

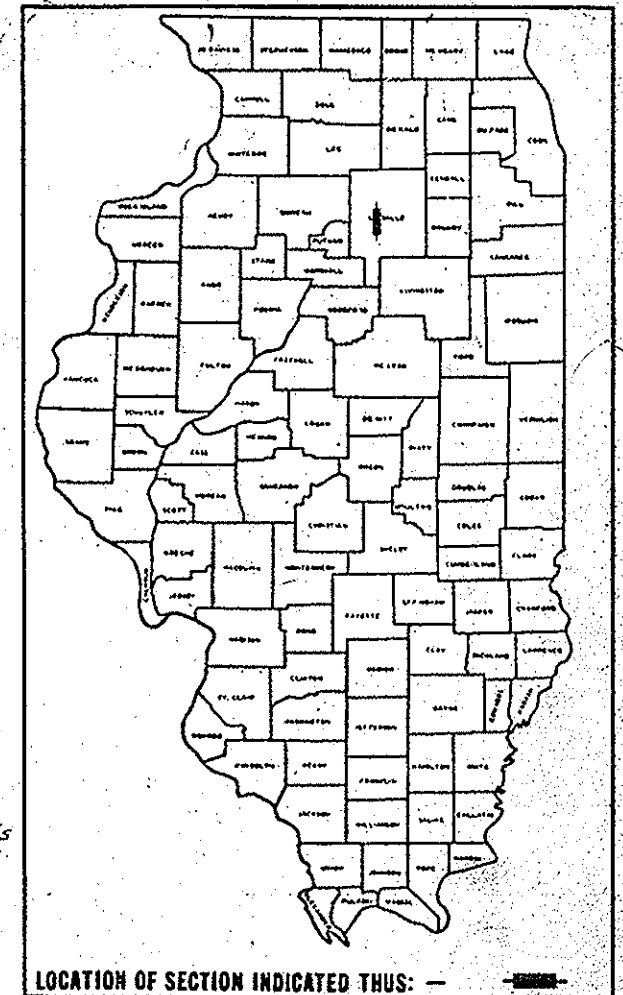
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 PLANS FOR PROPOSED
 FEDERAL AID PRIMARY HIGHWAY
 CONSTRUCTION PLANS

F.A. ROUTE 412
 SECTION 50-4B PROJECT
 LA SALLE COUNTY BRF-412-4(45)

C-93-067-84

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
EA. 412	50-4B	LA SALLE	246	1

P-93-021-74



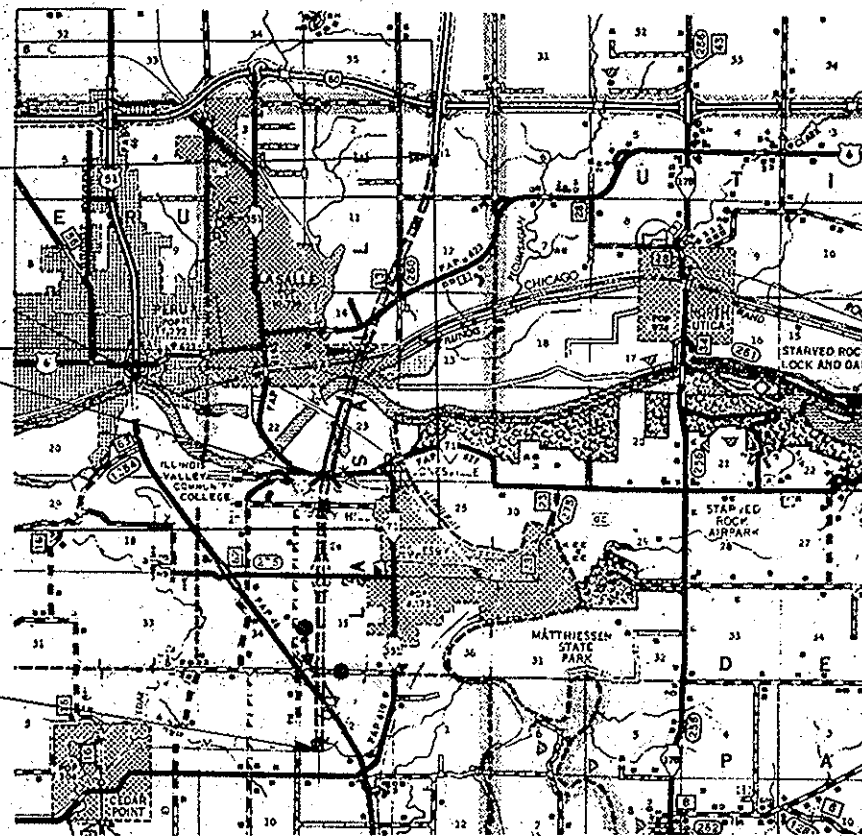
- INDEX OF SHEETS
- SHEET 1 COVER SHEET
 - SHEET 2 SUMMARY OF QUANTITIES
 - SHEET 3 PLAN AND PROFILE
 - SHEET 4 PLAN AND PROFILE
 - SHEET 5 PLAN AND PROFILE
 - SHEET 6 DETAILS OF PASSIVE EMBANKMENT AT I.C.G.R.R.
 - SHEET 7 THRU 169 STRUCTURE 50-4B SOUTH APPROACH
 - SHEET 170 THRU 245 STRUCTURE 50-4B NORTH APPROACH

SECTION 50-4B INCLUDES:
 ABUTMENTS, PIERS, GIRDERS, BEAMS,
 SLABS AND RELATED DETAILS FOR
 SOUTH AND NORTH APPROACHES AND
 SLAB AND RELATED DETAILS FOR
 TIED ARCH RIVER SPAN OF BRIDGE
 OVER ILLINOIS RIVER.

END SECTION 50-4
 END PROJECT EBF-412-4(45)
 STA. 897+45

STRUCTURE 50-4B
 NORTH AND SOUTH APPROACH--
 STEEL ALTERNATE
 DECK SLAB - TIED ARCH SPAN
 LENGTH: 7125.87 FT.
 BEGINNING STATION 808+26.21
 END STATION 879+52.08

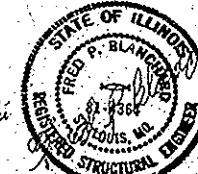
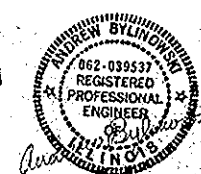
BEGIN PROJECT EBF-412-4(45)
 BEGIN SECTION 50-4
 STA. 657+40



NOTE:
 Wherever in these plans reference is
 made to Project EBF-412-4(6), it shall
 mean Project BRF-412-4(45).

APPROVED
 FOR STRUCTURAL SECURITY ONLY

Carl E. Thompson
 Engineer of Bridges and Structures



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED: _____ 19____

EXAMINED: *April 11* 19____ DISTRICT ENGINEER

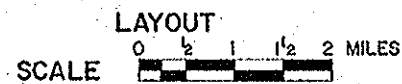
PASSED: *April 20* 19____ CHIEF OF PLANS AND CONTRACTS

APPROVED: *April 20* 19____ ENGINEER IN CHARGE

John P. Blangsted
 DISTRICT ENGINEER OF BRIDGES

CONTRACT NO. 38081
 DESIGN DESIGNATION

FA 412 13,000(2005) SUPPLEMENTAL FREEWAY (TRUNK HIGHWAY)



TOTAL LENGTH OF SECTION = 7125.87 FEET = 1.350 MILES

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR _____ DATE _____

50-4B LA SALLE 125 (Sta. 1)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. SECTION COUNTY TOTAL SHEETS SHEET NO.
F.A. 412 50-4B LASALLE 245 2
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	ROADWAY		BRIDGE		REMARKS
				STA. 808+26.21 TO STA. 879+52.08		STR. NO. 50-4B		
						SOUTH APPROACH	NORTH APPROACH	
				CONSTRUCTION CODE TYPE				
				X034-2B				
201005	TREE REMOVAL, ACRES	ACRE	13.73	13.73				
202001	EARTH EXCAVATION	CU. YD.	7,407	7,407				
204001	BORROW EXCAVATION	CU. YD.	23,521	23,521				FOR SELECT FILL
211001	POROUS GRANULAR BACKFILL	CU. YD.	216			216		
502001	STRUCTURE EXCAVATION	CU. YD.	4,388		3,960	428		
502003	COFFERDAM EXCAVATION	CU. YD.	12,874		9,658	3,216		
502004	ROCK EXCAVATION FOR STRUCTURES	CU. YD.	175			175		
X08803	COFFERDAM (PIER 3N)	EACH	1					
X08804	COFFERDAM (PIER 3S)	EACH	1					
X08805	COFFERDAM (PIER 4N)	EACH	1					
X08806	COFFERDAM (PIER 4S)	EACH	1					
X08807	COFFERDAM (PIER 5N)	EACH	1					
X08808	COFFERDAM (PIER 5S)	EACH	1					
X08809	COFFERDAM (PIER 6N)	EACH	1					
X08810	COFFERDAM (PIER 6S)	EACH	1					
X08811	COFFERDAM (PIER 7N)	EACH	1					
X08812	COFFERDAM (PIER 7S)	EACH	1					
X08813	COFFERDAM (PIER 8N)	EACH	1					
X08814	COFFERDAM (PIER 8S)	EACH	1					
X08815	COFFERDAM (PIER 9N)	EACH	1					
X08816	COFFERDAM (PIER 9S)	EACH	1					
X08817	COFFERDAM (PIER 10N)	EACH	1					
X08818	COFFERDAM (PIER 10S)	EACH	1					
X08819	COFFERDAM (PIER 11N)	EACH	1					
X08820	COFFERDAM (PIER 11S)	EACH	1					
X08821	COFFERDAM (PIER 12N)	EACH	1					
X08822	COFFERDAM (PIER 12S)	EACH	1					
X08823	COFFERDAM (PIER 13N)	EACH	1					
X08824	COFFERDAM (PIER 13S)	EACH	1					
X08825	COFFERDAM (PIER 14N)	EACH	1					
X08826	COFFERDAM (PIER 14S)	EACH	1					
X08827	COFFERDAM (PIER 17N)	EACH	1					
X08828	COFFERDAM (PIER 17S)	EACH	1					
X08829	COFFERDAM (PIER 18N)	EACH	1					
X08830	COFFERDAM (PIER 18S)	EACH	1					
X08831	COFFERDAM (PIER 19N)	EACH	1					
X08832	COFFERDAM (PIER 19S)	EACH	1					
X08833	COFFERDAM (PIER 20N)	EACH	1					
X08834	COFFERDAM (PIER 20S)	EACH	1					
X08835	COFFERDAM (PIER 21N)	EACH	1					
X08836	COFFERDAM (PIER 21S)	EACH	1					
X08837	COFFERDAM (PIER 22N)	EACH	1					
X08838	COFFERDAM (PIER 22S)	EACH	1					
X08839	COFFERDAM (PIER 31N)	EACH	1					
X08840	COFFERDAM (PIER 31S)	EACH	1					
X08841	COFFERDAM (PIER 32N)	EACH	1					
X08842	COFFERDAM (PIER 32S)	EACH	1					
X08843	COFFERDAM (PIER 33N)	EACH	1					
X08844	COFFERDAM (PIER 33S)	EACH	1					
X08845	COFFERDAM (PIER 36N)	EACH	1					
X08846	COFFERDAM (PIER 36S)	EACH	1					
X08847	COFFERDAM (PIER 37N)	EACH	1					
X08848	COFFERDAM (PIER 37S)	EACH	1					

DESIGNED A. BYLINOWSKI
CHECKED
DRAWN P. NELSON
CHECKED A. Bylinowski

202002	ROCK EXCAVATION	CU. YD.	906	906			
Z10046	BUILDING REMOVAL NO. 3	L. SUM.					
Z10047	BUILDING REMOVAL NO. 4	L. SUM.					
Z10048	BUILDING REMOVAL NO. 5	L. SUM.					
Z10049	BUILDING REMOVAL NO. 6	L. SUM.					

CODE NUMBER	ITEM	UNIT	TOTAL QUANTITY	ROADWAY		BRIDGE		REMARKS
				STA. 808+26.21 TO STA. 879+52.08		STR. NO. 50-4B		
						SOUTH APPROACH	NORTH APPROACH	
				CONSTRUCTION CODE TYPE				
				X034-2B				
X08863	COFFERDAM (PIER 38N)	EACH	1					
X08864	COFFERDAM (PIER 38S)	EACH	1					
X08865	COFFERDAM (PIER 39N)	EACH	1					
X08866	COFFERDAM (PIER 39S)	EACH	1					
X08867	COFFERDAM (PIER 40N)	EACH	1					
X08868	COFFERDAM (PIER 40S)	EACH	1					
X08869	COFFERDAM (PIER 41N)	EACH	1					
X08870	COFFERDAM (PIER 41S)	EACH	1					
X08871	COFFERDAM (PIER 42N)	EACH	1					
X08872	COFFERDAM (PIER 42S)	EACH	1					
503001	FLOOR DRAINS	EACH	363		296	67		
503003	PROTECTIVE COAT	SQ. YD.	71,853		54,426	17,227		
504003	CLASS X CONCRETE	CU. YD.	47,595		37,872	9,723		
504004	SEAL COAT CONCRETE	CU. YD.	719		486	233		
507001	FURNISHING AND ERECTING STRUCTURAL STEEL	LUMP SUM	1		0.78	0.22		
507005	STUD SHEAR CONNECTORS	EACH	105,555		83,025	22,530		
512001	REINFORCEMENT BARS	LBS.	3,785,680		3,184,570	621,110		
512002	REINFORCEMENT BARS (EPOXY COATED)	LBS.	5,154,560		3,750,830	1,403,730		
513014	FURNISHING STEEL PILES HP 10 X 42	LIN. FT.	1,419		1,419			
513019	FURNISHING STEEL PILES HP 14 X 89	LIN. FT.	88,416		78,896	9,520		
513027	DRIVING STEEL PILES	LIN. FT.	89,835		80,315	9,520		
513034	TEST PILES, STEEL HP 10 X 42 (INC. METAL SHOES)	EACH	1		1			
513039	TEST PILES, STEEL HP 14 X 89 (INC. METAL SHOES)	EACH	31		24	7		
513046	METAL SHOES	EACH	1,178		977	201		
X08877	TEMPORARY SHEET PILING, (PIER 15N)	LIN. FT.	52	52				
X08878	TEMPORARY SHEET PILING, (PIER 15S)	LIN. FT.	28	28				
X08879	TEMPORARY SHEET PILING, (PIER 16N)	LIN. FT.	28	28				
X08880	TEMPORARY SHEET PILING, (PIER 16S)	LIN. FT.	52	52				
X08881	TEMPORARY SHEET PILING, (EAST TOE)	LIN. FT.	218	218				
514001	NAME PLATES	EACH	2		1	1		
642003	SEEDING, CLASS III	ACRE	0.98	0.98				
642004	NITROGEN FERTILIZER NUTRIENT	LBS.	80	80				
642005	PHOSPHORUS FERTILIZER NUTRIENT	LBS.	160	160				
642006	POTASSIUM FERTILIZER NUTRIENT	LBS.	80	80				
X64308	MULCH, METHOD 2	TON	2	2				
X04474	MAINTAINING ENGINEER'S FIELD OFFICE	CAL. MO.	30		30			
X46004	ENGINEER'S FIELD OFFICE TYPE A	CAL. MO.	30			30		
646006	ENGINEER'S FIELD LABORATORY	CAL. MO.	30		30			
Z10193	DRAINAGE SCUPPERS	EACH	98		88	30		
Z10279	NEOPRENE EXPANSION JOINT (2")	LIN. FT.	97			97		
Z10280	NEOPRENE EXPANSION JOINT (2 1/2")	LIN. FT.	84		84			
Z10281	NEOPRENE EXPANSION JOINT (4")	LIN. FT.	181			181		
Z10282	NEOPRENE EXPANSION JOINT (6 1/2")	LIN. FT.	504		336	168		
Z10283	NEOPRENE EXPANSION JOINT (9")	LIN. FT.	420		420			
Z10284	NEOPRENE EXPANSION JOINT (13")	LIN. FT.	84			84		
X50314	PREFORMED JOINT SEAL (4")	LIN. FT.	344			344		
X50323	PREFORMED JOINT SEAL (5")	LIN. FT.	622			622		
X08794	PAINTING STEEL ARCH SPAN	LUMP SUM	1			1		
X61802	BITUMINOUS COATED AGGREGATE SLOPEWALL 6"	SQ. YD.	1,163		1,163			
X06441	LANNON WEATHER-EDGE STONE MASONRY	SQ. FT.	2,130			2,130		
X06471	STRUCTURE LIGHTING	LUMP SUM	1			1		
X06472	NAVIGATION LIGHTING	LUMP SUM	1			1		
X21490	FURNISHING AND MAINTAINING AUTOMOTIVE VEHICLES TRAINEES	LUMP SUM HOUR	1		0.5	0.5		
X08795	CONSTRUCTION LAYOUT	LUMP SUM	1			1		
Z10044	BUILDING REMOVAL NO. 1	LUMP SUM	1			1		
Z10045	BUILDING REMOVAL NO. 2	LUMP SUM	1			1		
X09748	MOBILIZATION	LUMP SUM	1		0.5	0.5		

* See Special Provisions
** Construction Type Code - Y080

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

STRUCTURAL STEEL ALTERNATE
SUMMARY OF QUANTITIES
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 808+26.21 TO STA. 879+52.08 (FA-412) LASALLE CO.
SHEET NO. 1 OF 1

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

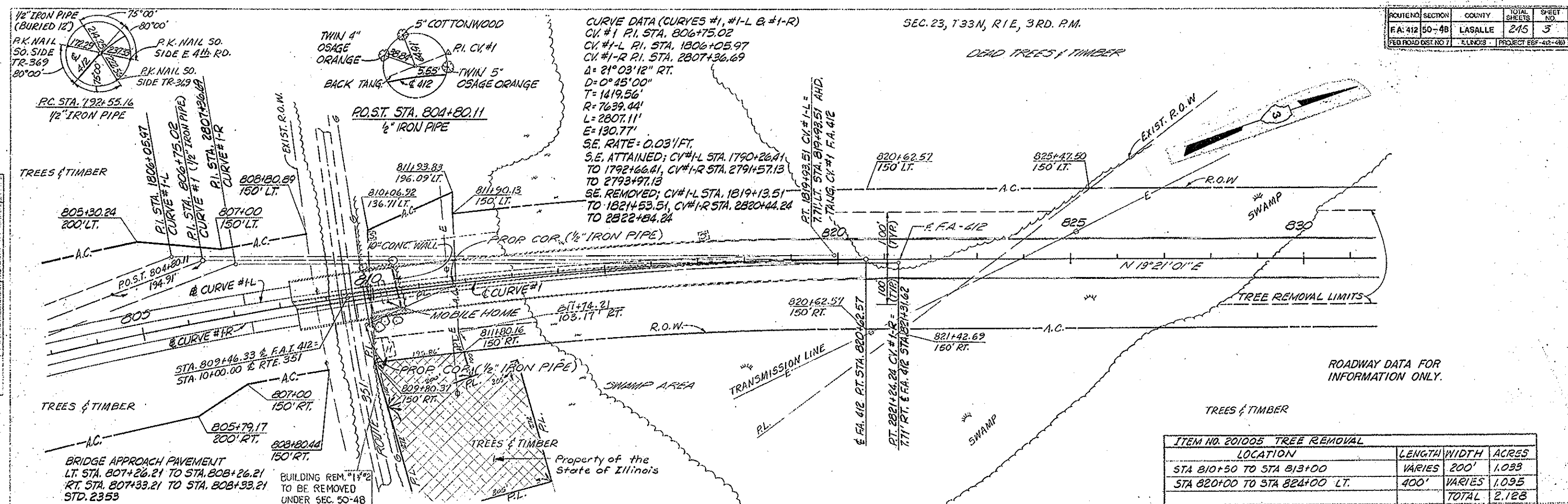
8892
84002

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 412	50-4B	LASALLE	245	3
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT EBF-412-481		

SEC. 23, T33N, R1E, 3RD. PM.

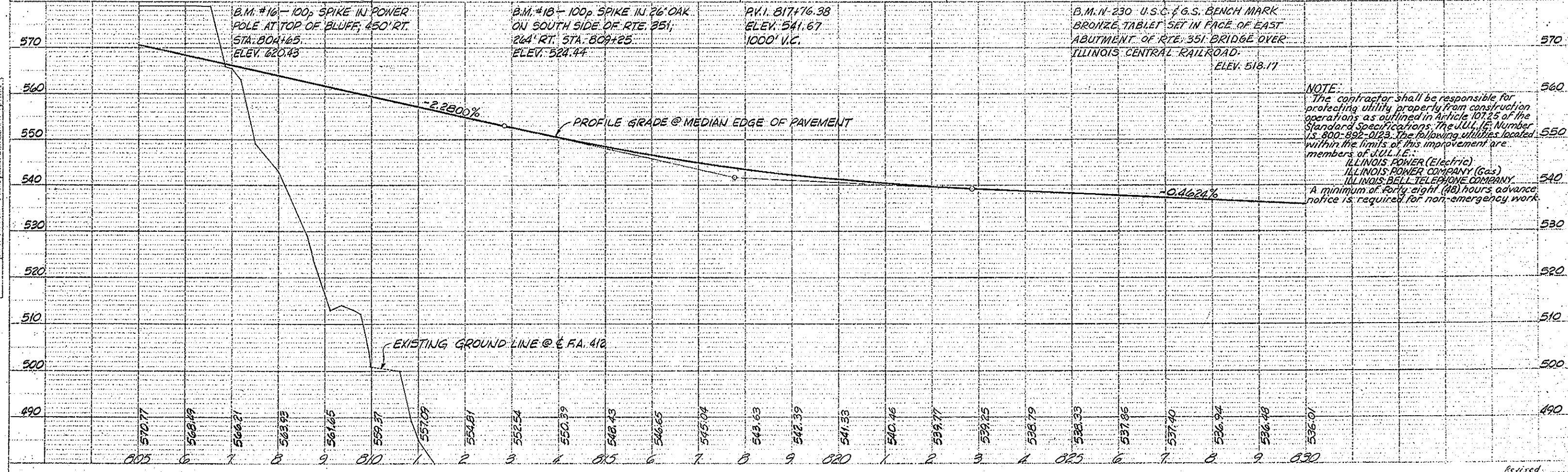
DEAD TREES & TIMBER

CURVE DATA (CURVES #1, #1-L & #1-R)
 CV #1 P.I. STA. 806+75.02
 CV #1-L P.I. STA. 1806+05.97
 CV #1-R P.I. STA. 2807+36.69
 $\Delta = 21^{\circ}03'12''$ RT.
 $D = 0^{\circ}45'00''$
 $T = 1419.56'$
 $R = 7639.44'$
 $L = 2807.11'$
 $E = 130.77'$
 S.E. RATE = 0.03'/FT.
 S.E. ATTAINED; CV #1-L STA. 1790+26.41 TO 1792+66.41, CV #1-R STA. 2794+57.13 TO 2793+97.13
 SE. REMOVED; CV #1-L STA. 1819+13.51 TO 1821+53.51, CV #1-R STA. 2820+44.24 TO 2822+84.24



ROADWAY DATA FOR INFORMATION ONLY.

ITEM NO. 201005 TREE REMOVAL			
LOCATION	LENGTH	WIDTH	ACRES
STA 810+50 TO STA 813+00	VARIABLE	200'	1.033
STA 820+00 TO STA 824+00 LT.	400'	VARIABLE	1.095
TOTAL			2.128



NOTE:
 The contractor shall be responsible for protecting utility property from construction operations as outlined in Article 107.25 of the Standard Specifications. The J.U.L.I.E. Number is 800-892-0123. The following utilities located within the limits of this improvement are members of J.U.L.I.E.:
 ILLINOIS POWER (Electric)
 ILLINOIS POWER COMPANY (Gas)
 ILLINOIS BELL TELEPHONE COMPANY
 A minimum of forty-eight (48) hours advance notice is required for non-emergency work.

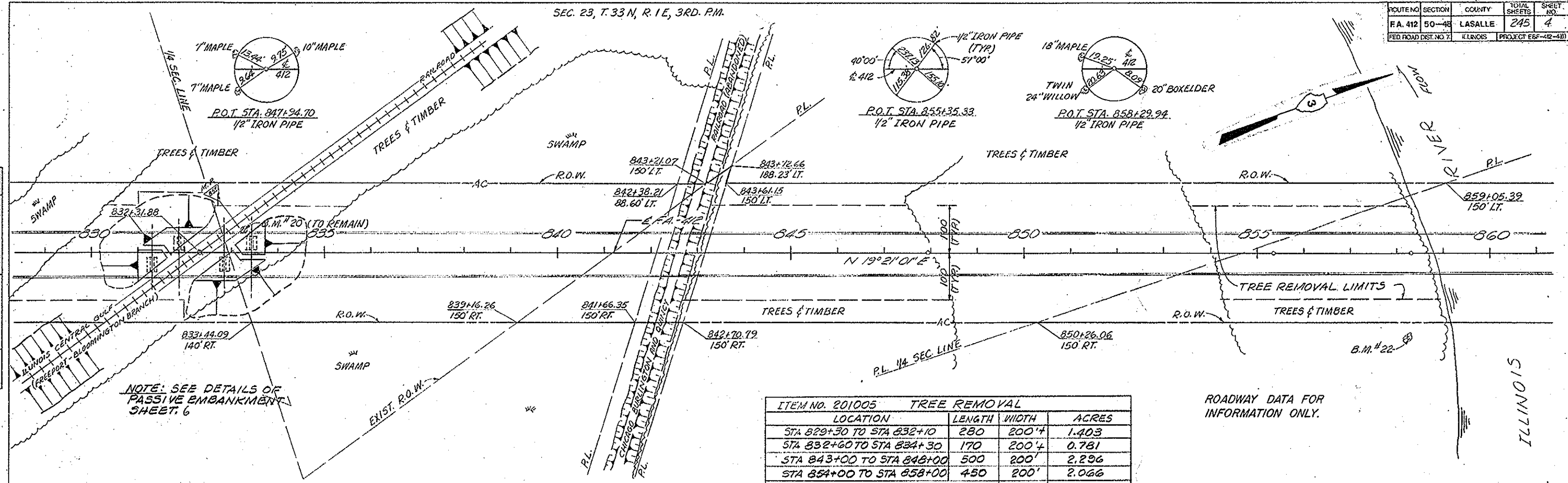
PROJECT: 50' WIDE
 LOTTERY: 10' WIDE
 SIDEWALK: 5' WIDE
 STRUCTURE: 10' WIDE
 TOTAL: 80' WIDE

PROJECT: 50' WIDE
 LOTTERY: 10' WIDE
 SIDEWALK: 5' WIDE
 STRUCTURE: 10' WIDE
 TOTAL: 80' WIDE

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 412	50-48	LASALLE	245	4
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT E6F-42-48	

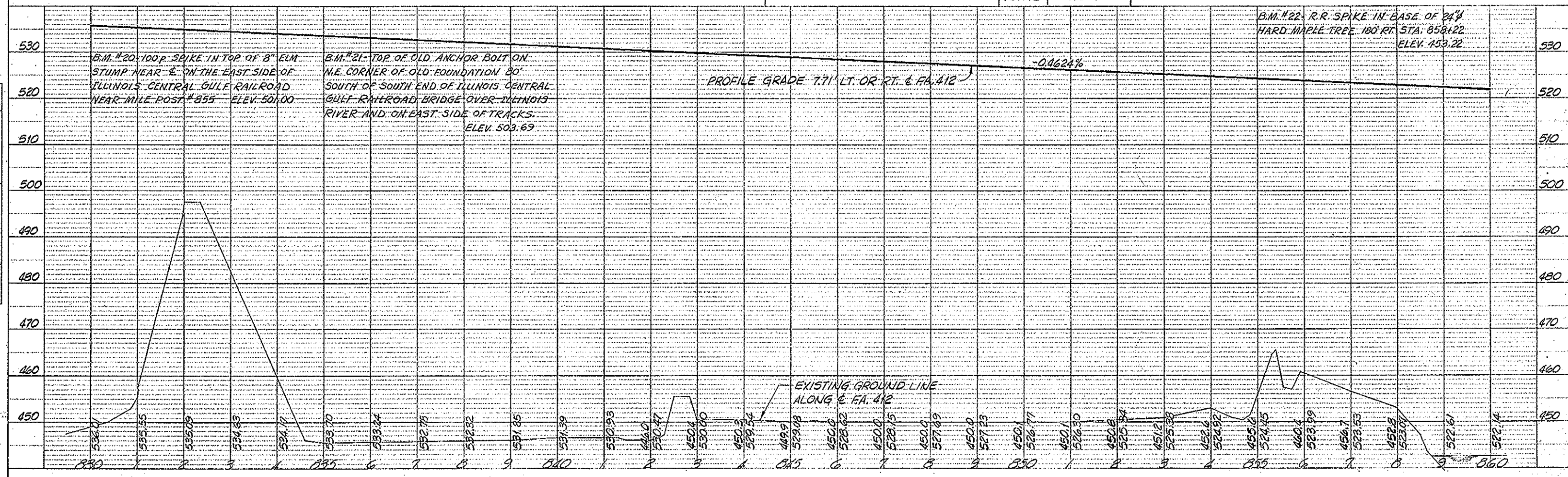
PLAN
 SURVEYED BY: [Name]
 PLOTTED BY: [Name]
 DATE: [Date]
 REVISIONS: [List]
 NO. [Number]

PROFILE
 SURVEYED BY: [Name]
 PLOTTED BY: [Name]
 DATE: [Date]
 REVISIONS: [List]
 NO. [Number]



LOCATION	LENGTH	WIDTH	ACRES
STA 829+30 TO STA 832+10	280	200'	1.403
STA 832+60 TO STA 834+30	170	200'	0.781
STA 843+00 TO STA 848+00	500	200'	2.296
STA 854+00 TO STA 858+00	450	200'	2.066
TOTAL			6.547

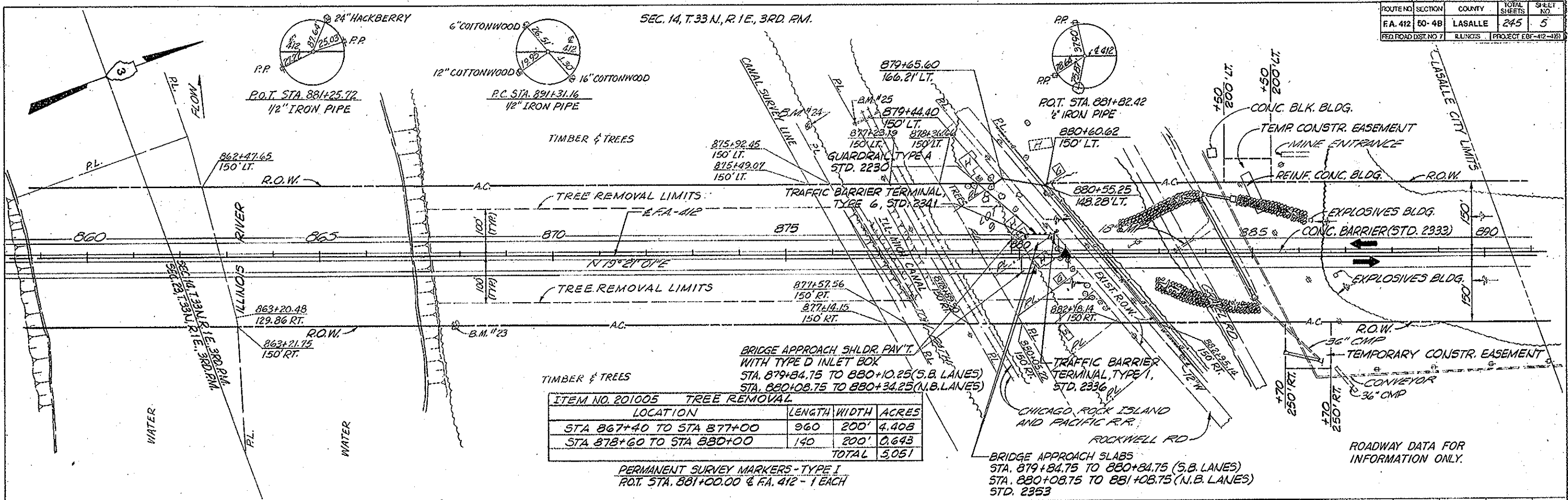
ROADWAY DATA FOR INFORMATION ONLY.



SEC. 14, T. 33 N., R. 1 E., 3RD. FM.

DATE: 7/2/73
 BY: [Signature]
 CHECKED: [Signature]
 PLAN NO. 82C-934

DATE: 7/2/73
 BY: [Signature]
 CHECKED: [Signature]
 PROFILE NO. 82C-934



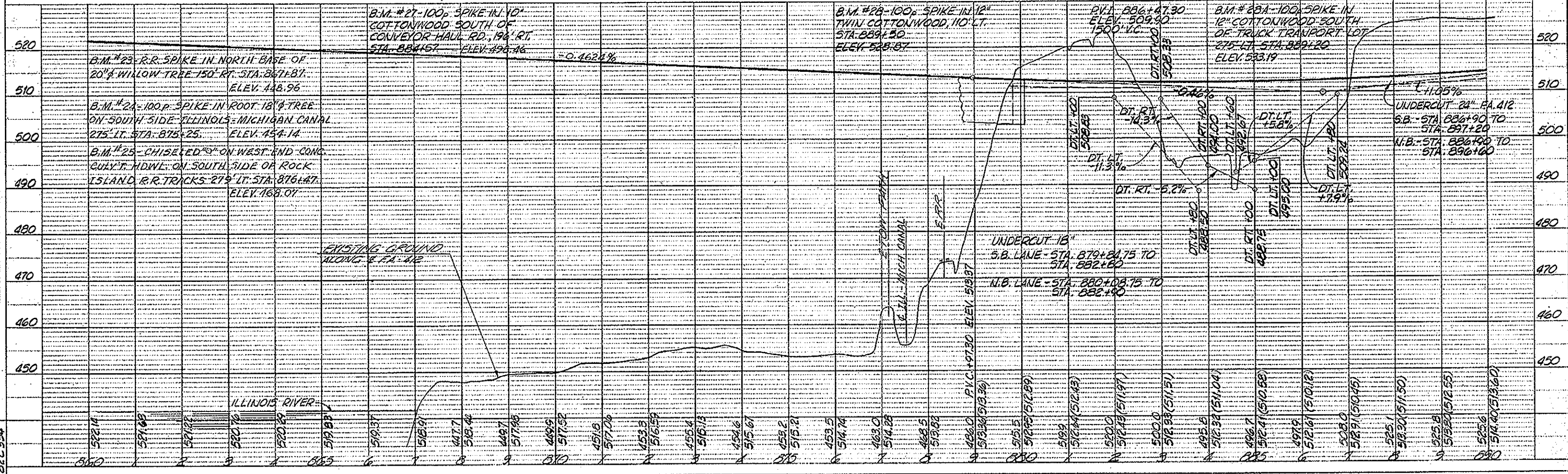
ITEM NO. 201005 TREE REMOVAL

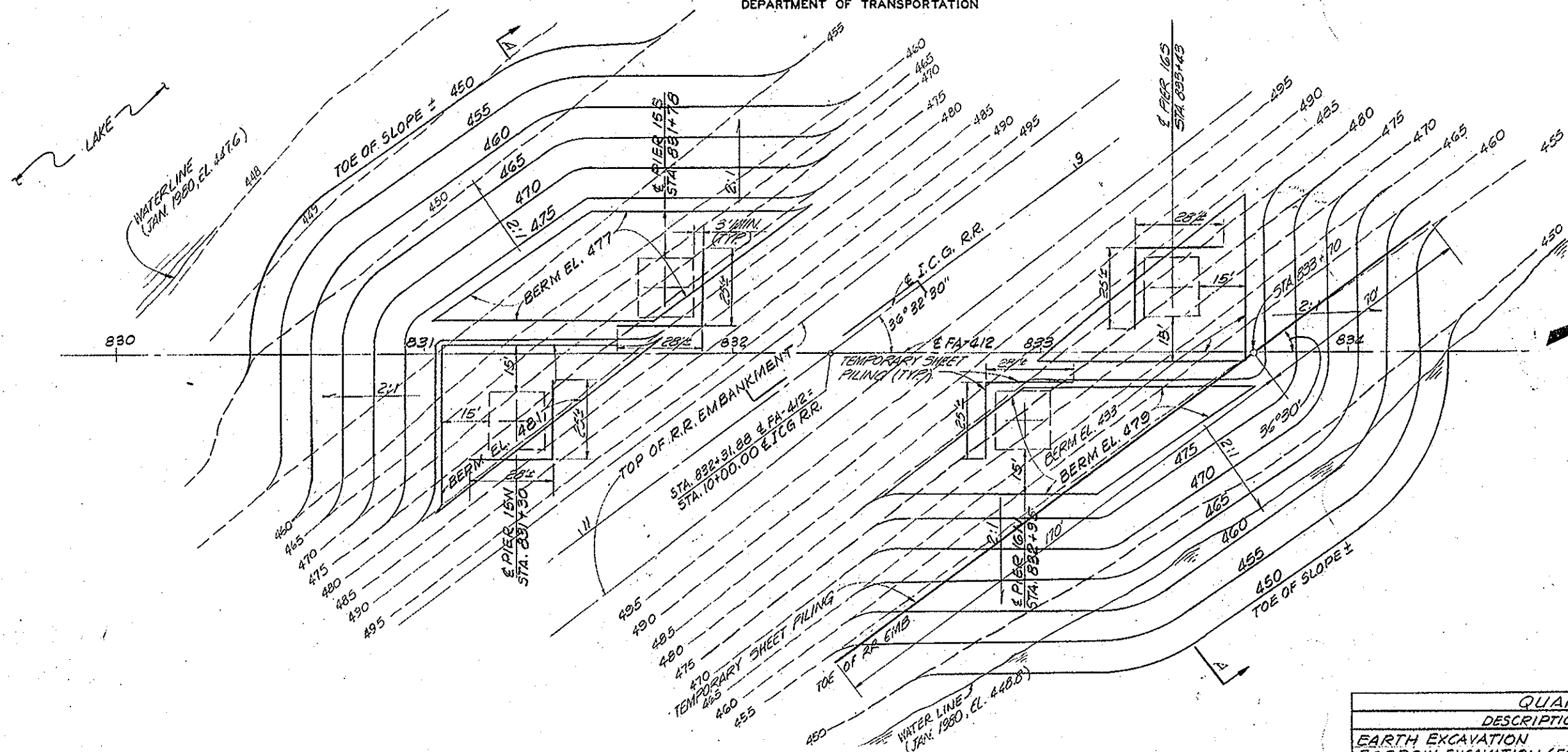
LOCATION	LENGTH	WIDTH	ACRES
STA 867+40 TO STA 877+00	960	200'	4.408
STA 878+60 TO STA 880+00	140	200'	0.643
			TOTAL 5.051

PERMANENT SURVEY MARKERS - TYPE I
 R.O.T. STA. 881+00.00 & FA. 412 - 1 EACH

BRIDGE APPROACH SLABS
 STA. 879+84.75 TO 880+84.75 (S.B. LANES)
 STA. 880+08.75 TO 881+08.75 (N.B. LANES)
 STD. 2353

ROADWAY DATA FOR INFORMATION ONLY.

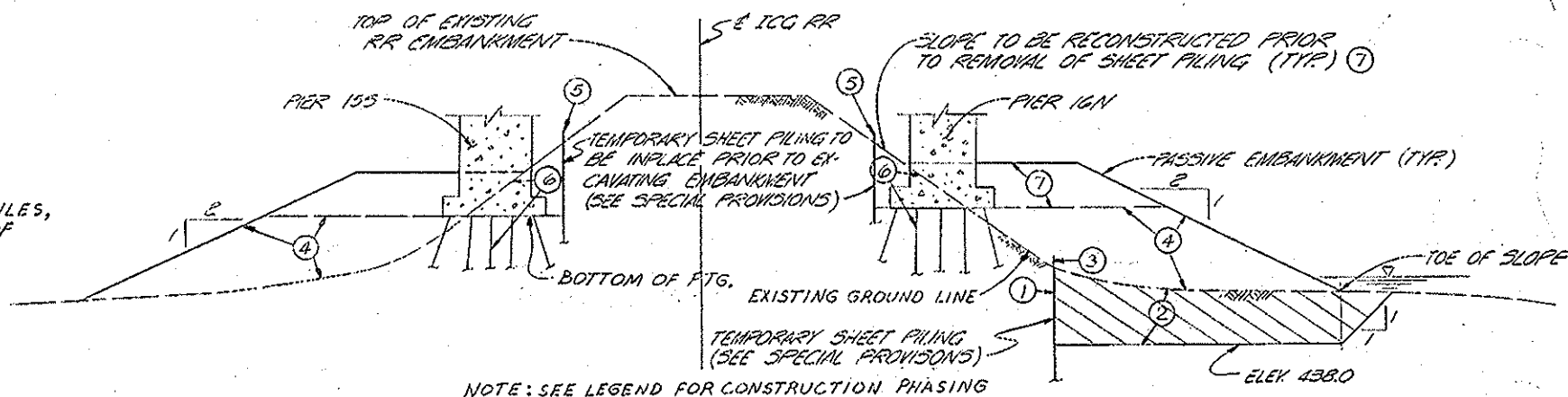




**STRUCTURAL STEEL ALTERNATE
PASSIVE EMBANKMENT**

LEGEND

- ① - DRIVE TEMPORARY SHEET PILE WALL
- ② - EXCAVATE UNSTABLE SOIL AND BACKFILL WITH SELECT FILL
- ③ - REMOVE TEMPORARY SHEET PILE WALL
- ④ - PLACE PARTIAL PASSIVE EMBANKMENT WITH SELECT FILL
- ⑤ - DRIVE TEMPORARY SHEET PILE WALL
- ⑥ - EXCAVATE FOR FOUNDATION, DRIVE H-PILES, CAST FOUNDATION AND LOWER PORTION OF PIER SHAFT
- ⑦ - COMPLETE THE PASSIVE EMBANKMENT & REMOVE TEMPORARY SHEET PILE WALL



NOTE: SEE LEGEND FOR CONSTRUCTION PHASING

**SECTION A-A
(TYPICAL SECTION THRU EMBANKMENT)**

QUANTITIES		
DESCRIPTION	UNIT	AMOUNT
EARTH EXCAVATION	Cu. Yd.	6,989
BORROW EXCAVATION (FOR SELECT FILL)	Cu. Yd.	24,669
SEEDING, CLASS III	ACRE	0.967
NITROGEN FERTILIZER NUTRIENT	POUND	80
PHOSPHORUS FERTILIZER NUTRIENT	POUND	160
POTASSIUM FERTILIZER NUTRIENT	POUND	80
MULCH, METHOD 2	TON	2
TEMPORARY SHEET PILING PIER 15N	LIN. FT.	53
TEMPORARY SHEET PILING PIER 15S	LIN. FT.	53
TEMPORARY SHEET PILING PIER 16N	LIN. FT.	53
TEMPORARY SHEET PILING PIER 16S	LIN. FT.	53
TEMPORARY SHEET PILING EAST TOE	LIN. FT.	240

DESIGNED R.E. PRENTICE
CHECKED A. BYLINOWSKI
DRAWN A.B.
CHECKED R.E.P.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	7
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				

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2. GENERAL PLAN AND ELEVATION - SPANS 1 THRU 8
3. GENERAL PLAN AND ELEVATION - SPANS 9 THRU 17
4. GENERAL PLAN AND ELEVATION - SPANS 18 THRU 27
5. GENERAL PLAN AND ELEVATION - SPANS 28 THRU 34
6. FOOTING LAYOUT
7. FOOTING LAYOUT
8. GENERAL NOTES AND TOTAL BILL OF MATERIAL
9. TOP OF SLAB ELEVATIONS - SPANS 1 AND 2 SOUTHBOUND
10. TOP OF SLAB ELEVATIONS - SPANS 1 AND 2 SOUTHBOUND
11. TOP OF SLAB ELEVATIONS - SPANS 1 AND 2 NORTHBOUND
12. TOP OF SLAB ELEVATIONS - SPANS 1 AND 2 NORTHBOUND
13. TOP OF SLAB ELEVATIONS - SPANS 3 THRU 6 SOUTHBOUND
14. TOP OF SLAB ELEVATIONS - SPANS 3 THRU 6 SOUTHBOUND
15. TOP OF SLAB ELEVATIONS - SPANS 3 THRU 6 SOUTHBOUND
16. TOP OF SLAB ELEVATIONS - SPANS 3 THRU 6 NORTHBOUND
17. TOP OF SLAB ELEVATIONS - SPANS 3 THRU 6 NORTHBOUND
18. TOP OF SLAB ELEVATIONS - SPANS 3 THRU 6 NORTHBOUND
19. TOP OF SLAB ELEVATIONS - SPANS 7 THRU 10 SOUTHBOUND
20. TOP OF SLAB ELEVATIONS - SPANS 7 THRU 10 SOUTHBOUND
21. TOP OF SLAB ELEVATIONS - SPANS 7 THRU 10 SOUTHBOUND
22. TOP OF SLAB ELEVATIONS - SPANS 7 THRU 10 NORTHBOUND
23. TOP OF SLAB ELEVATIONS - SPANS 7 THRU 10 NORTHBOUND
24. TOP OF SLAB ELEVATIONS - SPANS 7 THRU 10 NORTHBOUND
25. TOP OF SLAB ELEVATIONS - SPANS 11 THRU 14 NORTHBOUND & SOUTHBOUND
26. TOP OF SLAB ELEVATIONS - SPANS 11 THRU 14 NORTHBOUND & SOUTHBOUND
27. TOP OF SLAB ELEVATIONS - SPANS 11 THRU 14 NORTHBOUND & SOUTHBOUND
28. TOP OF SLAB ELEVATIONS - SPANS 15 THRU 17 SOUTHBOUND
29. TOP OF SLAB ELEVATIONS - SPANS 15 THRU 17 SOUTHBOUND
30. TOP OF SLAB ELEVATIONS - SPANS 15 THRU 17 NORTHBOUND
31. TOP OF SLAB ELEVATIONS - SPANS 15 THRU 17 NORTHBOUND
32. TOP OF SLAB ELEVATIONS - SPANS 18 THRU 21 NORTHBOUND & SOUTHBOUND
33. TOP OF SLAB ELEVATIONS - SPANS 18 THRU 21 NORTHBOUND & SOUTHBOUND
34. TOP OF SLAB ELEVATIONS - SPANS 18 THRU 21 NORTHBOUND & SOUTHBOUND
35. TOP OF SLAB ELEVATIONS - SPANS 22 THRU 25 NORTHBOUND & SOUTHBOUND
36. TOP OF SLAB ELEVATIONS - SPANS 22 THRU 25 NORTHBOUND & SOUTHBOUND
37. TOP OF SLAB ELEVATIONS - SPANS 22 THRU 25 NORTHBOUND & SOUTHBOUND
38. TOP OF SLAB ELEVATIONS - SPANS 26 THRU 28 NORTHBOUND & SOUTHBOUND
39. TOP OF SLAB ELEVATIONS - SPANS 26 THRU 28 NORTHBOUND & SOUTHBOUND
40. TOP OF SLAB ELEVATIONS - SPANS 29 THRU 31 NORTHBOUND & SOUTHBOUND
41. TOP OF SLAB ELEVATIONS - SPANS 29 THRU 31 NORTHBOUND & SOUTHBOUND
42. TOP OF SLAB ELEVATIONS - SPANS 32 THRU 34 NORTHBOUND & SOUTHBOUND
43. TOP OF SLAB ELEVATIONS - SPANS 32 THRU 34 NORTHBOUND & SOUTHBOUND
44. SUPERELEVATION TRANSITION - SPANS 7 THRU 9
45. SLAB - SPANS 1 AND 2 SOUTHBOUND
46. PARAPETS - SPANS 1 AND 2 SOUTHBOUND
47. SLAB - SPANS 1 AND 2 NORTHBOUND
48. PARAPETS - SPANS 1 AND 2 NORTHBOUND
49. SLAB - SPANS 3 THRU 6 SOUTHBOUND
50. SLAB - SPANS 3 THRU 6 SOUTHBOUND
51. PARAPETS - SPANS 3 THRU 6 SOUTHBOUND
52. SLAB - SPANS 3 THRU 6 NORTHBOUND
53. SLAB - SPANS 3 THRU 6 NORTHBOUND
54. PARAPETS - SPANS 3 THRU 6 NORTHBOUND
55. SLAB - SPANS 7 THRU 10 SOUTHBOUND
56. SLAB - SPANS 7 THRU 10 SOUTHBOUND
57. PARAPETS - SPANS 7 THRU 10 SOUTHBOUND
58. SLAB - SPANS 7 THRU 10 NORTHBOUND
59. SLAB - SPANS 7 THRU 10 NORTHBOUND
60. PARAPETS - SPANS 7 THRU 10 NORTHBOUND
61. SLAB - SPANS 11 THRU 14 & 18 THRU 21 NORTHBOUND & SOUTHBOUND
62. PARAPETS - SPANS 11 THRU 14 & 18 THRU 21 NORTHBOUND & SOUTHBOUND
63. SLAB - SPANS 15 THRU 17 SOUTHBOUND
64. PARAPETS - SPANS 15 THRU 17 SOUTHBOUND
65. SLAB - SPANS 15 THRU 17 NORTHBOUND
66. PARAPETS - SPANS 15 THRU 17 NORTHBOUND
67. SLAB - SPANS 22 THRU 25 - NORTHBOUND & SOUTHBOUND
68. PARAPETS - SPANS 22 THRU 25 NORTHBOUND & SOUTHBOUND
69. SLAB - SPANS 26 THRU 28 & 29 THRU 31 NORTHBOUND & SOUTHBOUND
70. PARAPETS - SPANS 26 THRU 28 & 29 THRU 31 NORTHBOUND & SOUTHBOUND
71. SLAB - SPANS 32 THRU 34 NORTHBOUND & SOUTHBOUND
72. PARAPETS - SPANS 32 THRU 34 NORTHBOUND & SOUTHBOUND
73. LIGHTING LOCATION PLAN AND DETAILS
74. DRAINAGE PLAN - SPANS 1 THRU 34
75. FLOOR DRAIN AND SCUPPER DETAILS
76. STEEL DRAINAGE SCUPPER
77. ALTERNATE-CAST IRON DRAINAGE SCUPPER
78. NEOPRENE EXPANSION JOINTS
79. NEOPRENE EXPANSION JOINTS
80. FRAMING PLAN AND GIRDER ELEVATION - SPANS 1 AND 2 SOUTHBOUND
81. FRAMING PLAN AND GIRDER ELEVATION - SPANS 1 AND 2 NORTHBOUND
82. FRAMING PLAN AND GIRDER ELEVATION - SPANS 3 THRU 6
83. FRAMING PLAN AND GIRDER ELEVATION - SPANS 3 THRU 6
84. FRAMING PLAN AND GIRDER ELEVATION - SPANS 7 AND 8 SOUTHBOUND
85. FRAMING PLAN AND GIRDER ELEVATION - SPANS 9 AND 10 SOUTHBOUND
86. FRAMING PLAN AND GIRDER ELEVATION - SPANS 7 AND 8 NORTHBOUND
87. FRAMING PLAN AND GIRDER ELEVATION - SPANS 9 AND 10 NORTHBOUND
88. FRAMING PLAN AND GIRDER ELEVATION - SPANS 11 THRU 14, 18 THRU 21 & 22 THRU 25
89. FRAMING PLAN AND GIRDER ELEVATION - SPANS 15 THRU 17 SOUTHBOUND
90. FRAMING PLAN AND GIRDER ELEVATION - SPANS 15 THRU 17 SOUTHBOUND
91. FRAMING PLAN AND GIRDER ELEVATION - SPANS 15 THRU 17 NORTHBOUND
92. FRAMING PLAN AND GIRDER ELEVATION - SPANS 15 THRU 17 NORTHBOUND
93. FRAMING PLAN AND GIRDER ELEVATION - SPANS 26 THRU 28 & 29 THRU 31
94. FRAMING PLAN AND GIRDER ELEVATION - SPANS 32 THRU 34
95. FRAMING PLAN AND GIRDER ELEVATION - SPANS 32 THRU 34
96. CROSS FRAME DETAILS
97. LATERAL BRACING DETAILS
98. FIELD SPLICE DETAILS
99. BEARING LOCATION PLAN
100. BEARING DETAILS
101. ANCHOR BOLTS
102. CAMBER DIAGRAMS - SPANS 1 THRU 10
103. CAMBER DIAGRAMS - SPANS 11 THRU 34
104. STRESS TABLES
105. SOUTH ABUTMENT NORTHBOUND
106. SOUTH ABUTMENT SOUTHBOUND
107. SOUTH ABUTMENT
108. SOUTH ABUTMENT
109. PIER 1 NORTHBOUND & SOUTHBOUND
110. PIER 2 NORTHBOUND & SOUTHBOUND
111. PIER 3 NORTHBOUND & SOUTHBOUND
112. PIER 3 NORTHBOUND & SOUTHBOUND
113. PIER 4 NORTHBOUND & SOUTHBOUND
114. PIER 4 NORTHBOUND & SOUTHBOUND
115. PIER 5 NORTHBOUND & SOUTHBOUND
116. PIER 5 NORTHBOUND & SOUTHBOUND
117. PIER 6 NORTHBOUND & SOUTHBOUND
118. PIER 6 NORTHBOUND & SOUTHBOUND
119. PIER 7 NORTHBOUND & SOUTHBOUND
120. PIER 7 NORTHBOUND & SOUTHBOUND
121. PIER 8 NORTHBOUND & SOUTHBOUND
122. PIER 8 NORTHBOUND & SOUTHBOUND
123. PIER 9 NORTHBOUND & SOUTHBOUND
124. PIER 9 NORTHBOUND & SOUTHBOUND
125. PIER 10 NORTHBOUND & SOUTHBOUND
126. PIER 10 NORTHBOUND & SOUTHBOUND
127. PIER 11 NORTHBOUND & SOUTHBOUND
128. PIER 11 NORTHBOUND & SOUTHBOUND
129. PIER 12 NORTHBOUND & SOUTHBOUND
130. PIER 12 NORTHBOUND & SOUTHBOUND
131. PIER 13 NORTHBOUND & SOUTHBOUND
132. PIER 13 NORTHBOUND & SOUTHBOUND
133. PIER 14 NORTHBOUND & SOUTHBOUND
134. PIER 14 NORTHBOUND & SOUTHBOUND
135. PIER 15 SOUTHBOUND
136. PIER 15 NORTHBOUND
137. PIER 16 SOUTHBOUND
138. PIER 16 NORTHBOUND
139. PIER 17 NORTHBOUND & SOUTHBOUND
140. PIER 17 NORTHBOUND & SOUTHBOUND
141. PIER 18 NORTHBOUND & SOUTHBOUND
142. PIER 18 NORTHBOUND & SOUTHBOUND
143. PIER 19 NORTHBOUND & SOUTHBOUND
144. PIER 19 NORTHBOUND & SOUTHBOUND
145. PIER 20 NORTHBOUND & SOUTHBOUND
146. PIER 20 NORTHBOUND & SOUTHBOUND
147. PIER 21 NORTHBOUND & SOUTHBOUND
148. PIER 21 NORTHBOUND & SOUTHBOUND
149. PIER 22 NORTHBOUND & SOUTHBOUND
150. PIER 22 NORTHBOUND & SOUTHBOUND
151. PIER 23 NORTHBOUND & SOUTHBOUND
152. PIER 24 NORTHBOUND & SOUTHBOUND
153. PIER 25 NORTHBOUND & SOUTHBOUND
154. PIER 26 NORTHBOUND & SOUTHBOUND
155. PIER 27 NORTHBOUND & SOUTHBOUND
156. PIER 28 NORTHBOUND & SOUTHBOUND
157. PIER 29 NORTHBOUND & SOUTHBOUND
158. PIER 30 NORTHBOUND & SOUTHBOUND
159. PIER 31 NORTHBOUND & SOUTHBOUND
160. PIER 32 NORTHBOUND & SOUTHBOUND
161. PIER 33 NORTHBOUND & SOUTHBOUND
162. PIER 33 NORTHBOUND & SOUTHBOUND
163. PIER 34 - APPROACH SPAN PEDESTAL

DESIGNED	T. Ritzheimer
CHECKED	L. Gloer
DRAWN	R. Priescher
CHECKED	T. Ritzheimer

8992
225497

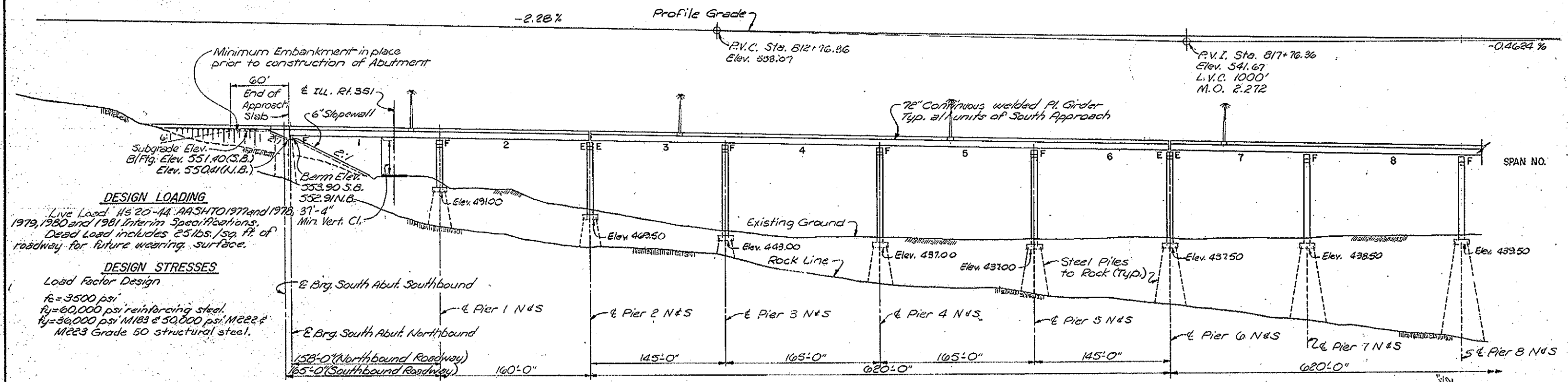
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
INDEX OF DRAWINGS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO

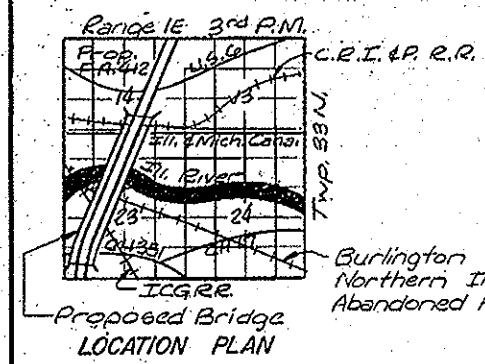
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 1 OF 163

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-4B	LASALLE	245	8
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



Note: Ground line shown is at E.F.A.-412 except as noted
All spans are measured along E.F.A.-412.



CURVE IL

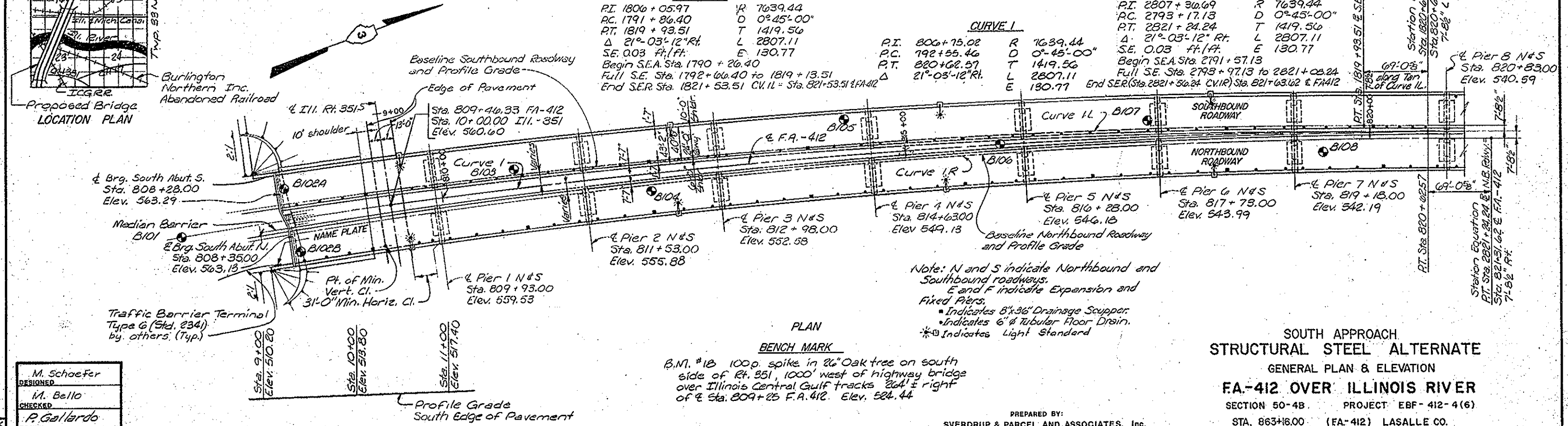
P.I. 1806+05.97	R 7639.44
P.C. 1791+86.40	D 0°-45'-00"
P.T. 1819+93.51	T 1419.56
Δ 21°-03'-12" Rt.	L 2807.11
SE. 0.03 ft./ft.	E 130.77
Begin S.E.A. Sta. 1790+26.40	
Full S.E. Sta. 1792+06.40 to 1819+13.51	
End S.E.R. Sta. 1821+53.51	CV. IL = Sta. 821+53.51 E.F.A.412

CURVE I

P.I. 800+75.02	R 7639.44
P.C. 792+55.46	D 0°-45'-00"
P.T. 820+62.57	T 1419.56
Δ 21°-03'-12" Rt.	L 2807.11
SE. 0.03 ft./ft.	E 130.77
Begin S.E.A. Sta. 2791+57.13	
Full S.E. Sta. 2793+97.13 to 2821+02.24	
End S.E.R. (Sta. 2821+50.24 CV. IR) Sta. 821+63.62 E.F.A.412	

CURVE IR

P.I. 2807+30.69	R 7639.44
P.C. 2793+17.13	D 0°-45'-00"
P.T. 2821+24.24	T 1419.56
Δ 21°-03'-12" Rt.	L 2807.11
SE. 0.03 ft./ft.	E 130.77
Begin S.E.A. Sta. 2791+57.13	
Full S.E. Sta. 2793+97.13 to 2821+02.24	
End S.E.R. (Sta. 2821+50.24 CV. IR) Sta. 821+63.62 E.F.A.412	



M. Schaefer
DESIGNED

M. Bello
CHECKED

P. Gallardo
DRAWN

T. Ritzheimer
CHECKED

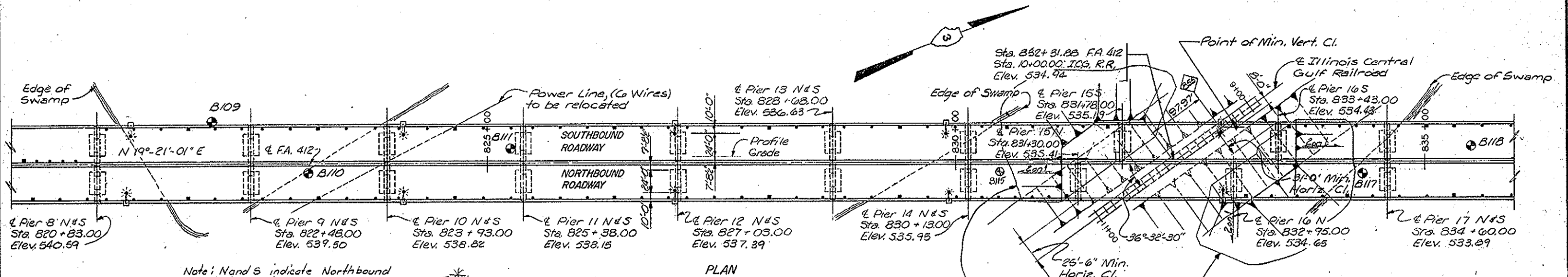
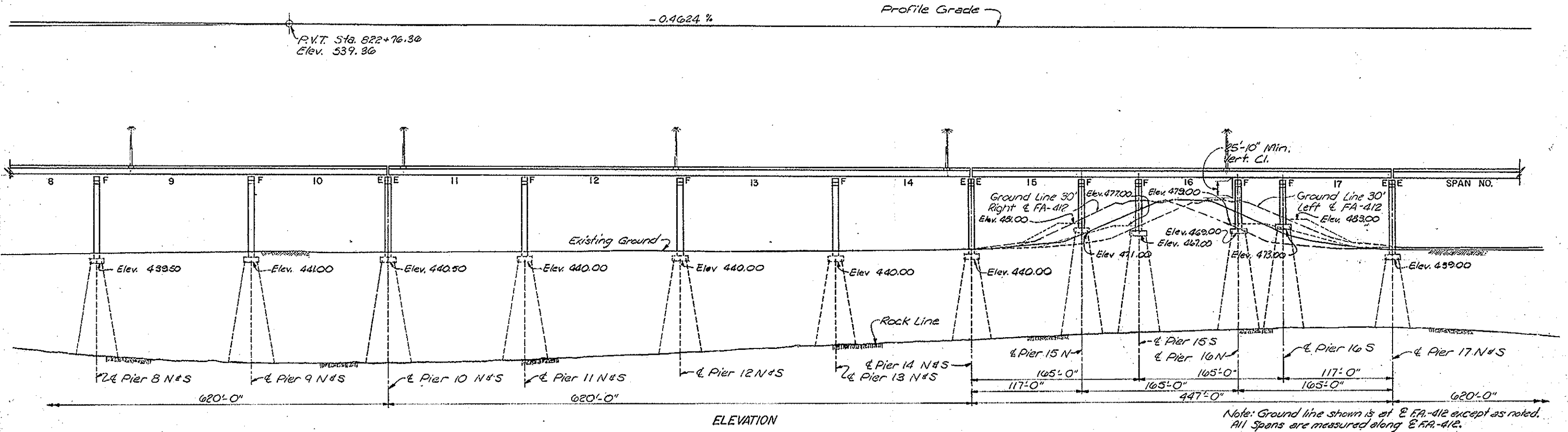
PROFILE GRADE ILL.-351

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
GENERAL PLAN & ELEVATION
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+18.00 (FA-412) LASALLE CO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	9
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



Note: N and S indicate Northbound and Southbound roadways
E and F indicate Expansion and Fixed Piers.
• Indicates 8' x 36' Drainage Scuppers.
• Indicates 6" Tubular Floor Drains.
* Indicates Light Standard.

M. Schaefer
DESIGNED

M. Bello
CHECKED

P. Gallardo
DRAWN

T. Ritcheimer
CHECKED

Sta. 9+00 Elev. N. Rail 501.15 Elev. S. Rail 501.14

Sta. 10+00 Elev. N. Rail 500.84 Elev. S. Rail 500.89

Sta. 11+00 Elev. N. Rail 500.75 Elev. S. Rail 500.75

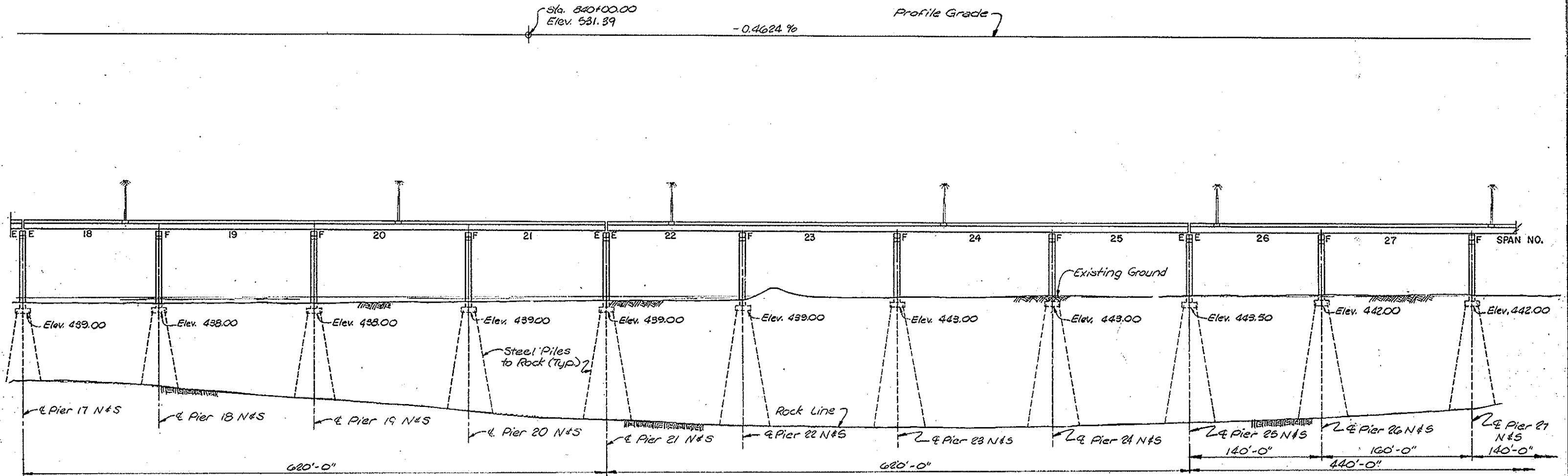
PROFILE GRADE - I.C.G. RAILROAD

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
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ENGINEERS' ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

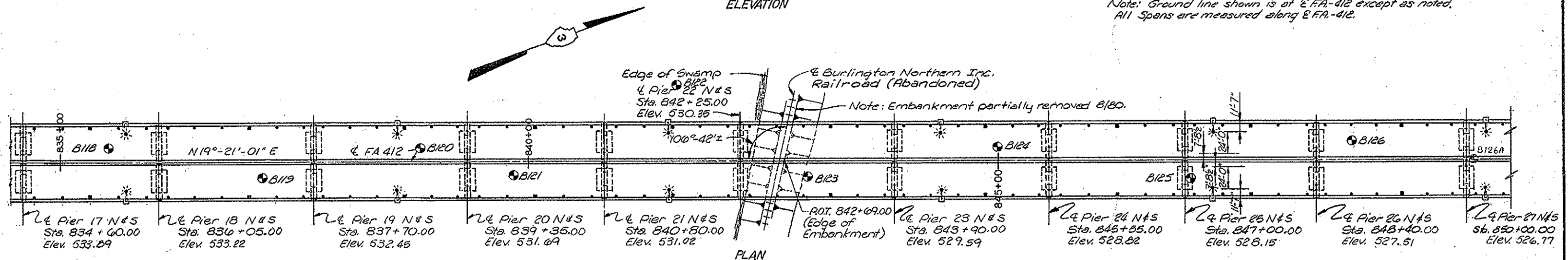
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
GENERAL PLAN & ELEVATION
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-4B	LASALLE	245	10
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



ELEVATION

Note: Ground line shown is at E.F.A.-412 except as noted.
All Spans are measured along E.F.A.-412.



PLAN

Note: N and S indicate Northbound and Southbound roadways.
E and F indicate Expansion and Fixed Piers.
• Indicates 8" x 36" Drainage Scupper.
• Indicates 6" Ø Tubular Floor Drain.
*⊙ Indicates Light Standard

BENCH MARK

B.M. # 21A 100p spike in top of 7" Elm stump
190'± left of E Sta. 843+19 F.A.-412, Elev. 460.21

DESIGNED	M. Schaefer
CHECKED	M. Bello
DRAWN	P. Galardo
CHECKED	T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

GENERAL PLAN, & ELEVATION

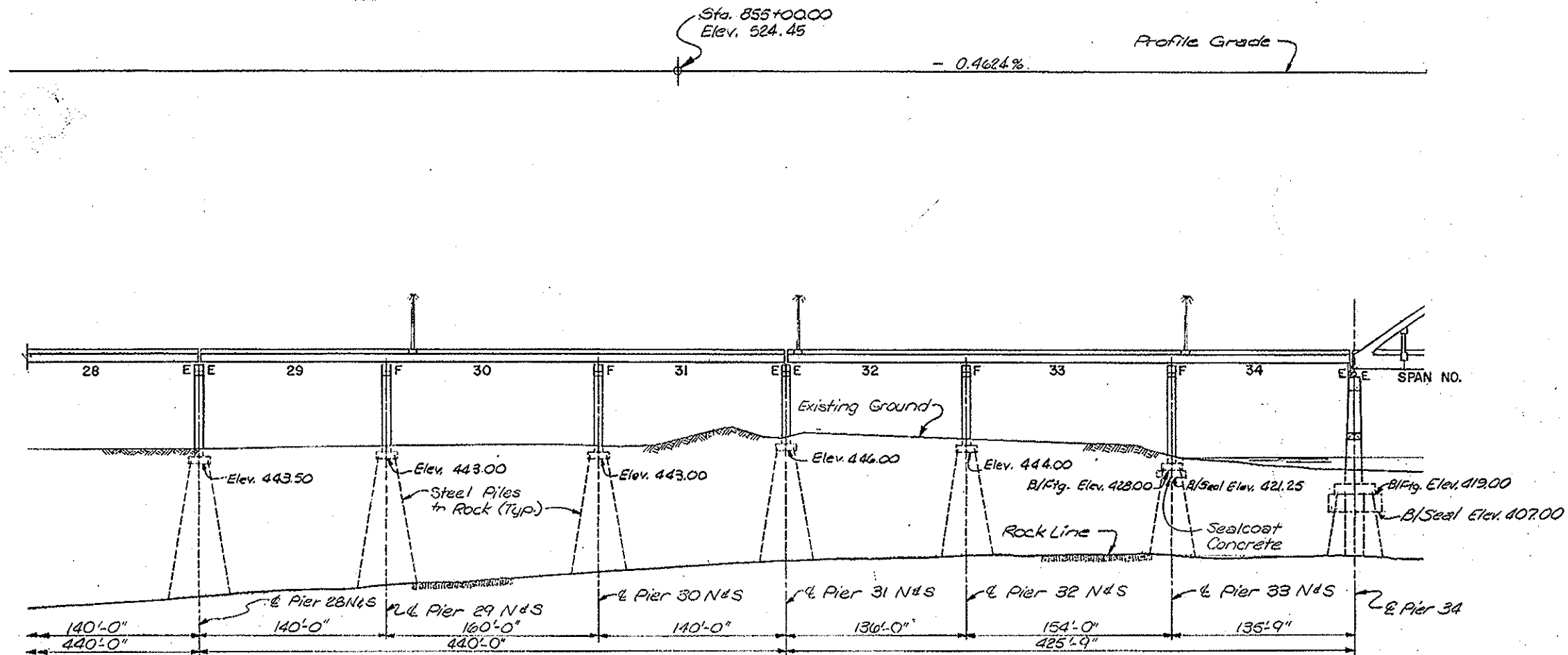
FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

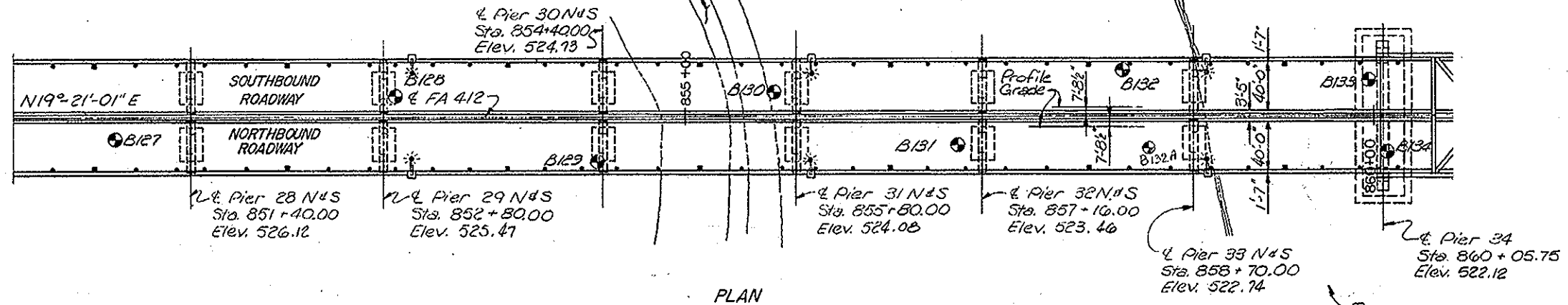
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	11
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



ELEVATION

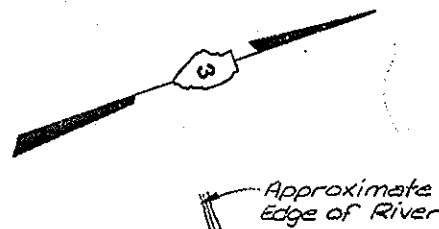
Note: Ground line shown is at & FA-412 except as noted. All Spans are measured along & FA-412.

Top of Tarsalic Levee
Elev. 465.0



PLAN

Note: N and S indicate Northbound and Southbound roadways.
& and F indicate Expansion and Fixed Piers.
• Indicates 8" x 36" Drainage Scupper.
• Indicates 6" Ø Tubular Floor Drain.
*⊙ Indicates Light Standard



Approximate Edge of River

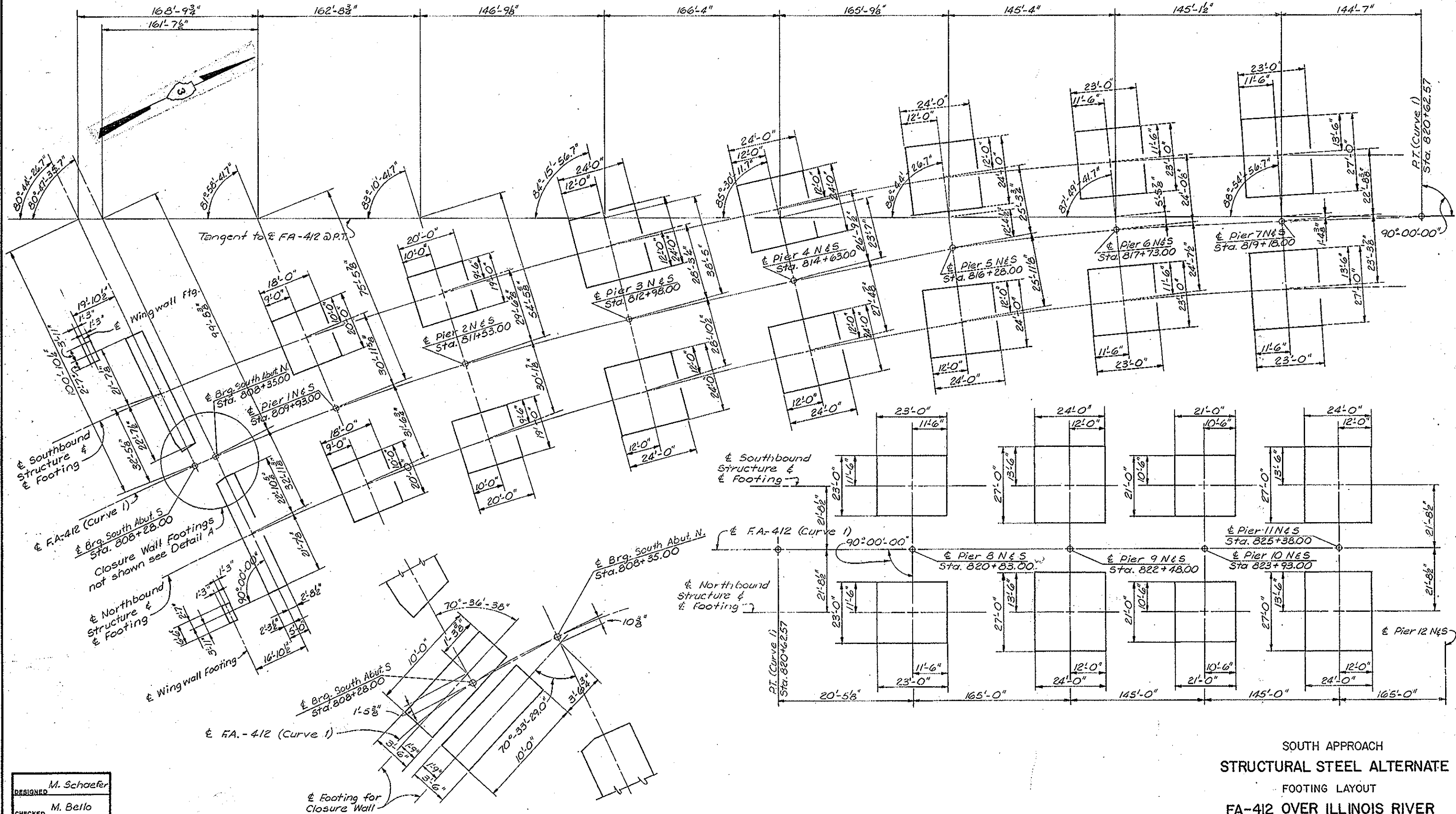
Flow

DESIGNED	M. Schaefer
CHECKED	M. Bello
DRAWN	P. Gallardo
CHECKED	T. Ritcheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
GENERAL PLAN & ELEVATION
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN L. S. Maus
CHECKED G. Roufa

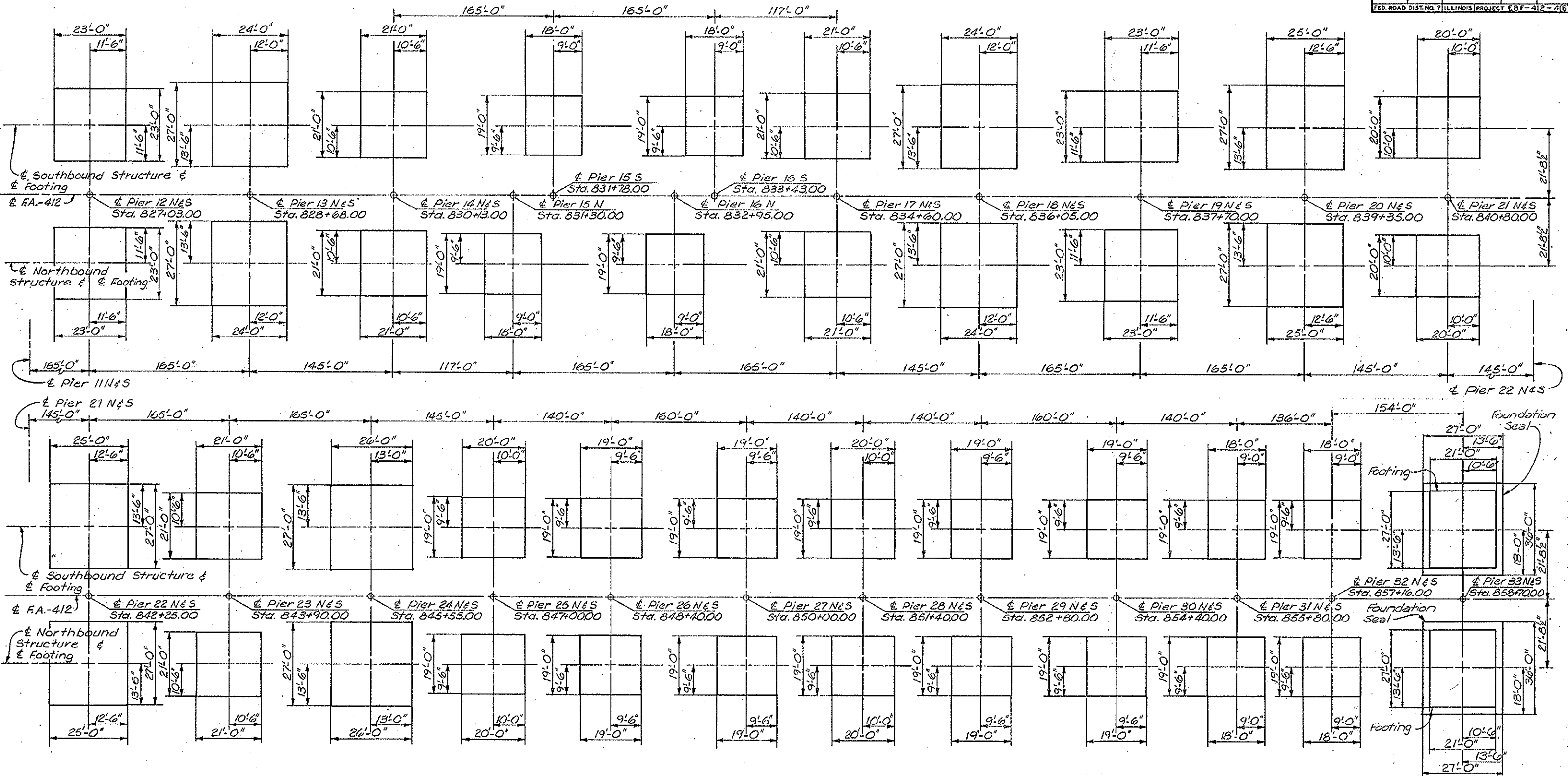
DETAIL A

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

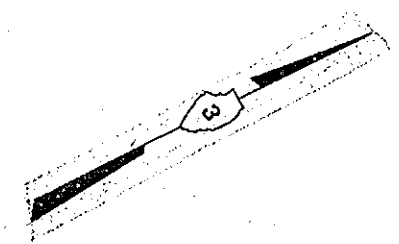
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FOOTING LAYOUT
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

SHEET NO. 6 OF 163



DESIGNED *M. Schaefer*
 CHECKED *M. Bello*
 DRAWN *L. S. Maus*
 CHECKED *G. J. Roufa*



SOUTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 FOOTING LAYOUT
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE, CO.

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: THE 1983 EDITION OF THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION," ADDENDUMS AND THE SPECIAL PROVISIONS SHALL GOVERN.

DESIGN SPECIFICATIONS: IN ACCORDANCE WITH AASHTO 1977 EDITION AND 1978, 1979, 1980 AND 1981 INTERIM SPECIFICATIONS.

SEE PROPOSAL FOR BORING DATA.

CALCULATED WEIGHT OF STRUCTURAL STEEL:

10,514,580 Lbs. M183
283,220 Lbs. M222
4,087,390 Lbs. M223 (GRADE 50)

BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 7/8" DIA., OPEN HOLES 15/16" DIA. UNLESS OTHERWISE NOTED.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING CROSS FRAMES OVER SUPPORTS.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE TENSION FLANGES, WEBS AND ALL SPLICE MATERIAL OF THE STEEL GIRDERS.

THE ZINC-SILICATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL EXCEPT AS OTHERWISE NOTED.

REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 OR M 53, GRADE 60.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OF GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

CAST STEEL SHALL BE CLASS 70. STRUCTURAL STEEL WELDMENTS OF EQUAL SECTIONS AND MEETING AASHTO M183 MAY BE SUBSTITUTED FOR CASTINGS AT THE OPTION OF THE CONTRACTOR, SUBJECT TO APPROVAL BY THE ENGINEER PRIOR TO FABRICATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR THIS SUBSTITUTION.

THE BACK FACE OF ABUTMENT SHALL BE WATERPROOFED ACCORDING TO ARTICLE 503.11 OF THE STANDARD SPECIFICATIONS.

ALL PILES SHALL HAVE CAST STEEL METAL SHOES "HARD-BITE" HP77600 AS MANUFACTURED BY ASSOCIATED PILE AND FITTING CORP., OR AN APPROVED EQUAL. METAL SHOES SHALL BE ATTACHED TO THE PILE AS RECOMMENDED BY THE MANUFACTURER.

THE CONTRACTOR SHALL DRIVE ONE HP10 x 42 TEST PILE AND TWENTY-FOUR HP14 x 89 TEST PILES IN PERMANENT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

A SUFFIX OF "N" OR "S" INDICATES NORTHBOUND OR SOUTHBOUND ROADWAY.

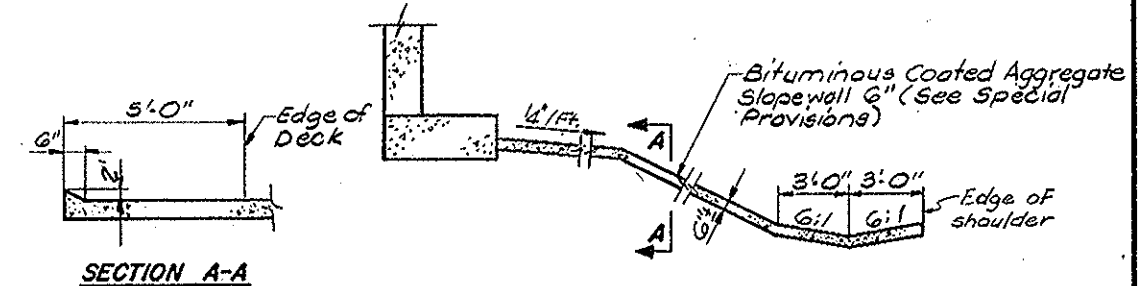
SEALCOATS FOR COFFERDAMS AT PIER 33 (N&S) ARE DESIGNED FOR HIGH WATER ELEVATION 451.00.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	14
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
STRUCTURE EXCAVATION	CU. YD.	---	3960	3960
COFFERDAM EXCAVATION	CU. YD.	---	9658	9658
CLASS X CONCRETE	CU. YD.	13,186.2	24,685.7	37,871.9
SEAL COAT CONCRETE	CU. YD.	---	486.0	486.0
REINFORCEMENT BARS	LBS.	---	3,164,570	3,164,570
REINFORCEMENT BARS (EPOXY COATED)	LBS.	3,750,280	550	3,750,830
STEEL PILES HP 10 X 42	LN. FT.	---	1419	1419
TEST PILES, STEEL HP 10 X 42 (INCLUDES METAL SHOE)	EACH	---	1	1
STEEL PILES HP 14 X 89	LN. FT.	---	78,896	78,896
TEST PILES, STEEL HP 14 X 89 (INCLUDES METAL SHOE)	EACH	---	24	24
METAL SHOES	EACH	---	977	977
BITUMINOUS COATED AGGREGATE SLOPEWALL 6"	SQ. YD.	---	---	1163
COFFERDAM (PIER 3H)	EACH	---	1	1
COFFERDAM (PIER 3S)	EACH	---	1	1
COFFERDAM (PIER 4H)	EACH	---	1	1
COFFERDAM (PIER 4S)	EACH	---	1	1
COFFERDAM (PIER 5H)	EACH	---	1	1
COFFERDAM (PIER 5S)	EACH	---	1	1
COFFERDAM (PIER 6H)	EACH	---	1	1
COFFERDAM (PIER 6S)	EACH	---	1	1
COFFERDAM (PIER 7H)	EACH	---	1	1
COFFERDAM (PIER 7S)	EACH	---	1	1
COFFERDAM (PIER 8H)	EACH	---	1	1
COFFERDAM (PIER 8S)	EACH	---	1	1
COFFERDAM (PIER 9H)	EACH	---	1	1
COFFERDAM (PIER 9S)	EACH	---	1	1
COFFERDAM (PIER 10H)	EACH	---	1	1
COFFERDAM (PIER 10S)	EACH	---	1	1
COFFERDAM (PIER 11H)	EACH	---	1	1
COFFERDAM (PIER 11S)	EACH	---	1	1
COFFERDAM (PIER 12H)	EACH	---	1	1
COFFERDAM (PIER 12S)	EACH	---	1	1
COFFERDAM (PIER 13H)	EACH	---	1	1
COFFERDAM (PIER 13S)	EACH	---	1	1
COFFERDAM (PIER 14H)	EACH	---	1	1
COFFERDAM (PIER 14S)	EACH	---	1	1
COFFERDAM (PIER 17H)	EACH	---	1	1
COFFERDAM (PIER 17S)	EACH	---	1	1
COFFERDAM (PIER 18H)	EACH	---	1	1
COFFERDAM (PIER 18S)	EACH	---	1	1
COFFERDAM (PIER 19H)	EACH	---	1	1
COFFERDAM (PIER 19S)	EACH	---	1	1
COFFERDAM (PIER 20H)	EACH	---	1	1
COFFERDAM (PIER 20S)	EACH	---	1	1
COFFERDAM (PIER 21H)	EACH	---	1	1
COFFERDAM (PIER 21S)	EACH	---	1	1
COFFERDAM (PIER 22H)	EACH	---	1	1
COFFERDAM (PIER 22S)	EACH	---	1	1
COFFERDAM (PIER 31H)	EACH	---	1	1
COFFERDAM (PIER 31S)	EACH	---	1	1
COFFERDAM (PIER 32H)	EACH	---	1	1
COFFERDAM (PIER 32S)	EACH	---	1	1
COFFERDAM (PIER 33H)	EACH	---	1	1
COFFERDAM (PIER 33S)	EACH	---	1	1
NEOPRENE EXPANSION JOINT (2'-1/2")	LN. FT.	84	---	84
NEOPRENE EXPANSION JOINT (6'-1/2")	LN. FT.	336	---	336
NEOPRENE EXPANSION JOINT (9")	LN. FT.	420	---	420
FURNISHING AND ERECTING STRUCTURAL STEEL	LUMP SUM	0.78	---	0.78
STUD SHEAR CONNECTORS	EACH	83,025	---	83,025
FLOOR DRAINS	EACH	296	---	296
DRAINAGE SCUPPERS	EACH	68	---	68
PROTECTIVE COAT	SQ. YD.	54,426	---	54,426
NAME PLATE	EACH	1	---	1



STATION 863+16.00
BUILT 198 BY
STATE OF ILLINOIS
FA. RT. 412 SEC. 50-4B
F.A. PROJ. BRP-412-4 (45)
LOADING HS20
STR. NO.

LETTERING FOR NAME PLATE
(See Std. 2118)
Structure Number to be
supplied by District.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

GENERAL NOTES AND QUANTITIES

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

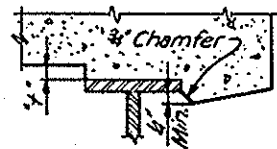
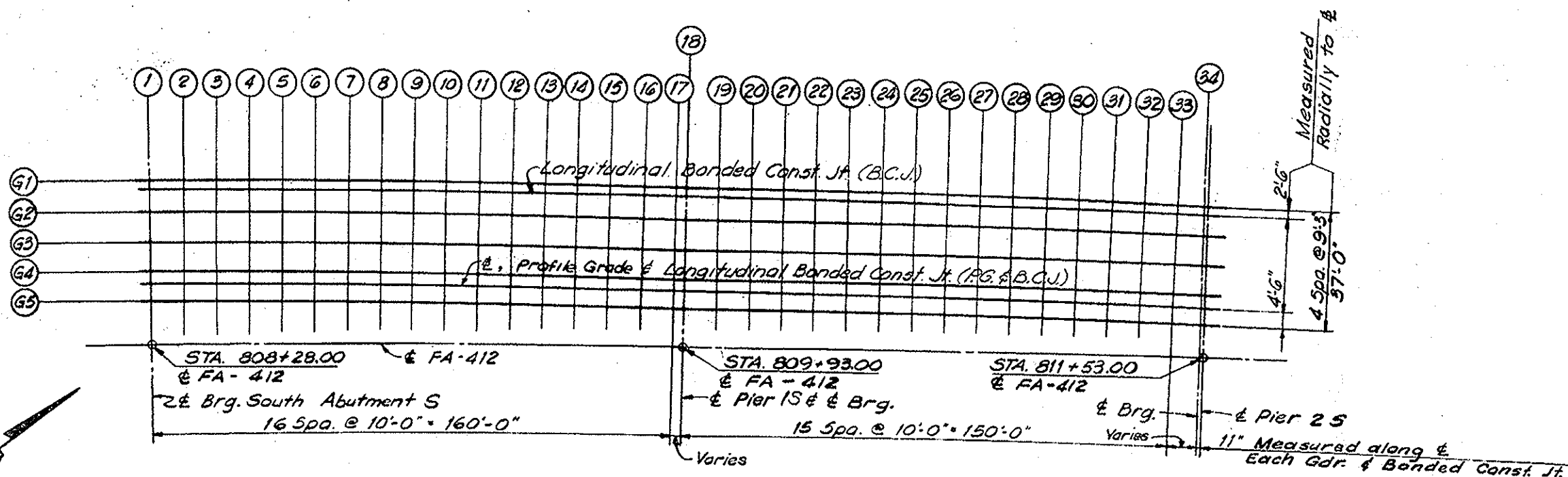
STA. 863+16.00 (FA-412) LASALLE CO.

M. Schaefer
DESIGNED
M. Bello
CHECKED
G. Stegman
DRAWN
CHECKED B. Beck

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

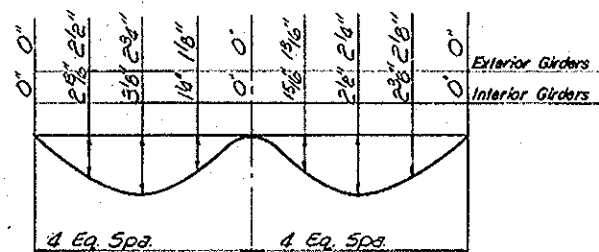
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 8 OF 163



FILLET HEIGHTS

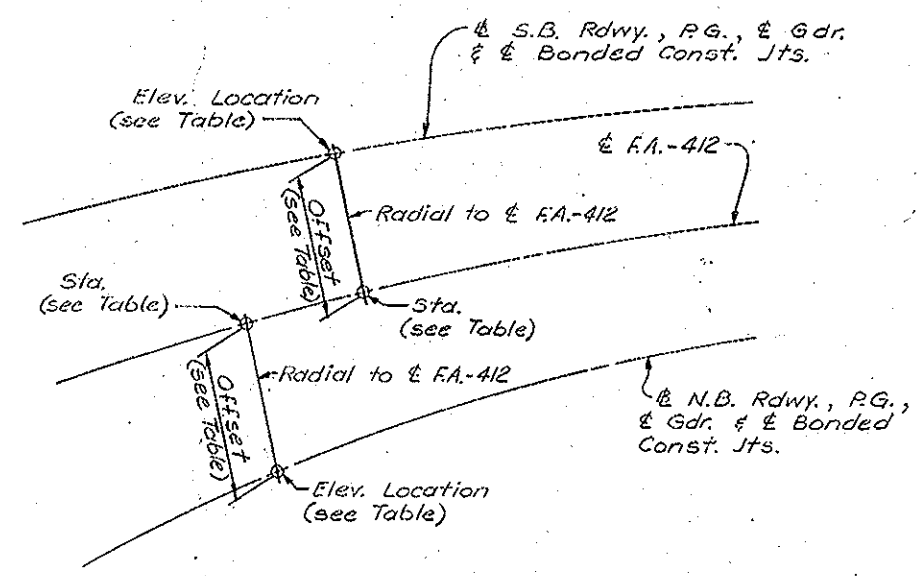
To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus Slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections"

LINE	LOCATION	STATION	OFFSET	PLAN	
				THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1	G1	808+28.000	50.927	564.276	564.276
	BCJ	808+28.000	48.427	564.201	564.201
	G2	808+28.000	41.676	563.997	563.997
	G3	808+28.000	32.426	563.717	563.717
	G4	808+28.000	23.176	563.438	563.438
2	PG & BCJ	808+28.000	18.426	563.295	563.295
	G5	808+28.000	13.926	563.159	563.159
	G1	808+37.933	50.040	564.050	564.116
	BCJ	808+37.937	48.337	563.974	564.043
	G2	808+37.945	41.587	563.770	563.843
3	G3	808+37.957	32.337	563.490	563.565
	G4	808+37.967	23.087	563.211	563.286
	PG & BCJ	808+37.976	18.338	563.067	563.138
	G5	808+37.981	13.838	562.931	562.998
	4	G1	808+47.867	50.752	563.823
BCJ		808+47.873	48.252	563.748	563.874
G2		808+47.891	41.502	563.543	563.680
G3		808+47.915	32.251	563.263	563.400
G4		808+47.939	23.001	562.983	563.120
5	PG & BCJ	808+47.951	18.250	562.840	562.969
	G5	808+47.963	13.750	562.704	562.825
	G1	808+57.801	50.665	563.597	563.767
	BCJ	808+57.810	48.165	563.521	563.696
	G2	808+57.837	41.414	563.316	563.506
6	G3	808+57.873	32.164	563.036	563.226
	G4	808+57.909	22.913	562.756	562.946
	PG & BCJ	808+57.927	18.163	562.612	562.792
	G5	808+57.945	13.662	562.476	562.646
	7	G1	808+67.735	50.578	563.370
BCJ		808+67.747	48.077	563.294	563.505
G2		808+67.782	41.327	563.090	563.320
G3		808+67.830	32.076	562.809	563.039
G4		808+67.878	22.825	562.529	562.759
8	PG & BCJ	808+67.903	18.075	562.385	562.602
	G5	808+67.927	13.575	562.248	562.452
	G1	808+77.668	50.490	563.144	563.377
	BCJ	808+77.685	47.990	563.068	563.309
	G2	808+77.728	41.239	562.863	563.125
9	G3	808+77.788	31.989	562.582	562.844
	G4	808+77.848	22.738	562.302	562.563
	PG & BCJ	808+77.877	17.987	562.157	562.404
	G5	808+77.909	13.487	562.021	562.254

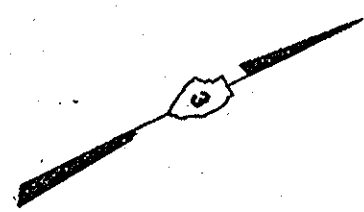
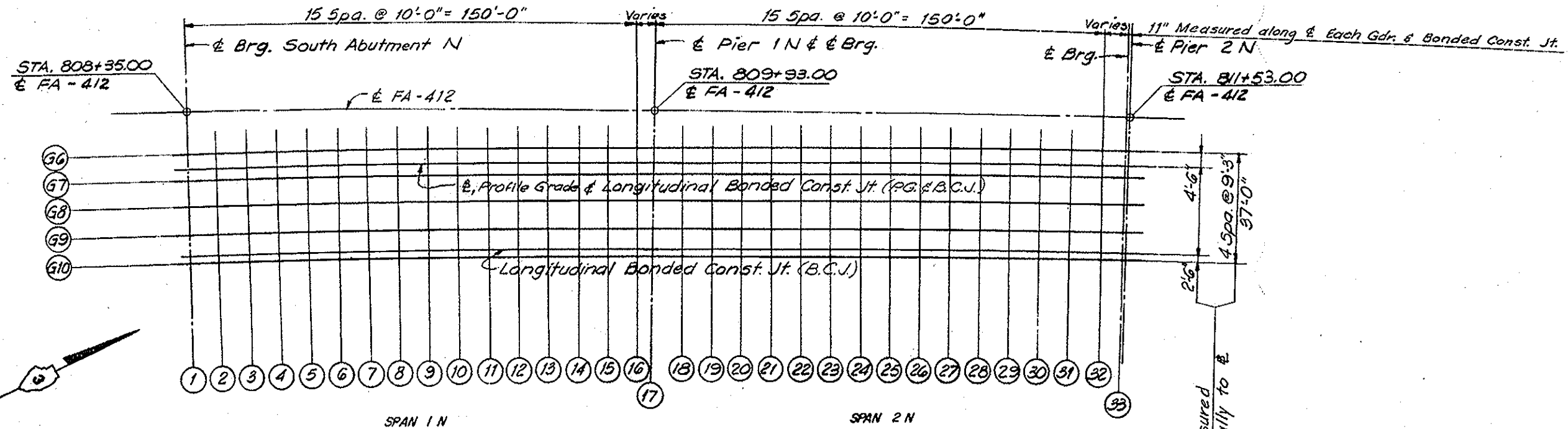


TOP OF SLAB ELEVATION DIAGRAM-SPANS 1 THRU 8

T. Ritzheimer
L. Glaser
R. Luer
J. Corley
T. Ritzheimer

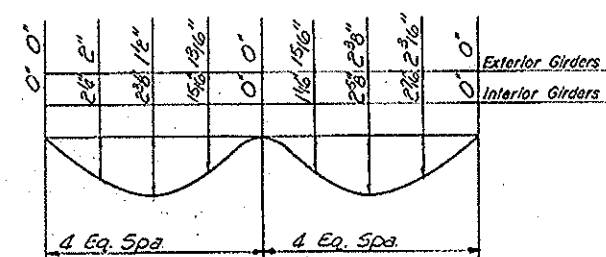
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SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 1 & 2 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "t" above top flange of girder.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

PLAN

For top of slab elevation diagram, see sht. 9.

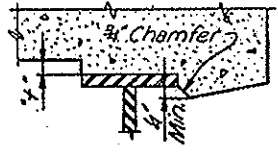
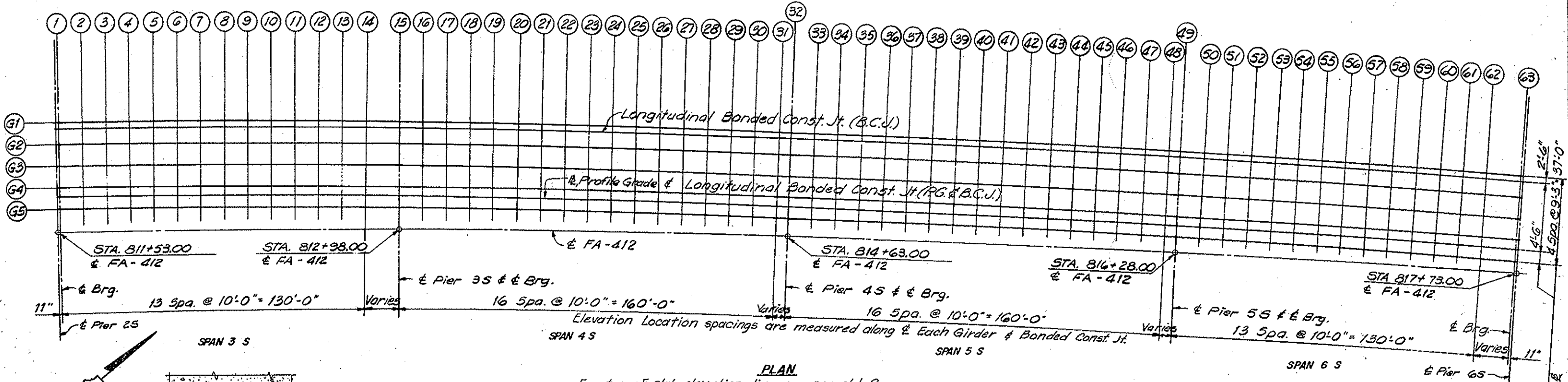
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	
1	G6	808+35.000	14.450	563.267	563.267	7	G6	808+95.109	13.924	561.899	562.092	
	PG & BCJ	808+35.000	16.931	563.135	563.135		PG & BCJ	808+95.145	18.424	561.764	561.968	
	G7	808+35.000	23.701	562.993	562.993		G7	808+95.182	23.174	561.621	561.837	
	G8	808+35.000	32.931	562.718	562.718		G8	808+95.256	32.424	561.344	561.560	
	G9	808+35.000	42.201	562.442	562.442		G9	808+95.329	41.673	561.067	561.283	
	BCJ	808+35.000	48.952	562.241	562.241		BCJ	808+95.382	48.423	560.855	561.063	
	G10	808+35.000	51.452	562.167	562.167	G10	808+95.402	50.923	560.790	560.982		
2	G6	808+45.019	14.363	563.041	563.098	8	G6	809+05.127	13.837	561.670	561.860	
	PG & BCJ	808+45.024	18.863	562.906	562.966		PG & BCJ	809+05.169	18.336	561.535	561.736	
	G7	808+45.031	23.613	562.765	562.827		G7	809+05.212	23.086	561.393	561.605	
	G8	808+45.043	32.063	562.409	562.551		G8	809+05.298	32.336	561.115	561.328	
	G9	808+45.055	42.113	562.213	562.275		G9	809+05.383	41.585	560.837	561.050	
	BCJ	808+45.064	48.364	562.012	562.070		BCJ	809+05.446	48.335	560.655	560.891	
	G10	808+45.067	51.364	561.957	561.994	G10	809+05.469	50.835	560.560	560.750		
3	G6	808+55.037	14.275	562.812	562.714	9	G6	809+15.145	13.749	561.442	561.616	
	PG & BCJ	808+55.049	18.775	562.678	562.706		PG & BCJ	809+15.192	18.249	561.307	561.490	
	G7	808+55.061	23.525	562.536	562.649		G7	809+15.242	22.999	561.164	561.379	
	G8	808+55.086	32.775	562.260	562.373		G8	809+15.340	32.248	560.886	561.081	
	G9	808+55.110	42.025	561.984	562.096		G9	809+15.438	41.497	560.608	560.803	
	BCJ	808+55.128	48.776	561.782	561.987		BCJ	809+15.509	48.247	560.406	560.585	
	G10	808+55.135	51.276	561.708	561.809	G10	809+15.536	50.747	560.330	560.504		
4	G6	808+65.055	14.188	562.584	562.724	10	G6	809+25.162	13.661	561.213	561.364	
	PG & BCJ	808+65.073	18.688	562.449	562.597		PG & BCJ	809+25.216	18.161	561.078	561.238	
	G7	808+65.092	23.438	562.307	562.464		G7	809+25.272	22.910	560.935	561.104	
	G8	808+65.128	32.688	562.031	562.188		G8	809+25.382	32.160	560.657	560.826	
	G9	808+65.165	41.938	561.754	561.911		G9	809+25.492	41.409	560.379	560.548	
	BCJ	808+65.192	48.688	561.553	561.698		BCJ	809+25.572	48.159	560.176	560.332	
	G10	808+65.202	51.188	561.478	561.618	G10	809+25.602	50.659	560.101	560.252		
5	G6	808+75.073	14.100	562.255	562.524	11	G6	809+35.180	13.573	560.985	561.107	
	PG & BCJ	808+75.097	18.600	562.221	562.399		PG & BCJ	809+35.239	18.073	560.850	560.978	
	G7	808+75.122	23.350	562.079	562.267		G7	809+35.302	22.822	560.707	560.842	
	G8	808+75.171	32.600	561.802	561.990		G8	809+35.424	32.072	560.428	560.563	
	G9	808+75.220	41.850	561.525	561.713		G9	809+35.546	41.321	560.150	560.285	
	BCJ	808+75.255	48.600	561.323	561.497		BCJ	809+35.638	48.071	559.947	560.073	
	G10	808+75.269	51.100	561.249	561.417	G10	809+35.668	50.570	559.871	559.993		
6	G6	808+85.091	14.012	562.127	562.315							
	PG & BCJ	808+85.121	18.512	561.992	562.190							
	G7	808+85.152	23.262	561.850	562.058							
	G8	808+85.213	32.512	561.573	561.781							
	G9	808+85.274	41.762	561.296	561.504							
	BCJ	808+85.319	48.511	561.094	561.287							
	G10	808+85.336	51.011	561.019	561.207							

T. Ritzheimer
DESIGNED
L. Glaiser
CHECKED
R. LUER
DRAWN
J. CORLEY
CHECKED
T. Ritzheimer

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SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

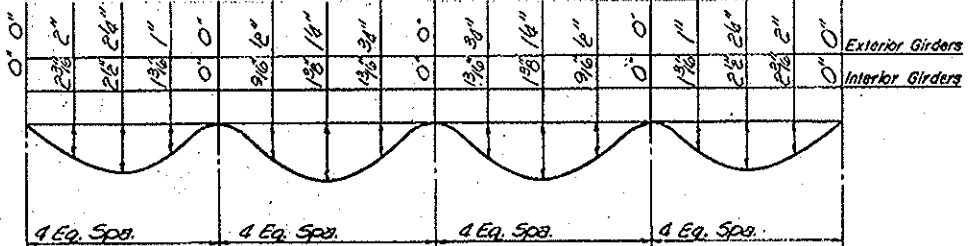
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 1 & 2 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

PLAN
For top of slab elevation diagram, see sheet 9.

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	
1 C.L. BRG. PIER 25	G1	811+53.911	48.030	556.846	556.846	
	DCJ	811+53.911	45.549	556.770	556.770	
	G2	811+53.912	38.799	556.866	556.566	
	G3	811+53.913	29.549	556.287	556.287	
	G4	811+53.914	20.298	556.008	556.008	
2	PG & BCJ	811+53.915	15.548	555.864	555.864	
	G5	811+53.915	11.048	555.728	555.728	
	3	G1	811+63.040	47.961	556.619	556.675
		DCJ	811+63.352	45.461	556.543	556.601
		G2	811+63.361	38.711	556.340	556.401
G3		811+63.374	29.460	556.060	556.122	
G4		811+63.387	20.210	553.780	555.842	
4	PG & BCJ	811+63.394	15.460	555.636	555.695	
	G5	811+63.391	10.960	555.500	555.556	
	5	G1	811+73.785	47.873	556.393	556.495
		DCJ	811+73.792	45.373	556.317	556.424
		G2	811+73.810	38.623	556.113	556.230
G3		811+73.836	29.372	555.833	555.951	
G4		811+73.861	20.121	555.533	555.671	
6	PG & DCJ	811+73.874	15.371	555.407	555.519	
	G5	811+73.886	10.871	555.273	555.375	
	7	G1	811+83.723	47.785	556.166	556.309
		DCJ	811+83.733	45.285	556.090	556.238
		G2	811+83.760	38.534	555.886	556.046
G3		811+83.797	29.283	555.606	555.766	
G4		811+83.834	20.033	555.325	555.485	
8	PG & BCJ	811+83.853	15.203	555.181	555.322	
	G5	811+83.871	10.782	555.045	555.188	
	9	G1	811+93.660	47.697	555.939	556.112
		DCJ	811+93.674	45.196	555.864	556.042
		G2	811+93.709	38.446	555.659	555.852
G3		811+93.758	29.195	555.378	555.571	
G4		811+93.808	19.944	555.098	555.291	
10	PG & DCJ	811+93.833	15.194	554.954	555.137	
	G5	811+93.857	10.693	554.817	554.990	

DESIGNED
T. Ritzheimer

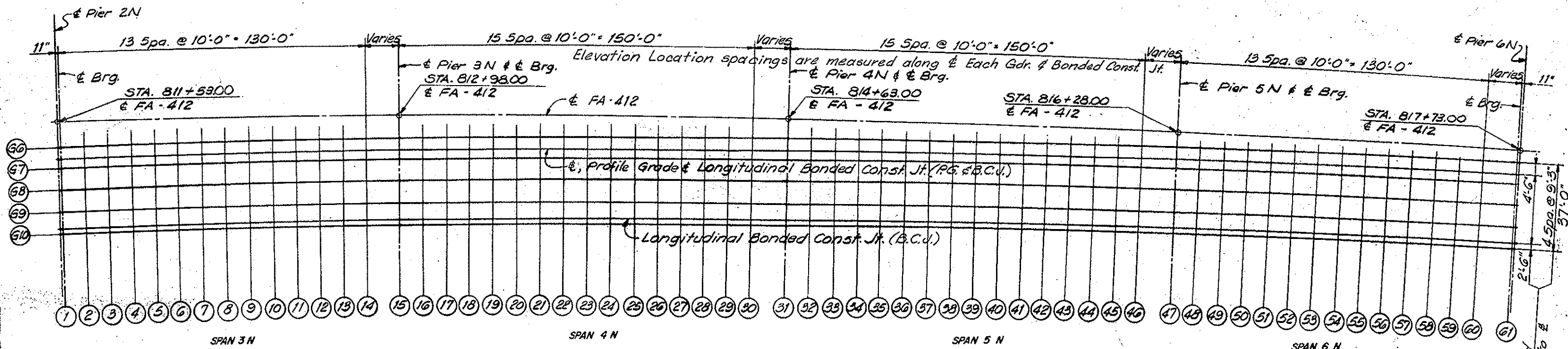
CHECKED
L. Glaser

DRAWN
J. Corley
R. Luer

CHECKED
T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 3, 4, 5 & 6 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B, PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

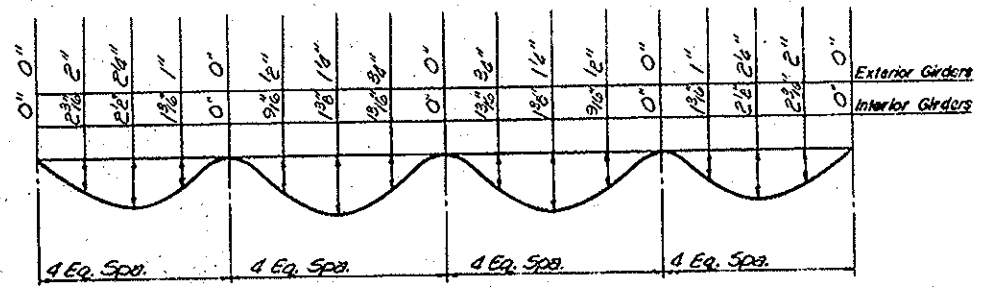


PLAN
For top of slab elevation diagram, see sht. 9.

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	
1 C.L. BRG. PIER 2N	G6	811+53.913	11.647	555.998	555.998	
	PG & BCJ	811+53.919	16.147	555.864	555.864	
	G7	811+53.919	20.899	555.722	555.722	
	G8	811+53.920	30.148	555.447	555.447	
	G9	811+53.921	39.398	555.171	555.171	
	BCJ	811+53.922	46.148	554.970	554.970	
	G10	811+53.923	48.648	554.896	554.896	
	2	G6	811+63.933	11.559	555.770	555.826
		PG & BCJ	811+63.939	16.059	555.635	555.694
		G7	811+63.946	20.809	555.494	555.556
G8		811+63.959	30.059	555.218	555.280	
G9		811+63.973	39.309	554.942	555.004	
BCJ		811+63.982	46.059	554.740	554.798	
G10		811+63.986	48.560	554.666	554.722	
3		G6	811+73.943	11.470	555.542	555.644
		PG & BCJ	811+73.960	15.970	555.407	555.517
		G7	811+73.973	20.720	555.265	555.383
	G8	811+73.992	29.970	554.989	555.107	
	G9	811+74.024	39.221	554.713	554.831	
	BCJ	811+74.043	45.971	554.511	554.618	
	G10	811+74.050	48.471	554.437	554.539	
	4	G6	811+83.962	11.382	555.313	555.456
		PG & BCJ	811+83.900	15.882	555.179	555.330
		G7	811+84.000	20.632	555.037	555.197
G8		811+84.037	29.882	554.760	554.920	
G9		811+84.075	39.132	554.484	554.644	
BCJ		811+84.103	45.882	554.282	554.430	
G10		811+84.113	48.382	554.207	554.350	
5		G6	811+93.977	11.293	555.085	555.298
		PG & BCJ	811+94.001	15.793	554.950	555.133
		G7	811+94.026	20.543	554.808	555.001
	G8	811+94.076	29.793	554.531	554.724	
	G9	811+94.126	39.043	554.254	554.447	
	BCJ	811+94.163	45.793	554.052	554.230	
	G10	811+94.176	48.293	553.978	554.151	
	6	G6	812+03.991	11.204	554.856	555.048
		PG & BCJ	812+04.021	15.704	554.722	554.926
		G7	812+04.053	20.454	554.580	554.795
G8		812+04.115	29.704	554.302	554.518	
G9		812+04.177	38.954	554.025	554.241	
BCJ		812+04.223	45.704	553.823	554.021	
G10		812+04.240	48.204	553.748	553.940	

FILLET HEIGHTS

To determine "f": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

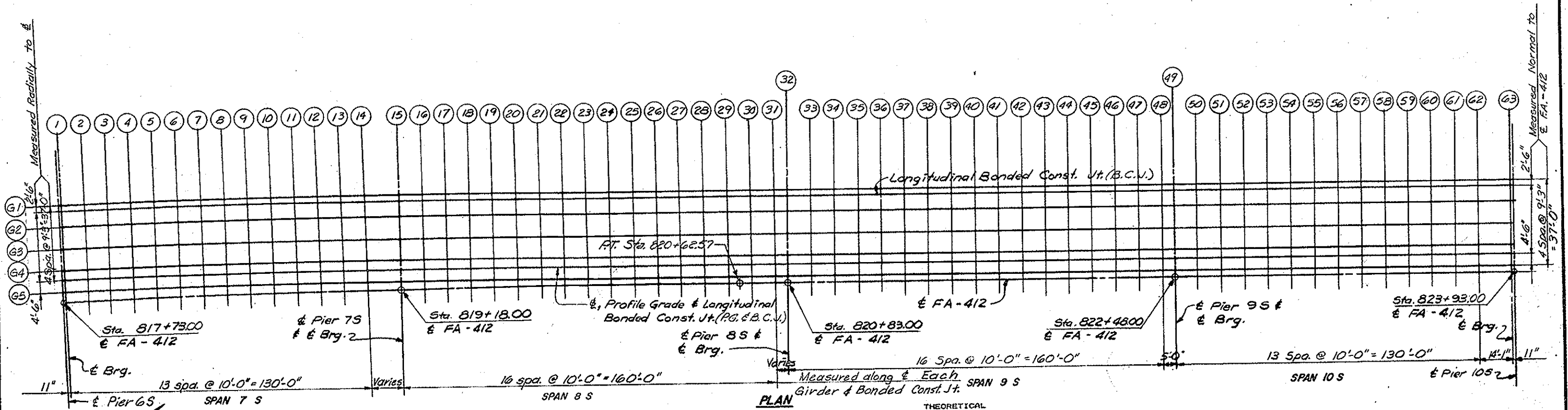
Note: The deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

DESIGNED
T. Ritzheimer
CHECKED
L. Glaser
DRAWN
R. LUBR
J. Corley
CHECKED
T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 3,4,5 & 6 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



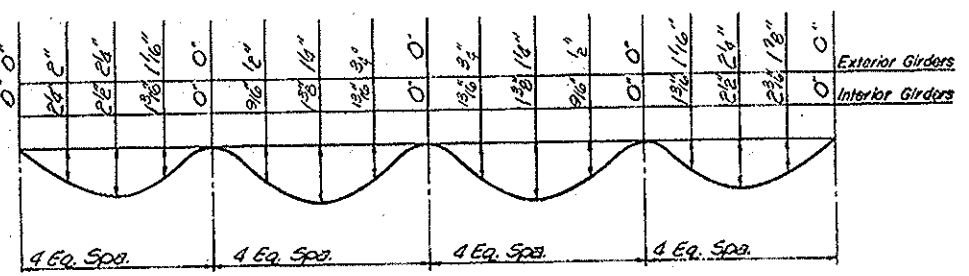
PLAN

For top of slab elevation diagram, see sh. 9.

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 6S	G1	817+73.912	42.504	544.958	544.958
	BCJ	817+73.912	40.003	544.882	544.882
	G2	817+73.913	33.253	544.679	544.679
	G3	817+73.914	24.003	544.400	544.400
	G4	817+73.915	14.752	544.122	544.122
2	PG & BCJ	817+73.915	10.002	543.979	543.979
	G5	817+73.916	5.502	543.843	543.843
	G1	817+83.856	42.414	544.822	544.876
	BCJ	817+83.859	39.914	544.746	544.802
	G2	817+83.869	33.164	544.543	544.604
3	G3	817+83.882	23.913	544.264	544.325
	G4	817+83.895	14.663	543.985	544.046
	PG & BCJ	817+83.902	9.912	543.842	543.899
	G5	817+83.909	5.412	543.706	543.760
	4	G1	817+93.800	42.324	544.688
BCJ		817+93.807	39.824	544.612	544.719
G2		817+93.825	33.074	544.408	544.522
G3		817+93.851	23.823	544.129	544.243
G4		817+93.876	14.573	543.851	543.964
5	PG & BCJ	817+93.889	9.822	543.707	543.816
	G5	817+93.901	5.322	543.572	543.675
	G1	818+03.745	42.235	544.555	544.699
	BCJ	818+03.755	39.735	544.479	544.628
	G2	818+03.782	32.984	544.276	544.437
6	G3	818+03.819	23.734	543.997	544.159
	G4	818+03.856	14.483	543.718	543.879
	PG & BCJ	818+03.876	9.732	543.574	543.726
	G5	818+03.894	5.232	543.439	543.593
	7	G1	818+13.690	42.145	544.425
BCJ		818+13.703	39.645	544.349	544.528
G2		818+13.739	32.894	544.145	544.340
G3		818+13.788	23.644	543.866	544.061
G4		818+13.837	14.393	543.587	543.782
8	PG & BCJ	818+13.863	9.642	543.443	543.627
	G5	818+13.887	5.142	543.308	543.480
	G1	818+23.634	42.056	544.296	544.487
	BCJ	818+23.651	39.555	544.220	544.417
	G2	818+23.695	32.805	544.016	544.230
9	G3	818+23.757	23.554	543.737	543.951
	G4	818+23.818	14.303	543.458	543.672
	PG & BCJ	818+23.850	9.552	543.314	543.516
	G5	818+23.880	5.052	543.178	543.369

FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "t" above top flange of girders.



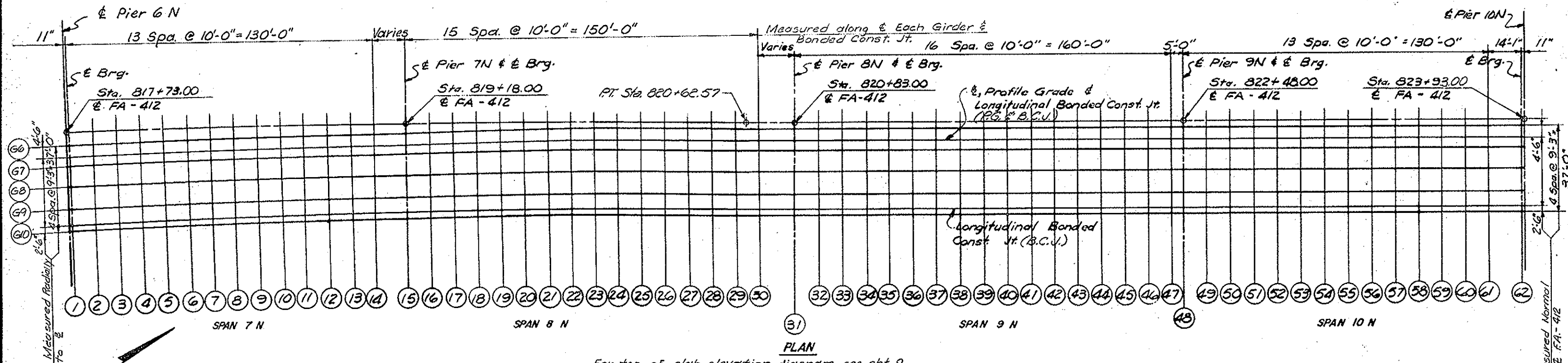
DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
R. Prescher
DRAWN
T. Ritzheimer
CHECKED

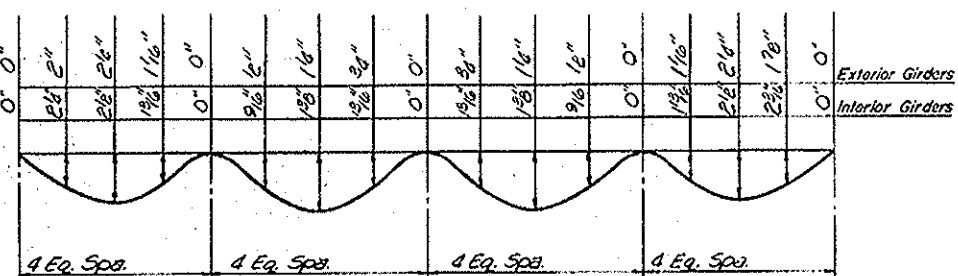
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 7, 8, 9 & 10 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI



FILLET HEIGHTS

To determine "f": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 6N	G6	817+73.917	6.170	544.113	544.113
	PG & DCJ	817+73.916	10.620	543.978	543.978
	G7	817+73.919	15.370	543.836	543.836
	G8	817+73.920	24.621	543.560	543.560
	G9	817+73.921	33.871	543.284	543.284
	BCJ	817+73.921	40.622	543.082	543.082
G10	817+73.922	43.122	543.007	543.007	
2	G6	817+83.925	6.030	543.976	544.030
	PG & DCJ	817+83.931	10.530	543.842	543.898
	G7	817+83.938	15.281	543.699	543.760
	G8	817+83.952	24.531	543.423	543.484
	G9	817+83.965	33.781	543.146	543.207
	DCJ	817+83.975	40.531	542.945	543.000
G10	817+83.978	43.031	542.870	542.924	
3	G6	817+93.932	5.940	543.841	543.945
	PG & DCJ	817+93.945	10.440	543.704	543.815
	G7	817+93.938	15.191	543.564	543.678
	G8	817+93.933	24.441	543.288	543.401
	G9	817+94.009	33.691	543.011	543.125
	BCJ	817+94.027	40.441	542.809	542.916
G10	817+94.034	42.941	542.734	542.838	
4	G6	818+03.940	5.050	543.708	543.832
	PG & DCJ	818+03.958	10.350	543.573	543.725
	G7	818+03.977	15.100	543.431	543.592
	G8	818+04.015	24.350	543.154	543.315
	G9	818+04.053	33.600	542.877	543.038
	BCJ	818+04.030	40.350	542.675	542.824
G10	818+04.090	42.050	542.600	542.744	
5	G6	818+13.947	5.760	543.577	543.750
	PG & DCJ	818+13.971	10.260	543.442	543.626
	G7	818+13.997	15.010	543.300	543.494
	G8	818+14.046	24.260	543.022	543.217
	G9	818+14.096	33.510	542.746	542.940
	DCJ	818+14.133	40.260	542.543	542.722
G10	818+14.146	42.760	542.469	542.641	
6	G6	818+23.954	5.670	543.447	543.638
	PG & DCJ	818+23.984	10.170	543.312	543.514
	G7	818+24.016	14.920	543.170	543.384
	G8	818+24.078	24.170	542.893	543.106
	G9	818+24.140	33.420	542.615	542.829
	DCJ	818+24.185	40.170	542.413	542.610
G10	818+24.202	42.670	542.338	542.529	

DESIGNED
T. Ritzheimer

CHECKED
L. Glaser

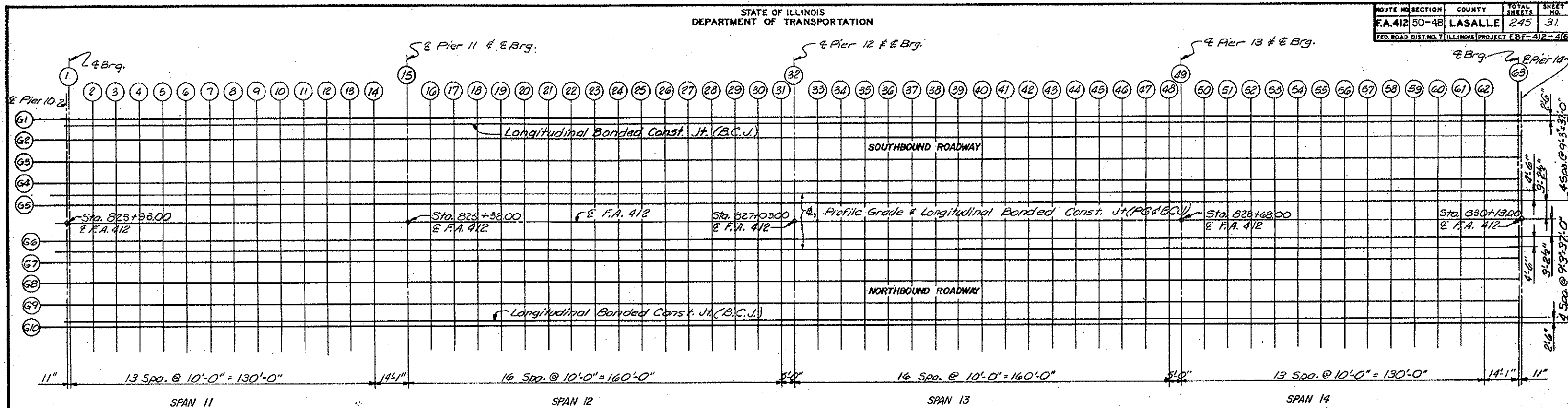
DESIGNED
J. Corley
R. Prescher

CHECKED
T. Ritzheimer

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

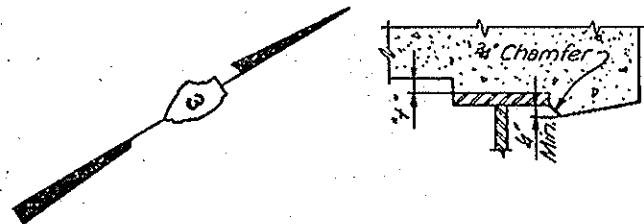
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
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SPANS 7, 8, 9 & 10 NORTHBOUND
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SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



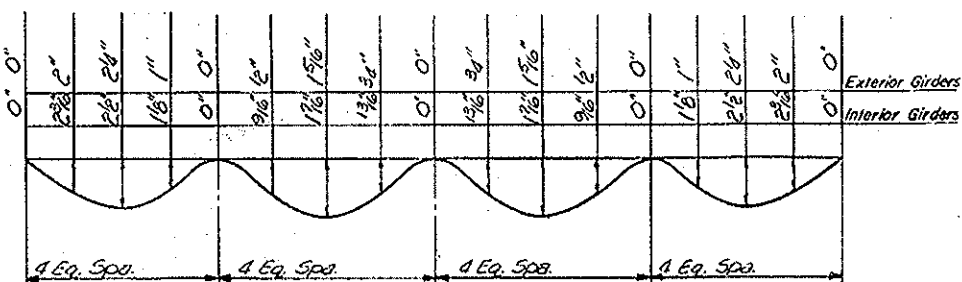
PLAN

Note: Stations and offsets are given along and normal to E.F.A. 412.



FILLET HEIGHTS

To determine 't': After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection, minus slab thickness, equals the fillet heights 't' above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

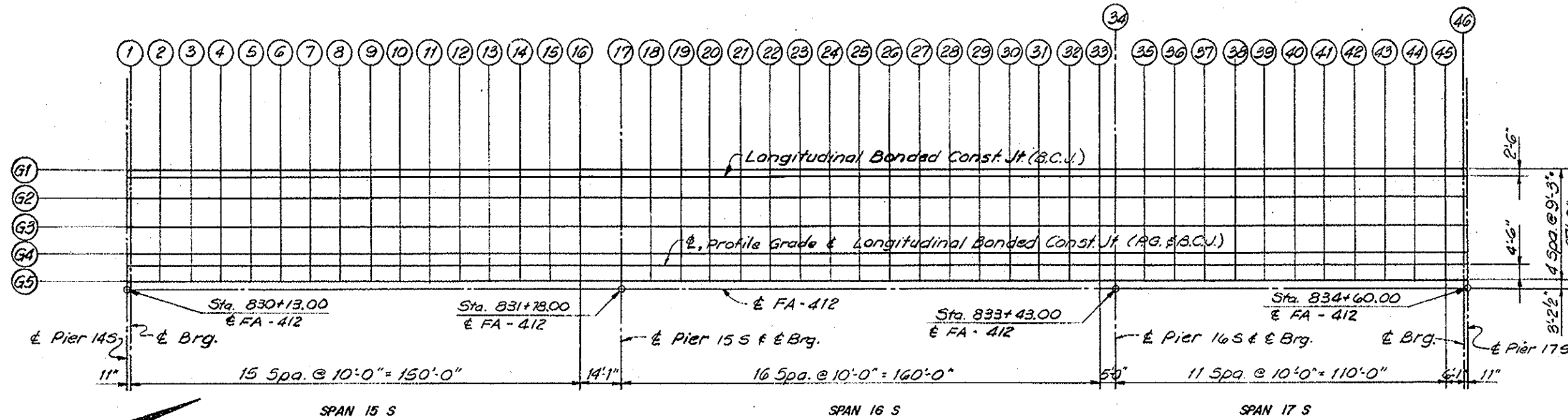
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 10	G1 & G10	823+93.917	40.208	538.167	538.167
	BCJ	823+93.917	37.708	538.217	538.217
	G2 & G9	823+93.917	30.958	538.352	538.352
	G3 & G8	823+93.917	21.708	538.537	538.537
	G4 & G7	823+93.917	12.458	538.722	538.722
2	P0 & BCJ	823+93.917	7.708	538.817	538.817
	G5 & G6	823+93.917	3.208	538.907	538.907
	G1 & G10	824+03.917	40.208	538.121	538.177
	BCJ	824+03.917	37.708	538.171	538.228
	G2 & G9	824+03.917	30.958	538.306	538.369
3	G3 & G8	824+03.917	21.708	538.491	538.554
	G4 & G7	824+03.917	12.458	538.676	538.739
	P0 & BCJ	824+03.917	7.708	538.771	538.830
	G5 & G6	824+03.917	3.208	538.861	538.917
	4	G1 & G10	824+13.917	40.208	538.075
BCJ		824+13.917	37.708	538.125	538.232
G2 & G9		824+13.917	30.958	538.260	538.376
G3 & G8		824+13.917	21.708	538.445	538.561
G4 & G7		824+13.917	12.458	538.630	538.746
5	P0 & BCJ	824+13.917	7.708	538.725	538.834
	G5 & G6	824+13.917	3.208	538.815	538.918
	G1 & G10	824+23.917	40.208	538.029	538.173
	BCJ	824+23.917	37.708	538.079	538.228
	G2 & G9	824+23.917	30.958	538.214	538.375
6	G3 & G8	824+23.917	21.708	538.399	538.560
	G4 & G7	824+23.917	12.458	538.583	538.744
	P0 & BCJ	824+23.917	7.708	538.679	538.832
	G5 & G6	824+23.917	3.208	538.769	538.913
	7	G1 & G10	824+33.917	40.208	537.982
BCJ		824+33.917	37.708	538.032	538.210
G2 & G9		824+33.917	30.958	538.167	538.360
G3 & G8		824+33.917	21.708	538.352	538.545
G4 & G7		824+33.917	12.458	538.537	538.730
8	P0 & BCJ	824+33.917	7.708	538.632	538.815
	G5 & G6	824+33.917	3.208	538.722	538.895
	G1 & G10	824+43.917	40.208	537.936	538.125
	BCJ	824+43.917	37.708	537.986	538.181
	G2 & G9	824+43.917	30.958	538.121	538.334
9	G3 & G8	824+43.917	21.708	538.306	538.519
	G4 & G7	824+43.917	12.458	538.491	538.704
	P0 & BCJ	824+43.917	7.708	538.586	538.787
	G5 & G6	824+43.917	3.208	538.676	538.865

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
S. Stegman
DRAWN
J. Corley
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 11, 12, 13 & 14 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
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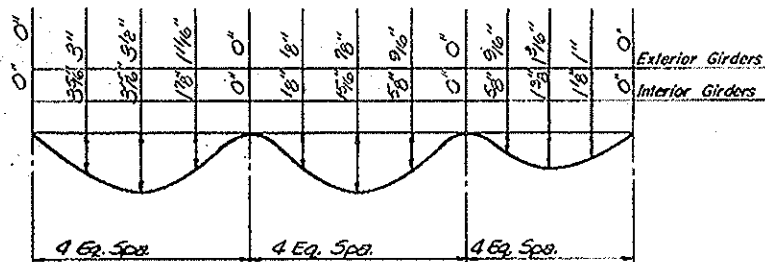
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



Note: Stations and offsets are given along and normal to E FA-412.

FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

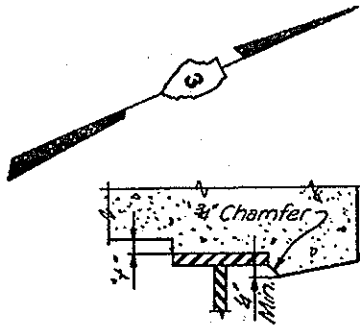
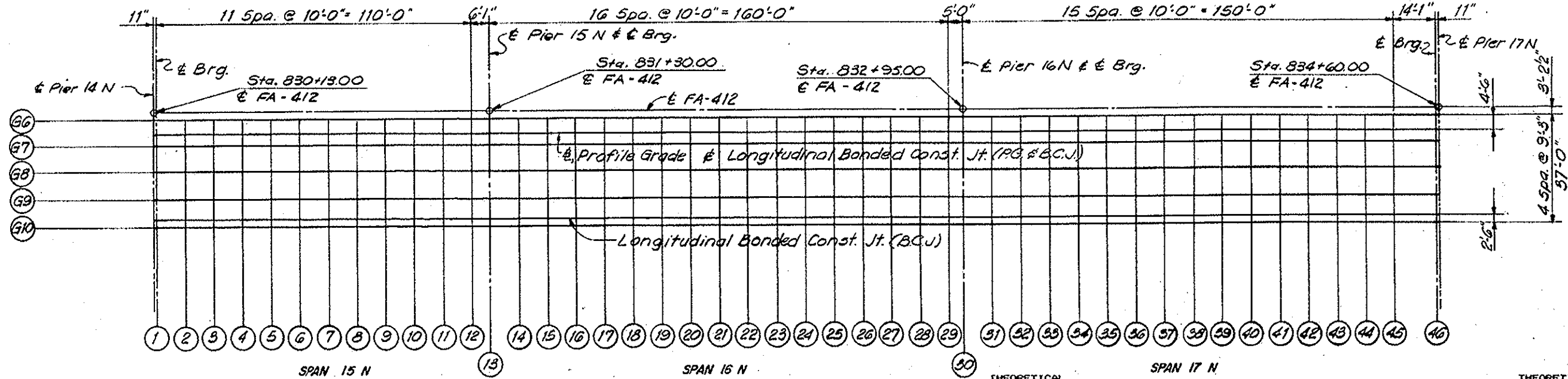
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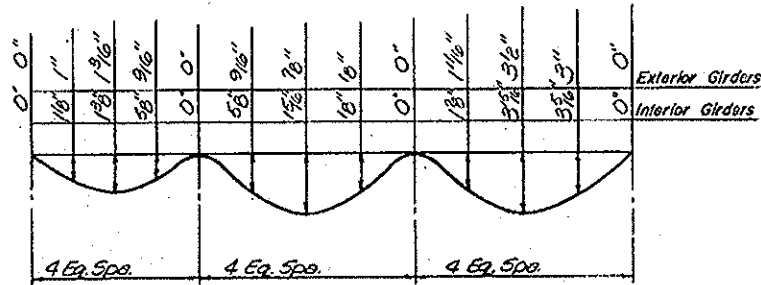
PLAN						THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION								
1	C.L. BRG.												
	PIER 145	G1	830+13.917	40.208	535.301	535.301	8	G1	830+83.917	40.208	534.977	535.280	
		BCJ	830+13.917	37.708	535.351	535.351		BCJ	830+83.917	37.708	533.027	535.340	
		G2	830+13.917	30.958	535.486	535.486		G2	830+83.917	30.958	533.162	535.502	
		G3	830+13.917	21.708	535.670	535.670		G3	830+83.917	21.708	533.347	535.687	
G4		830+13.917	12.458	535.855	535.855		G4	830+83.917	12.458	533.532	535.872		
	PG & BCJ	830+13.917	7.708	535.950	535.950		PG & BCJ	830+83.917	7.708	533.627	535.948		
	G5	830+13.917	3.208	536.041	536.041		G5	830+83.917	3.208	533.717	536.020		
2	G1	830+23.917	40.208	535.254	535.331	9	G1	830+93.917	40.208	534.930	535.226		
	BCJ	830+23.917	37.708	535.304	535.384		BCJ	830+93.917	37.708	534.980	535.284		
	G2	830+23.917	30.958	535.439	535.526		G2	830+93.917	30.958	533.115	535.447		
	G3	830+23.917	21.708	535.624	535.711		G3	830+93.917	21.708	533.301	535.632		
	G4	830+23.917	12.458	535.809	535.896		G4	830+93.917	12.458	533.486	535.617		
	PG & BCJ	830+23.917	7.708	535.904	535.986		PG & BCJ	830+93.917	7.708	533.581	535.895		
	G5	830+23.917	3.208	535.994	536.071		G5	830+93.917	3.208	533.670	535.966		
3	G1	830+33.917	40.208	535.208	535.354	10	G1	831+03.917	40.208	534.884	535.158		
	BCJ	830+33.917	37.708	535.258	535.408		BCJ	831+03.917	37.708	534.934	535.217		
	G2	830+33.917	30.958	535.393	535.553		G2	831+03.917	30.958	533.069	535.375		
	G3	830+33.917	21.708	535.578	535.738		G3	831+03.917	21.708	533.254	535.560		
	G4	830+33.917	12.458	535.763	535.923		G4	831+03.917	12.458	533.439	535.743		
	PG & BCJ	830+33.917	7.708	535.858	535.986		PG & BCJ	831+03.917	7.708	533.534	535.824		
	G5	830+33.917	3.208	535.948	536.094		G5	831+03.917	3.208	533.624	535.898		
4	G1	830+43.917	40.208	535.162	535.364	11	G1	831+13.917	40.208	534.838	535.082		
	BCJ	830+43.917	37.708	535.212	535.418		BCJ	831+13.917	37.708	534.888	535.140		
	G2	830+43.917	30.958	535.347	535.569		G2	831+13.917	30.958	533.023	535.294		
	G3	830+43.917	21.708	535.532	535.754		G3	831+13.917	21.708	533.208	535.481		
	G4	830+43.917	12.458	535.717	535.939		G4	831+13.917	12.458	533.393	535.666		
	PG & BCJ	830+43.917	7.708	535.812	536.024		PG & BCJ	831+13.917	7.708	533.488	535.746		
	G5	830+43.917	3.208	535.902	536.104		G5	831+13.917	3.208	533.578	535.822		
5	G1	830+53.917	40.208	535.115	535.358	12	G1	831+23.917	40.208	534.792	534.998		
	BCJ	830+53.917	37.708	535.164	535.417		BCJ	831+23.917	37.708	534.842	535.058		
	G2	830+53.917	30.958	535.301	535.579		G2	831+23.917	30.958	533.977	535.208		
	G3	830+53.917	21.708	535.486	535.758		G3	831+23.917	21.708	533.162	535.393		
	G4	830+53.917	12.458	535.670	535.942		G4	831+23.917	12.458	533.347	535.578		
	PG & BCJ	830+53.917	7.708	535.765	536.022		PG & BCJ	831+23.917	7.708	533.442	535.660		
	G5	830+53.917	3.208	535.855	536.098		G5	831+23.917	3.208	533.532	535.738		
6	G1	830+63.917	40.208	535.069	535.347	13	G1	831+33.917	40.208	534.746	534.904		
	BCJ	830+63.917	37.708	535.117	535.406		BCJ	831+33.917	37.708	534.796	534.958		
	G2	830+63.917	30.958	535.254	535.566		G2	831+33.917	30.958	533.931	535.107		
	G3	830+63.917	21.708	535.439	535.731		G3	831+33.917	21.708	533.115	535.292		
	G4	830+63.917	12.458	535.624	535.914		G4	831+33.917	12.458	533.301	535.477		
	PG & BCJ	830+63.917	7.708	535.719	536.014		PG & BCJ	831+33.917	7.708	533.396	535.563		
	G5	830+63.917	3.208	535.809	536.087		G5	831+33.917	3.208	533.486	535.644		
7	G1	830+73.917	40.208	535.023	535.322								
	BCJ	830+73.917	37.708	535.073	535.382								
	G2	830+73.917	30.958	535.208	535.544								
	G3	830+73.917	21.708	535.393	535.729								
	G4	830+73.917	12.458	535.578	535.914								
	PG & BCJ	830+73.917	7.708	535.673	535.990								
	G5	830+73.917	3.208	535.763	536.062								



Note: Stations and offsets are given along and normal to & FA-412.

FILLET HEIGHTS

To determine "f": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION				
1	C.L. BRG. PIER 14N	G6	830+13.917	3.208	535.041	535.041	8	G6	830+83.917	3.208	535.717	535.800			
		PG & BCJ	830+13.917	7.708	535.950	535.950		PG & BCJ	830+83.917	7.708	535.627	535.715			
		G7	830+13.917	12.458	535.655	535.655		G7	830+83.917	12.458	535.532	535.626			
		G8	830+13.917	21.708	535.670	535.670		G8	830+83.917	21.708	535.347	535.441			
		G9	830+13.917	30.958	535.486	535.486		G9	830+83.917	30.958	535.162	535.256			
		BCJ	830+13.917	37.708	535.351	535.351		BCJ	830+83.917	37.708	535.027	535.113			
		G10	830+13.917	40.208	535.301	535.301		G10	830+83.917	40.208	534.977	535.060			
		2		G6	830+23.917	3.208		535.994	535.027	9	G6	830+93.917	3.208	535.670	535.733
				PG & BCJ	830+23.917	7.708		535.904	535.939		PG & BCJ	830+93.917	7.708	535.581	535.647
				G7	830+23.917	12.458		535.809	535.847		G7	830+93.917	12.458	535.486	535.554
G8	830+23.917			21.708	535.624	535.662	G8	830+93.917	21.708		535.301	535.371			
G9	830+23.917			30.958	535.439	535.477	G9	830+93.917	30.958		535.115	535.186			
BCJ	830+23.917			37.708	535.304	535.338	BCJ	830+93.917	37.708		534.980	535.045			
G10	830+23.917			40.208	535.254	535.287	G10	830+93.917	40.208		534.930	534.993			
3				G6	830+33.917	3.208	535.948	535.011	10		G6	831+03.917	3.208	535.624	535.666
				PG & BCJ	830+33.917	7.708	535.858	535.925			PG & BCJ	831+03.917	7.708	535.534	535.578
				G7	830+33.917	12.458	535.763	535.835			G7	831+03.917	12.458	535.439	535.485
		G8	830+33.917	21.708	535.578	535.650	G8	831+03.917		21.708	535.254	535.300			
		G9	830+33.917	30.958	535.393	535.465	G9	831+03.917		30.958	535.069	535.115			
		BCJ	830+33.917	37.708	535.258	535.323	BCJ	831+03.917		37.708	534.934	534.977			
		G10	830+33.917	40.208	535.208	535.271	G10	831+03.917		40.208	534.884	534.926			
		4		G6	830+43.917	3.208	535.902	535.989		11	G6	831+13.917	3.208	535.578	535.597
				PG & BCJ	830+43.917	7.708	535.812	535.904			PG & BCJ	831+13.917	7.708	535.488	535.509
				G7	830+43.917	12.458	535.717	535.815			G7	831+13.917	12.458	535.393	535.413
G8	830+43.917			21.708	535.532	535.630	G8	831+13.917	21.708		535.208	535.230			
G9	830+43.917			30.958	535.347	535.445	G9	831+13.917	30.958		535.023	535.045			
BCJ	830+43.917			37.708	535.212	535.302	BCJ	831+13.917	37.708		534.888	534.908			
G10	830+43.917			40.208	535.162	535.249	G10	831+13.917	40.208		534.838	534.857			
5				G6	830+53.917	3.208	535.855	535.956	12		G6	831+23.917	3.208	535.532	535.537
				PG & BCJ	830+53.917	7.708	535.765	535.872			PG & BCJ	831+23.917	7.708	535.442	535.448
				G7	830+53.917	12.458	535.670	535.783			G7	831+23.917	12.458	535.347	535.353
		G8	830+53.917	21.708	535.486	535.598	G8	831+23.917		21.708	535.162	535.168			
		G9	830+53.917	30.958	535.301	535.413	G9	831+23.917		30.958	534.977	534.983			
		BCJ	830+53.917	37.708	535.166	535.269	BCJ	831+23.917		37.708	534.842	534.847			
		G10	830+53.917	40.208	535.115	535.216	G10	831+23.917		40.208	534.792	534.797			
		6		G6	830+63.917	3.208	535.809	535.913		13	G6	831+30.000	3.208	535.504	535.504
				PG & BCJ	830+63.917	7.708	535.719	535.829			PG & BCJ	831+30.000	7.708	535.414	535.414
				G7	830+63.917	12.458	535.624	535.741			G7	831+30.000	12.458	535.319	535.319
G8	830+63.917			21.708	535.439	535.556	G8	831+30.000	21.708		535.134	535.134			
G9	830+63.917			30.958	535.254	535.371	G9	831+30.000	30.958		534.949	534.949			
BCJ	830+63.917			37.708	535.119	535.227	BCJ	831+30.000	37.708		534.814	534.814			
G10	830+63.917			40.208	535.069	535.173	G10	831+30.000	40.208		534.764	534.764			
7				G6	830+73.917	3.208	535.763	535.861	C.L. PIER 15N		G6	831+30.000	3.208	535.504	535.504
				PG & BCJ	830+73.917	7.708	535.673	535.777			PG & BCJ	831+30.000	7.708	535.414	535.414
				G7	830+73.917	12.458	535.578	535.688			G7	831+30.000	12.458	535.319	535.319
		G8	830+73.917	21.708	535.393	535.503	G8	831+30.000		21.708	535.134	535.134			
		G9	830+73.917	30.958	535.208	535.318	G9	831+30.000		30.958	534.949	534.949			
		BCJ	830+73.917	37.708	535.073	535.174	BCJ	831+30.000		37.708	534.814	534.814			
		G10	830+73.917	40.208	535.023	535.121	G10	831+30.000		40.208	534.764	534.764			

SOUTH APPROACH

STRUCTURAL STEEL ALTERNATE

TOP OF SLAB ELEVATIONS
SPANS 15, 16 & 17 NORTHBOUND
FA-412 OVER ILLINOIS RIVER

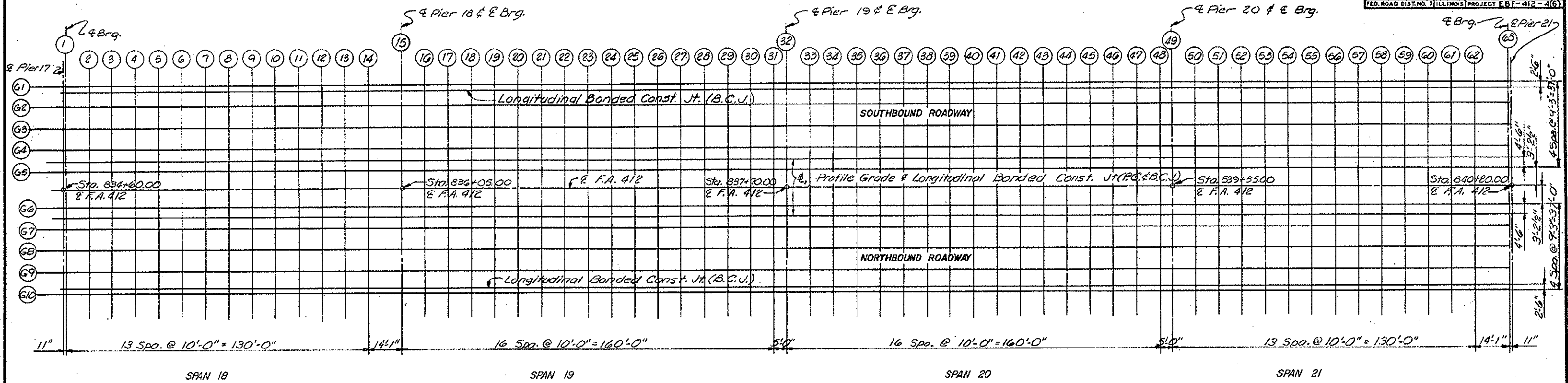
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED: T. Ritzheimer
CHECKED: L. Glaser
DRAWN: J. Carley R. LUER
CHECKED: T. Ritzheimer

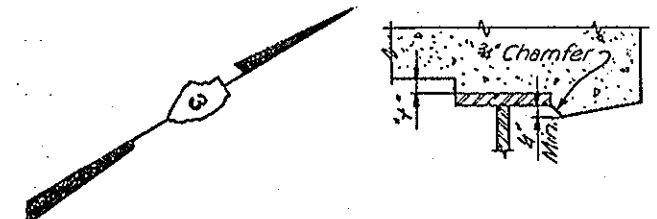
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PLAN

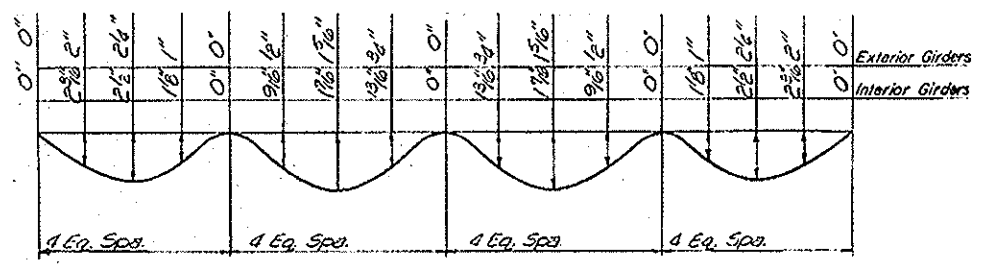
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 17	G1 & G10	834+60.917	40.208	533.233	533.233
	BCJ	834+60.917	37.708	533.283	533.283
	G2 & G9	834+60.917	30.958	533.418	533.418
	G3 & G8	834+60.917	21.708	533.604	533.604
	G4 & G7	834+60.917	12.458	533.789	533.789
	G5 & G6	834+60.917	3.208	533.973	533.973
2	G1 & G10	834+70.917	40.208	533.187	533.243
	BCJ	834+70.917	37.708	533.237	533.293
	G2 & G9	834+70.917	30.958	533.372	533.428
	G3 & G8	834+70.917	21.708	533.557	533.620
	G4 & G7	834+70.917	12.458	533.742	533.805
	G5 & G6	834+70.917	3.208	533.927	533.983
3	G1 & G10	834+80.917	40.208	533.141	533.244
	BCJ	834+80.917	37.708	533.191	533.298
	G2 & G9	834+80.917	30.958	533.326	533.442
	G3 & G8	834+80.917	21.708	533.511	533.627
	G4 & G7	834+80.917	12.458	533.696	533.812
	G5 & G6	834+80.917	3.208	533.881	533.994
4	G1 & G10	834+90.917	40.208	533.095	533.240
	BCJ	834+90.917	37.708	533.145	533.294
	G2 & G9	834+90.917	30.958	533.280	533.441
	G3 & G8	834+90.917	21.708	533.465	533.626
	G4 & G7	834+90.917	12.458	533.650	533.811
	G5 & G6	834+90.917	3.208	533.835	533.899
5	G1 & G10	835+00.917	40.208	533.049	533.221
	BCJ	835+00.917	37.708	533.099	533.277
	G2 & G9	835+00.917	30.958	533.234	533.427
	G3 & G8	835+00.917	21.708	533.419	533.612
	G4 & G7	835+00.917	12.458	533.604	533.796
	G5 & G6	835+00.917	3.208	533.789	533.881
6	G1 & G10	835+10.917	40.208	533.002	533.191
	BCJ	835+10.917	37.708	533.052	533.247
	G2 & G9	835+10.917	30.958	533.187	533.400
	G3 & G8	835+10.917	21.708	533.372	533.585
	G4 & G7	835+10.917	12.458	533.557	533.770
	G5 & G6	835+10.917	3.208	533.742	533.853

Note: Stations and offsets are given along and normal to E.F.A.-412.



FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of girders.



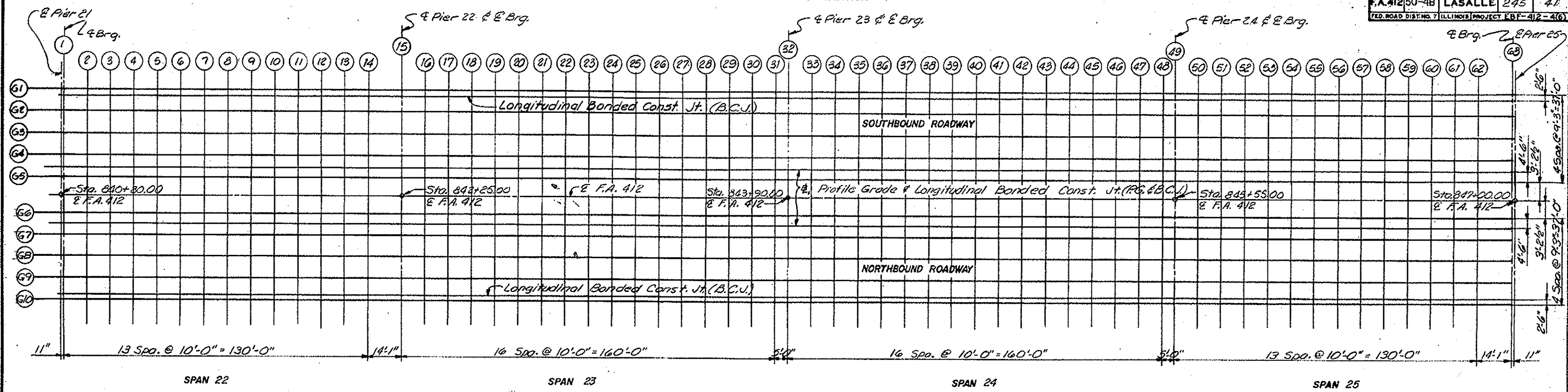
DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

DESIGNED	T. Ritzheimer
CHECKED	L. Gloser
DRAWN	S. Stegman
CHECKED	T. Ritzheimer

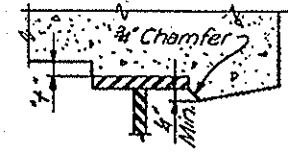
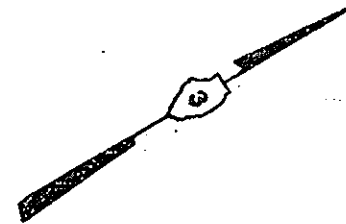
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 18, 19, 20, & 21 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B. PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.



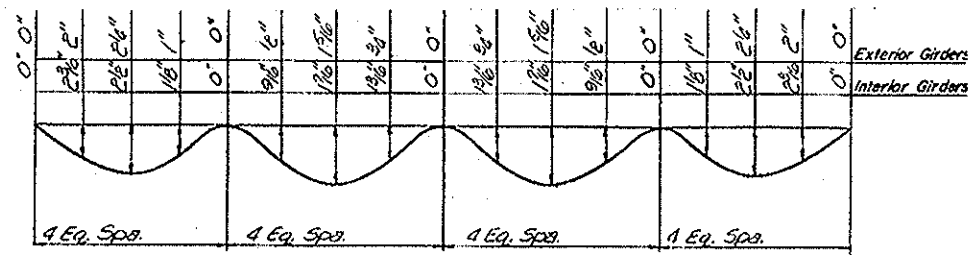
PLAN

Note: Stations and offsets are given along and normal to E.F.A. -412.



FILLET HEIGHTS

To determine 't': After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection, minus slab thickness, equals the fillet heights 't' above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections"

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 21	G1 & G10	840+80.917	40.208	530.367	530.367
	BCJ	840+80.917	37.708	530.417	530.417
	G2 & G9	840+80.917	30.958	530.532	530.532
	G3 & G8	840+80.917	21.708	530.737	530.737
	G4 & G7	840+80.917	12.458	530.922	530.922
2	G1 & G10	840+90.917	40.208	530.920	530.376
	BCJ	840+90.917	37.708	530.370	530.428
	G2 & G9	840+90.917	30.958	530.505	530.568
	G3 & G8	840+90.917	21.708	530.690	530.753
	G4 & G7	840+90.917	12.458	530.875	530.938
3	G1 & G10	841+00.917	40.208	530.274	530.377
	BCJ	841+00.917	37.708	530.324	530.431
	G2 & G9	841+00.917	30.958	530.459	530.575
	G3 & G8	841+00.917	21.708	530.644	530.760
	G4 & G7	841+00.917	12.458	530.829	530.945
4	G1 & G10	841+10.917	40.208	530.228	530.373
	BCJ	841+10.917	37.708	530.278	530.427
	G2 & G9	841+10.917	30.958	530.413	530.574
	G3 & G8	841+10.917	21.708	530.598	530.759
	G4 & G7	841+10.917	12.458	530.783	530.944
5	G1 & G10	841+20.917	40.208	530.182	530.354
	BCJ	841+20.917	37.708	530.232	530.410
	G2 & G9	841+20.917	30.958	530.367	530.560
	G3 & G8	841+20.917	21.708	530.552	530.745
	G4 & G7	841+20.917	12.458	530.737	530.930
6	G1 & G10	841+30.917	40.208	530.135	530.324
	BCJ	841+30.917	37.708	530.184	530.380
	G2 & G9	841+30.917	30.958	530.321	530.533
	G3 & G8	841+30.917	21.708	530.506	530.719
	G4 & G7	841+30.917	12.458	530.690	530.903

DESIGNED
T. Ritzheimer

CHECKED
L. Glaser

DRAWN
S. Stegman

CHECKED
T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 22, 23, 24, & 25 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	42

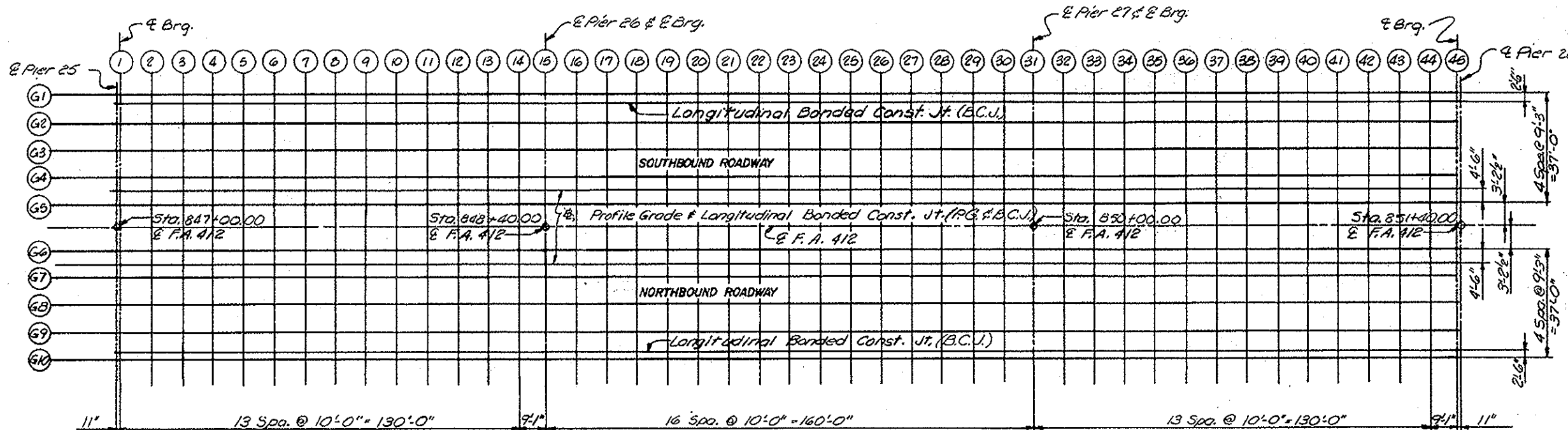
PER ROAD DISTRICT 7 ILLINOIS PROJECT EBF-412-4(6)

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
7	G1 & G10	841+40.917	40.208	530.099	530.283	18	G1 & G10	842+35.000	40.208	529.562	529.584	30	G1 & G10	843+75.000	40.208	529.007	529.020
	BCJ	841+40.917	37.708	530.139	530.339		BCJ	842+35.000	37.708	529.612	529.635		BCJ	843+75.000	37.708	529.057	529.070
	G2 & G9	841+40.917	30.958	530.274	530.492		G2 & G9	842+35.000	30.958	529.747	529.771		G2 & G9	843+75.000	30.958	529.192	529.206
	G3 & G8	841+40.917	21.708	530.459	530.677		G3 & G8	842+35.000	21.708	529.932	529.956		G3 & G8	843+75.000	21.708	529.377	529.391
	G4 & G7	841+40.917	12.458	530.644	530.862		G4 & G7	842+35.000	12.458	530.117	530.141		G4 & G7	843+75.000	12.458	529.562	529.576
	PO & BCJ	841+40.917	7.708	530.739	530.945		PO & BCJ	842+35.000	7.708	530.212	530.235		PO & BCJ	843+75.000	7.708	529.657	529.671
	G5 & G6	841+40.917	3.208	530.829	531.023		G5 & G6	842+35.000	3.208	530.302	530.324		G5 & G6	843+75.000	3.208	529.747	529.760
8	G1 & G10	841+50.917	40.208	530.043	530.231	19	G1 & G10	842+65.000	40.208	529.515	529.537	31	G1 & G10	843+85.000	40.208	528.961	528.984
	BCJ	841+50.917	37.708	530.093	530.287		BCJ	842+65.000	37.708	529.565	529.608		BCJ	843+85.000	37.708	529.011	529.014
	G2 & G9	841+50.917	30.958	530.228	530.440		G2 & G9	842+65.000	30.958	529.700	529.745		G2 & G9	843+85.000	30.958	529.146	529.149
	G3 & G8	841+50.917	21.708	530.413	530.625		G3 & G8	842+65.000	21.708	529.885	529.930		G3 & G8	843+85.000	21.708	529.331	529.334
	G4 & G7	841+50.917	12.458	530.598	530.810		G4 & G7	842+65.000	12.458	530.071	530.115		G4 & G7	843+85.000	12.458	529.516	529.519
	PO & BCJ	841+50.917	7.708	530.693	530.893		PO & BCJ	842+65.000	7.708	530.166	530.209		PO & BCJ	843+85.000	7.708	529.611	529.614
	G5 & G6	841+50.917	3.208	530.783	530.971		G5 & G6	842+65.000	3.208	530.256	530.298		G5 & G6	843+85.000	3.208	529.701	529.704
9	G1 & G10	841+60.917	40.208	529.997	530.168	20	G1 & G10	842+75.000	40.208	529.469	529.532	32	G1 & G10	843+90.000	40.208	528.937	528.937
	BCJ	841+60.917	37.708	530.047	530.225		BCJ	842+75.000	37.708	529.519	529.594		C.L.	843+90.000	37.708	528.988	528.988
	G2 & G9	841+60.917	30.958	530.182	530.375		G2 & G9	842+75.000	30.958	529.654	529.723		PIER 23	843+90.000	30.958	529.123	529.123
	G3 & G8	841+60.917	21.708	530.367	530.560		G3 & G8	842+75.000	21.708	529.839	529.908		G2 & G9	843+90.000	21.708	529.308	529.308
	G4 & G7	841+60.917	12.458	530.552	530.745		G4 & G7	842+75.000	12.458	530.024	530.093		G3 & G8	843+90.000	12.458	529.492	529.492
	PO & BCJ	841+60.917	7.708	530.647	530.829		PO & BCJ	842+75.000	7.708	530.119	530.185		PO & BCJ	843+90.000	7.708	529.587	529.587
	G5 & G6	841+60.917	3.208	530.737	530.909		G5 & G6	842+75.000	3.208	530.209	530.272		G5 & G6	843+90.000	3.208	529.677	529.677
10	G1 & G10	841+70.917	40.208	529.930	530.095	21	G1 & G10	842+85.000	40.208	529.423	529.506	33	G1 & G10	844+00.000	40.208	528.891	528.898
	BCJ	841+70.917	37.708	530.000	530.150		BCJ	842+85.000	37.708	529.473	529.558		BCJ	844+00.000	37.708	529.941	529.948
	G2 & G9	841+70.917	30.958	530.135	530.298		G2 & G9	842+85.000	30.958	529.608	529.700		G2 & G9	844+00.000	30.958	529.076	529.084
	G3 & G8	841+70.917	21.708	530.321	530.483		G3 & G8	842+85.000	21.708	529.793	529.885		BCJ	844+00.000	21.708	529.261	529.269
	G4 & G7	841+70.917	12.458	530.506	530.668		G4 & G7	842+85.000	12.458	529.978	530.070		G3 & G8	844+00.000	12.458	529.446	529.454
	PO & BCJ	841+70.917	7.708	530.601	530.754		PO & BCJ	842+85.000	7.708	530.073	530.160		PO & BCJ	844+00.000	7.708	529.541	529.549
	G5 & G6	841+70.917	3.208	530.690	530.835		G5 & G6	842+85.000	3.208	530.163	530.246		G5 & G6	844+00.000	3.208	529.631	529.638
11	G1 & G10	841+80.917	40.208	529.904	530.018	22	G1 & G10	842+95.000	40.208	529.377	529.475	34	G1 & G10	844+10.000	40.208	528.845	528.844
	BCJ	841+80.917	37.708	529.954	530.072		BCJ	842+95.000	37.708	529.427	529.528		BCJ	844+10.000	37.708	528.895	528.915
	G2 & G9	841+80.917	30.958	530.089	530.217		G2 & G9	842+95.000	30.958	529.562	529.671		G2 & G9	844+10.000	30.958	529.030	529.052
	G3 & G8	841+80.917	21.708	530.274	530.402		G3 & G8	842+95.000	21.708	529.747	529.855		G3 & G8	844+10.000	21.708	529.215	529.237
	G4 & G7	841+80.917	12.458	530.459	530.587		G4 & G7	842+95.000	12.458	529.932	530.041		G4 & G7	844+10.000	12.458	529.400	529.422
	PO & BCJ	841+80.917	7.708	530.554	530.673		PO & BCJ	842+95.000	7.708	530.027	530.129		PO & BCJ	844+10.000	7.708	529.495	529.516
	G5 & G6	841+80.917	3.208	530.644	530.758		G5 & G6	842+95.000	3.208	530.117	530.215		G5 & G6	844+10.000	3.208	529.585	529.604
12	G1 & G10	841+90.917	40.208	529.858	529.941	23	G1 & G10	843+05.000	40.208	529.331	529.438	35	G1 & G10	844+20.000	40.208	528.799	528.836
	BCJ	841+90.917	37.708	529.908	529.994		BCJ	843+05.000	37.708	529.381	529.498		BCJ	844+20.000	37.708	528.849	528.887
	G2 & G9	841+90.917	30.958	530.043	530.136		G2 & G9	843+05.000	30.958	529.515	529.634		G2 & G9	844+20.000	30.958	529.984	529.027
	G3 & G8	841+90.917	21.708	530.228	530.321		G3 & G8	843+05.000	21.708	529.700	529.819		G3 & G8	844+20.000	21.708	529.169	529.212
	G4 & G7	841+90.917	12.458	530.413	530.506		G4 & G7	843+05.000	12.458	529.885	530.004		G4 & G7	844+20.000	12.458	529.354	529.397
	PO & BCJ	841+90.917	7.708	530.508	530.596		PO & BCJ	843+05.000	7.708	529.980	530.093		PO & BCJ	844+20.000	7.708	529.449	529.489
	G5 & G6	841+90.917	3.208	530.598	530.681		G5 & G6	843+05.000	3.208	530.071	530.178		G5 & G6	844+20.000	3.208	529.539	529.577
13	G1 & G10	842+00.917	40.208	529.812	529.862	24	G1 & G10	843+15.000	40.208	529.284	529.391	36	G1 & G10	844+30.000	40.208	528.752	528.813
	BCJ	842+00.917	37.708	529.862	529.914		BCJ	843+15.000	37.708	529.334	529.445		BCJ	844+30.000	37.708	528.802	528.864
	G2 & G9	842+00.917	30.958	529.947	530.033		G2 & G9	843+15.000	30.958	529.469	529.589		G2 & G9	844+30.000	30.958	529.927	529.003
	G3 & G8	842+00.917	21.708	530.132	530.238		G3 & G8	843+15.000	21.708	529.654	529.774		G3 & G8	844+30.000	21.708	529.123	529.188
	G4 & G7	842+00.917	12.458	530.317	530.423		G4 & G7	843+15.000	12.458	529.839	529.959		G4 & G7	844+30.000	12.458	529.308	529.374
	PO & BCJ	842+00.917	7.708	530.412	530.518		PO & BCJ	843+15.000	7.708	529.932	530.047		PO & BCJ	844+30.000	7.708	529.403	529.466
	G5 & G6	842+00.917	3.208	530.502	530.602		G5 & G6	843+15.000	3.208	530.024	530.131		G5 & G6	844+30.000	3.208	529.492	529.553
14	G1 & G10	842+10.917	40.208	529.765	529.789	25	G1 & G10	843+25.000	40.208	529.238	529.340	37	G1 & G10	844+40.000	40.208	528.706	528.787
	BCJ	842+10.917	37.708	529.815	529.840		BCJ	843+25.000	37.708	529.288	529.393		BCJ	844+40.000	37.708	528.756	528.839
	G2 & G9	842+10.917	30.958	529.950	529.977		G2 & G9	843+25.000	30.958	529.423	529.537		G2 & G9	844+40.000	30.958	528.891	528.980
	G3 & G8	842+10.917	21.708	530.135	530.162		G3 & G8	843+25.000	21.708	529.608	529.722		G3 & G8	844+40.000	21.708	529.076	529.165
	G4 & G7	842+10.917	12.458	530.321	530.347		G4 & G7	843+25.000	12.458	529.793	529.907		G4 & G7	844+40.000	12.458	529.261	529.350
	PO & BCJ	842+10.917															

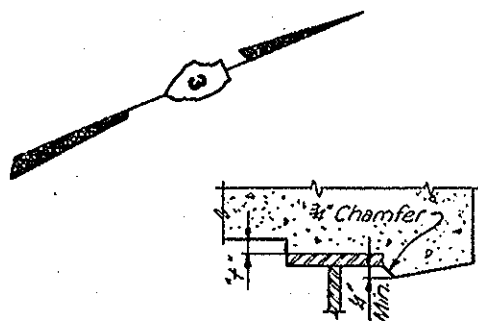
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	13
ILLINOIS PROJECT EBF-412-4(6)				

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
40	G1 & G10	844+70.000	40.208	528.567	528.675	51	G1 & G10	845+75.000	40.208	528.082	528.118	60	G1 & G10	846+65.000	40.208	527.666	527.827
	BCJ	844+70.000	37.708	528.617	528.728		BCJ	845+75.000	37.708	528.132	528.169		BCJ	846+65.000	37.708	527.716	527.882
	G2 & G9	844+70.000	30.958	528.752	528.872		G2 & G9	845+75.000	30.958	528.267	528.307		G2 & G9	846+65.000	30.958	527.651	528.030
	G3 & G8	844+70.000	21.708	528.937	529.057		G3 & G8	845+75.000	21.708	528.452	528.492		G3 & G8	846+65.000	21.708	528.036	528.215
	G4 & G7	844+70.000	12.458	529.123	529.242		G4 & G7	845+75.000	12.458	528.637	528.677		G4 & G7	846+65.000	12.458	528.221	528.400
	PG & BCJ	844+70.000	7.708	529.218	529.331		PG & BCJ	845+75.000	7.708	528.732	528.770		PG & BCJ	846+65.000	7.708	528.316	528.486
	G5 & G6	844+70.000	3.208	529.308	529.416		G5 & G6	845+75.000	3.208	528.822	528.858		G5 & G6	846+65.000	3.208	528.406	528.567
41	G1 & G10	844+80.000	40.208	528.521	528.624	52	G1 & G10	845+85.000	40.208	528.036	528.101	61	G1 & G10	846+75.000	40.208	527.620	527.746
	BCJ	844+80.000	37.708	528.571	528.677		BCJ	845+85.000	37.708	528.086	528.153		BCJ	846+75.000	37.708	527.670	527.800
	G2 & G9	844+80.000	30.958	528.706	528.821		G2 & G9	845+85.000	30.958	528.221	528.294		G2 & G9	846+75.000	30.958	527.805	527.945
	G3 & G8	844+80.000	21.708	528.891	529.006		G3 & G8	845+85.000	21.708	528.406	528.479		G3 & G8	846+75.000	21.708	527.990	528.129
	G4 & G7	844+80.000	12.458	529.076	529.191		G4 & G7	845+85.000	12.458	528.591	528.664		G4 & G7	846+75.000	12.458	528.175	528.314
	PG & BCJ	844+80.000	7.708	529.171	529.280		PG & BCJ	845+85.000	7.708	528.686	528.753		PG & BCJ	846+75.000	7.708	528.270	528.402
	G5 & G6	844+80.000	3.208	529.261	529.364		G5 & G6	845+85.000	3.208	528.776	528.841		G5 & G6	846+75.000	3.208	528.360	528.486
42	G1 & G10	844+90.000	40.208	528.475	528.566	53	G1 & G10	845+95.000	40.208	527.990	528.087	62	G1 & G10	846+85.000	40.208	527.573	527.655
	BCJ	844+90.000	37.708	528.525	528.619		BCJ	845+95.000	37.708	528.040	528.140		BCJ	846+85.000	37.708	527.623	527.707
	G2 & G9	844+90.000	30.958	528.660	528.761		G2 & G9	845+95.000	30.958	528.175	528.284		G2 & G9	846+85.000	30.958	527.758	527.848
	G3 & G8	844+90.000	21.708	528.845	528.946		G3 & G8	845+95.000	21.708	528.360	528.469		G3 & G8	846+85.000	21.708	527.943	528.033
	G4 & G7	844+90.000	12.458	529.030	529.131		G4 & G7	845+95.000	12.458	528.544	528.654		G4 & G7	846+85.000	12.458	528.128	528.218
	PG & BCJ	844+90.000	7.708	529.125	529.221		PG & BCJ	845+95.000	7.708	528.639	528.743		PG & BCJ	846+85.000	7.708	528.223	528.309
	G5 & G6	844+90.000	3.208	529.215	529.306		G5 & G6	845+95.000	3.208	528.729	528.827		G5 & G6	846+85.000	3.208	528.313	528.395
43	G1 & G10	845+00.000	40.208	528.429	528.503	54	G1 & G10	846+05.000	40.208	527.943	528.072	63	G1 & G10	846+99.083	40.208	527.508	527.508
	BCJ	845+00.000	37.708	528.479	528.555		BCJ	846+05.000	37.708	527.993	528.126		BCJ	846+99.083	37.708	527.558	527.558
	G2 & G9	845+00.000	30.958	528.614	528.695		G2 & G9	846+05.000	30.958	528.128	528.273		G2 & G9	846+99.083	30.958	527.693	527.693
	G3 & G8	845+00.000	21.708	528.799	528.880		G3 & G8	846+05.000	21.708	528.313	528.458		G3 & G8	846+99.083	21.708	527.878	527.878
	G4 & G7	845+00.000	12.458	528.984	529.065		G4 & G7	846+05.000	12.458	528.498	528.643		G4 & G7	846+99.083	12.458	528.063	528.063
	PG & BCJ	845+00.000	7.708	529.079	529.156		PG & BCJ	846+05.000	7.708	528.593	528.730		PG & BCJ	846+99.083	7.708	528.158	528.158
	G5 & G6	845+00.000	3.208	529.169	529.243		G5 & G6	846+05.000	3.208	528.683	528.812		G5 & G6	846+99.083	3.208	528.248	528.248
44	G1 & G10	845+10.000	40.208	528.383	528.436	55	G1 & G10	846+15.000	40.208	527.897	528.056		G1 & G10	846+15.000	40.208	527.947	528.111
	BCJ	845+10.000	37.708	528.433	528.487		BCJ	846+15.000	37.708	527.947	528.111		BCJ	846+15.000	37.708	527.997	528.161
	G2 & G9	845+10.000	30.958	528.568	528.625		G2 & G9	846+15.000	30.958	528.082	528.261		G2 & G9	846+15.000	30.958	527.943	528.205
	G3 & G8	845+10.000	21.708	528.753	528.811		G3 & G8	846+15.000	21.708	528.267	528.446		G3 & G8	846+15.000	21.708	528.175	528.390
	G4 & G7	845+10.000	12.458	528.937	528.995		G4 & G7	846+15.000	12.458	528.452	528.631		G4 & G7	846+15.000	12.458	528.360	528.575
	PG & BCJ	845+10.000	7.708	529.033	529.088		PG & BCJ	846+15.000	7.708	528.547	528.716		PG & BCJ	846+15.000	7.708	528.455	528.658
	G5 & G6	845+10.000	3.208	529.123	529.176		G5 & G6	846+15.000	3.208	528.637	528.796		G5 & G6	846+15.000	3.208	528.545	528.738
45	G1 & G10	845+20.000	40.208	528.336	528.368	56	G1 & G10	846+25.000	40.208	527.851	528.032		G1 & G10	846+25.000	40.208	527.901	528.088
	BCJ	845+20.000	37.708	528.386	528.419		BCJ	846+25.000	37.708	527.901	528.088		BCJ	846+25.000	37.708	527.951	528.142
	G2 & G9	845+20.000	30.958	528.521	528.589		G2 & G9	846+25.000	30.958	528.036	528.240		G2 & G9	846+25.000	30.958	527.990	528.205
	G3 & G8	845+20.000	21.708	528.706	528.740		G3 & G8	846+25.000	21.708	528.221	528.425		G3 & G8	846+25.000	21.708	528.175	528.390
	G4 & G7	845+20.000	12.458	528.891	528.925		G4 & G7	846+25.000	12.458	528.406	528.610		G4 & G7	846+25.000	12.458	528.360	528.575
	PG & BCJ	845+20.000	7.708	528.984	529.019		PG & BCJ	846+25.000	7.708	528.501	528.693		PG & BCJ	846+25.000	7.708	528.455	528.658
	G5 & G6	845+20.000	3.208	529.076	529.108		G5 & G6	846+25.000	3.208	528.591	528.772		G5 & G6	846+25.000	3.208	528.545	528.738
46	G1 & G10	845+30.000	40.208	528.290	528.304	57	G1 & G10	846+35.000	40.208	527.803	527.998		G1 & G10	846+35.000	40.208	527.853	528.033
	BCJ	845+30.000	37.708	528.340	528.353		BCJ	846+35.000	37.708	527.853	528.033		BCJ	846+35.000	37.708	527.903	528.083
	G2 & G9	845+30.000	30.958	528.475	528.491		G2 & G9	846+35.000	30.958	527.990	528.205		G2 & G9	846+35.000	30.958	527.943	528.205
	G3 & G8	845+30.000	21.708	528.660	528.676		G3 & G8	846+35.000	21.708	528.175	528.390		G3 & G8	846+35.000	21.708	528.175	528.390
	G4 & G7	845+30.000	12.458	528.845	528.861		G4 & G7	846+35.000	12.458	528.360	528.575		G4 & G7	846+35.000	12.458	528.360	528.575
	PG & BCJ	845+30.000	7.708	528.940	528.955		PG & BCJ	846+35.000	7.708	528.455	528.658		PG & BCJ	846+35.000	7.708	528.455	528.658
	G5 & G6	845+30.000	3.208	529.030	529.044		G5 & G6	846+35.000	3.208	528.545	528.738		G5 & G6	846+35.000	3.208	528.545	528.738
47	G1 & G10	845+40.000	40.208	528.244	528.247	58	G1 & G10	846+45.000	40.208	527.758	527.951		G1 & G10	846+45.000	40.208	527.808	528.008
	BCJ	845+40.000	37.708	528.294	528.297		BCJ	846+45.000	37.708	527.808	528.008		BCJ	846+45.000	37.708	527.858	528.058
	G2 & G9	845+40.000	30.958	528.429	528.432		G2 & G9	846+45.000	30.958	527.943	528.161		G2 & G9	846+45.000	30.958	527.943	528.161
	G3 & G8	845+40.000	21.708	528.614	528.617		G3 & G8	846+45.000	21.708	528.128	528.346		G3 & G8	846+45.000	21.708	528.128	528.346
	G4 & G7	845+40.000	12.458	528.799	528.802		G4 & G7	846+45.000	12.458	528.313	528.531		G4 & G7	846+45.000	12.458	528.313	528.531
	PG & BCJ	845+40.000	7.708	528.894	528.897		PG & BCJ	846+45.000	7.708	528.408	528.613		PG & BCJ	846+45.000	7.708	528.408	528.613
	G5 & G6	845+40.000	3.208	528.984	528.987		G5 & G6	846+45.000	3.208	528.498	528.691		G5 & G6	846+45.000	3.208	528.498	528.691
48	G1 & G10	845+50.000	40.208	528.198	528.198	59	G1 & G10	846+55.000	40.208	527.712	527.895		G1 & G10	846+55.000	40.208	527.762	527.951
	BCJ	845+50.000	37.708	528.248	528.248		BCJ	846+55.000	37.708	527.762	527.951		BCJ	846+55.000	37.708	527.812	528.002
	G2 & G9	845+50.000	30.958	528.383	528.384		G2 & G9	846+55.000	30.958	527.897	528.102		G2 & G9	846+55.000	30.958	527.897	528.102
	G3 & G8	845+50.000	21.708	528.568	528.569		G3 & G8	846+55.000	21.708	528.082	528.287		G3 & G8	846+55.000	21.708	528.082	528.287
	G4 & G7	845+50.000	12.458	528.753	528.754		G4 & G7	846+55									

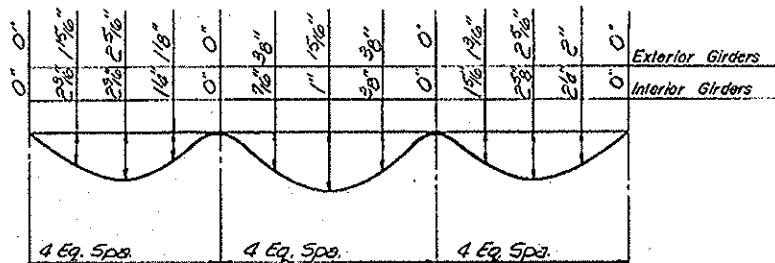


Note: Stations and offsets are given along and normal to E.F.A.-412.



FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

PLAN

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 25	G1 & G10	847+00.917	40.208	527.500	527.500	7	G1 & G10	847+60.917	40.208	527.222	527.420
	BCJ	847+00.917	37.708	527.550	527.550		BCJ	847+60.917	37.708	527.272	527.476
	G2 & G9	847+00.917	30.958	527.685	527.685		G2 & G9	847+60.917	30.958	527.407	527.629
	G3 & G8	847+00.917	21.708	527.870	527.870		G3 & G8	847+60.917	21.708	527.592	527.814
	G4 & G7	847+00.917	12.458	528.035	528.035		G4 & G7	847+60.917	12.458	527.777	527.999
	PG & BCJ	847+00.917	7.708	528.150	528.150		PG & BCJ	847+60.917	7.708	527.872	528.082
	G5 & G6	847+00.917	3.208	528.240	528.240		G5 & G6	847+60.917	3.208	527.962	528.160
2	G1 & G10	847+10.917	40.208	527.454	527.510	8	G1 & G10	847+70.917	40.208	527.176	527.366
	BCJ	847+10.917	37.708	527.503	527.561		BCJ	847+70.917	37.708	527.226	527.422
	G2 & G9	847+10.917	30.958	527.698	527.701		G2 & G9	847+70.917	30.958	527.361	527.375
	G3 & G8	847+10.917	21.708	527.823	527.886		G3 & G8	847+70.917	21.708	527.546	527.760
	G4 & G7	847+10.917	12.458	528.009	528.072		G4 & G7	847+70.917	12.458	527.731	527.945
	PG & BCJ	847+10.917	7.708	528.104	528.162		PG & BCJ	847+70.917	7.708	527.826	528.028
	G5 & G6	847+10.917	3.208	528.194	528.250		G5 & G6	847+70.917	3.208	527.916	528.106
3	G1 & G10	847+20.917	40.208	527.407	527.511	9	G1 & G10	847+80.917	40.208	527.130	527.302
	BCJ	847+20.917	37.708	527.457	527.565		BCJ	847+80.917	37.708	527.180	527.358
	G2 & G9	847+20.917	30.958	527.592	527.709		G2 & G9	847+80.917	30.958	527.315	527.509
	G3 & G8	847+20.917	21.708	527.777	527.894		G3 & G8	847+80.917	21.708	527.300	527.694
	G4 & G7	847+20.917	12.458	527.962	528.079		G4 & G7	847+80.917	12.458	527.685	527.879
	PG & BCJ	847+20.917	7.708	528.057	528.167		PG & BCJ	847+80.917	7.708	527.780	527.963
	G5 & G6	847+20.917	3.208	528.147	528.251		G5 & G6	847+80.917	3.208	527.870	528.042
4	G1 & G10	847+30.917	40.208	527.361	527.507	10	G1 & G10	847+90.917	40.208	527.093	527.228
	BCJ	847+30.917	37.708	527.411	527.562		BCJ	847+90.917	37.708	527.134	527.283
	G2 & G9	847+30.917	30.958	527.546	527.710		G2 & G9	847+90.917	30.958	527.269	527.491
	G3 & G8	847+30.917	21.708	527.731	527.895		G3 & G8	847+90.917	21.708	527.454	527.616
	G4 & G7	847+30.917	12.458	527.916	528.080		G4 & G7	847+90.917	12.458	527.639	527.802
	PG & BCJ	847+30.917	7.708	528.011	528.166		PG & BCJ	847+90.917	7.708	527.734	527.887
	G5 & G6	847+30.917	3.208	528.101	528.247		G5 & G6	847+90.917	3.208	527.823	527.968
5	G1 & G10	847+40.917	40.208	527.315	527.490	11	G1 & G10	848+00.917	40.208	527.037	527.150
	BCJ	847+40.917	37.708	527.365	527.546		BCJ	848+00.917	37.708	527.087	527.203
	G2 & G9	847+40.917	30.958	527.500	527.697		G2 & G9	848+00.917	30.958	527.222	527.347
	G3 & G8	847+40.917	21.708	527.685	527.882		G3 & G8	848+00.917	21.708	527.407	527.532
	G4 & G7	847+40.917	12.458	527.870	528.067		G4 & G7	848+00.917	12.458	527.592	527.717
	PG & BCJ	847+40.917	7.708	527.965	528.151		PG & BCJ	848+00.917	7.708	527.688	527.806
	G5 & G6	847+40.917	3.208	528.055	528.229		G5 & G6	848+00.917	3.208	527.777	527.890
6	G1 & G10	847+50.917	40.208	527.269	527.462		G1 & G10	848+00.917	40.208	527.037	527.150
	BCJ	847+50.917	37.708	527.319	527.519		BCJ	848+00.917	37.708	527.087	527.203
	G2 & G9	847+50.917	30.958	527.454	527.671		G2 & G9	848+00.917	30.958	527.222	527.347
	G3 & G8	847+50.917	21.708	527.639	527.856		G3 & G8	848+00.917	21.708	527.407	527.532
	G4 & G7	847+50.917	12.458	527.823	528.041		G4 & G7	848+00.917	12.458	527.592	527.717
	PG & BCJ	847+50.917	7.708	527.919	528.125		PG & BCJ	848+00.917	7.708	527.688	527.806
	G5 & G6	847+50.917	3.208	528.009	528.202		G5 & G6	848+00.917	3.208	527.777	527.890

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 26, 27 & 28 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

T. Ritzheimer
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L. Glaser
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S. Stegman
DRAWN
J. Corley
T. Ritzheimer
CHECKED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	45

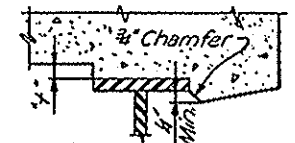
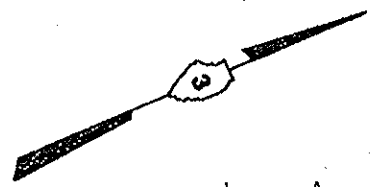
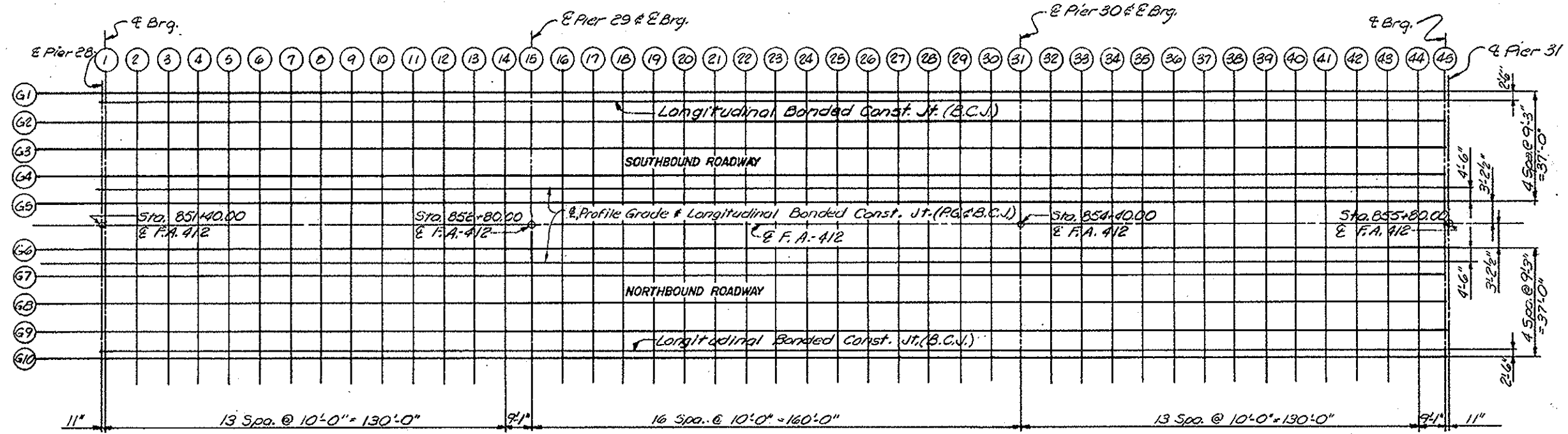
ILLINOIS PROJECT EBF-412-4(6)

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
12	G1 & G10 BCJ	848+10.917 848+10.917	40.208 37.708	526.991 527.041	527.068 527.120	24	G1 & G10 BCJ	849+30.000 849+30.000	40.208 37.708	526.440 526.490	526.513 526.565	36	G1 & G10 BCJ	850+50.000 850+50.000	40.208 37.708	525.885 525.936	526.035 526.090
	G2 & G9	848+10.917	30.958	527.176	527.262		G2 & G9	849+30.000	30.958	526.625	526.706		G2 & G9	850+50.000	30.958	526.071	526.238
	G3 & G8	848+10.917	21.708	527.361	527.447		G3 & G8	849+30.000	21.708	526.811	526.891		G3 & G8	850+50.000	21.708	526.256	526.423
	G4 & G7	848+10.917	12.458	527.346	527.432		G4 & G7	849+30.000	12.458	526.994	527.076		G4 & G7	850+50.000	12.458	526.441	526.608
	PG & BCJ	848+10.917	7.708	527.641	527.722		PG & BCJ	849+30.000	7.708	527.091	527.167		PG & BCJ	850+50.000	7.708	526.536	526.694
	G5 & G6	848+10.917	3.208	527.731	527.808		G5 & G6	849+30.000	3.208	527.180	527.253		G5 & G6	850+50.000	3.208	526.625	526.775
13	G1 & G10 BCJ	848+20.917 848+20.917	40.208 37.708	526.945 526.995	526.998 527.039	25	G1 & G10 BCJ	849+40.000 849+40.000	40.208 37.708	526.394 526.444	526.457 526.509	37	G1 & G10 BCJ	850+60.000 850+60.000	40.208 37.708	525.839 525.889	526.016 526.072
	G2 & G9	848+20.917	30.958	527.130	527.178		G2 & G9	849+40.000	30.958	526.579	526.648		G2 & G9	850+60.000	30.958	526.024	526.222
	G3 & G8	848+20.917	21.708	527.315	527.363		G3 & G8	849+40.000	21.708	526.764	526.833		G3 & G8	850+60.000	21.708	526.209	526.407
	G4 & G7	848+20.917	12.458	527.500	527.548		G4 & G7	849+40.000	12.458	526.949	527.018		G4 & G7	850+60.000	12.458	526.394	526.592
	PG & BCJ	848+20.917	7.708	527.640	527.688		PG & BCJ	849+40.000	7.708	527.044	527.051		PG & BCJ	850+60.000	7.708	526.490	526.676
	G5 & G6	848+20.917	3.208	527.885	527.928		G5 & G6	849+40.000	3.208	527.134	527.197		G5 & G6	850+60.000	3.208	526.579	526.756
14	G1 & G10 BCJ	848+30.917 848+30.917	40.208 37.708	526.999 526.949	526.915 526.966	26	G1 & G10 BCJ	849+50.000 849+50.000	40.208 37.708	526.348 526.398	526.396 526.447	38	G1 & G10 BCJ	850+70.000 850+70.000	40.208 37.708	525.793 525.843	525.938 526.044
	G2 & G9	848+30.917	30.958	527.084	527.102		G2 & G9	849+50.000	30.958	526.533	526.586		G2 & G9	850+70.000	30.958	525.978	526.196
	G3 & G8	848+30.917	21.708	527.269	527.287		G3 & G8	849+50.000	21.708	526.718	526.771		G3 & G8	850+70.000	21.708	526.163	526.301
	G4 & G7	848+30.917	12.458	527.454	527.471		G4 & G7	849+50.000	12.458	526.903	526.956		G4 & G7	850+70.000	12.458	526.348	526.566
	PG & BCJ	848+30.917	7.708	527.349	527.365		PG & BCJ	849+50.000	7.708	526.998	527.048		PG & BCJ	850+70.000	7.708	526.443	526.649
	G5 & G6	848+30.917	3.208	527.639	527.655		G5 & G6	849+50.000	3.208	527.088	527.136		G5 & G6	850+70.000	3.208	526.533	526.728
15 C.L. PIER 26	G1 & G10 BCJ	848+40.000 848+40.000	40.208 37.708	526.837 526.907	526.837 526.907	27	G1 & G10 BCJ	849+60.000 849+60.000	40.208 37.708	526.302 526.352	526.303 526.354	39	G1 & G10 BCJ	850+80.000 850+80.000	40.208 37.708	525.747 525.797	525.949 526.005
	G2 & G9	848+40.000	30.958	527.042	527.042		G2 & G9	849+60.000	30.958	526.487	526.520		G2 & G9	850+80.000	30.958	525.932	526.158
	G3 & G8	848+40.000	21.708	527.227	527.227		G3 & G8	849+60.000	21.708	526.672	526.705		G3 & G8	850+80.000	21.708	526.117	526.343
	G4 & G7	848+40.000	12.458	527.412	527.412		G4 & G7	849+60.000	12.458	526.857	526.890		G4 & G7	850+80.000	12.458	526.302	526.528
	PG & BCJ	848+40.000	7.708	527.507	527.507		PG & BCJ	849+60.000	7.708	526.952	526.984		PG & BCJ	850+80.000	7.708	526.397	526.611
	G5 & G6	848+40.000	3.208	527.597	527.597		G5 & G6	849+60.000	3.208	527.042	527.073		G5 & G6	850+80.000	3.208	526.487	526.689
16	G1 & G10 BCJ	848+50.000 848+50.000	40.208 37.708	526.810 526.860	526.806 526.856	28	G1 & G10 BCJ	849+70.000 849+70.000	40.208 37.708	526.256 526.305	526.269 526.319	40	G1 & G10 BCJ	850+90.000 850+90.000	40.208 37.708	525.701 525.751	525.894 525.954
	G2 & G9	848+50.000	30.958	526.995	526.991		G2 & G9	849+70.000	30.958	526.440	526.455		G2 & G9	850+90.000	30.958	525.886	526.107
	G3 & G8	848+50.000	21.708	527.180	527.176		G3 & G8	849+70.000	21.708	526.625	526.640		G3 & G8	850+90.000	21.708	526.071	526.292
	G4 & G7	848+50.000	12.458	527.365	527.361		G4 & G7	849+70.000	12.458	526.811	526.825		G4 & G7	850+90.000	12.458	526.256	526.477
	PG & BCJ	848+50.000	7.708	527.460	527.456		PG & BCJ	849+70.000	7.708	526.906	526.919		PG & BCJ	850+90.000	7.708	526.351	526.358
	G5 & G6	848+50.000	3.208	527.650	527.646		G5 & G6	849+70.000	3.208	526.996	527.009		G5 & G6	850+90.000	3.208	526.441	526.636
17	G1 & G10 BCJ	848+60.000 848+60.000	40.208 37.708	526.764 526.814	526.766 526.817	29	G1 & G10 BCJ	849+80.000 849+80.000	40.208 37.708	526.209 526.259	526.210 526.259	41	G1 & G10 BCJ	851+00.000 851+00.000	40.208 37.708	525.654 525.704	525.833 525.883
	G2 & G9	848+60.000	30.958	526.949	526.952		G2 & G9	849+80.000	30.958	526.394	526.393		G2 & G9	851+00.000	30.958	525.839	526.039
	G3 & G8	848+60.000	21.708	527.134	527.137		G3 & G8	849+80.000	21.708	526.579	526.578		G3 & G8	851+00.000	21.708	526.024	526.224
	G4 & G7	848+60.000	12.458	527.319	527.322		G4 & G7	849+80.000	12.458	526.764	526.763		G4 & G7	851+00.000	12.458	526.209	526.409
	PG & BCJ	848+60.000	7.708	527.414	527.417		PG & BCJ	849+80.000	7.708	526.859	526.859		PG & BCJ	851+00.000	7.708	526.304	526.493
	G5 & G6	848+60.000	3.208	527.504	527.506		G5 & G6	849+80.000	3.208	526.949	526.950		G5 & G6	851+00.000	3.208	526.394	526.593
18	G1 & G10 BCJ	848+70.000 848+70.000	40.208 37.708	526.718 526.768	526.733 526.784	30	G1 & G10 BCJ	849+90.000 849+90.000	40.208 37.708	526.163 526.213	526.159 526.207	42	G1 & G10 BCJ	851+10.000 851+10.000	40.208 37.708	525.608 525.658	525.757 525.812
	G2 & G9	848+70.000	30.958	526.903	526.920		G2 & G9	849+90.000	30.958	526.348	526.342		G2 & G9	851+10.000	30.958	525.793	525.961
	G3 & G8	848+70.000	21.708	527.088	527.105		G3 & G8	849+90.000	21.708	526.533	526.527		G3 & G8	851+10.000	21.708	525.978	526.146
	G4 & G7	848+70.000	12.458	527.273	527.290		G4 & G7	849+90.000	12.458	526.718	526.712		G4 & G7	851+10.000	12.458	526.163	526.331
	PG & BCJ	848+70.000	7.708	527.368	527.384		PG & BCJ	849+90.000	7.708	526.813	526.819		PG & BCJ	851+10.000	7.708	526.258	526.416
	G5 & G6	848+70.000	3.208	527.458	527.473		G5 & G6	849+90.000	3.208	526.903	526.898		G5 & G6	851+10.000	3.208	526.348	526.497
19	G1 & G10 BCJ	848+80.000 848+80.000	40.208 37.708	526.672 526.722	526.705 526.756	31 C.L. PIER 27	G1 & G10 BCJ	850+00.000 850+00.000	40.208 37.708	526.117 526.167	526.117 526.167	43	G1 & G10 BCJ	851+20.000 851+20.000	40.208 37.708	525.562 525.612	525.669 525.722
	G2 & G9	848+80.000	30.958	526.857	526.893		G2 & G9	850+00.000	30.958	526.302	526.302		G2 & G9	851+20.000	30.958	525.641	525.866
	G3 & G8	848+80.000	21.708	527.042	527.078		G3 & G8	850+00.000	21.708	526.487	526.487		G3 & G8	851+20.000	21.708	525.747	526.031
	G4 & G7	848+80.000	12.458	527.227	527.263		G4 & G7	850+00.000	12.458	526.672	526.672		G4 & G7	851+20.000	12.458	525.932	526.217
	PG & BCJ	848+80.000	7.708	527.322	527.357		PG & BCJ	850+00.000	7.708	526.767	526.767		PG & BCJ	851+20.000	7.708	526.117	526.325
	G5 & G6	848+80.000	3.208	527.412	527.445		G5 & G6	850+00.000	3.208	526.857	526.857		G5 & G6	851+20.000	3.208	526.302	526.409
20	G1 & G10 BCJ	848+90.000 848+90.000	40.208 37.708	526.625 526.674	526.674 526.723	32	G1 & G10 BCJ	850+10.000 850+10.000	40.208 37.708	526.071 526.121	526.088 526.139	44	G1 & G10 BCJ	851+30.000 851+30.000	40.208 37.708	525.516 525.566	525.571 525.623
	G2 & G9	848+90.000	30.958	526.811	526.865		G2 & G9	850+10.000	30.958	526.256	526.277		G2 & G9	851+30.000	30.958	525.701	525.764
	G3 & G8	848+90.000	21.708	527.000	527.030		G3 & G8	850+10.000	21.708	526.441	526.462		G3 & G8	851+30.000	21.708	525.886	525.949
	G4 & G7	848+90.000	12.458	527.180	527.234		G4 & G7	850+10.000	12.458	526.625	526.646		G4 & G7	851+30.000	12.458	526.071	526.134
	PG & BCJ	848+90.000	7.708	527.275	527.326		PG & BCJ	850+10.000	7.708	526.721	526.740		PG & BCJ	851+30.000	7.708	526.156	526.225
	G5 & G6	848+90.000	3.208	527.365	527.414		G5 & G6	850+10.000	3.208	526.811	526.828		G5 & G6	851+30.000	3.208	526.236	52

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	40
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT	EBF-412-4(6)	

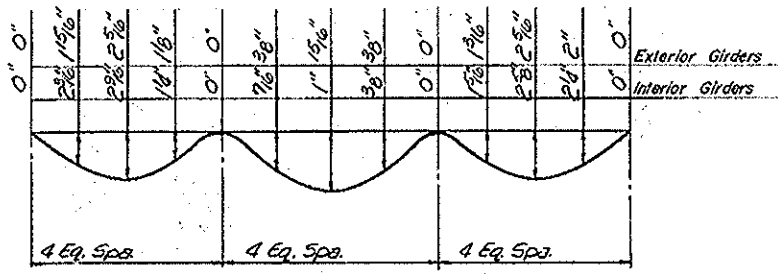
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
40	G1 & G10	838+50.000	40.208	531.434	531.542	51	G1 & G10	839+55.000	40.208	530.949	530.965	40	G1 & G10	840+45.000	40.208	530.533	530.694
	BCJ	838+50.000	37.708	531.494	531.395		BCJ	839+55.000	37.708	530.999	531.036		BCJ	840+45.000	37.708	530.583	530.749
	G2 & G9	838+50.000	30.958	531.619	531.739		G2 & G9	839+55.000	30.958	531.134	531.174		G2 & G9	840+45.000	30.958	530.718	530.897
	G3 & G8	838+50.000	21.708	531.804	531.924		G3 & G8	839+55.000	21.708	531.319	531.359		G3 & G8	840+45.000	21.708	530.903	531.082
	G4 & G7	838+50.000	12.458	531.990	532.109		G4 & G7	839+55.000	12.458	531.504	531.544		G4 & G7	840+45.000	12.458	531.088	531.267
	PG & BCJ	838+50.000	7.708	532.084	532.198		PG & BCJ	839+55.000	7.708	531.599	531.637		PG & BCJ	840+45.000	7.708	531.183	531.353
	G5 & G6	838+50.000	3.208	532.174	532.282		G5 & G6	839+55.000	3.208	531.689	531.725		G5 & G6	840+45.000	3.208	531.273	531.434
41	G1 & G10	838+60.000	40.208	531.388	531.491	52	G1 & G10	839+65.000	40.208	530.903	530.968	41	G1 & G10	840+55.000	40.208	530.487	530.613
	BCJ	838+60.000	37.708	531.438	531.544		BCJ	839+65.000	37.708	530.953	531.020		BCJ	840+55.000	37.708	530.537	530.667
	G2 & G9	838+60.000	30.958	531.579	531.688		G2 & G9	839+65.000	30.958	531.088	531.161		G2 & G9	840+55.000	30.958	530.571	530.711
	G3 & G8	838+60.000	21.708	531.758	531.873		G3 & G8	839+65.000	21.708	531.273	531.346		G3 & G8	840+55.000	21.708	530.654	530.796
	G4 & G7	838+60.000	12.458	531.943	532.058		G4 & G7	839+65.000	12.458	531.458	531.531		G4 & G7	840+55.000	12.458	531.042	531.181
	PG & BCJ	838+60.000	7.708	532.038	532.147		PG & BCJ	839+65.000	7.708	531.553	531.622		PG & BCJ	840+55.000	7.708	531.136	531.269
	G5 & G6	838+60.000	3.208	532.128	532.231		G5 & G6	839+65.000	3.208	531.643	531.708		G5 & G6	840+55.000	3.208	531.227	531.353
42	G1 & G10	838+70.000	40.208	531.342	531.433	53	G1 & G10	839+75.000	40.208	530.856	530.954	42	G1 & G10	840+65.000	40.208	530.440	530.522
	BCJ	838+70.000	37.708	531.392	531.486		BCJ	839+75.000	37.708	530.906	531.007		BCJ	840+65.000	37.708	530.490	530.574
	G2 & G9	838+70.000	30.958	531.527	531.628		G2 & G9	839+75.000	30.958	531.042	531.151		G2 & G9	840+65.000	30.958	530.625	530.715
	G3 & G8	838+70.000	21.708	531.712	531.813		G3 & G8	839+75.000	21.708	531.226	531.336		G3 & G8	840+65.000	21.708	530.700	530.800
	G4 & G7	838+70.000	12.458	531.897	531.998		G4 & G7	839+75.000	12.458	531.411	531.521		G4 & G7	840+65.000	12.458	531.295	531.385
	PG & BCJ	838+70.000	7.708	531.982	532.088		PG & BCJ	839+75.000	7.708	531.506	531.610		PG & BCJ	840+65.000	7.708	531.090	531.176
	G5 & G6	838+70.000	3.208	532.062	532.173		G5 & G6	839+75.000	3.208	531.596	531.694		G5 & G6	840+65.000	3.208	531.180	531.262
43	G1 & G10	838+80.000	40.208	531.294	531.370	54	G1 & G10	839+85.000	40.208	530.810	530.939	43	G1 & G10	840+75.003	40.208	530.375	530.375
	BCJ	838+80.000	37.708	531.344	531.422		BCJ	839+85.000	37.708	530.860	530.993		BCJ	840+75.003	37.708	530.425	530.425
	G2 & G9	838+80.000	30.958	531.481	531.562		G2 & G9	839+85.000	30.958	530.995	531.140		G2 & G9	840+75.003	30.958	530.560	530.560
	G3 & G8	838+80.000	21.708	531.666	531.747		G3 & G8	839+85.000	21.708	531.180	531.325		G3 & G8	840+75.003	21.708	530.745	530.745
	G4 & G7	838+80.000	12.458	531.851	531.931		G4 & G7	839+85.000	12.458	531.365	531.510		G4 & G7	840+75.003	12.458	530.930	530.930
	PG & BCJ	838+80.000	7.708	531.946	532.023		PG & BCJ	839+85.000	7.708	531.460	531.597		PG & BCJ	840+75.003	7.708	531.025	531.025
	G5 & G6	838+80.000	3.208	532.036	532.110		G5 & G6	839+85.000	3.208	531.550	531.679		G5 & G6	840+75.003	3.208	531.115	531.115
44	G1 & G10	838+90.000	40.208	531.250	531.302	55	G1 & G10	839+95.000	40.208	530.744	530.923	44	G1 & G10	840+85.000	40.208	530.671	530.864
	BCJ	838+90.000	37.708	531.299	531.353		BCJ	839+95.000	37.708	530.794	530.978		BCJ	840+85.000	37.708	530.721	530.920
	G2 & G9	838+90.000	30.958	531.434	531.492		G2 & G9	839+95.000	30.958	530.949	531.128		G2 & G9	840+85.000	30.958	530.856	531.072
	G3 & G8	838+90.000	21.708	531.619	531.677		G3 & G8	839+95.000	21.708	531.134	531.313		G3 & G8	840+85.000	21.708	531.042	531.257
	G4 & G7	838+90.000	12.458	531.804	531.862		G4 & G7	839+95.000	12.458	531.319	531.498		G4 & G7	840+85.000	12.458	531.227	531.442
	PG & BCJ	838+90.000	7.708	531.899	531.954		PG & BCJ	839+95.000	7.708	531.414	531.583		PG & BCJ	840+85.000	7.708	531.322	531.525
	G5 & G6	838+90.000	3.208	531.990	532.042		G5 & G6	839+95.000	3.208	531.504	531.663		G5 & G6	840+85.000	3.208	531.412	531.604
45	G1 & G10	839+00.000	40.208	531.203	531.235	56	G1 & G10	840+05.000	40.208	530.718	530.899	45	G1 & G10	840+95.000	40.208	530.625	530.818
	BCJ	839+00.000	37.708	531.253	531.286		BCJ	840+05.000	37.708	530.768	530.954		BCJ	840+95.000	37.708	530.675	530.875
	G2 & G9	839+00.000	30.958	531.388	531.422		G2 & G9	840+05.000	30.958	530.903	531.104		G2 & G9	840+95.000	30.958	530.810	531.028
	G3 & G8	839+00.000	21.708	531.573	531.607		G3 & G8	840+05.000	21.708	531.088	531.292		G3 & G8	840+95.000	21.708	530.995	531.213
	G4 & G7	839+00.000	12.458	531.758	531.792		G4 & G7	840+05.000	12.458	531.273	531.477		G4 & G7	840+95.000	12.458	531.180	531.398
	PG & BCJ	839+00.000	7.708	531.853	531.886		PG & BCJ	840+05.000	7.708	531.368	531.560		PG & BCJ	840+95.000	7.708	531.275	531.480
	G5 & G6	839+00.000	3.208	531.943	531.973		G5 & G6	840+05.000	3.208	531.458	531.639		G5 & G6	840+95.000	3.208	531.365	531.588
46	G1 & G10	839+10.000	40.208	531.137	531.171	57	G1 & G10	840+15.000	40.208	530.671	530.864	46	G1 & G10	840+15.000	40.208	530.671	530.864
	BCJ	839+10.000	37.708	531.187	531.222		BCJ	840+15.000	37.708	530.721	530.920		BCJ	840+15.000	37.708	530.721	530.920
	G2 & G9	839+10.000	30.958	531.322	531.358		G2 & G9	840+15.000	30.958	530.856	531.072		G2 & G9	840+15.000	30.958	530.856	531.072
	G3 & G8	839+10.000	21.708	531.507	531.543		G3 & G8	840+15.000	21.708	531.042	531.257		G3 & G8	840+15.000	21.708	531.042	531.257
	G4 & G7	839+10.000	12.458	531.712	531.728		G4 & G7	840+15.000	12.458	531.227	531.442		G4 & G7	840+15.000	12.458	531.227	531.442
	PG & BCJ	839+10.000	7.708	531.807	531.822		PG & BCJ	840+15.000	7.708	531.322	531.525		PG & BCJ	840+15.000	7.708	531.322	531.525
	G5 & G6	839+10.000	3.208	531.897	531.911		G5 & G6	840+15.000	3.208	531.412	531.604		G5 & G6	840+15.000	3.208	531.412	531.604
47	G1 & G10	839+20.000	40.208	531.111	531.114	58	G1 & G10	840+25.000	40.208	530.625	530.818	47	G1 & G10	840+25.000	40.208	530.625	530.818
	BCJ	839+20.000	37.708	531.161	531.164		BCJ	840+25.000	37.708	530.675	530.875		BCJ	840+25.000	37.708	530.675	530.875
	G2 & G9	839+20.000	30.958	531.296	531.299		G2 & G9	840+25.000	30.958	530.810	531.028		G2 & G9	840+25.000	30.958	530.810	531.028
	G3 & G8	839+20.000	21.708	531.481	531.484		G3 & G8	840+25.000	21.708	530.995	531.213		G3 & G8	840+25.000	21.708	530.995	531.213
	G4 & G7	839+20.000	12.458	531.666	531.669		G4 & G7	840+25.000	12.458	531.180	531.398		G4 & G7	840+25.000	12.458	531.180	531.398
	PG & BCJ	839+20.000	7.708														



Note: Stations and Offsets are given along and normal to E.F.A.-412.

FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM (INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

PLAN

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION		
1	C.L. BRG. PIER 28	G1 & G10	851+40.917	40.208	525.465	525.465	7	G1 & G10	852+00.917	40.208	525.188	525.386	
		BCJ	851+40.917	37.708	525.515	525.515			BCJ	852+00.917	37.708	525.238	525.442
		G2 & G9	851+40.917	30.958	525.650	525.650			G2 & G9	852+00.917	30.958	525.373	525.595
		G3 & G8	851+40.917	21.708	525.835	525.835			G3 & G8	852+00.917	21.708	525.558	525.780
		G4 & G7	851+40.917	12.458	526.020	526.020			G4 & G7	852+00.917	12.458	525.743	525.965
		PG & BCJ	851+40.917	7.708	526.115	526.115			PG & BCJ	852+00.917	7.708	525.838	526.048
		G5 & G6	851+40.917	3.208	526.205	526.205			G5 & G6	852+00.917	3.208	525.928	526.126
2	G1 & G10	851+50.917	40.208	525.419	525.475	8	G1 & G10	852+10.917	40.208	525.142	525.332		
		BCJ	851+50.917	37.708	525.527			525.527	BCJ	852+10.917	37.708	525.191	525.387
		G2 & G9	851+50.917	30.958	525.604			525.667	G2 & G9	852+10.917	30.958	525.326	525.540
		G3 & G8	851+50.917	21.708	525.789			525.852	G3 & G8	852+10.917	21.708	525.511	525.725
		G4 & G7	851+50.917	12.458	525.974			526.037	G4 & G7	852+10.917	12.458	525.697	525.910
		PG & BCJ	851+50.917	7.708	526.069	526.128			PG & BCJ	852+10.917	7.708	525.792	525.993
		G5 & G6	851+50.917	3.208	526.159	526.215			G5 & G6	852+10.917	3.208	525.882	526.072
3	G1 & G10	851+60.917	40.208	525.373	525.477	9	G1 & G10	852+20.917	40.208	525.095	525.267		
		BCJ	851+60.917	37.708	525.423			525.531	BCJ	852+20.917	37.708	525.145	525.323
		G2 & G9	851+60.917	30.958	525.558			525.675	G2 & G9	852+20.917	30.958	525.280	525.474
		G3 & G8	851+60.917	21.708	525.743			525.860	G3 & G8	852+20.917	21.708	525.465	525.659
		G4 & G7	851+60.917	12.458	525.928			526.045	G4 & G7	852+20.917	12.458	525.650	525.844
		PG & BCJ	851+60.917	7.708	526.023	526.139			PG & BCJ	852+20.917	7.708	525.745	525.928
		G5 & G6	851+60.917	3.208	526.113	526.217			G5 & G6	852+20.917	3.208	525.835	526.007
4	G1 & G10	851+70.917	40.208	525.326	525.472	10	G1 & G10	852+30.917	40.208	525.049	525.194		
		BCJ	851+70.917	37.708	525.376			525.527	BCJ	852+30.917	37.708	525.099	525.249
		G2 & G9	851+70.917	30.958	525.511			525.675	G2 & G9	852+30.917	30.958	525.234	525.397
		G3 & G8	851+70.917	21.708	525.697			525.860	G3 & G8	852+30.917	21.708	525.419	525.582
		G4 & G7	851+70.917	12.458	525.882			526.045	G4 & G7	852+30.917	12.458	525.604	525.767
		PG & BCJ	851+70.917	7.708	525.977	526.131			PG & BCJ	852+30.917	7.708	525.699	525.853
		G5 & G6	851+70.917	3.208	526.066	526.212			G5 & G6	852+30.917	3.208	525.789	525.934
5	G1 & G10	851+80.917	40.208	525.280	525.455	11	G1 & G10	852+40.917	40.208	525.003	525.115		
		BCJ	851+80.917	37.708	525.330			525.511	BCJ	852+40.917	37.708	525.053	525.169
		G2 & G9	851+80.917	30.958	525.465			525.642	G2 & G9	852+40.917	30.958	525.188	525.313
		G3 & G8	851+80.917	21.708	525.650			525.817	G3 & G8	852+40.917	21.708	525.373	525.498
		G4 & G7	851+80.917	12.458	525.835			526.002	G4 & G7	852+40.917	12.458	525.558	525.683
		PG & BCJ	851+80.917	7.708	525.930	526.116			PG & BCJ	852+40.917	7.708	525.653	525.772
		G5 & G6	851+80.917	3.208	526.020	526.193			G5 & G6	852+40.917	3.208	525.743	525.856
6	G1 & G10	851+90.917	40.208	525.234	525.428	12	G1 & G10	852+50.917	40.208	525.003	525.115		
		BCJ	851+90.917	37.708	525.284			525.484	BCJ	852+50.917	37.708	525.053	525.169
		G2 & G9	851+90.917	30.958	525.419			525.637	G2 & G9	852+50.917	30.958	525.188	525.313
		G3 & G8	851+90.917	21.708	525.604			525.822	G3 & G8	852+50.917	21.708	525.373	525.498
		G4 & G7	851+90.917	12.458	525.789			526.007	G4 & G7	852+50.917	12.458	525.558	525.683
		PG & BCJ	851+90.917	7.708	525.884	526.090			PG & BCJ	852+50.917	7.708	525.653	525.772
		G5 & G6	851+90.917	3.208	525.974	526.168			G5 & G6	852+50.917	3.208	525.743	525.856

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 29, 30, & 31 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
S. Stegman
DRAWN
J. Corley
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 40 OF 163

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ROUTE NO. SECTION COUNTY TOTAL SHEETS SHEET NO. FA-412 50-48 LASALLE 245 47

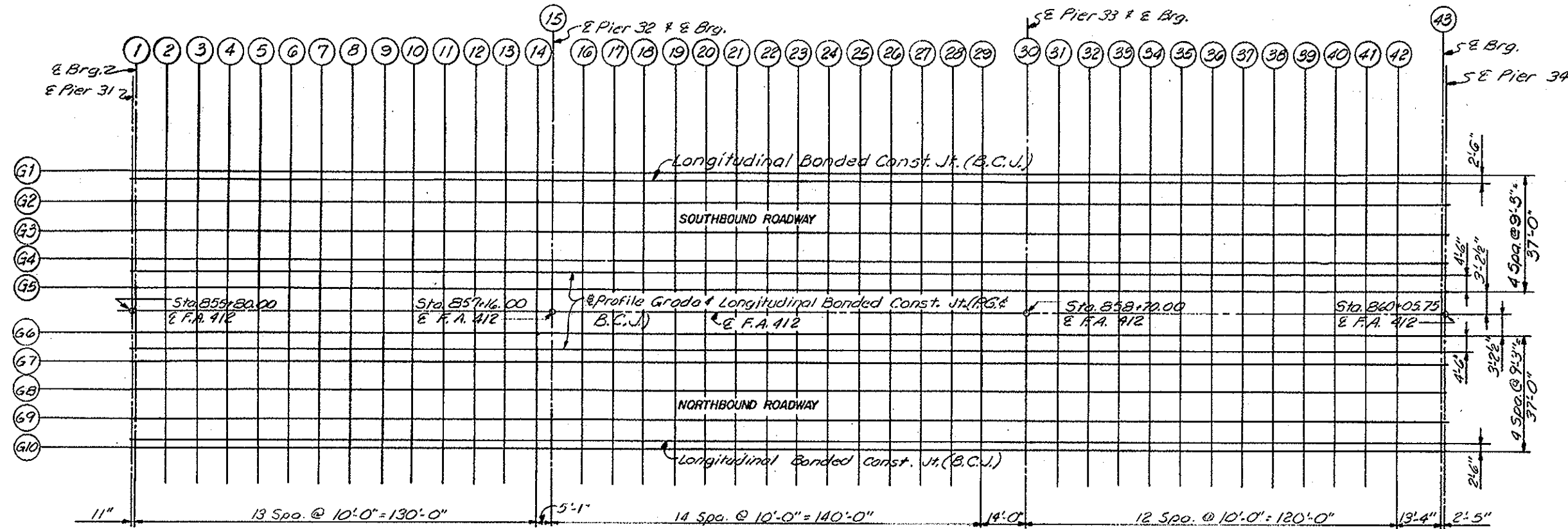
Main table with columns: LINE, LOCATION, STATION, OFFSET, THEORETICAL GRADE ELEVATION, THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION, and similar columns for adjacent spans.

DESIGNER: T. Ritzheimer, L. Glaser, J. Corley; CHECKER: T. Ritzheimer

SOUTH APPROACH STRUCTURAL STEEL ALTERNATE TOP OF SLAB ELEVATIONS SPANS 29, 30, & 31 NORTHBOUND & SOUTHBOUND FA-412 OVER ILLINOIS RIVER SECTION 50-48 PROJECT EBF-412-4(G) STA. 863+1600 (FA-412) LASALLE CO.

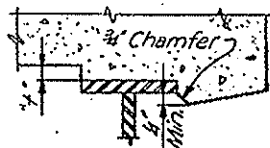
PREPARED BY: SVERDRUP & PARCEL AND ASSOCIATES, Inc. ENGINEERS ARCHITECTS PLANNERS ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



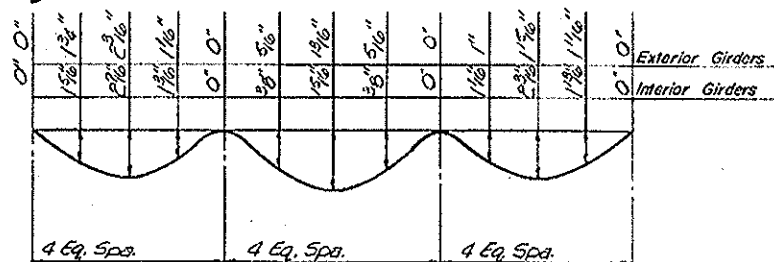
Note: Stations and offsets are given along and normal to E.F.A. 412.

SPAN 32



FILLET HEIGHTS

To determine "f": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

SPAN 33

PLAN

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 31	G1 & G10	835+80.917	40.208	523.431	523.431
	BCJ	835+80.917	37.708	523.481	523.481
	G2 & G9	835+80.917	30.958	523.616	523.616
	G3 & G8	835+80.917	21.708	523.801	523.801
	G4 & G7	835+80.917	12.458	523.986	523.986
2	G1 & G10	835+90.917	40.208	523.385	523.436
	BCJ	835+90.917	37.708	523.434	523.488
	G2 & G9	835+90.917	30.958	523.569	523.627
	G3 & G8	835+90.917	21.708	523.754	523.812
	G4 & G7	835+90.917	12.458	523.939	523.997
3	G1 & G10	836+00.917	40.208	523.338	523.435
	BCJ	836+00.917	37.708	523.388	523.488
	G2 & G9	836+00.917	30.958	523.523	523.632
	G3 & G8	836+00.917	21.708	523.708	523.817
	G4 & G7	836+00.917	12.458	523.893	524.002
4	G1 & G10	836+10.917	40.208	523.292	523.428
	BCJ	836+10.917	37.708	523.342	523.488
	G2 & G9	836+10.917	30.958	523.477	523.627
	G3 & G8	836+10.917	21.708	523.662	523.812
	G4 & G7	836+10.917	12.458	523.847	523.997
5	G1 & G10	836+20.917	40.208	523.246	523.407
	BCJ	836+20.917	37.708	523.296	523.463
	G2 & G9	836+20.917	30.958	523.431	523.612
	G3 & G8	836+20.917	21.708	523.616	523.797
	G4 & G7	836+20.917	12.458	523.801	523.982

SPAN 34

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ADJUSTED FOR DEAD LOAD DEFLECTION
6	G1 & G10	836+30.917	40.208	523.199	523.377
	BCJ	836+30.917	37.708	523.250	523.432
	G2 & G9	836+30.917	30.958	523.385	523.583
	G3 & G8	836+30.917	21.708	523.570	523.768
	G4 & G7	836+30.917	12.458	523.754	523.952
7	G1 & G10	836+40.917	40.208	523.153	523.333
	BCJ	836+40.917	37.708	523.203	523.389
	G2 & G9	836+40.917	30.958	523.338	523.539
	G3 & G8	836+40.917	21.708	523.523	523.724
	G4 & G7	836+40.917	12.458	523.708	523.909
8	G1 & G10	836+50.917	40.208	523.107	523.278
	BCJ	836+50.917	37.708	523.157	523.334
	G2 & G9	836+50.917	30.958	523.292	523.484
	G3 & G8	836+50.917	21.708	523.477	523.669
	G4 & G7	836+50.917	12.458	523.662	523.854
9	G1 & G10	836+60.917	40.208	523.061	523.213
	BCJ	836+60.917	37.708	523.111	523.268
	G2 & G9	836+60.917	30.958	523.246	523.417
	G3 & G8	836+60.917	21.708	523.431	523.603
	G4 & G7	836+60.917	12.458	523.616	523.788
10	G1 & G10	836+70.917	40.208	523.014	523.140
	BCJ	836+70.917	37.708	523.064	523.194
	G2 & G9	836+70.917	30.958	523.199	523.338
	G3 & G8	836+70.917	21.708	523.385	523.523
	G4 & G7	836+70.917	12.458	523.570	523.708

SOUTH APPROACH

STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 32, 33 & 34 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

DESIGNED: T. Ritzheimer
CHECKED: L. Glaser
DRAWN: R. LUEY
CHECKED: T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

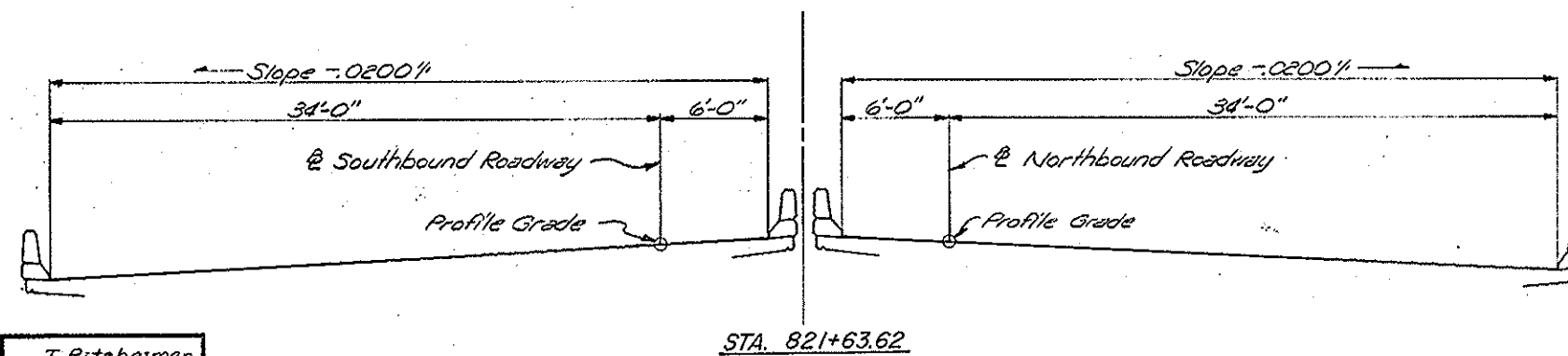
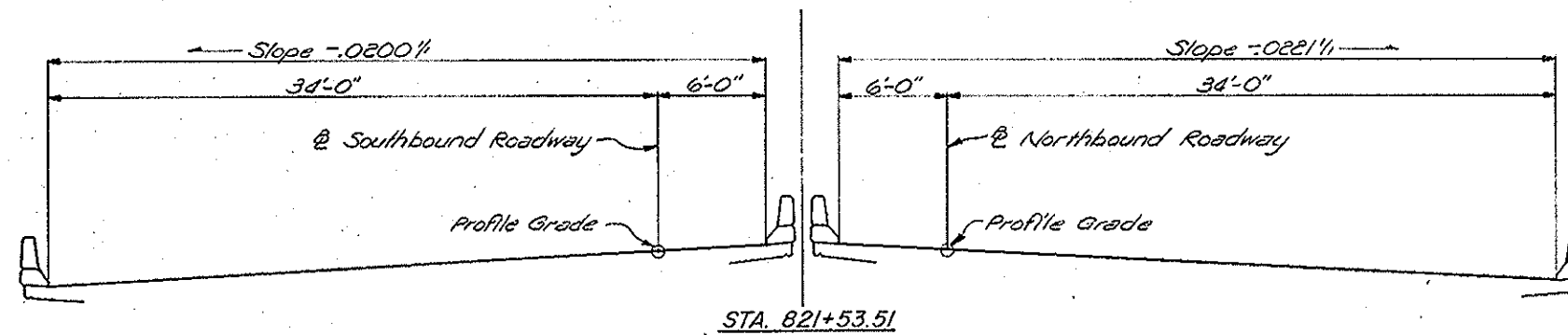
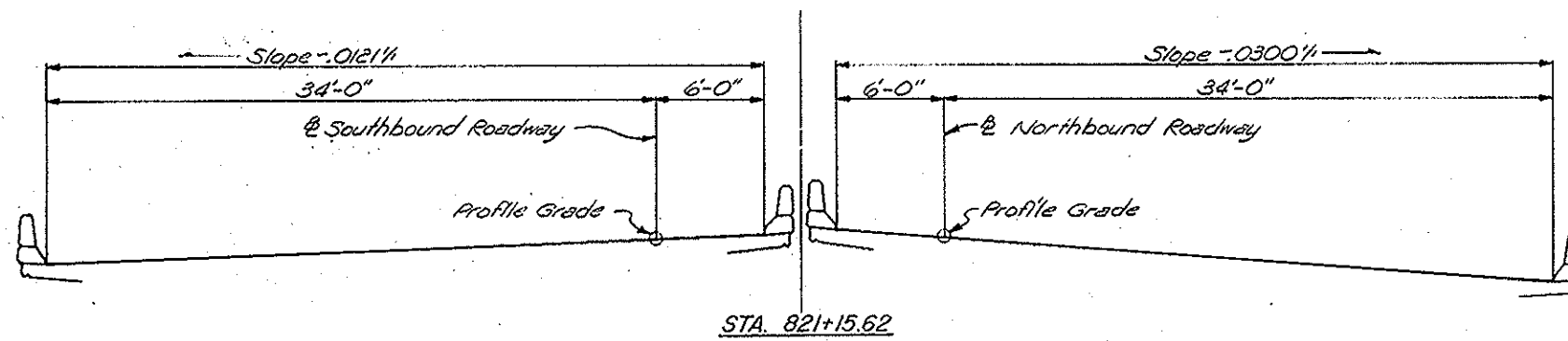
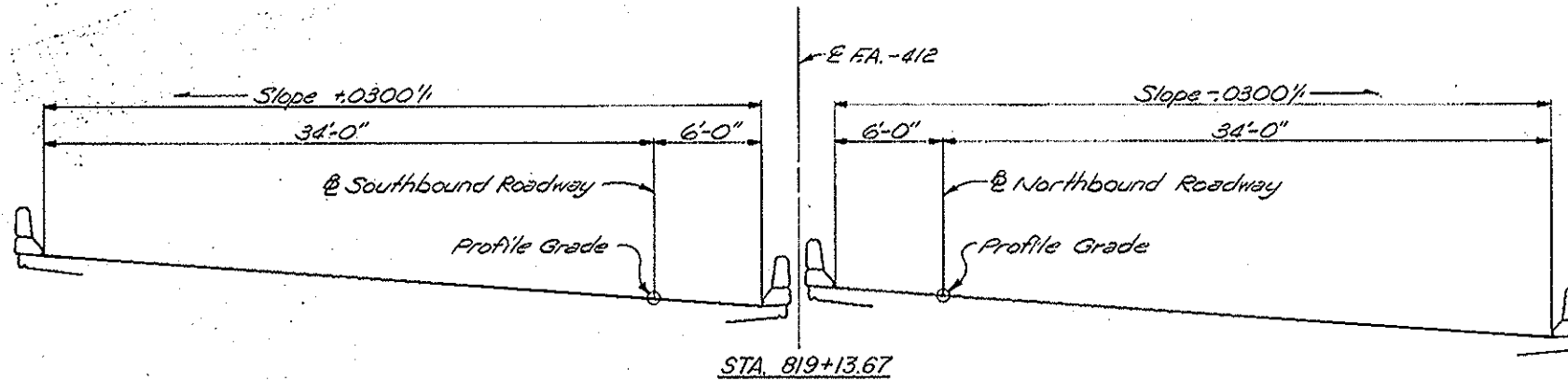
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA-412	50-4B	LASALLE	245	49

FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(G)

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ADJUSTED FOR DEAD LOAD DEFLECTION
11	G1 & GIO	856+80.917	40.208	522.968	523.062	23	G1 & GIO	857+96.000	40.208	522.436	522.504	35	G1 & GIO	859+20.000	40.208	521.863	521.992
	BCJ	856+80.917	37.708	523.018	523.112		BCJ	857+96.000	37.708	522.406	522.556		BCJ	859+20.000	37.708	521.913	522.046
	G2 & G9	856+80.917	30.958	523.158	523.252		G2 & G9	857+96.000	30.958	522.621	522.697		G2 & G9	859+20.000	30.958	522.048	522.192
	G3 & G8	856+80.917	21.708	523.338	523.443		G3 & G8	857+96.000	21.708	522.806	522.882		G3 & G8	859+20.000	21.708	522.233	522.377
	G4 & G7	856+80.917	12.458	523.523	523.628		G4 & G7	857+96.000	12.458	522.991	523.067		G4 & G7	859+20.000	12.458	522.418	522.563
	PG & BCJ	856+80.917	7.708	523.618	523.717		PG & BCJ	857+96.000	7.708	523.066	523.138		PG & BCJ	859+20.000	7.708	522.513	522.650
	G5 & G6	856+80.917	3.208	523.708	523.802		G5 & G6	857+96.000	3.208	523.176	523.244		G5 & G6	859+20.000	3.208	522.603	522.732
12	G1 & GIO	856+90.917	40.208	522.922	522.983	24	G1 & GIO	858+06.000	40.208	522.390	522.453	36	G1 & GIO	859+30.000	40.208	521.816	521.968
	BCJ	856+90.917	37.708	522.972	523.035		BCJ	858+06.000	37.708	522.440	522.505		BCJ	859+30.000	37.708	521.866	522.023
	G2 & G9	856+90.917	30.958	523.107	523.175		G2 & G9	858+06.000	30.958	522.575	522.646		G2 & G9	859+30.000	30.958	522.001	522.171
	G3 & G8	856+90.917	21.708	523.292	523.369		G3 & G8	858+06.000	21.708	522.760	522.831		G3 & G8	859+30.000	21.708	522.197	522.356
	G4 & G7	856+90.917	12.458	523.477	523.545		G4 & G7	858+06.000	12.458	522.945	523.016		G4 & G7	859+30.000	12.458	522.372	522.542
	PG & BCJ	856+90.917	7.708	523.572	523.636		PG & BCJ	858+06.000	7.708	523.040	523.107		PG & BCJ	859+30.000	7.708	522.467	522.627
	G5 & G6	856+90.917	3.208	523.662	523.723		G5 & G6	858+06.000	3.208	523.130	523.193		G5 & G6	859+30.000	3.208	522.556	522.708
13	G1 & GIO	857+00.917	40.208	522.876	522.906	25	G1 & GIO	858+16.000	40.208	522.344	522.396	37	G1 & GIO	859+40.000	40.208	521.770	521.934
	BCJ	857+00.917	37.708	522.926	522.958		BCJ	858+16.000	37.708	522.394	522.448		BCJ	859+40.000	37.708	521.820	521.990
	G2 & G9	857+00.917	30.958	523.061	523.095		G2 & G9	858+16.000	30.958	522.529	522.586		G2 & G9	859+40.000	30.958	521.955	522.140
	G3 & G8	857+00.917	21.708	523.246	523.280		G3 & G8	858+16.000	21.708	522.714	522.771		G3 & G8	859+40.000	21.708	522.140	522.325
	G4 & G7	857+00.917	12.458	523.431	523.465		G4 & G7	858+16.000	12.458	522.899	522.957		G4 & G7	859+40.000	12.458	522.325	522.510
	PG & BCJ	857+00.917	7.708	523.526	523.559		PG & BCJ	858+16.000	7.708	522.994	523.049		PG & BCJ	859+40.000	7.708	522.420	522.594
	G5 & G6	857+00.917	3.208	523.616	523.646		G5 & G6	858+16.000	3.208	523.083	523.136		G5 & G6	859+40.000	3.208	522.510	522.674
14	G1 & GIO	857+10.917	40.208	522.830	522.839	26	G1 & GIO	858+26.000	40.208	522.297	522.335	38	G1 & GIO	859+50.000	40.208	521.724	521.891
	BCJ	857+10.917	37.708	522.879	522.890		BCJ	858+26.000	37.708	522.347	522.386		BCJ	859+50.000	37.708	521.774	521.947
	G2 & G9	857+10.917	30.958	523.014	523.126		G2 & G9	858+26.000	30.958	522.482	522.524		G2 & G9	859+50.000	30.958	521.909	522.097
	G3 & G8	857+10.917	21.708	523.199	523.311		G3 & G8	858+26.000	21.708	522.667	522.709		G3 & G8	859+50.000	21.708	522.094	522.282
	G4 & G7	857+10.917	12.458	523.385	523.496		G4 & G7	858+26.000	12.458	522.852	522.894		G4 & G7	859+50.000	12.458	522.279	522.467
	PG & BCJ	857+10.917	7.708	523.479	523.590		PG & BCJ	858+26.000	7.708	522.948	522.987		PG & BCJ	859+50.000	7.708	522.374	522.551
	G5 & G6	857+10.917	3.208	523.570	523.579		G5 & G6	858+26.000	3.208	523.037	523.075		G5 & G6	859+50.000	3.208	522.464	522.631
15 C.L. PIER 32	G1 & GIO	857+16.000	40.208	522.806	522.806	27	G1 & GIO	858+36.000	40.208	522.251	522.272	39	G1 & GIO	859+60.000	40.208	521.678	521.838
	BCJ	857+16.000	37.708	522.856	522.856		BCJ	858+36.000	37.708	522.301	522.323		BCJ	859+60.000	37.708	521.728	521.893
	G2 & G9	857+16.000	30.958	522.991	522.991		G2 & G9	858+36.000	30.958	522.436	522.459		G2 & G9	859+60.000	30.958	521.863	522.041
	G3 & G8	857+16.000	21.708	523.176	523.176		G3 & G8	858+36.000	21.708	522.621	522.644		G3 & G8	859+60.000	21.708	522.048	522.226
	G4 & G7	857+16.000	12.458	523.361	523.361		G4 & G7	858+36.000	12.458	522.806	522.829		G4 & G7	859+60.000	12.458	522.233	522.411
	PG & BCJ	857+16.000	7.708	523.456	523.456		PG & BCJ	858+36.000	7.708	522.901	522.923		PG & BCJ	859+60.000	7.708	522.328	522.497
	G5 & G6	857+16.000	3.208	523.546	523.546		G5 & G6	858+36.000	3.208	522.991	523.012		G5 & G6	859+60.000	3.208	522.418	522.578
16	G1 & GIO	857+26.000	40.208	522.760	522.737	28	G1 & GIO	858+46.000	40.208	522.205	522.211	40	G1 & GIO	859+70.000	40.208	521.632	521.771
	BCJ	857+26.000	37.708	522.810	522.807		BCJ	858+46.000	37.708	522.255	522.261		BCJ	859+70.000	37.708	521.682	521.826
	G2 & G9	857+26.000	30.958	522.945	522.941		G2 & G9	858+46.000	30.958	522.390	522.396		G2 & G9	859+70.000	30.958	521.816	521.972
	G3 & G8	857+26.000	21.708	523.130	523.126		G3 & G8	858+46.000	21.708	522.575	522.581		G3 & G8	859+70.000	21.708	522.001	522.157
	G4 & G7	857+26.000	12.458	523.315	523.311		G4 & G7	858+46.000	12.458	522.760	522.766		G4 & G7	859+70.000	12.458	522.187	522.342
	PG & BCJ	857+26.000	7.708	523.410	523.406		PG & BCJ	858+46.000	7.708	522.855	522.861		PG & BCJ	859+70.000	7.708	522.281	522.429
	G5 & G6	857+26.000	3.208	523.500	523.497		G5 & G6	858+46.000	3.208	522.945	522.951		G5 & G6	859+70.000	3.208	522.372	522.511
17	G1 & GIO	857+36.000	40.208	522.714	522.711	29	G1 & GIO	858+56.000	40.208	522.159	522.156	41	G1 & GIO	859+80.000	40.208	521.585	521.695
	BCJ	857+36.000	37.708	522.764	522.761		BCJ	858+56.000	37.708	522.209	522.209		BCJ	859+80.000	37.708	521.635	521.748
	G2 & G9	857+36.000	30.958	522.899	522.896		G2 & G9	858+56.000	30.958	522.344	522.341		G2 & G9	859+80.000	30.958	521.770	521.892
	G3 & G8	857+36.000	21.708	523.083	523.081		G3 & G8	858+56.000	21.708	522.529	522.526		G3 & G8	859+80.000	21.708	521.955	522.077
	G4 & G7	857+36.000	12.458	523.269	523.266		G4 & G7	858+56.000	12.458	522.714	522.710		G4 & G7	859+80.000	12.458	522.140	522.262
	PG & BCJ	857+36.000	7.708	523.364	523.361		PG & BCJ	858+56.000	7.708	522.899	522.895		PG & BCJ	859+80.000	7.708	522.235	522.351
	G5 & G6	857+36.000	3.208	523.454	523.451		G5 & G6	858+56.000	3.208	522.899	522.896		G5 & G6	859+80.000	3.208	522.325	522.435
18	G1 & GIO	857+46.000	40.208	522.667	522.679	30 C.L. PIER 33	G1 & GIO	858+70.000	40.208	522.094	522.094	42	G1 & GIO	859+90.000	40.208	521.539	521.607
	BCJ	857+46.000	37.708	522.717	522.730		BCJ	858+70.000	37.708	522.144	522.144		BCJ	859+90.000	37.708	521.589	521.659
	G2 & G9	857+46.000	30.958	522.852	522.866		G2 & G9	858+70.000	30.958	522.279	522.279		G2 & G9	859+90.000	30.958	521.724	521.801
	G3 & G8	857+46.000	21.708	523.037	523.051		G3 & G8	858+70.000	21.708	522.464	522.464		G3 & G8	859+90.000	21.708	521.909	521.986
	G4 & G7	857+46.000	12.458	523.222	523.236		G4 & G7	858+70.000	12.458	522.649	522.649		G4 & G7	859+90.000	12.458	522.094	522.171
	PG & BCJ	857+46.000	7.708	523.317	523.330		PG & BCJ	858+70.000	7.708	522.744	522.744		PG & BCJ	859+90.000	7.708	522.189	522.261
	G5 & G6	857+46.000	3.208	523.407	523.419		G5 & G6	858+70.000	3.208	522.834	522.834		G5 & G6	859+90.000	3.208	522.279	522.347
19	G1 & GIO	857+56.000	40.208	522.621	522.651	31	G1 & GIO	858+80.000	40.208	522.048	522.064	43 C.L. BRO. PIER 34	G1 & GIO	860+03.333	40.208	521.477	521.477
	BCJ	857+56.000	37.708	522.671	522.702		BCJ	858+80.000	37.708	522.098	522.115		BCJ	860+03.333	37.708	521.527	521.527
	G2 & G9	857+56.000	30.958	522.806	522.839		G2 & G9	858+80.000	30.958	522.233	522.250		G2 & G9	860+03.333	30.958	521.662	521.662
	G3 & G8	857+56.000	21.708	522.991	523.024		G3 & G8	858+80.000	21.708	522.418	522.436		G3 & G8				

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	50
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT EBF-412-4(6)			



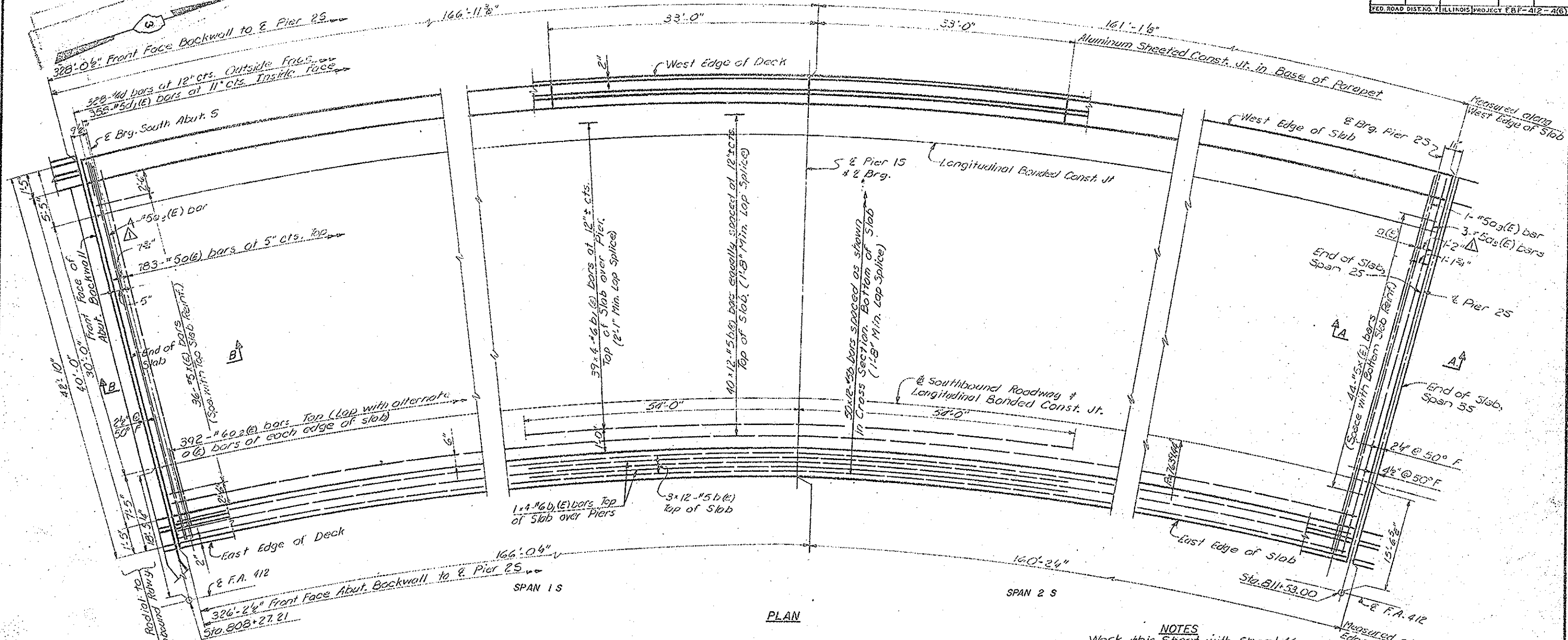
DESIGNED	T. Ritzheimer
CHECKED	L. Glaser
DRAWN	P. Gallardo
CHECKED	T. Ritzheimer

Note: All slopes and roadway dimensions given are radial to their respective roadway baseline (Ⓢ) along the curve and normal to their respective baseline and E FA-412 after the curve.

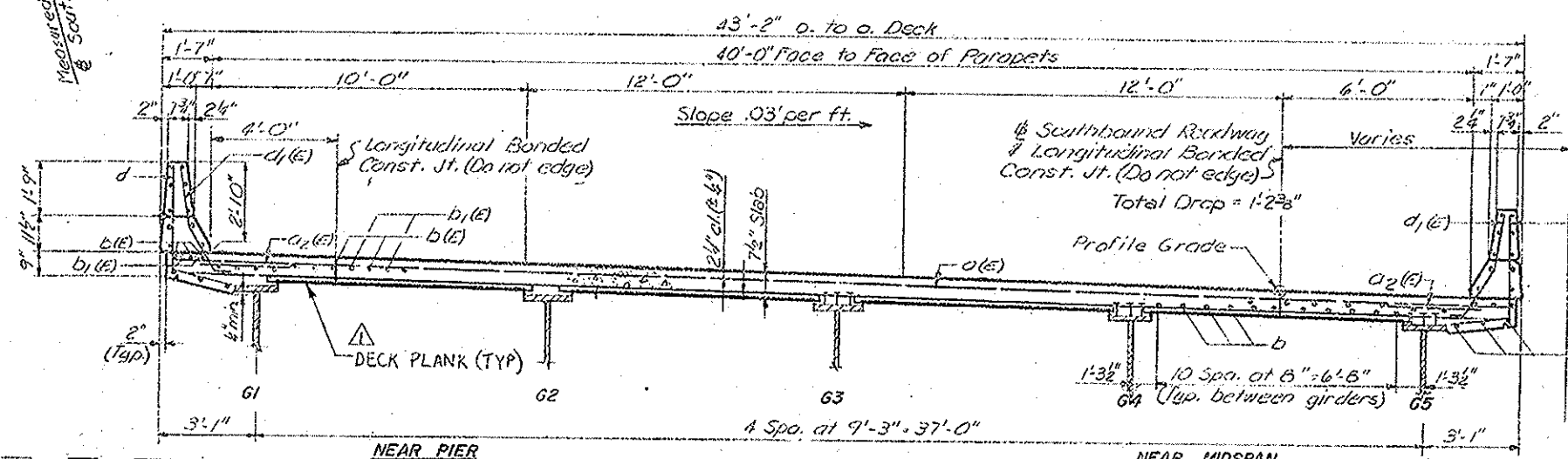
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SUPERELEVATION TRANSITION—SPANS 7 THRU 9
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



PLAN



CROSS SECTION
Looking North

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

NOTES
Work this Sheet with Sheet 46.
For General Notes, see Sheet B.
Lighting Pedestals not shown. See Sheet 73 for location and details.
d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Spacing of Transverse Reinforcement Bars is measured along West Edge of Slab.
Bars shown thus: 39 x 3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
For location and details of Floor Drains and Scuppers, see Sheets 74 & 75
Space bars a₁(E), d and d₁(E) in field to miss Floor Drains and Scuppers.
Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

SLAB - SPANS 1 AND 2 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(G)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

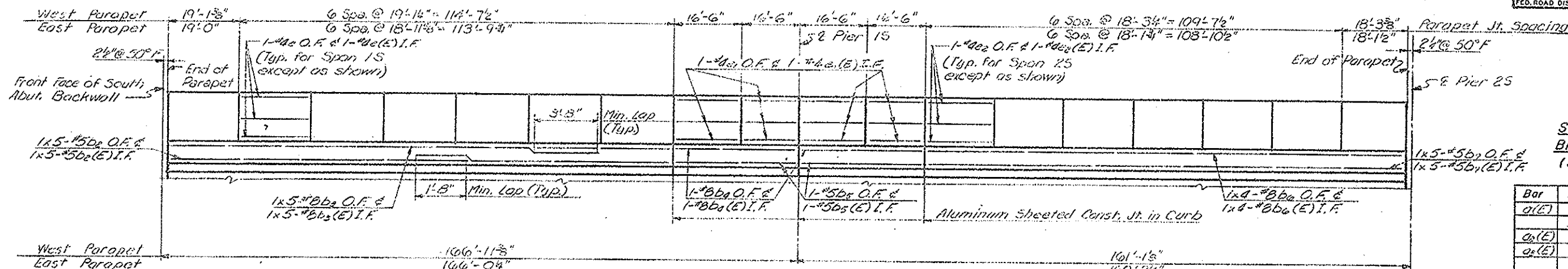
ADD DECK PLANKS, ELIMINATE a, BARS, ADD a₁(E) BARS
SHEET NO. 45 OF 163

DESIGNED Arman
CHECKED R. Butterfield
DRAWN R. Prescher
CHECKED G. Revata

AS REVISED

6892
825006

10/7/85

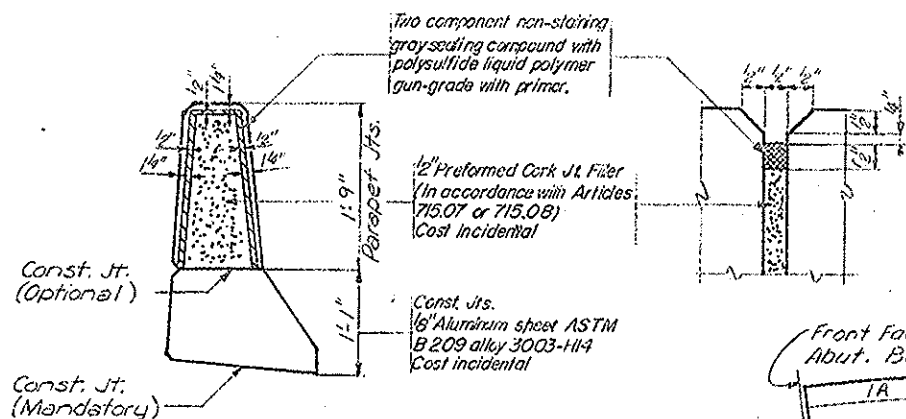


**SUPERSTRUCTURE
BILL OF MATERIAL
(SPANS 1 & 2S)**

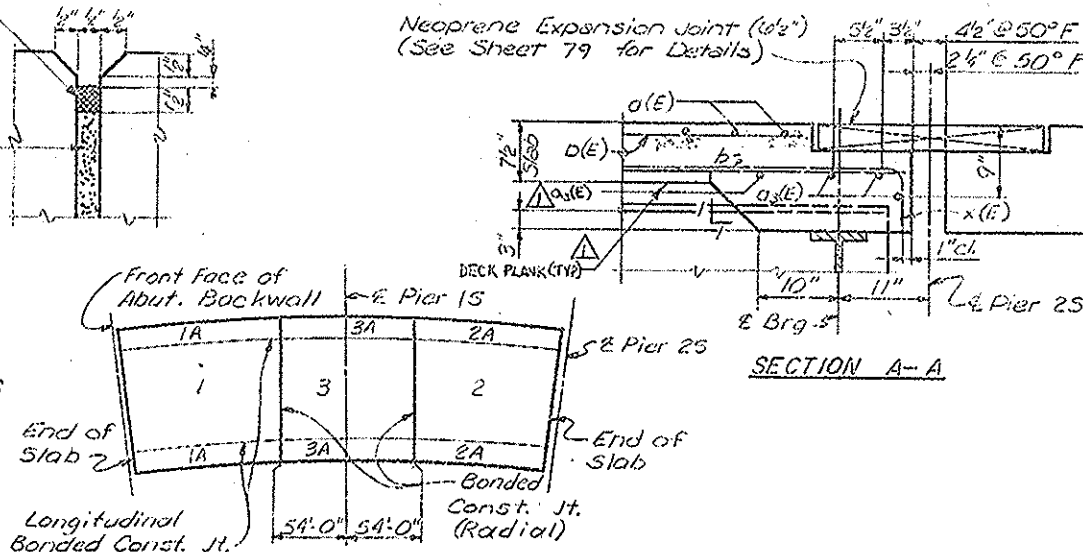
Bar	No.	Size	Length	Shape
a(E)	783	#5	41'-2"	
a ₁ (E)	784	#6	1'-0"	
a ₂ (E)	8	#5	22'-6"	
b(E)	552	#5	28'-11"	
b	600	#5	28'-11"	
b ₁ (E)	172	#6	28'-7"	
b ₂ (E)	10	#5	28'-0"	
b ₃	10	#5	28'-0"	
b ₄ (E)	10	#8	29'-8"	
b ₅	10	#8	29'-8"	
b ₆ (E)	4	#8	32'-8"	
b ₇	4	#8	32'-8"	
b ₈ (E)	6	#8	34'-9"	
b ₉	6	#8	34'-9"	
b ₁₀ (E)	10	#5	26'-11"	
b ₁₁	10	#5	26'-11"	
b ₁₂ (E)	16	#5	2'-0"	
d	656	#8	5'-1"	L
d ₁ (E)	716	#5	3'-11"	L
d ₂ **	3	#6	4'-5"	L
d ₃ **	5	#6	8'-11"	L
e(E)	42	#8	18'-9"	
e	42	#8	18'-9"	
e ₁ (E)	24	#8	16'-2"	
e ₂	24	#8	16'-2"	
e ₃ (E)	42	#8	17'-11"	
e ₄	42	#8	17'-11"	
x(E)	80	#5	5'-0"	J
Reinforcement Bars (Epoxy Coated)		Lbs.	117,940	
Class X Concrete		Cu.Yds.	420.6	

INSIDE ELEVATION OF WEST PARAPET

Note: East Parapet same except as noted.
O.F. indicates Outside Face.
I.F. indicates Inside Face.
Longitudinal dimensions and joint spacings are measured along East and West edges of slab.

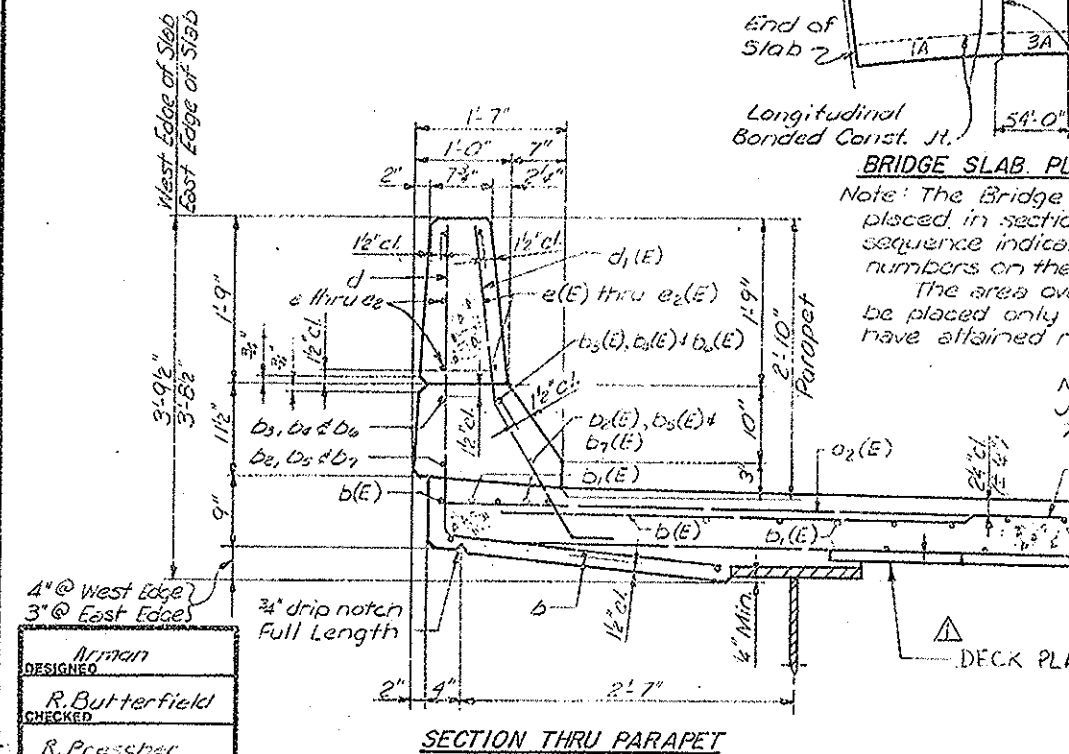


PARAPET JOINT DETAILS

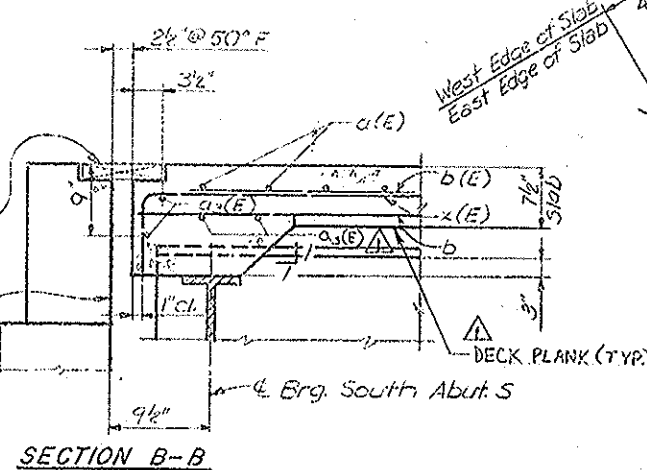


BRIDGE SLAB PLACING SEQUENCE

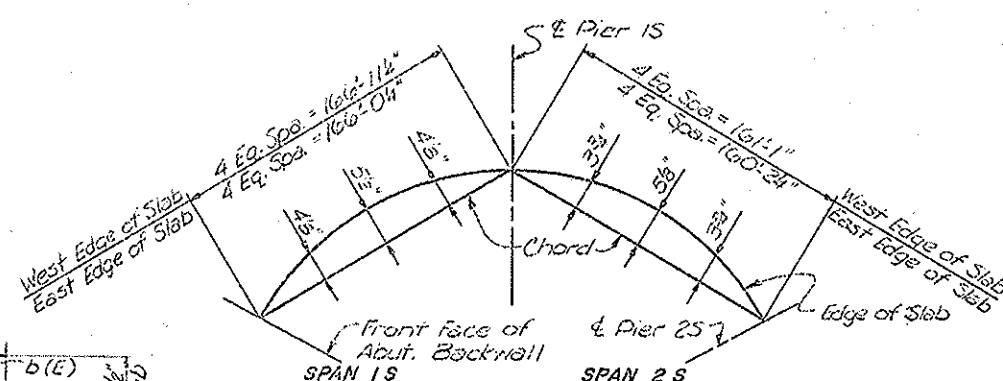
Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan. The area over the pier is to be placed only after pours 1 & 2 have attained required strength.



SECTION THRU PARAPET



SECTION B-B



EDGE OF SLAB ORDINATES

Note: Longit. Dim. are measured along chords.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

Note: Work this Sheet with Sheet 45.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

PARAPETS - SPANS 1 AND 2 SOUTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-48 PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

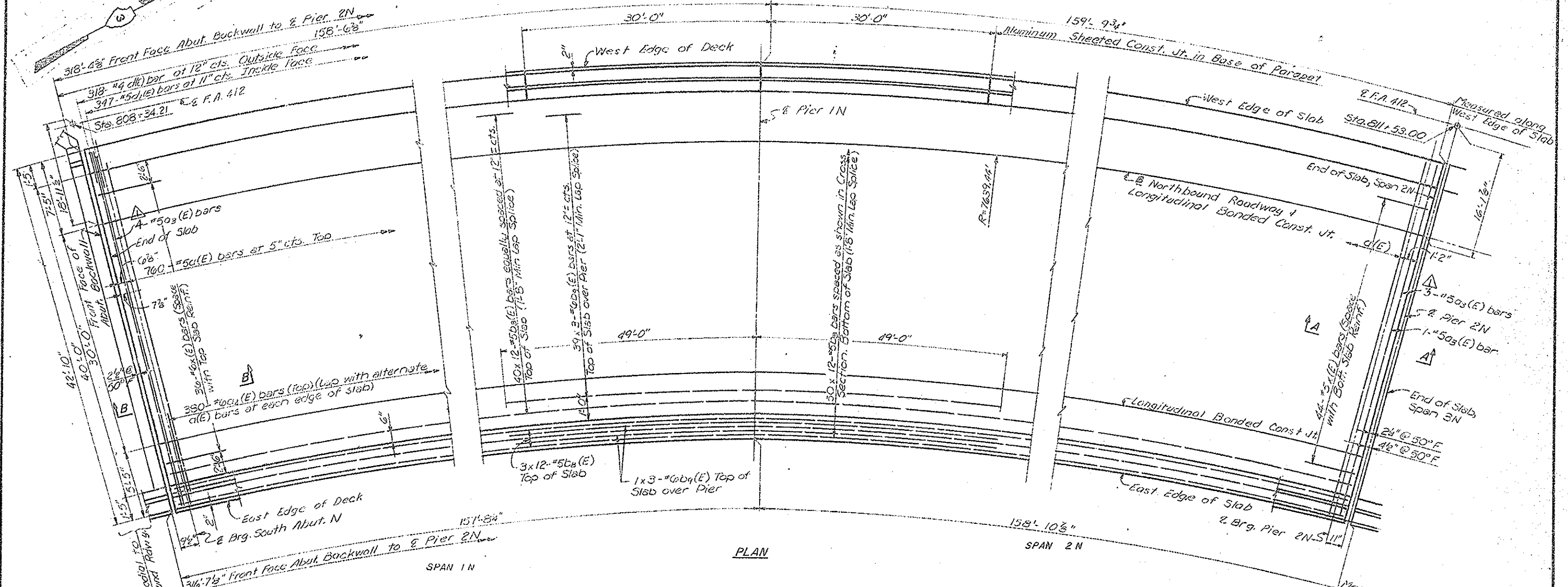
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE a₁ BARS, ADD a₂(E) BARS

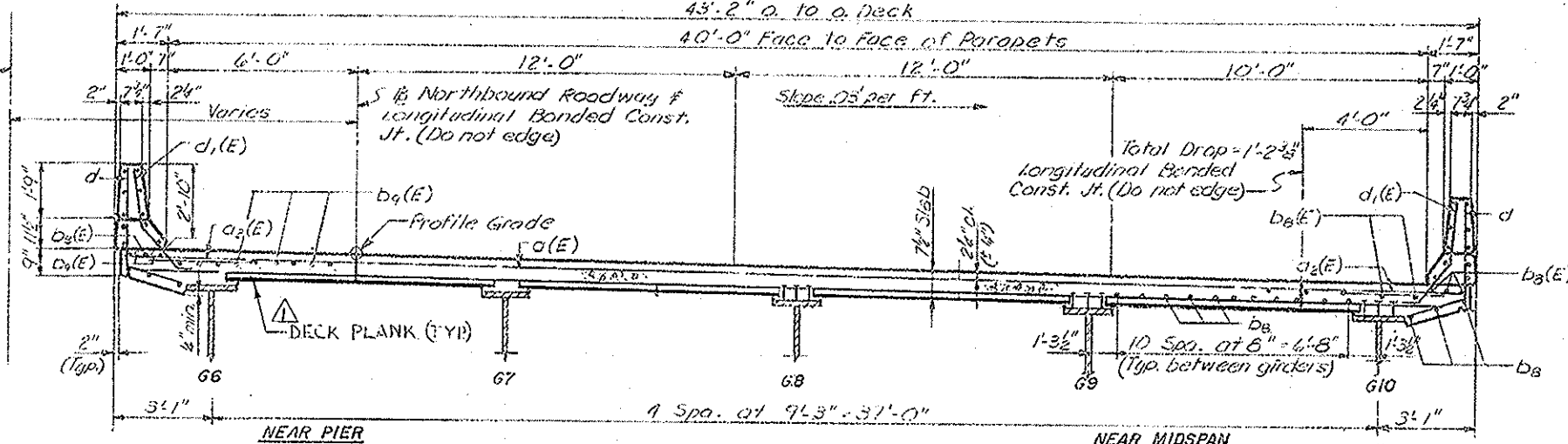
DESIGNED BY
R. Butterfield
CHECKED BY
R. Prascher
DRAWN BY
G. Roufa
CHECKED BY

LAS REVISED 1

6692
525017



PLAN



CROSS SECTION
Looking North

NOTES
 Work this Sheet with Sheet 4B.
 For General Notes, see Sheet B.
 Lighting pedestals not shown. See Sheet 73 for location and details.
 d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
 Spacing of Transverse Reinforcement Bars is measured along West Edge of Slab.
 Bars shown thus: 39x3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
 For location and details of Floor Drains and Scuppers, see Sheets 74 & 75.
 Space bars a₂(E), d and d₁(E) in field to miss Floor Drains and Scuppers.
 Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

SLAB - SPANS 1 AND 2 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(B)
 STA. 863+16.00 (FA-412) LASALLE CO.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

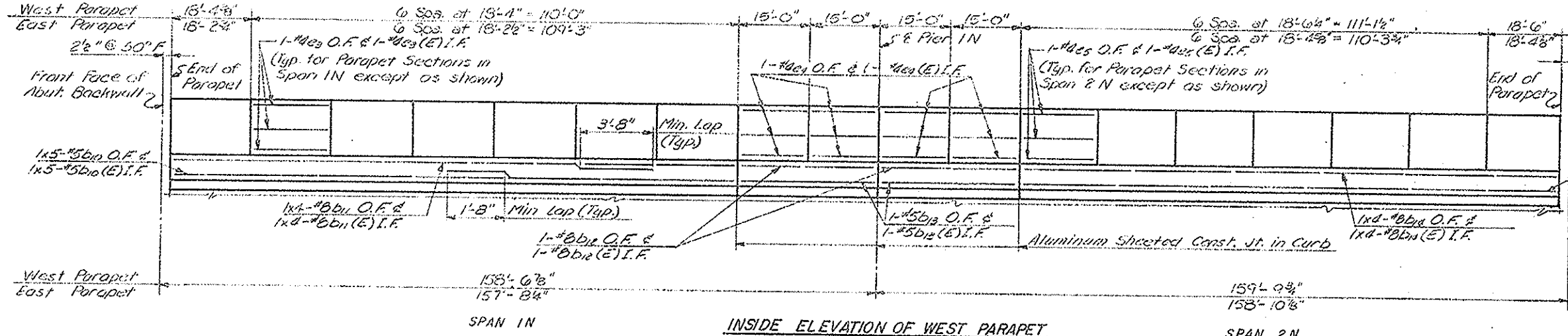
ADD DECK PLANKS; ELIMINATE α₁ BARS, ADD α₂(E) BARS.
 SHEET NO. 47 OF 163.

Arman
DESIGNED
 R. Butterfield
CHECKED
 R. Prescher
DRAWN
 G. Roufa
CHECKED

IAS REVISED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

6892
825030

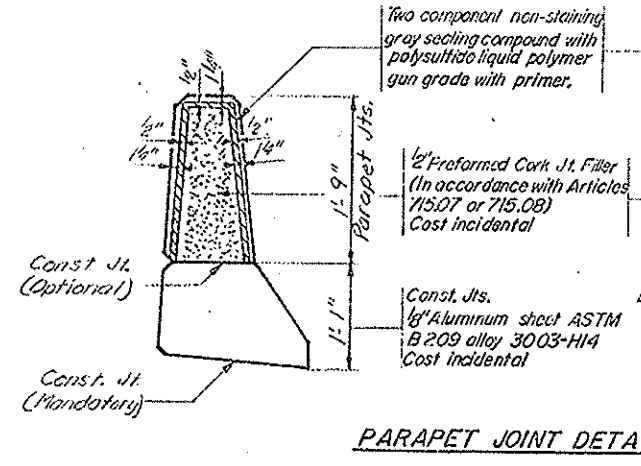


**SUPERSTRUCTURE
BILL OF MATERIAL
(SPANS 1 & 2 N)**

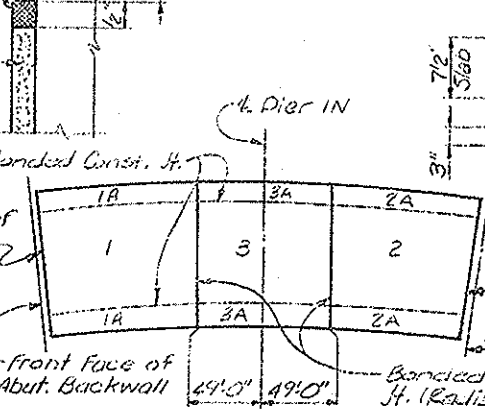
Bar	No.	Size	Length	Shops
a ₁ (E)	760	#5	41'-2"	
a ₂ (E)	760	#6	41'-0"	
a ₃ (E)	871	#5	42'-6"	
a ₄ (E)	552	#5	29'-1"	
a ₅ (E)	600	#5	28'-1"	
b ₁ (E)	129	#6	30'-1"	
b ₂ (E)	10	#5	27'-0"	
b ₃ (E)	10	#5	27'-0"	
b ₄ (E)	8	#8	34'-10"	
b ₅ (E)	8	#8	34'-10"	
b ₆ (E)	4	#8	29'-8"	
b ₇ (E)	4	#8	29'-8"	
b ₈ (E)	4	#8	29'-8"	
b ₉ (E)	4	#8	29'-8"	
b ₁₀ (E)	8	#8	35'-2"	
b ₁₁ (E)	8	#8	35'-2"	
b ₁₂ (E)	10	#5	27'-3"	
b ₁₃ (E)	10	#5	27'-3"	
b ₁₄ (E)	16	#5	21'-0"	
d	636	#4	5'-1"	L
d ₁ (E)	671	#5	3'-11"	L
d ₂ (E)	3	#6	4'-5"	L
d ₃ (E)	5	#6	8'-11"	L
e ₁ (E)	42	#4	18'-0"	
e ₂ (E)	42	#4	18'-0"	
e ₃ (E)	24	#4	14'-8"	
e ₄ (E)	24	#4	14'-8"	
e ₅ (E)	42	#4	18'-1"	
e ₆ (E)	42	#4	18'-1"	
x(E)	80	#5	3'-0"	
Reinforcement Bars (Epoxy Coated)				Lbs. 113,880
Class X Concrete				Cu.Yds. 408.4

INSIDE ELEVATION OF WEST PARAPET

Note: East Parapet same except as noted.
O.F. indicates Outside Face.
I.F. indicates Inside Face.
Longitudinal dimensions and joint spacings are measured along East and West edges of slab.

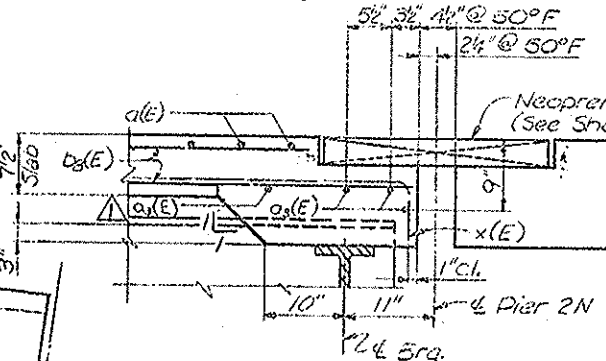


PARAPET JOINT DETAILS

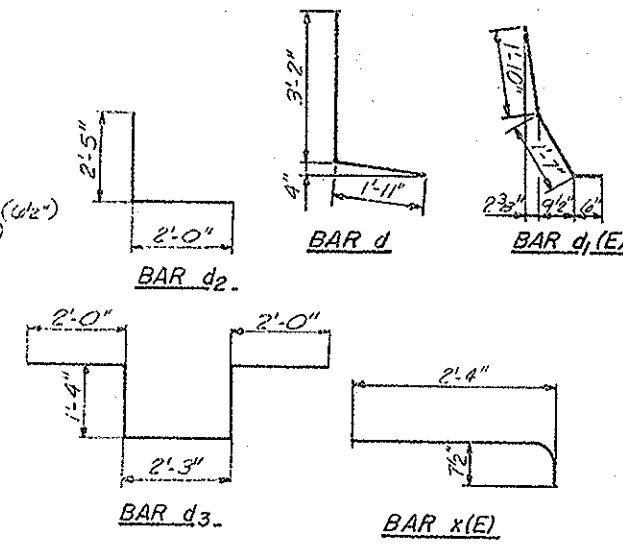
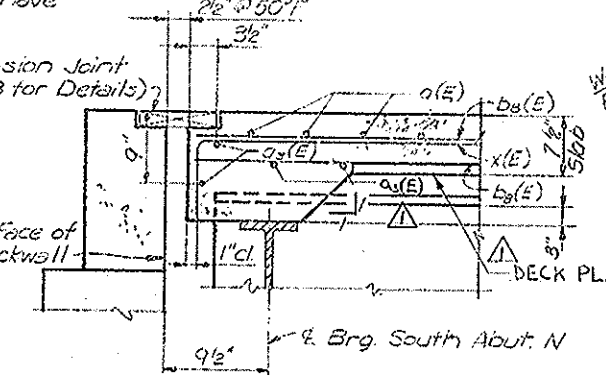


BRIDGE SLAB PLACING SEQUENCE

SECTION A-A

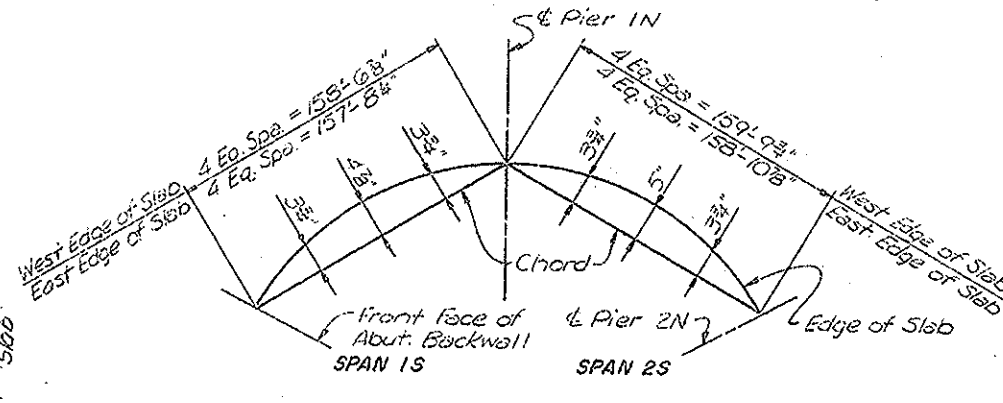


SECTION B-B



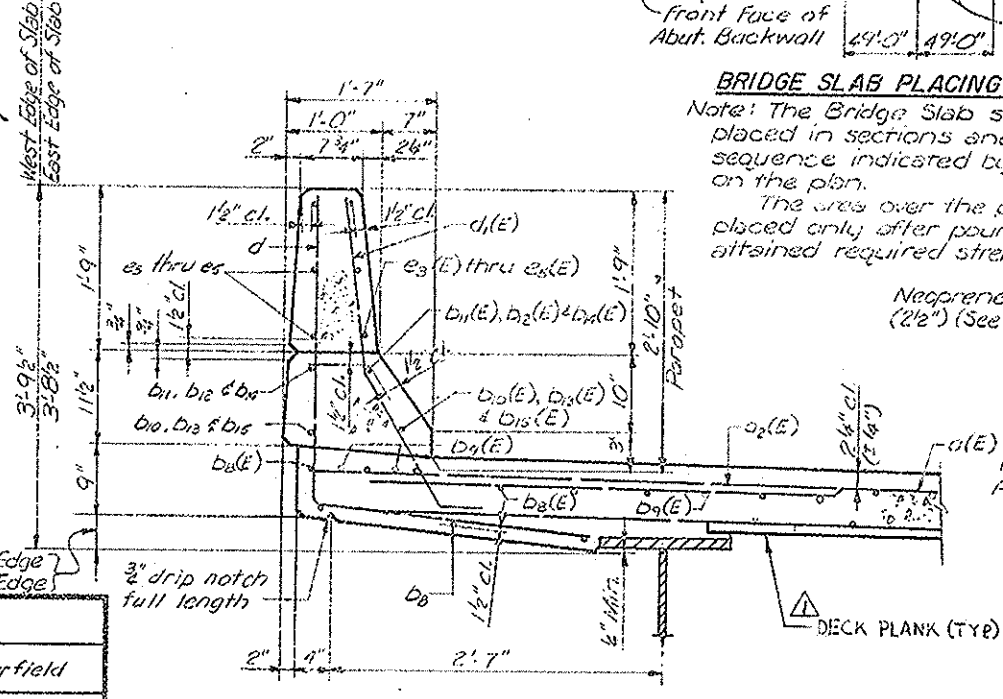
EDGE OF SLAB ORDINATES

Note: Longit. Dim are measured along chords.



ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

Note: Work this sheet with Sheet 47.



SECTION THRU PARAPET

IAS REVISED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE a₁ BARS, ADD a₃(E) BARS

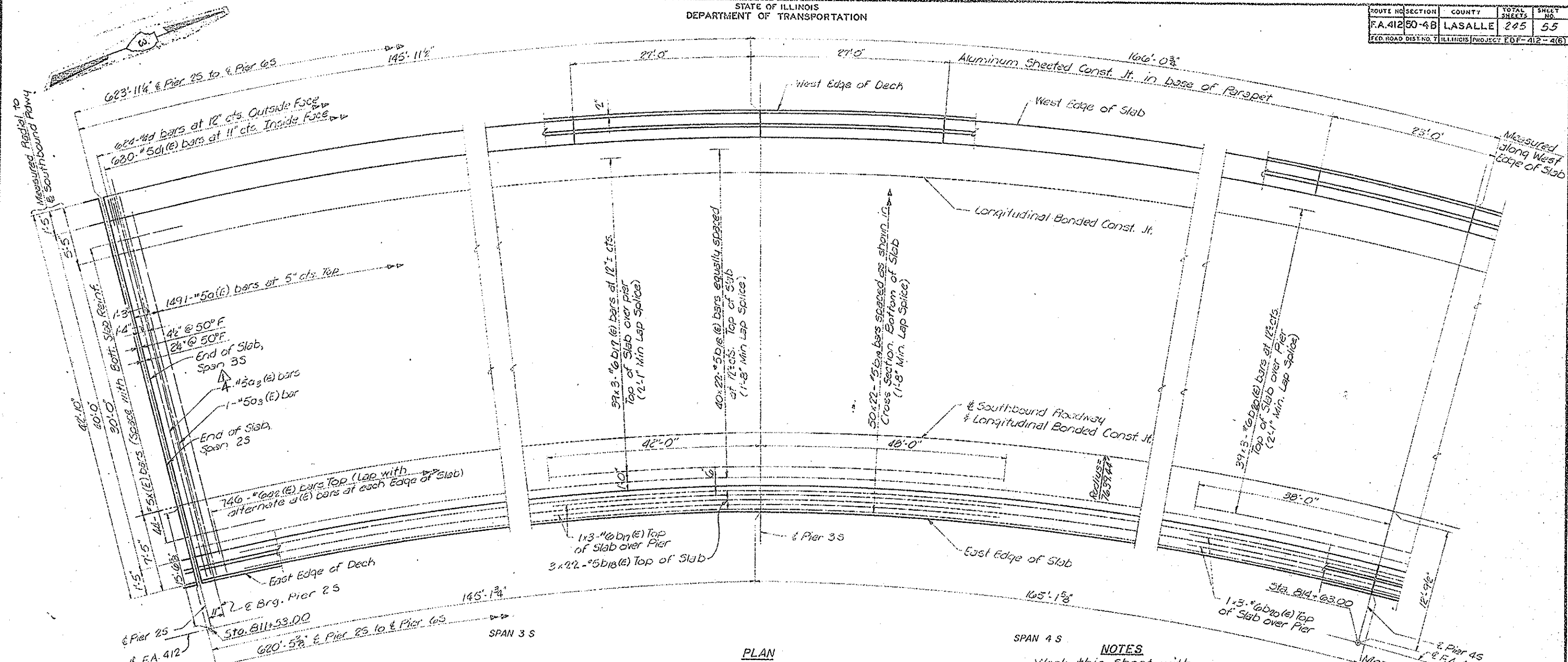
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPETS - SPANS 1 AND 2 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)

STA. 863+1600 (FA-412) LASALLE CO.

Arman DESIGNED
R. Butterfield CHECKED
R. Prescher DRAWN
CHECKED G. Rovfo

6692
823027

10/7/85



PLAN

NOTES

Work this Sheet with Sheets 50 and 51. For General Notes, see Sheet B.

d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.

Spacing of Transverse Reinforcement bars is measured along west edge of Slab.

Bars shown thus: 39x3-#6 etc indicates 39 lines of bars with 3 lengths per line.

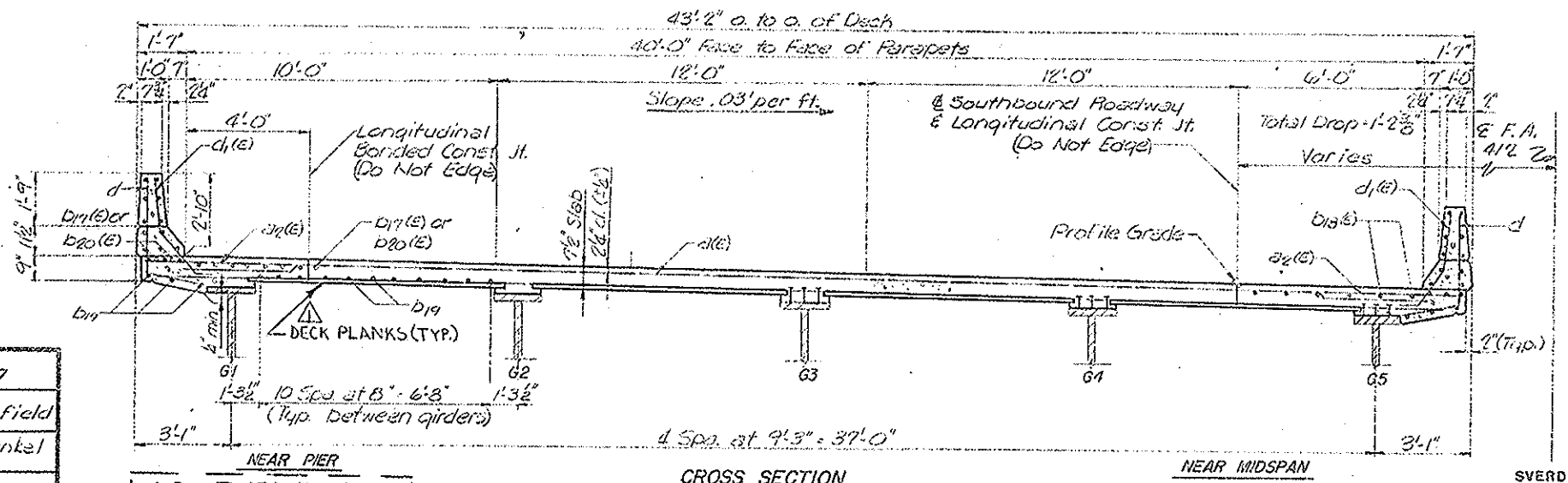
Floor Drains and Scuppers not shown. See Sheets 74 & 75 for location and details.

Space bars a₂(E), d₁(E), and d in field to miss Floor Drains and Scuppers. Cut bars a₁(E) and a₂ in field to miss Floor Drains and Scuppers.

Lighting Pedestals not shown. See Sheet 73 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 3 THRU 6 - SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)



CROSS SECTION
(Looking North)

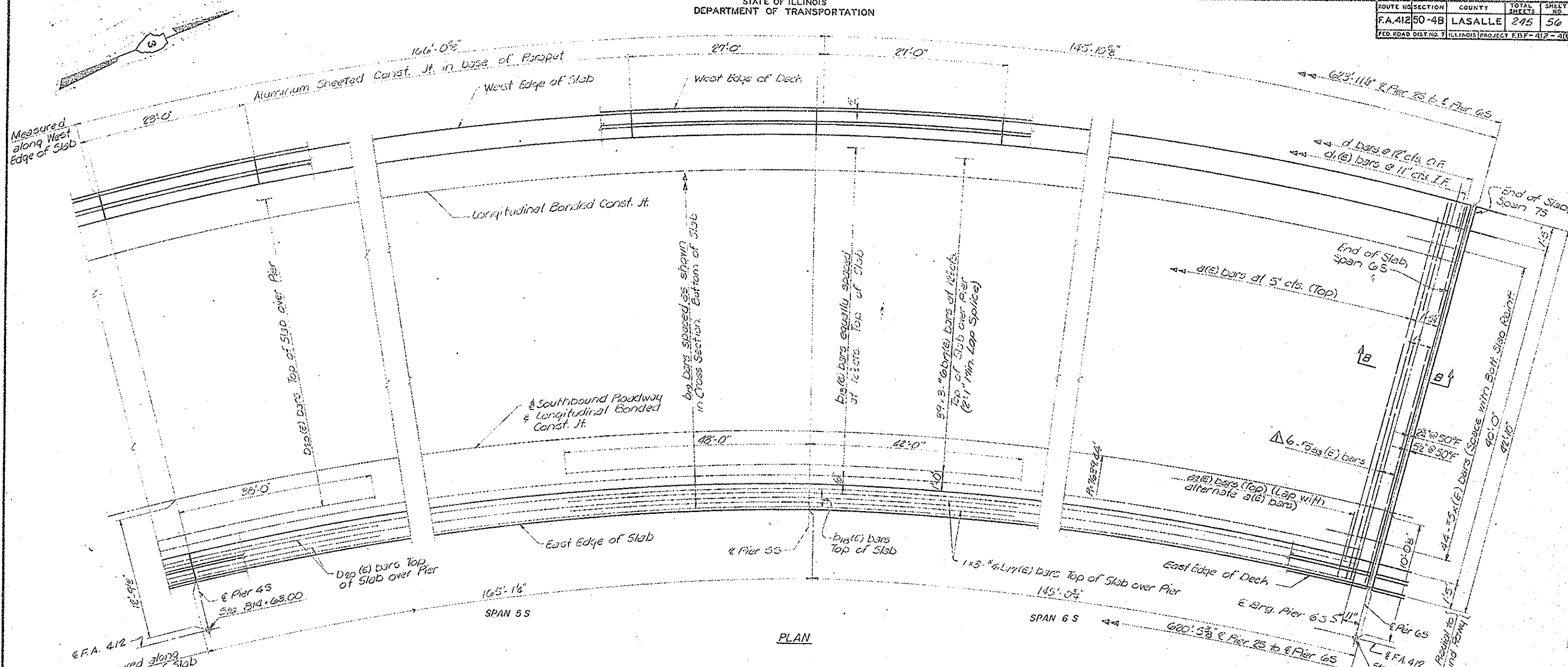
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED Arman
CHECKED R. Butterfield
DRAWN Susie I Wenkel
CHECKED C. Ruffolo

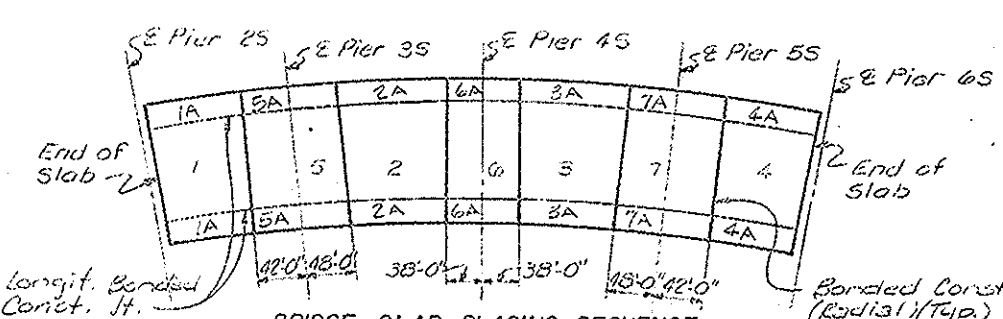
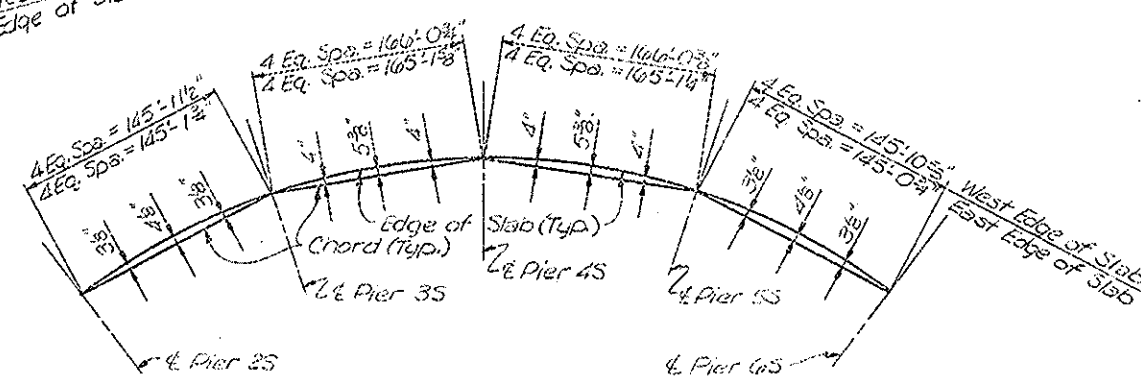
AS REVISED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE a₁ BARS, ADD a₂(E) BARS



PLAN



ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 3 THRU 6 - SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+18.00 (FA-412) LASALLE CO.

DESIGNED
Arman

CHECKED
R. Butterfield

DRAWN
Susan J. Wenkel

CHECKED
G. Roufa

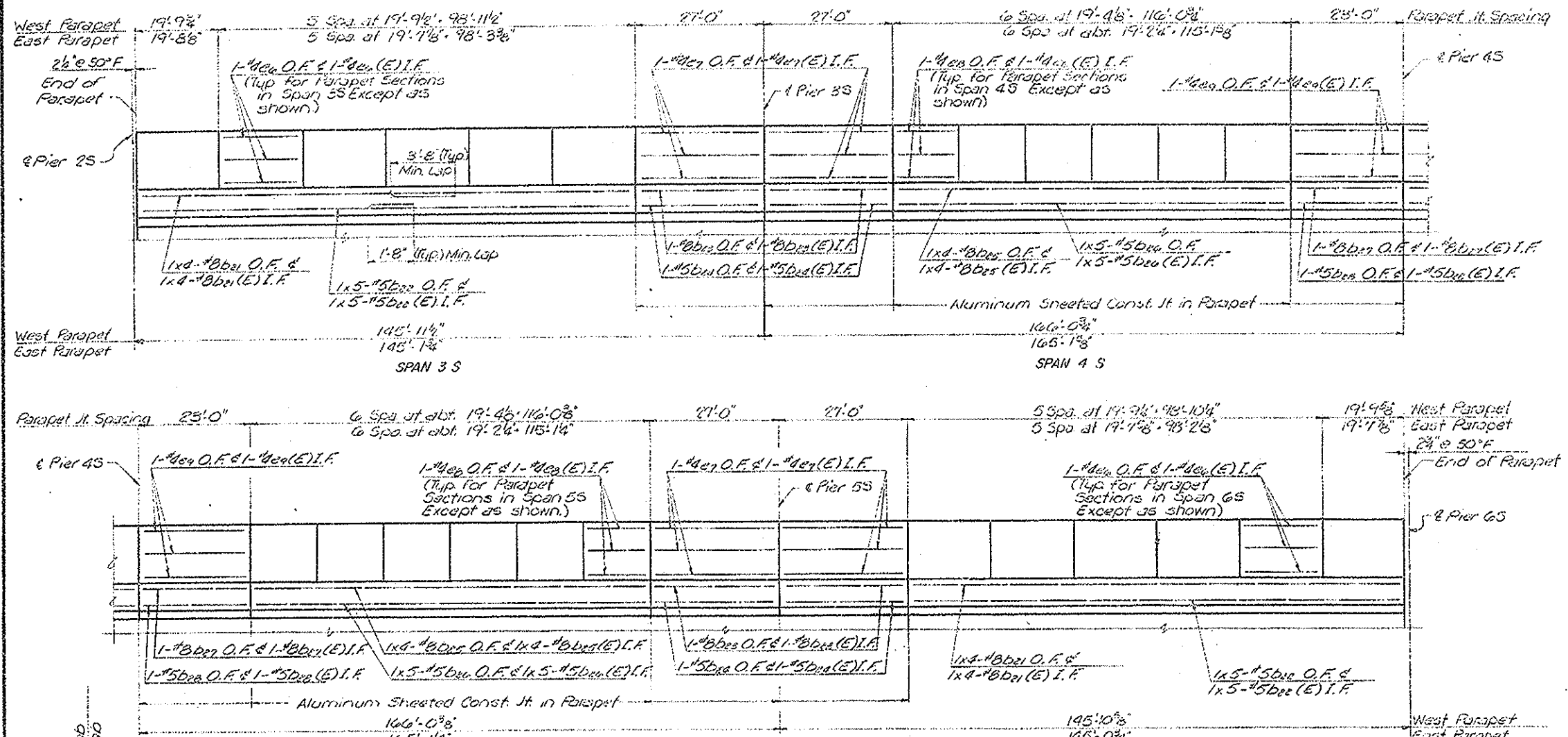
LAS REVISED

Note: Work this Sheet with Sheets 49 and 51.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

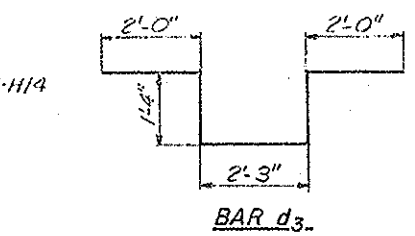
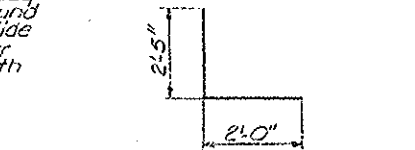
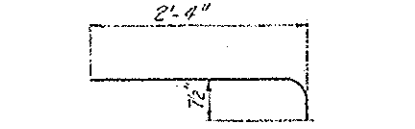
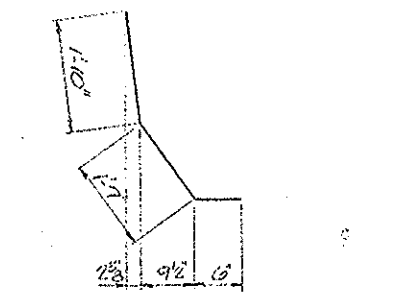
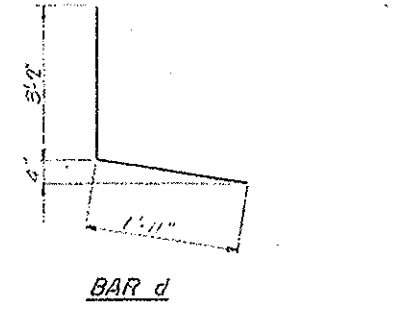
10/2/85
ELIMINATE α_1 BARS, ADD $\alpha_3(e)$ BARS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



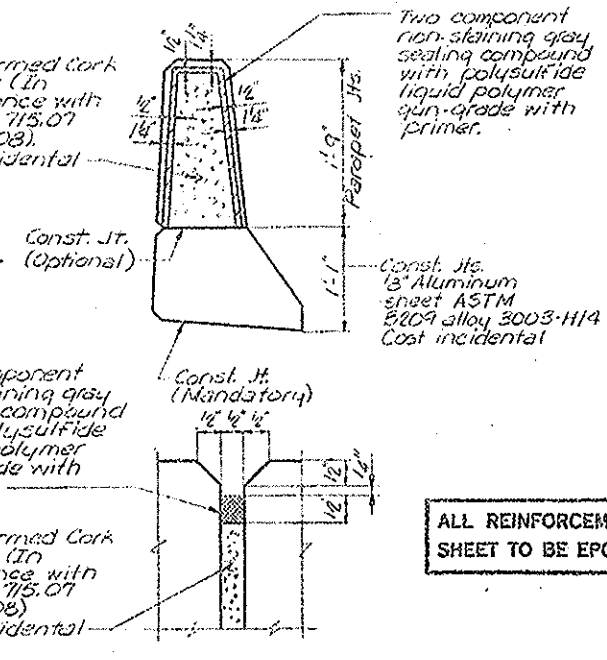
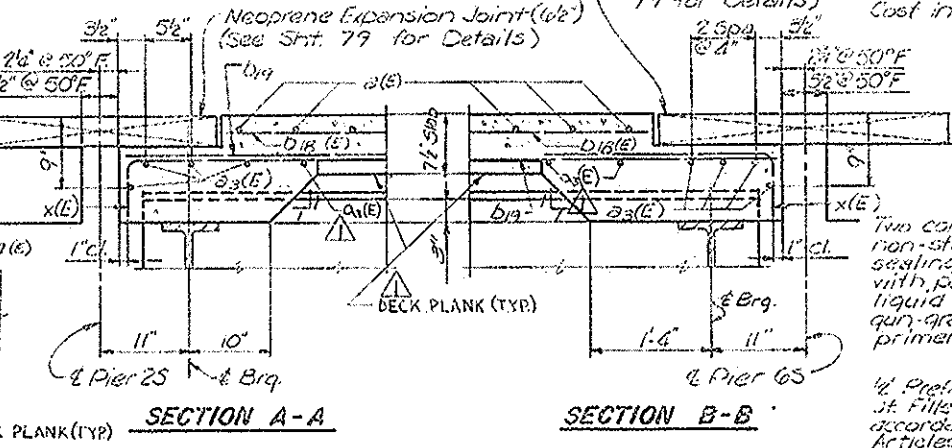
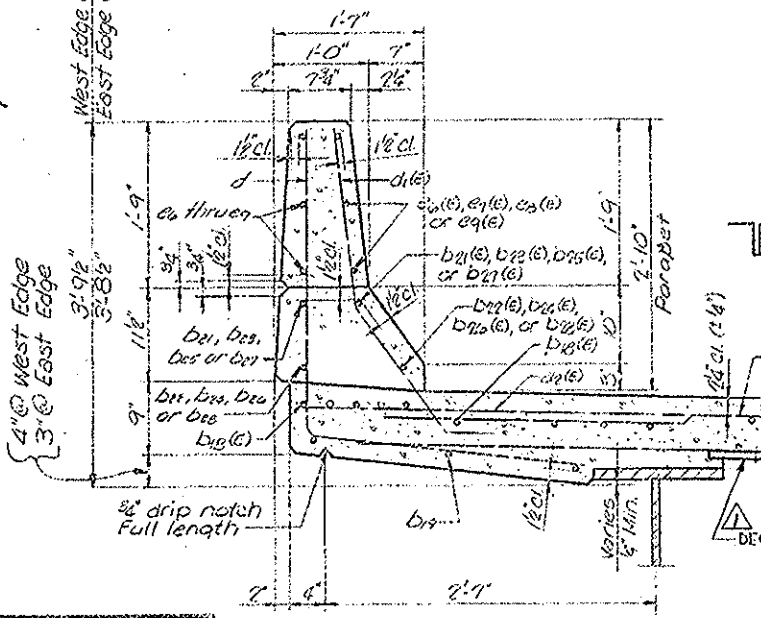
**SUPERSTRUCTURE
BILL OF MATERIAL
(SPANS 3 THRU 6 S)**

Bars	No.	Size	Length	Shape
a1(e)	1491	#5	41'-2"	---
a2(e)	1492	#6	4'-0"	---
a3(e)	11	#5	42'-6"	---
b1(e)	16	#5	2'-0"	---
b2(e)	258	#6	31'-5"	---
b3(e)	1012	#5	21'-10"	---
b4	1100	#5	24'-11"	---
b5(e)	129	#6	26'-9"	---
b6(e)	14	#5	32'-5"	---
b7	16	#8	33'-5"	---
b8(e)	20	#5	25'-7"	---
b9	20	#5	25'-11"	---
b10(e)	5	#5	20'-9"	---
b11	8	#8	22'-9"	---
b12(e)	8	#5	22'-9"	---
b13	6	#5	22'-9"	---
b14(e)	16	#8	31'-9"	---
b15	16	#8	31'-9"	---
b16(e)	20	#5	26'-6"	---
b17	20	#5	24'-6"	---
b18(e)	4	#5	22'-9"	---
b19	4	#8	22'-9"	---
b20(e)	4	#5	22'-9"	---
b21	4	#5	22'-9"	---
b22	4	#5	22'-9"	---
c	1843	#4	3'-1"	L
d	1840	#5	3'-11"	L
d1	6	#6	4'-5"	L
d2	10	#6	23'-11"	L
e1(e)	72	#4	19'-5"	---
e2	72	#4	19'-5"	---
e3(e)	22	#4	22'-9"	---
e4	24	#4	20'-9"	---
e5(e)	12	#4	19'-0"	---
e6	72	#4	19'-0"	---
e7(e)	12	#4	22'-9"	---
e8	12	#4	22'-9"	---
x (e)	28	#5	3'-0"	L
Reinforcement Bars (Epoxy Coated)		Lbs.	227,910	
Class X Concrete		Cu. Yds.	793.6	



INSIDE ELEVATION OF WEST PARAPET

Note: East Parapet same except as noted.
O.F. indicates Outside Face.
I.F. indicates Inside Face.
Longitudinal dimensions and joint spacings are measured along West and East Edges of Slab.



ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

PARAPETS-SPANS 3 THRU 6 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1800 (FA-412) LASALLE CO.
ADD DECK PLANKS, ELIMINATE a1 BARS, ADD a3(E) BARS

DESIGNED Arman
CHECKED Butterfield
Susan I. Wenzel
DRAWN
CHECKED G. Roufa

IAS REVISED!

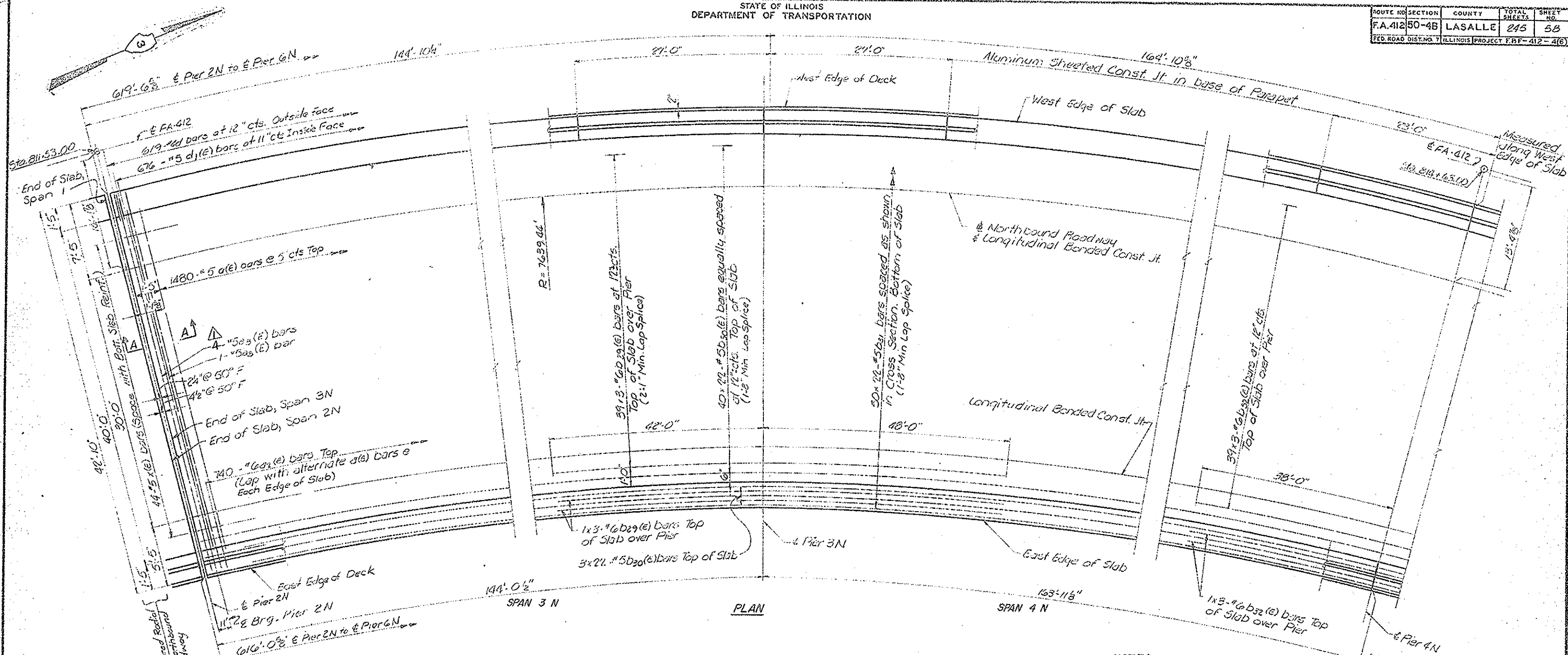
Note: Work this sheet with sheets 49 and 50.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

10/7/85

SHEET NO. 51 OF 163



PLAN

NOTES

Work this Sheet with Sheets 53 and 54. For General Notes, see Sheet 5.

d₁(E) bars located near the ends of parapets shall set back to clear block out for Exp. Joints by 1 inch.

Spacing of Transverse Reinforcement bars is measured along West Edge of Slab.

Bars shown thus: 39x3-1/4 etc. indicates 39 lines of bars with 3 lengths per line.

Floor Drains and Scuppers not shown. See Sheets 74 & 75 for location and details.

Space bars a₂(E), d₁(E) and d in field to miss Floor Drains and Scuppers.

Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.

Lighting Pedestals not shown. See Sheet 73 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

SLAB - SPANS 3 THRU 6 - NORTHBOUND

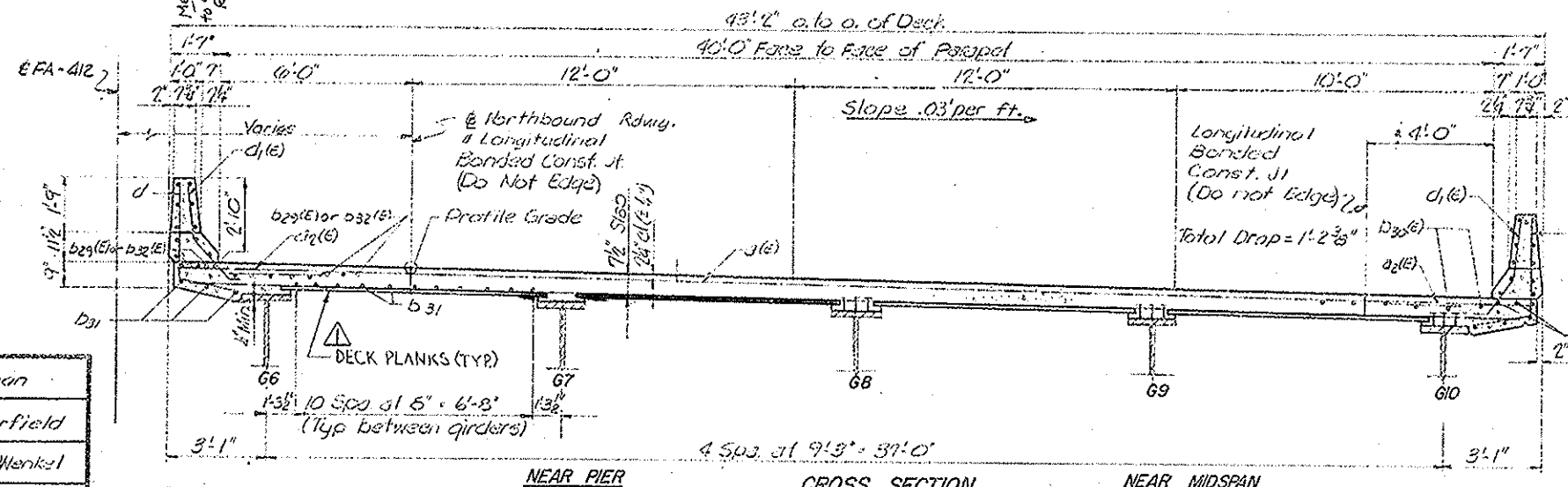
FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+1600 (FA-412) LASALLE CO.

ADD DECK PLANKS, ELIMINATE α₂ BARS, ADD α₃(E) BARS

SHEET NO. 52 OF 163



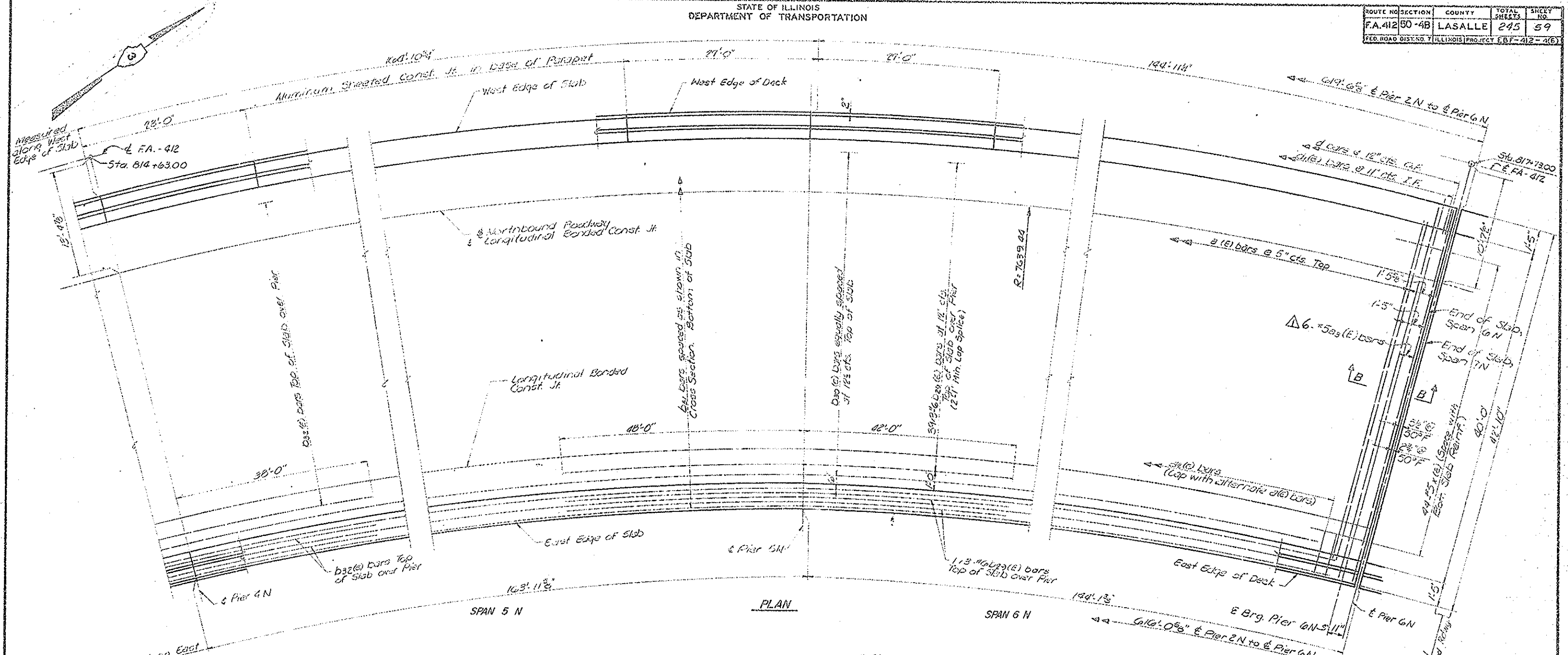
CROSS SECTION
Looking North

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

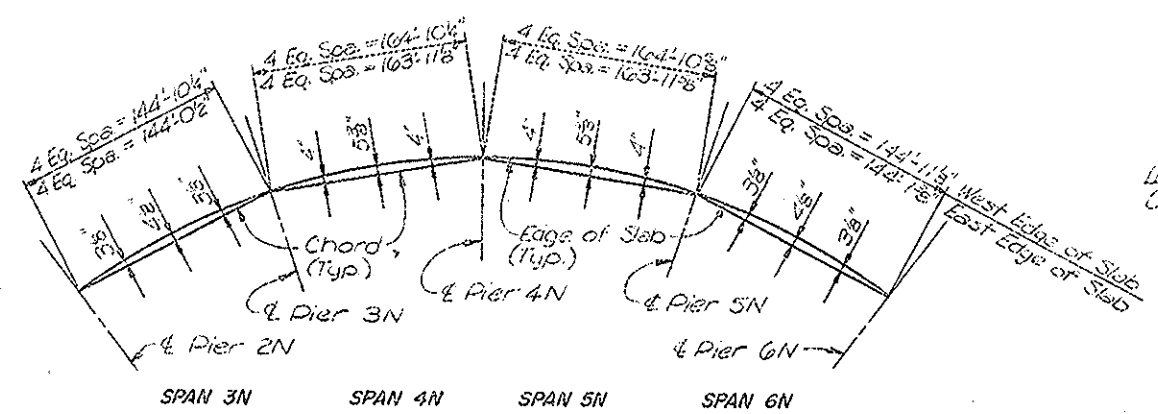
DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: Susie I. Wenkel
CHECKED: G. Rowan

IAS REVISED

10/7/85



PLAN



	1A	5A	2A	6A	3A	7A	4A
End of Slab	1	5	2	6	3	7	4
	1A	5A	2A	6A	3A	7A	4A

BRIDGE SLAB PLACING SEQUENCE

Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1, 2, 3 & 4 have attained required strength.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 3 THRU 6 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

Note: Work this sheet with sheets 52 and 54

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ELIMINATE α₁ BARS, ADD α₃(E) BARS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

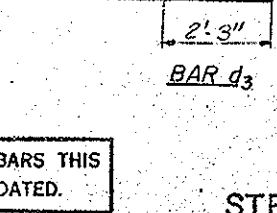
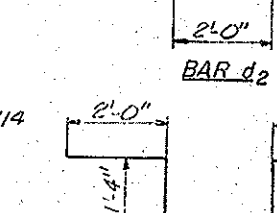
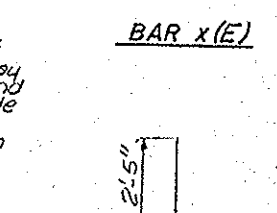
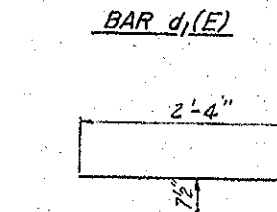
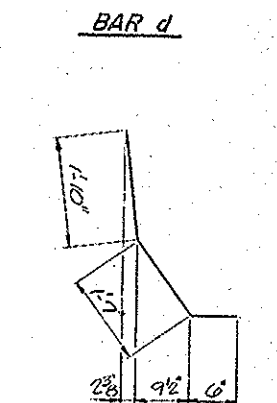
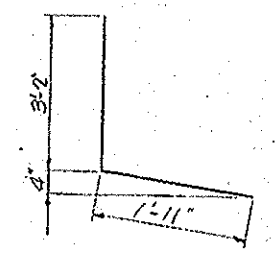
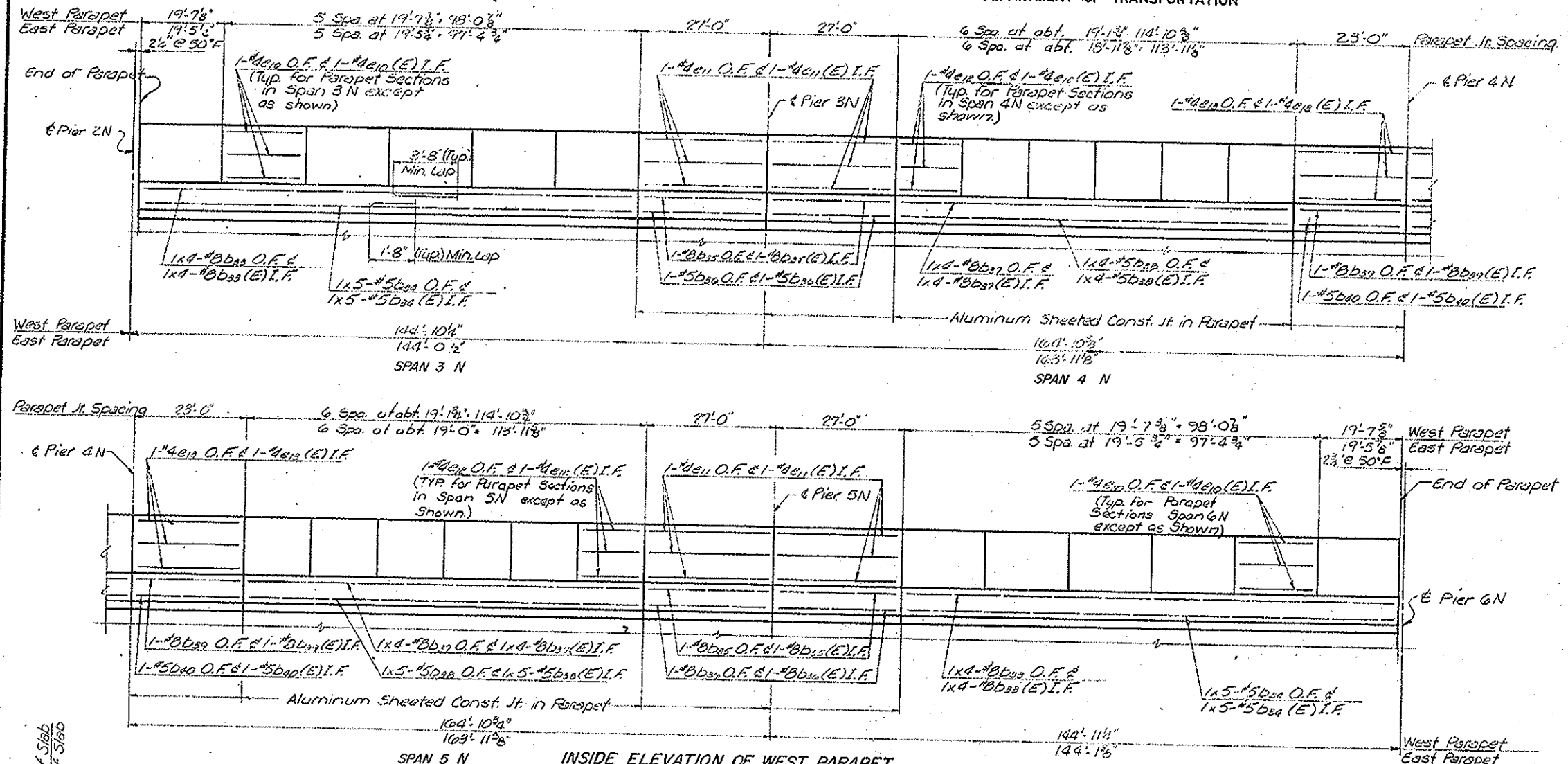
AS REVISED

DESIGNED: Arman
CHECKED: P. Butterfield
DRAWN: Susie Wenkel
CHECKED: G. Reul

910528
669 2

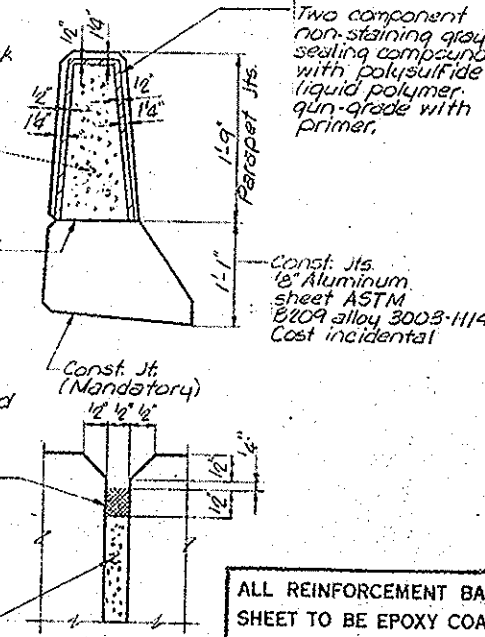
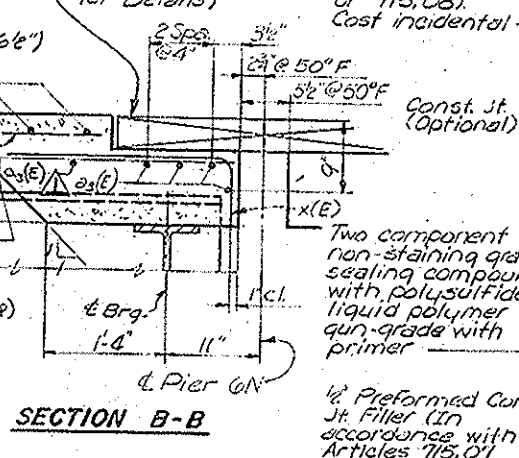
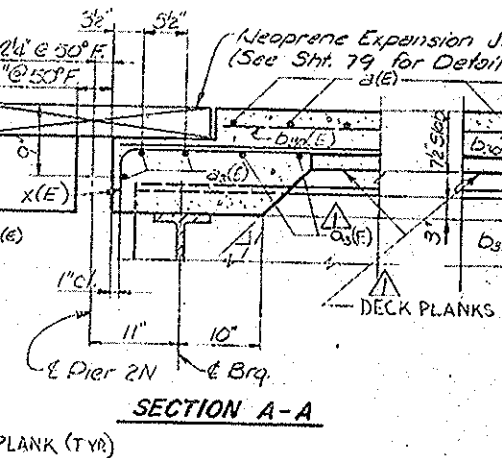
**SUPERSTRUCTURE
BILL OF MATERIAL
(SPANS 3 THRU 6 N)**

Bars	No.	Size	Length	Shape
a1(e)	1480	#5	41'-2"	---
a2(e)	1480	#6	41'-0"	---
a3(e)	117	#5	41'-0"	---
b16(e)	16	#5	2'-0"	---
b24(e)	258	#6	31'-5"	---
b26(e)	1012	#5	29'-8"	---
b21	1100	#5	29'-9"	---
b22(e)	129	#6	26'-9"	---
b33	16	#8	32'-2"	---
b33(e)	16	#8	32'-2"	---
b34	20	#5	24'-10"	---
b34(e)	20	#5	24'-10"	---
b35	8	#8	26'-9"	---
b35(e)	8	#8	26'-9"	---
b36	8	#5	26'-9"	---
b36(e)	8	#5	26'-9"	---
b37	16	#8	31'-5"	---
b37(e)	16	#8	31'-5"	---
b38	16	#5	29'-11"	---
b38(e)	16	#5	29'-11"	---
b39	4	#8	22'-9"	---
b39(e)	4	#8	22'-9"	---
b40	4	#5	22'-9"	---
b40(e)	4	#5	22'-9"	---
d	1238	#4	3'-7"	L
d1(e)	1352	#5	3'-11"	L
d2	6	#6	4'-5"	L
d3	10	#6	8'-11"	L
e10(e)	72	#4	19'-4"	---
e10	72	#4	19'-4"	---
e11(e)	24	#4	26'-9"	---
e11	24	#4	26'-9"	---
e12(e)	72	#4	18'-9"	---
e12	72	#4	18'-9"	---
e13(e)	12	#4	22'-9"	---
e13	12	#4	22'-9"	---
x(e)	88	#5	3'-0"	---
Reinforcement Bars (Epoxy Coated)		Lbs.	225,620	
Class X Concrete		Cu. Yds.	788.0	

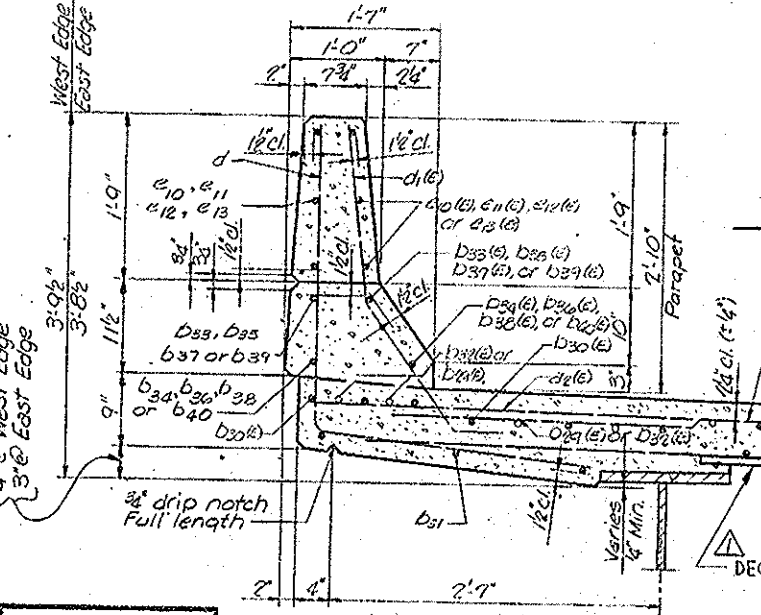


INSIDE ELEVATION OF WEST PARAPET

Note: East Parapet same except as noted. O.F. indicates Outside Face. I.F. indicates Inside Face. Longitudinal dimensions and joint spacings are measured along West and East Edges of Slab.



ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.



SECTION THRU PARAPET

AS REVISED

DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: Susan J. Wenkel
CHECKED: G. Roufa

Note: Work this Sheet with Sheets 52 and 53.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

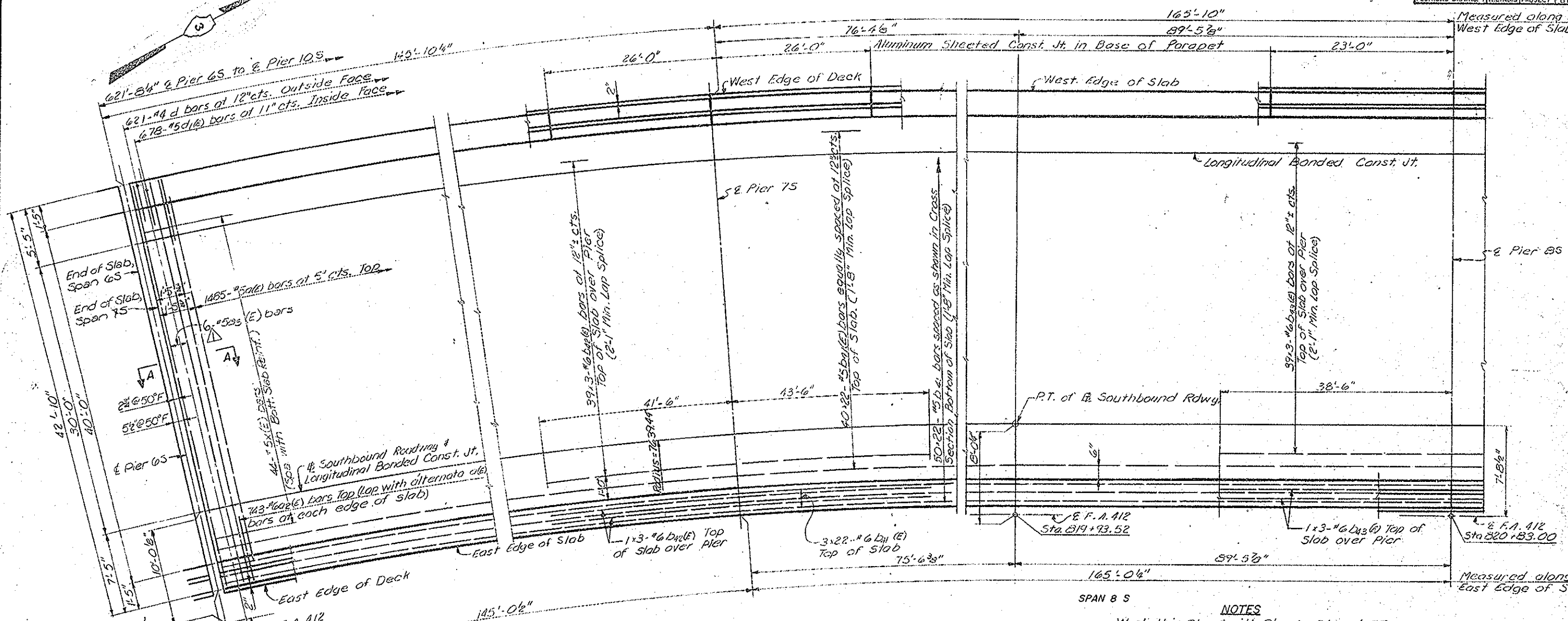
STRUCTURAL STEEL ALTERNATE
PARAPETS - SPANS 3 THRU 6 - NORTHBOUND

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

10/7/85

ADD DECK PLANKS, ELIMINATE a, BARS, ADD d, (E) BARS

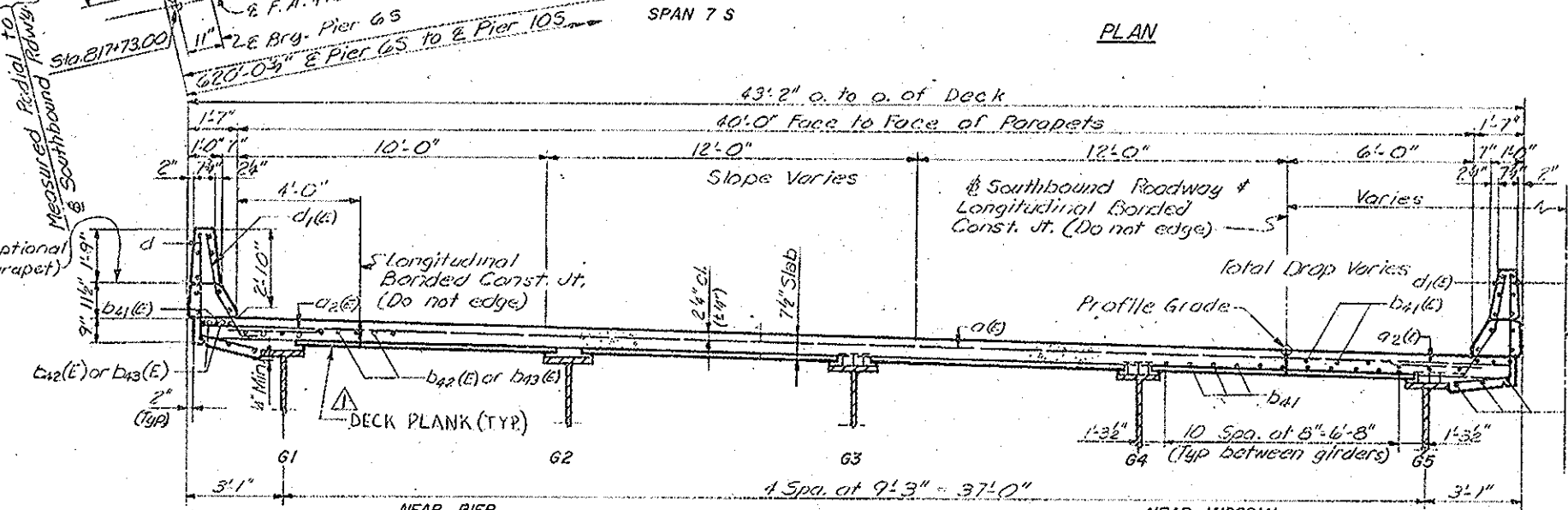


PLAN

SPAN 8 S

NOTES

Work this Sheet with Sheets 56 and 57.
For General Notes, see Sheet B.
d₁(E) bars located near the ends of parapet shall be set back to clear block out for Exp. Joints by 1 inch.
Spacing of Transverse Reinforcement Bars is measured along West Edge of Slab.
Bars shown thus: 39x3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
For location and details of Floor Drains and Scuppers, see Sheets 74 & 75.
Space bars a₂(E), d₁(E) and d in field to miss Floor Drains and Scuppers.
Cut bars o₁(E) and a₁ in field to miss Floor Drains and Scuppers.
For Roadway Cross Slope thru Superelevation Transition, see Sheet 44.
Lighting pedestals, not shown. See Sheet 73 for location and details.



CROSS SECTION
Looking North

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED Arman
CHECKED R. Butterfield
DRAWN R. Prescher
CHECKED G. Roufa

AS REVISED

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

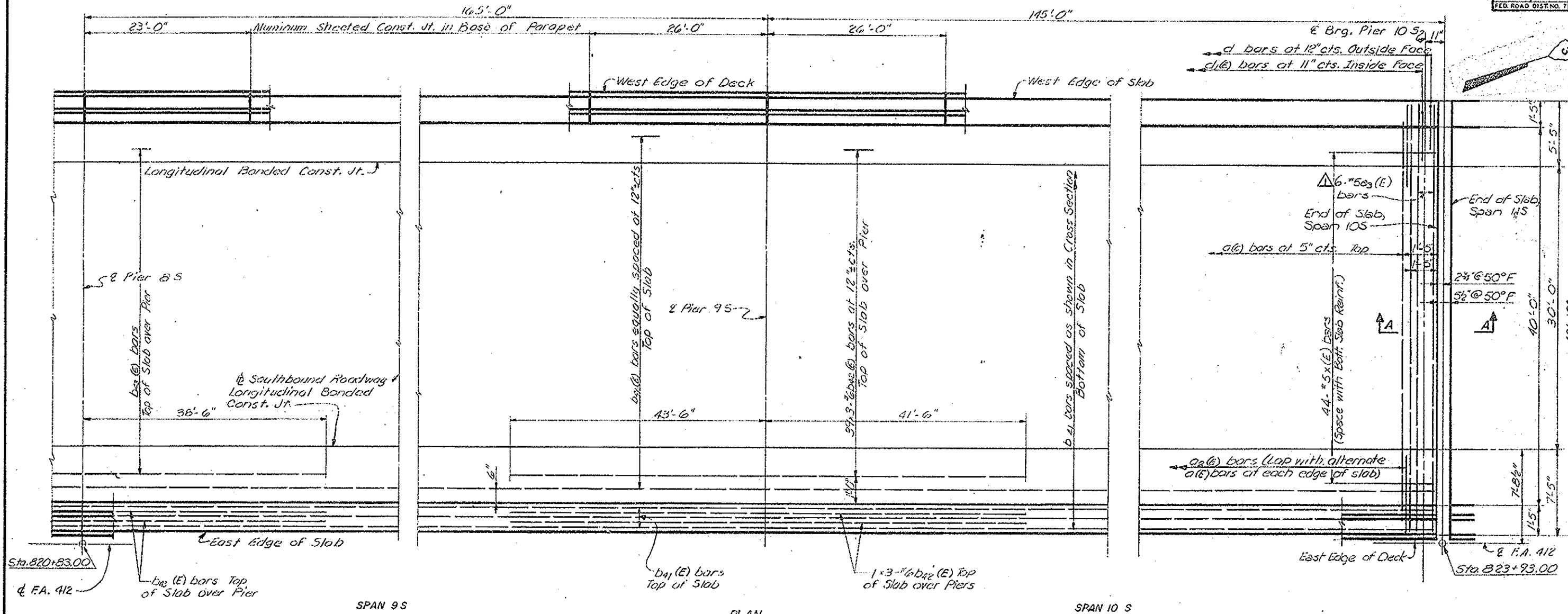
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 7 THRU 10 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE O₁ BARS, ADD α₃(E) BARS
STA. 863+16.00 (FA-412) LASALLE CO.
SHEET NO. 55 OF 163

6692
52504E

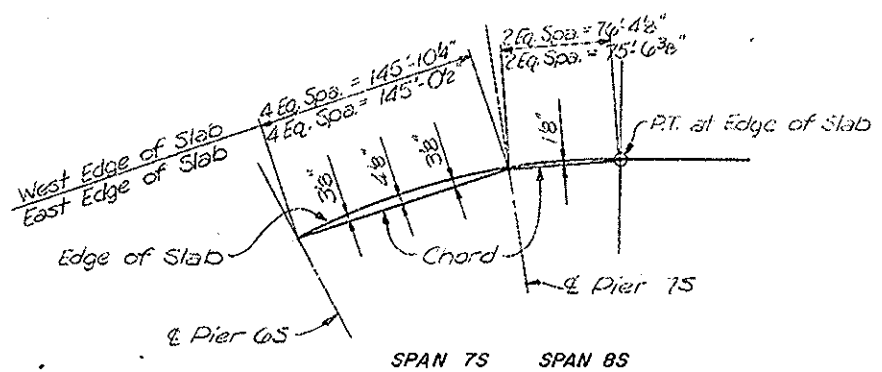
12/2/85



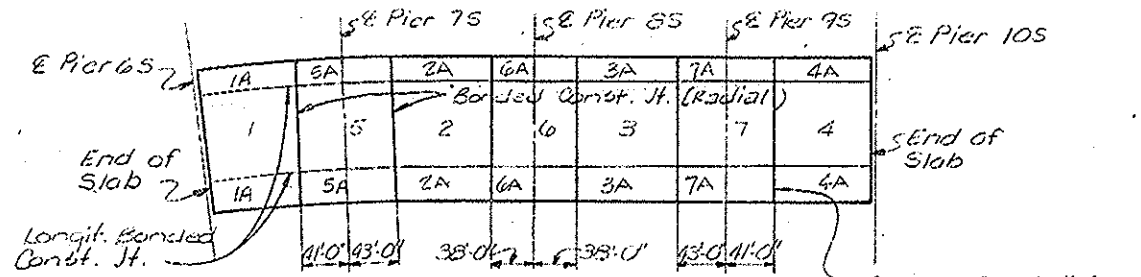
Sta. 820+83.00
& F.A. 412

& F.A. 412
Sta. 823+93.00

PLAN



EDGE OF SLAB ORDINATES
Note: Longit. Dim. are measured along chords.



BRIDGE SLAB PLACING SEQUENCE
Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the Piers are to be placed only after pours 1, 2, 3 & 4 have attained required strength.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

Note: Work this Sheet with Sheets 55 and 57.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED: Armon
CHECKED: R. Butterfield
DRAWN: R. Prescher
CHECKED: G. Rouffo

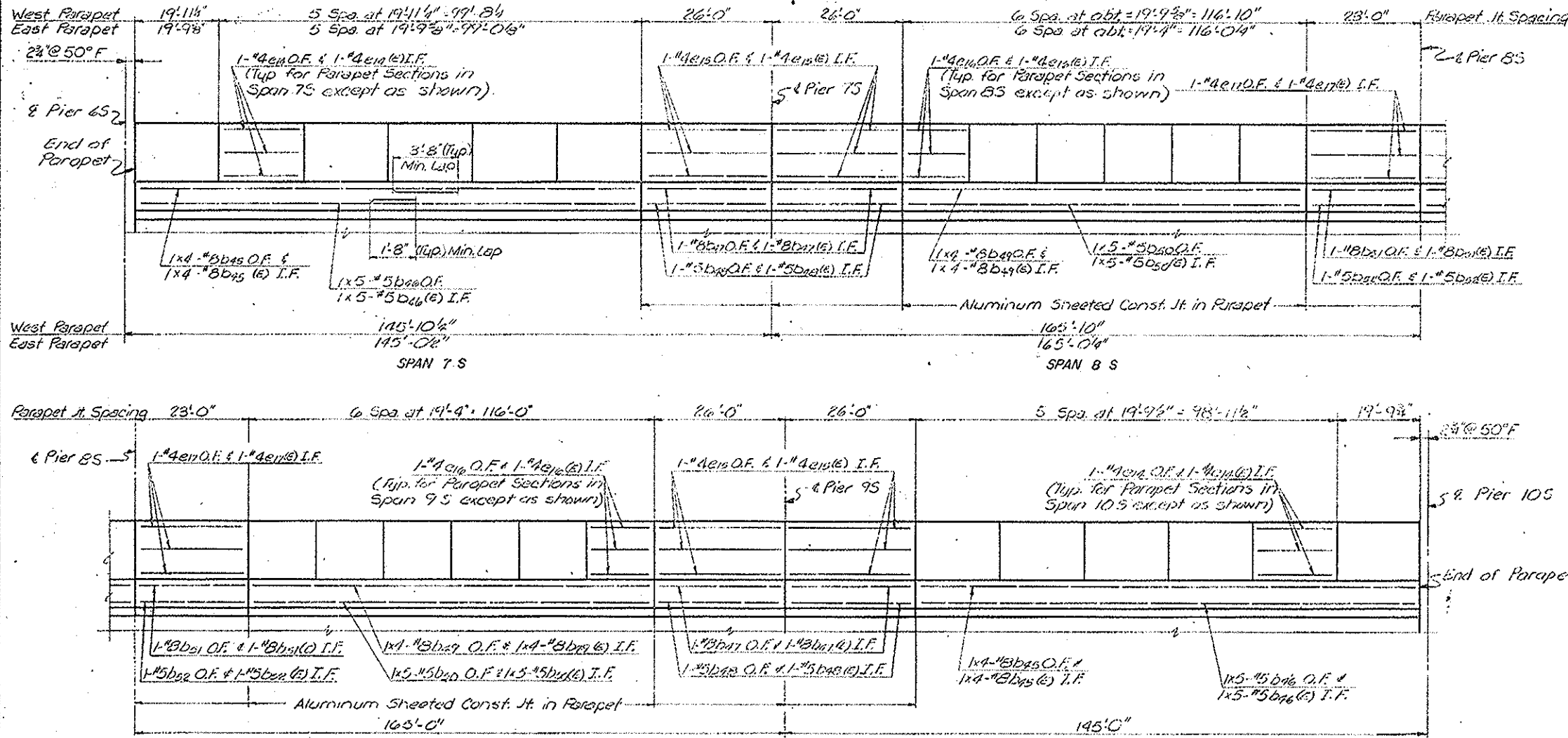
1 AS REVISED 1

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ELIMINATE α_2 BARS, ADD α_3 (E) BARS

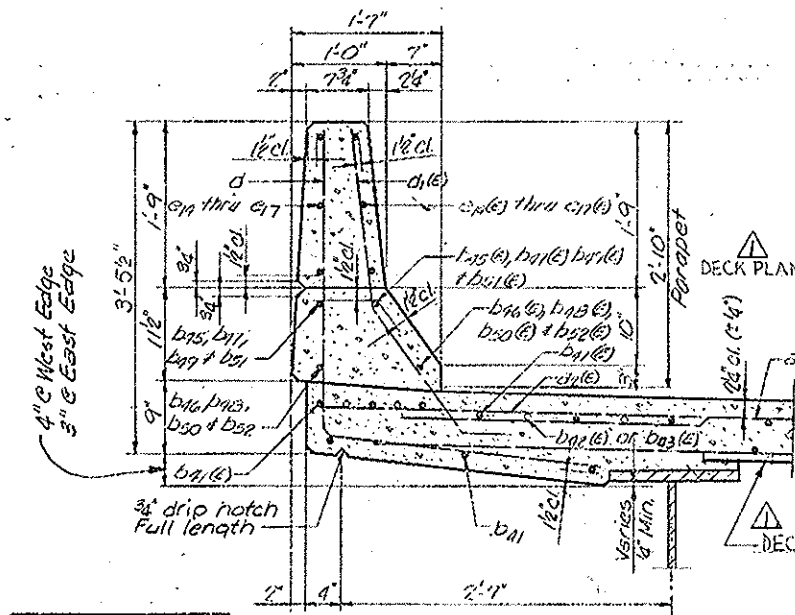
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 7 THRU 10 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863 + 1600 (FA-412) LASALLE CO.



INSIDE ELEVATION OF WEST PARAPET

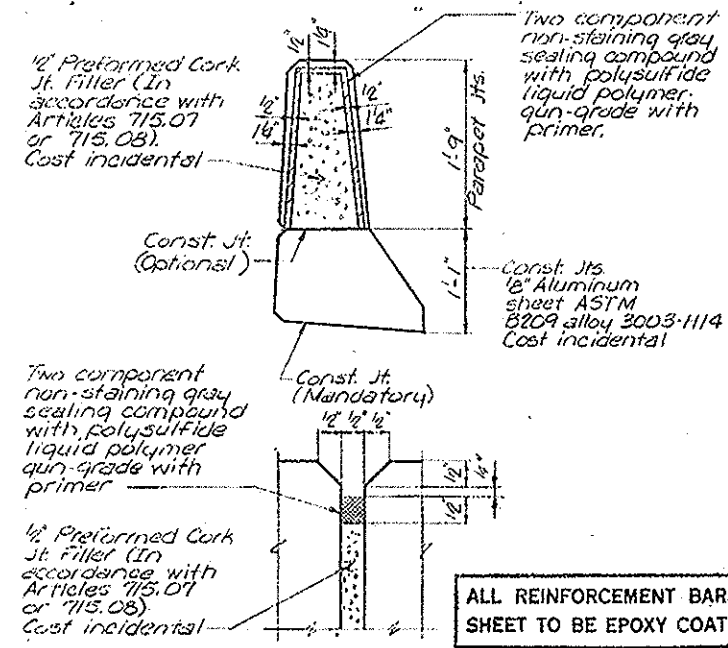
Note: East Parapet same except as noted.
I.F. indicates Inside Face
O.F. indicates Outside Face
Longitudinal dimensions and joint spacings are measured along West and East Edges of Slab.



SECTION THRU PARAPET

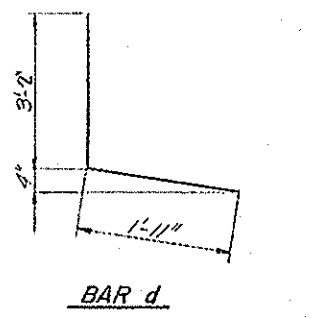
DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: R. Prosser
CHECKED: G. Roufa

IAS REVISED

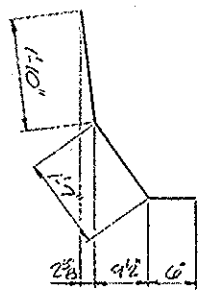


PARAPET JOINT DETAILS

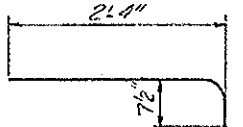
ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.



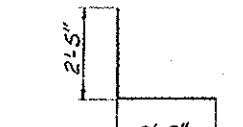
BAR d



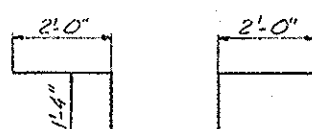
BAR d1(E)



BAR x(E)



BAR d2



BAR d3

**SUPERSTRUCTURE
BILL OF MATERIAL
(SPANS 7 THRU 10 S)**

Bars	No.	Size	Length	Shape
a1(E)	1485	#5	41'-2"	
a2(E)	1480	#6	4'-0"	
a3(E)	112	#5	42'-6"	
b16(E)	24	#5	2'-0"	
b17(E)	1012	#5	29'-9"	
b18	1100	#5	29'-9"	
b19(E)	258	#6	29'-9"	
b20(E)	129	#6	27'-1"	
b21(E)	16	#8	32'-8"	
b22	16	#8	32'-8"	
b23	20	#5	25'-3"	
b24	20	#5	25'-3"	
b25(E)	8	#8	25'-8"	
b26	8	#8	25'-8"	
b27	8	#8	25'-8"	
b28(E)	8	#5	25'-8"	
b29	8	#5	25'-8"	
b30(E)	16	#8	31'-11"	
b31	16	#8	31'-11"	
b32(E)	20	#5	24'-8"	
b33	20	#5	24'-8"	
b34(E)	4	#8	22'-8"	
b35	4	#8	22'-8"	
b36(E)	4	#5	22'-8"	
b37	4	#5	22'-8"	
d	1242	#4	5'-11"	
d1(E)	1356	#5	3'-11"	
d2**	6	#6	4'-5"	
d3**	10	#6	8'-11"	
e11(E)	72	#4	19'-7"	
e12	72	#4	19'-7"	
e13(E)	24	#4	25'-8"	
e14	24	#4	25'-8"	
e15(E)	72	#4	19'-2"	
e16	72	#4	19'-2"	
e17(E)	12	#4	22'-8"	
e18	12	#4	22'-8"	
x(E)	88	#5	3'-0"	
Reinforcement Bars (Epoxy Coated)		Lbs.	223,920	
Class X Concrete		Cu. Yds.	792.0	

*For location of b16(E) bars See Drainage Scupper Details, Sheet 75.
**For location of d2 and d3 bars See Lighting Details, Sheet 73.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

PARAPET - SPANS 7 THRU 10 SOUTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 663+16.00 (FA-412) LASALLE CO.

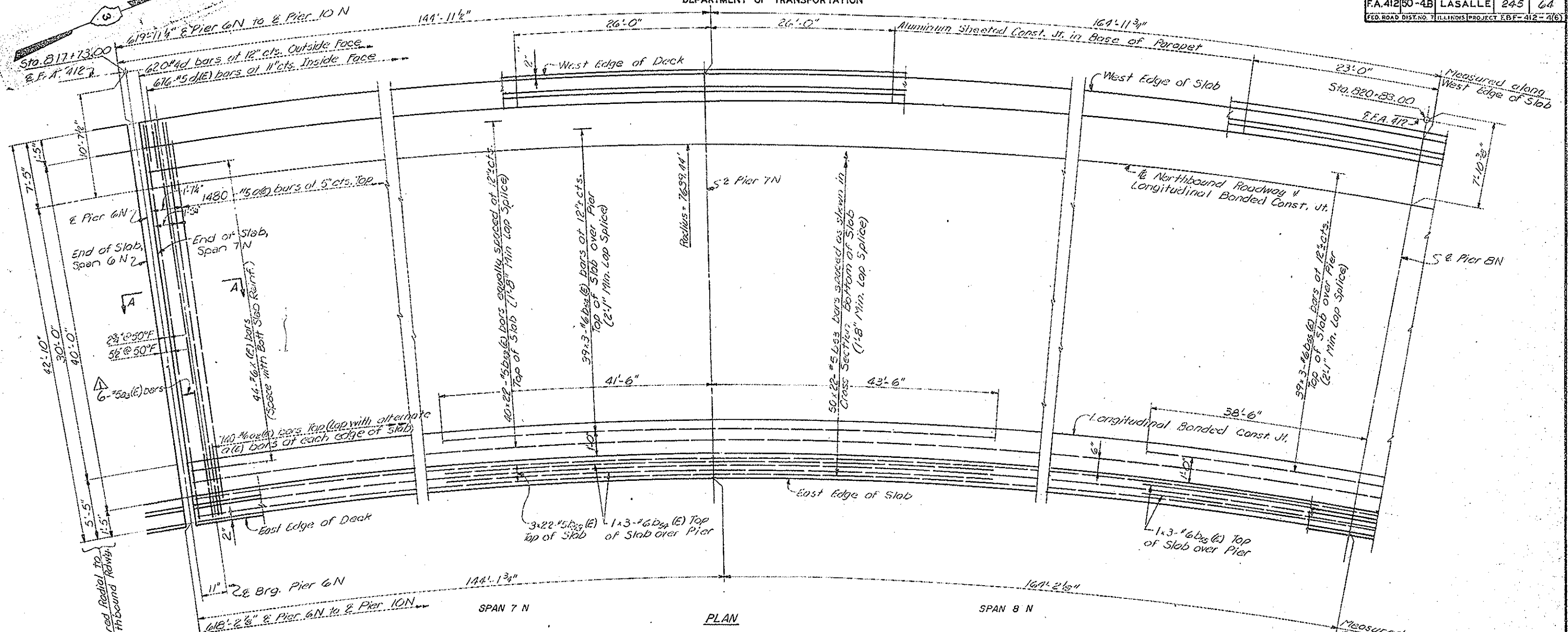
ADD DECK PLANKS, ELIMINATE a, BARS, ADD a3(E) BARS.

Note: Work this Sheet with Sheets 55 and 56.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

10/8/85



NOTES

Work this sheet with sheets 59 and 60. For General Notes, see Sheet B.
d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Spacing of Transverse Reinforcement Bars. is measured along West Edge of Slab.
Bars shown thus: 39 #3 #6 etc. indicates 39 lines of bars with 3 lengths per line.
For location and details of Floor Drains and Scuppers, see sheets 74 & 75.
Space bars a₂(E), d₁(E) and d in field to miss floor Drains and Scuppers.
Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.
For Roadway Cross Slope thru Superelevation Transition, see Sheet 44.
Lighting pedestals not shown. See Sheet 73 for location and details.

SOUTH APPROACH

STRUCTURAL STEEL ALTERNATE

SLAB - SPANS 7 THRU 10 NORTHBOUND

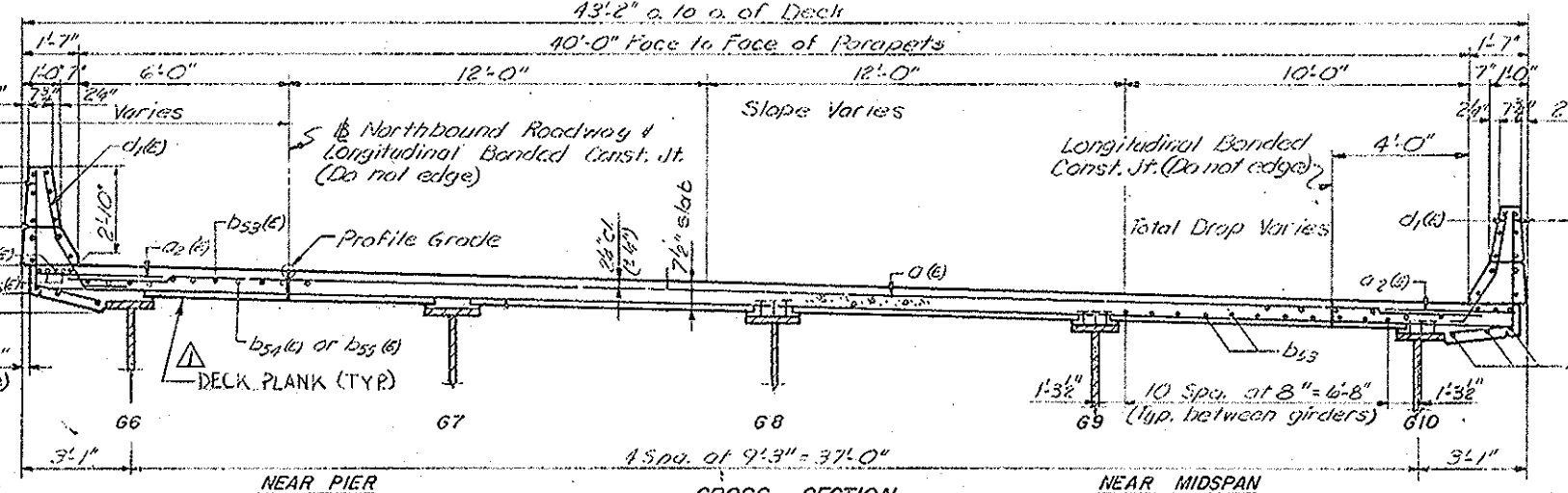
FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

ADD DECK PLANKS, ELIMINATE a₃ BARS, ADD a₃(E) BARS

SHEET NO. 58 OF 163



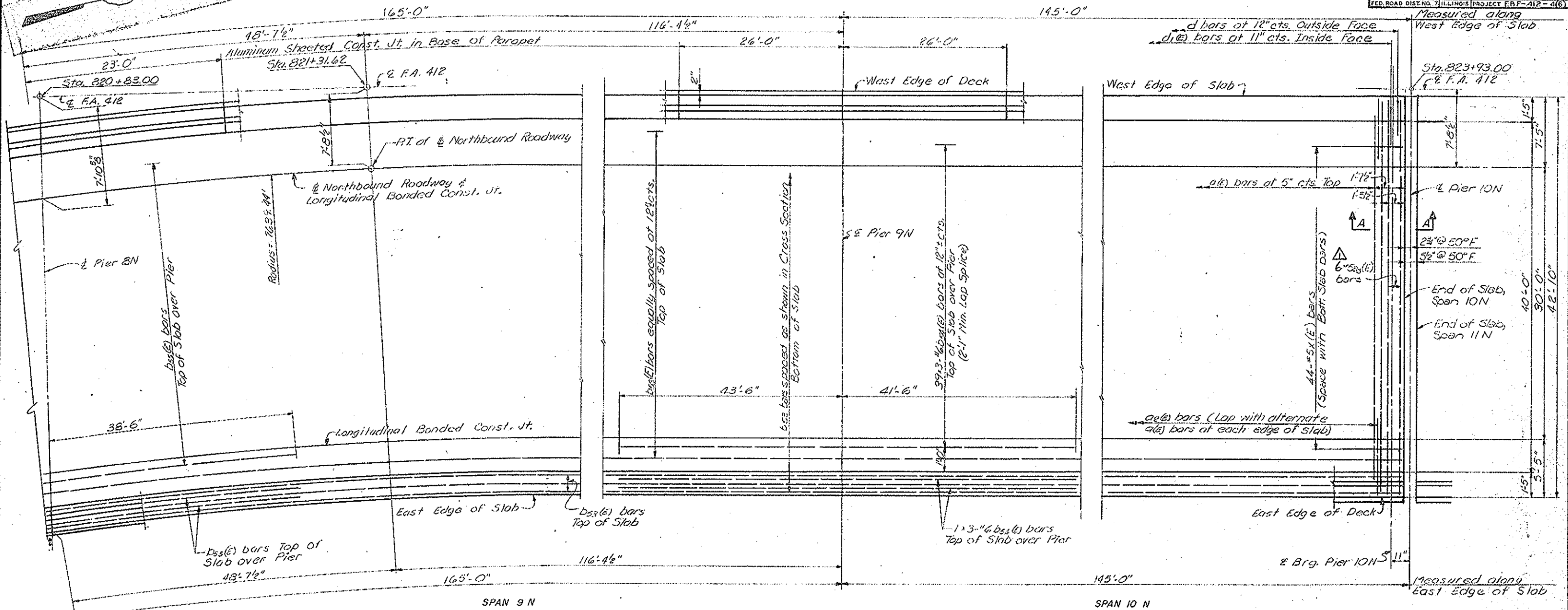
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED Arman
CHECKED R. Butterfield
DRAWN R. Prascher
CHECKED G. Roufa

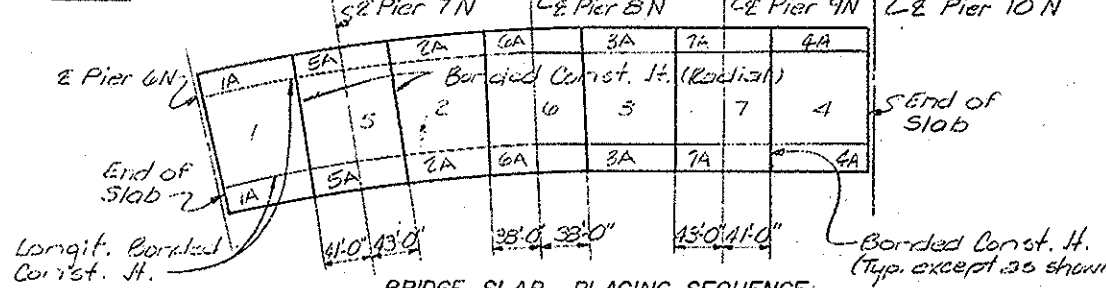
IAS REVISED I

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

10/8/85



PLAN



BRIDGE SLAB PLACING SEQUENCE

Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1, 2, 3 & 4 have attained required strength.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 7 THRU 10 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (F.A.-412) LASALLE CO.
10/8/85
ELIMINATE a₃ BARS, ADD a₃(E) BARS

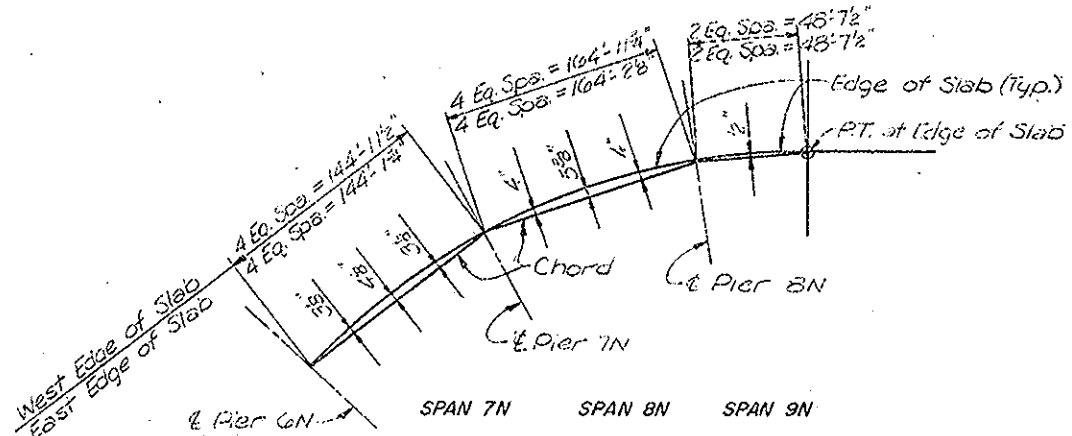
DESIGNED Arman
CHECKED R. Butterfield
DRAWN R. Prescher
CHECKED G. Roufa

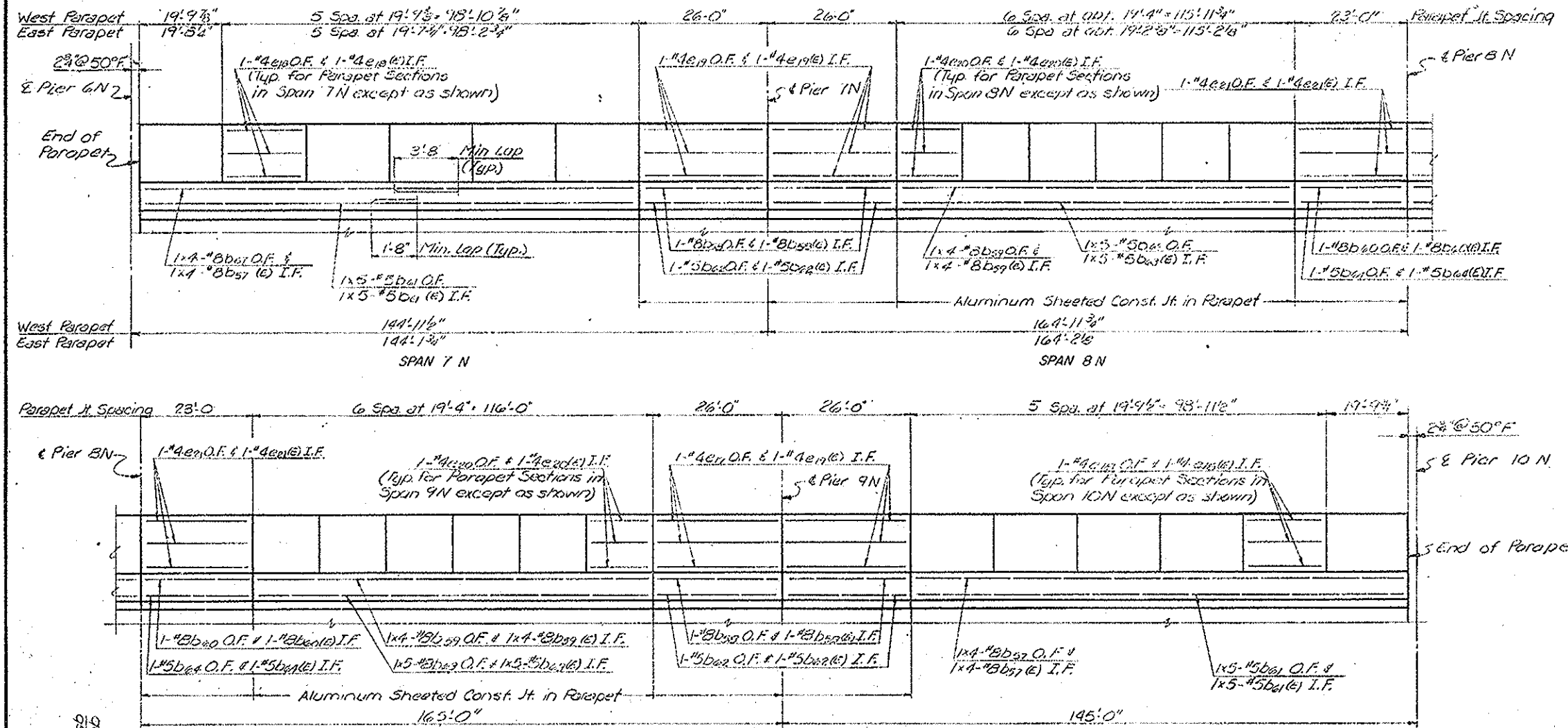
LAS REVISED 1

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

Note: Work this Sheet with Sheets 58 and 60.

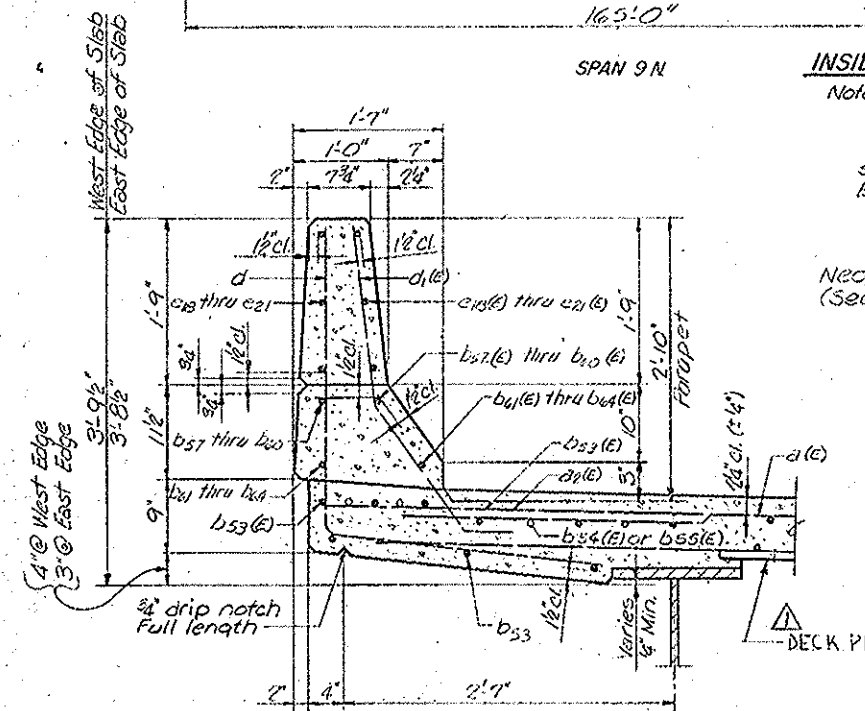
EDGE OF SLAB ORDINATES
Note: Longit. Dim. are measured along chords



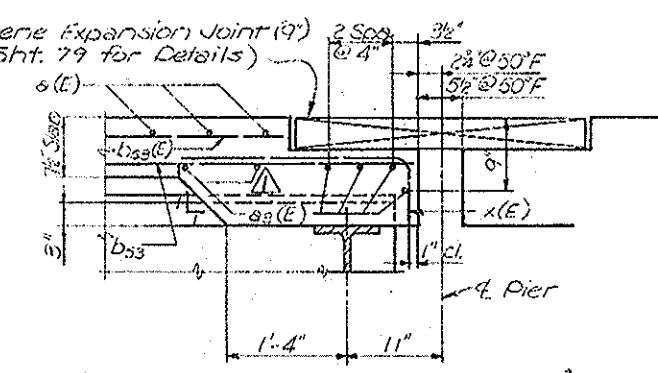


INSIDE ELEVATION OF WEST PARAPET

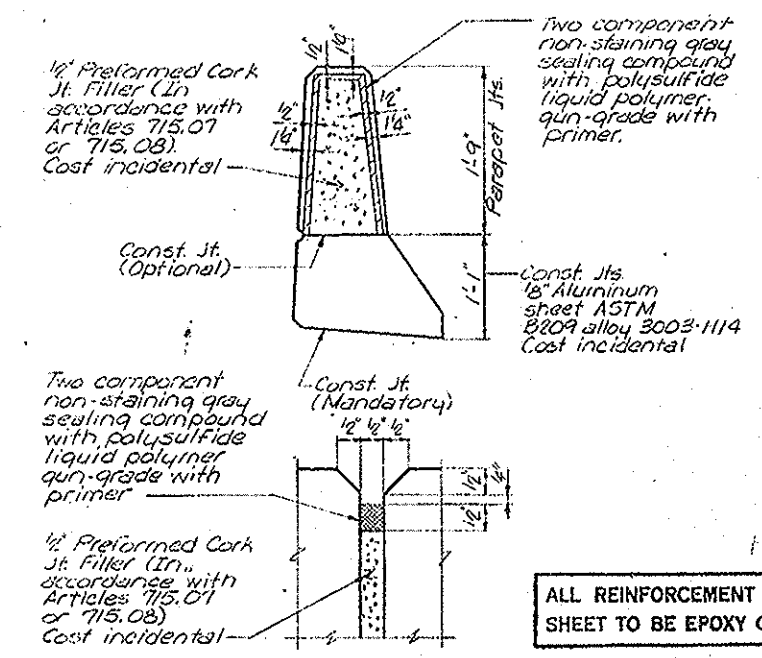
Note: East Parapet same except as noted.
I.F. indicates Inside Face
O.F. indicates Outside Face
Longitudinal dimensions and joint spacings are measured along West and East Edges of Slab



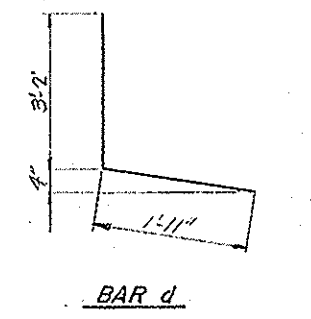
SECTION THRU PARAPET



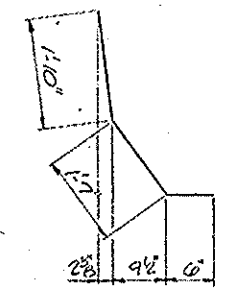
SECTION A-A



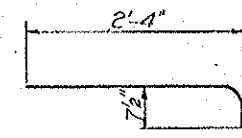
PARAPET JOINT DETAILS



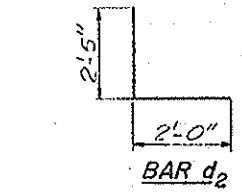
BAR d



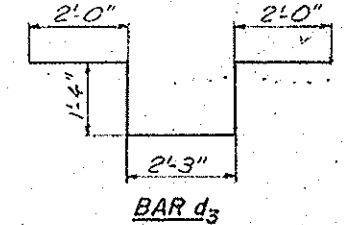
BAR d1(E)



BAR d2



BAR d3



BAR x(E)

**SUPERSTRUCTURE
BILL OF MATERIAL
(SPANS 7 THRU 10 N)**

Bars	No.	Size	Length	Shape
a1(e)	1480	#5	41'-2"	
a2(e)	1480	#6	4'-0"	
a3(e)	12	#5	42'-6"	
b16(e)	27	#5	2'-0"	
b22(e)	1012	#5	29'-8"	
b22	1100	#5	29'-8"	
b21(e)	258	#6	29'-9"	
b21(e)	129	#6	27'-1"	
b57(e)	16	#8	32'-5"	
b57	16	#8	32'-5"	
b58(e)	8	#8	25'-8"	
b58	8	#8	25'-8"	
b59(e)	16	#8	31'-9"	
b59	16	#8	31'-9"	
b60(e)	4	#8	22'-8"	
b60	4	#8	22'-8"	
b61(e)	20	#5	25'-1"	
b61	20	#5	25'-1"	
b62(e)	8	#5	25'-8"	
b62	8	#5	25'-8"	
b63(e)	20	#5	24'-6"	
b63	20	#5	24'-6"	
b64(e)	7	#5	22'-8"	
b64	4	#5	22'-8"	
d	1240	#4	5'-1"	
d1(e)	1352	#5	3'-11"	
d2**	0	#6	4'-5"	
d3**	10	#6	8'-11"	
e18(e)	72	#4	19'-6"	
e18	72	#4	19'-6"	
e19(e)	24	#4	25'-8"	
e19	24	#4	25'-8"	
e20(e)	72	#4	19'-0"	
e20	72	#4	19'-0"	
e21(e)	12	#4	22'-8"	
e21	12	#4	22'-8"	
x(e)	88	#5	3'-0"	
Reinforcement Bars (Epoxy Coated)		Lbs.	225,040	
Glass K Concrete		Cu. Yds.	789.8	

*For location of b16(e) bars, see Drainage Scupper Details, Sheet 75.
**For location of d2 and d3 bars, see Lighting Details, Sheet 73.

SOUTH APPROACH

STRUCTURAL STEEL ALTERNATE

PARAPET - SPANS 7 THRU 10 NORTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

ADD DECK PLANKS, ELIMINATE a1 BARS, ADD a3(E) BARS

SHEET NO. 60 OF 163

DESIGNED Armon
CHECKED R. Butterfield
DRAWN R. Prescher
CHECKED G. Roufa

IAS REVISED I

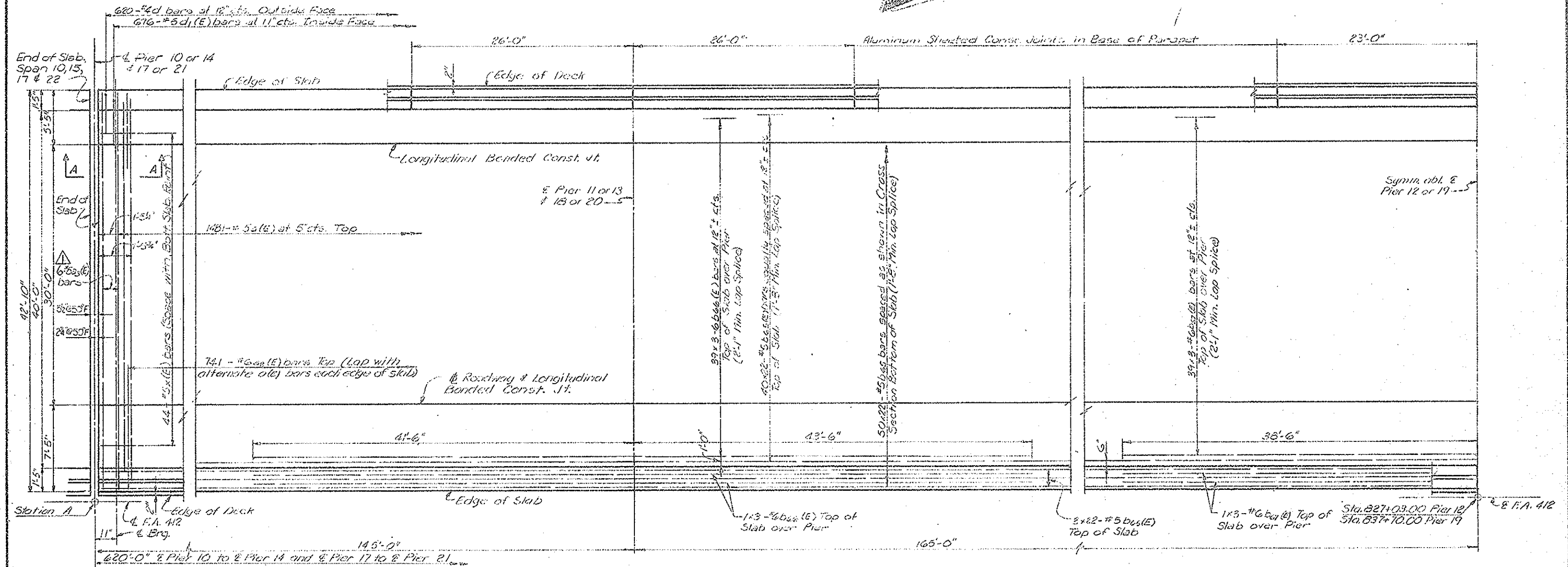
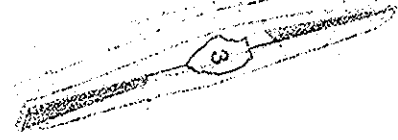
Note: Work this Sheet with Sheets 58 and 59.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

10/6/85



PIER	STATION A
10	Sta. 823+93.00
14	Sta. 827+13.00
17	Sta. 834+80.00
21	Sta. 840+80.00

SPANS 11 & 14
SPANS 18 & 21

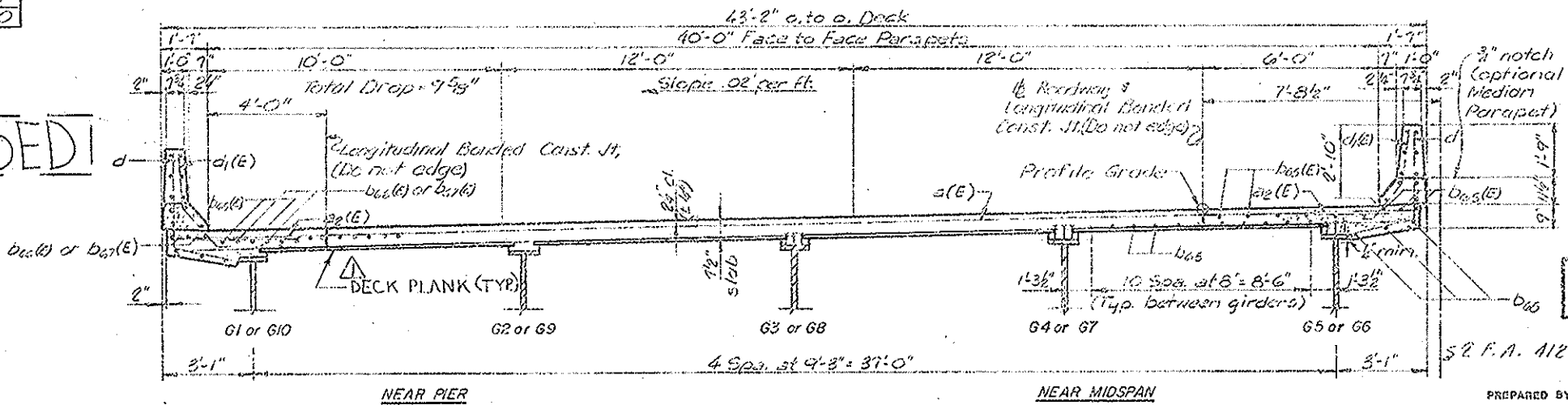
HALF PLAN
Note: Southbound Roadway shown.
Northbound Roadway symm. abt.
F.A. 412.

SPANS 12 & 13
SPANS 19 & 20

NOTES

Work this Sheet with Sheet G2.
For General Notes, see Sheet G3.
d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Bars shown thus: 39x3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
Floor Drains and Scuppers not shown. See Sheet 74875 for location and details.
Space bars a₂(E), d₁(E) and d₁ in field to miss Floor Drains and Scuppers.
Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.
Lighting Pedestals not shown. See Sheet 73 for location and details.

AS REVISED



CROSS SECTION
Looking North
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

Note: Southbound Roadway shown.
Northbound Roadway symm. abt. F.A. 412.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB**

SPANS 11 THRU 14 & 18 THRU 21-NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

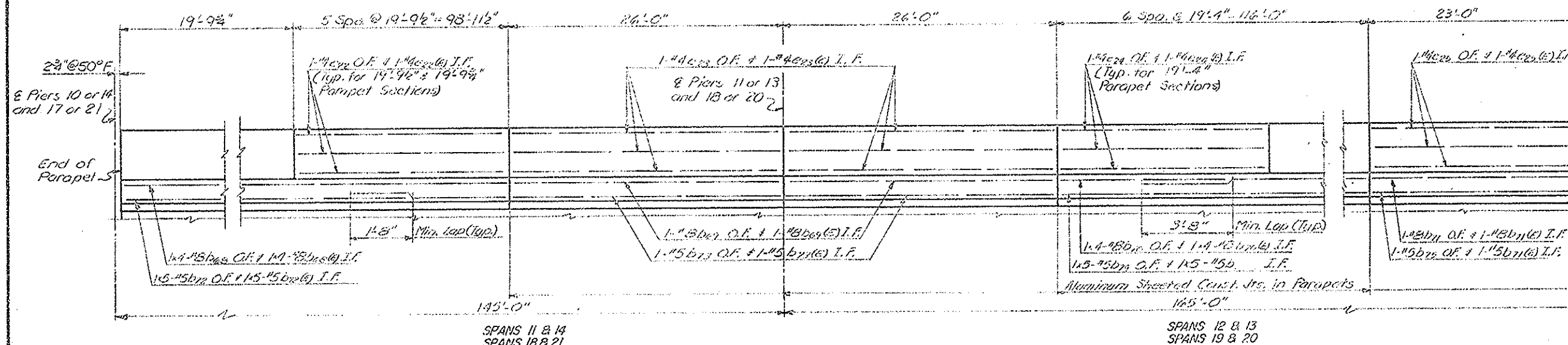
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

STA. 863+16.00 (FA-412) LASALLE CO.
ADD DECK PLANKS, ELIMINATE a₁ BARS, ADD a₂(E) BARS
SHEET NO. 61 OF 163

DESIGNED: Armon
CHECKED: R. Butterfield
DRAWN: S. Stegman
CHECKED: R. Preschler
CHECKED: G. Roufa

6692
85877

9/27/85

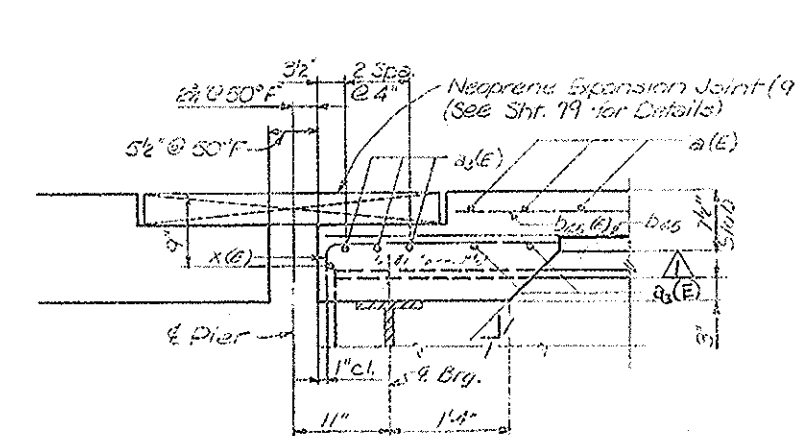


Parapet Jt. Spacing
Symm. abt. & Piers 12 and 19

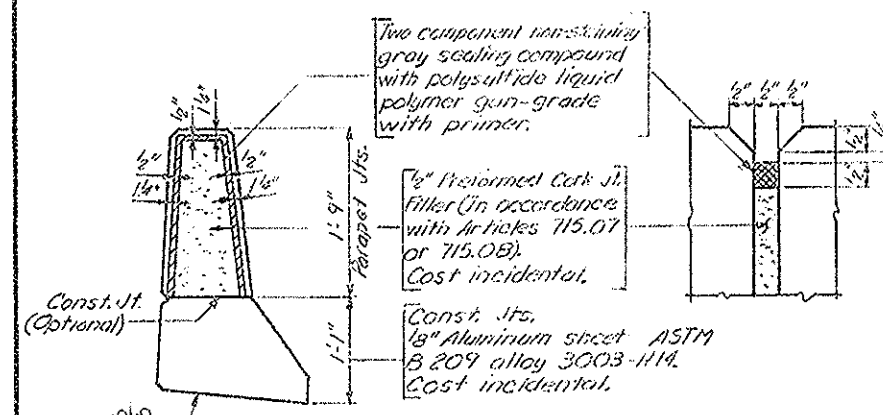
BILL OF MATERIAL
FOUR SUPERSTRUCTURE UNITS
(SPANS 11-14 N & S AND SPANS 18-21 N & S)

Bar	No.	Size	Length	Shape
o1(e)	5924	#5	41'2"	
o2(e)	5928	#6	4'0"	
o3(e)	48	#5	42'0"	
b1(e)	64	#5	2'0"	
b2(e)	4045	#5	29'5"	
b3(e)	4000	#5	29'6"	
b4(e)	1032	#6	29'9"	
b5(e)	516	#6	27'1"	
b6(e)	64	#8	32'5"	
b7	64	#8	32'5"	
b8(e)	32	#8	25'8"	
b9	32	#8	25'8"	
b10(e)	64	#8	31'5"	
b11	64	#8	31'5"	
b12(e)	16	#8	22'8"	
b13	16	#8	22'8"	
b14(e)	80	#5	25'1"	
b15	80	#5	25'1"	
b16(e)	32	#5	25'8"	
b17	32	#5	25'8"	
b18(e)	80	#5	24'6"	
b19	80	#5	24'6"	
b20(e)	16	#5	22'8"	
b21	16	#5	22'8"	
d	4960	#4	5'1"	
d1(e)	3408	#5	3'11"	
d2	30	#6	1'5"	
d3	50	#6	5'11"	
e22(e)	288	#4	19'7"	
e23	288	#4	19'7"	
e24(e)	96	#4	25'8"	
e25	96	#4	25'8"	
e26(e)	288	#4	19'7"	
e27	288	#4	19'7"	
e28(e)	48	#4	22'8"	
e29	48	#4	22'8"	
x(e)	352	#5	3'0"	
Reinforcement Bars (Epoxy Coated)		Lbs.	400,500	
Class X Concrete		Cu.Yds.	3152.0	

INSIDE ELEVATION OF PARAPET
Note: I.F. indicates Inside Face
O.F. indicates Outside Face



SECTION A-A



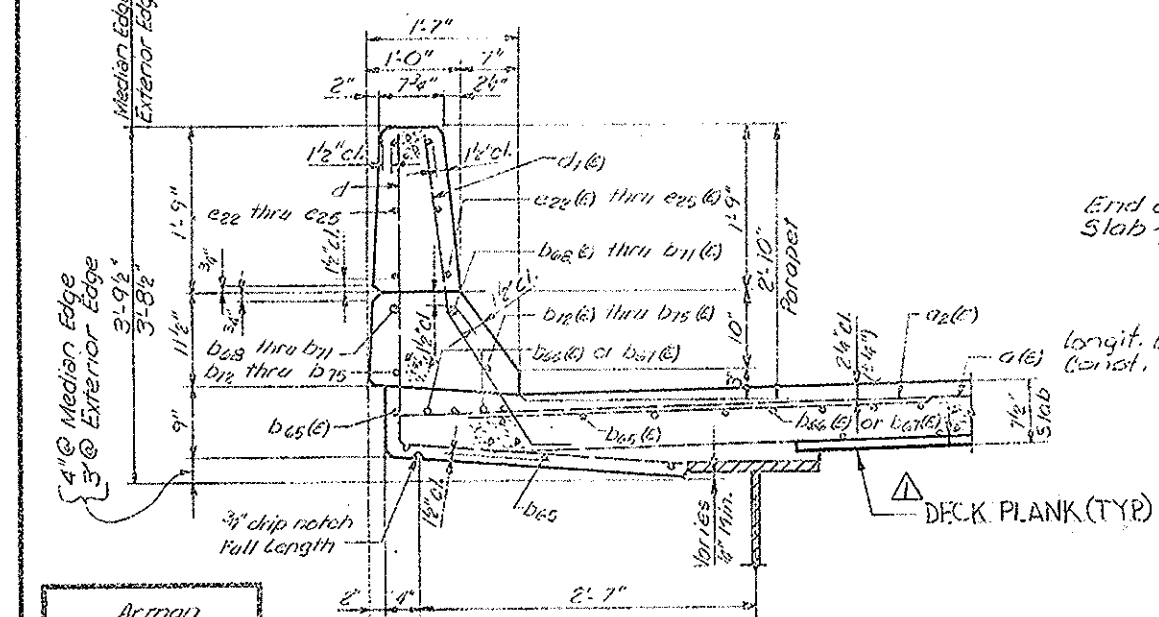
PARAPET JOINT DETAILS

SE Pier 10 or 17	SE Pier 11 or 18	SE Pier 12 or 19	SE Pier 13 or 20	SE Pier 14 or 21
1A	5A	2A	6A	3A
1	5	2	6	3
7A	4A	7A	4A	7A
1A	5A	2A	6A	3A
1A	5A	2A	6A	3A
1A	5A	2A	6A	3A

BRIDGE SLAB PLACING SEQUENCE

Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1, 2, 3 & 4 have attained required strength.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

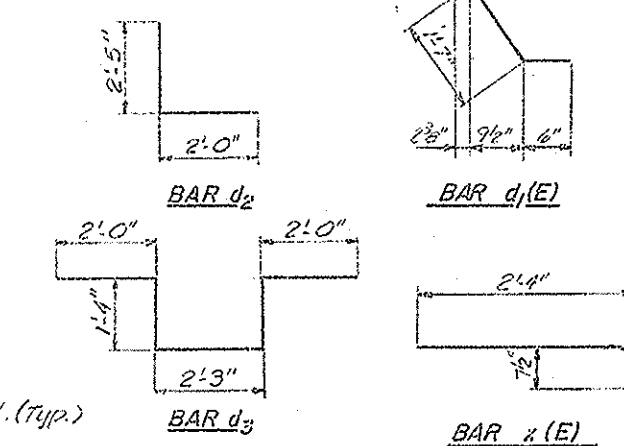


SECTION THRU PARAPET

AS REVISED

Note: Work this Sheet with Sheet 61.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPETS

SPANS 11 THRU 14 & 18 THRU 21- NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER

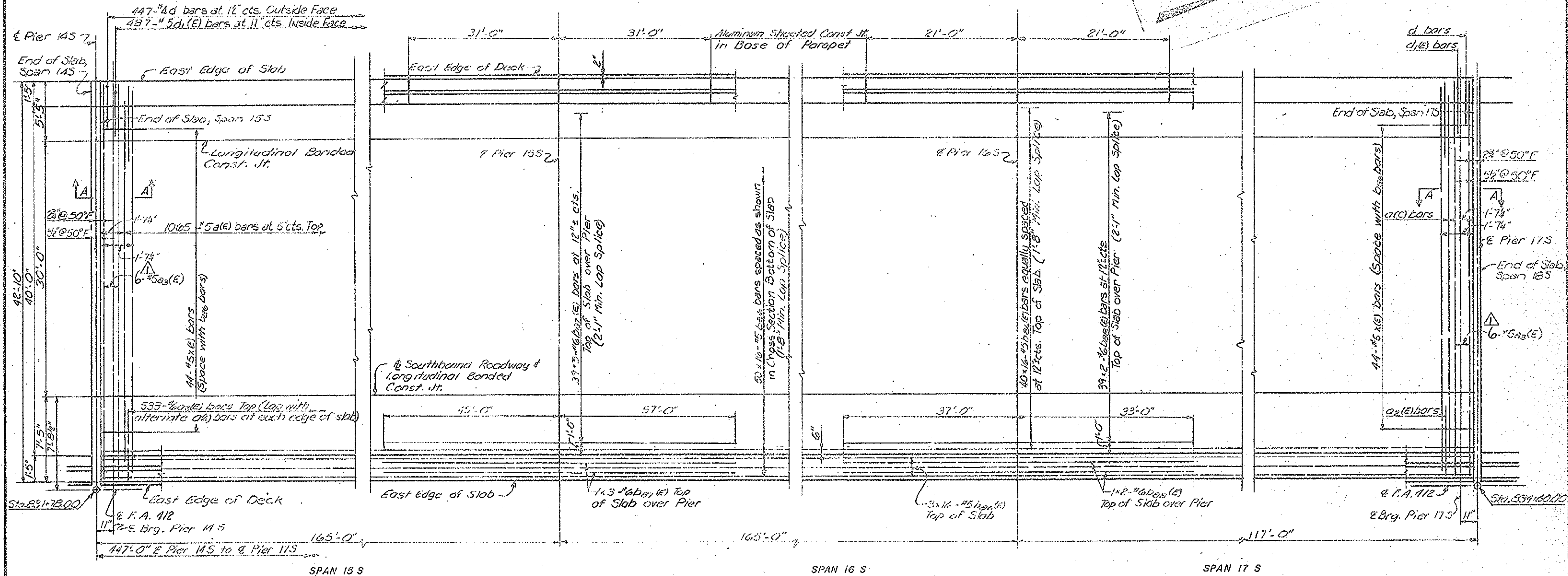
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

STA. 863+16.00 (FA-412 LASALLE CO.)
SECTION 50-4B PROJECT EBF-412-4(6)
ADD DECK PLANKS, ELIMINATE o1 BARS, ADD o3 (E) BARS

9/27/85

SHEET NO. 62 OF 163

DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: R. Prescher
CHECKED: G. Roufo



PLAN

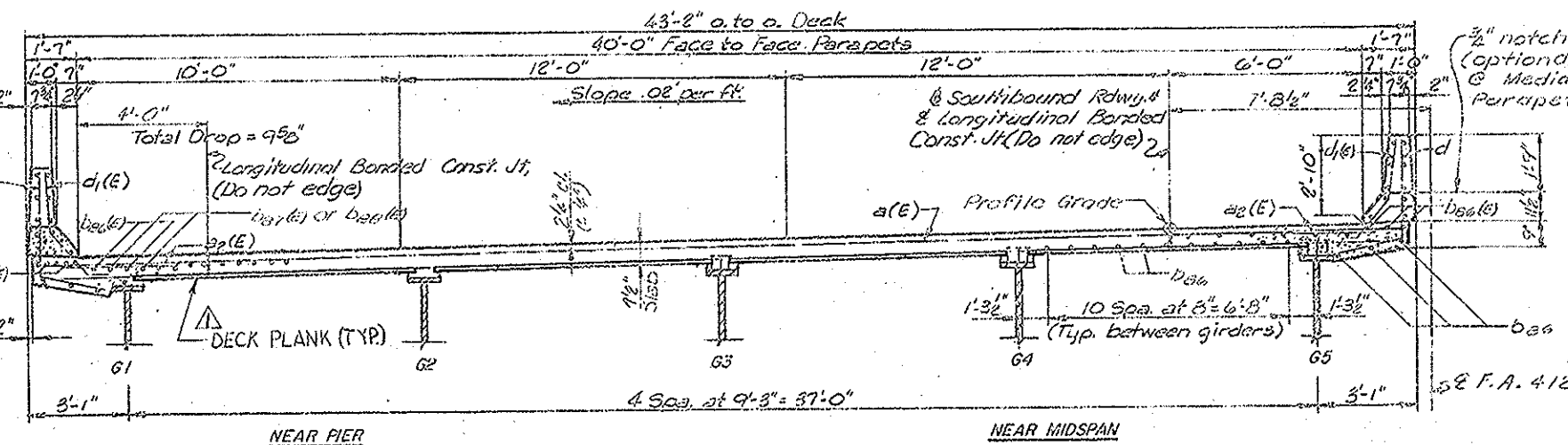
NOTES

Work this sheet with sheet 64.
For General Notes, see Sheet 3.
d, (E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Bars shown thus: 39x3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
Floor Drains and Scuppers not shown. See Sheets 74 & 75 for location and details.
Space bars a₂(E), d₁(E) and d in field to miss Floor Drains and Scuppers.
Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.
Lighting Pedestals not shown. See Sheet 73 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 15 THRU 17 - SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 865+16.00 (FA-412) LASALLE CO.

ADD DECK PLANKS, ELIMINATE a₁ BARS, ADD a₃(E) BARS



CROSS SECTION
Looking North

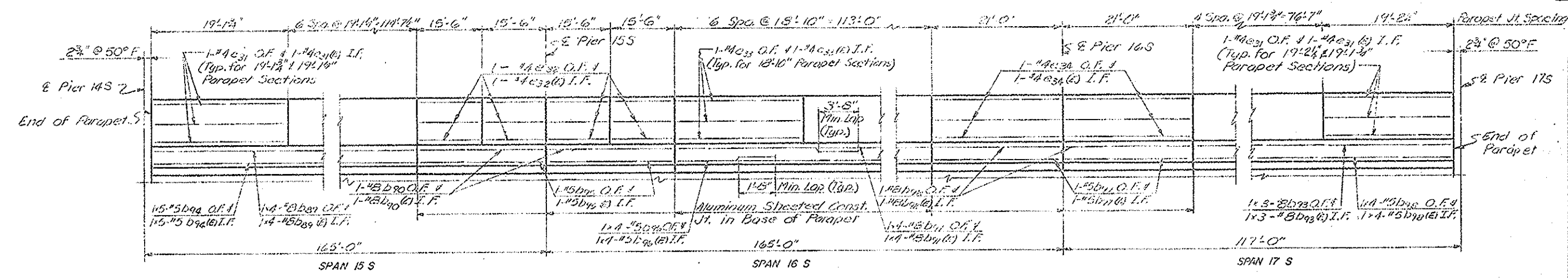
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED
Arman
CHECKED
R. Butterfield
S. Wenke
DRAWN
R. Prescher
CHECKED
G. Roubal

IAS REVISED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

9/27/85

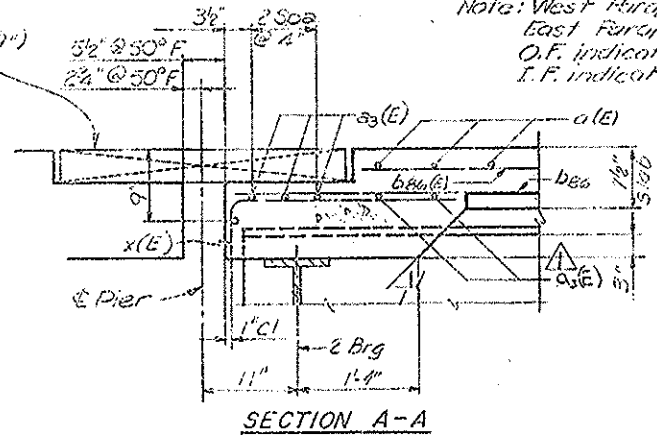


**SUPERSTRUCTURE
BILL OF MATERIAL**
(SPANS 15 THRU 17 S)

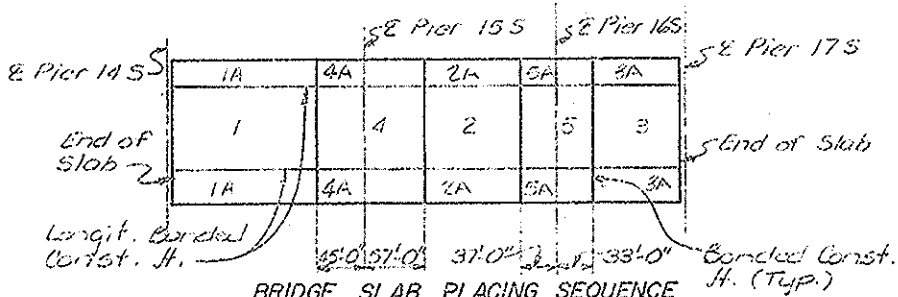
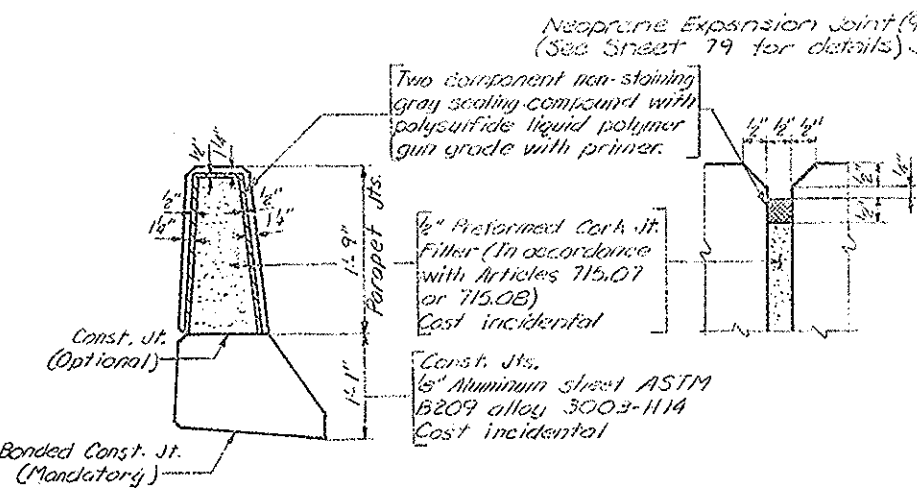
Bar	No	Size	Length	Shape
a1(E)	10x5	#5	41'-2"	
a2(E)	10x6	#6	41'-0"	
a3(E)	12	#5	42'-0"	
b1(E)	24	#5	2'-0"	
b2(E)	736	#5	29'-4"	
b3(E)	300	#5	29'-4"	
b4(E)	129	#6	33'-5"	
b5(E)	252	#6	33'-7"	
b59(E)	8	#8	36'-3"	
b59	8	#8	36'-3"	
b59(E)	4	#8	30'-8"	
b59	4	#8	30'-8"	
b71(E)	8	#8	31'-0"	
b71	8	#8	31'-0"	
b72(E)	4	#8	20'-8"	
b72	4	#8	20'-8"	
b73(E)	6	#8	31'-5"	
b73	6	#8	31'-5"	
b92(E)	10	#5	28'-1"	
b92	10	#5	28'-1"	
b95(E)	4	#5	30'-8"	
b95	4	#5	30'-8"	
b96(E)	8	#5	27'-6"	
b96	8	#5	27'-6"	
b97(E)	4	#5	20'-8"	
b97	4	#5	20'-8"	
b98(E)	8	#5	25'-3"	
b98	8	#5	25'-3"	
d	274	#4	5'-1"	L
d1(E)	974	#5	3'-11"	L
d1**	3	#6	4'-5"	L
d3**	5	#6	8'-11"	L
e21(E)	72	#4	13'-11"	
e21	72	#4	13'-11"	
e22(E)	24	#4	15'-2"	
e22	24	#4	15'-2"	
e23(E)	36	#4	18'-8"	
e23	36	#4	18'-8"	
e24(E)	12	#4	20'-8"	
e24	12	#4	20'-8"	
x(E)	8E	#5	3'-0"	L
Reinforcement Bars		Lbs.	161,542	
Class X Concrete		CuYds.	57.1	

INSIDE ELEVATION OF PARAPET

Note: West Parapet shown.
East Parapet opposite hand.
O.F. indicates Outside face.
I.F. indicates Inside face.



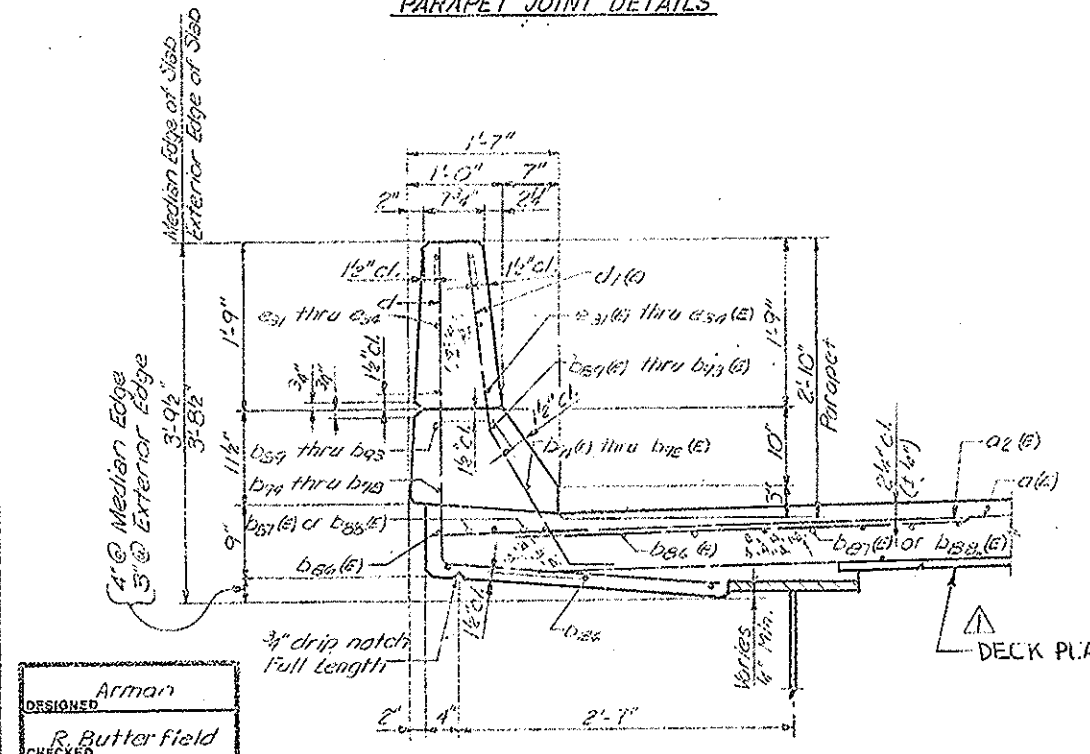
PARAPET JOINT DETAILS



Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1,2,3 have attained required strength.

SECTION THRU PARAPET

IAS REVISED



Note: Work this Sheet with Sheet 63.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

* For location of b16(E) bars, See Drainage Scupper Details, Sheet 75.
** For location of d2 and d3 bars, See Lighting Details, Sheet 73.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPET - SPANS 15 THRU 17 - SOUTHBOUND**

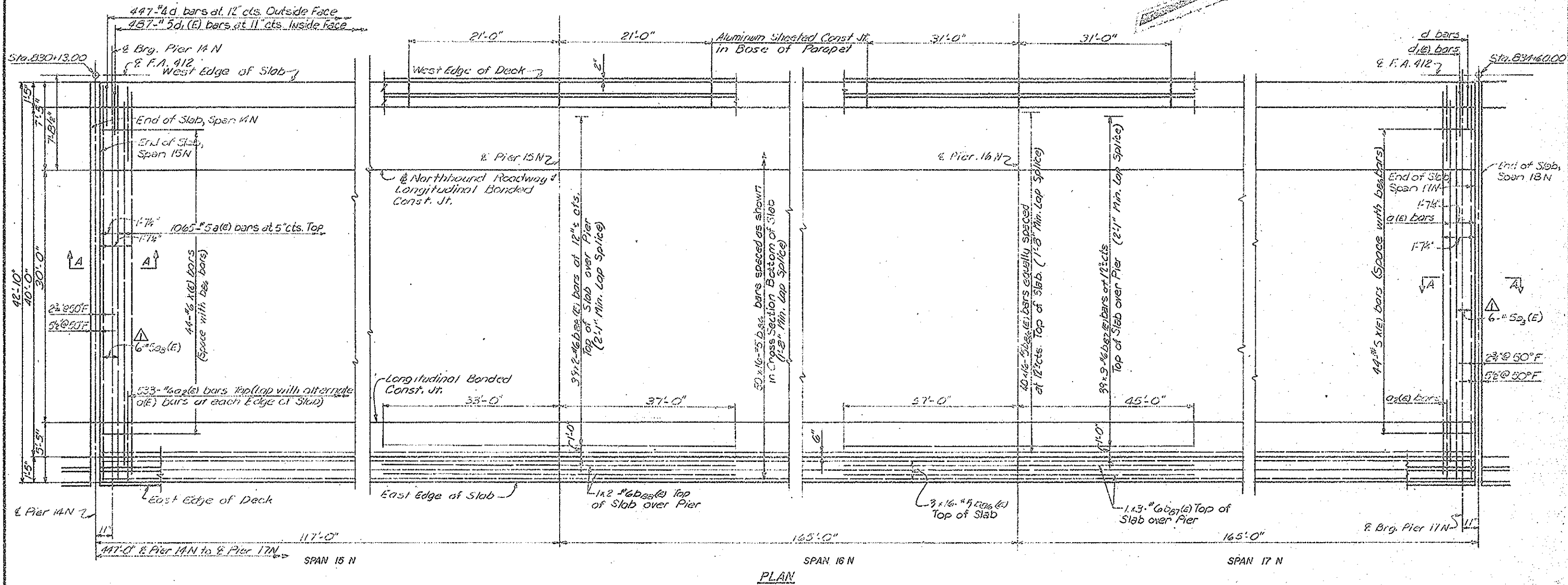
**EA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)**

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

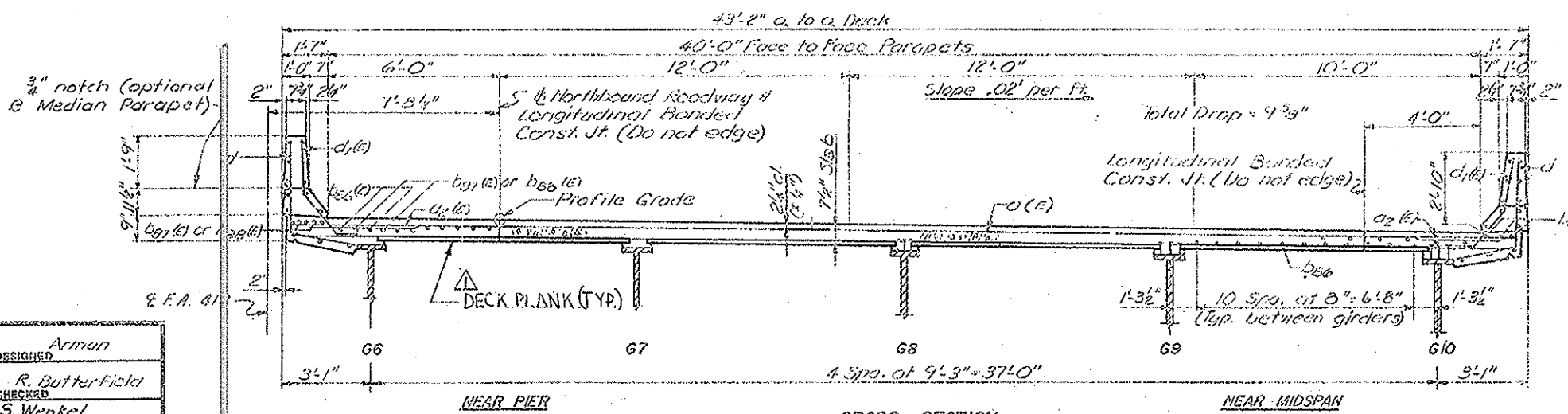
STA. 863+16.00 (F.A. 412) LASALLE CO.
ADD DECK PLANKS, ELIMINATE a1 BARS, ADD a1(E) BARS

DESIGNED	Arman
CHECKED	R. Butterfield
DRAWN	R. Prescher
CHECKED	G. Roufa

9/27/85



PLAN



CROSS SECTION
Looking North

NOTES
 Work this Sheet with Sheet 66.
 For General Notes, see Sheet 8.
 d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
 Bars shown thus: 39 x 3 - #6 etc. indicates 39 lines of bars with 3 lengths per line.
 Floor Drains and Scuppers not shown. See Sheets 74 & 75 for location and details.
 Space bars a₂(E), d₁(E) and d₂ in field to miss Floor Drains and Scuppers.
 Cut bars a₁(E) and a₂ in field to miss Floor Drains and Scuppers.
 Lighting pedestals not shown. See Sheet 73 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 SLAB - SPANS 15 THRU 17 - NORTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4 (6)

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEER ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE α_1 BARS, ADD α_3 (E) BARS

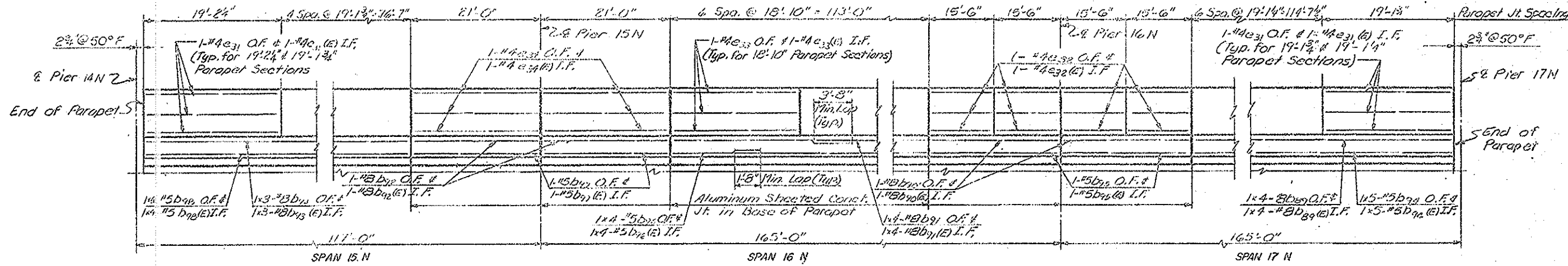
DESIGNED	Arman
CHECKED	R. Butterfield
CHECKED	S. Wenke
CHECKED	ORAVVA R. Prescher
CHECKED	G. Roufa

[AS REVISED]

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

7/27/85

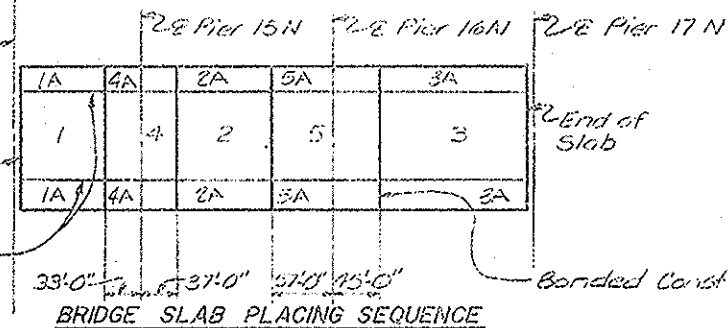
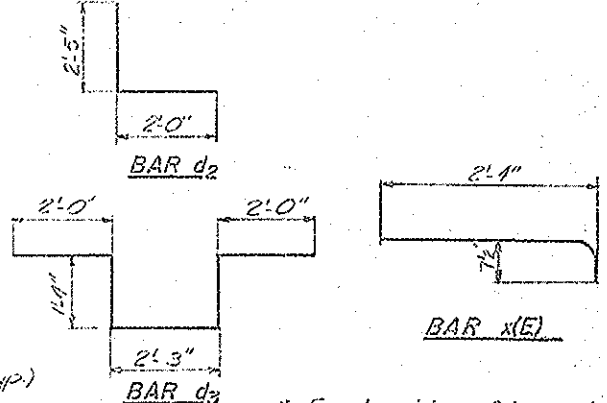
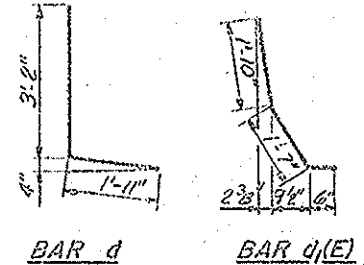
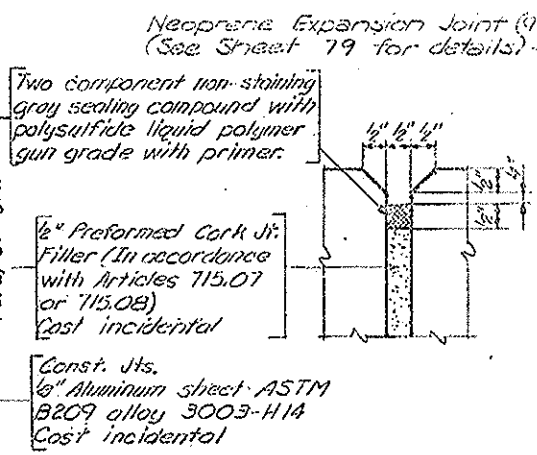
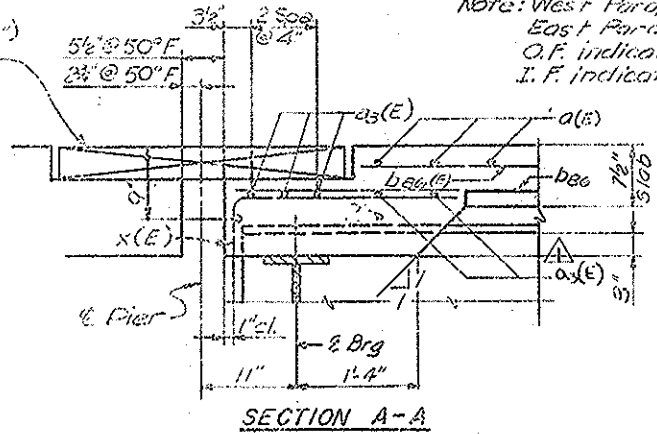
SHEET NO. 65 OF 163



**SUPERSTRUCTURE
BILL OF MATERIAL**
(SPANS 15 THRU 17 N)

Bar	No	Size	Length	Shape
d1(E)	1065	#5	41'-2"	
d1(E)	1046	#6	1'-0"	
d1(E)	112	#5	42'-6"	
d1(E)	24	#5	2'-0"	
b24(E)	736	#5	29'-4"	
b24	800	#5	29'-4"	
b24(E)	129	#6	36'-5"	
b24(E)	86	#6	38'-1"	
b24(E)	8	#8	36'-3"	
b24	8	#8	36'-3"	
b24(E)	4	#8	30'-8"	
b24	4	#8	30'-8"	
b24(E)	8	#8	31'-0"	
b24	8	#8	31'-0"	
b24(E)	4	#8	20'-8"	
b24	4	#8	20'-8"	
b24(E)	4	#8	20'-8"	
b24	4	#8	20'-8"	
b24(E)	6	#8	34'-5"	
b24	6	#8	34'-5"	
b24(E)	10	#5	28'-1"	
b24	10	#5	28'-1"	
b24(E)	1	#5	30'-8"	
b24	4	#5	30'-8"	
b24(E)	8	#5	29'-6"	
b24	8	#5	29'-6"	
b24(E)	4	#5	20'-8"	
b24	4	#5	20'-8"	
b24(E)	8	#5	25'-3"	
b24	8	#5	25'-3"	
d	894	#4	5'-1"	L
d1(E)	974	#5	3'-11"	L
d1	3	#6	4'-5"	L
d3**	5	#6	8'-11"	L
e21(E)	72	#4	18'-11"	
e21	72	#4	18'-11"	
e21(E)	24	#4	18'-2"	
e21	24	#4	18'-2"	
e21(E)	36	#4	18'-8"	
e21	36	#4	18'-8"	
e21(E)	12	#4	20'-8"	
e21	12	#4	20'-8"	
x(E)	88	#5	3'-0"	
Reinforcement Bars (Epoxy Coated)	Lbs.		161,540	
Class X Concrete	Cu/Yds.		571.1	

INSIDE ELEVATION OF PARAPET
Note: West Parapet shown.
East Parapet opposite hand.
O.F. indicates Outside Face.
I.F. indicates Inside Face.



Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1,2,3 have attained required strength.

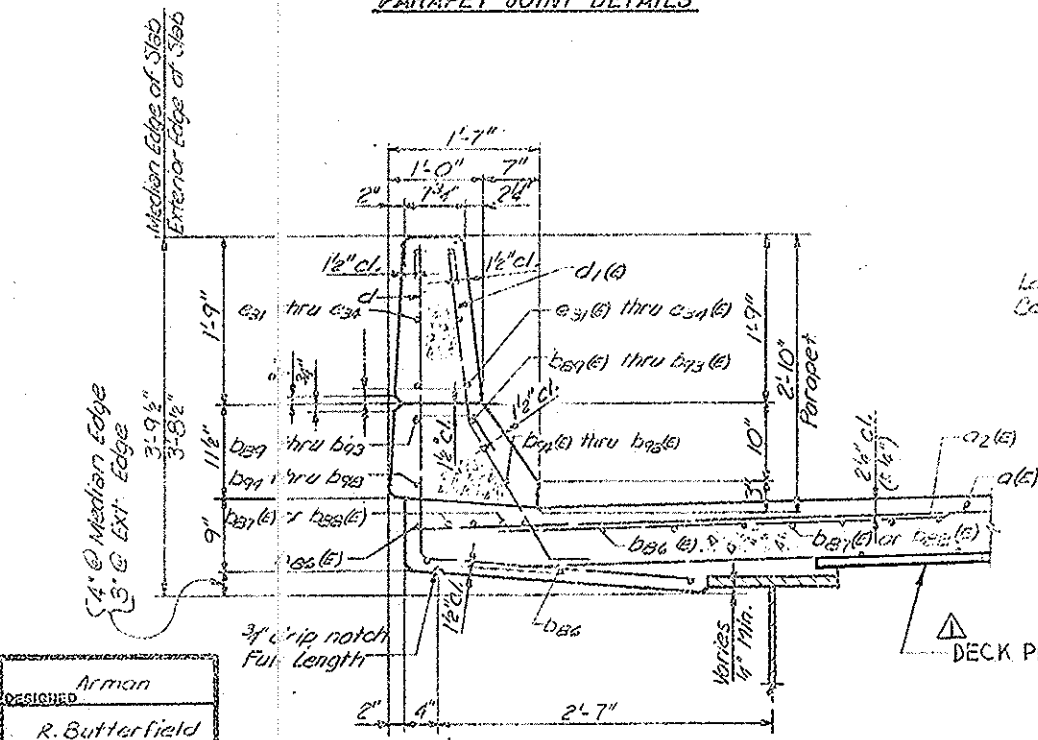
* For location of d1(E) bars, See Drainage Scupper Details, Sheet 75.
** For location of d2 and d3 bars, See Lighting Details, Sheet 73.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPET - SPANS 15 THRU 17 - NORTHBOUND

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+15.00 (FA-412) LASALLE CO.
ADD DECK PLANKS, ELIMINATE d1 BARS, ADD d3(E) BARS



AS REVISED 1

Note: Work this Sheet with Sheet 45.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

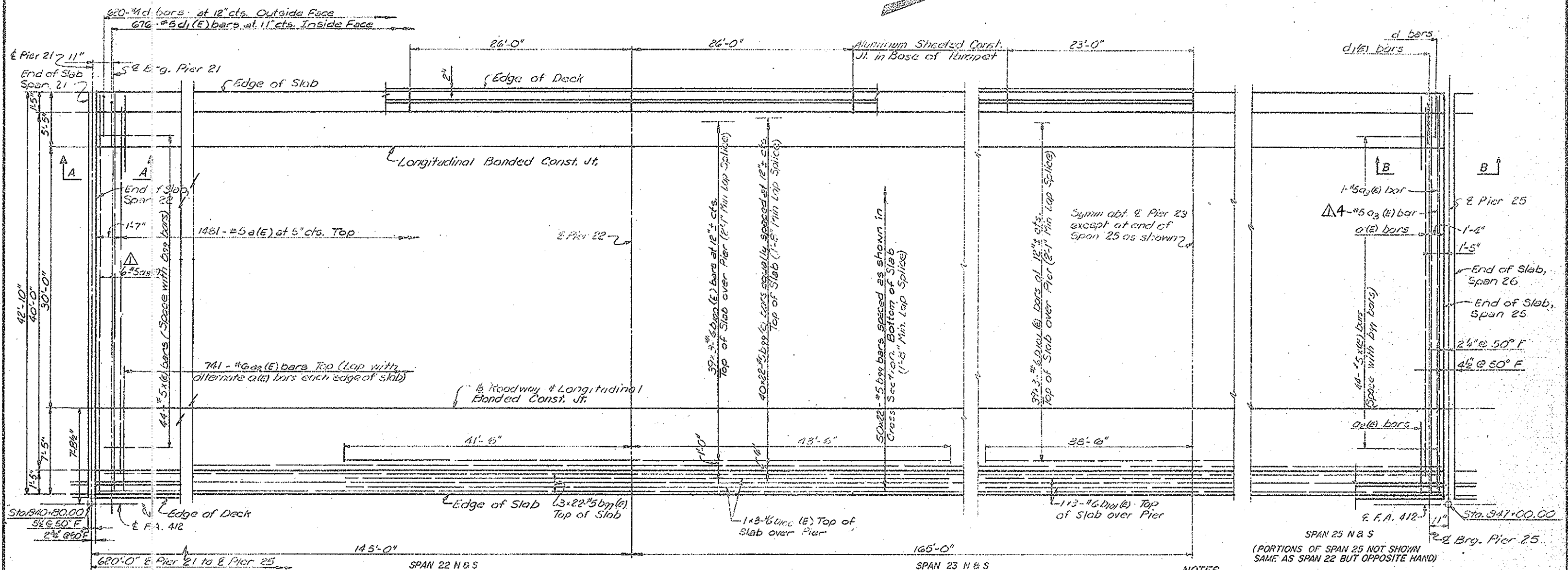
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

9/27/85

DESIGNED Armon
CHECKED R. Butterfield
DRAWN R. Prescher
CHECKED G. Roufa

8892

SHEET NO. 66 OF 163



PLAN

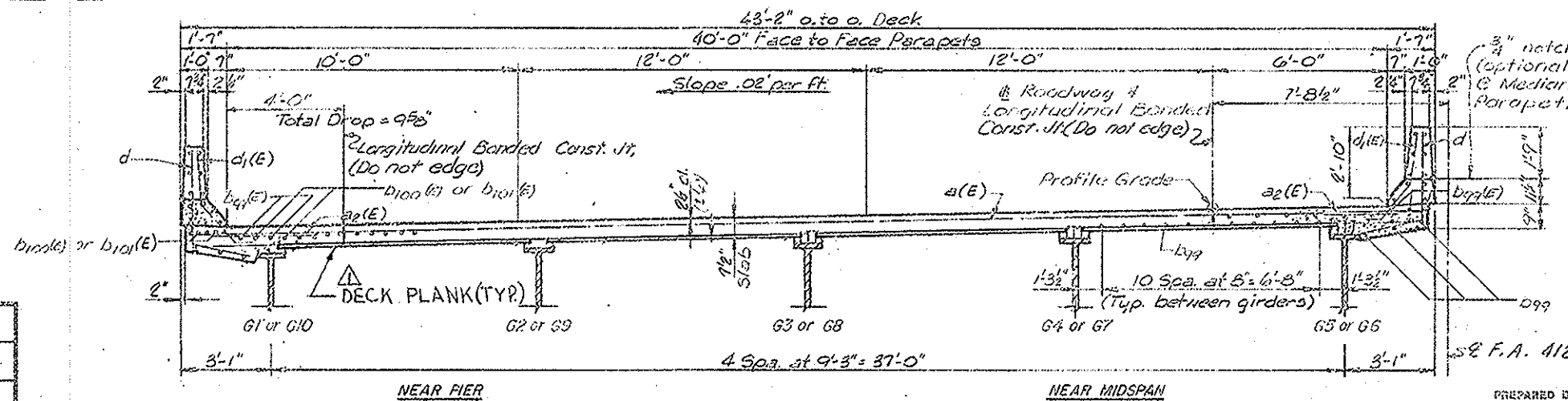
Note: Southbound Roadway shown.
Northbound Roadway symm. abt. & F.A. 412.

NOTES

Space bars $a_2(E)$, $d_1(E)$ and d in field to miss floor Drains and Scuppers.
Cut bars $a_1(E)$ and a in field to miss floor Drains and Scuppers.
Work this Sheet with Sheet 68.
For General Notes see Sheet 8.
 $d_1(E)$ bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Bars shown thus: 39 x 3-#6 etc. indicates 39 lines of Bars with 3 lengths per line.
Lighting Pads not shown. See Sheet 73 for location and details.
Floor Drains and Scuppers not shown. See Sheets 74 & 75 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

AS REVISED



CROSS SECTION

Looking North
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB-SPANS 22 THRU 25 NORTHBOUND & SOUTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4 (6)

STA. 863+16.00 (FA-412) LASALLE CO.

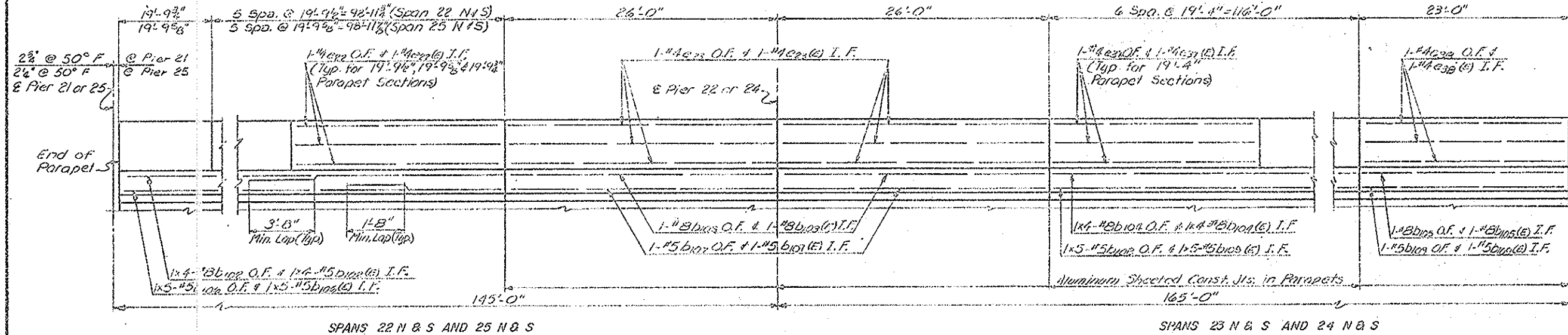
ADD DECK PLANKS, ELIMINATE a_1 BARS, ADD $a_2(E)$ BARS

SHEET NO. 67 OF 163

DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: S. Stegman
CHECKED: G. J. Roufa

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

9/27/85

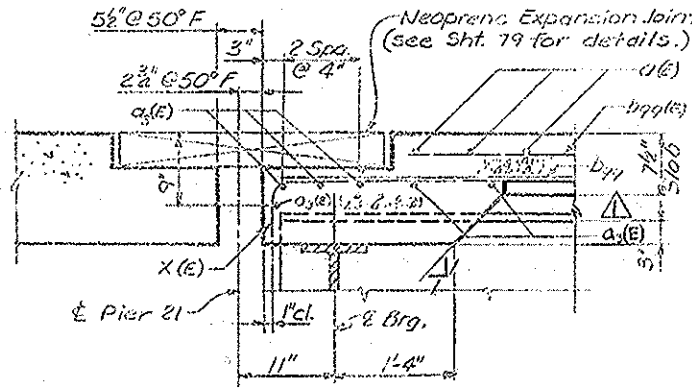


BILL OF MATERIAL
TWO SUPERSTRUCTURE UNITS
(SPANS 22 - 25 N & S)

Bar	No.	Size	Length	Shape
o ₁ (E)	2962	#5	412"	
o ₂ (E)	2964	#6	410"	
o ₃ (E)	22	#5	421.6"	
b ₁₆ (E)	64	#5	2'-0"	
b ₉₉ (E)	2,024	#5	29'-9"	
b ₉₉	2,200	#5	29'-9"	
b ₁₀₀ (E)	516	#6	29'-9"	
b ₁₀₀ (E)	258	#6	27'-1"	
b ₁₀₂ (E)	32	#8	32'-5"	
b ₁₀₂	32	#8	32'-5"	
b ₁₀₃	16	#8	25'-8"	
b ₁₀₃	16	#8	25'-8"	
b ₁₀₄ (E)	32	#8	31'-8"	
b ₁₀₄	32	#8	31'-8"	
b ₁₀₅ (E)	8	#8	22'-8"	
b ₁₀₅	8	#8	22'-8"	
b ₁₀₆ (E)	40	#5	25'-1"	
b ₁₀₆	40	#5	25'-1"	
b ₁₀₇ (E)	16	#5	25'-8"	
b ₁₀₇	16	#5	25'-8"	
b ₁₀₈ (E)	40	#5	24'-6"	
b ₁₀₈	40	#5	24'-6"	
b ₁₀₉ (E)	8	#5	22'-8"	
b ₁₀₉	8	#5	22'-8"	
d	2,380	#4	5'-1"	
d ₁ (E)	2,704	#5	3'-11"	
d ₂ **	12	#6	4'-5"	
d ₃ **	20	#6	8'-11"	
e ₂₀ (E)	144	#4	19'-7"	
e ₂₅	144	#4	19'-7"	
e ₃₆ (E)	48	#4	25'-8"	
e ₃₆	48	#4	25'-8"	
e ₃₇ (E)	144	#4	19'-7"	
e ₃₇	144	#4	19'-7"	
e ₃₈ (E)	24	#4	22'-8"	
e ₃₈	24	#4	22'-8"	
x(E)	176	#5	3'-0"	
Reinforcement Bars (Epoxy Coated)		Lbs.	450,510	
Class X Concrete		Cu Yds.	1575.8	

INSIDE ELEVATION OF PARAPET

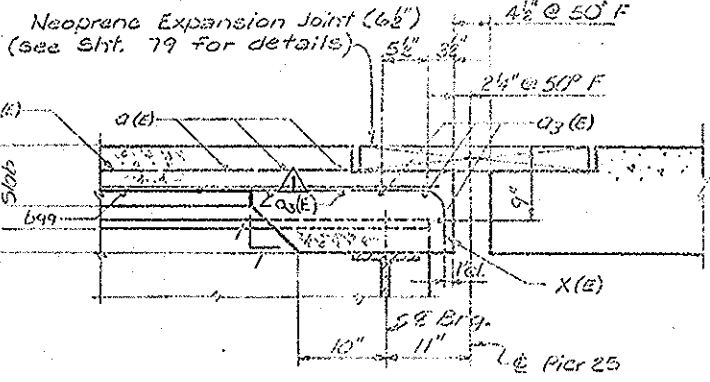
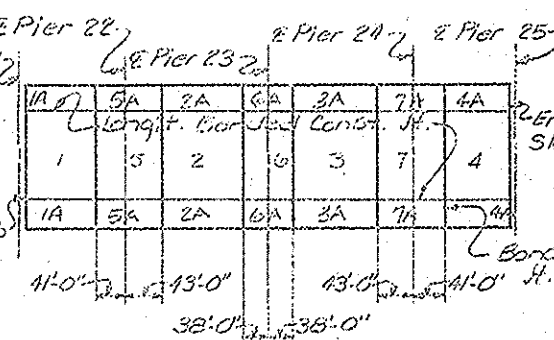
Note: West Parapet shown.
East Parapet opposite hand.
O.F. indicates Outside Face.
I.F. indicates Inside Face.



SECTION A-A

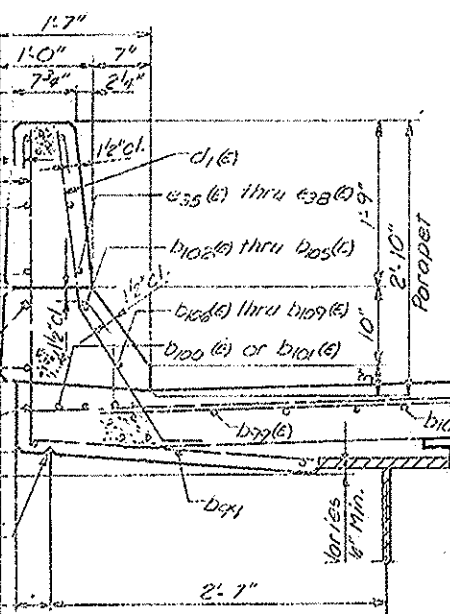
BRIDGE SLAB PLACING SEQUENCE

Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1, 2, 3 & 4 have attained required strength.

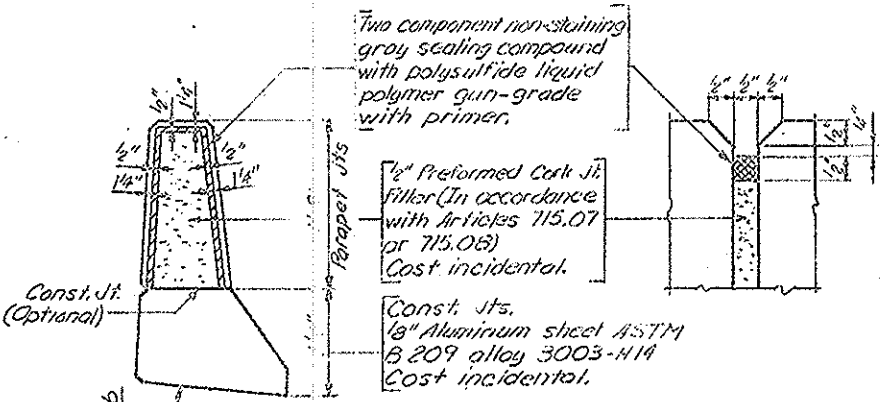


SECTION B-B

PARAPET JOINT DETAILS

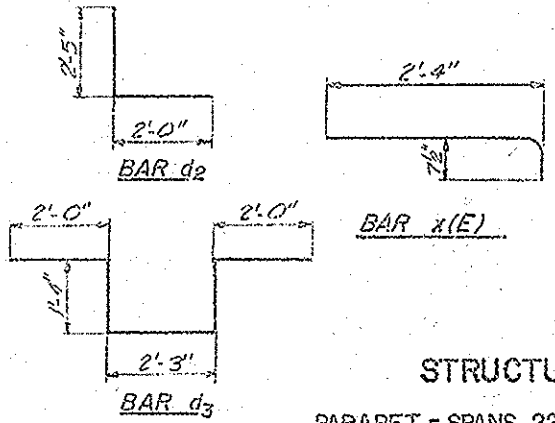


SECTION THRU PARAPET



PARAPET JOINT DETAILS

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.



SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

PARAPET - SPANS 22 THRU 25 NORTHBOUND & SOUTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4 (S)

STA. 863+16.00 (FA-412) LASALLE CO.

ADD DECK PLANKS, ELIMINATE O₁ BARS, ADD O₃(E) BARS

SHEET NO. 66 OF 163

DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: R. Prescher
CHECKED: G. J. Roufa

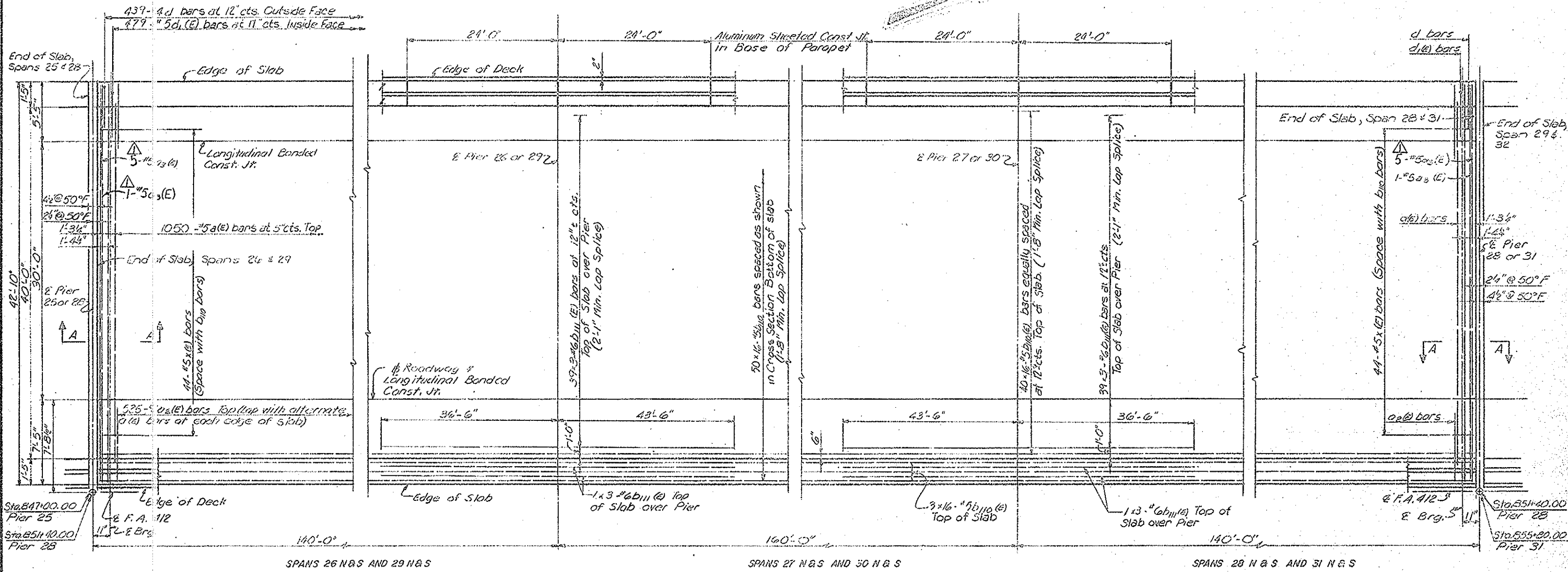
IAS REVISED!

Note: Work this Sheet with Sheet 67.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

9/27/85



IAS REVISED I

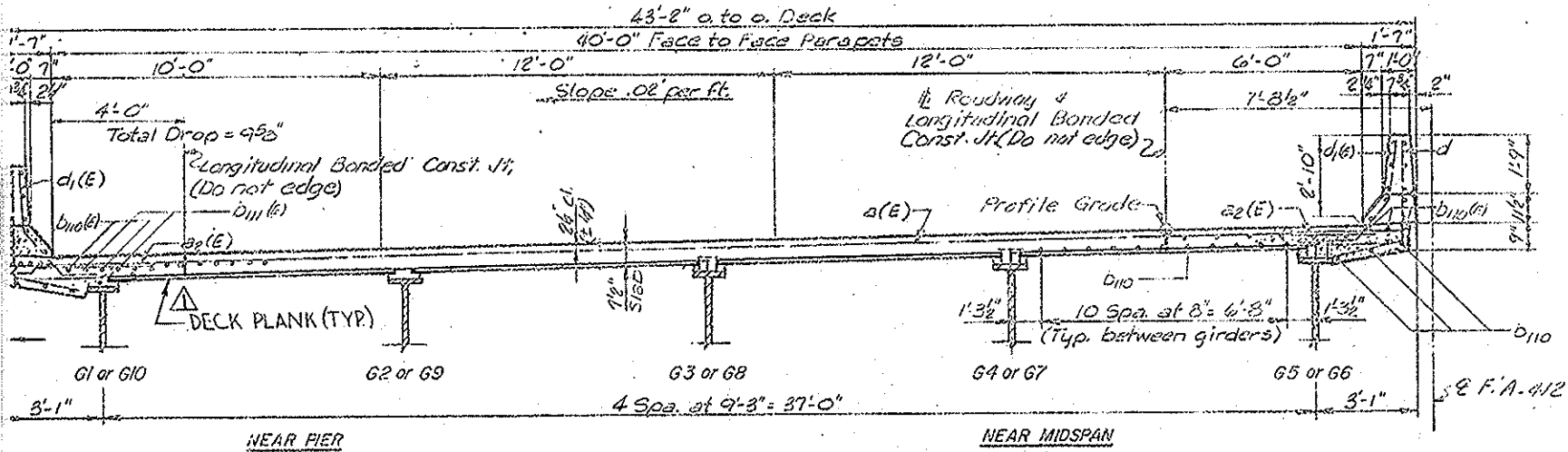
PLAN
Note: Southbound Roadway shown.
Northbound Roadway symm. abt. & F.A. 412.

NOTES

Work this Sheet with Sheet 70.
For General Notes, see Sheet 8.
d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Bars shown thus: 39 x 3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
Floor Drains and Scuppers not shown. See Sheets 74 & 75 for location and details.
Space bars a₂(E), d₁(E) and d₁ in field to miss Floor Drains and Scuppers.
Cut bars a₁(E) and a₁ in field to miss Floor Drains and Scuppers.
Lighting Pedestals not shown. See Sheet 73 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE SLAB
SPANS 26 THRU 28 & 29 THRU 31-NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
ADD DECK PLANKS, ELIMINATE a₁ BARS, ADD a₃(E) BARS



Note: Southbound Roadway shown.
Northbound Roadway symm. abt. & F.A. 412.

CROSS SECTION
Looking North

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

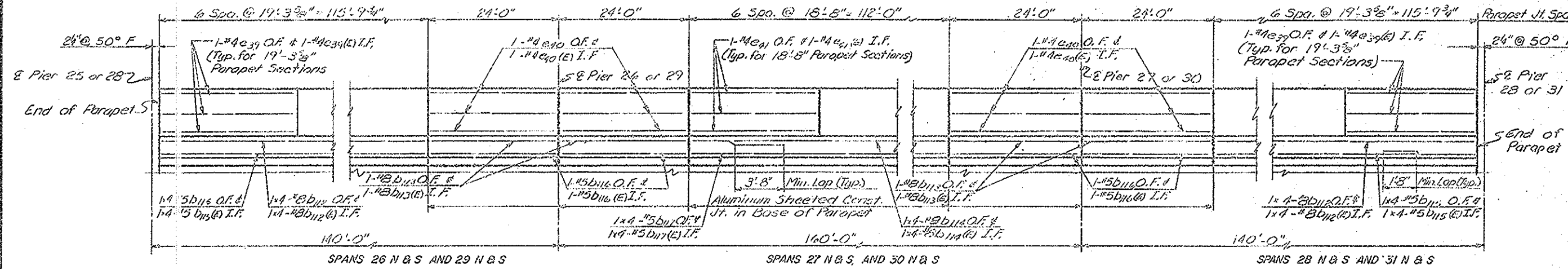
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

9/27/85

DESIGNED	Arman
CHECKED	R. Butterfield
DRAWN	R. Prescher
CHECKED	G. J. Roufa

8692
BEST COPY

SHEET NO. 69 OF 163



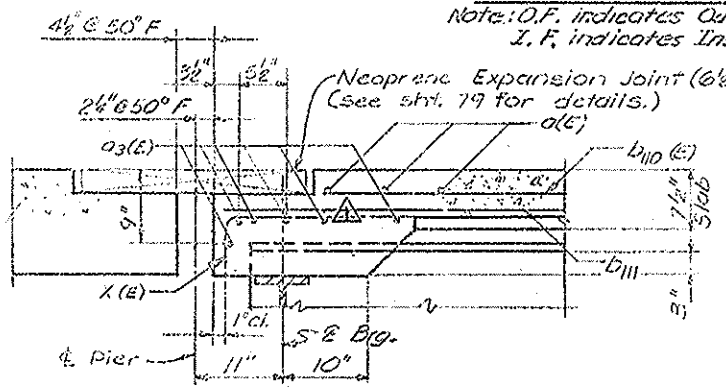
BILL OF MATERIAL

FOUR SUPERSTRUCTURE UNITS
(SPANS 26-28 N & S - SPANS 29-31 N & S)

Bar No.	Size	Length	Shape
a1(E)	4200	#5	41'-2"
a2(E)	4200	#6	4'-0"
a3(E)	148	#5	12'-6"
b10(E)	36	#5	2'-0"
b10(E)	2974	#5	24'-1"
b10	3200	#5	24'-1"
b11(E)	1032	#6	23'-1"
b12	64	#8	31'-9"
b12	61	#8	31'-9"
b13(E)	32	#8	23'-2"
b13	32	#8	23'-5"
b14(E)	32	#8	30'-9"
b14	32	#8	30'-9"
b15(E)	64	#5	30'-2"
b15	61	#5	30'-2"
b16(E)	32	#5	23'-8"
b16	32	#5	23'-8"
b17(E)	32	#5	29'-3"
b17	32	#5	27'-3"
d	3512	#4	3'-1"
d1(E)	3232	#5	3'-11"
d2**	18	#6	11'-5"
d3**	30	#6	8'-11"
e39(E)	288	#4	19'-1"
e39	288	#4	19'-1"
e40(E)	96	#4	23'-8"
e40	96	#4	23'-8"
e41(E)	144	#4	18'-6"
e41	144	#4	18'-6"
x(E)	352	#5	3'-0"

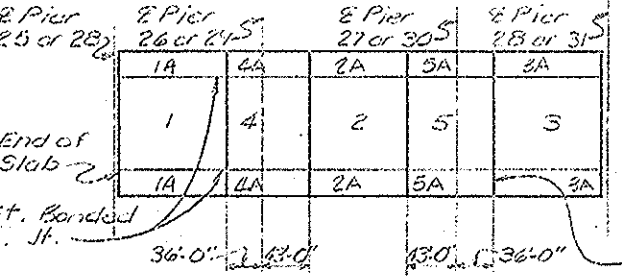
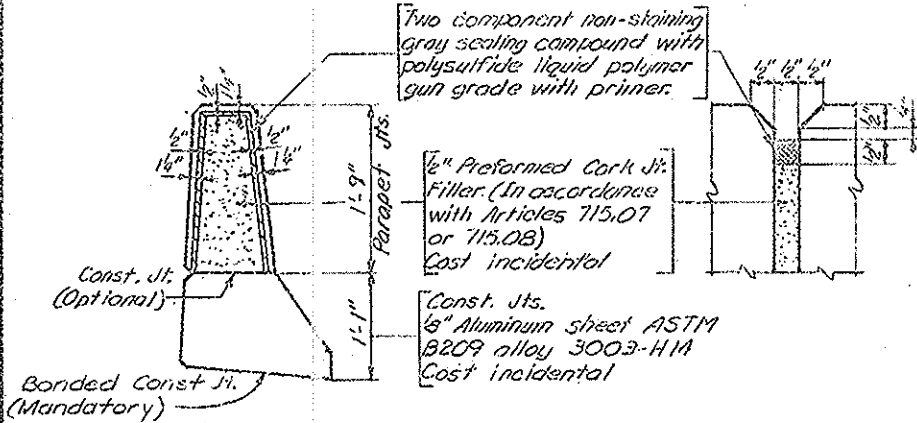
INSIDE ELEVATION OF PARAPET

Note: O.F. indicates Outside Face
I.F. indicates Inside Face



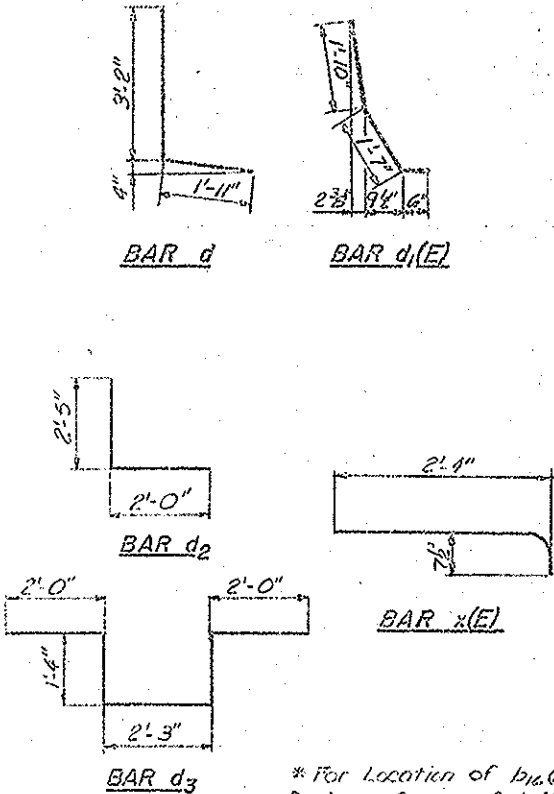
SECTION A-A

PARAPET JOINT DETAILS



BRIDGE SLAB PLACING SEQUENCE

Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after pours 1, 2 & 3 have attained required strength.



* For Location of b16(E) bars, See Drainage Scupper Details, Sheet 75.
** For location of d2 and d3 bars, See Lighting Details, Sheet 73.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE PARAPETS
SPANS 26 THRU 28 & 29 THRU 31-NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 263+13.00 (FA-412) LASALLE CO.

REINFORCEMENT BARS (EPOXY COATED) Lbs. 635,750
CLASS X CONCRETE CuYds. 2237.8

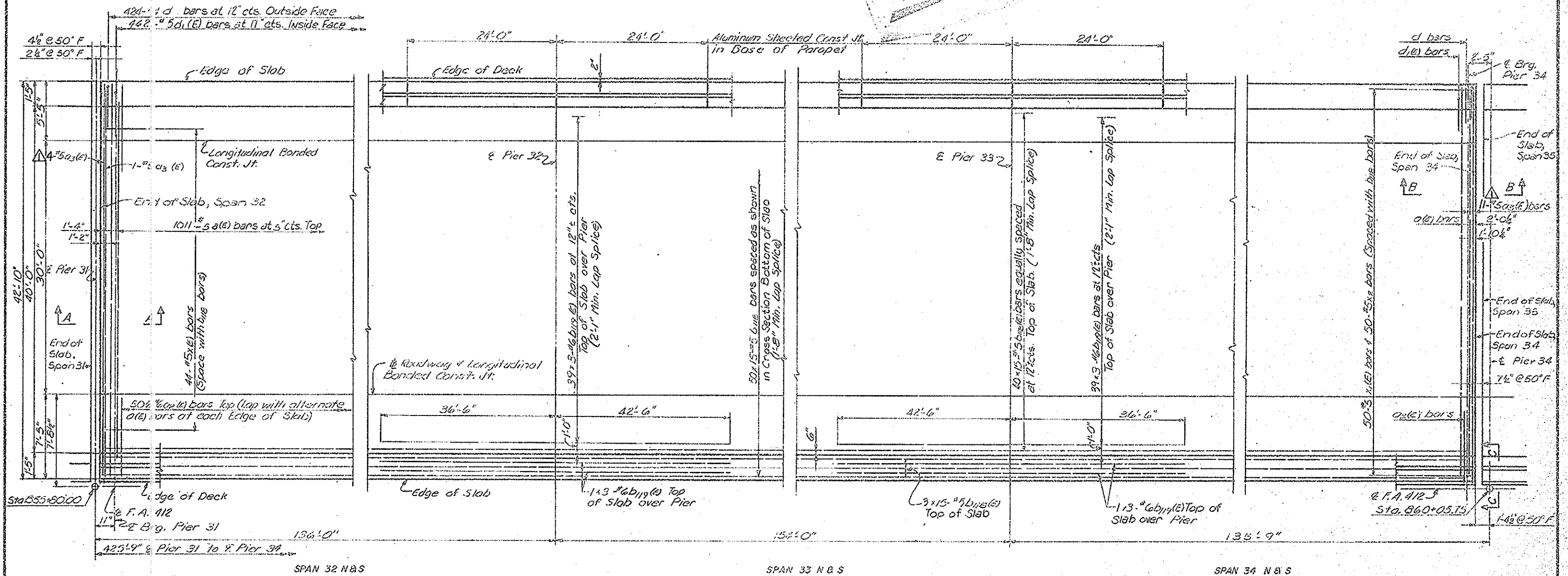
DESIGNED: Armon
CHECKED: R. Butterfield
DRAWN: R. Prescher
CHECKED: G. Roufa

SECTION THRU PARAPET
IAS REVISED!

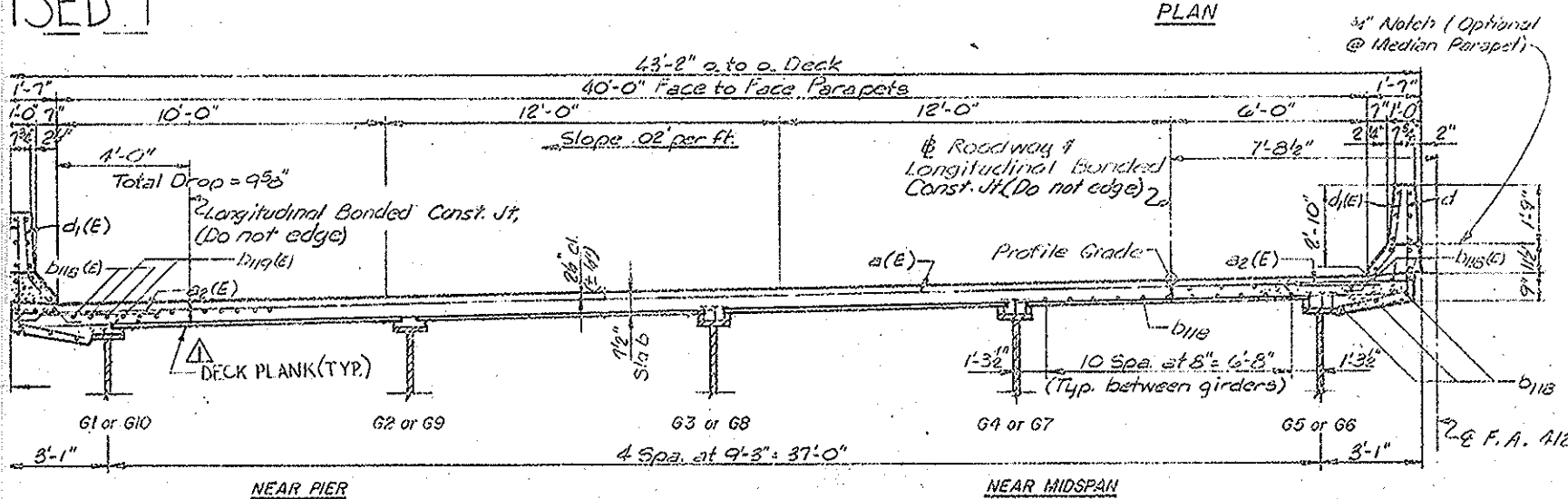
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

9/27/85

PREPARED BY: SVDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI
ADD DECK PLANKS, ELIMINATE a1 BARS, ADD a3(E) BARS
SHEET NO. 70 OF 163



IAS REVISED



NOTES
 Work this sheet with sheet 72.
 For General Notes, see sheet 8.
 d1(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
 Bars shown thus: 39x3-#6 etc. indicates 39 lines of bars with 3 lengths per line.
 Floor Drains and Scuppers not shown. See sheets 74 & 75 for location and details.
 Space bars d2(E), d1(E) and d1 in field to miss Floor Drains and Scuppers.
 Cut bars d2 and d1 in field to miss Floor Drains and Scuppers.
 Lighting Pedestals not shown. See sheet 73 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

SOUTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 SLAB - SPANS 32 THRU 34 NORTHBOUND & SOUTHBOUND
 FA-412 OVER ILLINOIS RIVER

DESIGNED Arman
 CHECKED Butterfield
 DRAWN R. Prescher
 CHECKED G. Roufa

Note: Southbound Roadway shown. Northbound Roadway Symm. abt. E.F.A.-412.

CROSS SECTION
 Looking North

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

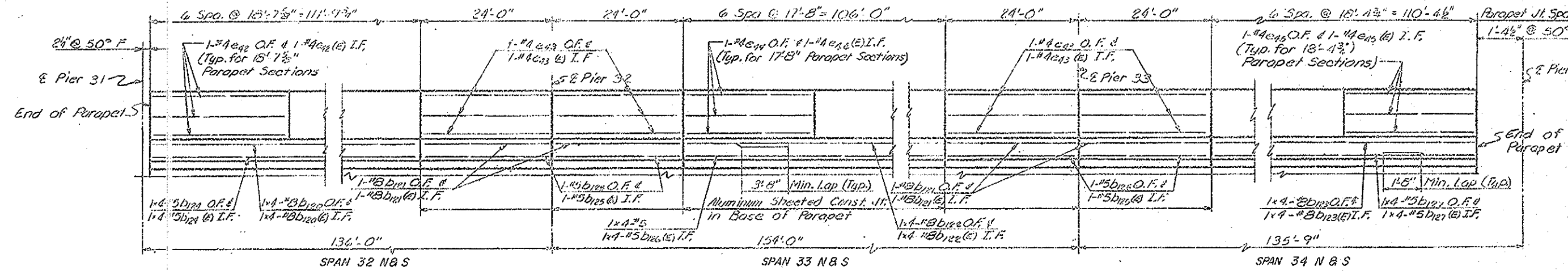
PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

SECTION 50-48 PROJECT EBF-412-4 (S)
 STA. 853+16.00 FA-412 LASALLE CO.

ADD DECK PLANKS, ELIMINATE d1 BARS, ADD d3(E) BARS

9/27/85

SHEET NO. 71 OF 163

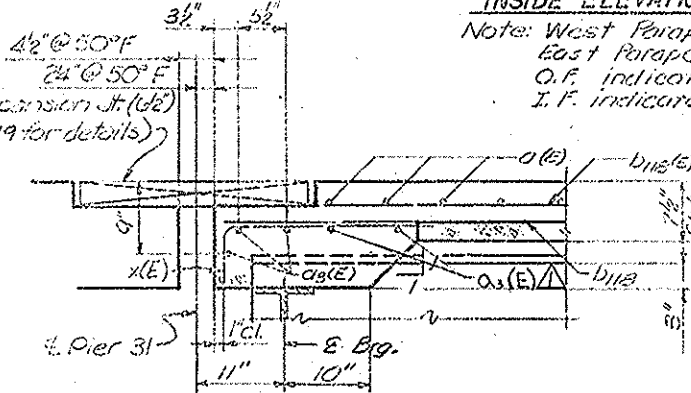


BILL OF MATERIAL
TWO SUPERSTRUCTURE UNITS
(SPANS 32-34 N & S)

Bar	No	Size	Length	Shape
d1(E)	2022	#5	41'-2"	
d2(E)	2024	#6	4'-0"	
d3(E)	32	#5	42'-6"	
b1(E)	48	#5	2'-0"	
b2(E)	1380	#5	29'-8"	
b3	1500	#5	29'-8"	
b4(E)	516	#6	27'-9"	
b5(E)	14	#8	30'-8"	
b6(E)	16	#8	30'-8"	
b7(E)	16	#8	23'-8"	
b8	16	#8	23'-8"	
b9(E)	16	#8	29'-2"	
b10	16	#5	29'-2"	
b11(E)	16	#5	23'-8"	
b12	16	#5	23'-8"	
b13	16	#5	27'-9"	
b14(E)	16	#5	27'-9"	
b15	16	#5	27'-9"	
b16	16	#5	27'-9"	
b17(E)	16	#5	28'-10"	
b18	16	#5	28'-10"	
d	1676	#4	5'-1"	L
d1(E)	1848	#5	3'-11"	L
d2**	12	#6	1'-5"	L
d3**	20	#6	3'-11"	L
e22(E)	72	#4	18'-5"	
e12	72	#4	18'-5"	
e13(E)	48	#4	23'-8"	
e13	48	#4	23'-8"	
e24(E)	72	#4	17'-6"	
e24	72	#4	17'-6"	
e45(E)	72	#4	18'-2"	
e45	72	#4	18'-2"	
x(E)	82	#5	3'-0"	
x1(E)	100	#5	4'-5"	
x2	100	#5	4'-8"	
Reinforcement Bars (Epoxy Coated)		Lbs.	307,410	
Class X Concrete		Cu.Yds.	1086.0	

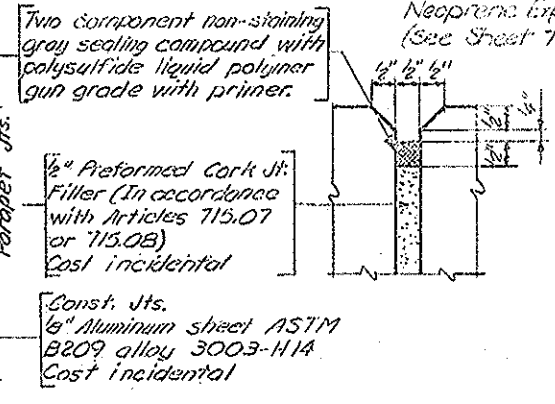
INSIDE ELEVATION OF PARAPET

Note: West Parapet shown.
East Parapet opposite hand.
O.F. indicates Outside face.
I.F. indicates Inside face.

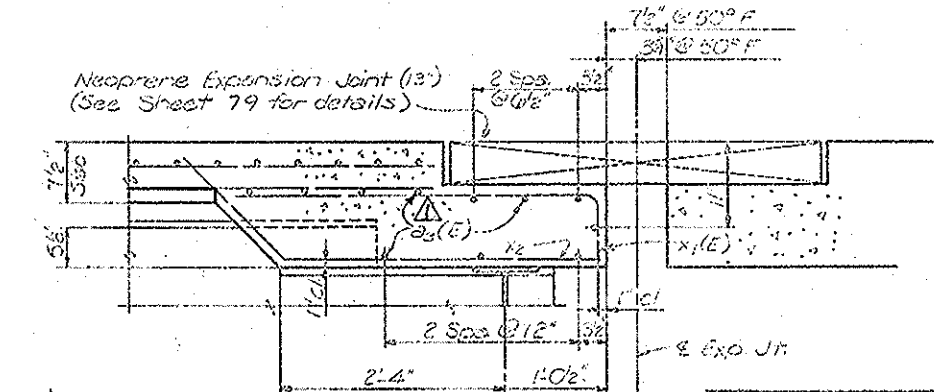


SECTION A-A

Note: For Expansion Joint Details, see Sheet 79.

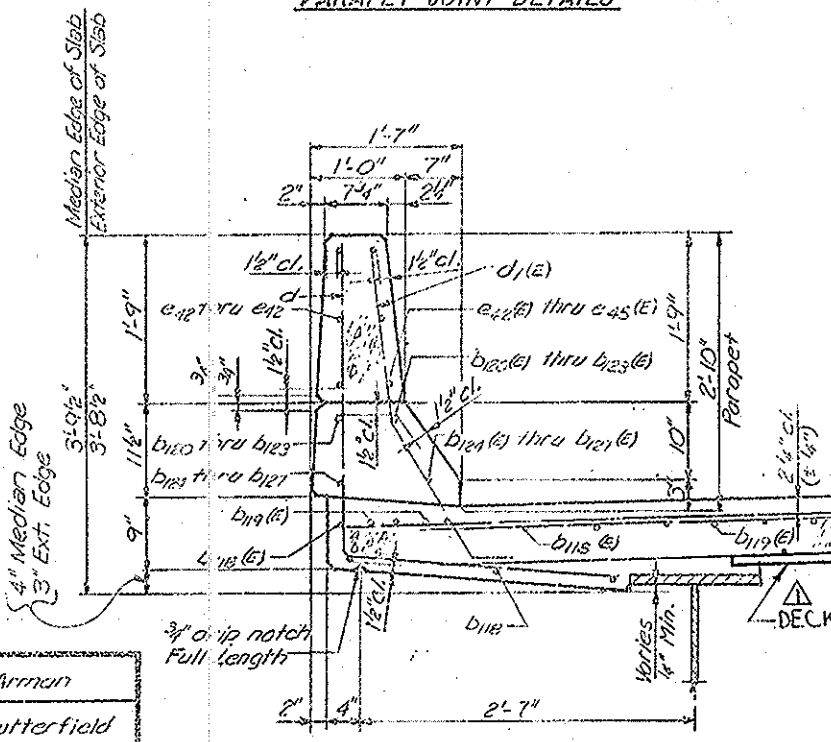


PARAPET JOINT DETAILS



SECTION B-B

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.



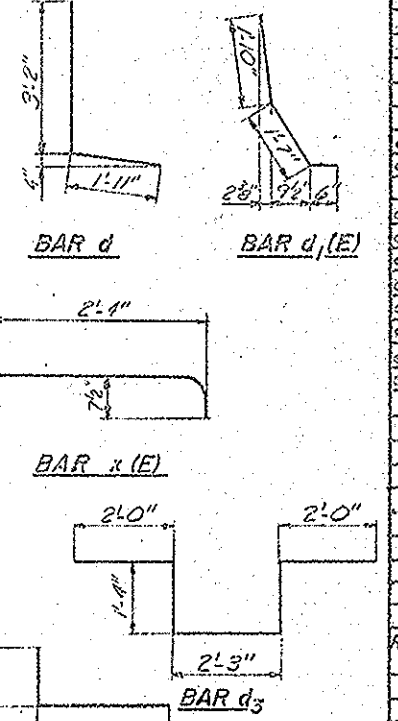
SECTION THRU PARAPET

BRIDGE SLAB PLACING SEQUENCE

1A	2A	3A	4A	5A
1	2	3	4	5

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

* For location of b16(E) bars, see Drainage Scupper Details, Sheet 75.
** For location of d1 and d3 bars, see Lighting Details, Sheet 13.



SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

PARAPETS-SPANS 32 THRU 34 NORTHBOUND & SOUTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

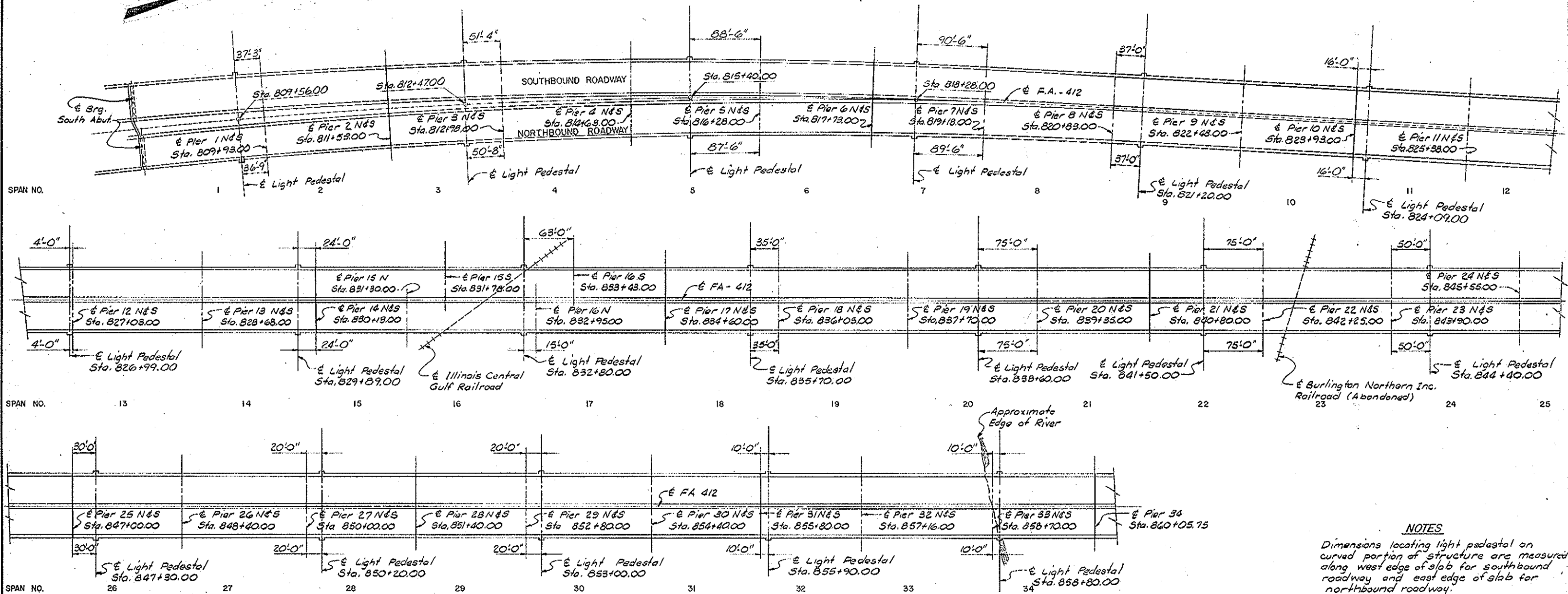
ADD DECK PLANKS, ELIMINATE d1 BARS, ADD d3(E) BARS

SHEET NO. 78 OF 163

DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: R. Prescher
CHECKED: G. Ruffe

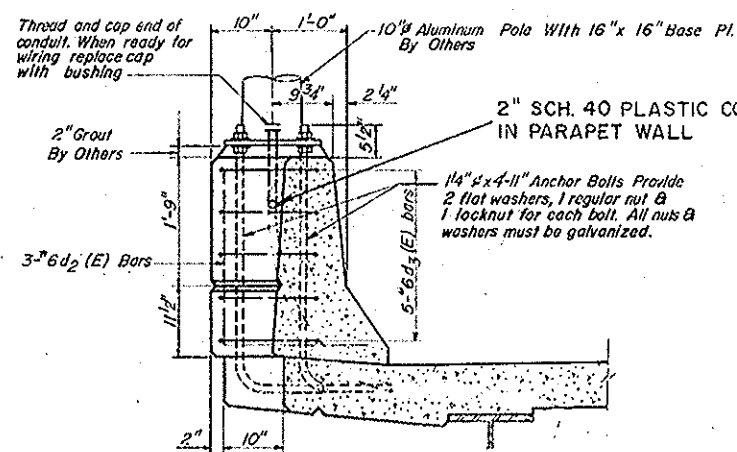
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

9/27/85

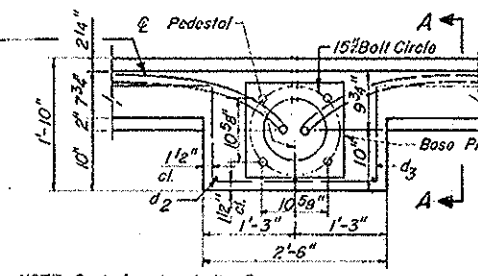


NOTES
Dimensions locating light pedestal on curved portion of structure are measured along west edge of slab for southbound roadway and east edge of slab for northbound roadway.

LIGHTING LOCATION PLAN

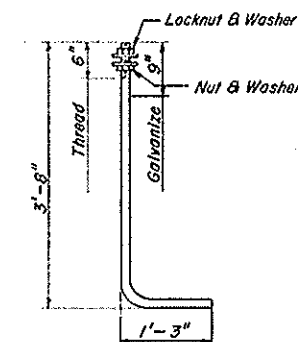


NOTE: Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump, cost incidental to pole.



NOTE: Cost of anchor bolts & conduit is incidental.

PLAN OF PEDESTAL

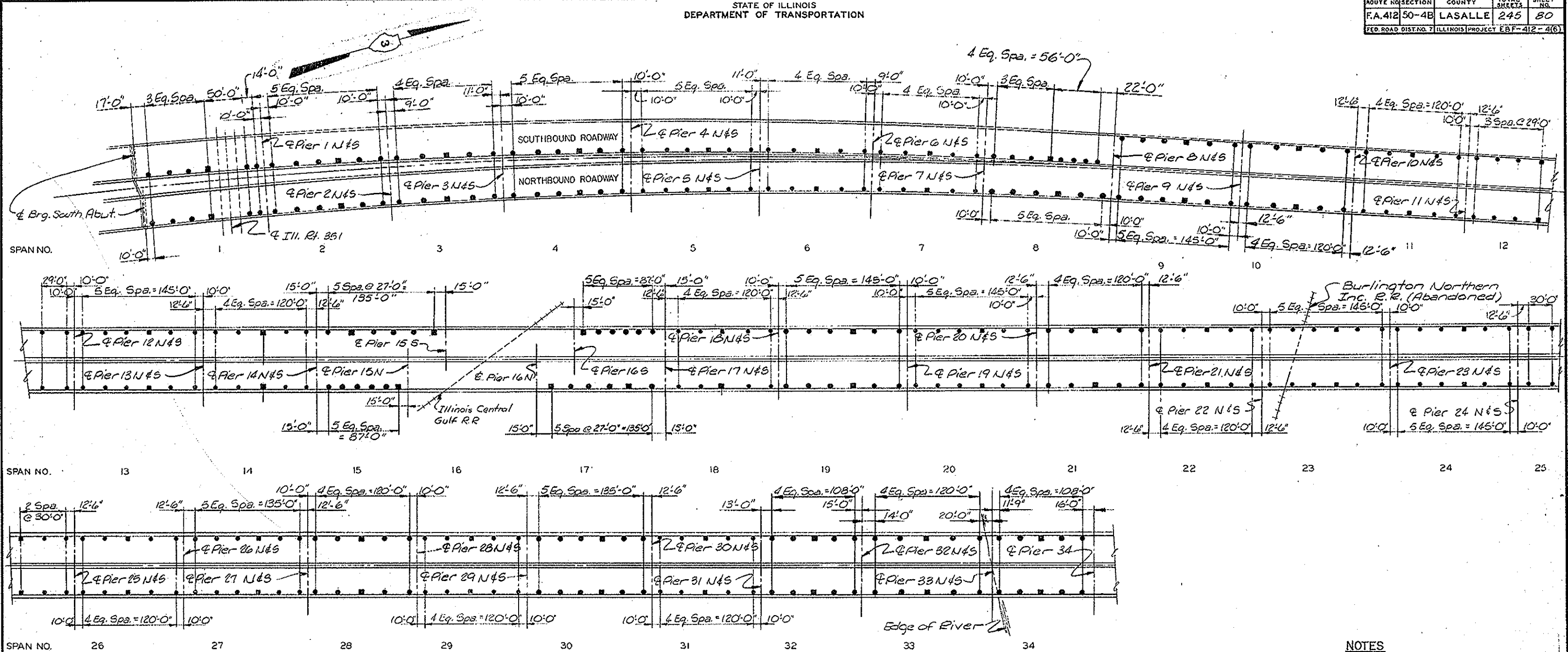


1 1/4" Ø ANCHOR BOLT

DESIGNED	
CHECKED	
DRAWN	J. Corley
CHECKED	R.F. Beck

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
LIGHTING LOCATION PLAN & DETAILS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



DRAINAGE PLAN

NOTES

- Indicates 8" x 36" Drainage Scupper
- Indicates 6" Tubular Floor Drain
- Drain spacing for curved portions of bridge is measured along east edge of slab for each roadway.
- The deck drains in the spans shall be spaced to clear any communication lines, cross arms, and/or power lines under that span by 10'-0" as determined in the field by the Engineer.
- No Drains shall be within R.R. Right-of-Way.

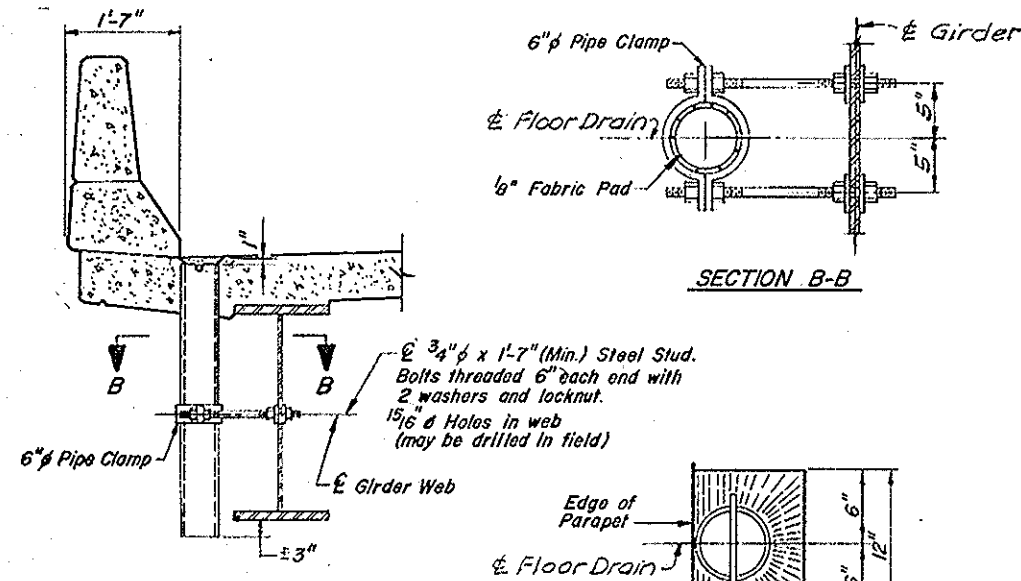
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

DRAINAGE PLAN - SPANS 1 THRU 34
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA 863+16.00 (FA-412) LASALLE CO

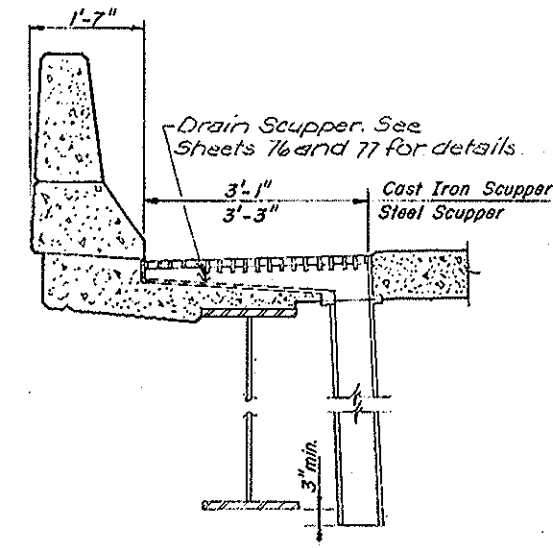
DESIGNED
CHECKED
R. Prescher
DRAWN
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



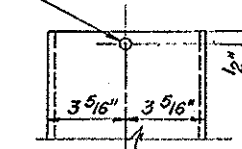
SECTION B-B



SECTION C-C

SECTION AT PARAPET
The surface of the Fiberglass pipe shall be free of bond inhibiting agents.

1/2" x 8" Alum. Bar
ASTM: B211 alloy
6061-T6

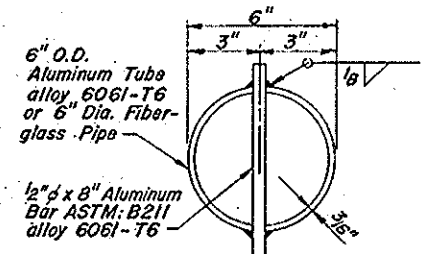


FIBERGLASS PIPE

Fill slot with weld



ALUMINUM TUBE

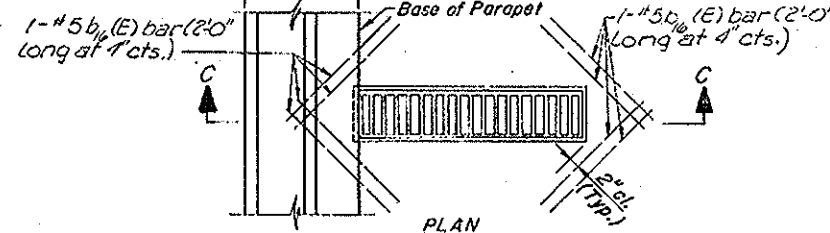


TOP PLAN

Aluminum Tube shown.

NOTE: Fiberglass pipe shall conform to ASTM D2996, with short time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the Floor Drain shall be painted with the vinyl enamel coat painting specified for structural steel. The exterior surfaces of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structures Painting Councils Spec. SSPC-SPI & SSPC-Paint 27 prior to painting.

FLOOR DRAIN
296 Req'd.



PLAN

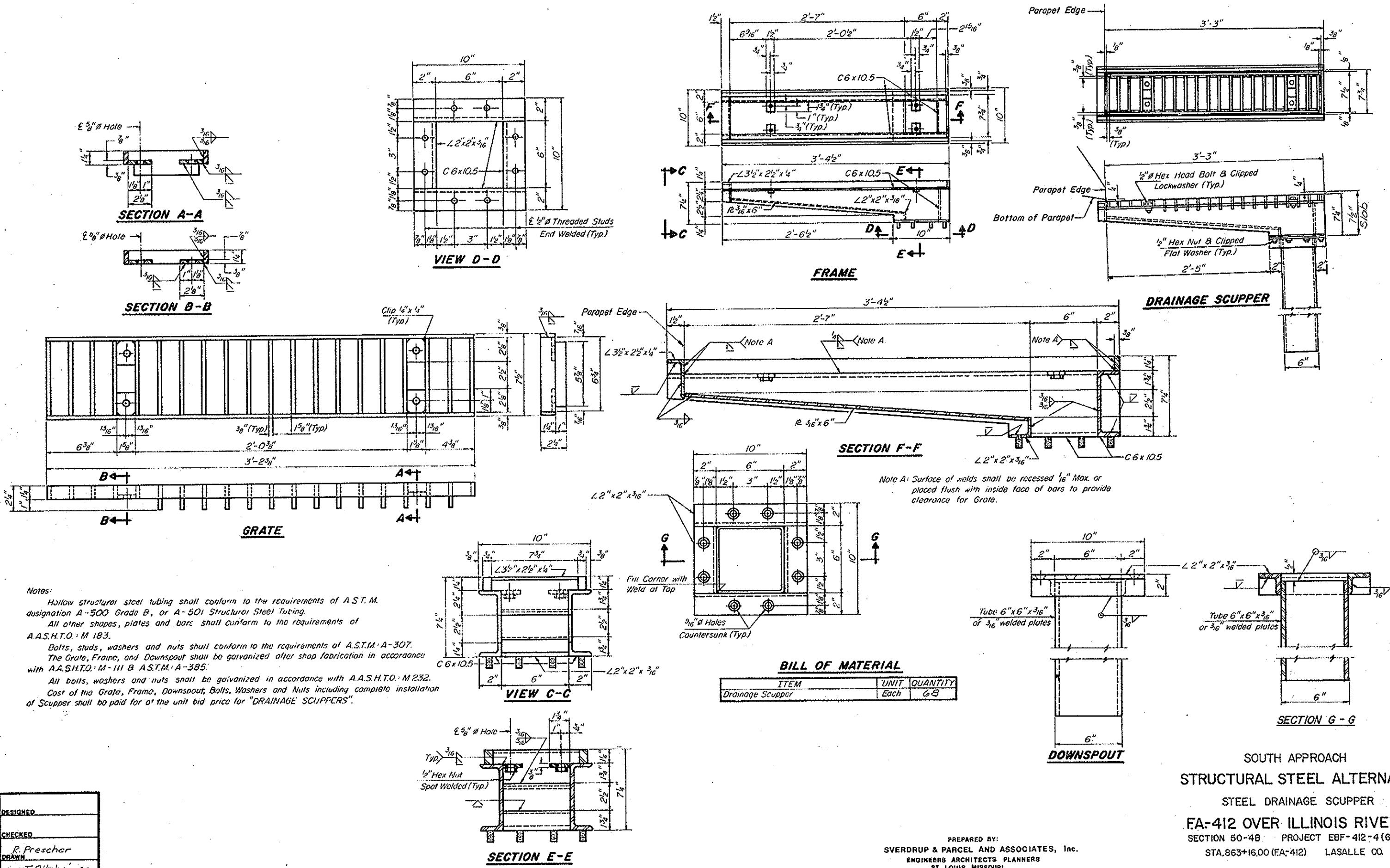
DRAINAGE SCUPPER DETAIL
68 Req'd.

DESIGNED
CHECKED
R. Prescher
DRAWN
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FLOOR DRAIN AND SCUPPER DETAILS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



Notes:
Hollow structural steel tubing shall conform to the requirements of A.S.T.M. designation A-500 Grade B, or A-501 Structural Steel Tubing.
All other shapes, plates and bars shall conform to the requirements of A.A.S.H.T.O. M 183.
Bolts, studs, washers and nuts shall conform to the requirements of A.S.T.M. A-307.
The Grate, Frame, and Downspout shall be galvanized after shop fabrication in accordance with A.A.S.H.T.O. M-111 & A.S.T.M. A-385.
All bolts, washers and nuts shall be galvanized in accordance with A.A.S.H.T.O. M 232.
Cost of the Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".

Note A: Surface of welds shall be recessed 1/16" Max. or placed flush with inside face of bars to provide clearance for Grate.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper	Each	68

DESIGNED
CHECKED
DRAWN
CHECKED

R. Prescher
T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
STEEL DRAINAGE SCUPPER
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-4B	LASALLE	245	84
PER ROAD DIST. DIV. 7		ILLINOIS	REV. AID PROJECT EBF-412-4(6)	

Joint Size	"C" at 50°F	"D" at 50°F	Location
2	2"	1½" min.	—
2½	2½"	1¾" min.	South Abutment
4	3"	2½" min.	—

INSTALLATION NOTES

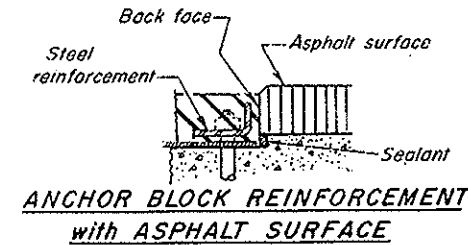
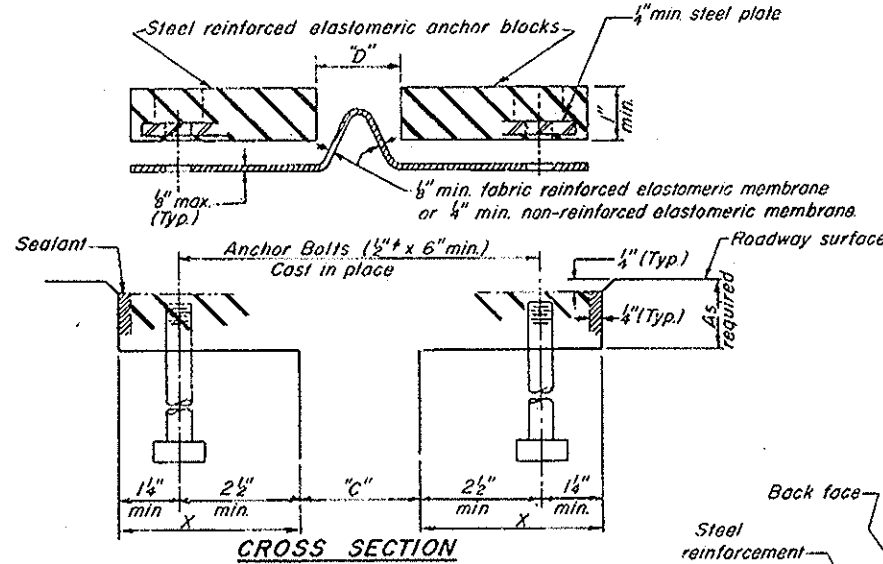
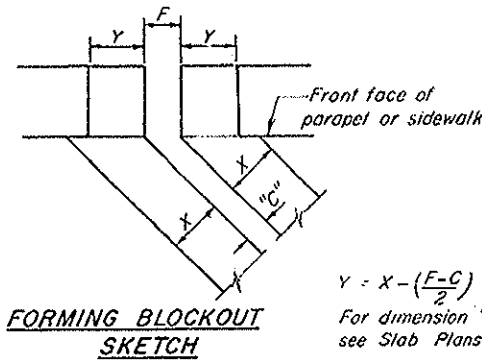
1. Install sponge mandrels into positions shown to form flap convolution.
2. Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
3. Install continuous seal in roadway.
4. Install anchor blocks as indicated.

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° skews.

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 1½" from centerline of anchor studs to edge of parapet opening. The anchor studs and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



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.

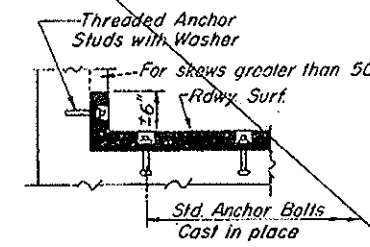
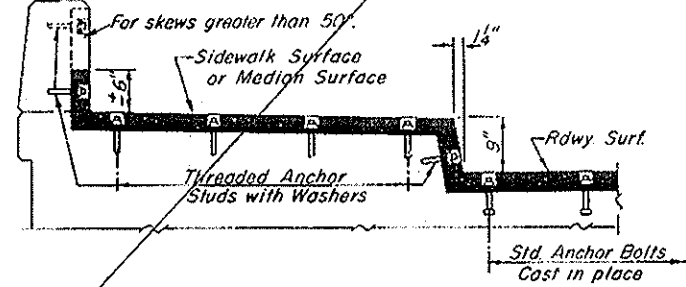
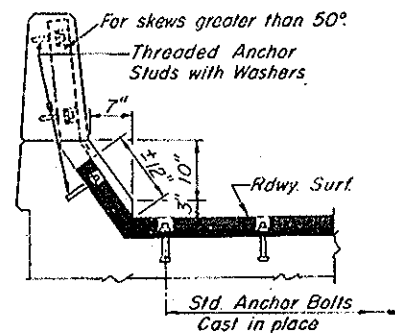
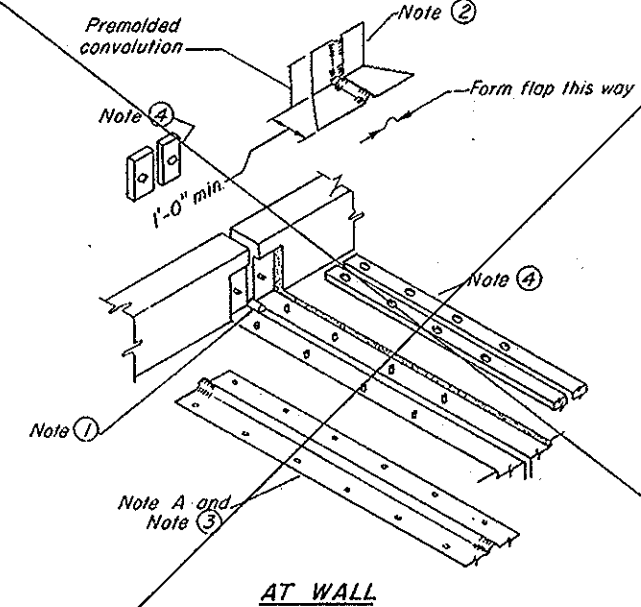
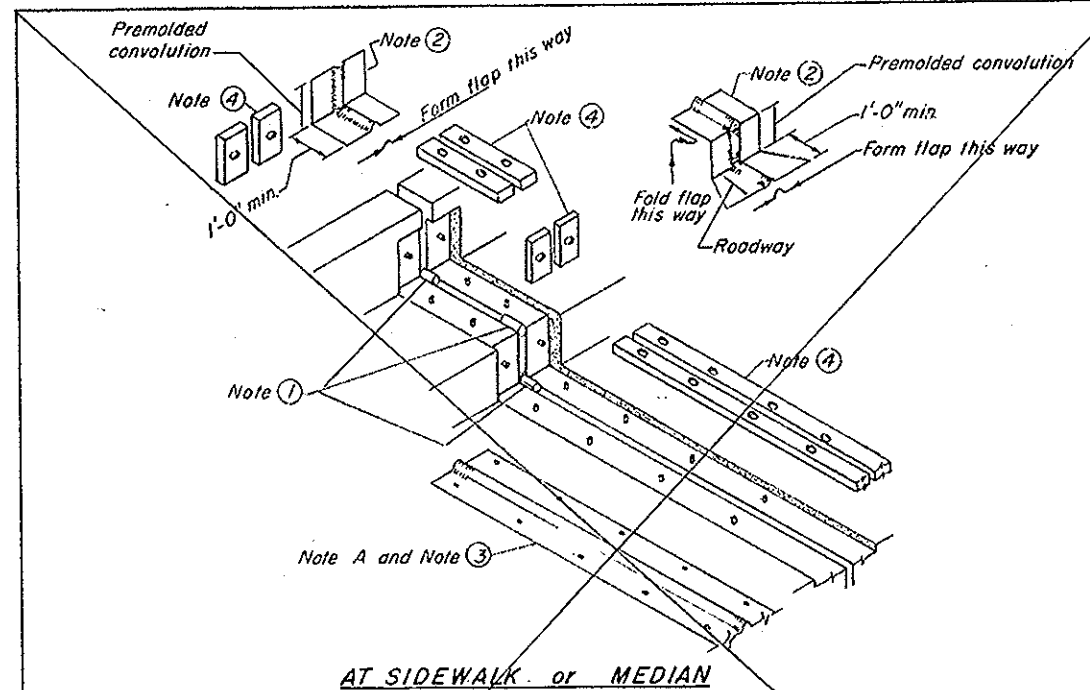
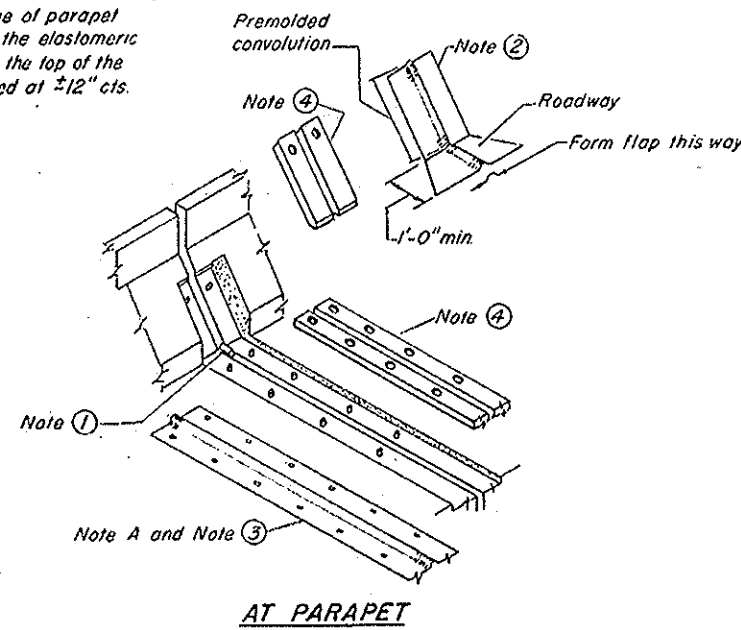
The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete 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 sidewalk 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.



TYPICAL END TREATMENTS

CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2", 2½" and 4" Movement

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

NEOPRENE EXPANSION JOINTS

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

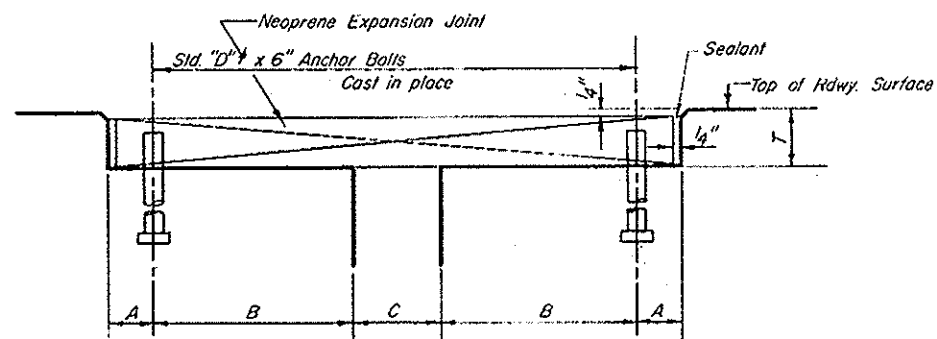
DESIGNED R. Butterfield
CHECKED R. Wokurka
DRAWN L. S. Maus
T. Ritzheimer
CHECKED L. Glasser

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	85
FED. ROAD DIST. NO. 7			FED. PROJ. NO. EBF-412-4(6)	

NEOPRENE EXPANSION JOINTS (6½), (9) and (13)
(See Special Provisions)

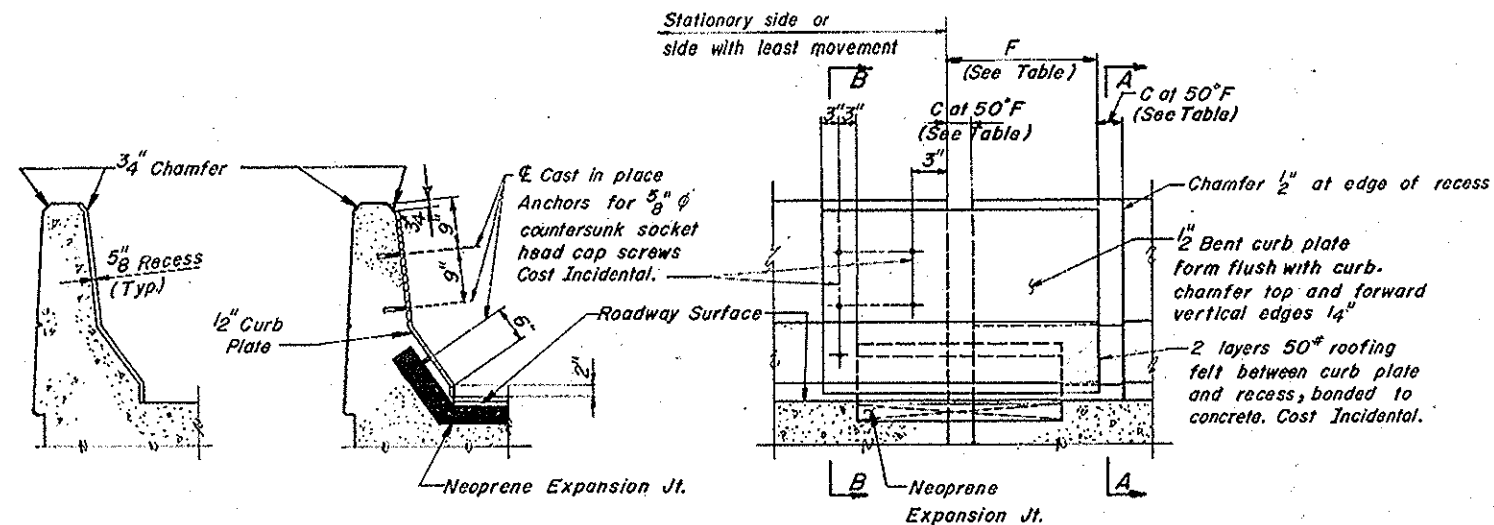
Model	Supplier	Blockout Dimensions
(6½) TRANSFLEX, MODEL 650	General Tire Company	T = 3¼", A = 2¾", B = 9⅞"
(9) TRANSFLEX, MODEL 900	General Tire Company	T = 4", A = 2⅞", B = 12¾"
(13) TRANSFLEX, MODEL 1300	General Tire Company	T = 5¼", A = 2¾", B = 17½"



CROSS SECTION
At 50°F
Dimensions are at right angles.

NOTE:
Joint Openings shall be adjusted in accordance with Article 503.07 (c) of the Std. Spec's when the deck is poured at an ambient temperature other than 50°F.

Joint Size	C at 50°F	"D"	F	Location
6½	4½"	⅞"	1'-10"	Piers 2,25,28 And 31
9	5½"	⅞"	2'-4"	Piers 6,10,14,17 And 21
13	7½"	1⅞"	—	—

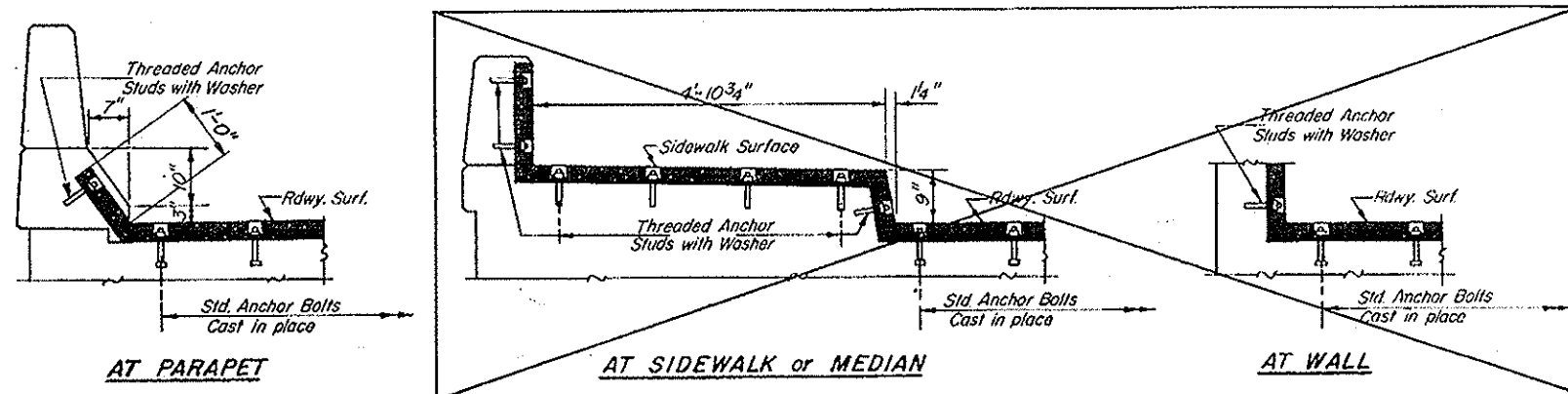


SECTION A-A

SECTION B-B

ELEVATION-EXPANSION JT. CURB PLATE

NOTES
It shall be contractors responsibility to coordinate the approved expansion device with the end curb plate detail shown on this sheet.
All curb plates shall be AASHTO M183 and shop painted with zinc silicate and vinyl paint system.



TYPICAL END TREATMENTS

DESIGNED	R. Butterfield
CHECKED	R. Wokurka
DRAWN	L.S. Maus T. Ritzheimer
CHECKED	L. Glaser

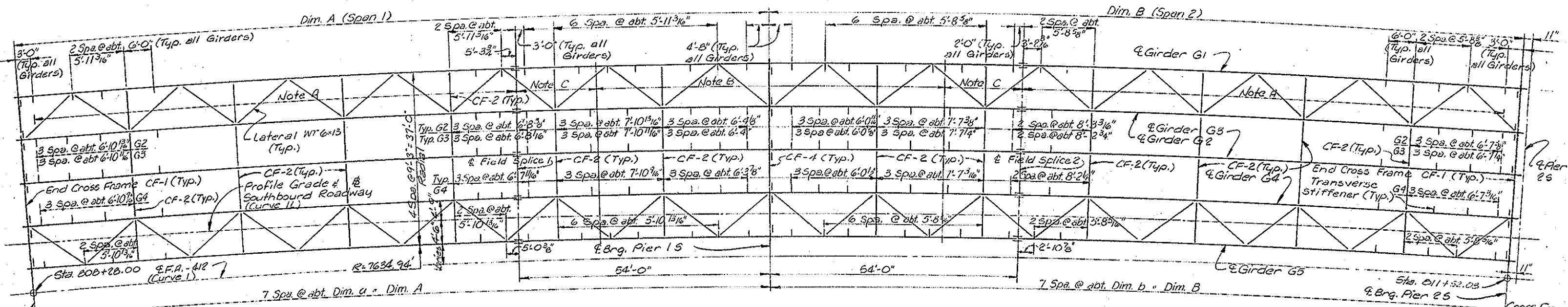
EJ-T 2-1-83

NEOPRENE EXPANSION JOINTS
For 6½", 9" and 13" Units.

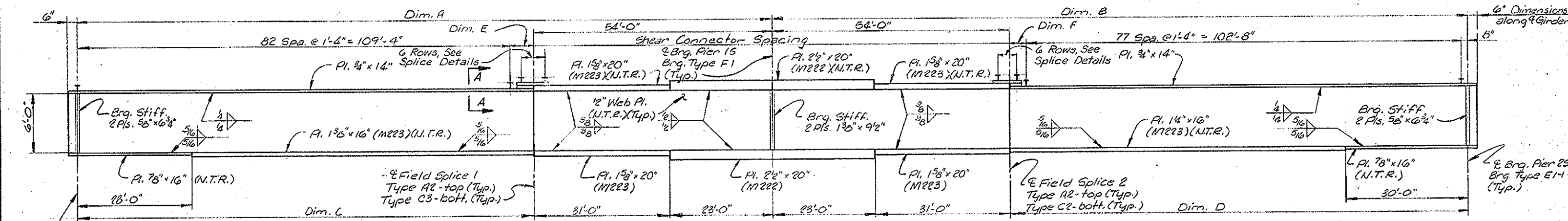
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

NEOPRENE EXPANSION JOINTS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863 16.00 (FA-412) LASALLE CO.

SHEET NO. 79 OF 163



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

STRUCTURAL STEEL NOTES

All Structural Steel to be AASHTO M-183 unless otherwise noted.
All longitudinal dimensions are measured horizontally.
All bearing stiffeners shall be vertical in the completed structure and all intermediate cross frames shall be normal to the girders.
All steel labeled (M223) shall be AASHTO M223, Grade 50.

NOTES

Transverse Stiffeners are Bars 5" x 7/16"
For Notes A, B & C see Sheet 96.
For General Notes see Sheet 8.
(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Camber Diagram see Sheet 102.
For Section A-A see Sheet 95.

GIRDER VARIABLES

Girder	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. a	Dim. b
G1	166'-11"	160'-13"	112'-11"	106'-15"	2'-9 1/8"	2'-9 5/16"	23'-8 3/4"	22'-10 1/2"
G2	165'-10 1/4"	159'-11"	111'-10 1/4"	105'-11"	2'-6 1/16"	2'-7"	23'-8 3/8"	22'-10 1/8"
G3	165'-8 5/16"	159'-8 1/16"	111'-8 5/16"	105'-8 1/16"	2'-4 3/16"	2'-4 1/16"	23'-8 1/16"	22'-9 13/16"
G4	163'-5 1/8"	159'-6 3/8"	111'-5 1/8"	105'-6 3/8"	2'-7 1/8"	2'-2 3/8"	23'-7 1/16"	22'-9 1/2"
G5	165'-3 1/2"	159'-4 1/2"	111'-3 1/2"	105'-4 1/2"	1'-11 1/2"	2'-0 1/16"	23'-7 3/8"	22'-9 1/8"

TOP OF WEB ELEVATIONS(*)

Girder	Location	⊕ Brg. South Abut. S.	⊕ Field Splice 1	⊕ Brg. Pier 1 S	⊕ Field Splice 2	⊕ Brg. Pier 2 S Span 2
G1		563.40	560.86	559.64	558.42	556.01
G2		563.12	560.58	559.36	558.14	555.73
G3		562.84	560.31	559.08	557.85	555.45
G4		562.56	560.03	558.80	557.57	555.17
G5		562.28	559.75	558.52	557.29	554.89

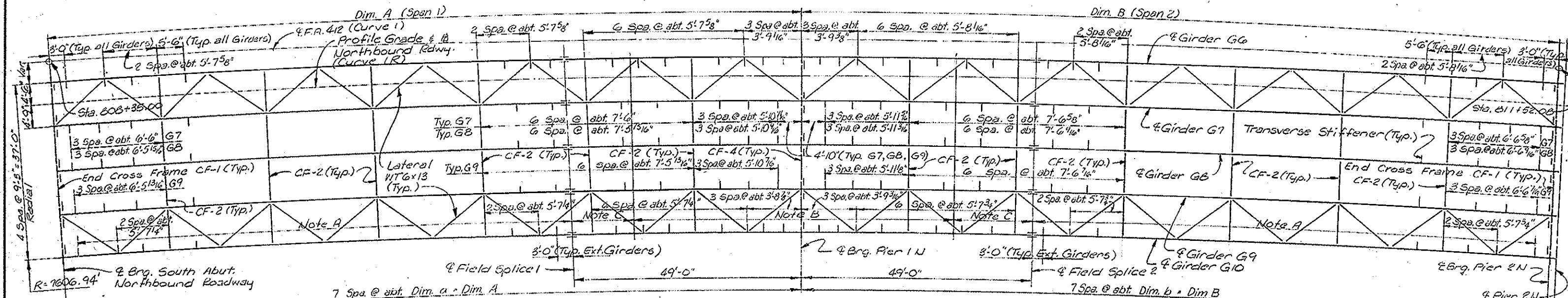
(*) For fabrication only.

BUTTERFIELD
DESIGNED
WOKURKA
CHECKED
STEGMAN
DRAWN
C.A. HIZANA
CHECKED

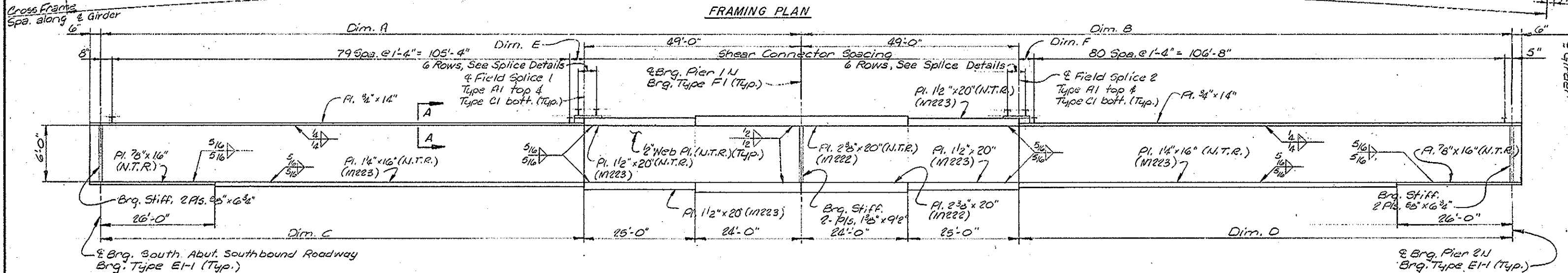
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 1 AND 2 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



FRAMING PLAN



Girder	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. a	Dim. b
G6	157'-8 1/16"	153'-9 1/16"	103'-8 1/16"	109'-9 1/16"	2'-8 1/16"	2'-8 1/16"	22'-6 3/8"	22'-8 1/4"
G7	157'-6 3/8"	153'-7 5/8"	103'-6 3/8"	109'-7 5/8"	2'-6 3/8"	2'-6 3/8"	22'-6 1/16"	22'-7 15/16"
G8	157'-4 1/8"	153'-5 9/16"	103'-4 1/8"	109'-5 9/16"	2'-4 1/8"	2'-4 5/16"	22'-5 3/4"	22'-7 5/8"
G9	157'-1 3/4"	153'-3"	103'-1 3/4"	109'-3"	2'-1 3/4"	2'-2"	22'-5 3/8"	22'-7 3/16"
G10	156'-1 1/2"	153'-0 1/16"	107'-1 1/2"	109'-0 1/16"	1'-1 1/2"	1'-1 1/16"	22'-5 1/16"	22'-6 15/16"

GIRDER ELEVATION
Note: Transverse Stiffeners and splice plates are not shown.

NOTES
Transverse Stiffeners are Bars 5"x 7/16"
For Notes A, B & C, see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

Location	Brig. South Abut. N.	Field Splice 1	Brig. Pier 1N	Field Splice 2	Brig. Pier 2N Span 2
G6	502.37	559.91	558.79	557.61	555.16
G7	502.12	559.64	558.52	557.40	554.89
G8	561.84	559.36	558.24	557.12	554.61
G9	561.57	559.09	557.97	556.84	554.34
G10	561.29	558.81	557.69	556.56	554.06

(*) For Fabrication only.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.

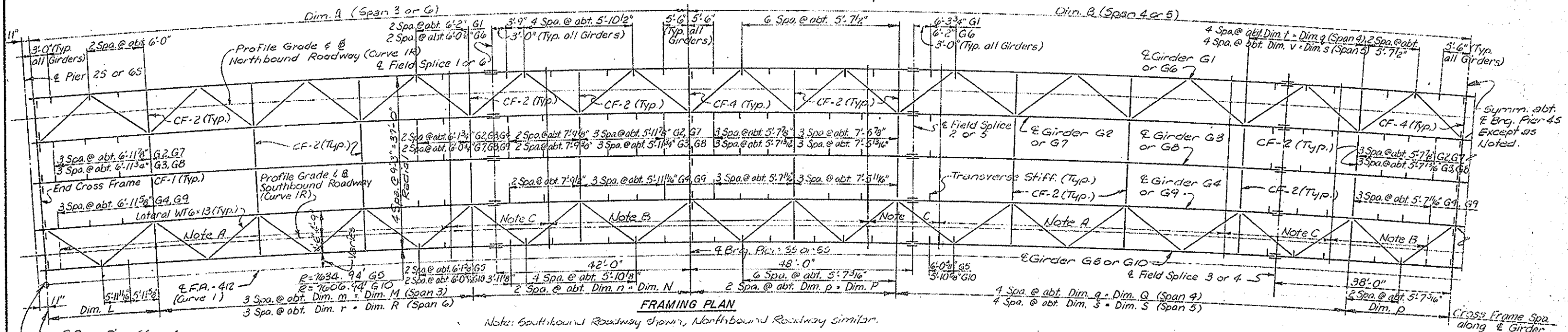
For Camber Diagram see Sheet 102.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Section A-A see Sheet 95.

DESIGNED BY
WOKURKA
CHECKED BY
BUTTERFIELD
DRAWN BY
STEGMAN
CHECKED BY
C.A. LIZANA

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

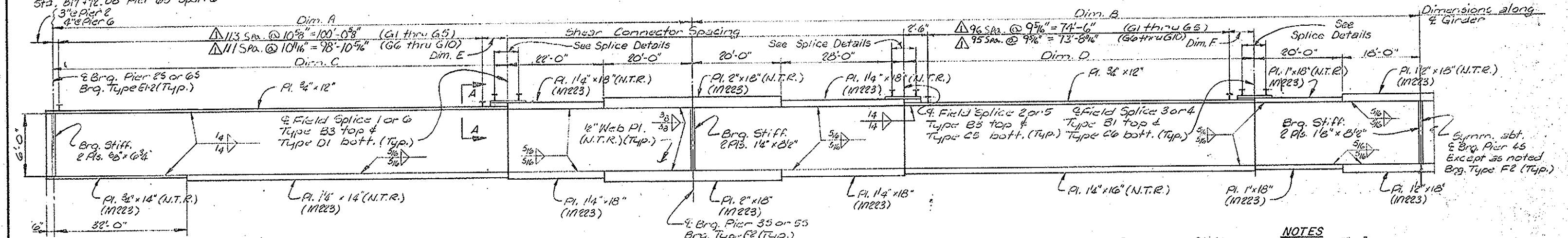
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 1 AND 2 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



FRAMING PLAN

Note: Southbound Roadway shown, Northbound Roadway similar.



GIRDER ELEVATION

Note: Transverse Stiffeners and Splice Plates not shown.

GIRDER VARIABLES						
Girder	Spans 3 & 4					
	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F
G1	144'-11 1/8"	166'-0"	102'-11 1/8"	80'-0"	2'-8 1/4"	3'-0"
G2	144'-9 3/4"	165'-9 5/8"	102'-9 3/4"	79'-9 3/8"	2'-6 1/8"	2'-9 5/8"
G3	144'-7 3/8"	165'-7 3/16"	102'-7 3/8"	79'-7 3/16"	2'-4"	2'-7 1/16"
G4	144'-5 1/16"	165'-4 1/16"	102'-5 1/16"	79'-4 1/16"	2'-1 5/16"	2'-4 3/16"
G5	144'-3 1/16"	165'-2 1/16"	102'-3 1/16"	79'-2 1/16"	1'-11 1/16"	2'-2 1/16"
G6	143'-10 1/16"	164'-9 1/16"	101'-10 1/16"	78'-9 1/16"	2'-9 1/16"	2'-6 1/16"
G7	143'-8 1/16"	164'-7 1/16"	101'-8 1/16"	78'-7 1/16"	2'-7 1/16"	2'-4 1/16"
G8	143'-6 3/8"	164'-4 1/8"	101'-6 3/8"	78'-4 1/8"	2'-5 1/8"	2'-2 1/8"
G9	143'-4 1/4"	164'-2 3/8"	101'-4 1/4"	78'-2 3/8"	2'-2 5/8"	1'-11 1/16"
G10	143'-2 1/8"	164'-0"	101'-2 1/8"	78'-0"	2'-0 1/8"	1'-9 1/16"
Girder	Spans 5 & 6					
	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F
G1	144'-10 1/8"	165'-11 1/8"	102'-10 1/8"	79'-11 1/8"	2'-6 1/4"	2'-11 1/8"
G2	144'-8 1/8"	165'-9 1/4"	102'-8 1/8"	79'-9 1/4"	2'-4 3/8"	2'-9 1/4"
G3	144'-6 1/16"	165'-6 1/16"	102'-6 1/16"	79'-6 1/16"	2'-2 1/16"	2'-6 1/16"
G4	144'-4 1/16"	165'-4 1/16"	102'-4 1/16"	79'-4 1/16"	1'-11 1/16"	2'-9 1/16"
G5	144'-2 1/16"	165'-2 1/16"	102'-2 1/16"	79'-2 1/16"	1'-9 1/16"	2'-2 1/16"
G6	143'-11 1/2"	164'-9 1/2"	101'-11 1/2"	78'-9 1/2"	2'-9 1/2"	2'-7 1/4"
G7	143'-9 1/16"	164'-7 1/16"	101'-9 1/16"	78'-7 1/16"	2'-7 1/16"	2'-4 1/8"
G8	143'-7 1/16"	164'-5 1/16"	101'-7 1/16"	78'-5 1/16"	2'-5 1/16"	2'-2 1/8"
G9	143'-5 3/16"	164'-2 3/4"	101'-5 3/16"	78'-2 3/4"	2'-2 1/8"	2'-0 1/16"
G10	143'-3 1/8"	164'-0 3/8"	101'-3 1/8"	78'-0 3/8"	2'-0 1/8"	1'-9 1/16"

TOP OF WEB ELEVATIONS(*)											
Location	Pier 2S		Pier 3S		Pier 4S		Pier 5S		Pier 6S		
	Span 3	Splice 1	Span 3	Splice 2	Span 4	Splice 4	Span 5	Splice 6	Span 6	Splice 6	
G1	555.97	553.64	552.69	551.64	549.99	549.24	548.52	547.09	546.28	545.61	544.11
G2	555.69	553.36	552.41	551.36	549.71	548.96	548.24	546.81	546.00	545.33	543.83
G3	555.41	553.08	552.13	551.08	549.43	548.68	547.96	546.53	545.73	545.05	543.55
G4	555.13	552.80	551.85	550.80	549.15	548.40	547.68	546.25	545.45	544.78	543.27
G5	554.85	552.52	551.57	550.52	548.87	548.12	547.40	545.98	545.17	544.50	542.99

TOP OF WEB ELEVATIONS(*)											
Location	Pier 2N		Pier 3N		Pier 4N		Pier 5N		Pier 6N		
	Span 3	Splice 1	Span 3	Splice 2	Span 4	Splice 4	Span 5	Splice 6	Span 6	Splice 6	
G6	555.12	552.80	551.84	550.79	549.14	548.39	547.67	546.25	545.44	544.76	543.26
G7	554.85	552.52	551.57	550.51	548.87	548.12	547.39	545.97	545.16	544.49	542.99
G8	554.57	552.25	551.29	550.23	548.60	547.84	547.11	545.70	544.89	544.21	542.71
G9	554.30	551.97	551.02	549.96	548.32	547.57	546.84	545.42	544.61	543.93	542.43
G10	554.02	551.70	550.74	549.68	548.05	547.29	546.56	545.15	544.33	543.66	542.16

(*) For Fabrication only.

NOTES
Transverse Stiffeners are Bars 5" x 7/16"
For Notes A,B,C, see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Camber Diagram see Sheet 95.
For Section A-A see Sheet 95.
For additional dimensions see Sheet 83.

AS REVISED!

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 3 THRU 6
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
CHANGE SHEAR STUD SPACING FOR DECK PLANKS
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI
10/18/85
SHEET NO. 82 OF 163

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

BUTTERFIELD
DESIGNED
ROUFA
CHECKED
STEGMAN
DRAWN
C.A. LIZANA
CHECKED

6692
EBS07

GIRDER VARIABLES

Girder	Dim. L	Dim. m	Dim. M	Dim. n	Dim. N	Dim. p	Dim. P	Dim. q	Dim. Q	Dim. r	Dim. R	Dim. s	Dim. S	Dim. t	Dim. v
G1	24'-0"	24'-7 ¹⁵ / ₁₆ "	73'-11 ⁷ / ₈ "	23'-6"	47'-0"	22'-6"	45'-0"	24'-7 ¹ / ₂ "	98'-6"	24'-7 ⁵ / ₈ "	73'-10 ⁷ / ₈ "	24'-7 ³ / ₈ "	98'-5 ³ / ₈ "	6'-1 ⁷ / ₈ "	6'-1 ⁷ / ₈ "
G2	23'-11 ⁵ / ₈ "	24'-7 ⁹ / ₁₆ "	73'-10 ³ / ₄ "	23'-5 ¹¹ / ₁₆ "	46'-11 ³ / ₈ "	22'-5 ¹¹ / ₁₆ "	44'-11 ³ / ₈ "	24'-7 ¹ / ₈ "	98'-4 ⁹ / ₁₆ "	24'-7 ¹ / ₄ "	73'-9 ¹³ / ₁₆ "	24'-7 ¹ / ₁₆ "	98'-4 ³ / ₁₆ "	6'-11 ³ / ₁₆ "	6'-1 ³ / ₄ "
G3	23'-11 ¹ / ₄ "	24'-7 ¹ / ₄ "	73'-9 ³ / ₄ "	23'-5 ⁵ / ₁₆ "	46'-10 ⁵ / ₈ "	22'-5 ³ / ₈ "	44'-10 ³ / ₄ "	24'-6 ³ / ₄ "	98'-3 ¹ / ₁₆ "	24'-6 ¹³ / ₁₆ "	73'-8 ¹³ / ₁₆ "	24'-6 ¹ / ₁₆ "	98'-2 ¹ / ₁₆ "	6'-1 ¹ / ₁₆ "	6'-1 ¹ / ₁₆ "
G4	23'-10 ⁷ / ₈ "	24'-6 ¹ / ₈ "	73'-8 ¹ / ₁₆ "	23'-5"	46'-10"	22'-5"	44'-10"	24'-6 ⁷ / ₁₆ "	98'-1 ¹³ / ₁₆ "	24'-6 ⁹ / ₁₆ "	73'-7 ¹ / ₁₆ "	24'-6 ⁵ / ₁₆ "	98'-1 ¹ / ₁₆ "	6'-1 ⁵ / ₈ "	6'-1 ⁹ / ₁₆ "
G5	23'-10 ⁵ / ₈ "	24'-6 ¹ / ₂ "	73'-7 ⁹ / ₁₆ "	23'-4 ⁵ / ₈ "	46'-9 ¹ / ₄ "	22'-4 ¹ / ₁₆ "	44'-9 ³ / ₈ "	24'-6 ¹ / ₁₆ "	98'-0 ³ / ₈ "	24'-6 ³ / ₁₆ "	73'-6 ⁵ / ₈ "	24'-6"	98'-0"	6'-1 ¹ / ₂ "	6'-1 ¹ / ₂ "
G6	24'-0"	24'-3 ¹ / ₂ "	72'-10 ⁹ / ₁₆ "	23'-6"	47'-0"	22'-6"	45'-0"	24'-3 ⁷ / ₈ "	97'-3 ⁹ / ₁₆ "	24'-3 ¹³ / ₁₆ "	72'-11 ¹ / ₂ "	24'-4"	97'-3 ¹³ / ₁₆ "	6'-0 ¹³ / ₁₆ "	6'-1"
G7	23'-11 ⁵ / ₈ "	24'-3 ¹ / ₈ "	72'-9 ⁷ / ₁₆ "	23'-5 ¹¹ / ₁₆ "	46'-11 ³ / ₈ "	22'-5 ¹¹ / ₁₆ "	44'-11 ³ / ₈ "	24'-3 ¹ / ₁₆ "	97'-2 ¹ / ₈ "	24'-3 ¹ / ₂ "	72'-10 ⁷ / ₁₆ "	24'-3 ⁵ / ₈ "	97'-2 ¹ / ₂ "	6'-0 ⁷ / ₈ "	6'-0 ⁷ / ₈ "
G8	23'-11 ¹ / ₄ "	24'-2 ¹³ / ₁₆ "	72'-8 ¹ / ₂ "	23'-5 ⁵ / ₁₆ "	46'-10 ⁵ / ₈ "	22'-5 ³ / ₈ "	44'-10 ³ / ₄ "	24'-3 ¹ / ₁₆ "	97'-0 ¹ / ₁₆ "	24'-3 ¹ / ₈ "	72'-9 ⁷ / ₁₆ "	24'-3 ³ / ₁₆ "	97'-1 ¹ / ₁₆ "	6'-0 ¹³ / ₁₆ "	6'-0 ¹³ / ₁₆ "
G9	23'-10 ⁷ / ₈ "	24'-2 ¹ / ₁₆ "	72'-7 ³ / ₈ "	23'-5"	46'-10"	22'-5"	44'-10"	24'-2 ¹³ / ₁₆ "	96'-11 ³ / ₈ "	24'-2 ³ / ₄ "	72'-8 ⁵ / ₁₆ "	24'-2 ¹³ / ₁₆ "	96'-11 ³ / ₄ "	6'-0 ¹ / ₁₆ "	6'-0 ³ / ₄ "
G10	23'-10 ⁵ / ₈ "	24'-2 ¹ / ₁₆ "	72'-6 ¹ / ₄ "	23'-4 ⁵ / ₈ "	46'-9 ¹ / ₄ "	22'-4 ¹ / ₁₆ "	44'-9 ³ / ₈ "	24'-2 ¹ / ₂ "	96'-9 ¹³ / ₁₆ "	24'-2 ⁷ / ₁₆ "	72'-7 ¹ / ₄ "	24'-2 ⁹ / ₁₆ "	96'-10 ⁹ / ₁₆ "	6'-0 ³ / ₈ "	6'-0 ³ / ₈ "

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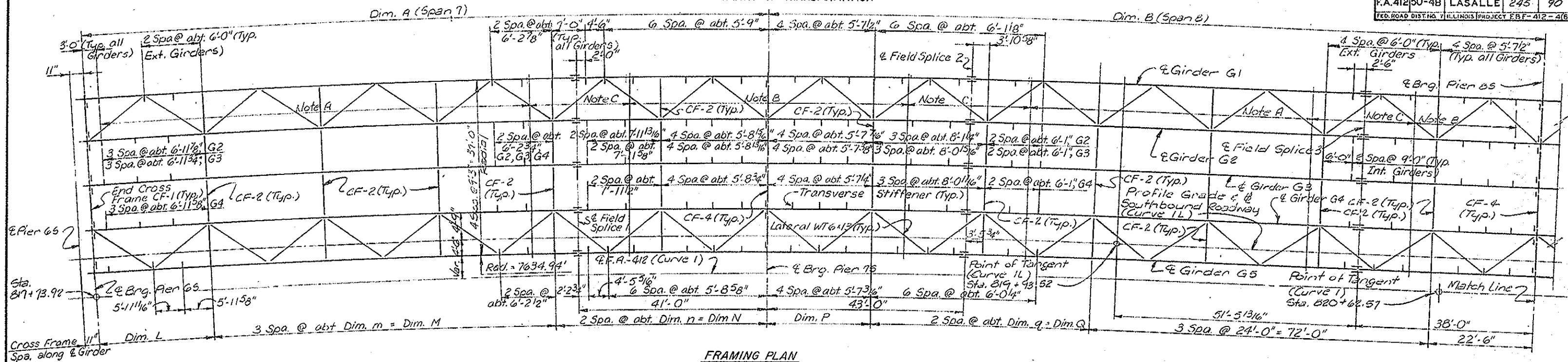
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SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 3 THRU 6
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

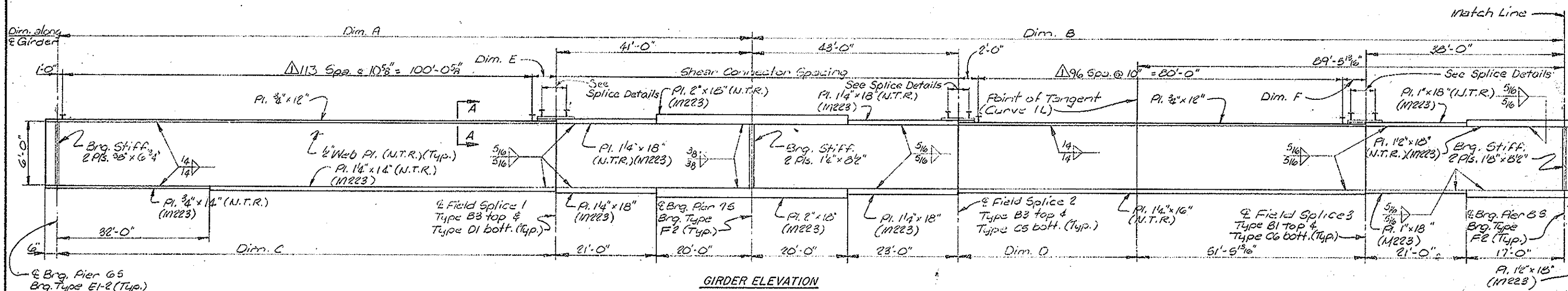
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NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 83 OF 163



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

GIRDER VARIABLES				
Girder	Dim. A	Dim. B	Dim. C	Dim. D
G1	144'-10 3/8"	165'-9 1/4"	103'-10 5/8"	33'-3 1/2"
G2	144'-8 1/2"	165'-7 3/8"	103'-8 1/2"	33'-13 1/2"
G3	144'-6 3/8"	165'-5 1/8"	103'-6 3/8"	32'-11 1/4"
G4	144'-2 3/8"	165'-2 1/8"	103'-4 3/8"	32'-9 1/8"
G5	144'-2 3/8"	165'-0 1/8"	103'-2 3/8"	32'-7 1/8"

NOTES

Transverse Stiffeners are Bars 5" x 7 1/2".
For Notes A, B, C see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 20.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
Work this sheet with Sheet 85.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Camber Diagram see Sheet 102.
For Section A-A see Sheet 95.

GIRDER VARIABLES										
Girder	Dim. E	Dim. F	Dim. L	Dim. m	Dim. M	Dim. n	Dim. N	Dim. P	Dim. q	Dim. Q
G1	2'-10"	2'-9 1/4"	24'-0"	24'-11 1/8"	74'-10 3/8"	23'-0"	46'-0"	22'-6"	24'-4 3/8"	48'-9 1/4"
G2	2'-7 1/8"	2'-7 3/16"	23'-11 3/8"	24'-11 3/8"	74'-9 1/2"	22'-11 1/8"	45'-11 3/8"	22'-5 1/16"	24'-3 3/4"	48'-7 1/2"
G3	2'-5 3/4"	2'-5 1/16"	23'-11 1/4"	24'-10 3/8"	74'-8 7/16"	22'-11 3/16"	45'-10 1/16"	22'-5 3/8"	24'-2 7/8"	48'-5 1/16"
G4	2'-3 1/16"	2'-2 1/16"	23'-10 7/8"	24'-10 1/8"	74'-7 7/16"	22'-11"	45'-10"	22'-5"	24'-2"	48'-3 1/16"
G5	2'-1 1/16"	2'-0 1/8"	23'-10 3/8"	24'-10 1/8"	74'-6 5/8"	22'-10 5/8"	45'-9 1/4"	22'-4 1/16"	24'-1 1/16"	48'-2 3/8"

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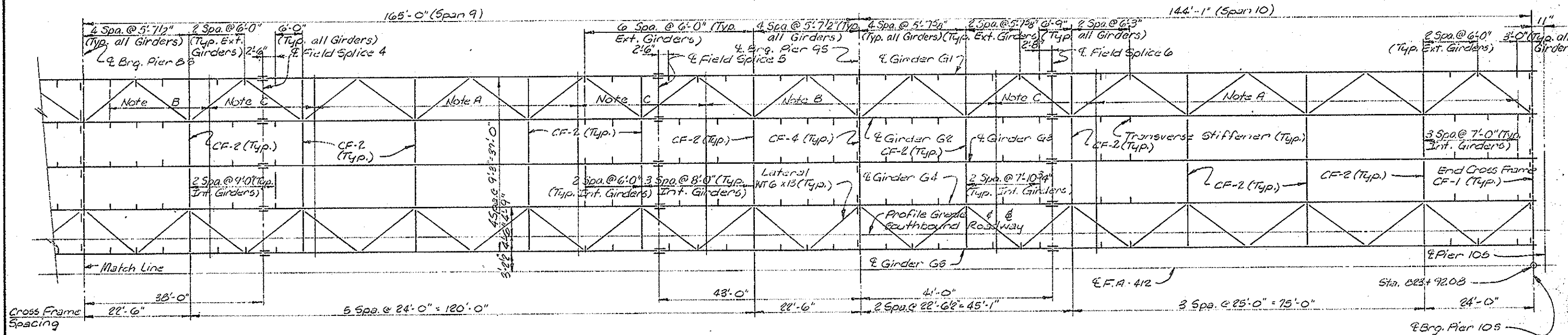
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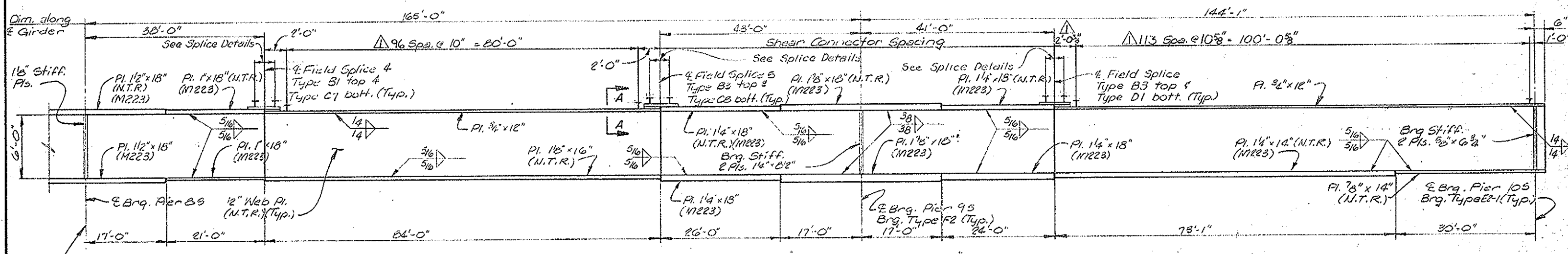
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CHANGE SHEAR STUD SPACING FOR DECK PLANKS

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 7 AND 8 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA: 863+16.00 (FA-412) LASALLE CO.



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

TOP OF WEB ELEVATIONS(*)

Location	2 Brg. Pier 6 S Span 7	2 Field Splice 1	2 Brg. Pier 7 S	2 Field Splice 2	2 Field Splice 3	2 Brg. Pier 8 S	2 Field Splice 4	2 Field Splice 5	2 Brg. Pier 9 S	2 Field Splice 6	2 Brg. Pier 10 S Span 10
G1	544.08	542.76	542.26	541.51	540.13	539.55	538.99	538.21	537.97	537.78	537.30
G2	543.80	542.48	541.99	541.32	540.10	539.60	539.12	538.40	538.16	537.96	537.47
G3	543.53	542.20	541.72	541.13	540.08	539.65	539.24	538.58	538.34	538.15	537.67
G4	543.25	541.92	541.45	540.95	540.05	539.69	539.36	538.77	538.53	538.33	537.86
G5	542.97	541.65	541.18	540.76	540.03	539.74	539.48	538.95	538.71	538.52	538.04

(*) For fabrication only.

NOTES

Transverse Stiffeners are Bars 5" x 7/16"
 For Notes A, B & C see Sheet 96.
 For General Notes see Sheet 8.
 For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.

For Corbel Diagram see Sheet 102.
 For Cross Frame Details see Sheet 96.
 For Lateral Bracing Details see Sheet 97.
 For Field Splice Details see Sheet 98.
 For Bearing Details see Sheet 100.
 Work this sheet with Sheet 84.
 For Section A-A see Sheet 75.

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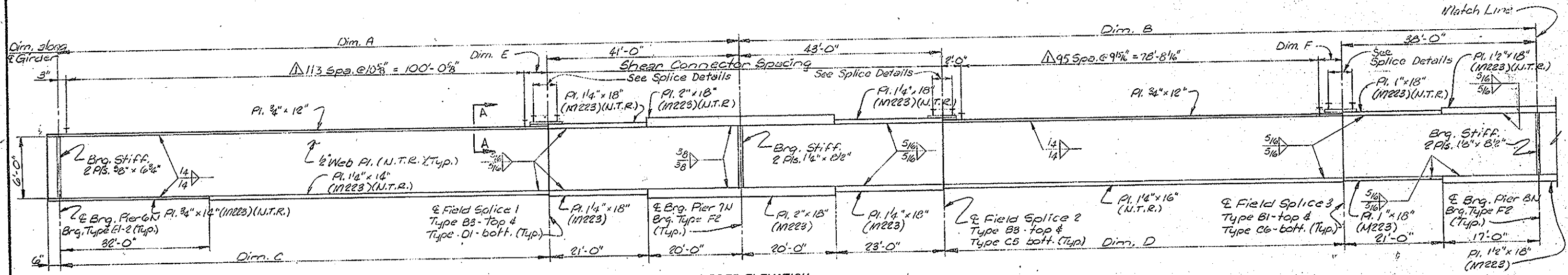
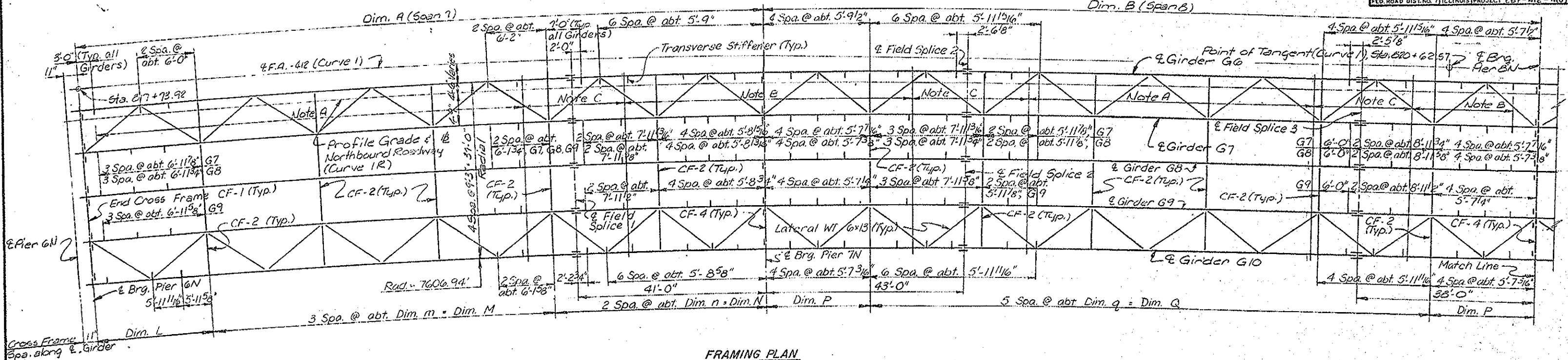
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SOUTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 FRAMING PLAN AND GIRDER ELEVATION
 SPANS 9 AND 10 SOUTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.
 Δ CHANGE SHEAR STUD SPACING FOR DECK PLANKS
 SHEET NO. 85 OF 163

10/10/85



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

GIRDER VARIABLES				
Girder	Dim. A	Dim. B	Dim. C	Dim. D
G6	143'-11 1/2"	164'-11 1/2"	102'-11 1/2"	83'-11 1/2"
G7	143'-9 1/2"	164'-9"	102'-9 1/2"	83'-9"
G8	143'-7 1/2"	164'-6 1/2"	102'-7 1/2"	83'-6 1/2"
G9	143'-5 1/2"	164'-4 1/2"	102'-5 1/2"	83'-4 1/2"
G10	143'-3 1/2"	164'-2 1/2"	102'-3 1/2"	83'-2 1/2"

NOTES

Transverse Stiffeners are Bars 5" x 7/16".
For Notes A, B & C see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.
(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Camber Diagram see Sheet 102.
For Cross Frame Details, see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
Work this sheet with Sheet 87.
For Section A-A see Sheet 95.

GIRDER VARIABLES									
Girder	Dim. E	Dim. F	Dim. L	Dim. m	Dim. M	Dim. n	Dim. P	Dim. q	Dim. Q
G6	2'-8 3/4"	3'-3 1/4"	24'-0"	24'-7 1/2"	73'-11 1/2"	23'-0"	46'-0"	22'-6"	23'-11 1/2"
G7	2'-6 1/2"	3'-0 1/2"	23'-11 3/8"	24'-7 9/16"	73'-10 1/2"	22'-11 1/2"	45'-11 3/8"	22'-5 1/2"	23'-11 1/2"
G8	2'-4"	2'-10 3/8"	23'-11 1/4"	24'-7 1/4"	73'-9 1/2"	22'-11 5/16"	45'-10 1/2"	22'-5 3/8"	23'-11 1/4"
G9	2'-1 1/2"	2'-8 3/4"	23'-10 1/8"	24'-6 1/8"	73'-8 5/8"	22'-11"	45'-10"	22'-5"	23'-10 1/8"
G10	1'-11 1/2"	2'-6 1/4"	23'-10 3/8"	24'-6 1/2"	73'-7 1/2"	22'-10 3/8"	45'-9 1/4"	22'-4 1/2"	23'-10 3/8"

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 7 AND 8 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

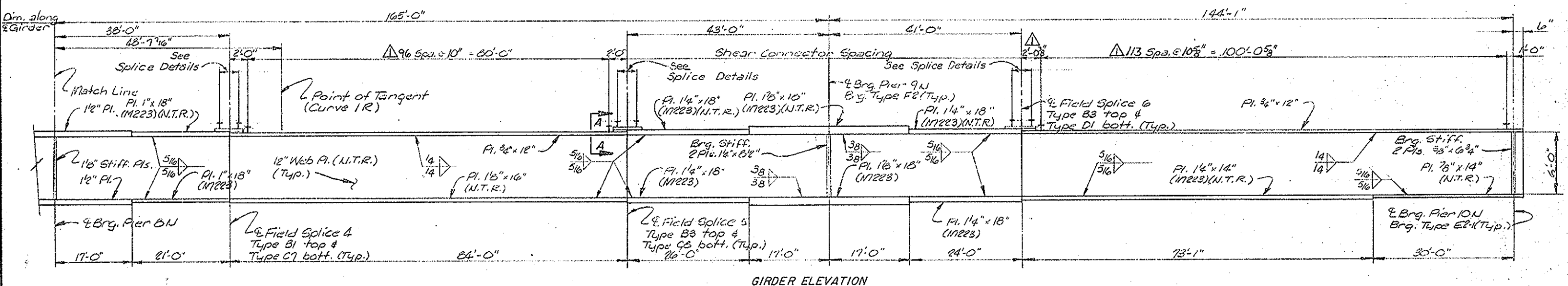
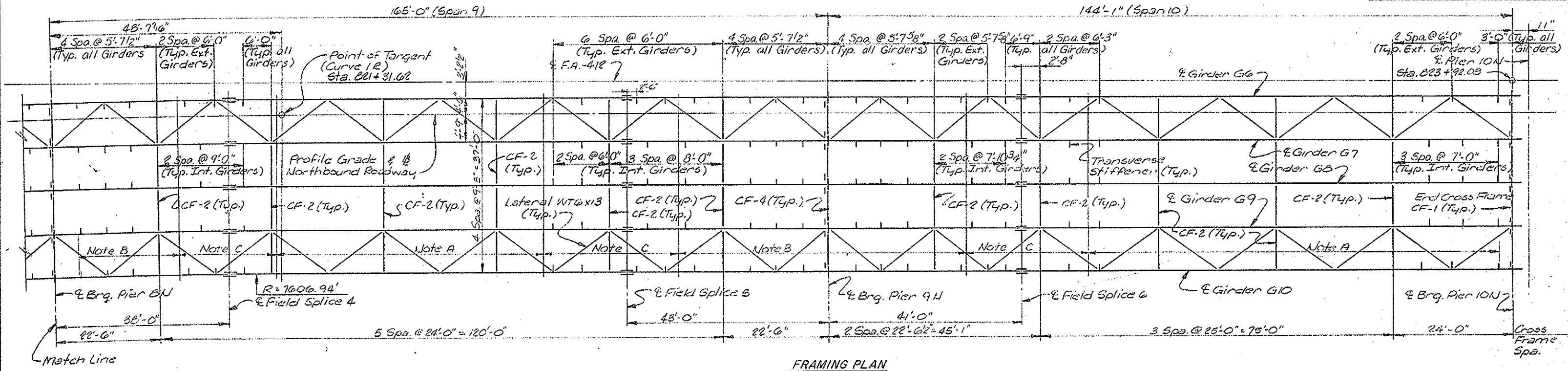
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CHANGE SHEAR STUD SPACING FOR DECK PLANKS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



TOP OF WEB ELEVATIONS (*)

Location	Brig. Pier 6N Span 7	Field Splice 1	Brig. Pier 7N	Field Splice 2	Field Splice 3	Brig. Pier 8N	Field Splice 4	Field Splice 5	Brig. Pier 9N	Field Splice 6	Brig. Pier 10N Span 10
G6	543.24	541.92	541.44	540.96	540.18	539.85	539.55	538.95	538.71	538.52	538.04
G7	542.96	541.64	541.17	540.70	539.90	539.52	539.29	538.77	538.53	538.33	537.86
G8	542.69	541.36	540.89	540.43	539.62	539.30	539.02	538.53	538.24	538.15	537.67
G9	542.41	541.09	540.61	540.15	539.35	539.02	538.75	538.40	538.16	537.96	537.49
G10	542.13	540.81	540.34	539.87	539.07	538.75	538.48	538.21	537.97	537.78	537.30

(*) For fabrication only.

Note: Transverse Stiffeners and splice plates not shown.

NOTES
 Transverse Stiffeners are Bars 5" x 7/16"
 For Notes A, B, C see Sheet 96.
 For General Notes see Sheet 8.
 For Structural Steel Notes see Sheet 80.
 (N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
 For Camber Diagrams see Sheet 102.
 For Section A-A see Sheet 95.
 For Cross Frame Details see Sheet 96.
 For Lateral Bracing Details see Sheet 97.
 For Field Splice Details see Sheet 98.
 For Bracing Details see Sheet 100.
 Work this sheet with Sheet 86.

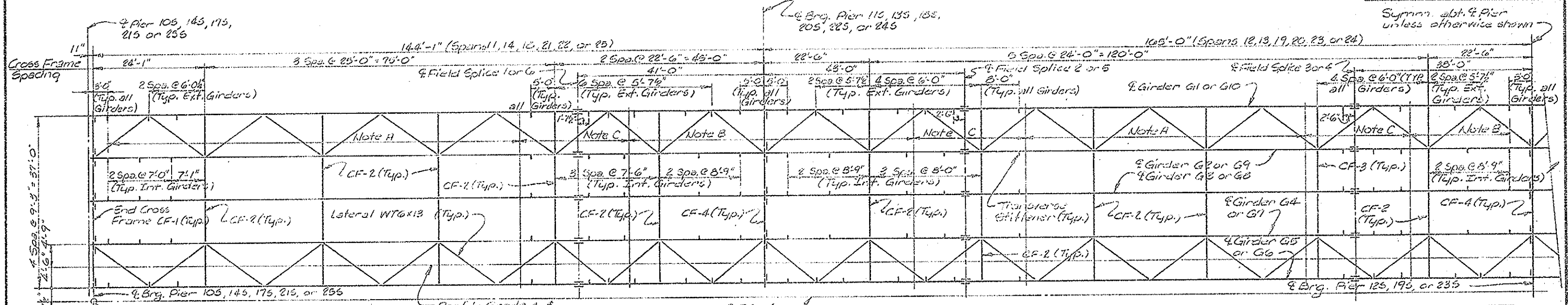
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SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
 FRAMING PLAN AND GIRDER ELEVATION
 SPANS 9 AND 10 NORTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.
 CHANGE SHEAR STUD SPACING FOR DECK PLANKS
 SHEET NO. 87 OF 163

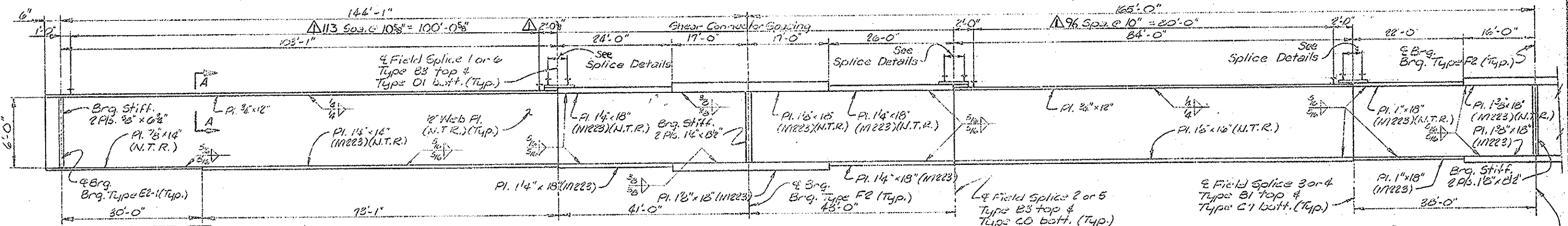


Sta. 823 + 93.92 (Pier 105, Span 11)
Sta. 830 + 12.08 (Pier 145, Span 14)
Sta. 834 + 60.92 (Pier 175, Span 18)
Sta. 840 + 19.08 (Pier 215, Span 21)
Sta. 840 + 80.92 (Pier 215, Span 22)
Sta. 846 + 99.08 (Pier 255, Span 25)

TOP OF WEB ELEVATIONS (*) SPANS 11 THRU 14

Location	€ Brg. Pier 10	€ Field Splice 1	€ Brg. Pier 11	€ Field Splice 2	€ Field Splice 3	€ Brg. Pier 12	€ Field Splice 4	€ Field Splice 5	€ Brg. Pier 13	€ Field Splice 6	€ Brg. Pier 14
G1 or G10	537.29	536.82	536.83	536.43	536.04	535.26	535.69	535.30	535.10	534.91	534.43
G2 or G9	537.48	537.00	536.81	536.61	536.22	536.05	535.87	535.48	535.29	535.10	534.62
G3 or G8	537.66	537.19	537.00	536.80	536.41	536.23	536.06	535.67	535.47	535.28	534.80
G4 or G7	537.85	537.37	537.18	536.98	536.59	536.42	536.24	535.85	535.66	535.47	534.99
G5 or G6	538.03	537.56	537.37	537.17	536.78	536.60	536.43	536.04	535.84	535.65	535.17

(*) For fabrication only



TOP OF WEB ELEVATIONS (*) SPANS 18 THRU 21

Location	€ Brg. Pier 17	€ Field Splice 1	€ Brg. Pier 18	€ Field Splice 2	€ Field Splice 3	€ Brg. Pier 19	€ Field Splice 4	€ Field Splice 5	€ Brg. Pier 20	€ Field Splice 6	€ Brg. Pier 21
G1 or G10	522.36	531.82	531.67	531.49	531.11	530.93	530.75	530.27	530.17	529.98	529.50
G2 or G9	532.54	532.07	531.88	531.68	531.29	531.11	530.94	530.55	530.35	530.16	529.69
G3 or G8	532.73	532.25	532.06	531.86	531.48	531.30	531.12	530.74	530.54	530.35	529.87
G4 or G7	532.91	532.44	532.25	532.05	531.66	531.48	531.31	530.92	530.72	530.53	530.06
G5 or G6	533.10	532.62	532.43	532.23	531.85	531.67	531.49	531.11	530.91	530.72	530.24

(*) For fabrication only

TOP OF WEB ELEVATIONS (*) SPANS 22 THRU 25

Location	€ Brg. Pier 21	€ Field Splice 1	€ Brg. Pier 22	€ Field Splice 2	€ Field Splice 3	€ Brg. Pier 23	€ Field Splice 4	€ Field Splice 5	€ Brg. Pier 24	€ Field Splice 6	€ Brg. Pier 25
G1 or G10	529.49	529.02	528.83	528.63	528.24	528.06	527.89	527.50	527.30	527.11	526.63
G2 or G9	529.68	529.20	529.01	528.81	528.42	528.25	528.07	527.68	527.49	527.30	526.82
G3 or G8	529.86	529.39	529.20	529.00	528.61	528.43	528.26	527.87	527.67	527.48	527.00
G4 or G7	530.05	529.57	529.38	529.18	528.79	528.62	528.44	528.05	527.85	527.66	527.19
G5 or G6	530.23	529.76	529.57	529.37	528.98	528.80	528.63	528.24	528.05	527.85	527.37

(*) For fabrication only

NOTES

Transverse Stiffeners are Bars 5"x7/16"

For Notes A, B & C see Sheet 96.

For General Notes see Sheet 8.

For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.

For Camber Diagram see Sheet 103.

For Cross Frame Details see Sheet 96.

For Lateral Bracing Details see Sheet 97.

For Field Splice Details see Sheet 98.

For Bearing Details see Sheet 100.

For Section A-A see Sheet 95.

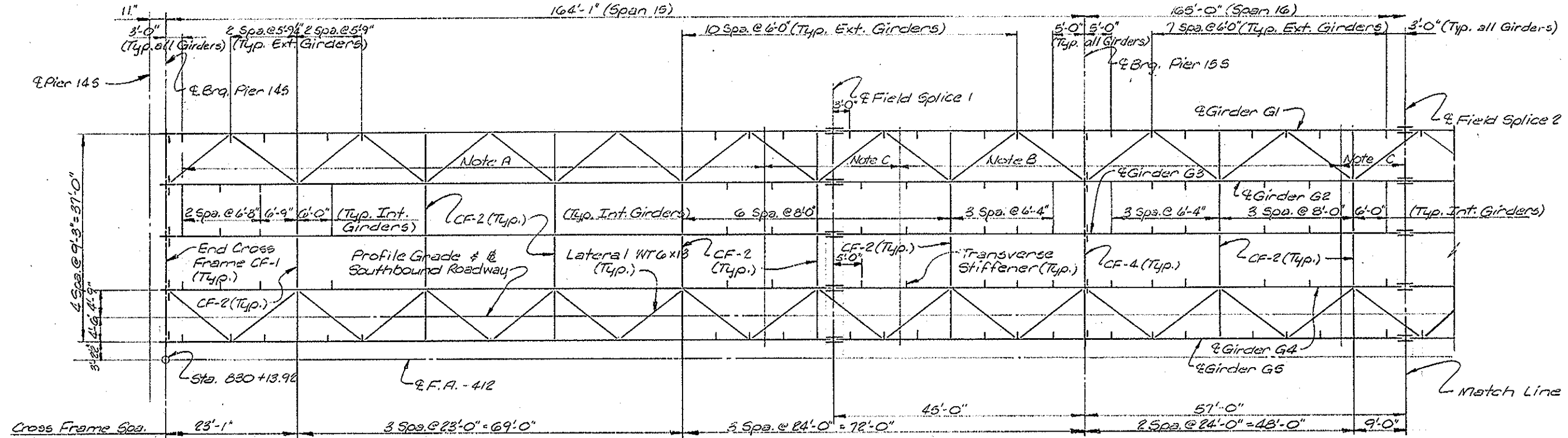
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 11 THRU 14, 18 THRU 21, AND 22 THRU 25
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
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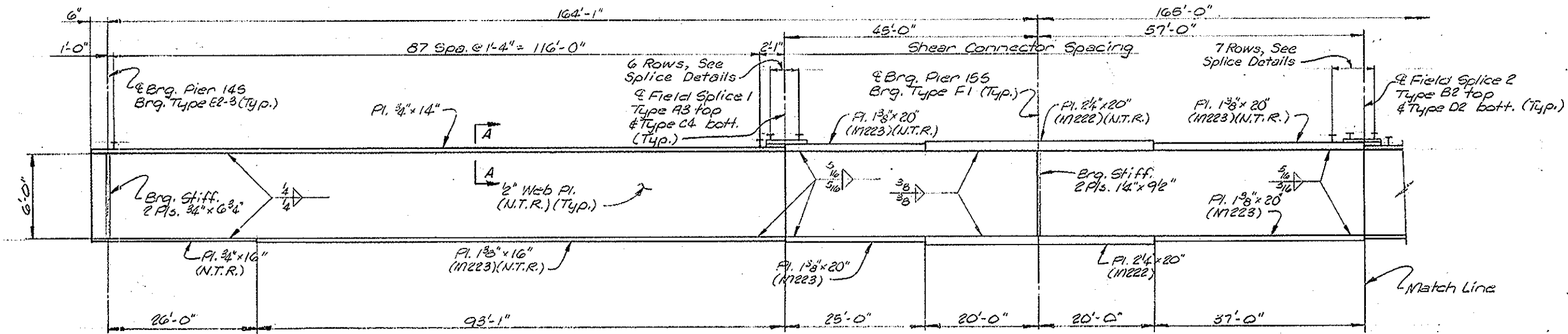
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9/27/85

SHEET NO. 88 OF 163



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse Stiffeners and Splice Plates not shown.

TOP OF WEB ELEVATIONS (*)				
Location	Br. Pier 14 S	Field Splice 1	Br. Pier 15 S	Field Splice 2
G1	534.43	533.88	533.67	533.40
G2	534.61	534.06	533.85	533.59
G3	534.80	534.25	534.04	533.77
G4	534.98	534.43	534.22	533.96
G5	535.17	534.62	534.41	534.14

(*) For fabrication only.

NOTES

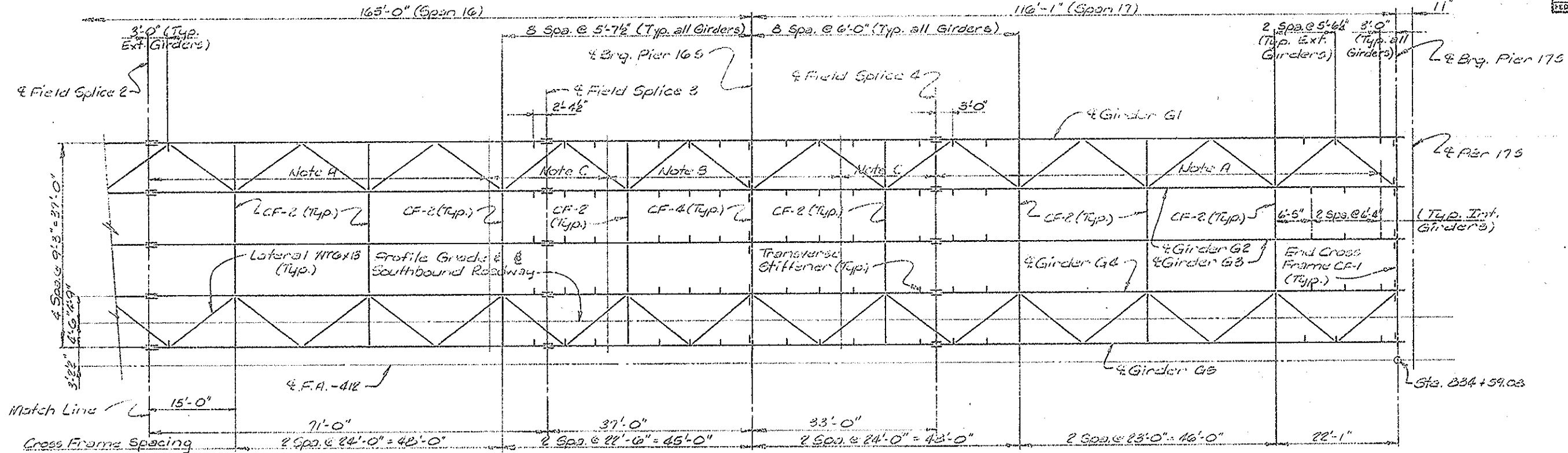
- Transverse Stiffeners are Bars 5" x 7/16"
- For Notes A, B & C see Sheet 96.
- For General Notes see Sheet 8.
- For Structural Steel Notes see Sheet 80.
- (N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
- For Cross Frame Details see Sheet 96.
- For Lateral Bracing Details see Sheet 97.
- For Field Splice Details see Sheet 98.
- For Bearing Details see Sheet 100.
- For Camber Diagram see Sheet 103.
- For Section A-A see Sheet 95.
- Work this sheet with Sheet 90.

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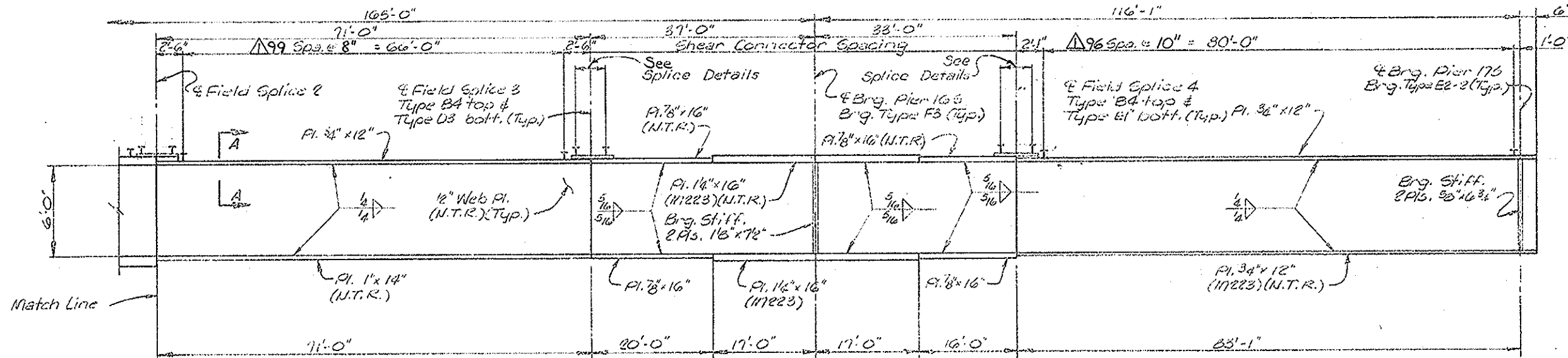
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 15 THRU 17 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

TOP OF WEB ELEVATIONS(*)				
Location	@ Field Splice 3	@ Brg. Pier 16 S	@ Field Splice 4	@ Brg. Pier 17 S
G1	533.03	532.90	532.75	532.37
G2	533.26	533.09	532.94	532.55
G3	533.45	533.27	533.12	532.74
G4	533.63	533.46	533.31	532.92
G5	533.82	533.64	533.49	533.11

(*) For fabrication only.

NOTES

Transverse Stiffeners are Bars 5" x 7/16"
For Notes A, B, C see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Match Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Camber Diagram see Sheet 103.
For Section A-A see Sheet 95.
Work this sheet with Sheet 39.

BUTTERFIELD
DESIGNED
ROUFA
CHECKED
STEGMAN
DRAWN
C.A. LIZANA
CHECKED

AS REVISED

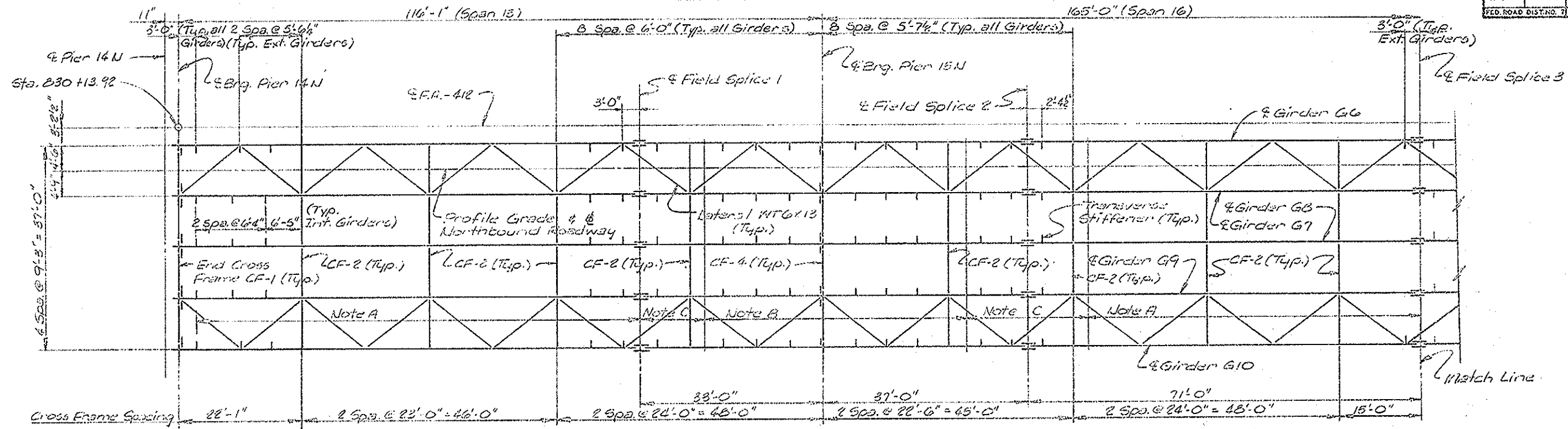
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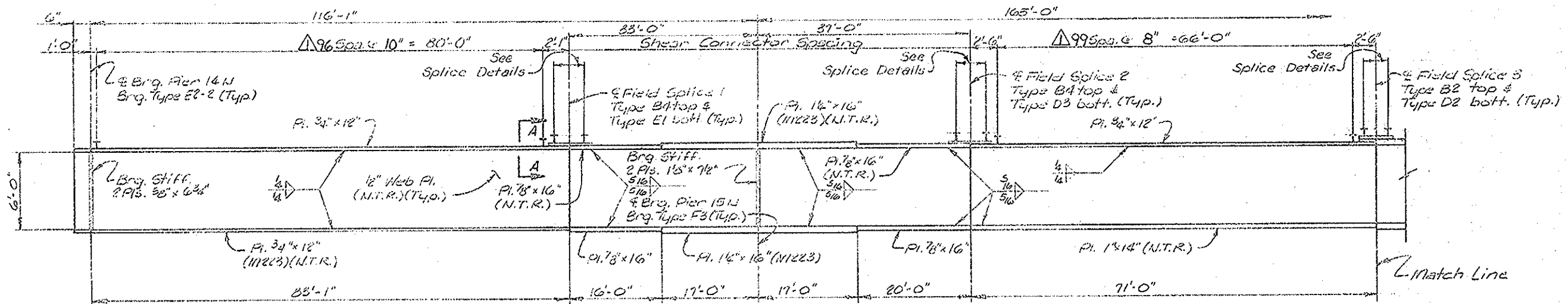
9/27/85

CHANGE SHEAR STUD SPACING FOR DECK PLANKS

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 15 THRU 17 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
SHEET NO. 90 OF 163



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

TOP OF WEB ELEVATIONS (*)				
Location	Br. Pier 14N	Field Splice 1	Br. Pier 15N	Field Splice 2
G6	535.17	534.78	534.63	534.46
G7	534.98	534.60	534.44	534.27
G8	534.80	534.41	534.26	534.09
G9	534.61	534.23	534.07	533.90
G10	534.43	534.04	533.89	533.72

(*) For fabrication only

NOTES

Transverse Stiffeners are Bars 5" x 1/16"
For Notes A, B & C see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Camber Diagram see Sheet 103.
For Section A-A see Sheet 95.
Work this sheet with Sheet 92.

BUTTERFIELD
DESIGNED
ROUFA
CHECKED
STEQMAN
DRAWN
C.A. LIZANA
CHECKED

IAS REVISED

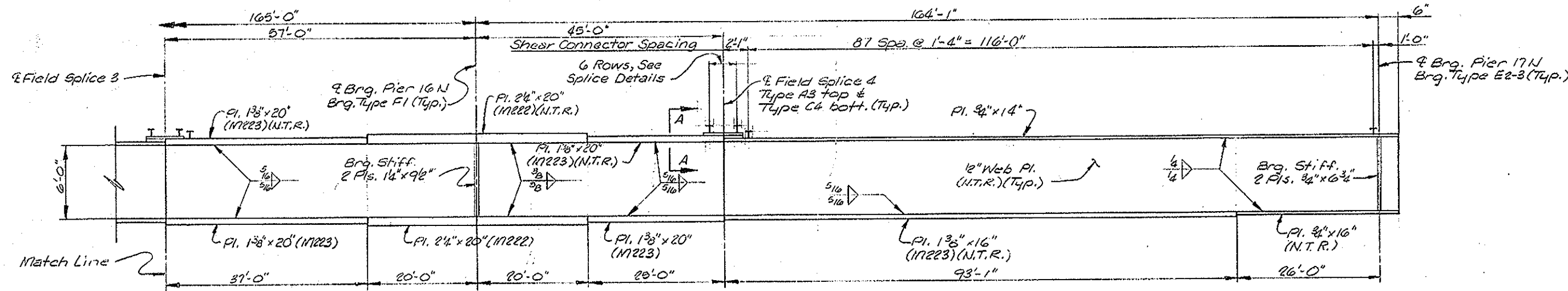
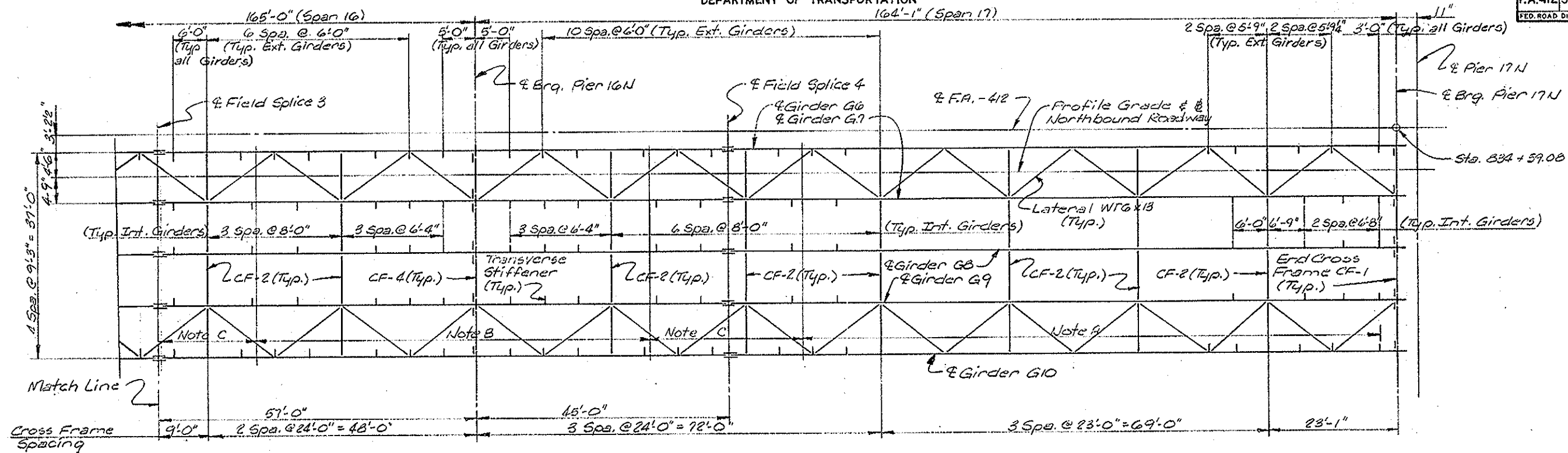
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9/27/85

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 15 THRU 17 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 363+18.00 (FA-412) LASALLE CO.

CHANGE SHEAR STUD SPACING FOR DECK PLANKS
SHEET NO. 91 OF 163



Notes: Transverse Stiffeners and splice plates not shown.

NOTES

Transverse Stiffeners are Bars 5" x 7/16"
For Notes A, B & C see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Camber Diagram see Sheet 103.
For Section A-A see Sheet 95.
Work this sheet with Sheet 91.

TOP OF WEB ELEVATIONS(*)				
Location	4 Field Splice 3	4 Brq. Pier 16N	4 Field Splice 4	4 Brq. Pier 17N Span 17
G6	534.13	533.87	533.66	533.11
G7	533.95	533.68	533.47	532.92
G8	533.76	533.50	533.29	532.74
G9	533.58	533.31	533.10	532.55
G10	533.39	533.13	532.92	532.37

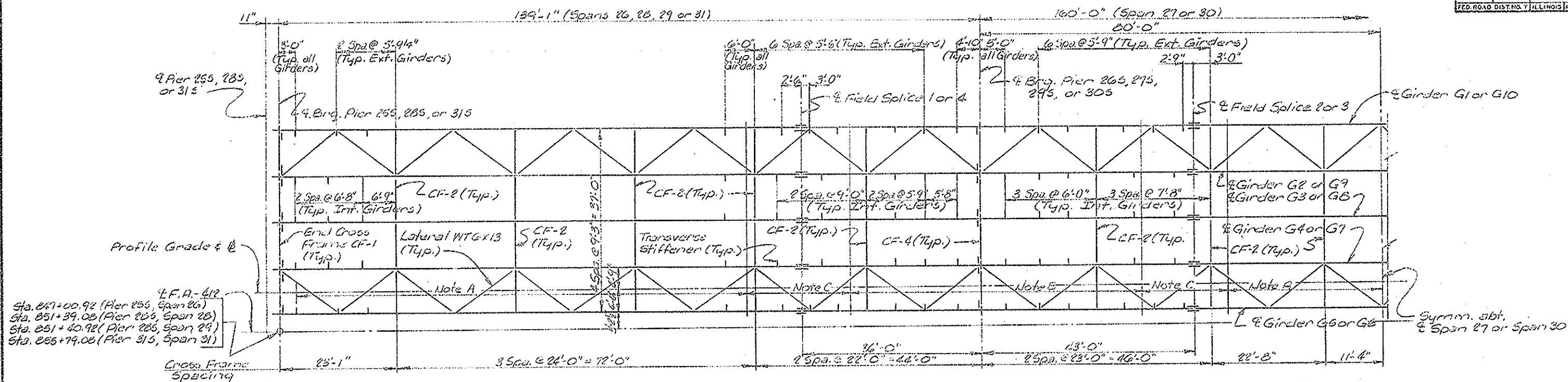
(*) For fabrication only.

BUTTERFIELD
DESIGNED
ROUFA
CHECKED
STEGMAN
DRAWN
C. A. LIZANA
CHECKED

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

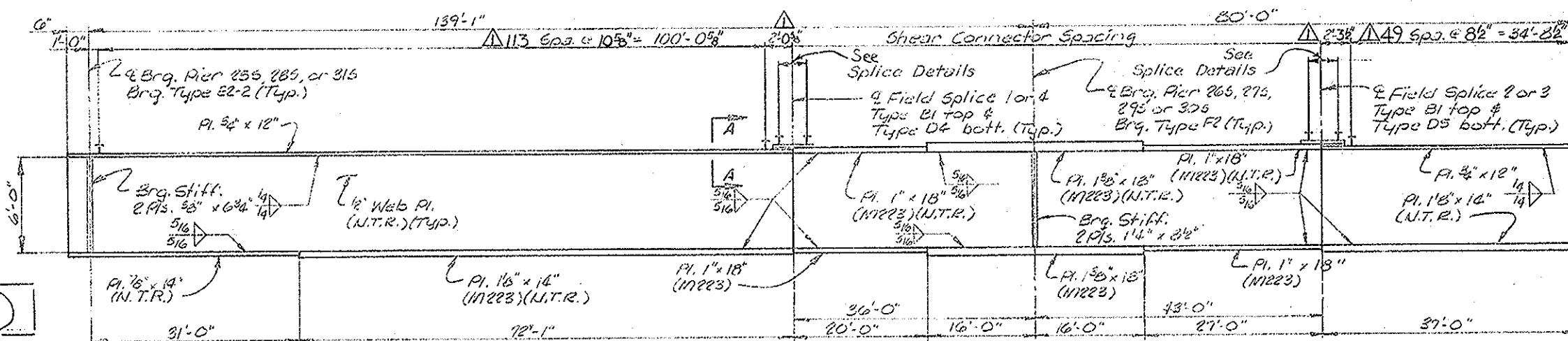
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 15 THRU 17 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



FRAMING PLAN

Southbound Roadway shown - Northbound Roadway similar and opposite hand.



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

NOTES

Transverse Stiffeners are: Bars 5" x 7/16"
For Notes A, B & C see Sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Camber Diagram see Sheet 103.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Section A-A see Sheet 95.

TOP OF WEB ELEVATIONS SPANS 26 THRU 28

Location	Brig. Pier 25 Span 26	Field Splice 1	Brig. Pier 26	Field Splice 2	Field Splice 3	Brig. Pier 27	Field Splice 4	Brig. Pier 28 Span 28
G1 or G10	526.63	526.15	525.48	525.78	525.64	525.24	525.08	524.60
G2 or G9	526.81	526.35	526.17	525.97	525.63	525.43	525.26	524.78
G3 or G8	527.00	526.52	526.35	526.15	525.81	525.61	525.45	524.97
G4 or G7	527.18	526.70	526.54	526.34	526.00	525.80	525.63	525.15
G5 or G6	527.37	526.89	526.72	526.52	526.18	525.98	525.82	525.34

TOP OF WEB ELEVATIONS SPANS 29 THRU 31

Location	Brig. Pier 28 Span 29	Field Splice 1	Brig. Pier 29	Field Splice 2	Field Splice 3	Brig. Pier 30	Field Splice 4	Brig. Pier 31 Span 31
G1 or G10	524.59	524.11	523.93	523.75	523.41	523.21	523.04	522.56
G2 or G9	524.78	524.30	524.13	523.93	523.59	523.39	523.23	522.75
G3 or G8	524.96	524.48	524.32	524.12	523.78	523.58	523.41	522.93
G4 or G7	525.15	524.67	524.50	524.30	523.96	523.76	523.60	523.12
G5 or G6	525.33	524.85	524.69	524.49	524.15	523.95	523.78	523.30

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

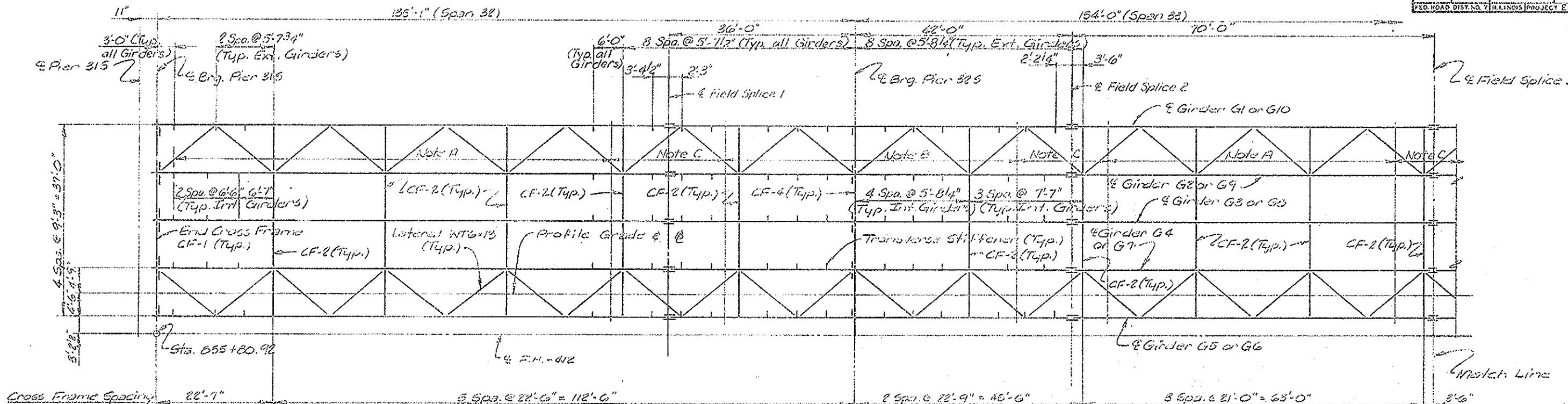
AS REVISED

DESIGNED: RCUFA
CHECKED: ARMAN
DRAWN: STEGMAN
CHECKED: C.A. LIZANA

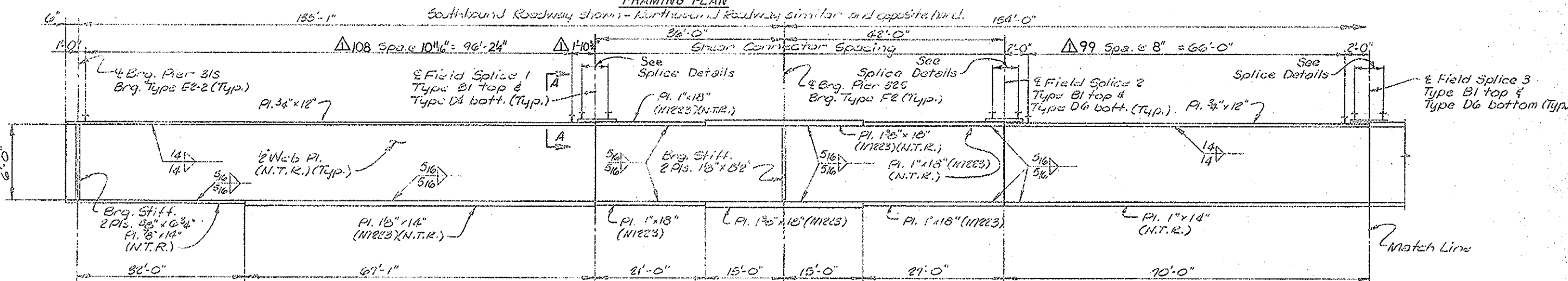
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 26 THRU 28 AND 29 THRU 31
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+18.00 (FA-412) LASALLE CO.
CHANGE SHEAR STUD SPACING FOR DECK PLANKS
SHEET NO. 99 OF 163

9/27/85



FRAMING PLAN



GIRDER ELEVATION

Note: Transverse stiffeners and splice plates not shown.

NOTES

Transverse stiffeners are Bars 5" x 7/16"
For Notes A, B & C see sheet 96.
For General Notes see Sheet 8.
For Structural Steel Notes see Sheet 80.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 96.
For Lateral Bracing Details see Sheet 97.
For Field Splice Details see Sheet 98.
For Bearing Details see Sheet 100.
For Corroder Diagram see Sheet 103.
For Section A-A see Sheet 95.
Work this sheet with sheet 95.

TOP OF WEB ELEVATIONS (ft)								
Location	Brig. Pier 31	Field Splice 1	Brig. Pier 32	Field Splice 2	Field Splice 3	Brig. Pier 33	Field Splice 4	Brig. Pier 34
Girder	Span 32							Span 33
G1 or G10	522.56	522.10	521.93	521.74	521.41	521.22	521.05	520.60
G2 or G9	522.74	522.28	522.12	521.92	521.60	521.40	521.24	520.79
G3 or G8	522.93	522.47	522.30	522.11	521.78	521.59	521.42	520.97
G4 or G7	523.11	522.65	522.49	522.29	521.97	521.77	521.61	521.16
G5 or G6	523.30	522.84	522.67	522.48	522.15	521.96	521.79	521.34

(*) For fabrication only.

BUTTERFIELD
DESIGNED
WOLUKA
CHECKED
STEGMAN
DRAWN
C.A. LIZANA
CHECKED

AS REVISED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

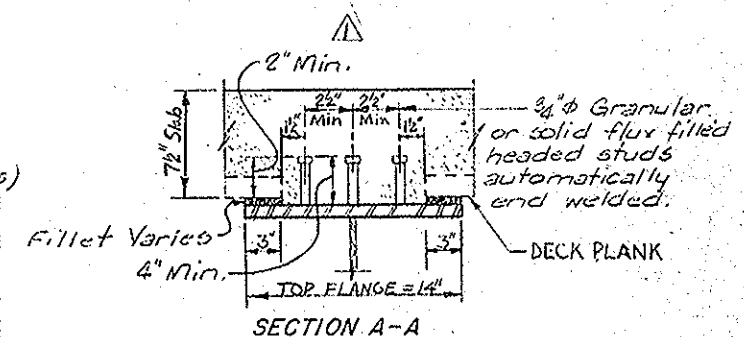
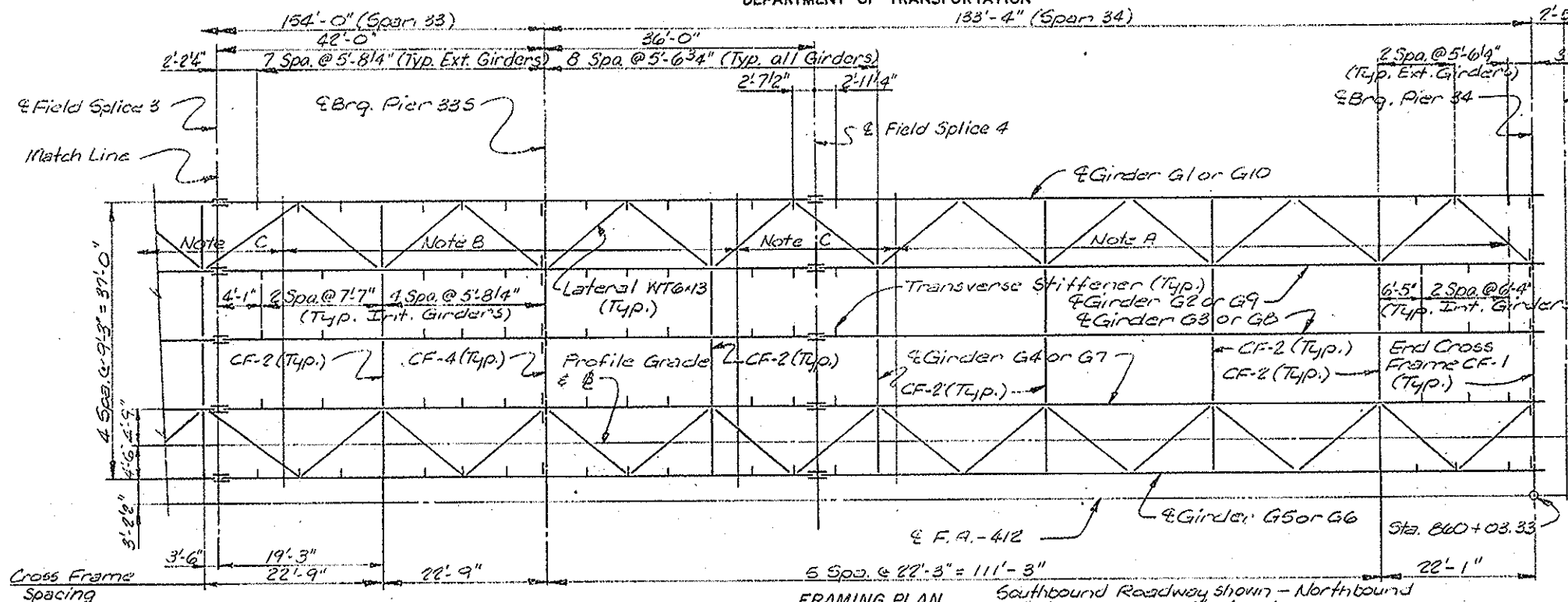
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CHANGE SHEAR STUD SPACING FOR DECK PLANKS

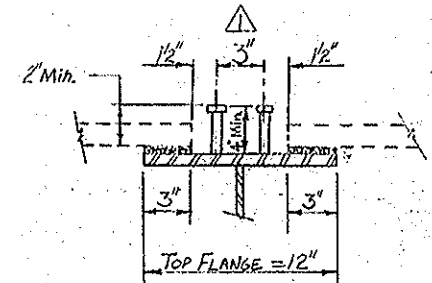
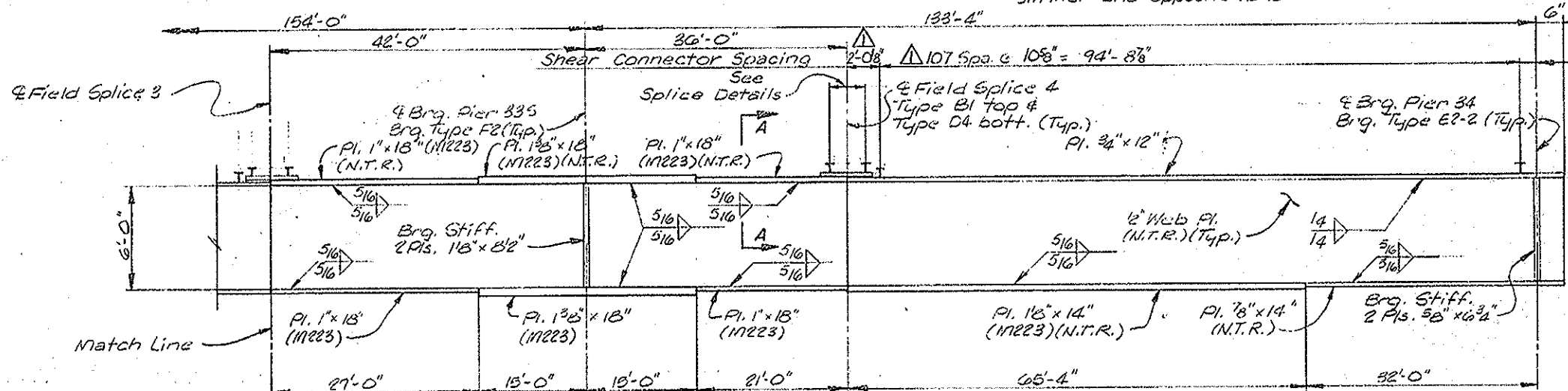
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 32 THRU 34
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

SHEET NO. 94 OF 163



Shear Studs - No. Req'd. Spans 1 thru 24 (See Note)
 Southbound Roadway = 41,550 studs
 Northbound Roadway = 41,475 studs

Note: Total studs shown here includes those on or adjacent to splice plates, as noted in girder elevations. For studs at splices see field splice details.



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

NOTES

Transverse Stiffeners are Bars 5" x 7/16"
 For Notes A, B & C see Sheet 96.
 For General Notes see Sheet 8.
 For Structural Steel Notes see Sheet 80.
 (N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
 For Cross Frame Details see Sheet 96.
 For Lateral Bracing Details see Sheet 97.
 For Field Splice Details see Sheet 98.
 For Bearing Details see Sheet 100.
 For Camber Diagram see Sheet 103.
 Work this sheet with Sheet 94.

BUTTERFIELD
 DESIGNED
 WOKURKA
 CHECKED
 STEGMAN
 DRAWN
 C.A. LIZANA
 CHECKED

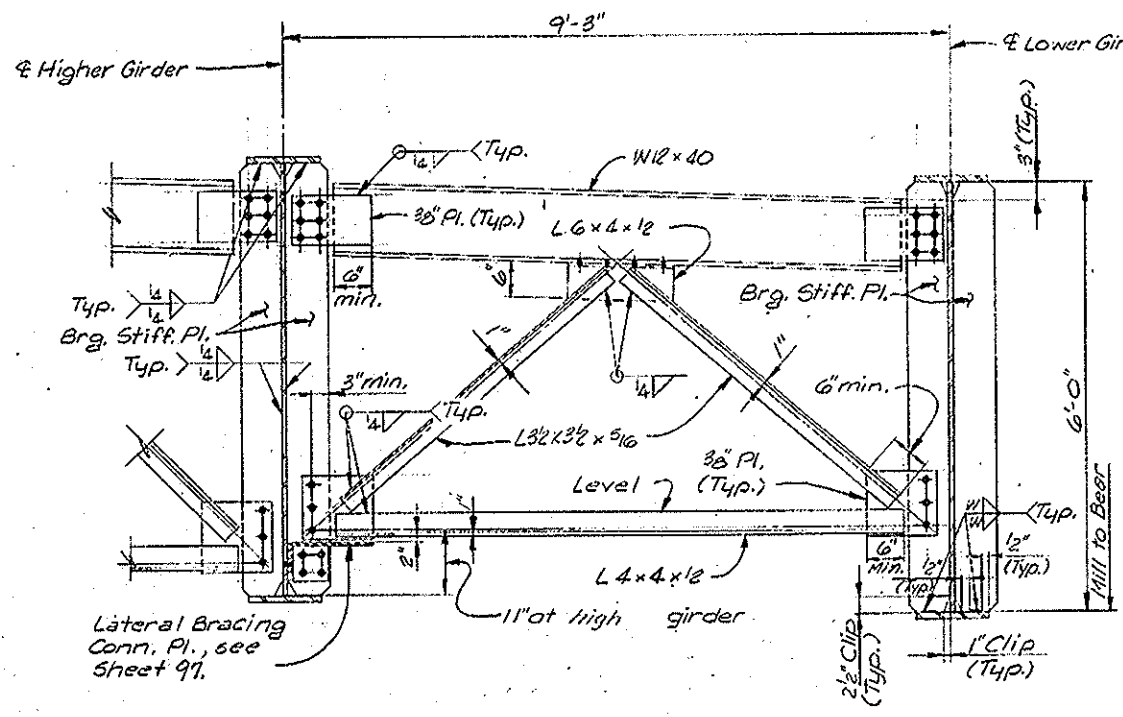
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 ST. LOUIS, MISSOURI

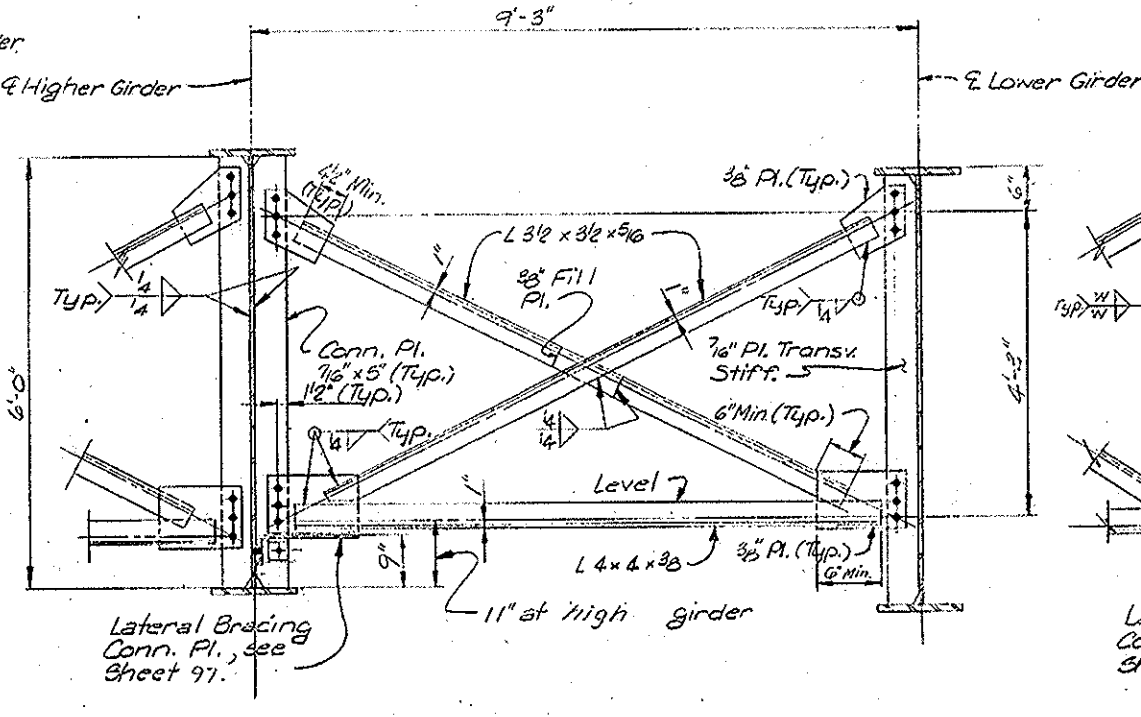
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 STRUCTURAL STEEL ALTERNATE
 FRAMING PLAN AND GIRDER ELEVATION
 SPANS 32 THRU 34
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

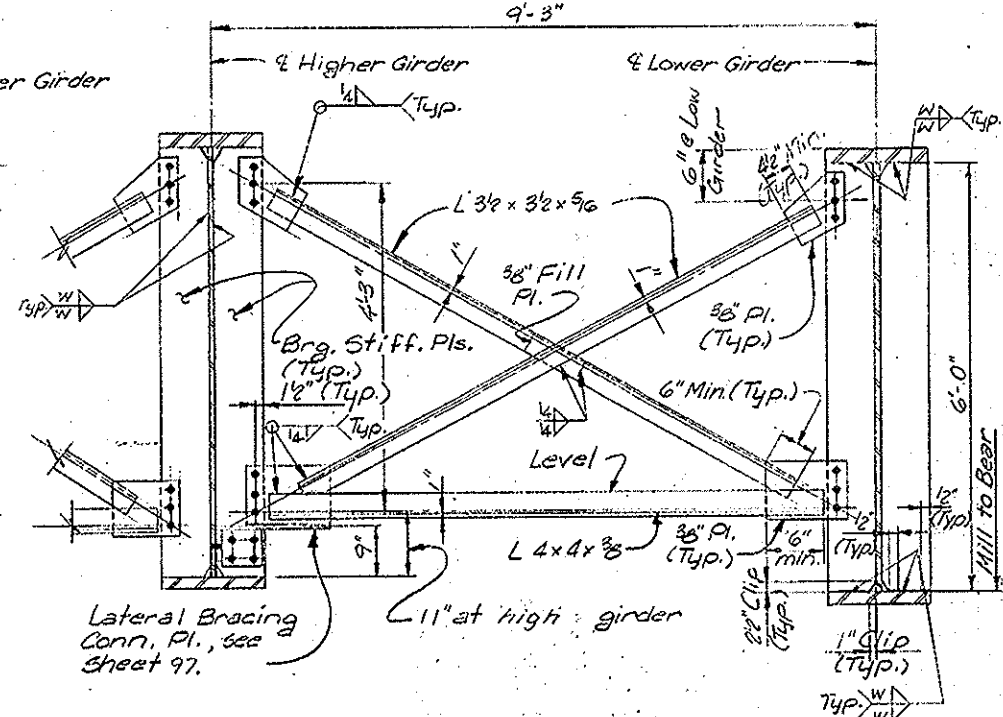
CHANGE SHEAR STUD SPACING FOR DECK PLANKS
 10/10/85
 SHEET NO. 95 OF 163



END CROSS FRAME CF-1



CROSS FRAME CF-2



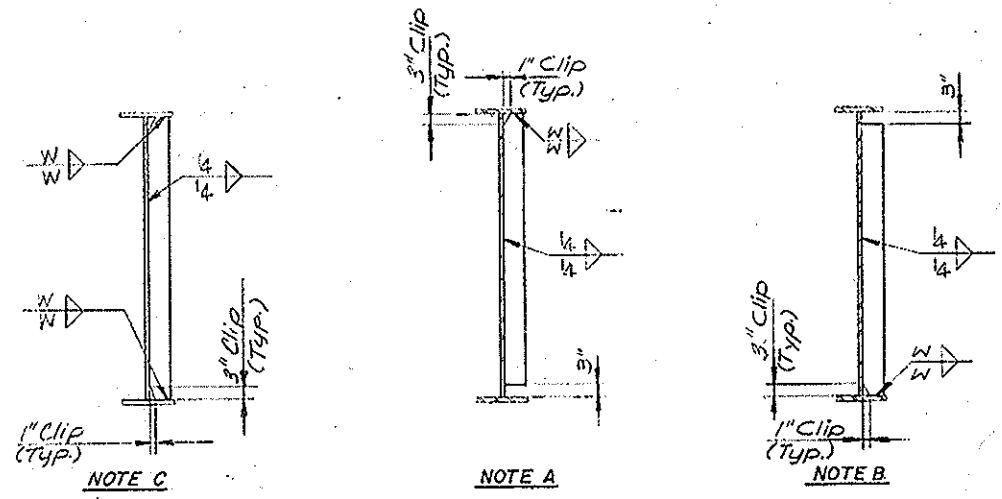
CROSS FRAME CF-4

Note: For treatment of Connection Plates see Notes A, B, & C.

NOTES

- Note A: Transverse Stiffeners and CF connection plates shall be welded to top flange of girder and cut short at bottom flange as shown.
 - Note B: Transverse Stiffeners and CF connection plates shall be welded to bottom flange of girder and cut short at top flange as shown.
 - Note C: Transverse Stiffeners and CF connection plates shall be welded to both top and bottom flanges as shown.
- Provide 1/16" holes for 1/2" H.S. bolts with 2 hardened washers over all oversize holes in cross frame connections.
- For location of cross frames and transverse stiffeners see Framing Plans.
- For Lateral Bracing Details see Sheet 97.
- All steel to be AASHTO 17-183 unless otherwise noted.

WELD SIZE TABLE	
Flange Plate Size	Weld Size W.
Over 1/2" to 3/4" incl.	1/4"
Over 3/4" to 1 1/2" incl.	5/16"
Over 1 1/2" to 2 1/4" incl.	3/8"
Over 2 1/4"	1/2"



TRANSVERSE STIFFENER AND CROSS FRAME CONNECTION PLATE DETAILS

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
CROSS FRAME DETAILS

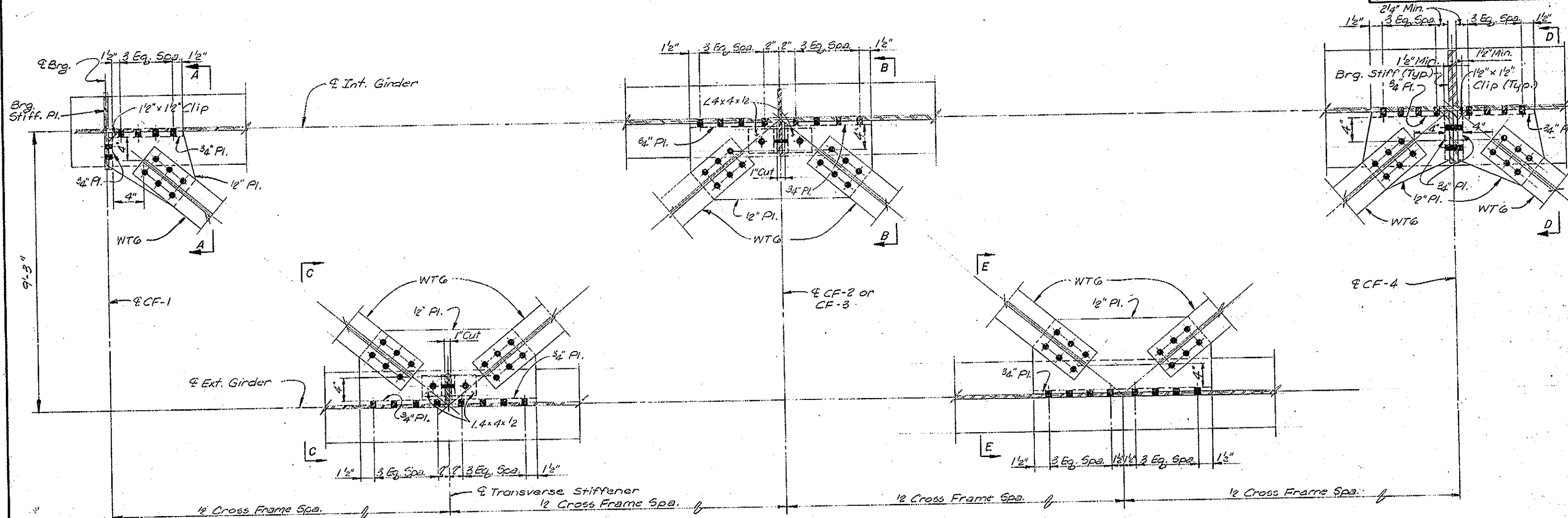
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

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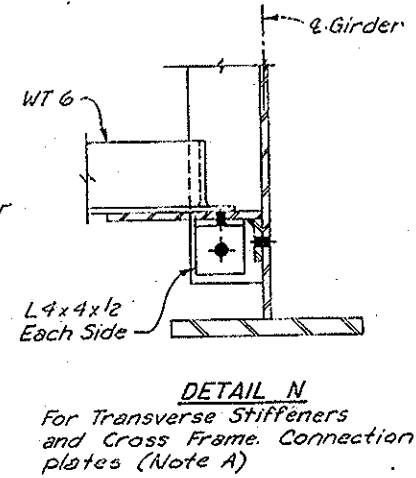
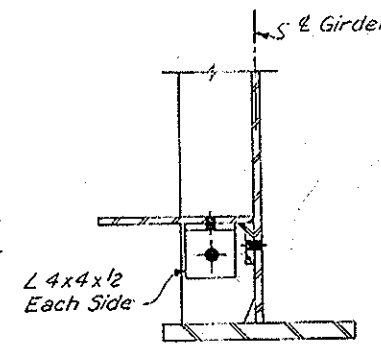
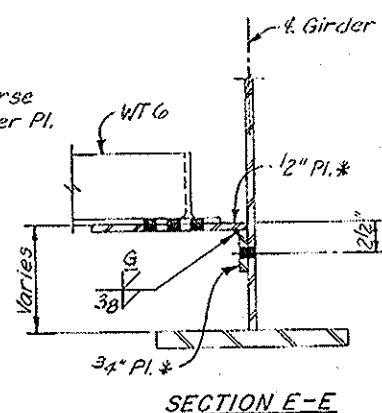
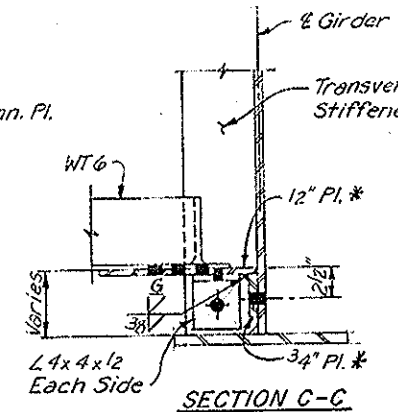
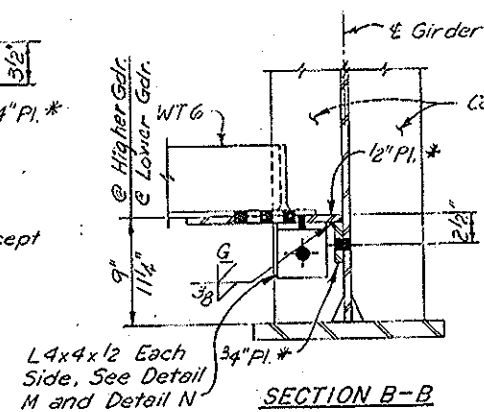
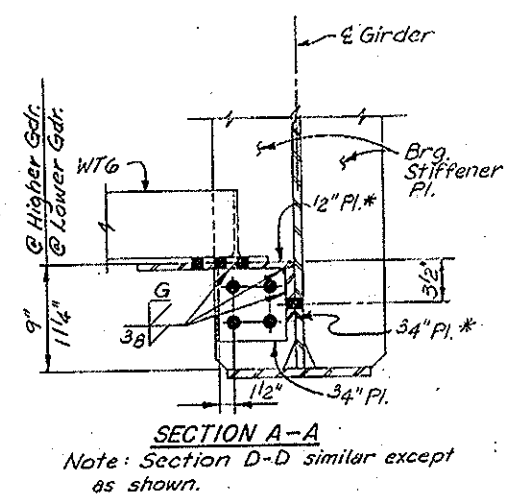
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

R. HOKURKA
DESIGNED
S. STODOLA
CHECKED
Stegman
DRAWN
C.A. LIZANA
CHECKED

6892
923461R



PART PLAN-LOWER LATERAL BRACING
 Notes: Provide $1\frac{1}{16}$ " holes for $\frac{1}{2}$ " H.S. bolts with 2 hardened washers for all bolted connections.
 For Intermediate and end cross frame details see Sheet 96.
 For Structural Steel Notes see Sheet 80.
 For Cross Frame Spacing see Framing Plans.
 For Notes A, B and C see Sheet 96.



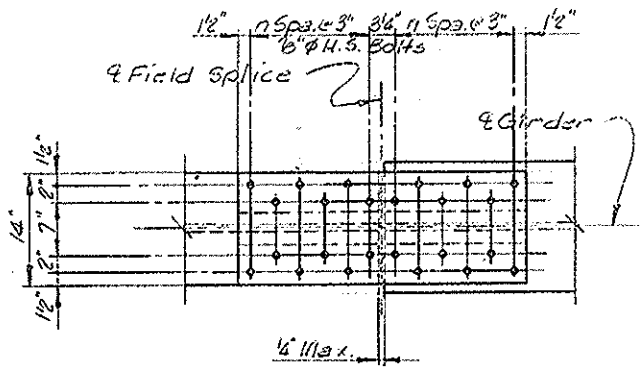
DESIGNED
R. Wokurka
 CHECKED
R. Butterfield
 DRAWN
C.A. LIZANA
 CHECKED
STEGMAN

* Note: Rather than the welded $\frac{1}{2}$ "- $\frac{3}{4}$ " Pl. Gusset shown, the Contractor may substitute a structural Tee of equal or greater thickness.

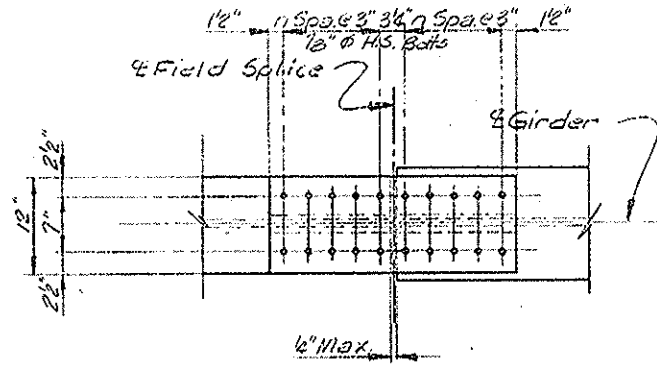
DETAIL M
 For Transverse Stiffeners and Cross Frame Connection plates (Note B & C).
 PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

SOUTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 LATERAL BRACING DETAILS
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.

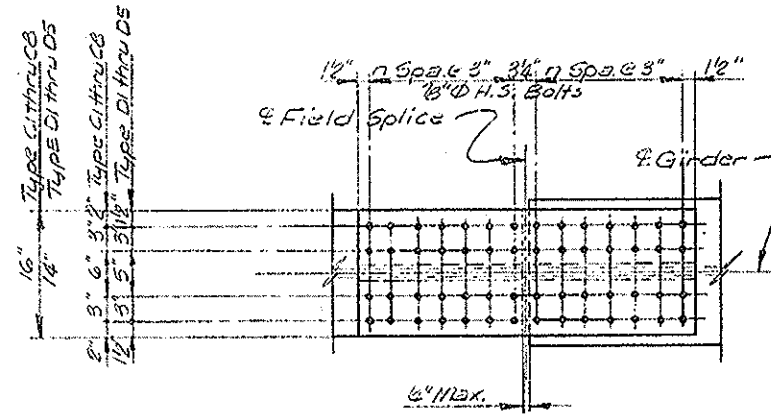
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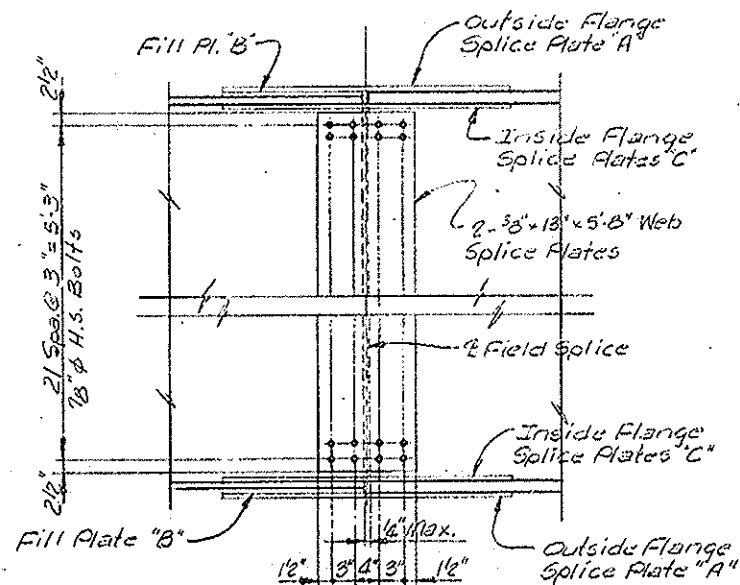
TOP FLANGE SPLICE TYPE A1, A2, A3



TOP FLANGE SPLICE TYPE B1 THRU B4
BOTTOM FLANGE SPLICE TYPE E1



BOTTOM FLANGE SPLICE TYPE C1 THRU C8 AND D1 THRU D6

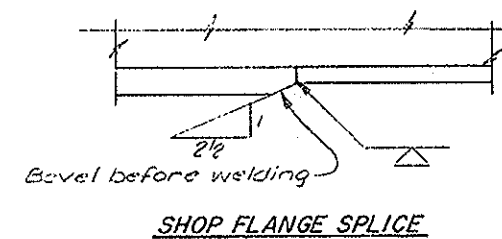


TYPICAL WEB SPLICE

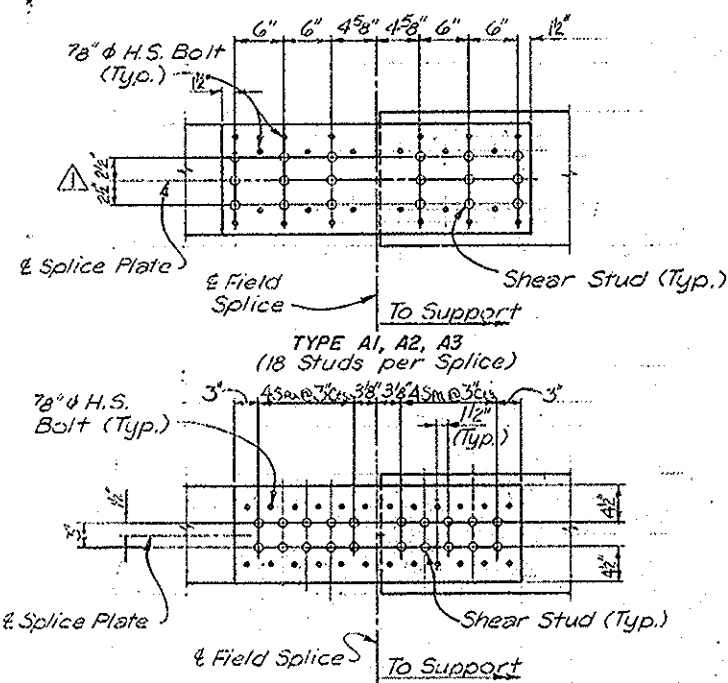
FIELD SPLICE DIMENSIONS					
Type	Plate A	Plate B	Plates C	n	Pl. Material
A1	3/8" x 14" x 3'-0 1/4"	3/4" x 14" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
A2	3/8" x 14" x 3'-0 1/4"	7/8" x 14" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
A3	3/8" x 14" x 3'-0 1/4"	5/8" x 14" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
B1	3/8" x 12" x 3'-0 1/4"	1/2" x 12" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
B2	3/8" x 12" x 3'-0 1/4"	3/8" x 12" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
B3	3/8" x 12" x 3'-0 1/4"	1/2" x 12" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
B4	3/8" x 12" x 3'-0 1/4"	1/8" x 12" x 1'-6"	2 - 5/8" x 5" x 3'-0 1/4"	5	M183
C1	1/2" x 16" x 3'-0 1/4"	1/4" x 16" x 1'-6"	2 - 5/8" x 7" x 3'-0 1/4"	5	M183 Grade 50
C2	1/2" x 16" x 3'-0 1/4"	3/8" x 16" x 1'-6"	2 - 5/8" x 7" x 3'-0 1/4"	5	M183 Grade 50
C3	3/8" x 16" x 3'-0 1/4"	1/4" x 16" x 1'-9"	2 - 1/2" x 7" x 3'-0 1/4"	6	M183 Grade 50
C4	3/8" x 16" x 3'-0 1/4"		2 - 1/2" x 7" x 3'-0 1/4"	6	M183 Grade 50
C5	1/2" x 16" x 2'-6 1/4"		2 - 5/8" x 7" x 2'-6 1/4"	4	M183
C6	1/2" x 16" x 2'-6 1/4"	1/4" x 16" x 1'-3"	2 - 5/8" x 7" x 2'-6 1/4"	4	M183
C7	1/2" x 16" x 2'-6 1/4"	1/8" x 16" x 1'-3"	2 - 9/16" x 7" x 2'-6 1/4"	4	M183
C8	1/2" x 16" x 2'-6 1/4"	1/8" x 16" x 1'-3"	2 - 9/16" x 7" x 2'-6 1/4"	4	M183
D1	3/4" x 14" x 3'-0 1/4"		2 - 5/8" x 6" x 3'-0 1/4"	5	M183 Grade 50
D2	1/2" x 14" x 2'-0 1/4"	3/8" x 14" x 1'-0"	2 - 5/8" x 6" x 2'-0 1/4"	3	M183
D3	1/2" x 14" x 2'-0 1/4"	1/8" x 14" x 1'-0"	2 - 5/8" x 6" x 2'-0 1/4"	3	M183
D4	1/2" x 14" x 2'-0 1/4"	1/8" x 14" x 1'-3"	2 - 5/8" x 6" x 2'-0 1/4"	4	M183 Grade 50
D5	1/2" x 14" x 2'-0 1/4"	1/8" x 14" x 1'-0"	2 - 5/8" x 6" x 2'-0 1/4"	3	M183
D6	1/2" x 14" x 2'-0 1/4"		2 - 5/8" x 6" x 2'-0 1/4"	3	M183
E1	3/8" x 12" x 3'-0 1/4"	1/8" x 12" x 1'-6"	2 - 3/4" x 5" x 3'-0 1/4"	5	M183 Grade 50

NOTES

All splice plate material to be AASHTO M183 unless otherwise noted.
For Notch Toughness Requirements see Structural Steel Notes, Sheet 80.
All splice plates except fill plates are N.T.R.
All bolt holes for splices are 15/16" ϕ .
All bolts in flange splices to be placed with bolt heads in up position. At top flange any washer, if used, shall be under nut only.



SHOP FLANGE SPLICE



SHEAR STUDS AT TOP FLANGE SPLICES

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
FIELD SPLICE DETAILS

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

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ST. LOUIS, MISSOURI

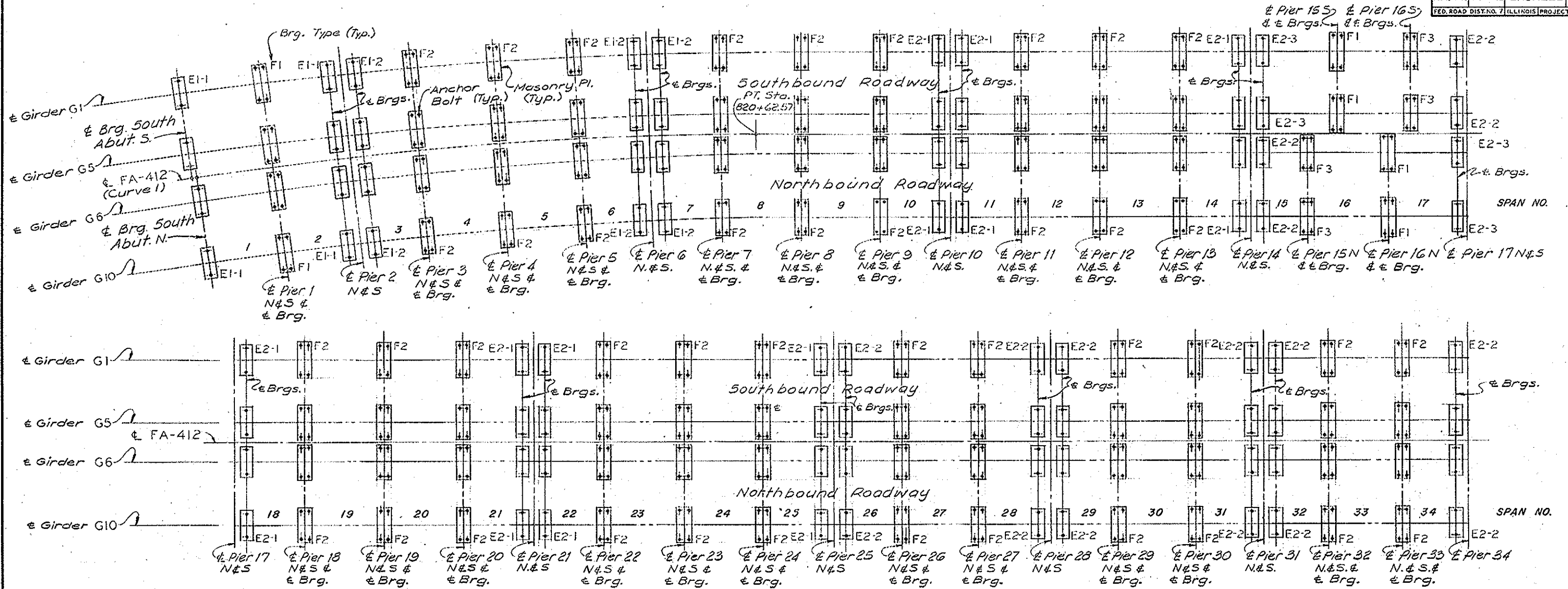
CHANGE SHEAR STUD SPACING FOR DECK PLANKS
SHEET NO. 98 OF 163

R. BUTTERFIELD
DESIGNED
S. STODOLA
CHECKED
Stegman
DRAWN
C. A. LIZANA
CHECKED

IAS REVISED I

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

12/11/85



NOTES
For Bearing Details see Sheet 100.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

BEARING LOCATION PLAN

FA-412 OVER ILLINOIS RIVER

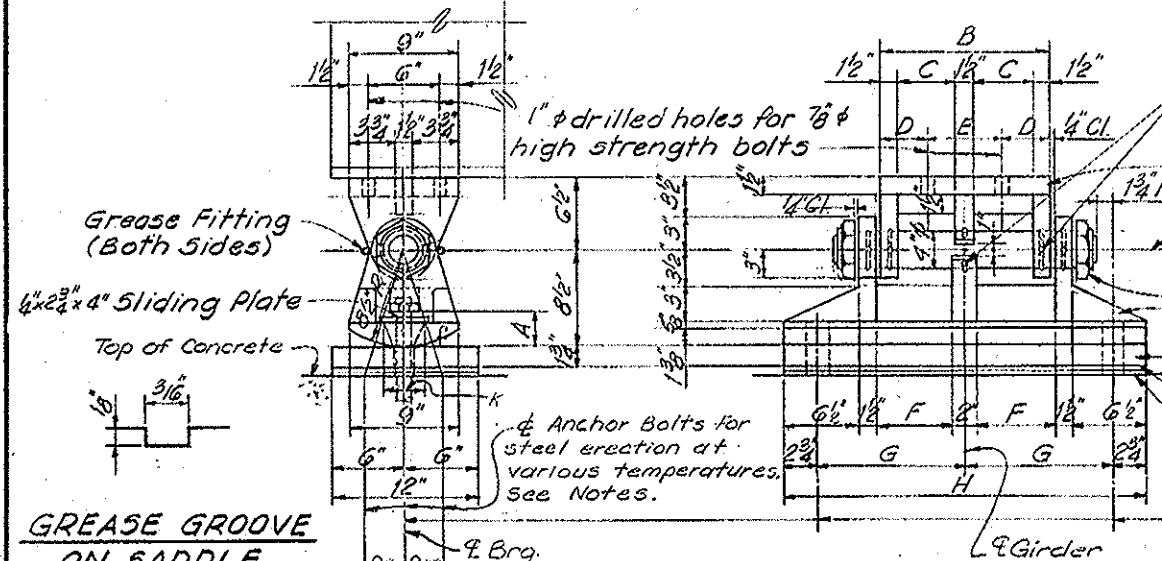
SECTION 50-4B PROJECT EBF-412-4 (6)

STA. 863 +16.00 (FA-412) LASALLE CO.

DESIGNED	R. Butterfield
CHECKED	L. Glaser
DRAWN	R. Luer
CHECKED	C.A. LIZANA

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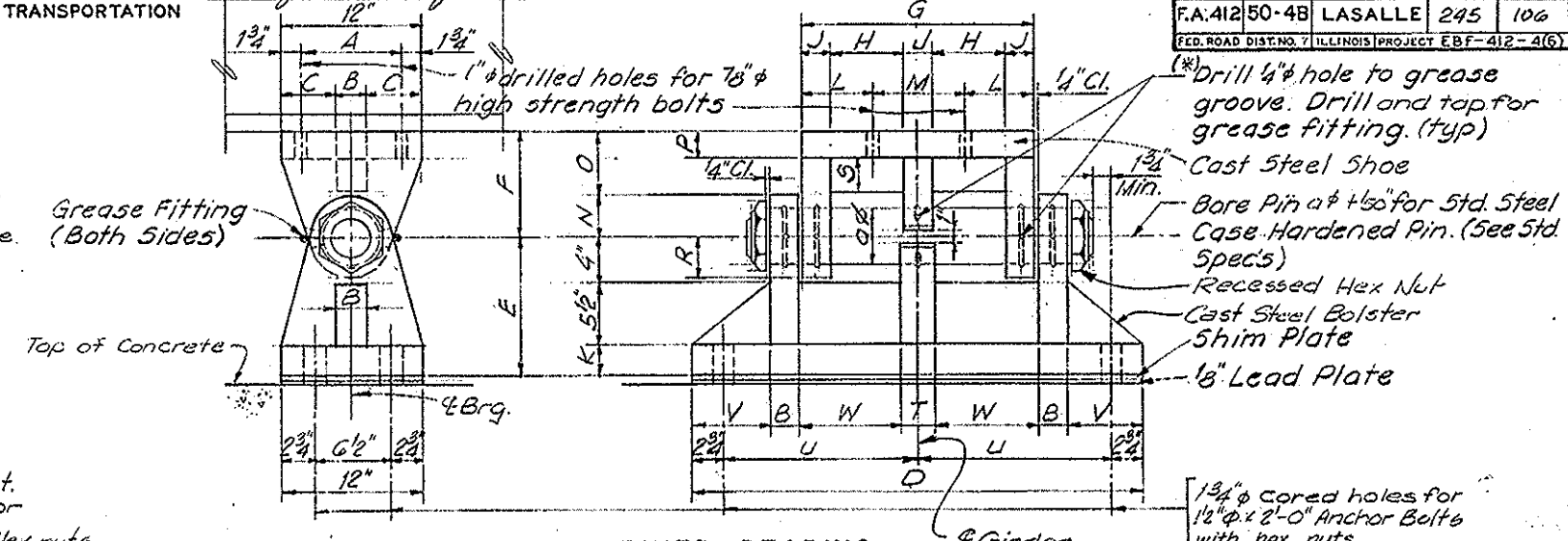
GREASE GROOVE ON SADDLE

Note: (*) Grease bearing assembly with molybdenum grease before installation.

EXPANSION BEARING

Note: Bearing stiffener Plates not shown.

BEARING DIMENSIONS										
TYPE	A	B	C	D	E	F	G	H	K	TOTAL REQ'D
E1-1	2 1/2"	14"	4 3/4"	4"	0"	6 1/4"	12 1/2"	2-6 1/2"	24"	20
E1-2	2 1/8"	14"	4 3/4"	4"	6"	6 1/4"	12 1/2"	2-6 1/2"	24"	30
E2-1	2 1/8"	12"	3 3/4"	3 1/4"	5 1/2"	5 1/4"	11 1/2"	2-4 1/2"	23 1/2"	70
E2-2	2 5/8"	12"	3 3/4"	3 1/4"	5 1/2"	5 1/4"	11 1/2"	2-4 1/2"	24"	70
E2-3	2 3/4"	12"	3 3/4"	3 1/4"	5 1/2"	5 1/4"	11 1/2"	2-4 1/2"	2 1/2"	10



FIXED BEARING

Note: Bearing stiffener Plates not shown.

BEARING DIMENSIONS																							
TYPE	a	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U	V	W	TOTAL REQ'D
F1	5"	8 1/2"	2 1/2"	4 3/4"	3-3"	12"	9 1/4"	1-8"	6 1/4"	2 1/2"	2 1/2"	6"	8"	3 5/8"	5 5/8"	2 1/4"	3 5/8"	3"	3"	1-4 3/4"	6 3/8"	8 3/4"	20
F2	4 3/4"	8 1/2"	2 1/4"	4 8"	3-0 1/2"	12"	8 3/4"	1-6"	5 3/8"	2 1/4"	2 1/2"	5 1/2"	7 1/2"	3 1/2"	5 1/4"	2"	3 1/2"	2 3/4"	2 3/4"	1-3 1/2"	6 3/4"	7 1/2"	210
F3	4 1/4"	8 1/2"	2"	5"	2-10"	11 1/4"	8 3/4"	1-4"	5"	2"	2 1/4"	4 1/2"	7"	3 1/2"	5 1/4"	1 3/4"	3 1/2"	3"	2 1/2"	1-2 1/4"	6 3/4"	7"	10

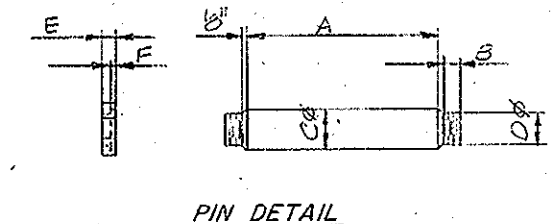
Notes: Structural Steel Weldments of equal sections and meeting AASHTO M183 may be substituted for the castings. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4" thickness of plate being welded, except maximum size of weld need not exceed 3/4".
For Anchor Bolts Detail See Sheet 101.

SHIM PLATE THICKNESS "t"											
LOCATION	GIRDER	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
4 Brg. Pier 2S, Span 2		1/2"	1/2"	1/2"	1/2"	1/2"					
4 Brg. Pier 2N, Span 2						1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
4 Brg. Pier 6S, Span 6		3/8"	3/8"	1/4"	1/4"	1/4"					
4 Brg. Pier 6N, Span 6						1/4"	3/8"	1/4"	1/4"	3/8"	3/8"
4 Brg. Pier 10, Span 10		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4 Brg. Pier 14, Span 14		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4 Brg. Pier 17, Span 17		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4 Brg. Pier 21, Span 21		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4 Brg. Pier 25, Span 25		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4 Brg. Pier 28, Span 28		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"
4 Brg. Pier 31, Span 31		1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARING

- D* (Side of brg. away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50° F.
D** (Side of brg. toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.
- After girders have been erected and dimensions D* & D** determined holes shall be drilled and anchor bolts shall be grouted in places.

PIN DIMENSIONS						
Type	A	B	C	D	E	F
E1-1	1-6 1/2"	13 1/2"	4"	3"	1 1/4"	3 1/2"
E1-2	1-6 1/2"	13 1/2"	4"	3"	1 1/4"	3 1/2"
E2-1	1-4 1/2"	13 1/2"	4"	3"	1 1/4"	3 1/2"
E2-2	1-4 1/2"	13 1/2"	4"	3"	1 1/4"	3 1/2"
E2-3	1-4 1/2"	13 1/2"	4"	3"	1 1/4"	3 1/2"
F1	2-2 3/4"	7 1/2"	5"	4"	1 1/2"	1 1/2"
F2	2-0 1/4"	12"	4 3/8"	3 1/2"	1 3/8"	1 1/2"
F3	1-9 1/4"	1 1/2"	4 1/4"	3 1/2"	1 1/2"	1 1/2"



R. WOKURKA
DESIGNED
R. BUTTERFIELD
CHECKED
R. LUER
DRAWN
C.A. LIZANA
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
BEARING DETAILS

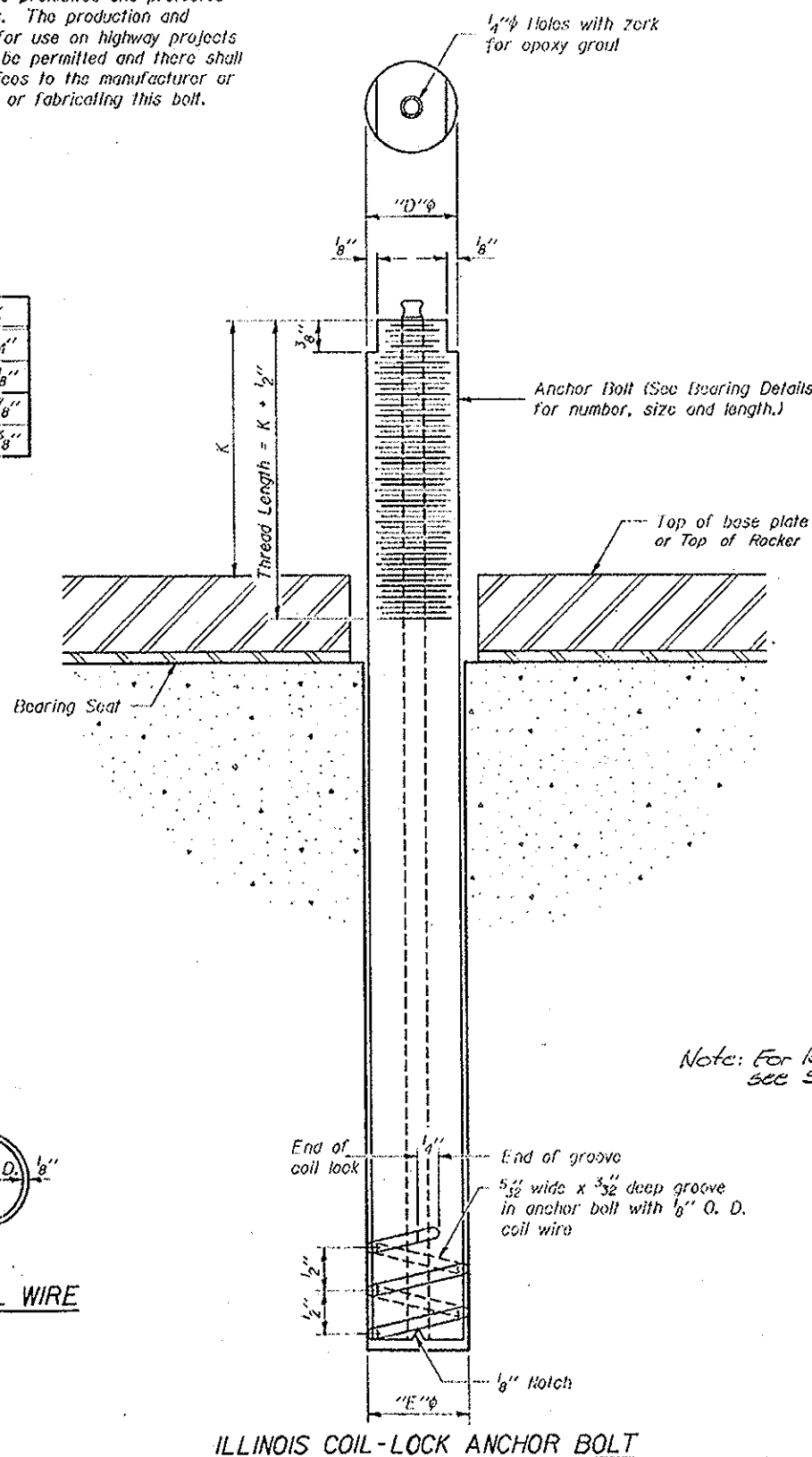
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	EDWY	NO. SHEETS	SHEET NO.
FA. 412	50-4B	LASALLE	245	107
FED. ROAD DIST. NO. Y		PLAN NO.	FED. PROJ. PRODUCT-EBF-412-4(6)	

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K
1"	1 1/8"	1 3/8"	1 3/4"
1 1/2"	1 5/8"	1 5/8"	2 1/8"
2"	2 1/8"	1 3/4"	2 7/8"
2 1/2"	2 5/8"	2 1/8"	3 3/8"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A513, Grade 1026 and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

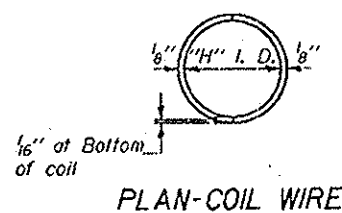
ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or in accordance with the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

Note: For length of Anchor Bolts see Sheet 100.

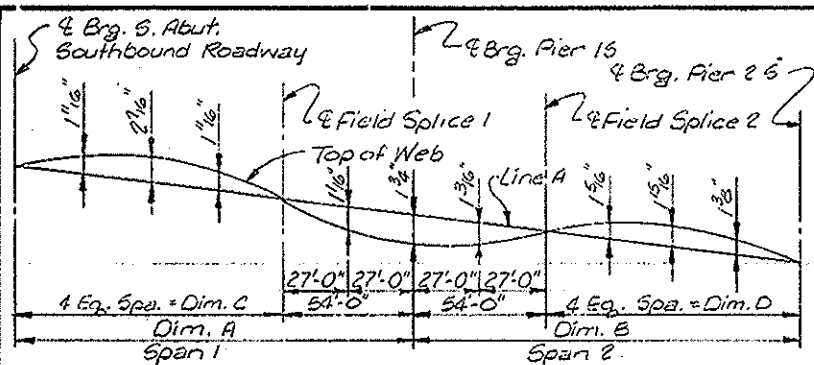


DESIGNED
CHECKED
DRAWN
CHECKED

ABB-1 6-15-83

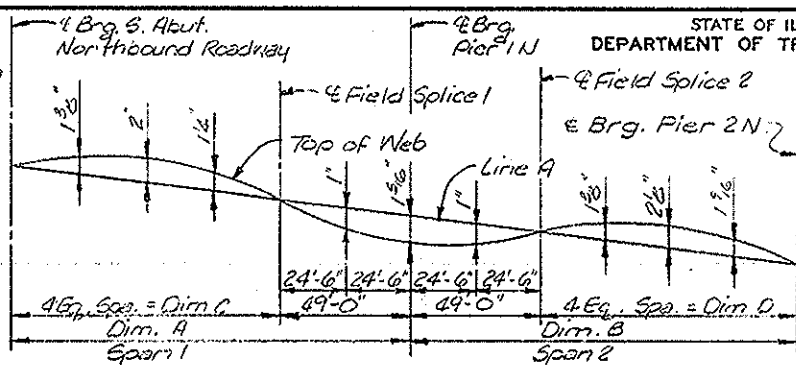
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
ANCHOR BOLTS

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B(C) PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



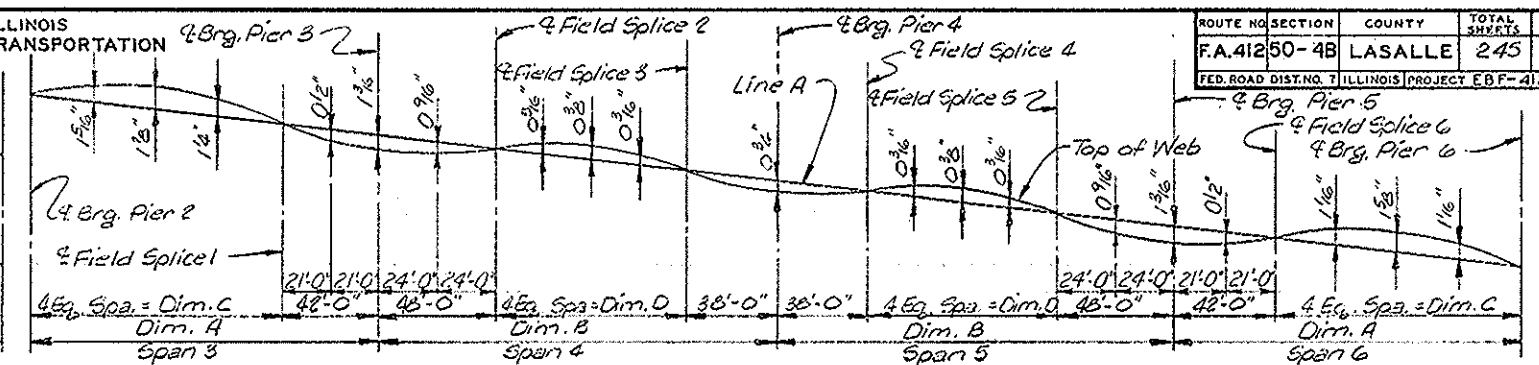
**CAMBER DIAGRAM - GIRDERS G1 THRU G5
SPANS 1 AND 2 - SOUTHBOUND ROADWAY**

Note: For dimensions A, B, C, & D see Sheet 80.



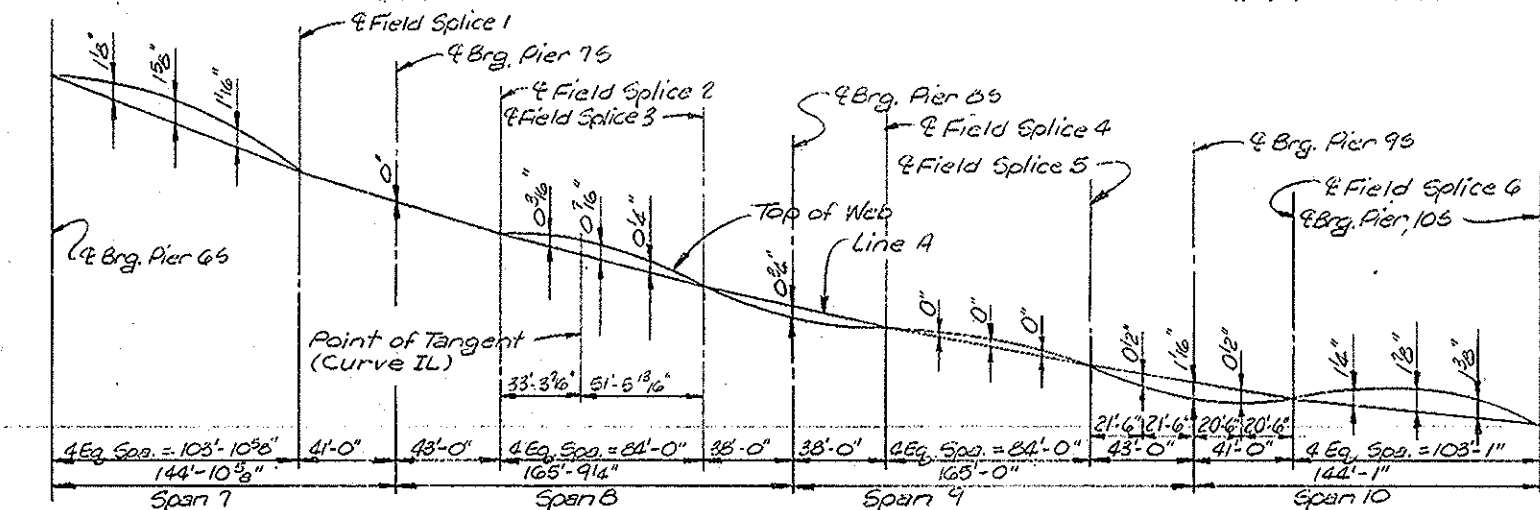
**CAMBER DIAGRAM - GIRDERS G6 THRU G10
SPANS 1 AND 2 - NORTHBOUND ROADWAY**

Note: For dimensions A, B, C, & D see Sheet B1

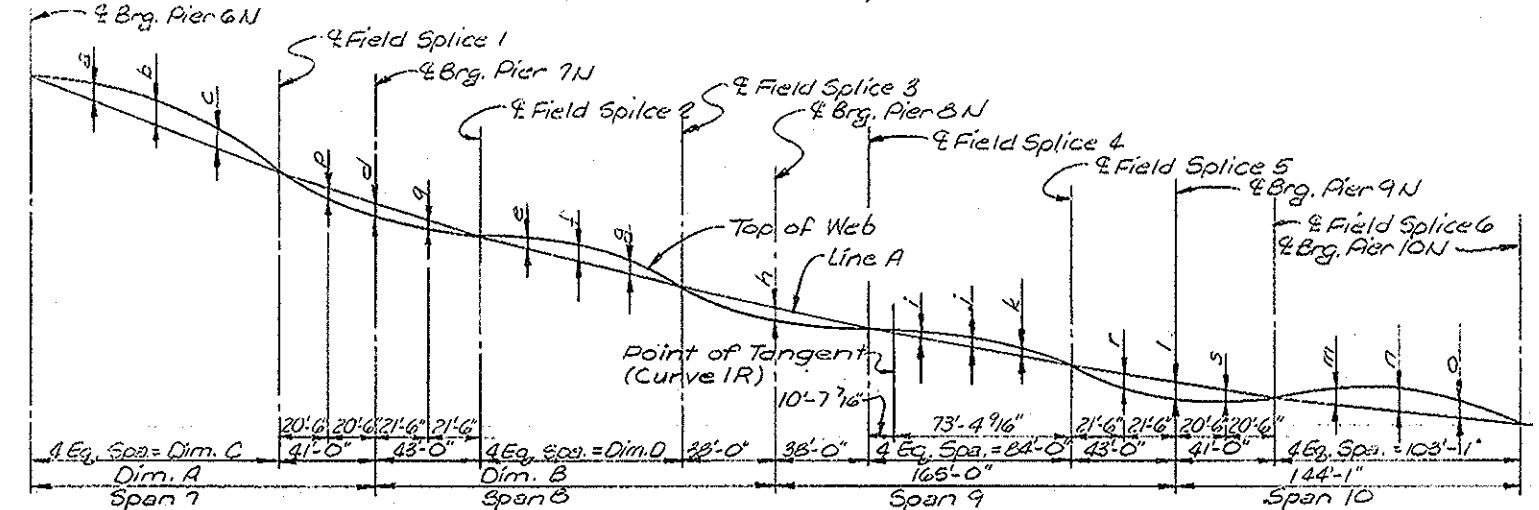


**CAMBER DIAGRAM - GIRDERS G1 THRU G10
SPANS 3 THRU 6 - NORTHBOUND AND SOUTHBOUND ROADWAYS**

Note: For dimensions A, B, C, & D see Sheet 82.

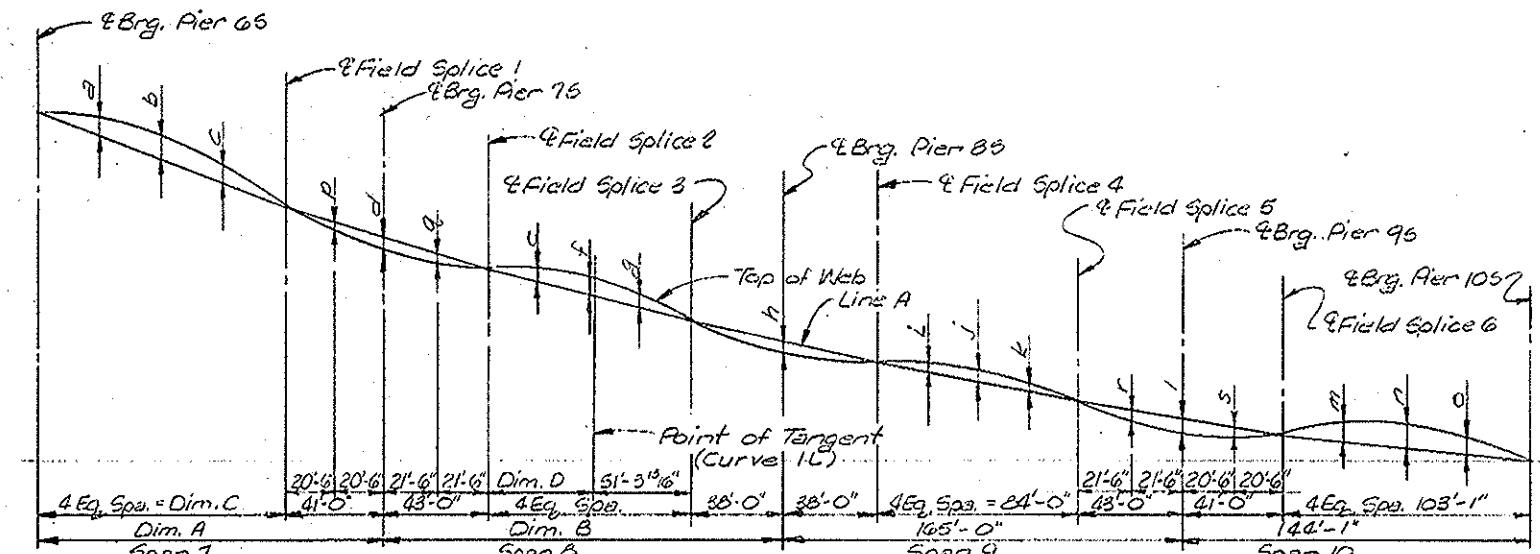


**CAMBER DIAGRAM - GIRDER G1
SPANS 7 THRU 10 - SOUTHBOUND ROADWAY**



**CAMBER DIAGRAM - GIRDERS G6 THRU G10
SPANS 7 THRU 10 - NORTHBOUND ROADWAY**

Note: For dimensions A, B, C, & D see Sheet 86.



**CAMBER DIAGRAM - GIRDERS G2 THRU G5
SPANS 7 THRU 10 - SOUTHBOUND ROADWAY**

Note: For dimensions A, B, C, & D see Sheet B4.

Girder	Dim.	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
G6	116"	128"	116"	116"	0 3/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0"	0"	0"	0"	116"	144"	128"	0 3/8"	0 3/8"	0 3/8"	0 3/8"
G7	116"	128"	116"	116"	0 3/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 3/8"	0 3/8"	0 3/8"	0 3/8"	116"	144"	128"	0 3/8"	0 3/8"	0 3/8"	0 3/8"
G8	116"	128"	116"	116"	0 3/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 3/8"	0 3/8"	0 3/8"	0 3/8"	116"	144"	128"	0 3/8"	0 3/8"	0 3/8"	0 3/8"
G9	116"	128"	116"	116"	0 3/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 3/8"	0 3/8"	0 3/8"	0 3/8"	116"	144"	128"	0 3/8"	0 3/8"	0 3/8"	0 3/8"
G10	116"	128"	116"	116"	0 3/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 3/8"	0 3/8"	0 3/8"	0 3/8"	116"	144"	128"	0 3/8"	0 3/8"	0 3/8"	0 3/8"

NOTES

Line A is a straight line between & bearing and & field splice and between & field splices at top of web plate.

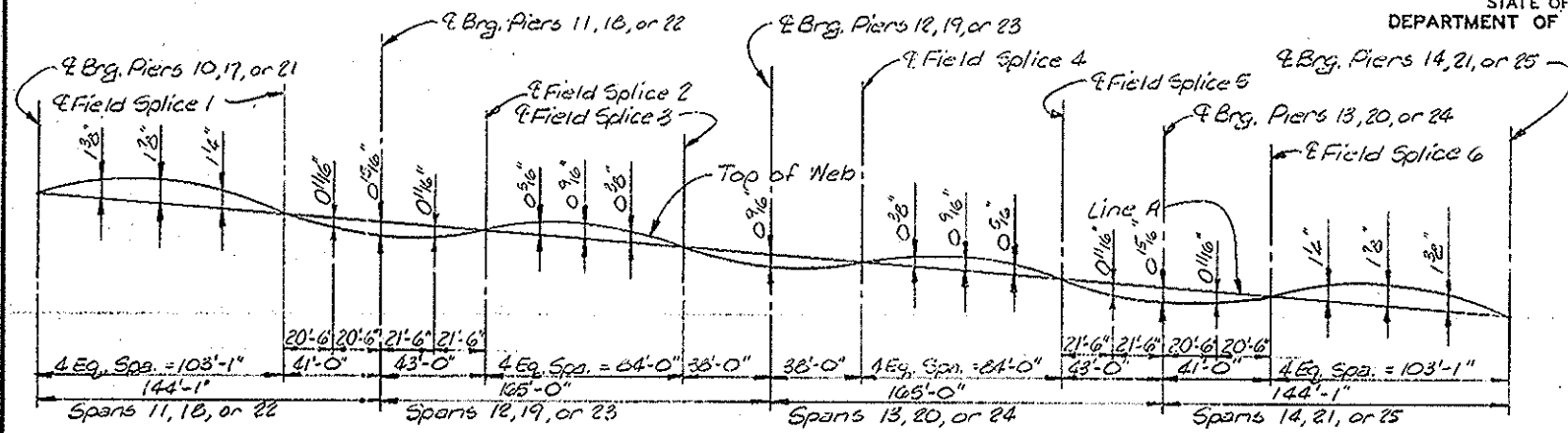
Stodola
DESIGNED
C. Lizana
CHECKED
STEGAN
DRAWN
C. Lizana
CHECKED

Girder	Dim.	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
G2	116"	128"	116"	0"	0 3/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0"	0"	0"	0"	116"	144"	128"	0"	0"	0 1/8"	0 1/8"
G3	116"	128"	116"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0"	0"	0"	0"	116"	144"	128"	3/8"	3/8"	0 1/8"	0 1/8"
G4	116"	128"	116"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	116"	144"	128"	0 1/8"	0 1/8"	0 1/8"	0 1/8"
G5	116"	128"	116"	1/4"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	0 1/8"	116"	144"	128"	0 1/8"	0 1/8"	0 1/8"	0 1/8"

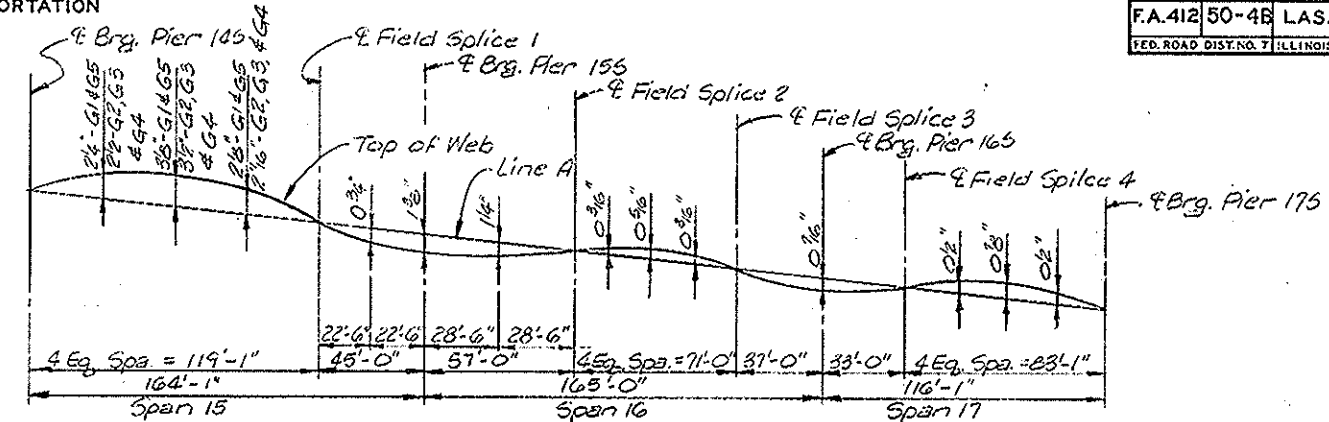
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

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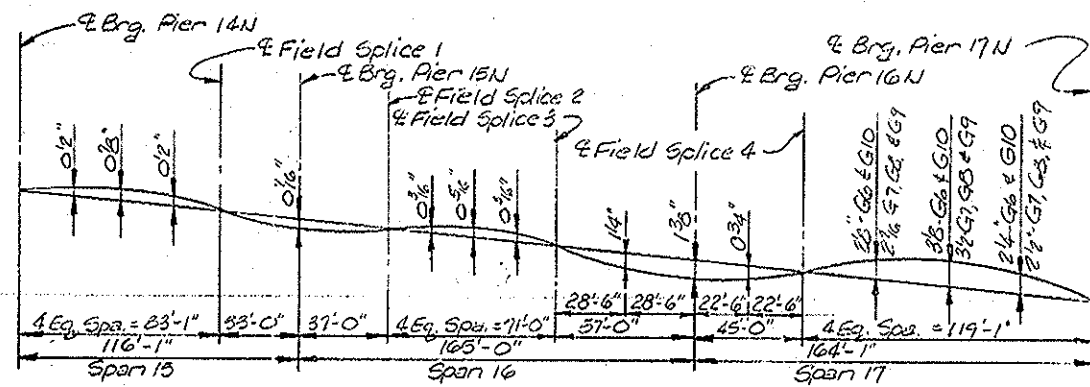
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
CAMBER DIAGRAMS-SPANS 1 THRU 10
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



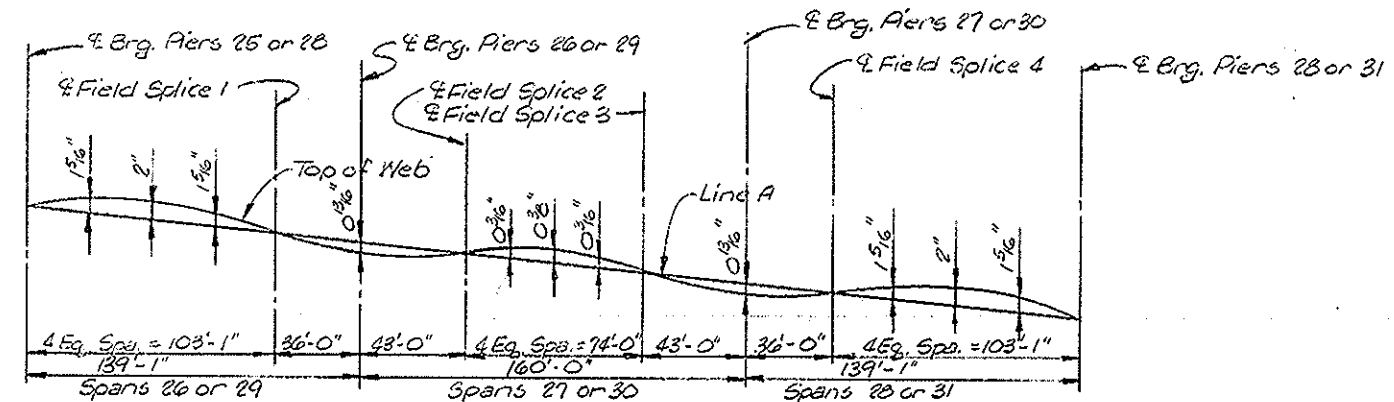
**CAMBER DIAGRAM - GIRDERS G1 THRU G10
SPANS 11 THRU 14, 18 THRU 21, AND
22 THRU 25 NORTHBOUND AND SOUTHBOUND ROADWAYS**



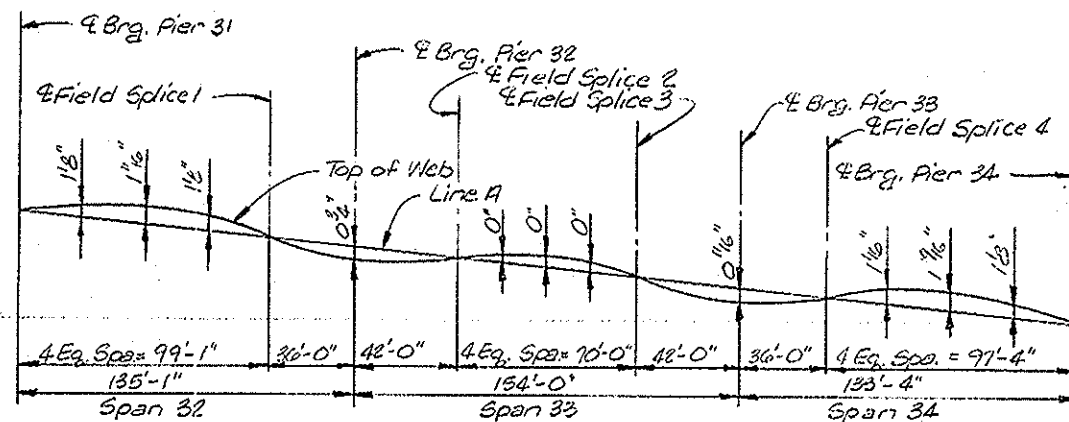
**CAMBER DIAGRAM - GIRDERS G1 THRU G5
SPANS 15 THRU 17 - SOUTHBOUND ROADWAY**



**CAMBER DIAGRAM - GIRDERS G6 THRU G10
SPANS 15 THRU 17 - NORTHBOUND ROADWAY**



**CAMBER DIAGRAM - GIRDERS G1 THRU G10
SPANS 26 THRU 28 AND 29 THRU 31
NORTHBOUND AND SOUTHBOUND ROADWAYS**



**CAMBER DIAGRAM - GIRDERS G1 THRU G10
SPANS 32 THRU 34 NORTHBOUND AND SOUTHBOUND ROADWAYS**

NOTES

Line A is a straight line between bearing and field splice, and between field splices at top of web plate.

DESIGNED	Stodola
CHECKED	C.A. LIZANA
DRAWN	STEGMAN
CHECKED	C.A. LIZANA

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
CAMBER DIAGRAMS SPANS 11 THRU 34
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
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INTERIOR GIRDER MOMENT TABLE

	SPANS 1 & 2						SPANS 3 THRU 6				SPANS 7 THRU 10						SPANS 11 THRU 14, 18 THRU 21, AND 22 THRU 25					
	N.B. Roadway			S.B. Roadway			0.4 Span 3	Pier 3	0.5 Span 4	Pier 4	0.4 Span 7	Pier 7	0.5 Span 8	Pier 8	0.5 Span 9	Pier 9	0.6 Span 10	0.4 Span 11, 18, & 22	Piers 11, 13, 18, 20, 22, & 24	0.5 Spans 12, 13, 19, 20, 23, & 24	Piers 12, 19, & 23	
	0.4 Span 1	Pier 1	0.6 Span 2	0.4 Span 1	Pier 1	0.6 Span 2	0.6 Span 6	Pier 5	0.5 Span 5	Pier 4	0.4 Span 7	Pier 7	0.5 Span 8	Pier 8	0.5 Span 9	Pier 9	0.6 Span 10	0.4 Span 11, 18, & 22	Piers 11, 13, 18, 20, 22, & 24	0.5 Spans 12, 13, 19, 20, 23, & 24	Piers 12, 19, & 23	
Is (in ⁴)	64,419	146,922	54,419	56,411	184,302	54,419	49,355	114,144	51,757	28,476	49,355	114,144	51,757	28,476	49,355	107,641	49,355	49,355	49,355	49,355	49,355	171
Ic n=9 (in ⁴)	136,093	---	136,093	142,571	---	136,093	127,491	---	136,655	---	127,491	---	136,655	---	129,019	---	127,491	127,491	---	129,019	---	---
Ic n=27 (in ⁴)	96,436	---	96,436	100,427	---	96,436	90,217	---	96,195	---	90,217	---	96,195	---	91,134	---	90,217	90,217	---	91,134	---	---
Ss (in ³)	1702	3829	1702	1810	4008	1702	1531	3003	1669	2859	1531	3003	1669	2859	1531	3003	1531	1531	2842	1531	1531	2194
Sc n=9 (in ³)	2369	---	2369	2512	---	2369	2187	---	2369	---	2187	---	2369	---	2226	---	2187	2187	---	2226	---	---
Sc n=27 (in ³)	2138	---	2138	2269	---	2138	1966	---	2138	---	1966	---	2138	---	2002	---	1966	1966	---	2002	---	---
Q (K/1)	1.188	1.747	1.188	1.165	1.764	1.188	1.144	1.669	1.153	1.608	1.144	1.669	1.153	1.608	1.144	1.669	1.144	1.144	1.654	1.144	1.144	1.593
M _D (K)	2010	-7920	2124	2406	-2432	2086	2003	-5805	1266	-4281	1982	-5840	1251	-4274	1237	-5654	1986	1973	-5661	1254	-4213	---
f _{s non-comp} (ksi)	14.2	25.0	15.0	15.9	25.3	14.7	15.7	23.2	9.1	21.8	15.6	23.3	9.0	21.8	9.5	23.9	15.6	15.6	23.9	9.6	23.0	---
S _D (K/1)	0.370	---	0.370	0.370	---	0.370	0.370	---	0.370	---	0.370	---	0.370	---	0.370	---	0.370	0.370	---	0.370	---	---
M _{sD} (K)	817	---	864	925	---	831	757	---	593	---	156	---	591	---	888	---	751	749	---	592	---	---
f _{s comp} n=27 (ksi)	4.6	---	4.6	4.9	---	4.7	4.4	---	3.3	---	4.6	---	3.3	---	3.5	---	4.6	4.6	---	3.5	---	---
M _L (K)	3813	-4813	3885	4137	-5101	3926	3523	-4152	3538	-3780	3514	-4160	3549	-3795	3490	-4073	3491	3491	-4080	3506	-3708	---
M imp. (K)	674	-847	682	711	-884	686	650	-739	608	-649	648	-740	610	-658	602	-727	647	646	-728	604	-689	---
f _{s comp} n=9 (ksi)	22.7	17.5	23.1	23.2	17.9	23.4	22.9	19.6	21.0	22.5	22.8	19.6	21.1	22.6	22.1	20.3	22.7	22.7	20.3	22.2	23.7	---
f _{s Total} (ksi)	41.5	42.5	42.9	44.0	43.2	42.8	43.0	42.7	33.4	44.3	43.0	42.9	33.4	44.4	35.1	44.2	42.9	42.8	44.2	36.3	46.7	---
VR (K)	28.0	---	39.1	41.1	---	40.2	36.1	---	42.1	---	36.2	---	42.2	---	41.6	---	35.7	25.6	---	41.6	---	---

INTERIOR GIRDER REACTION TABLE

	SPANS 1 & 2						SPANS 3 THRU 6				SPANS 7 THRU 10						SPANS 11 THRU 14, 18 THRU 21, AND 22 THRU 25				
	N.B. Roadway			S.B. Roadway			Pier 2 Span 3	Pier 3	Pier 4	Pier 6 Span 7	Pier 7	Pier 8	Pier 9	Pier 10	Pier 10 Span 11	Pier 14 Span 14	Piers 11, 13, 18, 20, 22, & 24	Piers 12, 19 & 23			
	S. Abut.	Pier 1	Pier 2 Span 2	S. Abut.	Pier 1	Pier 2 Span 2	Pier 6 Span 6	Pier 5	Pier 4	Pier 6 Span 7	Pier 7	Pier 8	Pier 9	Pier 10	Pier 10 Span 11	Pier 14 Span 14	Pier 21 Span 21	Pier 25 Span 25	Piers 11, 13, 18, 20, 22, & 24	Piers 12, 19 & 23	
R _D (K)	22.4	392.7	24.4	25.6	344.4	23.2	20.1	22.2	242.8	79.7	222.5	242.2	278.2	79.6	79.8	60.3	60.3	278.2	240.6	---	---
R _L (K)	62.0	132.5	62.4	63.8	156.7	62.6	60.9	62.1	123.9	60.4	126.1	123.9	125.2	60.3	60.3	11.2	11.2	125.3	123.2	---	---
Imp. (K)	11.0	23.3	11.0	11.0	23.5	11.0	11.2	22.4	21.3	11.2	22.4	21.3	22.3	11.2	11.2	11.2	11.2	22.4	21.2	---	---
R Total (K)	155.4	428.5	157.8	163.4	508.6	156.8	151.8	430.8	388.0	151.3	431.0	387.4	425.7	151.1	151.3	425.9	425.9	425.9	385.0	---	---

INTERIOR GIRDER MOMENT TABLE

	SPANS 15 THRU 17						SPANS 26 THRU 28, AND 29 THRU 31						SPANS 32 THRU 34					
	N.B. Roadway			S.B. Roadway			0.4 Span 26	Piers 26, 27, 29, & 30	0.5 Span 27	0.4 Span 32	Pier 32	0.5 Span 33	Pier 33	0.6 Span 34				
	0.4 Span 15	Pier 15	0.5 Span 16	Pier 16	0.6 Span 17	0.4 Span 26	Piers 26, 27, 29, & 30	0.5 Span 27	0.4 Span 32	Pier 32	0.5 Span 33	Pier 33	0.6 Span 34					
Is (in ⁴)	39,362	69,201	45,834	139,890	56,411	47,493	82,171	47,493	47,493	82,171	45,834	82,171	47,493					
Ic n=9 (in ⁴)	97,091	---	115,843	142,571	---	121,483	---	121,483	---	115,843	---	121,483	---					
Ic n=27 (in ⁴)	70,710	---	82,985	100,427	---	86,469	---	86,469	---	82,985	---	86,469	---					
Ss (in ³)	1071	1828	1344	5680	1810	1438	2199	1438	2199	1344	2199	1438						
Sc n=9 (in ³)	1976	---	1937	2512	---	2062	---	2062	---	1937	---	2062	---					
Sc n=27 (in ³)	1406	---	1737	2269	---	1852	---	1852	---	1737	---	1852	---					
Q (K/1)	1.116	1.560	1.133	1.730	1.165	1.139	1.593	1.139	1.139	1.593	1.133	1.593	1.139					
M _D (K)	1289	-3550	936	-7195	2715	1996	-4725	1060	1893	-4441	965	-4341	1829					
f _{s non-comp} (ksi)	14.4	22.9	8.3	23.7	16.0	16.7	25.8	8.8	15.8	24.2	8.6	23.7	15.3					
S _D (K/1)	0.370	---	0.370	---	0.370	0.370	---	0.370	0.370	---	0.370	---	0.370	---				
M _{sD} (K)	481	---	518	---	986	736	---	550	695	---	503	---	671	---				
f _{s comp} n=27 (ksi)	4.1	---	3.6	---	5.2	---	3.6	---	4.5	---	3.5	---	4.3	---				
M _L (K)	2790	-3031	3300	-4811	4185	3400	-3489	3269	3291	-3309	3097	-3271	3240	---				
M imp. (K)	577	-578	569	-830	721	642	-634	573	631	-613	555	-609	626	---				
f _{s comp} n=9 (ksi)	25.7	23.5	24.0	18.5	23.4	23.5	22.5	22.4	22.8	21.4	22.6	21.2	22.5	---				
f _{s Total} (ksi)	44.2	46.4	35.9	42.2	46.6	45.0	43.3	34.8	43.1	45.6	34.7	44.9	42.1	---				
VR (K)	77.7	---	90.3	---	90.9	82.5	---	86.9	81.0	---	85.0	---	80.6	---				

INTERIOR GIRDER REACTION TABLE

	SPANS 15 THRU 17				SPANS 26 THRU 28, AND 29 THRU 31				SPANS 32 THRU 34			
	N.B. Roadway		S.B. Roadway		Pier 25 Span 26, Pier 28 Span 28	Piers 26, 27, 29, & 30	Pier 31 Span 32	Pier 32	Pier 33	Pier 34		
	Pier 15 Span 15	Pier 15	Pier 16	Pier 17 Span 17	Pier 28 Span 29, Pier 31 Span 31	Piers 26, 27, 29, & 30	Pier 31 Span 32	Pier 32	Pier 33	Pier 34 Span 34		
R _D (K)	63.9	221.5	313.6	42.8	79.3	256.8	77.4	247.7	245.0	75.9		
R _L (K)	57.7	112.1	132.1	64.2	59.3	119.1	59.2	116.0	115.4	59.0		
Imp. (K)	11.9	21.2	22.8	11.1	11.2	21.7	11.3	21.5	21.5	11.4		
R Total (K)	133.5	354.8	468.5	168.1	149.8	397.6	147.9	385.2	381.9	146.3		

NOTES

Is and Ss are the moment of inertia and section modulus of the steel section used in computing f_{s Total}.
Ic and Sc are the moment of inertia and section modulus of the composite section used in computing f_{s Total}.
VR is the maximum L_t + Impact shear range in span.
The load factor (1.3)[2 + 1/2(L_t + Imp.)] is used in computing moments and stresses.

BUTTERFIELD
DESIGNED
RITZHEIMER
CHECKED
STEGMAN
DRAWN
C. A. LIZANA
CHECKED

682
685/05

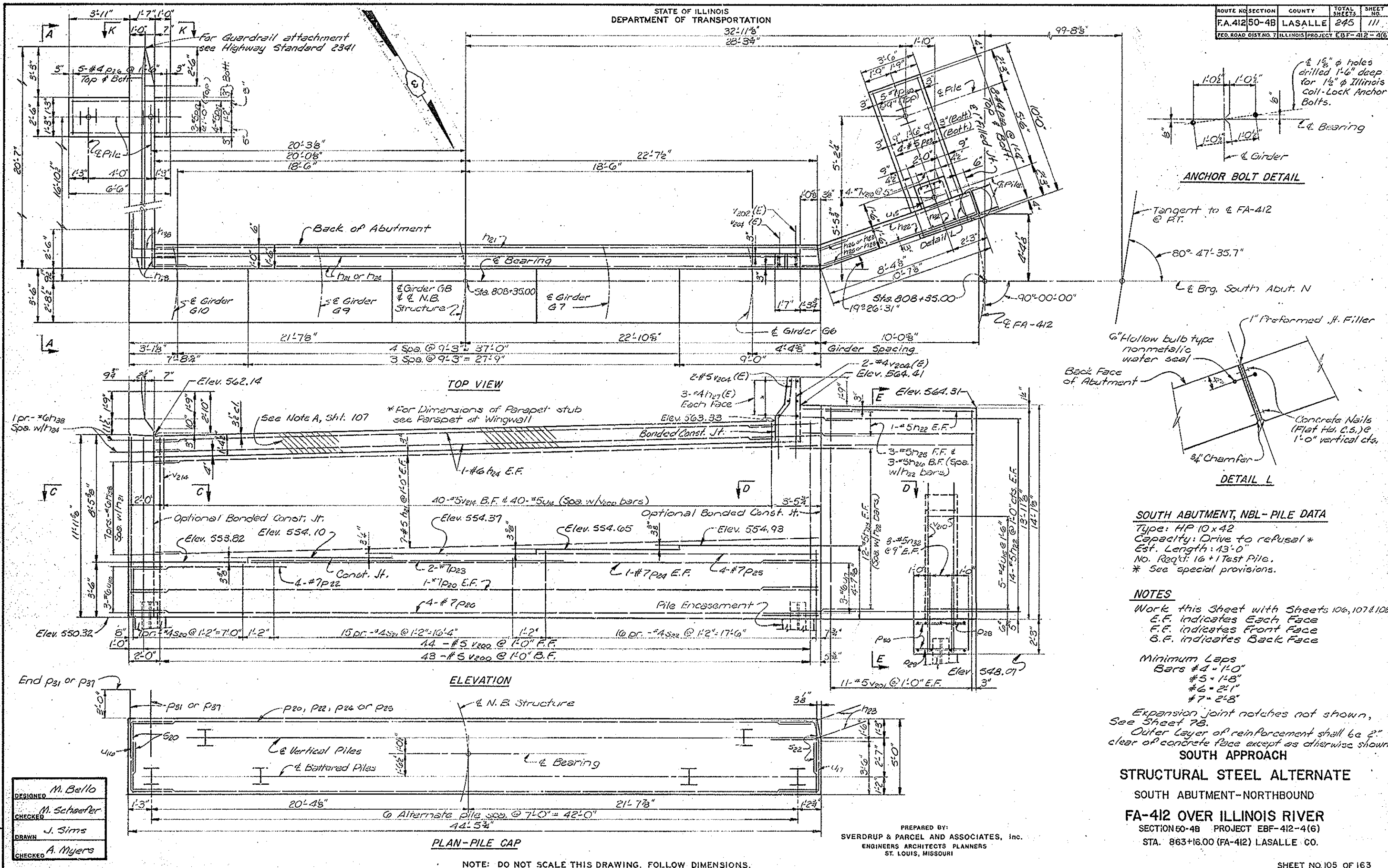
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
STRESS TABLES
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 104 OF 163

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	111

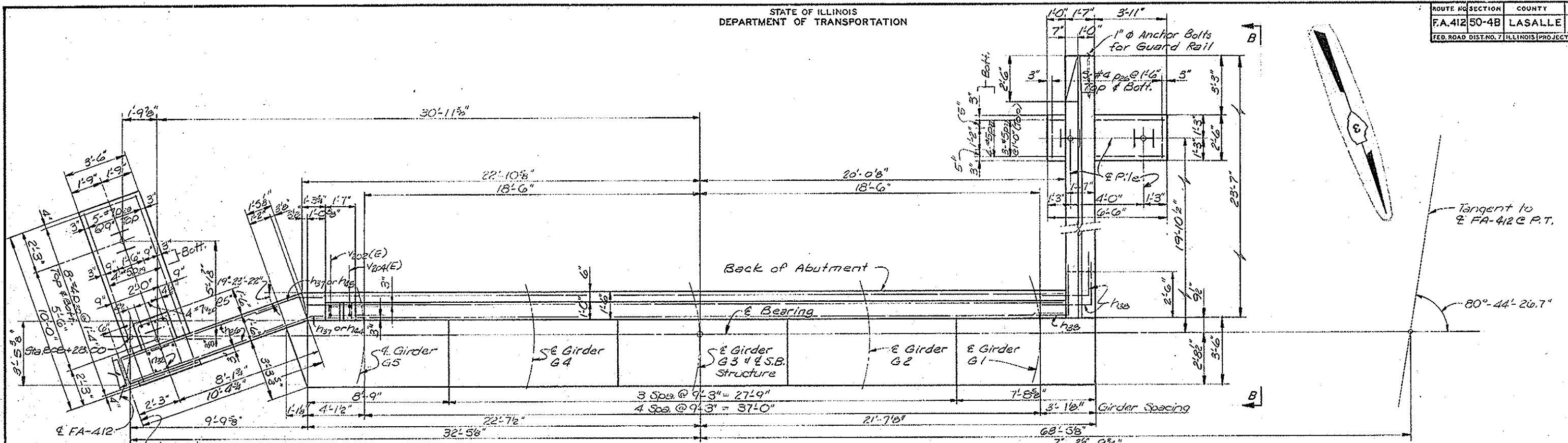


DESIGNED M. Bello
CHECKED M. Schaefer
DRAWN J. Sims
CHECKED A. Myers

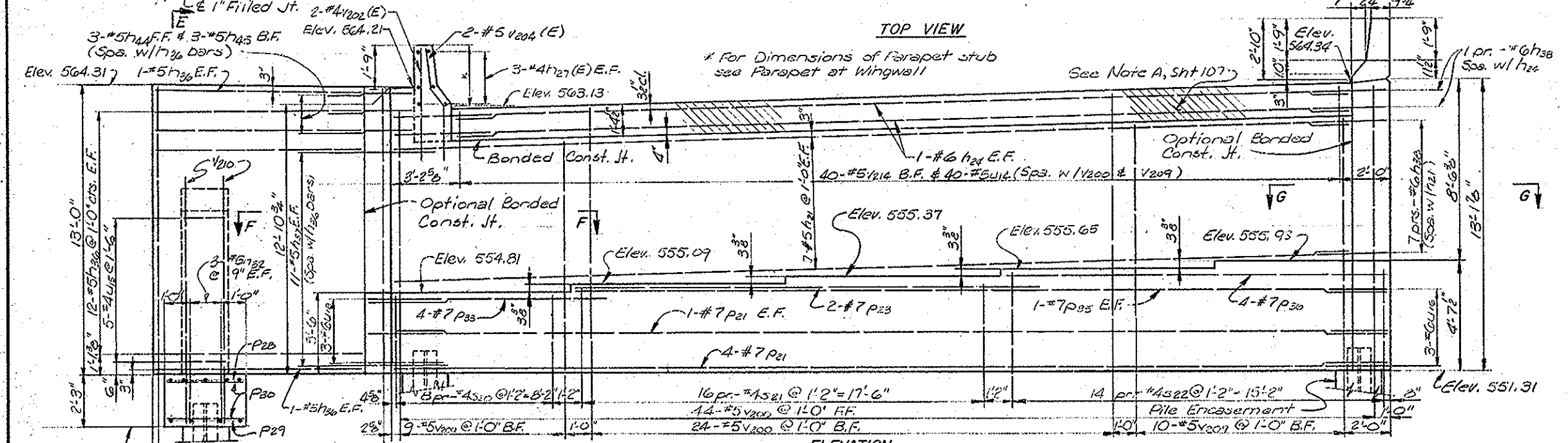
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SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SOUTH ABUTMENT-NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

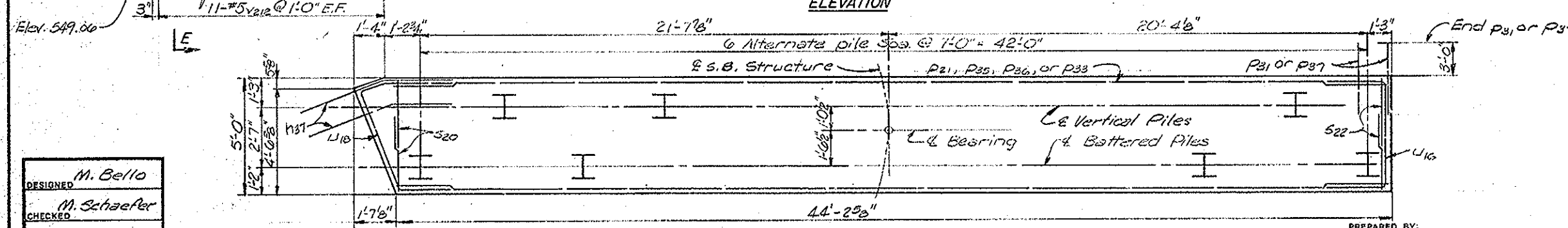
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



TOP VIEW



ELEVATION



PLAN-PILE CAP

SOUTH ABUTMENT, SBL-PILE DATA
 Type: HP 10 x 42
 Capacity: Drive to refusal *
 Est. Length: 43'-0"
 No. Req'd: 17
 * See Special Provisions.

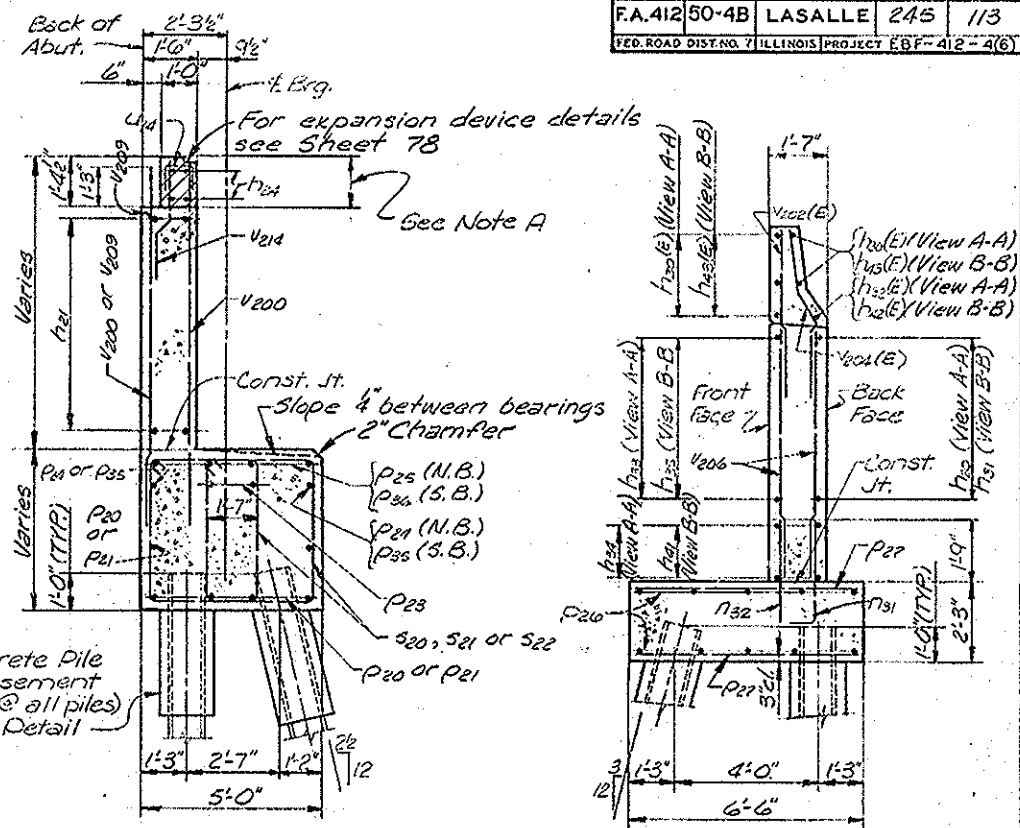
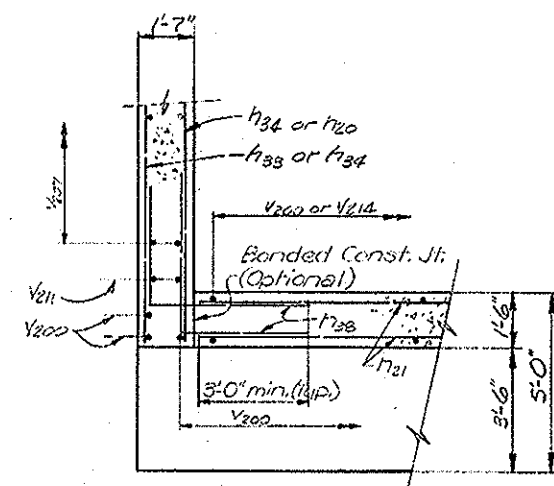
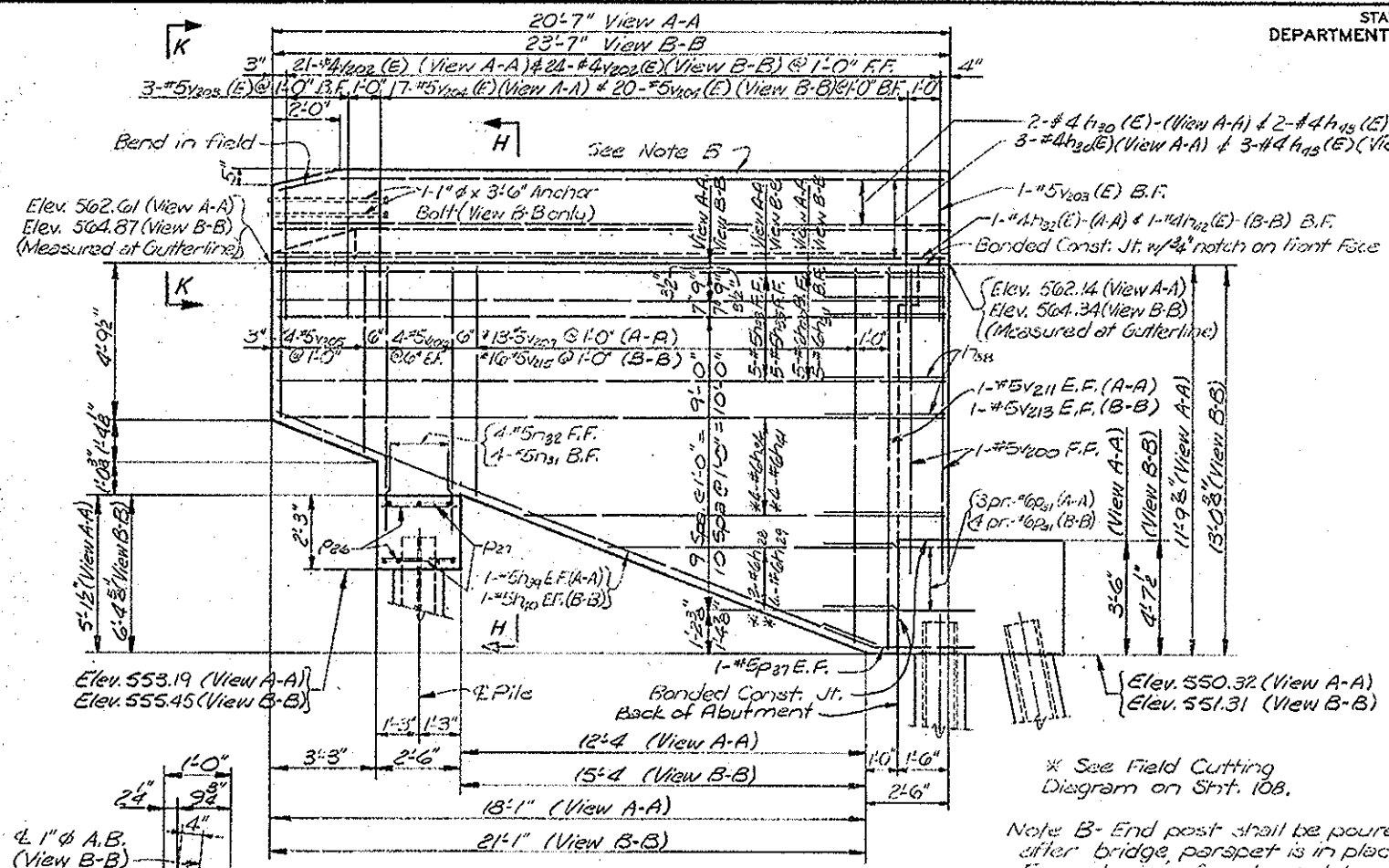
NOTES
 Work this Sheet with Sheets 105, 107 & 108.
 E.F. indicates Each Face
 F.F. indicates Front Face
 B.F. indicates Back Face
 Minimum Caps
 Bars #4 = 1'-0"
 #5 = 1'-8"
 #6 = 2'-1"
 #7 = 2'-8"
 Expansion joint notches not shown,
 See Sheet 78.

**SOUTH APPROACH
 STRUCTURAL STEEL ALTERNATE**
 SOUTH ABUTMENT - SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.

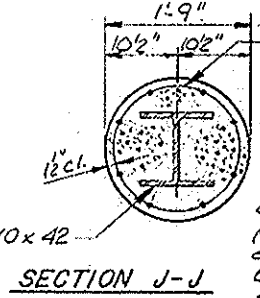
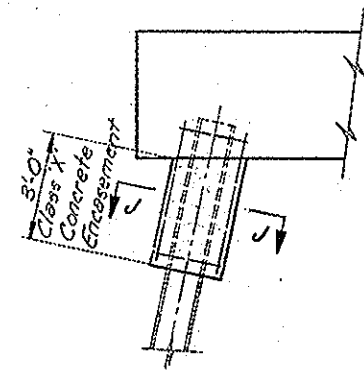
DESIGNED M. Bello
 CHECKED M. Schaefer
 DRAWN J. Sims
 CHECKED A. Myers

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

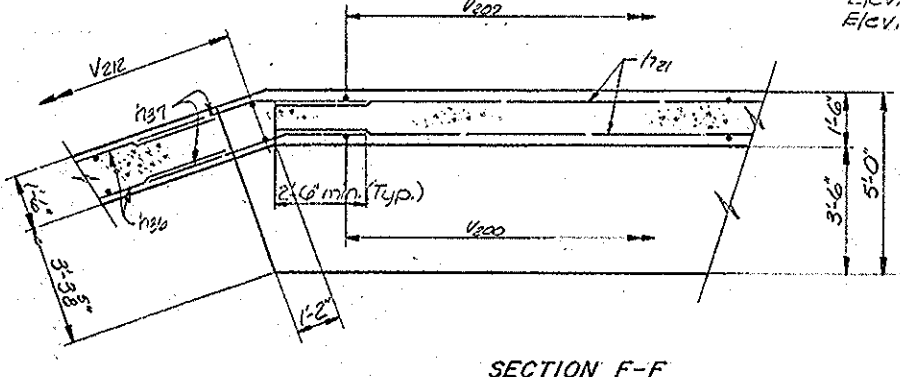
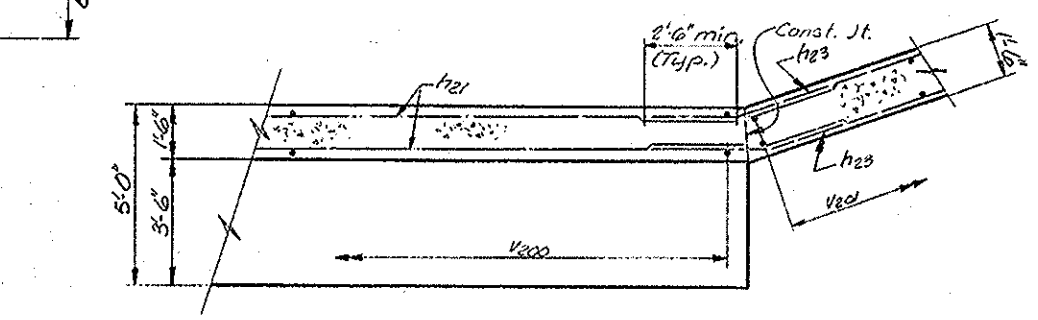
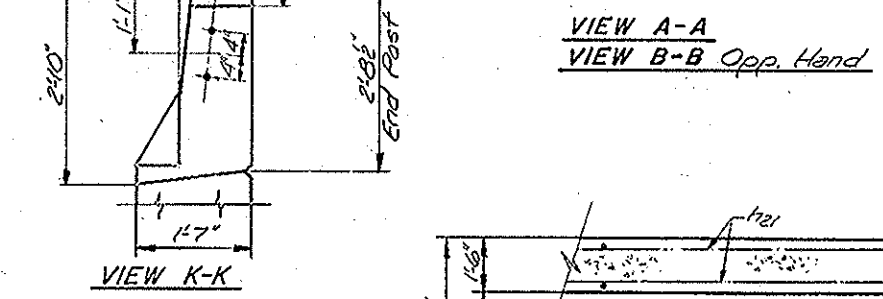


Note A: Top of Backwall (Hatched Area) to be placed with superstructure concrete. Quantity is included in Superstructure Quantity for Class X Concrete.



NOTES
Work this sheet with sheets 105, 106 & 108. Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SOUTH ABUTMENT
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B(C) PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



DESIGNED M. Bello
CHECKED M. Schaefer
DRAWN J. Sims
CHECKED A. Myers

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

BILL OF MATERIAL

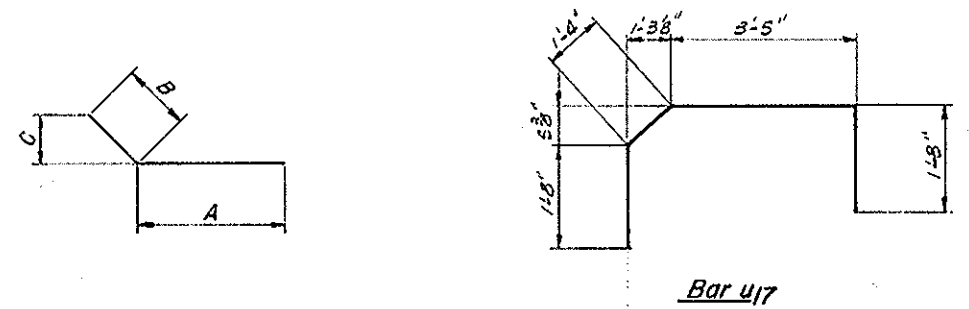
South Abutment - Northbound				
Bar	No.	Size	Length	Shape
h20	5	#6	20'-4"	—
h21	14	#5	42'-5"	—
h22	30	#5	10'-2"	—
h23	24	#5	5'-6"	—
h24	4	#6	39'-10"	—
h25	3	#5	4'-1"	—
h26	3	#5	3'-6"	—
h27(E)	6	#4	10'	—
*h28	3	#6	11'-10"	—
h30(E)	5	#4	20'-5"	—
h32(E)	1	#4	19'-11"	—
h33	5	#5	20'-4"	—
*h34	4	#6	31'-5"	—
h35	18	#6	7'-6"	—
h39	2	#5	19'-7"	—
s20	14	#4	13'-5"	□
s21	30	#4	14'-0"	□
s22	32	#4	15'-1"	□
u14	40	#5	2'-4"	—
u15	5	#4	7'-2"	—
u16	3	#6	8'-0"	—
u17	3	#6	8'-1"	—
p20	6	#7	44'-2"	—
p22	4	#7	9'-11"	—
p23	2	#7	20'-8"	—
p24	2	#7	36'-5"	—
p25	4	#7	17'-11"	—
p26	10	#4	2'-2"	—
p27	7	#5	6'-2"	—
p28	5	#7	9'-8"	—
p29	4	#5	9'-8"	—
p30	16	#4	3'-2"	—
p31	6	#6	5'-1"	—
p37	2	#5	4'-9"	—
n31	4	#5	3'-7"	—
n32	10	#5	3'-0"	—
v200	89	#5	9'-8"	—
v201	22	#5	13'-9"	—
v202(E)	23	#4	3'-10"	—
v203(E)	4	#5	2'-8"	—
v204(E)	19	#5	4'-10"	—
*v205	4	#5	10'-8"	—
v206	8	#5	7'-1"	—
*v207	13	#5	19'-5"	—
v210	4	#7	12'-3"	—
v211	2	#5	12'-10"	—
v214	40	#5	3'-8"	—
Reinforcement Bars Lbs. 6316				
Class X Concrete Cu. Yds. 75.9				
Steel Piles (HP10x42) Lin. Ft. 688				
Test Pile (Steel HP10x42) Each 1				
Metal Shoes Each 16				
Reinforcement Bars (Epoxy Coated) Lbs. 259				

BILL OF MATERIAL

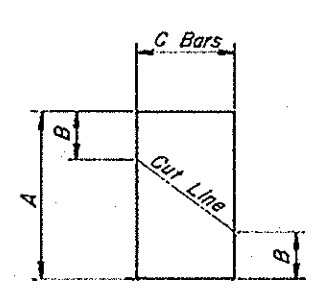
South Abutment - Southbound				
Bar	No.	Size	Length	Shape
h21	14	#5	42'-5"	—
h24	4	#6	39'-10"	—
h27(E)	6	#4	10'	—
*h29	4	#6	18'-3"	—
h31	5	#6	23'-4"	—
h35	5	#5	23'-4"	—
h36	28	#5	10'-3"	—
h37	22	#5	6'-11"	—
h38	18	#6	7'-6"	—
h40	2	#5	22'-10"	—
*h41	4	#6	37'-3"	—
h42(E)	1	#4	22'-11"	—
h43(E)	5	#4	23'-4"	—
h44	3	#5	4'-9"	—
h45	3	#5	5'-1"	—
s20	14	#4	13'-5"	□
s21	30	#4	14'-0"	□
s22	28	#4	15'-1"	□
u14	40	#5	2'-4"	—
u15	5	#4	7'-2"	—
u16	3	#6	8'-0"	—
u18	3	#6	9'-4"	—
p21	6	#7	49'-0"	—
p22	2	#7	20'-8"	—
p26	10	#4	2'-2"	—
p27	7	#5	6'-2"	—
p28	5	#7	9'-8"	—
p29	4	#5	9'-8"	—
p30	16	#4	3'-2"	—
p31	6	#6	5'-1"	—
p32	4	#7	12'-6"	—
p33	2	#7	35'-3"	—
p36	4	#7	16'-8"	—
p37	2	#5	4'-9"	—
n31	4	#5	3'-7"	—
n32	10	#5	3'-0"	—
v200	10	#5	9'-8"	—
v202(E)	26	#4	3'-10"	—
v203(E)	4	#5	4'-8"	—
v204(E)	22	#5	4'-10"	—
*v205	4	#5	10'-8"	—
v206	8	#5	7'-1"	—
v209	19	#5	8'-3"	—
v210	4	#7	12'-3"	—
v212	22	#5	12'-9"	—
v213	2	#5	11'-7"	—
v214	40	#5	3'-8"	—
*v215	16	#5	20'-3"	—
Reinforcement Bars Lbs. 6506				
Class X Concrete Cu. Yds. 77.8				
Steel Piles (HP10x42) Lin. Ft. 731				
Metal Shoes Each 17				
Reinforcement Bars (Epoxy Coated) Lbs. 294				

Bar	A	B	C
h23	2'-9"	2'-9"	11"
h25	1'-4"	2'-9"	11"
h26	9"	2'-9"	11"
h32(E)	17'-6"	2'-5"	7"
h37	3'-11"	3'-0"	1'-0"
h42(E)	20'-6"	2'-5"	7"
h44	3'-11"	10"	3 7/8"
h45	3'-9"	1'-4"	5 3/8"
p37	2'-9"	2'-0"	9'-4"
v203(E)	2'-10"	1'-10"	2'-8"
v210	9'-0"	3'-3"	2'-8 1/2"

Bar	A	B	C
h28	11'-10"	3'-6"	3
h29	15'-3"	4'-0"	4
h34	31'-8"	12'-3"	4
h41	37'-9"	15'-2"	4
v205	10'-8"	4'-9"	4
v207	19'-0"	7'-0"	13
v215	20'-3"	7'-0"	16

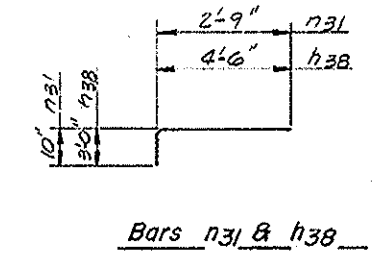


Bar u17

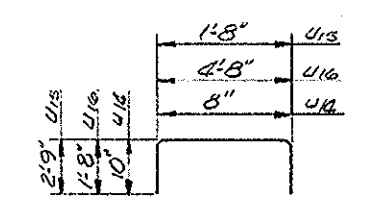


Bar u18

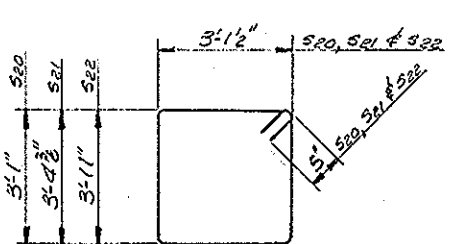
FIELD CUTTING DIAGRAM
* Order h28, h29, h34, h41, v205, v207 & v215 bars full length. Cut to fit as shown and use remainder of bars in other face.



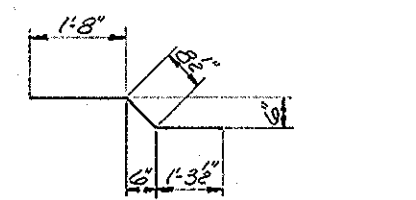
Bars n31 & n32



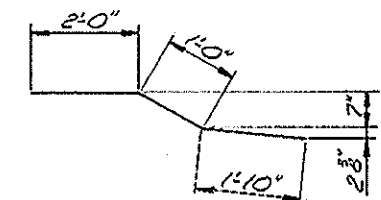
Bars u14, u15 & u16



Bars s20, s21 & s22



Bar v214



Bar v204(E)

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
SOUTH ABUTMENT

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

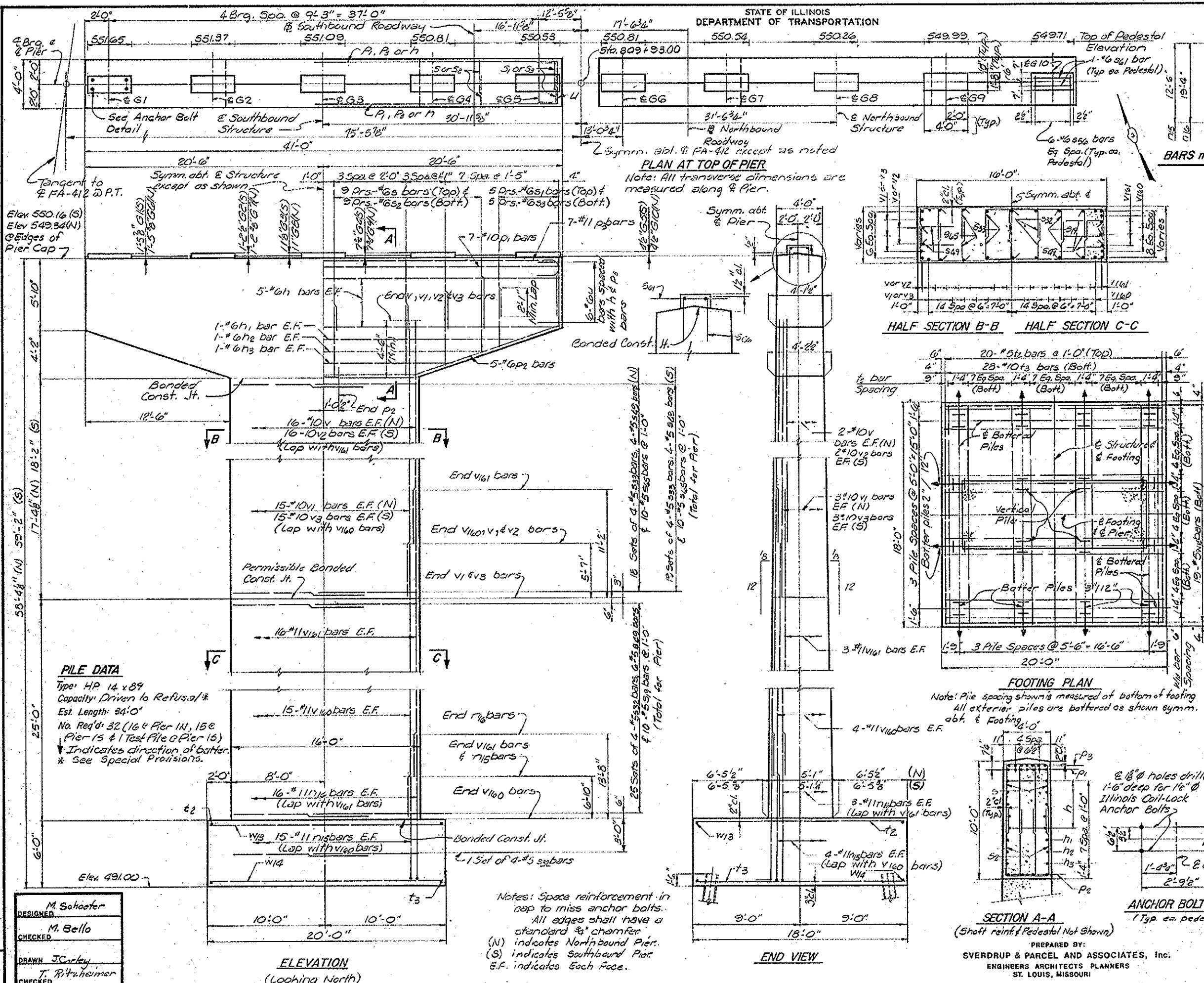
PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 108 OF 163

DESIGNED M. Bello
CHECKED M. Schaefer
DRAWN J. Sims
CHECKED A. Myers

6692
625327



BILL OF MATERIAL

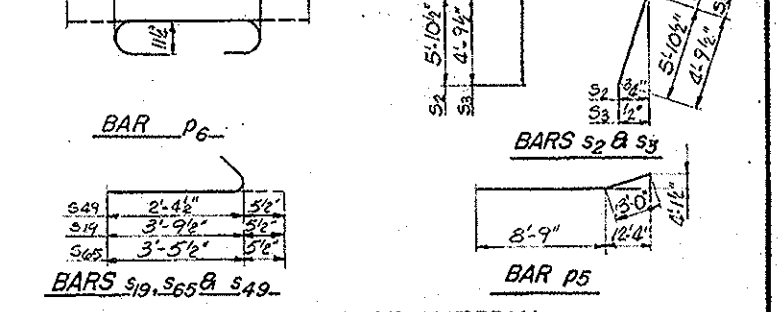
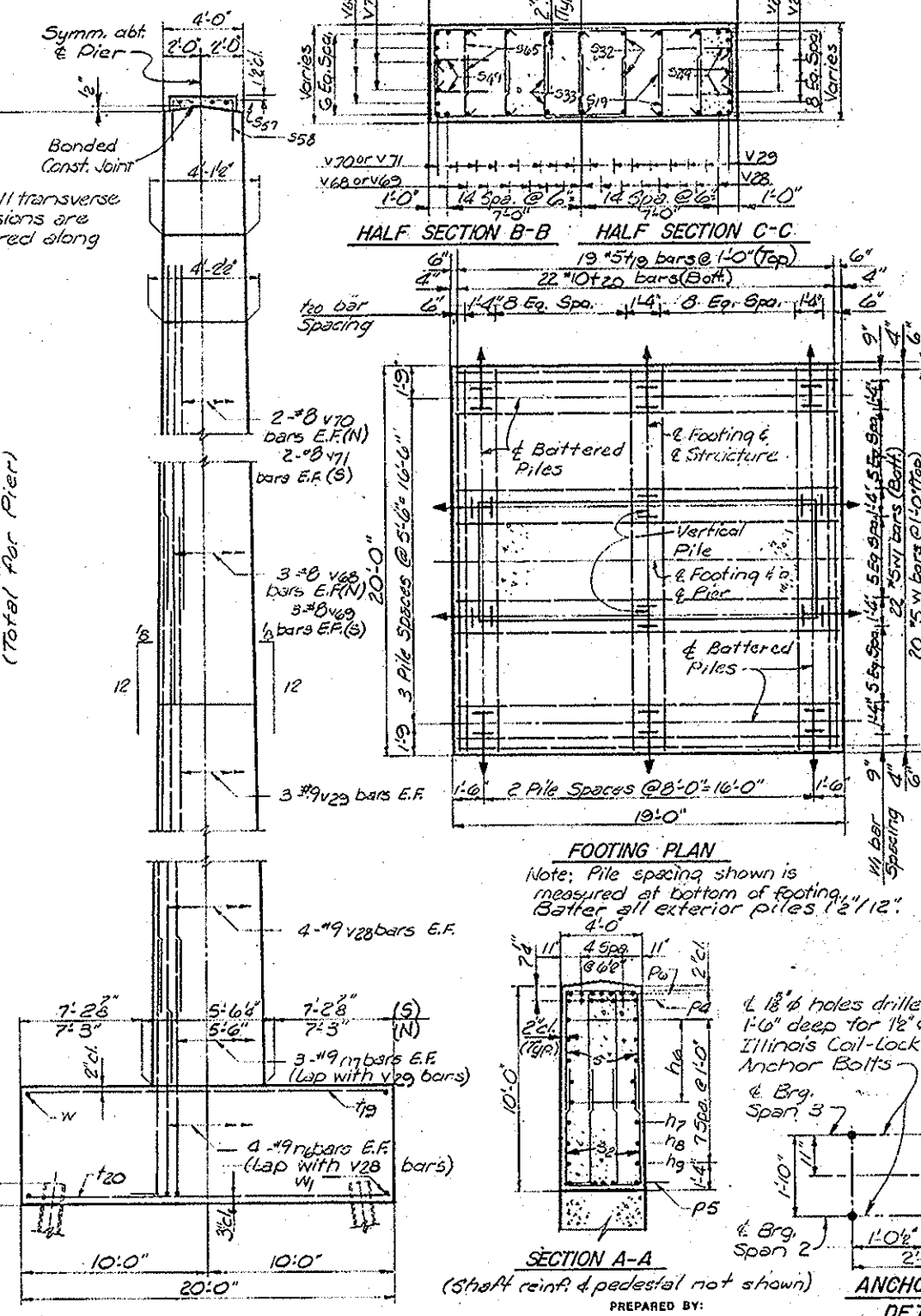
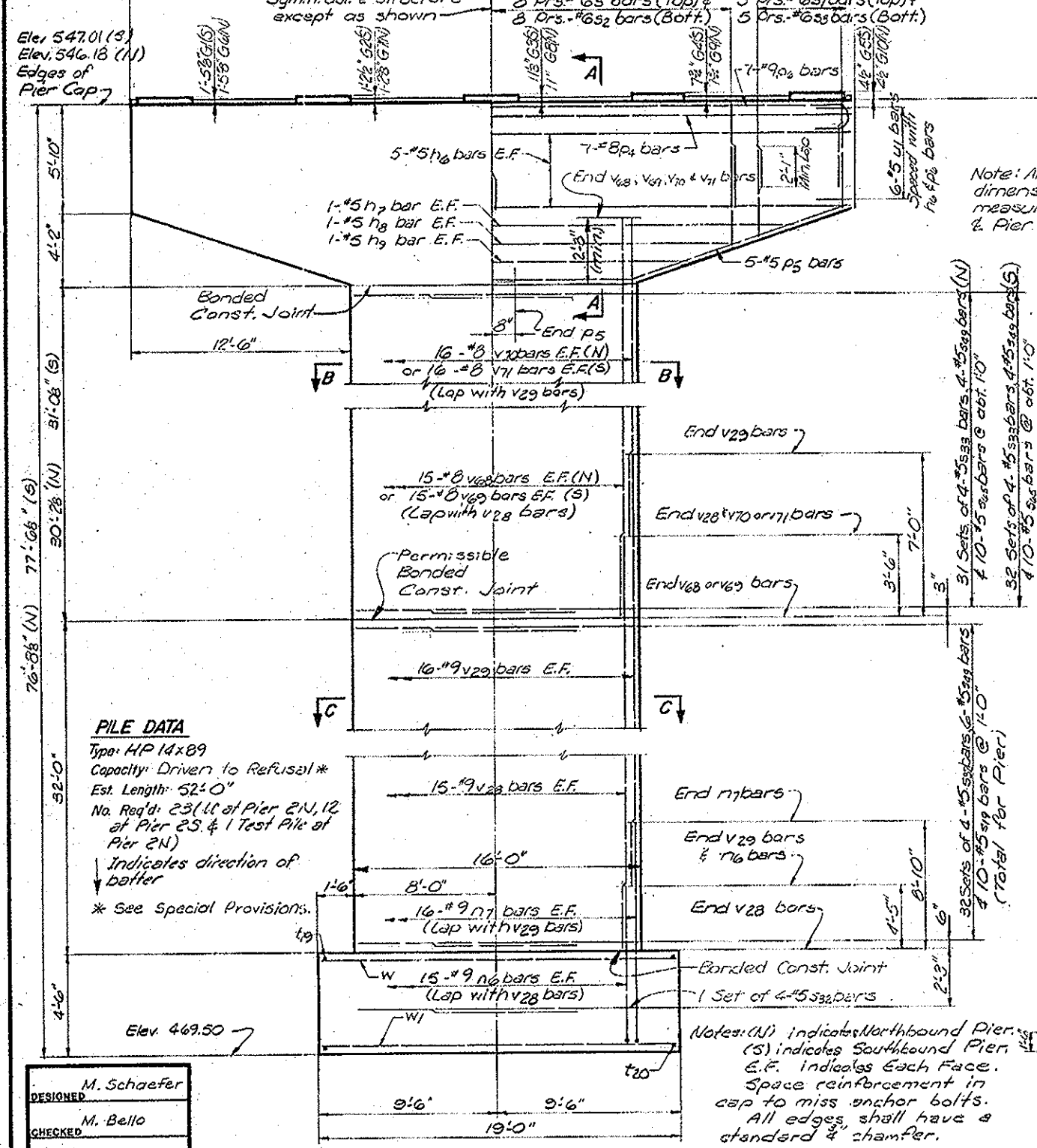
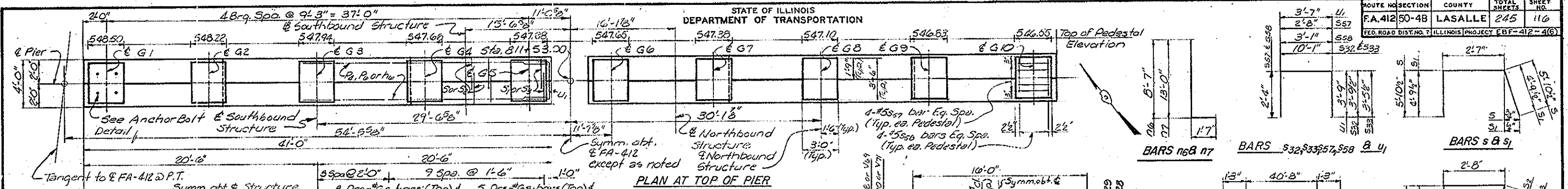
PIER I NORTHBOUND					PIER I SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	10	#6	40'-8"	—	h	10	#6	40'-8"	—
h1	2	#6	35'-0"	—	h1	2	#6	35'-0"	—
h2	2	#6	28'-11"	—	h2	2	#6	28'-11"	—
h3	2	#6	22'-10"	—	h3	2	#6	22'-10"	—
n15	38	#11	14'-6"	L	n15	38	#11	14'-6"	L
n16	38	#11	21'-4"	L	n16	38	#11	21'-4"	L
p1	7	#10	40'-8"	—	p1	7	#10	40'-8"	—
p2	10	#6	22'-11"	—	p2	10	#6	22'-11"	—
p3	7	#11	23'-10"	—	p3	7	#11	23'-10"	—
s	36	#6	14'-4"	—	s	36	#6	14'-4"	—
s1	20	#6	12'-2"	—	s1	20	#6	12'-2"	—
s2	36	#6	14'-5"	—	s2	36	#6	14'-5"	—
s3	20	#6	12'-3"	—	s3	20	#6	12'-3"	—
s19	250	#5	4'-3"	—	s19	250	#5	4'-3"	—
s32	104	#5	17'-8"	—	s32	104	#5	17'-8"	—
s33	72	#5	17'-0"	—	s33	76	#5	17'-0"	—
s49	222	#5	2'-10"	—	s49	226	#5	2'-10"	—
s50	30	#6	6'-0"	—	s50	30	#6	6'-0"	—
s61	10	#6	8'-4"	—	s61	10	#6	8'-4"	—
s65	180	#5	5'-11"	—	s65	190	#5	5'-11"	—
t2	20	#5	17'-6"	—	t2	20	#5	17'-6"	—
t3	28	#10	17'-6"	—	t3	28	#10	17'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v	36	#10	16'-4"	—	v	36	#10	17'-1"	—
v1	36	#10	21'-11"	—	v1	36	#10	22'-8"	—
v10	38	#11	30'-7"	—	v10	38	#11	30'-7"	—
v16	38	#11	29'-4"	—	v16	38	#11	29'-4"	—
w13	18	#5	19'-6"	—	w13	18	#5	19'-6"	—
w14	19	#5	19'-6"	—	w14	19	#5	19'-6"	—
Class X Concrete Cu.Yds. 251.9					Class X Concrete Cu.Yds. 251.4				
Reinforcement Bars Lbs. 4112.6					Reinforcement Bars Lbs. 4182				
Steel Piles HP14x89 Lin.Ft. 544					Steel Piles HP14x89 Lin.Ft. 510				
Metal Shoes Each 1.0					Test Piles (Steel HP14x89) Each 1				
Structure Excav. Cu.Yds. 176					Metal Shoes Each 15				
					Structure Excav. Cu.Yds. 176				

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER I NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-4B	LASALLE	245	110



BILL OF MATERIAL

PIER 2 NORTHBOUND				PIER 2 SOUTHBOUND			
Bar No.	Size	Length	Shape	Bar No.	Size	Length	Shape
h6	#5	40'-8"	—	h6	#5	40'-8"	—
h7	#5	35'-0"	—	h7	#5	35'-0"	—
h8	#5	28'-11"	—	h8	#5	28'-11"	—
h9	#5	22'-10"	—	h9	#5	22'-10"	—
n6	#9	10'-2"	L	n6	#9	10'-2"	L
n7	#9	14'-7"	L	n7	#9	14'-7"	L
p4	#8	40'-8"	—	p4	#8	40'-8"	—
p5	#5	21'-9"	—	p5	#5	21'-9"	—
p6	#9	43'-2"	—	p6	#9	43'-2"	—
s	#6	14'-4"	—	s	#6	14'-4"	—
s1	#6	12'-2"	—	s1	#6	12'-2"	—
s2	#6	14'-5"	—	s2	#6	14'-5"	—
s3	#6	12'-3"	—	s3	#6	12'-3"	—
s19	#5	4'-3"	—	s19	#5	4'-3"	—
s32	#5	17'-8"	—	s32	#5	17'-8"	—
s33	#5	17'-0"	—	s33	#5	17'-0"	—
s49	#5	2'-10"	—	s49	#5	2'-10"	—
s57	#5	7'-4"	—	s57	#5	7'-4"	—
s58	#5	7'-9"	—	s58	#5	7'-9"	—
s65	#5	3'-11"	—	s65	#5	3'-11"	—
t19	#5	19'-6"	—	t19	#5	19'-6"	—
t20	#10	19'-6"	—	t20	#10	19'-6"	—
u1	#5	11'-1"	—	u1	#5	11'-1"	—
v28	#9	35'-6"	—	v28	#9	35'-6"	—
v29	#9	34'-7"	—	v29	#9	34'-7"	—
v68	#8	32'-11"	—	v68	#8	32'-11"	—
v70	#8	29'-5"	—	v70	#8	29'-5"	—
w	#5	18'-6"	—	w	#5	18'-6"	—
w1	#5	18'-6"	—	w1	#5	18'-6"	—
Class X Concrete Cu. Yds. 298.2				Class X Concrete Cu. Yds. 301.0			
Reinforcement Bars Lbs. 34,638				Reinforcement Bars Lbs. 34,922			
Steel Piles HP14x89 Lin. Ft. 872				Steel Piles HP14x89 Lin. Ft. 674			
Test Piles (Steel HP14x89) Each 1				Metal Shoes Each 12			
Metal Shoes Each 11				Structure Excav. Cu. Yds. 133			

PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal *
Est. Length: 52'-0"
No. Req'd: 23 (11 at Pier 2N, 12 at Pier 2S & 1 Test Pile at Pier 2N)
Indicates direction of batter
* See Special Provisions.

Notes: (N) indicates Northbound Pier, (S) indicates Southbound Pier, E.F. indicates Each Face. Space reinforcement in cap to miss anchor bolts. All edges shall have a standard chamfer.

FOOTING PLAN
Note: Pile spacing shown is measured at bottom of footing. Batter all exterior piles 1/2" / 12".

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

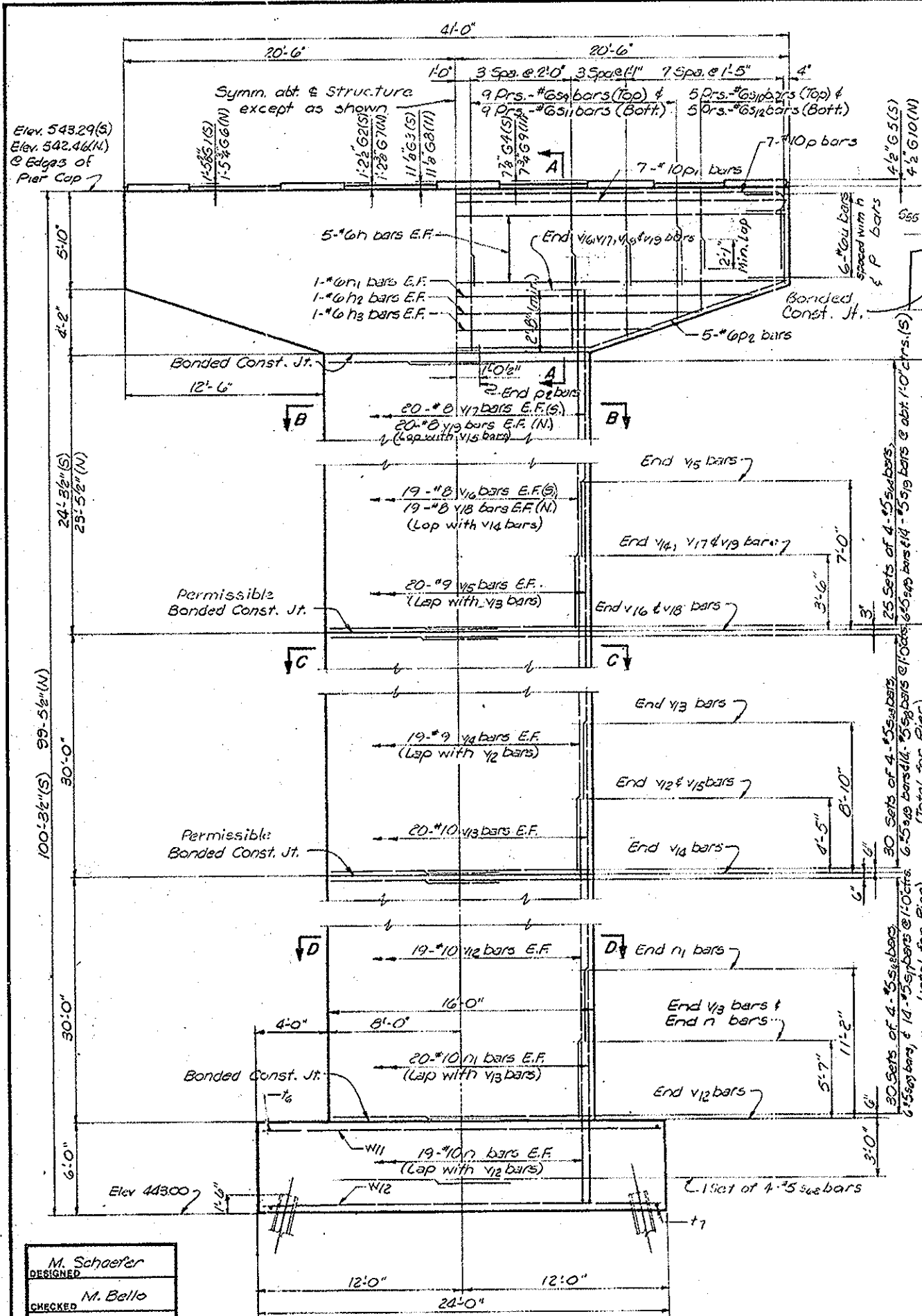
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

STRUCTURAL STEEL ALTERNATE
PIER 2 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

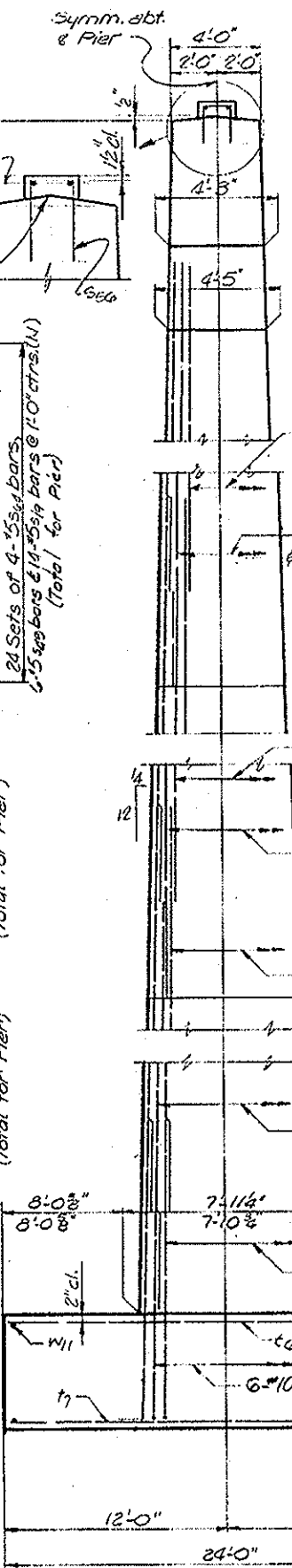
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	117
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				

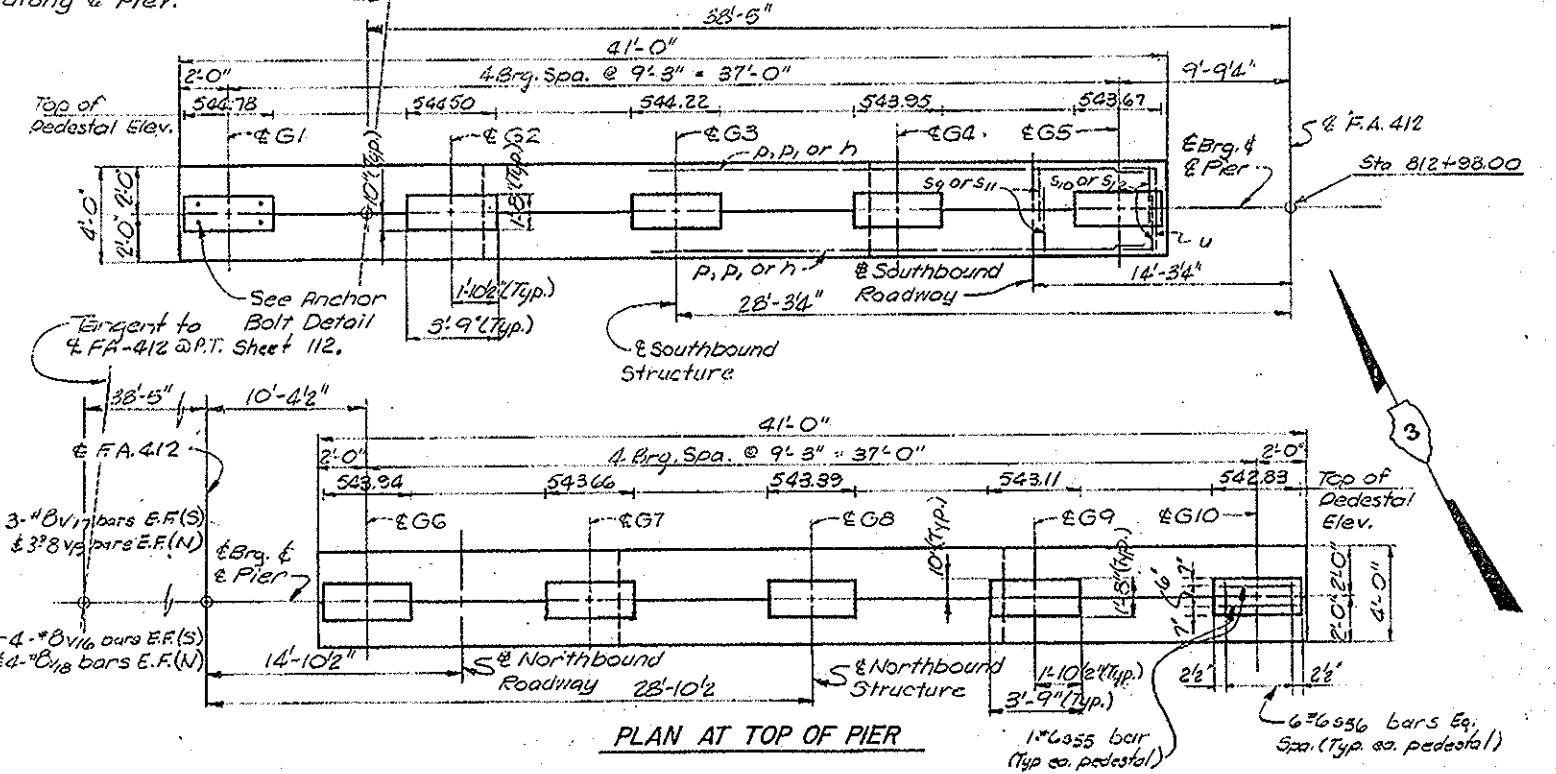
Note: All transverse dimensions are measured along & Pier.



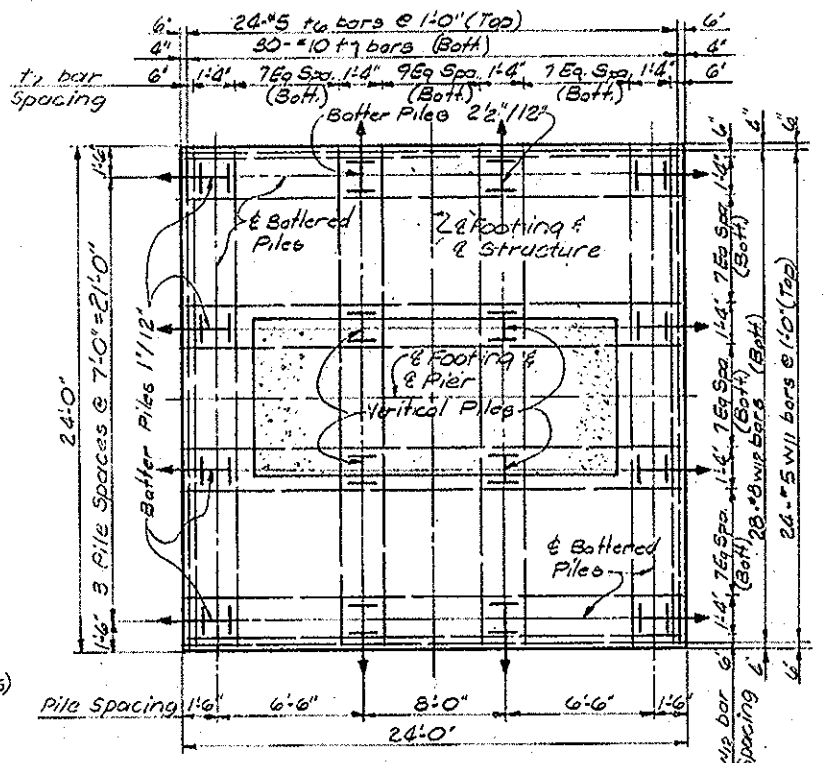
ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER



FOOTING PLAN

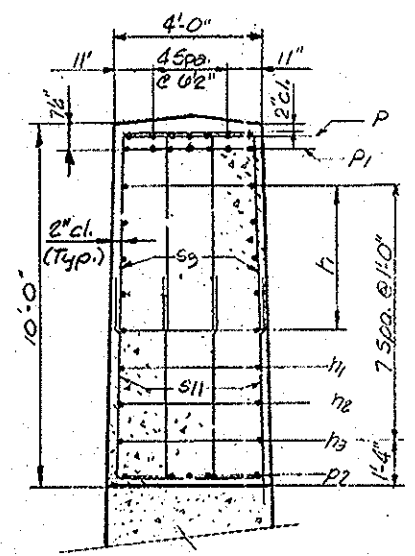
Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. about & Footing

PILE DATA
Type: HP 14 x 89
Capacity: Driven to refusal
Est. Length: 41'-0"
No. Req'd: 32 (16 @ Pier 3N, 15 @ Pier 3S + 1 Test Pile @ Pier 3S)
↑ Indicates direction of batter
* See Special Provisions.
Note: Space reinforcement in cap to miss Anchor Bolts.
All edge shall have a standard 3/4" chamfer.
(N) indicates Northbound Pier
(S) indicates Southbound Pier
E.F. indicates Each Face
Work this Sheet with Sheet 112.

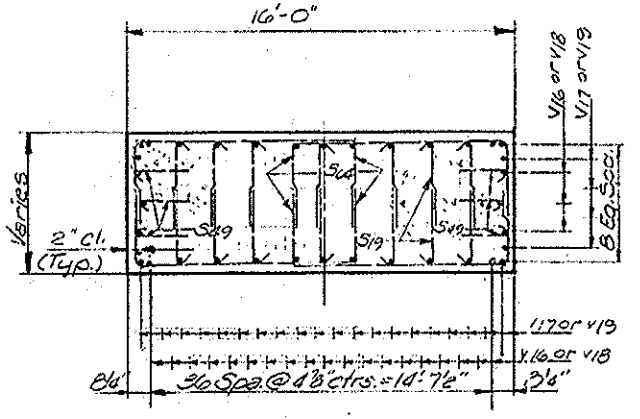
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 3 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

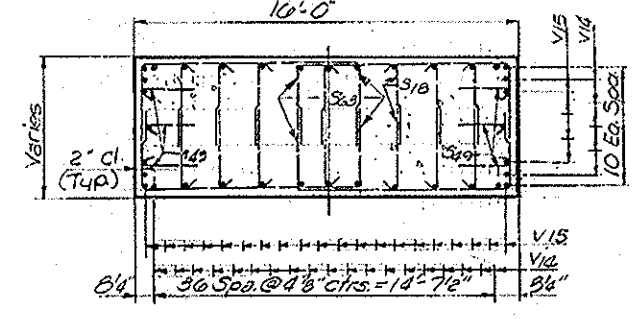
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



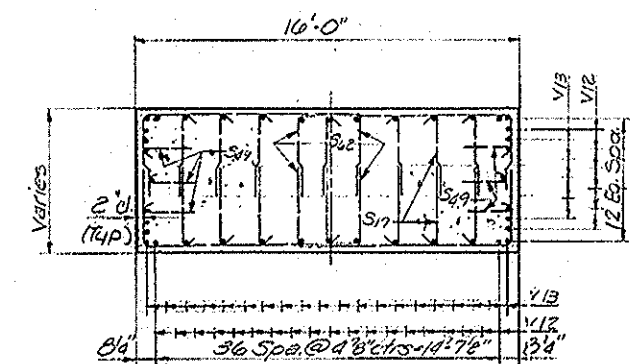
SECTION A-A
(Shoof reinf. & Pedestal not shown)



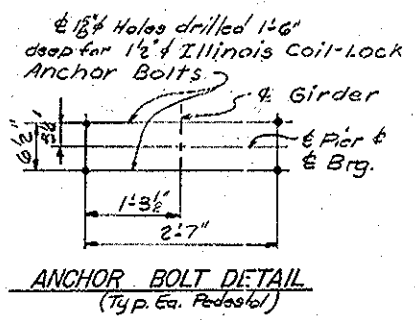
SECTION B-B



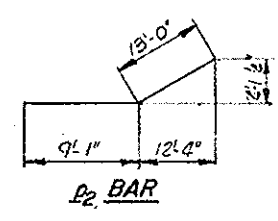
SECTION C-C



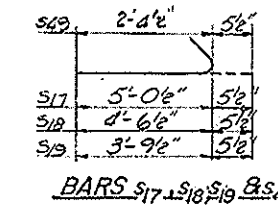
SECTION D-D



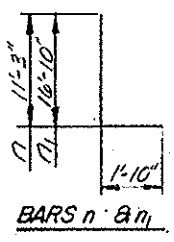
ANCHOR BOLT DETAIL
(Typ. Ea. Pedestal)



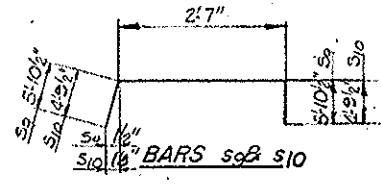
P2 BAR



BARS S17, S18, S19, S49

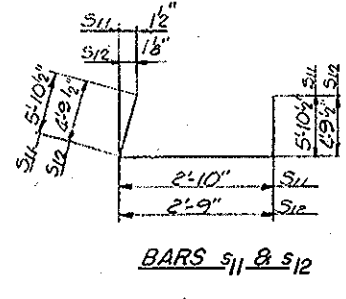


BARS n & m

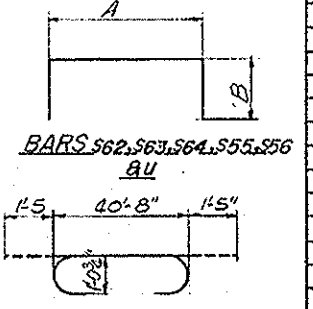


BARS S28 & S30

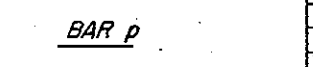
Bar	A	B
S22	9'-3"	5'-0 1/2"
S23	9'-3"	4'-5"
S24	9'-3"	3'-9 1/2"
S25	9'-5"	2'-4"
S26	1'-4"	2'-8"
U	3'-7"	4'-0"



BARS S11 & S12



BARS S62, S63, S64, S55, S56



BAR p

BILL OF MATERIAL

PIER 3 NORTHBOUND					PIER 3 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	—	n	10	#6	40'-8"	—
n1	2	#6	35'-0"	—	n1	2	#6	34'-0"	—
n2	2	#6	28'-11"	—	n2	2	#6	28'-11"	—
n3	2	#6	22'-10"	—	n3	2	#6	22'-10"	—
n	50	#10	13'-1"	L	n	50	#10	13'-1"	L
n1	50	#10	18'-8"	L	n1	50	#10	18'-8"	L
p	7	#10	43'-6"	C	p	7	#10	43'-6"	C
p1	7	#10	40'-8"	—	p1	7	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
S9	36	#6	14'-4"	⊃	S9	36	#6	14'-4"	⊃
S10	20	#6	12'-2"	⊃	S10	20	#6	12'-2"	⊃
S11	30	#6	14'-7"	L	S11	36	#6	14'-7"	L
S12	20	#6	12'-4"	L	S12	20	#6	12'-4"	L
S17	420	#5	5'-6"	→	S17	420	#5	5'-6"	→
S18	420	#5	5'-0"	→	S18	420	#5	5'-0"	→
S19	336	#5	4'-3"	→	S19	350	#5	4'-3"	→
S29	504	#5	2'-10"	→	S29	510	#5	2'-10"	→
S25	10	#6	8'-1"	⊃	S25	10	#6	8'-1"	⊃
S26	30	#6	6'-0"	⊃	S26	30	#6	6'-0"	⊃
S22	124	#5	19'-4"	⊃	S22	124	#5	19'-4"	⊃
S23	120	#5	18'-1"	⊃	S23	120	#5	18'-1"	⊃
S24	96	#5	16'-10"	⊃	S24	100	#5	16'-10"	⊃
t6	24	#5	23'-6"	—	t6	24	#5	23'-6"	—
t7	30	#10	23'-6"	—	t7	30	#10	23'-6"	—
u	12	#6	11'-7"	⊃	u	12	#6	11'-7"	⊃
v12	50	#10	34'-5"	—	v12	50	#10	34'-5"	—
v13	50	#10	33'-3"	—	v13	50	#10	33'-3"	—
v14	48	#9	33'-6"	—	v14	48	#9	33'-6"	—
v15	48	#9	32'-7"	—	v15	48	#9	32'-7"	—
v18	46	#8	26'-2"	—	v16	46	#8	27'-0"	—
v19	46	#8	22'-8"	—	v17	46	#8	23'-6"	—
w11	24	#5	23'-6"	—	w11	24	#5	23'-6"	—
w12	28	#8	23'-6"	—	w12	28	#8	23'-6"	—

Class X Concrete	Cu. Yds.	489.2	Class X Concrete	Cu. Yds.	493.3
Reinforcement Bars	Lbs.	6805	Reinforcement Bars	Lbs.	65160
Steel Piles HP14x89	Lin. Ft.	656	Steel Piles HP14x89	Lin. Ft.	615
Metal Shoes	Each	16	Cast Piles Steel HP14x89	Each	1
Cofferdam	Each	1	Metal Shoes	Each	15
Cofferdam Excav.	Cu. Yds.	232	Cofferdam	Each	1
			Cofferdam Excav.	Cu. Yds.	232

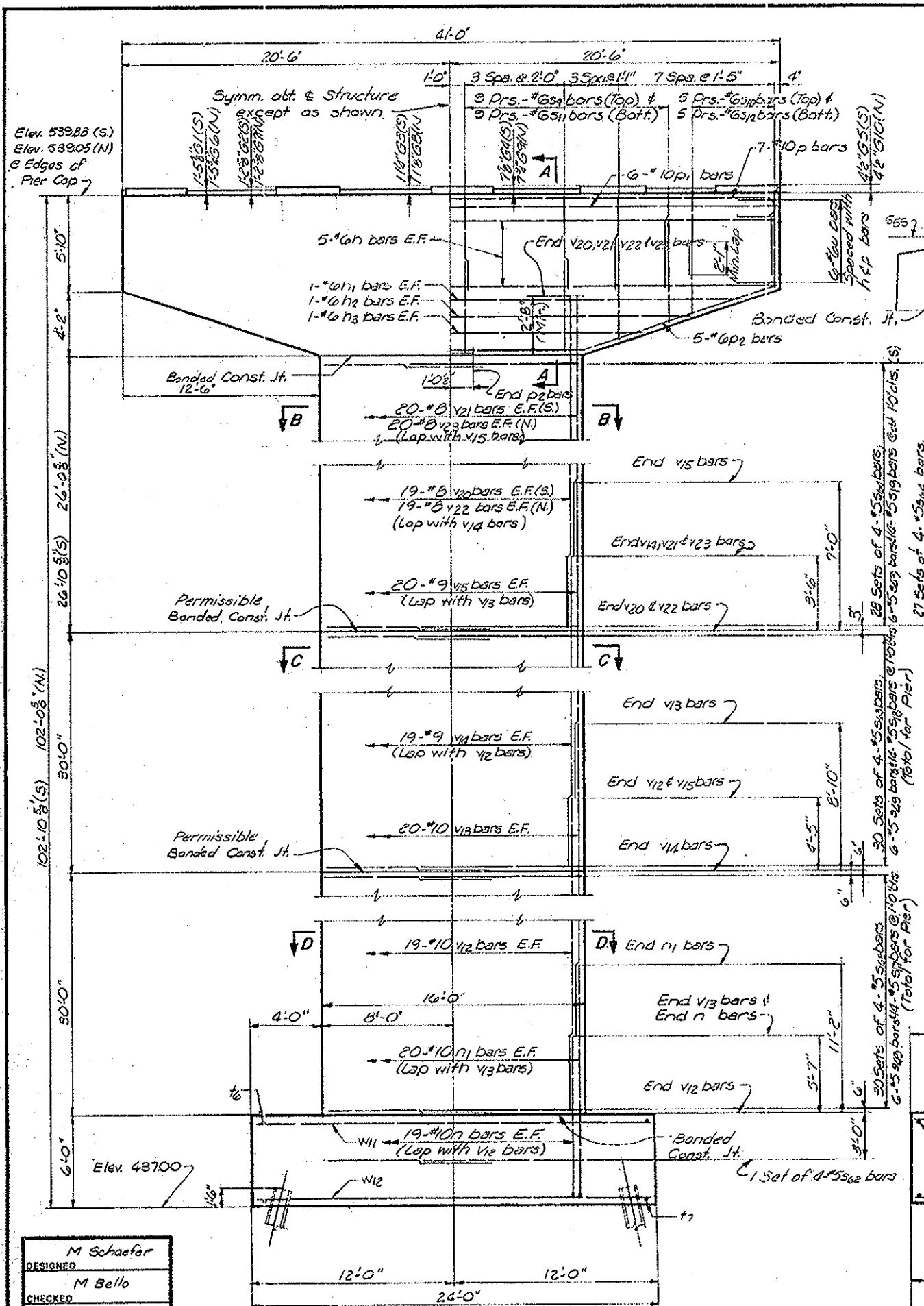
Note: Work this sheet with sheet 111.

DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN J. Corley
CHECKED T. Ritzheimer

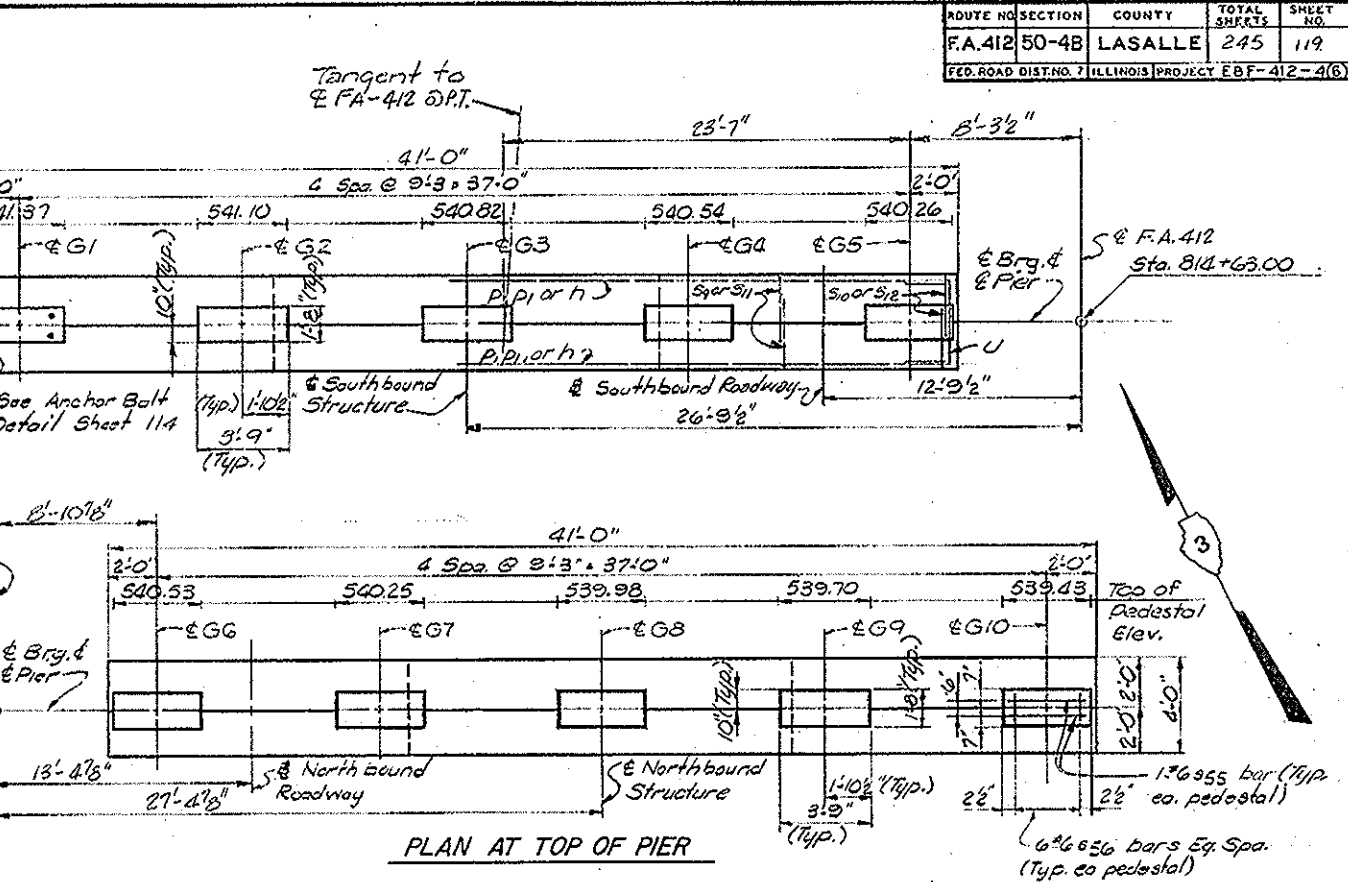
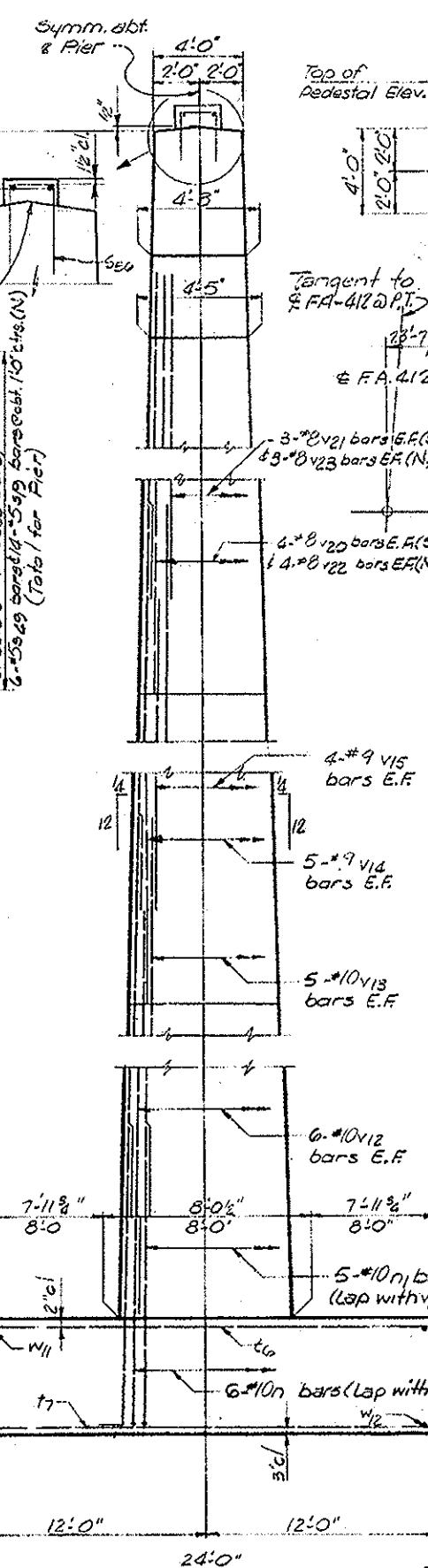
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 3 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

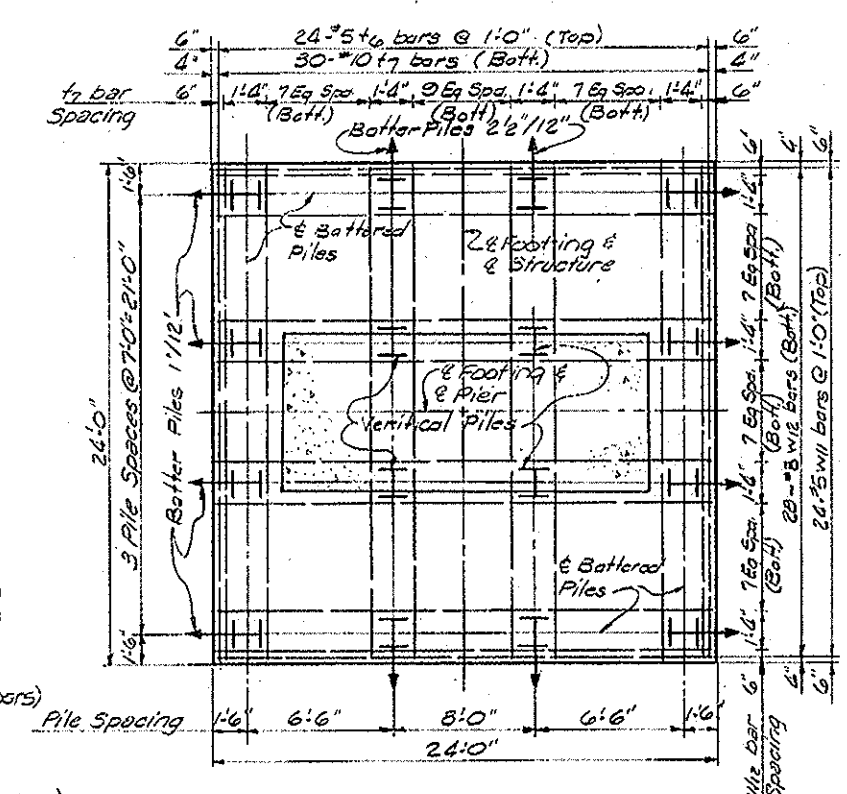
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



Note: All transverse dimensions are measured along E Pier



PLAN AT TOP OF PIER



FOOTING PLAN

PILE DATA

Type: HP 14 x 89
Capacity: Driven to Refusal *
Est. Length: 45'-0"
No. Req'd: 32 (15 @ Pier 4N, 16 @ Pier 4S & 1 Test Pile @ Pier 4N)
Indicates direction of batter *
* See Special Provisions.
Note: Space reinforcement in cap to miss Anchor Bolts.
All edges shall have standard 3/4" chamfer.
(N) - indicates Northbound Pier
(S) - indicates Southbound Pier
E.F. - indicates each face
Work this Sheet with Sheet 114.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 4 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

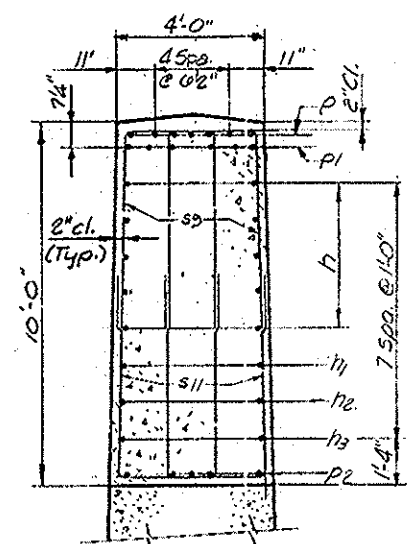
DESIGNED: M Schaefer
CHECKED: M Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

ELEVATION
(Looking North)

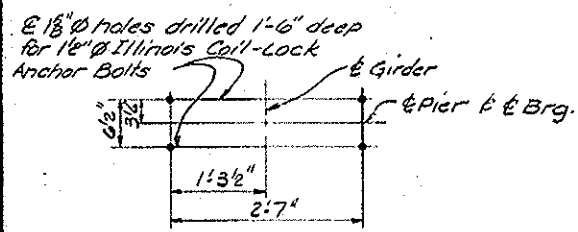
END VIEW

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

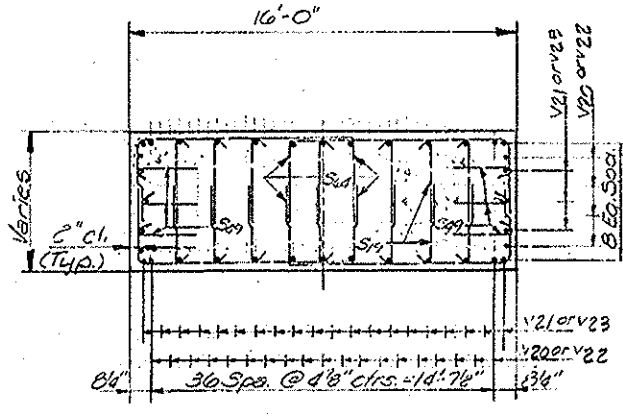
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI



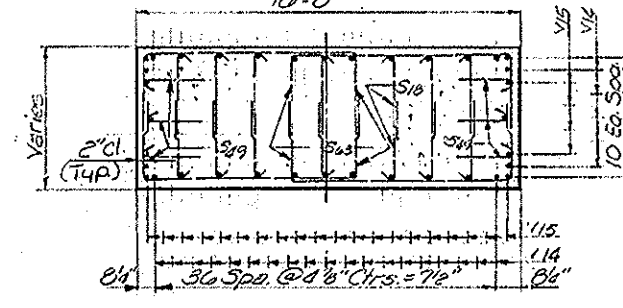
SECTION A-A
(shaft reinf. & pedestal not shown)



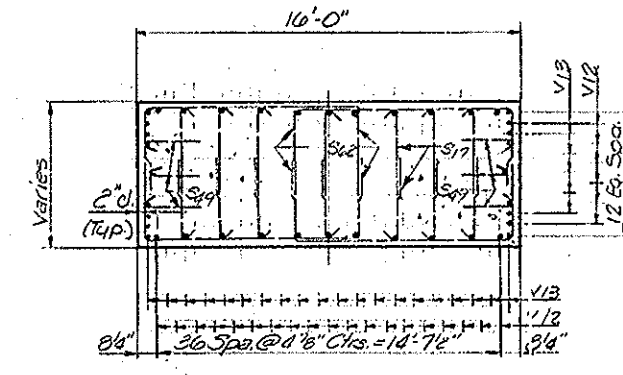
ANCHOR BOLT DETAIL
(Typ. each pedestal)



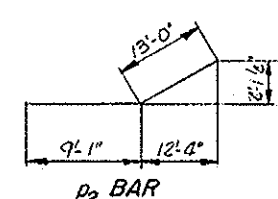
SECTION B-B



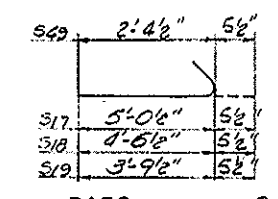
SECTION C-C



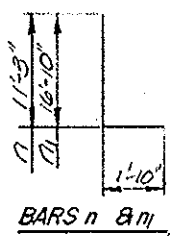
SECTION D-D



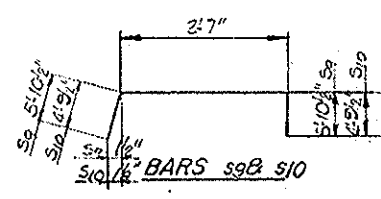
P2 BAR



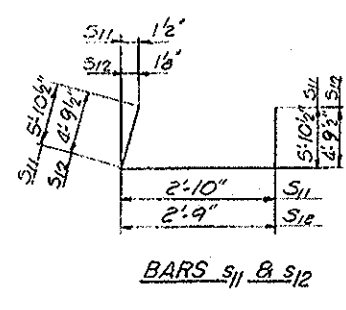
BARS S17, S18, S19 & S49



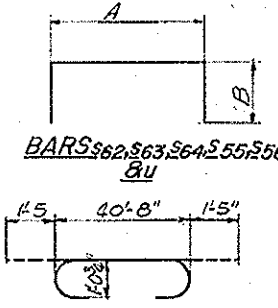
BARS n & m



Bar	A	B
S55	3'-5"	2'-4"
S54	1'-4"	2'-4"
S42	9'-3"	5'-0 1/2"
S69	9'-3"	4'-6"
S64	9'-3"	3'-9 1/2"
u	5'-7"	4'-0"



BARS s11 & s12



BAR P

BILL OF MATERIAL

PIER 4 NORTHBOUND					PIER 4 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	□	n	10	#6	40'-8"	□
n1	2	#6	35'-0"	□	n1	2	#6	35'-0"	□
n2	2	#6	28'-11"	□	n2	2	#6	28'-11"	□
n3	2	#6	22'-10"	□	n3	2	#6	22'-10"	□
n	50	#10	13'-1"	L	n	50	#10	13'-1"	L
n1	50	#10	18'-8"	L	n1	50	#10	18'-8"	L
p	7	#10	43'-6"	□	p	7	#10	43'-6"	□
p1	6	#10	40'-8"	□	p1	6	#10	40'-8"	□
p2	10	#6	22'-1"	□	p2	10	#6	22'-1"	□
s9	36	#6	14'-4"	□	s9	36	#6	14'-4"	□
s10	20	#6	12'-2"	□	s10	20	#6	12'-2"	□
s11	36	#6	14'-7"	□	s11	36	#6	14'-7"	□
s12	20	#6	12'-4"	□	s12	20	#6	12'-4"	□
s17	420	#5	5'-6"	□	s17	420	#5	5'-6"	□
s18	420	#5	5'-0"	□	s18	420	#5	5'-0"	□
s19	378	#5	4'-3"	□	s19	378	#5	4'-3"	□
s29	522	#5	2'-10"	□	s29	520	#5	2'-10"	□
s45	10	#6	8'-1"	□	s45	10	#6	8'-1"	□
s50	30	#6	6'-0"	□	s50	30	#6	6'-0"	□
s62	124	#5	19'-4"	□	s62	124	#5	19'-4"	□
s63	120	#5	18'-1"	□	s63	120	#5	18'-1"	□
s64	108	#5	16'-10"	□	s64	112	#5	16'-10"	□
t6	24	#5	23'-6"	□	t6	24	#5	23'-6"	□
t7	30	#10	23'-6"	□	t7	30	#10	23'-6"	□
u	12	#6	11'-7"	□	u	12	#6	11'-7"	□
v12	50	#10	34'-5"	□	v12	50	#10	34'-5"	□
v13	50	#10	33'-3"	□	v13	50	#10	33'-3"	□
v14	48	#9	33'-6"	□	v14	48	#9	33'-6"	□
v15	48	#9	32'-7"	□	v15	48	#9	32'-7"	□
v22	46	#8	28'-9"	□	v22	46	#8	28'-9"	□
v23	46	#8	25'-3"	□	v21	46	#8	26'-1"	□
w11	28	#5	23'-6"	□	w11	28	#5	23'-6"	□
w12	28	#8	23'-6"	□	w12	28	#8	23'-6"	□
Class X Concrete	Cu.Yds.	50.12			Class X Concrete	Cu.Yds.	50.54		
Reinforcement Bars	Lbs.	65,715			Reinforcement Bars	Lbs.	66,069		
Steel Piles HP14x89	Lin. Ft.	675			Steel Piles HP14x89	Lin. Ft.	720		
Test Piles (Steel HP4x8.9)	Each	1			Metal Shoes	Each	16		
Metal Shoes	Each	15			Cofferdam	Each	1		
Cofferdam	Each	1			Cofferdam Excav.	Su.Yds.	232		
Cofferdam Excav.	Cu.Yds.	232							

Note: Work this Sheet with Sheet 113.

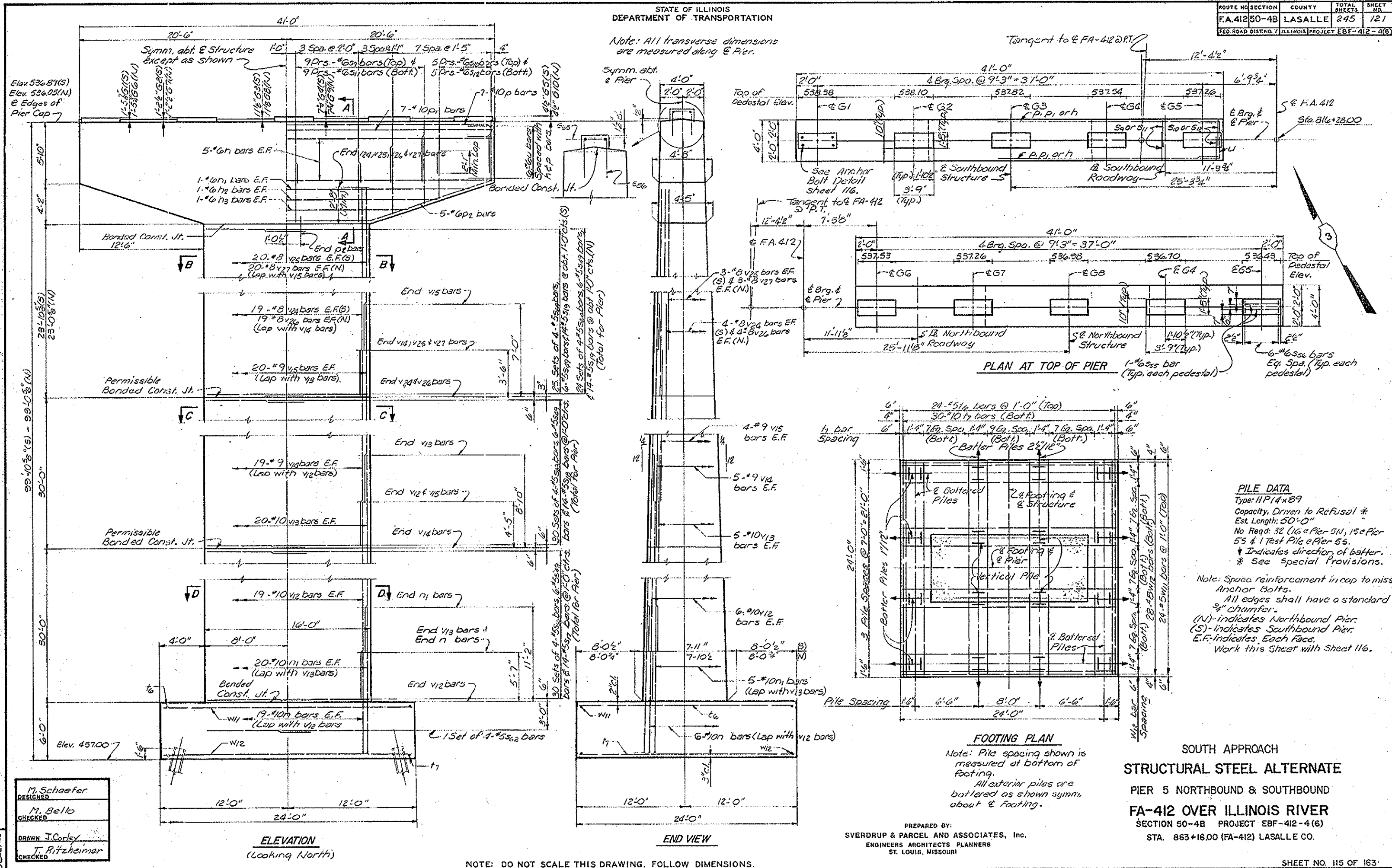
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 4 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

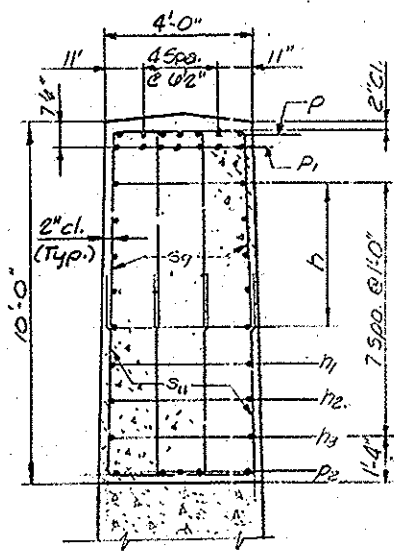
DESIGNED M. Schoeter
CHECKED M. Bello
DRAWN J. Corley
CHECKED T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

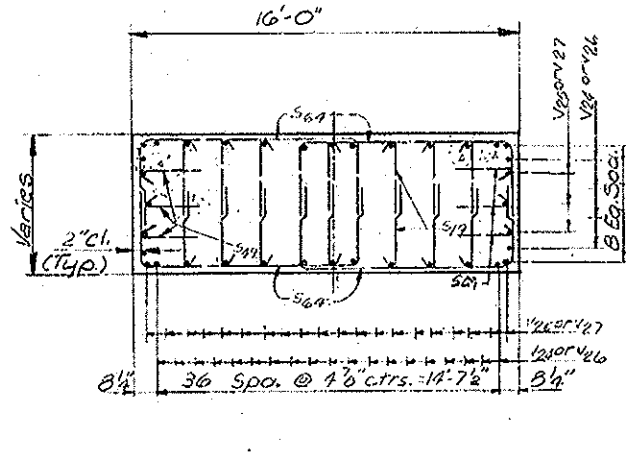
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 114 OF 163

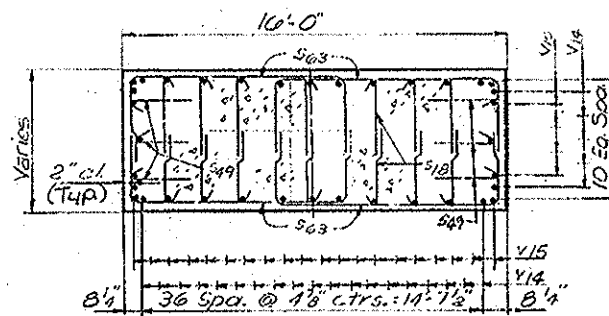




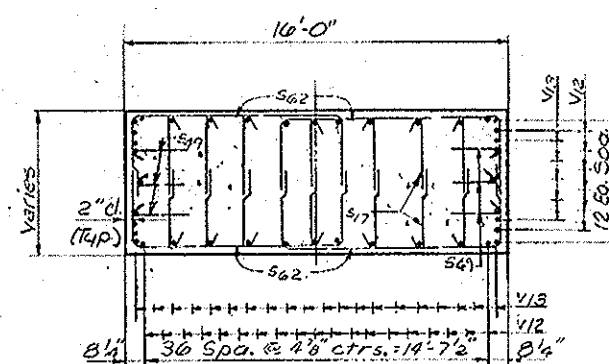
SECTION A-A
(Shaft reinf. & pedestal not shown)



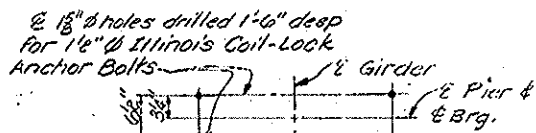
SECTION B-B



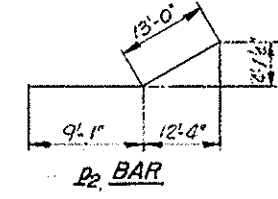
SECTION C-C



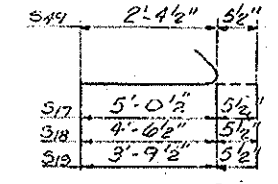
SECTION D-D



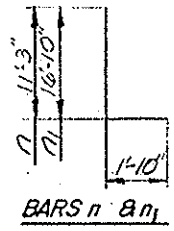
ANCHOR BOLT DETAIL
(Typ. each pedestal)



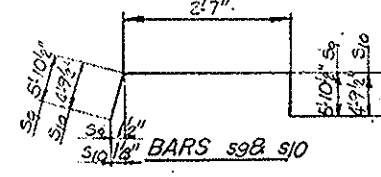
P2 BAR



BARS S17, S18, S19 & S49

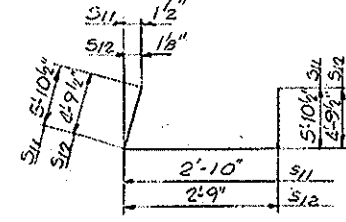


BARS n & a1

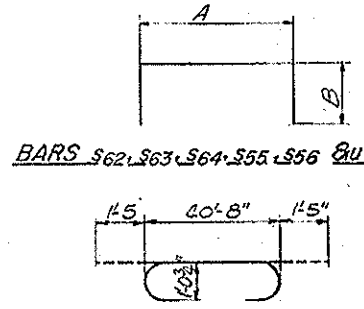


BARS S9 & S10

Bar	A	B
S62	9'-3"	5'-0"
S63	9'-3"	4'-5"
S64	9'-3"	3'-9 1/2"
S65	3'-5"	2'-4"
S66	1'-2"	2'-4"
U	3'-7"	4'-0"



BARS S11 & S12



BAR P

BARS S62, S63, S64, S65, S66 & U

BILL OF MATERIAL

PIER 5 NORTHBOUND					PIER 5 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	—	n	10	#6	40'-8"	—
n1	2	#6	35'-0"	—	n1	2	#6	35'-0"	—
n2	2	#6	28'-11"	—	n2	2	#6	28'-11"	—
n3	2	#6	22'-10"	—	n3	2	#6	22'-10"	—
n	50	#10	13'-1"	L	n	50	#10	13'-1"	L
n1	50	#10	18'-8"	L	n1	50	#10	18'-8"	L
p	7	#10	43'-6"	—	p	7	#10	43'-6"	—
p1	7	#10	40'-8"	—	p1	7	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s9	36	#6	14'-4"	□	s9	36	#6	14'-4"	□
s10	20	#6	12'-2"	□	s10	20	#6	12'-2"	□
s11	36	#6	14'-7"	U	s11	36	#6	14'-7"	U
s12	20	#6	12'-4"	U	s12	20	#6	12'-4"	U
s17	420	#5	5'-6"	→	s17	420	#5	5'-6"	→
s18	420	#5	5'-0"	→	s18	420	#5	5'-0"	→
s19	330	#5	4'-3"	→	s19	350	#5	4'-3"	→
s49	504	#5	2'-10"	→	s49	510	#5	2'-10"	→
s55	10	#6	8'-1"	□	s55	10	#6	8'-1"	□
s60	30	#6	6'-0"	□	s60	30	#6	6'-0"	□
s62	124	#5	19'-4"	□	s62	124	#5	19'-4"	□
s63	120	#5	18'-1"	□	s63	120	#5	18'-1"	□
s64	96	#5	16'-10"	□	s64	100	#5	16'-10"	□
t6	24	#5	23'-6"	—	t6	24	#5	23'-6"	—
t7	30	#10	23'-6"	—	t7	30	#10	23'-6"	—
u	12	#6	11'-7"	□	u	12	#6	11'-7"	□
v12	50	#10	34'-5"	—	v12	50	#10	34'-5"	—
v2	50	#10	33'-3"	—	v2	50	#10	33'-3"	—
v4	48	#9	33'-6"	—	v4	48	#9	33'-6"	—
v8	48	#9	32'-7"	—	v8	48	#9	32'-7"	—
v24	46	#8	25'-9"	—	v24	46	#8	26'-7"	—
v27	16	#8	22'-3"	—	v28	46	#8	23'-1"	—
w11	24	#5	23'-6"	—	w11	24	#5	23'-6"	—
w12	28	#5	23'-6"	—	w12	28	#5	23'-6"	—
Class X Concrete Cu. Yds. 187.2					Class X Concrete Cu. Yds. 491.3				
Reinforcement Bars Lbs. 64703					Reinforcement Bars Lbs. 65058				
Steel Piles HPI4x89 Lin. Ft. 800					Steel Piles HPI4x89 Lin. Ft. 750				
Metal Shoes Each 16					Metal Shoes (Steel HPI4x89) Each 1				
Cofferdam Each 1					Metal Shoes Each 15				
Cofferdam Excav. Cu. Yds. 232					Cofferdam Each 1				
					Cofferdam Excav. Cu. Yds. 232				

Note: Work this Sheet with Sheet 115.

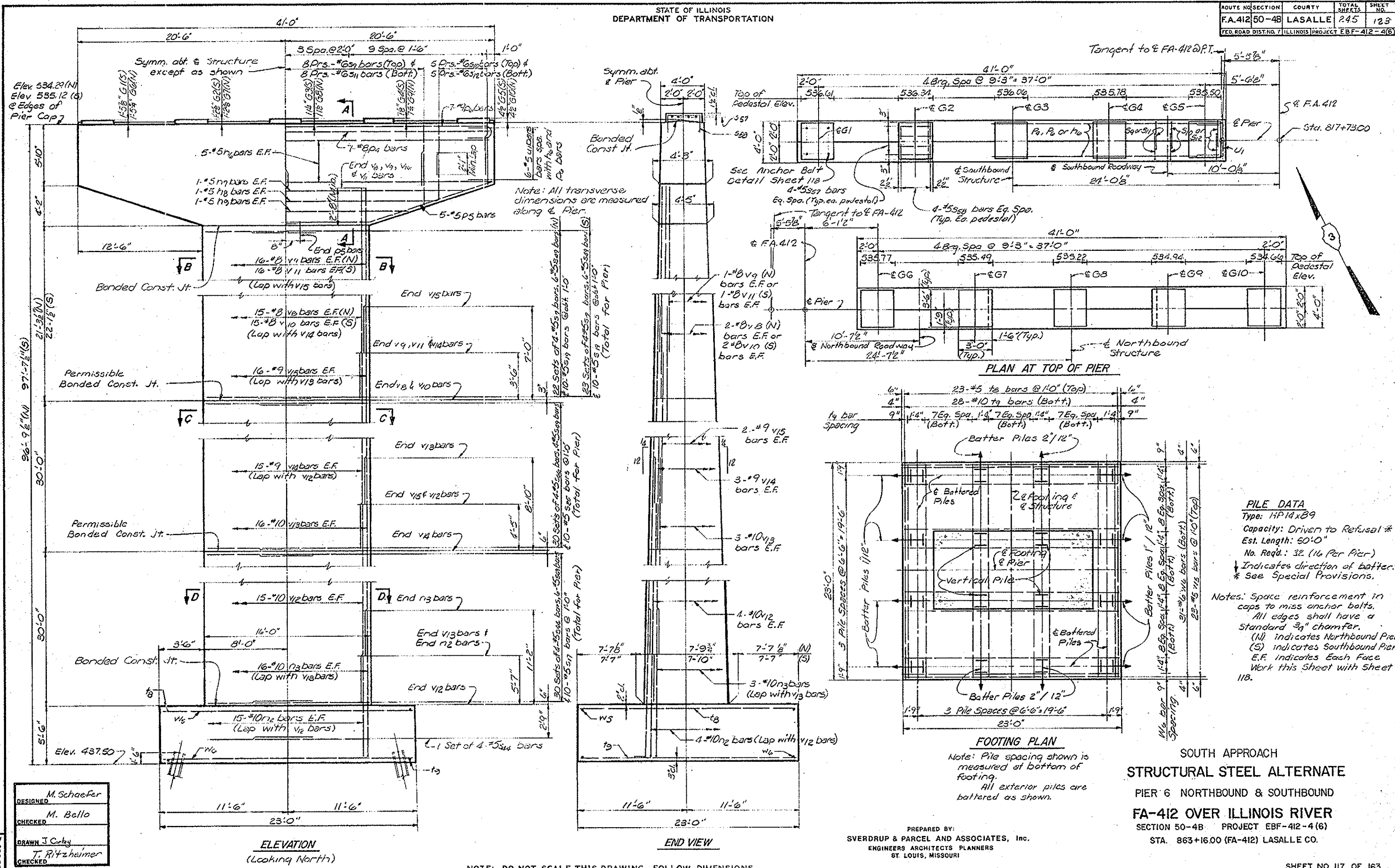
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 5 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

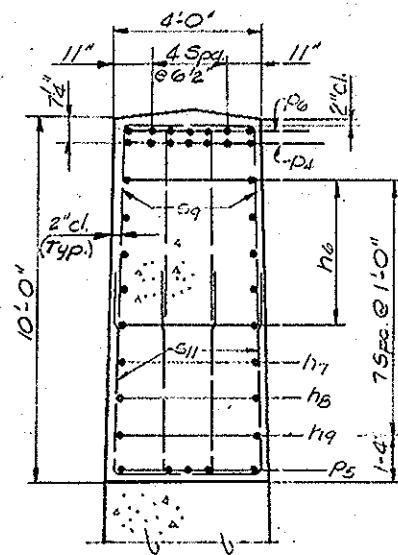
M. Schaefer
DESIGNED
M. Bello
CHECKED
DRAWN J. Corley
T. Pitzkeimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

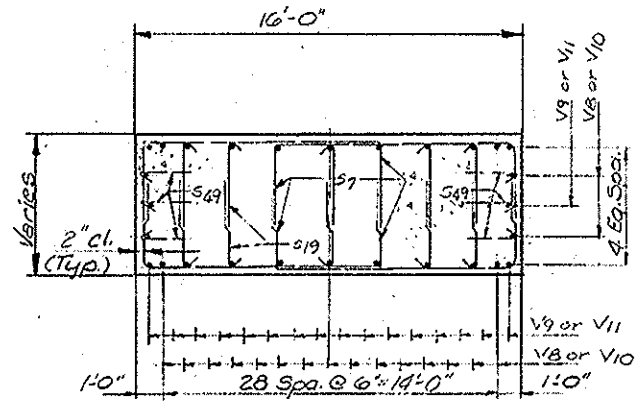
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 116 OF 163

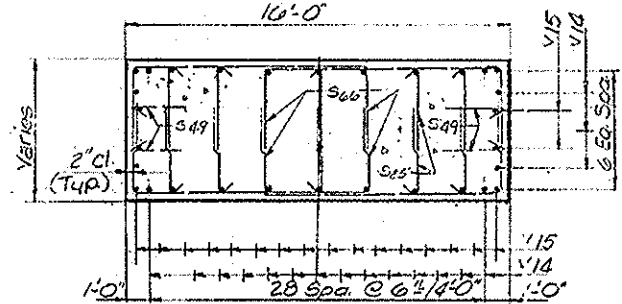




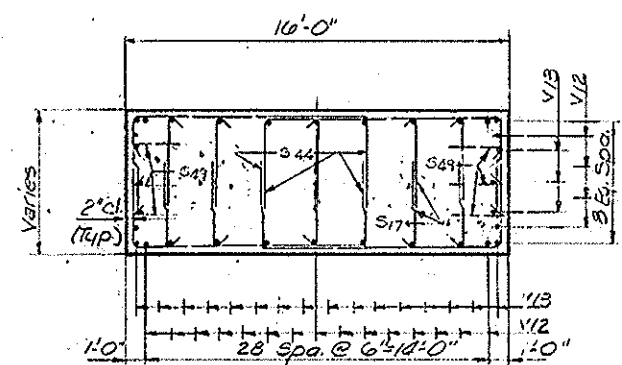
SECTION A-A
(Shaft reinf. & pedestal not shown)



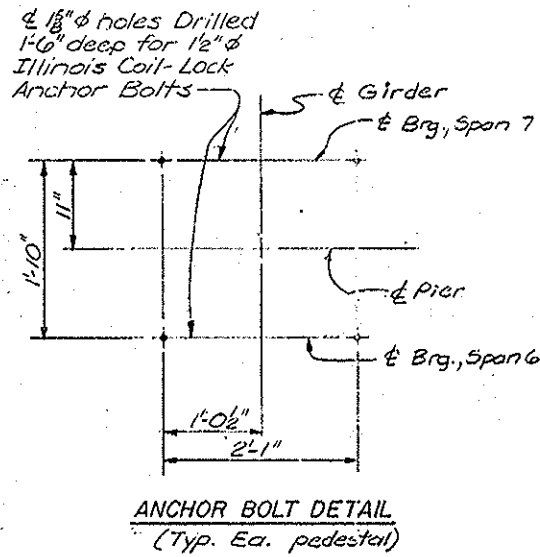
SECTION B-B



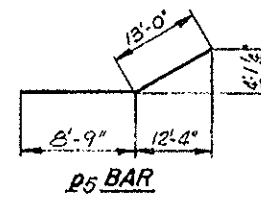
SECTION C-C



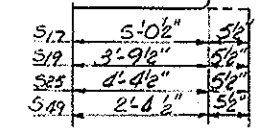
SECTION D-D



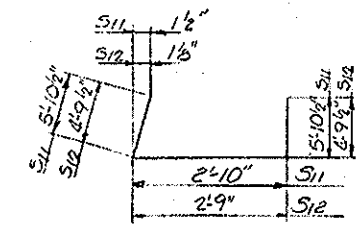
ANCHOR BOLT DETAIL
(Typ. Ea. pedestal)



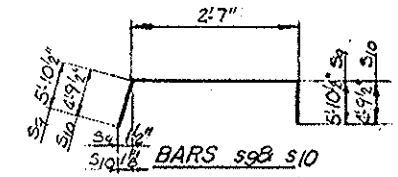
P5 BAR



BARS S17, S19, S25 & S49

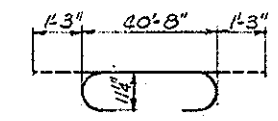


BARS S11 & S12



Bar	A	B
S7	10'-1"	3'-9 1/2"
S11	10'-1"	4'-11 1/2"
S17	2'-8"	2'-4"
S19	3'-1"	2'-4"
S66	10'-1"	4'-4"
U1	3'-7"	3'-9"

BARS S7, S11, S17, S19, S66 & U1



BAR P6

BILL OF MATERIAL

PIER 6 NORTHBOUND					PIER 6 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
P4	7	#8	40'-8"	—	P4	7	#8	40'-8"	—
P5	10	#5	21'-9"	—	P5	10	#5	21'-9"	—
P6	7	#9	43'-2"	—	P6	7	#9	43'-2"	—
S7	88	#5	17'-8"	—	S7	92	#5	17'-8"	—
S9	30	#6	14'-4"	—	S9	30	#6	14'-4"	—
S10	20	#6	12'-2"	—	S10	20	#6	12'-2"	—
S11	30	#6	14'-7"	—	S11	30	#6	14'-7"	—
S12	20	#6	12'-4"	—	S12	20	#6	12'-4"	—
S17	300	#5	5'-6"	—	S17	300	#5	5'-6"	—
S19	220	#5	4'-3"	—	S19	230	#5	4'-3"	—
S25	300	#5	4'-10"	—	S25	300	#5	4'-10"	—
S44	124	#5	20'-0"	—	S44	124	#5	20'-0"	—
S49	432	#5	2'-10"	—	S49	438	#5	2'-10"	—
S57	20	#5	7'-4"	—	S57	20	#5	7'-4"	—
S58	20	#5	7'-9"	—	S58	20	#5	7'-9"	—
S66	120	#5	18'-9"	—	S66	120	#5	18'-9"	—
T8	23	#5	22'-6"	—	T8	23	#5	22'-6"	—
T9	28	#10	22'-6"	—	T9	28	#10	22'-6"	—
U1	12	#5	11'-1"	—	U1	12	#5	11'-1"	—
V8	34	#8	24'-0"	—	V10	34	#8	24'-0"	—
V9	34	#8	20'-6"	—	V11	34	#8	21'-4"	—
V12	38	#10	34'-5"	—	V12	38	#10	34'-5"	—
V13	38	#10	33'-3"	—	V13	38	#10	33'-3"	—
V14	36	#9	33'-6"	—	V14	36	#9	33'-6"	—
V15	36	#9	32'-7"	—	V15	36	#9	32'-7"	—
W5	23	#5	22'-6"	—	W5	23	#5	22'-6"	—
W6	31	#6	22'-6"	—	W6	31	#6	22'-6"	—
Class X Concrete	Cu.Yds.	459.6			Class X Concrete	Cu.Yds.	463.1		
Reinforcement Bars	Lbs.	50,211			Reinforcement Bars	Lbs.	50,498		
Steel Piles HP 14x89	Lin. Ft.	800			Steel Piles HP 14x89	Lin. Ft.	800		
Metal Shoes	Each	16			Metal Shoes	Each	16		
Cofferdam	Each	1			Cofferdam	Each	1		
Cofferdam Excav.	Cu.Yds.	203			Cofferdam Excav.	Cu.Yds.	203		

Note: Work this Sheet with Sheet 117.

M. Schaefer
DESIGNED
M. Bello
CHECKED
DRAWN J. Carley
T. Ritzheimer
CHECKED

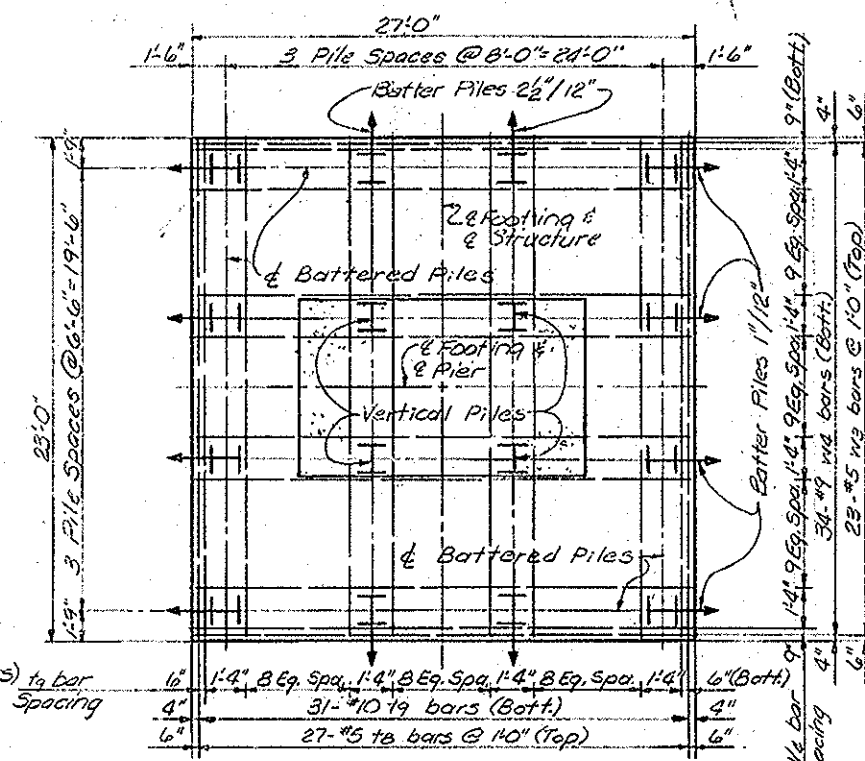
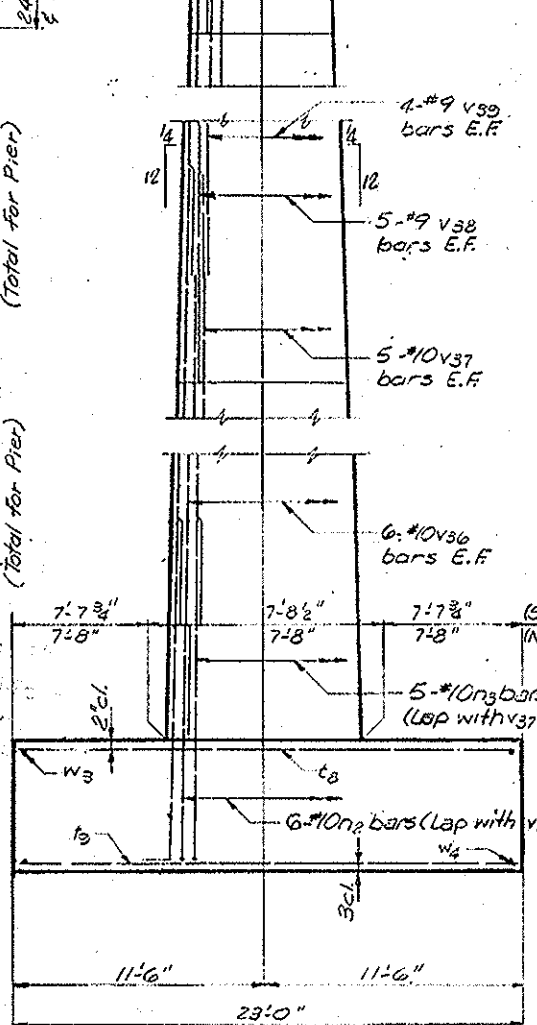
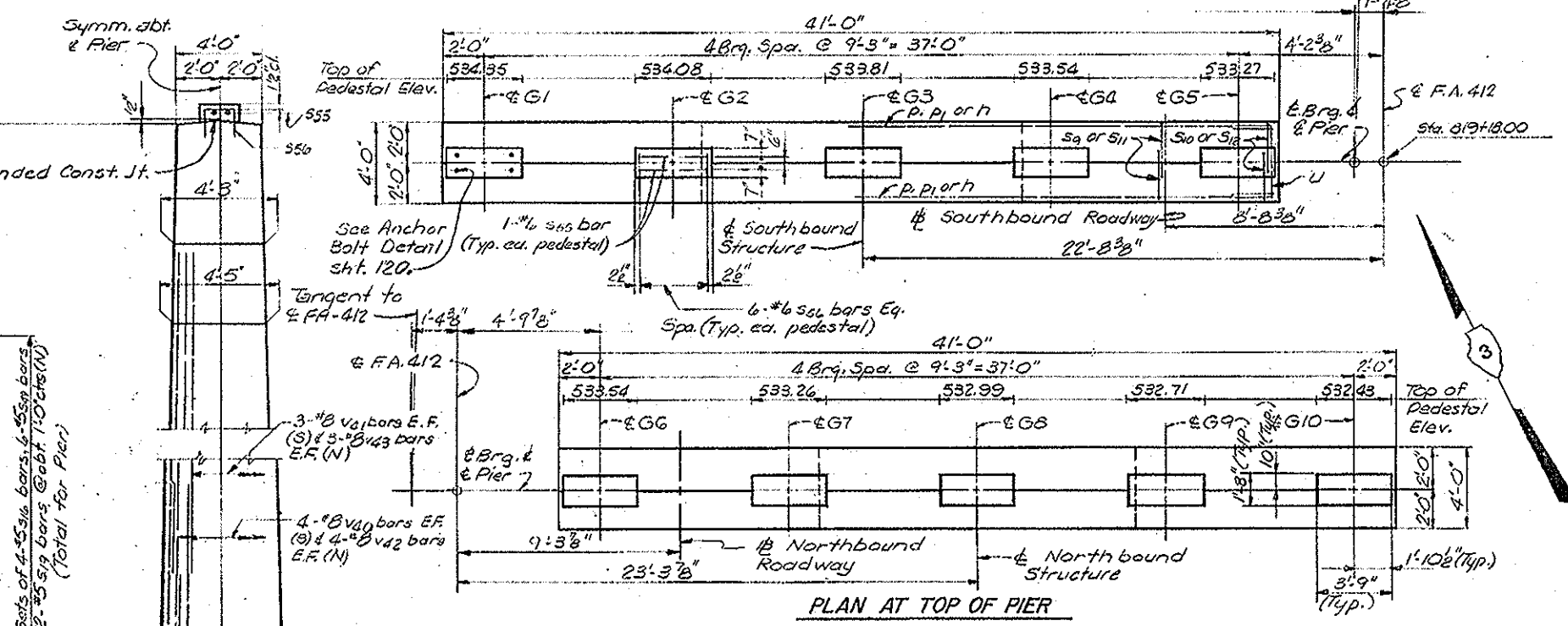
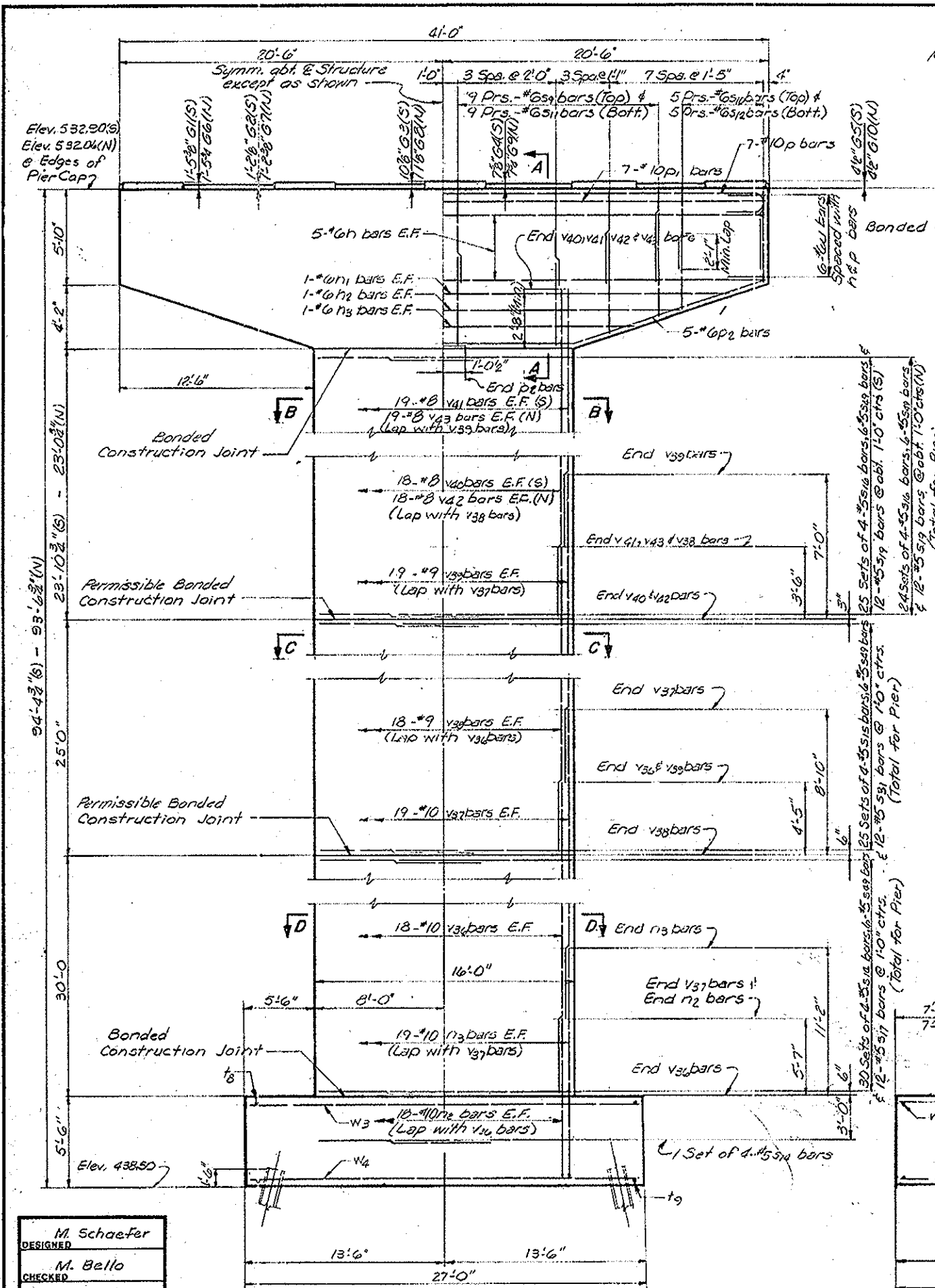
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SVDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 6 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO 118 OF 163

Note: All transverse dimensions are measured along & Pier.



PILE DATA
Type: 11/4 x 89
Capacity: Driven to Refusal *
Est. Length: 54'-0"
No. Reqd. 32 (16 Pier 7N, 16 Pier 7S & 17 Est. Pile @ Pier 7S)
* See Special Provisions.
↓ Indicates direction of batter.

Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard 3/4" chamfer. (N) indicates Northbound Pier. (S) indicates Southbound Pier. E.F. indicates Each Face Work this Sheet with Sheet 120.

FOOTING PLAN
Note: Pile spacing shown is measured at bottom of footing. All exterior piles are battered as shown symmetrical about & Footing.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 7 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B(C) PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

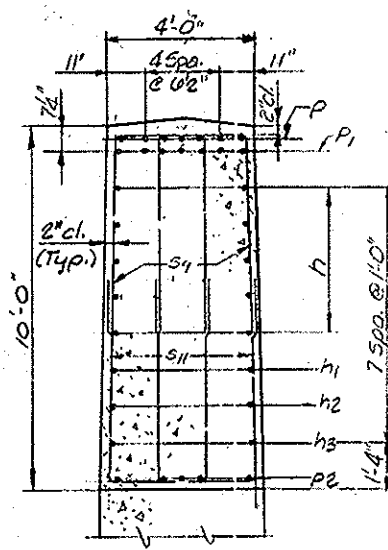
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

ELEVATION
(Looking North)

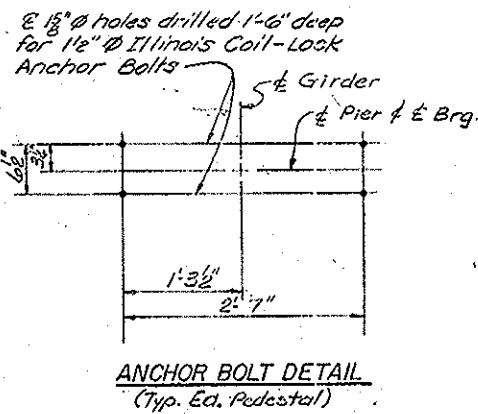
END VIEW

FOOTING PLAN

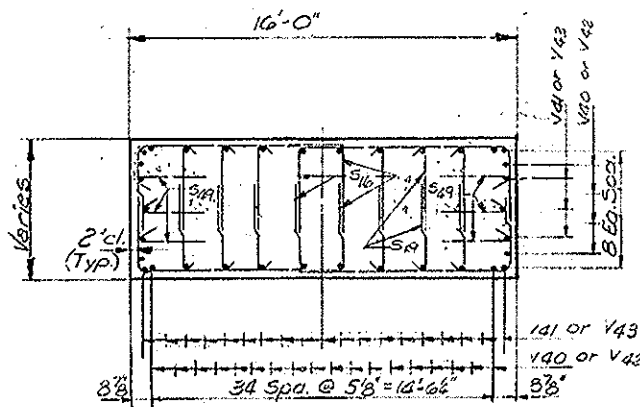
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



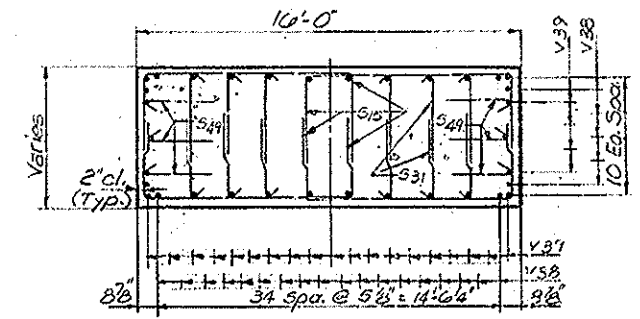
SECTION A-A
(Shaft Reinf. & Pedestal not shown.)



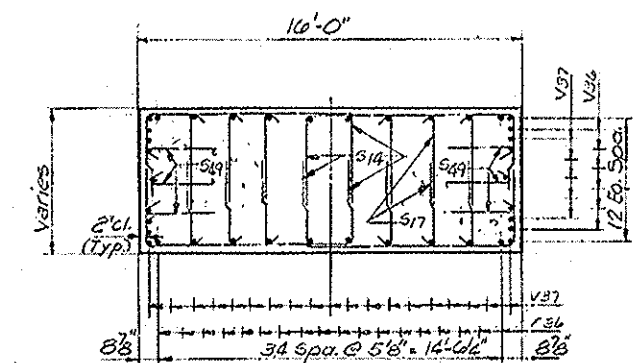
ANCHOR BOLT DETAIL
(Typ. Ecd. Pedestal)



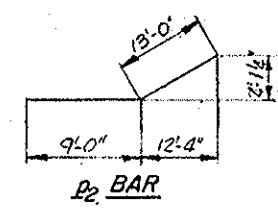
SECTION B-B



SECTION C-C



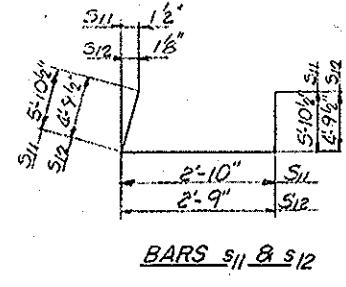
SECTION D-D



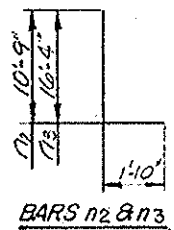
P2 BAR

S17	5'-0 1/2"	S51
S19	3'-9 1/2"	S52
S31	4'-3 1/2"	S53
S49	2'-4 1/2"	S54

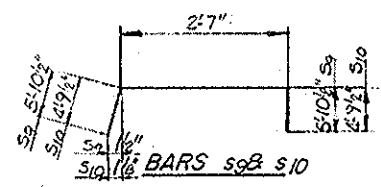
BARS S17, S19, S31 & S49



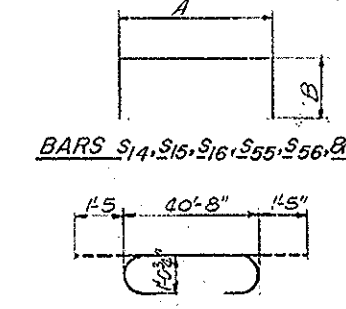
BARS S11 & S12



BARS N2 & N3



Bar	A	B
S14	8'-11"	4'-11"
S15	8'-11"	4'-3"
S16	8'-11"	3'-9"
S55	3'-5"	2'-4"
S56	1'-4"	2'-4"
U	3'-7"	4'-0"



BAR P

BILL OF MATERIAL

PIER 7 NORTHBOUND					PIER 7 SOUTHBOUND				
Bar	No.	Size	Length	Splice	Bar	No.	Size	Length	Splice
n	10	#6	40'-8"		n	10	#6	40'-8"	
n1	?	#6	35'-0"		n1	?	#6	35'-0"	
n2	?	#6	28'-11"		n2	?	#6	28'-11"	
n3	?	#6	22'-10"		n3	?	#6	22'-10"	
n7	48	#10	12'-7"	L	n7	48	#10	12'-7"	L
n3	48	#10	18'-2"	L	n3	48	#10	18'-2"	L
P	7	#10	43'-6"		P	7	#10	43'-6"	
P1	7	#10	40'-8"		P1	7	#10	40'-8"	
P2	10	#6	22'-1"		P2	10	#6	22'-1"	
S9	36	#6	14'-4"		S9	36	#6	14'-4"	
S10	20	#6	12'-2"		S10	20	#6	12'-2"	
S11	36	#6	14'-7"	L	S11	36	#6	14'-7"	L
S12	20	#6	12'-4"	L	S12	20	#6	12'-4"	L
S14	124	#5	18'-9"		S14	124	#5	18'-9"	
S15	100	#5	17'-5"		S15	100	#5	17'-5"	
S16	96	#5	16'-5"		S16	100	#5	16'-5"	
S17	360	#5	5'-6"		S17	360	#5	5'-6"	
S19	288	#5	4'-3"		S19	300	#5	4'-3"	
S31	300	#5	4'-9"		S31	300	#5	4'-9"	
S49	474	#5	2'-10"		S49	380	#5	2'-10"	
S55	10	#6	8'-1"		S55	10	#6	8'-1"	
S56	30	#6	6'-0"		S56	30	#6	6'-0"	
T8	27	#5	22'-6"		T8	27	#5	22'-6"	
T9	31	#10	22'-6"		T9	31	#10	22'-6"	
U	12	#6	11'-7"		U	12	#6	11'-7"	
V36	48	#10	34'-5"		V36	48	#10	34'-5"	
V37	48	#10	33'-3"		V37	48	#10	33'-3"	
V38	46	#9	28'-6"		V38	46	#9	28'-6"	
V39	46	#9	27'-7"		V39	46	#9	27'-7"	
V42	44	#8	25'-9"		V42	44	#8	25'-9"	
V43	44	#8	22'-3"		V43	44	#8	23'-1"	
W3	23	#5	26'-6"		W3	23	#5	26'-6"	
W4	34	#9	26'-6"		W4	34	#9	26'-6"	
Class X Concrete	Cu.Yds.	462.7			Class X Concrete	Cu.Yds.	466.6		
Reinforcement Bars	Lbs.	60824			Reinforcement Bars	Lbs.	60,861		
Steel Piles HPAx89	Lin. Ft.	864			Steel Piles HPAx89	Lin. Ft.	810		
Metal Shoes	Ea.	16			Rest Piles (Steel HPAx89)	Ea.	1		
Cofferdam	Ea.	1			Metal Shoes	Ea.	15		
Cofferdam Excav.	Cu.Yds.	233			Cofferdam	Ea.	1		
					Cofferdam Excav.	Cu.Yds.	233		

Note: Work this sheet with sheet 119.

DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN J. Corley
CHECKED T. Fitzhumer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 7 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

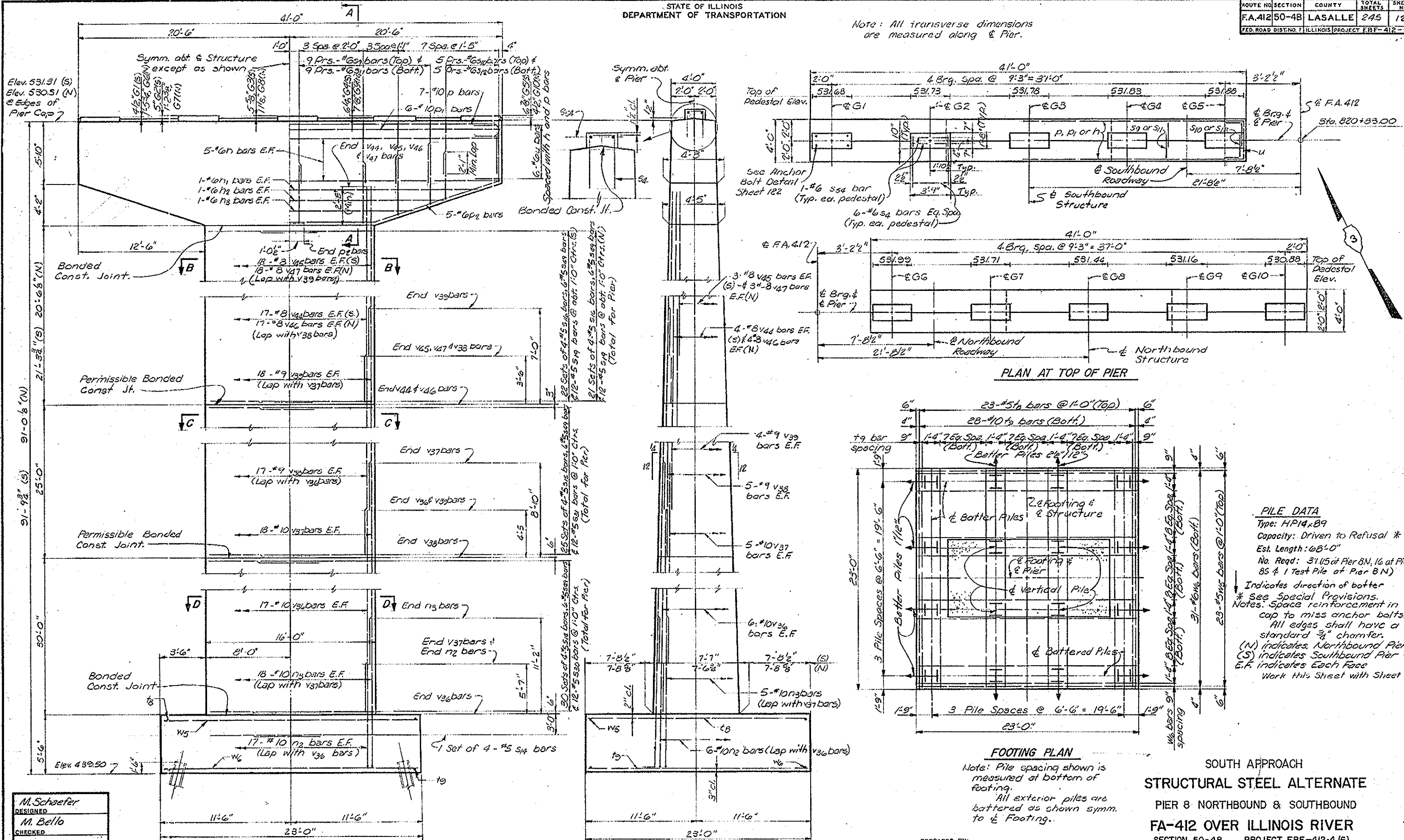
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 120 OF 163

SEC-50-43 La Salle sheets 126 thru 198 (Steel)

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-48	LASALLE	245	127
FED. ROAD DIST. NO.	ILLINOIS PROJECT EBF-412-4(6)			

Note: All transverse dimensions are measured along & Pier.



DESIGNED	M. Schaefer
CHECKED	M. Bello
DRAWN	J. Corlay
CHECKED	T. Fitzheimer

ELEVATION
(Looking North)

END VIEW

FOOTING PLAN

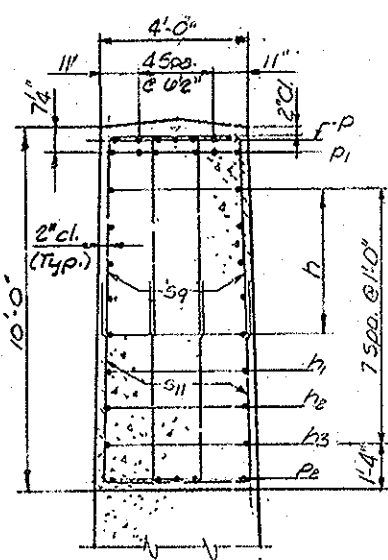
Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. to & Footing.

PILE DATA
Type: HP14x89
Capacity: Driven to Refusal *
Est. Length: 68'-0"
No. Req'd: 31.05 at Pier BN, 16 at Pier BS & 1 Test Pile at Pier BN
Indicates direction of batter
* See Special Provisions.
Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard 3/8" chamfer. (N) indicates Northbound Pier (S) indicates Southbound Pier. E.F. indicates Each Face. Work this Sheet with Sheet 122.

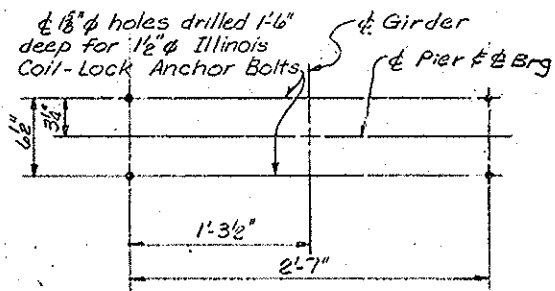
**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**
PIER 8 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

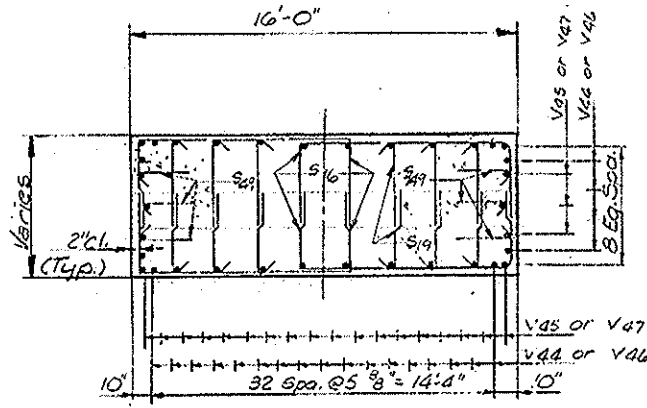
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



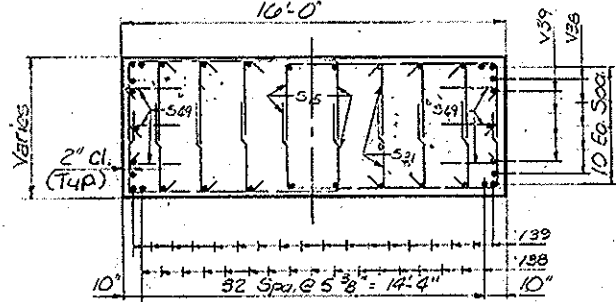
SECTION A-A
(Shaft reinf. & pedestal not shown)



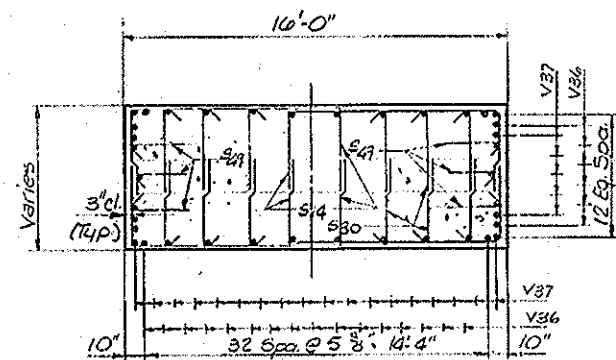
ANCHOR BOLT DETAIL
(Typ. ea. pedestal)



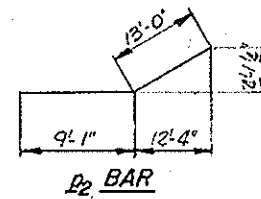
SECTION B-B



SECTION C-C



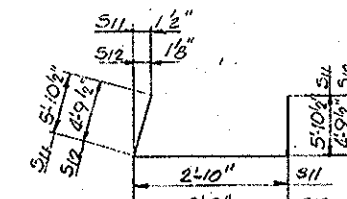
SECTION D-D



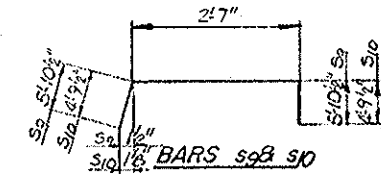
P2 BAR

BARS S19, S20, S21 & S19

S19	3'-9 1/2"	5/8"
S20	4'-9 1/2"	5/8"
S21	4'-3 1/2"	5/8"
S19	2'-0 1/2"	5/8"

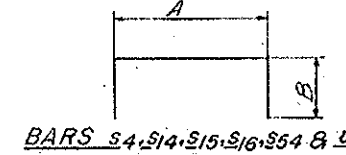


BARS S11 & S12

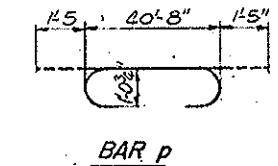


BARS S22 & S30

Bar	A	B
S22	1'-4"	2'-0"
S24	8'-11"	4'-11"
S25	8'-11"	4'-3"
S26	8'-11"	3'-9"
S27	3'-5"	2'-0"
U	3'-7"	4'-0"



BARS S4, S14, S15, S16, S54 & U



BAR P

BILL OF MATERIAL

PIER 8 NORTHBOUND					PIER 8 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	—	n	10	#6	40'-8"	—
h1	2	#6	35'-0"	—	h1	2	#6	35'-0"	—
h2	2	#6	28'-11"	—	h2	2	#6	28'-11"	—
h3	2	#6	22'-10"	—	h3	2	#6	22'-10"	—
n2	46	#10	12'-7"	—	n2	46	#10	12'-7"	—
n3	46	#10	18'-2"	—	n3	46	#10	18'-2"	—
p	7	#10	43'-6"	—	p	7	#10	43'-6"	—
p1	6	#10	40'-8"	—	p1	6	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s4	30	#6	5'-4"	—	s4	30	#6	5'-4"	—
s9	36	#6	14'-2"	—	s9	36	#6	14'-2"	—
s10	20	#6	12'-2"	—	s10	20	#6	12'-2"	—
s11	36	#6	14'-7"	—	s11	36	#6	14'-7"	—
s12	20	#6	12'-2"	—	s12	20	#6	12'-2"	—
s14	124	#5	18'-9"	—	s14	124	#5	18'-9"	—
s15	100	#5	17'-5"	—	s15	100	#5	17'-5"	—
s16	84	#5	16'-5"	—	s16	83	#5	16'-5"	—
s19	252	#5	4'-3"	—	s19	264	#5	4'-3"	—
s20	360	#5	5'-3"	—	s20	360	#5	5'-3"	—
s21	300	#5	4'-9"	—	s21	300	#5	4'-9"	—
s29	456	#5	2'-10"	—	s29	462	#5	2'-10"	—
s54	10	#6	7'-5"	—	s54	10	#6	7'-5"	—
t8	23	#5	22'-6"	—	t8	23	#5	22'-6"	—
t9	28	#10	22'-6"	—	t9	28	#10	22'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v36	46	#10	34'-5"	—	v36	46	#10	34'-5"	—
v37	46	#10	33'-3"	—	v37	46	#10	33'-3"	—
v38	44	#9	28'-6"	—	v38	44	#9	28'-6"	—
v39	44	#9	27'-7"	—	v39	44	#9	27'-7"	—
v46	42	#8	23'-3"	—	v46	42	#8	24'-0"	—
v47	42	#8	19'-9"	—	v47	42	#8	20'-6"	—
w5	23	#5	22'-6"	—	w5	23	#5	22'-6"	—
w6	31	#6	22'-6"	—	w6	31	#6	22'-6"	—
Class X Concrete Cu. Yds. 432.4					Class X Concrete Cu. Yds. 435.1				
Reinforcement Bars Lbs. 55556					Reinforcement Bars Lbs. 55864				
Steel Piles HP14x89 Lin. Ft. 1020					Steel Piles HP14x89 Lin. Ft. 1020				
Test Piles (Steel HP14x89) Each 1					Metal Shoes Each 16				
Metal Shoes Each 15					Cofferdam Each 1				
Cofferdam Each 1					Cofferdam Excav. Cu. Yds. 203				

Note: Work this sheet with Sheet 121.

M. Schaefer
DESIGNED
M. Bello
CHECKED
DRAWN J. Corley
T. Ritzheimer
CHECKED

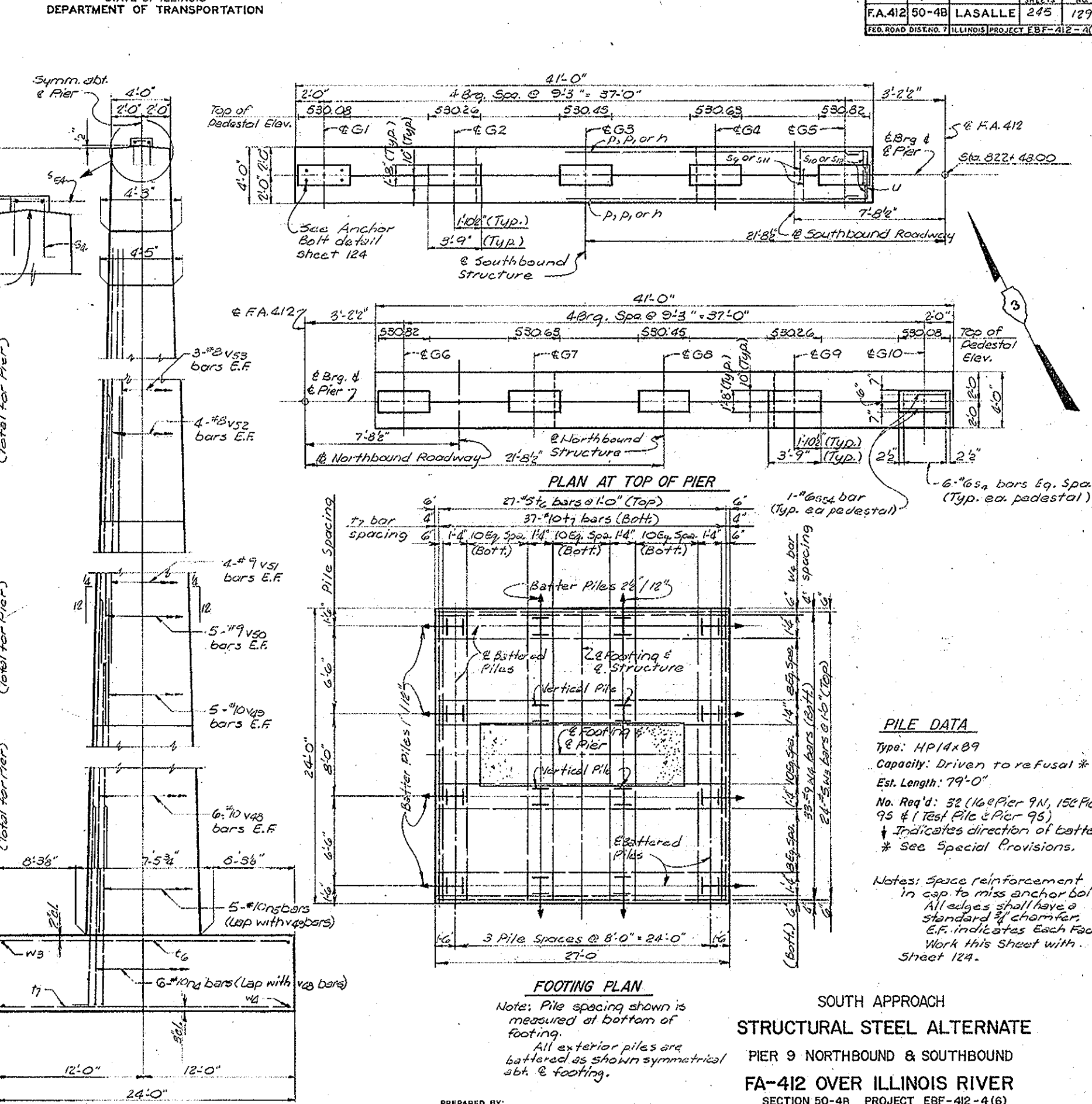
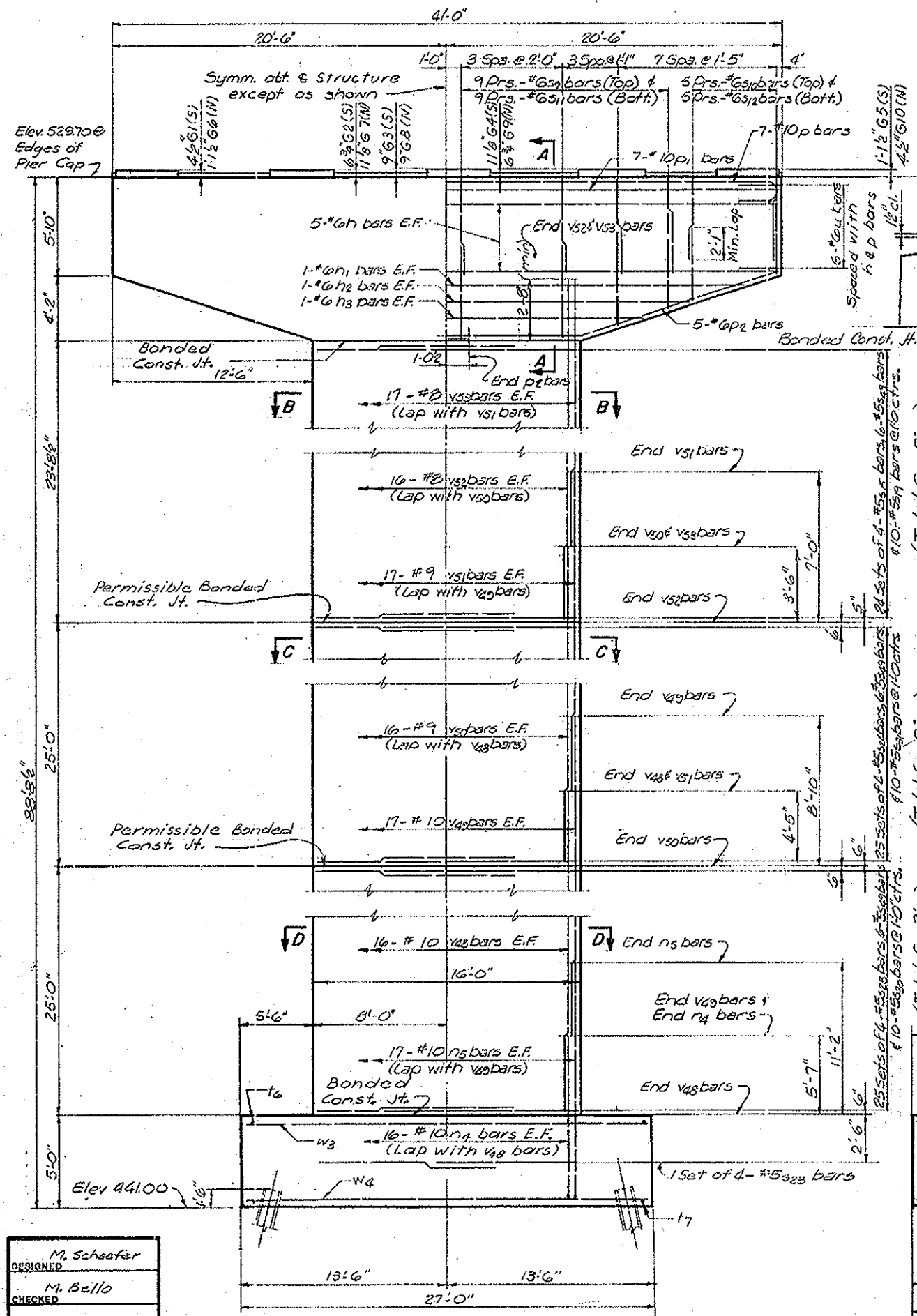
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 8 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 122 OF 163

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-4B	LASALLE	245	129
FED. ROAD DIST. NO. ILLINOIS PROJECT EBF-412-4(6)				



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symmetrical abt. & footing.

PILE DATA

Type: HP14x89
Capacity: Driven to refusal *
Est. Length: 79'-0"
No. Req'd: 32 (16 @ Pier 9N, 16 @ Pier 9S & 1 Test Pile @ Pier 9S)
* Indicates direction of batter.
* See Special Provisions.
Notes: Space reinforcement in cap. to miss anchor bolts. All edges shall have a standard 3/4 chamfer. E.F. indicates Each Face. Work this Sheet with Sheet 124.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 9 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

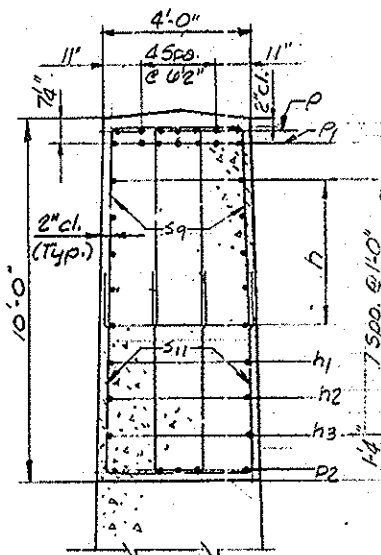
DESIGNED
M. Schaefer

CHECKED
M. Bello

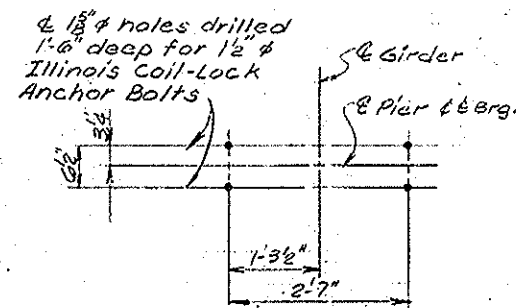
DRAWN
J. Corley

CHECKED
T. Ritzheimer

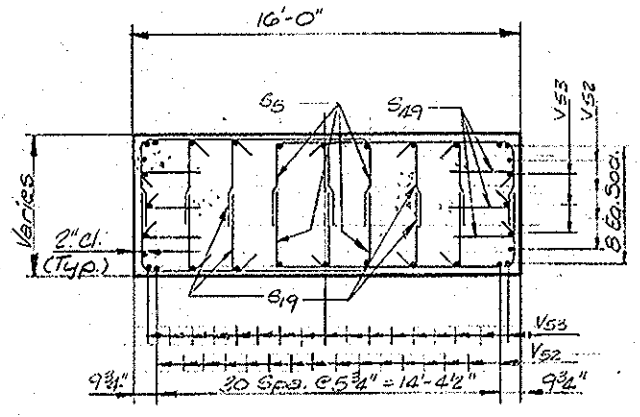
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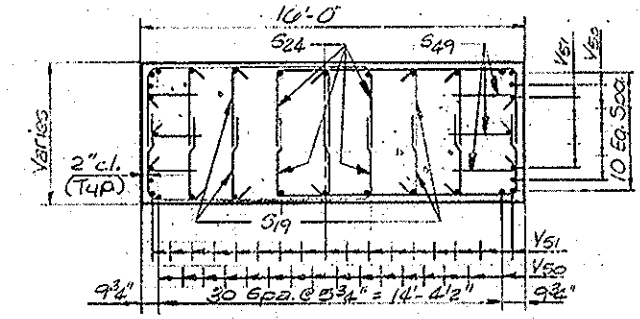
SECTION A-A
(Shaft reinf. and Pedestal not shown)



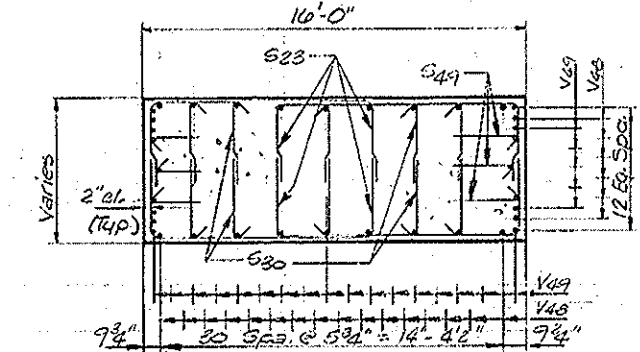
ANCHOR BOLT DETAIL
(Typ. as Pedestal)



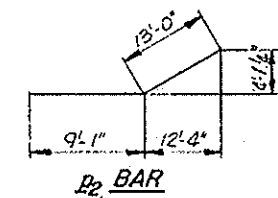
SECTION B-B



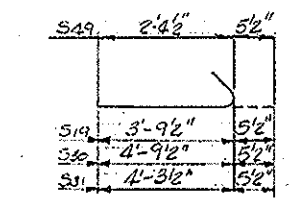
SECTION C-C



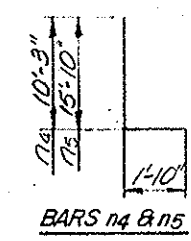
SECTION D-D



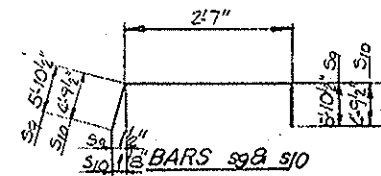
P2 BAR



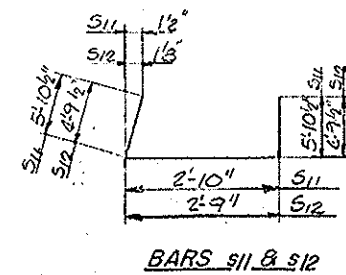
BARS S19, S30, S31 & S49



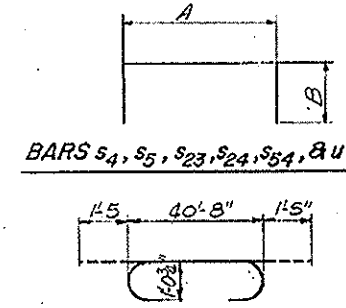
BARS n4 & n5



Bar	A	B
S4	1'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S23	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S26	3'-5"	2'-0"
U	3'-7"	4'-0"



BARS s11 & s12



BAR P

BILL OF MATERIAL

PIER 9 NORTHBOUND					PIER 9 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	—	n	10	#6	40'-8"	—
n1	2	#6	35'-0"	—	n1	2	#6	35'-0"	—
n2	2	#6	28'-11"	—	n2	2	#6	28'-11"	—
n3	2	#6	22'-10"	—	n3	2	#6	22'-10"	—
n4	44	#10	12'-1"	L	n4	44	#10	12'-1"	L
n5	44	#10	17'-8"	L	n5	44	#10	17'-8"	L
p	7	#10	43'-6"	(C)	p	7	#10	43'-6"	(C)
p1	7	#10	40'-8"	—	p1	7	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s4	30	#6	5'-4"	—	s4	30	#6	5'-4"	—
s5	96	#5	17'-7"	—	s5	96	#5	17'-7"	—
s9	36	#6	18'-4"	—	s9	36	#6	18'-4"	—
s10	20	#6	12'-2"	—	s10	20	#6	12'-2"	—
s11	36	#6	18'-7"	—	s11	36	#6	18'-7"	—
s12	20	#6	12'-4"	—	s12	20	#6	12'-4"	—
s19	240	#5	4'-3"	—	s19	240	#5	4'-3"	—
s20	100	#5	19'-7"	—	s20	100	#5	19'-7"	—
s21	100	#5	18'-7"	—	s21	100	#5	18'-7"	—
s22	250	#5	5'-3"	—	s22	250	#5	5'-3"	—
s23	250	#5	4'-9"	—	s23	250	#5	4'-9"	—
s24	444	#5	2'-10"	—	s24	444	#5	2'-10"	—
s26	10	#6	7'-5"	—	s26	10	#6	7'-5"	—
t6	27	#5	23'-6"	—	t6	27	#5	23'-6"	—
t7	37	#10	23'-6"	—	t7	37	#10	23'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v48	44	#10	29'-5"	—	v48	44	#10	29'-5"	—
v49	44	#10	28'-3"	—	v49	44	#10	28'-3"	—
v50	42	#9	22'-6"	—	v50	42	#9	22'-6"	—
v51	42	#9	27'-7"	—	v51	42	#9	27'-7"	—
v52	40	#8	26'-5"	—	v52	40	#8	26'-5"	—
v53	40	#8	22'-11"	—	v53	40	#8	22'-11"	—
w3	24	#6	26'-6"	—	w3	24	#6	26'-6"	—
w4	33	#9	26'-6"	—	w4	33	#9	26'-6"	—
Class X Concrete Cu.Yds. 436.3					Class X Concrete Cu.Yds. 436.3				
Reinforcement Bars Lbs. 55273					Reinforcement Bars Lbs. 55273				
Steel Piles HP14x89 Lin. Ft. 1264					Steel Piles HP14x89 Lin. Ft. 1185				
Metal Shoes Each 16					Metal Shoes Each 15				
Cofferdam Each 1					Cofferdam Each 1				
Cofferdam Excav. Cu.Yds. 225					Cofferdam Excav. Cu.Yds. 225				

Note: Work this Sheet with Sheet 123.

DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN J. Corley
CHECKED T. Ritzheimer

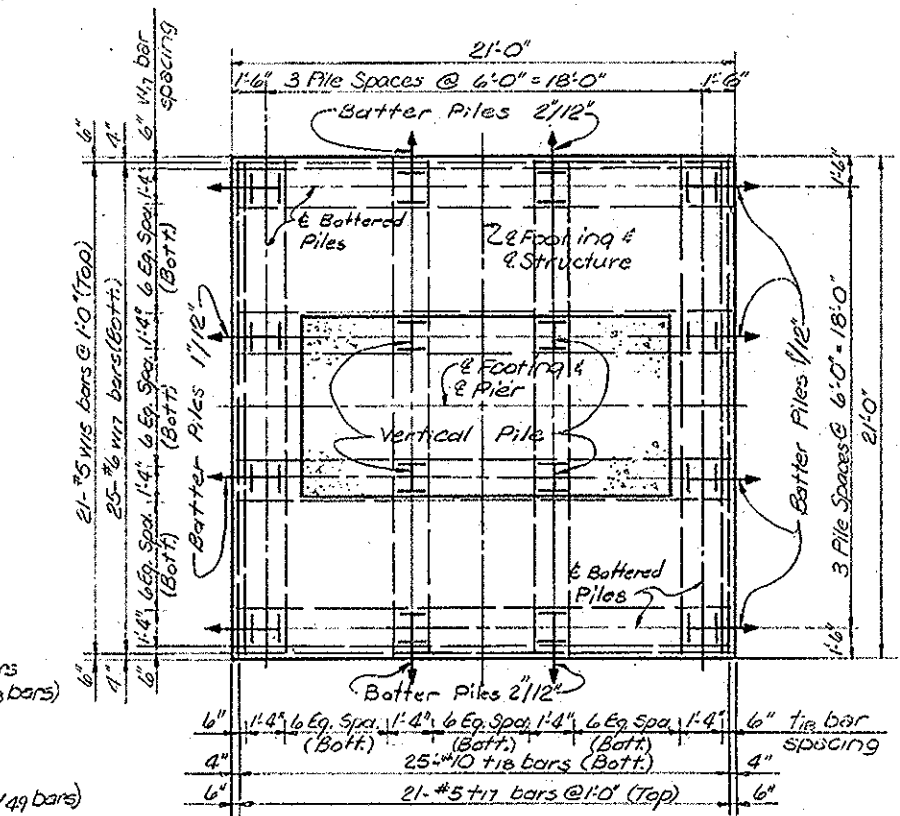
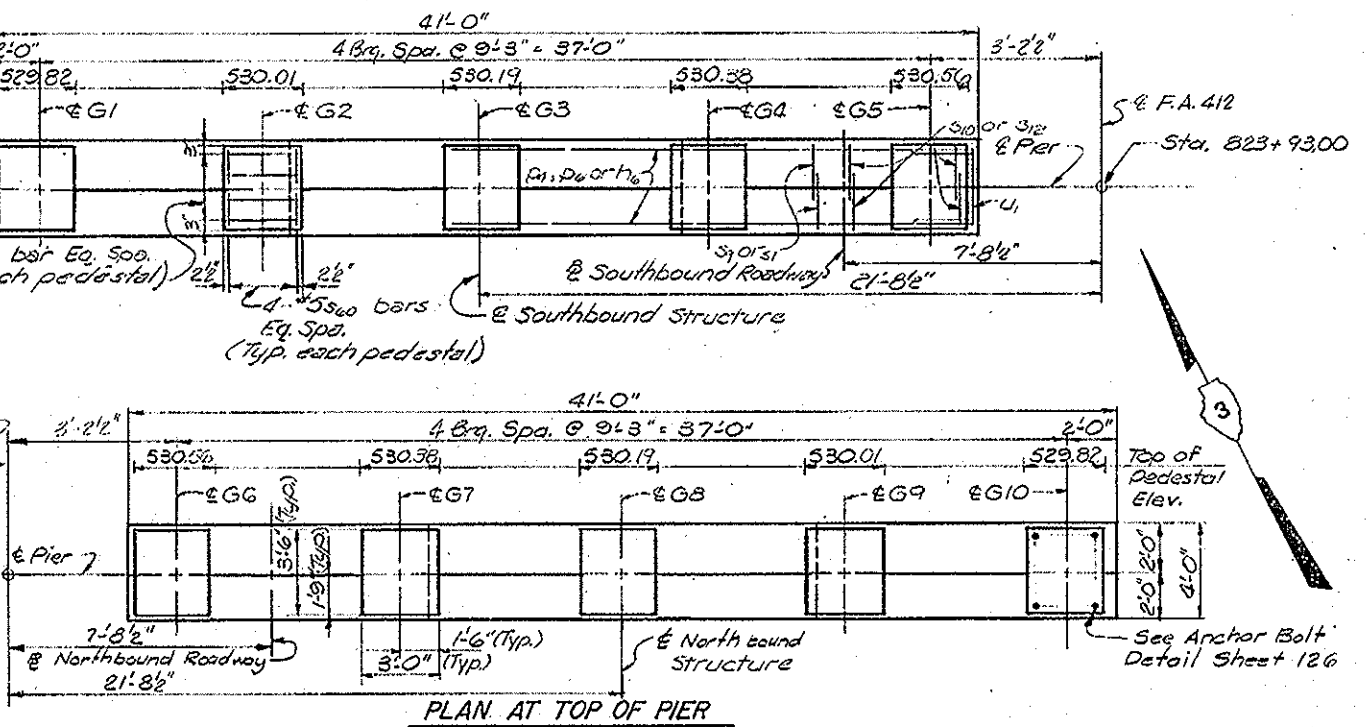
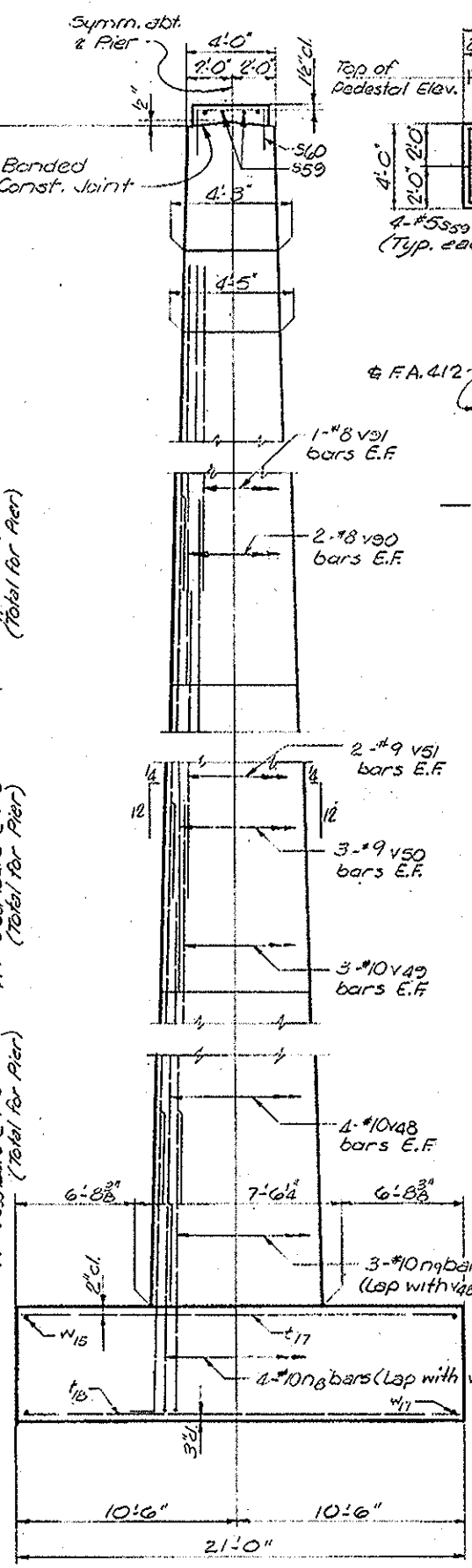
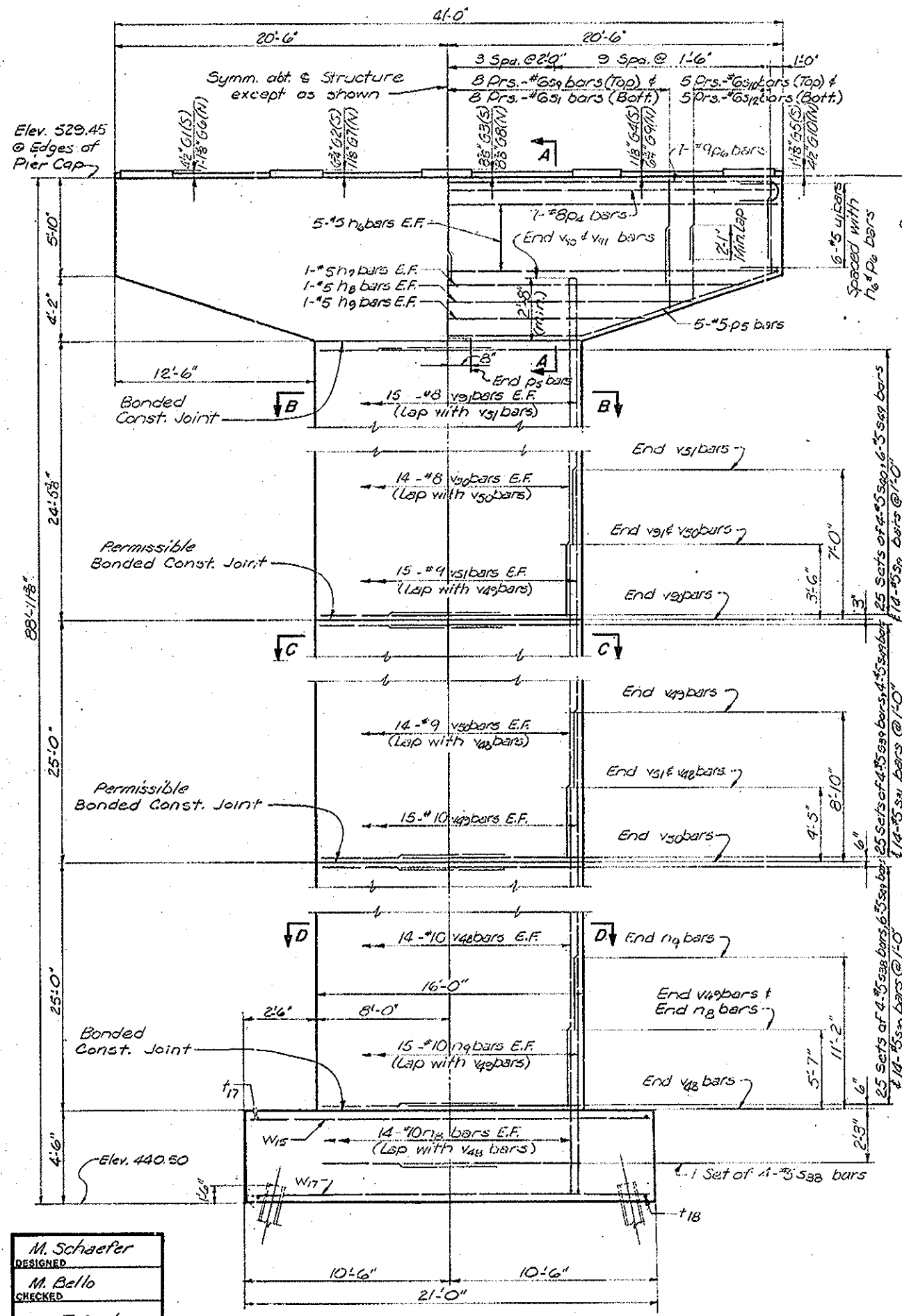
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 9 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 124 OF 163

ROUTE NO. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412 50-4B	LASALLE	245	131
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)			



PILE DATA
Type: HP 14 x 89
Capacity: Driven to Refusal *
Est. Length: 70'-0"
No. Req'd: 32 (16 per pier)
↓ Indicates direction of batter.
* See Special Provisions.
Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a 3/4" chamfer.
E.F. indicates Each Face
Work this Sheet with Sheet 126.

M. Schaefer
DESIGNED
M. Bello
CHECKED
J. Corley
DRAWN
T. Ritzheimer
CHECKED

ELEVATION
(Looking North)

END VIEW

FOOTING PLAN

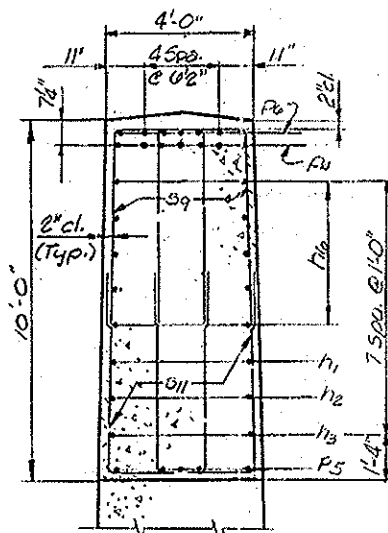
Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 10 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

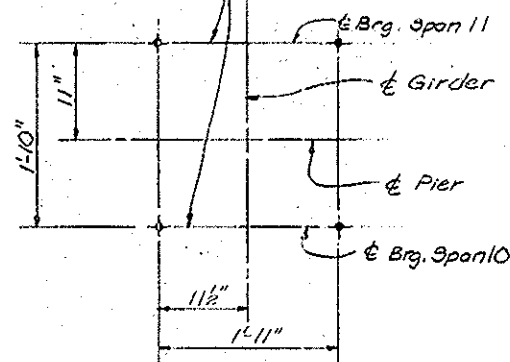
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 125 OF 163

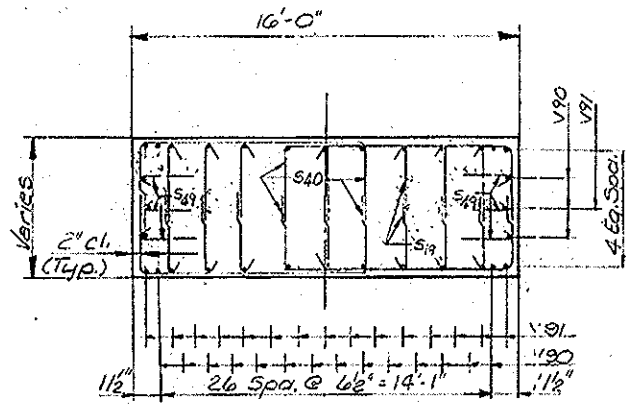


SECTION A-A
(Shaft reinf. & pedestal not shown.)

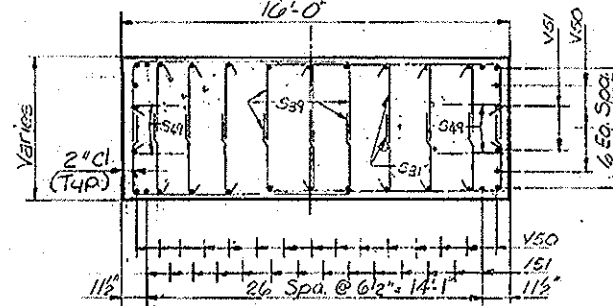
4 1/2" dia holes drilled
1'-0" deep for 1/2" dia
Illinois Coil-Lock
Anchor Bolts



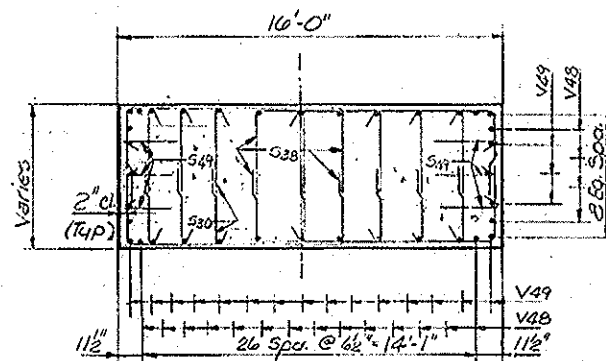
ANCHOR BOLT DETAIL
(Typ. ea. pedestal)



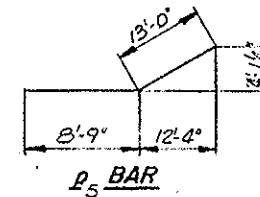
SECTION B-B



SECTION C-C



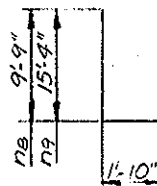
SECTION D-D



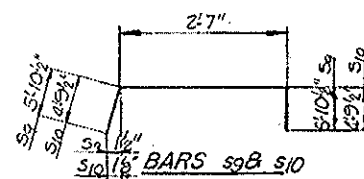
P5 BAR

S19	3'-9 1/2"	5/8"
S30	4'-9 1/2"	5/8"
S31	4'-3 1/2"	5/8"
S49	2'-4 1/2"	5/8"

BARS S19, S30, S31 & S49

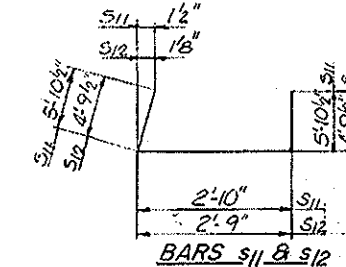


BARS n8 & n9

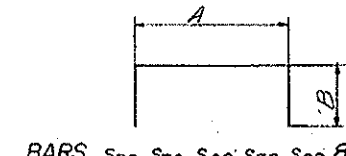


BARS s9 & s10

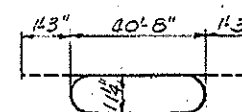
Bar	A	B
S38	9'-8"	4'-9 1/2"
S39	9'-8"	4'-3 1/2"
S40	9'-8"	3'-9"
S59	2'-8"	2'-0"
S60	3'-1"	2'-0"
U1	3'-7"	3'-9"



BARS s11 & s12



BARS s38, s39, s40, s59, s60 & U1



BAR P6

BILL OF MATERIAL

PIER 10 NORTHBOUND					PIER 10 SOUTHBOUND						
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape		
n6	10	#5	40'-8"	—	n6	10	#5	40'-8"	—		
n7	2	#5	35'-0"	—	n7	2	#5	35'-0"	—		
n8	2	#5	28'-11"	—	n8	2	#5	28'-11"	—		
n9	2	#5	22'-10"	—	n9	2	#5	22'-10"	—		
n8	36	#10	11'-7"	L	n8	36	#10	11'-7"	L		
n9	36	#10	17'-2"	L	n9	36	#10	17'-2"	L		
p4	7	#8	40'-8"	—	p4	7	#8	40'-8"	—		
p5	10	#5	21'-9"	—	p5	10	#5	21'-9"	—		
p6	7	#9	43'-2"	—	p6	7	#9	43'-2"	—		
s9	32	#6	14'-4"	□	s9	32	#6	14'-4"	□		
s10	20	#6	12'-2"	□	s10	20	#6	12'-2"	□		
s11	32	#6	14'-7"	L	s11	32	#6	14'-7"	L		
s12	20	#6	12'-4"	L	s12	20	#6	12'-4"	L		
s19	350	#5	4'-3"	→	s19	350	#5	4'-3"	→		
s20	350	#5	5'-3"	→	s20	350	#5	5'-3"	→		
s31	350	#5	4'-9"	→	s31	350	#5	4'-9"	→		
s38	104	#5	19'-3"	□	s38	104	#5	19'-3"	□		
s39	100	#5	18'-3"	□	s39	100	#5	18'-3"	□		
s40	100	#5	17'-2"	□	s40	100	#5	17'-2"	□		
s49	400	#5	2'-10"	→	s49	400	#5	2'-10"	→		
s59	20	#5	6'-8"	□	s59	20	#5	6'-8"	□		
s60	20	#5	7'-1"	□	s60	20	#5	7'-1"	□		
t17	21	#5	20'-6"	—	t17	21	#5	20'-6"	—		
t18	22	#10	20'-6"	—	t18	22	#10	20'-6"	—		
u1	12	#5	11'-1"	□	u1	12	#5	11'-1"	□		
v48	36	#10	29'-5"	—	v48	36	#10	29'-5"	—		
v49	36	#10	28'-3"	—	v49	36	#10	28'-3"	—		
v50	34	#9	28'-6"	—	v50	34	#9	28'-6"	—		
v51	34	#9	27'-7"	—	v51	34	#9	27'-7"	—		
v90	32	#8	27'-2"	—	v90	32	#8	27'-2"	—		
v91	32	#8	23'-8"	—	v91	32	#8	23'-8"	—		
w15	21	#5	20'-6"	—	w15	21	#5	20'-6"	—		
w17	25	#6	21'-8"	—	w17	25	#6	21'-8"	—		
Class X Concrete				Cu. Yds.	393.8	Class X Concrete				Cu. Yds.	393.8
Reinforcement Bars				Lbs.	45252	Reinforcement Bars				Lbs.	45252
Steel Piles HP14x89				Lin. Ft.	1248	Steel Piles HP14x89				Lin. Ft.	1248
Metal Shoes				Each	16	Metal Shoes				Each	16
Cofferdam				Each	1	Cofferdam				Each	1
Cofferdam Excav.				Cu. Yds.	150	Cofferdam Excav.				Cu. Yds.	150

Note: Work this sheet with sheet 125.

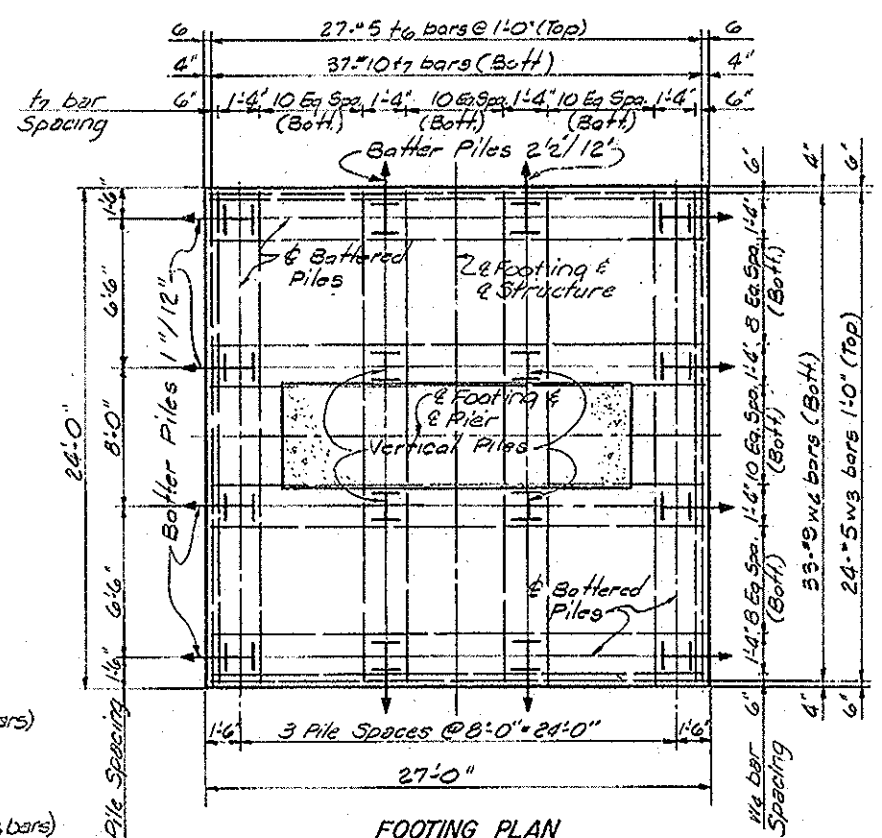
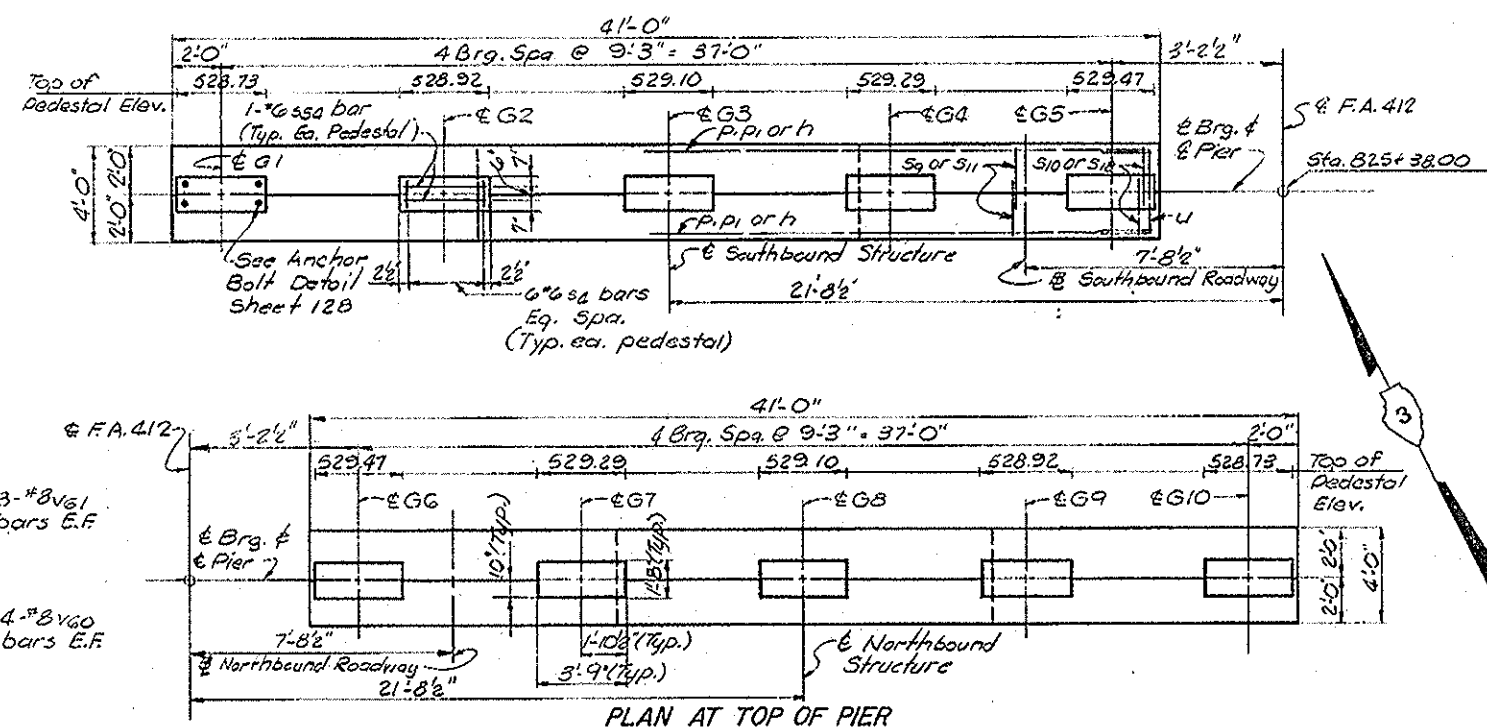
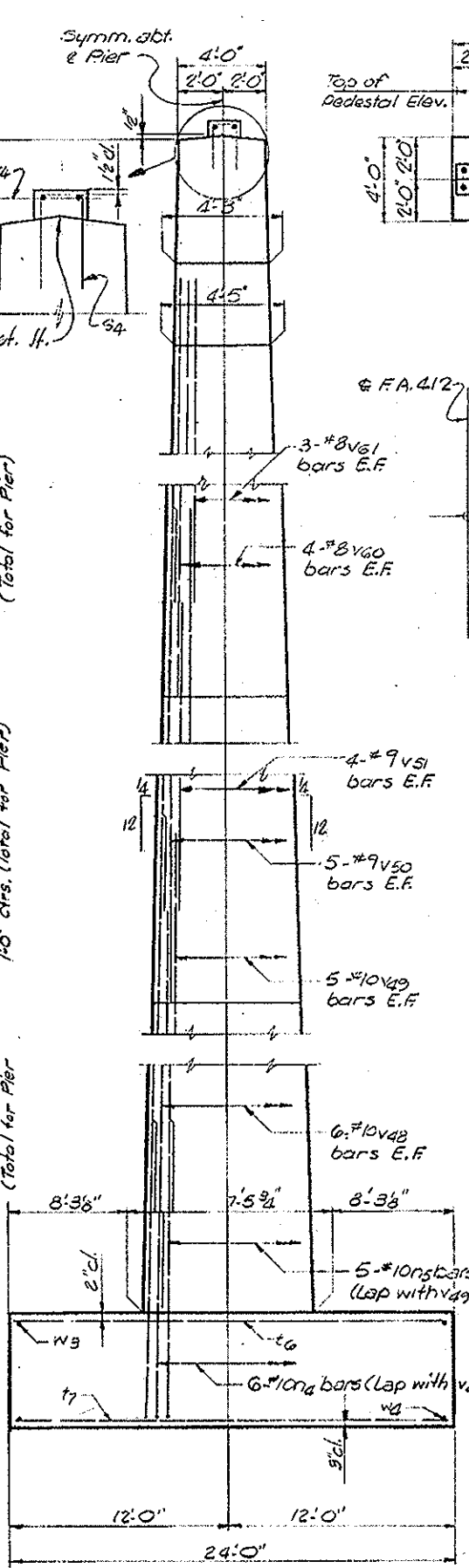
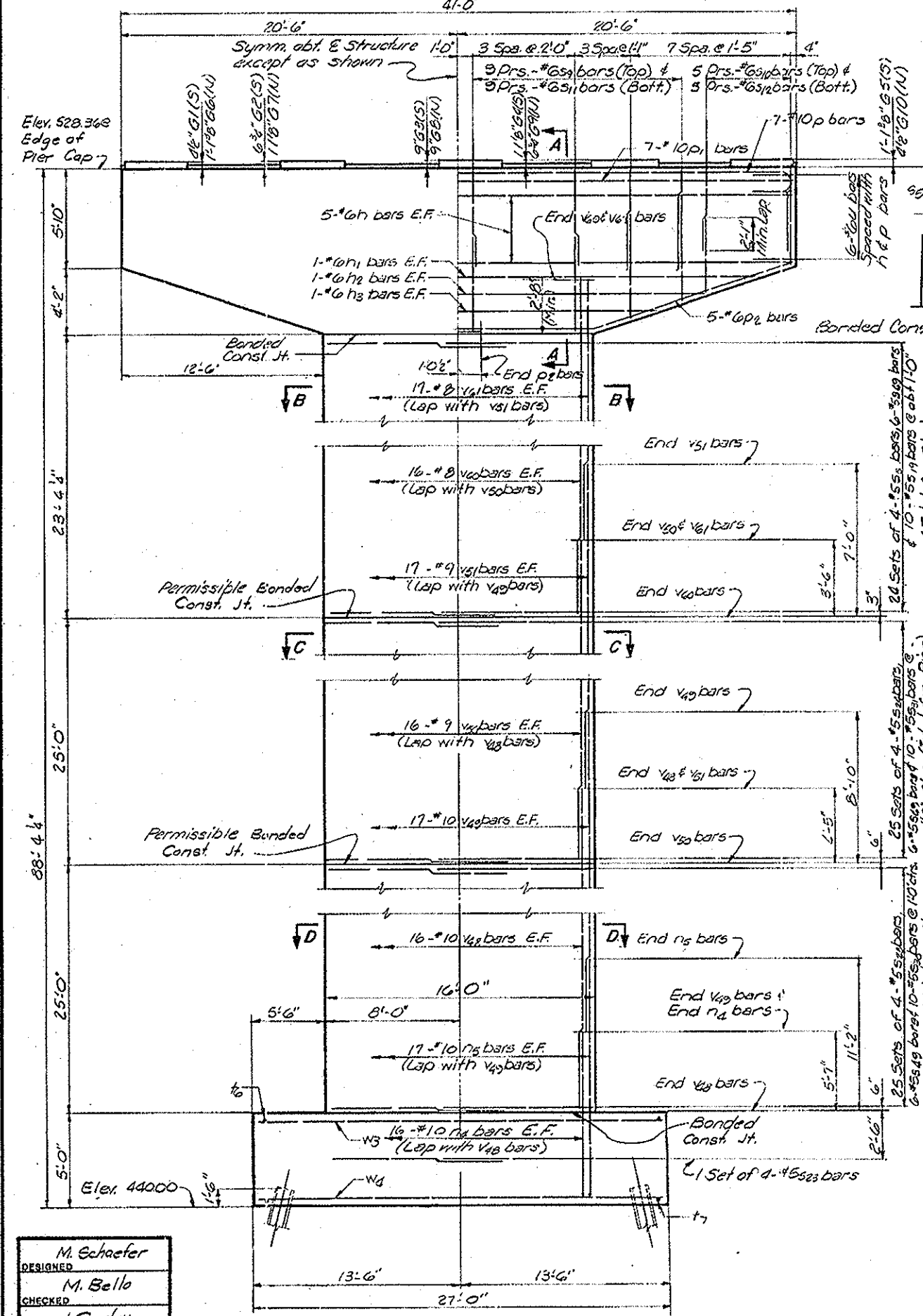
M. Schaefer
DESIGNED
M. Bello
CHECKED
J. Corley
DRAWN
T. Ritzheimer
CHECKED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 10 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

SHEET NO. 126 OF 163



PILE DATA
Type: H.P. 14x89
Capacity: Driven to Refusal *
Est. Length: 78'-0"
No. Req'd: 32 (16 per pier)
* Indicates direction of batter
* See Special Provisions.

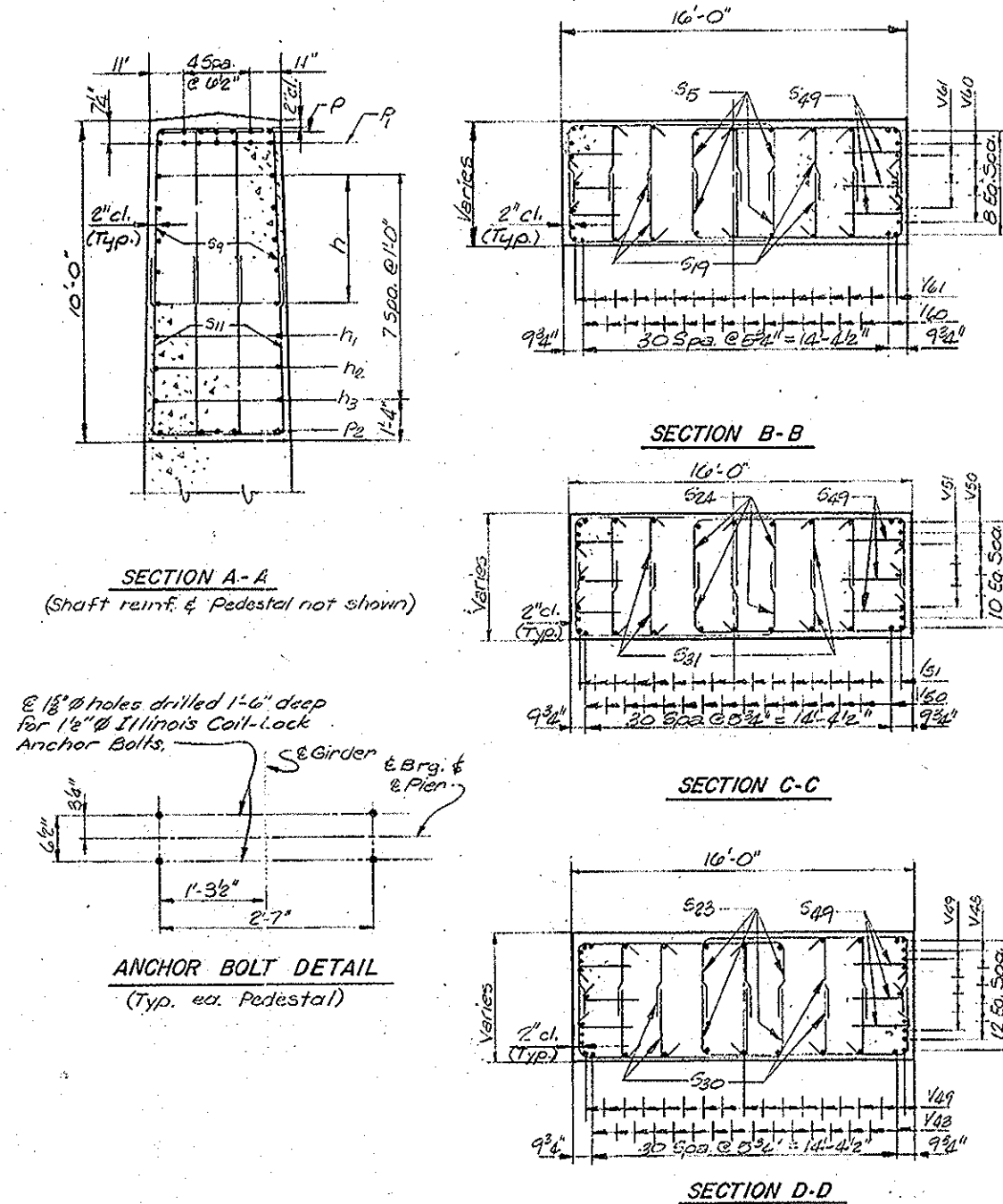
Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard 3/4" chamfer. E.F. - indicates Each Face. Work this sheet with Sheet 128.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER II NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

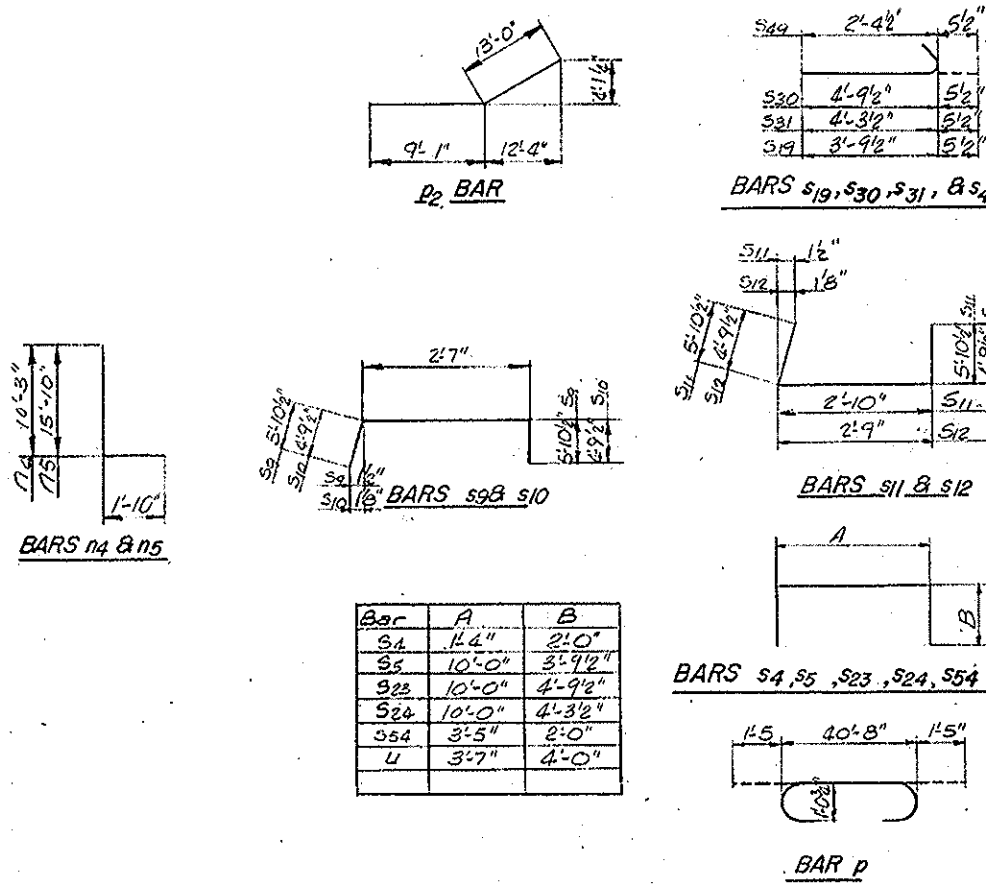
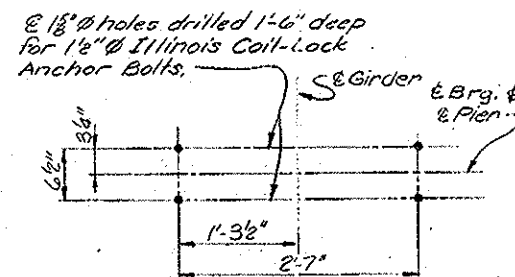
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



SECTION A-A
(Shaft reinf. & Pedestal not shown)



Bar	A	B
S4	14.4"	21.0"
S5	10.0"	31.9 1/2"
S23	10.0"	41.9 1/2"
S24	10.0"	41.3 1/2"
S54	3.5"	2.0"
U	3.7"	4.0"

BILL OF MATERIAL

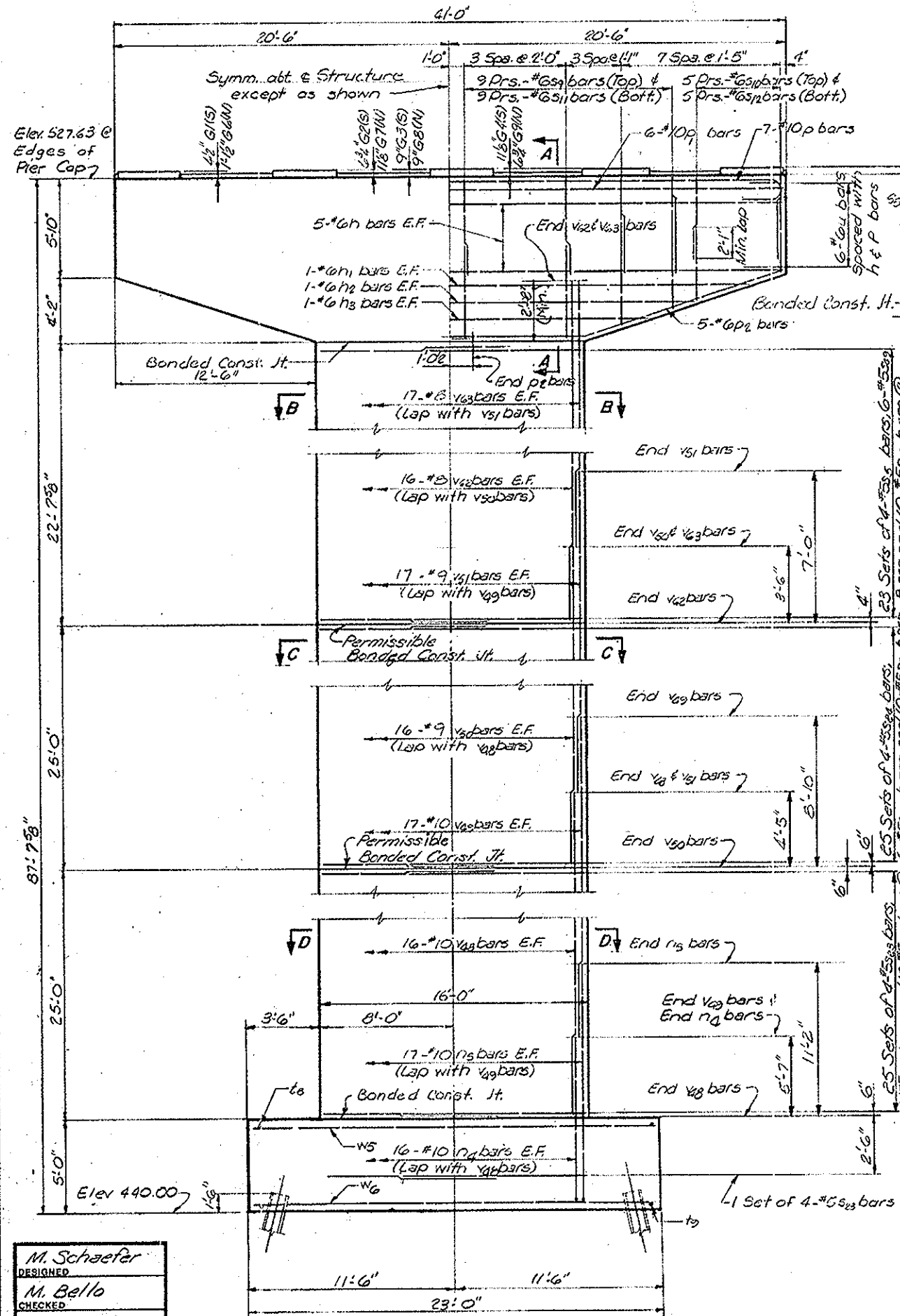
PIER II NORTHBOUND					PIER II SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	10	#6	40'-8"		h	10	#6	40'-8"	
n	2	#6	35'-0"		n	2	#6	35'-0"	
n2	2	#6	28'-11"		ne	2	#6	28'-11"	
n3	2	#6	22'-10"		na	2	#6	22'-10"	
na	44	#10	12'-1"	L	na	44	#10	12'-1"	L
ns	44	#10	17'-8"	L	ns	44	#10	17'-8"	L
p	7	#10	43'-6"	C	p	7	#10	43'-6"	C
pi	7	#10	40'-8"		pi	7	#10	40'-8"	
pe	10	#6	22'-1"		pe	10	#6	22'-1"	
pa	30	#6	5'-4"		pa	30	#6	5'-4"	
ps	90	#5	17'-7"		ps	90	#5	17'-7"	
sa	30	#6	14'-1"		sa	30	#6	14'-1"	
sa	20	#6	12'-2"		sa	20	#6	12'-2"	
sa	30	#6	14'-7"		sa	30	#6	14'-7"	
sa	20	#6	12'-8"		sa	20	#6	12'-8"	
sa	240	#5	4'-3"		sa	240	#5	4'-3"	
sa	100	#5	19'-7"		sa	100	#5	19'-7"	
sa	100	#5	18'-7"		sa	100	#5	18'-7"	
sa	250	#5	5'-3"		sa	250	#5	5'-3"	
sa	250	#5	4'-9"		sa	250	#5	4'-9"	
sa	444	#5	2'-10"		sa	444	#5	2'-10"	
sa	10	#6	7'-5"		sa	10	#6	7'-5"	
t6	27	#5	23'-6"		t6	27	#5	23'-6"	
t7	37	#10	23'-6"		t7	37	#10	23'-6"	
u	12	#6	11'-7"		u	12	#6	11'-7"	
v48	44	#10	29'-5"		v48	44	#10	29'-5"	
v49	44	#10	28'-3"		v49	44	#10	28'-3"	
v50	42	#9	28'-6"		v50	42	#9	28'-6"	
v51	42	#9	27'-7"		v51	42	#9	27'-7"	
v60	40	#8	26'-1"		v60	40	#8	26'-1"	
v61	40	#8	22'-7"		v61	40	#8	22'-7"	
w3	24	#6	26'-6"		w3	24	#6	26'-6"	
w4	33	#9	26'-6"		w4	33	#9	26'-6"	
Class X Concrete Cu.Yds. 435.0					Class X Concrete Cu.Yds. 435.0				
Reinforcement Bars Lbs. 55,202					Reinforcement Bars Lbs. 55,202				
Steel Piles HP14x89 Lin. Ft. 1248					Steel Piles HP14x89 Lin. Ft. 1248				
Metal Shoes Each 10					Metal Shoes Each 10				
Cofferdam Each 1					Cofferdam Each 1				
Cofferdam Exc. Cu.Yds. 225					Cofferdam Exc. Cu.Yds. 225				

Note: Work this Sheet with Sheet 123.

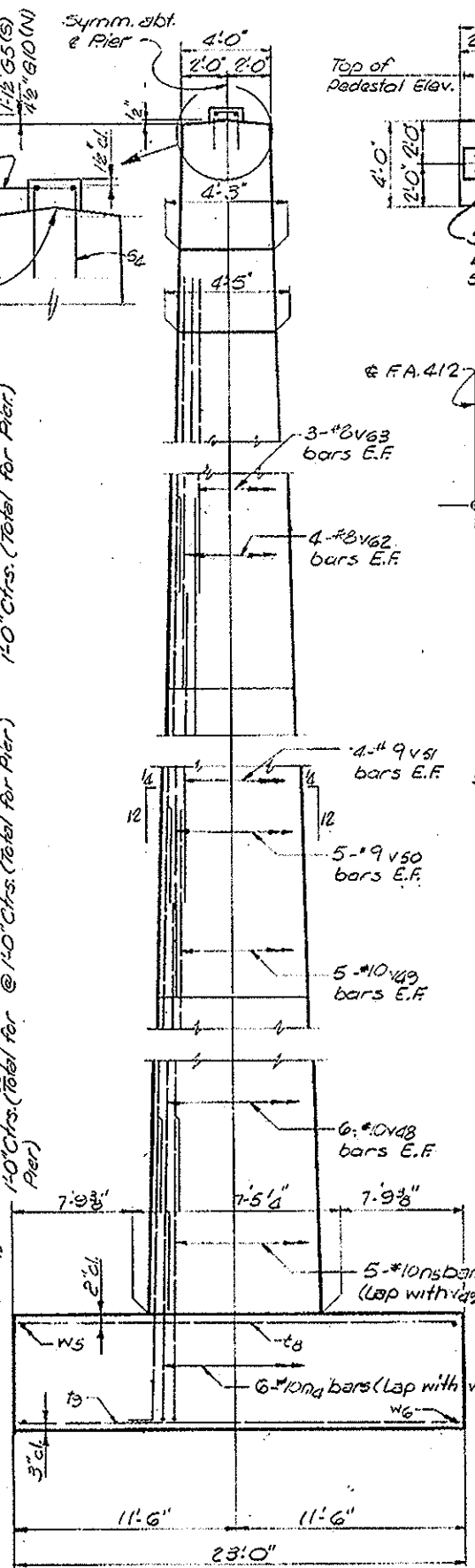
DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN J. Corley
CHECKED T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

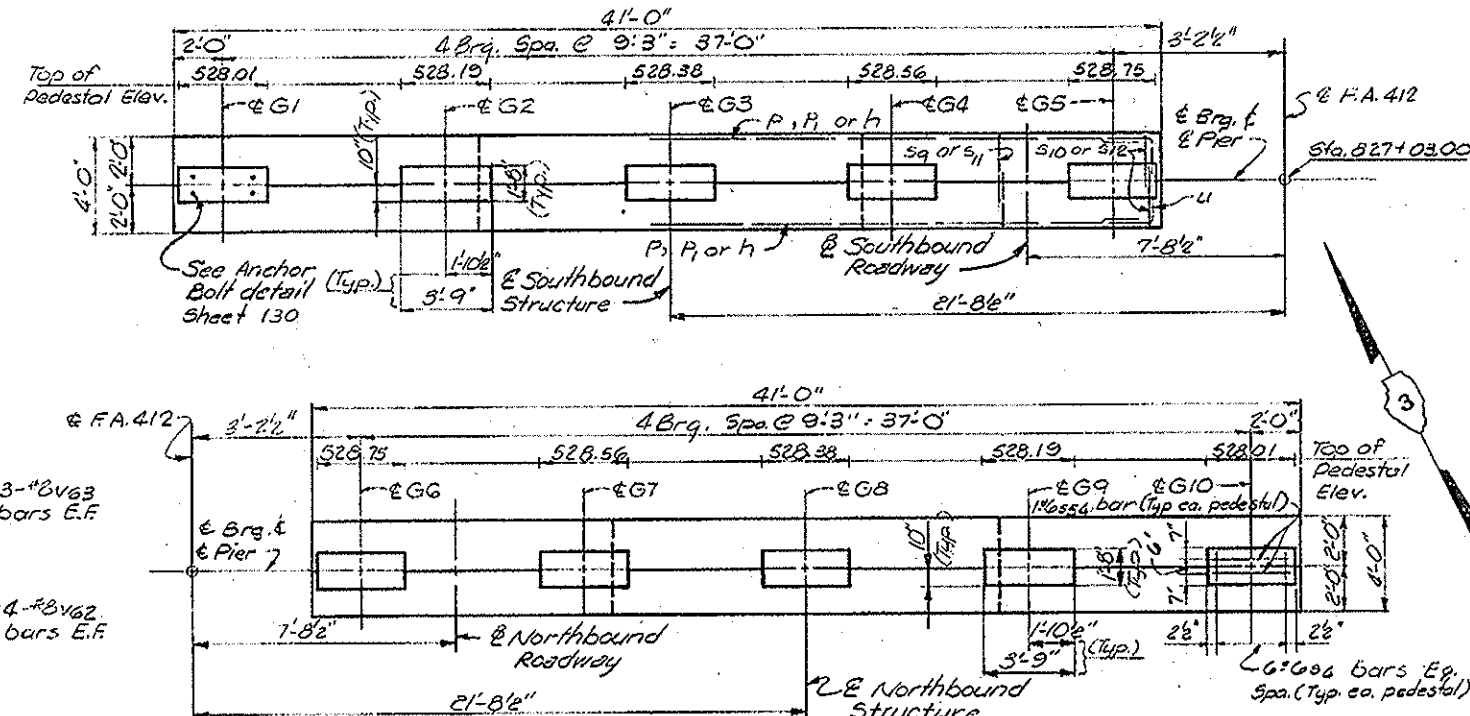
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER II NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



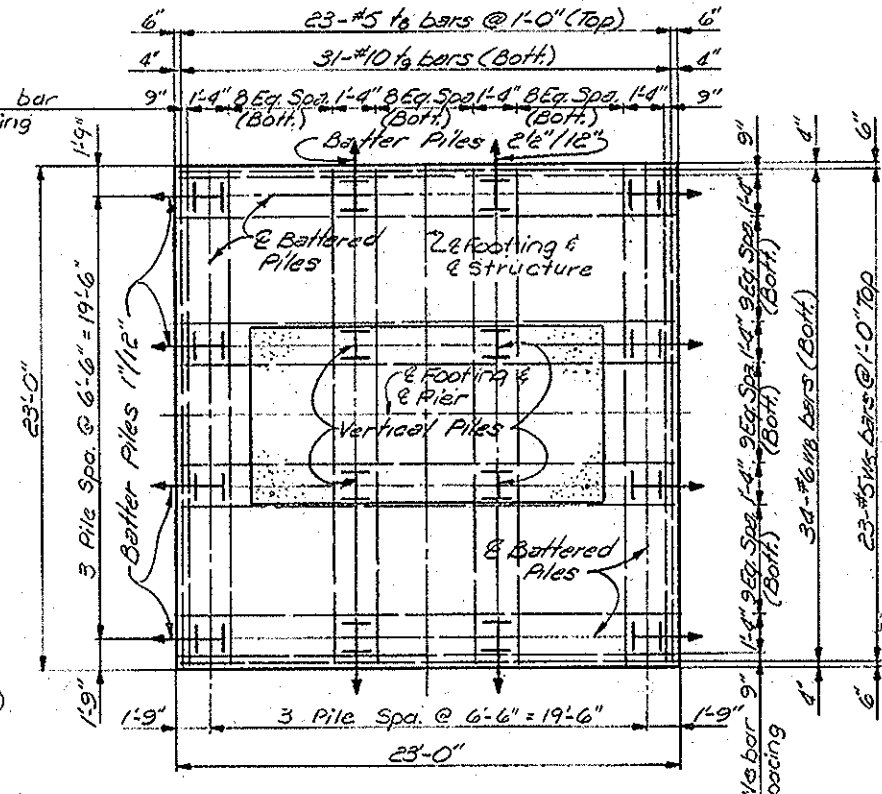
ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symmetrical about & footing.

PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal
Est. Length: 87'-0"
No. Req'd: 31 (16 at Pier 12N, 15 at Pier 12S & 1 Test Pile at Pier 12S)
Indicates direction of batter
See Special Provisions.
Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4" Chamfer.
E.F. indicates Each Face.
Work this Sheet with Sheet 130.

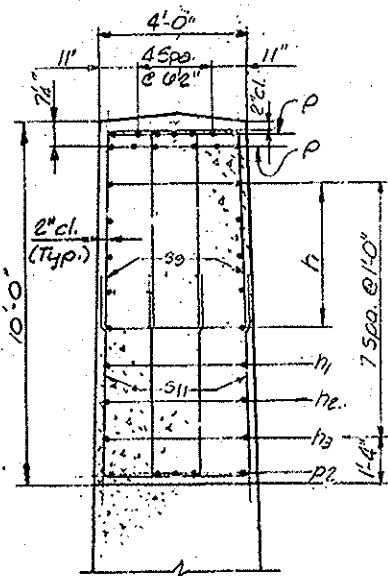
**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 12 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

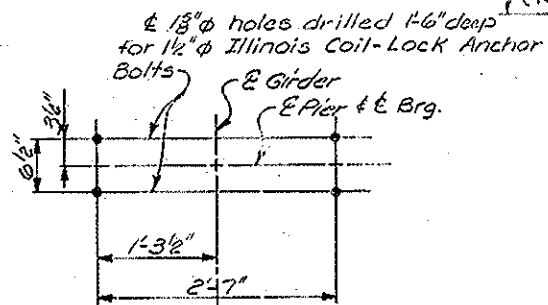
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED
M. Schaefer
CHECKED
M. Bello
DRAWN
J. Corley
CHECKED
T. Ritzheimer

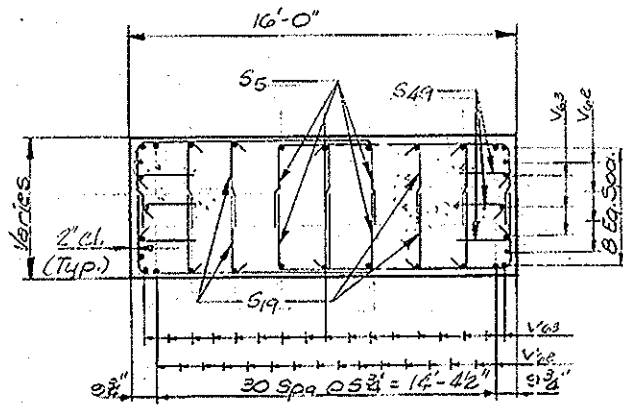
6692
225207R



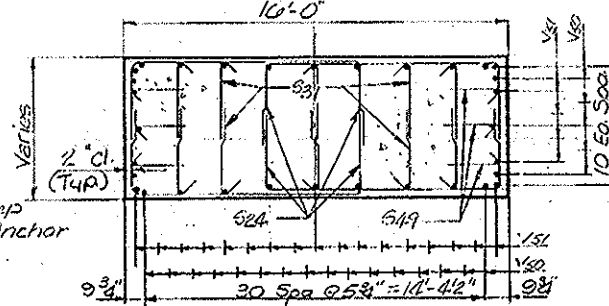
SECTION A-A
(Shaft Reinf. & Pedestal not shown)



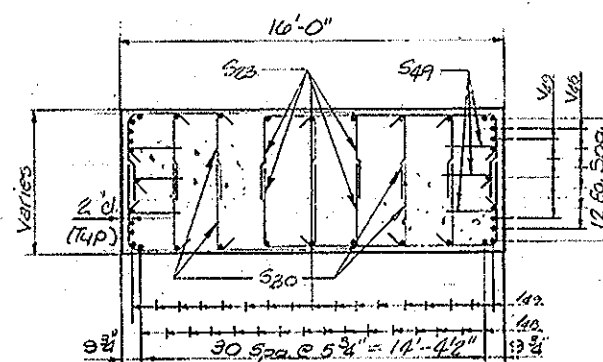
ANCHOR BOLT DETAIL
(Typ. Ea. Pedestal)



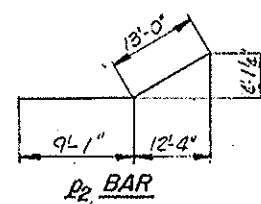
SECTION B-B



SECTION C-C



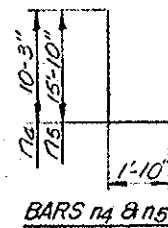
SECTION D-D



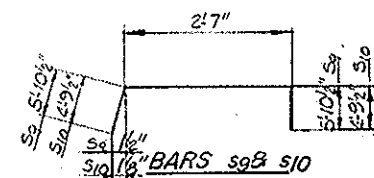
P2 BAR

s49	2'-4 1/2"	5'-2"
s19	3'-9 1/2"	5'-2"
s20	4'-9 1/2"	5'-2"
s31	4'-3 1/2"	5'-2"

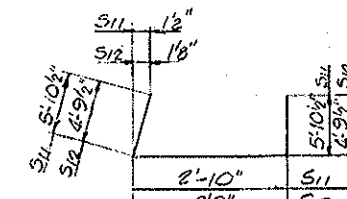
BARS s49, s30, s31 & s49



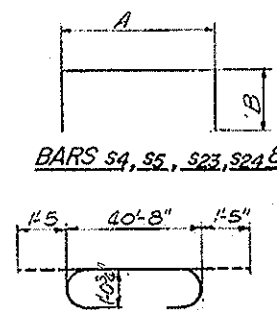
BARS n4 & n5



Bar	A	B
s4	1'-4"	2'-0"
s5	10'-0"	3'-9 1/2"
s23	10'-0"	4'-9 1/2"
s24	10'-0"	4'-3 1/2"
s4	3'-5"	2'-0"
u	3'-7"	4'-0"



BARS s11 & s12



BAR p

BILL OF MATERIAL

PIER 12 NORTHBOUND						PIER 12 SOUTHBOUND					
Bar	No.	Size	Length	Shape		Bar	No.	Size	Length	Shape	
n	10	#6	40'-8"			n	10	#6	40'-8"		
n1	2	#6	35'-0"			n1	2	#6	35'-0"		
n2	2	#6	28'-11"			n2	2	#6	28'-11"		
n3	2	#6	22'-10"			n3	2	#6	22'-10"		
p4	44	#10	12'-1"	L		p4	44	#10	12'-1"	L	
p5	44	#10	17'-8"	L		p5	44	#10	17'-8"	L	
p	7	#10	43'-6"	C		p	7	#10	43'-6"	C	
p1	6	#10	40'-8"			p1	6	#10	40'-8"		
p2	10	#6	22'-1"			p2	10	#6	22'-1"		
s4	30	#6	5'-4"			s4	30	#6	5'-4"		
s5	92	#5	17'-7"			s5	92	#5	17'-7"		
s9	36	#6	14'-4"			s9	36	#6	14'-4"		
s10	20	#6	12'-2"			s10	20	#6	12'-2"		
s11	36	#6	14'-7"			s11	36	#6	14'-7"		
s12	20	#6	12'-4"			s12	20	#6	12'-4"		
s19	230	#5	4'-3"			s19	230	#5	4'-3"		
s23	104	#5	19'-7"			s23	104	#5	19'-7"		
s24	100	#5	18'-7"			s24	100	#5	18'-7"		
s30	250	#5	5'-3"			s30	250	#5	5'-3"		
s31	250	#5	4'-9"			s31	250	#5	4'-9"		
s49	438	#5	2'-10"			s49	438	#5	2'-10"		
s54	10	#6	7'-5"			s54	10	#6	7'-5"		
u	12	#6	11'-7"			u	12	#6	11'-7"		
v48	44	#10	29'-5"			v48	44	#10	29'-5"		
v49	44	#10	28'-3"			v49	44	#10	28'-3"		
v50	42	#9	28'-6"			v50	42	#9	28'-6"		
v51	42	#9	27'-7"			v51	42	#9	27'-7"		
v62	40	#8	25'-4"			v62	40	#8	25'-4"		
v63	40	#8	21'-10"			v63	40	#8	21'-10"		
w5	23	#5	22'-6"			w5	23	#5	22'-6"		
w6	34	#6	22'-6"			w6	34	#6	22'-6"		
Class X Concrete Cu.Yds. 409.6						Class X Concrete Cu.Yds. 409.6					
Reinforcement Bars Lbs. 51921						Reinforcement Bars Lbs. 51921					
Steel Piles HPIA x 89 Lin.Ft. 1392						Steel Piles HPIA x 89 Lin.Ft. 1305					
Metal Shoes Each 16						Test Piles (Steel HPIA x 89) Each 1					
Cofferdam Each 1						Metal Shoes Each 15					
Cofferdam Exc. Cu.Yds. 189						Cofferdam Each 1					
						Cofferdam Exc. Cu.Yds. 189					

Work this Sheet with Sheet 129.

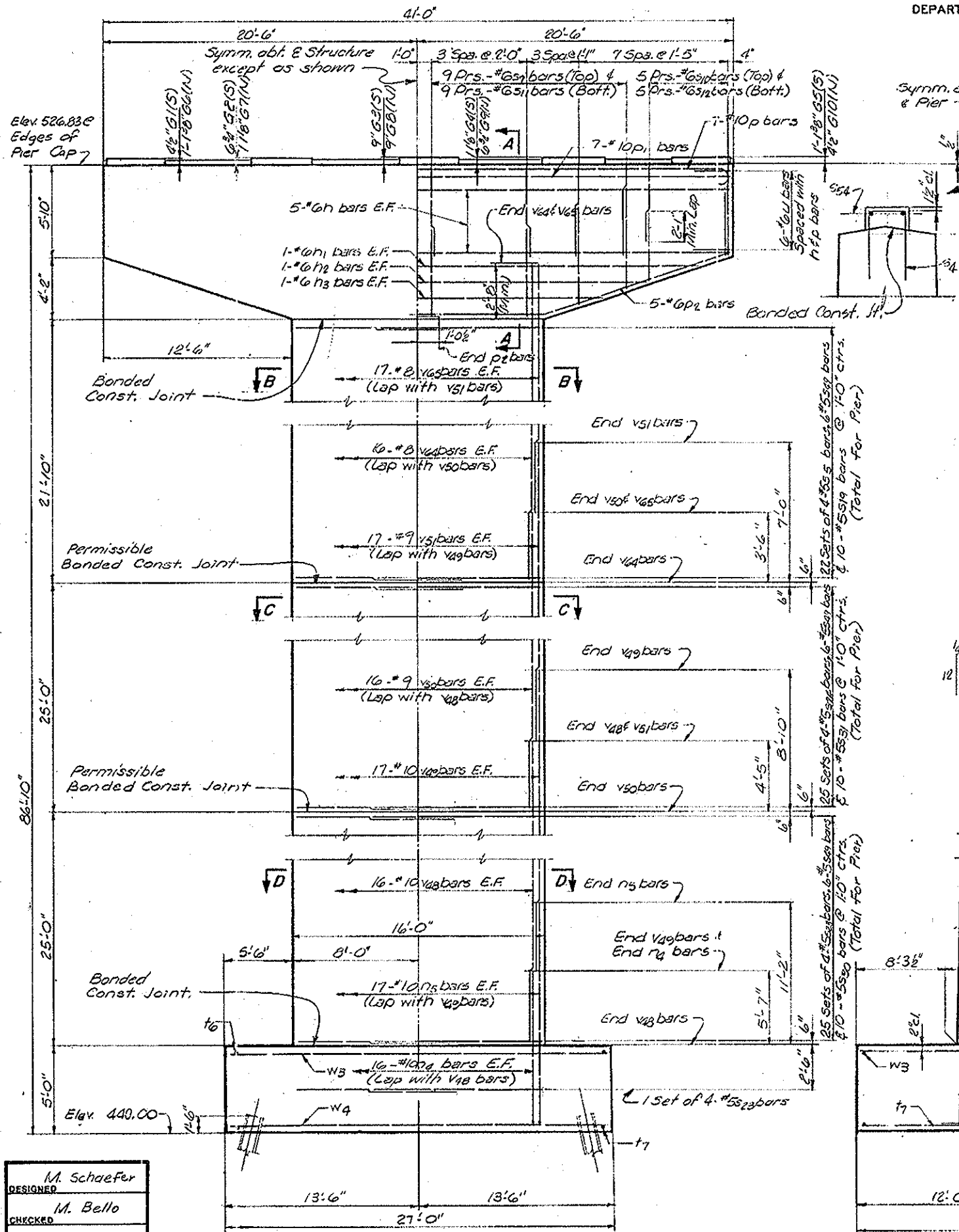
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 12 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

M. Schaefer
DESIGNED
M. Bello
CHECKED
DRAWN J. Corley
T. Pitzhumer
CHECKED

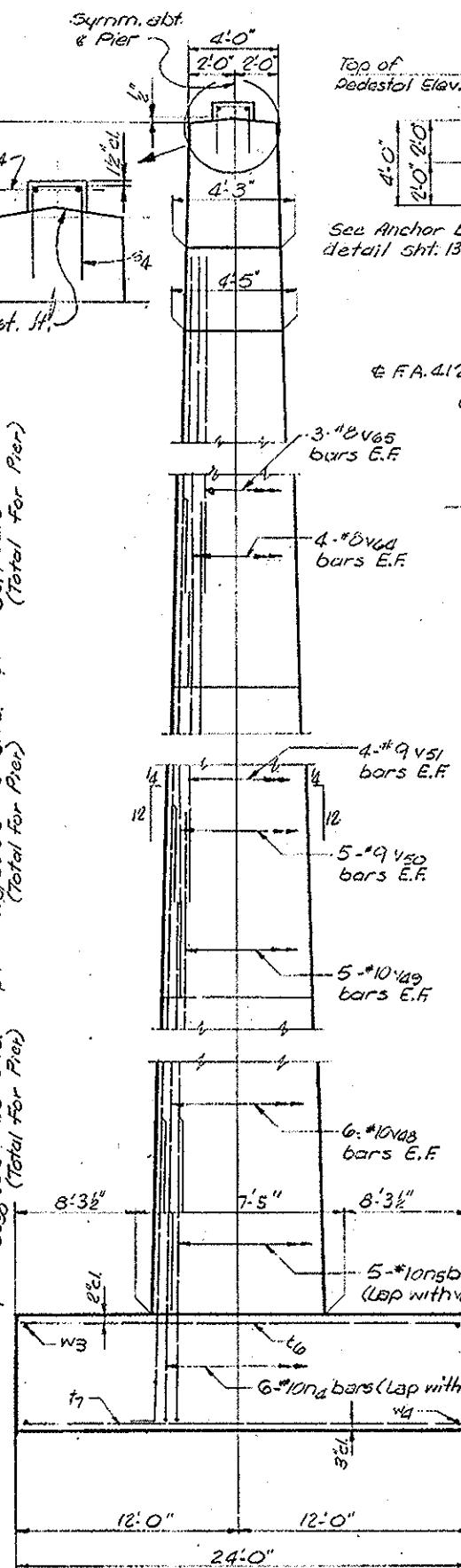
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

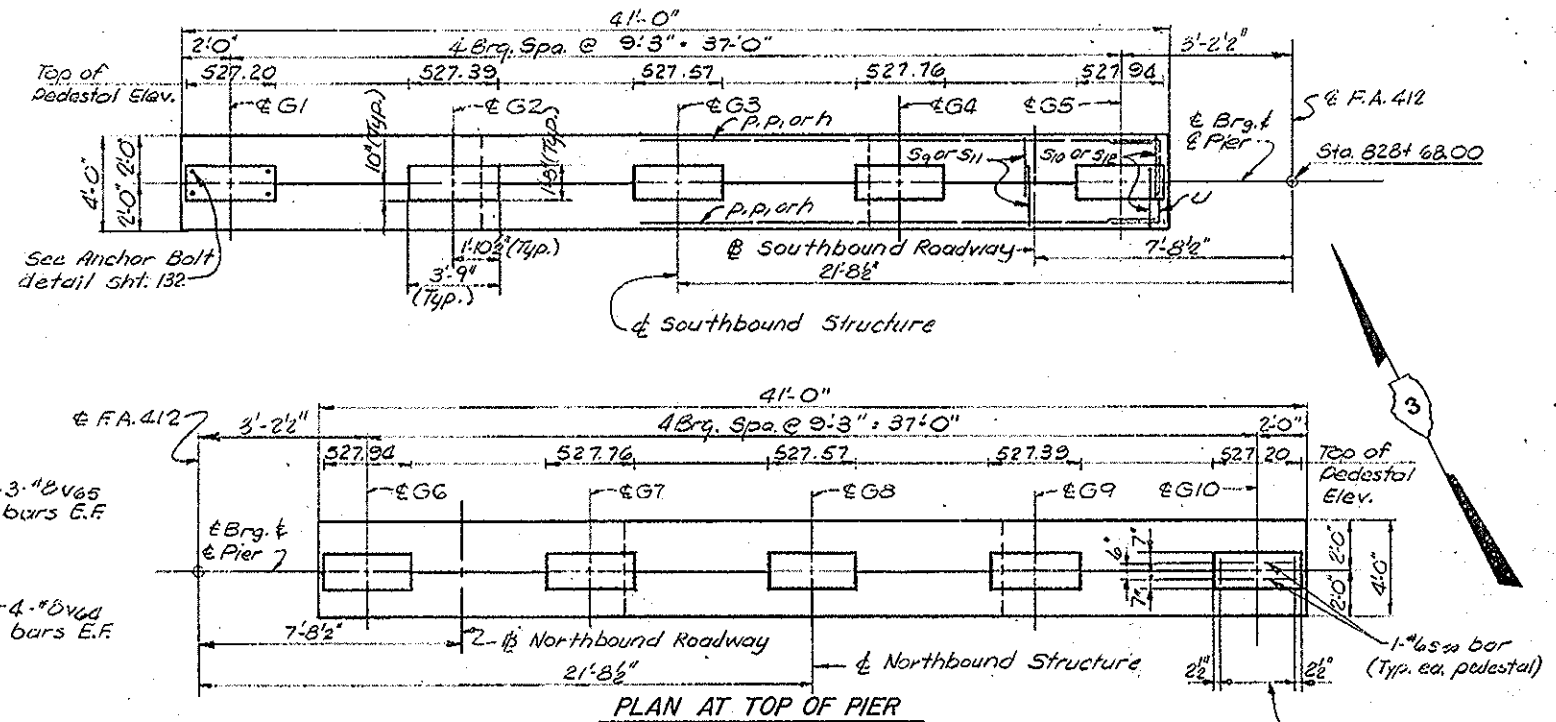
SHEET NO. 130 OF 163



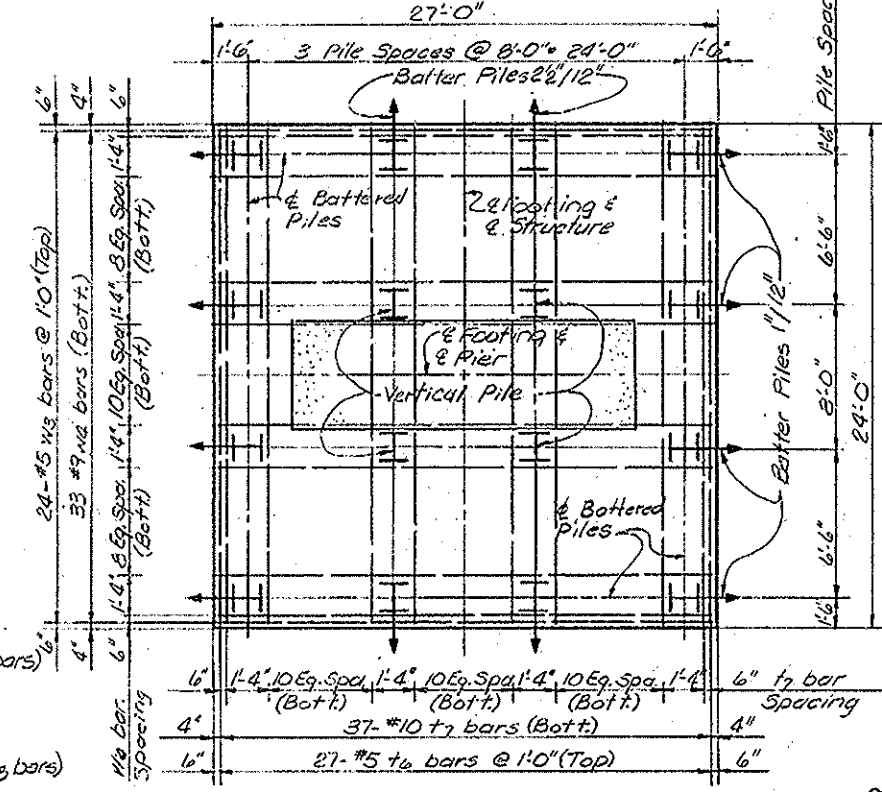
ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. abt. & footing.

PILE DATA
Type: HP14x89
Capacity: Driven to Refusal *
Est. Length: 95'-0"
No. Req'd: 32 (15 @ Pier 13N, 16 @ Pier 13S & 1 Test Pile @ Pier 13N)
* Indicates direction of batter.
* See Special Provisions.
Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4 chamfer.
E.F. indicates Each Face
Work this Sheet with Sheet 132.

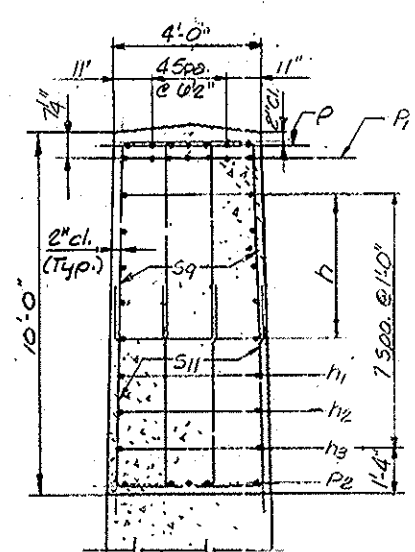
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 13 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED BY
M. Schaefer
CHECKED BY
M. Bello
DRAWN BY
J. Coyle
CHECKED BY
T. Ritzheimer

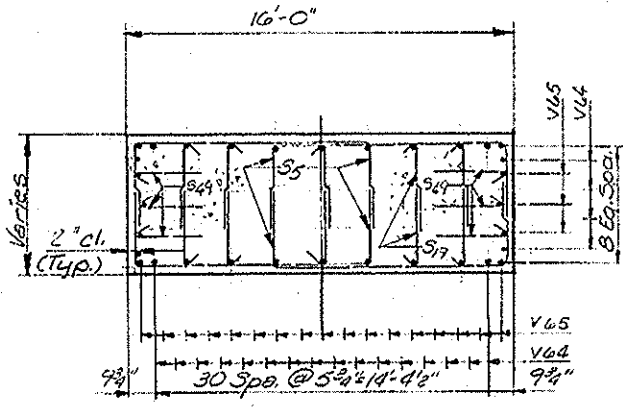
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

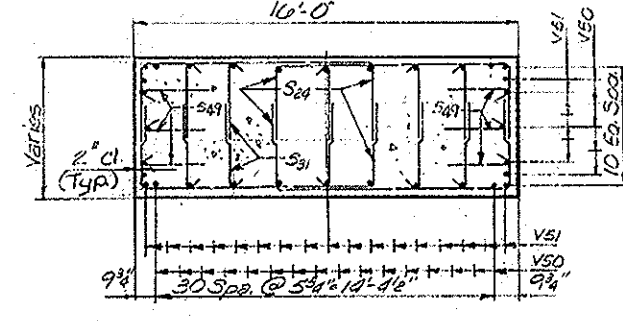
SHEET NO. 131 OF 163



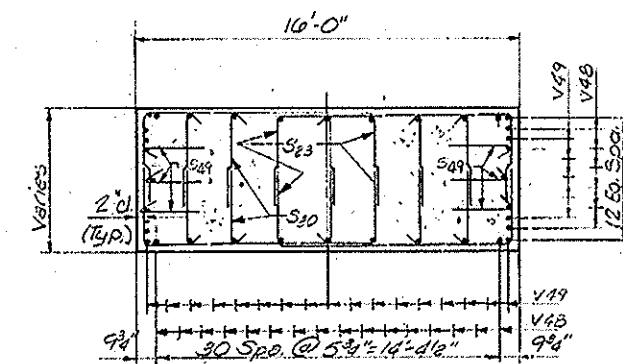
SECTION A-A
(Shaft reinf. & Pedestal not shown)



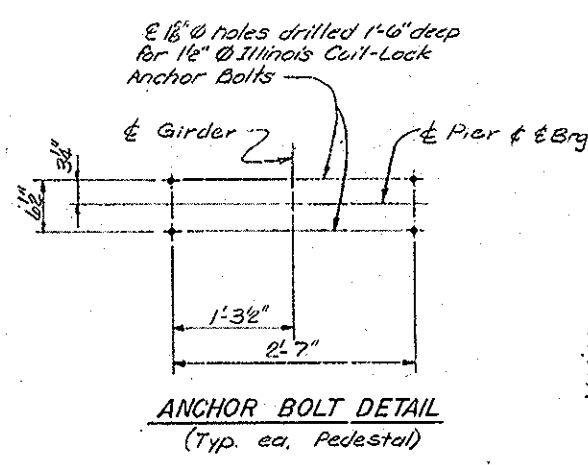
SECTION B-B



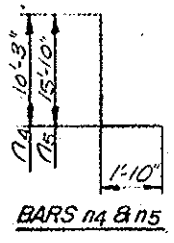
SECTION C-C



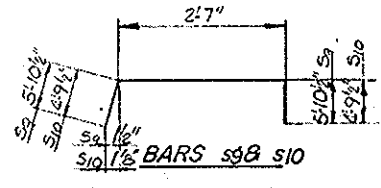
SECTION D-D



ANCHOR BOLT DETAIL
(Typ. ea. Pedestal)

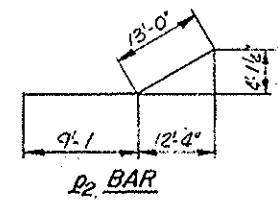


BARS n4 & n5

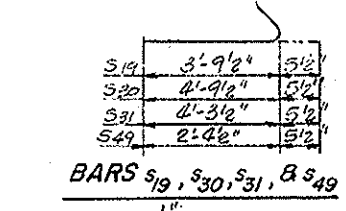


Bar	A	B
S4	11'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S23	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S54	3'-5"	2'-0"
U	3'-7"	4'-0"

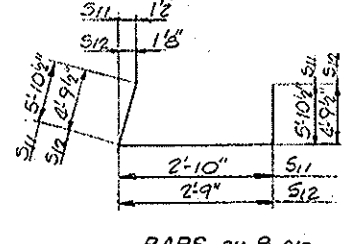
BARS s9 & s10



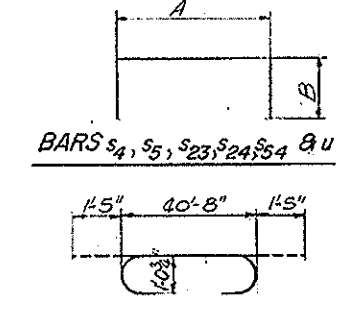
P2 BAR



BARS s19, s30, s31, & s49



BARS s11 & s12



BARS s4, s5, s23, s24, s54 & u

BAR p

BILL OF MATERIAL

PIER 13 NORTHBOUND					PIER 13 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"		n	10	#6	40'-8"	
h1	2	#6	35'-0"		h1	2	#6	35'-0"	
h2	2	#6	28'-11"		h2	2	#6	28'-11"	
h3	2	#6	28'-10"		h3	2	#6	28'-10"	
n4	44	#10	12'-1"		n4	44	#10	12'-1"	
n5	44	#10	17'-8"		n5	44	#10	17'-8"	
p	7	#10	43'-6"		p	7	#10	43'-6"	
P1	7	#10	20'-8"		P1	7	#10	20'-8"	
P2	10	#6	22'-1"		P2	10	#6	22'-1"	
S4	30	#6	5'-4"		S4	30	#6	5'-4"	
S5	88	#5	17'-7"		S5	88	#5	17'-7"	
S9	36	#6	14'-4"		S9	36	#6	14'-4"	
S10	20	#6	12'-2"		S10	20	#6	12'-2"	
S11	36	#6	14'-7"		S11	36	#6	14'-7"	
S12	20	#6	12'-4"		S12	20	#6	12'-4"	
S19	260	#5	4'-3"		S19	260	#5	4'-3"	
S23	104	#5	19'-7"		S23	104	#5	19'-7"	
S24	100	#5	18'-7"		S24	100	#5	18'-7"	
S30	300	#5	5'-3"		S30	300	#5	5'-3"	
S31	300	#5	4'-9"		S31	300	#5	4'-9"	
S49	432	#5	2'-10"		S49	432	#5	2'-10"	
S54	10	#6	7'-5"		S54	10	#6	7'-5"	
F6	27	#5	23'-6"		F6	27	#5	23'-6"	
F7	37	#10	23'-6"		F7	37	#10	23'-6"	
U	12	#6	11'-7"		U	12	#6	11'-7"	
V48	44	#10	29'-5"		V48	44	#10	29'-5"	
V49	44	#10	28'-3"		V49	44	#10	28'-3"	
V50	42	#9	28'-6"		V50	42	#9	28'-6"	
V51	42	#9	27'-7"		V51	42	#9	27'-7"	
V64	40	#8	24'-6"		V64	40	#8	24'-6"	
V65	40	#8	21'-0"		V65	40	#8	21'-0"	
W3	24	#5	26'-6"		W3	24	#5	26'-6"	
W4	33	#9	26'-6"		W4	33	#9	26'-6"	
Class X Concrete				Cu.Yds. 424.7	Class X Concrete				Cu.Yds. 424.7
Reinforcement Bars				Lbs. 55039	Reinforcement Bars				Lbs. 55039
Steel Piles HP14x89				Lin. Ft. 14-25	Steel Piles HP14x89				Lin. Ft. 15-20
Steel Piles (Steel HP14x89)				Each 1	Metal Snags				Each 16
Metal Snags				Each 15	Cofferdam				Each 1
Cofferdam				Each 1	Cofferdam Exc.				Cu.Yds. 225
Cofferdam Exc.				Cu.Yds. 225					

Note: Work this sheet with sheet 131.

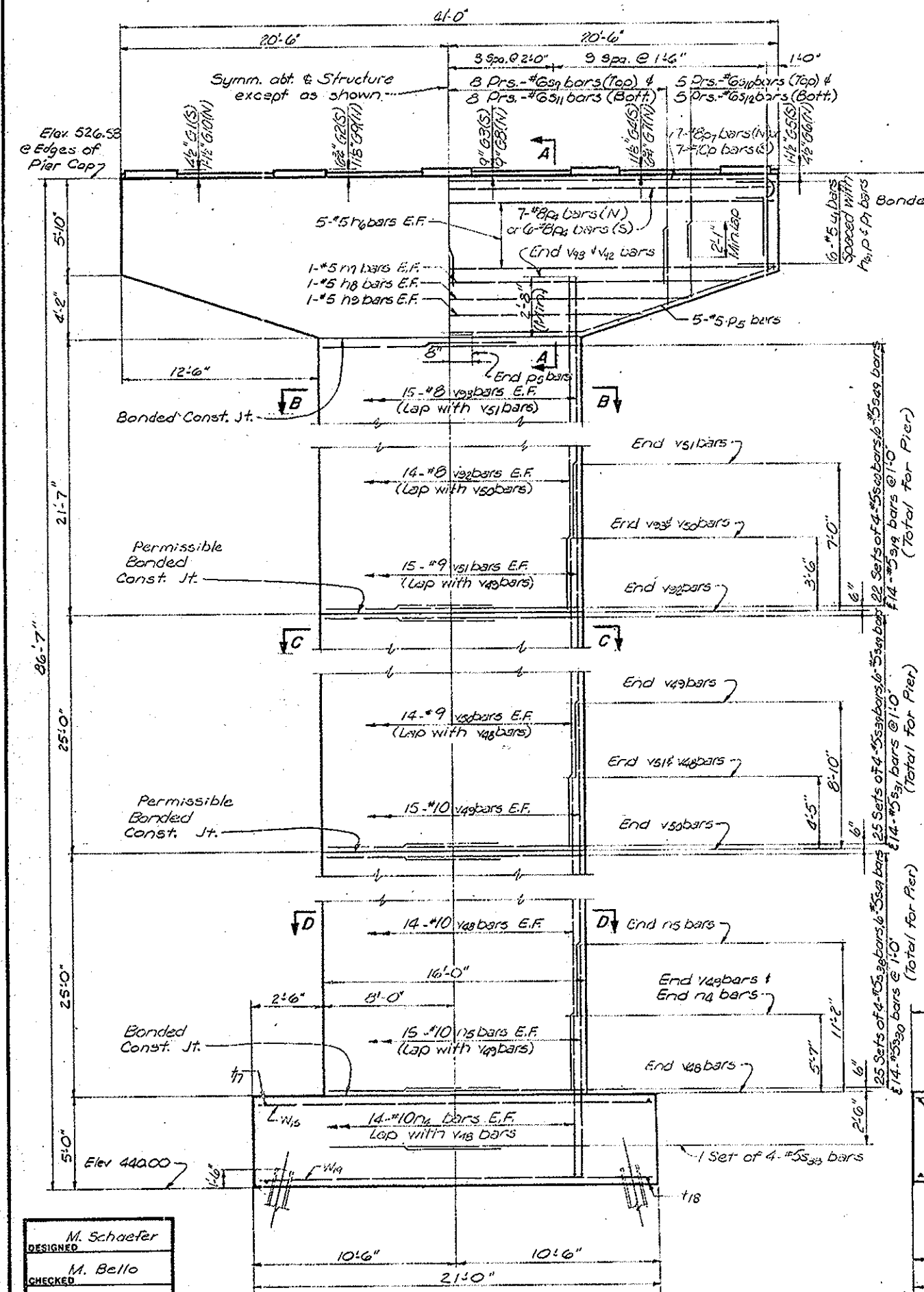
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Cortez
CHECKED: T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

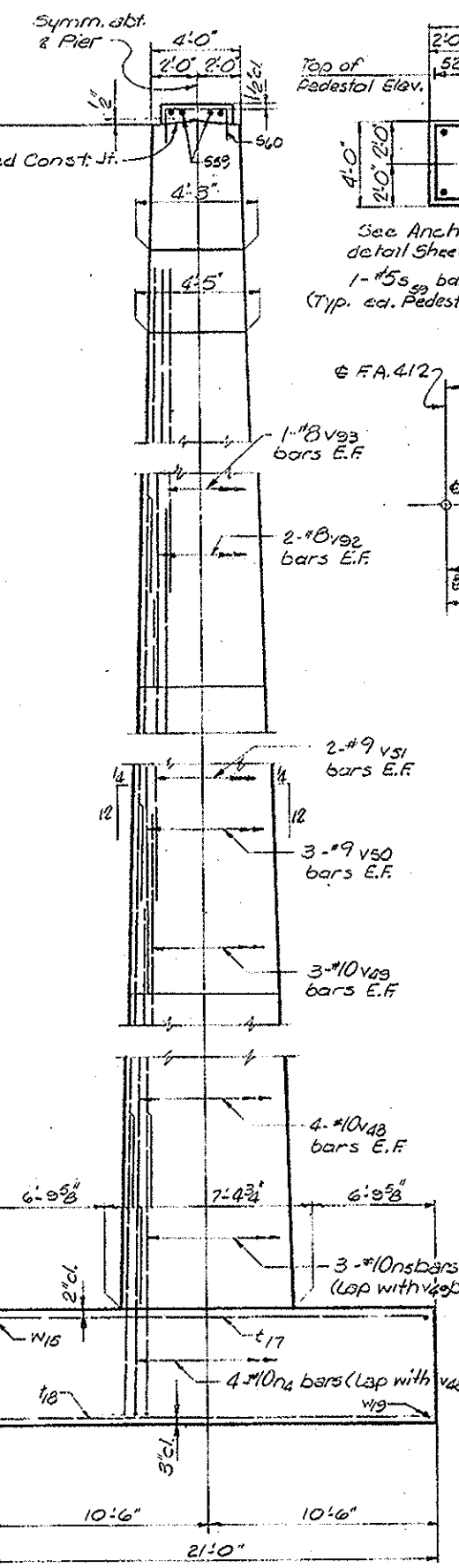
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 13 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

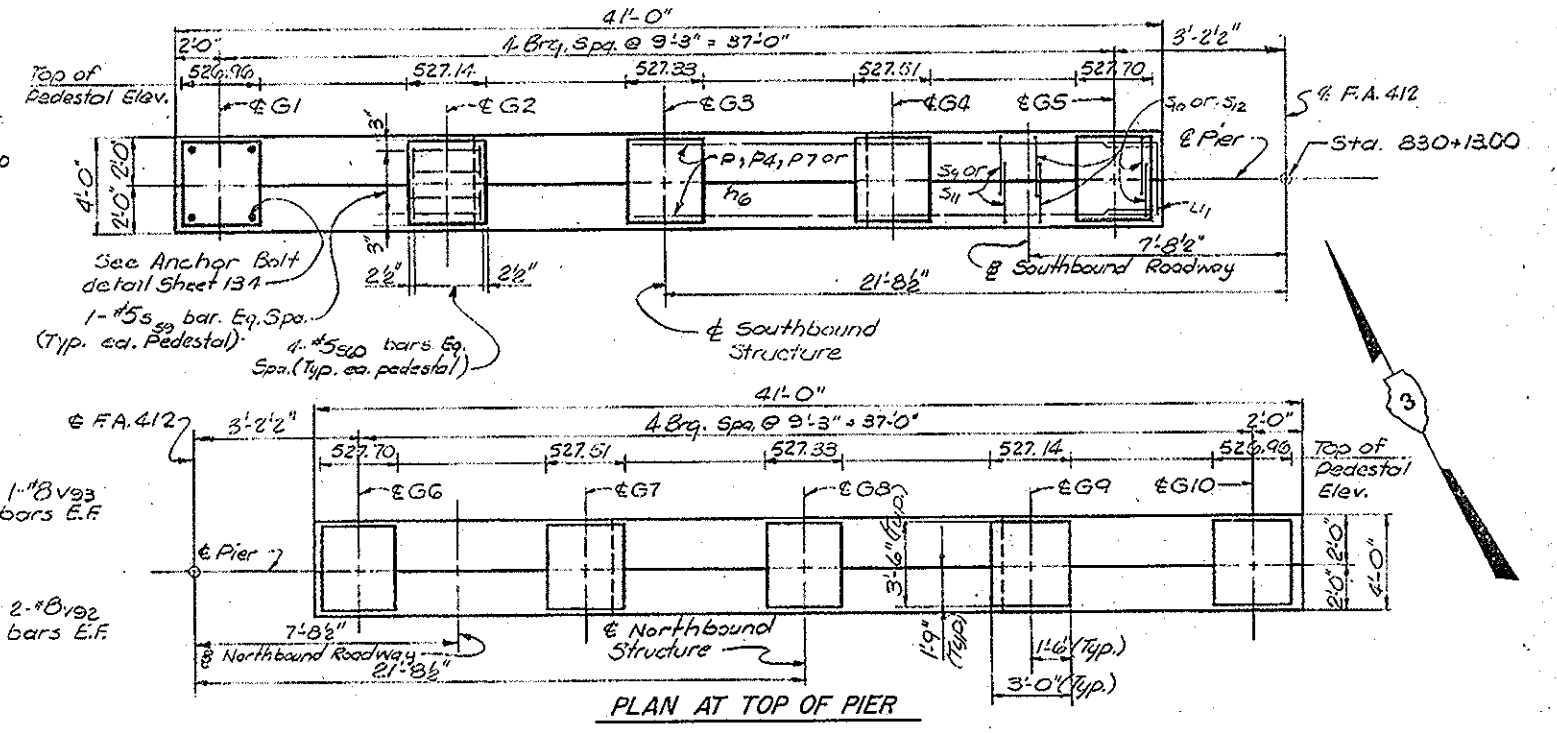
SHEET NO. 132 OF 163



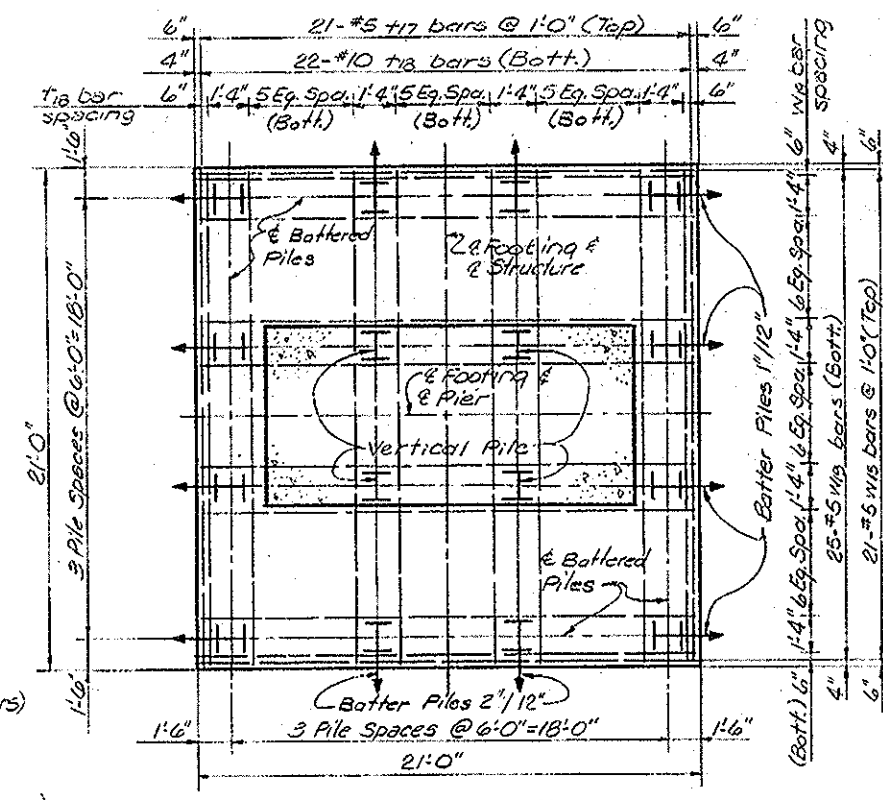
ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. abt. & footing.

PILE DATA
Type: HP14x89
Capacity: Driven to Refusal *
Est. Length: 102'-0"
No. Req'd: 32 (16 ea. Pier 14N, 15 ea. Pier 14S & 1 Test Pile ea. Pier 14S)
* Indicates direction of batter.
* See Special Provisions
Notes: Space reinforcement in cap to miss Anchor Bolts.
All edges shall have a standard 3/4" chamfer.
E. F. indicates each face
Work this sheet with sheet 134.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**
PIER 14 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

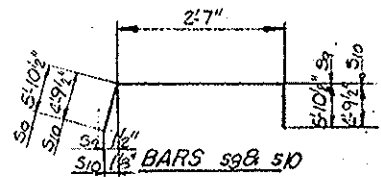
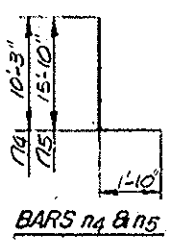
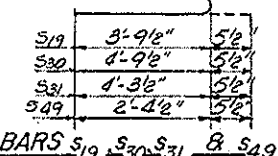
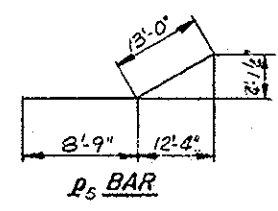
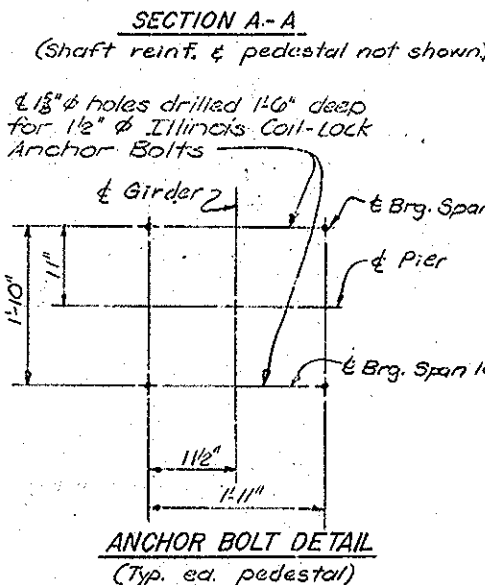
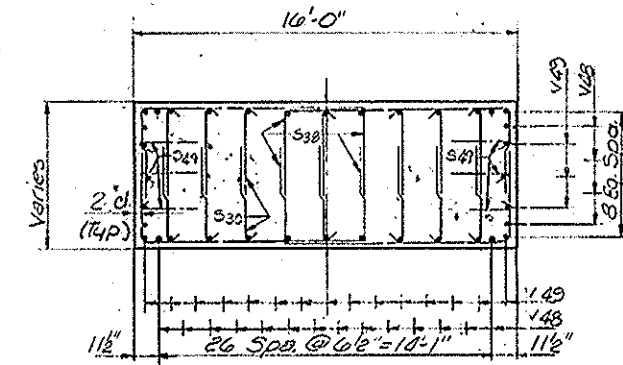
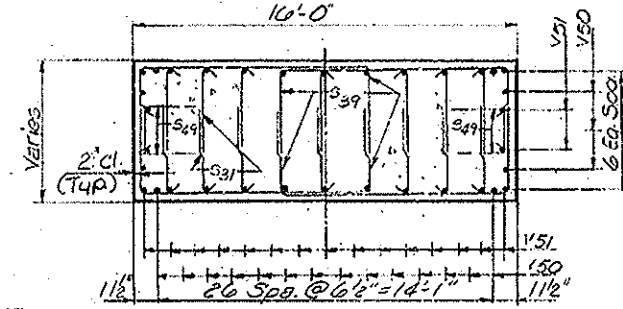
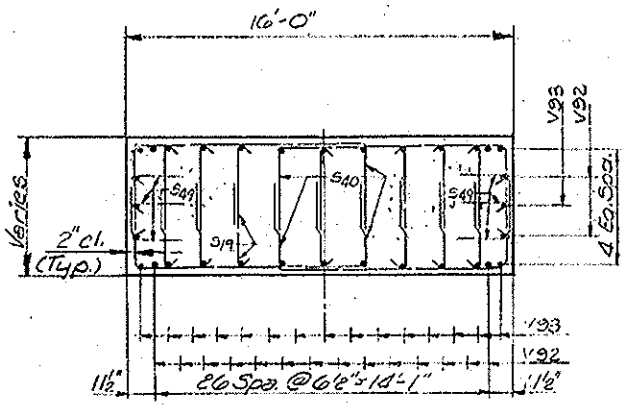
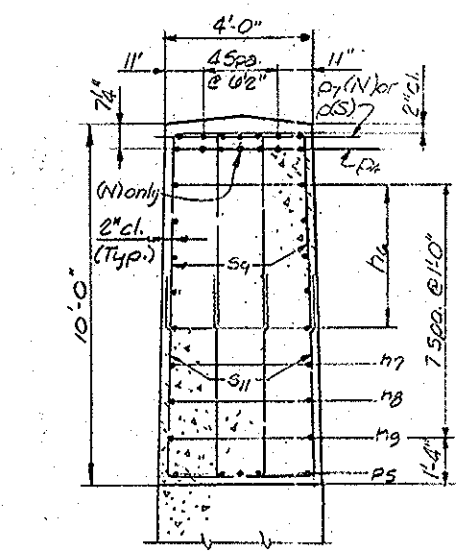
PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

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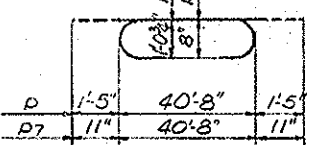
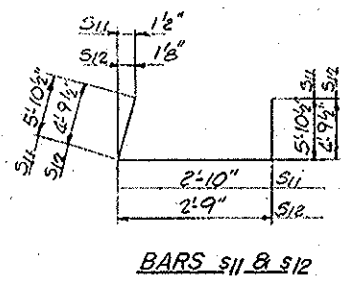
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

6892
82310R

SHEET NO. 133 OF 163



Bar	A	B
S38	9'-8"	4'-9 1/2"
S39	9'-8"	4'-3 1/2"
S40	9'-8"	3'-9"
S59	2'-8"	2'-0"
S40	3'-1"	2'-0"
U1	3'-7"	3'-9"



BARS P & P7

BILL OF MATERIAL

PIER 14 NORTHBOUND					PIER 14 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n6	10	#5	40'-8"	—	n6	10	#5	40'-8"	—
n7	2	#5	35'-0"	—	n7	2	#5	35'-0"	—
n8	2	#5	28'-11"	—	n8	2	#5	28'-11"	—
n9	2	#5	22'-10"	—	n9	2	#5	22'-10"	—
n14	36	#10	12'-1"	L	n14	36	#10	12'-1"	L
n15	36	#10	17'-8"	L	n15	36	#10	17'-8"	L
P4	7	#8	40'-8"	—	P4	7	#8	40'-8"	—
P5	10	#5	21'-9"	—	P2	6	#8	40'-8"	—
P7	7	#8	42'-6"	—	P5	10	#5	21'-9"	—
S9	32	#6	14'-4"	—	S9	32	#6	14'-4"	—
S10	20	#6	12'-2"	—	S10	20	#6	12'-2"	—
S11	32	#6	14'-7"	—	S11	32	#6	14'-7"	—
S12	20	#6	12'-4"	—	S12	20	#6	12'-4"	—
S19	308	#5	4'-3"	—	S19	308	#5	4'-3"	—
S20	350	#5	5'-3"	—	S20	350	#5	5'-3"	—
S21	350	#5	4'-9"	—	S21	350	#5	4'-9"	—
S22	104	#5	19'-3"	—	S22	104	#5	19'-3"	—
S29	100	#5	18'-3"	—	S29	100	#5	18'-3"	—
S40	88	#5	17'-2"	—	S40	88	#5	17'-2"	—
S49	432	#5	2'-10"	—	S49	432	#5	2'-10"	—
S59	20	#5	6'-8"	—	S59	20	#5	6'-8"	—
S60	20	#5	7'-11"	—	S60	20	#5	7'-11"	—
T17	21	#5	20'-6"	—	T17	21	#5	20'-6"	—
T18	22	#10	20'-6"	—	T18	22	#10	20'-6"	—
U1	12	#5	11'-1"	—	U1	12	#5	11'-1"	—
V48	36	#10	29'-5"	—	V48	36	#10	29'-5"	—
V49	36	#10	28'-3"	—	V49	36	#10	28'-3"	—
V50	34	#9	28'-6"	—	V50	34	#9	28'-6"	—
V51	34	#9	27'-7"	—	V51	34	#9	27'-7"	—
V92	32	#8	24'-4"	—	V92	32	#8	24'-4"	—
V93	32	#8	20'-10"	—	V93	32	#8	20'-10"	—
W15	21	#5	20'-6"	—	W15	21	#5	20'-6"	—
W19	25	#5	20'-6"	—	W19	25	#5	20'-6"	—
Class X Concrete	Cu. Yds.	389.3			Class X Concrete	Cu. Yds.	389.3		
Reinforcement Bars	Lbs.	44107			Reinforcement Bars	Lbs.	44515		
Steel Piles HP14x89	Lin. Ft.	1632			Steel Piles HP14x89	Lin. Ft.	1530		
Metal Shoes	Each	16			Metal Shoes	Each	15		
Cofferdam	Each	1			Cofferdam	Each	1		
Cofferdam Excav.	Cu. Yds.	185			Cofferdam Excav.	Cu. Yds.	185		

Note: Work this Sheet with Sheet 133.

M. Schaefer
DESIGNED

M. Bello
CHECKED

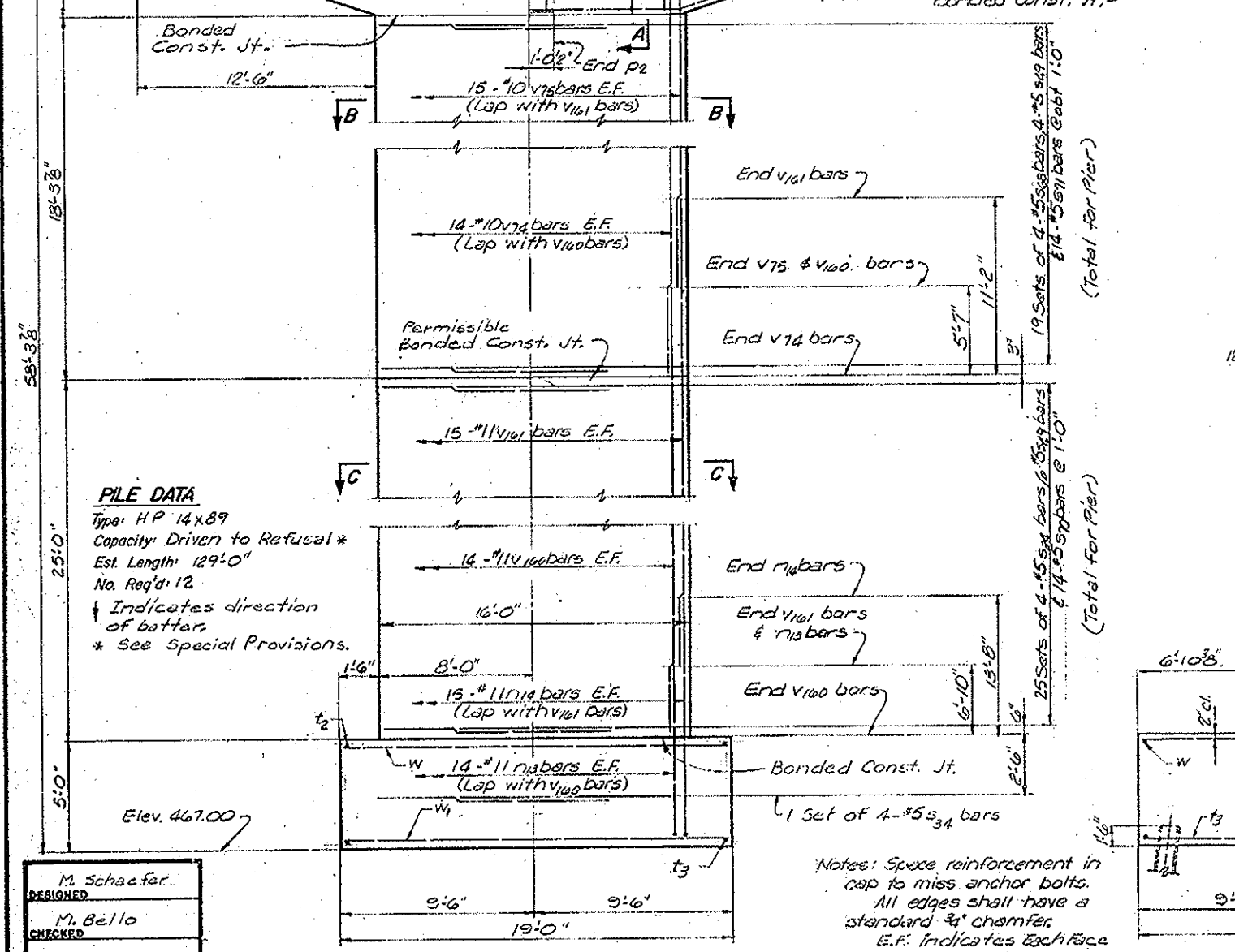
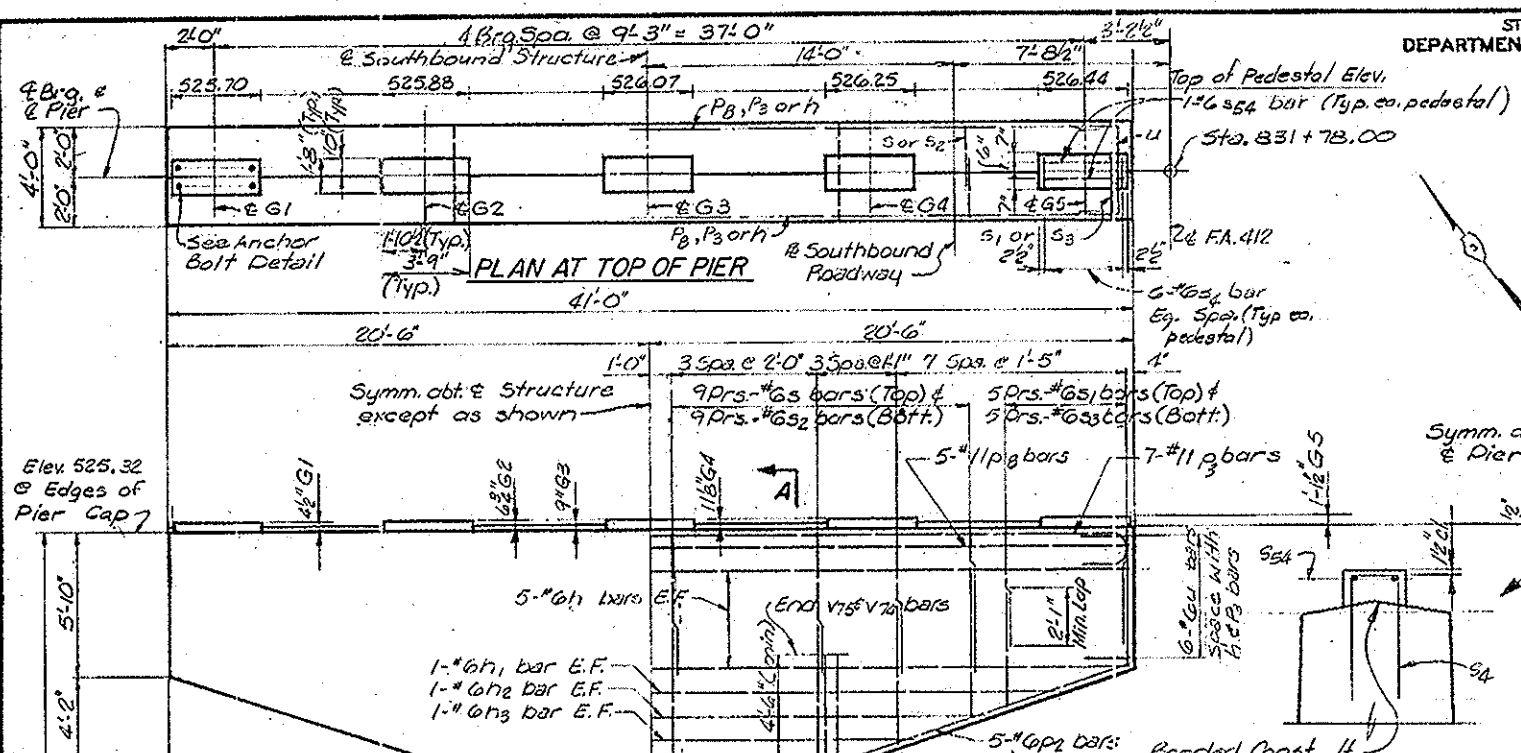
J. Corley
DRAWN

T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 14 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+18.00 (FA-412) LASALLE CO.

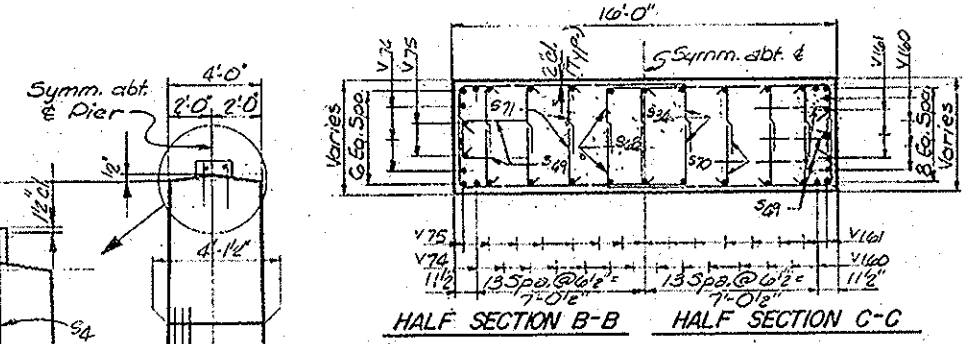
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



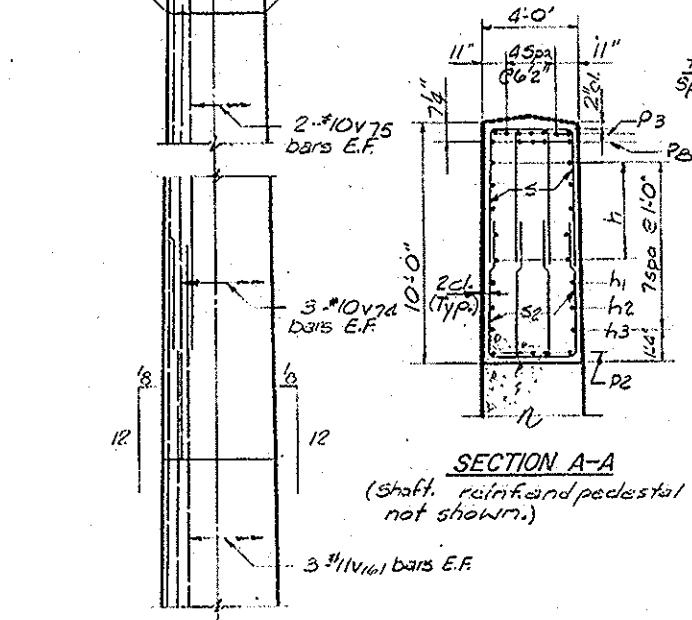
PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal *
Est. Length: 129'-0"
No. Req'd: 12
↑ Indicates direction of batter.
* See Special Provisions.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

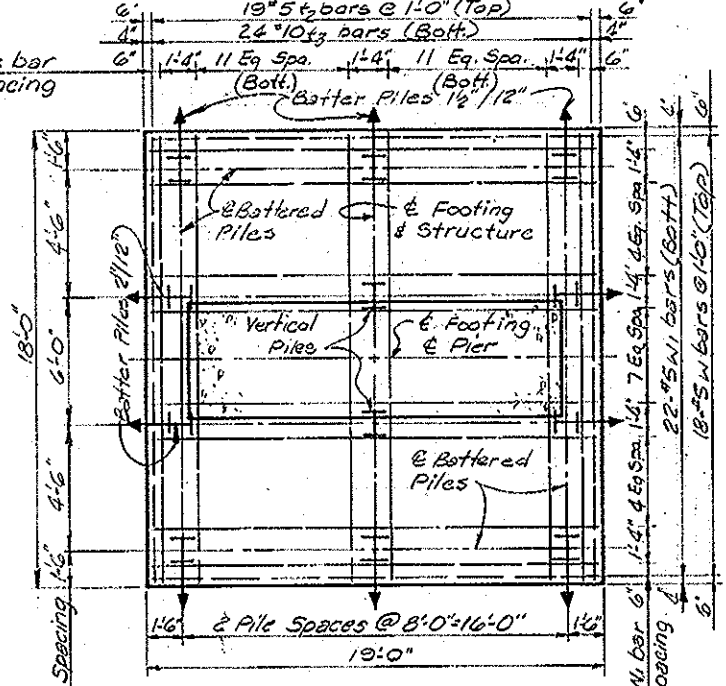
ELEVATION
(Looking North)



HALF SECTION B-B HALF SECTION C-C

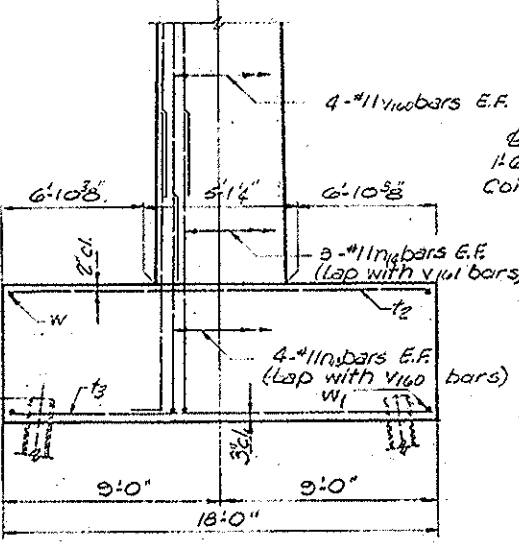


SECTION A-A
(Shaft, reinf. and pedestal not shown.)



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symmetrical about @ footing.

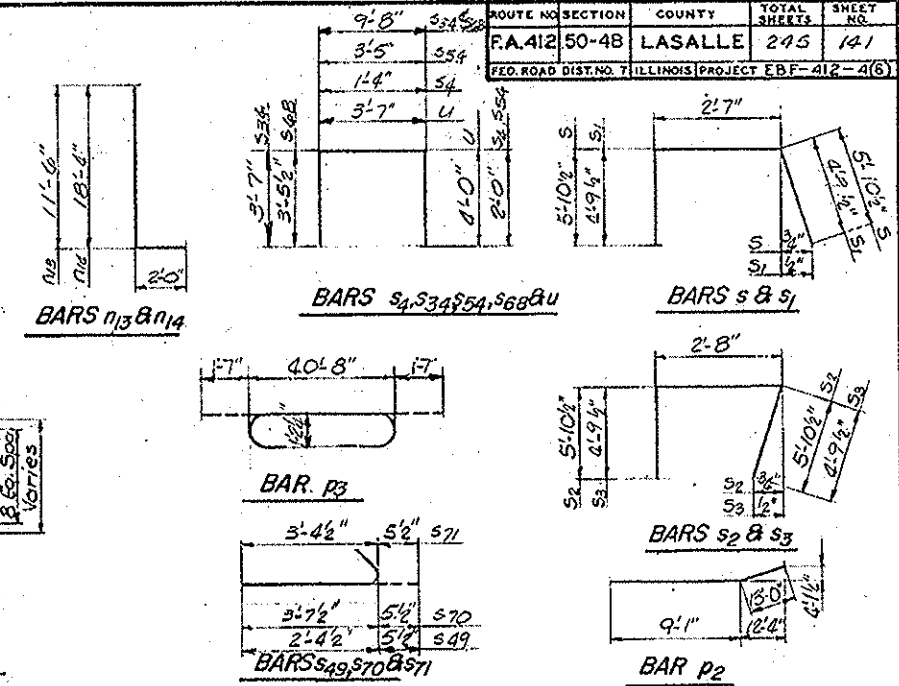


ANCHOR BOLT DETAIL
(Typ. each pedestal)

END VIEW

Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4\"/>

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

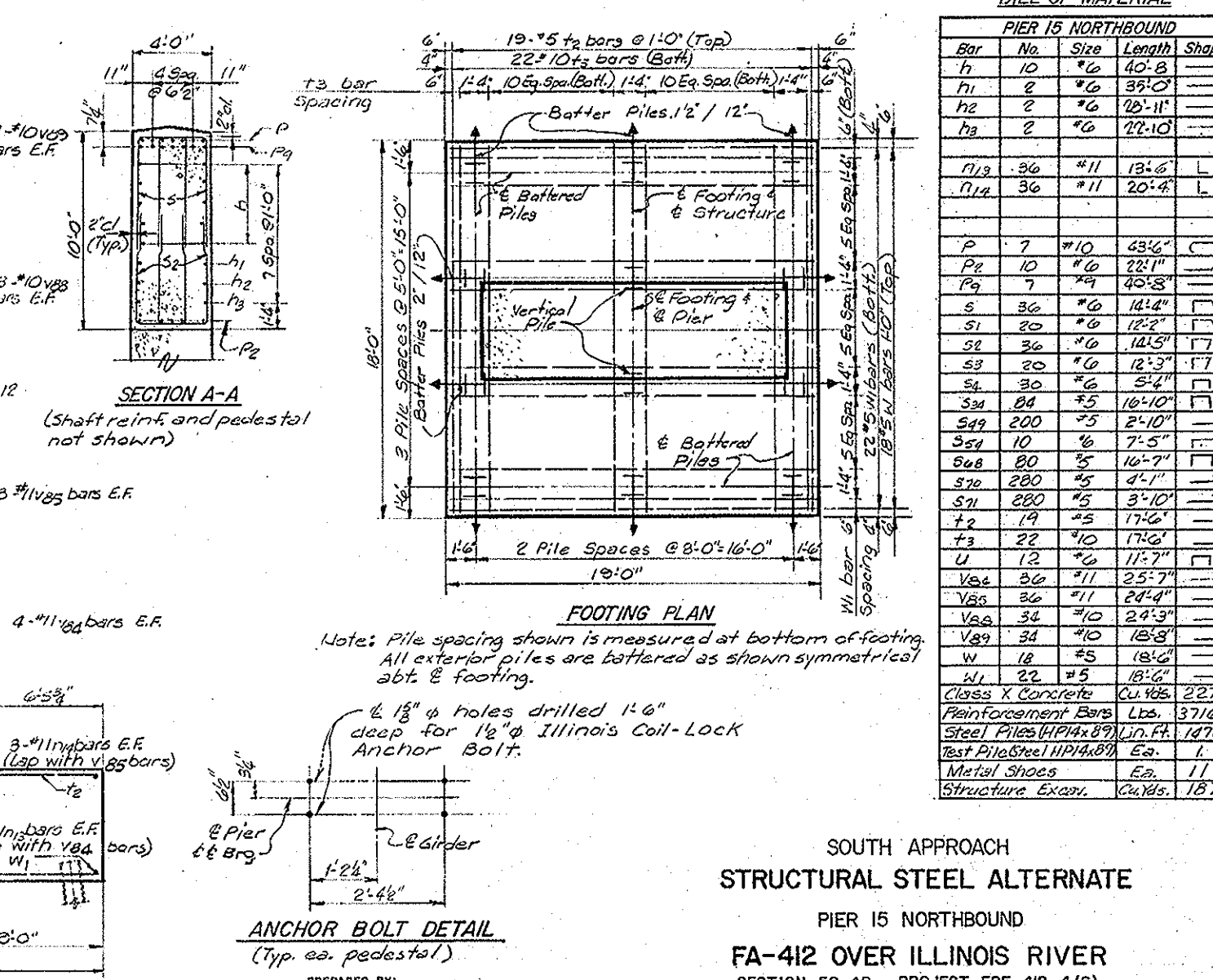
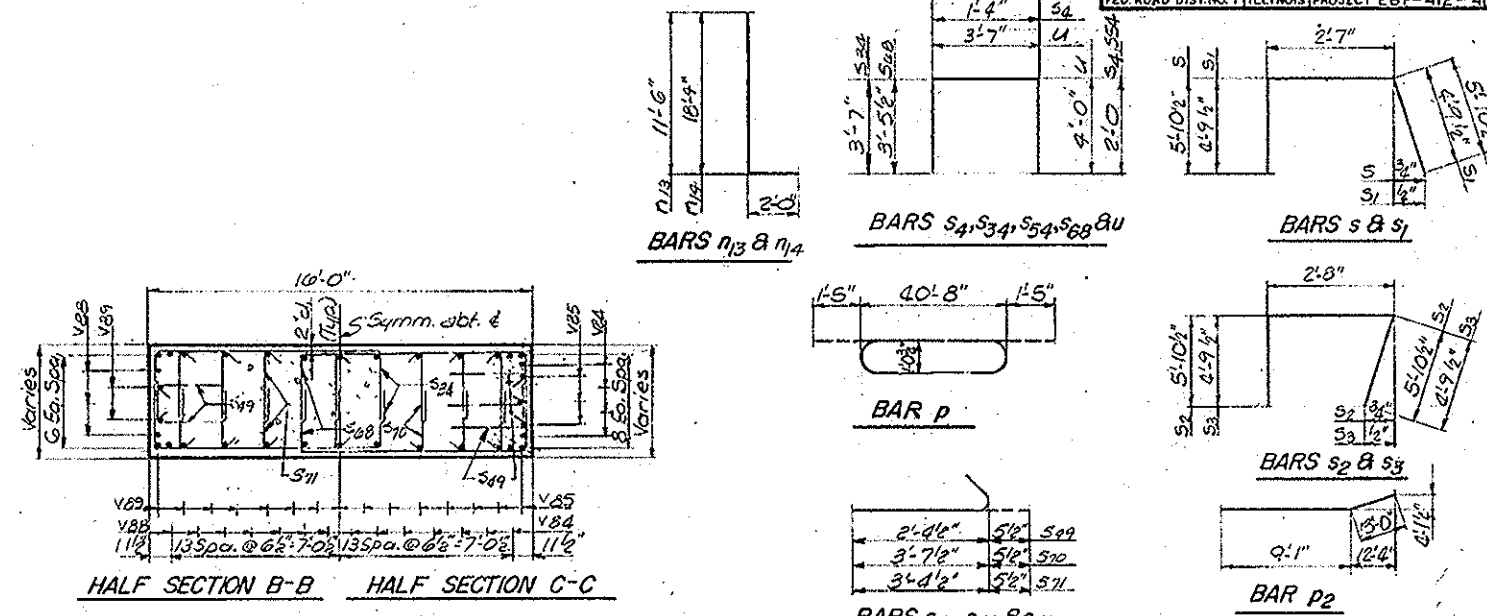
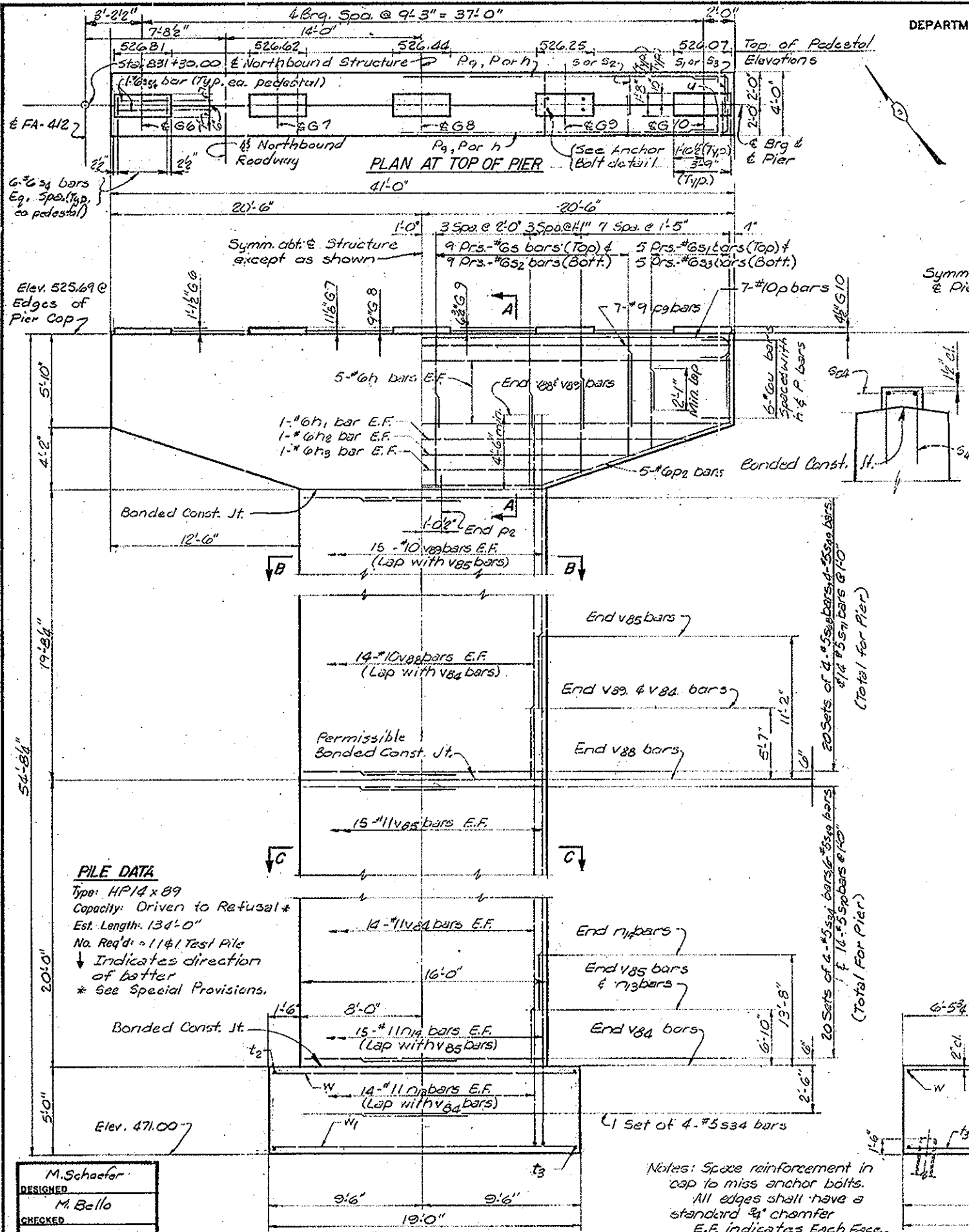


BILL OF MATERIAL

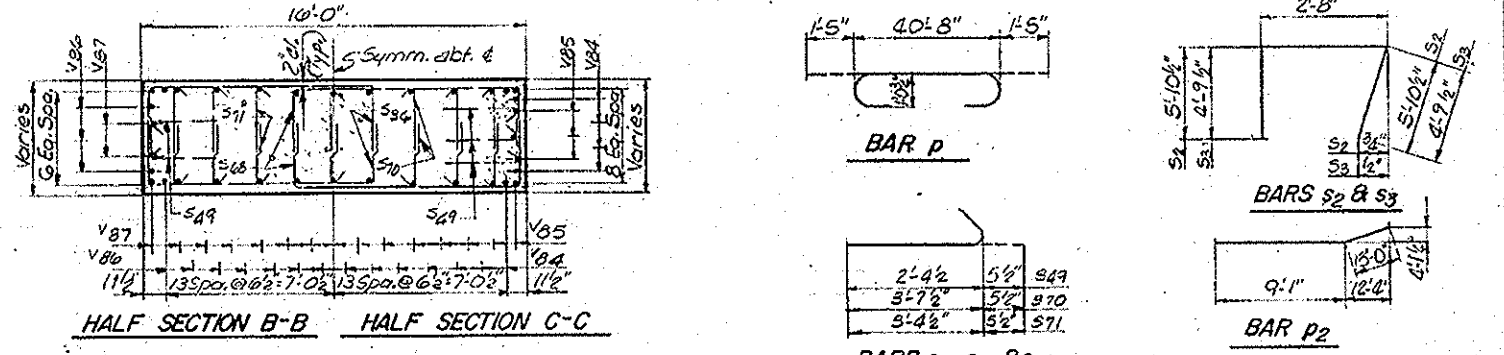
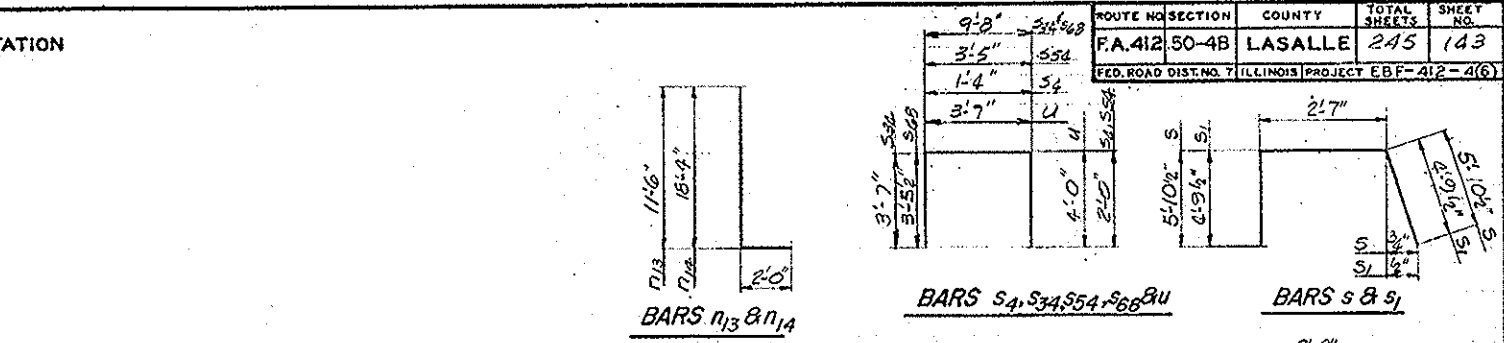
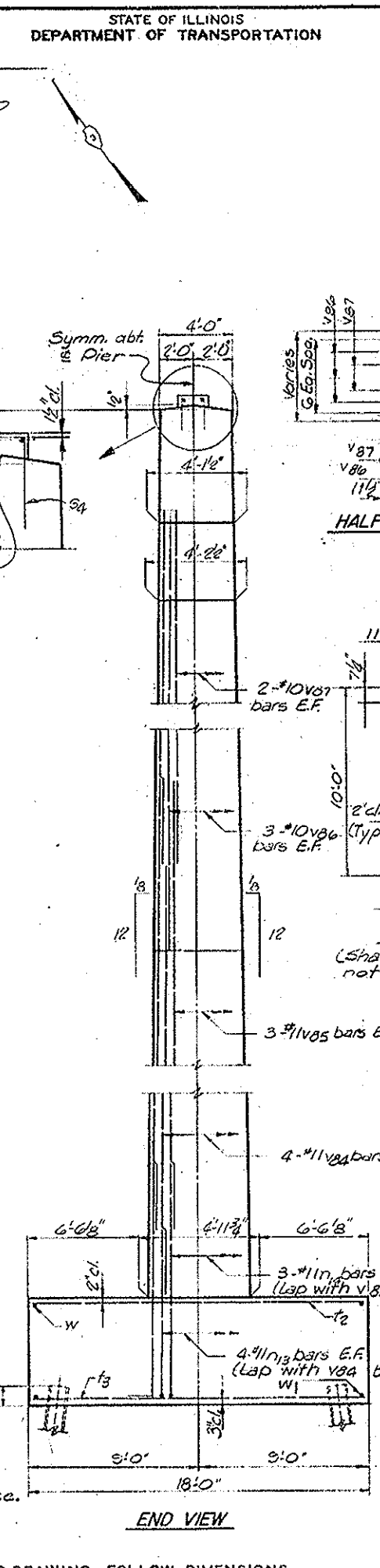
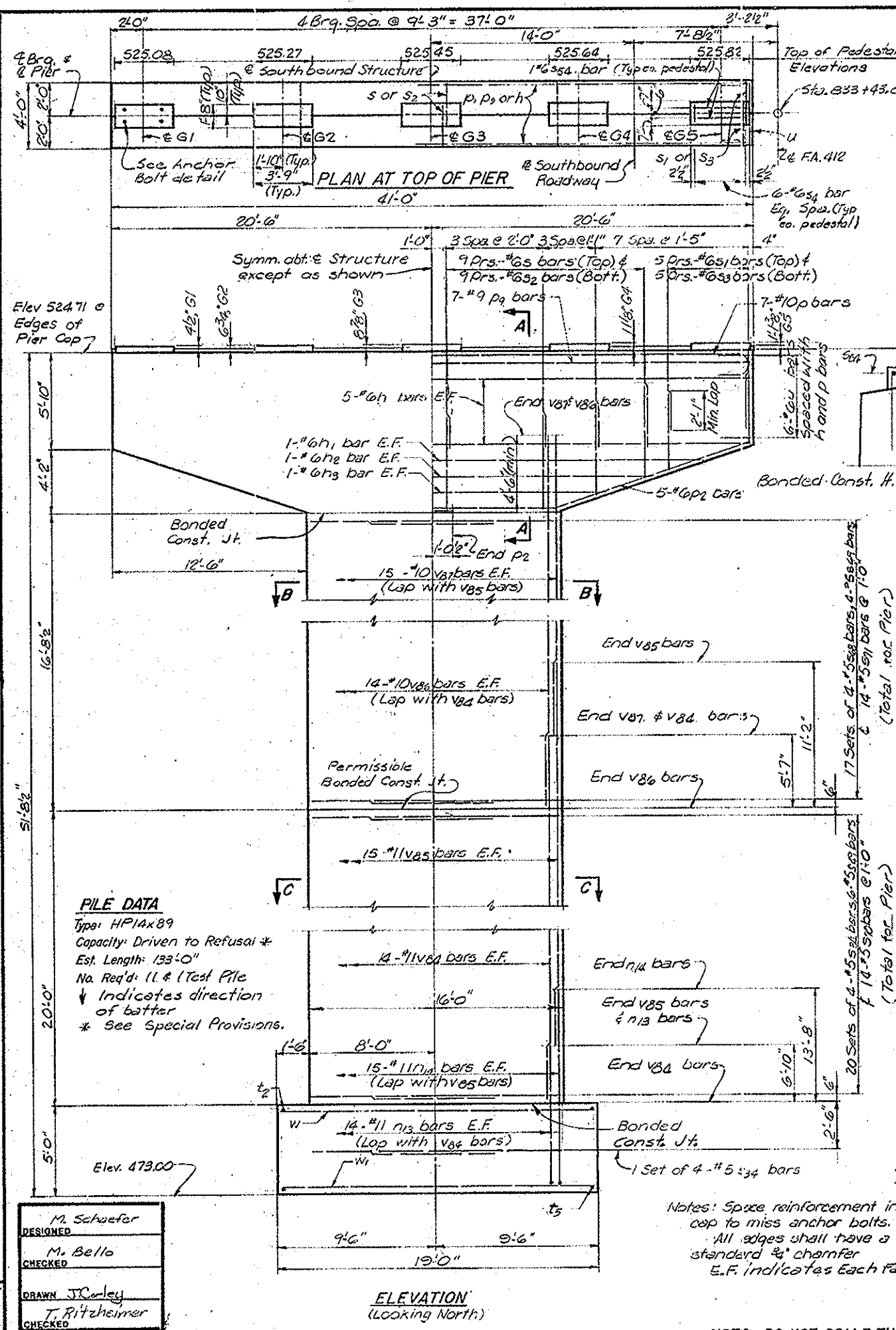
PIER 15 SOUTHBOUND				
Bar	No.	Size	Length	Shape
h	10	#6	40'-8"	□
h1	2	#6	39'-0"	□
h2	2	#6	28'-11"	□
h3	2	#6	22'-10"	□
n13	36	#11	13'-0"	L
n14	36	#11	20'-4"	L
P2	10	#6	22'-11"	□
P3	7	#11	43'-10"	□
P4	5	#11	40'-8"	□
s	36	#6	14'-4"	□
s1	20	#6	12'-2"	□
s2	36	#6	14'-5"	□
s3	20	#6	12'-3"	□
s4	30	#6	5'-4"	□
s54	104	#5	16'-10"	□
s49	226	#5	2'-10"	□
s54	10	#6	7'-5"	□
s68	76	#5	16'-7"	□
s70	350	#5	4'-1"	□
s71	266	#5	3'-10"	□
t2	19	#5	17'-6"	□
t3	24	#10	17'-6"	□
u	12	#6	11'-7"	□
v24	34	#10	22'-10"	□
v75	34	#10	17'-3"	□
v140	36	#11	30'-7"	□
v141	36	#11	29'-4"	□
w	18	#5	18'-6"	□
w1	22	#5	18'-6"	□
Class X Concrete	Cu.Yds.	237.9		
Reinforcement Bars	Lbs.	37846		
Steel Piles HP14x89	Lin. Ft.	1543		
Metal Shoes	Ea.	12		
Structural Excav.	Cu.Yds.	187		

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 15 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

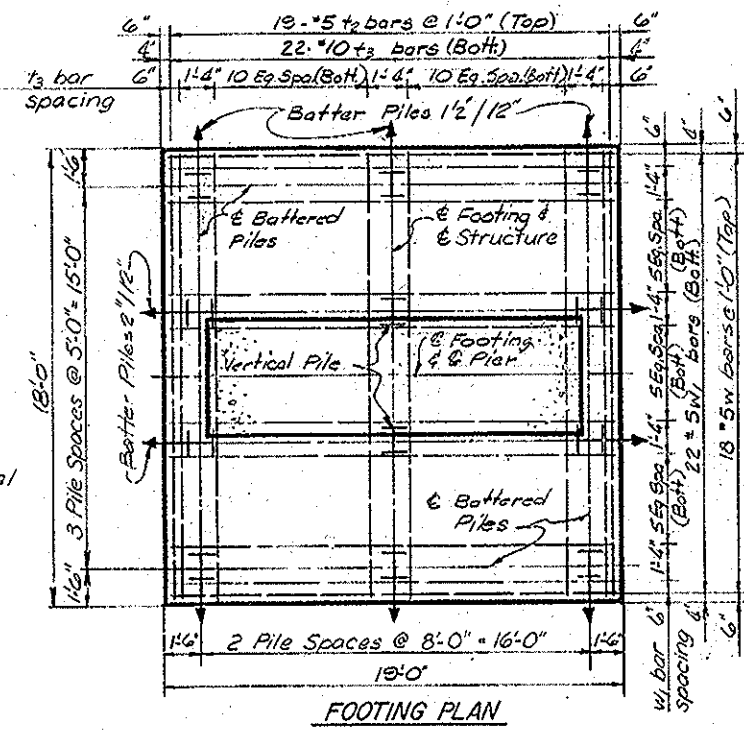
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI



M. Schaefer
DESIGNED
M. Bello
CHECKED
DRAWN J. Corley
T. Ritzheimer
CHECKED



BILL OF MATERIAL				
PIER 16 SOUTHBOUND				
Bar	No.	Size	Length	Shape
h	10	#6	40'-8"	
n1	2	#6	35'-0"	
n2	2	#6	28'-11"	
n3	2	#6	22'-10"	
n13	36	#11	13'-6"	L
n14	36	#11	20'-4"	L
P	7	#10	43'-6"	
P2	10	#6	22'-11"	
P4	7	#9	40'-8"	
s	36	#6	14'-4"	
s1	20	#6	12'-2"	
s2	36	#6	12'-5"	
s3	20	#6	12'-3"	
s4	30	#6	5'-4"	
s34	84	#5	16'-10"	
s49	188	#5	2'-10"	
s54	10	#6	7'-5"	
s68	68	#5	16'-9"	
s70	280	#5	4'-11"	
s71	238	#5	3'-10"	
t2	19	#5	17'-6"	
t3	22	#6	17'-6"	
u	12	#6	11'-7"	
v84	36	#11	25'-7"	
v85	36	#11	24'-2"	
v86	34	#10	21'-3"	
v87	34	#10	15'-8"	
w	18	#5	18'-6"	
w1	22	#5	18'-6"	
Class X Concrete			Cu. Yds.	218.4
Reinforcement Bars			Lbs.	35875
Steel Piles HP14x89			Lin. Ft.	1463
Test Piles (Steel HP14x89)			Eq.	1
Metal Shocs			Eq.	11
Structure Excav.			Cu. Yds.	127



PILE DATA
Type: HP14x89
Capacity: Driven to Refusal *
Est. Length: 133'-0"
No. Req'd: 11 & 1 Test Pile
Indicates direction of batter
* See Special Provisions.

Notes: Splice reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4" chamfer.
E.F. indicates Each Face.

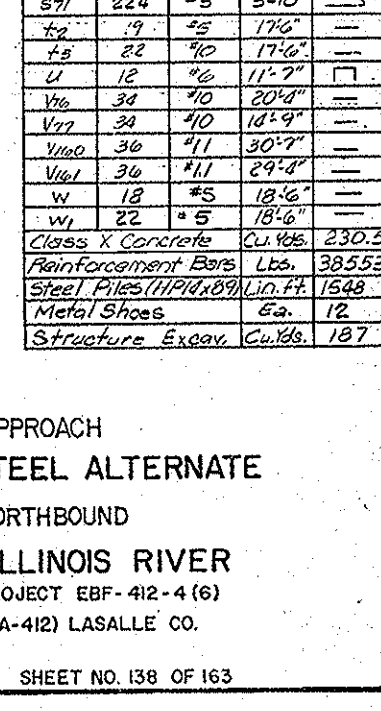
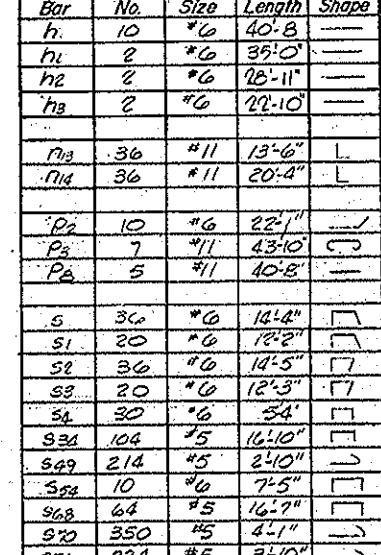
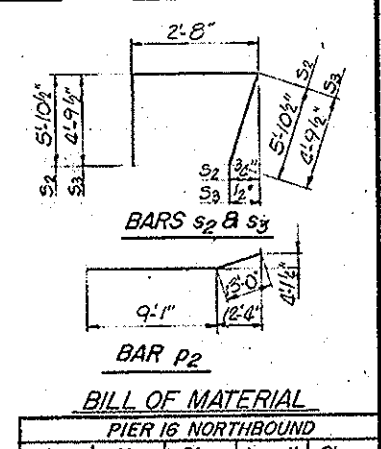
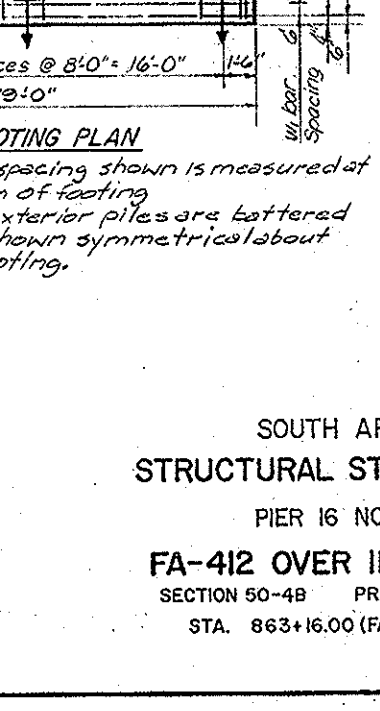
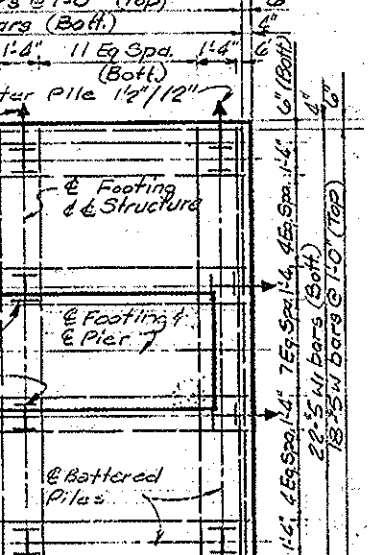
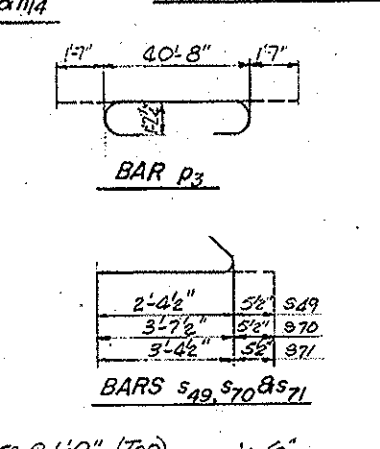
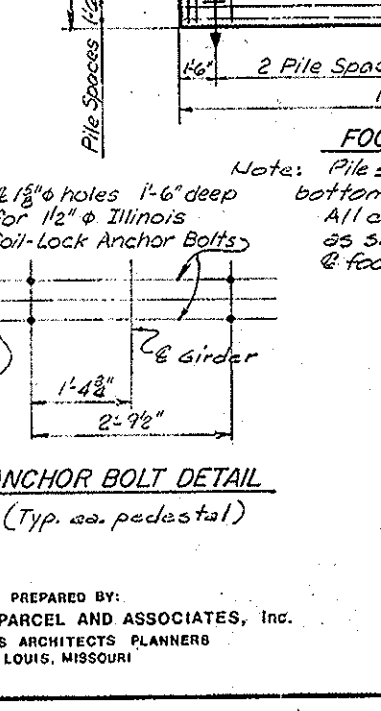
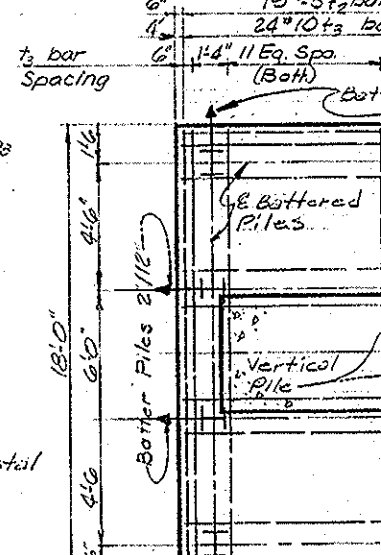
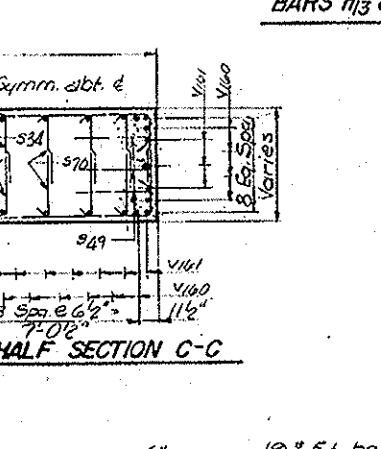
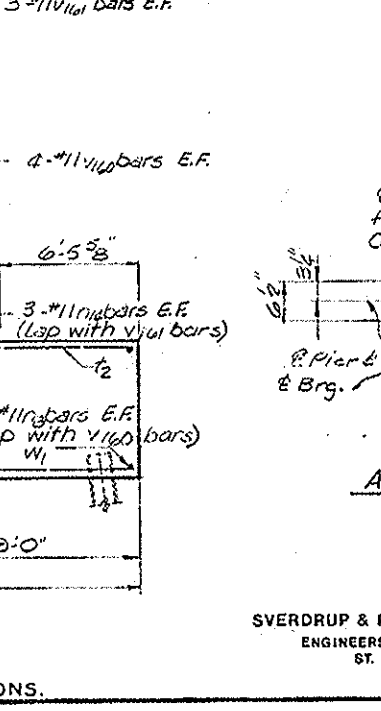
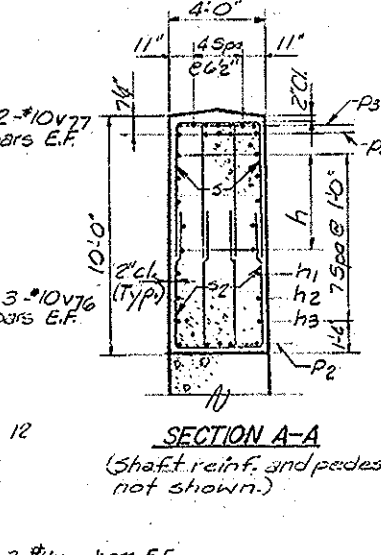
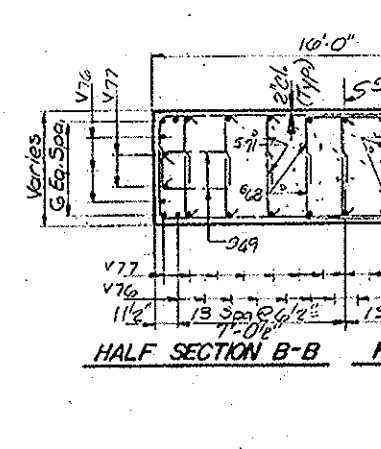
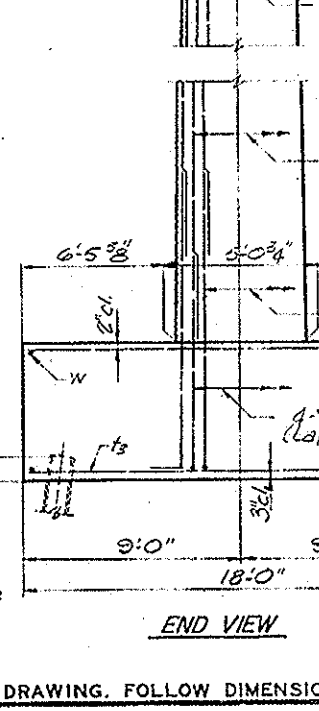
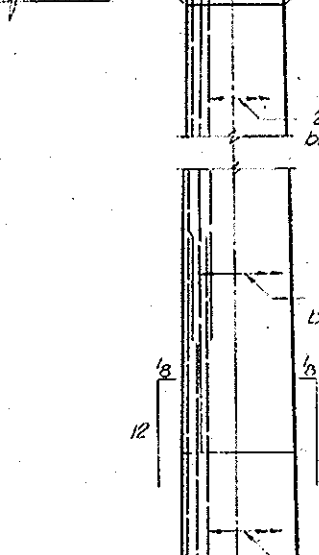
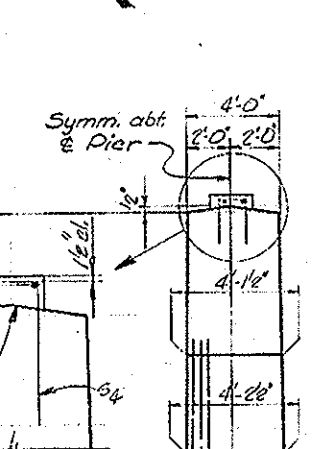
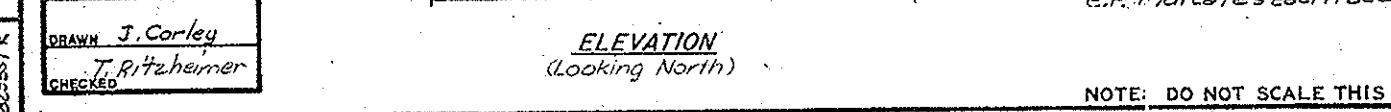
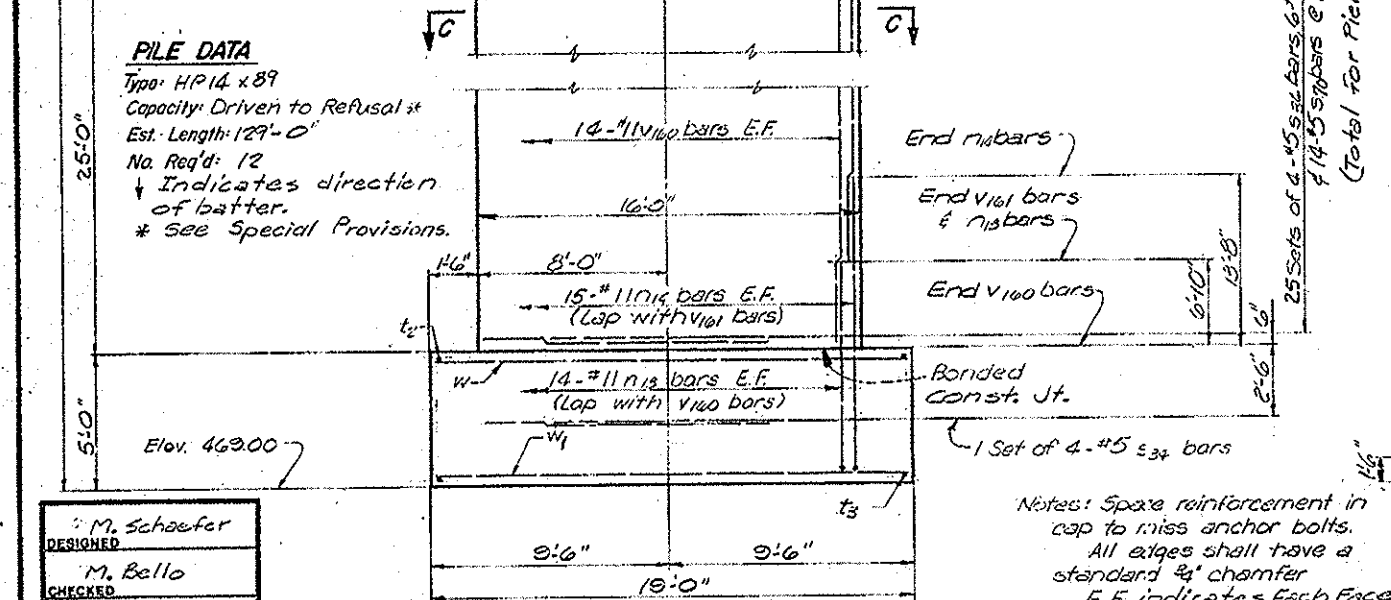
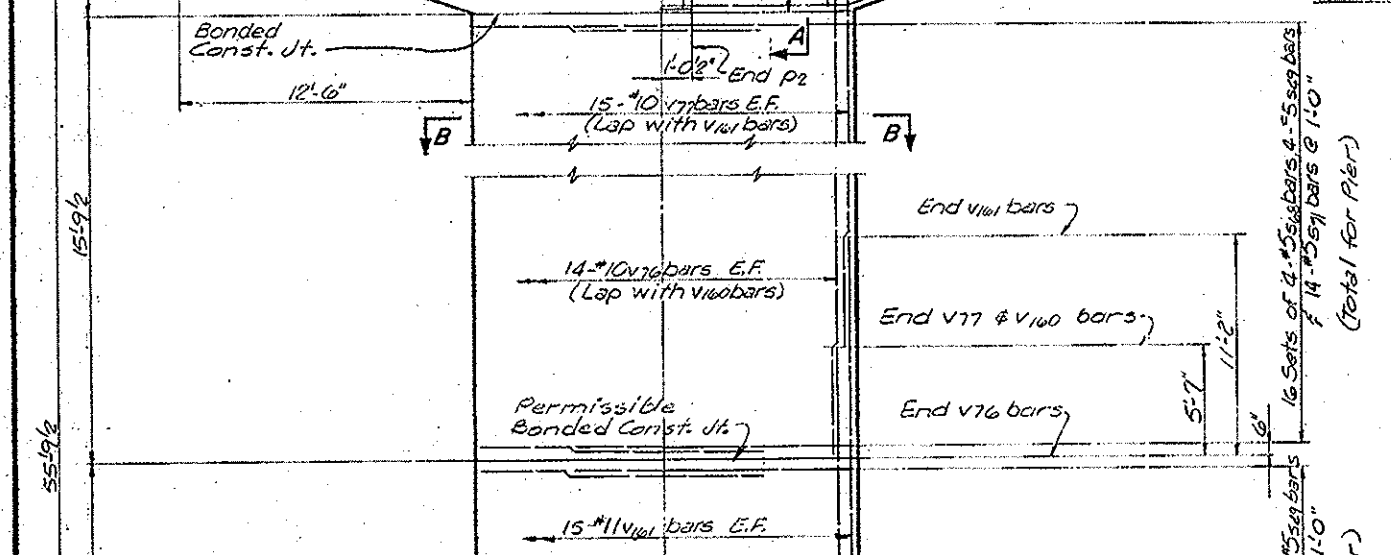
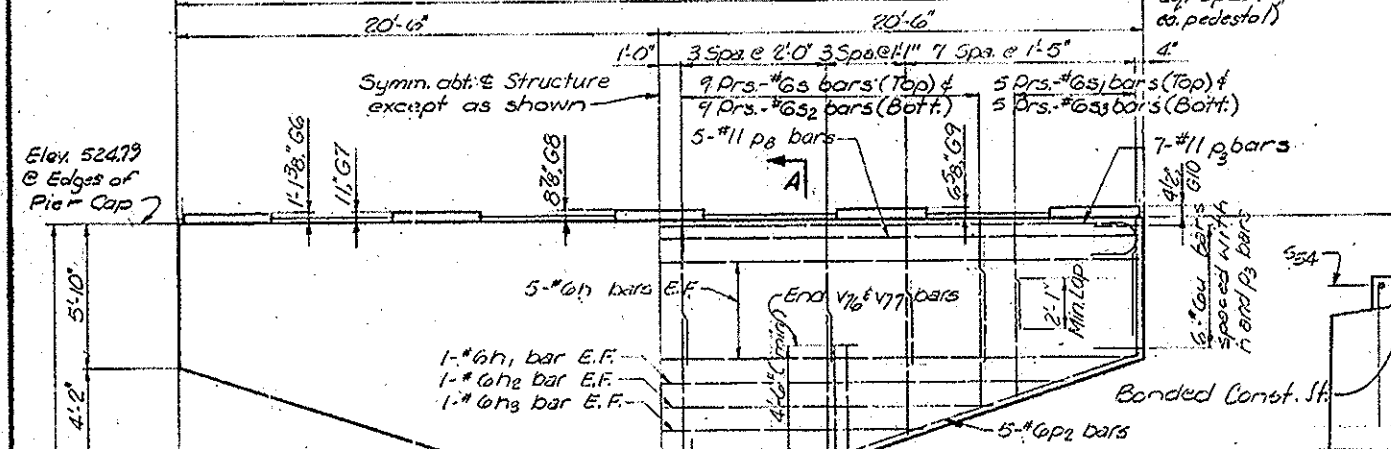
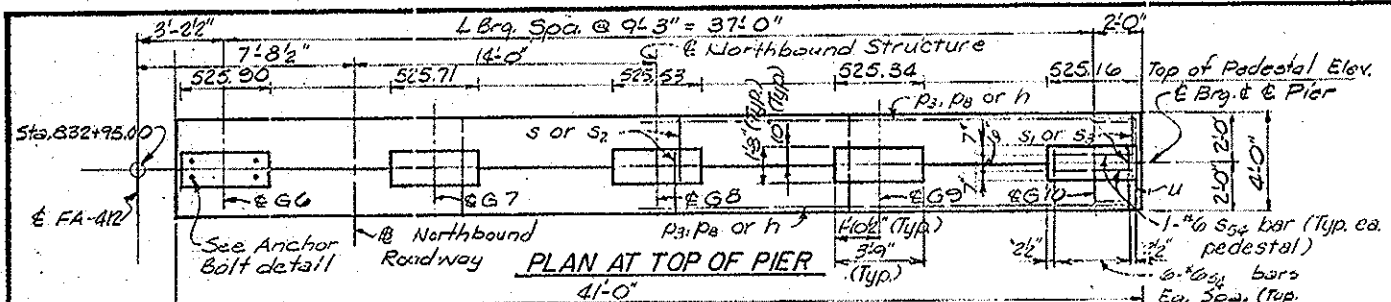
DESIGNED	M. Schwefler
CHECKED	M. Bello
DRAWN	J. Carley
CHECKED	T. Ritzheimer

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 16 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-48	LASALLE	245	144



Class X Concrete	Cu. Yds.	230.3
Reinforcement Bars	Lbs.	385.53
Steel Piles (HP14x89)	Lin. Ft.	1548
Metal Shoes	EA.	12
Structure Excav.	Cu. Yds.	187

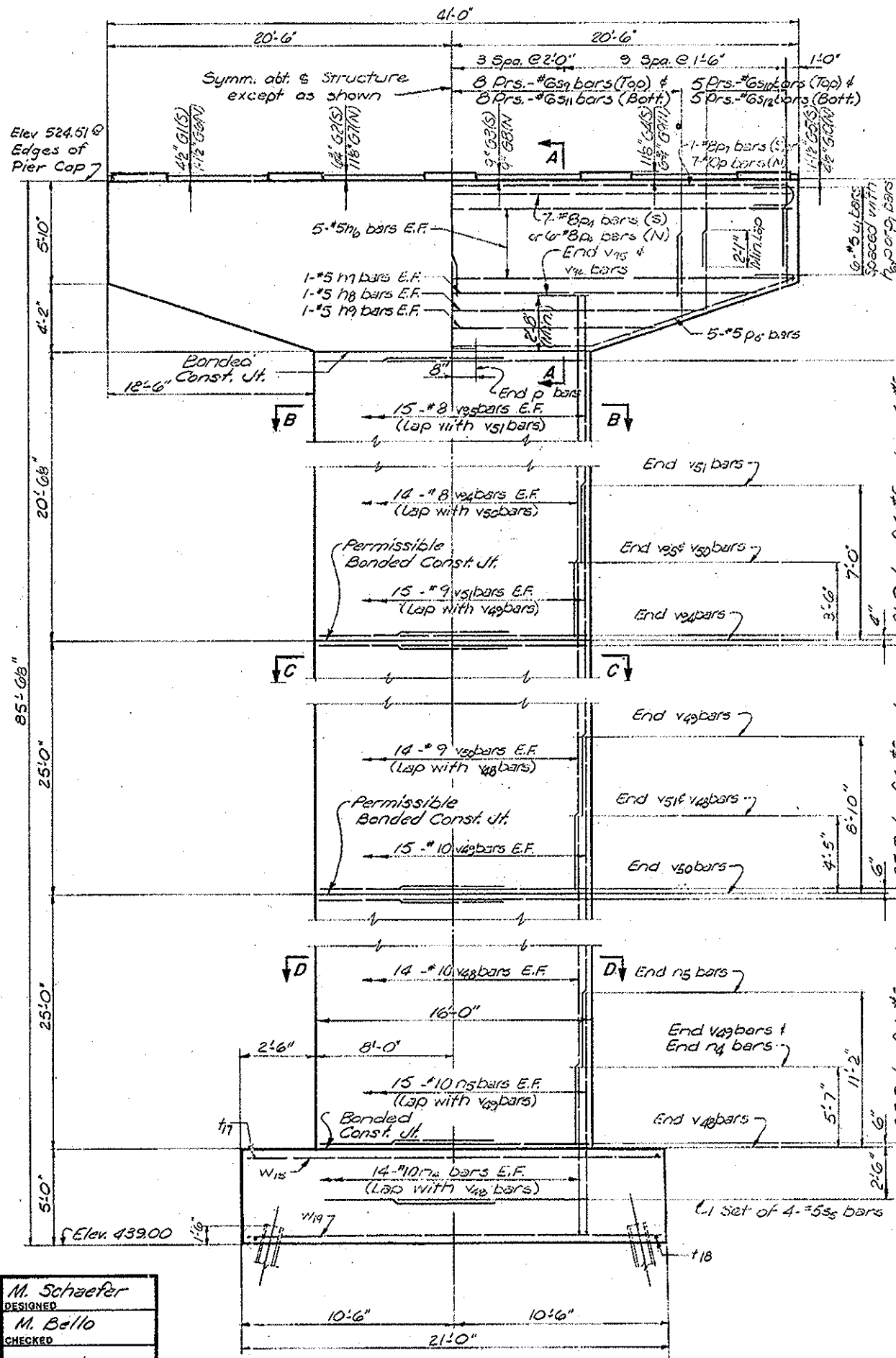
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 16 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

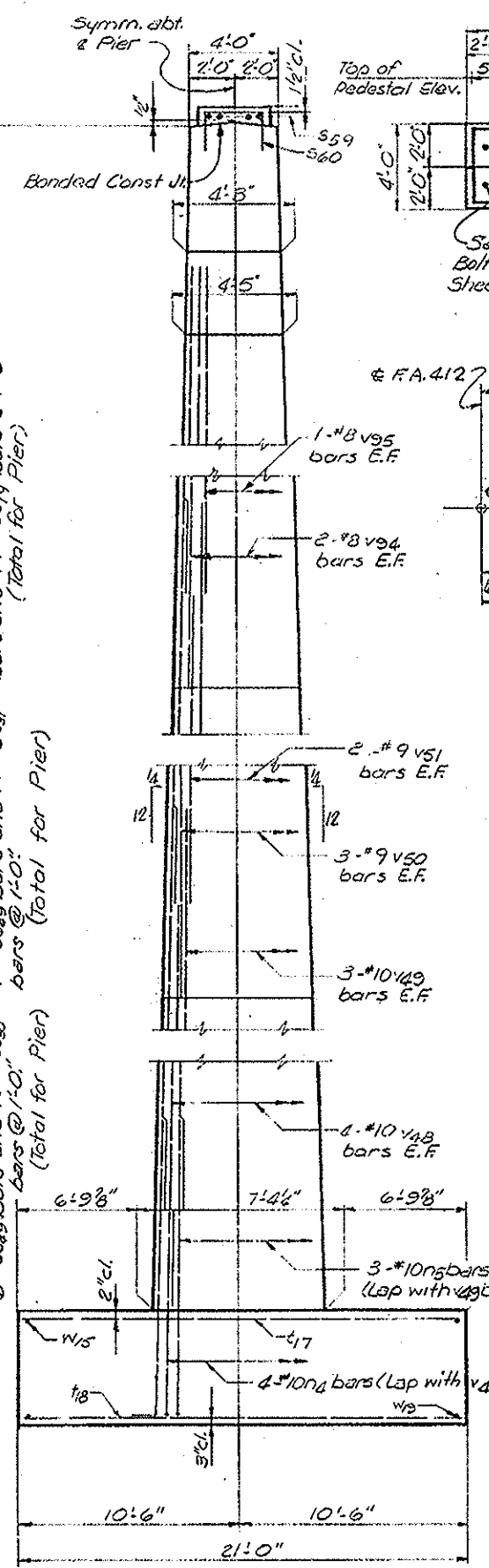
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED	M. Schaefer
CHECKED	M. Ballo
DRAWN	J. Corley
CHECKED	T. Ritzheimer

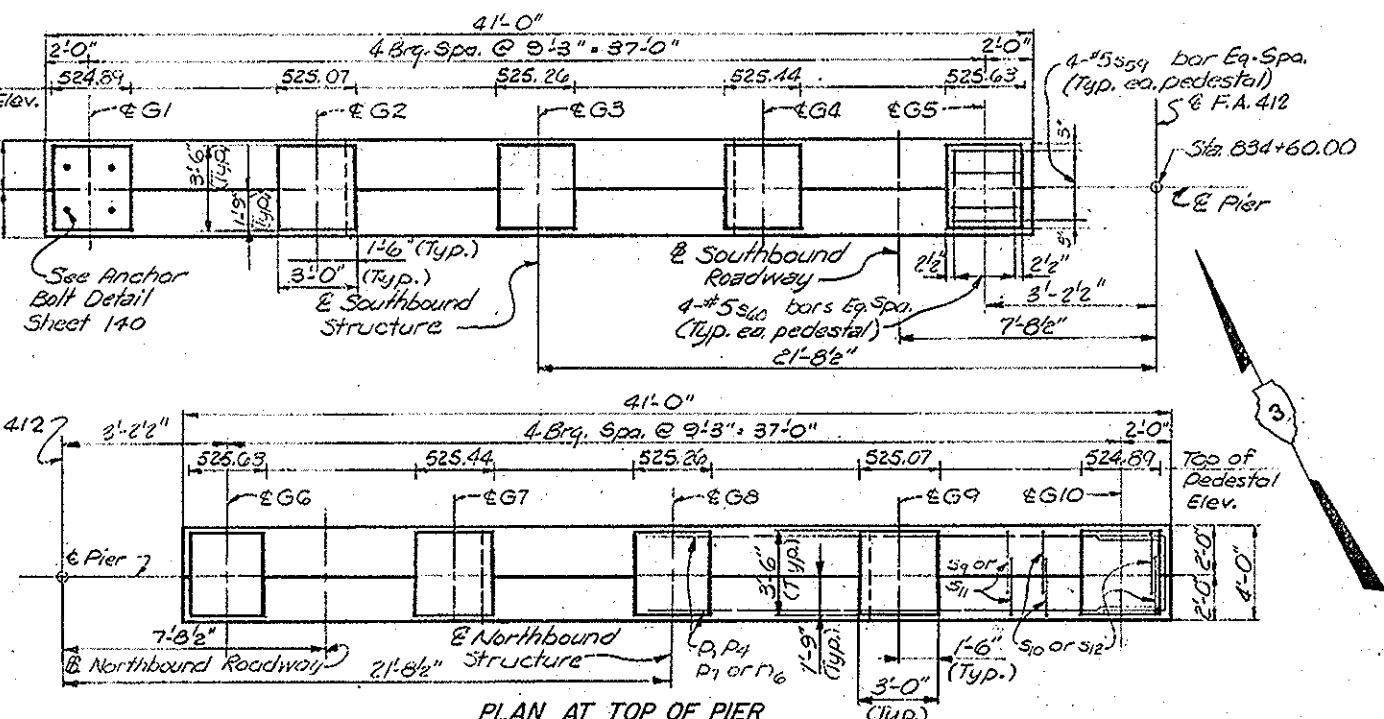
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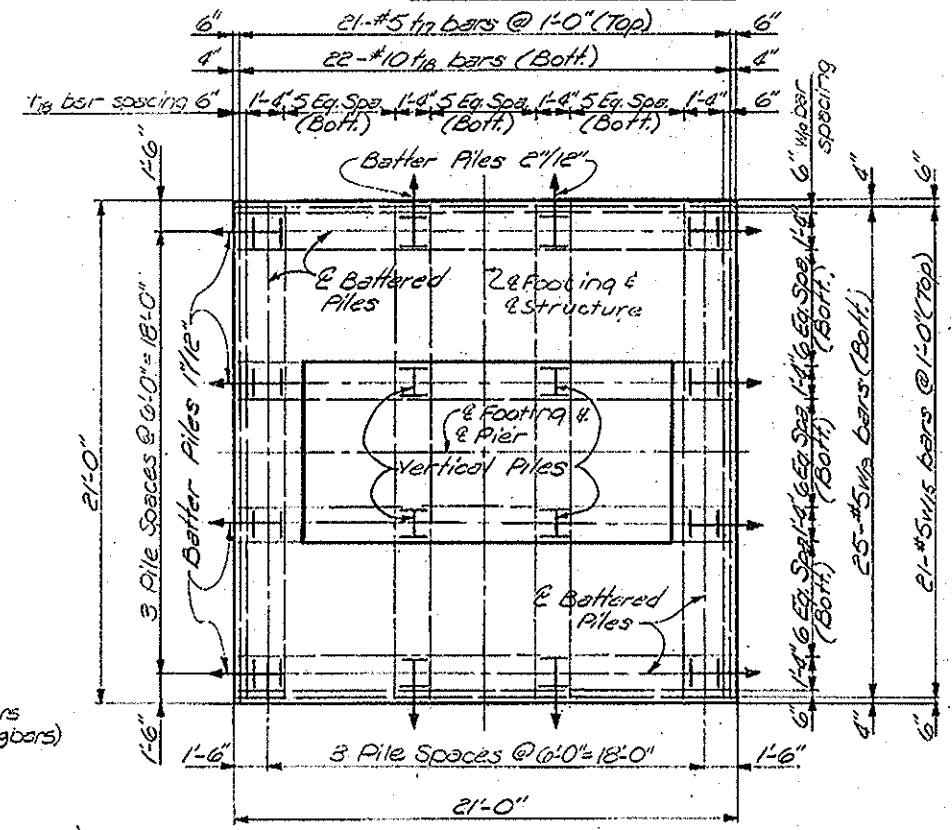
ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. about & footing.

PILE DATA
Type: HP 14x89
Capacity: Driven to refusal
Est. Length: 95'-0"
No. Req'd: 32 (16 at pier 17N, 15 at Pier 17S)
Test Pile at Pier 17S
Indicates direction of batter.
* See Special Provisions.

Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4" chamfer.
(N) indicate Northbound Pier.
(S) indicates Southbound Pier.
E.F. indicates Each Face
Work this sheet with sheet 140.

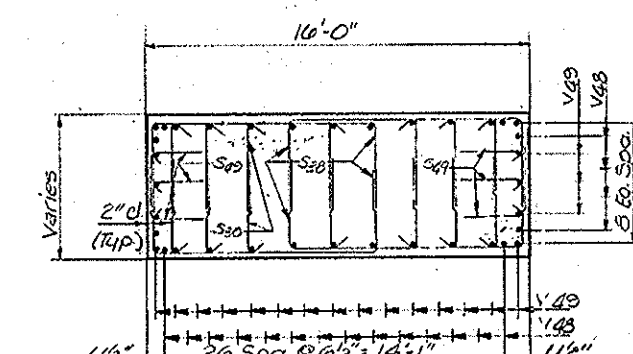
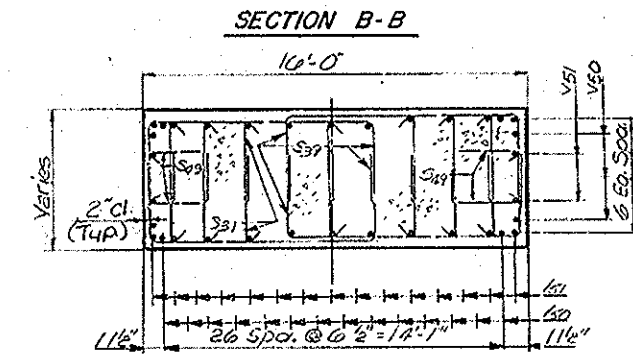
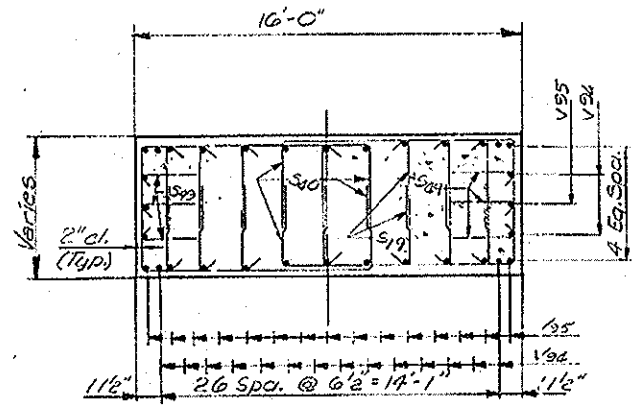
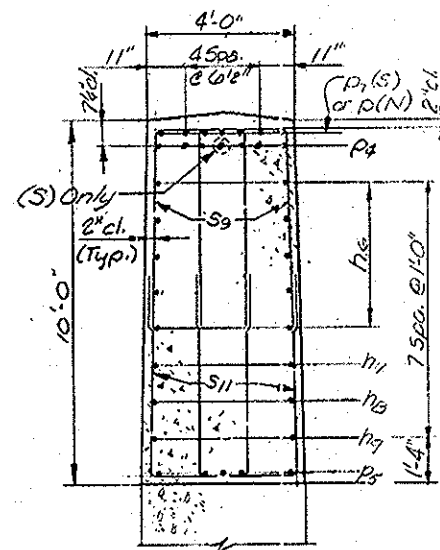
**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 17 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B. PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

DESIGNED
M. Schaefer
CHECKED
M. Bello
DRAWN
J. Corley
CHECKED
T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

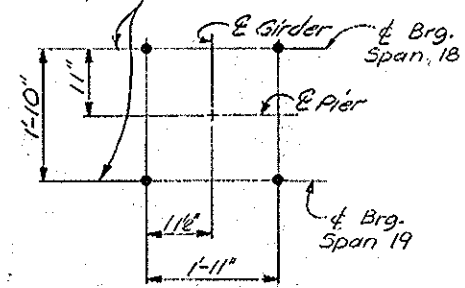
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 139 OF 163

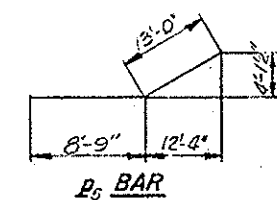


SECTION A-A
(Shaft reinf. & Pedestal not shown)

4. 1 1/2" dia holes drilled
1'-0" deep for 1 1/2" dia
Illinois Coil-Lock
Anchor Bolts



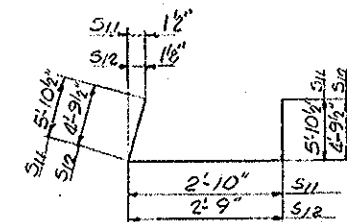
ANCHOR BOLT DETAIL
(Top of each pedestal)



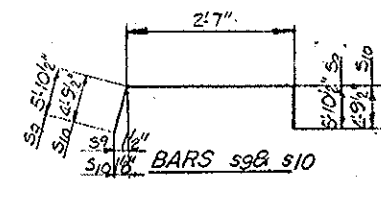
P5 BAR

S30	4'-9 1/2"	5/8"
S31	4'-3 1/2"	5/8"
S19	3'-9 1/2"	5/8"
S39	2'-8 1/2"	5/8"

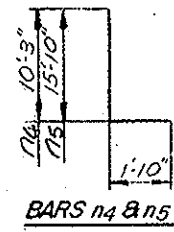
BARS S19, S30, S31 & S39



BARS S11 & S12

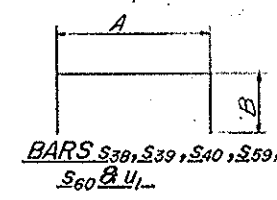


BARS S9 & S10

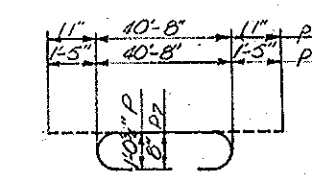


BARS N4 & N5

Bar	A	B
S20	9'-8"	4'-9 1/2"
S39	9'-8"	4'-3 1/2"
S2	9'-8"	3'-9"
S59	2'-8"	2'-0"
S20	3'-1"	2'-0"
U1	3'-7"	3'-9"



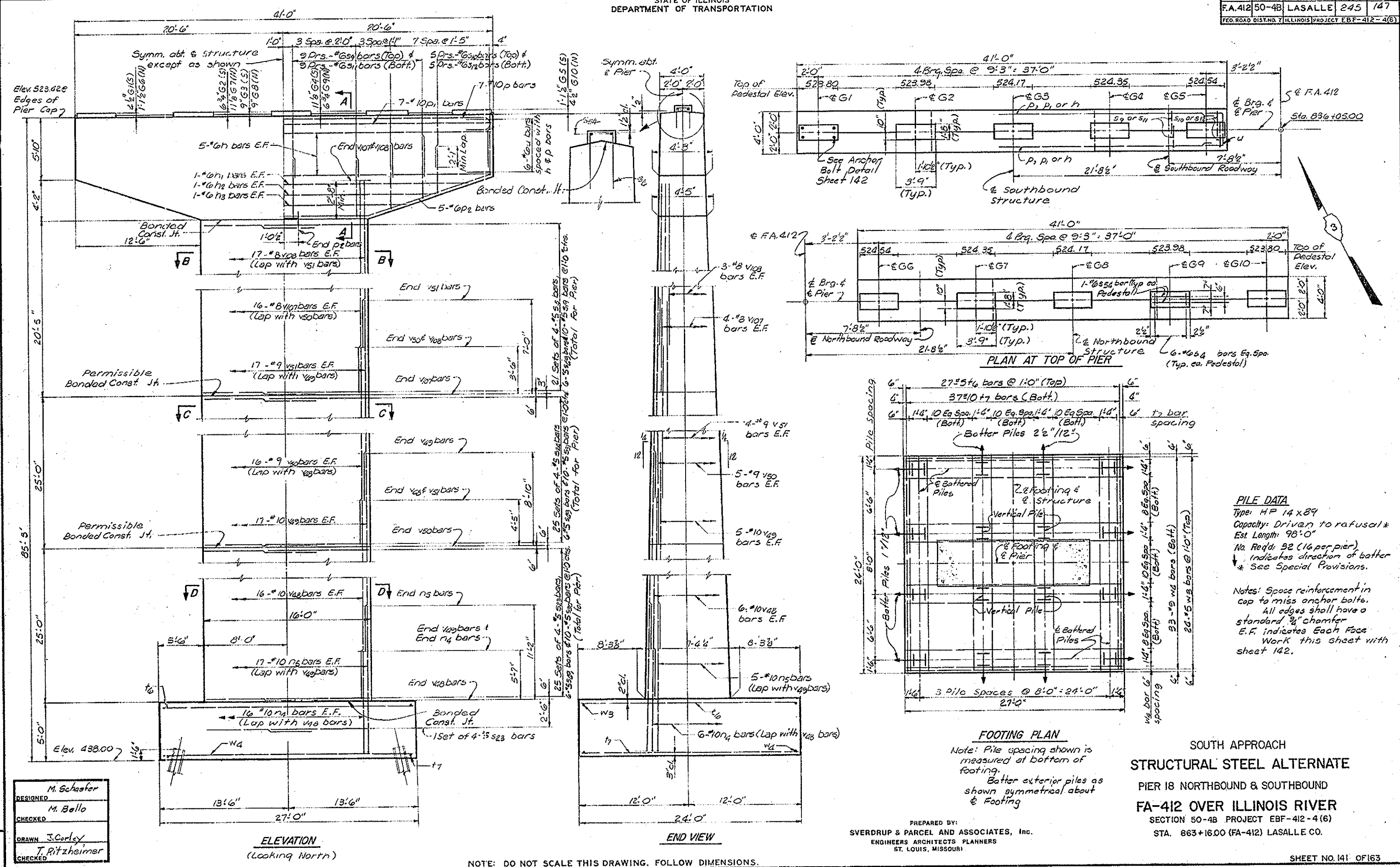
BARS S38, S39, S40, & S59



BARS P & P7

BILL OF MATERIAL

PIER 17 NORTHBOUND					PIER 17 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
N6	10	#5	40'-8"	—	N6	10	#5	40'-8"	—
N7	2	#5	39'-0"	—	N7	2	#5	39'-0"	—
N8	2	#5	28'-11"	—	N8	2	#5	28'-11"	—
N9	2	#5	22'-10"	—	N9	2	#5	22'-10"	—
N10	2	#5	22'-10"	—	N10	2	#5	22'-10"	—
N11	2	#5	22'-10"	—	N11	2	#5	22'-10"	—
N12	2	#5	22'-10"	—	N12	2	#5	22'-10"	—
N13	2	#5	22'-10"	—	N13	2	#5	22'-10"	—
N14	2	#5	22'-10"	—	N14	2	#5	22'-10"	—
N15	2	#5	22'-10"	—	N15	2	#5	22'-10"	—
N16	2	#5	22'-10"	—	N16	2	#5	22'-10"	—
N17	2	#5	22'-10"	—	N17	2	#5	22'-10"	—
N18	2	#5	22'-10"	—	N18	2	#5	22'-10"	—
N19	2	#5	22'-10"	—	N19	2	#5	22'-10"	—
N20	2	#5	22'-10"	—	N20	2	#5	22'-10"	—
N21	2	#5	22'-10"	—	N21	2	#5	22'-10"	—
N22	2	#5	22'-10"	—	N22	2	#5	22'-10"	—
N23	2	#5	22'-10"	—	N23	2	#5	22'-10"	—
N24	2	#5	22'-10"	—	N24	2	#5	22'-10"	—
N25	2	#5	22'-10"	—	N25	2	#5	22'-10"	—
N26	2	#5	22'-10"	—	N26	2	#5	22'-10"	—
N27	2	#5	22'-10"	—	N27	2	#5	22'-10"	—
N28	2	#5	22'-10"	—	N28	2	#5	22'-10"	—
N29	2	#5	22'-10"	—	N29	2	#5	22'-10"	—
N30	2	#5	22'-10"	—	N30	2	#5	22'-10"	—
N31	2	#5	22'-10"	—	N31	2	#5	22'-10"	—
N32	2	#5	22'-10"	—	N32	2	#5	22'-10"	—
N33	2	#5	22'-10"	—	N33	2	#5	22'-10"	—
N34	2	#5	22'-10"	—	N34	2	#5	22'-10"	—
N35	2	#5	22'-10"	—	N35	2	#5	22'-10"	—
N36	2	#5	22'-10"	—	N36	2	#5	22'-10"	—
N37	2	#5	22'-10"	—	N37	2	#5	22'-10"	—
N38	2	#5	22'-10"	—	N38	2	#5	22'-10"	—
N39	2	#5	22'-10"	—	N39	2	#5	22'-10"	—
N40	2	#5	22'-10"	—	N40	2	#5	22'-10"	—
N41	2	#5	22'-10"	—	N41	2	#5	22'-10"	—
N42	2	#5	22'-10"	—	N42	2	#5	22'-10"	—
N43	2	#5	22'-10"	—	N43	2	#5	22'-10"	—
N44	2	#5	22'-10"	—	N44	2	#5	22'-10"	—
N45	2	#5	22'-10"	—	N45	2	#5	22'-10"	—
N46	2	#5	22'-10"	—	N46	2	#5	22'-10"	—
N47	2	#5	22'-10"	—	N47	2	#5	22'-10"	—
N48	2	#5	22'-10"	—	N48	2	#5	22'-10"	—
N49	2	#5	22'-10"	—	N49	2	#5	22'-10"	—
N50	2	#5	22'-10"	—	N50	2	#5	22'-10"	—
N51	2	#5	22'-10"	—	N51	2	#5	22'-10"	—
N52	2	#5	22'-10"	—	N52	2	#5	22'-10"	—
N53	2	#5	22'-10"	—	N53	2	#5	22'-10"	—
N54	2	#5	22'-10"	—	N54	2	#5	22'-10"	—
N55	2	#5	22'-10"	—	N55	2	#5	22'-10"	—
N56	2	#5	22'-10"	—	N56	2	#5	22'-10"	—
N57	2	#5	22'-10"	—	N57	2	#5	22'-10"	—
N58	2	#5	22'-10"	—	N58	2	#5	22'-10"	—
N59	2	#5	22'-10"	—	N59	2	#5	22'-10"	—
N60	2	#5	22'-10"	—	N60	2	#5	22'-10"	—
N61	2	#5	22'-10"	—	N61	2	#5	22'-10"	—
N62	2	#5	22'-10"	—	N62	2	#5	22'-10"	—
N63	2	#5	22'-10"	—	N63	2	#5	22'-10"	—
N64	2	#5	22'-10"	—	N64	2	#5	22'-10"	—
N65	2	#5	22'-10"	—	N65	2	#5	22'-10"	—
N66	2	#5	22'-10"	—	N66	2	#5	22'-10"	—
N67	2								



DESIGNED	M. Schaefer
CHECKED	M. Ballo
DRAWN	J. Corley
CHECKED	T. Ritzheimer

ELEVATION
(Looking North)

END VIEW

FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
Batter exterior piles as shown symmetrical about footing

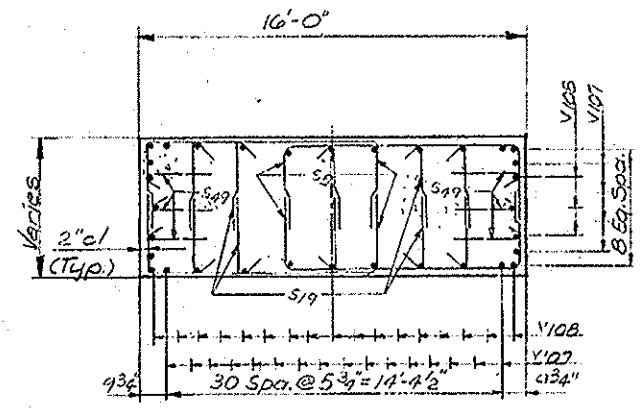
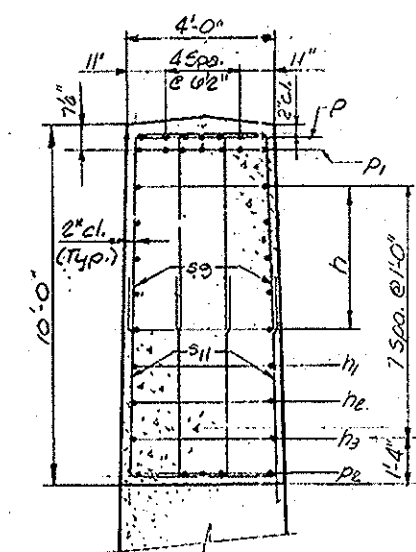
PILE DATA
Type: HP 14 x 89
Capacity: Driven to refusal *
Est Length: 98' 0"
No. Reqd: 92 (16 per pier)
↓ Indicates direction of batter
* See Special Provisions.

Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/8" chamfer.
E.F. indicates Each Face.
Work this sheet with sheet 142.

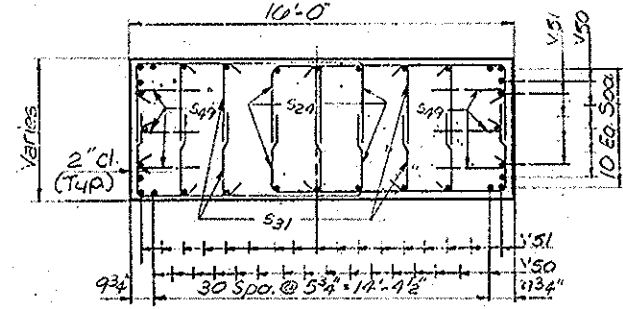
**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**
PIER 18 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

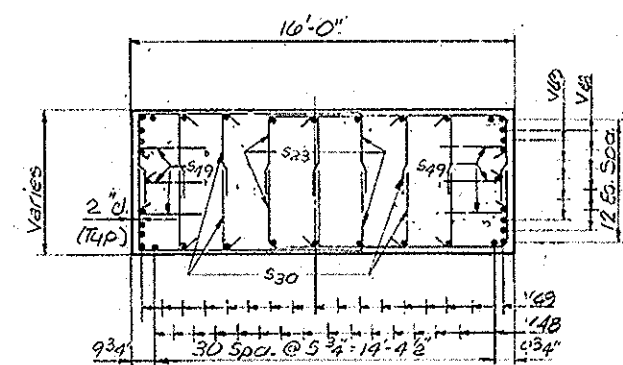
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



SECTION B-B

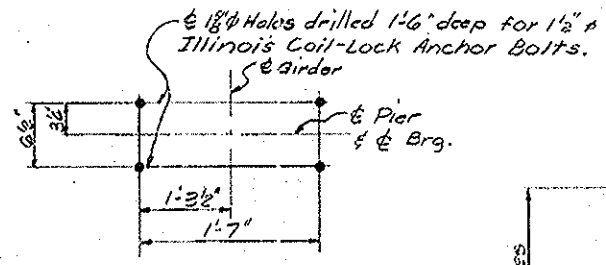


SECTION C-C

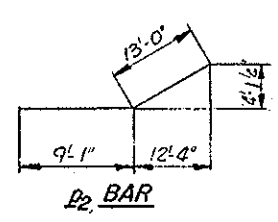


SECTION D-D

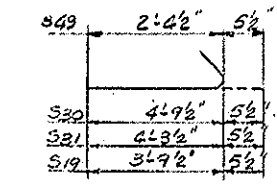
SECTION A-A
(Shaft reinf. & Pedestal not shown)



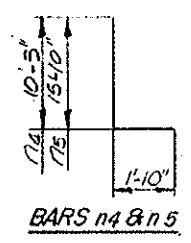
ANCHOR BOLT DETAIL
(Typ. ea. Pedestal)



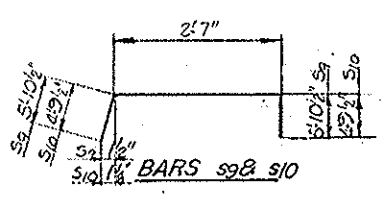
BAR P2



BARS S19, S30, S31 & S49

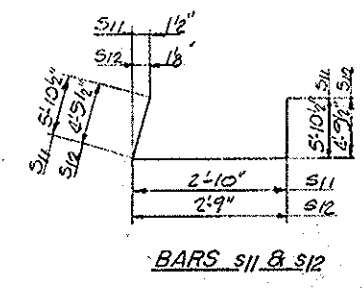


BARS n4 & n5

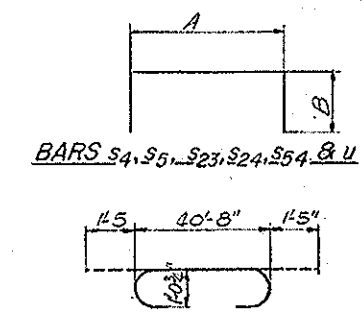


BARS s9 & s10

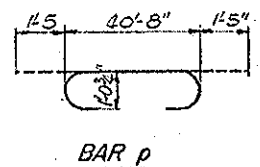
Bar	A	B
S4	1'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S23	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S56	3'-5"	2'-0"
U	3'-7"	4'-0"



BARS s11 & s12



BARS S4, S5, S23, S24, S54 & U



BAR p

BILL OF MATERIAL

PIER 18 NORTHBOUND					PIER 18 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	—	n	10	#6	40'-8"	—
n1	2	#6	35'-0"	—	n1	2	#6	35'-0"	—
n2	2	#6	28'-11"	—	n2	2	#6	28'-11"	—
n3	2	#6	22'-10"	—	n3	2	#6	22'-10"	—
n4	44	#10	12'-1"	L	n4	44	#10	12'-1"	L
n5	44	#10	17'-8"	L	n5	44	#10	17'-8"	L
p	7	#10	43'-6"	—	p	7	#10	43'-6"	—
p1	7	#10	40'-8"	—	p1	7	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s4	30	#6	5'-4"	—	s4	30	#6	5'-4"	—
s5	84	#5	17'-7"	—	s5	84	#5	17'-7"	—
s9	36	#6	14'-4"	—	s9	36	#6	14'-4"	—
s10	20	#6	12'-2"	—	s10	20	#6	12'-2"	—
s11	36	#6	4'-7"	—	s11	36	#6	4'-7"	—
s12	20	#6	12'-4"	—	s12	20	#6	12'-4"	—
s19	210	#5	4'-3"	—	s19	210	#5	4'-3"	—
s23	104	#5	19'-7"	—	s23	104	#5	19'-7"	—
s24	100	#5	18'-7"	—	s24	100	#5	18'-7"	—
s30	250	#5	5'-3"	—	s30	250	#5	5'-3"	—
s31	250	#5	4'-9"	—	s31	250	#5	4'-9"	—
s49	426	#5	2'-10"	—	s49	426	#5	2'-10"	—
s54	10	#6	7'-5"	—	s54	10	#6	7'-5"	—
t6	27	#5	23'-6"	—	t6	27	#5	23'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v48	44	#10	29'-5"	—	v48	44	#10	29'-5"	—
v49	44	#10	28'-3"	—	v49	44	#10	28'-3"	—
v50	42	#9	28'-6"	—	v50	42	#9	28'-6"	—
v51	42	#9	27'-7"	—	v51	42	#9	27'-7"	—
v107	40	#8	23'-1"	—	v107	40	#8	23'-1"	—
v108	40	#8	19'-7"	—	v108	40	#8	19'-7"	—
w3	24	#5	26'-6"	—	w3	24	#5	26'-6"	—
w4	33	#9	26'-6"	—	w4	33	#9	26'-6"	—
Class X Concrete				Cu.Yds. 421.9	Class X Concrete				Cu.Yds. 421.9
Reinforcement Bars				Lbs. 54155	Reinforcement Bars				Lbs. 54155
Steel Piles HP14x89				Lin. Ft. 1568	Steel Piles HP14x89				Lin. Ft. 1568
Metal Shoes				Each 16	Metal Shoes				Each 16
Cofferdam				Each 1	Cofferdam				Each 1
Cofferdam Excav.				Cu.Yds. 225	Cofferdam Excav.				Cu.Yds. 225

Note: Work this Sheet with Sheet 141.

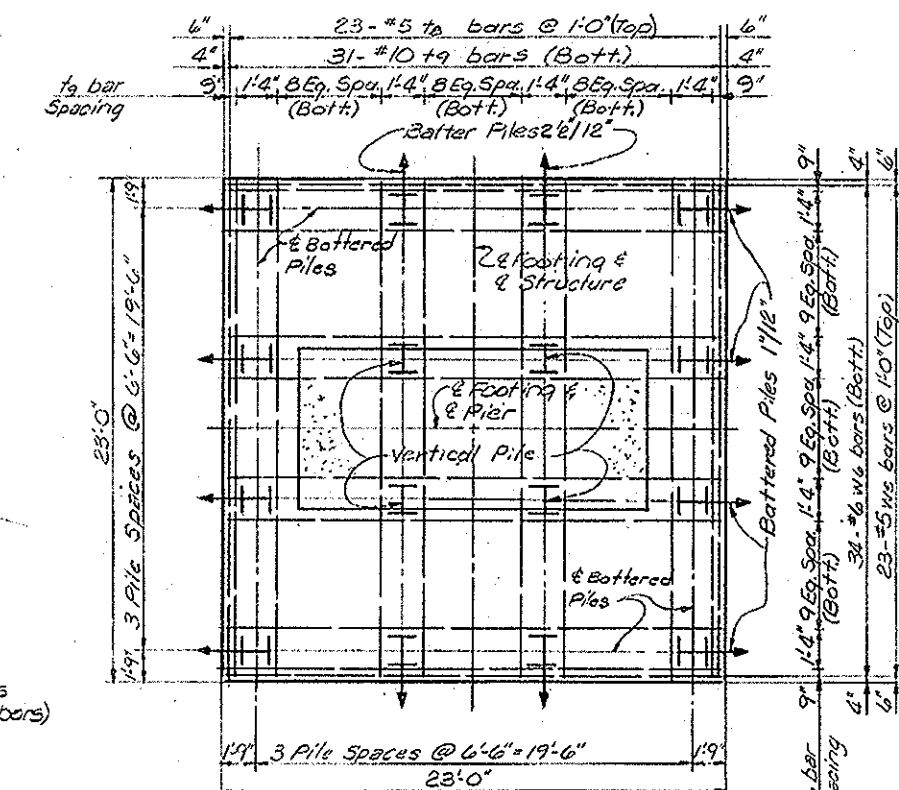
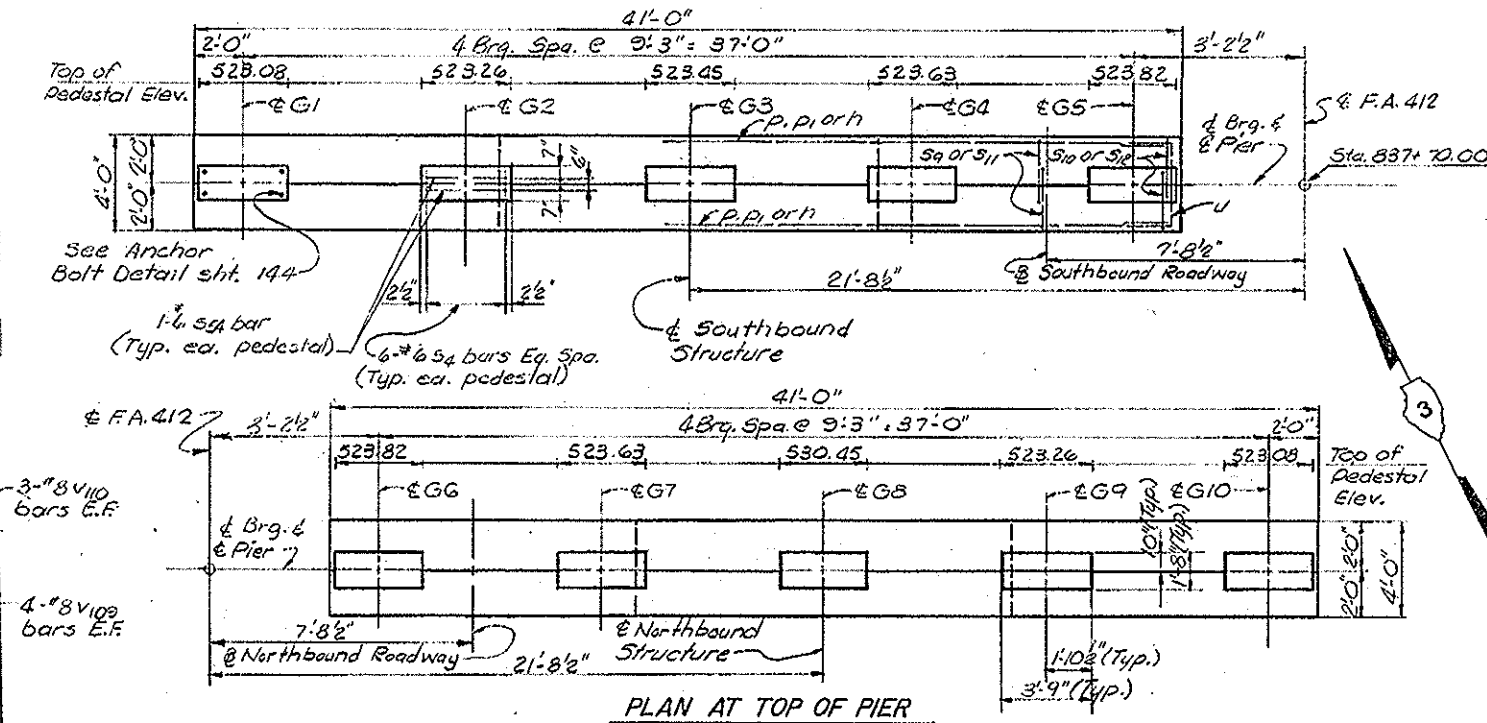
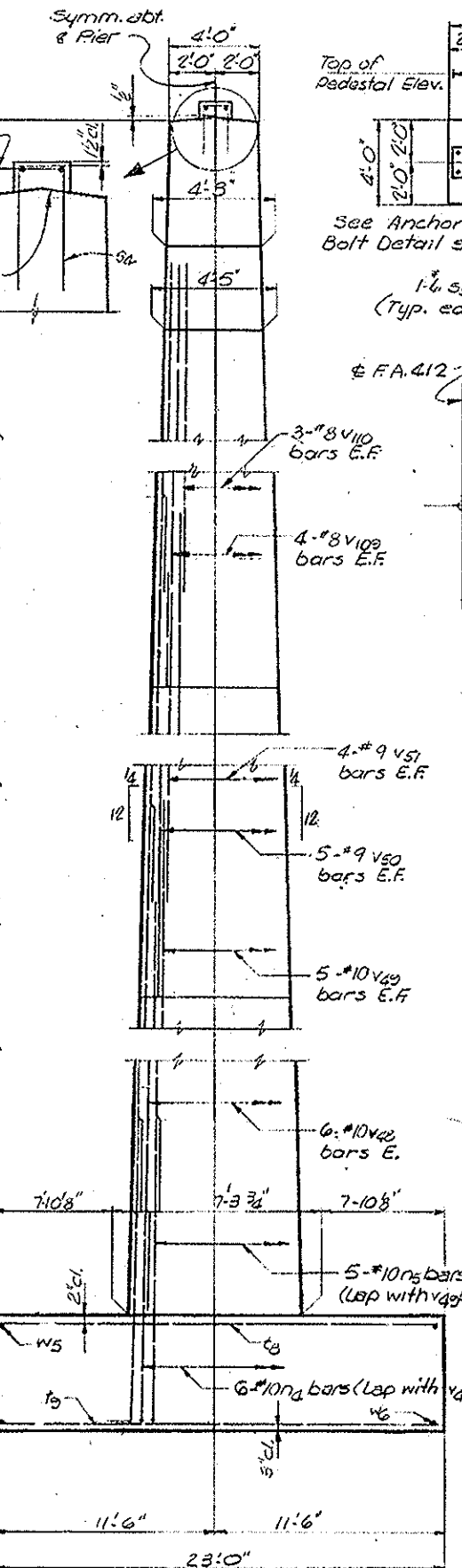
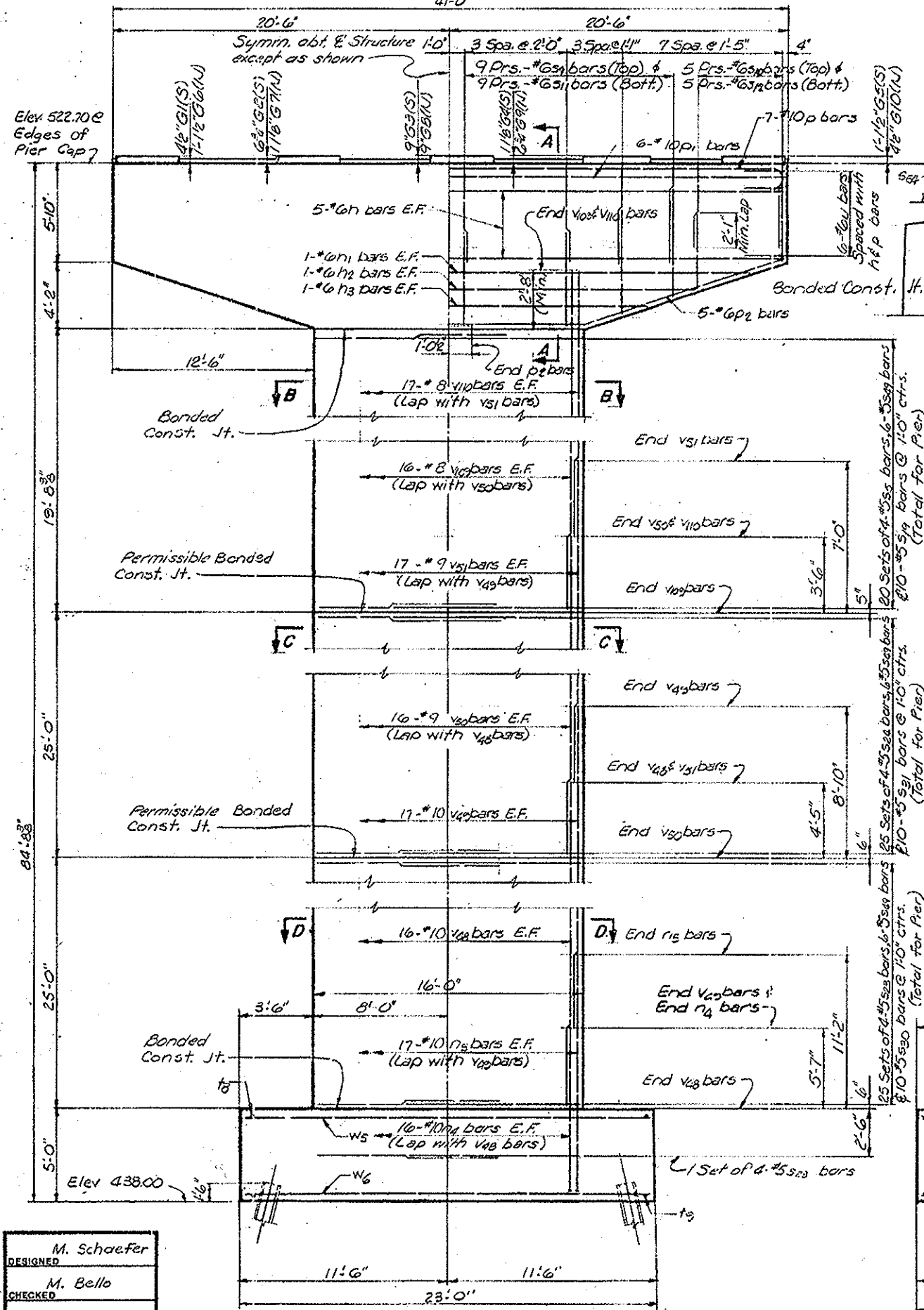
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 18 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Pitzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 142 OF 163



* See Special Provisions.
PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal *
Est. Length: 90'-0"
No. Req'd: 32 (16 @ Pier 19N, 15 @ Pier 19S & 1 Test Pile @ Pier 19S)
Indicates direction of batter.
Notes: Space Reinforcement in cap to miss Anchor Bolts.
All edges shall have a standard 3/4" chamfer.
E.F. indicates Each Face
Work this sheet with sheet 144.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

ELEVATION
(Looking North)

END VIEW

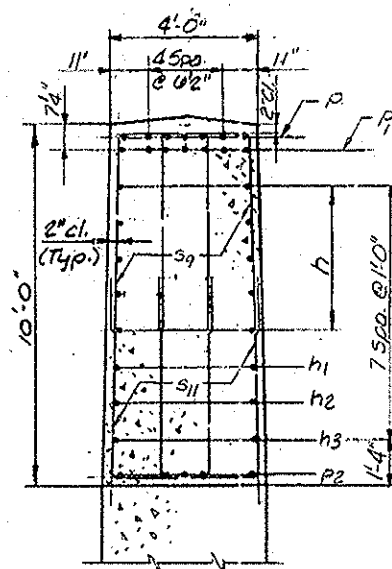
FOOTING PLAN

Notes: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. about & Footing.

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**
PIER 19 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

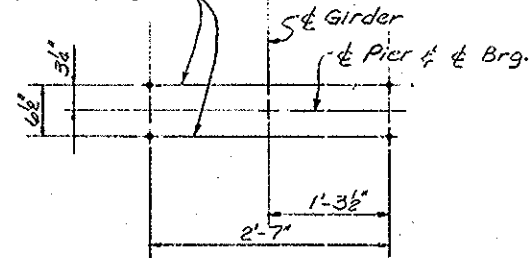
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

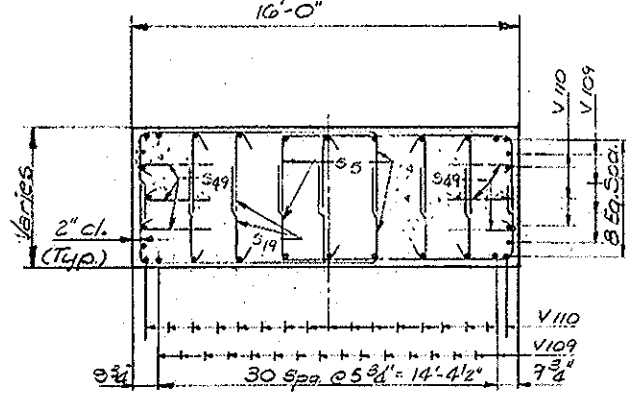


SECTION A-A
(Shaft reinf. & pedestal not shown.)

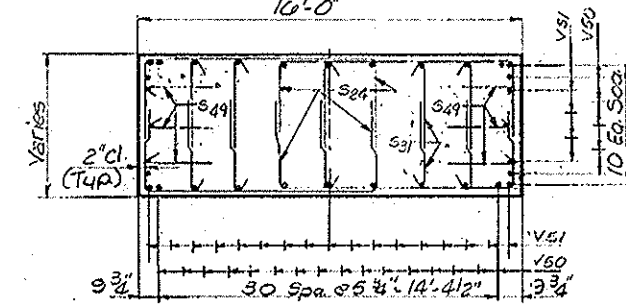
2" cl. (Typ.)
1/8" holes drilled 1'-6" deep for 1/2" Illinois Coil-Lock Anchor Bolts



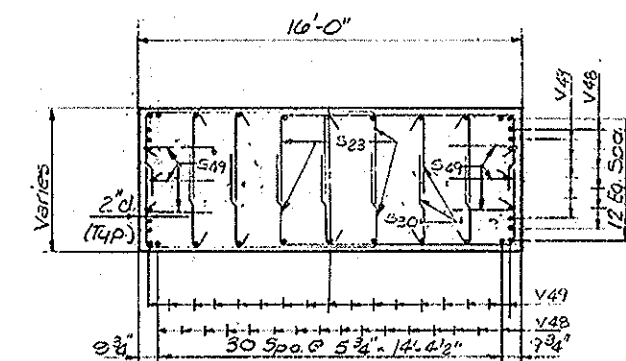
ANCHOR BOLT DETAIL
(Typ. ca. pedestal)



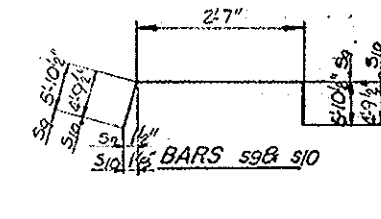
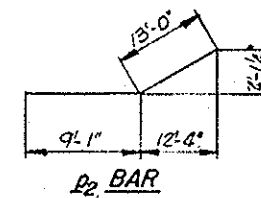
SECTION B-B



SECTION C-C



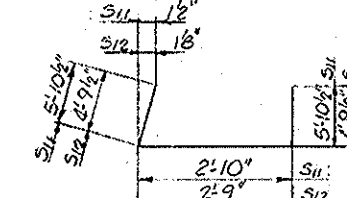
SECTION D-D



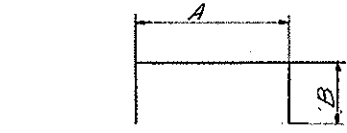
Bar	A	B
S4	1'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S23	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S54	3'-5"	2'-0"
U	3'-7"	4'-0"

Bar	Length	Shape
S19	3'-9 1/2"	5/8"
S20	4'-9 1/2"	5/8"
S21	4'-3 1/2"	5/8"
S49	2'-4 1/2"	5/8"

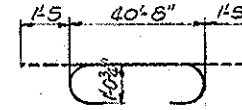
BARS S19, S20, S21 & S49



BARS S11 & S12



BARS S4, S5, S23, S24, S54 & U



BAR P

BILL OF MATERIAL

PIER 19 NORTHBOUND				PIER 19 SOUTHBOUND					
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"		n	10	#6	40'-8"	
n1	2	#6	39'-0"		n1	2	#6	39'-0"	
n2	2	#6	28'-11"		n2	2	#6	28'-11"	
n3	2	#6	22'-10"		n3	2	#6	22'-10"	
n4	44	#10	12'-1"	L	n4	44	#10	12'-1"	L
n5	44	#10	17'-8"	L	n5	44	#10	17'-8"	L
p	7	#10	43'-6"	C	p	7	#10	43'-6"	C
p1	6	#10	40'-8"		p1	6	#10	40'-8"	
p2	10	#6	22'-11"		p2	10	#6	22'-11"	
s4	30	#6	5'-4"		s4	30	#6	5'-4"	
s5	80	#5	17'-7"		s5	80	#5	17'-7"	
s9	36	#6	14'-4"		s9	36	#6	14'-4"	
s10	20	#6	12'-2"		s10	20	#6	12'-2"	
s11	36	#6	14'-7"	L	s11	36	#6	14'-7"	L
s12	20	#6	12'-4"	L	s12	20	#6	12'-4"	L
s19	200	#5	4'-3"		s19	200	#5	4'-3"	
s23	104	#5	19'-7"		s23	104	#5	19'-7"	
s24	100	#5	18'-7"		s24	100	#5	18'-7"	
s30	250	#5	5'-3"		s30	250	#5	5'-3"	
s31	250	#5	4'-9"		s31	250	#5	4'-9"	
s49	420	#5	2'-10"		s49	420	#5	2'-10"	
s54	10	#6	7'-5"		s54	10	#6	7'-5"	
t8	23	#5	22'-6"		t8	23	#5	22'-6"	
t9	31	#10	22'-6"		t9	31	#10	22'-6"	
u	12	#6	11'-7"		u	12	#6	11'-7"	
v48	44	#10	29'-5"		v48	44	#10	29'-5"	
v49	44	#10	28'-3"		v49	44	#10	28'-3"	
v50	42	#9	28'-6"		v50	42	#9	28'-6"	
v51	42	#9	27'-7"		v51	42	#9	27'-7"	
v109	40	#8	22'-5"		v109	40	#8	22'-5"	
v110	40	#8	18'-11"		v110	40	#8	18'-11"	
w5	23	#5	22'-6"		w5	23	#5	22'-6"	
w6	34	#6	22'-6"		w6	34	#6	22'-6"	
Class X Concrete Cu.Yds.				3966	Class X Concrete Cu.Yds.				3966
Reinforcement Bars Lbs.				50892	Reinforcement Bars Lbs.				50892
Steel Piles HP14x89 Lin.Ft.				1440	Steel Piles HP14x89 Lin.Ft.				1350
Metal Shoes Each				16	Metal Shoes Each				1
Cofferdam Each				1	Cofferdam Each				15
Cofferdam Excav. Cu.Yds.				189	Cofferdam Excav. Cu.Yds.				189

Note: Work this sheet with Sheet 143.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

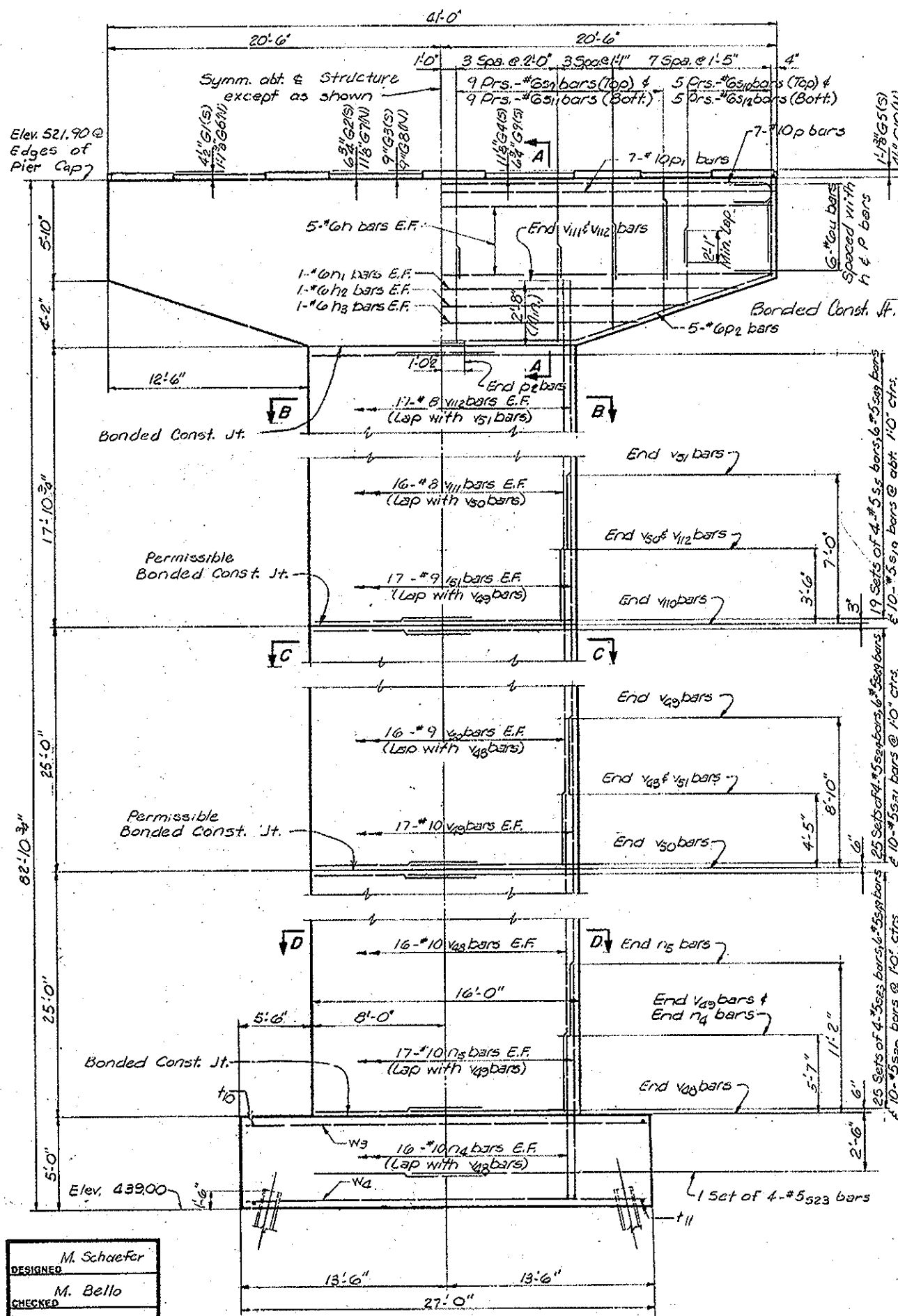
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 19 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

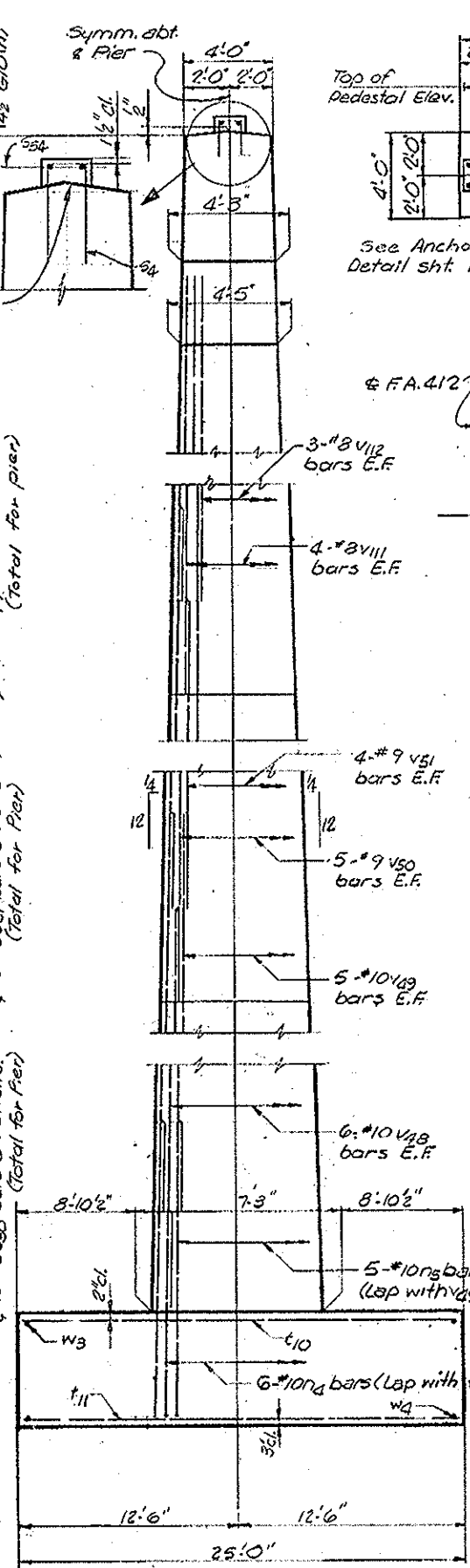
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 144 OF 163

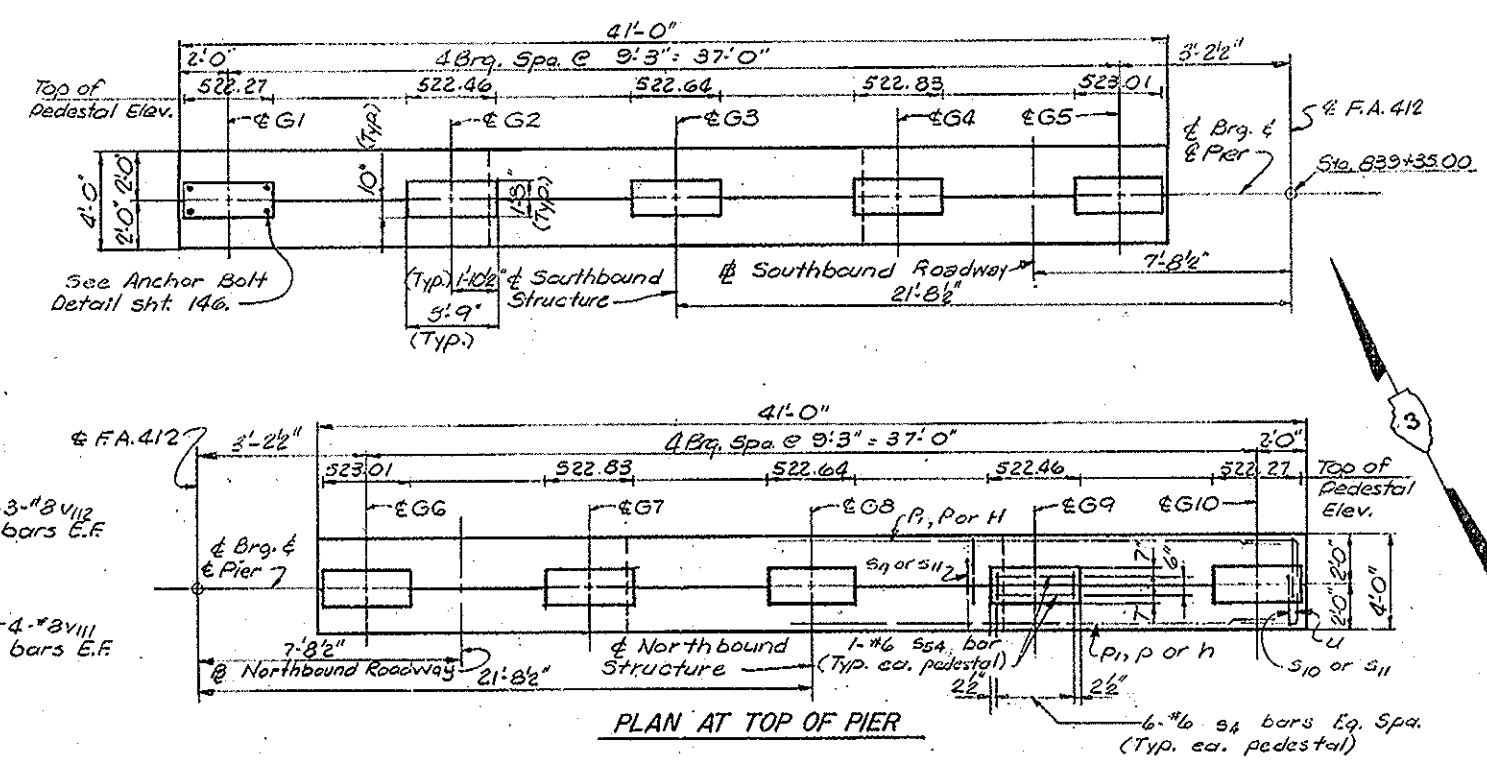
ROUTE NO. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412 50-4B	LASALLE	245	151
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)			



ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER

FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. abt. & Footing.

* See Special Provisions.
PILE DATA
Type: HP14x89
Capacity: Driven to Refusal
Est. Length: 98'-0"
No. Reqd. 32 (15 @ Pier 20N, 16 @ Pier 20S & 1 Test Pile @ Pier 20N)
↓ Indicates direction of batter.
Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4" chamfer.
E.F. indicates Each Face.
Work this sheet with sheet 146.

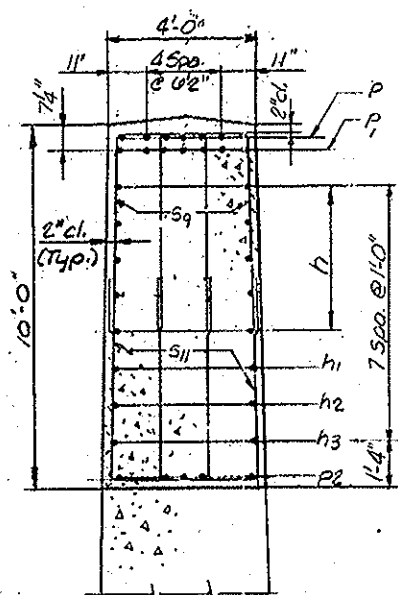
**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 20 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

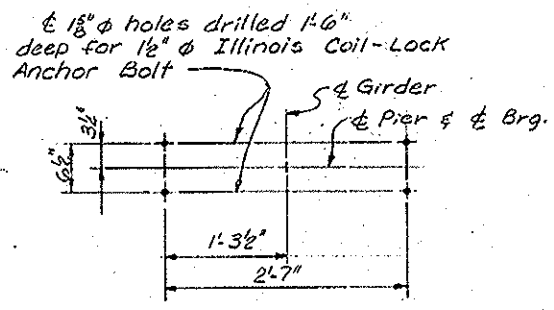
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED	M. Schaefer
CHECKED	M. Bello
DRAWN	J. Carby
CHECKED	J. Ritzheimer

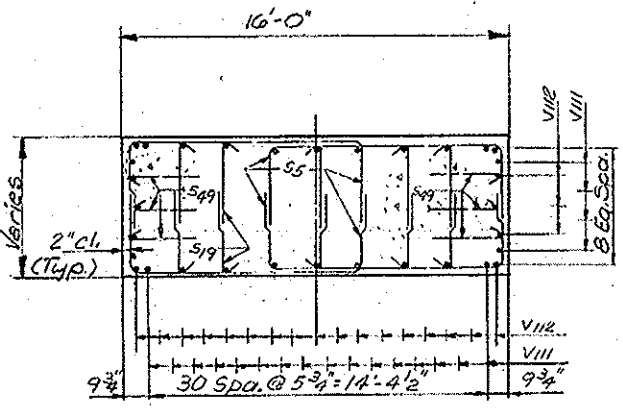
6692
8252392



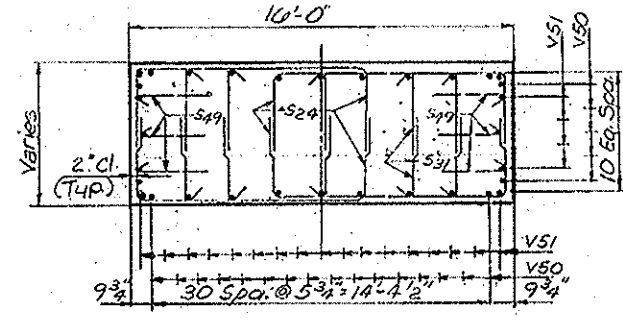
SECTION A-A
(Shaft reinf. & pedestal not shown.)



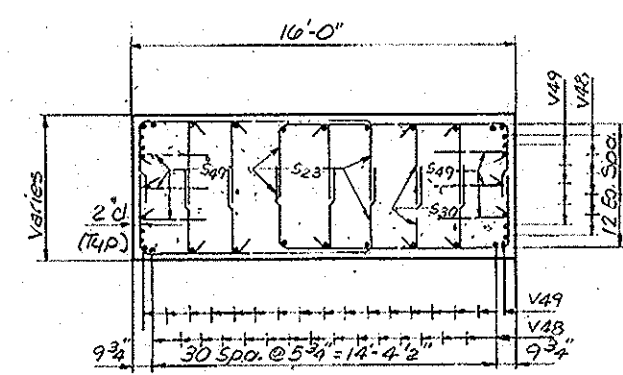
ANCHOR BOLT DETAIL
(Typ. ea pedestal)



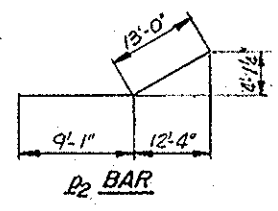
SECTION B-B



SECTION C-C



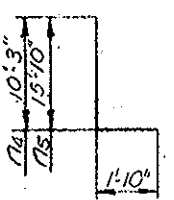
SECTION D-D



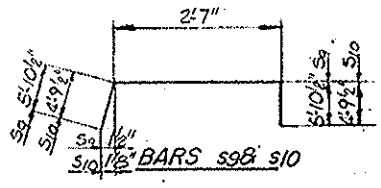
P2 BAR

S30	4'-9 1/2"	5 1/2"
S31	4'-3 1/2"	5 1/2"
S19	3'-9 1/2"	5 1/2"
S49	2'-4 1/2"	5 1/2"

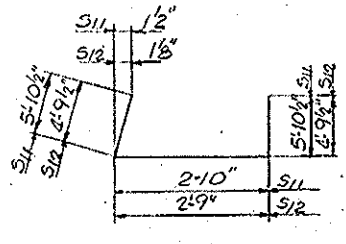
BARS S19, S30, S31 & S49



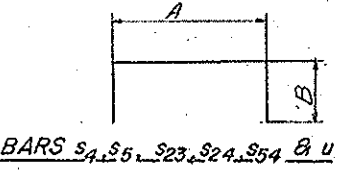
BARS n4 & n5



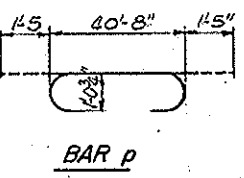
Bar	A	B
S4	1'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S23	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S54	3'-5"	2'-0"
U	3'-7"	4'-0"



BARS s11 & s12



BARS S4, S5, S23, S24, S54 & U



BAR P

BILL OF MATERIAL

PIER 20 NORTHBOUND					PIER 20 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"		n	10	#6	40'-8"	
h1	2	#6	35'-0"		h1	2	#6	35'-0"	
h2	2	#6	28'-11"		h2	2	#6	28'-11"	
h3	2	#6	22'-10"		h3	2	#6	22'-10"	
n4	44	#10	12'-1"	L	n4	44	#10	12'-1"	L
n5	44	#10	17'-8"		n5	44	#10	17'-8"	
P	7	#10	43'-6"		P	7	#10	43'-6"	
P1	7	#10	40'-8"		P1	7	#10	40'-8"	
P2	10	#6	22'-1"		P2	10	#6	22'-1"	
S4	30	#6	5'-4"		S4	30	#6	5'-4"	
S5	76	#5	17'-7"		S5	76	#5	17'-7"	
S9	36	#6	14'-4"		S9	36	#6	14'-4"	
S10	20	#6	12'-2"		S10	20	#6	12'-2"	
S11	36	#6	14'-7"	L	S11	36	#6	14'-7"	L
S12	20	#6	12'-4"	L	S12	20	#6	12'-4"	L
S19	190	#5	4'-3"		S19	190	#5	4'-3"	
S23	104	#5	19'-7"		S23	104	#5	19'-7"	
S24	100	#5	18'-7"		S24	100	#5	18'-7"	
S30	250	#5	5'-3"		S30	250	#5	5'-3"	
S31	250	#5	4'-9"		S31	250	#5	4'-9"	
S49	414	#5	2'-10"		S49	414	#5	2'-10"	
S54	10	#6	7'-5"		S54	10	#6	7'-5"	
T10	27	#5	24'-6"		T10	27	#5	24'-6"	
T11	37	#10	24'-6"		T11	37	#10	24'-6"	
U	12	#6	11'-7"		U	12	#6	11'-7"	
V48	44	#10	29'-5"		V48	44	#10	29'-5"	
V49	44	#10	28'-3"		V49	44	#10	28'-3"	
V50	42	#9	28'-6"		V50	42	#9	28'-6"	
V51	42	#9	27'-7"		V51	42	#9	27'-7"	
VIII	40	#8	20'-7"		VIII	40	#8	20'-7"	
VIII	40	#8	17'-1"		VIII	40	#8	17'-1"	
W3	25	#5	26'-6"		W3	25	#5	26'-6"	
W4	32	#9	26'-6"		W4	32	#9	26'-6"	
Class X Concrete	Cu.Yds.	416.1			Class X Concrete	Cu.Yds.	416.1		
Reinforcement Bars	Lbs.	53475			Reinforcement Bars	Lbs.	53475		
Steel Piles HP14x89	Lin. Ft.	1470			Steel Piles HP14x89	Lin. Ft.	1568		
Test Piles (Steel HP14x89)	Each	1			Metal Shoes	Each	16		
Metal Shoes	Each	15			Cofferdam	Each	1		
Cofferdam	Each	1			Cofferdam Excav.	Cu.Yds.	233		
Cofferdam Excav.	Cu.Yds.	233							

Note: Work this Sheet with Sheet 145.

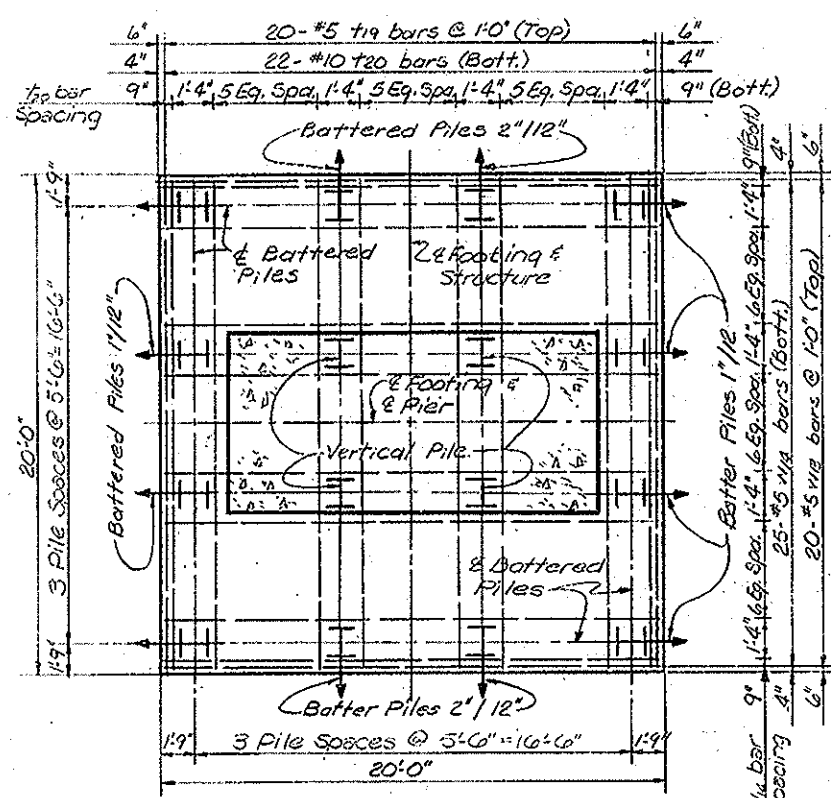
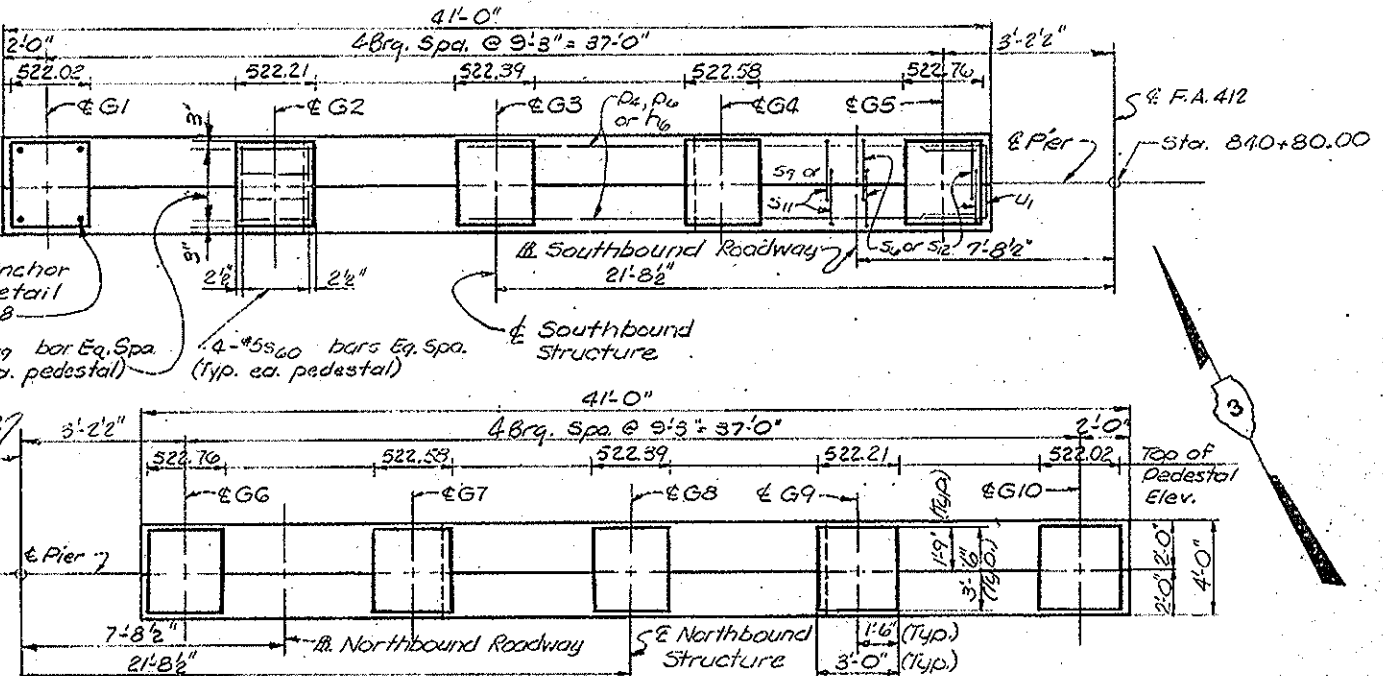
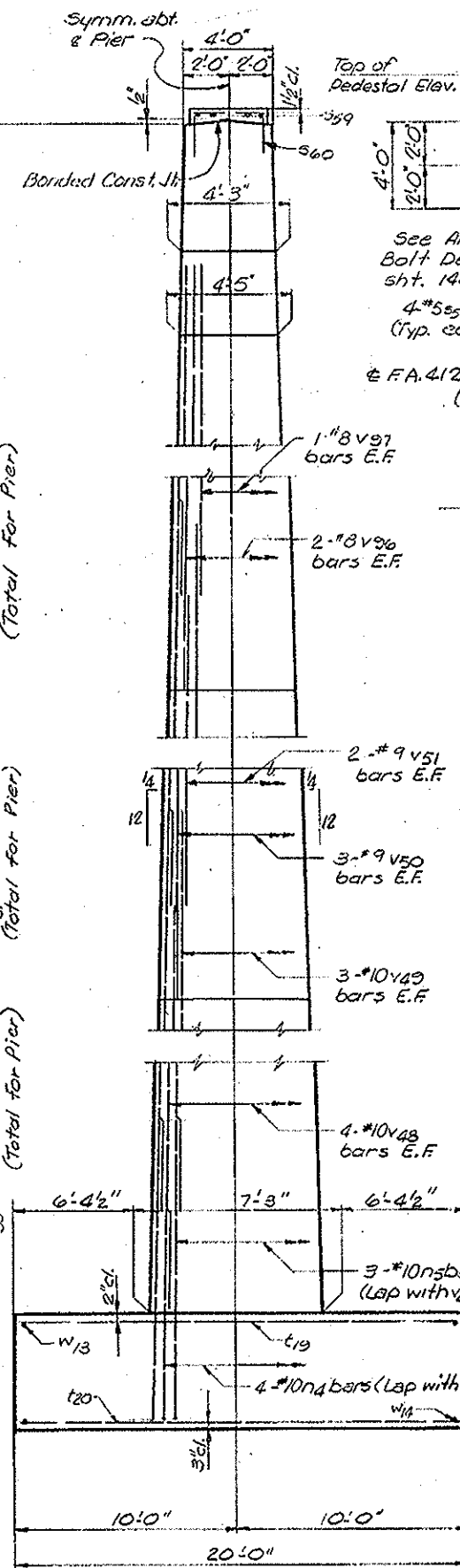
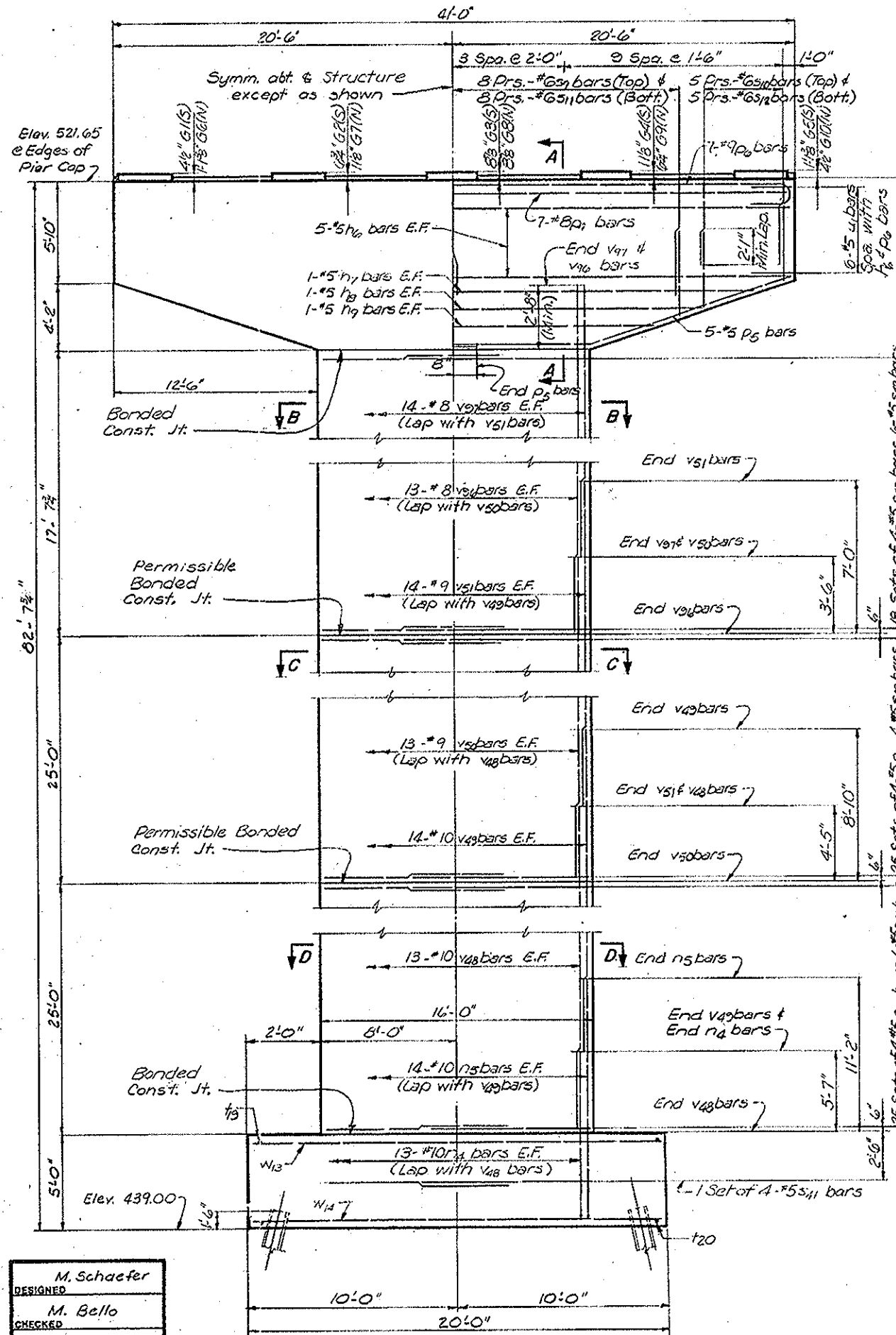
DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN J. Carley
CHECKED T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 20 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 146 OF 163



* See Special Provisions.
PILE DATA
Type: HP 14 x 89
Capacity: Driven to Refusal
Est. Length: 97'-0"
No. Req'd.: 32 (16 @ Pier 21N, 15 @ Pier 21S & 1 Test Pile @ Pier 21S)
↑ Indicates direction of batter.
Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a standard 3/4" chamfer.
E.F. indicates Each Face
Work this sheet with sheet 148.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 21 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED
M. Schaefer
CHECKED
M. Bello
DRAWN
J. Carley
CHECKED
T. Ritzheimer

ELEVATION
(Looking North)

END VIEW

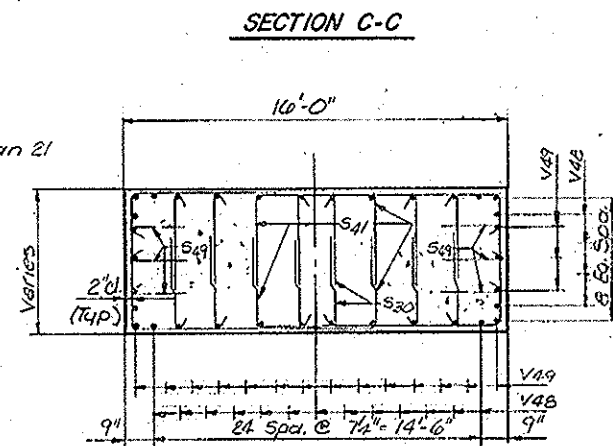
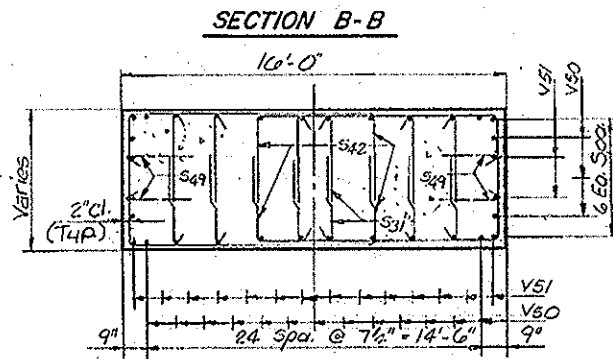
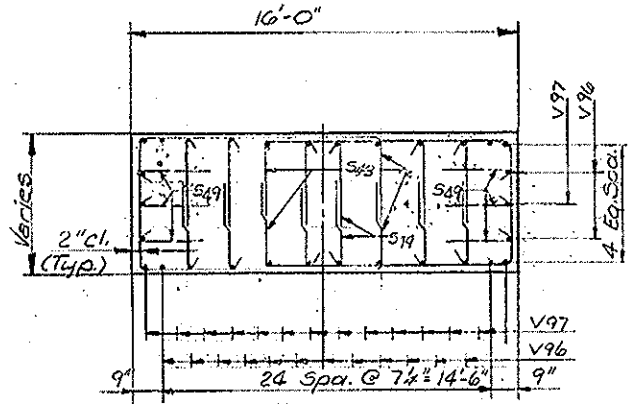
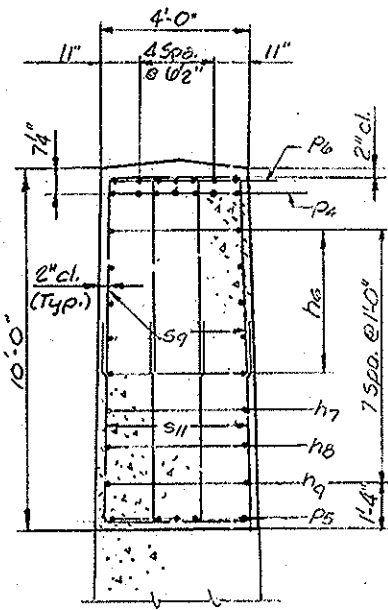
FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. about & footing.

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ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 147 OF 153



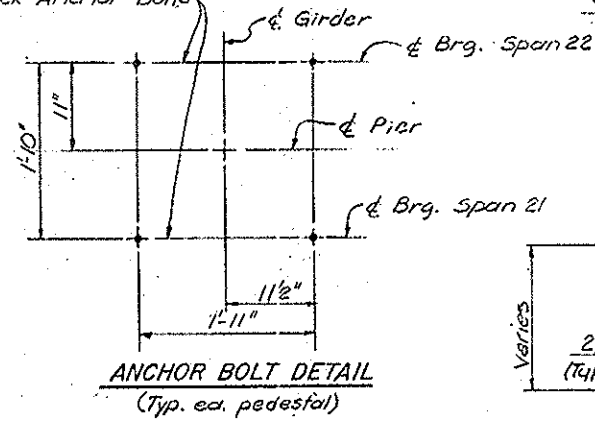
SECTION A-A
(Shaft reinf. & Pedestal not shown)

SECTION B-B

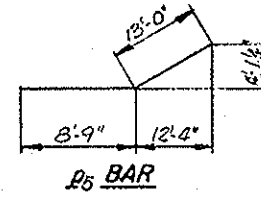
SECTION C-C

SECTION D-D

& 1 1/2" holes drilled 1'-0" deep for 1/2" Illinois Coil-Lock Anchor Bolts



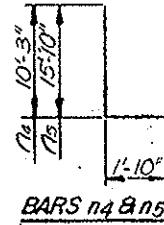
ANCHOR BOLT DETAIL
(Typ. ea. pedestal)



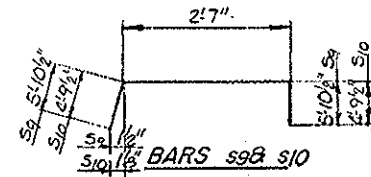
P5 BAR

S19	3'-9 1/2"	5/8"
S30	4'-9 1/2"	5/8"
S31	4'-3 1/2"	5/8"
S49	2'-4 1/2"	5/8"

BARS S19, S30, S31 & S49

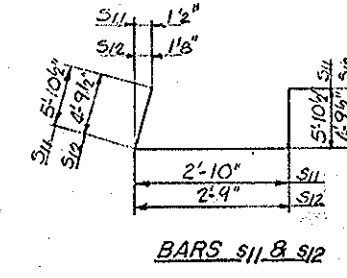


BARS N4 & N5

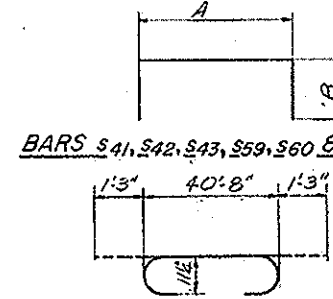


BARS S9 & S10

Bar	A	B
S41	10'-6"	4'-8"
S42	10'-6"	4'-2"
S43	10'-6"	3'-7 1/2"
S59	2'-8"	2'-0"
S60	3'-1"	2'-0"
U1	3'-7"	3'-9"



BARS S11 & S12



BARS S41, S42, S43, S59, S60 & U1

BAR P6

BILL OF MATERIAL

PIER 21 NORTHBOUND					PIER 21 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
N7	10	#5	40'-8"		N2	10	#5	40'-8"	
N7	2	#5	39'-0"		N7	2	#5	39'-0"	
N8	2	#5	28'-11"		N8	2	#5	28'-11"	
N9	2	#5	22'-10"		N9	2	#5	22'-10"	
N4	34	#10	12'-1"	L	N4	34	#10	12'-1"	L
N5	34	#10	17'-8"	L	N5	34	#10	17'-8"	L
P4	7	#8	40'-8"		P4	7	#8	40'-8"	
P5	10	#5	21'-9"		P5	10	#5	21'-9"	
P6	7	#9	43'-2"		P6	7	#9	43'-2"	
S9	30	#6	14'-2"		S9	30	#6	14'-2"	
S10	20	#6	12'-2"		S10	20	#6	12'-2"	
S11	30	#6	14'-7"		S11	30	#6	14'-7"	
S12	20	#6	12'-4"		S12	20	#6	12'-4"	
S19	216	#5	4'-3"		S19	216	#5	4'-3"	
S30	300	#5	5'-3"		S30	300	#5	5'-3"	
S31	300	#5	4'-9"		S31	300	#5	4'-9"	
S41	104	#5	19'-10"		S41	104	#5	19'-10"	
S42	100	#5	18'-10"		S42	100	#5	18'-10"	
S43	72	#5	17'-9"		S43	72	#5	17'-9"	
S49	358	#5	2'-10"		S49	358	#5	2'-10"	
S59	20	#5	6'-8"		S59	20	#5	6'-8"	
S60	20	#5	7'-1"		S60	20	#5	7'-1"	
T19	20	#5	19'-6"		T19	20	#5	19'-6"	
T20	22	#10	19'-6"		T20	22	#10	19'-6"	
U1	12	#5	11'-1"		U1	12	#5	11'-1"	
V48	34	#10	29'-5"		V48	34	#10	29'-5"	
V49	34	#10	28'-3"		V49	34	#10	28'-3"	
V50	32	#9	28'-6"		V50	32	#9	28'-6"	
V51	32	#9	27'-7"		V51	32	#9	27'-7"	
V96	30	#8	20'-4"		V96	30	#8	20'-4"	
V97	30	#8	16'-10"		V97	30	#8	16'-10"	
W13	20	#5	19'-6"		W13	20	#5	19'-6"	
W14	25	#5	19'-6"		W14	25	#5	19'-6"	
Class X Concrete Cu.Yds. 364.9					Class X Concrete Cu.Yds. 364.9				
Reinforcement Bars Lbs. 40714					Reinforcement Bars Lbs. 40714				
Steel Piles HP14x89 Lin.Ft. 1552					Steel Piles HP14x89 Lin.Ft. 1455				
Metal Shoes Each 16					Metal Shoes Each 1				
Cofferdam Each 1					Metal Shoes Each 15				
Cofferdam Excav. Cu.Yds. 149					Cofferdam Each 1				
					Cofferdam Excav. Cu.Yds. 149				

Note: Work this sheet with Sheet 147.

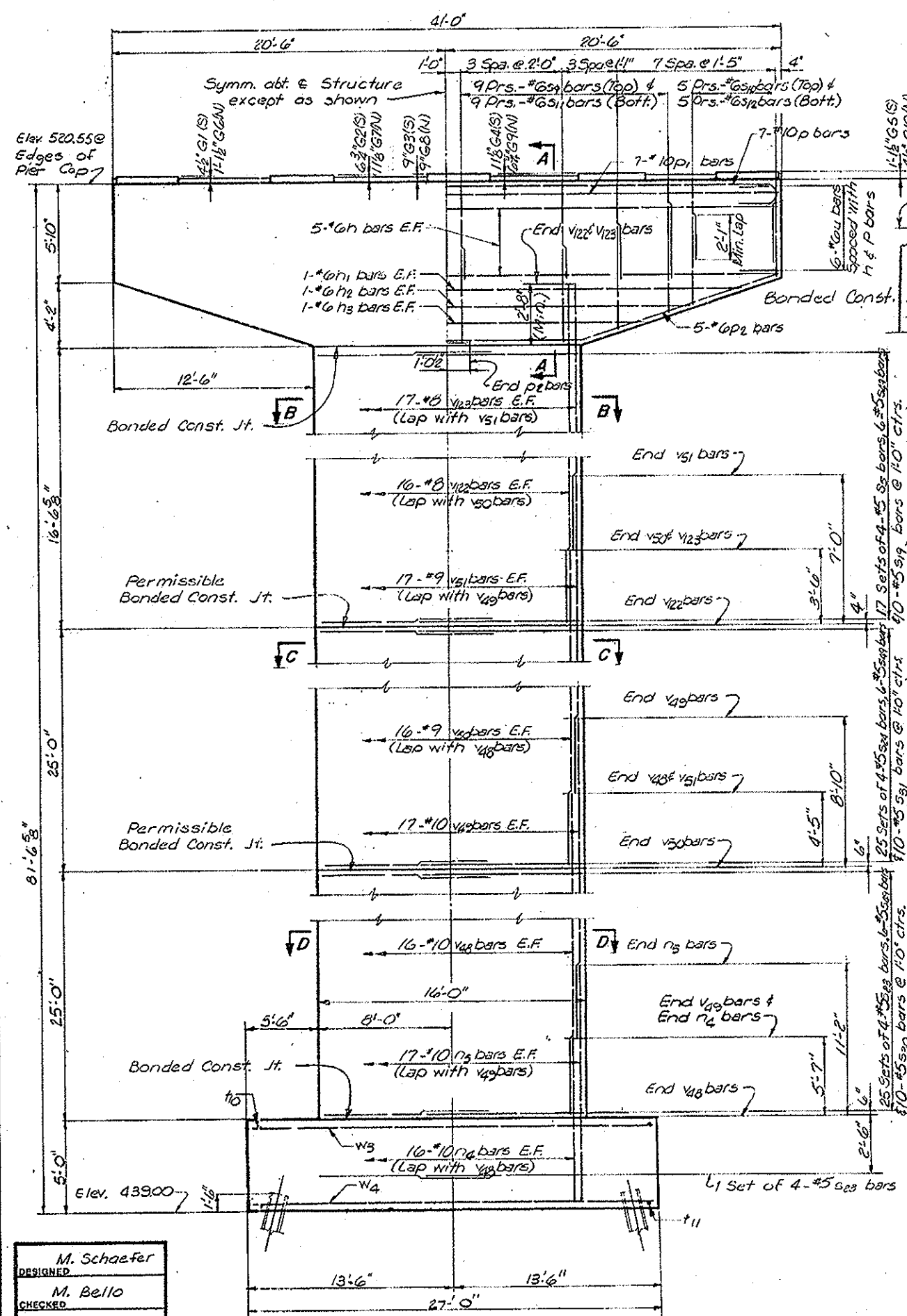
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

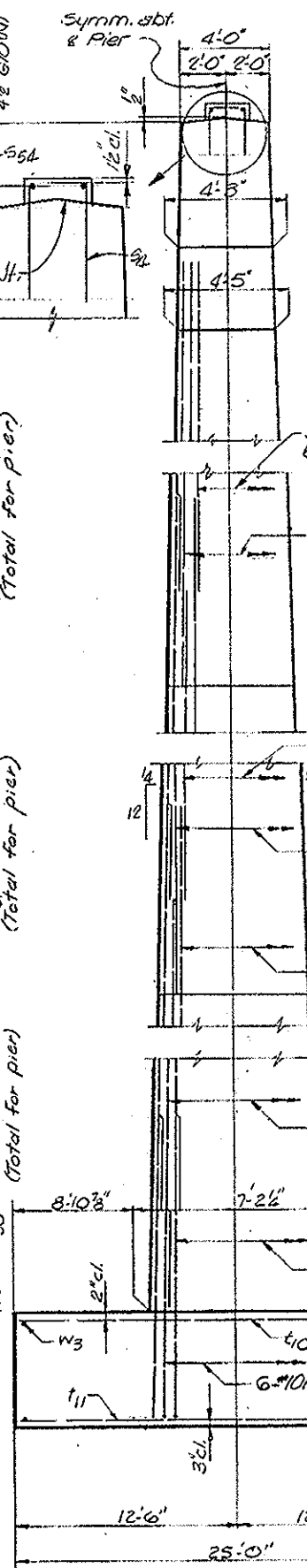
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 21 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

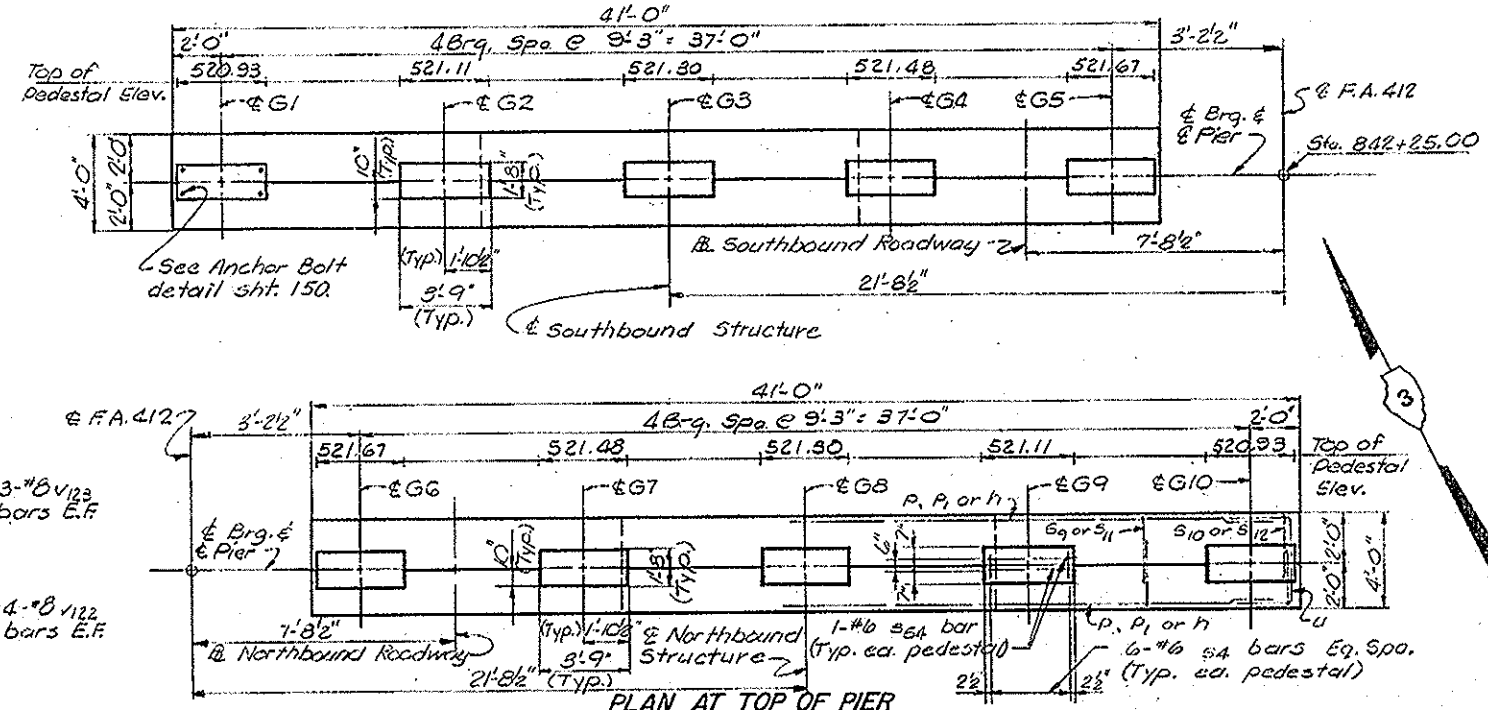
SHEET NO. 148 OF 163



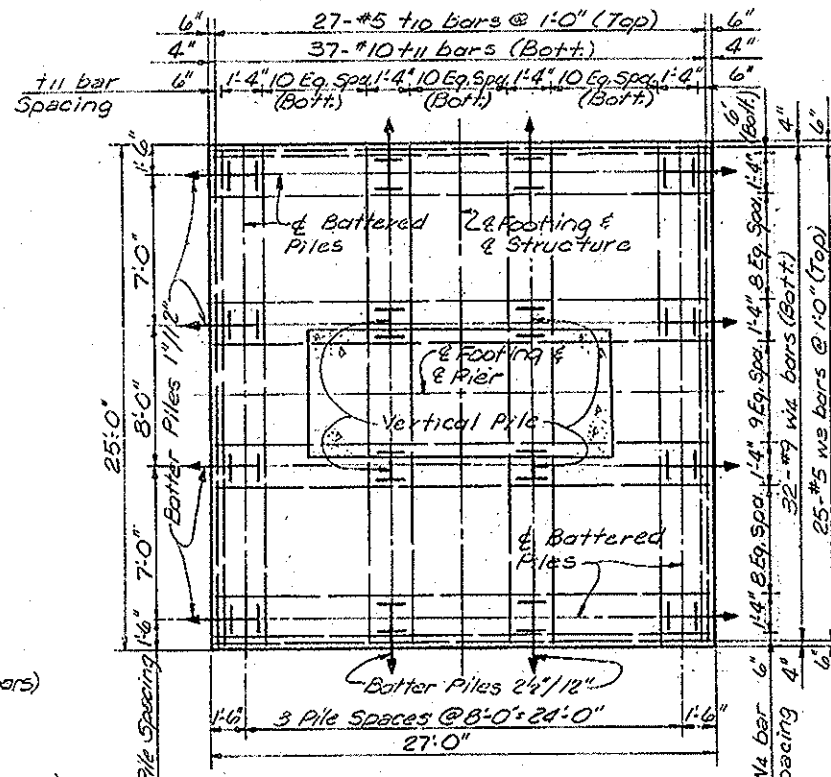
ELEVATION
(Looking North)



END VIEW



PLAN AT TOP OF PIER



FOOTING PLAN

Note: Pile spacing shown is measured at bottom of footing.
All exterior piles are battered as shown symm. about E footing.

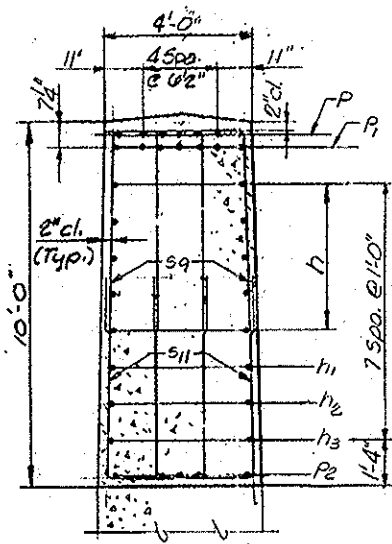
* See Special Provisions.
PILE DATA
Type: HP14x89
Capacity: Driven to Refusal *
Est. Length: 98'-0"
No. Req'd: 32 (16 per pier)
↓ Indicates direction of batter
Notes: Space reinforcement in cap to miss anchor bolts.
All edges shall have a 3/4" chamfer.
E.F. indicates Each Face
Work this sheet with sheet 150.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 22 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

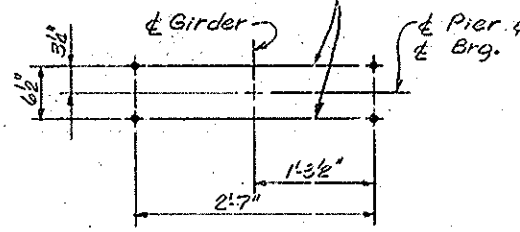
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
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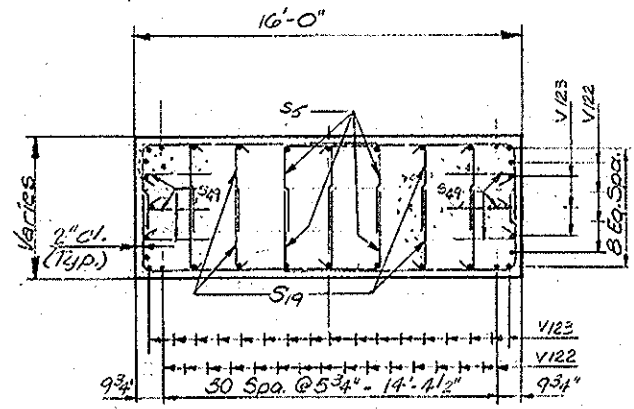
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



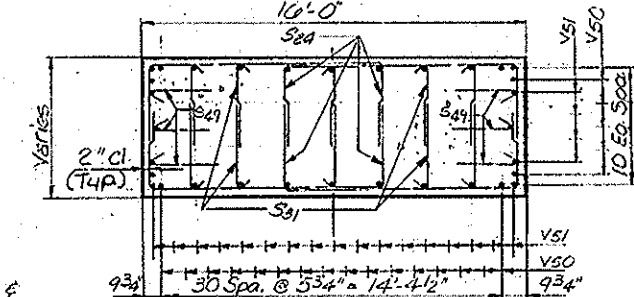
SECTION A-A
(Shaft reinf. & pedestal, not shown)
1/8" φ holes drilled 1'-6" deep for 1/2" φ Illinois Coil-Lock Anchor Bolts



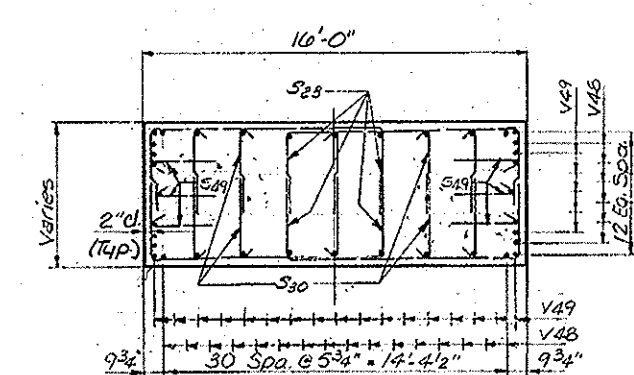
ANCHOR BOLT DETAIL
(Typ. ea. pedestal)



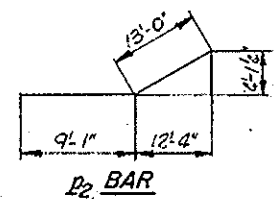
SECTION B-B



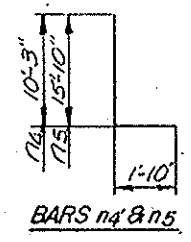
SECTION C-C



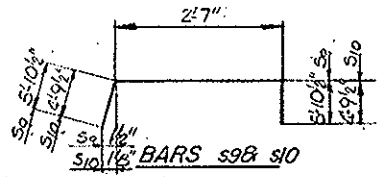
SECTION D-D



P2 BAR



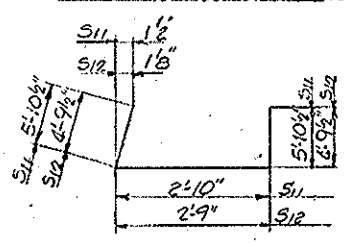
BARS n4 & n5



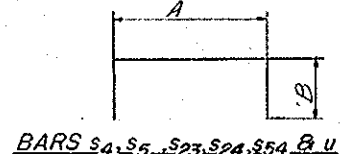
Bar	A	B
S4	1'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S22	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S54	3'-5"	2'-0"
L	3'-7"	4'-0"

Bar	Length	Shape
S19	3'-9 1/2"	5/8"
S20	4'-9 1/2"	5/8"
S31	3'-7 1/2"	5/8"
S49	2'-4 1/2"	5/8"

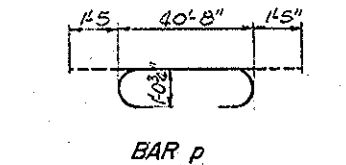
BARS S19, S20, S31 & S49



BARS s11 & s12



BARS s4, s5, s23, s24, s54 & L



BAR P

BILL OF MATERIAL

PIER 22 NORTHBOUND					PIER 22 SOUTHBOUND				
Bar	No	Size	Length	Shape	Bar	No	Size	Length	Shape
h	10	#6	40'-8"	---	h	10	#6	40'-8"	---
h1	2	#6	35'-0"	---	h1	2	#6	35'-0"	---
h2	2	#6	25'-11"	---	h2	2	#6	25'-11"	---
h3	2	#6	22'-10"	---	h3	2	#6	22'-10"	---
n2	44	#10	12'-1"	L	n2	44	#10	12'-1"	L
n5	44	#10	17'-8"	L	n5	44	#10	17'-8"	L
D	7	#10	43'-6"	U	D	7	#10	43'-6"	U
P1	7	#10	40'-8"	---	P1	7	#10	40'-8"	---
P2	10	#6	22'-1"	---	P2	10	#6	22'-1"	---
S4	30	#6	5'-4"	---	S4	30	#6	5'-4"	---
S5	68	#5	17'-7"	---	S5	68	#5	17'-7"	---
S9	36	#6	14'-4"	---	S9	36	#6	14'-4"	---
S10	20	#6	12'-2"	---	S10	20	#6	12'-2"	---
S11	36	#6	14'-7"	L	S11	36	#6	14'-7"	L
S12	20	#6	12'-4"	L	S12	20	#6	12'-4"	L
S19	170	#5	4'-3"	---	S19	170	#5	4'-3"	---
S23	104	#5	19'-7"	---	S23	104	#5	19'-7"	---
S24	100	#5	18'-7"	---	S24	100	#5	18'-7"	---
S25	250	#5	5'-3"	---	S25	250	#5	5'-3"	---
S31	250	#5	4'-9"	---	S31	250	#5	4'-9"	---
S49	402	#5	2'-10"	---	S49	402	#5	2'-10"	---
S54	10	#6	7'-5"	---	S54	10	#6	7'-5"	---
T10	27	#5	24'-6"	---	T10	27	#5	24'-6"	---
T11	37	#10	24'-6"	---	T11	37	#10	24'-6"	---
L	12	#6	11'-7"	---	L	12	#6	11'-7"	---
V48	44	#10	29'-5"	---	V48	44	#10	29'-5"	---
V49	44	#10	28'-3"	---	V49	44	#10	28'-3"	---
V50	42	#9	28'-6"	---	V50	42	#9	28'-6"	---
V51	42	#9	27'-7"	---	V51	42	#9	27'-7"	---
V122	40	#8	19'-3"	---	V122	40	#8	19'-3"	---
V123	40	#8	15'-9"	---	V123	40	#8	15'-9"	---
W3	25	#5	26'-6"	---	W3	25	#5	26'-6"	---
W4	32	#9	26'-6"	---	W4	32	#9	26'-6"	---
Class X Concrete				Cu. Yds. 410.3	Class X Concrete				Cu. Yds. 410.3
Reinforcement Bars				Lbs. 52920	Reinforcement Bars				Lbs. 52920
Steel Piles HP14x89				Lin. Ft. 1568	Steel Piles HP14x89				Lin. Ft. 1568
Metal Shoes				Each 16	Metal Shoes				Each 16
Cofferdam				Each 1	Cofferdam				Each 1
Cofferdam Excav.				Cu. Yds. 233	Cofferdam Excav.				Cu. Yds. 233

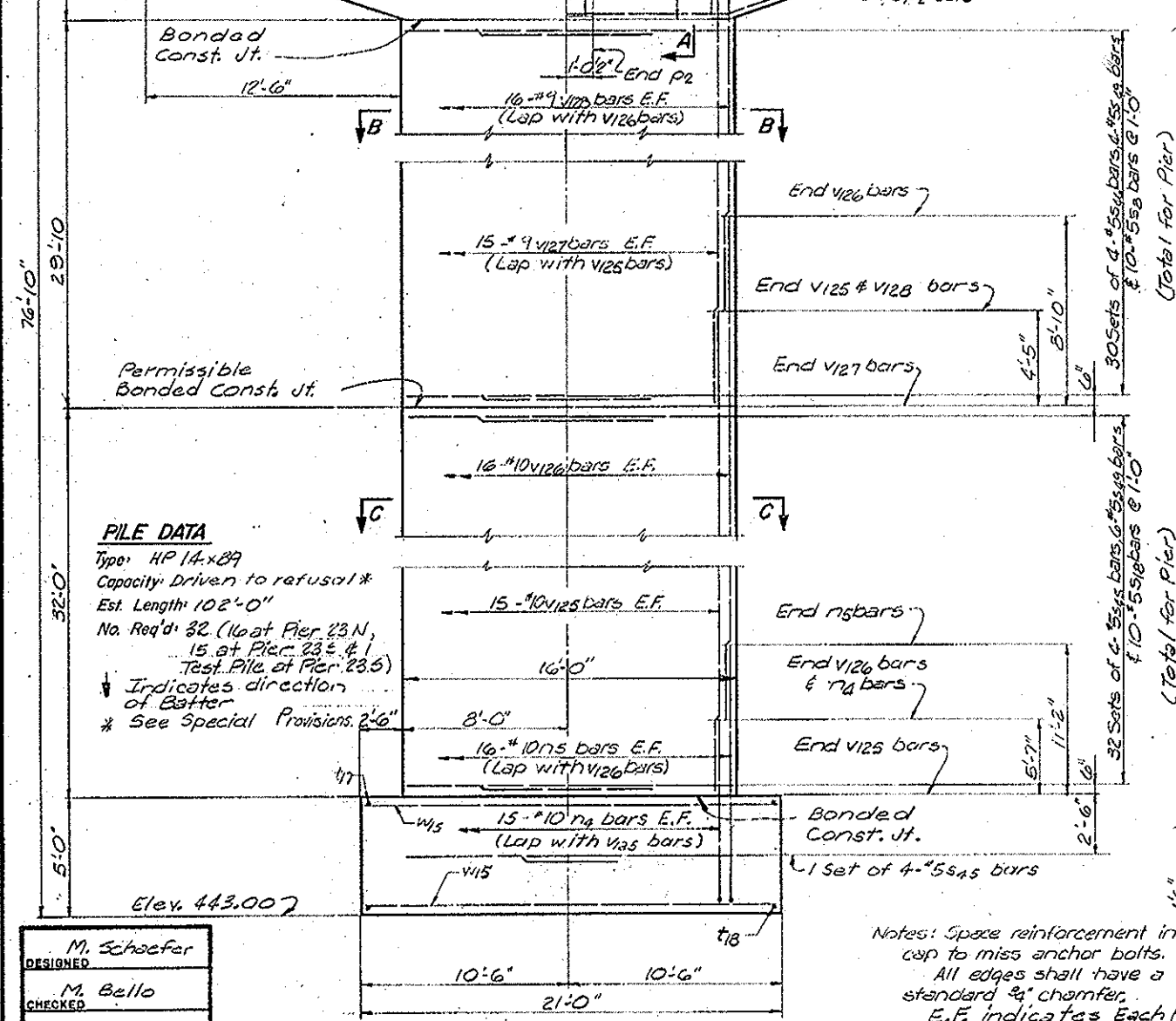
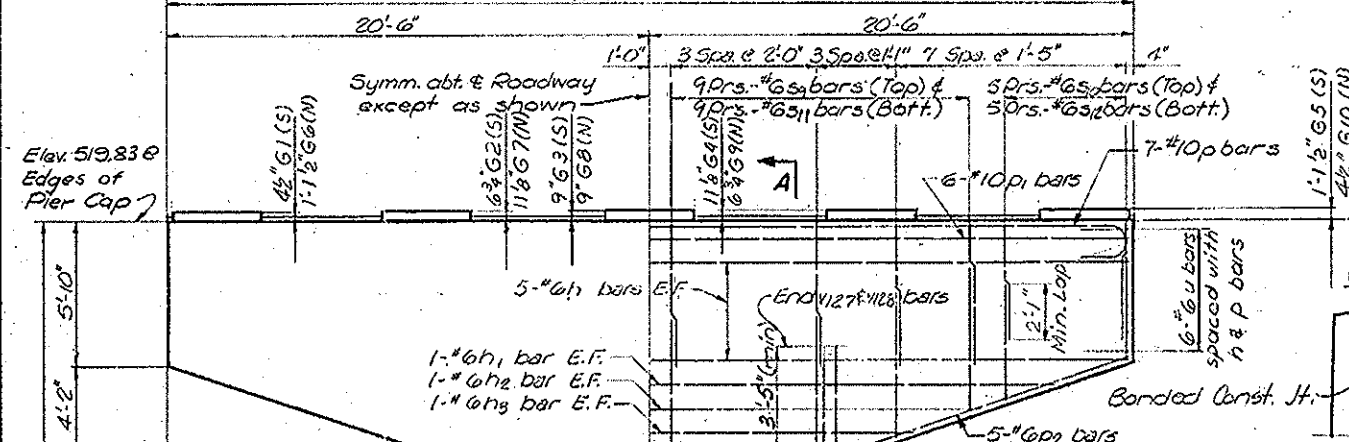
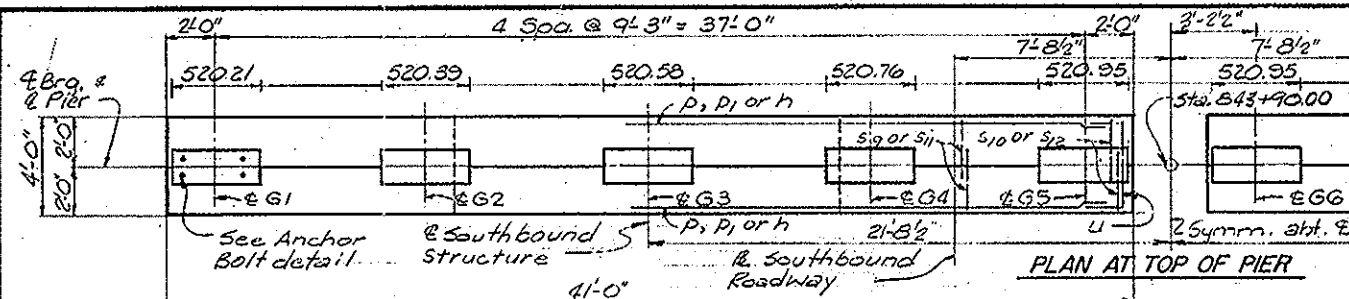
Note: Work this sheet with sheet 149.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corby
CHECKED: T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 22 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

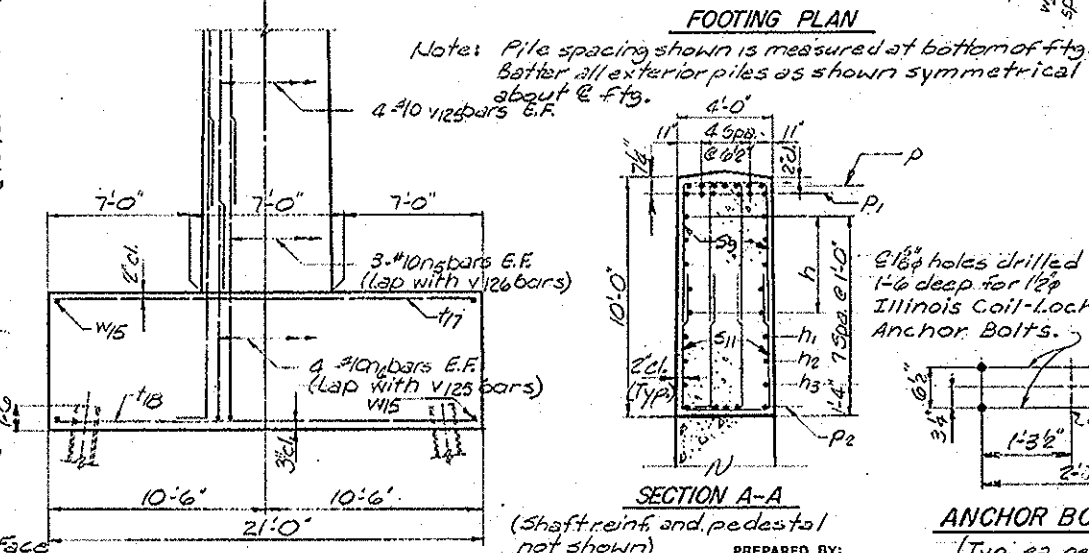
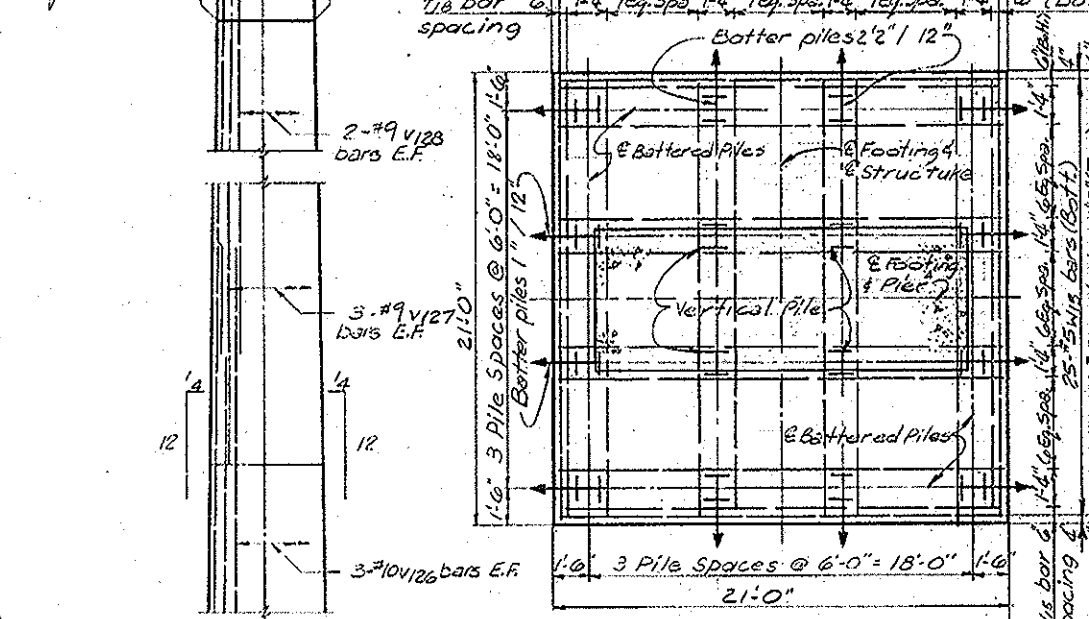
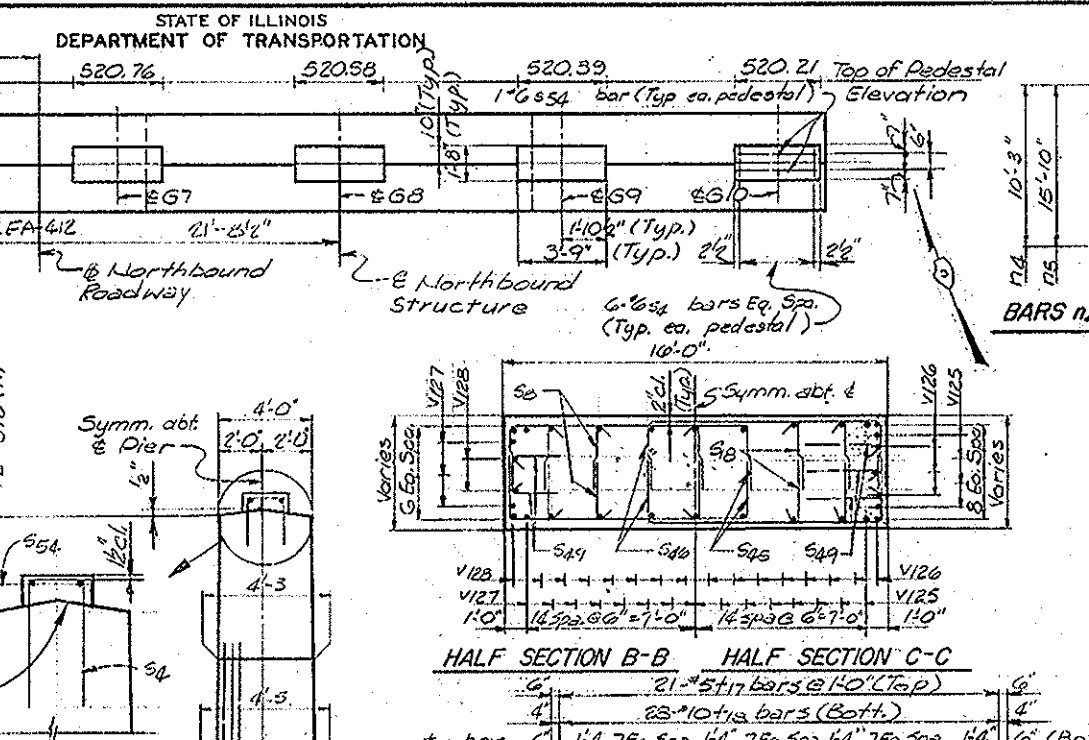


FILE DATA

Type: HP 14x29
Capacity: Driven to refusal *
Est. Length: 102'-0"
No. Req'd: 32 (16 at Pier 23N, 15 at Pier 23S & 1 Test Pile at Pier 23S)
Indicates direction of Batter
* See Special Provisions 2-6

Elev. 443.007

DESIGNED: M. Schoefer
CHECKED: M. Bello
DRAWN: J. Carley
CHECKED: J. Fitzheimer



BILL OF MATERIAL

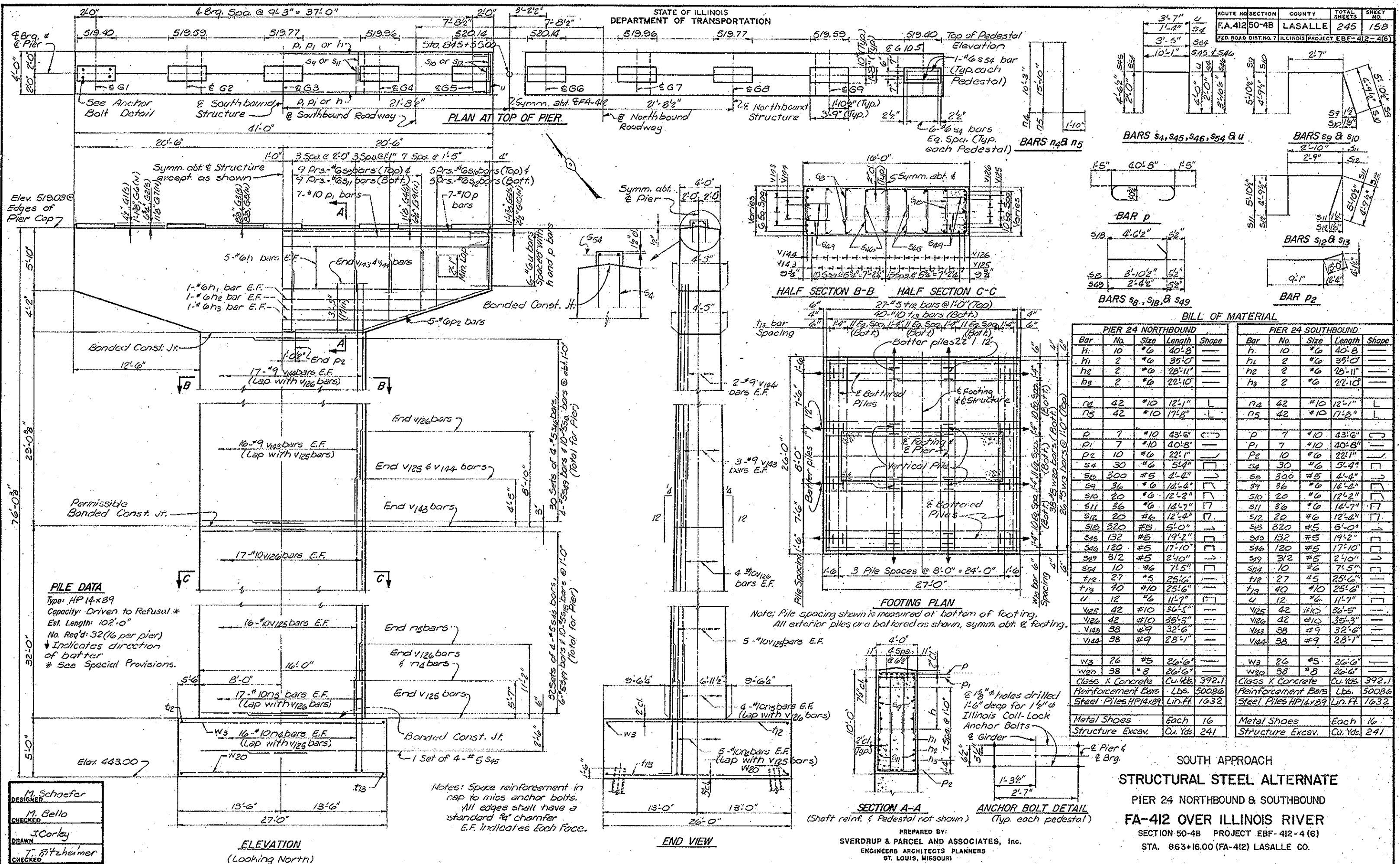
PIER 23 NORTHBOUND					PIER 23 SOUTHBOUND				
Bar	No.	Size	Length	Shops	Bar	No.	Size	Length	Shops
h1	10	#6	40'-8"		h1	10	#6	40'-8"	
h1	2	#6	35'-0"		h1	2	#6	35'-0"	
h2	2	#6	28'-11"		h2	2	#6	28'-11"	
h3	2	#6	22'-10"		h3	2	#6	22'-10"	
n4	38	#10	12'-1"	L	n4	38	#10	12'-1"	L
n5	38	#10	17'-8"	L	n5	38	#10	17'-8"	L
p	7	#10	43'-6"		p	7	#10	43'-6"	
p1	6	#10	40'-8"		p1	6	#10	40'-8"	
p2	10	#6	22'-11"		p2	10	#6	22'-11"	
s4	30	#6	5'-4"		s4	30	#6	5'-4"	
s8	300	#5	4'-4"		s8	300	#5	4'-4"	
s9	36	#6	14'-4"		s9	36	#6	14'-4"	
s10	20	#6	12'-2"		s10	20	#6	12'-2"	
s11	30	#6	14'-7"		s11	30	#6	14'-7"	
s12	20	#6	12'-4"		s12	20	#6	12'-4"	
s18	320	#5	5'-0"		s18	320	#5	5'-0"	
s45	132	#5	19'-2"		s45	132	#5	19'-2"	
s46	120	#5	17'-10"		s46	120	#5	17'-10"	
s49	312	#5	2'-10"		s49	312	#5	2'-10"	
s54	10	#6	7'-5"		s54	10	#6	7'-5"	
t17	21	#5	20'-6"		t17	21	#5	20'-6"	
t18	28	#10	20'-6"		t18	28	#10	20'-6"	
u	12	#6	11'-7"		u	12	#6	11'-7"	
v125	38	#10	36'-5"		v125	38	#10	36'-5"	
v126	38	#10	35'-3"		v126	38	#10	35'-3"	
v127	36	#9	33'-3"		v127	36	#9	33'-3"	
v128	36	#9	28'-10"		v128	36	#9	28'-10"	
w15	46	#5	20'-6"		w15	46	#5	20'-6"	

Class X Concrete	Cu. Yds.	3972	Class X Concrete	Cu. Yds.	3972
Reinforcement Bars	Lbs.	43325	Reinforcement Bars	Lbs.	43325
Steel Piles HP14x29	Lin. Ft.	1632	Steel Piles HP14x29	Lin. Ft.	1630
Test Piles (3/8" dia)	Eq.	1	Test Piles (3/8" dia)	Eq.	1
Metal Shoes	Each	16	Metal Shoes	Each	15
Structure Excav.	Cu. Yds.	162	Structure Excav.	Cu. Yds.	162

ANCHOR BOLT DETAIL
(Typ. ea. pedestal)

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 23 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI



BILL OF MATERIAL

PIER 24 NORTHBOUND				PIER 24 SOUTHBOUND					
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h1	10	#6	40'-8"	—	h1	10	#6	40'-8"	—
h2	2	#6	35'-0"	—	h2	2	#6	35'-0"	—
h3	2	#6	28'-11"	—	h3	2	#6	28'-11"	—
h4	2	#6	22'-10"	—	h4	2	#6	22'-10"	—
n4	42	#10	12'-1"	L	n4	42	#10	12'-1"	L
n5	42	#10	17'-8"	L	n5	42	#10	17'-8"	L
p	7	#10	43'-6"	C	p	7	#10	43'-6"	C
p1	7	#10	40'-8"	—	p1	7	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s4	30	#6	5'-4"	—	s4	30	#6	5'-4"	—
s5	300	#5	4'-4"	—	s5	300	#5	4'-4"	—
s6	36	#6	18'-4"	—	s6	36	#6	18'-4"	—
s7	20	#6	12'-2"	—	s7	20	#6	12'-2"	—
s8	20	#6	12'-2"	—	s8	20	#6	12'-2"	—
s9	320	#5	6'-0"	—	s9	320	#5	6'-0"	—
s10	132	#5	19'-2"	—	s10	132	#5	19'-2"	—
s11	120	#5	17'-10"	—	s11	120	#5	17'-10"	—
s12	312	#5	2'-10"	—	s12	312	#5	2'-10"	—
s13	10	#6	7'-5"	—	s13	10	#6	7'-5"	—
t1	27	#5	25'-6"	—	t1	27	#5	25'-6"	—
t2	40	#10	25'-6"	—	t2	40	#10	25'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v125	42	#10	36'-5"	—	v125	42	#10	36'-5"	—
v126	42	#10	35'-3"	—	v126	42	#10	35'-3"	—
v143	38	#9	32'-6"	—	v143	38	#9	32'-6"	—
v144	38	#9	28'-1"	—	v144	38	#9	28'-1"	—
w3	26	#5	26'-6"	—	w3	26	#5	26'-6"	—
w20	38	#8	26'-6"	—	w20	38	#8	26'-6"	—

Class X Concrete Cu. Yds. 392.1
Reinforcement Bars Lbs. 50086
Steel Piles HP14x89 Lin. Ft. 1632

Class X Concrete Cu. Yds. 392.1
Reinforcement Bars Lbs. 50086
Steel Piles HP14x89 Lin. Ft. 1632

Metal Shoes Each 16
Structure Excav. Cu. Yds. 241

Metal Shoes Each 16
Structure Excav. Cu. Yds. 241

PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal *
Est. Length: 102'-0"
No. Req'd: 32 (16 per pier)
↓ Indicates direction of batter
* See Special Provisions.

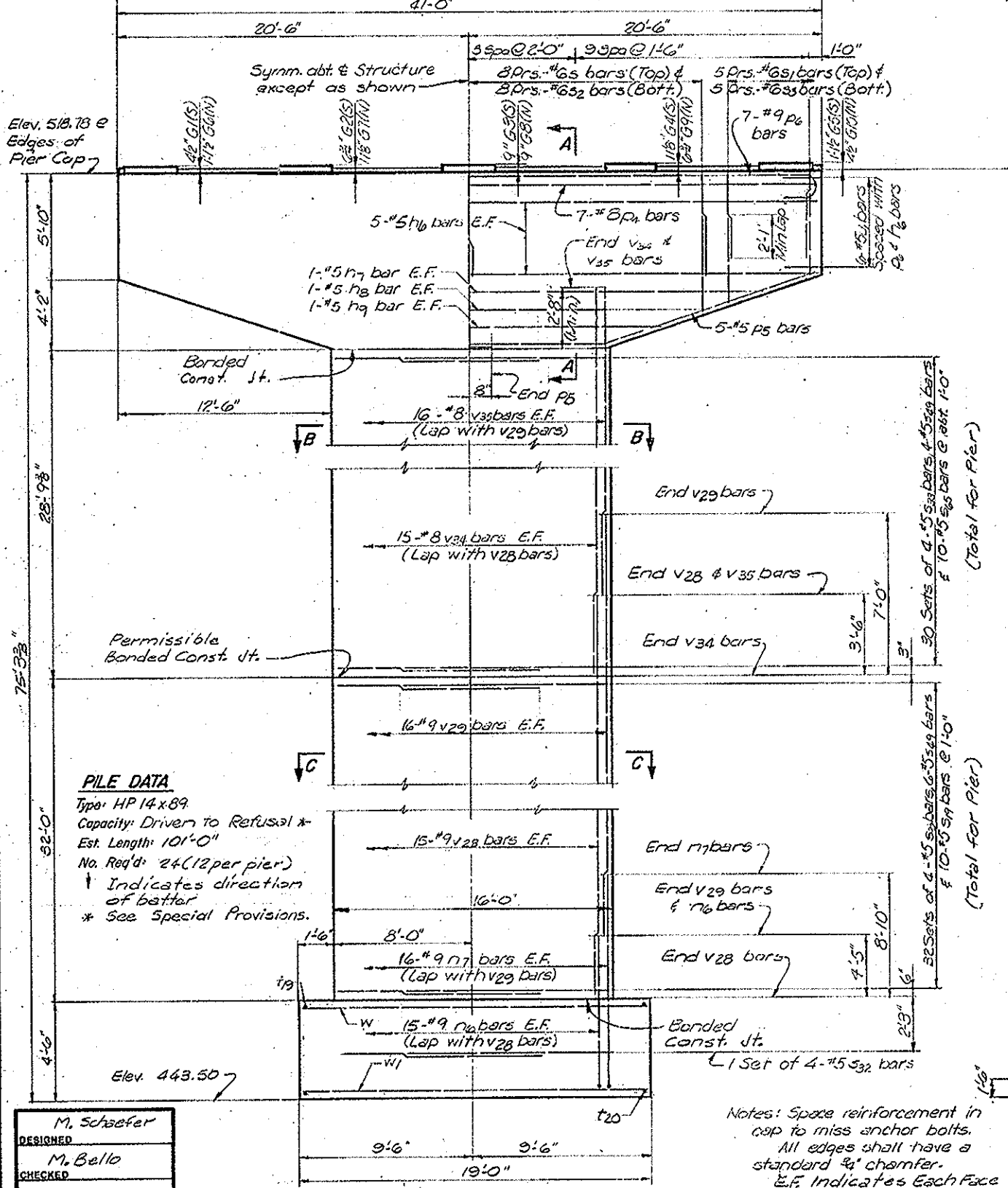
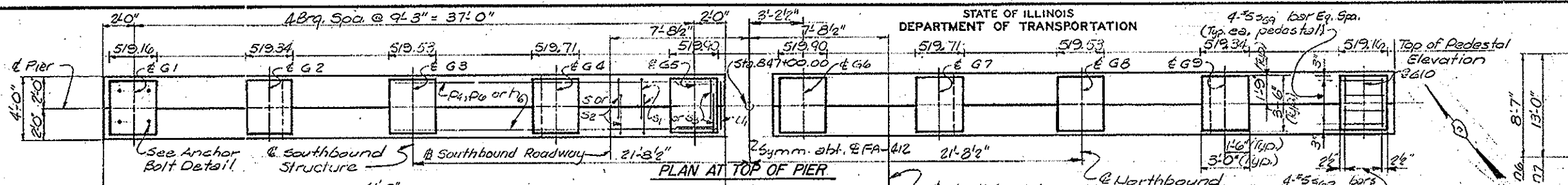
DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

Notes: Splice reinforcement in cap to miss anchor bolts. All edges shall have a standard 90° chamfer. E.F. indicates Each Face.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

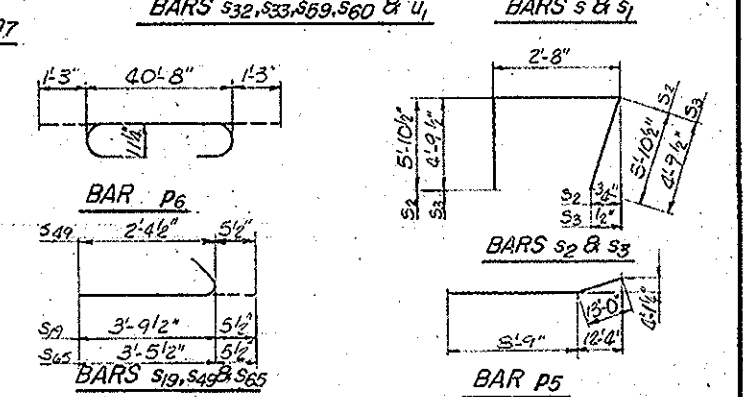
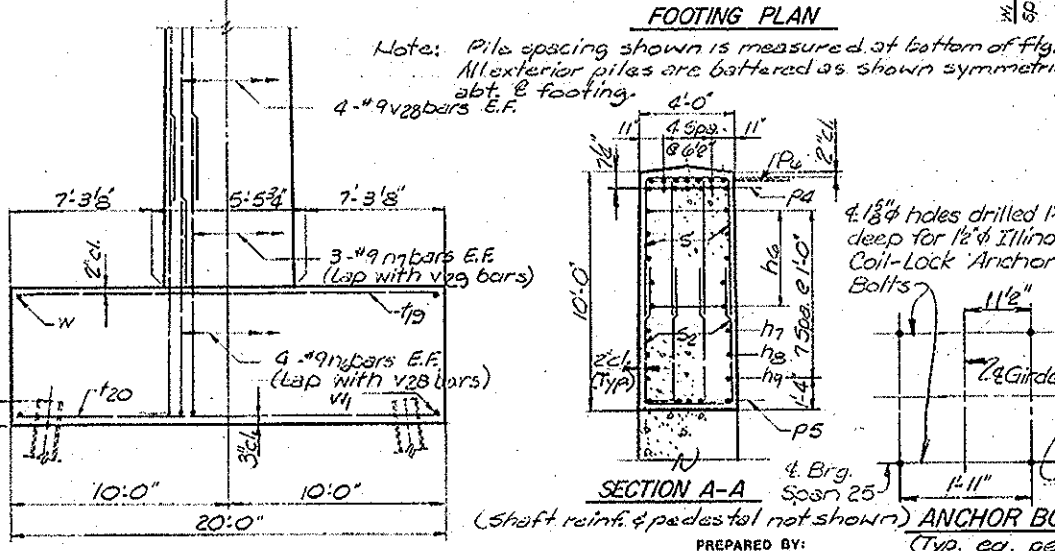
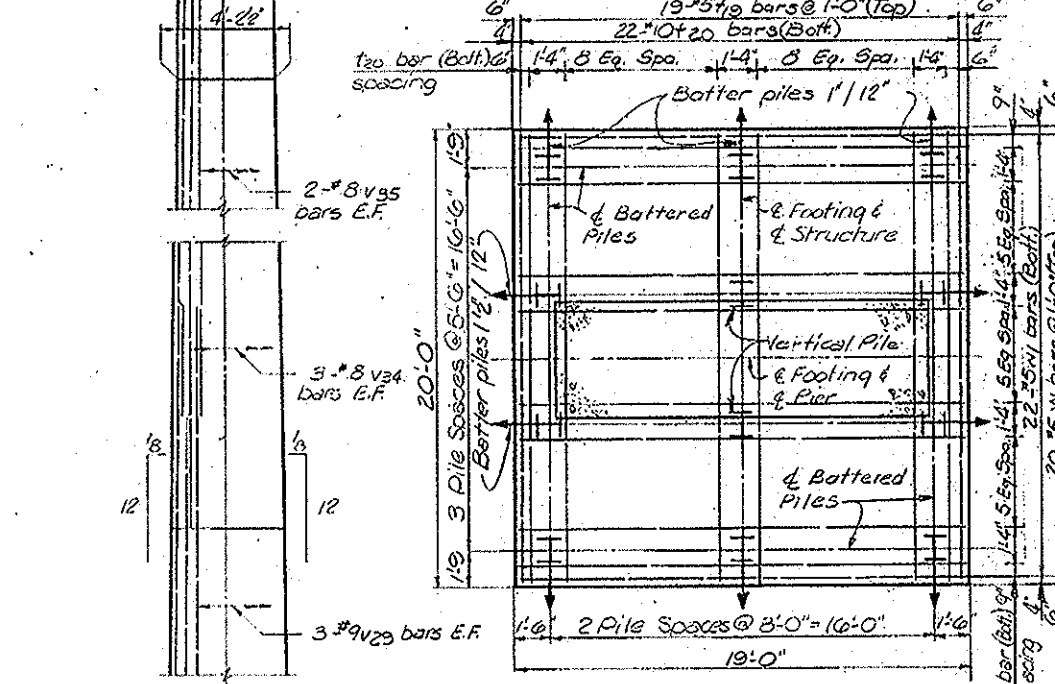
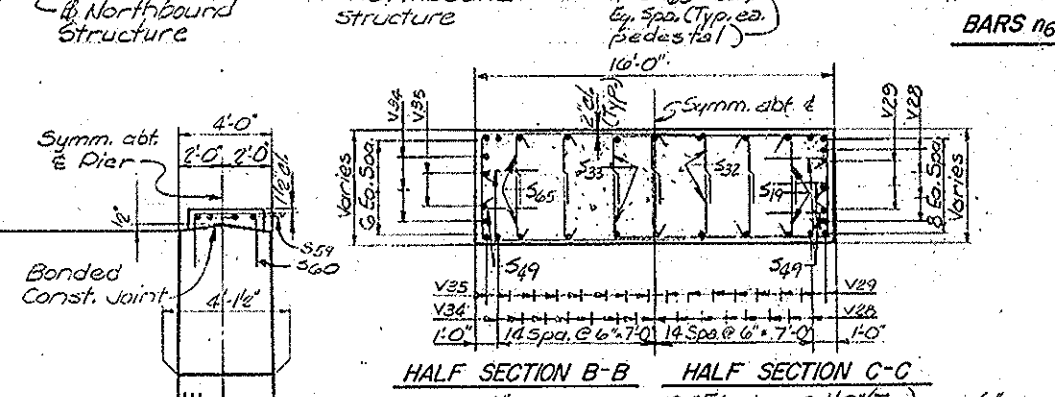
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 24 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI



PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal *
Est. Length: 101'-0"
No. Req'd: 24 (12 per pier)
↑ Indicates direction of batter
* See Special Provisions.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzheimer

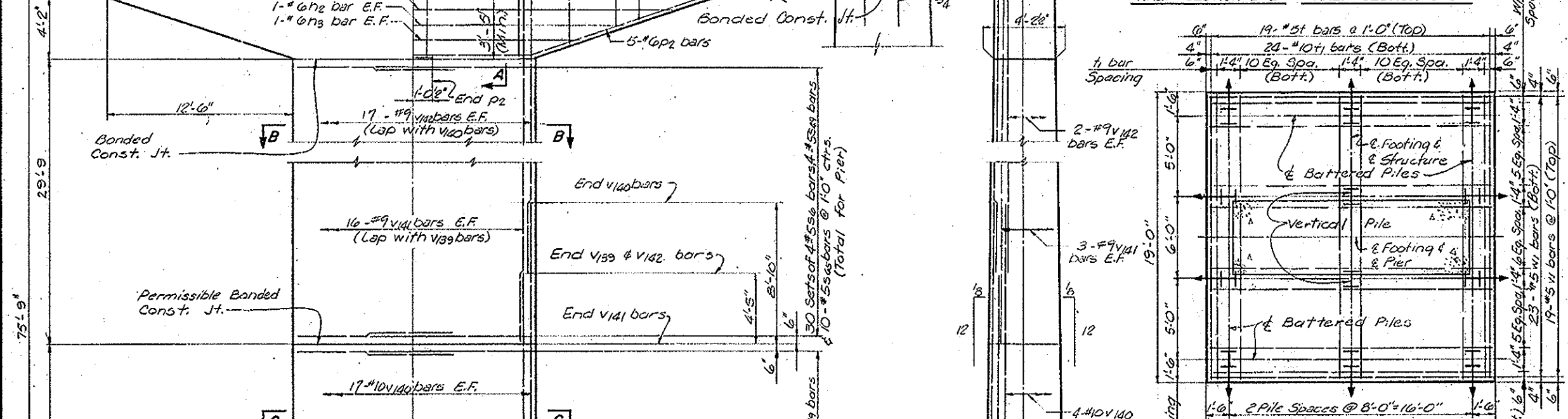
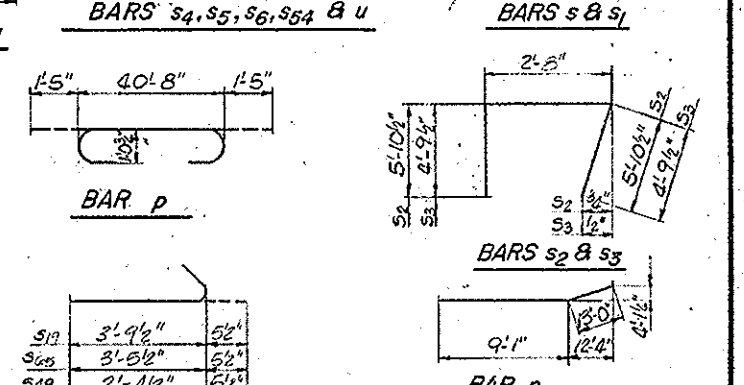
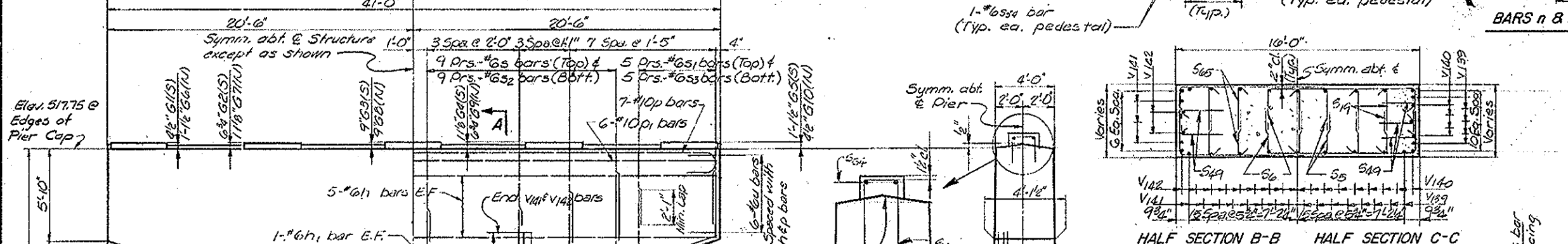
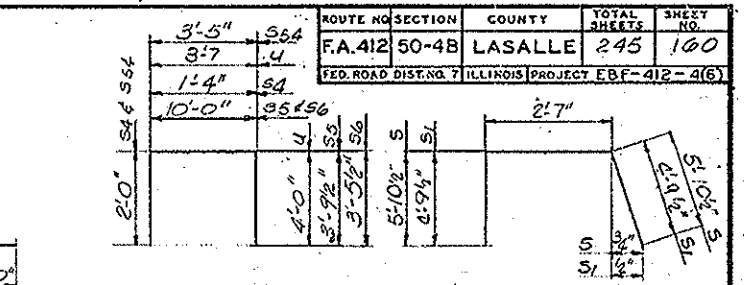
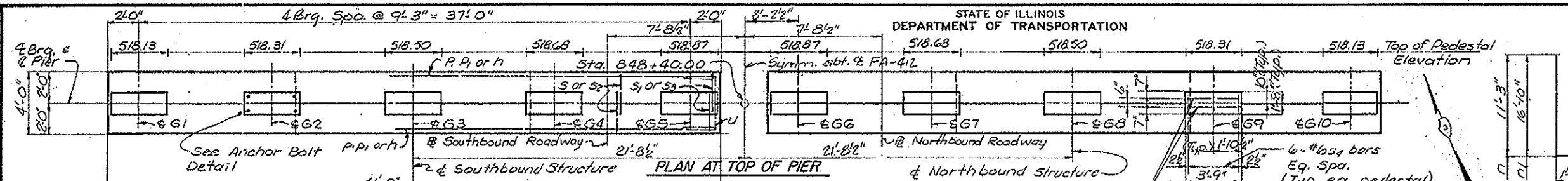


BILL OF MATERIAL

PIER 25 NORTHBOUND					PIER 25 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h6	10	#5	40'-8"	—	h6	10	#5	40'-8"	—
h7	2	#5	35'-0"	—	h7	2	#5	35'-0"	—
h8	2	#5	28'-11"	—	h8	2	#5	28'-11"	—
h9	2	#5	22'-10"	—	h9	2	#5	22'-10"	—
n6	38	#9	10'-2"	L	n6	38	#9	10'-2"	L
n7	38	#9	14'-7"	L	n7	38	#9	14'-7"	L
p4	7	#8	40'-8"	—	p4	7	#8	40'-8"	—
p5	10	#5	21'-9"	—	p5	10	#5	21'-9"	—
p6	7	#9	43'-2"	—	p6	7	#9	43'-2"	—
s	32	#6	14'-4"	—	s	32	#6	14'-4"	—
s1	20	#6	12'-2"	—	s1	20	#6	12'-2"	—
s2	32	#6	14'-5"	—	s2	32	#6	14'-5"	—
s3	20	#6	12'-3"	—	s3	20	#6	12'-3"	—
s19	320	#5	4'-3"	—	s19	320	#5	4'-3"	—
s22	132	#5	17'-8"	—	s22	132	#5	17'-8"	—
s23	120	#5	17'-0"	—	s23	120	#5	17'-0"	—
s49	312	#5	2'-10"	—	s49	312	#5	2'-10"	—
s59	20	#5	6'-8"	—	s59	20	#5	6'-8"	—
s60	20	#5	7'-1"	—	s60	20	#5	7'-1"	—
s65	300	#5	3'-11"	—	s65	300	#5	3'-11"	—
t19	19	#5	19'-6"	—	t19	19	#5	19'-6"	—
t20	22	#0	19'-6"	—	t20	22	#0	19'-6"	—
u1	12	#5	11'-1"	—	u1	12	#5	11'-1"	—
v28	38	#9	35'-6"	—	v28	38	#9	35'-6"	—
v29	38	#9	34'-7"	—	v29	38	#9	34'-7"	—
v34	36	#8	31'-6"	—	v34	36	#8	31'-6"	—
v35	36	#8	28'-0"	—	v35	36	#8	28'-0"	—
w	20	#5	18'-6"	—	w	20	#5	18'-6"	—
w1	22	#5	18'-0"	—	w1	22	#5	18'-0"	—
Class X Concrete Cu.Yds. 293.5					Class X Concrete Cu.Yds. 293.5				
Reinforcement Bars Lbs. 34301					Reinforcement Bars Lbs. 34301				
Steel Piles HP14x89 Lin.Ft. 1212					Steel Piles HP14x89 Lin.Ft. 1212				
Metal Shoes Each 12					Metal Shoes Each 12				
Structure Excav. Cu.Yds. 133					Structure Excav. Cu.Yds. 133				

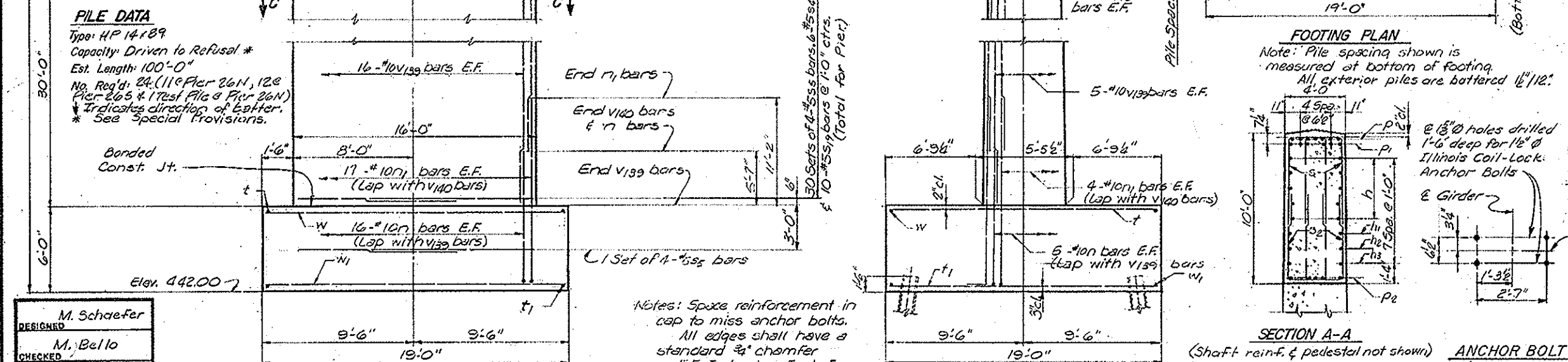
SOUTH APPROACH
BRG. SPAN 20'
STRUCTURAL STEEL ALTERNATE
PIER 25 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
SHEET NO. 153 OF 163

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



BARS s1, s2, s3 & s5 - BILL OF MATERIAL

PIER 26 NORTHBOUND				PIER 26 SOUTHBOUND			
Bar No.	Size	Length	Shape	Bar No.	Size	Length	Shape
h1	10	40'-8"	—	h1	10	40'-8"	—
h2	2	35'-0"	—	h2	2	35'-0"	—
h3	2	28'-11"	—	h3	2	28'-11"	—
h4	2	22'-10"	—	h4	2	22'-10"	—
n	42	#10 13'-1"	L	n	42	#10 13'-1"	L
n1	42	#10 18'-8"	L	n1	42	#10 18'-8"	L
p	7	#10 43'-6"	—	p	7	#10 43'-6"	—
p1	6	#10 40'-8"	—	p1	6	#10 40'-8"	—
p2	10	#6 22'-1"	—	p2	10	#6 22'-1"	—
s	36	#6 14'-4"	—	s	36	#6 14'-4"	—
s1	20	#6 12'-2"	—	s1	20	#6 12'-2"	—
s2	36	#6 14'-5"	—	s2	36	#6 14'-5"	—
s3	20	#6 12'-3"	—	s3	20	#6 12'-3"	—
s4	30	#6 5'-0"	—	s4	30	#6 5'-0"	—
s5	124	#5 17'-7"	—	s5	124	#5 17'-7"	—
s6	120	#5 16'-11"	—	s6	120	#5 16'-11"	—
s19	300	#5 4'-3"	—	s19	300	#5 4'-3"	—
s49	300	#5 2'-10"	—	s49	300	#5 2'-10"	—
s54	10	#6 7'-5"	—	s54	10	#6 7'-5"	—
s65	300	#5 3'-11"	—	s65	300	#5 3'-11"	—
t	19	#5 18'-6"	—	t	19	#5 18'-6"	—
t1	24	#10 18'-6"	—	t1	24	#10 18'-6"	—
u	12	#6 11'-7"	—	u	12	#6 11'-7"	—
v139	42	#10 34'-5"	—	v139	42	#10 34'-5"	—
v40	42	#10 33'-3"	—	v40	42	#10 33'-3"	—
v41	38	#9 33'-2"	—	v41	38	#9 33'-2"	—
v42	38	#9 28'-9"	—	v42	38	#9 28'-9"	—
w	19	#5 18'-6"	—	w	19	#5 18'-6"	—
w1	23	#5 18'-6"	—	w1	23	#5 18'-6"	—



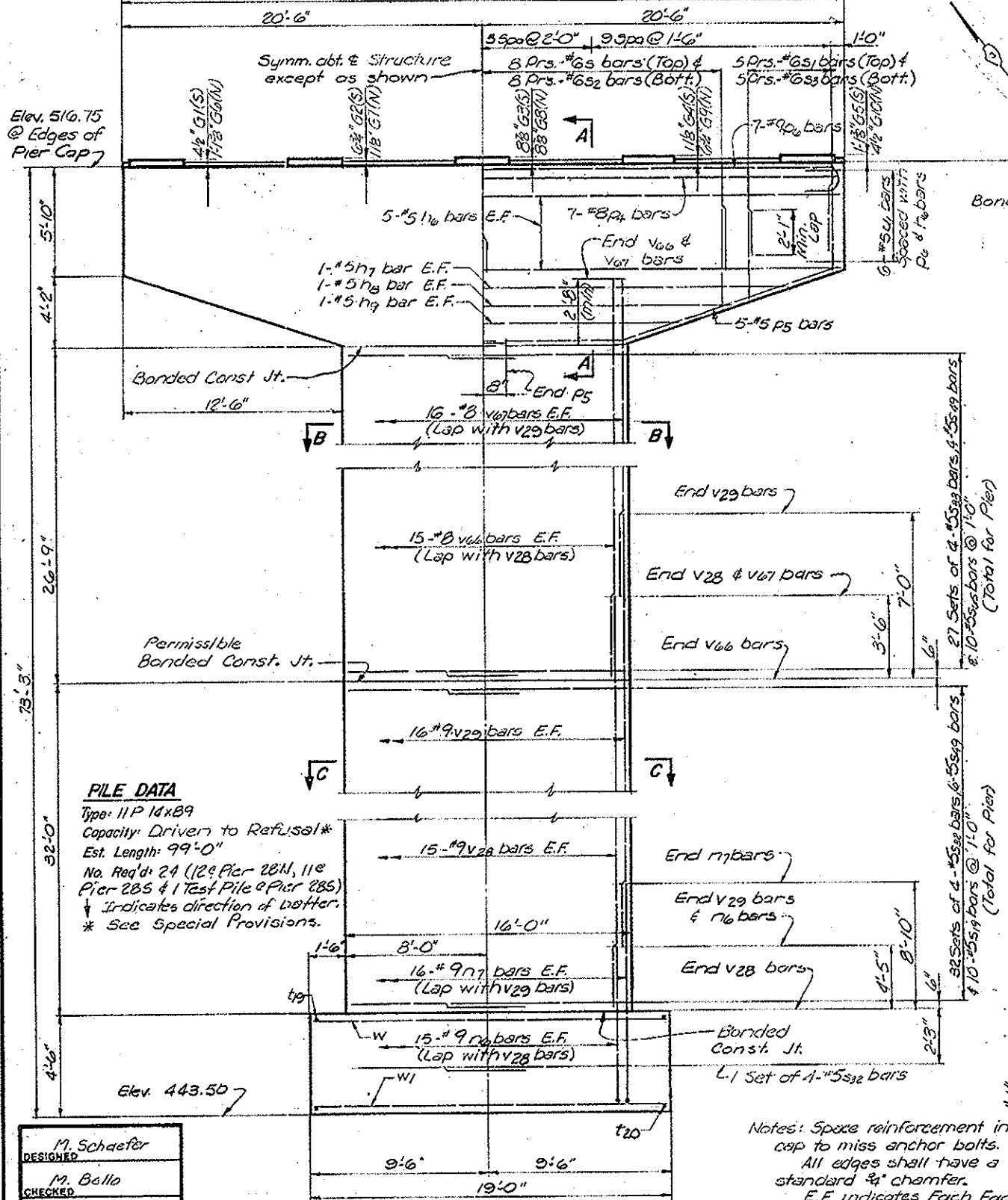
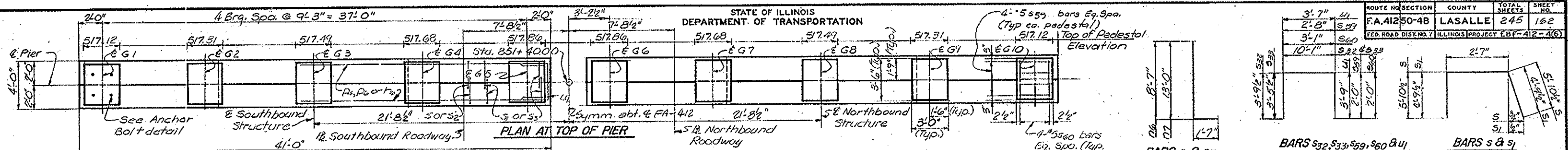
SOUTH APPROACH STRUCTURAL STEEL ALTERNATE PIER 26 NORTHBOUND & SOUTHBOUND FA-412 OVER ILLINOIS RIVER SECTION 50-4B PROJECT EBF-412-4(6) STA. 863+16.00 (FA-412) LASALLE CO.

Item	Quantity	Unit	Notes
Class X Concrete	Cu. Yds.	306.5	
Reinforcement Bars	Lbs.	43299	
Steel Piles HP14x89	Lin. Ft.	1100	
Test Piles (incl. HP14x89)	Each	1	
Metal Shoes	Each	11	
Structure Excav.	Cu. Yds.	157	

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: T. Ritzeheimer

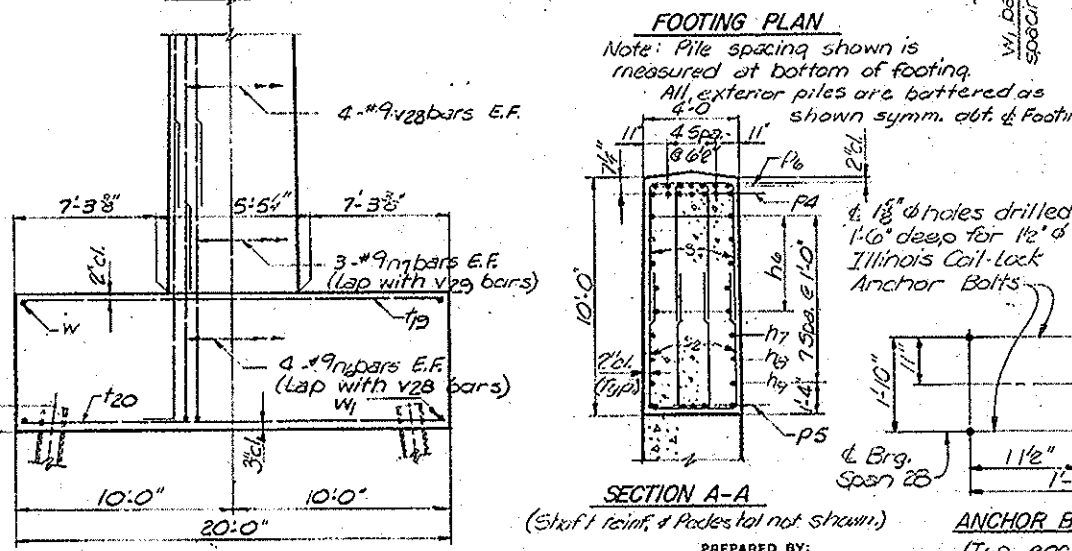
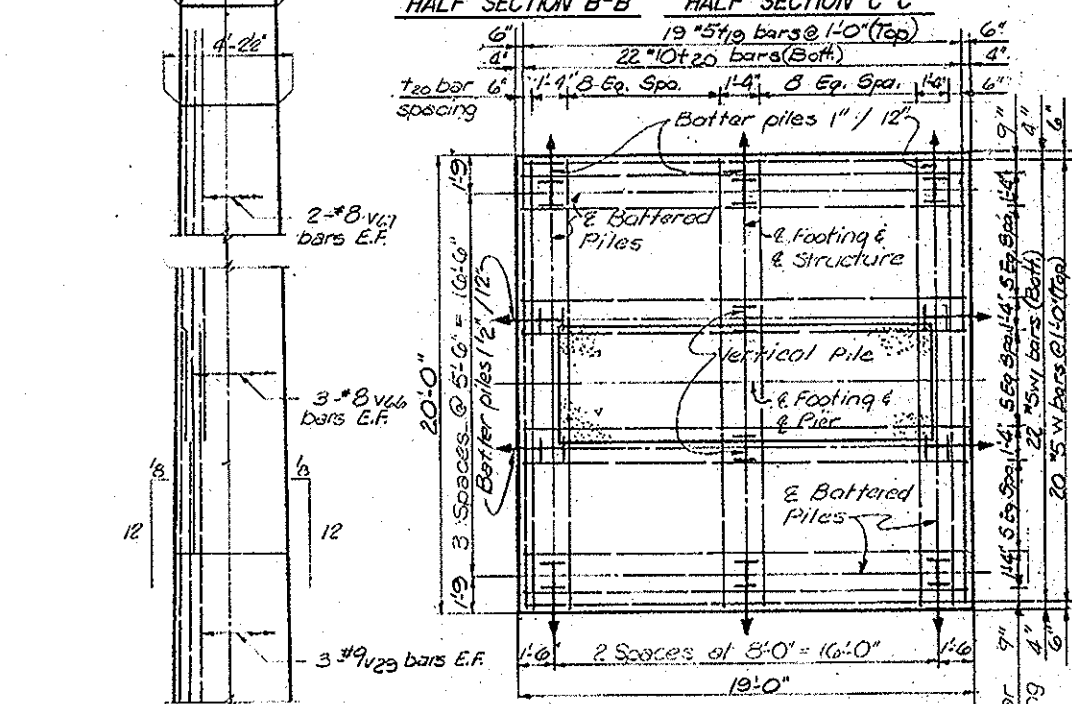
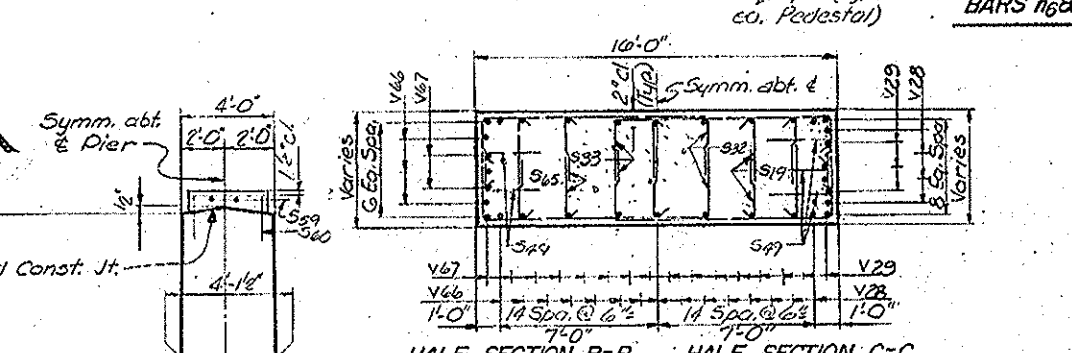
Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard chamfer. E.F. Indicates Each Face

SECTION A-A (Shaft reinf. & pedestal not shown)
ANCHOR BOLT DETAIL (Typ. ea. pedestal)
PREPARED BY: SVERDRUP & PARCEL AND ASSOCIATES, Inc. ENGINEERS ARCHITECTS PLANNERS ST. LOUIS, MISSOURI



PILE DATA
Type: 11P 14x89
Capacity: Driver to Refusal*
Est. Length: 99'-0"
No. Req'd: 24 (12@ Pier 28N, 11@ Pier 28S & 1 Test Pile @ Pier 28S)
* Indicates direction of batter.
* See Special Provisions.

DESIGNED	M. Schaefer
CHECKED	M. Bello
DRAWN	J. Corley
CHECKED	T. Ritzheimer



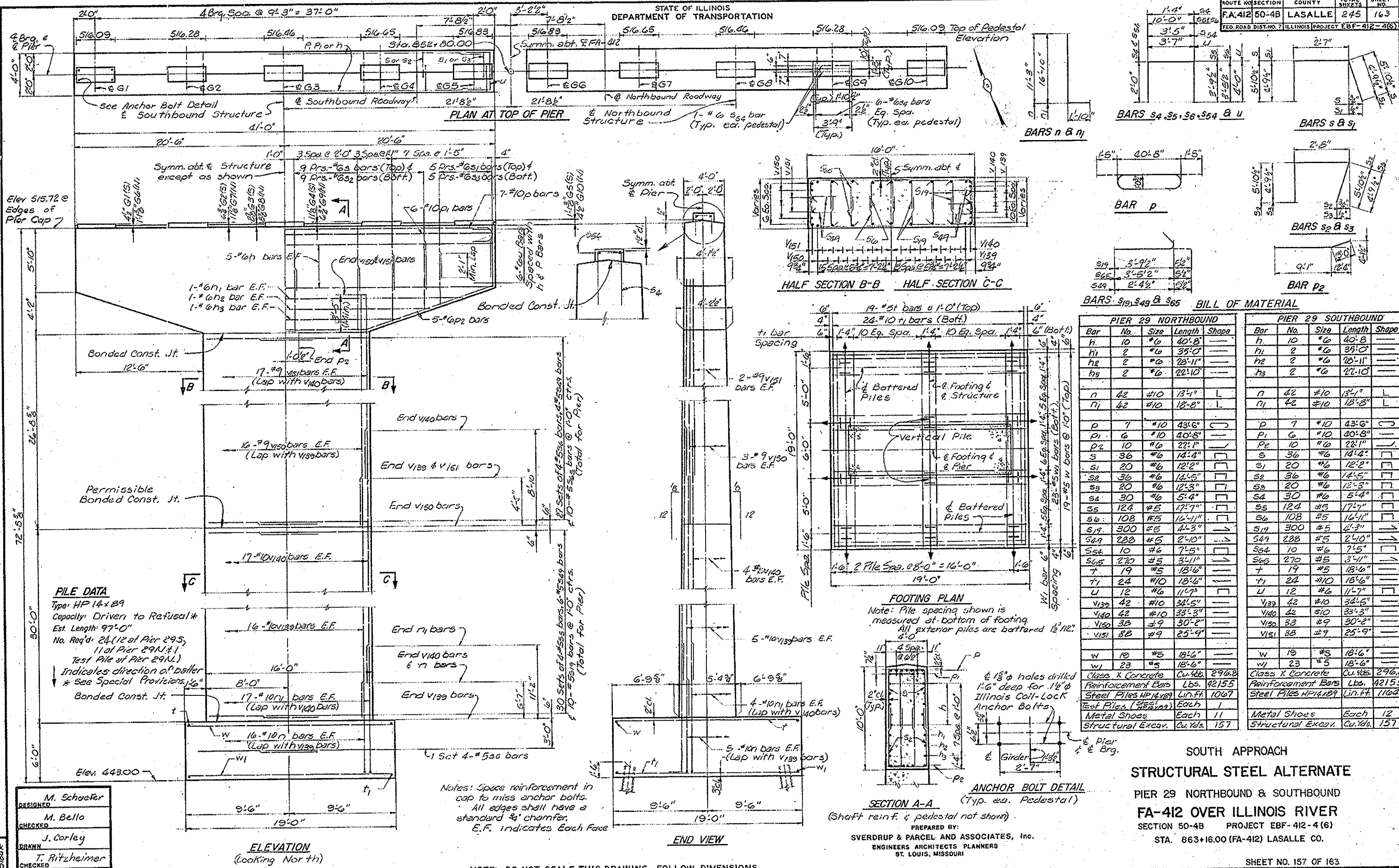
BILL OF MATERIAL

PIER 28 NORTHBOUND					PIER 28 SOUTHBOUND				
Bar No.	Size	Length	Shape		Bar No.	Size	Length	Shape	
h6	10	#5	40'-8"		h6	10	#5	40'-8"	
h7	2	#5	35'-0"		h7	2	#5	35'-0"	
h8	2	#5	28'-11"		h8	2	#5	28'-11"	
h9	2	#5	22'-10"		h9	2	#5	22'-10"	
n6	38	#9	10'-2"	L	n6	38	#9	10'-2"	L
n7	38	#9	14'-7"	L	n7	38	#9	14'-7"	L
p4	7	#8	40'-8"		p4	7	#8	40'-8"	
p5	10	#5	21'-9"		p5	10	#5	21'-9"	
p6	7	#9	43'-2"		p6	7	#9	43'-2"	
s	32	#6	14'-4"		s	32	#6	14'-4"	
s1	20	#6	12'-2"		s1	20	#6	12'-2"	
s2	32	#6	14'-5"		s2	32	#6	14'-5"	
s3	20	#6	12'-3"		s3	20	#6	12'-3"	
s19	320	#5	4'-3"		s19	320	#5	4'-3"	
s32	132	#5	17'-8"		s32	132	#5	17'-8"	
s33	108	#5	17'-0"		s33	108	#5	17'-0"	
s49	300	#5	2'-10"		s49	300	#5	2'-10"	
s59	20	#5	6'-8"		s59	20	#5	6'-8"	
s60	20	#5	7'-1"		s60	20	#5	7'-1"	
s65	270	#5	3'-11"		s65	270	#5	3'-11"	
t19	19	#5	19'-6"		t19	19	#5	19'-6"	
t20	22	#10	19'-6"		t20	22	#10	19'-6"	
u1	12	#5	11'-1"		u1	12	#5	11'-1"	
v28	38	#9	35'-6"		v28	38	#9	35'-6"	
v29	38	#9	34'-7"		v29	38	#9	34'-7"	
v66	36	#8	29'-5"		v66	36	#8	29'-5"	
v67	36	#8	25'-11"		v67	36	#8	25'-11"	
w	20	#5	18'-6"		w	20	#5	18'-6"	
w1	22	#5	18'-6"		w1	22	#5	18'-6"	
Class X Concrete Cu. Yds. 287.0					Class X Concrete Cu. Yds. 287.0				
Reinforcement Bars Lbs. 33529					Reinforcement Bars Lbs. 33529				
Steel Piles HP14x89 Lin. Ft. 1188					Steel Piles HP14x89 Lin. Ft. 1089				
Metal Shoes Each 12					Metal Shoes (Steel HP14x89) Each 1				
Structure Excav. Cu. Yds. 133					Structure Excav. Cu. Yds. 133				

Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard 3/4" chamfer. E.F. indicates Each Face.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 28 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI
STA. 863+16.00 (FA-412) LASALLE CO.
SHEET NO. 156 OF 163



PILE DATA
 Type: HP 14x89
 Capacity: Driven to Refusal*
 Est. Length: 97'-0"
 No. Req'd: 24 (12 at Pier 29S, 11 at Pier 29N, 1 Test Pile at Pier 29N.)
 * Indicates direction of batter.
 * See Special Provisions, 16"

BILL OF MATERIAL

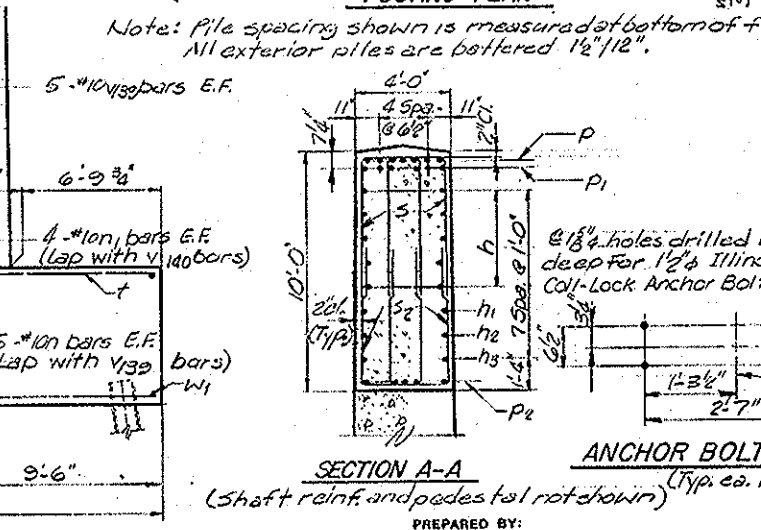
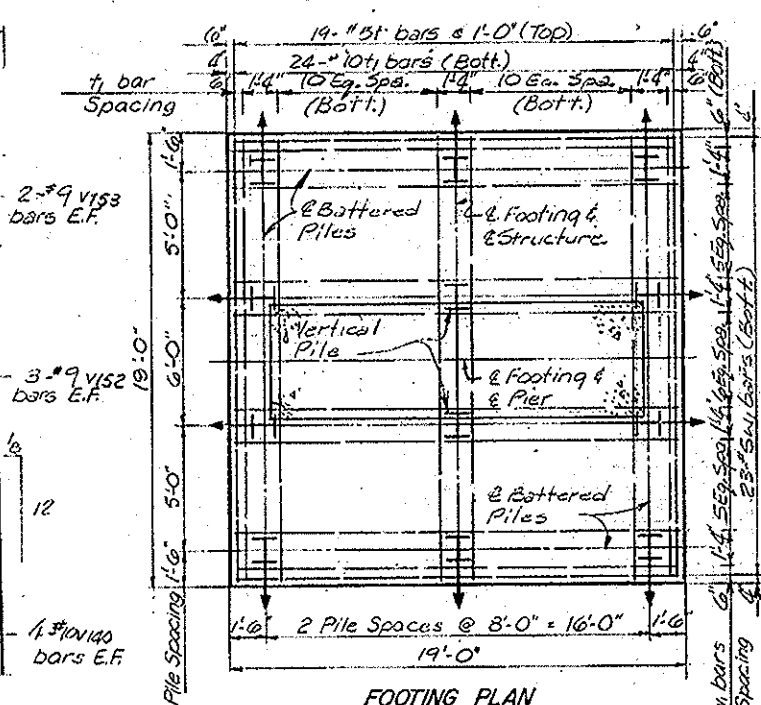
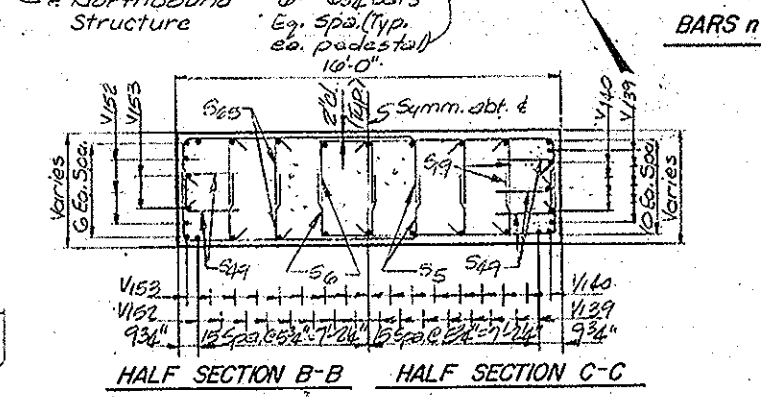
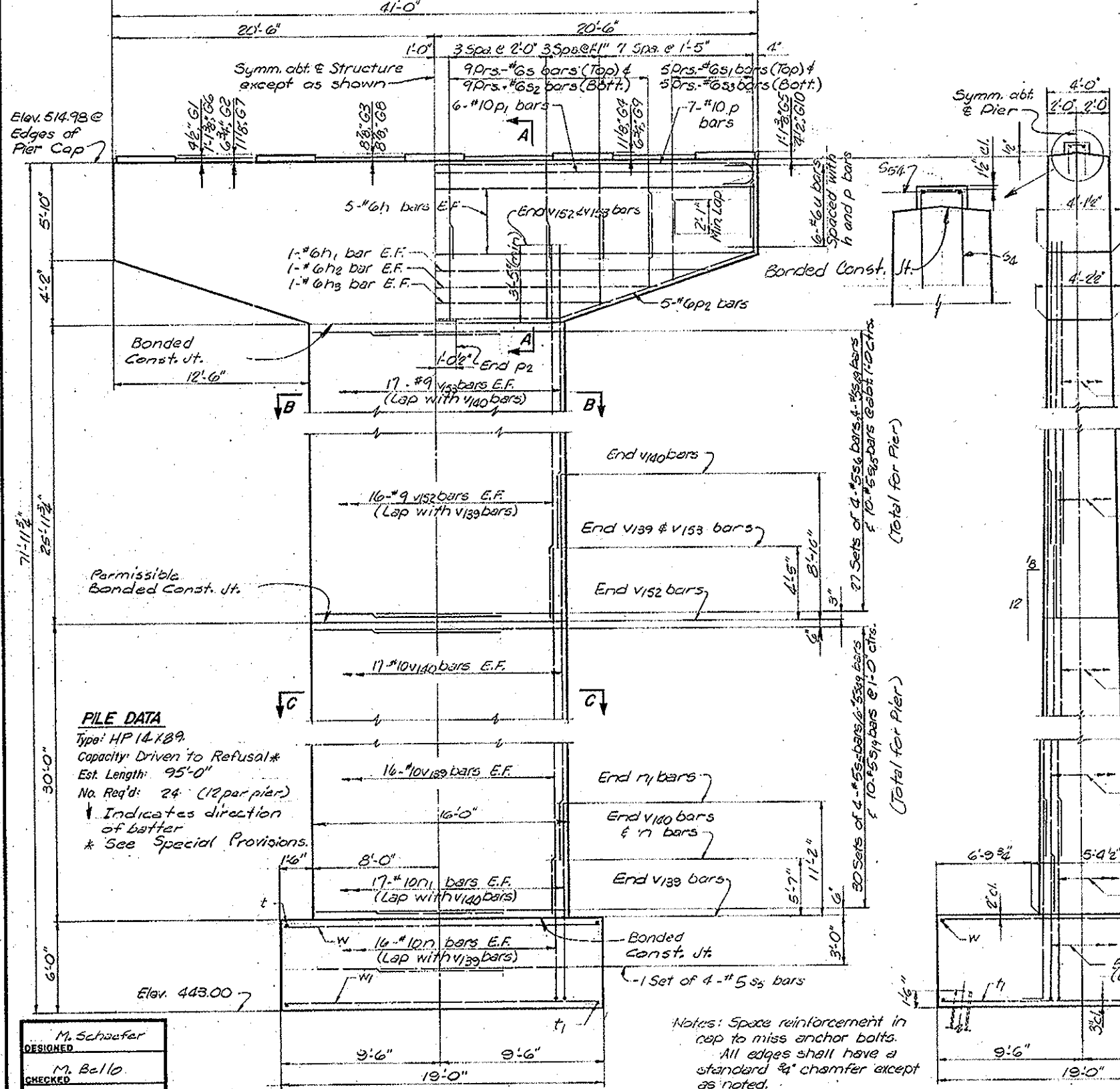
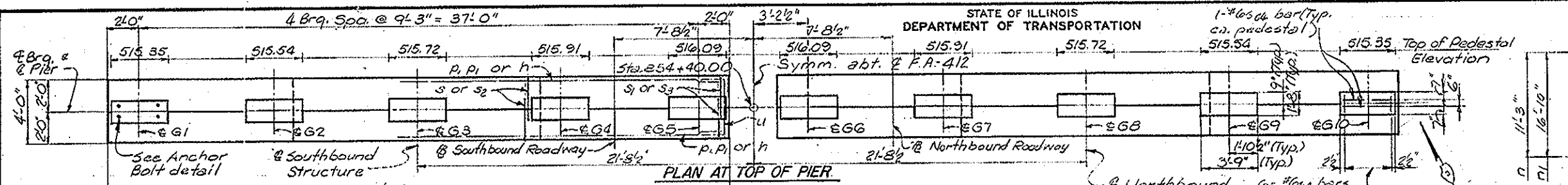
PIER 29 NORTHBOUND					PIER 29 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h	10	#6	40'-8"	—	h	10	#6	40'-8"	—
h1	2	#6	35'-0"	—	h1	2	#6	35'-0"	—
h2	2	#6	28'-11"	—	h2	2	#6	28'-11"	—
h3	2	#6	22'-10"	—	h3	2	#6	22'-10"	—
n	42	#10	18'-1"	L	n	42	#10	18'-1"	L
n1	42	#10	18'-8"	L	n1	42	#10	18'-8"	L
p	7	#10	43'-6"	—	p	7	#10	43'-6"	—
p1	6	#10	40'-8"	—	p1	6	#10	40'-8"	—
p2	10	#6	22'-7"	—	p2	10	#6	22'-7"	—
s	36	#6	14'-4"	—	s	36	#6	14'-4"	—
s1	20	#6	12'-2"	—	s1	20	#6	12'-2"	—
s2	36	#6	14'-5"	—	s2	36	#6	14'-5"	—
s3	20	#6	12'-3"	—	s3	20	#6	12'-3"	—
s4	30	#6	5'-4"	—	s4	30	#6	5'-4"	—
s5	124	#5	17'-7"	—	s5	124	#5	17'-7"	—
s6	108	#5	16'-11"	—	s6	108	#5	16'-11"	—
s19	300	#5	4'-3"	—	s19	300	#5	4'-3"	—
s49	288	#5	2'-10"	—	s49	288	#5	2'-10"	—
sat	10	#6	7'-5"	—	sat	10	#6	7'-5"	—
s65	270	#5	3'-11"	—	s65	270	#5	3'-11"	—
t	19	#5	18'-6"	—	t	19	#5	18'-6"	—
t1	24	#10	18'-6"	—	t1	24	#10	18'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v139	42	#10	34'-5"	—	v139	42	#10	34'-5"	—
v140	42	#10	33'-3"	—	v140	42	#10	33'-3"	—
v150	38	#9	30'-2"	—	v150	38	#9	30'-2"	—
v151	38	#9	25'-9"	—	v151	38	#9	25'-9"	—
w	10	#5	18'-6"	—	w	10	#5	18'-6"	—
w1	23	#5	18'-6"	—	w1	23	#5	18'-6"	—
Class X Concrete Cu.Yds. 296.8					Class X Concrete Cu.Yds. 296.8				
Reinforcement Bars Lbs. 42155					Reinforcement Bars Lbs. 42155				
Steel Piles HP14x89 Lin.Ft. 1067					Steel Piles HP14x89 Lin.Ft. 1067				
Test Piles (3) Each 1					Test Piles (3) Each 1				
Metal Shoes Each 11					Metal Shoes Each 12				
Structural Excav. Cu.Yds. 157					Structural Excav. Cu.Yds. 157				

DESIGNED M. Schaefer
 CHECKED M. Bello
 DRAWN J. Corley
 CHECKED T. Ritzheimer

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE**

PIER 29 NORTHBOUND & SOUTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI



BILL OF MATERIAL

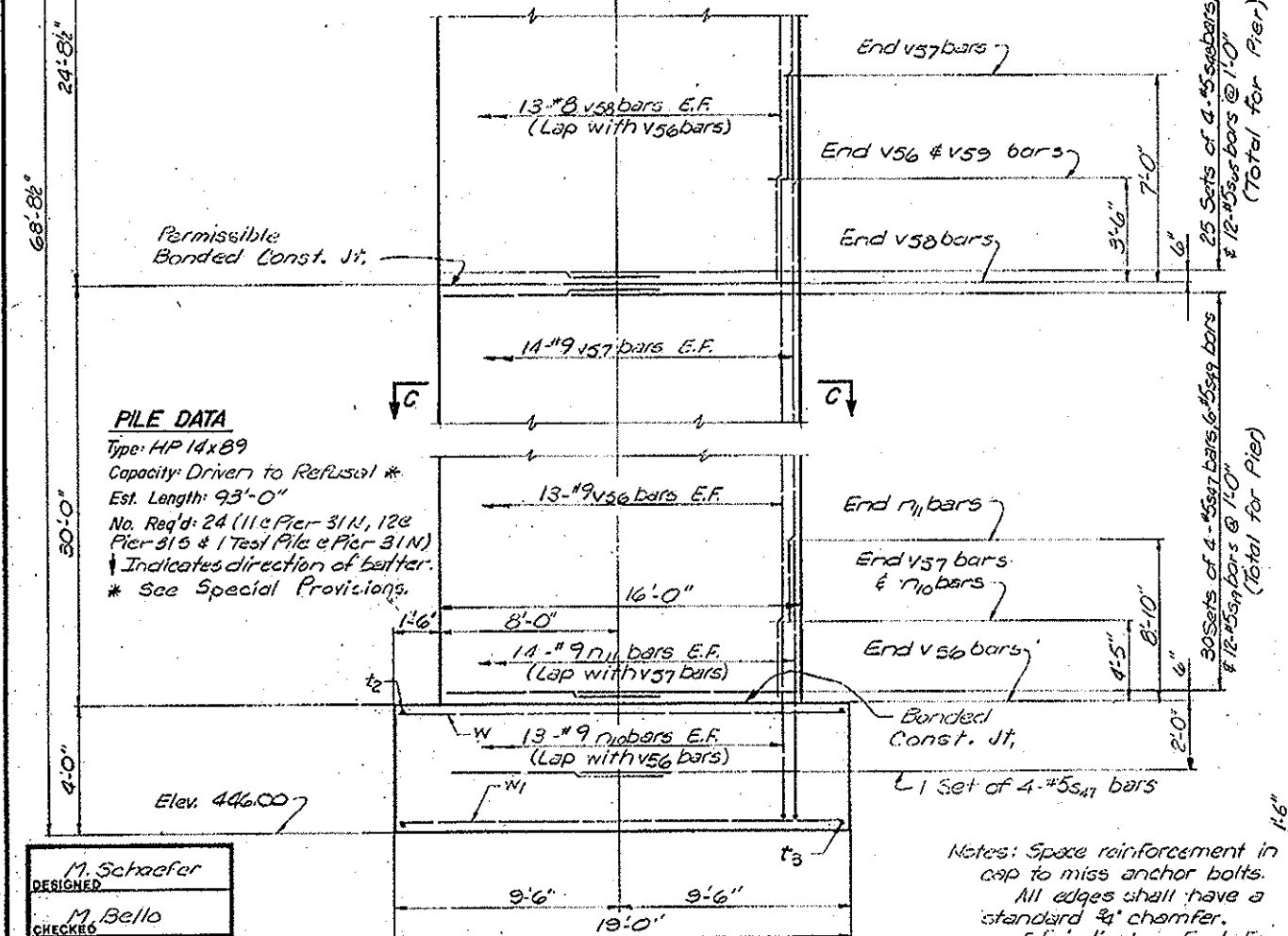
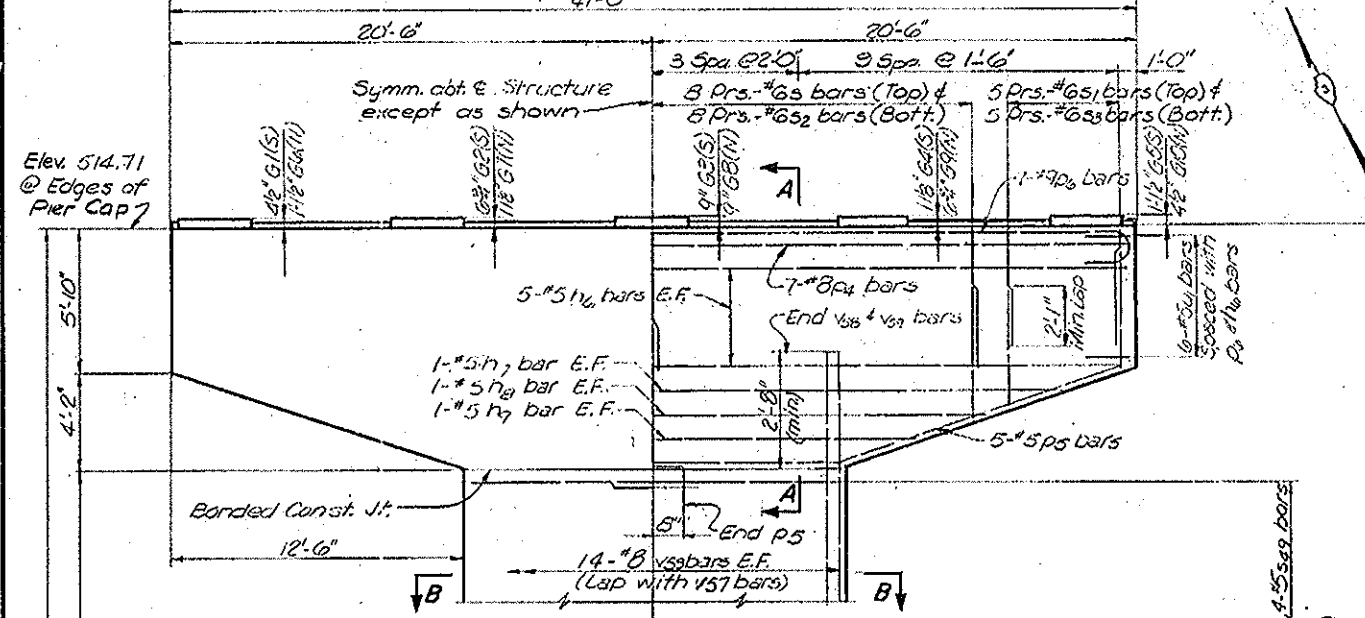
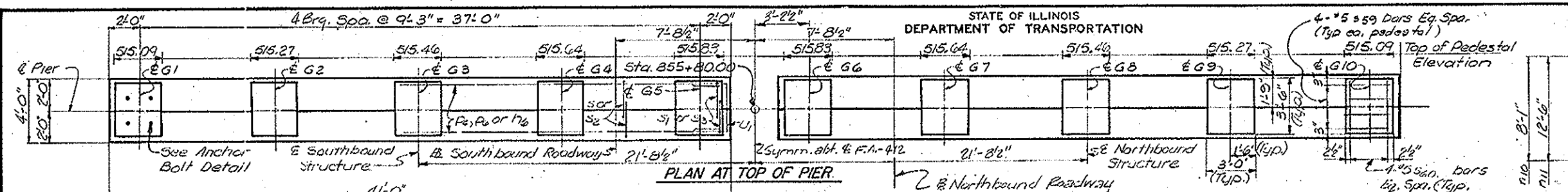
PIER 30 NORTHBOUND					PIER 30 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h1	10	#6	40'-8"	—	h1	10	#6	40'-8"	—
h2	2	#6	35'-0"	—	h2	2	#6	35'-0"	—
h3	2	#6	28'-11"	—	h3	2	#6	28'-11"	—
n	42	#10	18'-11"	L	n	42	#10	18'-11"	L
n1	42	#10	18'-2"	L	n1	42	#10	18'-2"	L
p	7	#10	43'-6"	□	p	7	#10	43'-6"	□
p1	6	#10	40'-8"	—	p1	6	#10	40'-8"	—
p2	10	#6	22'-11"	—	p2	10	#6	22'-11"	—
s	36	#6	12'-4"	□	s	36	#6	12'-4"	□
s1	20	#6	12'-2"	□	s1	20	#6	12'-2"	□
s2	36	#6	14'-5"	□	s2	36	#6	14'-5"	□
s3	20	#6	12'-3"	□	s3	20	#6	12'-3"	□
s4	30	#6	5'-4"	□	s4	30	#6	5'-4"	□
s5	124	#5	17'-9"	□	s5	124	#5	17'-9"	□
s6	108	#5	16'-11"	□	s6	108	#5	16'-11"	□
s19	300	#5	4'-3"	→	s19	300	#5	4'-3"	→
s49	288	#5	2'-10"	→	s49	288	#5	2'-10"	→
s54	10	#6	7'-5"	□	s54	10	#6	7'-5"	□
s65	270	#5	3'-11"	→	s65	270	#5	3'-11"	→
t	19	#5	18'-6"	—	t	19	#5	18'-6"	—
t1	24	#10	18'-6"	—	t1	24	#10	18'-6"	—
u	12	#6	11'-7"	□	u	12	#6	11'-7"	□
v139	42	#10	34'-5"	—	v139	42	#10	34'-5"	—
v140	42	#10	33'-3"	—	v140	42	#10	33'-3"	—
v152	38	#9	29'-5"	—	v152	38	#9	29'-5"	—
v153	38	#9	25'-0"	—	v153	38	#9	25'-0"	—
w	19	#5	18'-6"	—	w	19	#5	18'-6"	—
w1	23	#5	18'-6"	—	w1	23	#5	18'-6"	—
Class X Concrete Cu. Yds. 294.2					Class X Concrete Cu. Yds. 294.2				
Reinforcement Bars Lbs. 41961					Reinforcement Bars Lbs. 41961				
Steel Piles HP14x89 Lin. Ft. 1140					Steel Piles HP14x89 Lin. Ft. 1140				
Metal Shoes Ea. 12					Metal Shoes Ea. 12				
Structure Excav. Cu. Yds. 157					Structure Excav. Cu. Yds. 157				

PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal*
Est. Length: 95'-0"
No. Req'd: 24 (12 per pier)
↓ Indicates direction of batter
* See Special Provisions.

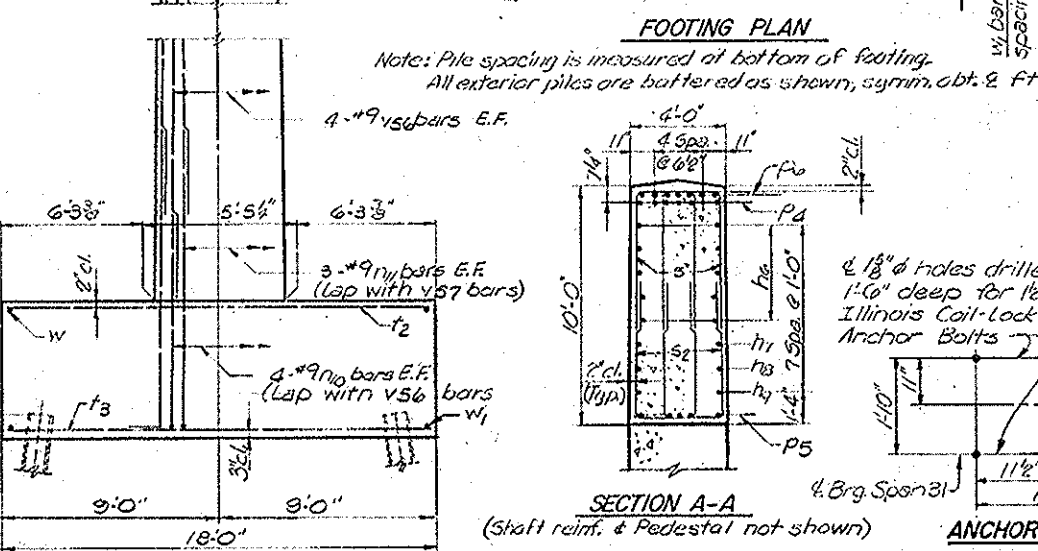
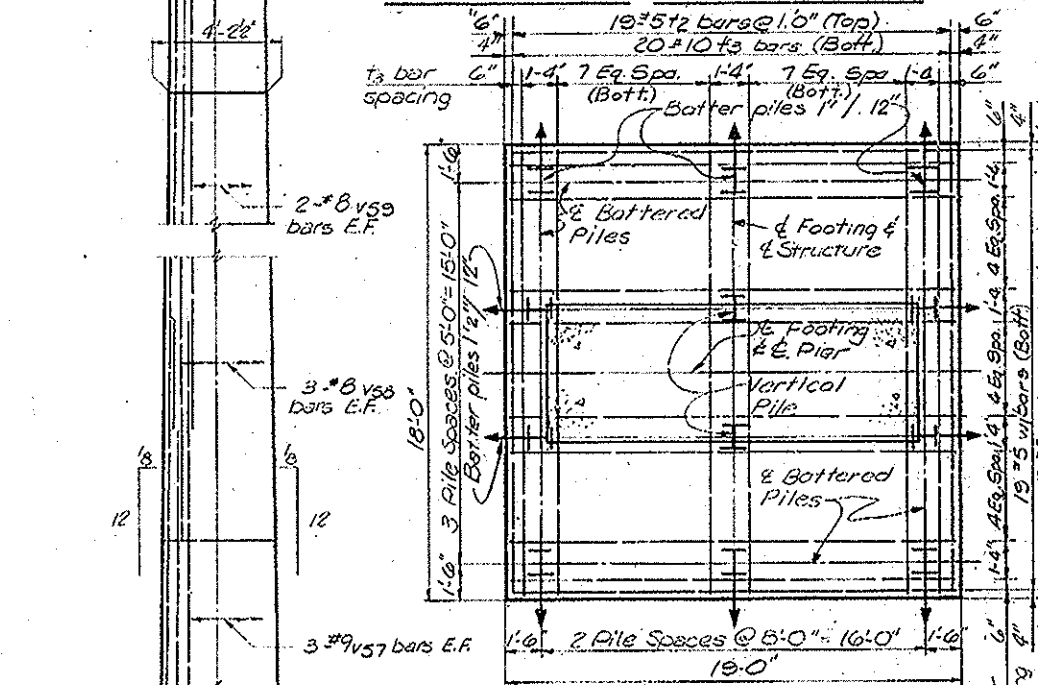
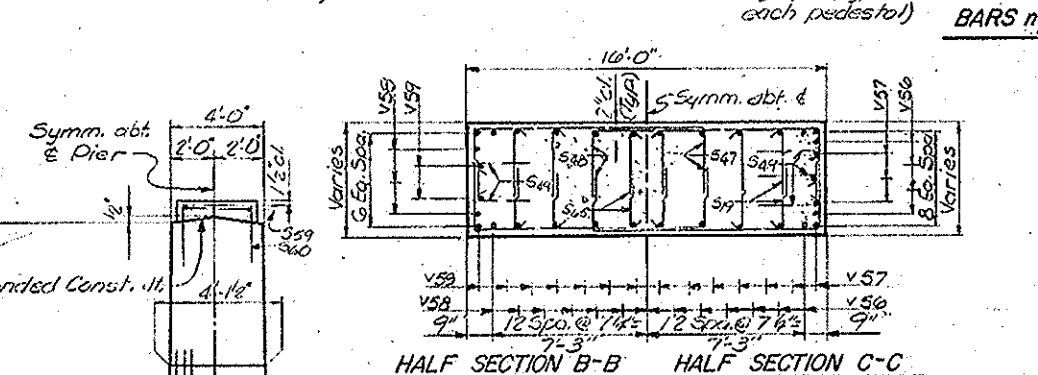
Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard 3/4" chamfer except as noted. E.F. indicates Each Face

DESIGNED: M. Schaefer
CHECKED: M. Ballo
DRAWN: J. Corley
CHECKED: T. Ritzheimer

**SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 30 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B. PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**



DESIGNED M. Schaefer
 CHECKED M. Bello
 DRAWN J. Corley
 CHECKED T. Ritzheimer



BILL OF MATERIAL

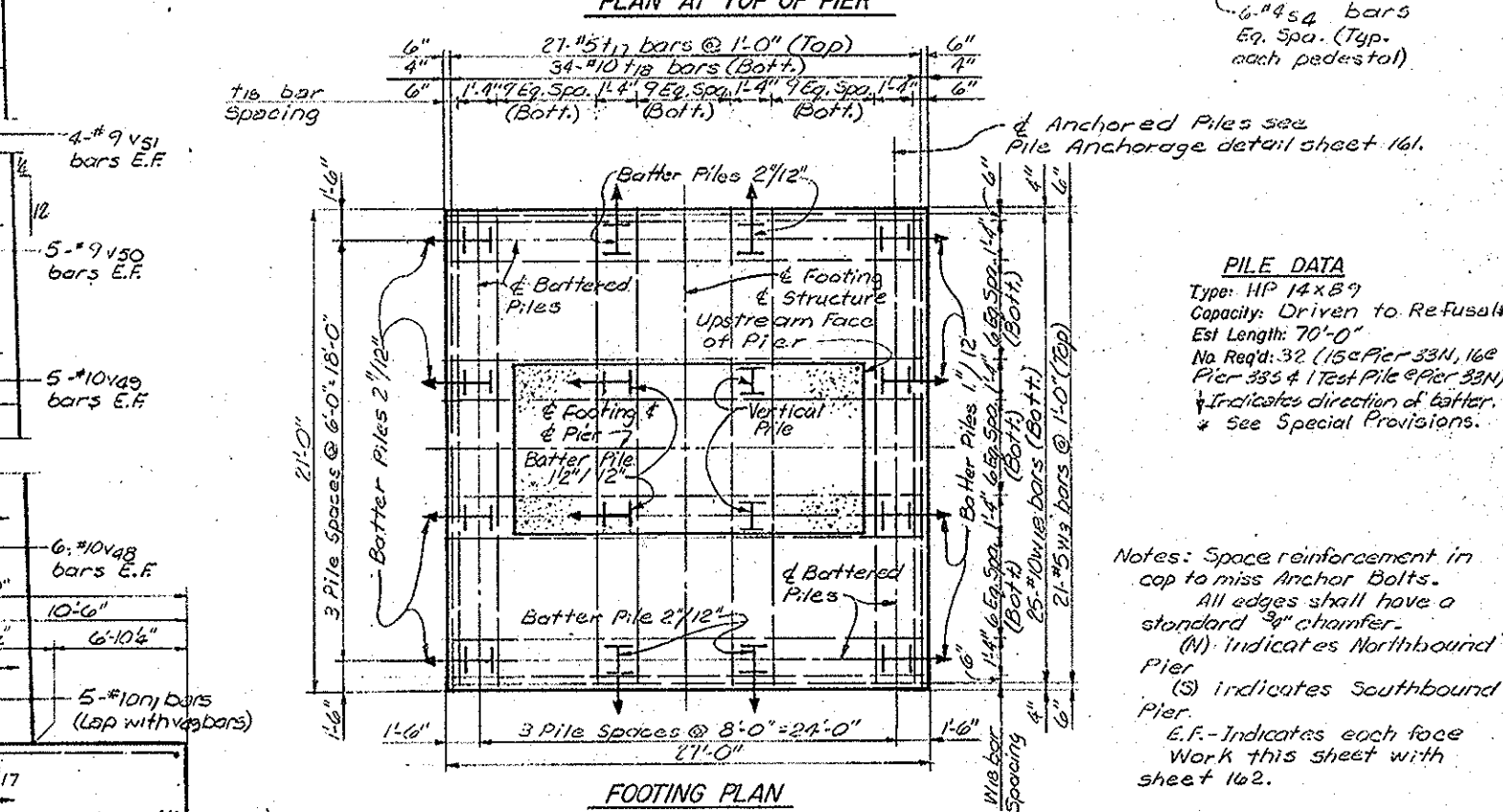
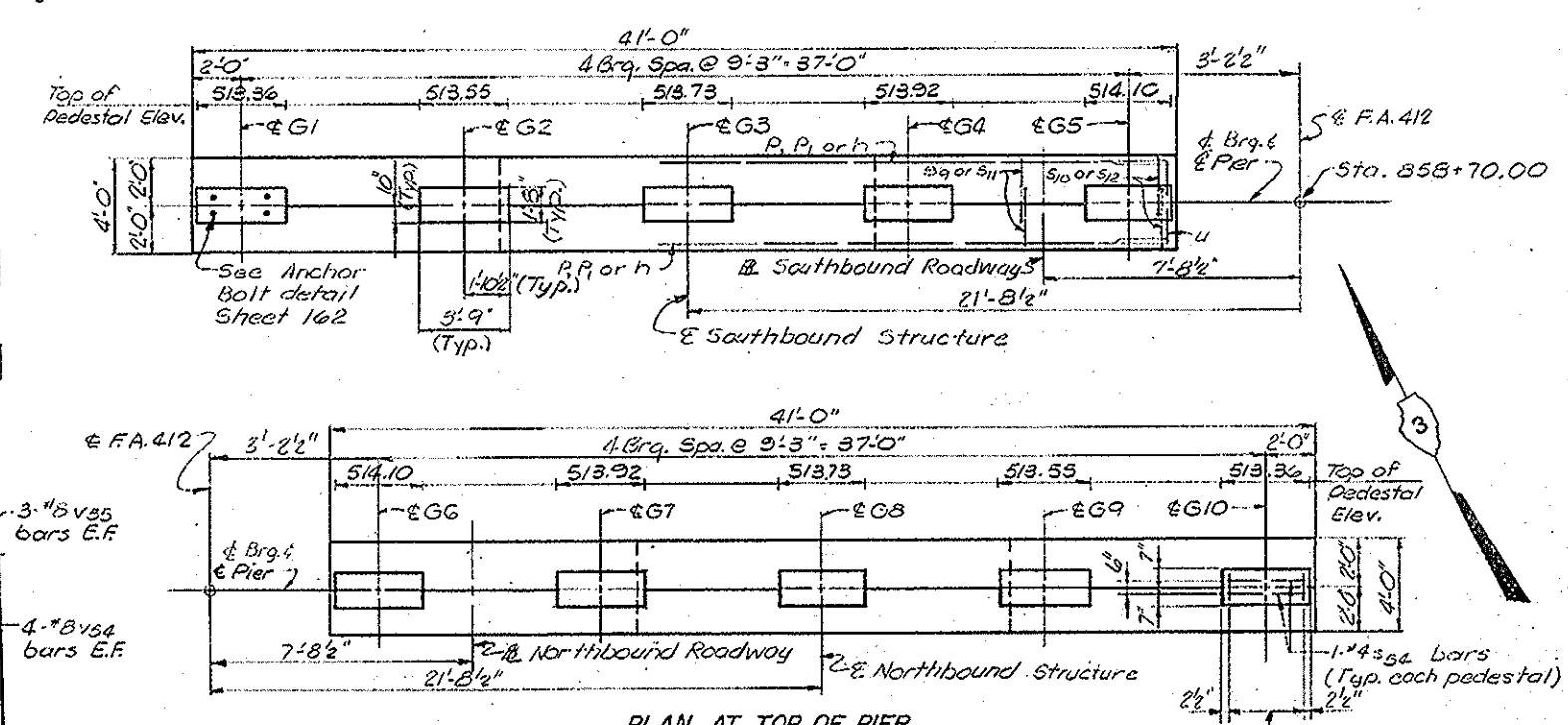
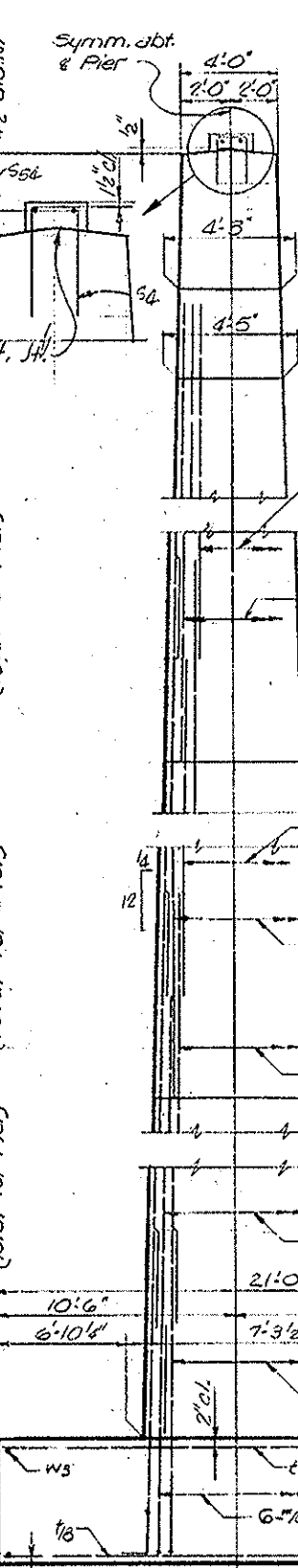
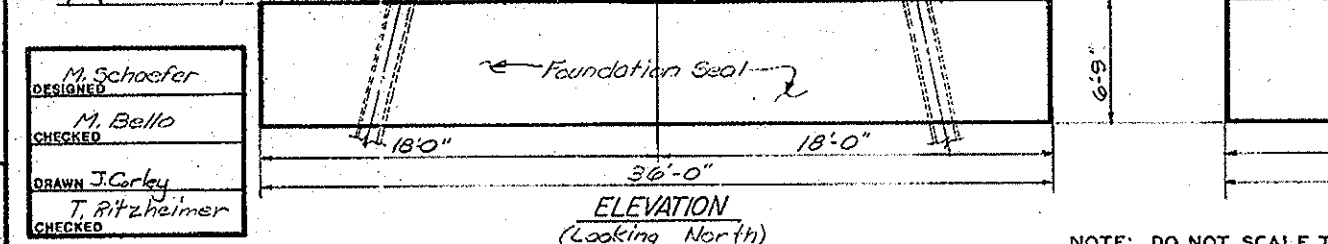
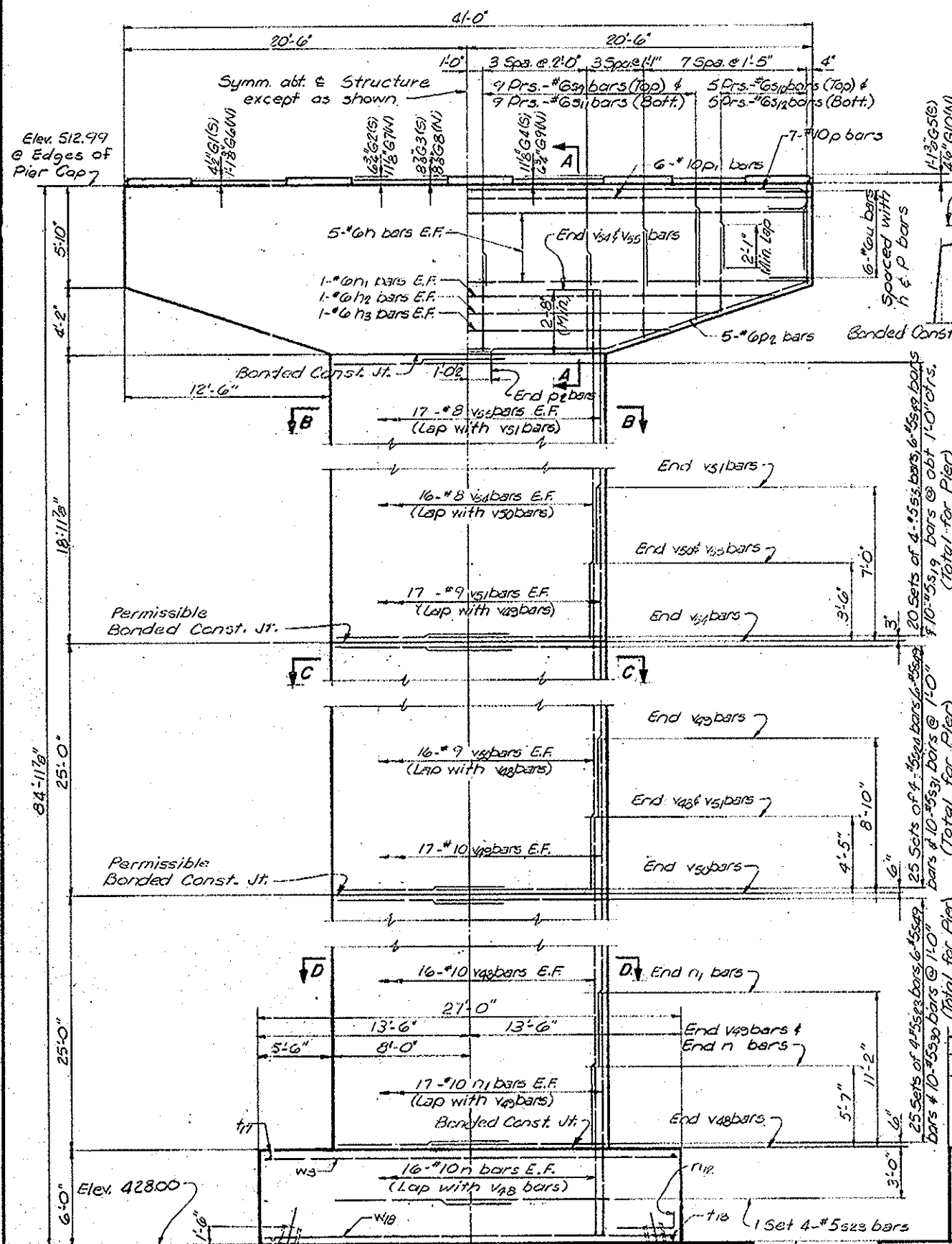
PIER 31 NORTHBOUND					PIER 31 SOUTHBOUND				
Bar No.	Size	Length	Shape		Bar No.	Size	Length	Shape	
h6	10	#5	40'-8"		h6	10	#5	40'-8"	
h7	2	#5	35'-0"		h7	2	#5	35'-0"	
h8	2	#5	28'-11"		h8	2	#5	28'-11"	
h9	2	#5	22'-10"		h9	2	#5	22'-10"	
n10	34	#9	9'-8"	L	n10	34	#9	9'-8"	L
n11	34	#9	14'-1"	L	n11	34	#9	14'-1"	L
p1	7	#8	40'-8"		p1	7	#8	40'-8"	
p2	10	#5	21'-9"		p2	10	#5	21'-9"	
p3	7	#9	43'-2"	C	p3	7	#9	43'-2"	C
s	32	#6	14'-4"	□	s	32	#6	14'-4"	□
s1	20	#6	12'-2"	□	s1	20	#6	12'-2"	□
s2	32	#6	14'-5"	□	s2	32	#6	14'-5"	□
s3	20	#6	12'-3"	□	s3	20	#6	12'-3"	□
s19	360	#5	4'-3"	→	s19	360	#5	4'-3"	→
s47	124	#5	18'-1"	□	s47	124	#5	18'-1"	□
s48	100	#5	17'-5"	□	s48	100	#5	17'-5"	□
s49	280	#5	2'-10"	→	s49	280	#5	2'-10"	→
s59	20	#5	6'-8"	→	s59	20	#5	6'-8"	→
s60	20	#5	7'-1"	□	s60	20	#5	7'-1"	□
s65	300	#5	3'-11"	→	s65	300	#5	3'-11"	→
t2	19	#5	17'-6"		t2	19	#5	17'-6"	
t3	20	#10	17'-6"		t3	20	#10	17'-6"	
u1	12	#5	11'-1"	□	u1	12	#5	11'-1"	□
v56	34	#9	33'-6"		v56	34	#9	33'-6"	
v57	34	#9	32'-7"		v57	34	#9	32'-7"	
v58	32	#8	27'-5"		v58	32	#8	27'-5"	
v59	32	#8	23'-11"		v59	32	#8	23'-11"	
w	18	#5	18'-6"		w	18	#5	18'-6"	
w1	19	#5	18'-6"		w1	19	#5	18'-6"	
Class X Concrete Cu. Yds. 262.8					Class X Concrete Cu. Yds. 262.8				
Reinforcement Bars Lbs. 30302					Reinforcement Bars Lbs. 30302				
Steel Piles HP14x89 Lin. Ft. 1023					Steel Piles HP14x89 Lin. Ft. 1116				
Test Piles (Steel HP14x89) Each 1					Metal Shoes Each 12				
Metal Shoes Each 11					Cofferdam Each 1				
Cofferdam Each 1					Cofferdam Excav. Cu. Yds. 187				

DESIGNED M. Schaefer
 CHECKED M. Bello
 DRAWN J. Corley
 CHECKED T. Ritzheimer

PREPARED BY: SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

STRUCTURAL STEEL ALTERNATE
 PIER 31 NORTHBOUND & SOUTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.
 SHEET NO. 159 OF 163

Note: All transverse dimensions are measured along E Pier.



PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal
Est Length: 70'-0"
No. Req'd: 32 (15# Pier 33N, 16# Pier 33S & 1 Test Pile # Pier 33N)
↑ Indicates direction of batter.
* See Special Provisions.

Notes: Space reinforcement in cap to miss Anchor Bolts.
All edges shall have a standard 3" chamfer.
(N) indicates Northbound Pier
(S) indicates Southbound Pier
E.F. - Indicates each face Work this sheet with sheet 162.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 33 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

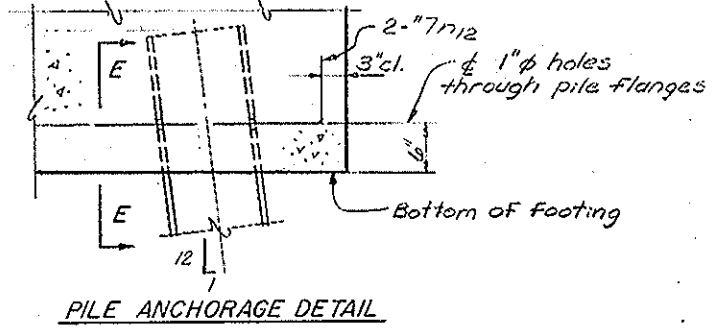
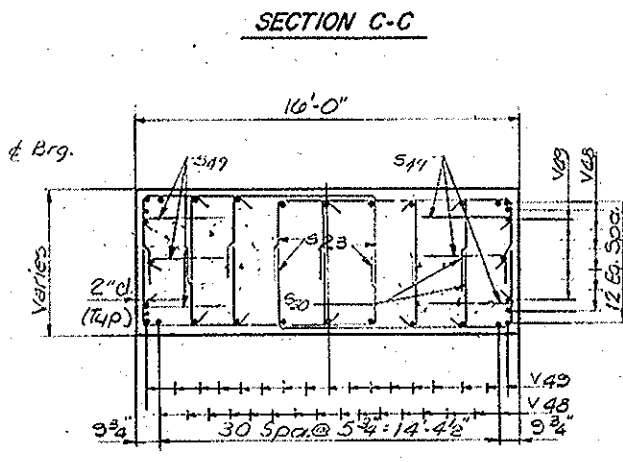
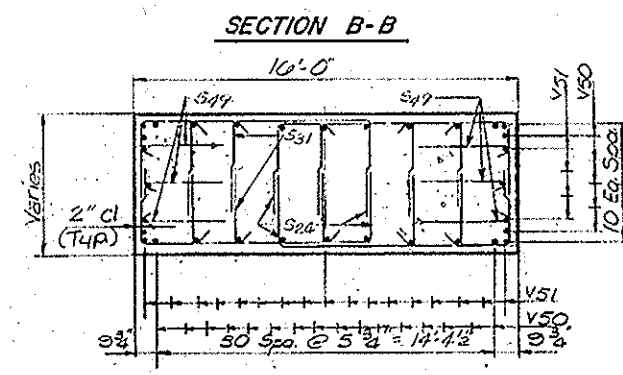
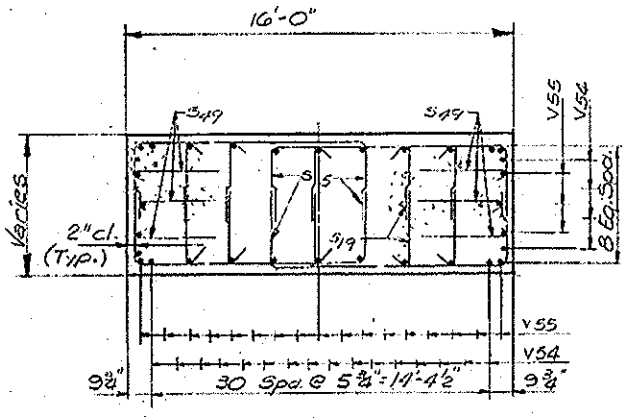
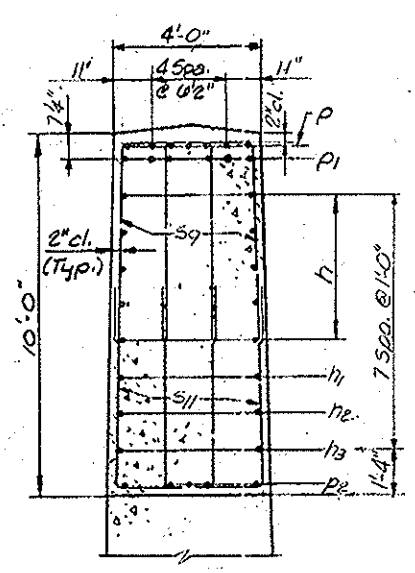
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 161 OF 163

DESIGNED
M. Schoefer
CHECKED
M. Bello
DRAWN
J. Corby
T. Pitzheimer
CHECKED

6892
83264K



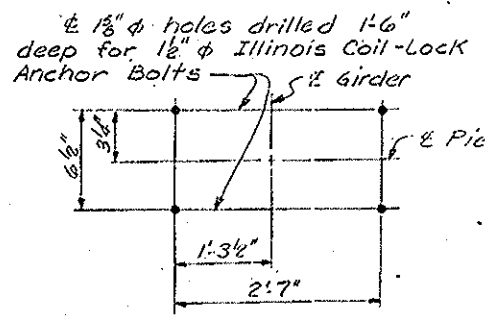
SECTION A-A
(Shaft reinf. & Pedestal not shown)

SECTION B-B

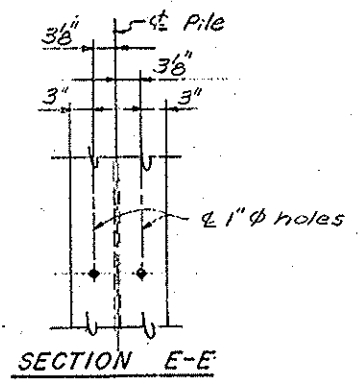
SECTION C-C

SECTION D-D

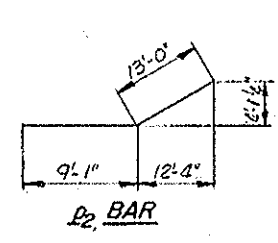
Note: Anchorage reinforcement is only located on the upstream row of battered piles in the footing.



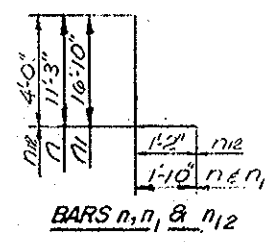
ANCHOR BOLT DETAIL
(Typ. each pedestal)



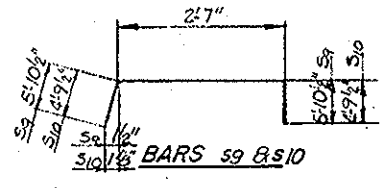
SECTION E-E



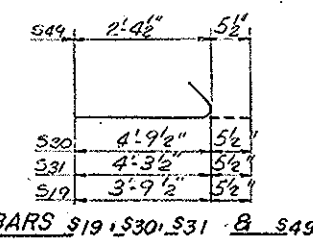
P2 BAR



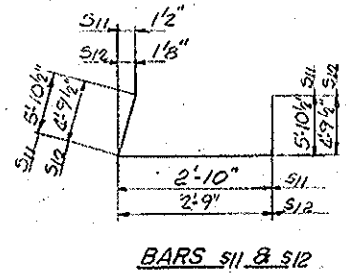
BARS n, n, & n12



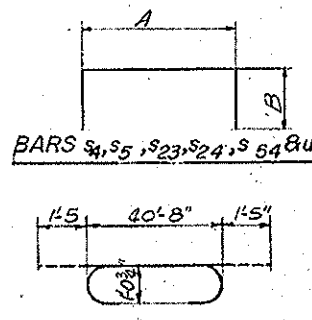
Bar	A	B
S4	14'-4"	2'-0"
S5	10'-0"	3'-9 1/2"
S23	10'-0"	4'-9 1/2"
S24	10'-0"	4'-3 1/2"
S34	3'-5"	2'-0"
U	3'-7"	4'-0"



BARS s19, s30, s31 & s49



BARS s11 & s12



BARS s4, s5, s23, s24, s34 & u

BAR p

BILL OF MATERIAL

PIER 33 NORTHBOUND					PIER 33 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
n	10	#6	40'-8"	—	n	10	#6	40'-8"	—
n1	2	#6	35'-0"	—	n1	2	#6	35'-0"	—
n2	2	#6	28'-11"	—	n2	2	#6	28'-11"	—
n3	2	#6	22'-10"	—	n3	2	#6	22'-10"	—
n	44	#10	13'-1"	L	n	44	#10	13'-1"	L
n1	44	#10	18'-8"	L	n1	44	#10	18'-8"	L
n2	8	#7	5'-2"	L	n2	8	#7	5'-2"	L
p	7	#10	43'-6"	C	p	7	#10	43'-6"	C
p1	6	#10	20'-8"	—	p1	6	#10	20'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s4	30	#6	5'-4"	—	s4	30	#6	5'-4"	—
s5	80	#5	17'-7"	—	s5	80	#5	17'-7"	—
s9	36	#6	14'-4"	—	s9	36	#6	14'-4"	—
s10	20	#6	12'-2"	—	s10	20	#6	12'-2"	—
s11	36	#6	14'-7"	—	s11	36	#6	14'-7"	—
s12	20	#6	12'-4"	—	s12	20	#6	12'-4"	—
s19	200	#5	4'-3"	—	s19	200	#5	4'-3"	—
s23	104	#5	19'-7"	—	s23	104	#5	19'-7"	—
s24	100	#5	18'-7"	—	s24	100	#5	18'-7"	—
s30	250	#5	5'-3"	—	s30	250	#5	5'-3"	—
s31	250	#5	4'-9"	—	s31	250	#5	4'-9"	—
s49	420	#5	2'-10"	—	s49	420	#5	2'-10"	—
s54	10	#6	7'-5"	—	s54	10	#6	7'-5"	—
f17	27	#5	20'-6"	—	f17	27	#5	20'-6"	—
f18	34	#10	20'-6"	—	f18	34	#10	20'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v48	44	#10	29'-5"	—	v48	44	#10	29'-5"	—
v49	44	#10	28'-3"	—	v49	44	#10	28'-3"	—
v50	42	#9	28'-6"	—	v50	42	#9	28'-6"	—
v51	42	#9	27'-7"	—	v51	42	#9	27'-7"	—
v54	40	#8	21'-8"	—	v54	40	#8	21'-8"	—
v55	40	#8	18'-2"	—	v55	40	#8	18'-2"	—
w3	21	#5	26'-6"	—	w3	21	#5	26'-6"	—
w18	25	#10	26'-6"	—	w18	25	#10	26'-6"	—
Class X Concrete				Cu.Yds. 421.7	Class X Concrete				Cu.Yds. 421.7
Reinforcement Bars				Lbs. 52973	Reinforcement Bars				Lbs. 52973
Steel Piles HP14x89				Lin.Ft. 1050	Steel Piles HP14x89				Lin.Ft. 1120
Steel Piles (Steel HP14x89)				Each 1	Steel Piles (Steel HP14x89)				Each 1
Seal Coat					Seal Coat				
Concrete				Cu.Yds. 243.0	Concrete				Cu.Yds. 243.0
Metal Shoes				Each 15	Metal Shoes				Each 16
Cofferdam				Each 1	Cofferdam				Each 1
Cofferdam Exca.				Cu.Yds. 711	Cofferdam Exca.				Cu.Yds. 711

Note: Work this sheet with sheet 161.

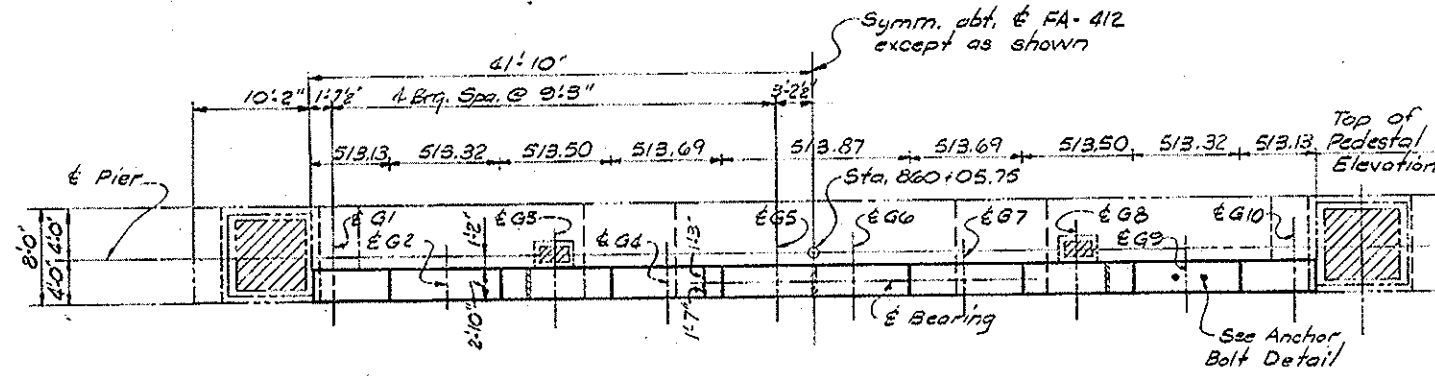
SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 33 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

M. Schaefer
DESIGNED
M. Bello
CHECKED
DRAWN J. Corley
T. Ritzheimer
CHECKED

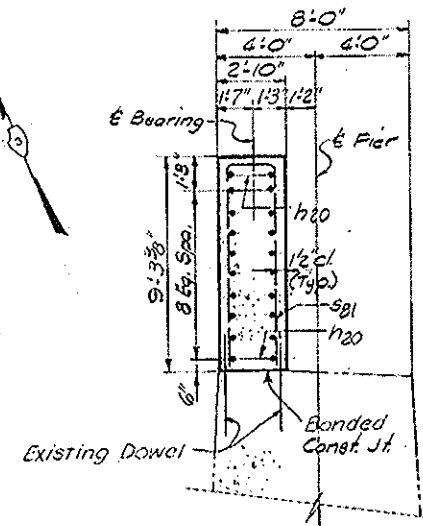
PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

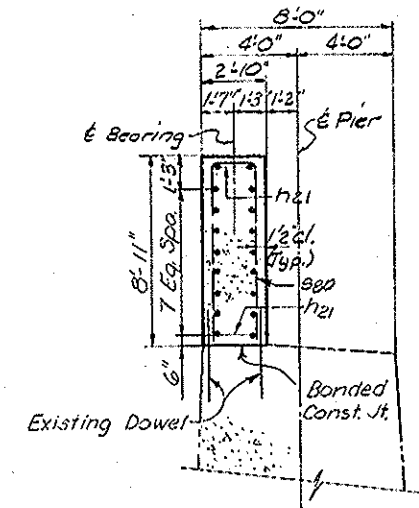
SHEET NO. 162 OF 163



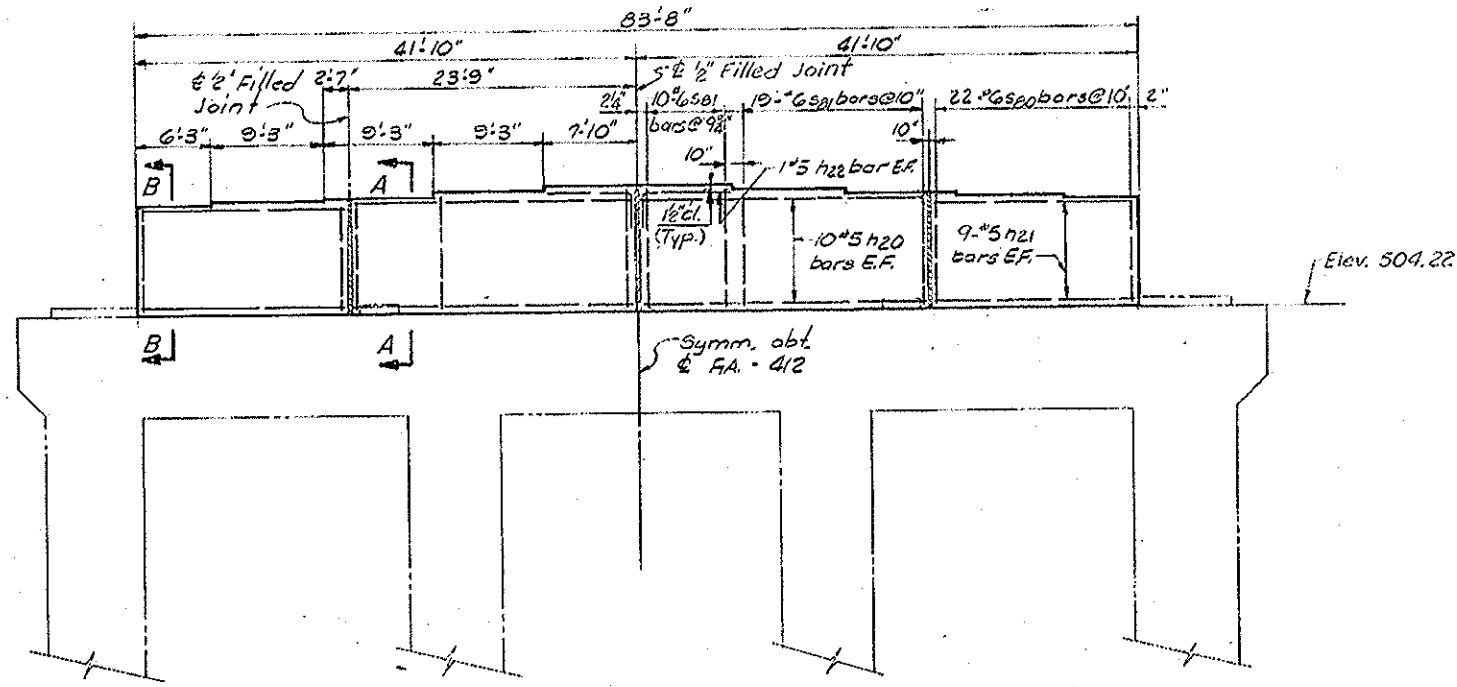
PLAN AT TOP PIER



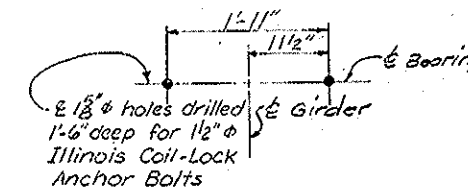
SECTION A-A



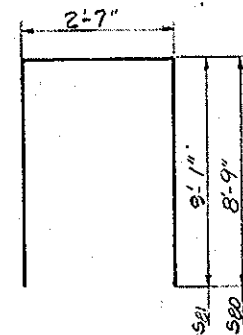
SECTION B-B



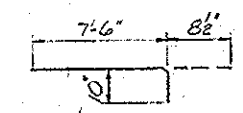
ELEVATION



ANCHOR BOLT DETAIL
(Typ. ea. Girder)



BARS s20 @ s21



BAR h22

BILL OF MATERIAL

PIER 34 APPROACH SPAN PEDESTAL				
Bar	No.	Size	Length	Shape
h20	40	#5	25'-5"	—
h21	30	#5	17'-8"	—
h22	4	#5	8'-3"	—
s20	44	#6	20'-1"	—
s21	56	#6	20'-9"	—
Class X Concrete			Cu. Yds.	81.8
Reinforcement Bars			Lbs.	1819

Notes: Space reinforcement in pedestal forms Anchor Bolts.
E.F. Indicates Each Face.
All edges shall have a standard 3/4" chamfer.

SOUTH APPROACH
STRUCTURAL STEEL ALTERNATE

PIER 34 APPROACH SPAN PEDESTAL
FA-412 OVER ILLINOIS RIVER
'SECTION 50-4B' PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: R.F. Beck

6692
62929

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3. GENERAL PLAN AND ELEVATION - SPANS 36 THRU 44
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5. GENERAL NOTES AND TOTAL BILL OF MATERIAL
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75. NAVIGATION LIGHT ACCESS AT MID-CHANNEL
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DESIGNED	T. Ritzheimer
CHECKED	L. Glaser
DRAWN	R. Prescher
CHECKED	T. Ritzheimer

6602
225496

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

INDEX OF DRAWINGS

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (EA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

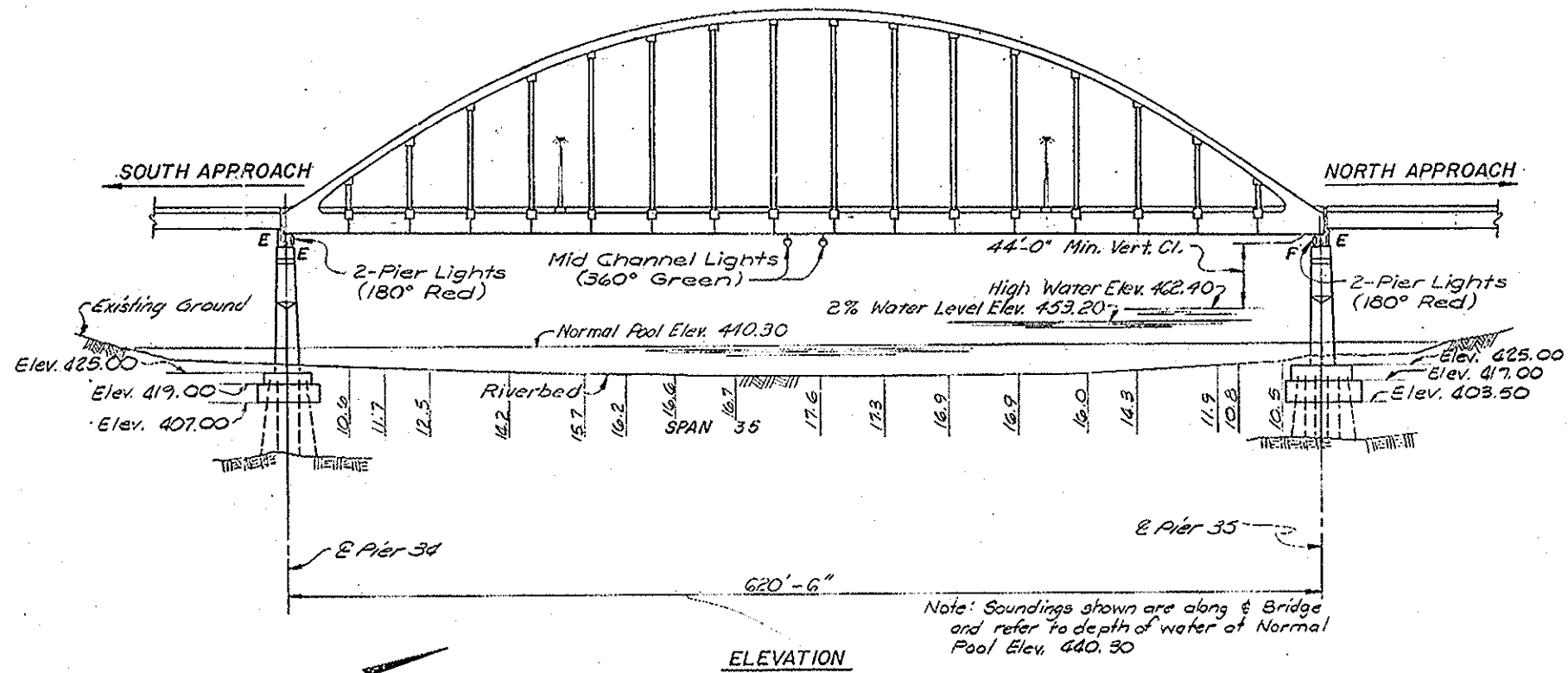
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 1 OF 76

Profile Grade γ - 0.4624%

P.O.T. Sta. 855+00.00
P.G. Elev. 524.05

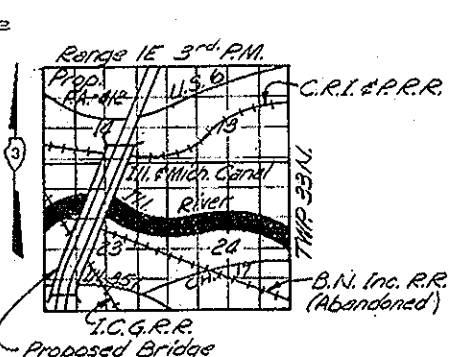
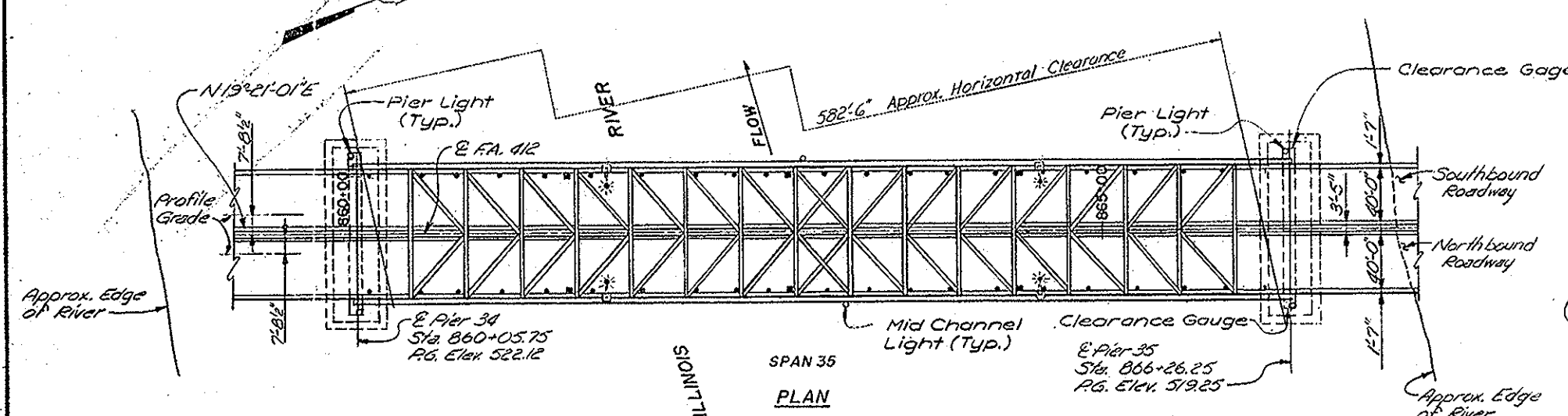
Note: Structure Depth from Profile Grade to top of Bearings = 12.6900'
Exp. Brg. height (incl. Lead Pl.) = 4.8542'
Fixed Brg. height (incl. Lead Pl.) = 3.8542'



WATERWAY INFORMATION

Drainage Area 8,259 sq. mi.	Low Grade Elev.	High Level Bridge at Sta. 863+16.00						
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E. Exist.	Prop.	Headwater Elev. Exist.	Prop.
Design	50	36,000	---	70,880	463.4	---	---	463.4
Base	100	77,300	---	77,180*	464.9	---	---	464.9
Overtopping								
Max. Calc.	500							

*Gross waterway opening (Includes Piers)



BENCH MARK

B.M. #23 Railroad spike in north base of 20" Willow tree 150'± right of E Sta. 867+67 Elev. 418.96

- Indicates 8" x 36" Drainage Gouper
- Indicates 6" Tubular Floor Drain
- Indicates Light Standard

NORTH APPROACH
ARCH SPAN DECK
STRUCTURAL STEEL ALTERNATE

GENERAL PLAN AND ELEVATION
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

C. Wilczorok
DESIGNED

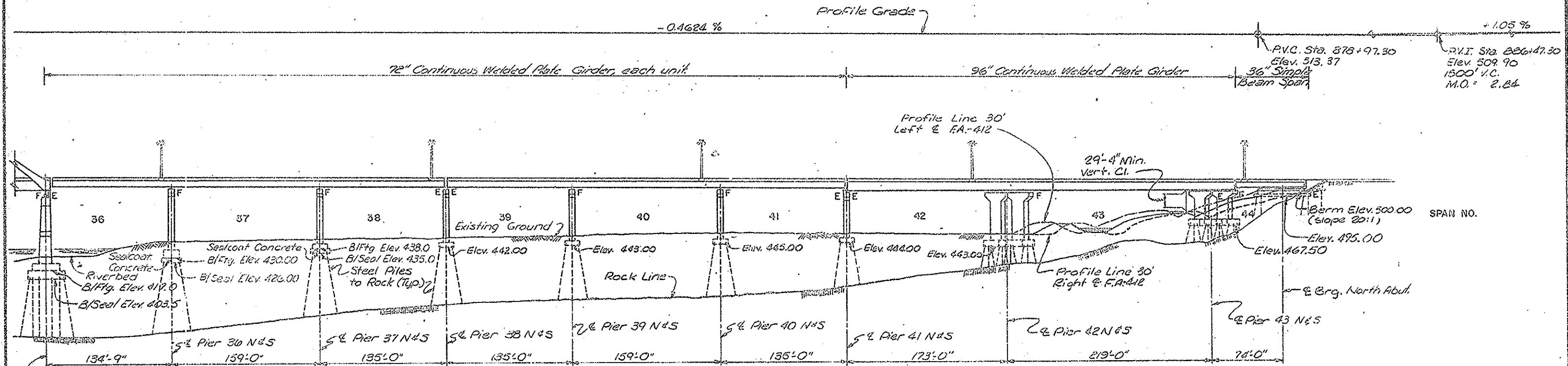
G. Routh
CHECKED

R. Prescher
DRAWN

T. Ritzheimer
CHECKED

PREPARED BY:
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ST. LOUIS, MISSOURI

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Note: Ground Line shown is along E.F.A. 412.

ELEVATION

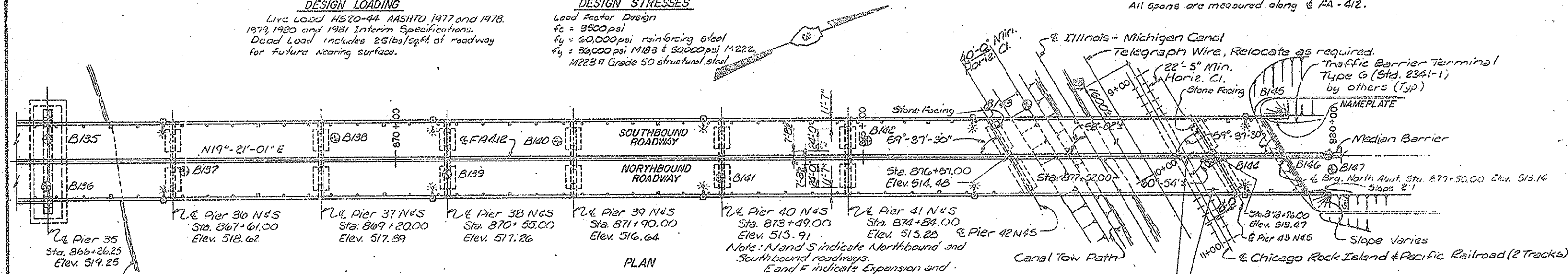
Note: Piers 42 & 43 N&S shall have a special masonry facing on span 43 side. See Special Provisions. Ground line shown is at E.F.A. 412 except as noted. All spans are measured along E.F.A. 412.

DESIGN LOADING

Live Load HS20-44 AASHTO 1977 and 1978, 1979, 1980 and 1981 Interim Specifications. Dead Load includes 25 lbs/sqft of roadway for future wearing surface.

DESIGN STRESSES

Load Factor Design
 $f_c = 3500$ psi
 $f_y = 60,000$ psi reinforcing steel
 $f_y = 36,000$ psi M18 & 50,000 psi M222, M223 & Grade 50 structural steel



PLAN

Note: N and S indicate Northbound and Southbound roadways. E and F indicate Expansion and Fixed Piers.
 * Indicates 8"x36" Drainage Scupper.
 * Indicates 6" Tubular Floor Drain.
 * Indicates Light Standard

BENCH MARKS

B.M. #23 Railroad spike in north base of 20" Willow tree 150' right of E Sta. 867+87.00 F.A. 412. Elev. 448.96.
 B.M. #24 100p. spike in root of 18" Cottonwood tree on south side of Illinois-Michigan Canal 215' left of E Sta. 875+25.00 F.A. 412. Elev. 454.14.
 B.M. #25 Chiseled "D" on west end of concrete culvert headwall on south side of Rock Island tracks 279' left of E Sta. 876+47. Elev. 468.07

M. Schaefer
DESIGNED
 M. Bello
CHECKED
 P. Gallardo
DRAWN
 T. Ritzheimer
CHECKED

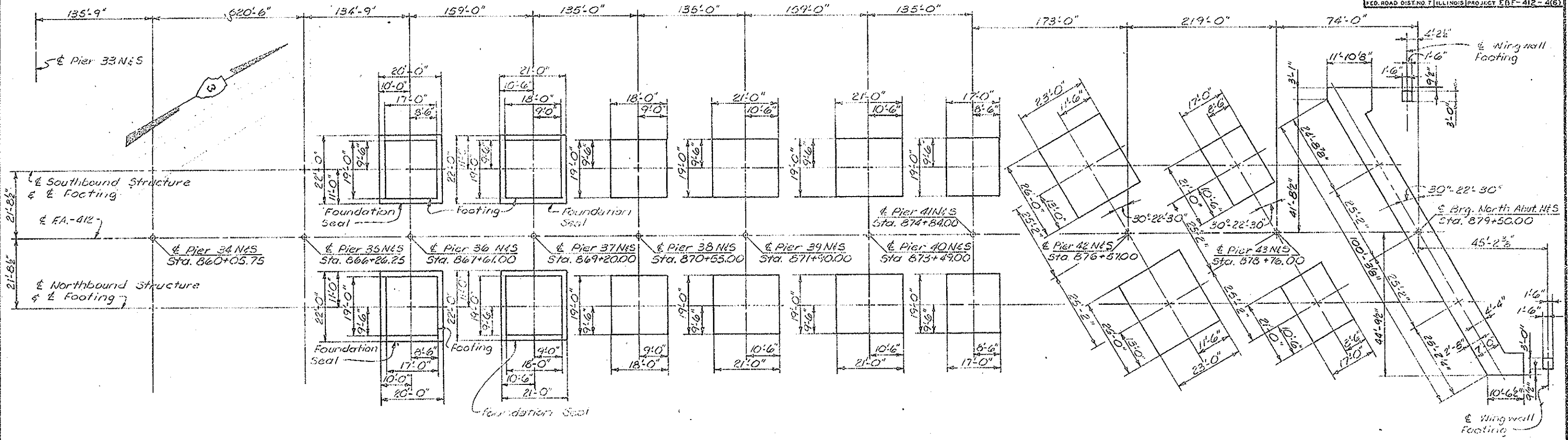
AS REVISED

PROFILE GRADE - CHICAGO ROCK ISLAND & PACIFIC RAILROAD

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 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

NORTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 GENERAL PLAN & ELEVATION
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO



M. Schaefer
 DESIGNED
 M. Bello
 CHECKED
 L. S. Maus
 DRAWN
 G. J. Routh
 CHECKED

AS REVISED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
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 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

NORTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 FOOTING LAYOUT
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+1600 (FA-412) LASALLE CO.

SHEET NO. 4 OF 76

As revised 4-30-85

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: THE 1983 EDITION OF THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION," ADDENDUMS AND THE SPECIAL PROVISIONS SHALL GOVERN.

DESIGN SPECIFICATIONS: IN ACCORDANCE WITH AASHTO 1977 EDITION AND 1978, 1979, 1980 AND 1981 INTERIM SPECIFICATIONS.

SEE PROPOSAL FOR BORING DATA.

CALCULATED WEIGHT OF STRUCTURAL STEEL:

3,075,210 LBS. #183
194,300 LBS. #222
889,150 LBS. #223 (GRADE 50)

BEARING SEAT SURFACES SHALL BE CONSTRUCTED OR ADJUSTED TO THE DESIGNATED ELEVATIONS WITHIN A TOLERANCE OF 1/8 INCH. ADJUSTMENT SHALL BE MADE EITHER BY GRINDING THE SURFACE OR BY SHIMMING THE BEARING. TWO 1/8" ADJUSTING SHIMS, OF THE DIMENSIONS OF THE BOTTOM BEARING PLATE, SHALL BE PROVIDED FOR EACH BEARING IN ADDITION TO ALL OTHER PLATES OR SHIMS.

FASTENERS SHALL BE HIGH STRENGTH BOLTS. BOLTS 7/8" DIA., OPEN HOLES 15/16" DIA., UNLESS OTHERWISE NOTED.

ANCHOR BOLTS SHALL BE SET BEFORE BOLTING CROSS FRAMES OVER SUPPORTS.

THE MAIN LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS SHALL CONFORM TO THE SUPPLEMENTAL REQUIREMENTS FOR NOTCH TOUGHNESS ZONE 2. THESE COMPONENTS ARE THE TENSION FLANGES, WEBS AND ALL SPLICE MATERIAL OF THE STEEL GIRDERS.

THE ZINC-SILICATE AND VINYL PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL EXCEPT AS OTHERWISE NOTED. See Special Provisions.

REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 OR M 53, GRADE 60.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR GIRDERS NOR TO THE TOP FLANGE FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE PIER SUPPORTS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

CAST STEEL SHALL BE CLASS 70. STRUCTURAL STEEL WELDMENTS OF EQUAL SECTIONS AND MEETING AASHTO M183 MAY BE SUBSTITUTED FOR CASTINGS AT THE OPTION OF THE CONTRACTOR, SUBJECT TO APPROVAL BY THE ENGINEER PRIOR TO FABRICATION. NO ADDITIONAL COMPENSATION WILL BE ALLOWED THE CONTRACTOR FOR THIS SUBSTITUTION.

THE BACK FACE OF ABUTMENT SHALL BE WATERPROOFED ACCORDING TO ARTICLE 503.11 OF THE STANDARD SPECIFICATIONS.

ALL PILES SHALL HAVE CAST STEEL METAL SHOES "HARD-BITE" HP77600 AS MANUFACTURED BY ASSOCIATED PILE AND FITTING CORP., OR AN APPROVED EQUAL. METAL SHOES SHALL BE ATTACHED TO THE PILE AS RECOMMENDED BY THE MANUFACTURER.

THE CONTRACTOR SHALL DRIVE SEVEN HP14 X 89 TEST PILES IN PERMANENT LOCATIONS AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.

A SUFFIX OF "N" OR "S" INDICATES NORTHBOUND OR SOUTHBOUND ROADWAY.

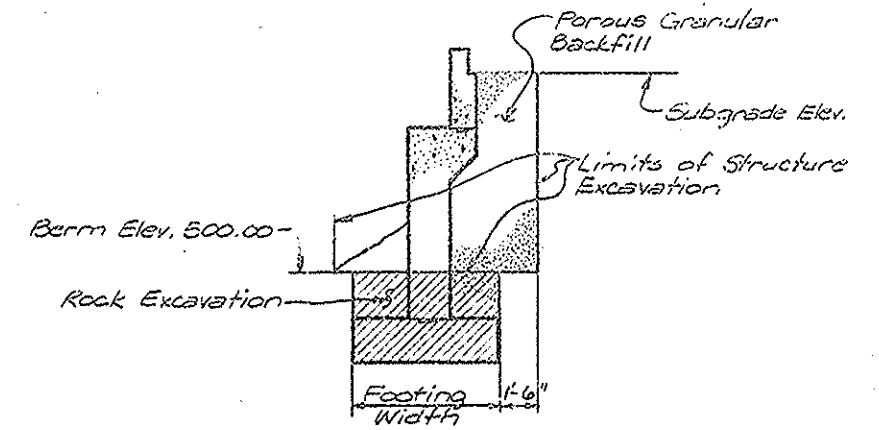
SEALCOATS FOR COFFERDAMS AT PIERS 36 (N&S) AND 37 (N&S) ARE DESIGNED FOR HIGH WATER ELEVATION 451.00.

TOTAL BILL OF MATERIAL				
ITEM	UNIT	SUPERSTR.	SUBSTR.	TOTAL
STRUCTURE EXCAVATION	CU. YD.	---	428	428
ROCK EXCAVATION FOR STRUCTURES	CU. YD.	---	145	145
COFFERDAM EXCAVATION	CU. YD.	---	3216	3216
POROUS GRANULAR BACKFILL	CU. YD.	---	216	216
CLASS X CONCRETE	CU. YD.	5047.6	4657.3	9704.9
SEAL COAT CONCRETE	CU. YD.	---	233.0	233.0
REINFORCEMENT BARS	LBS.	---	619,020	619,020
REINFORCEMENT BARS (EPOXY COATED)	LBS.	1,403,120	610	1,403,730
STEEL PILES HP 14 X 89	LIN. FT.	---	10,120	10,120
TEST PILES, STEEL HP 14 X 89 (INCLUDES METAL SHOE)	EACH	---	8	8
METAL SHOES	EACH	---	231	231
COFFERDAM (PIER 36N)	EACH	---	1	1
COFFERDAM (PIER 36S)	EACH	---	1	1
COFFERDAM (PIER 37N)	EACH	---	1	1
COFFERDAM (PIER 37S)	EACH	---	1	1
COFFERDAM (PIER 38N)	EACH	---	1	1
COFFERDAM (PIER 38S)	EACH	---	1	1
COFFERDAM (PIER 39N)	EACH	---	1	1
COFFERDAM (PIER 39S)	EACH	---	1	1
COFFERDAM (PIER 40N)	EACH	---	1	1
COFFERDAM (PIER 40S)	EACH	---	1	1
COFFERDAM (PIER 41N)	EACH	---	1	1
COFFERDAM (PIER 41S)	EACH	---	1	1
COFFERDAM (PIER 42N)	EACH	---	1	1
COFFERDAM (PIER 42S)	EACH	---	1	1
NEOPRENE EXPANSION JOINT (2")	LIN. FT.	97	---	97
NEOPRENE EXPANSION JOINT (4")	LIN. FT.	181	---	181
NEOPRENE EXPANSION JOINT (6-1/2")	LIN. FT.	168	---	168
NEOPRENE EXPANSION JOINT (13")	LIN. FT.	84	---	84
PERFORMED JOINT SEAL (4")	LIN. FT.	344	---	344
PERFORMED JOINT SEAL (5")	LIN. FT.	622	---	622
FURNISHING AND ERECTING STRUCTURAL STEEL	LUMP SUM	0.22	---	0.22
STUD SHEAR CONNECTORS	EACH	22,530	---	22,530
**PAINTING ARCH SPAN	LUMP SUM	1	---	1
FLOOR DRAINS	EACH	67	---	67
DRAINAGE SCUPPERS	EACH	30	---	30
PROTECTIVE COAT	SQ. YD.	17,227	---	17,227
LANXON WEATHER-EDGE STONE MASONRY	SQ. FT.	---	2130	2130
STRUCTURE LIGHTING	LUMP SUM	1	---	1
NAVIGATION LIGHTING	LUMP SUM	1	---	1
NAME PLATE	EACH	1	---	1

*SEE SPECIAL PROVISIONS
**INCLUDES 3194.2 TONS OF STRUCTURAL STEEL

FIELD WELDING - ARCH SPAN

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO ANY PART OF THE ARCH SPAN TIE GIRDER, THE BOTTOM FLANGES AND WEBS OF THE ARCH SPAN FLOOR BEAMS AND STRINGERS NOR TO THE TOP FLANGE OF STRINGERS FOR A DISTANCE EQUAL TO ONE-FOURTH THE SPAN LENGTH EACH WAY FROM THE CENTER OF SUPPORT OVER WHICH THE MEMBER IS CONTINUOUS. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.



ABUTMENT EXCAVATION AND BACKFILL

STATION 863+16.00
BUILT 198 BY
STATE OF ILLINOIS
F.A. RT. 412 SEC. 50-4B
F.A. PROJ. EBF-412-4(6)
LOADING HS20
STR. NO.

LETTERING FOR NAME PLATE
(See Std. 2113)
Structure Number to be
supplied by District

**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE**

GENERAL NOTES AND QUANTITIES
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

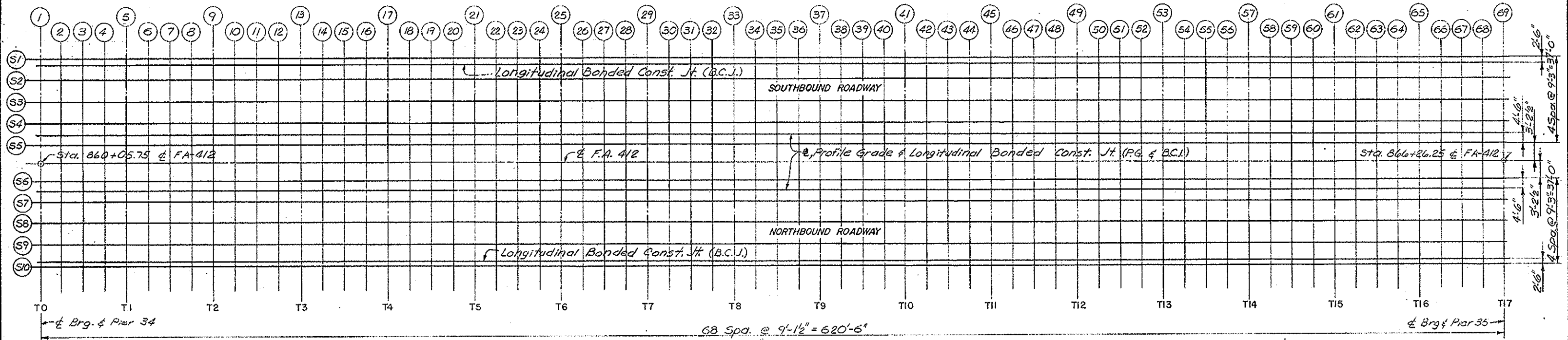
AS REVISED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED M. Schaefer
CHECKED M. Bello
DRAWN S. Stegman
CHECKED B. Beck

As revised 4-30-85

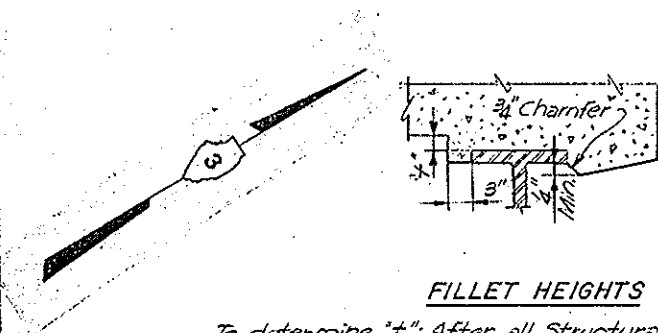
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-48	LASALLE	245	175
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



SPAN 35

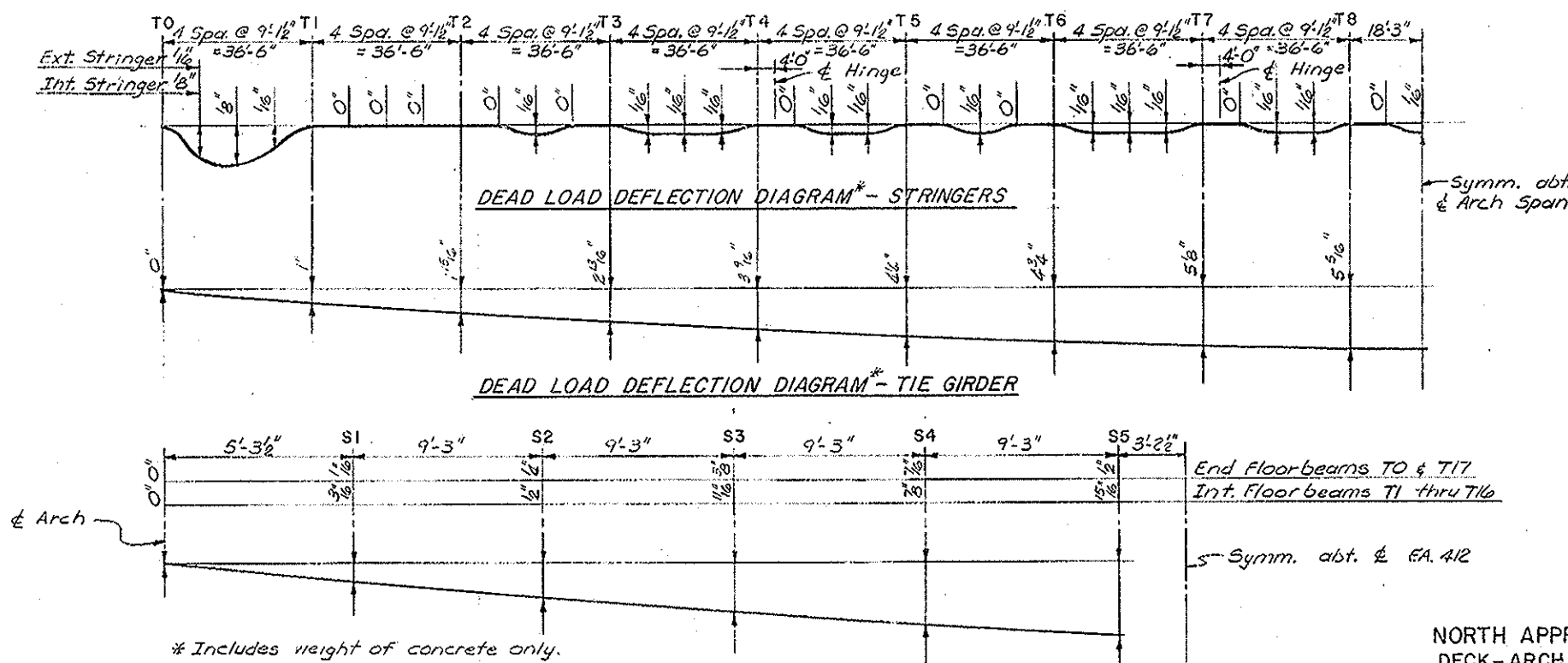
PLAN

Note: Stations & offsets are given along and normal to C.F.A.-412.



FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflections" minus Slab thickness, equals the fillet heights "t" above top flange of girders.



T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
L.S. Maus
DRAWN
T. Ritzheimer
CHECKED

Note: The above Deflections are not to be used in the Field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NORTH APPROACH
DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPAN 35
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 6 OF 76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-4B	LASALLE	245	176
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION			
1	CL END FB	S1 & S10 BCJ	40.208 37.708	521.466 521.516	521.473 521.526	12	S1 & S10 BCJ	861+06.125 861+06.125	40.208 37.708	521.002 521.052	521.034 521.090	23	S1 & S10 BCJ	862+06.500 862+06.500	40.208 37.708	520.538 520.588	520.929 520.986			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.651 521.836 522.021 522.116 522.206	521.671 521.865 522.057 522.154 522.245															
2		S1 & S10 BCJ	40.208 37.708	521.424 521.474	521.461 521.515	13	S1 & S10 BCJ	861+15.250 861+15.250	40.208 37.708	520.960 520.910	521.208 521.265	24	S1 & S10 BCJ	862+15.625 862+15.625	40.208 37.708	520.496 520.546	520.897 520.953			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.609 521.794 521.979 522.074 522.164	521.663 521.860 522.054 522.151 522.242															
3		S1 & S10 BCJ	40.208 37.708	521.302 521.432	521.443 521.498	14	S1 & S10 BCJ	861+24.375 861+24.375	40.208 37.708	520.918 520.968	521.185 521.242	25	S1 & S10 BCJ	862+24.750 862+24.750	40.208 37.708	520.454 520.504	520.864 520.921			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.567 521.752 521.937 522.032 522.122	521.649 521.849 522.045 522.143 522.234															
4		S1 & S10 BCJ	40.208 37.708	521.340 521.390	521.421 521.477	15	S1 & S10 BCJ	861+33.500 861+33.500	40.208 37.708	520.875 520.925	521.160 521.216	26	S1 & S10 BCJ	862+33.875 862+33.875	40.208 37.708	520.411 520.461	520.832 520.889			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.525 521.710 521.895 521.990 522.080	521.630 521.833 522.031 522.129 522.221															
5		S1 & S10 BCJ	40.208 37.708	521.297 521.347	521.396 521.452	16	S1 & S10 BCJ	861+42.625 861+42.625	40.208 37.708	520.833 520.883	521.132 521.189	27	S1 & S10 BCJ	862+43.000 862+43.000	40.208 37.708	520.369 520.419	520.800 520.856			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.482 521.667 521.852 521.948 522.037	521.607 521.813 522.013 522.114 522.206															
6		S1 & S10 BCJ	40.208 37.708	521.255 521.305	521.373 521.430	17	S1 & S10 BCJ	861+51.750 861+51.750	40.208 37.708	520.791 520.841	521.101 521.157	28	S1 & S10 BCJ	862+52.125 862+52.125	40.208 37.708	520.327 520.377	520.765 520.821			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.440 521.625 521.810 521.905 521.995	521.584 521.789 521.989 522.088 522.180															
7		S1 & S10 BCJ	40.208 37.708	521.213 521.263	521.302 521.368	18	S1 & S10 BCJ	861+60.875 861+60.875	40.208 37.708	520.749 520.799	521.076 521.132	29	S1 & S10 BCJ	862+61.250 862+61.250	40.208 37.708	520.285 520.335	520.725 520.781			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.263 521.448 521.633 521.728 521.813	521.408 521.614 521.820 522.026 522.135															
8		S1 & S10 BCJ	40.208 37.708	521.171 521.221	521.329 521.385	19	S1 & S10 BCJ	861+70.000 861+70.000	40.208 37.708	520.707 520.757	521.050 521.106	30	S1 & S10 BCJ	862+70.375 862+70.375	40.208 37.708	520.243 520.293	520.690 520.746			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.356 521.541 521.726 521.821 521.911	521.537 521.740 521.939 522.139 522.129															
9		S1 & S10 BCJ	40.208 37.708	521.129 521.179	521.304 521.360	20	S1 & S10 BCJ	861+79.125 861+79.125	40.208 37.708	520.664 520.714	521.021 521.076	31	S1 & S10 BCJ	862+79.500 862+79.500	40.208 37.708	520.200 520.250	520.654 520.710			
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.314 521.499 521.684 521.779 521.869	521.511 521.713 521.911 522.105 522.101															
10		S1 & S10 BCJ	40.208 37.708	521.084 521.134	521.282 521.339	21	S1 & S10 BCJ	861+88.250 861+88.250	40.208 37.708	520.622 520.672	520.989 521.045									
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.271 521.456 521.641 521.737 521.826	521.470 521.673 521.891 522.095 522.081															
11		S1 & S10 BCJ	40.208 37.708	521.044 521.094	521.258 521.315	22	S1 & S10 BCJ	861+97.375 861+97.375	40.208 37.708	520.580 520.630	520.959 521.019									
		S2 & S9 S3 & S8 S4 & S7 PG & BCJ S5 & S6	30.958 21.708 12.458 7.708 3.208	521.229 521.414 521.599 521.694 521.784	521.468 521.671 521.870 522.067 522.060															

NORTH APPROACH
DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPAN 35
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
DRAWN J. Corley
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA.412	50-4B	LASALLE	245	177
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT EBF-412-4(6)		

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
32	S1 & S10	862+88.625	40.208	520.158	520.614	43	S1 & S10	863+89.000	40.208	519.694	520.125	54	S1 & S10	864+89.375	40.208	519.230	519.529
	BCJ	862+88.625	37.708	520.208	520.670		BCJ	863+89.000	37.708	519.744	520.181		BCJ	864+89.375	37.708	519.280	519.506
	S2 & S9	862+88.625	30.958	520.343	520.824		S2 & S9	863+89.000	30.958	519.879	520.334		S2 & S9	864+89.375	30.958	519.415	519.736
	S3 & S8	862+88.625	21.708	520.528	521.028		S3 & S8	863+89.000	21.708	520.064	520.537		S3 & S8	864+89.375	21.708	519.600	519.937
	S4 & S7	862+88.625	12.458	520.713	521.224		S4 & S7	863+89.000	12.458	520.249	520.730		S4 & S7	864+89.375	12.458	519.785	520.137
33	S1 & S10	862+97.750	40.208	520.116	520.574	44	S1 & S10	863+98.125	40.208	519.652	520.073	55	S1 & S10	864+98.500	40.208	519.188	519.475
	BCJ	862+97.750	37.708	520.166	520.630		BCJ	863+98.125	37.708	519.702	520.130		BCJ	864+98.500	37.708	519.238	519.527
	S2 & S9	862+97.750	30.958	520.301	520.783		S2 & S9	863+98.125	30.958	519.837	520.282		S2 & S9	864+98.500	30.958	519.373	519.682
	S3 & S8	862+97.750	21.708	520.486	520.988		S3 & S8	863+98.125	21.708	520.022	520.486		S3 & S8	864+98.500	21.708	519.558	519.885
	S4 & S7	862+97.750	12.458	520.671	521.186		S4 & S7	863+98.125	12.458	520.207	520.677		S4 & S7	864+98.500	12.458	519.743	520.083
34	S1 & S10	863+06.875	40.208	520.074	520.534	45	S1 & S10	864+07.250	40.208	519.610	520.020	56	S1 & S10	865+07.625	40.208	519.146	519.413
	BCJ	863+06.875	37.708	520.124	520.590		BCJ	864+07.250	37.708	519.640	520.077		BCJ	865+07.625	37.708	519.194	519.475
	S2 & S9	863+06.875	30.958	520.259	520.743		S2 & S9	864+07.250	30.958	519.795	520.230		S2 & S9	865+07.625	30.958	519.331	519.623
	S3 & S8	863+06.875	21.708	520.444	520.948		S3 & S8	864+07.250	21.708	519.980	520.434		S3 & S8	865+07.625	21.708	519.516	519.827
	S4 & S7	863+06.875	12.458	520.629	521.146		S4 & S7	864+07.250	12.458	520.165	520.623		S4 & S7	865+07.625	12.458	519.701	520.026
35	S1 & S10	863+16.000	40.208	520.031	520.493	46	S1 & S10	864+16.375	40.208	519.568	519.969	57	S1 & S10	865+16.750	40.208	519.103	519.351
	BCJ	863+16.000	37.708	520.082	520.547		BCJ	864+16.375	37.708	519.617	520.024		BCJ	865+16.750	37.708	519.153	519.408
	S2 & S9	863+16.000	30.958	520.217	520.705		S2 & S9	864+16.375	30.958	519.753	520.177		S2 & S9	865+16.750	30.958	519.288	519.561
	S3 & S8	863+16.000	21.708	520.402	520.908		S3 & S8	864+16.375	21.708	519.938	520.383		S3 & S8	865+16.750	21.708	519.473	519.766
	S4 & S7	863+16.000	12.458	520.587	521.106		S4 & S7	864+16.375	12.458	520.122	520.573		S4 & S7	865+16.750	12.458	519.658	519.965
36	S1 & S10	863+25.125	40.208	519.989	520.449	47	S1 & S10	864+25.500	40.208	519.525	519.916	58	S1 & S10	865+25.875	40.208	519.061	519.293
	BCJ	863+25.125	37.708	520.039	520.505		BCJ	864+25.500	37.708	519.575	519.975		BCJ	865+25.875	37.708	519.111	519.349
	S2 & S9	863+25.125	30.958	520.174	520.658		S2 & S9	864+25.500	30.958	519.710	520.124		S2 & S9	865+25.875	30.958	519.246	519.502
	S3 & S8	863+25.125	21.708	520.359	520.863		S3 & S8	864+25.500	21.708	519.895	520.330		S3 & S8	865+25.875	21.708	519.431	519.706
	S4 & S7	863+25.125	12.458	520.544	521.061		S4 & S7	864+25.500	12.458	520.080	520.524		S4 & S7	865+25.875	12.458	519.616	519.905
37	S1 & S10	863+34.250	40.208	519.947	520.405	48	S1 & S10	864+34.625	40.208	519.483	519.867	59	S1 & S10	865+35.000	40.208	519.019	519.233
	BCJ	863+34.250	37.708	519.997	520.461		BCJ	864+34.625	37.708	519.533	519.918		BCJ	865+35.000	37.708	519.069	519.290
	S2 & S9	863+34.250	30.958	520.132	520.614		S2 & S9	864+34.625	30.958	519.668	520.072		S2 & S9	865+35.000	30.958	519.204	519.443
	S3 & S8	863+34.250	21.708	520.317	520.819		S3 & S8	864+34.625	21.708	519.853	520.277		S3 & S8	865+35.000	21.708	519.389	519.646
	S4 & S7	863+34.250	12.458	520.502	521.017		S4 & S7	864+34.625	12.458	520.038	520.472		S4 & S7	865+35.000	12.458	519.574	519.845
38	S1 & S10	863+43.375	40.208	519.905	520.361	49	S1 & S10	864+43.750	40.208	519.441	519.800	60	S1 & S10	865+44.125	40.208	518.935	519.133
	BCJ	863+43.375	37.708	519.955	520.417		BCJ	864+43.750	37.708	519.491	519.864		BCJ	865+44.125	37.708	518.985	519.193
	S2 & S9	863+43.375	30.958	520.090	520.571		S2 & S9	864+43.750	30.958	519.626	520.017		S2 & S9	865+44.125	30.958	519.160	519.397
	S3 & S8	863+43.375	21.708	520.275	520.775		S3 & S8	864+43.750	21.708	519.811	520.212		S3 & S8	865+44.125	21.708	519.295	519.562
	S4 & S7	863+43.375	12.458	520.460	520.973		S4 & S7	864+43.750	12.458	519.996	520.420		S4 & S7	865+44.125	12.458	519.480	519.747
39	S1 & S10	863+52.500	40.208	519.863	520.317	50	S1 & S10	864+52.875	40.208	519.399	519.755	61	S1 & S10	865+53.250	40.208	518.893	519.051
	BCJ	863+52.500	37.708	519.913	520.373		BCJ	864+52.875	37.708	519.449	519.811		BCJ	865+53.250	37.708	518.943	519.211
	S2 & S9	863+52.500	30.958	520.048	520.525		S2 & S9	864+52.875	30.958	519.584	519.964		S2 & S9	865+53.250	30.958	519.066	519.333
	S3 & S8	863+52.500	21.708	520.233	520.729		S3 & S8	864+52.875	21.708	519.769	520.168		S3 & S8	865+53.250	21.708	519.250	519.517
	S4 & S7	863+52.500	12.458	520.418	520.924		S4 & S7	864+52.875	12.458	519.954	520.366		S4 & S7	865+53.250	12.458	519.434	519.701
40	S1 & S10	863+61.625	40.208	519.821	520.268	51	S1 & S10	864+62.000	40.208	519.357	519.700	62	S1 & S10	865+62.375	40.208	518.851	519.083
	BCJ	863+61.625	37.708	519.871	520.324		BCJ	864+62.000	37.708	519.406	519.755		BCJ	865+62.375	37.708	518.901	519.243
	S2 & S9	863+61.625	30.958	520.006	520.473		S2 & S9	864+62.000	30.958	519.542	519.909		S2 & S9	865+62.375	30.958	519.022	519.289
	S3 & S8	863+61.625	21.708	520.191	520.677		S3 & S8	864+62.000	21.708	519.727	520.112		S3 & S8	865+62.375	21.708	519.305	519.572
	S4 & S7	863+61.625	12.458	520.376	520.873		S4 & S7	864+62.000	12.458	519.911	520.310		S4 & S7	865+62.375	12.458	519.489	519.756
41	S1 & S10	863+70.750	40.208	519.779	520.219	52	S1 & S10	864+71.125	40.208	519.314	519.641	63	S1 & S10	865+71.500	40.208	518.803	519.015
	BCJ	863+70.750	37.708	519.828	520.274		BCJ	864+71.125	37.708	519.364	519.697		BCJ	865+71.500	37.708	518.853	519.175
	S2 & S9	863+70.750	30.958	519.964	520.424		S2 & S9	864+71.125	30.958	519.499	519.847		S2 & S9	865+71.500	30.958	518.988	519.335
	S3 & S8	863+70.750	21.708	520.148	520.627		S3 & S8	864+71.125	21.708	519.684	520.050		S3 & S8	865+71.500	21.708	519.270	519.537
	S4 & S7	863+70.750	12.458	520.333	520.823		S4 & S7	864+71.125	12.458	519.869	520.247		S4 & S7	865+71.500	12.458	519.454	519.721
42	S1 & S10	863+79.875	40.208	519.736	520.174	53	S1 & S10	864+80.250	40.208	519.272	519.582	64	S1 & S10	865+80.625	40.208	518.766	519.008
	BCJ	863+79.875	37.708	519.786	520.230		BCJ	864+80.250	37.708	519.322	519.638		BCJ	865+80.625	37.708	518.816	519.168
	S2 & S9	863+79.875	30.958	519.921	520.381		S2 & S9	864+80.250	30.958	519.457	519.780		S2 & S9	865+80.625	30.958	518.951	519.327
	S3 & S8	863+79.875	21.708	520.106	520.583		S3 & S8	864+80.250	21.708	519.642	519.970		S3 & S8	865+80.625	21.708	519.186	519.453
	S4 & S7	863+79.875	12.458	520.291	520.778		S4 & S7	864+80.250	12.458	519.827	520.107		S4 & S7	865+80.625	12.458	519.421	519.688

**NORTH APPROACH
DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPAN 35
FA-412 OVER ILLINOIS RIVER**

SECTION 50-4B PROJECT EBF-412-4(6)
STA: 863+16.00 (FA-412) LASALLE CO.

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
J. Corley
DRAWN
T. Ritzheimer
CHECKED</

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FA.412	50-4B	LASALLE	245	178
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT EBF-412-4(6)		

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR BEAD LOAD DEFLECTION
60	S1 & S10	865+44.125	40.208	518.977	519.173
	BCJ	865+44.125	37.708	519.027	519.227
	S2 & S9	865+44.125	30.958	517.162	519.380
	S3 & S8	865+44.125	21.708	519.347	519.583
	S4 & S7	865+44.125	12.458	519.532	519.781
	PG & BCJ	865+44.125	7.708	519.627	519.880
	SS & S6	865+44.125	3.208	519.717	519.972
61	S1 & S10	865+53.250	40.208	518.935	519.110
	BCJ	865+53.250	37.708	518.985	519.166
	S2 & S9	865+53.250	30.958	519.120	519.317
	S3 & S8	865+53.250	21.708	519.305	519.519
	S4 & S7	865+53.250	12.458	519.490	519.717
	PG & BCJ	865+53.250	7.708	519.585	519.815
	SS & S6	865+53.250	3.208	519.675	519.907
62	S1 & S10	865+62.375	40.208	518.892	519.050
	BCJ	865+62.375	37.708	518.942	519.106
	S2 & S9	865+62.375	30.958	519.077	519.258
	S3 & S8	865+62.375	21.708	519.262	519.461
	S4 & S7	865+62.375	12.458	519.447	519.660
	PG & BCJ	865+62.375	7.708	519.542	519.750
	SS & S6	865+62.375	3.208	519.632	519.850
63	S1 & S10	865+71.500	40.208	518.850	518.989
	BCJ	865+71.500	37.708	518.900	519.045
	S2 & S9	865+71.500	30.958	519.035	519.199
	S3 & S8	865+71.500	21.708	519.220	519.403
	S4 & S7	865+71.500	12.458	519.405	519.602
	PG & BCJ	865+71.500	7.708	519.500	519.700
	SS & S6	865+71.500	3.208	519.590	519.792
64	S1 & S10	865+80.625	40.208	518.808	518.926
	BCJ	865+80.625	37.708	518.858	518.983
	S2 & S9	865+80.625	30.958	518.993	519.137
	S3 & S8	865+80.625	21.708	519.178	519.342
	S4 & S7	865+80.625	12.458	519.363	519.542
	PG & BCJ	865+80.625	7.708	519.458	519.641
	SS & S6	865+80.625	3.208	519.548	519.733
65	S1 & S10	865+89.750	40.208	518.766	518.864
	BCJ	865+89.750	37.708	518.816	518.921
	S2 & S9	865+89.750	30.958	518.951	519.076
	S3 & S8	865+89.750	21.708	519.136	519.282
	S4 & S7	865+89.750	12.458	519.321	519.482
	PG & BCJ	865+89.750	7.708	519.416	519.582
	SS & S6	865+89.750	3.208	519.506	519.674
66	S1 & S10	865+98.875	40.208	518.724	518.805
	BCJ	865+98.875	37.708	518.774	518.861
	S2 & S9	865+98.875	30.958	518.909	519.014
	S3 & S8	865+98.875	21.708	519.094	519.217
	S4 & S7	865+98.875	12.458	519.279	519.415
	PG & BCJ	865+98.875	7.708	519.374	519.513
	SS & S6	865+98.875	3.208	519.464	519.605
67	S1 & S10	866+08.000	40.208	518.681	518.742
	BCJ	866+08.000	37.708	518.731	518.797
	S2 & S9	866+08.000	30.958	518.866	518.948
	S3 & S8	866+08.000	21.708	519.051	519.148
	S4 & S7	866+08.000	12.458	519.236	519.344
	PG & BCJ	866+08.000	7.708	519.331	519.442
	SS & S6	866+08.000	3.208	519.421	519.533
68	S1 & S10	866+17.125	40.208	518.639	518.676
	BCJ	866+17.125	37.708	518.689	518.730
	S2 & S9	866+17.125	30.958	518.824	518.878
	S3 & S8	866+17.125	21.708	519.009	519.075
	S4 & S7	866+17.125	12.458	519.194	519.269
	PG & BCJ	866+17.125	7.708	519.289	519.366
	SS & S6	866+17.125	3.208	519.379	519.457
69 CL END FB	S1 & S10	866+26.250	40.208	518.597	518.604
	BCJ	866+26.250	37.708	518.647	518.657
	S2 & S9	866+26.250	30.958	518.782	518.802
	S3 & S8	866+26.250	21.708	518.967	518.996
	S4 & S7	866+26.250	12.458	519.152	519.188
	PG & BCJ	866+26.250	7.708	519.247	519.285
	SS & S6	866+26.250	3.208	519.337	519.376

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
DRAWN J. Corley
T. Ritzheimer
CHECKED

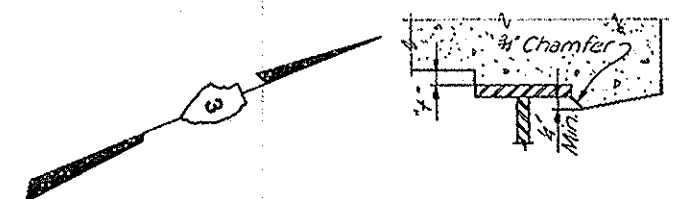
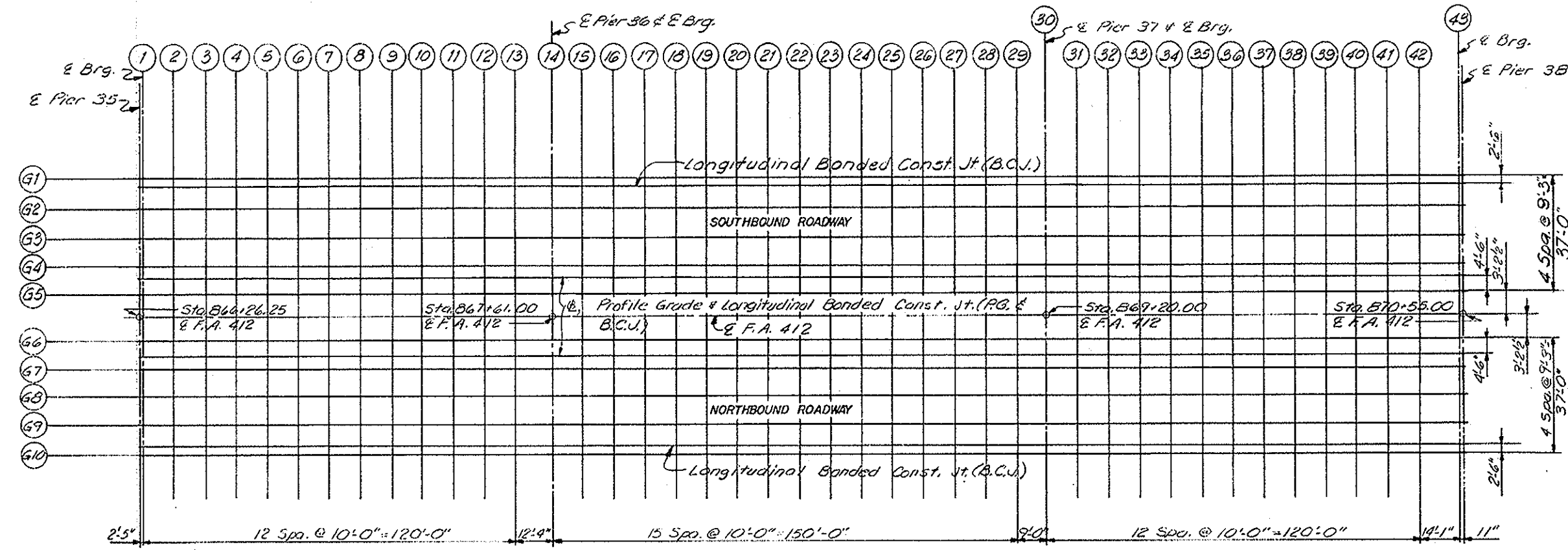
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NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

NORTH APPROACH
DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPAN 35
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

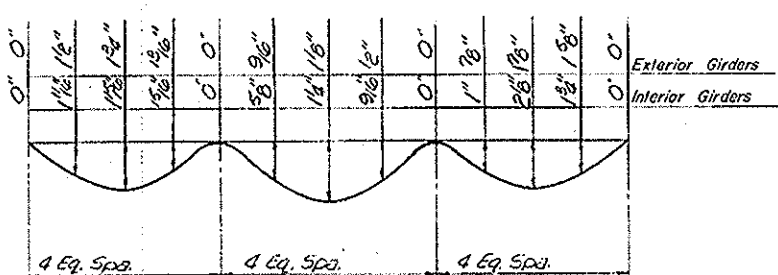
SHEET NO. 9 OF 76



Note: Stations and offsets are given along and normal to E.F.A.-412.

PLAN

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	
1	G1 & G10	866+29.667	40.208	518.586	518.586	
	BCJ	866+29.667	37.708	518.636	518.636	
	G2 & G9	866+29.667	30.958	518.771	518.771	
	G3 & G8	866+29.667	21.708	518.956	518.956	
	G4 & G7	866+29.667	12.458	519.141	519.141	
2	PG & BCJ	866+29.667	7.708	519.236	519.236	
	G5 & G6	866+29.667	3.208	519.326	519.326	
	3	G1 & G10	866+38.667	40.208	518.540	518.585
		BCJ	866+38.667	37.708	518.590	518.637
		G2 & G9	866+38.667	30.958	518.725	518.776
G3 & G8		866+38.667	21.708	518.910	518.961	
G4 & G7		866+38.667	12.458	519.094	519.146	
4	PG & BCJ	866+38.667	7.708	519.190	519.239	
	G5 & G6	866+38.667	3.208	519.280	519.325	
	5	G1 & G10	866+48.667	40.208	518.493	518.379
		BCJ	866+48.667	37.708	518.543	518.632
		G2 & G9	866+48.667	30.958	518.678	518.776
G3 & G8		866+48.667	21.708	518.863	518.961	
G4 & G7		866+48.667	12.458	519.048	519.146	
6	PG & BCJ	866+48.667	7.708	519.143	519.235	
	G5 & G6	866+48.667	3.208	519.233	519.319	
	7	G1 & G10	866+58.667	40.208	518.447	518.565
		BCJ	866+58.667	37.708	518.497	518.519
		G2 & G9	866+58.667	30.958	518.632	518.763
G3 & G8		866+58.667	21.708	518.817	518.948	
G4 & G7		866+58.667	12.458	519.002	519.133	
8	PG & BCJ	866+58.667	7.708	519.097	519.221	
	G5 & G6	866+58.667	3.208	519.187	519.305	
	9	G1 & G10	866+68.667	40.208	518.401	518.540
		BCJ	866+68.667	37.708	518.451	518.595
		G2 & G9	866+68.667	30.958	518.586	518.742
G3 & G8		866+68.667	21.708	518.771	518.927	
G4 & G7		866+68.667	12.458	518.956	519.112	
10	PG & BCJ	866+68.667	7.708	519.051	519.198	
	G5 & G6	866+68.667	3.208	519.141	519.280	



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
J. Corley
R. LUEB
DRAWN
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

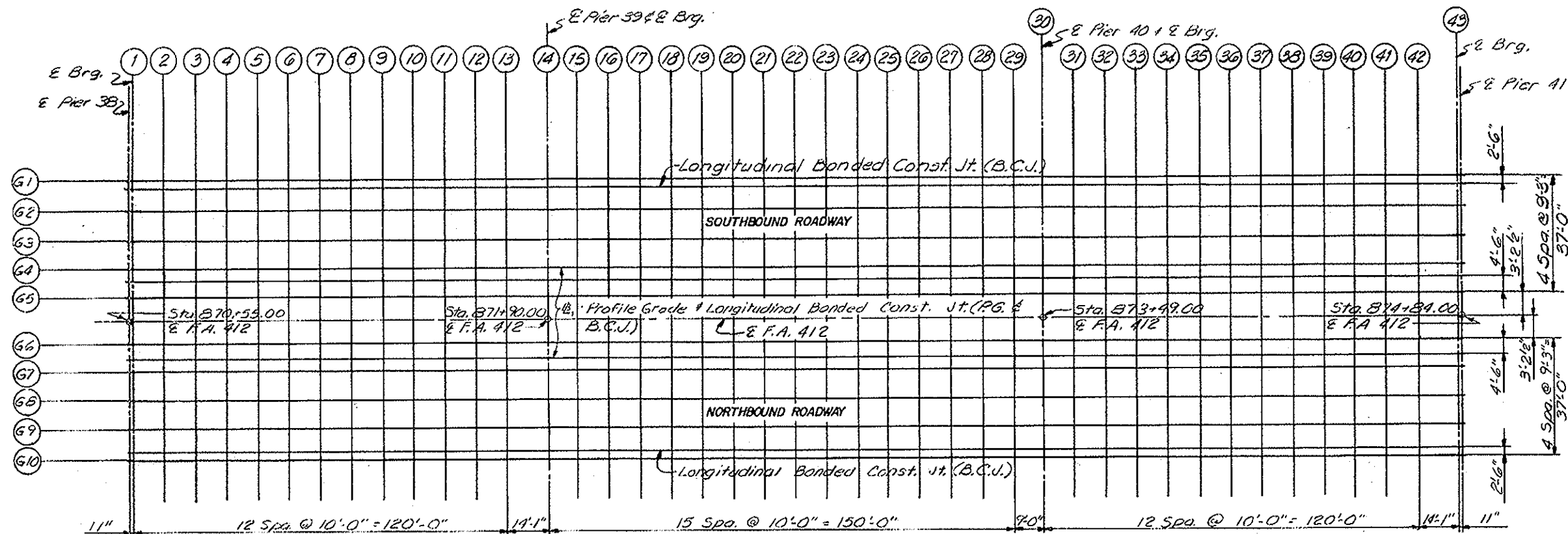
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 36 THRU 38 NORTHBOUND & SOUTHBOUND
FA- 412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(B)
STA. 863+1600 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

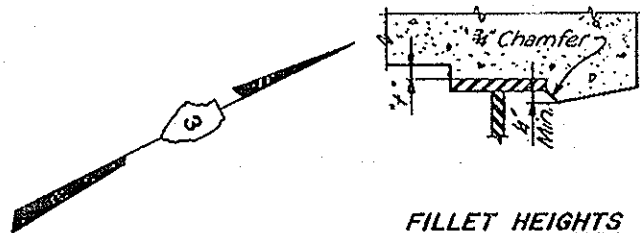
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 412	50-4B	LASALLE	245	180
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT EBF-412-4(6)		

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ADJUSTED FOR DEAD LOAD DEFLECTION
11	G1 & G10	867+28.667	40.208	518.124	518.193	23	G1 & G10	868+51.000	40.208	517.558	517.646	35	G1 & G10	869+70.000	40.208	517.008	517.127
	BCJ	867+28.667	37.708	518.174	518.243		BCJ	868+51.000	37.708	517.608	517.697		BCJ	869+70.000	37.708	517.058	517.183
	G2 & G9	867+28.667	30.958	518.309	518.386		G2 & G9	868+51.000	30.958	517.743	517.841		G2 & G9	869+70.000	30.958	517.192	517.329
	G3 & G8	867+28.667	21.708	518.493	518.571		G3 & G8	868+51.000	21.708	517.928	518.026		G3 & G8	869+70.000	21.708	517.377	517.514
	G4 & G7	867+28.667	12.458	518.678	518.756		G4 & G7	868+51.000	12.458	518.113	518.211		G4 & G7	869+70.000	12.458	517.563	517.699
	PG & BCJ	867+28.667	7.708	518.773	518.847		PG & BCJ	868+51.000	7.708	518.208	518.301		PG & BCJ	869+70.000	7.708	517.657	517.793
	G5 & G6	867+28.667	3.208	518.864	518.933		G5 & G6	868+51.000	3.208	518.298	518.386		G5 & G6	869+70.000	3.208	517.748	517.887
12	G1 & G10	867+38.667	40.208	518.077	518.116	24	G1 & G10	868+61.000	40.208	517.512	517.588	36	G1 & G10	869+80.000	40.208	516.961	517.106
	BCJ	867+38.667	37.708	518.127	518.168		BCJ	868+61.000	37.708	517.562	517.639		BCJ	869+80.000	37.708	517.011	517.161
	G2 & G9	867+38.667	30.958	518.262	518.308		G2 & G9	868+61.000	30.958	517.697	517.781		G2 & G9	869+80.000	30.958	517.146	517.309
	G3 & G8	867+38.667	21.708	518.447	518.493		G3 & G8	868+61.000	21.708	517.882	517.966		G3 & G8	869+80.000	21.708	517.331	517.494
	G4 & G7	867+38.667	12.458	518.632	518.678		G4 & G7	868+61.000	12.458	518.067	518.151		G4 & G7	869+80.000	12.458	517.516	517.679
	PG & BCJ	867+38.667	7.708	518.727	518.769		PG & BCJ	868+61.000	7.708	518.162	518.241		PG & BCJ	869+80.000	7.708	517.611	517.765
	G5 & G6	867+38.667	3.208	518.817	518.856		G5 & G6	868+61.000	3.208	518.252	518.328		G5 & G6	869+80.000	3.208	517.701	517.846
13	G1 & G10	867+48.667	40.208	518.031	518.047	25	G1 & G10	868+71.000	40.208	517.465	517.524	37	G1 & G10	869+90.000	40.208	516.915	517.075
	BCJ	867+48.667	37.708	518.081	518.098		BCJ	868+71.000	37.708	517.515	517.576		BCJ	869+90.000	37.708	516.965	517.130
	G2 & G9	867+48.667	30.958	518.216	518.235		G2 & G9	868+71.000	30.958	517.650	517.717		G2 & G9	869+90.000	30.958	517.100	517.278
	G3 & G8	867+48.667	21.708	518.401	518.420		G3 & G8	868+71.000	21.708	517.835	517.902		G3 & G8	869+90.000	21.708	517.285	517.463
	G4 & G7	867+48.667	12.458	518.586	518.605		G4 & G7	868+71.000	12.458	518.020	518.087		G4 & G7	869+90.000	12.458	517.470	517.648
	PG & BCJ	867+48.667	7.708	518.681	518.709		PG & BCJ	868+71.000	7.708	518.115	518.178		PG & BCJ	869+90.000	7.708	517.565	517.734
	G5 & G6	867+48.667	3.208	518.771	518.787		G5 & G6	868+71.000	3.208	518.205	518.264		G5 & G6	869+90.000	3.208	517.655	517.815
14 C.L. PIER 36	G1 & G10	867+61.000	40.208	517.974	517.974	26	G1 & G10	868+81.000	40.208	517.419	517.459	38	G1 & G10	870+00.000	40.208	516.869	517.032
	BCJ	867+61.000	37.708	518.024	518.024		BCJ	868+81.000	37.708	517.469	517.511		BCJ	870+00.000	37.708	516.919	517.087
	G2 & G9	867+61.000	30.958	518.159	518.159		G2 & G9	868+81.000	30.958	517.604	517.651		G2 & G9	870+00.000	30.958	517.054	517.237
	G3 & G8	867+61.000	21.708	518.344	518.344		G3 & G8	868+81.000	21.708	517.789	517.836		G3 & G8	870+00.000	21.708	517.239	517.422
	G4 & G7	867+61.000	12.458	518.529	518.529		G4 & G7	868+81.000	12.458	517.974	518.021		G4 & G7	870+00.000	12.458	517.424	517.607
	PG & BCJ	867+61.000	7.708	518.624	518.624		PG & BCJ	868+81.000	7.708	518.069	518.112		PG & BCJ	870+00.000	7.708	517.519	517.692
	G5 & G6	867+61.000	3.208	518.714	518.714		G5 & G6	868+81.000	3.208	518.159	518.199		G5 & G6	870+00.000	3.208	517.609	517.772
15	G1 & G10	867+71.000	40.208	517.928	517.929	27	G1 & G10	868+91.000	40.208	517.373	517.393	39	G1 & G10	870+10.000	40.208	516.823	516.979
	BCJ	867+71.000	37.708	517.978	517.979		BCJ	868+91.000	37.708	517.423	517.444		BCJ	870+10.000	37.708	516.873	517.034
	G2 & G9	867+71.000	30.958	518.113	518.115		G2 & G9	868+91.000	30.958	517.558	517.581		G2 & G9	870+10.000	30.958	517.008	517.184
	G3 & G8	867+71.000	21.708	518.298	518.300		G3 & G8	868+91.000	21.708	517.743	517.766		G3 & G8	870+10.000	21.708	517.193	517.369
	G4 & G7	867+71.000	12.458	518.483	518.485		G4 & G7	868+91.000	12.458	517.928	517.951		G4 & G7	870+10.000	12.458	517.378	517.554
	PG & BCJ	867+71.000	7.708	518.579	518.580		PG & BCJ	868+91.000	7.708	518.023	518.045		PG & BCJ	870+10.000	7.708	517.473	517.640
	G5 & G6	867+71.000	3.208	518.668	518.669		G5 & G6	868+91.000	3.208	518.113	518.133		G5 & G6	870+10.000	3.208	517.563	517.719
16	G1 & G10	867+81.000	40.208	517.882	517.889	28	G1 & G10	869+01.000	40.208	517.327	517.333	40	G1 & G10	870+20.000	40.208	516.776	516.912
	BCJ	867+81.000	37.708	517.931	517.940		BCJ	869+01.000	37.708	517.377	517.384		BCJ	870+20.000	37.708	516.826	516.966
	G2 & G9	867+81.000	30.958	518.066	518.078		G2 & G9	869+01.000	30.958	517.512	517.520		G2 & G9	870+20.000	30.958	516.961	517.112
	G3 & G8	867+81.000	21.708	518.251	518.263		G3 & G8	869+01.000	21.708	517.697	517.704		G3 & G8	870+20.000	21.708	517.146	517.297
	G4 & G7	867+81.000	12.458	518.437	518.448		G4 & G7	869+01.000	12.458	517.882	517.889		G4 & G7	870+20.000	12.458	517.331	517.482
	PG & BCJ	867+81.000	7.708	518.531	518.541		PG & BCJ	869+01.000	7.708	517.977	517.984		PG & BCJ	870+20.000	7.708	517.426	517.569
	G5 & G6	867+81.000	3.208	518.622	518.629		G5 & G6	869+01.000	3.208	518.067	518.073		G5 & G6	870+20.000	3.208	517.516	517.652
17	G1 & G10	867+91.000	40.208	517.835	517.861	29	G1 & G10	869+11.000	40.208	517.281	517.281	41	G1 & G10	870+30.000	40.208	516.730	516.888
	BCJ	867+91.000	37.708	517.885	517.912		BCJ	869+11.000	37.708	517.331	517.331		BCJ	870+30.000	37.708	516.780	516.931
	G2 & G9	867+91.000	30.958	518.020	518.050		G2 & G9	869+11.000	30.958	517.465	517.466		G2 & G9	870+30.000	30.958	516.915	517.035
	G3 & G8	867+91.000	21.708	518.205	518.235		G3 & G8	869+11.000	21.708	517.650	517.651		G3 & G8	870+30.000	21.708	517.100	517.220
	G4 & G7	867+91.000	12.458	518.390	518.420		G4 & G7	869+11.000	12.458	517.835	517.836		G4 & G7	870+30.000	12.458	517.285	517.405
	PG & BCJ	867+91.000	7.708	518.485	518.513		PG & BCJ	869+11.000	7.708	517.930	517.931		PG & BCJ	870+30.000	7.708	517.380	517.494
	G5 & G6	867+91.000	3.208	518.575	518.601		G5 & G6	869+11.000	3.208	518.021	518.021		G5 & G6	870+30.000	3.208	517.470	517.578
18	G1 & G10	868+01.000	40.208	517.789	517.837	30 C.L. PIER 37	G1 & G10	869+20.000	40.208	517.239	517.239	42	G1 & G10	870+40.000	40.208	516.684	516.753
	BCJ	868+01.000	37.708	517.839	517.888		BCJ	869+20.000	37.708	517.289	517.289		BCJ	870+40.000	37.708	516.734	516.806
	G2 & G9	868+01.000	30.958	517.974	518.026		G2 & G9	869+20.000	30.958	517.424	517.424		G2 & G9	870+40.000	30.958	516.869	516.949
	G3 & G8	868+01.000	21.708	518.159	518.211		G3 & G8	869+20.000	21.708	517.609	517.609		G3 & G8	870+40.000	21.708	517.054	517.134
	G4 & G7	868+01.000	12.458	518.344	518.396		G4 & G7	869+20.000	12.458	517.794	517.794		G4 & G7	870+40.000	12.458	517.239	517.319
	PG & BCJ	868+01.000	7.708	518.4													

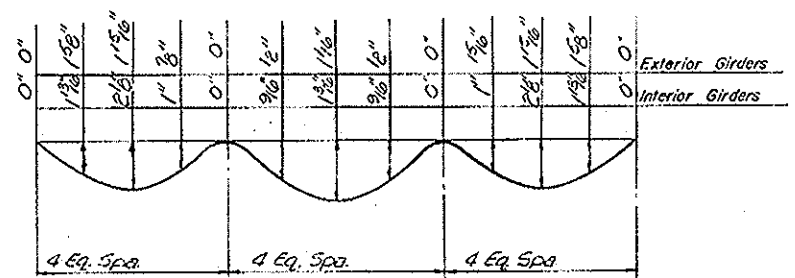


Note: Stations and offsets are given along and normal to E.F.A.-412.



FILLET HEIGHTS

To determine "f": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the "Theoretical Grade Elevation Adjusted for Dead Load Deflection" minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM

(INCLUDES WEIGHT OF CONCRETE ONLY)
Note: The deflections are not to be used in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections."

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 39	G1 & G10	870+55.917	40.208	516.610	516.610	6	G1 & G10	871+05.917	40.208	516.379	516.542
	BCJ	870+55.917	37.708	516.660	516.660		BCJ	871+05.917	37.708	516.429	516.597
	G2 & G9	870+55.917	30.958	516.795	516.795		G2 & G9	871+05.917	30.958	516.564	516.747
	G3 & G8	870+55.917	21.708	516.980	516.980		G3 & G8	871+05.917	21.708	516.749	516.932
	G4 & G7	870+55.917	12.458	517.165	517.165		G4 & G7	871+05.917	12.458	516.934	517.117
	PG & BCJ	870+55.917	7.708	517.260	517.260		PG & BCJ	871+05.917	7.708	517.029	517.202
	G5 & G6	870+55.917	3.208	517.350	517.350		G5 & G6	871+05.917	3.208	517.119	517.282
2	G1 & G10	870+65.917	40.208	516.564	516.614	8	G1 & G10	871+25.917	40.208	516.287	516.441
	BCJ	870+65.917	37.708	516.614	516.665		BCJ	871+25.917	37.708	516.337	516.497
	G2 & G9	870+65.917	30.958	516.749	516.804		G2 & G9	871+25.917	30.958	516.472	516.545
	G3 & G8	870+65.917	21.708	516.934	516.989		G3 & G8	871+25.917	21.708	516.656	516.829
	G4 & G7	870+65.917	12.458	517.119	517.174		G4 & G7	871+25.917	12.458	516.842	517.014
	PG & BCJ	870+65.917	7.708	517.214	517.265		PG & BCJ	871+25.917	7.708	516.937	517.100
	G5 & G6	870+65.917	3.208	517.304	517.354		G5 & G6	871+25.917	3.208	517.027	517.181
3	G1 & G10	870+75.917	40.208	516.518	516.610	9	G1 & G10	871+35.917	40.208	516.240	516.377
	BCJ	870+75.917	37.708	516.568	516.662		BCJ	871+35.917	37.708	516.290	516.431
	G2 & G9	870+75.917	30.958	516.703	516.804		G2 & G9	871+35.917	30.958	516.425	516.577
	G3 & G8	870+75.917	21.708	516.888	516.989		G3 & G8	871+35.917	21.708	516.610	516.762
	G4 & G7	870+75.917	12.458	517.073	517.174		G4 & G7	871+35.917	12.458	516.795	516.947
	PG & BCJ	870+75.917	7.708	517.168	517.264		PG & BCJ	871+35.917	7.708	516.890	517.034
	G5 & G6	870+75.917	3.208	517.258	517.350		G5 & G6	871+35.917	3.208	516.980	517.117
4	G1 & G10	870+85.917	40.208	516.471	516.597	10	G1 & G10	871+45.917	40.208	516.194	516.302
	BCJ	870+85.917	37.708	516.521	516.651		BCJ	871+45.917	37.708	516.244	516.356
	G2 & G9	870+85.917	30.958	516.656	516.796		G2 & G9	871+45.917	30.958	516.379	516.501
	G3 & G8	870+85.917	21.708	516.842	516.981		G3 & G8	871+45.917	21.708	516.564	516.686
	G4 & G7	870+85.917	12.458	517.027	517.167		G4 & G7	871+45.917	12.458	516.749	516.871
	PG & BCJ	870+85.917	7.708	517.122	517.234		PG & BCJ	871+45.917	7.708	516.844	516.959
	G5 & G6	870+85.917	3.208	517.211	517.337		G5 & G6	871+45.917	3.208	516.934	517.042
5	G1 & G10	870+95.917	40.208	516.425	516.574	11	G1 & G10	871+55.917	40.208	516.174	516.262
	BCJ	870+95.917	37.708	516.475	516.629		BCJ	871+55.917	37.708	516.224	516.316
	G2 & G9	870+95.917	30.958	516.610	516.777		G2 & G9	871+55.917	30.958	516.379	516.501
	G3 & G8	870+95.917	21.708	516.795	516.962		G3 & G8	871+55.917	21.708	516.564	516.686
	G4 & G7	870+95.917	12.458	516.980	517.147		G4 & G7	871+55.917	12.458	516.749	516.871
	PG & BCJ	870+95.917	7.708	517.075	517.233		PG & BCJ	871+55.917	7.708	516.844	516.959
	G5 & G6	870+95.917	3.208	517.165	517.314		G5 & G6	871+55.917	3.208	516.934	517.042

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 39 THRU 41 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
J. Carley
DRAWN
R. LUER
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO. SECTION COUNTY TOTAL SHEET NO.
F.A. 412 50-48 LASALLE 245 182
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)

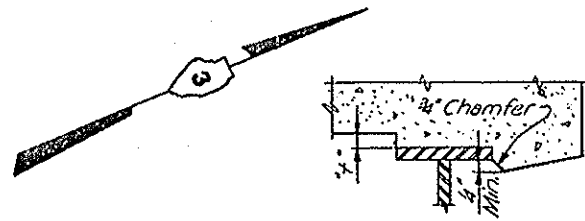
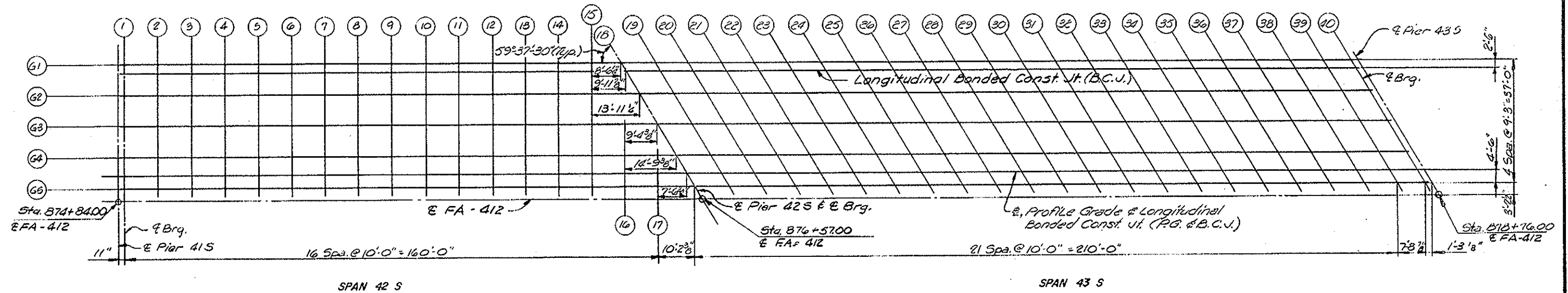
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ADJUSTED FOR DEAD LOAD DEFLECTION
11	G1 & G10 BCJ	871+55.917 871+55.917	40.208 37.708	516.148 516.198	516.226 516.279	23	G1 & G10 BCJ	872+80.000 872+80.000	40.208 37.708	515.574 515.624	515.659 515.712	35	G1 & G10 BCJ	873+99.000 873+99.000	40.208 37.708	515.024 515.074	515.145 515.199
12	G1 & G10 BCJ	871+65.917 871+65.917	40.208 37.708	516.102 516.152	516.149 516.201	24	G1 & G10 BCJ	872+90.000 872+90.000	40.208 37.708	515.528 515.578	515.603 515.653	36	G1 & G10 BCJ	874+09.000 874+09.000	40.208 37.708	514.978 515.028	515.122 515.177
13	G1 & G10 BCJ	871+75.917 871+75.917	40.208 37.708	516.055 516.105	516.078 516.129	25	G1 & G10 BCJ	873+00.000 873+00.000	40.208 37.708	515.482 515.531	515.540 515.591	37	G1 & G10 BCJ	874+19.000 874+19.000	40.208 37.708	514.931 514.981	515.092 515.147
14 C.L. PIER 39	G1 & G10 BCJ	871+90.000 871+90.000	40.208 37.708	515.990 516.040	515.990 516.040	26	G1 & G10 BCJ	873+10.000 873+10.000	40.208 37.708	515.435 515.485	515.475 515.526	38	G1 & G10 BCJ	874+29.000 874+29.000	40.208 37.708	514.885 514.935	515.049 515.104
15	G1 & G10 BCJ	872+00.000 872+00.000	40.208 37.708	515.944 515.994	515.945 515.995	27	G1 & G10 BCJ	873+20.000 873+20.000	40.208 37.708	515.389 515.439	515.408 515.459	39	G1 & G10 BCJ	874+39.000 874+39.000	40.208 37.708	514.859 514.889	514.997 515.052
16	G1 & G10 BCJ	872+10.000 872+10.000	40.208 37.708	515.898 515.948	515.905 515.955	28	G1 & G10 BCJ	873+30.000 873+30.000	40.208 37.708	515.343 515.393	515.348 515.399	40	G1 & G10 BCJ	874+49.000 874+49.000	40.208 37.708	514.792 514.843	514.931 514.986
17	G1 & G10 BCJ	872+20.000 872+20.000	40.208 37.708	515.852 515.902	515.875 515.925	29	G1 & G10 BCJ	873+40.000 873+40.000	40.208 37.708	515.297 515.347	515.298 515.348	41	G1 & G10 BCJ	874+59.000 874+59.000	40.208 37.708	514.746 514.796	514.856 514.910
18	G1 & G10 BCJ	872+30.000 872+30.000	40.208 37.708	515.805 515.855	515.849 515.900	30 C.L. PIER 40	G1 & G10 BCJ	873+49.000 873+49.000	40.208 37.708	515.255 515.305	515.255 515.305	42	G1 & G10 BCJ	874+69.000 874+69.000	40.208 37.708	514.700 514.750	514.771 514.823
19	G1 & G10 BCJ	872+40.000 872+40.000	40.208 37.708	515.759 515.809	515.821 515.873	31	G1 & G10 BCJ	873+59.000 873+59.000	40.208 37.708	515.209 515.259	515.222 515.273	43 C.L. BRG. PIER 41	G1 & G10 BCJ	874+83.083 874+83.083	40.208 37.708	514.635 514.685	514.635 514.685
20	G1 & G10 BCJ	872+50.000 872+50.000	40.208 37.708	515.713 515.763	515.770 515.822	32	G1 & G10 BCJ	873+69.000 873+69.000	40.208 37.708	515.163 515.213	515.198 515.249		G2 & G9 BCJ	874+83.083 874+83.083	30.958 21.708	514.820 515.005	514.820 515.005
21	G1 & G10 BCJ	872+60.000 872+60.000	40.208 37.708	515.667 515.717	515.752 515.805	33	G1 & G10 BCJ	873+79.000 873+79.000	40.208 37.708	515.116 515.166	515.181 515.233		G3 & G8 BCJ	874+83.083 874+83.083	21.708 12.458	515.005 515.190	515.005 515.190
22	G1 & G10 BCJ	872+70.000 872+70.000	40.208 37.708	515.620 515.670	515.709 515.762	34	G1 & G10 BCJ	873+89.000 873+89.000	40.208 37.708	515.070 515.120	515.163 515.216		G4 & G7 BCJ	874+83.083 874+83.083	7.708 3.208	515.285 515.375	515.285 515.375

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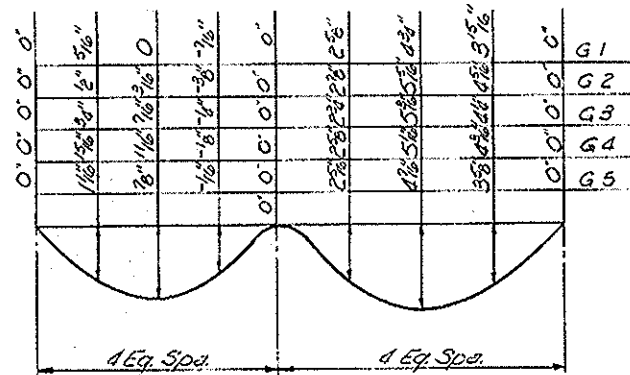
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



Note: Stations and offsets are given along and normal to E FA-412.

FILLET HEIGHTS

To determine 't': After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the Fillet heights 't' above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM

(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 415	G1	874+84.917	40.208	514.627	514.627	8	G1	875+54.917	40.208	514.303	514.306
	BCJ	874+84.917	37.708	514.677	514.677		BCJ	875+54.917	37.708	514.353	514.362
	G2	874+84.917	30.958	514.812	514.812		G2	875+54.917	30.958	514.488	514.512
	G3	874+84.917	21.708	514.997	514.997		G3	875+54.917	21.708	514.673	514.722
	G4	874+84.917	12.458	515.182	515.182		G4	875+54.917	12.458	514.858	514.933
	PG & BCJ	874+84.917	7.708	515.277	515.277		PG & BCJ	875+54.917	7.708	514.953	515.035
	G5	874+84.917	3.208	515.367	515.367		G5	875+54.917	3.208	515.043	515.132
2	G1	874+94.917	40.208	514.580	514.589	9	G1	875+64.917	40.208	514.257	514.249
	BCJ	874+94.917	37.708	514.630	514.640		BCJ	875+64.917	37.708	514.307	514.303
	G2	874+94.917	30.958	514.765	514.779		G2	875+64.917	30.958	514.442	514.433
	G3	874+94.917	21.708	514.950	514.971		G3	875+64.917	21.708	514.627	514.633
	G4	874+94.917	12.458	515.135	515.161		G4	875+64.917	12.458	514.812	514.874
	PG & BCJ	874+94.917	7.708	515.230	515.257		PG & BCJ	875+64.917	7.708	514.907	514.977
	G5	874+94.917	3.208	515.320	515.348		G5	875+64.917	3.208	514.997	515.074
3	G1	875+04.917	40.208	514.534	514.552	10	G1	875+74.917	40.208	514.210	514.190
	BCJ	875+04.917	37.708	514.584	514.605		BCJ	875+74.917	37.708	514.260	514.244
	G2	875+04.917	30.958	514.719	514.747		G2	875+74.917	30.958	514.396	514.391
	G3	875+04.917	21.708	514.904	514.942		G3	875+74.917	21.708	514.580	514.599
	G4	875+04.917	12.458	515.089	515.137		G4	875+74.917	12.458	514.765	514.811
	PG & BCJ	875+04.917	7.708	515.184	515.234		PG & BCJ	875+74.917	7.708	514.860	514.915
	G5	875+04.917	3.208	515.274	515.325		G5	875+74.917	3.208	514.950	515.013
4	G1	875+14.917	40.208	514.488	514.511	11	G1	875+84.917	40.208	514.164	514.135
	BCJ	875+14.917	37.708	514.538	514.565		BCJ	875+84.917	37.708	514.214	514.188
	G2	875+14.917	30.958	514.673	514.711		G2	875+84.917	30.958	514.349	514.331
	G3	875+14.917	21.708	514.858	514.909		G3	875+84.917	21.708	514.534	514.536
	G4	875+14.917	12.458	515.043	515.109		G4	875+84.917	12.458	514.719	514.745
	PG & BCJ	875+14.917	7.708	515.138	515.207		PG & BCJ	875+84.917	7.708	514.814	514.851
	G5	875+14.917	3.208	515.228	515.299		G5	875+84.917	3.208	514.904	514.951
5	G1	875+24.917	40.208	514.442	514.466	12	G1	875+94.917	40.208	514.118	514.084
	BCJ	875+24.917	37.708	514.492	514.521		BCJ	875+94.917	37.708	514.168	514.135
	G2	875+24.917	30.958	514.627	514.670		G2	875+94.917	30.958	514.303	514.274
	G3	875+24.917	21.708	514.812	514.871		G3	875+94.917	21.708	514.488	514.473
	G4	875+24.917	12.458	515.097	515.075		G4	875+94.917	12.458	514.673	514.681
	PG & BCJ	875+24.917	7.708	515.092	515.174		PG & BCJ	875+94.917	7.708	514.768	514.785
	G5	875+24.917	3.208	515.182	515.266		G5	875+94.917	3.208	514.858	514.884
6	G1	875+34.917	40.208	514.396	514.415	7	G1	875+44.917	40.208	514.349	514.362
	BCJ	875+34.917	37.708	514.445	514.471		BCJ	875+44.917	37.708	514.399	514.419
	G2	875+34.917	30.958	514.580	514.621		G2	875+44.917	30.958	514.534	514.569
	G3	875+34.917	21.708	514.765	514.828		G3	875+44.917	21.708	514.719	514.777
	G4	875+34.917	12.458	514.950	515.034		G4	875+44.917	12.458	514.904	514.987
	PG & BCJ	875+34.917	7.708	515.045	515.133		PG & BCJ	875+44.917	7.708	514.999	515.088
	G5	875+34.917	3.208	515.135	515.227		G5	875+44.917	3.208	515.089	515.183

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 42 & 43 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

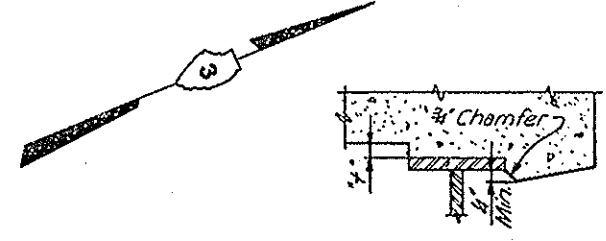
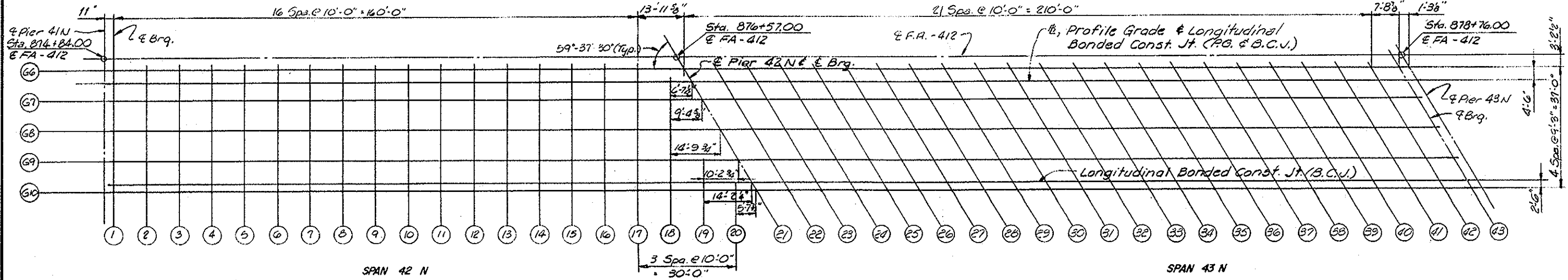
DESIGNED
T. Ritzheimer
L. Glaser
CHECKED
S. Stegman
DRAWN
J. Carley
T. Ritzheimer
CHECKED

6692
3795518

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	184
FED. ROAD DIST. NO.	ILLINOIS PROJECT EBF-412-4(6)			

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	
13	G1	876+04.917	40.208	514.072	514.038	24	G1	876+93.433	40.208	513.662	513.905	34	G1	877+93.433	40.208	513.200	513.539	
	BCJ	876+04.917	37.708	514.122	514.037		BCJ	876+94.399	37.708	513.706	513.954		BCJ	877+94.899	37.708	513.243	513.591	
	G2	876+04.917	30.958	514.257	514.222		G2	876+98.855	30.958	513.822	514.089		G2	877+98.855	30.958	513.360	513.733	
	G3	876+04.917	21.708	514.442	514.418		G3	877+04.276	21.708	513.982	514.238		G3	878+04.276	21.708	513.520	513.886	
	G4	876+04.917	12.458	514.627	514.619		G4	877+09.698	12.458	514.142	514.390		G4	878+09.698	12.458	513.680	514.043	
14	PG & BCJ	876+04.917	7.708	514.722	514.722	PG & BCJ	877+12.482	7.708	514.224	514.456	PG & BCJ	878+12.482	7.708	513.762	514.102			
	G5	876+04.917	3.208	514.812	514.820	G5	877+15.120	3.208	514.302	514.519	G5	878+15.120	3.208	513.840	514.156			
	15	G1	876+14.917	40.208	514.025	513.994	25	G1	877+03.433	40.208	513.616	513.903	35	G1	878+03.433	40.208	513.154	513.451
		BCJ	876+14.917	37.708	514.075	514.043		BCJ	877+04.899	37.708	513.659	513.954		BCJ	878+04.899	37.708	513.197	513.502
		G2	876+14.917	30.958	514.210	514.176		G2	877+08.855	30.958	513.776	514.092		G2	878+08.855	30.958	513.314	513.641
G3		876+14.917	21.708	514.396	514.366	G3		877+14.276	21.708	513.936	514.244	G3		878+14.276	21.708	513.474	513.794	
G4		876+14.917	12.458	514.581	514.562	G4		877+19.698	12.458	514.094	514.394	G4		878+19.698	12.458	513.634	513.952	
16	PG & BCJ	876+14.917	7.708	514.676	514.662	PG & BCJ	877+22.482	7.708	514.178	514.457	PG & BCJ	878+22.482	7.708	513.716	514.014			
	G5	876+14.917	3.208	514.765	514.759	G5	877+25.120	3.208	514.256	514.517	G5	878+25.120	3.208	513.793	514.071			
	17	G1	876+24.917	40.208	513.979	513.964	26	G1	877+13.433	40.208	513.570	513.897	36	G1	878+13.433	40.208	513.107	513.353
		BCJ	876+24.917	37.708	514.029	514.011		BCJ	877+14.899	37.708	513.613	513.949		BCJ	878+14.899	37.708	513.151	513.403
		G2	876+24.917	30.958	514.164	514.138		G2	877+18.855	30.958	513.730	514.089		G2	878+18.855	30.958	513.267	513.636
G3		876+24.917	21.708	514.349	514.322	G3		877+24.276	21.708	513.890	514.239	G3		878+24.276	21.708	513.427	513.692	
G4		876+24.917	12.458	514.534	514.511	G4		877+29.698	12.458	514.050	514.390	G4		878+29.698	12.458	513.587	513.850	
18 C.L. DRG. PIER 42S	PG & BCJ	876+24.917	7.708	514.629	514.610	PG & BCJ	877+32.482	7.708	514.152	514.442	PG & BCJ	878+32.482	7.708	513.669	513.917			
	G5	876+24.917	3.208	514.719	514.704	G5	877+35.120	3.208	514.210	514.509	G5	878+35.120	3.208	513.747	513.980			
	19	G1	876+34.917	21.708	514.303	514.288	27	G1	877+23.433	40.208	513.524	513.883	37	G1	878+23.433	40.208	513.061	513.248
		G4	876+34.917	12.458	514.488	514.468		BCJ	877+24.899	37.708	513.567	513.936		BCJ	878+24.899	37.708	513.104	513.295
		PG & BCJ	876+34.917	7.708	514.583	514.564		G2	877+28.855	30.958	513.684	514.081		G2	878+28.855	30.958	513.221	513.424
G5		876+34.917	3.208	514.673	514.655	G3		877+34.276	21.708	513.844	514.229	G3		878+34.276	21.708	513.381	513.583	
G4		876+34.917	12.458	514.629	514.610	G4		877+39.698	12.458	514.003	514.379	G4		878+39.698	12.458	513.541	513.742	
20	PG & BCJ	876+34.917	7.708	514.537	514.527	PG & BCJ	877+42.482	7.708	514.086	514.438	PG & BCJ	878+42.482	7.708	513.623	513.812			
	G5	876+34.917	3.208	514.627	514.614	G5	877+45.120	3.208	514.163	514.493	G5	878+45.120	3.208	513.701	513.879			
	21	G1	876+44.917	40.208	513.940	513.940	28	G1	877+33.433	40.208	513.477	513.863	38	G1	878+33.433	40.208	513.015	513.137
		BCJ	876+44.917	37.708	513.983	513.983		BCJ	877+34.899	37.708	513.521	513.918		BCJ	878+34.899	37.708	513.058	513.183
		G2	876+44.917	30.958	514.100	514.100		G2	877+38.855	30.958	513.637	514.062		G2	878+38.855	30.958	513.175	513.308
G3		876+44.917	21.708	514.260	514.260	G3		877+44.276	21.708	513.797	514.212	G3		878+44.276	21.708	513.335	513.470	
G4		876+44.917	12.458	514.420	514.420	G4		877+49.698	12.458	513.957	514.361	G4		878+49.698	12.458	513.493	513.629	
22	PG & BCJ	876+44.917	7.708	514.302	514.302	PG & BCJ	877+52.482	7.708	514.039	514.418	PG & BCJ	878+52.482	7.708	513.577	513.701			
	G5	876+44.917	3.208	514.390	514.380	G5	877+55.120	3.208	514.117	514.472	G5	878+55.120	3.208	513.655	513.769			
	23	G1	876+53.433	40.208	513.894	513.924	29	G1	877+43.433	40.208	513.431	513.833	39	G1	878+43.433	40.208	512.969	513.024
		BCJ	876+53.433	37.708	513.937	513.968		BCJ	877+44.899	37.708	513.474	513.887		BCJ	878+44.899	37.708	513.012	513.068
		G2	876+53.433	30.958	514.053	514.085		G2	877+48.855	30.958	513.591	514.034		G2	878+48.855	30.958	513.129	513.188
G3		876+53.433	21.708	514.213	514.240	G3		877+54.276	21.708	513.751	514.186	G3		878+54.276	21.708	513.289	513.349	
G4		876+53.433	12.458	514.373	514.398	G4		877+59.698	12.458	513.911	514.335	G4		878+59.698	12.458	513.448	513.509	
24	PG & BCJ	876+53.433	7.708	514.456	514.479	PG & BCJ	877+62.482	7.708	513.993	514.391	PG & BCJ	878+62.482	7.708	513.531	513.586			
	G5	876+53.433	3.208	514.533	514.555	G5	877+65.120	3.208	514.071	514.444	G5	878+65.120	3.208	513.608	513.658			
	25	G1	876+63.433	40.208	513.847	513.910	30	G1	877+53.433	40.208	513.385	513.794	40 C.L. DRG. PIER 43S	G1	878+53.433	40.208	512.933	512.933
		BCJ	876+63.433	37.708	513.891	513.956		BCJ	877+54.899	37.708	513.428	513.848		BCJ	878+54.899	37.708	512.976	512.976
		G2	876+63.433	30.958	514.007	514.077		G2	877+58.855	30.958	513.545	513.996		G2	878+58.855	30.958	513.093	513.093
G3		876+63.433	21.708	514.167	514.232	G3		877+64.276	21.708	513.705	514.147	G3		878+64.276	21.708	513.253	513.253	
G4		876+63.433	12.458	514.327	514.388	G4		877+69.698	12.458	513.865	514.299	G4		878+69.698	12.458	513.413	513.413	
26	PG & BCJ	876+63.433	7.708	514.409	514.470	PG & BCJ	877+72.482	7.708	513.947	514.353	PG & BCJ	878+72.482	7.708	513.495	513.495			
	G5	876+63.433	3.208	514.487	514.539	G5	877+75.120	3.208	514.025	514.407	G5	878+75.120	3.208	513.573	513.573			
	27	G1	876+73.433	40.208	513.801	513.901	31	G1	877+63.433	40.208	513.339	513.747	31	G1	878+63.433	40.208	512.933	512.933
		BCJ	876+73.433	37.708	513.844	513.948		BCJ	877+64.899	37.708	513.382	513.801		BCJ	878+64.899	37.708	512.976	512.976
		G2	876+73.433	30.958	513.961	514.077		G2	877+68.855	30.958	513.499	513.948		G2	878+68.855	30.958	513.093	513.093
G3		876+73.433	21.708	514.121	514.231	G3		877+74.276	21.708	513.659	514.100	G3		878+74.276	21.708	513.253	513.253	
G4		876+73.433	12.458	514.281	514.386	G4		877+79.698	12.458	513.819	514.250	G4		878+79.698	12.458	513.413	513.413	
28	PG & BCJ	876+73.433	7.708	514.363	514.461	PG & BCJ	877+82.482	7.708	513.901	514.306	PG & BCJ	878+82.482	7.708	513.495	513.495			
	G5	876+73.433	3.208	514.441	514.532	G5	877+85.120	3.208	513.979	514.359	G5	878+85.120	3.208	513.573	513.573			
	29	G1	876+83.433	40.208	513.755	513.903	32	G1	877+73.433	40.208	513.292	513.689	32	G1	878+73.433	40.208	512.933	512.933
		BCJ	876+83.433	37.708	513.798	513.948		BCJ	877+74.899	37.708	513.336	513.744		BCJ	878+74.899	37.708	512.976	512.976
		G2	876+83.433	30.958	513.915	514.079		G2	877+78.855	30.958	513.452	513.898		G2	878+78.855	30.958	513.093	513.093
G3		876+83.433	21.708	5														

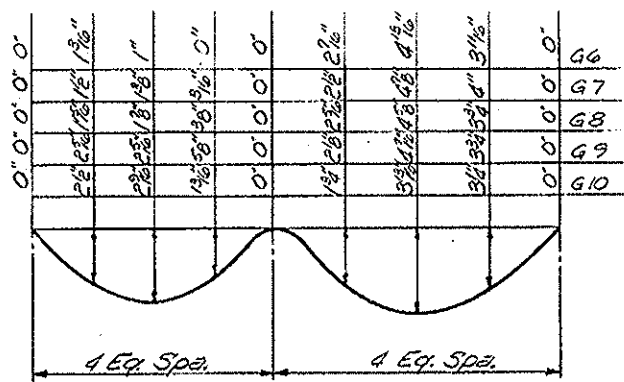


Note: Stations and offsets are given along and normal to E.F.A.-412.

PLAN

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION		
1 C.L. BRG. PIER 41N	G6	874+84.917	3.208	515.367	515.367	8	G6	875+54.917	3.208	515.043	515.142		
	PG & BCJ	874+84.917	7.708	515.277	515.277		PG & BCJ	875+54.917	7.708	514.953	515.070		
	G7	874+84.917	12.458	515.182	515.182		G7	875+54.917	12.458	514.858	514.994		
	G8	874+84.917	21.708	514.997	514.997		G8	875+54.917	21.708	514.673	514.855		
	G9	874+84.917	30.958	514.812	514.812		G9	875+54.917	30.958	514.488	514.709		
	BCJ	874+84.917	37.708	514.677	514.677		BCJ	875+54.917	37.708	514.353	514.535		
	G10	874+84.917	40.208	514.627	514.627		G10	875+54.917	40.208	514.303	514.539		
	2	G6	874+94.917	3.208	515.320		515.351	9	G6	875+64.917	3.208	514.977	515.086
		PG & BCJ	874+94.917	7.708	515.230		515.264		PG & BCJ	875+64.917	7.708	514.907	515.015
		G7	874+94.917	12.458	515.135		515.172		G7	875+64.917	12.458	514.812	514.938
G8		874+94.917	21.708	514.950	514.996	G8	875+64.917		21.708	514.627	514.802		
G9		874+94.917	30.958	514.765	514.818	G9	875+64.917		30.958	514.442	514.657		
BCJ		874+94.917	37.708	514.630	514.677	BCJ	875+64.917		37.708	514.307	514.537		
G10		874+94.917	40.208	514.580	514.633	G10	875+64.917		40.208	514.257	514.491		
3		G6	875+04.917	3.208	515.274	515.330	10		G6	875+74.917	3.208	514.950	515.026
		PG & BCJ	875+04.917	7.708	515.184	515.246			PG & BCJ	875+74.917	7.708	514.860	514.954
		G7	875+04.917	12.458	515.089	515.157			G7	875+74.917	12.458	514.765	514.877
	G8	875+04.917	21.708	514.904	514.989	G8		875+74.917	21.708	514.580	514.740		
	G9	875+04.917	30.958	514.719	514.820	G9		875+74.917	30.958	514.396	514.598		
	BCJ	875+04.917	37.708	514.584	514.686	BCJ		875+74.917	37.708	514.260	514.479		
	G10	875+04.917	40.208	514.534	514.637	G10		875+74.917	40.208	514.210	514.433		
	4	G6	875+14.917	3.208	515.228	515.306		11	G6	875+84.917	3.208	514.904	514.962
		PG & BCJ	875+14.917	7.708	515.138	515.224			PG & BCJ	875+84.917	7.708	514.814	514.889
		G7	875+14.917	12.458	515.043	515.137			G7	875+84.917	12.458	514.719	514.811
G8		875+14.917	21.708	514.858	514.977	G8	875+84.917		21.708	514.534	514.673		
G9		875+14.917	30.958	514.673	514.815	G9	875+84.917		30.958	514.349	514.531		
BCJ		875+14.917	37.708	514.538	514.681	BCJ	875+84.917		37.708	514.214	514.414		
G10		875+14.917	40.208	514.488	514.633	G10	875+84.917		40.208	514.164	514.371		
5		G6	875+24.917	3.208	515.182	515.274	12		G6	875+94.917	3.208	514.858	514.897
		PG & BCJ	875+24.917	7.708	515.092	515.197			PG & BCJ	875+94.917	7.708	514.768	514.822
		G7	875+24.917	12.458	514.997	515.114			G7	875+94.917	12.458	514.673	514.742
	G8	875+24.917	21.708	514.812	514.959	G8		875+94.917	21.708	514.488	514.601		
	G9	875+24.917	30.958	514.627	514.801	G9		875+94.917	30.958	514.303	514.458		
	BCJ	875+24.917	37.708	514.492	514.672	BCJ		875+94.917	37.708	514.168	514.343		
	G10	875+24.917	40.208	514.442	514.624	G10		875+94.917	40.208	514.118	514.301		
	6	G6	875+34.917	3.208	515.135	515.237		7	G6	875+44.917	3.208	515.089	515.193
		PG & BCJ	875+34.917	7.708	515.045	515.161			PG & BCJ	875+44.917	7.708	514.999	515.120
		G7	875+34.917	12.458	514.950	515.081			G7	875+44.917	12.458	514.904	515.042
G8		875+34.917	21.708	514.765	514.933	G8	875+44.917		21.708	514.719	514.898		
G9		875+34.917	30.958	514.580	514.779	G9	875+44.917		30.958	514.534	514.749		
BCJ		875+34.917	37.708	514.443	514.631	BCJ	875+44.917		37.708	514.399	514.623		
G10		875+34.917	40.208	514.396	514.603	G10	875+44.917		40.208	514.349	514.576		

FILLET HEIGHTS
To determine "f": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "f" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)
Note: The deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPANS 42 & 43 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

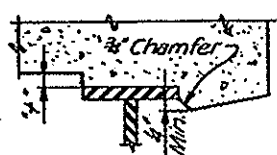
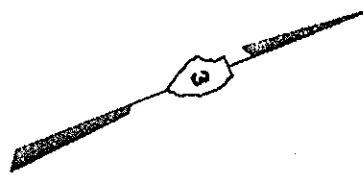
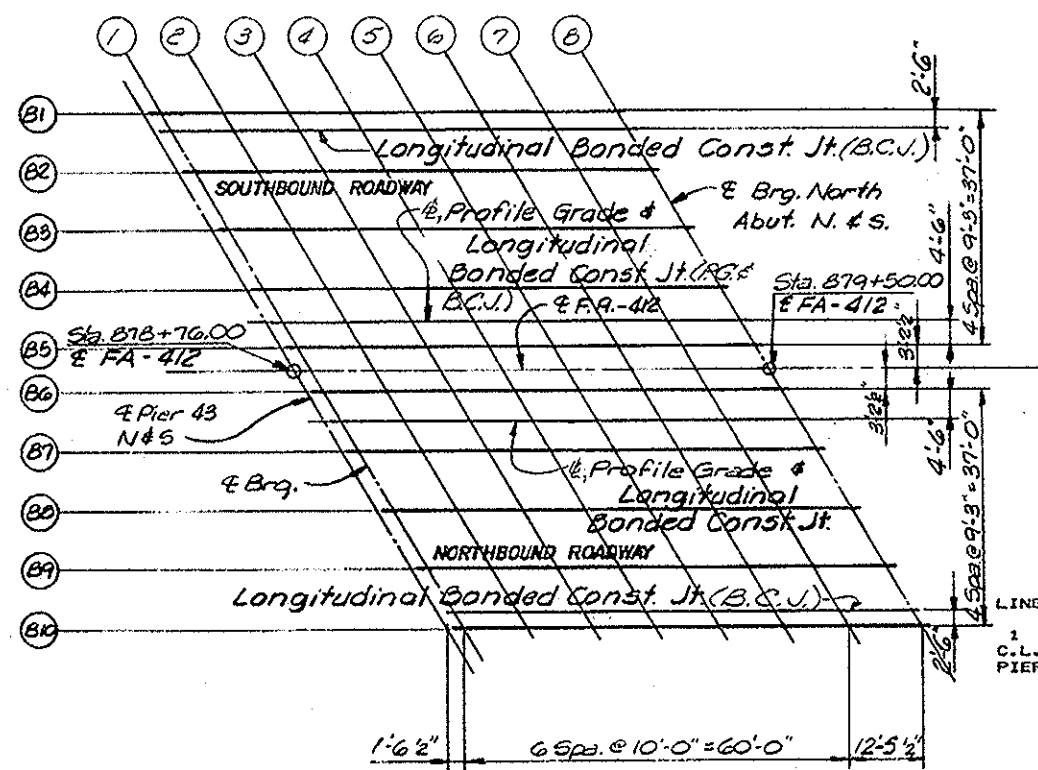
T. Ritzheimer
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PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

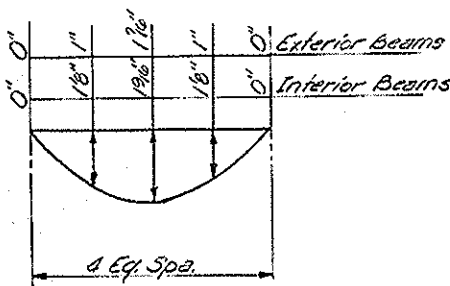
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	186
FED. ROAD DIST. NO. 7	ILLINOIS PROJECT EBF-412-4(6)			

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION		LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION		LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION	
				THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION					THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION						
13	G6 PG & BCJ G7 G8 G9 BCJ G10	876+04.917	3.208	514.812	514.831	25	G6 PG & BCJ G7 G8 G9 BCJ G10	876+08.880	3.208	514.377	514.506	36	G6 PG & BCJ G7 G8 G9 BCJ G10	878+08.880	3.208	513.869	514.216
		876+04.917	7.708	514.722	514.755			877+01.518	7.708	514.275	514.406			878+11.518	7.708	513.766	514.130
		876+04.917	12.458	514.627	514.674			877+04.302	12.458	514.167	514.301			878+14.302	12.458	513.658	514.040
		876+04.917	21.708	514.442	514.527			877+09.723	21.708	513.957	514.092			878+19.723	21.708	513.448	513.816
		876+04.917	30.958	514.257	514.379			877+15.145	30.958	513.747	513.860			878+25.145	30.958	513.238	513.593
		876+04.917	37.708	514.122	514.268			877+19.101	37.708	513.594	513.692			878+29.101	37.708	513.038	513.404
876+04.917	40.208	514.072	514.224	877+20.566	40.208	513.537	513.629	878+30.566	40.208	513.028	513.334						
14	G6 PG & BCJ G7 G8 G9 BCJ G10	876+14.917	3.208	514.765	514.768	26	G6 PG & BCJ G7 G8 G9 BCJ G10	877+08.880	3.208	514.331	514.501	37	G6 PG & BCJ G7 G8 G9 BCJ G10	878+18.880	3.208	513.822	514.139
		876+14.917	7.708	514.676	514.688			877+11.518	7.708	514.229	514.406			878+21.518	7.708	513.720	514.052
		876+14.917	12.458	514.581	514.604			877+14.302	12.458	514.121	514.305			878+24.302	12.458	513.612	513.960
		876+14.917	21.708	514.396	514.451			877+19.723	21.708	513.911	514.082			878+29.723	21.708	513.402	513.738
		876+14.917	30.958	514.210	514.301			877+25.145	30.958	513.701	513.856			878+35.145	30.958	513.192	513.517
		876+14.917	37.708	514.075	514.189			877+29.101	37.708	513.548	513.684			878+39.101	37.708	513.039	513.332
876+14.917	40.208	514.025	514.148	877+30.566	40.208	513.491	513.619	878+40.566	40.208	512.982	513.263						
15	G6 PG & BCJ G7 G8 G9 BCJ G10	876+24.917	3.208	514.719	514.710	27	G6 PG & BCJ G7 G8 G9 BCJ G10	877+18.880	3.208	514.285	514.498	38	G6 PG & BCJ G7 G8 G9 BCJ G10	878+28.880	3.208	513.776	514.054
		876+24.917	7.708	514.629	514.627			877+21.518	7.708	514.183	514.406			878+31.518	7.708	513.674	513.966
		876+24.917	12.458	514.534	514.539			877+24.302	12.458	514.075	514.308			878+34.302	12.458	513.566	513.872
		876+24.917	21.708	514.349	514.380			877+29.723	21.708	513.863	514.081			878+39.723	21.708	513.356	513.652
		876+24.917	30.958	514.164	514.224			877+35.145	30.958	513.653	513.855			878+45.145	30.958	513.146	513.430
		876+24.917	37.708	514.029	514.109			877+39.101	37.708	513.501	513.678			878+49.101	37.708	512.993	513.249
876+24.917	40.208	513.979	514.067	877+40.566	40.208	513.444	513.612	878+50.566	40.208	512.936	513.182						
16	G6 PG & BCJ G7 G8 G9 BCJ G10	876+34.917	3.208	514.673	514.658	29	G6 PG & BCJ G7 G8 G9 BCJ G10	877+28.880	3.208	514.239	514.496	39	G6 PG & BCJ G7 G8 G9 BCJ G10	878+38.880	3.208	513.730	513.958
		876+34.917	7.708	514.583	514.573			877+31.518	7.708	514.136	514.404			878+41.518	7.708	513.628	513.869
		876+34.917	12.458	514.488	514.480			877+34.302	12.458	514.028	514.306			878+44.302	12.458	513.520	513.773
		876+34.917	21.708	514.303	514.313			877+39.723	21.708	513.818	514.081			878+49.723	21.708	513.310	513.553
		876+34.917	30.958	514.118	514.151			877+45.145	30.958	513.608	513.854			878+55.145	30.958	513.100	513.336
		876+34.917	37.708	513.983	514.034			877+49.101	37.708	513.455	513.673			878+59.101	37.708	512.946	513.159
876+34.917	40.208	513.933	513.991	877+50.566	40.208	513.398	513.606	878+60.566	40.208	512.890	513.094						
17	G6 PG & BCJ G7 G8 G9 BCJ G10	876+44.917	3.208	514.627	514.613	29	G6 PG & BCJ G7 G8 G9 BCJ G10	877+38.880	3.208	514.192	514.486	40	G6 PG & BCJ G7 G8 G9 BCJ G10	878+48.880	3.208	513.684	513.957
		876+44.917	7.708	514.537	514.523			877+41.518	7.708	514.090	514.397			878+51.518	7.708	513.581	513.764
		876+44.917	12.458	514.442	514.428			877+44.302	12.458	513.982	514.302			878+54.302	12.458	513.473	513.666
		876+44.917	21.708	514.257	514.253			877+49.723	21.708	513.772	514.079			878+59.723	21.708	513.263	513.448
		876+44.917	30.958	514.072	514.083			877+55.145	30.958	513.562	513.848			878+65.145	30.958	513.053	513.234
		876+44.917	37.708	513.937	513.965			877+59.101	37.708	513.409	513.663			878+69.101	37.708	512.900	513.063
876+44.917	40.208	513.887	513.920	877+60.566	40.208	513.352	513.606	878+70.566	40.208	512.843	513.000						
18	G7 G8 G9 BCJ G10	876+54.917	12.458	514.396	514.386	30	G6 PG & BCJ G7 G8 G9 BCJ G10	877+48.880	3.208	514.146	514.472	41	G6 PG & BCJ G7 G8 G9 BCJ G10	878+58.880	3.208	513.637	513.751
		876+54.917	21.708	514.210	514.204			877+51.518	7.708	514.044	514.364			878+61.518	7.708	513.535	513.657
		876+54.917	30.958	514.025	514.025			877+54.302	12.458	513.936	514.290			878+64.302	12.458	513.427	513.538
		876+54.917	37.708	513.890	513.901			877+59.723	21.708	513.726	514.068			878+69.723	21.708	513.217	513.397
		876+54.917	40.208	513.741	513.755			877+65.145	30.958	513.516	513.836			878+75.145	30.958	513.007	513.126
								877+69.101	37.708	513.363	513.647			878+79.101	37.708	512.854	512.963
				877+70.566	40.208	513.306	513.578	878+80.566	40.208	512.797	512.902						
19	G9 BCJ G10	876+64.917	30.958	513.979	513.976	31	G6 PG & BCJ G7 G8 G9 BCJ G10	877+58.880	3.208	514.100	514.451	42	G6 PG & BCJ G7 G8 G9 BCJ G10	878+68.880	3.208	513.591	513.642
		876+64.917	37.708	513.844	513.845			877+61.518	7.708	513.998	514.365			878+71.518	7.708	513.489	513.540
		876+64.917	40.208	513.794	513.797			877+64.302	12.458	513.890	514.273			878+74.302	12.458	513.381	513.441
20	G10	876+74.917	40.208	513.748	513.745	32	G6 PG & BCJ G7 G8 G9 BCJ G10	877+64.302	12.458	513.844	514.247	43 C.L. BRG. PIER 43N	G6 PG & BCJ G7 G8 G9 BCJ G10	878+76.625	3.208	513.555	513.555
								877+69.723	21.708	513.680	514.050			878+79.262	7.708	513.453	513.453
								877+75.145	30.958	513.469	513.817			878+82.046	12.458	513.345	513.345
								877+79.101	37.708	513.316	513.628			878+87.469	21.708	513.135	513.135
								877+80.566	40.208	513.260	513.557			878+92.689	30.958	512.925	512.925
														878+96.846	37.708	512.772	512.772
								878+90.566	40.208	512.751	512.799						
21 C.L. PIER 42N	G6 PG & BCJ G7 G8 G9 BCJ G10	876+58.880	3.208	514.562	514.562	32	G6 PG & BCJ G7 G8 G9 BCJ G10	877+68.880	3.208	514.053	514.423	43 C.L. BRG. PIER 43N	G6 PG & BCJ G7 G8 G9 BCJ G10	878+76.625	3.208	513.555	513.555
		876+58.880	7.708	514.460	514.460			877+71.518	7.708	513.951	514.338			878+79.262	7.708	513.453	513.453
		876+58.880	12.458	514.352	514.352			877+74.302	12.458	513.844	514.247			878+82.046	12.458	513.345	513.345
		876+58.880	21.708	514.142	514.142			877+79.723	21.708	513.633	514.022			878+87.469	21.708	513.135	513.135
		876+58.880	30.958	513.932	513.932			877+85.145	30.958	513.423	513.792			878+92.689	30.958	512.925	512.925
		876+58.880	37.708	513.779	513.779			877+89.101	37.708	513.270	513.602			878+96.846	37.708	512.772	512.772
876+58.880	40.208	513.722	513.722	877+90.566	40.208	513.213	513.531	878+98.311	40.208	512.715	512.715						
22	G6 PG & BCJ G7 G8 G9 BCJ G10	876+68.880	3.208	514.516	514.539	33	G6 PG & BCJ G7 G8 G9 BCJ G10	877+78.880	3.208	514.007	514.387	43 C.L. BRG. PIER 43N	G6 PG & BCJ G7 G8 G9 BCJ G10	878+76.625	3.208	513.555	513.555
		876+68.880	7.708	514.414	514.437			877+81.518	7.708	513.905	514.301			878+79.262	7.708	513.453	513.453
		876+68.880	12.458	514.306	514.329			877+84.302	12.458	513.797	514.210			878+82.046	12.458	513.345	513.345
		876+68.880	21.708	514.096	514.115			877+89.723	21.708	513.587	513.986			878+87.469	21.708	513.135	513.135
		876+68.880	30.958														



FILLET HEIGHTS

To determine "t": After all Structural Steel has been erected, elevations of the top flanges of the beams shall be taken at the intervals shown above. These elevations subtracted from the Theoretical Grade Elevation Adjusted for Dead Load Deflection minus slab thickness, equals the fillet heights "t" above top flange of girders.



DEAD LOAD DEFLECTION DIAGRAM
(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The deflections are not to be used in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflections.

LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 43N	B1	878+53.979	40.208	512.920	512.920
	BCJ	878+55.444	37.708	512.963	512.963
	B2	878+59.400	30.958	513.080	513.080
	B3	878+64.822	21.708	513.240	513.240
	B4	878+70.243	12.458	513.400	513.400
	PG & BCJ	878+73.028	7.708	513.482	513.482
B5	878+75.665	3.208	513.560	513.560	
2	B1	878+63.979	40.208	512.874	512.923
	BCJ	878+65.444	37.708	512.917	512.968
	B2	878+69.400	30.958	513.034	513.089
	B3	878+74.822	21.708	513.194	513.249
	B4	878+80.243	12.458	513.354	513.408
	PG & BCJ	878+83.028	7.708	513.436	513.488
B5	878+85.665	3.208	513.513	513.562	
3	B1	878+73.979	40.208	512.827	512.916
	BCJ	878+75.444	37.708	512.871	512.963
	B2	878+79.400	30.958	512.988	513.086
	B3	878+84.822	21.708	513.147	513.246
	B4	878+90.243	12.458	513.307	513.406
	PG & BCJ	878+93.028	7.708	513.389	513.483
B5	878+95.665	3.208	513.467	513.556	
4	B1	878+83.979	40.208	512.781	512.894
	BCJ	878+85.444	37.708	512.824	512.941
	B2	878+89.400	30.958	512.941	513.067
	B3	878+94.822	21.708	513.101	513.227
	B4	879+00.243	12.458	513.261	513.387
	PG & BCJ	879+03.028	7.708	513.344	513.462
B5	879+05.665	3.208	513.421	513.534	
5	B1	878+93.979	40.208	512.735	512.852
	BCJ	878+95.444	37.708	512.778	512.899
	B2	878+99.400	30.958	512.895	513.025
	B3	879+04.822	21.708	513.055	513.185
	B4	879+10.243	12.458	513.216	513.346
	PG & BCJ	879+13.028	7.708	513.298	513.421
B5	879+15.665	3.208	513.376	513.493	
6	B1	879+03.979	40.208	512.689	512.790
	BCJ	879+05.444	37.708	512.732	512.836
	B2	879+09.400	30.958	512.850	512.941
	B3	879+14.822	21.708	513.010	513.122
	B4	879+20.243	12.458	513.171	513.283
	PG & BCJ	879+23.028	7.708	513.254	513.360
B5	879+25.665	3.208	513.333	513.433	
7	B1	879+13.979	40.208	512.644	512.711
	BCJ	879+15.444	37.708	512.688	512.756
	B2	879+19.400	30.958	512.805	512.879
	B3	879+24.822	21.708	512.966	513.040
	B4	879+30.243	12.458	513.128	513.202
	PG & BCJ	879+33.028	7.708	513.211	513.281
B5	879+35.665	3.208	513.290	513.357	
8 C.L. BRG. NORTH ABUTMENT S	B1	879+26.433	40.208	512.589	512.589
	BCJ	879+27.899	37.708	512.633	512.633
	B2	879+31.855	30.958	512.751	512.751
	B3	879+37.277	21.708	512.913	512.913
	B4	879+42.699	12.458	513.075	513.075
	PG & BCJ	879+45.482	7.708	513.159	513.159
B5	879+48.120	3.208	513.238	513.238	

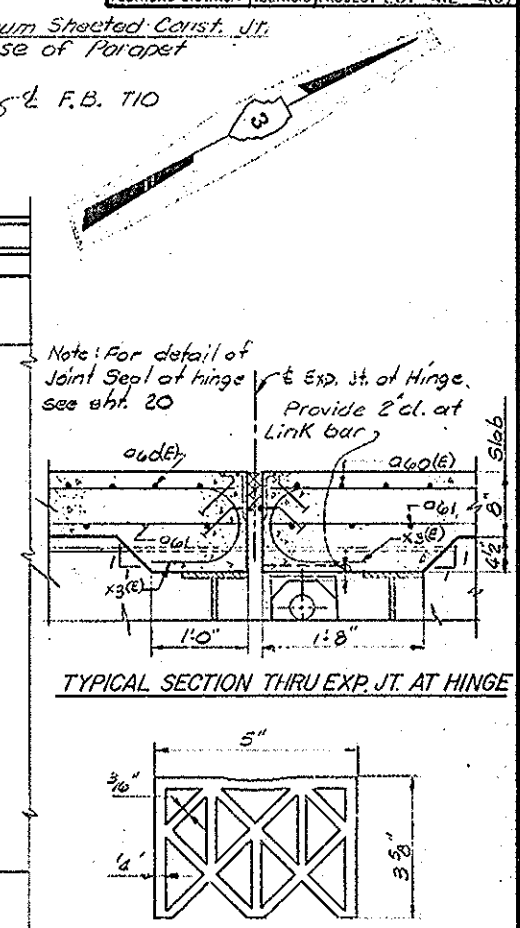
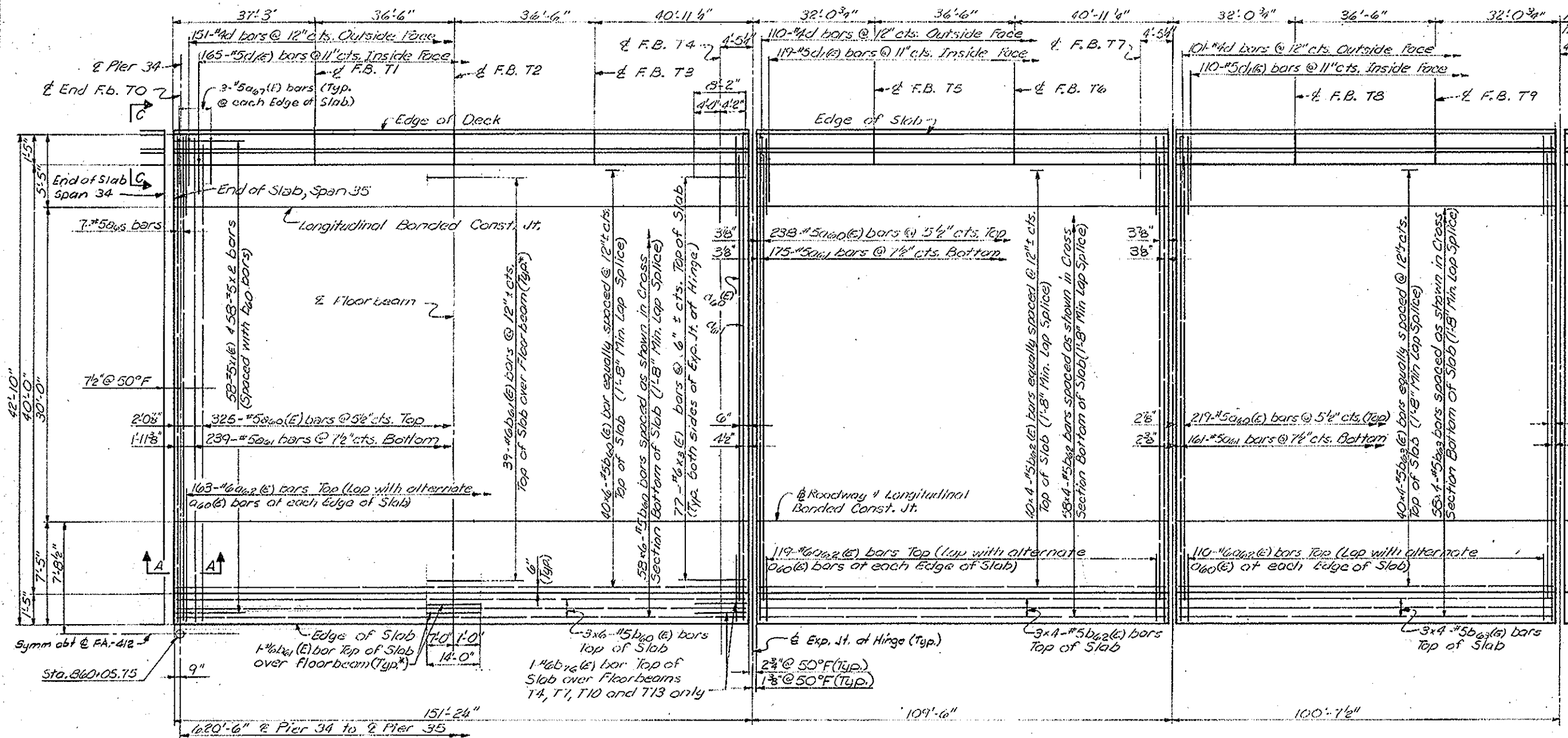
LINE	LOCATION	STATION	OFFSET	THEORETICAL GRADE ELEVATION	THEORETICAL GRADE ELEVATION ADJUSTED FOR DEAD LOAD DEFLECTION
1 C.L. BRG. PIER 43N	B6	878+79.426	3.208	513.542	513.542
	PG & BCJ	878+82.063	7.708	513.440	513.440
	B7	878+84.847	12.458	513.332	513.332
	B8	878+90.269	21.708	513.122	513.122
	B9	878+95.690	30.958	512.912	512.912
	BCJ	878+99.647	37.708	512.759	512.759
B10	879+01.112	40.208	512.702	512.702	
2	B6	878+89.426	3.208	513.494	513.545
	PG & BCJ	878+92.063	7.708	513.394	513.446
	B7	878+94.847	12.458	513.284	513.341
	B8	879+00.269	21.708	513.076	513.131
	B9	879+05.690	30.958	512.866	512.921
	BCJ	879+09.647	37.708	512.713	512.764
B10	879+11.112	40.208	512.657	512.706	
3	B6	878+99.426	3.208	513.450	513.539
	PG & BCJ	879+02.063	7.708	513.348	513.442
	B7	879+04.847	12.458	513.240	513.339
	B8	879+10.269	21.708	513.031	513.129
	B9	879+15.690	30.958	512.821	512.920
	BCJ	879+19.647	37.708	512.669	512.761
B10	879+21.112	40.208	512.613	512.701	
4	B6	879+09.426	3.208	513.404	513.517
	PG & BCJ	879+12.063	7.708	513.302	513.421
	B7	879+14.847	12.458	513.195	513.321
	B8	879+20.269	21.708	512.986	513.112
	B9	879+25.690	30.958	512.778	512.904
	BCJ	879+29.647	37.708	512.623	512.742
B10	879+31.112	40.208	512.569	512.682	
5	B6	879+19.426	3.208	513.360	513.477
	PG & BCJ	879+22.063	7.708	513.258	513.381
	B7	879+24.847	12.458	513.151	513.281
	B8	879+30.269	21.708	512.943	513.073
	B9	879+35.690	30.958	512.735	512.865
	BCJ	879+39.647	37.708	512.583	512.704
B10	879+41.112	40.208	512.527	512.644	
6	B6	879+29.426	3.208	513.316	513.417
	PG & BCJ	879+32.063	7.708	513.215	513.321
	B7	879+34.847	12.458	513.108	513.220
	B8	879+40.269	21.708	512.900	513.012
	B9	879+45.690	30.958	512.693	512.805
	BCJ	879+49.647	37.708	512.542	512.645
B10	879+51.112	40.208	512.486	512.586	
7	B6	879+39.426	3.208	513.274	513.341
	PG & BCJ	879+42.063	7.708	513.173	513.243
	B7	879+44.847	12.458	513.066	513.140
	B8	879+50.269	21.708	512.859	512.933
	B9	879+55.690	30.958	512.652	512.726
	BCJ	879+59.647	37.708	512.501	512.570
B10	879+61.112	40.208	512.445	512.512	
8 C.L. BRG. NORTH ABUTMENT N	B6	879+51.880	3.208	513.222	513.222
	PG & BCJ	879+54.518	7.708	513.122	513.122
	B7	879+57.302	12.458	513.015	513.015
	B8	879+62.723	21.708	512.809	512.809
	B9	879+68.145	30.958	512.602	512.602
	BCJ	879+72.101	37.708	512.452	512.452
B10	879+73.566	40.208	512.396	512.396	

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
TOP OF SLAB ELEVATIONS
SPAN 44 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(C)
STA. 863+1600 (FA-412) LASALLE CO.

T. Ritzheimer
DESIGNED
L. Glaser
CHECKED
S. Stegman
DRAWN
T. Ritzheimer
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

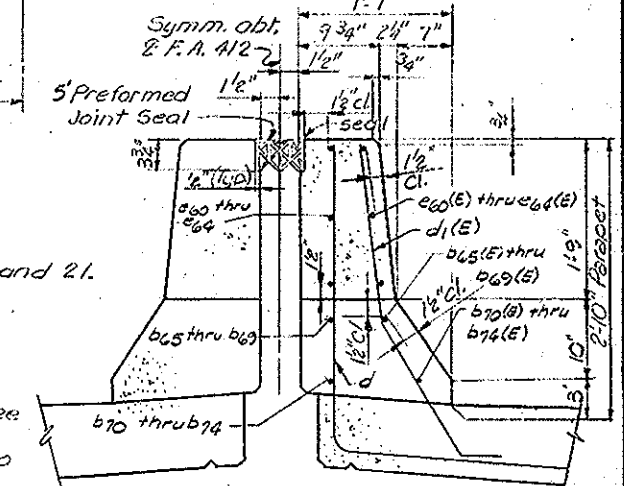


* Typical over Floorbeams
T1, T2, T3, T5, T6, T8, T9, T11, T12,
T14, T15 and T16.

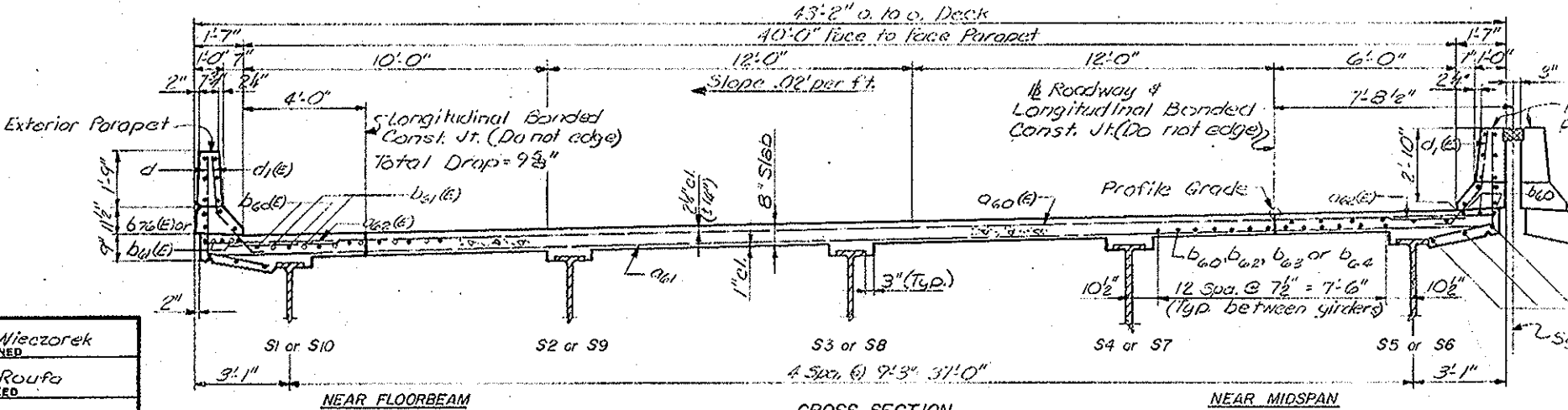
PLAN

NOTES

Work this sheet with sheets 20 and 21.
d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Bars shown thus: 40x6-5 etc. indicates 40 lines of bars with 6 lengths per line.
Floor Drains and Scuppers not shown. See sheets 35 and 36 for location and details.
Space bars a₆₂(E), d₁(E) and d₁ in field to miss Floor Drains.
Cut bars a₆₀(E) and d₁₆ in field to miss Floor Drains.
Lighting Pedestals not shown. See sheet 34 for location and details.



SECTION THRU MEDIAN PARAPET



CROSS SECTION (Looking North)

Note. Southbound Roadway shown.
Northbound Roadway Symm. abt. & F.A.-412

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
SLAB-SPAN 35

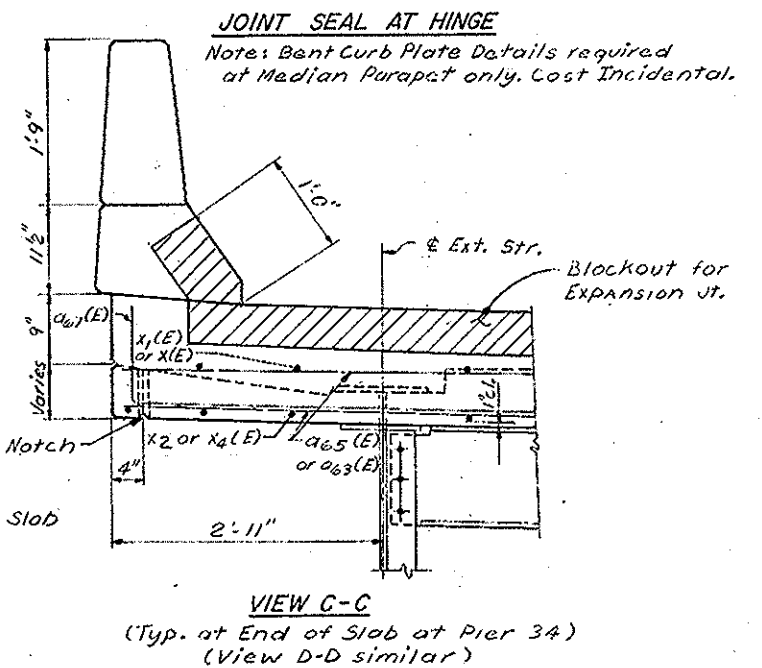
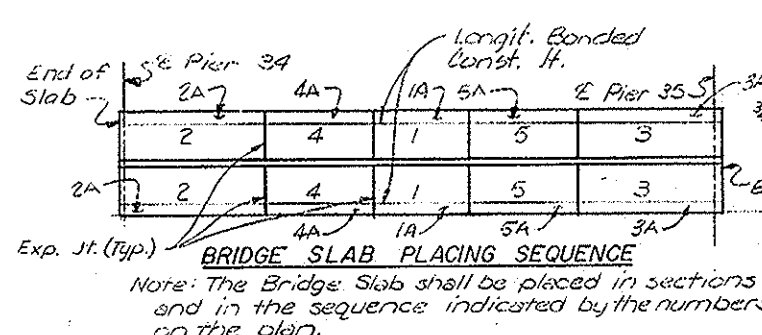
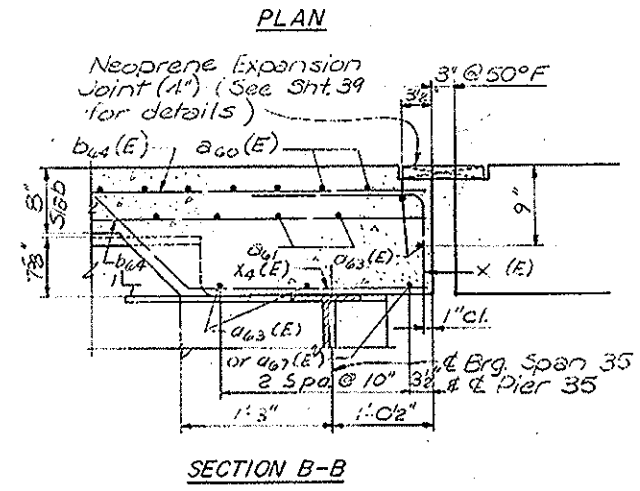
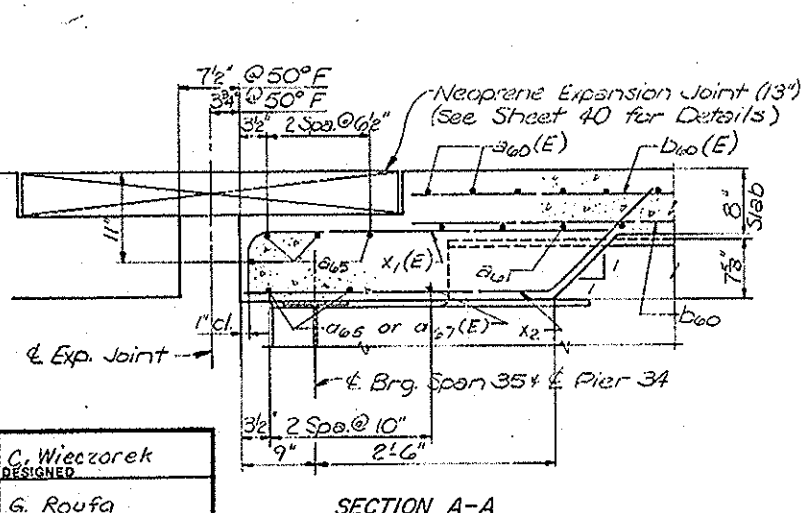
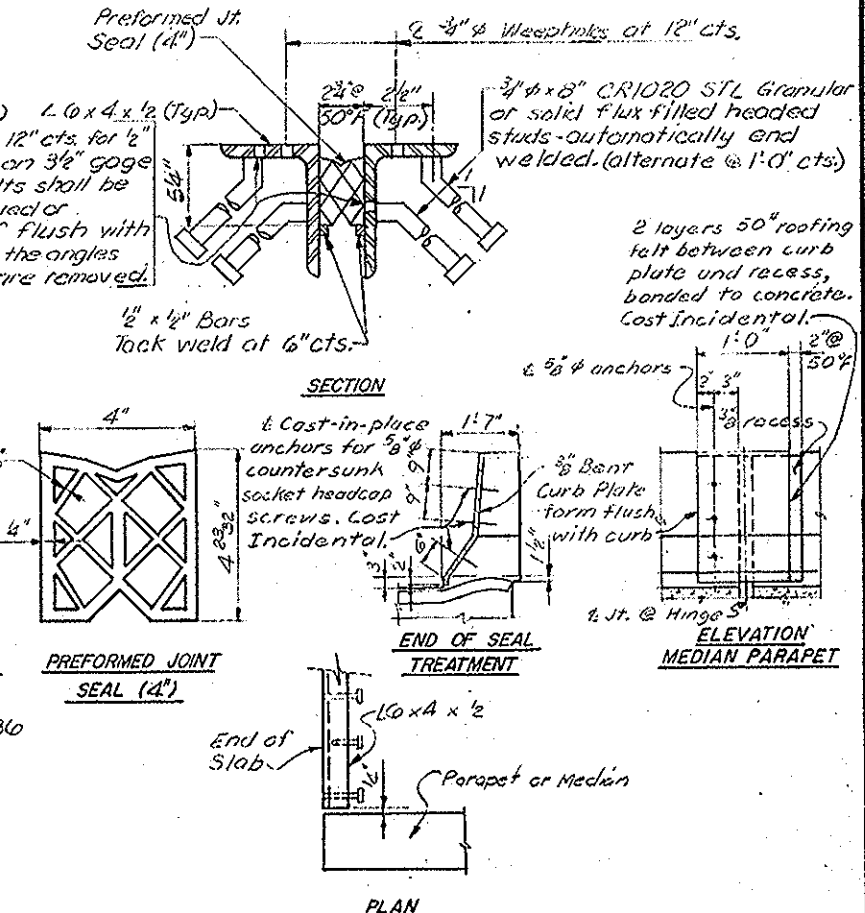
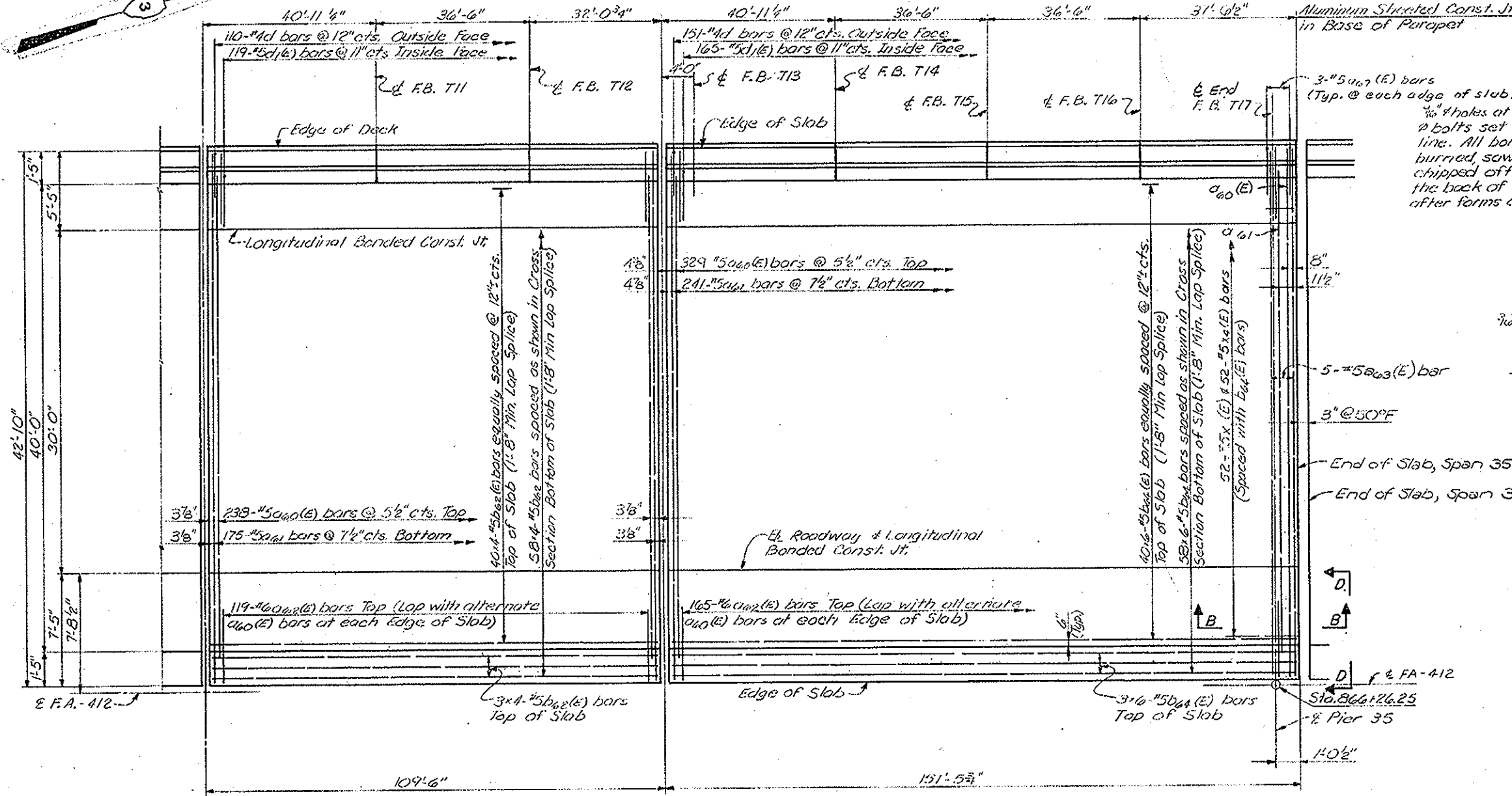
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 19 OF 76

C. Wiczorek
DESIGNED
G. Roufo
CHECKED
R. Prescher
DRAWN
T. Ritzheimer
CHECKED

6692
525328



C. Wiczorek
DESIGNED
G. Roufa
CHECKED
R. Prascher
DRAWN
T. Ritzheimer
CHECKED

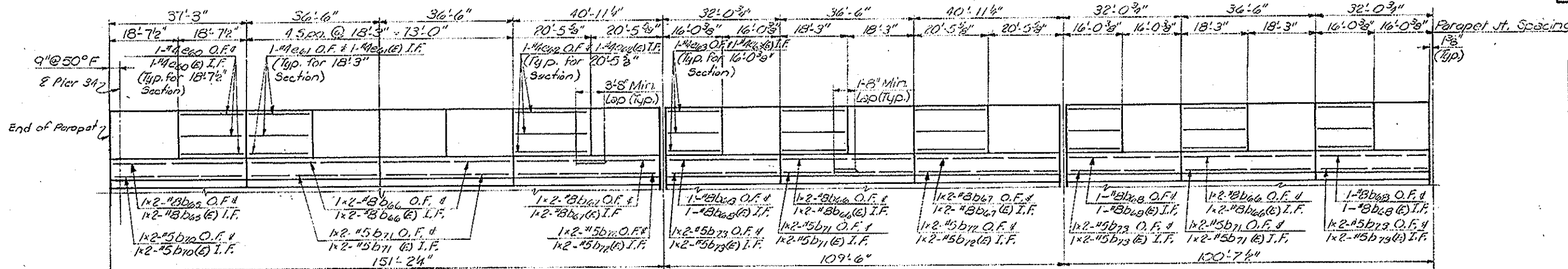
ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

Note: Work this sheet with Sheets 19 and 21.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

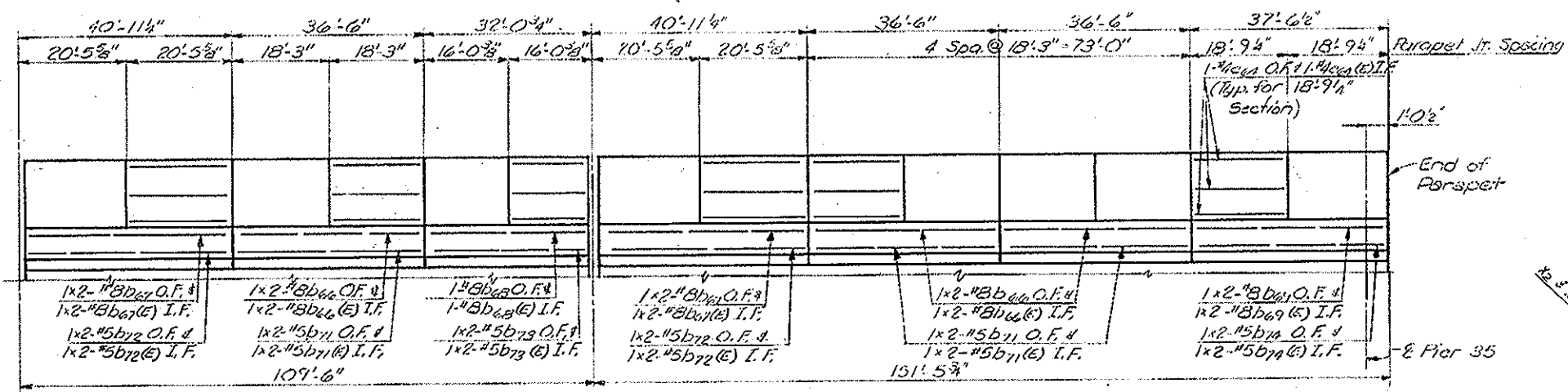
DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
SLAB-SPAN 35
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



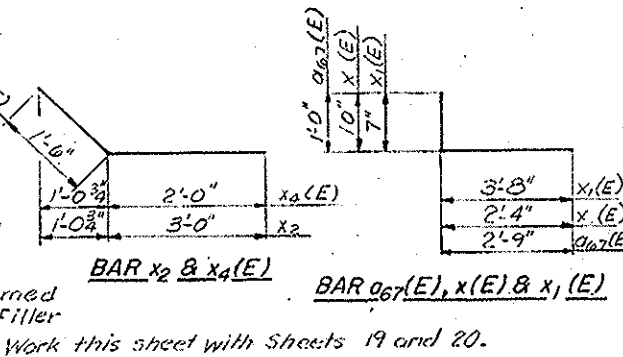
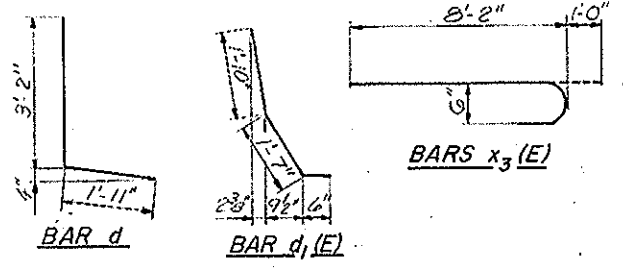
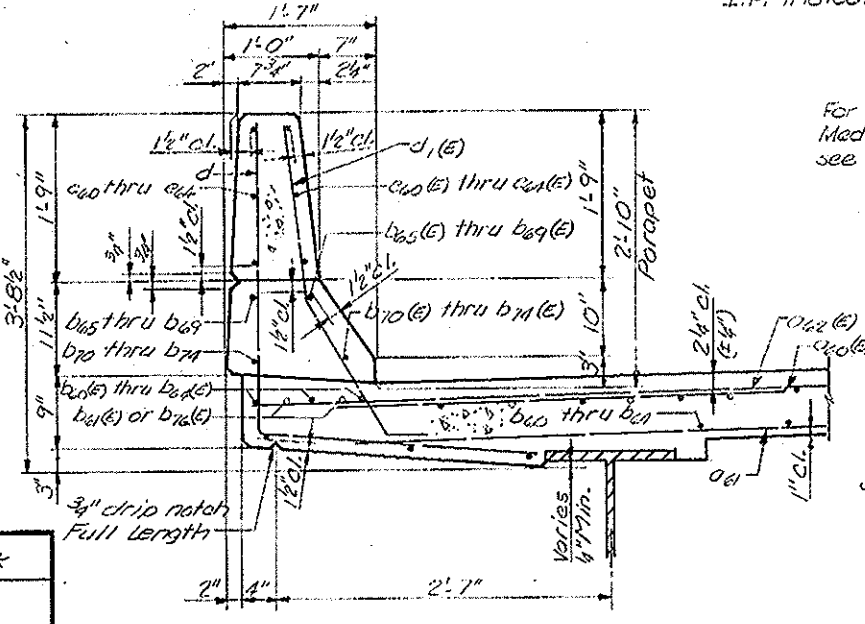
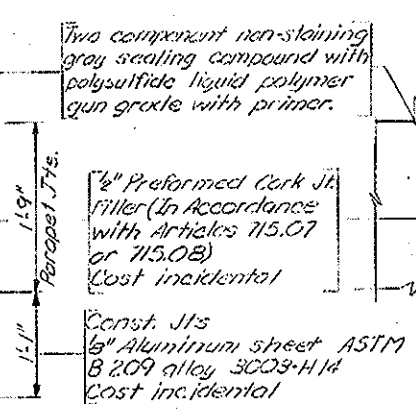
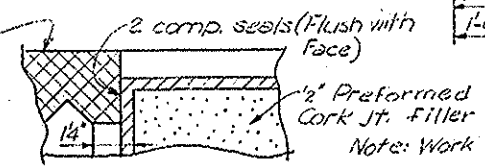
**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
b10(E)	2698	#5	41.2"	
b11	1982	#5	41.0"	
b12(E)	2104	#6	41.0"	
b13(E)	10	#5	42.6"	
b14	14	#5	42.6"	
b17(E)	24	#5	31.9"	
b16(E)	96	#5	21.0"	
b20(E)	552	#5	16.6"	
b20	696	#5	26.6"	
b21(E)	1032	#6	16.0"	
b21(E)	736	#5	18.7"	
b22	728	#5	28.7"	
b23(E)	368	#5	26.4"	
b23	164	#5	26.4"	
b24(E)	552	#5	26.7"	
b24	696	#5	26.7"	
b25(E)	8	#8	20.1"	
b25	8	#8	20.4"	
b26(E)	56	#8	20.0"	
b26	56	#8	20.0"	
b27(E)	32	#8	22.2"	
b27	32	#8	22.2"	
b28(E)	16	#8	31.8"	
b28	16	#8	31.8"	
b29	8	#8	20.6"	
b29	8	#8	20.6"	
b29(E)	8	#5	19.4"	
b29	8	#5	19.4"	
b29(E)	56	#5	19.0"	
b29	56	#5	19.0"	
b29(E)	32	#5	21.2"	
b29	32	#5	21.2"	
b29(E)	32	#5	16.9"	
b29	32	#5	16.9"	
b29(E)	8	#5	19.6"	
b29	8	#5	19.6"	
b29(E)	32	#6	81.0"	
b29	2492	#4	51.7"	
d1(E)	2112	#5	31.1"	
d17	12	#6	41.5"	
d18	20	#6	13.11"	
e20(E)	24	#4	18.4"	
e20	24	#4	18.4"	
e20(E)	168	#4	18.1"	
e20	168	#4	18.1"	
e21	168	#4	18.1"	
e21	168	#4	18.1"	
e22(E)	96	#4	20.3"	
e22	96	#4	20.3"	
e23(E)	96	#4	15.10"	
e23	96	#4	15.10"	
e24(E)	24	#4	18.7"	
e24	24	#4	18.7"	
e24	24	#4	18.7"	
x(E)	104	#5	31.2"	
x1(E)	116	#5	41.3"	
x2	116	#5	41.6"	
x3(E)	1232	#6	91.2"	
x1(E)	104	#5	31.6"	
Reinforcement Bars (Epoxy Coated)	Lbs.		449,970	
Class X Concrete	Cu.Yds.		1669.6	



INSIDE ELEVATION OF PARAPET

Note: West Exterior Parapet or Median Parapet shown.
East Exterior Parapet or Median Parapet opposite hand.
O.F. indicates Outside Face.
I.F. indicates Inside Face.



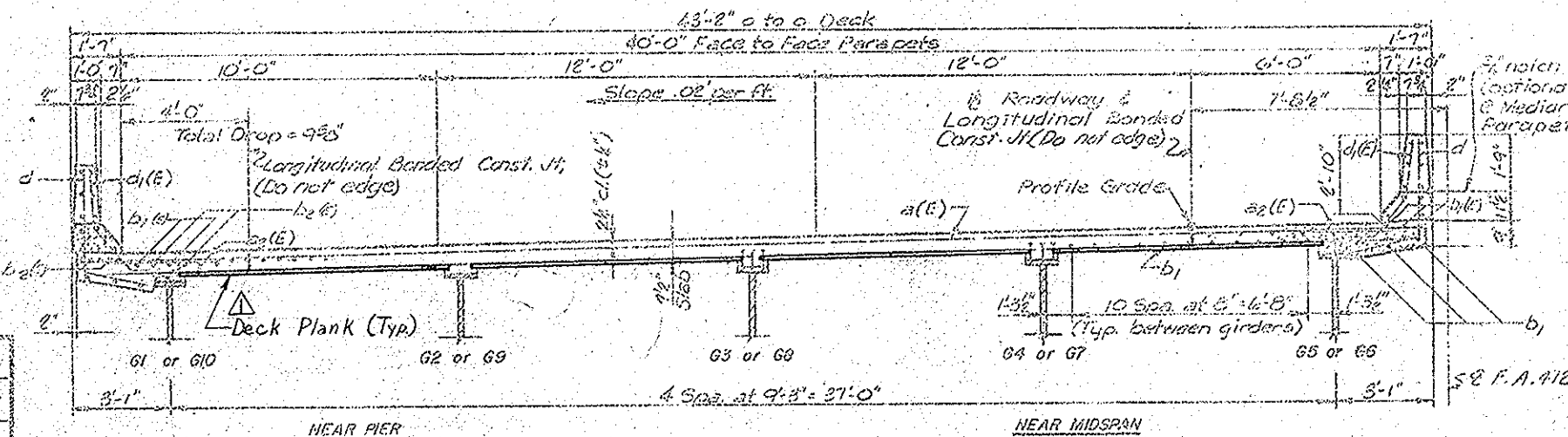
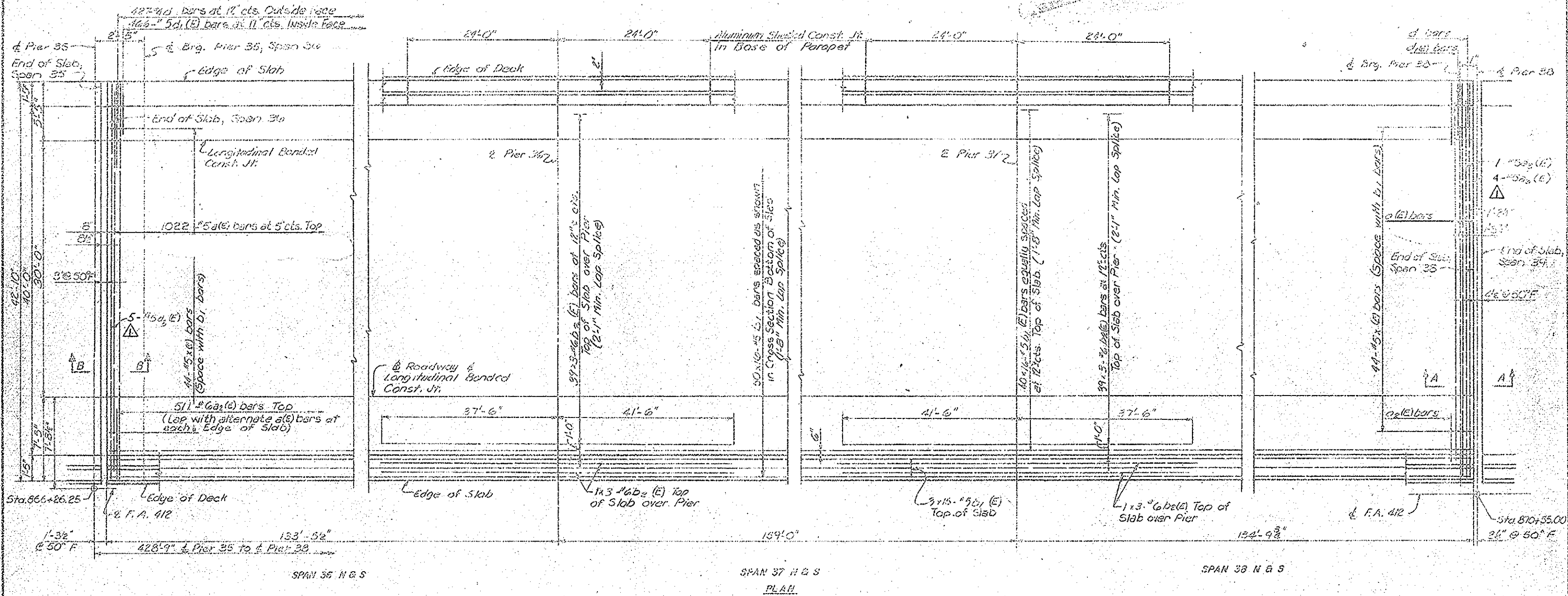
* For location of b16 (E) bars, see Drainage Scupper Details, Sheet 36.
** For location of d2 and d3 bars, see Lighting Details, Sheet 34.

C. Wiczorek
DESIGNED
G. Roufa
CHECKED
R. Prescher
DRAWN
T. Ritzheimer
CHECKED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

DECK-ARCH SPAN
STRUCTURAL STEEL ALTERNATE
PARAPET & MEDIAN - SPAN 35
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
SHEET NO. 21 OF 76



NOTES

Work this sheet with Sheet 23.

d(e) bars located near the ends of parapets shall be cut back to clear block out for Exp. Jts. by 1 inch.

Bars shown thus: 39x3-46 etc. indicates 39 lines of bars with 3 lengths per line.

Floor Drains and Scuppers not shown. See Sheets 35 & 36 for location and details.

Space bars a₂(e), d₁(e) and e₁ in field to miss Floor Drains and Scuppers.

Cut bars a₁(e) and a₂ in field to miss floor Drains and Scuppers.

For General Notes, see Sheet 5.

Lighting Pedestals not shown. See Sheet 34 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 36 THRU 38 NORTHBOUND & SOUTHBOUND
EA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 8637+18.00 (EA-412) LASALLE CO.
ADD DECK PLANKS, ELIMINATE α BARS, ADD α_3 (E) BARS

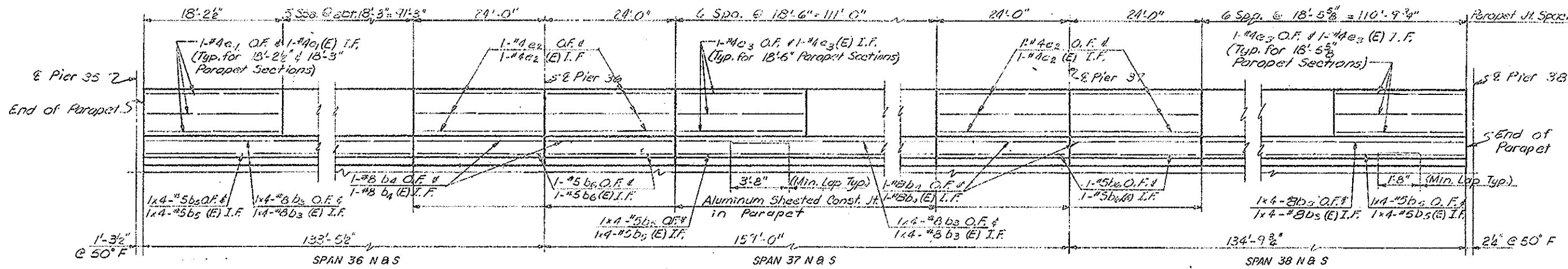
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

CROSS SECTION
Looking North
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED BY: Arman
CHECKED BY: R. Burrierfield
DRAWN BY: R. Prescher
PROJECT NO. 6-25-52

Note: Southbound Roadway shown, Northbound Roadway is symm. abt. & F.A. 412.

1/14/86

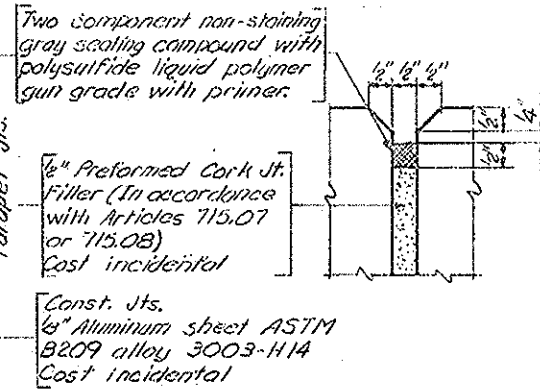


INSIDE ELEVATION OF PARAPET

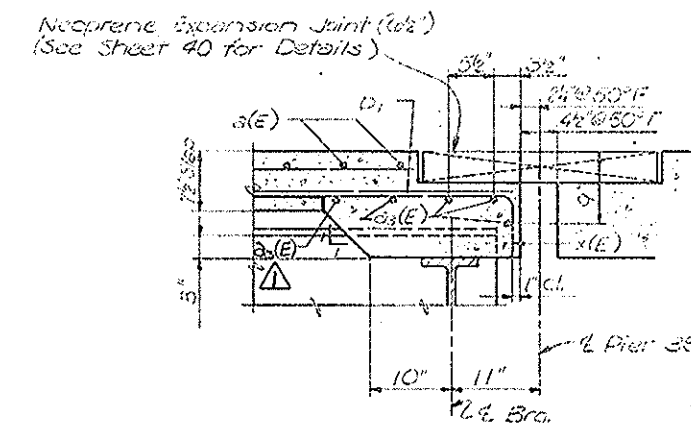
Note: West Parapet shown.
East Parapet Opp. Hand.
O.F. indicates Outside Face
I.F. indicates Inside Face

BILL OF MATERIAL
TWO SUPERSTRUCTURE UNITS
(SPAN 36-38 N & S)

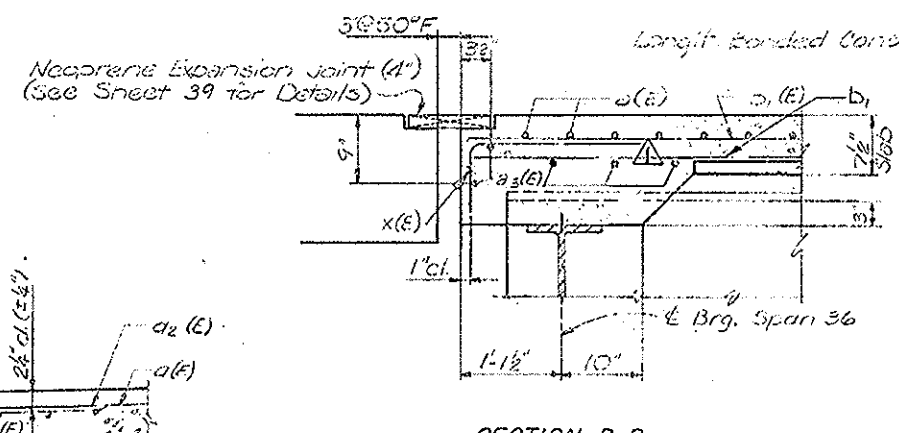
Bar	No	Size	Length	Shape
a(E)	2044	#5	41'-2"	—
a2(E)	2044	#6	4'-0"	—
a3(E)	20	#5	42'-6"	—
b1	1472	#5	28'-3"	—
b1(E)	1402	#5	28'-3"	—
b2(E)	516	#5	27'-9"	—
b3(E)	48	#8	30'-6"	—
b3	48	#8	30'-6"	—
b4	16	#8	23'-8"	—
b4(E)	16	#8	23'-8"	—
b5(E)	48	#5	29'-0"	—
b5	48	#5	29'-0"	—
b6(E)	16	#5	23'-8"	—
b6	16	#5	23'-8"	—
b1d1*	48	#5	2'-0"	—
d	1105	#4	5'-1"	L
d(E)	1864	#5	3'-11"	L
d2**	12	#6	4'-5"	L
d3**	20	#6	3'-11"	L
e1(E)	72	#4	18'-0"	—
e1	72	#4	18'-0"	—
e2(E)	48	#4	23'-8"	—
e2	48	#4	23'-8"	—
e3(E)	144	#4	18'-3"	—
e3	144	#4	18'-3"	—
x(E)	116	#5	3'-0"	—
Reinforcement Bars (Epoxy Coated)	Lbs.	309,720		
Class X Concrete	CuYds.	1,089.9		



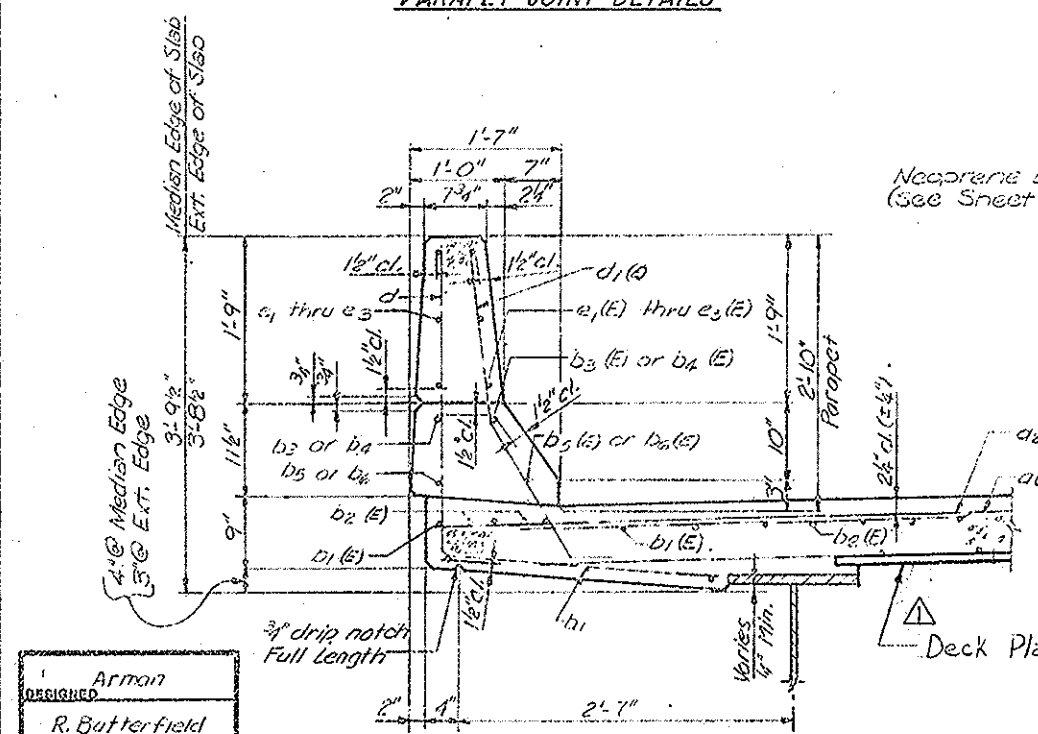
PARAPET JOINT DETAILS



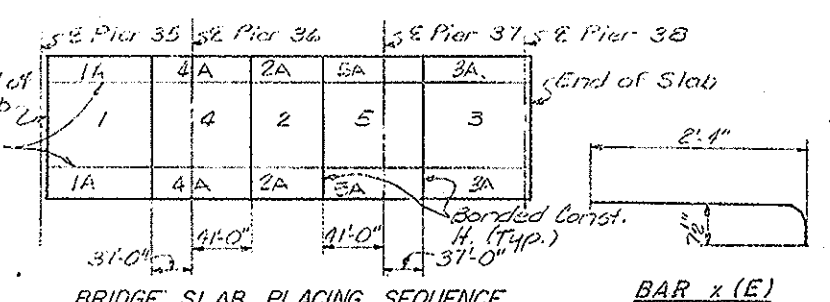
SECTION A-A



SECTION B-B



SECTION THRU PARAPET



BRIDGE SLAB PLACING SEQUENCE

Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.
The areas over the piers are to be placed only after piers 1, 2 & 3 have attained required strength.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

Note: Work this Sheet with Sheet 22.

DESIGNED
Arman
R. Butterfield
CHECKED
R. Prescher
DRAWN
C. Roufa
CHECKED

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPETS-SPANS 36 THRU 38 NORTHBOUND & SOUTHBOUND

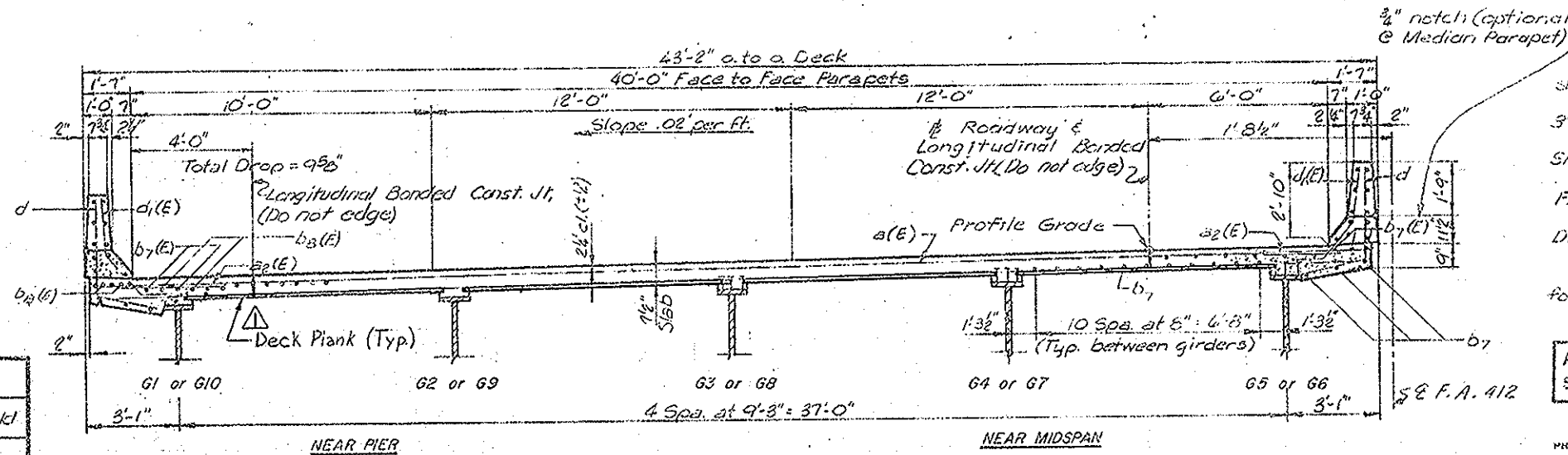
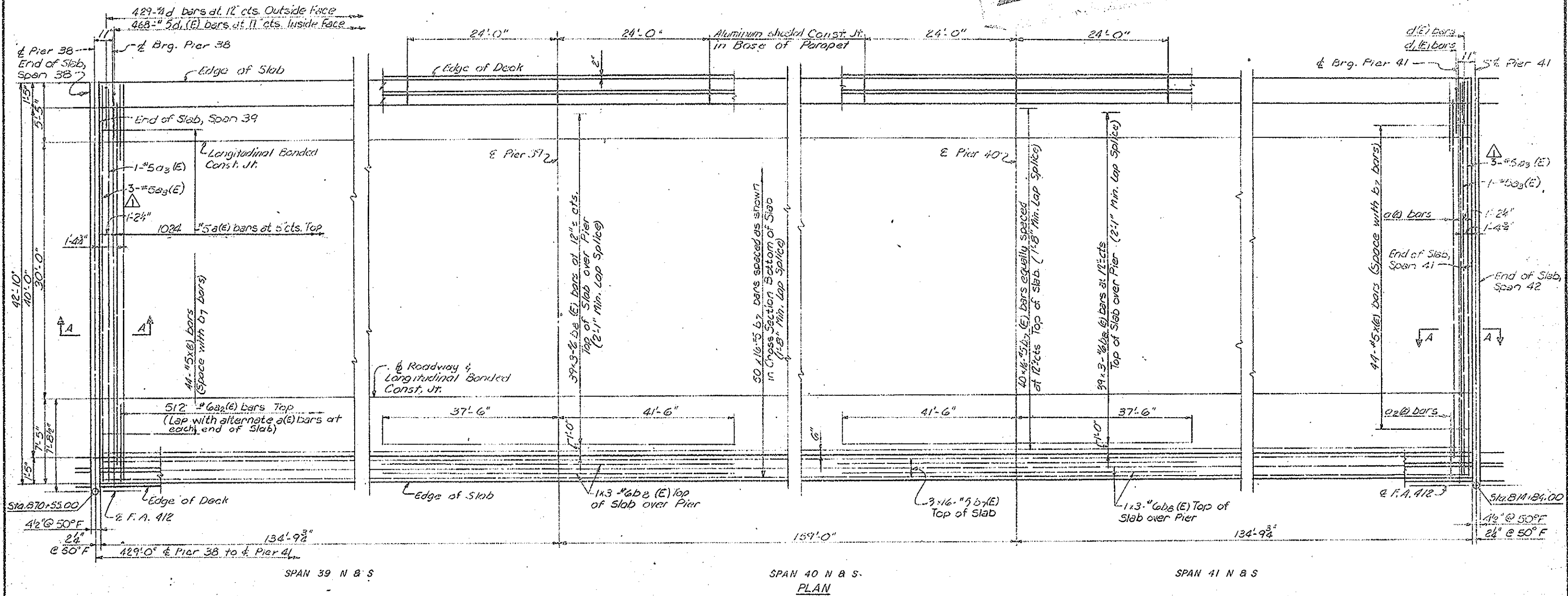
EA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE a1 BARS, ADD a3(E) BARS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 23 OF 76



NOTES

Work this sheet with Sheet 25.
 d(e) bars located near the ends of parapets shall be set back to clear block out for Exp. Jts. by 1 inch.
 Bars shown thus: 39 x 3-#6 etc, indicates 39 lines of bars with 3 lengths per line.
 Floor Drains and Scuppers not shown. See Sheets 35 & 36 for location and details.
 Space bars a₂(e), d₁(e) and d in field to miss Floor Drains and Scuppers.
 Cut bars a₁(e) and a₁ in field to miss Floor Drains and Scuppers.
 For General Notes, see Sheet 5.
 Lighting Pedestals not shown. See Sheet 34 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE**

SLAB - SPANS 39 THRU 41 NORTHBOUND & SOUTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.
 ADD DECK PLANKS, ELIMINATE O₁ BARS, ADD O₃(E) BARS

DESIGNED Arman
 CHECKED R. Butterfield
 DRAWN R. Prescher
 CHECKED G. Ruffa

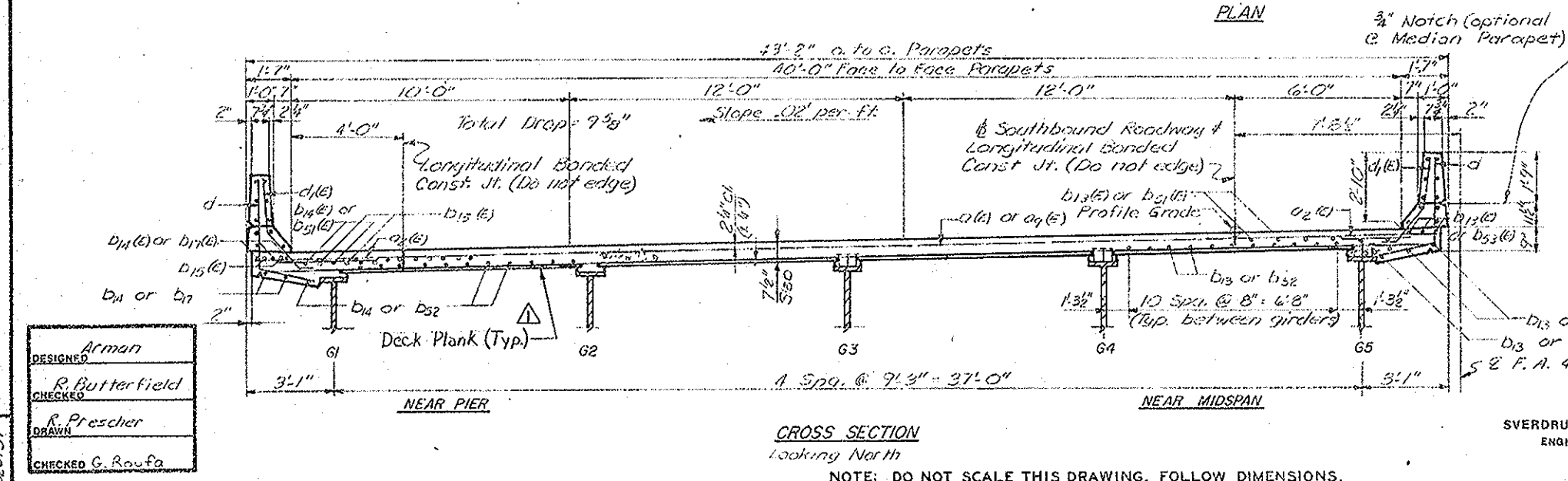
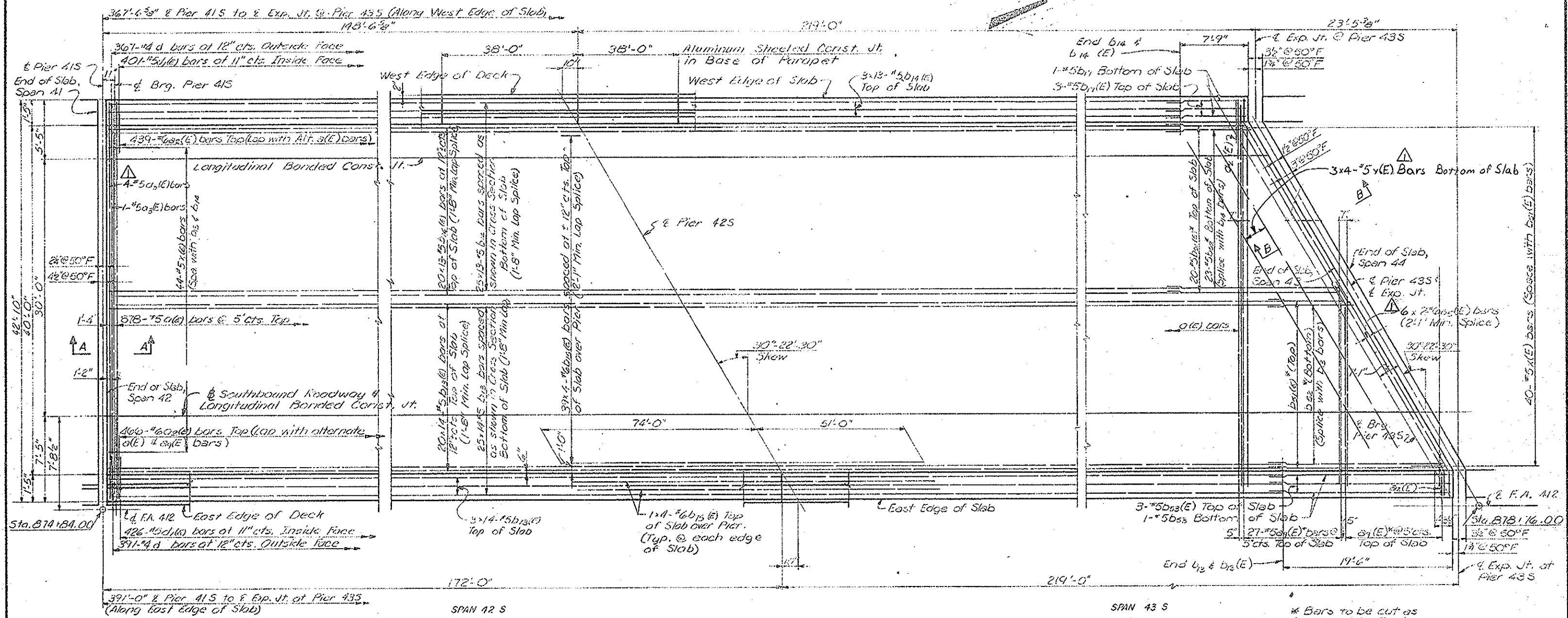
Note: Southbound Roadway shown, Northbound Roadway symm. abt. F.A. 412.
CROSS SECTION
 Looking North
 NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
 SVDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

6092
 EBF35R

11/18/66

SHEET NO. 24 OF 76



NOTES

Work this sheet with Sheet 27.

d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Jt. by 1 in.

Bars shown thus: 39x3-46 etc. indicates 39 lines of bars with 3 lengths per line.

Floor Drains and Scuppers not shown. See Sheets 35 and 36 for location and details.

Space bars a₂(E), d and d₁(E) in field to miss Floor Drains and Scuppers.

Cut bars a₁(E), a₁(E) and a₉ in field to miss Floor Drains and Scuppers.

For General Notes, see Sheet 5.

Lighting Pedestals not shown. See Sheet 34 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

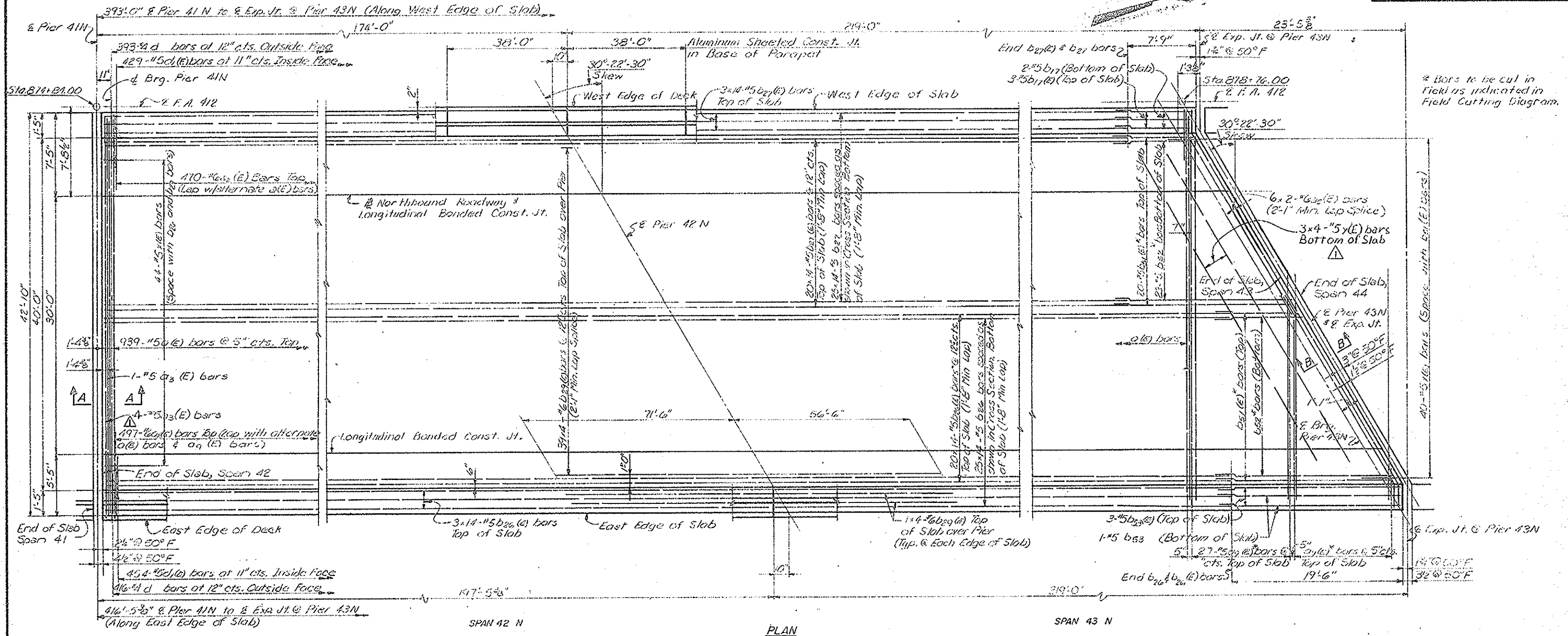
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
SLAB - SPANS 42 AND 43 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
ILLINOIS PROJECT EBF-412-4(6)
SHEET NO. 26 OF 76

DESIGNED Arman
CHECKED R. Butterfield
DRAWN R. Prescher
CHECKED G. Roufa

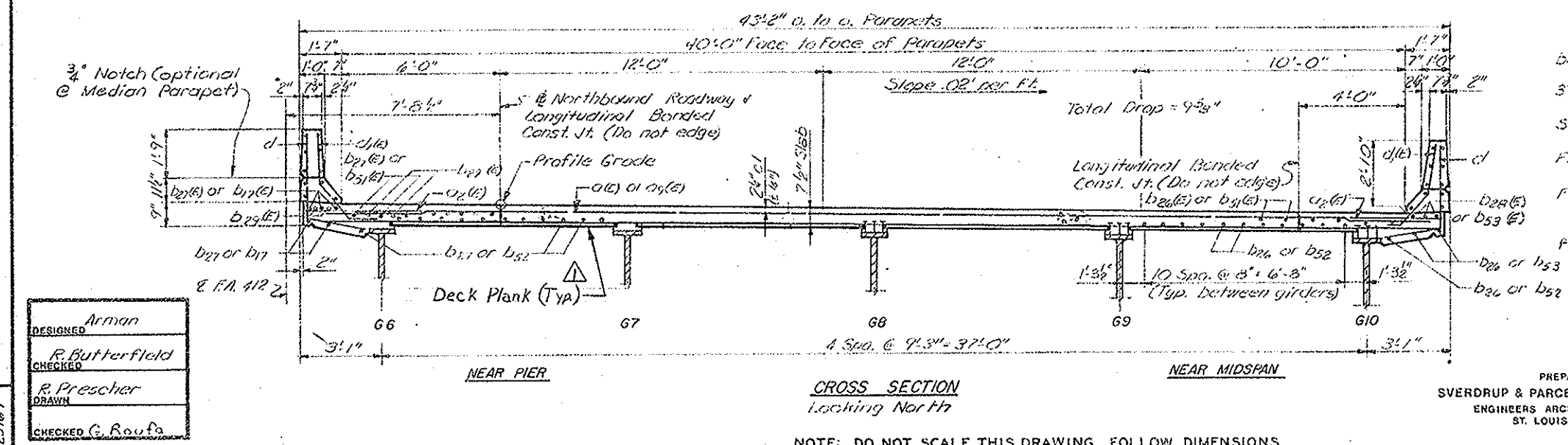
PREPARED BY:
SVDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

ADD DECK PLANKS, ELIMINATE a₁ + a₁₀ BARS, ADD a₃(E), a₅(E) + Y(E) BARS



* Bars to be cut in field as indicated in field cutting diagram.



NOTES
 Work this sheet with Sheet 29.
 d(E) bars located near the ends of parapets shall be set back to clear block out for Expansion Joints by 1 inch.
 Bars indicated thus: 391-#6 etc. indicates 39 lines of bars with 5 lengths per line.
 Floor Drains and Scuppers not shown. See Sheets 35 & 36 for location and details.
 Space bars $a_2(E)$, d and $d_1(E)$ in field to miss Floor Drains and Scuppers.
 Cut bars $a_1(E)$, $a_1(E)$ and $a_1(E)$ in field to miss Floor Drains and Scuppers.
 For General Notes, see Sheet 5.
 Lighting Pedestals not shown. See Sheet 34 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

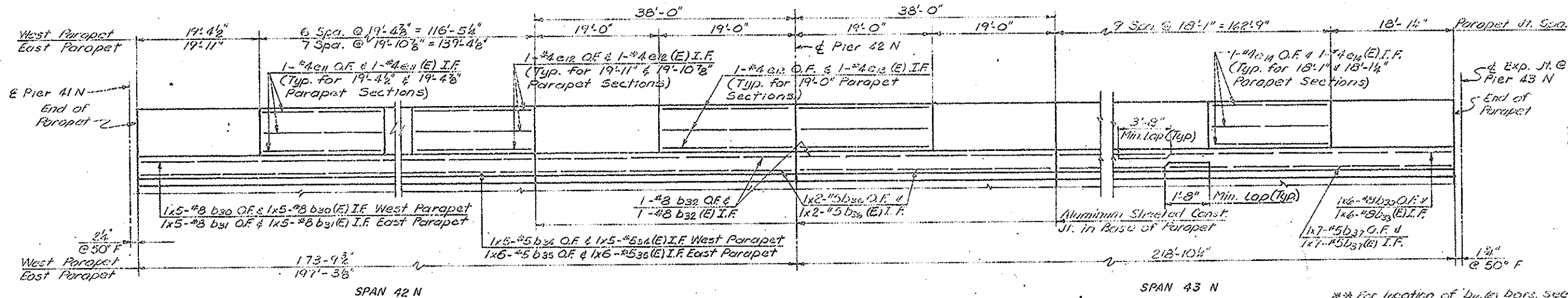
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
 SLAB - SPANS 42 AND 43 - NORTHBOUND
FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA 863+16.00 (FA-412) LASALLE CO.
 SHEET NO. 28 OF 76

PREPARED BY:
 SVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

DESIGNED: Arman
 CHECKED: R. Butterfield
 DRAWN: R. Prescher
 CHECKED: C. Roufa

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

6892
 2/25/69



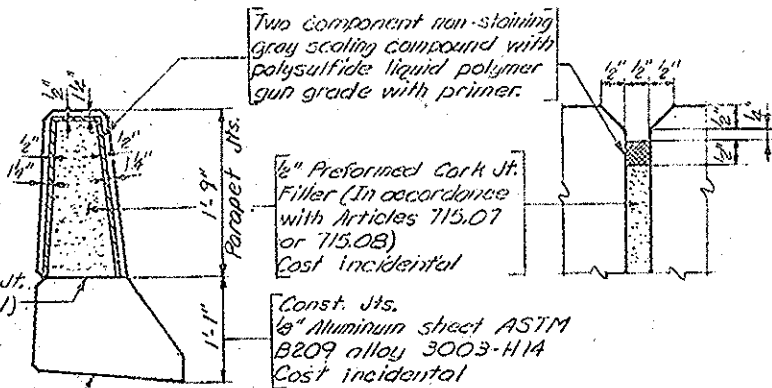
INSIDE ELEVATION OF WEST PARAPET
Note: East Parapet Opp. Hand except as noted.
O.F. indicates Outside Face
I.F. indicates Inside Face

** For location of d_{16} bars, see Drainage Scupper Details, Sheet 36.

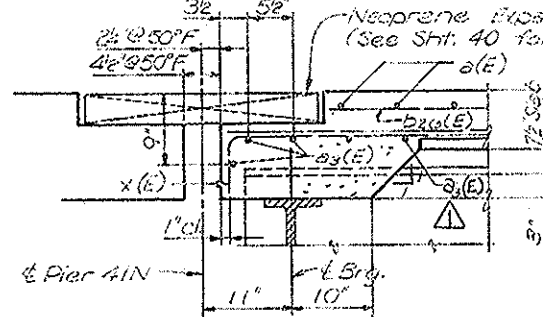
*** For location of d_2 and d_3 bars, see Lighting Details, Sheet 34.

BILL OF MATERIAL
ONE SUPERSTRUCTURE UNIT

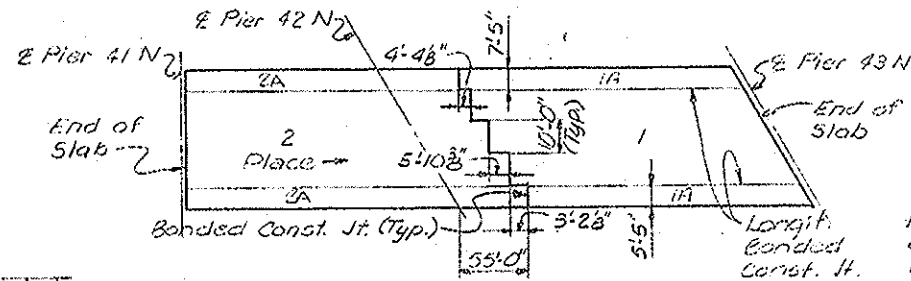
(SPANS 42 & 43)				
Bar	No	Size	Length	Shape
a_6	939	#5	41'-2"	—
a_2	907	#6	4'-0"	—
a_3	5	#5	42'-6"	—
a_5	12	#6	25'-6"	—
a_9	27	#5	42'-10"	—
b_{16}	16	#5	2'-0"	—
b_{17}	3	#5	9'-4"	—
b_{17}	2	#5	9'-4"	—
b_{26}	328	#5	29'-11"	—
b_{26}	350	#5	29'-11"	—
b_{27}	350	#5	29'-11"	—
b_{27}	322	#5	29'-11"	—
b_{29}	172	#6	33'-7"	—
b_{30}	5	#8	30'-11"	—
b_{30}	5	#8	30'-11"	—
b_{31}	5	#8	34'-9"	—
b_{31}	5	#8	34'-9"	—
b_{32}	4	#8	37'-8"	—
b_{32}	4	#8	37'-8"	—
b_{33}	12	#8	33'-2"	—
b_{33}	12	#8	33'-2"	—
b_{34}	5	#5	28'-6"	—
b_{34}	5	#5	28'-6"	—
b_{35}	6	#5	27'-11"	—
b_{35}	6	#5	27'-11"	—
b_{36}	8	#5	19'-8"	—
b_{36}	8	#5	19'-8"	—
b_{37}	14	#5	27'-3"	—
b_{37}	14	#5	27'-3"	—
b_{51}	20	#5	29'-10"	—
b_{52}	23	#5	30'-0"	—
b_{53}	3	#5	21'-11"	—
b_{53}	2	#5	21'-11"	—
c_1	209	#4	5'-11"	—
c_1	283	#5	3'-11"	—
c_2	3	#6	1'-5"	—
c_2	5	#6	2'-11"	—
c_{11}	21	#4	19'-2"	—
c_{11}	21	#4	19'-2"	—
c_{12}	24	#4	19'-8"	—
c_{12}	24	#4	19'-8"	—
c_{13}	24	#4	18'-8"	—
c_{13}	24	#4	18'-8"	—
c_{14}	60	#4	17'-10"	—
c_{14}	60	#4	17'-10"	—
x	88	#5	3'-0"	—
x	12	#5	9'-2"	—
Reinforcement Bars (Epoxy Coated)				Lbs. 145,150
Class X Concrete				Cu.Yds. 513.4



PARAPET JOINT DETAILS



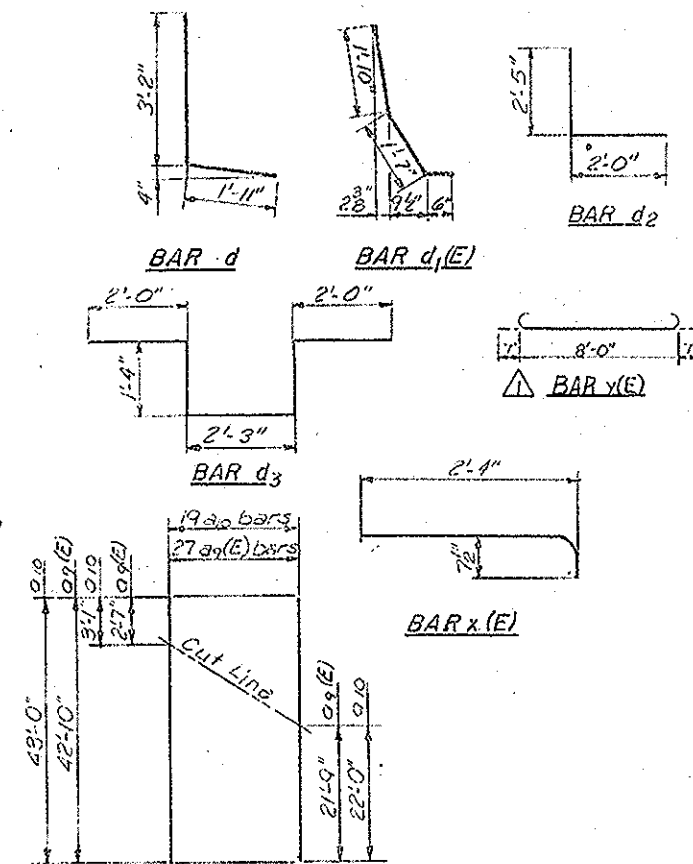
SECTION A-A



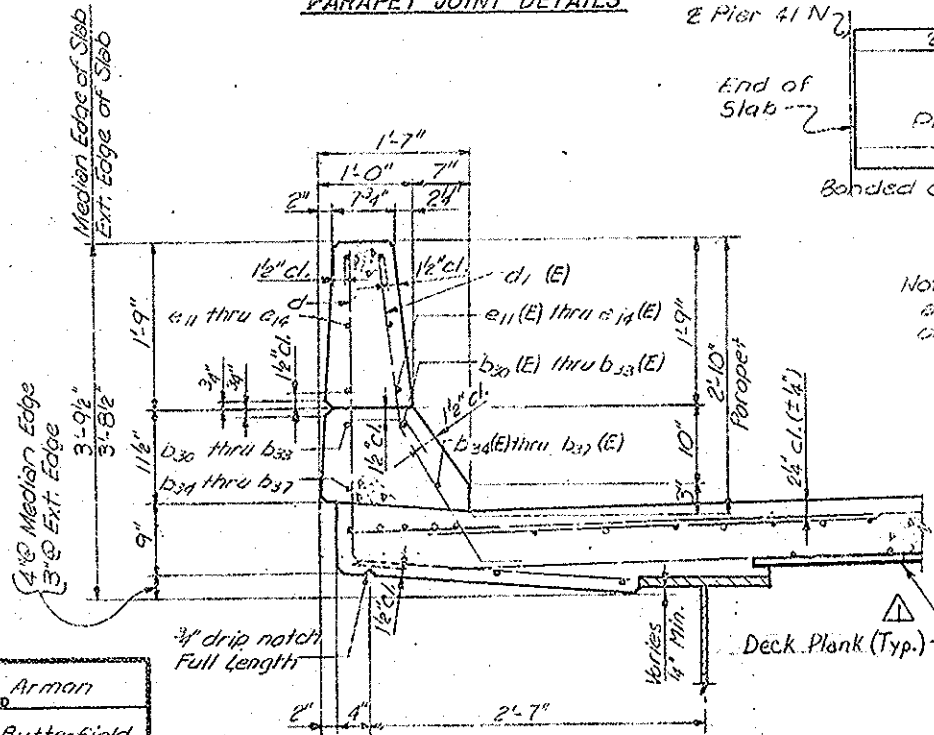
BRIDGE SLAB PLACING SEQUENCE
Note: The Bridge Slab shall be placed in sections and in the sequence indicated by the numbers on the plan.

FIELD CUTTING DIAGRAM
* Order b_{51} and b_{52} bars full length. Cut to fit as shown and use remaining shorter bars as indicated in Plan.

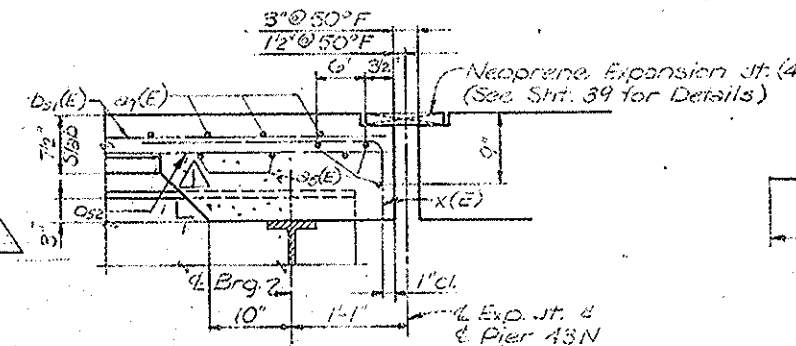
ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.



FIELD CUTTING DIAGRAM
* Order a_9 and a_{10} bars full length. Cut to fit as shown and use remaining shorter bars as indicated in Plan.



SECTION THRU PARAPET



SECTION B-B

Note: Work this sheet with Sheet 28.

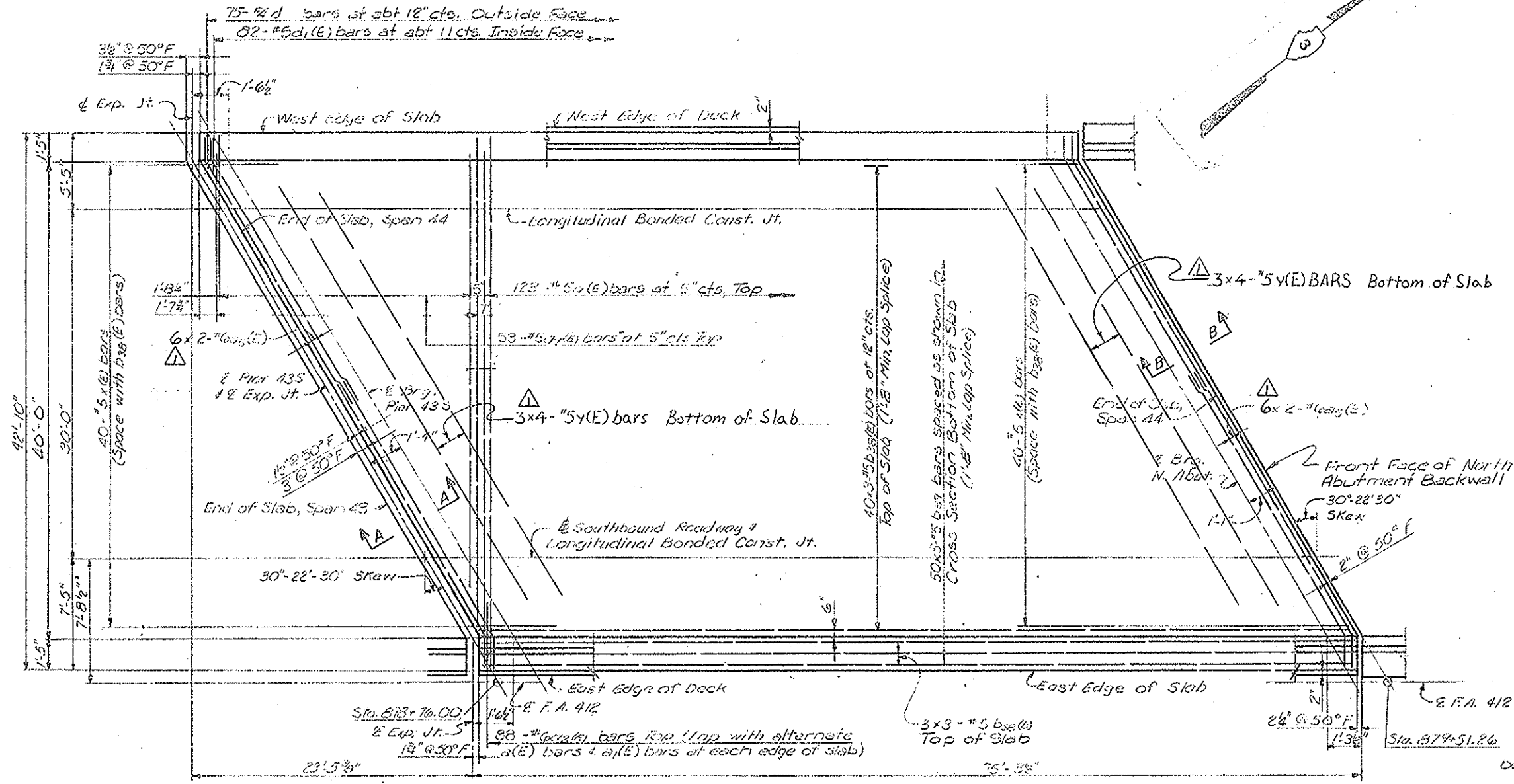
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED: Arman
CHECKED: R. Butterfield
DRAWN: R. Prescher
CHECKED: C. Roofa

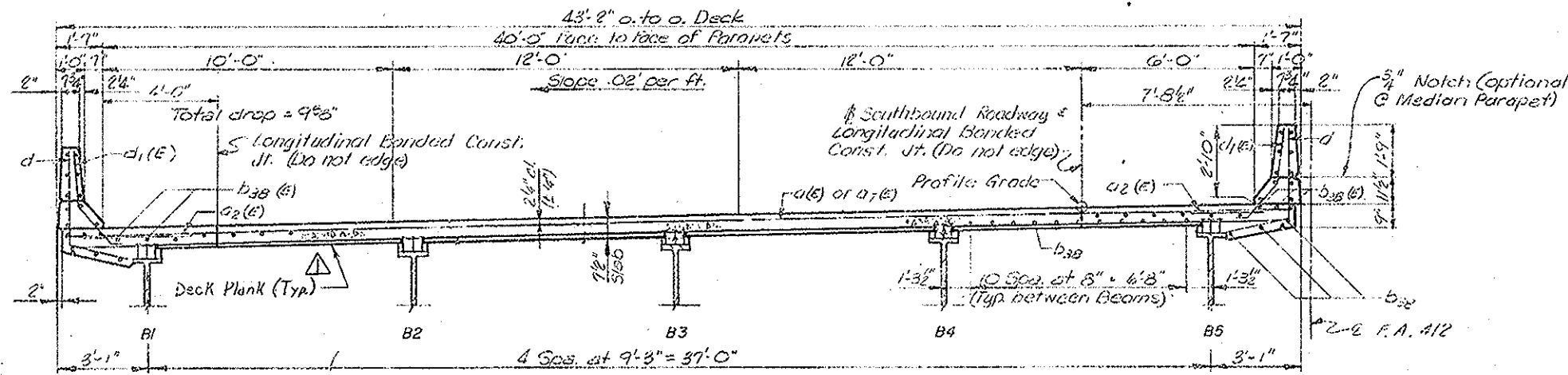
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE a_9 & a_{10} BARS, ADD O_3 (E), O_5 (E) & Y (E) BARS

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPETS - SPANS 42 AND 43 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 FA-412 LASALLE CO.



PLAN



CROSS SECTION
Looking North

NOTES

Work this sheet with Sheet 31.
d, (E) bars located near the ends of parapets shall be set back to clear block out for expansion joints by 1 inch.
Bars shown thus: 40x3-45 etc. indicates 40 lines of bars with 3 lengths per line.
Floor Drains and Scuppers not shown. See Sheets 35 & 36 for location and details.
Space bars a₂(E), d and d₁(E) in field to miss Floor Drains and Scuppers.
Cut bars a₁(E), a₁(E) and a₃ in field to miss Floor Drains and Scuppers.
For General Notes, see sheet 5.
Lighting Pedestals not shown. See Sheet 34 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

SLAB - SPAN 44 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

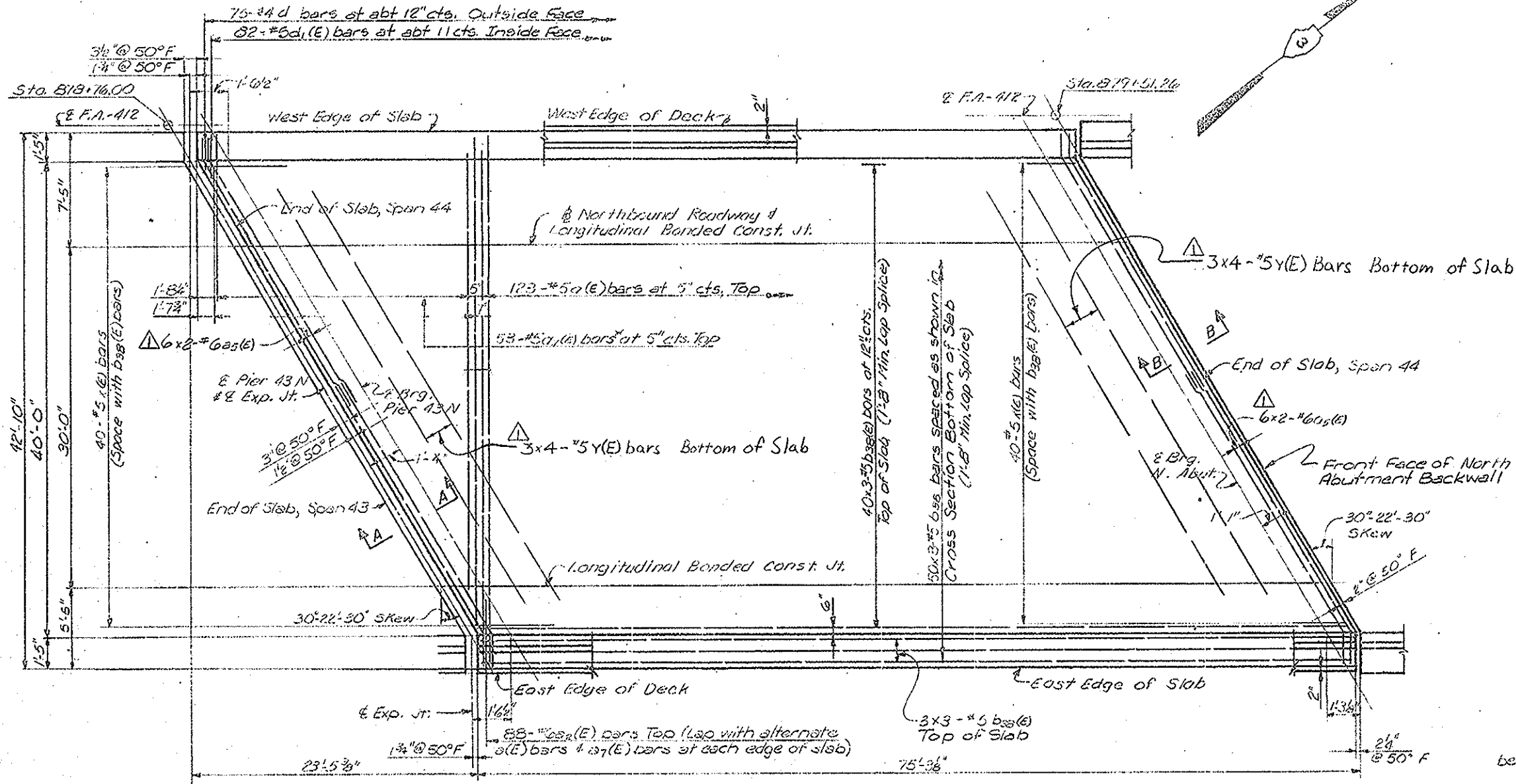
ADD DECK PLANKS, ELIMINATE a₁ & a₂ BARS, ADD a₃(E) + y(E) BARS

SHEET NO. 30 OF 76

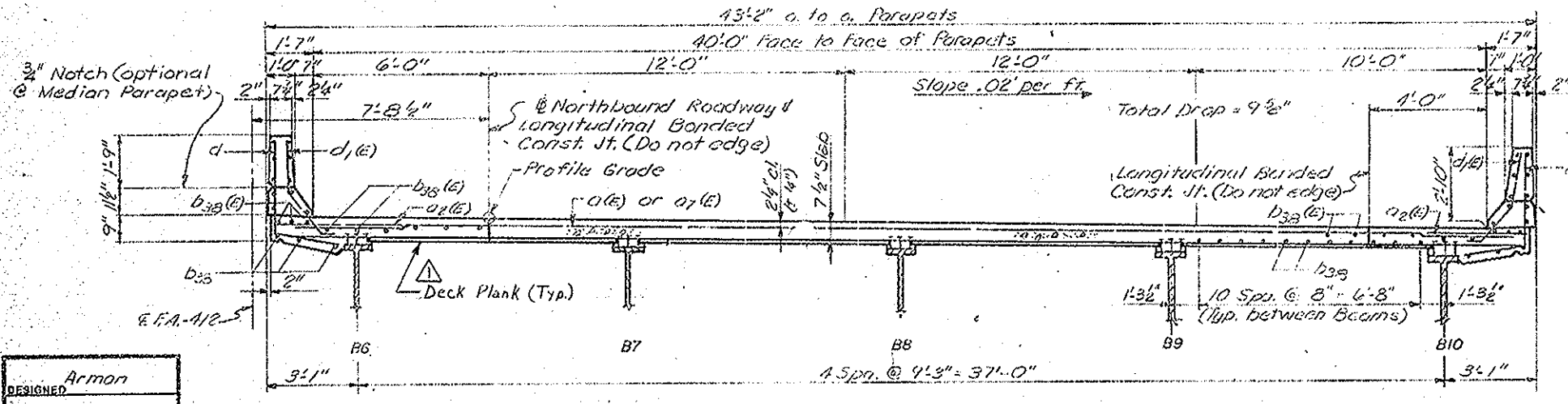
DESIGNED Armon
CHECKED R. Butterfield
Steve Stegman
DRAWN R. Prescher
CHECKED G. Roufa

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

1/14/86



PLAN



CROSS SECTION
Looking North

NOTES
Work this sheet with Sheet 33.
d₁(E) bars located near the ends of parapets shall be set back to clear block out for Exp. Joints by 1 inch.
Bars shown thus: 10x3-#5 etc. indicates 10 lines of bars with 3 lengths per line.
Floor Drains and Scuppers not shown. See Sheets 35 & 36 for location and details.
Space bars a₂(E), d and d₁(E) in field to miss Floor Drains and Scuppers.
Cut bars a₁(E), a₁(E) and a₃ in field to miss Floor Drains and Scuppers.
For General Notes, see Sheet 5.
Lighting Pedestals not shown. See Sheet 34 for location and details.

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

SLAB - SPAN 44 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

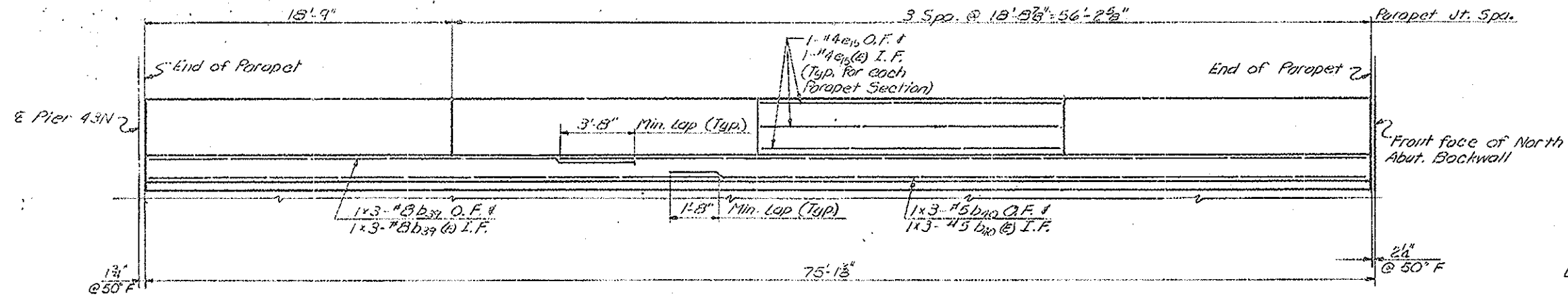
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

ADD DECK PLANKS, ELIMINATE a₁ + a₂ BARS, ADD a₁(E) + Y(E) BARS
1/15/86

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED Armon
CHECKED R. Butterfield
Steve Stegman
DRAWN R. Prescher
CHECKED G. Roufa

6892
225303

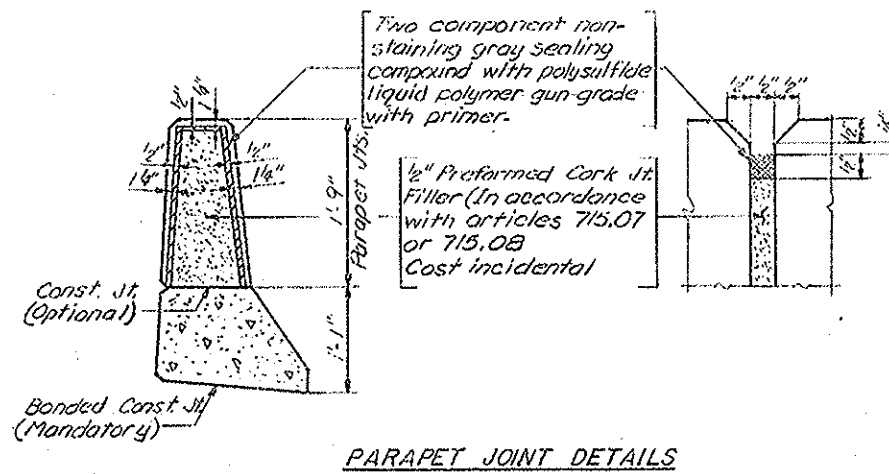


INSIDE ELEVATION OF PARAPET

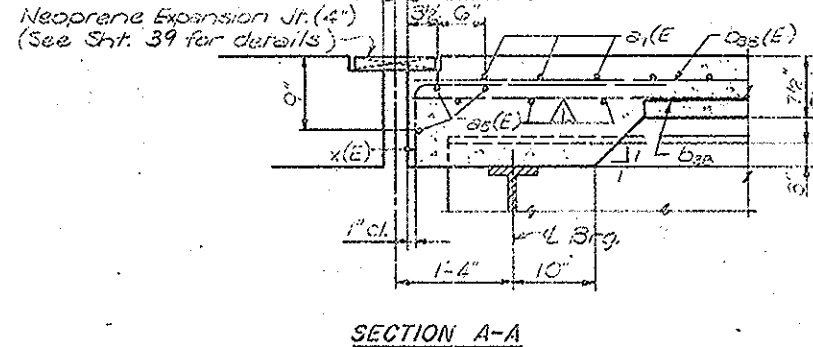
Note: O.F. indicates Outside Face
I.F. indicates Inside Face

**SUPERSTRUCTURE
BILL OF MATERIAL**

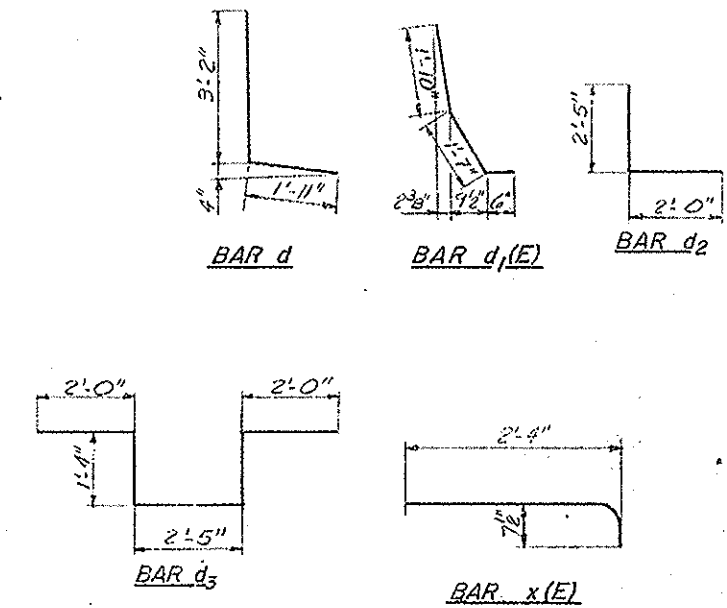
Bar	No.	Size	Length	Shape
a1(E)	123	#5	41'-2"	—
a2(E)	170	#6	41'-0"	—
a3(E)	24	#6	25'-6"	—
a7(E)	53	#5	43'-0"	—
b1(E)	3	#5	21'-0"	—
b38(E)	138	#5	26'-1"	—
b39	150	#5	26'-1"	—
b77(E)	6	#8	27'-5"	—
b79	6	#8	27'-5"	—
b80(E)	6	#5	26'-1"	—
b80	6	#5	26'-1"	—
c1	150	#4	51'-1"	L
c16(E)	164	#3	3'-11"	L
d1***	3	#6	41'-5"	L
d3***	5	#6	8'-11"	L
e15(E)	24	#4	13'-6"	—
e16	24	#4	13'-6"	—
x(E)	80	#6	3'-0"	—
y(E)	24	#5	9'-7"	—
Reinforcement Bars (Epoxy Coated)				Lbs. 25,797
Class X Concrete				Cu.Yds. 100.7



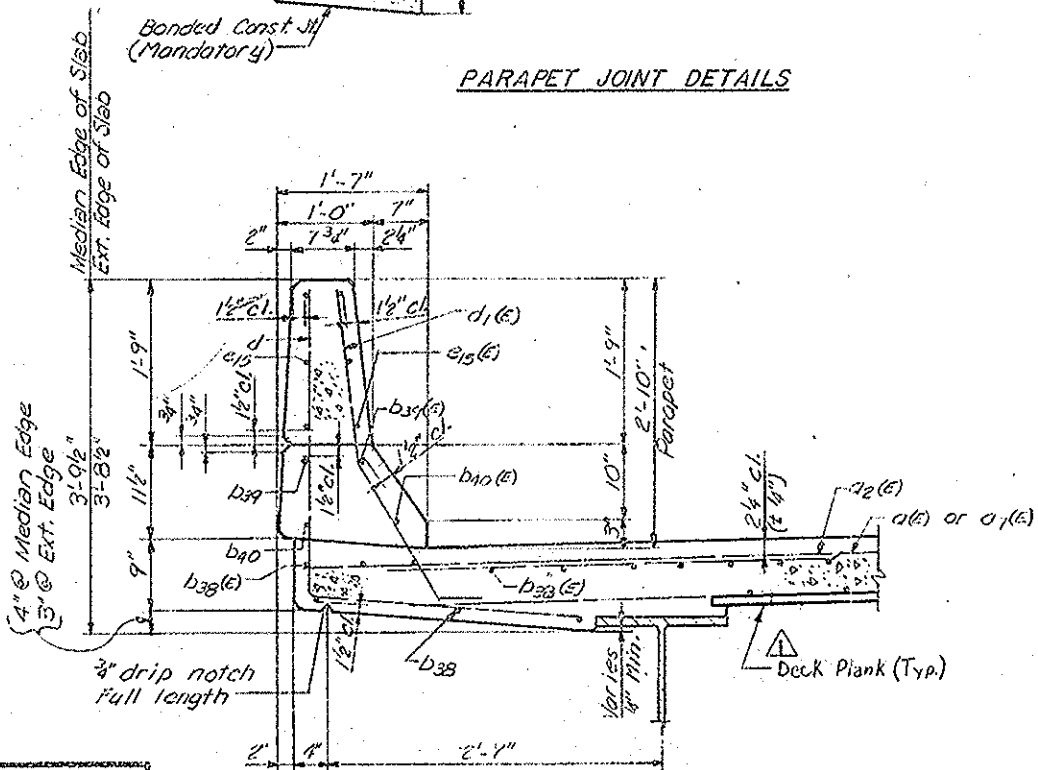
PARAPET JOINT DETAILS



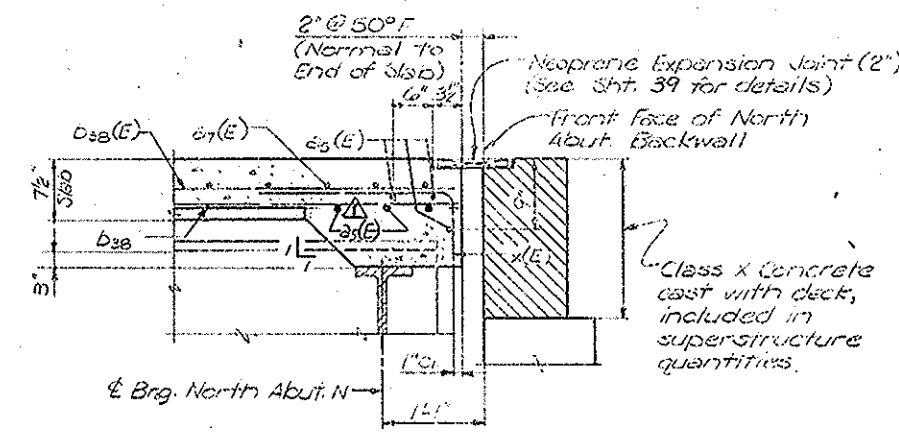
SECTION A-A



FIELD CUTTING DIAGRAM



SECTION THRU PARAPET



SECTION B-B

DESIGNED
Arman
R. Butterfield
CHECKED
R. Prescher
DRAWN
G. Roufa
CHECKED

Note: Work this sheet with Sheet 32-

ALL REINFORCEMENT BARS THIS SHEET TO BE EPOXY COATED.

* Order bars full length. Cut in field as shown to fit skew and use remaining bars at opposite end of slab.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

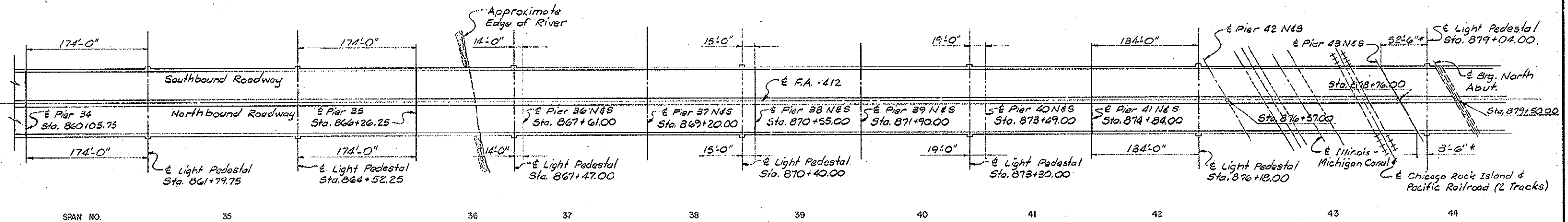
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PARAPETS - SPAN 44 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)

ADD DECK PLANKS, ELIMINATE a1 + a3 BARS, ADD a5(E) + Y(E) BARS
SHEET NO. 33 OF 76

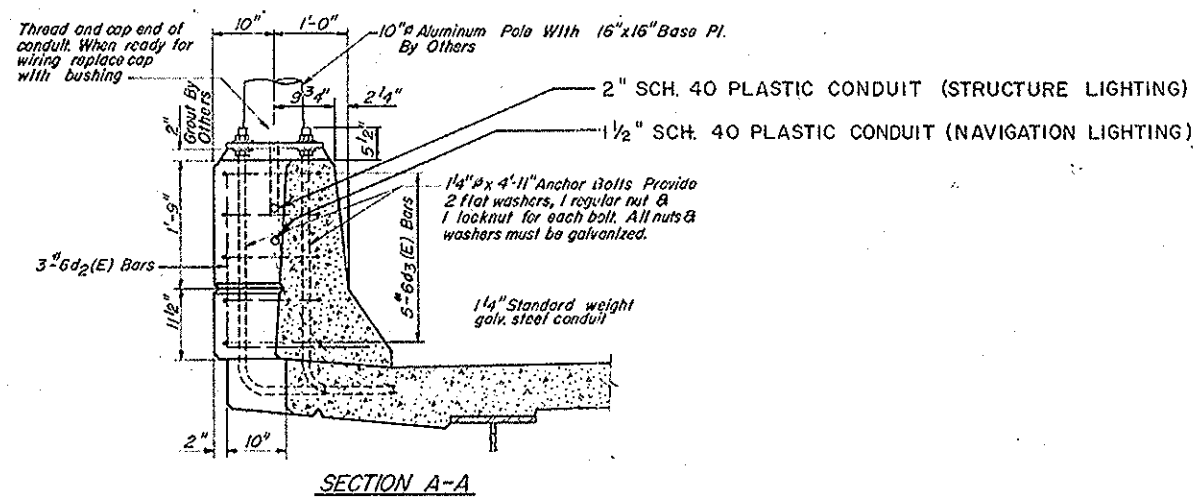
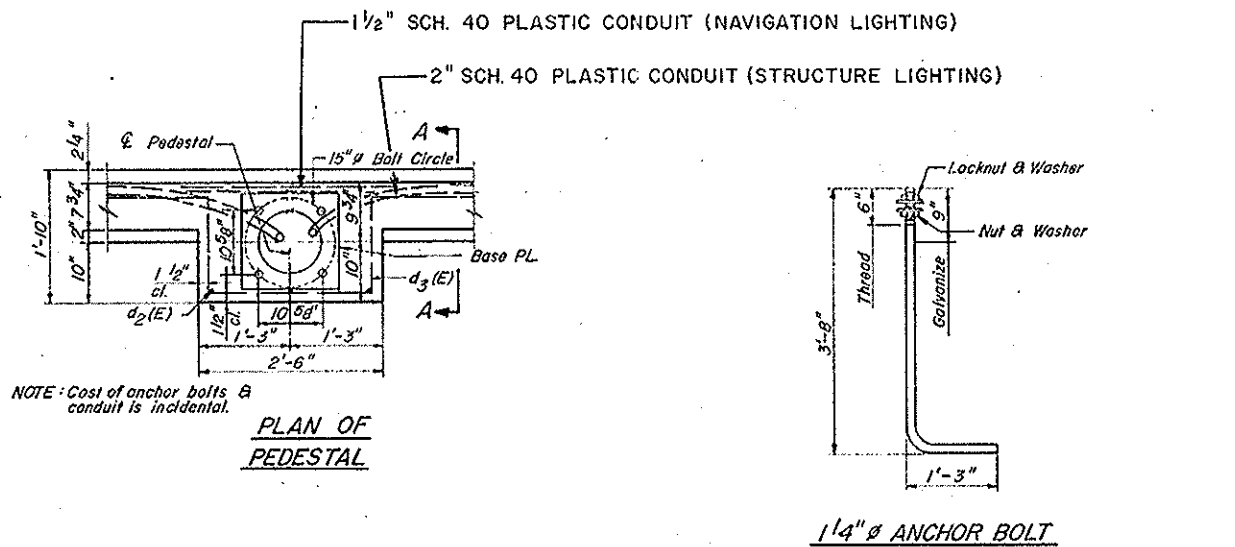
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

1/15/86

* Dimensions shown are measured along gutter line.



LIGHTING LOCATION PLAN



DESIGNED	
CHECKED	
DRAWN	J. Corley
CHECKED	R.F. Beck

6692
899025

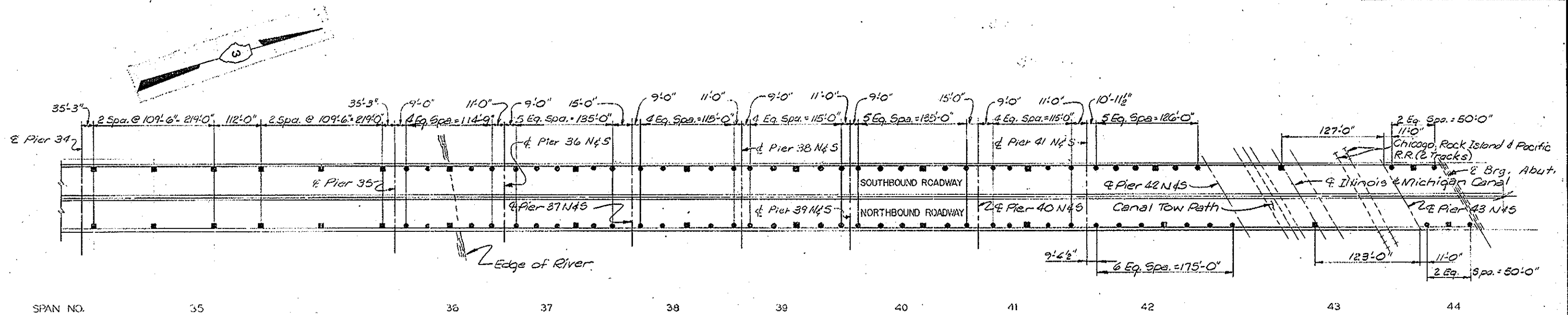
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
LIGHTING LOCATION PLAN & DETAILS
SPANS 35 THRU 44
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

SHEET NO. 34 OF 76

Revised 6-12-34



DRAINAGE PLAN

NOTES

- Indicates 8" x 36" Drainage Scupper
 - Indicates 6" Tubular Floor Drain
- The deck drains in the spans shall be spaced to clear any communication lines, cross arms, and/or power lines under that span by 10'-0" as determined in the field by the Engineer.
No Drains shall be within R.R. Right-of-Way.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

DRAINAGE PLAN - SPANS 35 THRU 44

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

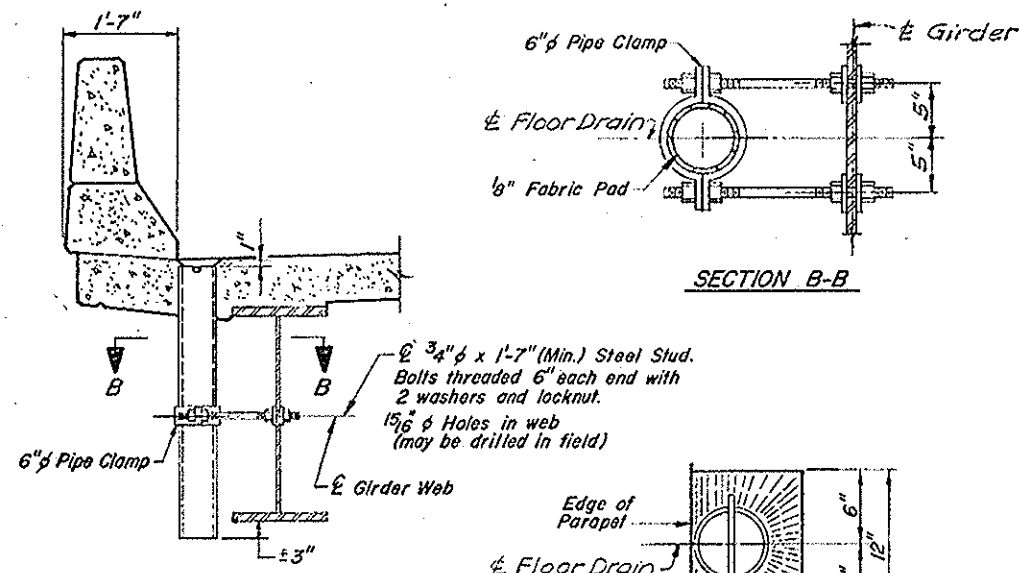
STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED	
CHECKED	
DRAWN	R. Prescher
CHECKED	T. Ritzheimer

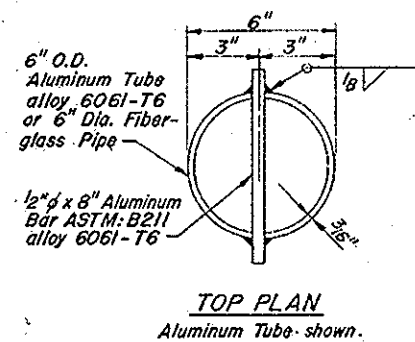
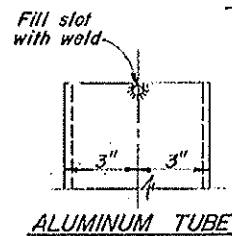
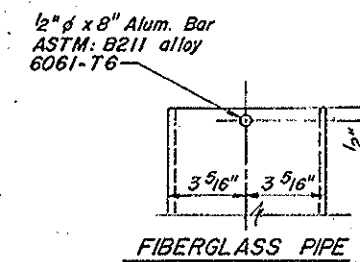
6692
B225476

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



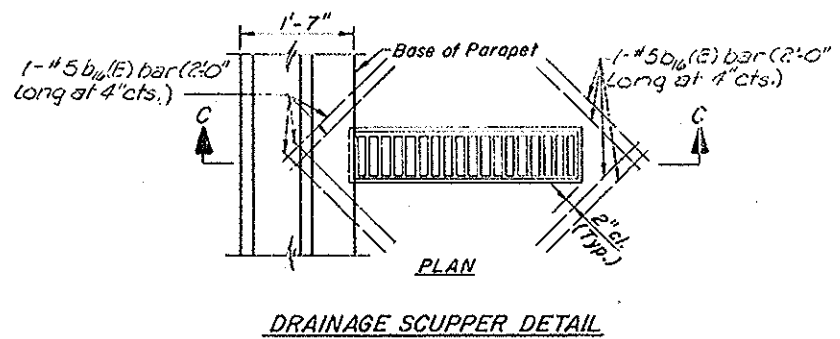
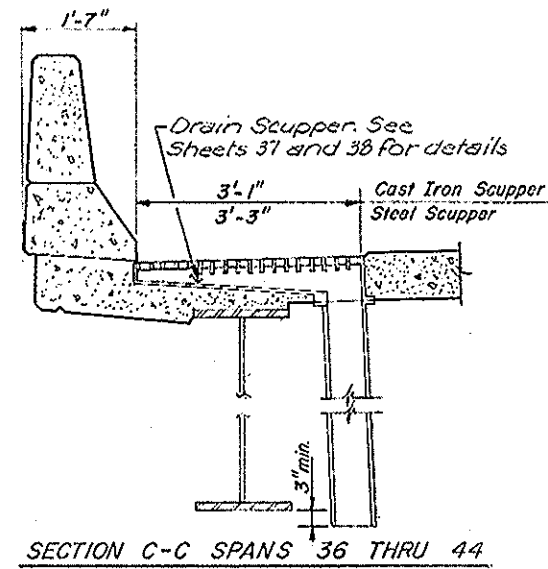
SECTION AT PARAPET
The surface of the Fiberglass pipe shall be free of bond inhibiting agents.



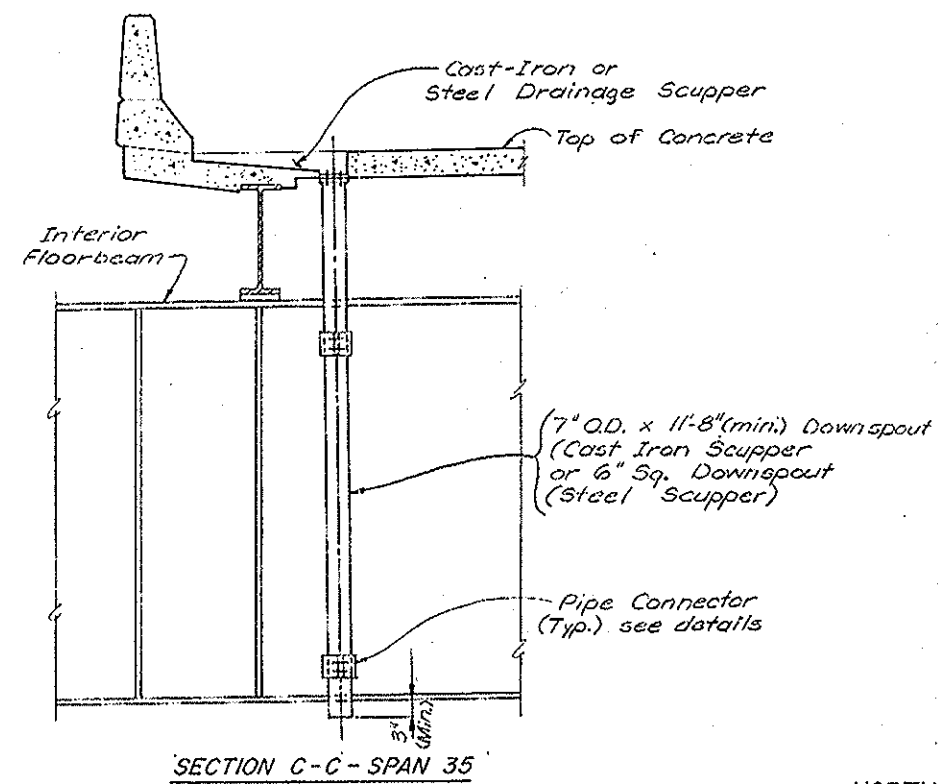
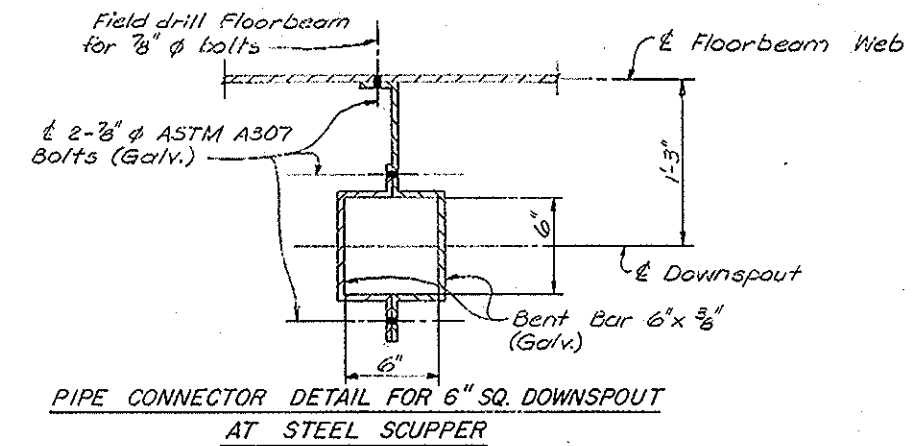
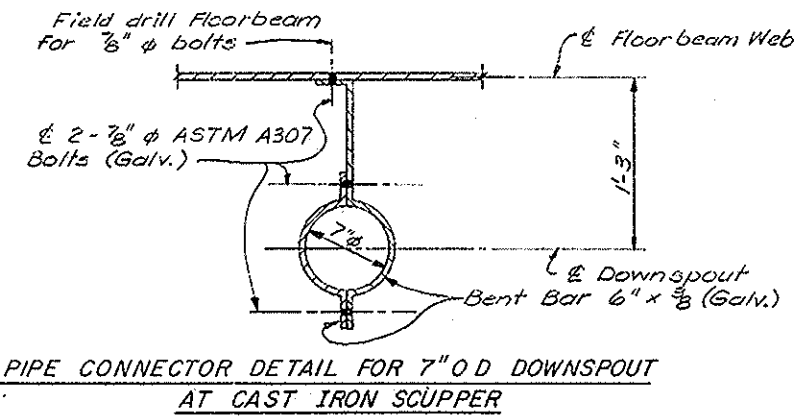
NOTE: Fiberglass pipe shall conform to ASTM D2996, with short time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the Floor Drain shall be painted with the vinyl enamel coat painting specified for structural steel. The exterior surfaces of the Aluminum tube shall be cleaned and given a washcoat pretreatment in accordance with Steel Structures Painting Councils Spec. SSPC-SPI & SSPC-Paint 27 prior to painting.

FLOOR DRAIN
67 Req'd.



DRAINAGE SCUPPER
30 Req'd.

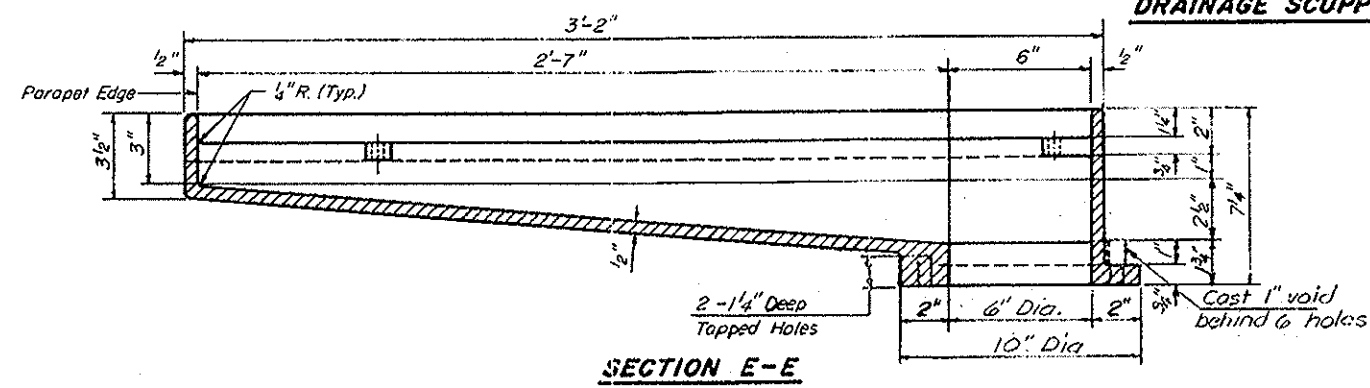
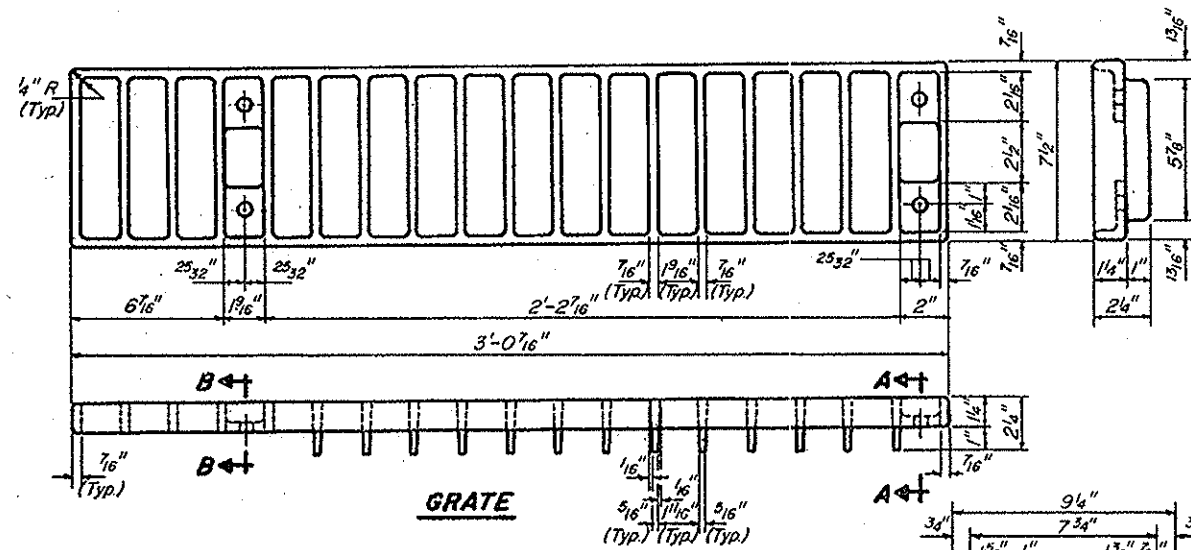
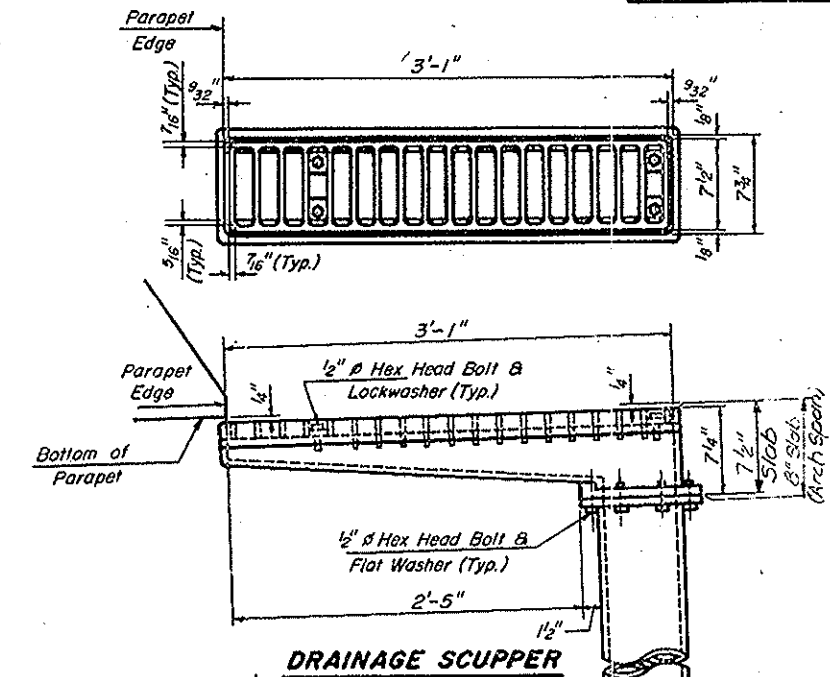
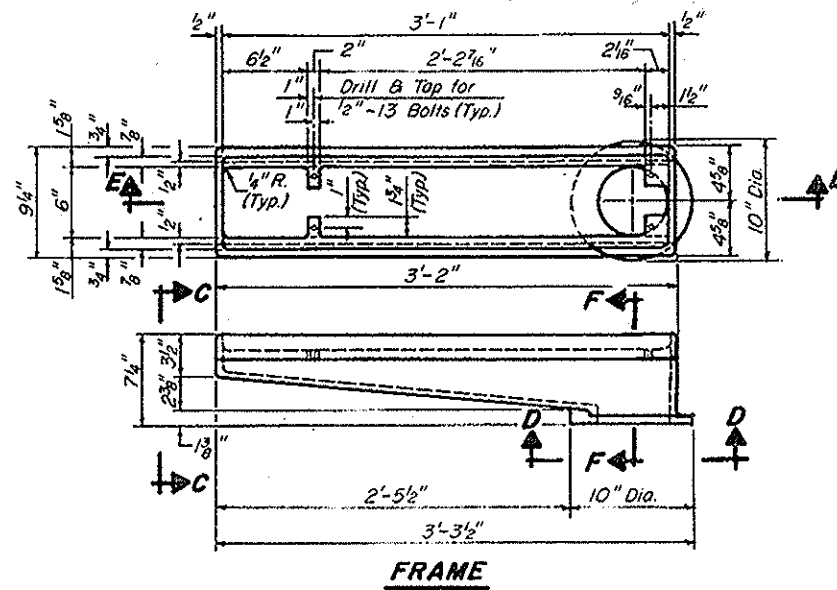
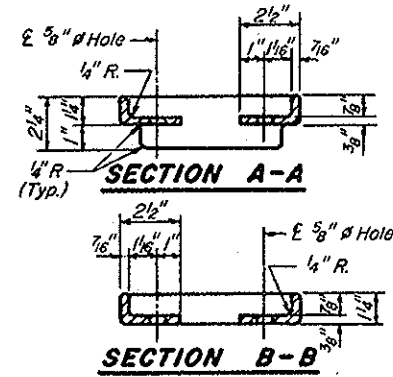


NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FLOOR DRAIN AND SCUPPER DETAILS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+1600 (FA-412) LASALLE CO.

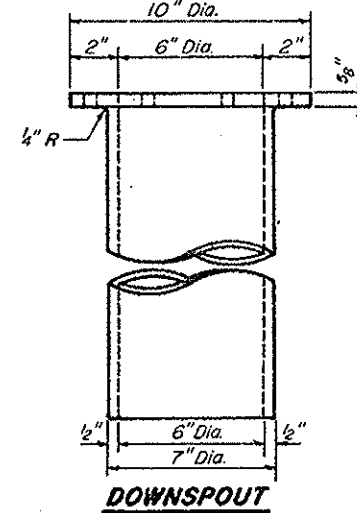
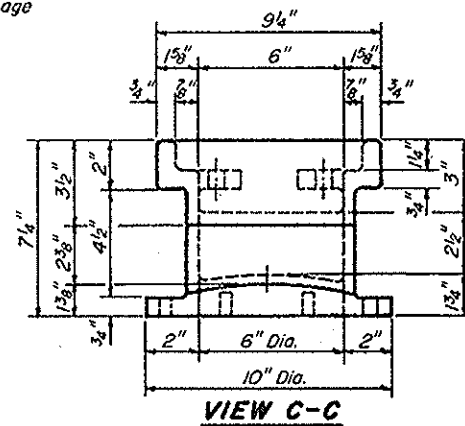
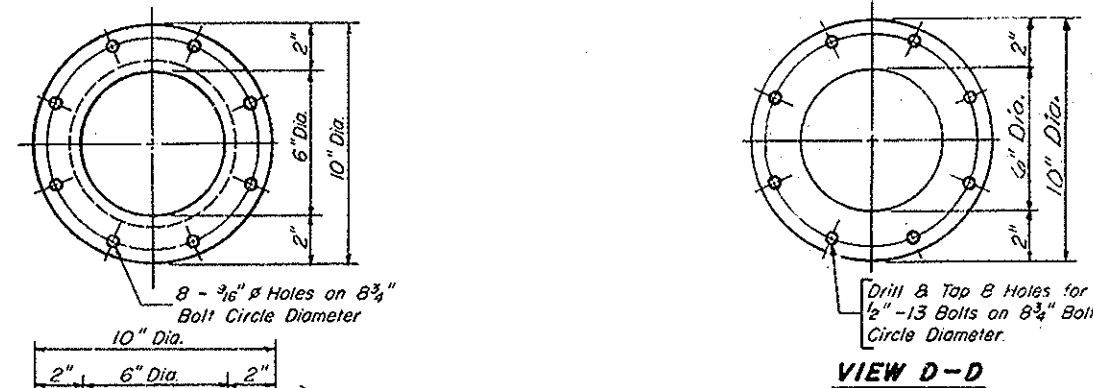
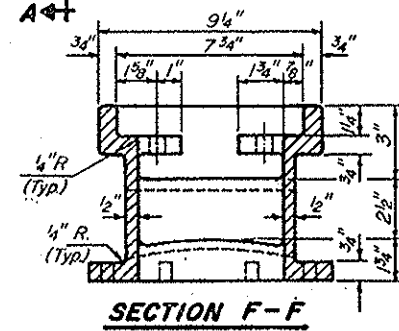
DESIGNED	
CHECKED	
DRAWN	R. Prescher
CHECKED	T. Ritzeheimer

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	207
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M-105, Class 30.
 Bolts and washers shall conform to the requirements of A.S.T.M. A-307.
 All bolts and washers shall be galvanized in accordance with A.A.S.H.T.O. M-232.
 As an alternate bolts and washers may be stainless steel conforming to the requirements of A.S.T.M. A-193, Type 304.
 Cost of the Grate, Frame, Downspout, bolts and washers including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".
 The Contractor may use at his option steel drainage scuppers or cast iron drainage scuppers.



NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED	
CHECKED	
DRAWN	R. Prescher
CHECKED	T. Ritzheimer

6692
925457R

PREPARED BY:
 SVDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

NORTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 ALTERNATE - CAST IRON DRAINAGE SCUPPER
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	208
FED. ROAD DIST. NO. 7	MAINTEN.	FED. AID PROJECT	EBF-412-4(6)	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Joint Size	"C" at 50°F	"D" at 50°F	Location
2	2"	1 1/2" min.	North Abutment
2 1/2	2 1/2"	1 3/4" min.	
4	3"	2 1/2" min.	Flers 35 And 43

INSTALLATION NOTES

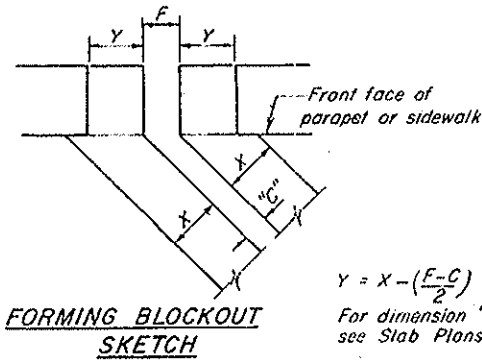
1. Install sponge mandrels into positions shown to form flap convolution.
2. Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
3. Install continuous seal in roadway.
4. Install anchor blocks as indicated.

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

SKEW LIMITATIONS

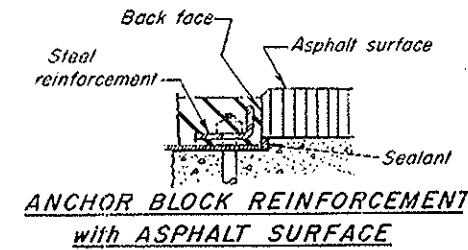
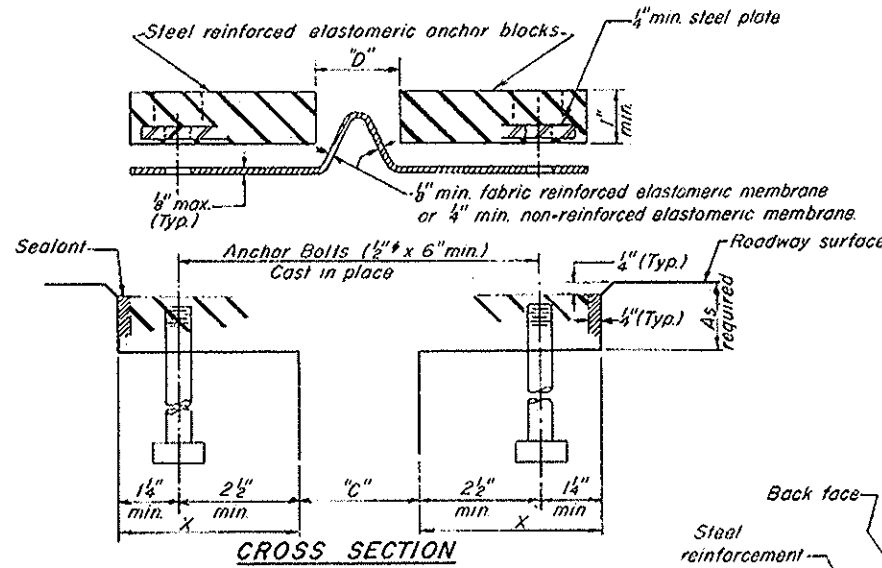
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews.

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.



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

For dimension "F" see Slab Plans.



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.

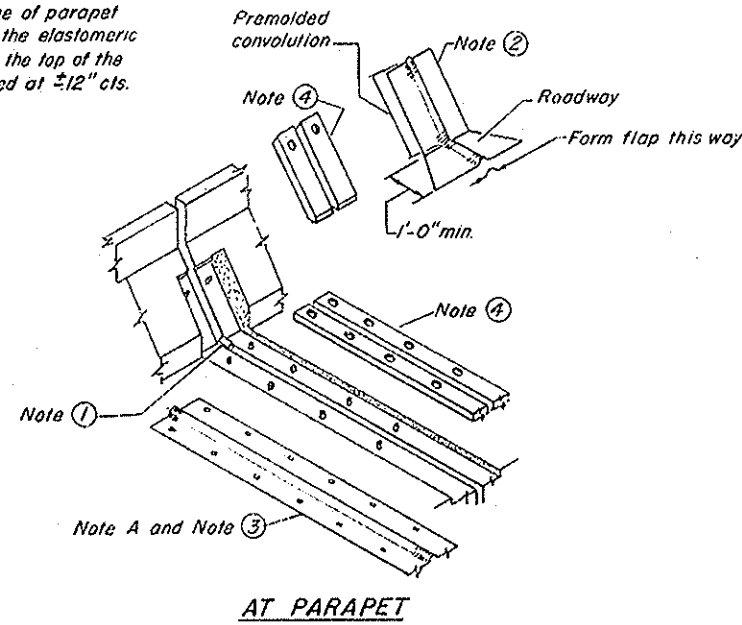
The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

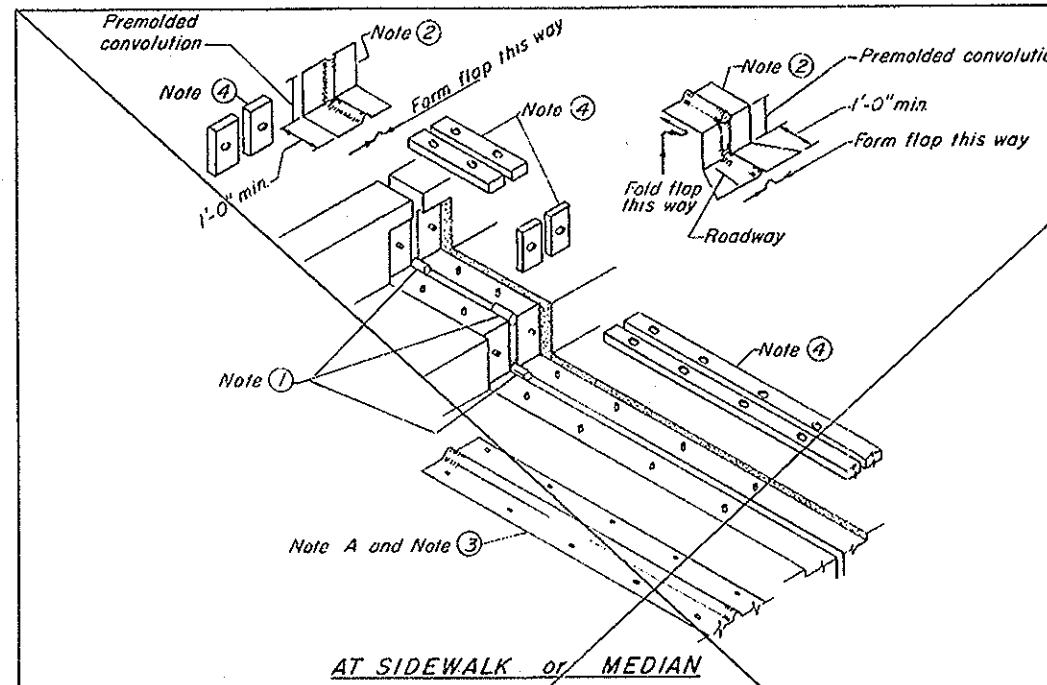
The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

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.

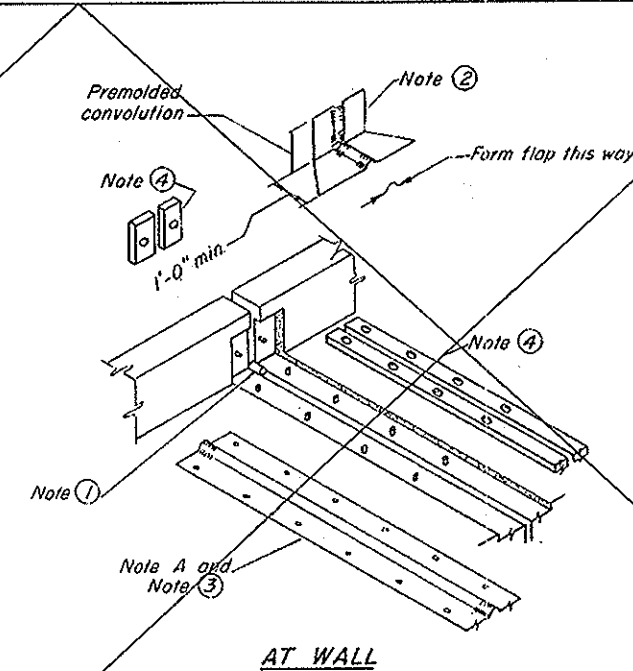
The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.



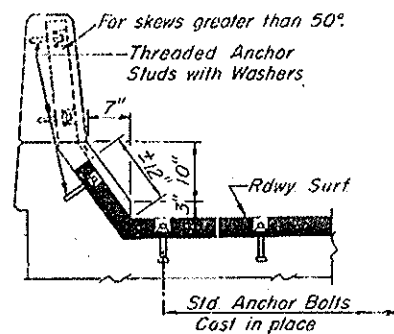
AT PARAPET



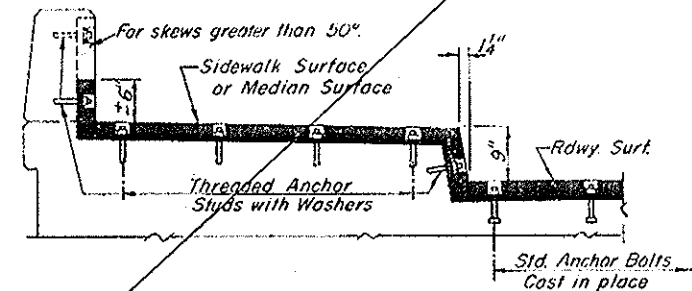
AT SIDEWALK or MEDIAN



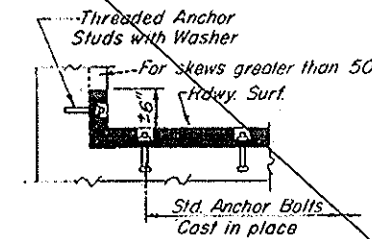
AT WALL



AT PARAPET



AT SIDEWALK or MEDIAN



AT WALL

TYPICAL END TREATMENTS

CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2", 2 1/2" and 4" Movement

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

NEOPRENE EXPANSION JOINTS

FA-412 OVER ILLINOIS RIVER

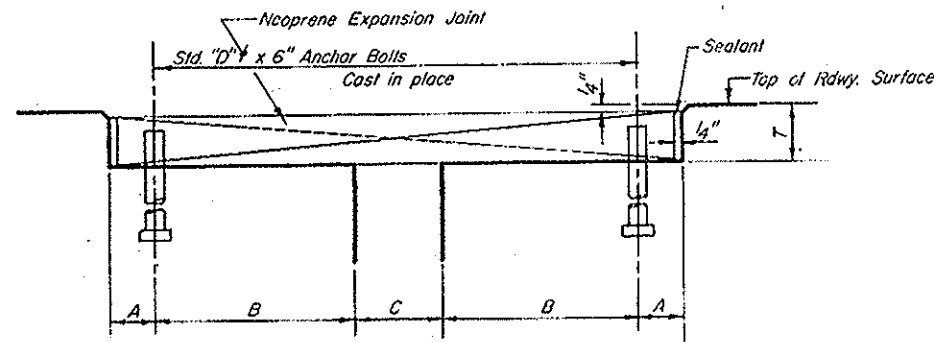
SECTION 50-4B PROJECT EBF-412-4 (6)

STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED R. Butterfield
CHECKED R. Wokurka
DRAWN L.S. Maus
T. Ritzheimer
CHECKED L. Glaser

NEOPRENE EXPANSION JOINTS (6½), (9) and (13)
(See Special Provisions)

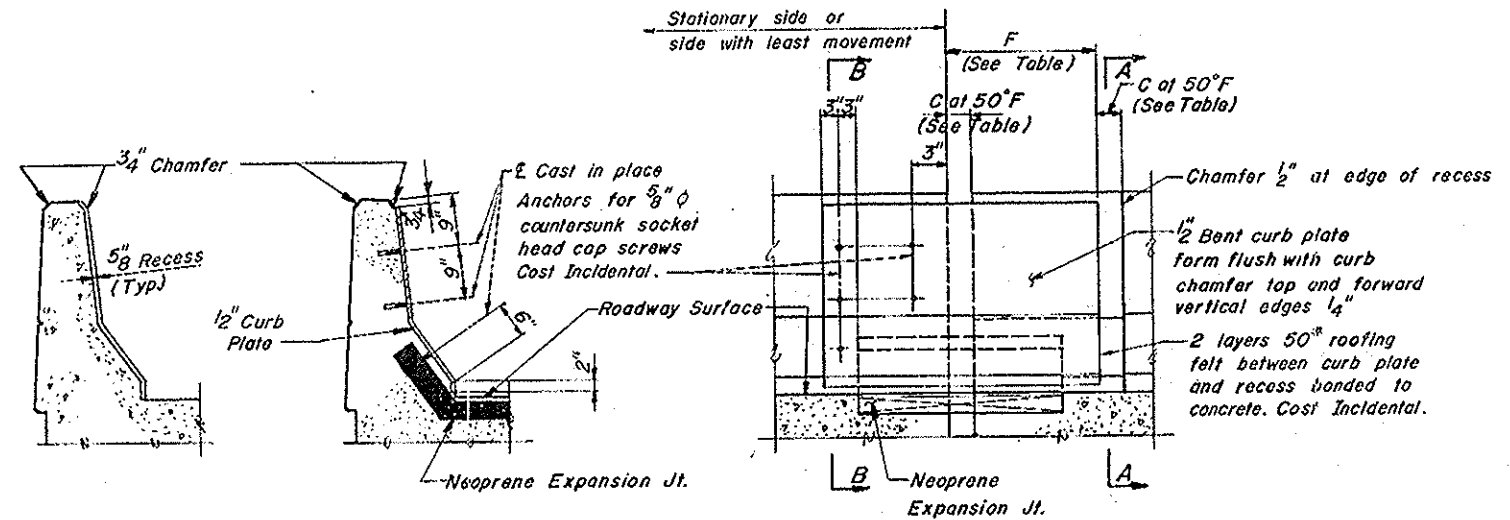
Model	Supplier	Blockout Dimensions
(6½) TRANSFLEX, MODEL 650	General Tire Company	T = 3¼", A = 2⅞", B = 9⅞"
(9) TRANSFLEX, MODEL 900	General Tire Company	T = 4", A = 2⅞", B = 12¼"
(13) TRANSFLEX, MODEL 1300	General Tire Company	T = 5¼", A = 2¾", B = 17½"



CROSS SECTION
At 50°F
Dimensions are at right angles.

NOTE:
Joint Openings shall be adjusted in accordance with Article 503.07 (c) of the Std. Spec's when the deck is poured at an ambient temperature other than 50°F.

Joint Size	C at 50°F	"D"	F	Location
6½	4½"	⅞"	1'-10"	Piers 38 And 41
9	5½"	⅞"	---	---
13	7½"	1⅞"	3'-0"	Pier 34



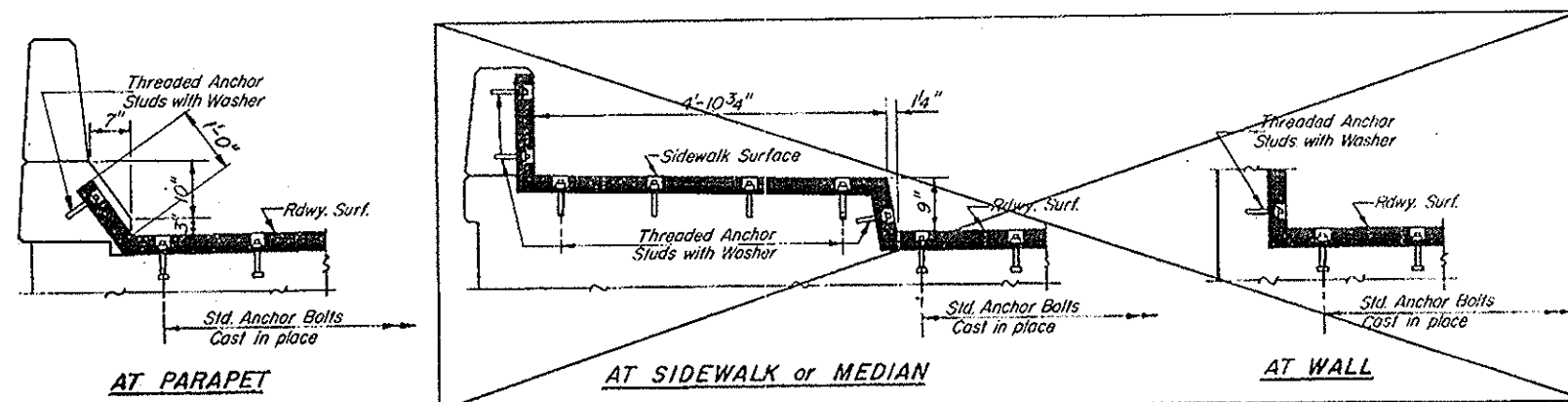
SECTION A-A

SECTION B-B

ELEVATION-EXPANSION JT. CURB PLATE

NOTES

It shall be the contractor's responsibility to coordinate the approved expansion device with the end curb plate detail shown on this sheet.
All curb plates shall be AASHTO M183 and shop painted with zinc silicate and vinyl paint system.



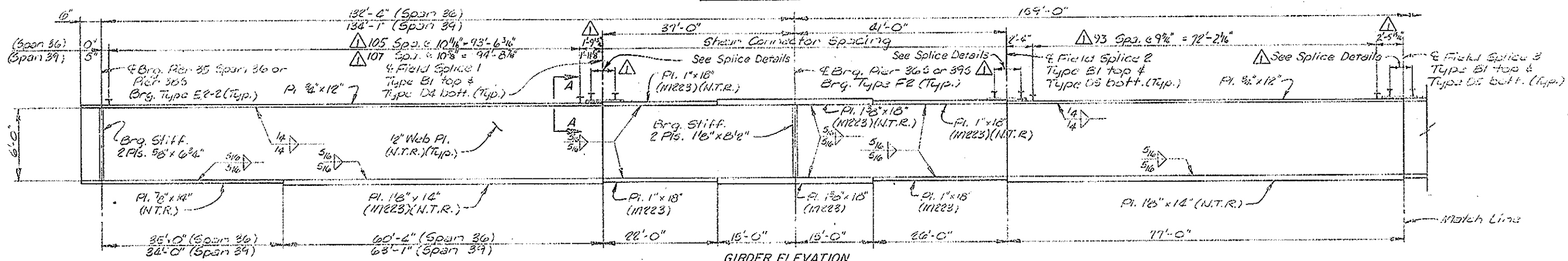
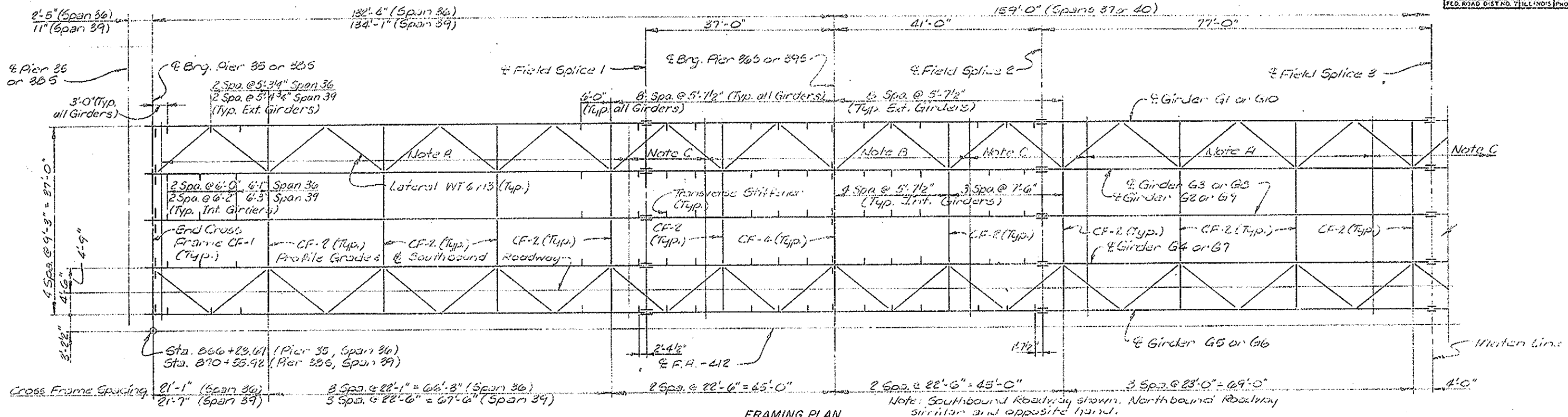
TYPICAL END TREATMENTS

NEOPRENE EXPANSION JOINTS
For 6½", 9" and 13" Units.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

NEOPRENE EXPANSION JOINTS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863-16.00 (FA.-412) LASALLE CO.

DESIGNED R. Butterfield
CHECKED R. Wokurka
DRAWN L. S. Mous
T. Ritzheimer
CHECKED L. Glaser



Location	± Brg. Pier 35 Span 36	± Field Splice 1	± Brg. Pier 36	± Field Splice 2	± Field Splice 3	± Brg. Pier 37	± Field Splice 4	± Brg. Pier 38 Span 38
G1 or G10	517.71	517.27	517.12	516.91	516.55	516.56	516.19	515.74
G2 or G9	517.90	517.46	517.25	517.02	516.72	516.55	516.38	515.93
G3 or G8	518.08	517.64	517.47	517.28	516.92	516.75	516.56	516.11
G4 or G7	518.27	517.83	517.63	517.47	517.11	516.92	516.75	516.30
G5 or G6	518.45	518.01	517.84	517.65	517.29	517.10	516.95	516.48

(±) For fabrication only.

NOTES

Transverse Stiffeners are Bars 5" x 1/4".
For Notes A, B and C, see Sheet 48.
For General Notes see Sheet 5.

(N.T.R.) Designates plates to which Match Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 48.
For Lateral Bracing Details see Sheet 49.
For Field Splice Details see Sheet 50.
For Bearing Details see Sheet 52.
For Camber Diagram see Sheet 54.
For Section A-A see Sheet 47.
Work this sheet with Sheet 42.

STRUCTURAL STEEL NOTES

All Structural Steel to be AASHTO M-103 unless otherwise noted.
All longitudinal dimensions are measured horizontally.
All bearing stiffeners shall be vertical in the completed structure and all intermediate cross frames shall be normal to the girders.
All steel labeled (M223) shall be AASHTO M223 Grade 50.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 36 THRU 38 & 39 THRU 41
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

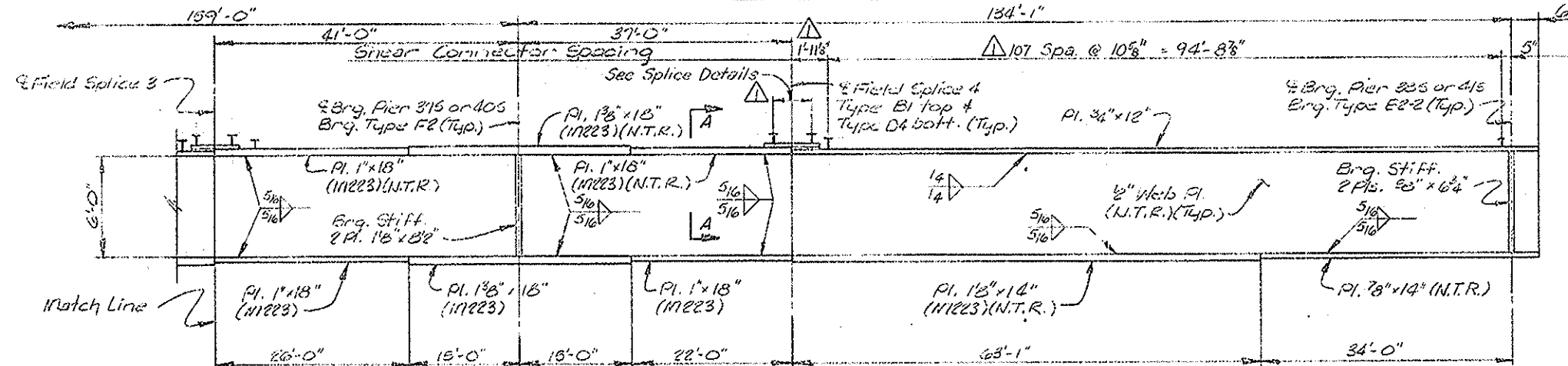
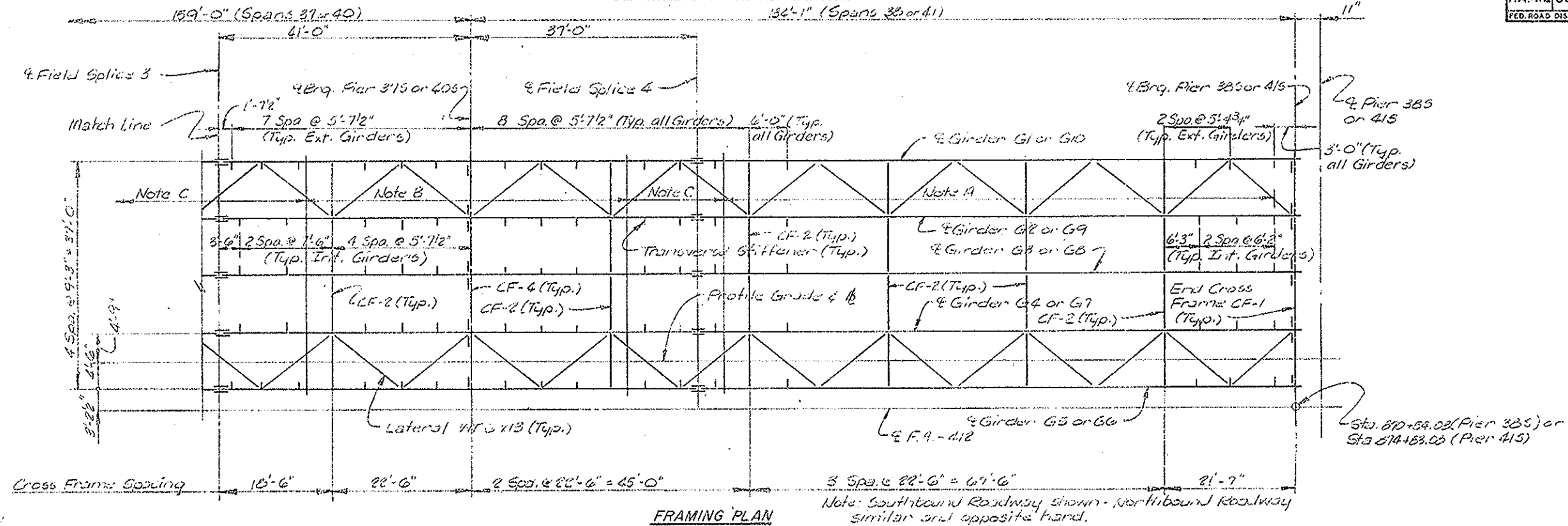
BUTTERFIELD
DESIGNED
RITZHEIMER
CHECKED
STEGMAN
DRAWN
C.A. LIZANIA
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

CHANGE SHEAR STUD SPACING FOR DECK PLANKS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 41 OF 76



GIRDER ELEVATION

Note: Transverse Stiffeners and splice plates not shown.

NOTES

Transverse Stiffeners are Bars 5" x 7/16".
For Notes A, B and C see Sheet 48.
For General Notes see Sheet 5.
For Structural Steel Notes see Sheet 41.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 48.
For Lateral Bracing Details see Sheet 49.
For Field Splice Details see Sheet 50.
For Bearing Details see Sheet 52.
For Camber Diagram see Sheet 54.
For Section A-A see Sheet 47.
Work this sheet with Sheet 41.

TOP OF WEB ELEVATIONS (*) SPANS 39 THRU 41

Location	¢ Brg. Pier 38 Span 39	¢ Field Splice 1	¢ Brg. Pier 39	¢ Field Splice 2	¢ Field Splice 3	¢ Brg. Pier 40	¢ Field Splice 4	¢ Brg. Pier 41 Span 41
G1 or G10	515.74	515.29	515.12	514.93	514.57	514.38	514.21	513.76
G2 or G9	515.92	515.47	515.30	515.11	514.75	514.57	514.39	513.95
G3 or G8	516.11	515.66	515.49	515.30	514.94	514.75	514.58	514.13
G4 or G7	516.29	515.84	515.67	515.48	515.12	514.94	514.76	514.32
G5 or G6	516.48	516.03	515.86	515.67	515.31	515.12	514.95	514.50

(*) For fabrication only.

BUTTERFIELD
DESIGNED
RITZHEIMER
CHECKED
STEGMAN
DRAWN
C.A. LIZANA
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 36 THRU 38 & 39 THRU 41
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

CHANGE SHEAR STUD SPACING FOR DECK PLANKS

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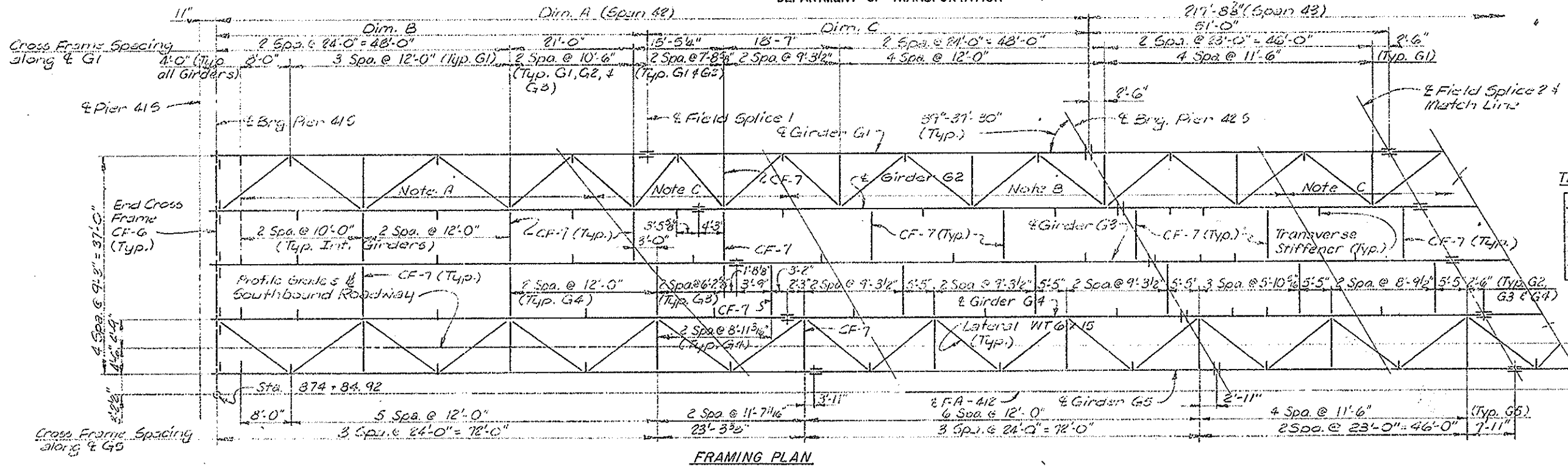
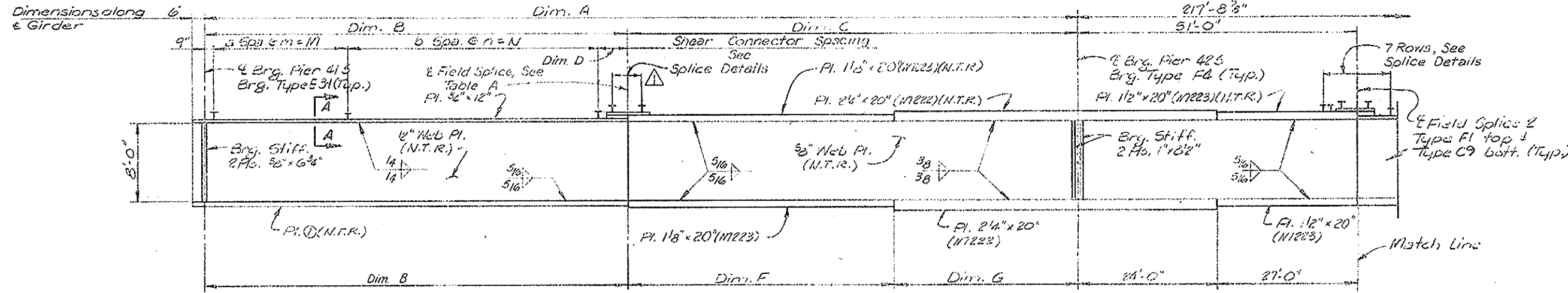


TABLE A - FIELD SPLICE I TYPE

Girder	Top Flange	Bot. Flange
G1	B4	E2
G2	B4	E2
G3	B4	E3
G4	B4	E4
G5	B4	E5



Note: Transverse Stiffeners and splice plates not shown.

Girder	GIRDER VARIABLES												
	Dim. A	Dim. B	Dim. C	Dim. D	Dim. F	Dim. G	a	m	M	b	n	N	Plate (I)
G1	118'-6 1/4"	79'-6 1/4"	74'-0"	2'-4 1/16"	45'-0"	27'-0"	15	8 1/16"	10'-10 3/8"	78	9 1/2"	60'-6 3/8"	3/2" x 12"
G2	153'-11 1/4"	80'-2 1/4"	73'-9"	2'-7 1/2"	43'-3"	30'-0"	12	9 5/16"	9'-3 3/4"	81	10"	67'-6"	3/2" x 12"
G3	159'-4 3/8"	86'-1 3/8"	73'-3"	2'-6 1/4"	42'-3"	31'-0"	93	10 1/16"	82'-9 1/4"				1 1/8" x 12"
G4	164'-9 3/8"	93'-0 3/8"	71'-9"	2'-8 3/4"	40'-3"	31'-6"	30	10 1/16"	86'-2 3/8"	63	1'-0"	63'-0"	1" x 12"
G5	170'-2 3/8"	99'-2 3/8"	71'-0"	2'-5 1/16"	37'-0"	33'-4"	33	10 1/16"	89'-4 1/4"	60	1'-1 1/16"	60'-6 3/4"	1 1/4" x 12"

NOTES

- Transverse Stiffeners are Bars 5/2" x 12".
- For Notes AB&C see Sheet 48.
- For General Notes see Sheet 5.
- For Structural Steel Notes see Sheet 41.
- For Bearing Stiffener details at Pier 42, see Sheet 48.
- (N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
- For Cross Frame Details see Sheet 48.
- For Lateral Bracing Details see Sheet 49.
- For Field Splice Details see Sheet 50.
- For Bearing Details see Sheet 52.
- For Camber Diagram see Sheet 54.
- For Section A-A see Sheet 47.
- Work this sheet with Sheet 44.

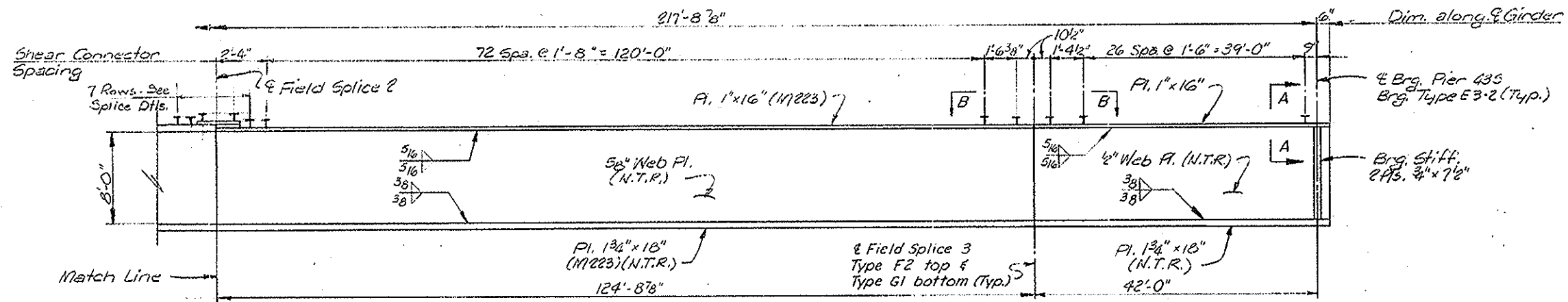
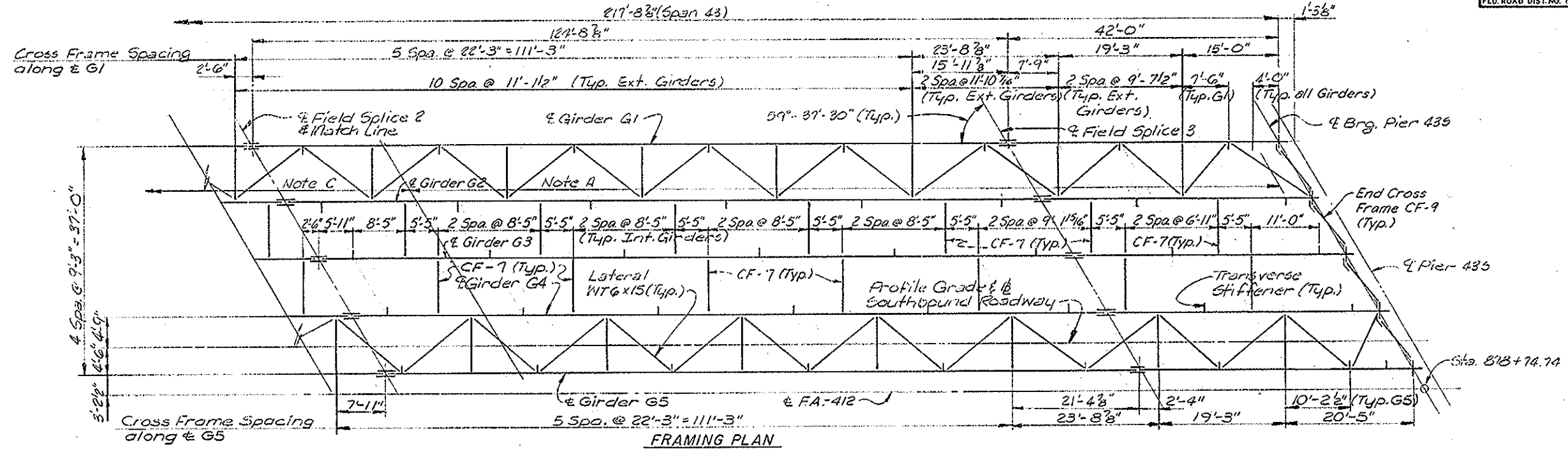
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

Arman
DESIGNED
Butterfield
CHECKED
STEGMAN
DRAWN
C.A. LIZANG
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

CHANGE SHEAR STUD SPACING FOR DECK PLANKS

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 42 AND 43 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



GIRDER ELEVATION

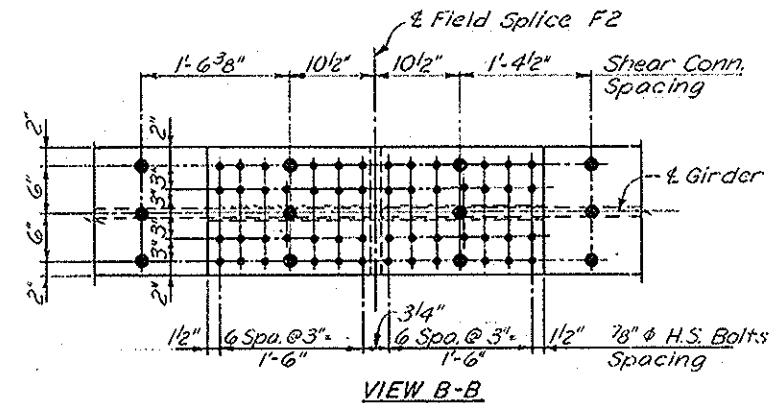
Note: Transverse Stiffeners and splice plates not shown.

NOTES

- Transverse Stiffeners are Bars 5/2" x 12".
- For Notes A, B & C see Sheet 48.
- For General Notes see Sheet 5.
- For Structural Steel Notes see Sheet 41.
- (N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
- For Cross Frame Details see Sheet 48.
- For Lateral Bracing Details see Sheet 49.
- For Field Splice Details see Sheet 50.
- For Bearing Details see Sheet 52.
- For Camber Diagram see Sheet 54.
- For Section A-A see Sheet 47.
- Work this sheet with Sheet 43.

TOP OF WEB ELEVATIONS (*)					
Location	¢ Brg. Pier 41S Span 42	¢ Field Splice 1	¢ Brg. Pier 42S	¢ Field Splice 2	¢ Brg. Pier 43S Span 43
G1	513.75	513.41	513.07	512.83	512.06
G2	513.94	513.57	513.23	512.99	512.22
G3	514.12	513.73	513.39	513.15	512.37
G4	514.31	513.88	513.55	513.31	512.53
G5	514.48	514.04	513.71	513.47	512.69

(*) For fabrication only.



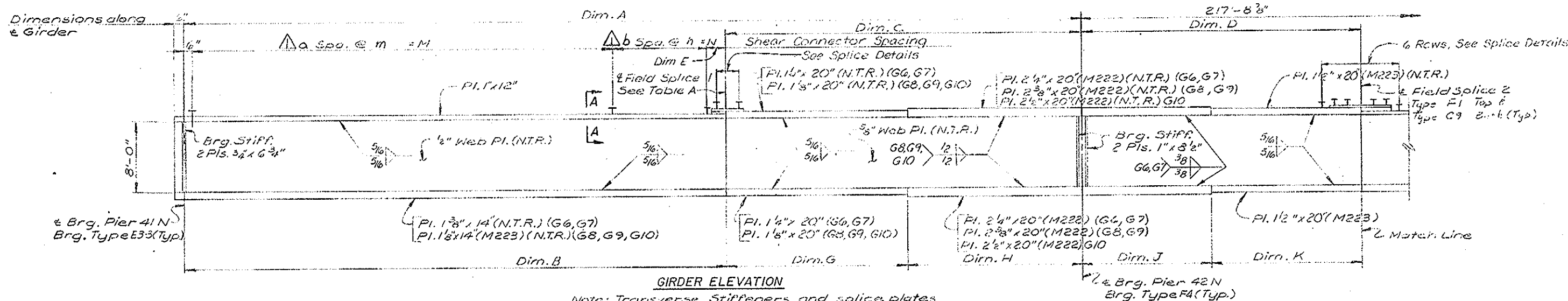
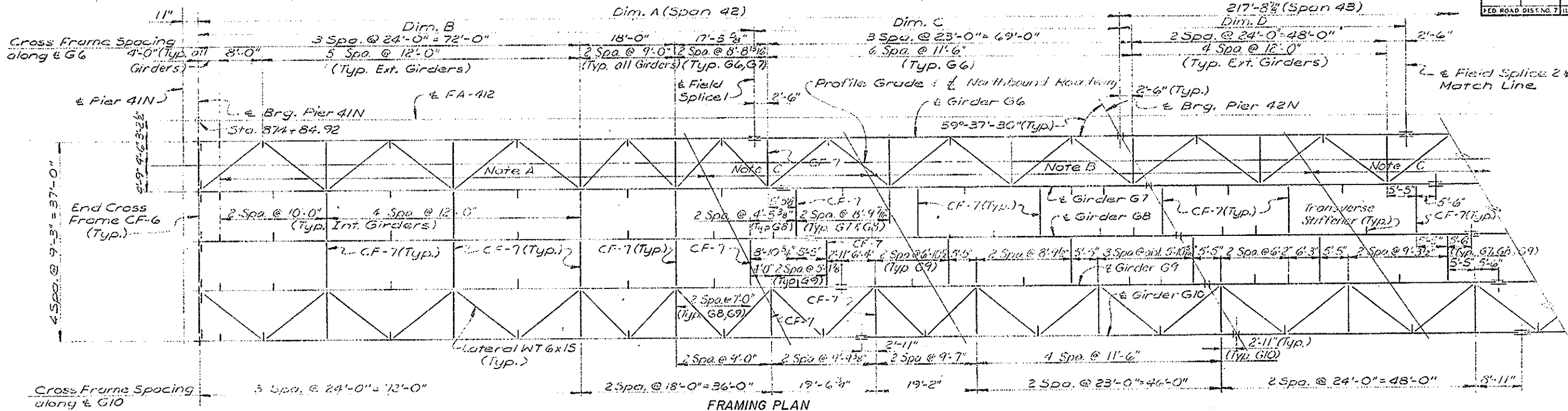
VIEW B-B

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 42 AND 43 SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

Arman
DESIGNED
R. Butterfield
CHECKED
STEGMAN
DRAWN
C. A. LIZANA
CHECKED

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



Girder	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. G	Dim. H	Dim. J	Dim. K	a	m	M	b	n	N
G6	173'-11 3/8"	104'-11 3/8"	69'-0"	53'-0"	2'-0 3/8"	32'-6"	36'-6"	25'-0"	28'-0"	95	10 5/8"	84'-1 3/8"	17	1'-0 3/8"	18'-3 1/2"
G7	179'-4 5/8"	110'-4 3/8"	69'-0"	54'-0"	1'-9 3/8"	32'-6"	36'-6"	25'-0"	29'-0"	92	10 5/8"	81'-5 1/2"	24	1'-1 1/8"	26'-7 1/2"
G8	184'-9 3/8"	115'-9 3/8"	69'-0"	56'-0"	1'-10 1/2"	27'-6"	41'-6"	26'-6"	29'-6"	90	10 1/2"	80'-1 1/8"	30	1'-1 1/8"	33'-3 3/8"
G9	190'-2 3/4"	121'-2 3/4"	69'-0"	56'-0"	1'-11 1/8"	28'-0"	41'-0"	27'-0"	29'-0"	96	10 1/2"	85'-6"	30	1'-1 1/8"	33'-5 3/8"
G10	195'-7 3/4"	124'-7 3/4"	71'-0"	54'-0"	2'-0 1/8"	27'-0"	41'-0"	27'-6"	27'-6"	96	10 1/2"	85'-6"	33	1'-1 1/8"	36'-1 1/8"

TABLE A-FIELD SPLICE I TYPE

Girder	Top Flange	Bot. Flange
G6	B3	D6
G7	B6	D6
G8	B5	D7
G9	B5	D7
G10	B5	D7

NOTES

Transverse Stiffeners are Bars: 5/8" x 12".
 For Notes A, B & C see Sheet 23.
 For General Notes see Sheet 5.
 For Structural Steel Notes see Sheet 4.
 For Bearing Stiffener Details, see Sheet 42.
 (N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes
 For Cross Frame Details see Sheet 48.
 For Lateral Bracing Details see Sheet 49.
 For Field Splice Details see Sheet 50.
 For Camber Diagram see Sheet 54.
 For Section A-A see Sheet 47.
 Work this sheet with Sheet 46.
 For Bearing Details see Sheet 52.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

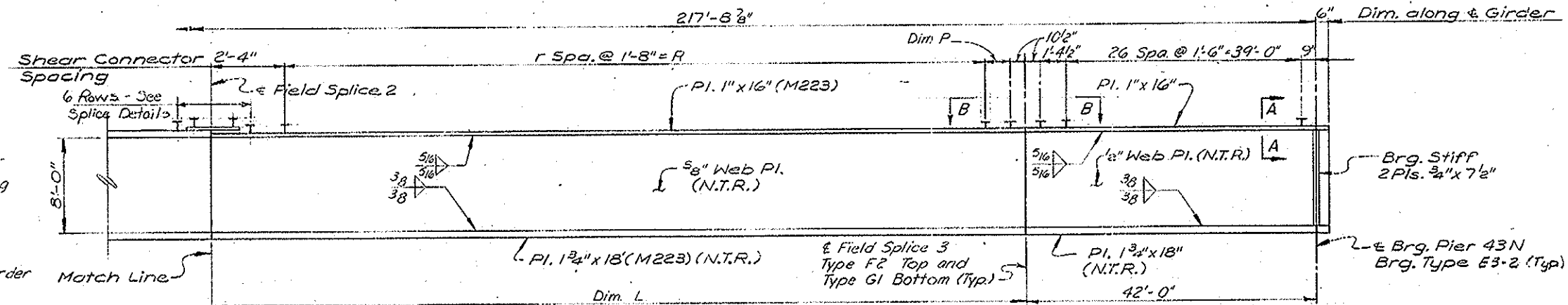
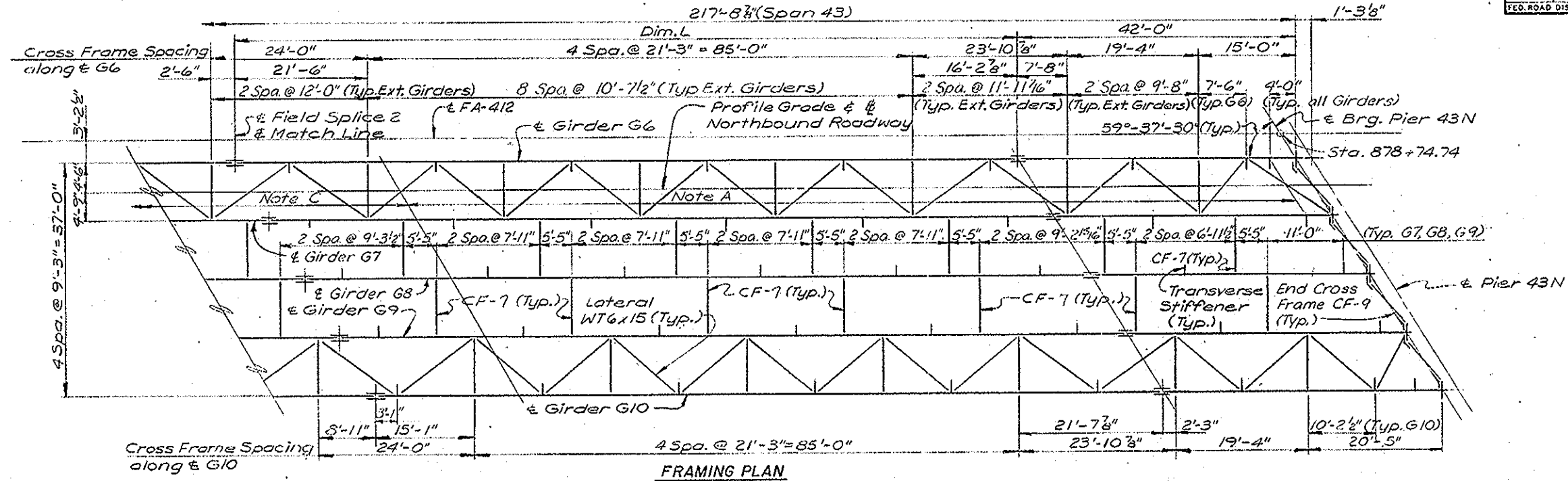
Arman
DESIGNER
R. Butterfield
CHECKED
D. Smithpeters
DRAWN
C.A. LIZARD
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

CHANGE SHEAR STUD SPACING FOR DECK PLANKS

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 42 AND 43 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+18.00 (FA-412) LASALLE CO.

Rev 6/14/84



GIRDER VARIABLES

Girder	Dim. L	Dim. P	r	R
G6	122'-8 3/8"	1'-2 3/8"	71	118'-4"
G7	121'-8 3/8"	1'-10 3/8"	70	116'-8"
G8	119'-8 3/8"	1'-6 3/8"	69	115'-0"
G9	119'-8 3/8"	1'-6 3/8"	69	115'-0"
G10	121'-8 3/8"	1'-10 3/8"	70	116'-8"

Note: Transverse Stiffeners and Splice Plates not shown.

TOP OF WEB ELEVATIONS (*)

Girder	& Brg. Pier 41N Span 42	& Field Splice 1	& Brg. Pier 42N	& Field Splice 2	& Brg. Pier 43N Span 43
G6	514.50	514.01	513.69	513.44	512.68
G7	514.31	513.80	513.48	513.23	512.47
G8	514.12	513.59	513.28	513.01	512.26
G9	513.94	513.38	513.06	512.80	512.05
G10	513.75	513.18	512.86	512.60	511.84

(*) For Fabrication only.

NOTES

Transverse Stiffeners are Bars 5/2" x 1/2".
For Notes A, B, C see Sheet 48.
For General Notes see Sheet 5.
For Structural Steel Notes see Sht. 41.

(N.T.R.) Designates plates to which Notch Toughness Requirements are applicable. See Structural Steel Notes.
For Cross Frame Details see Sheet 48.
For Lateral Bracing Details see Sheet 49.
For Field Splice Details see Sheet 50.
For Bearing Details see Sheet 52.
For Camber Diagram see Sheet 54.
For Section A-A see Sheet 47.
Work this sheet with Sheet 45.

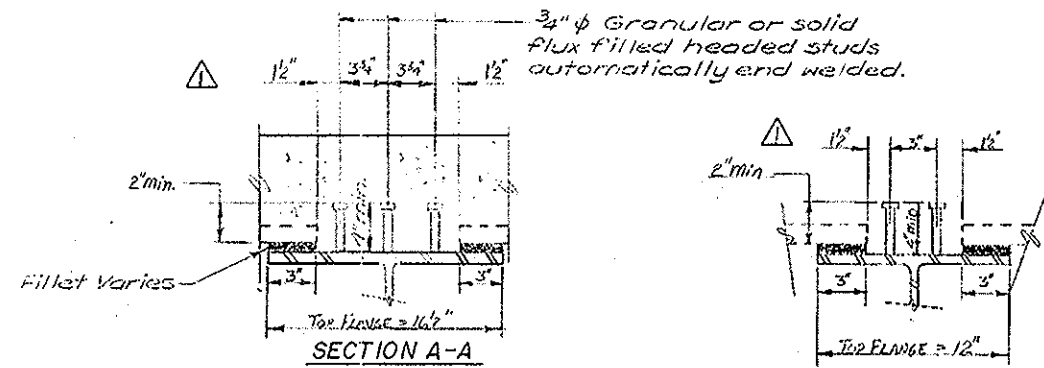
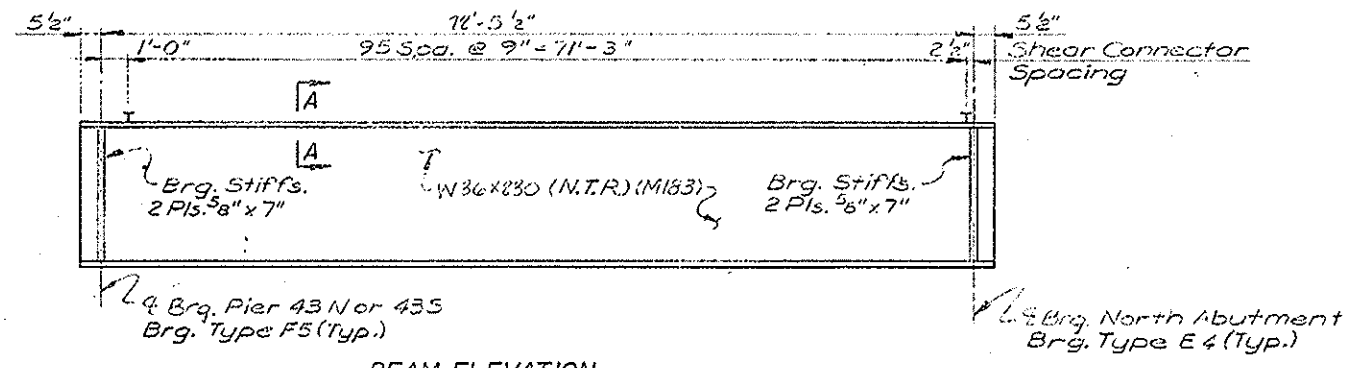
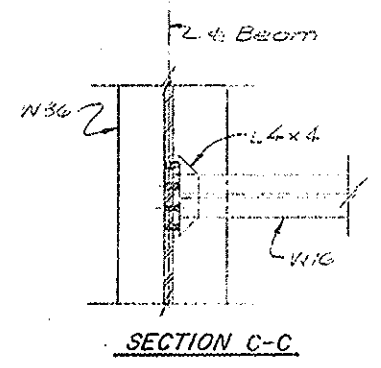
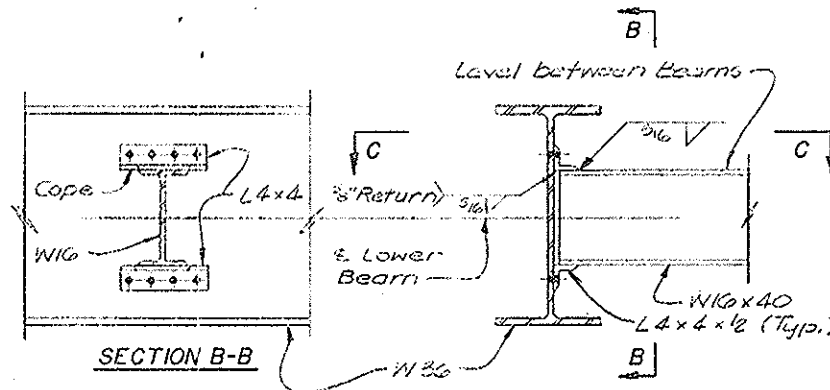
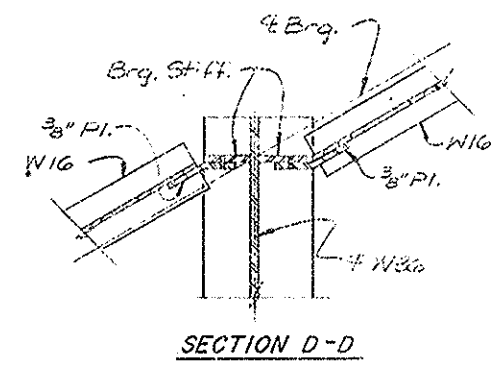
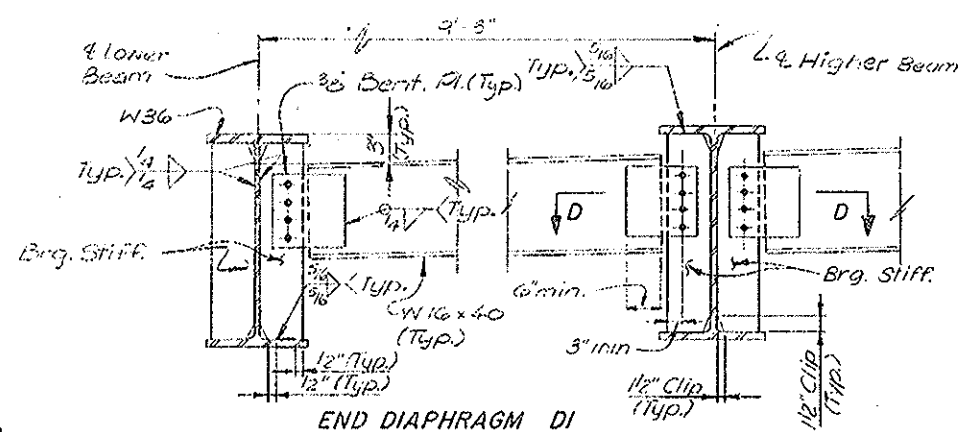
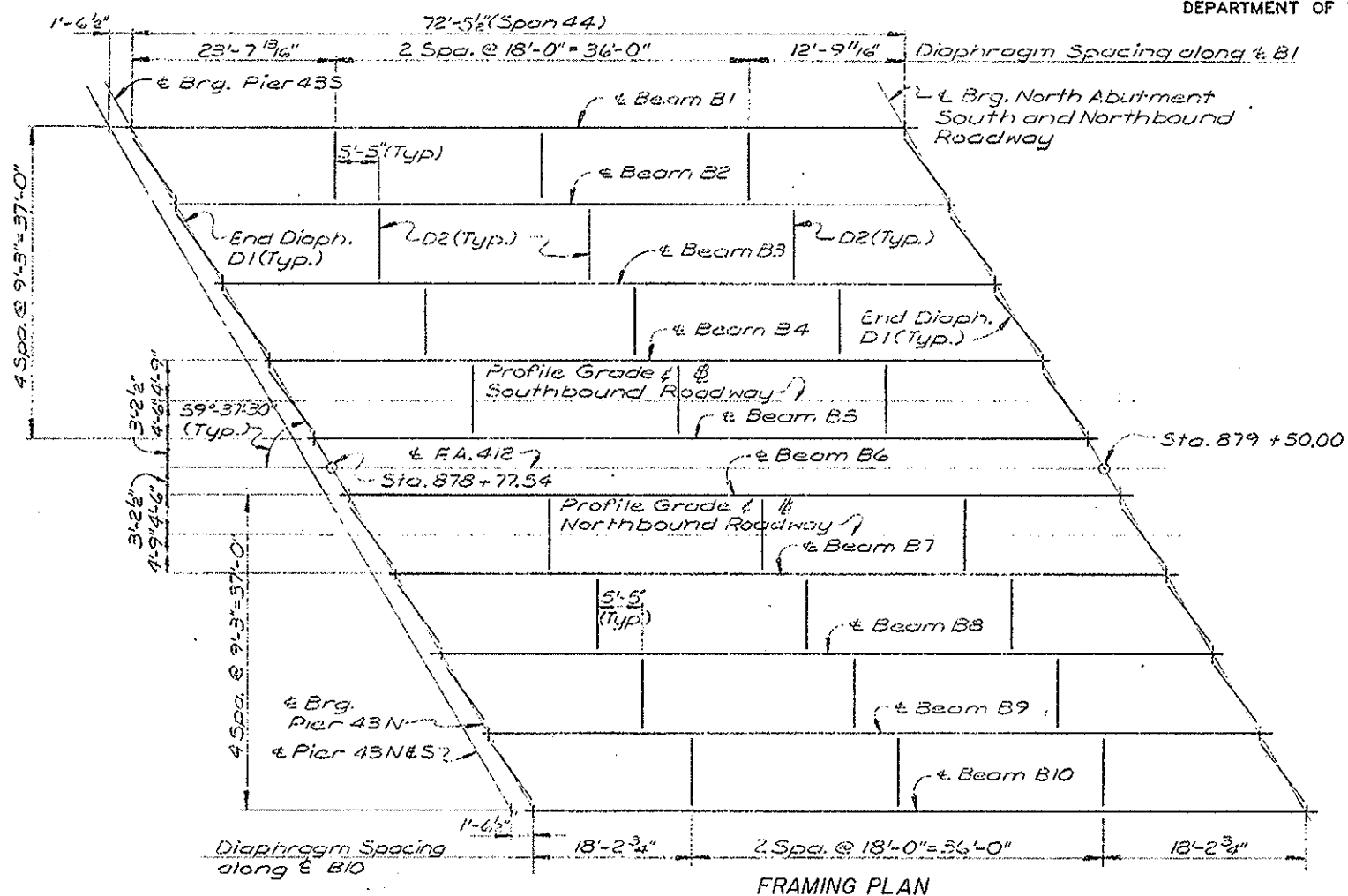
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN AND GIRDER ELEVATION
SPANS 42 AND 43 NORTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

Arman
DESIGNED
R. Butterfield
CHECKED
D. Smithpeters
DRAWN
C. A. LIZANA
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

Rev 6/12/89 JE



Shear Studs - No. Req'd Spans 36 Thru 44
(includes studs at splices)
Southbound Roadway = 11,370 studs
Northbound Roadway = 11,160 studs

TOP OF STEEL ELEVATIONS*

SOUTHBOUND ROADWAY			NORTHBOUND ROADWAY		
Location	& Brg. Pier 43S Span 44	& Brg. North Abut.	Location	& Brg. Pier 43N Span 44	& Brg. North Abut.
Beam B1	512.15	511.82	Beam B6	512.77	512.45
Beam B2	512.31	511.98	Beam B7	512.56	512.24
Beam B3	512.47	512.14	Beam B8	512.35	512.04
Beam B4	512.63	512.30	Beam B9	512.14	511.83
Beam B5	512.79	512.47	Beam B10	511.93	511.63

* For Fabrication Only.

NOTES

For General Notes, see Sheet 5.
For Bearing Details see Sheet 52.
For Structural Steel Notes see Sheet 41.
(N.T.R.) Denotes members to which Notch Toughness Requirements are applicable, see Structural Steel Notes.

**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FRAMING PLAN, BEAM ELEVATION
AND DETAILS
SPAN 44**

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

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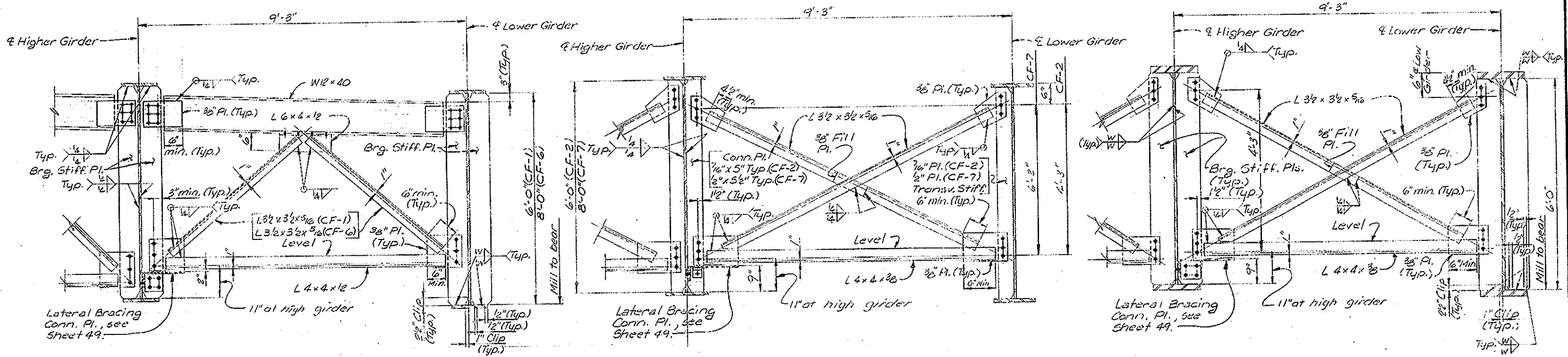
CHANGE SHEAR STUD SPACING FOR DECK PLANKS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 47 OF 76

DESIGNED: Arman
CHECKED: Butterfield
DRAWN: D. Smithpeters
CHECKED: C.A. LIZANA

6892
8/2/86



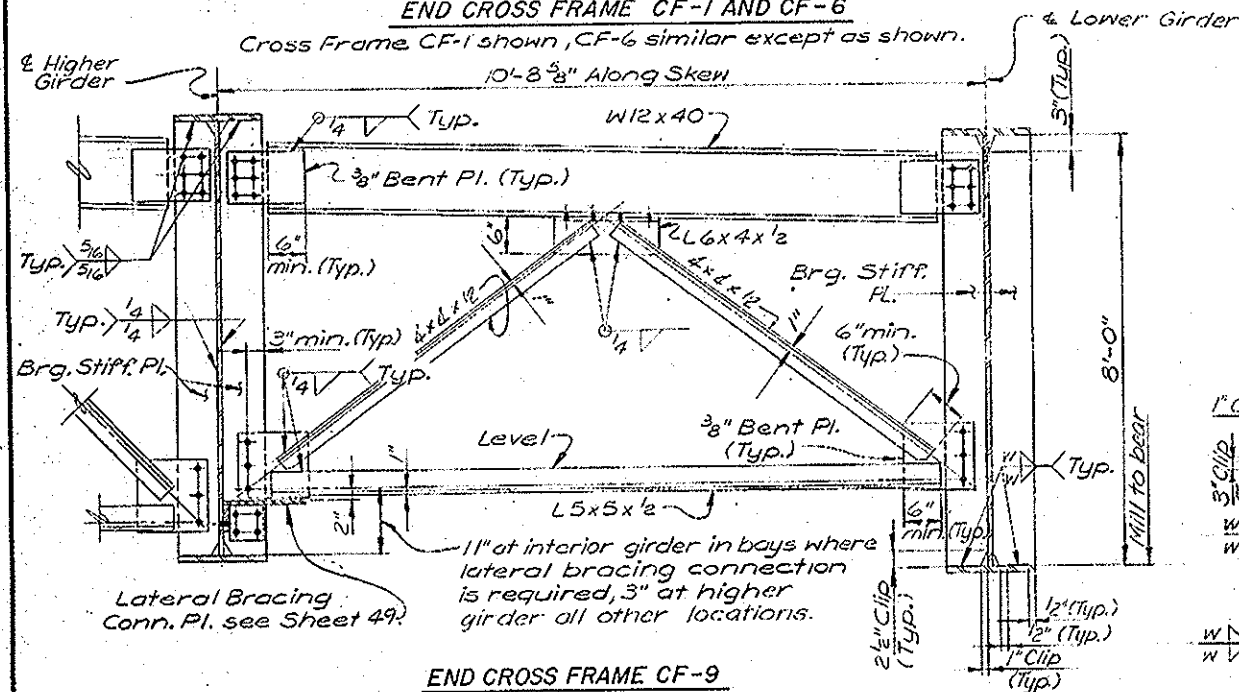
END CROSS FRAME CF-1 AND CF-6

Cross Frame CF-1 shown, CF-6 similar except as shown.

CROSS FRAME CF-2 AND CF-7

Note: For treatment of Connection Plates see Notes A, B & C.

CROSS FRAME CF-4

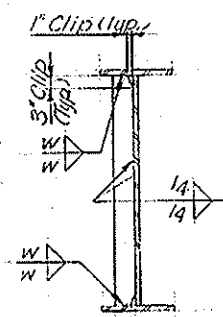


END CROSS FRAME CF-9

NOTES

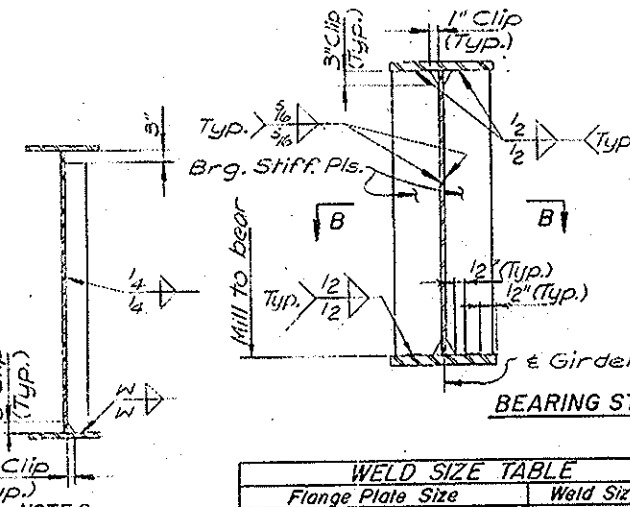
Note A: Transverse Stiffeners and CF connection plates shall be welded to top flange of girder and cut short at bottom flange as shown.
 Note B: Transverse Stiffeners and CF connection plates shall be welded to bottom flange of girder and cut short at top flange as shown.
 Note C: Transverse Stiffeners and CF connection plates shall be welded to both top and bottom flanges of girder as shown.
 Provide 1 1/16" ϕ holes for 7/8" ϕ H.S. bolts with 2 hardened washers over all oversize holes in cross frame connections.
 For location of cross frames and transverse stiffeners see Framing Plans.
 For lateral bracing details see Sheet 49.
 All steel to be AASHTO M-183 unless otherwise noted.

NOTE C



NOTE A

TRANSVERSE STIFFENER AND CROSS FRAME CONNECTION PLATE DETAILS



BEARING STIFFENERS AT PIER 42

WELD SIZE TABLE	
Flange Plate Size	Weld Size W
Over 1/2" to 3/4" incl.	1/4"
Over 3/4" to 1 1/2" incl.	5/16"
Over 1 1/2" to 2 1/4" incl.	3/8"
Over 2 1/4"	1/2"

**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE**

CROSS FRAME DETAILS

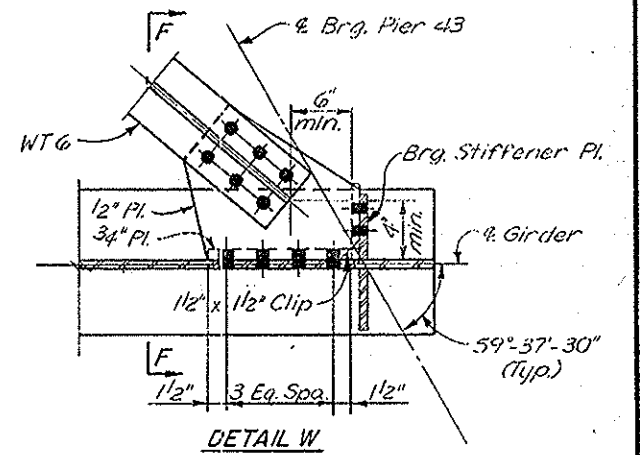
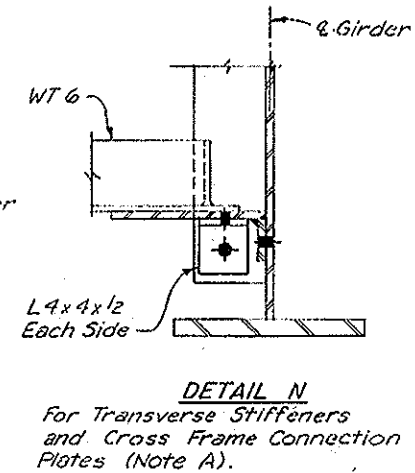
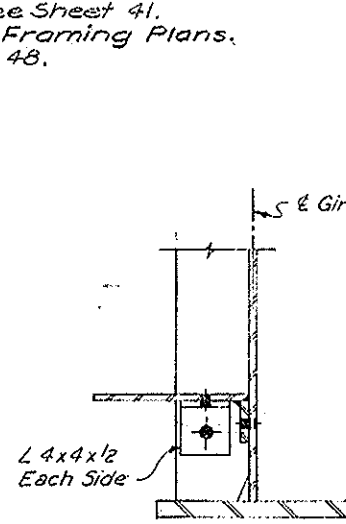
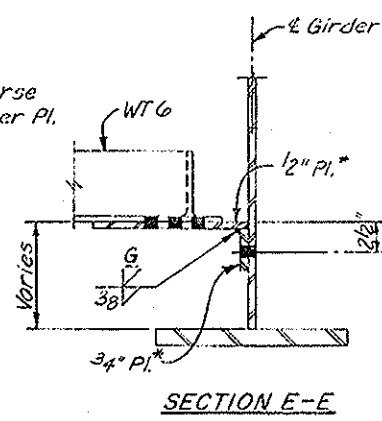
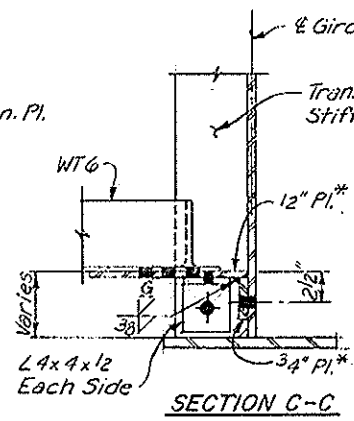
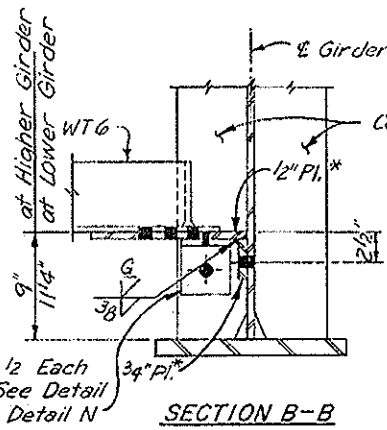
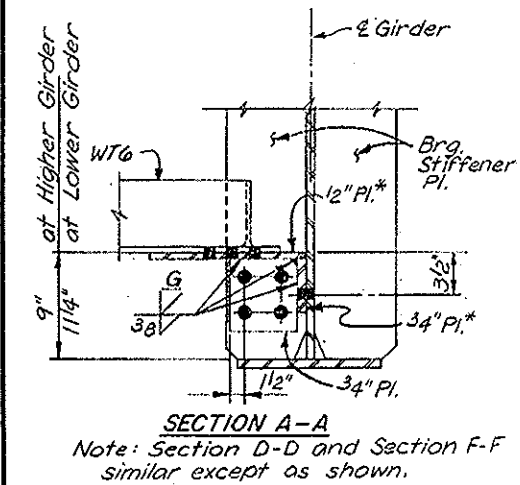
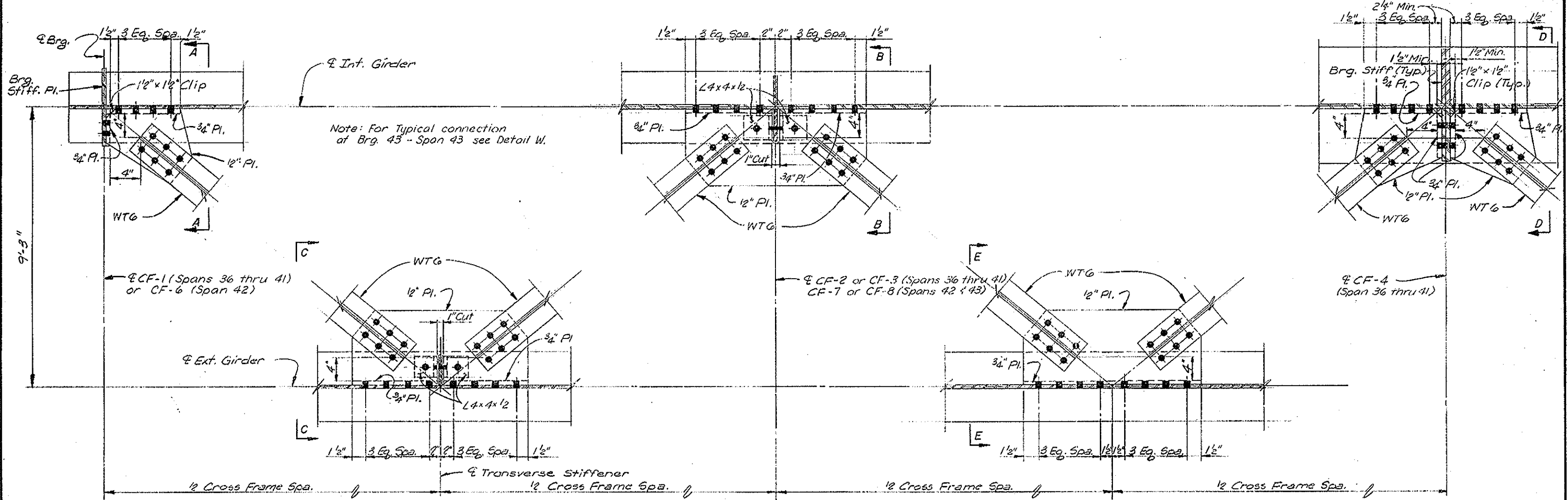
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

DESIGNED	R. Wokurka
CHECKED	S. Stobola
CHECKED	Stegman
DRAWN	
CHECKED	C.A. Lizana

6892
82395

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA-412	50-4B	LASALLE	245	218
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				



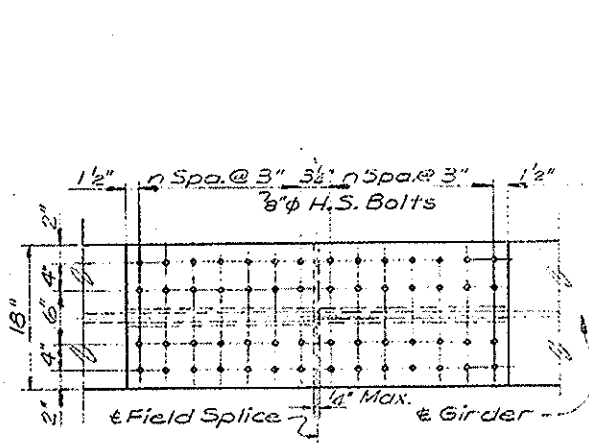
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
LATERAL BRACING DETAILS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

R. Wokurka
DESIGNED
R. Butterfield
CHECKED
STEGMAN
DRAWN
C.A. LIZANA
CHECKED

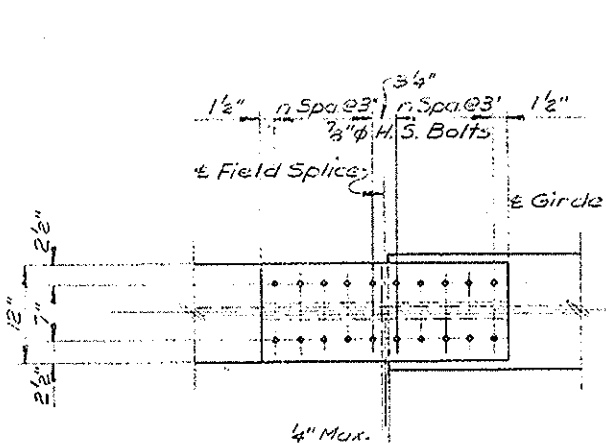
* Note: Rather than the welded 1/2" - 3/4" Pl. Gusset shown, the contractor may substitute a Structural Tee of equal or greater thickness.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

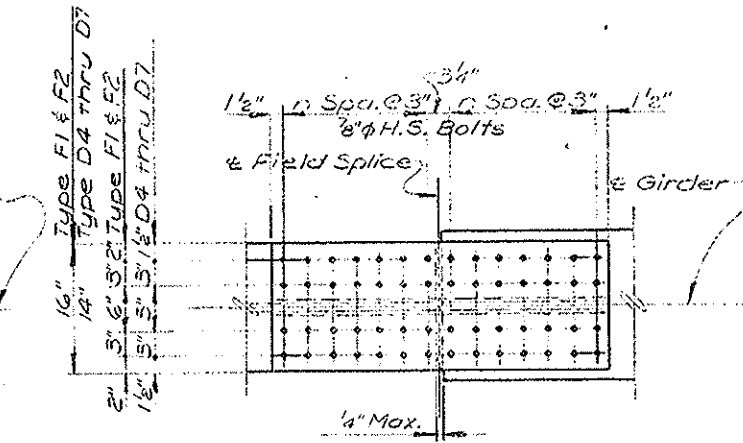
PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI



BOTTOM FLANGE SPLICE TYPE G1 AND C9

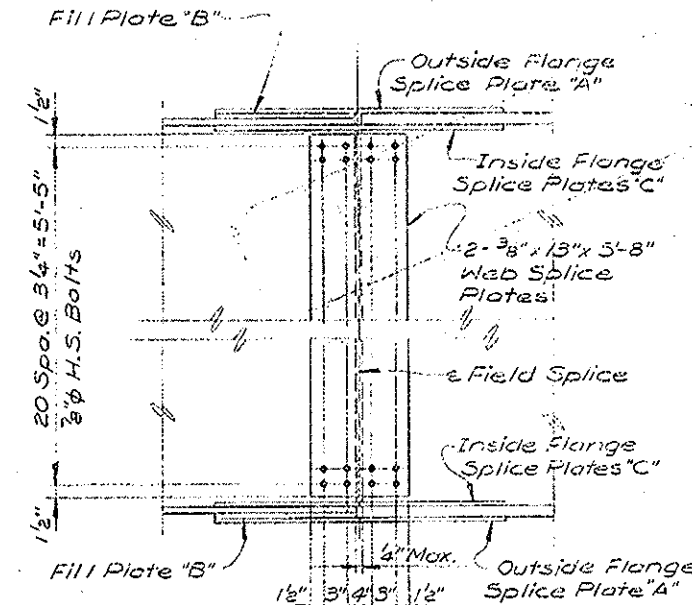


**TOP FLANGE SPLICE TYPE B1, B4 THRU B6
BOTTOM FLANGE SPLICE TYPE E2 THRU E5**

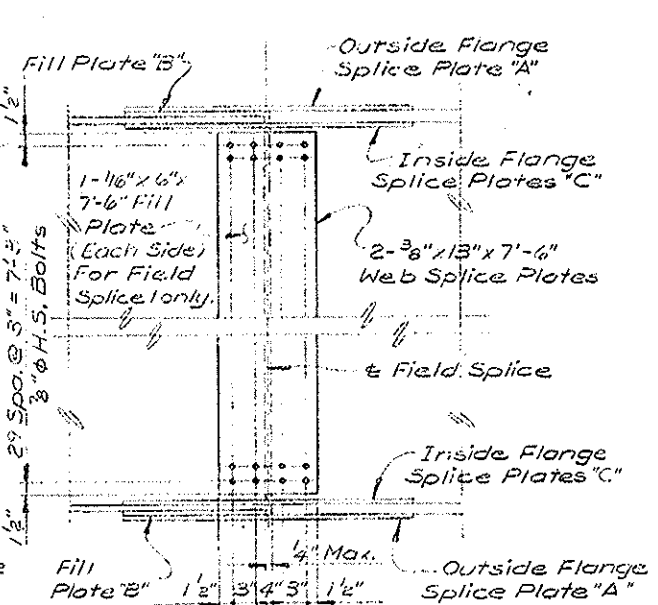


**TOP FLANGE SPLICE TYPE F1
BOTTOM FLANGE SPLICE TYPE D4 THRU D7**

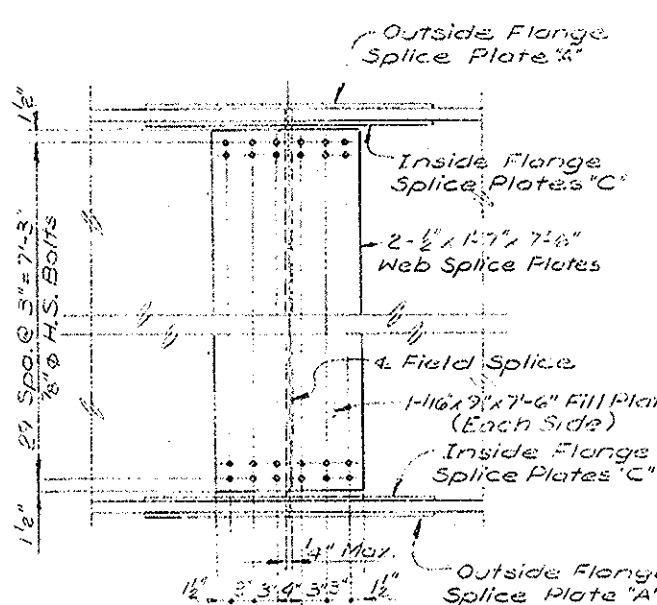
FIELD SPLICE DIMENSIONS					
Type	Plate "A"	Plate "B"	Plates "C"	n	Plate Material
B1	2-8"x12"x3'-0 1/2"	4"x12"x1'-6"	2-1/2"x5"x3'-0 1/2"	5	M183
B4	2-8"x12"x3'-0 1/2"	3/8"x12"x1'-6"	2-1/2"x5"x3'-0 1/2"	5	M183
B5	2-8"x12"x3'-0 1/2"	1/2"x12"x1'-6"	2-1/2"x5"x3'-0 1/2"	5	M183
B6	2-8"x12"x3'-0 1/2"	4"x12"x1'-6"	2-1/2"x5"x3'-0 1/2"	5	M183
C9	2-8"x18"x3'-6 1/2"	1/4"x18"x1'-9"	2-1"x8"x3'-6 1/2"	7	M225, Grade 50
D4	2-8"x14"x2'-6 1/2"	1/8"x14"x1'-3"	2-3/8"x6"x2'-6 1/2"	4	M223, Grade 50
D5	2-8"x14"x2'-6 1/2"	1/8"x14"x1'-0"	2-3/8"x6"x2'-6 1/2"	3	M183
D6	2-8"x14"x2'-6 1/2"	1/8"x14"x1'-3"	2-3/8"x6"x2'-6 1/2"	4	M183
D7	2-8"x14"x2'-6 1/2"	1/8"x14"x1'-3"	2-7/8"x6"x2'-6 1/2"	4	M223, Grade 50
E2	2-8"x12"x2'-6 1/2"	3/8"x12"x1'-3"	2-1/8"x5"x2'-6 1/2"	4	M183
E3	2-8"x12"x2'-6 1/2"	1/4"x12"x1'-3"	2-7/8"x5"x2'-6 1/2"	4	M183
E4	2-8"x12"x2'-6 1/2"	1/8"x12"x1'-9"	2-5/8"x5"x3'-6 1/2"	6	M183
E5	2-8"x12"x2'-6 1/2"	1/8"x12"x1'-9"	2-7/8"x5"x3'-6 1/2"	6	M183
F1	2-8"x16"x2'-0 1/2"	1/2"x16"x1'-0"	2-1/2"x7"x2'-0 1/2"	3	M183
F2	2-8"x16"x3'-6 1/2"	1/2"x16"x3'-6 1/2"	2-3/8"x7"x3'-6 1/2"	6	M183
G1	1"x18"x5'-0 1/2"		2-1/4"x8"x5'-0 1/2"	9	M183



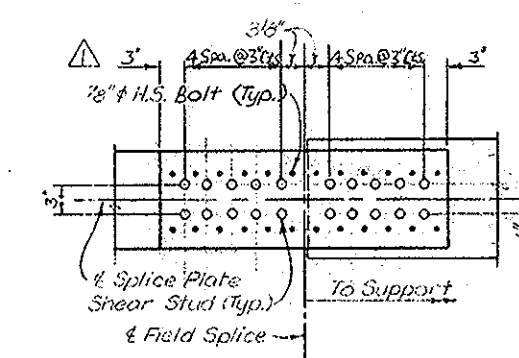
**TYPICAL 72" WEB SPLICE - G1 THRU G10
SPANS 36 THRU 41**



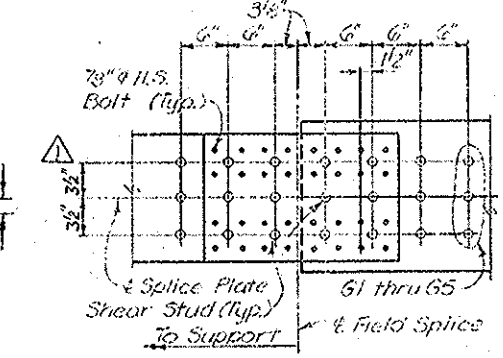
**TYPICAL 96" WEB SPLICE - G1 THRU G10
FIELD SPLICE 1 - SPAN 42
FIELD SPLICE 2 - SPAN 43**



**TYPICAL 96" WEB SPLICE - G1 THRU G10
FIELD SPLICE 3 - SPAN 43**

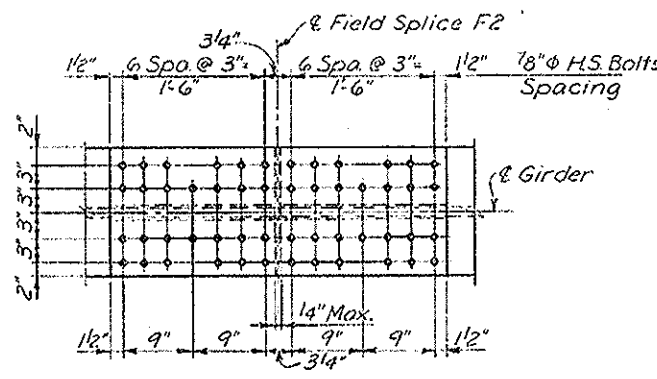


**TYPE B1, B4 THRU B6
SHEAR STUDS AT TOP FLANGE SPLICES**

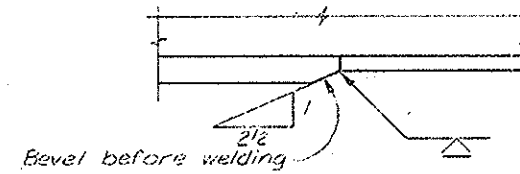


TYPE F1

NOTES
All splice plate material to be AASHTO M183 unless otherwise noted.
For Notch Toughness Requirements see Structural Steel Notes, Sheet 41.
All splice plates except fill plates are NTR



TOP FLANGE SPLICE TYPE F2



SHOP FLANGE SPLICE

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
FIELD SPLICE DETAILS
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863 +16.00 (FA-412) LASALLE CO.

Armann
DESIGNED
Butterfield
CHECKED
D. Smithpeters
DRAWN
C. LEBLANC
CHECKED

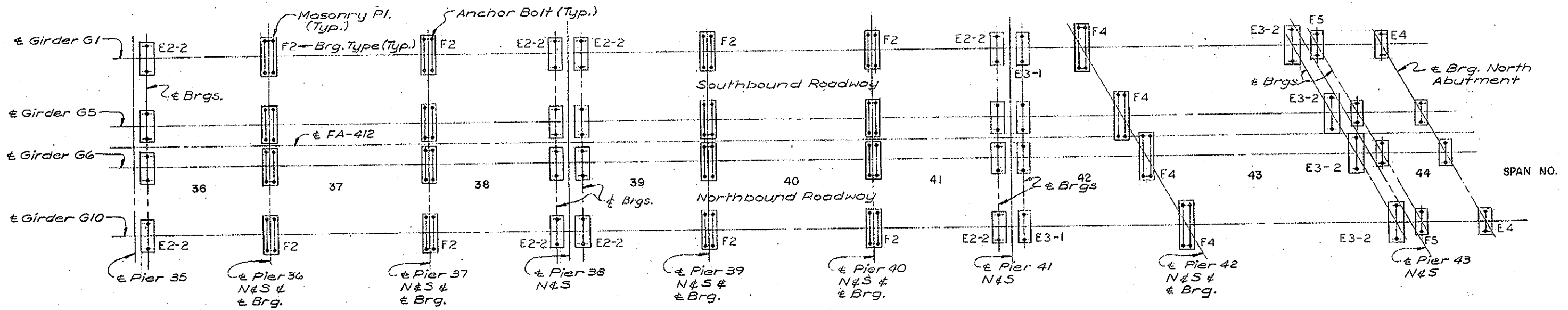
PREPARED BY
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

CHANGE SHEAR STUD SPACING FOR DECK PLANKS

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

11/5/86

SHEET NO. 50 OF 76



NOTES
For Bearing Details, see Sheet 52.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
BEARING LOCATION PLAN

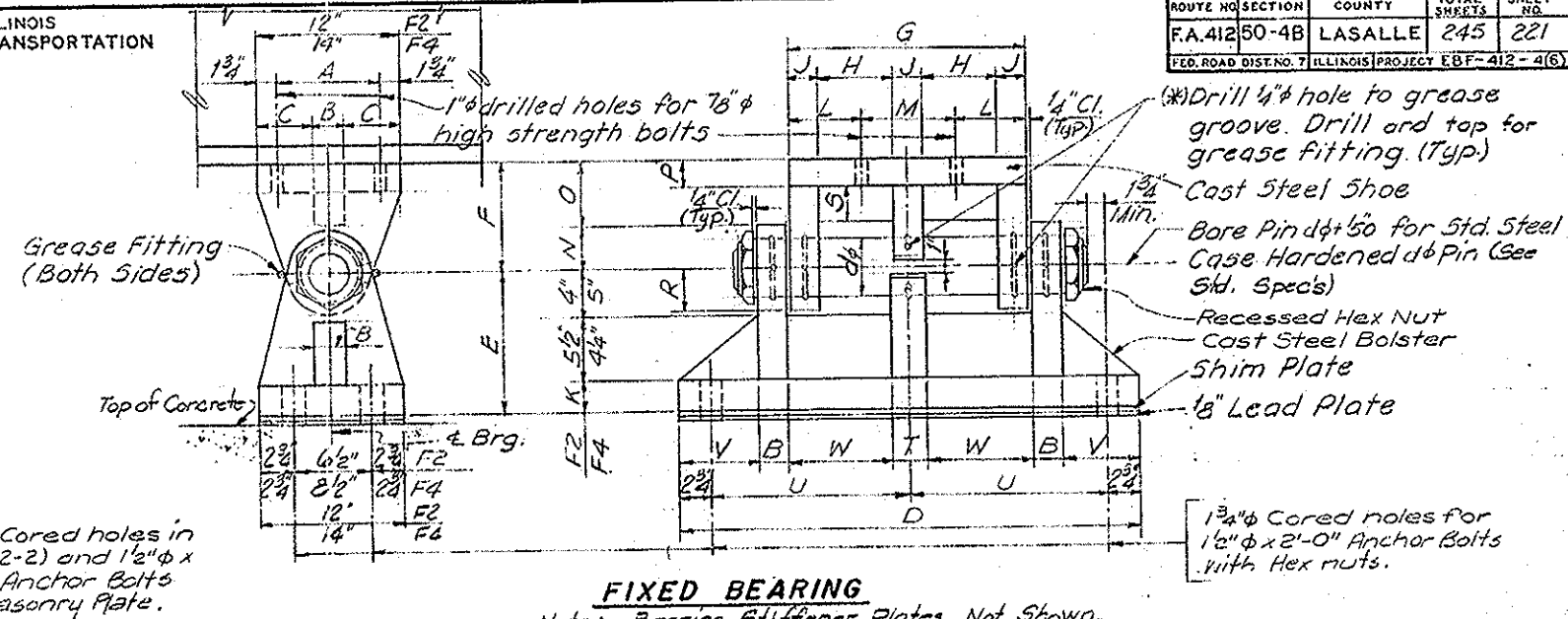
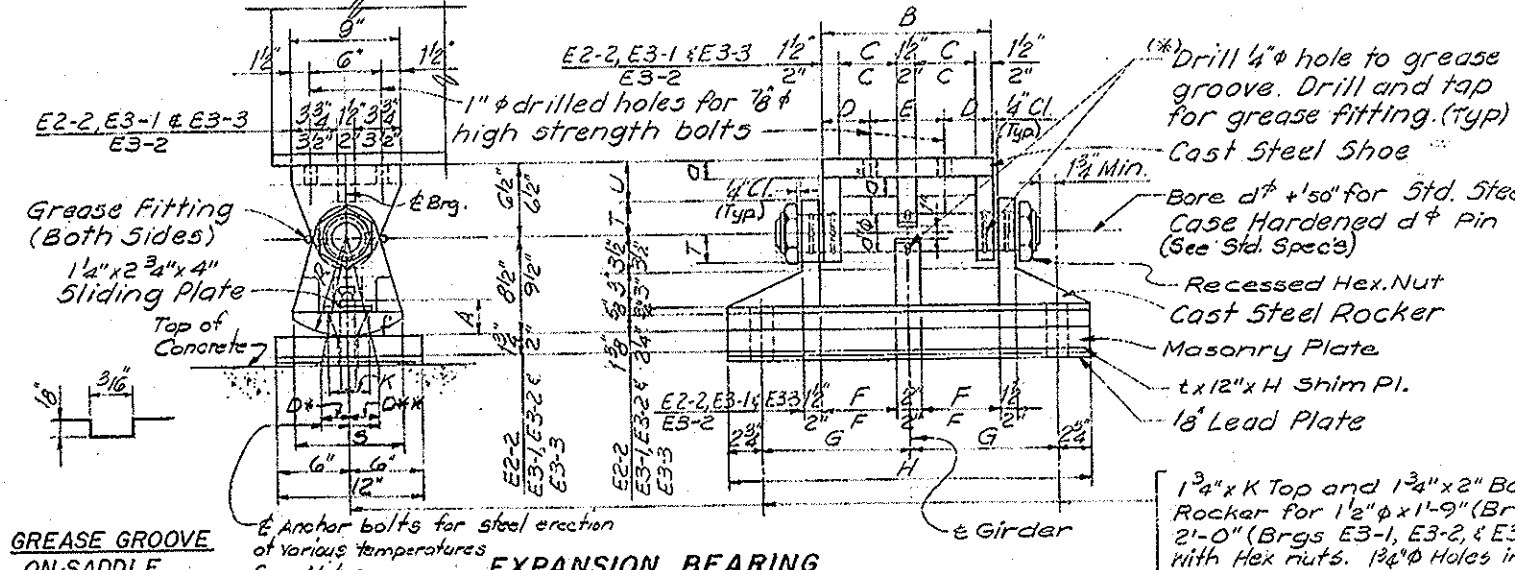
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4 (6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

R. Butterfield
DESIGNED
L. Glaser
CHECKED
D. Smithpeters
DRAWN
C.A. LIZANA
CHECKED

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

6692
82S428



GREASE GROOVE ON-SADDLE

EXPANSION BEARING

FIXED BEARING

Note: (*) Grease Bearing assembly with molybdenum grease before installation.

Note: Bearing Stiffener Plates Not Shown.

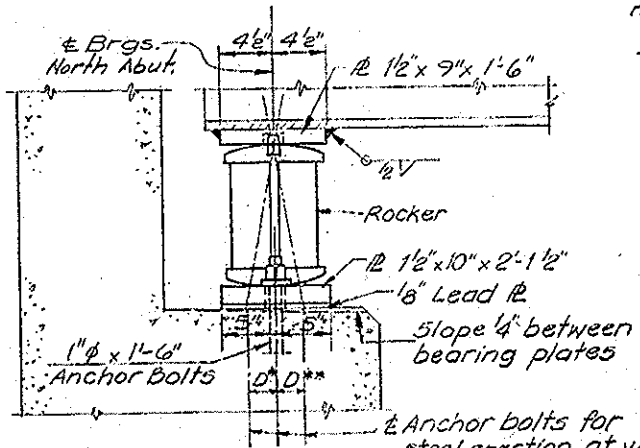
Note: Bearing Stiffener Plates Not Shown.

Type	A	B	C	D	E	F	G	H	K	R	S	T	U	d	a	Total Req'd
E2-2	25 3/4"	12"	3 3/4"	3 3/4"	5 1/2"	5 1/4"	11 1/2"	2 1/4"	2 1/4"	8 1/2"	9"	3"	3 1/2"	4"	1 1/2"	40
E3-1	4"	12"	3 3/4"	3 3/4"	5 1/2"	5 1/4"	11 1/2"	2 1/4"	2 1/4"	9 1/2"	12"	3"	3 1/2"	4"	1 1/2"	5
E3-2	4"	18"	6"	4 1/2"	9"	8 1/4"	1 1/2"	2 1/4"	2 3/4"	9 1/2"	12"	3 1/4"	3 1/4"	4"	1 3/4"	10
E3-3	4"	14"	4 3/4"	3 3/4"	6 1/2"	6 1/4"	1 1/2"	2 1/4"	2 3/4"	9 1/2"	12"	3"	3 1/2"	4"	1 1/2"	5

Type	d	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	R	S	T	U	V	W	Total Req'd
F2	4 3/4"	8 1/2"	2 1/4"	4 1/2"	5 1/2"	12"	8 3/4"	1 1/2"	5 3/8"	2 1/4"	2 1/2"	5 1/4"	7 1/2"	3 1/2"	5 1/4"	2"	3 1/2"	2 3/4"	2 3/4"	1 3/4"	6 3/4"	7 3/8"	40
F4	5 3/4"	10 1/2"	3"	5 1/2"	3 1/2"	12"	9"	1 1/2"	5 1/2"	3"	2 3/4"	5 1/4"	9 1/2"	4 1/2"	4 1/2"	2 1/2"	4 1/2"	2"	3"	1 7/8"	9 1/4"	8 3/4"	10

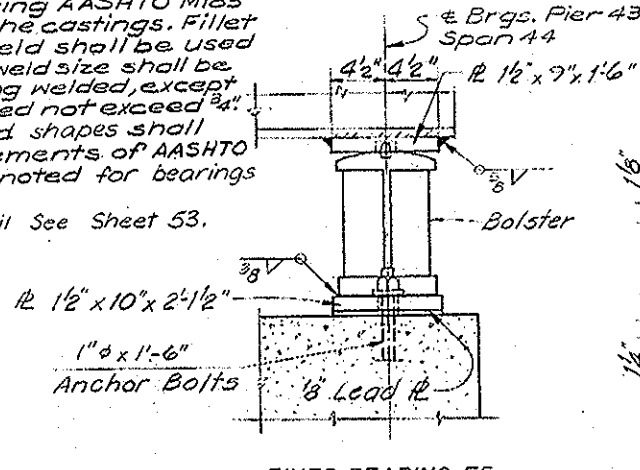
SHIM PLATE THICKNESS "1"

Location	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10
Girder										
E Brg. Pier 38, Span 44		18"		18"			18"		18"	
E Brg. Pier 41 N, Span 42							14"			



EXPANSION BEARING E4

Notes: Structural Steel Weldments of equal sections and meeting AASHTO M183 may be substituted for the castings. Fillet or partial penetration weld shall be used for weldments. Minimum weld size shall be 1/4 thickness of plate being welded, except maximum size of weld need not exceed 3/4". Steel for all plates and shapes shall conform to the requirements of AASHTO M-183 unless otherwise noted for bearings E4 and F5. For Anchor Bolts Detail See Sheet 53.



FIXED BEARING F5

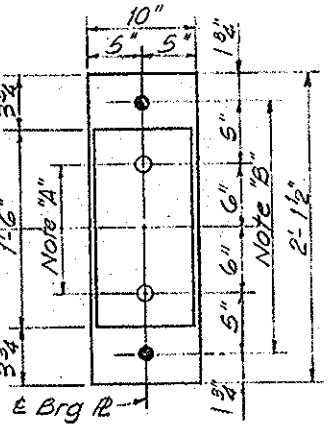
Note "A"
1 3/8" Holes - 1" deep in top R for 1 1/4" Pintles. Thread or press fit pintles in bottom R.

Note "B"
1 1/2" Holes for 1" x 1 1/2" Anchor bolts. 5/16" x 2 1/2" x 2 1/2" R washer under nut.

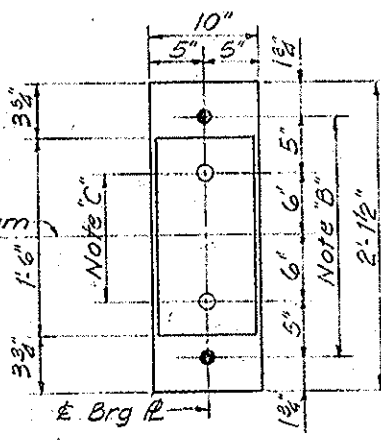
PINTLE

NOTES FOR SETTING OF ANCHOR BOLTS AT EXPANSION BEARING

- D* (Side of brg away from fixed brg.)
D* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50° F.
D** (Side of brg toward fixed brg.)
D** = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50° F.
- After girders or beams have been erected and dimensions D* & D** determined, holes shall be drilled and anchor bolts shall be grouted in place.



PLAN

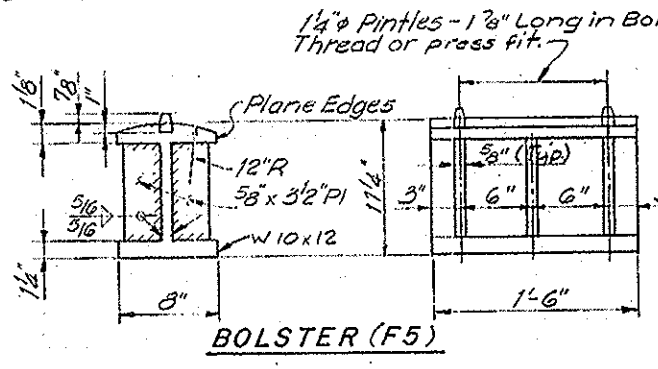


PLAN

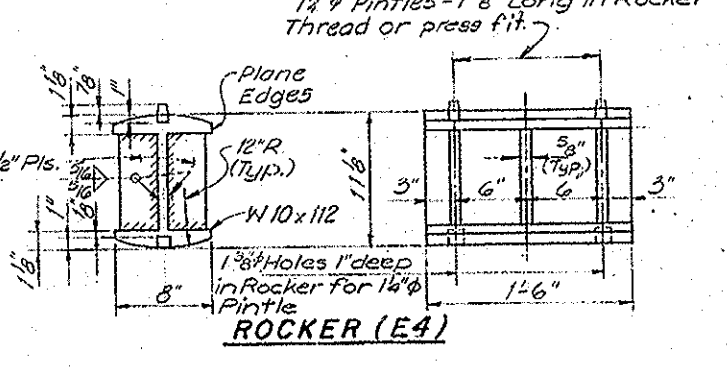
Note B:
1 1/2" Holes for 1" x 1 1/2" Anchor bolts - 5/16" x 2 1/2" x 2 1/2" R. Washer under nut.

Note C:
1 3/8" Holes - 1" deep in Top Pl. for 1 1/4" Pintles

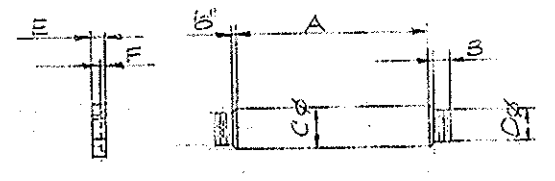
Type	A	B	C	D	E	F
E2-2	1 1/4"	1 3/8"	4"	3"	1 1/4"	3 1/2"
E3-1	1 1/4"	1 3/8"	4"	3"	1 1/4"	3 1/2"
E3-2	1 1/4"	1 3/8"	4"	3"	1 1/4"	3 1/2"
E3-3	1 1/4"	1 3/8"	4"	3"	1 1/4"	3 1/2"
F2	2 1/4"	1 1/2"	4 1/2"	3 1/2"	1 3/8"	1 1/2"
F4	2 1/4"	1 1/2"	5 1/2"	4 1/2"	1 3/8"	1 1/2"



BOLSTER (F5)



ROCKER (E4)



PIN DETAIL

Arman
DESIGNED
R. Butterfield
CHECKED
R. LUER
DRAWN
C.A. LIZANA
CHECKED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

BEARING DETAILS

FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863 + 16.00 (FA-412) LASALLE CO.

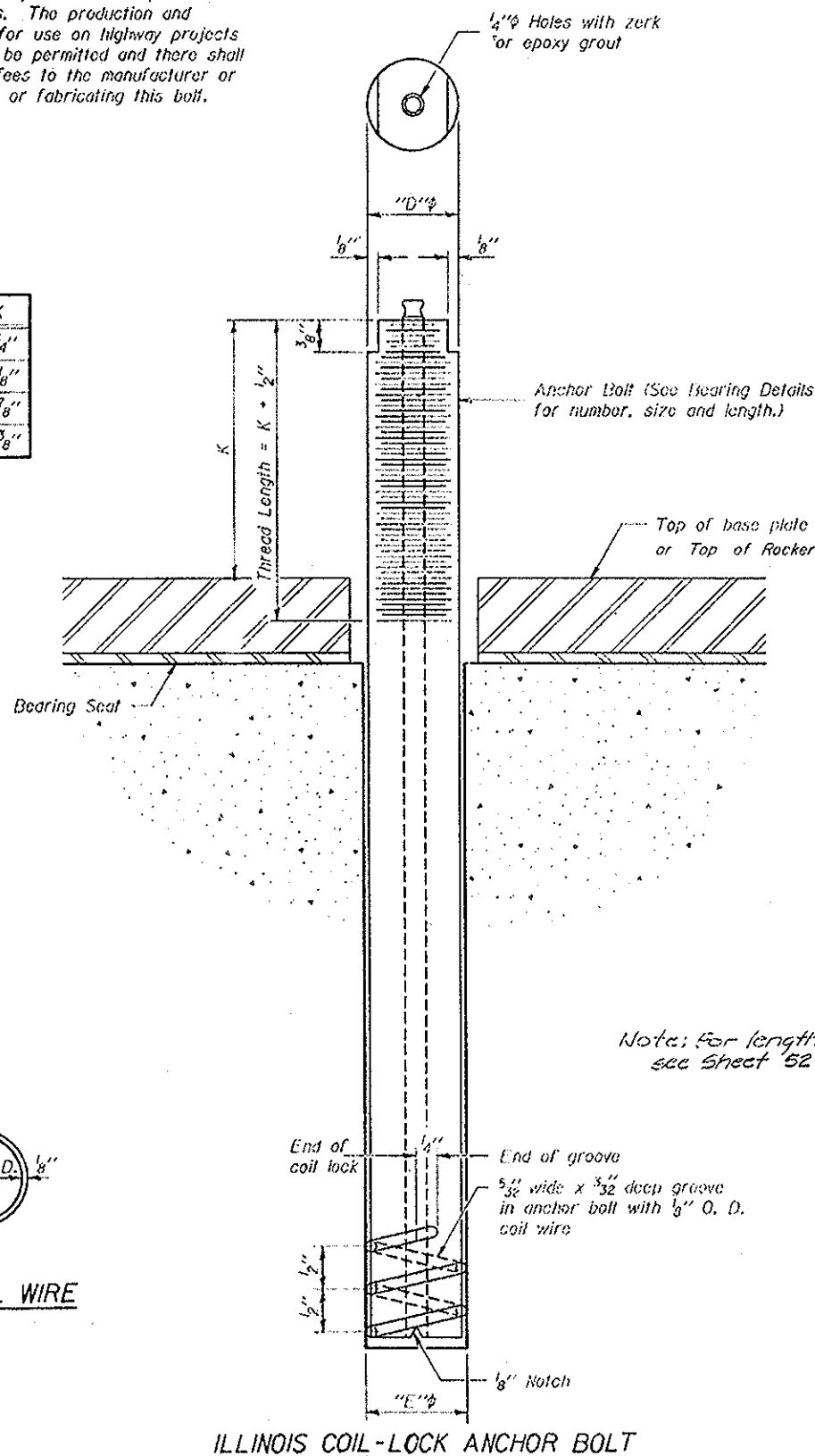
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET	TOTAL
FA 412 50-4B	LASALLE	245	222	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-EBF-412-4(6)	

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K
1"	1 1/8"	1 3/16"	1 3/4"
1 1/2"	1 5/8"	1 5/16"	2 1/8"
2"	2 1/8"	1 3/8"	2 7/8"
2 1/2"	2 5/8"	2 5/16"	3 3/8"



Note: For length of Anchor Bolts see Sheet 52.

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A513, Grade 1026 and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C881, Type I, Grade I and of a Class suitable for the temperature of installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk filling with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes in accordance with the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer conforming to ASTM A307.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

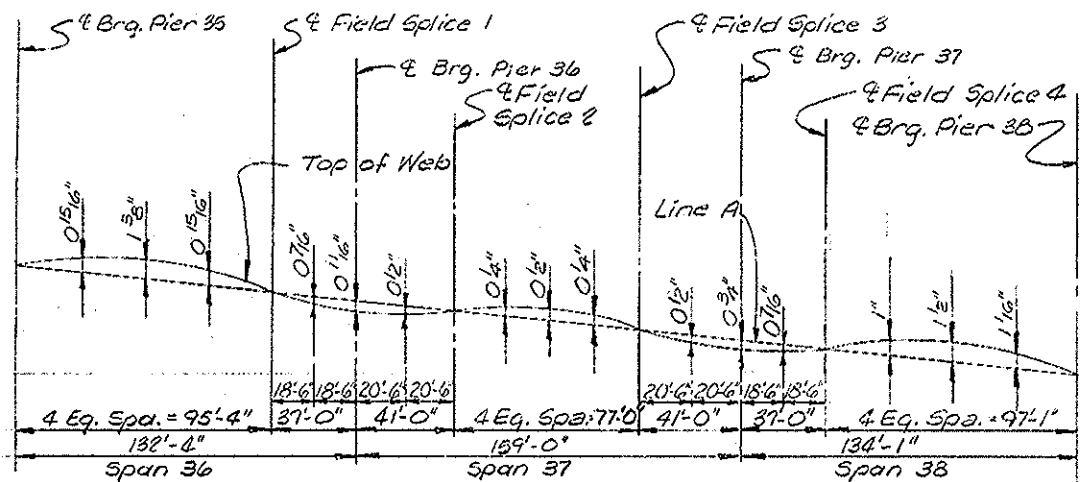
GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or in accordance with the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for "Furnishing and Erecting Structural Steel".

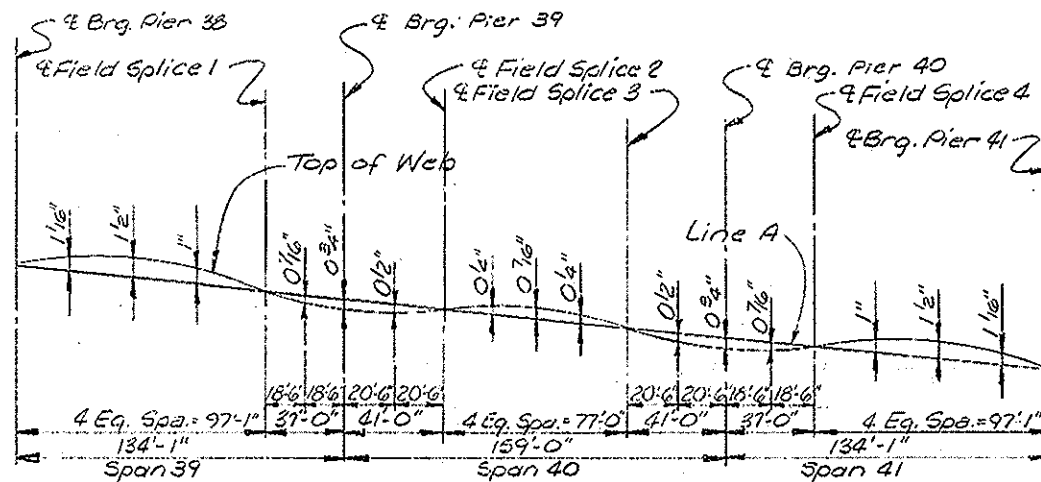
DESIGNED
CHECKED
DRAWN
CHECKED

ABB-1 6-15-83

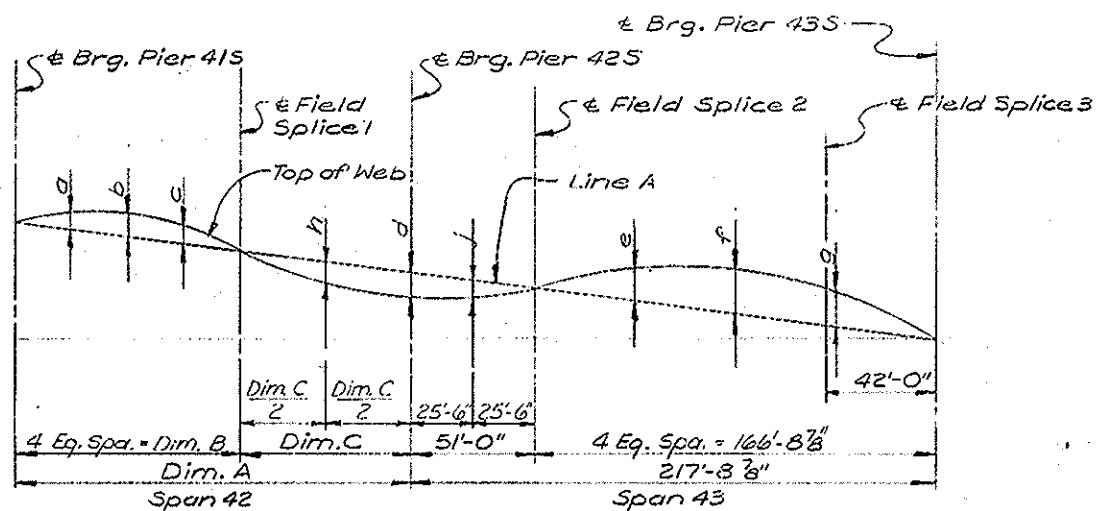
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
ANCHOR BOLTS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



CAMBER DIAGRAM - GIRDERS G1 THRU G10
SPANS 36 THRU 38 - NORTHBOUND AND SOUTHBOUND ROADWAYS

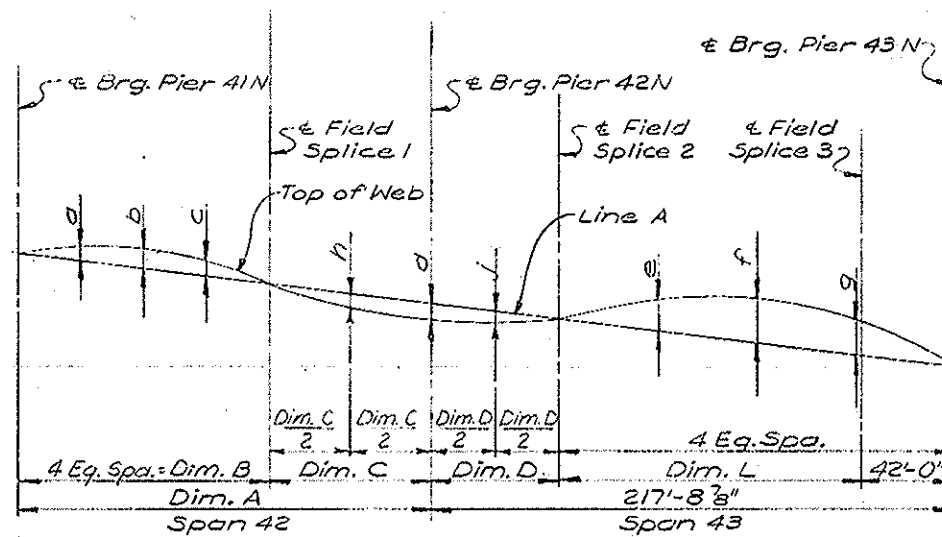


CAMBER DIAGRAM - GIRDERS G1 THRU G10
SPANS 39 THRU 41 - NORTHBOUND AND SOUTHBOUND ROADWAYS



CAMBER DIAGRAM - GIRDERS G1 THRU G5
SPANS 42 AND 43 - SOUTHBOUND ROADWAY

Note: For dimensions A, B & C, see Sheet 43.



CAMBER DIAGRAM - GIRDERS G6 THRU G10
SPAN 42 AND 43 - NORTHBOUND ROADWAY

Note: For dimensions A, B, C, D & L, see Sheets 45 and 46.

NOTES
Line A is a straight line between & bearing and & field splice or between & field splices at top of web plate.

Girder	Dim.	a	b	c	d	e	f	g	h	j
G1		0"	0"	0"	1 1/16"	3 1/16"	5 3/16"	3 9/16"	1 3/8"	1"
G2		1/8"	5/16"	1/8"	2 1/16"	4"	5 3/8"	3 15/16"	1 3/8"	1 1/8"
G3		1/4"	1/2"	1/4"	2 1/16"	3 1/16"	5 1/2"	3 15/16"	1 3/8"	1 3/16"
G4		3/8"	1 1/16"	7/16"	2 1/16"	3 15/16"	5 1/2"	3 13/16"	1 1/2"	1 1/4"
G5		9/16"	1 3/16"	1 1/2"	1 13/16"	3 1/2"	5"	3 7/16"	1 3/8"	1 1/8"
G6		5/8"	1 1/16"	1 1/16"	1 1/2"	3 1/8"	5 3/8"	3 7/8"	1 1/16"	1"
G7		7/8"	1 1/4"	1 3/16"	2 3/16"	3 5/8"	5 5/8"	3 5/8"	1 3/8"	1 1/4"
G8		1 1/8"	1 3/4"	1 1/2"	2 3/16"	3 1/2"	4 15/16"	3 1/2"	1 3/8"	1 3/16"
G9		1 1/16"	2 3/16"	1 1/2"	2 3/8"	3 5/8"	4 13/16"	3 5/16"	1 1/8"	1 1/2"
G10		1 5/8"	2 3/8"	1 3/8"	2 1/16"	3"	4 3/8"	3 1/16"	1 3/8"	1 3/8"

S. Stodola
DESIGNED
C. Lizana
CHECKED
D. Smithpaters
DRAWN
C. A. LIZANA
CHECKED

6692
825484

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE

CAMBER DIAGRAMS-SPANS 36 THRU 43

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863 +16.00(FA-412) LASALLE CO.

SHEET NO. 54 OF 76

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.412	50-48	LASALLE	245	224
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT EBF-412-4(6)				

	SPANS 36, 37, & 38				SPANS 39, 40, & 41			GIRDER G1 - SPANS 42 & 43			GIRDER G10 - SPANS 42 & 43			SPAN 44	
	0.4 Span 36	Pier 36	0.5 Span 37	Pier 37	0.6 Span 38	0.6 Span 41	Pier 40	0.5 Span 40	0.3 Span 42	Pier 42	0.6 Span 43	0.4 Span 42	Pier 42	0.6 Span 43	0.5 Span 44
I_s (in ⁴)	47,493	82,171	47,493	82,171	47,493	47,493	82,171	47,493	78,972	263,256	153,520	101,778	288,618	153,520	15,000
I_c (in ⁴)	121,483	---	121,483	---	121,483	121,483	---	121,483	178,701	---	311,257	217,962	---	311,257	35,926
I_c n=27 (in ⁴)	86,469	---	86,469	---	86,469	86,469	---	86,469	128,910	---	224,078	158,028	---	224,078	25,401
S_s (in ³)	1438	2199	1438	2199	1438	1438	2199	1438	1620	5239	3600	2179	5715	3600	943*
S_c n=9 (in ³)	2062	---	2062	---	2062	2062	---	2062	2343	---	4693	2967	---	4693	1586*
S_c n=27 (in ³)	1852	---	1852	---	1852	1852	---	1852	2,061	---	4209	2,648	---	4209	---
R (K/1)	1.139	1.593	1.139	1.593	1.139	1.139	1.593	1.139	1.059	1.715	1.201	1.093	1.749	1.201	1.170
M (K)	1736	-4476	1183	-4513	1800	1807	-4551	1137	876	-10,539	5566	2728	-12,860	4869	1041
f_s non-comp (ksi)	14.5	24.4	9.7	25.0	15.0	15.1	24.8	9.5	6.5	24.1	18.6	15.0	27.0	16.2	13.2
S_L (K/1)	0.370	---	0.370	---	0.370	0.370	---	0.370	0.370	---	0.370	0.370	---	0.370	0.370
$M_s R$ (K)	645	---	572	---	669	671	---	567	471	---	1870	1139	---	1658	329
f_s comp. n=27 (ksi)	4.2	---	3.7	---	4.3	4.3	---	3.7	2.7	---	5.3	5.2	---	4.7	2.5
M_L (K)	3219	-3327	3226	-3362	3270	3271	-3364	3229	2877	-5606	5737	4727	-6896	5869	1925
M imp. (K)	624	-614	508	-616	629	629	-619	569	525	-909	837	736	-1039	856	484
f_s comp. n=9 (ksi)	22.4	21.5	22.1	21.7	22.7	22.7	21.7	22.1	17.4	14.9	16.8	22.1	16.7	17.2	18.2
f_s Total (ksi)	41.1	45.9	35.5	46.7	42.0	42.1	46.5	35.5	26.6	39.0	40.7	42.3	43.7	38.1	33.9
VR (K)	80.6	---	85.7	---	81.0	81.0	---	85.9	80.6	---	91.4	90.6	---	94.1	66

	SPANS 36, 37, & 38				SPANS 39, 40, & 41		GIRDER G1 - SPANS 42 & 43			GIRDER G10 - SPANS 42 & 43			SPAN 44
	Pier 35 Span 36	Pier 36	Pier 37	Pier 38 Span 38	Pier 41 Span 41	Pier 40	Pier 41 Span 42	Pier 42	Pier 43 Span 43	Pier 41 Span 42	Pier 42	Pier 43 Span 43	Pier 43 Span 44
R_R (K)	74.1	249.2	251.2	75.4	75.5	251.2	55.2	384.9	143.3	94.4	426.6	124.7	57
R_L (K)	59.0	116.5	117.2	59.0	59.0	117.2	49.6	129.1	63.4	58.3	141.6	63.8	57
Imp (K)	11.4	21.5	21.5	11.4	11.4	21.5	9.1	20.9	9.3	9.3	21.3	9.3	14
R Total (K)	144.5	387.2	390.5	145.8	145.9	389.9	104.8	534.9	233.8	162.1	589.5	197.8	128

NOTES

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s Total.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f_s Total.
 VR is the maximum t_c + Impact shear range in Span.
 The load factor (1.3)[$R + \frac{5}{8}(t_c + Imp.)$] is used in computing moments and stresses.
 * Plastic Section Modulus (z) based on compact section.

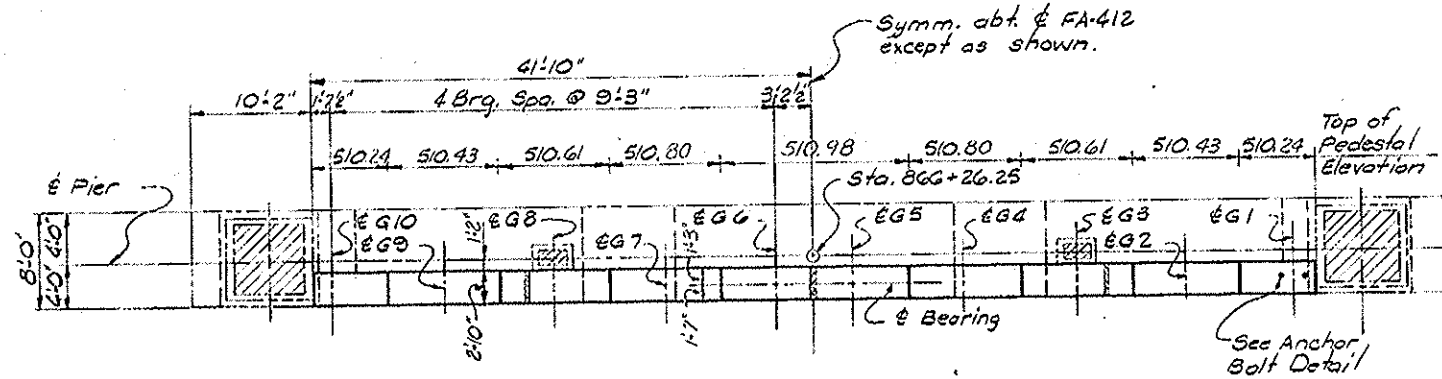
DESIGNED	Arman
CHECKED	R. Butterfield
DRAWN	D. Smithpeters
CHECKED	C.A. LIZANA

PREPARED BY:
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

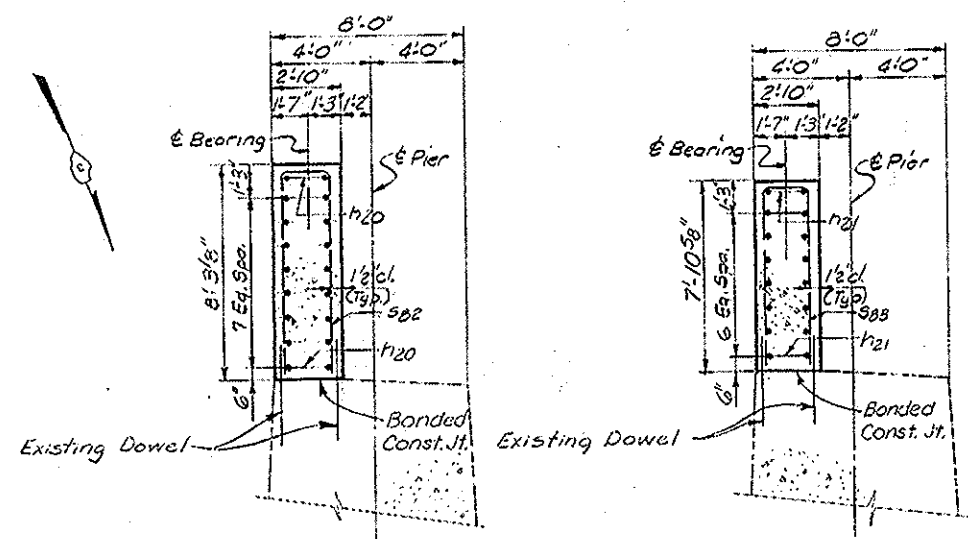
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
STRESS TABLES

F.A.-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (F.A.-412) LASALLE CO.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

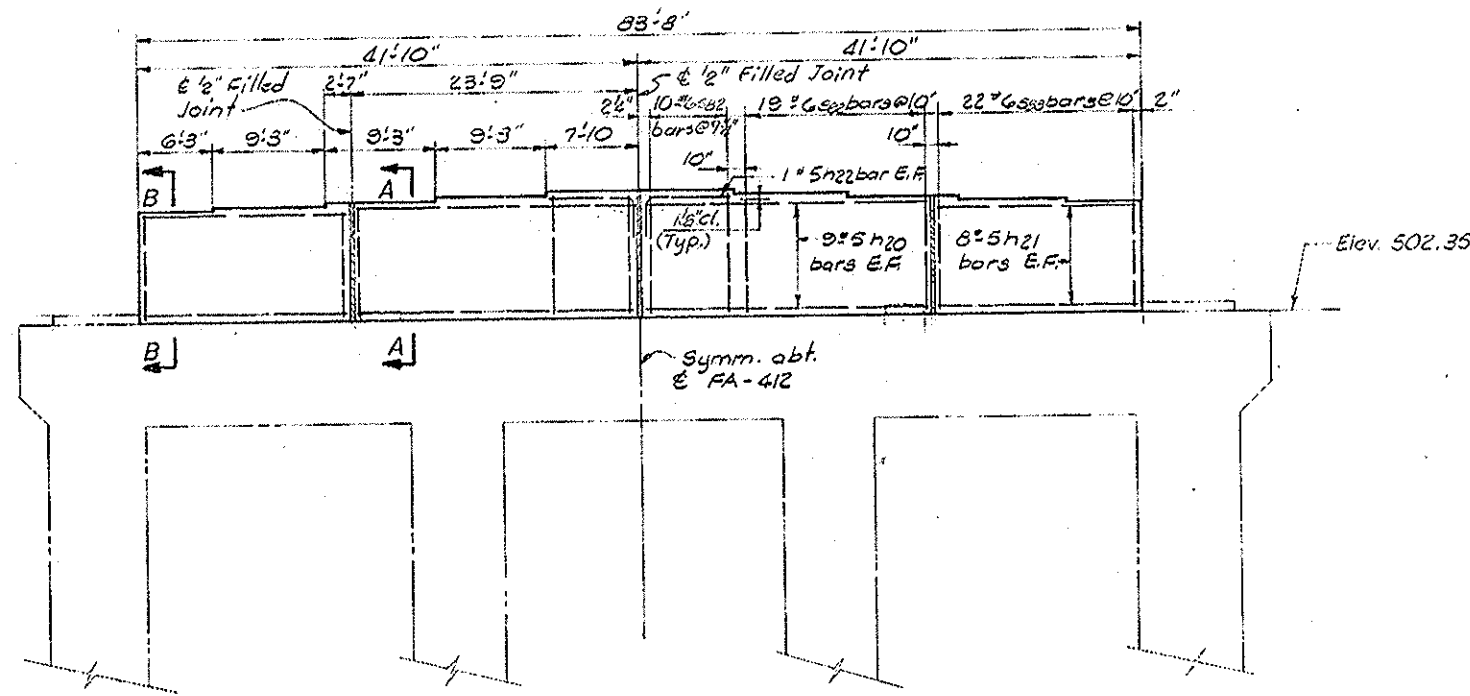


PLAN AT TOP PIER

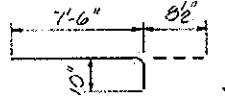
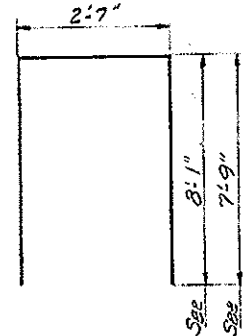
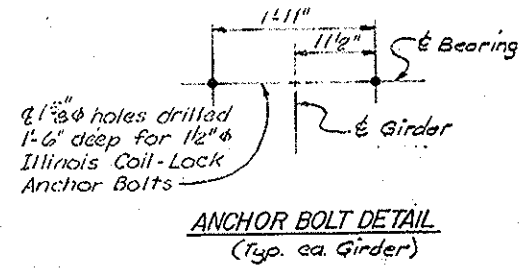


SECTION A-A

SECTION B-B



ELEVATION



BILL OF MATERIAL

PIER 35 APPROACH SPAN PEDESTAL				
Bar	No.	Size	Length	Shape
h20	36	#5	23'-5"	—
h21	32	#5	17'-8"	—
h22	4	#5	8'-3"	—
s22	58	#6	18'-9"	—
s23	44	#6	18'-1"	—
Class X Concrete			Cu. Yds.	72.8
Reinforcement Bars			Lbs.	4,340

Notes: Space reinforcement in pedestal to miss anchor bolts. E.F. indicates Each Face. All edges shall have a standard 3/8" chamfer.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 35 APPROACH SPAN PEDESTAL
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

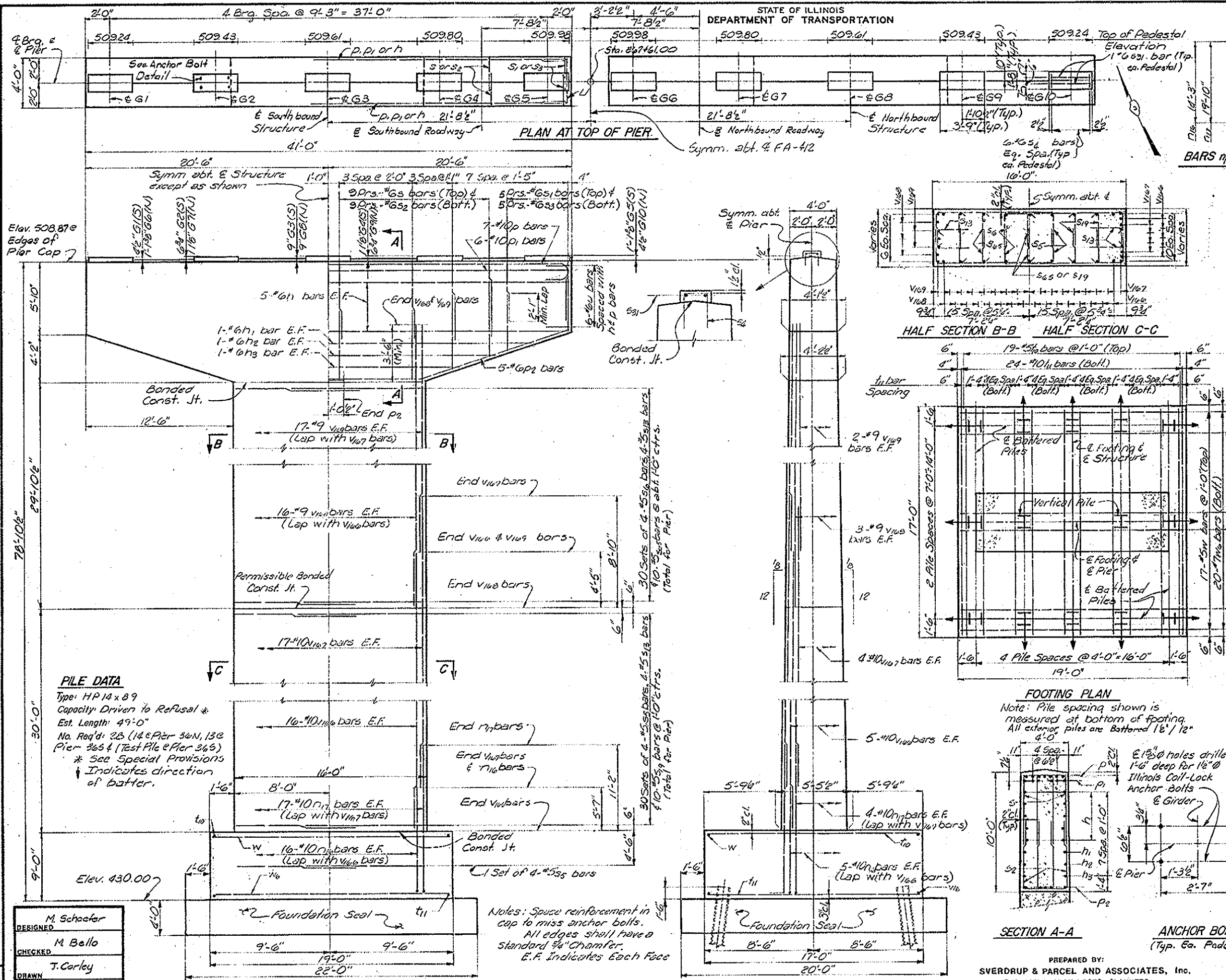
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 56 OF 76

DESIGNED: M. Schaefer
CHECKED: M. Bello
DRAWN: J. Corley
CHECKED: R.F. Beck

005522
2 9 9



BILL OF MATERIAL

PIER 36 NORTHBOUND					PIER 36 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h1	10	#6	40'-8"	---	h1	10	#6	40'-8"	---
h2	2	#6	35'-0"	---	h2	2	#6	28'-11"	---
h3	2	#6	28'-11"	---	h3	2	#6	22'-10"	---
n16	42	#10	16'-11"	L	n16	42	#10	10'-11"	L
n17	42	#10	21'-8"	L	n17	42	#10	21'-8"	L
p	7	#10	43'-6"	C	p	7	#10	43'-6"	C
p1	6	#10	40'-8"	---	p1	6	#10	40'-8"	---
p2	10	#6	22'-1"	---	p2	10	#6	22'-1"	---
s	36	#6	14'-4"	□	s	36	#6	14'-4"	□
s1	20	#6	12'-2"	□	s1	20	#6	12'-2"	□
s2	36	#6	14'-5"	□	s2	36	#6	14'-5"	□
s3	20	#6	12'-3"	□	s3	20	#6	12'-3"	□
s4	30	#6	5'-4"	□	s4	30	#6	5'-4"	□
s5	124	#5	17'-7"	□	s5	124	#5	17'-7"	□
s6	120	#5	16'-11"	□	s6	120	#5	16'-11"	□
s13	240	#5	2'-10"	□	s13	240	#5	2'-10"	□
s19	300	#5	4'-3"	□	s19	300	#5	4'-3"	□
s31	10	#6	7'-5"	□	s31	10	#6	7'-5"	□
s65	300	#5	3'-11"	□	s65	300	#5	3'-11"	□
u	19	#5	16'-6"	---	u	19	#5	16'-6"	---
u11	24	#10	16'-6"	---	u11	24	#10	16'-6"	---
u	12	#6	11'-7"	□	u	12	#6	11'-7"	□
v16	42	#10	34'-5"	---	v16	42	#10	34'-5"	---
v17	42	#10	33'-3"	---	v17	42	#10	33'-3"	---
v16	38	#9	33'-6"	---	v16	38	#9	33'-6"	---
v19	38	#9	29'-1"	---	v19	38	#9	29'-1"	---
w	17	#5	18'-6"	---	w	17	#5	18'-6"	---
w6	20	#7	18'-6"	---	w6	20	#7	18'-6"	---
Class X Concrete Cu.Yds 334.4					Class X Concrete Cu.Yds 334.4				
Reinforcement Bars Lbs. 44,320					Reinforcement Bars Lbs. 44,320				
Steel Piles HP14x89 Lin.Ft 6876					Steel Piles HP14x89 Lin.Ft 6876				
Metal Shoes Each 14					Metal Shoes Each 14				
Cofferdam Each 13					Cofferdam Each 13				
Cofferdam Excav. Cu.Yds 342					Cofferdam Excav. Cu.Yds 342				
Seal Coat Conc. Cu.Yds 65.2					Seal Coat Conc. Cu.Yds 65.2				

STRUCTURAL STEEL ALTERNATE

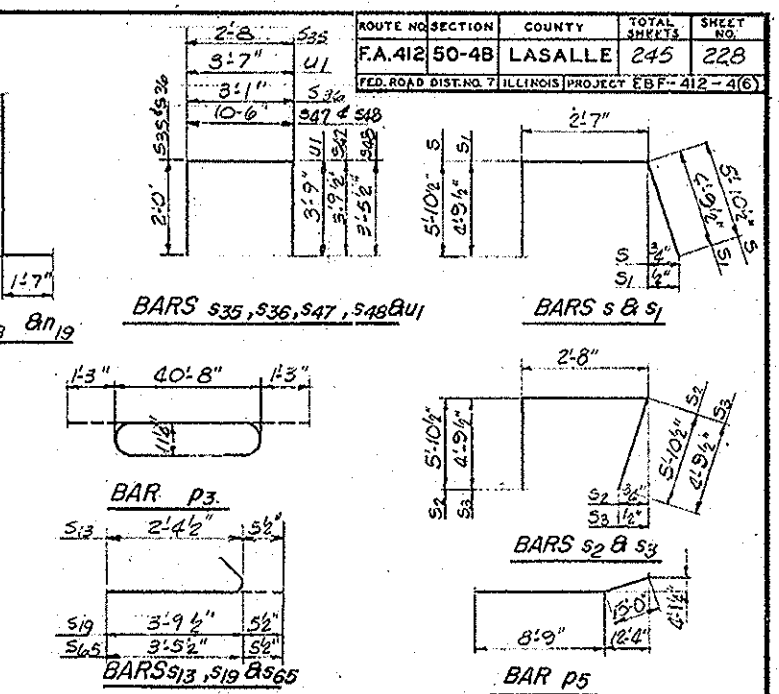
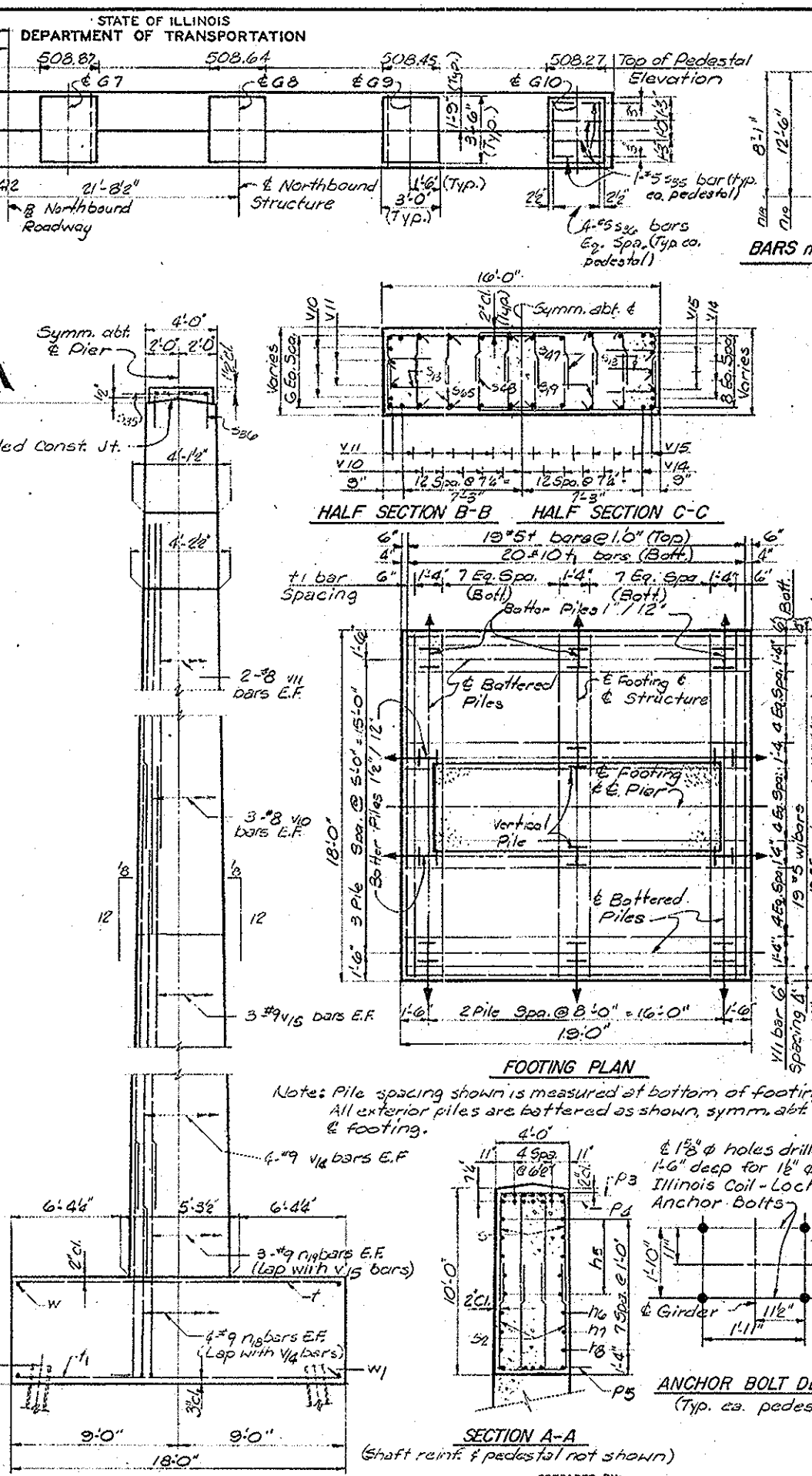
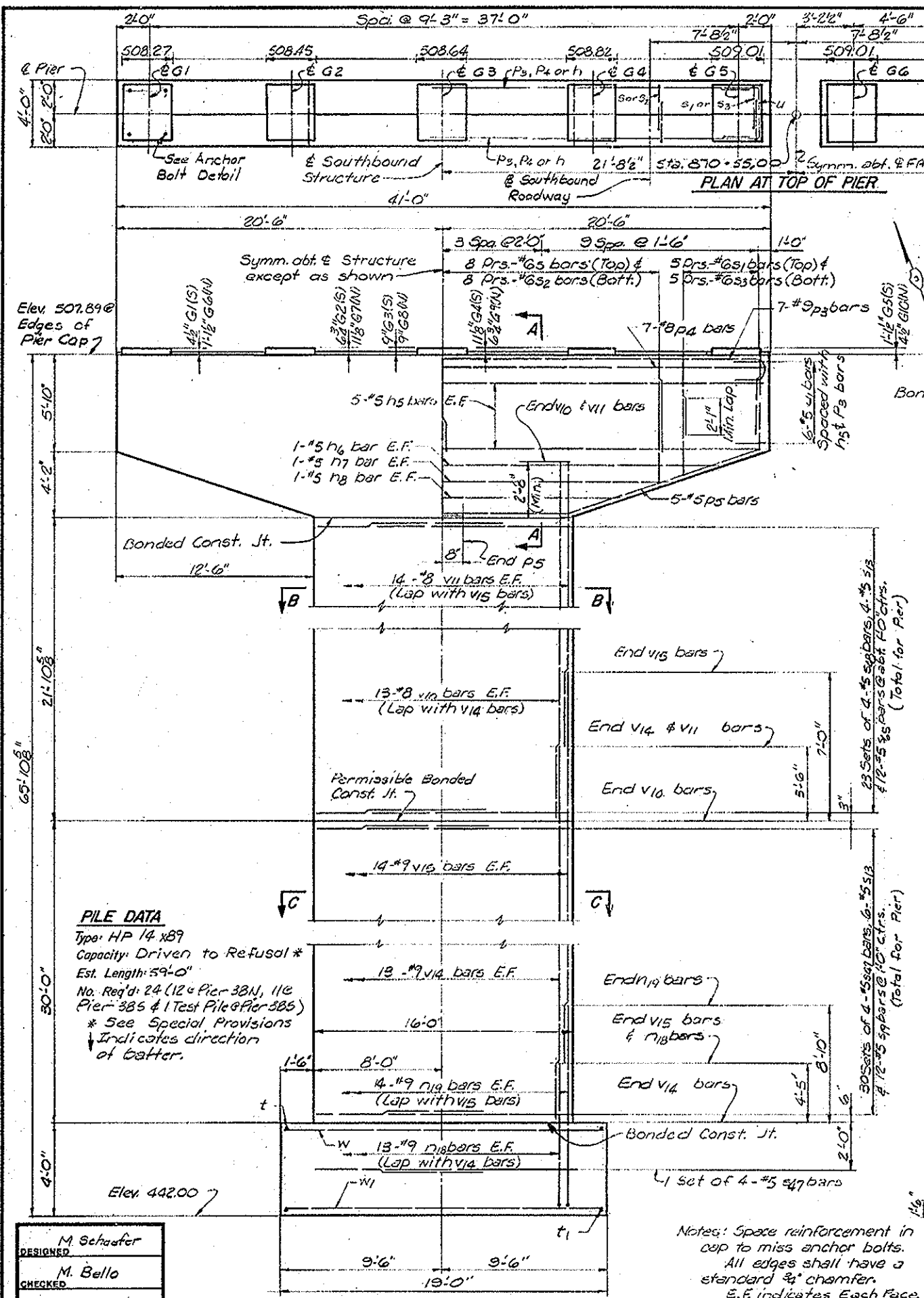
PIER 36 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

SHEET NO. 37 OF 76

DESIGNED	M. Schaefer
CHECKED	M. Bello
DRAWN	J. Corley
CHECKED	T. Ritzheimer

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.



PILE DATA
 Type: HP 14 X89
 Capacity: Driven to Refusal *
 Est. Length: 59'-0"
 No. Req'd: 24 (12 @ Pier 38N, 11 @ Pier 38S & 1 Test Pile @ Pier 38S)
 * See Special Provisions
 † Indicates direction of batter.

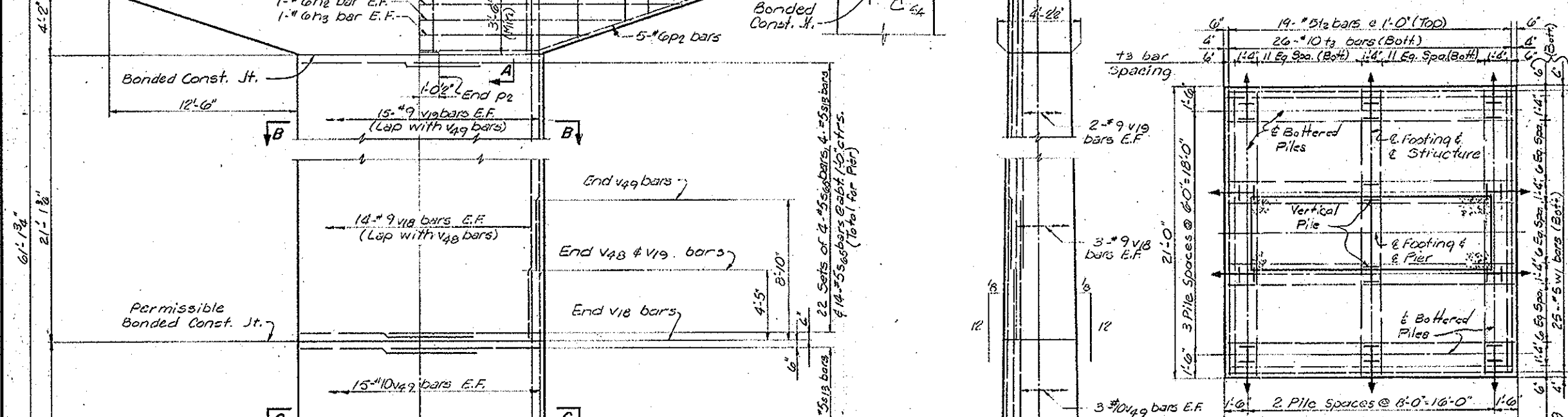
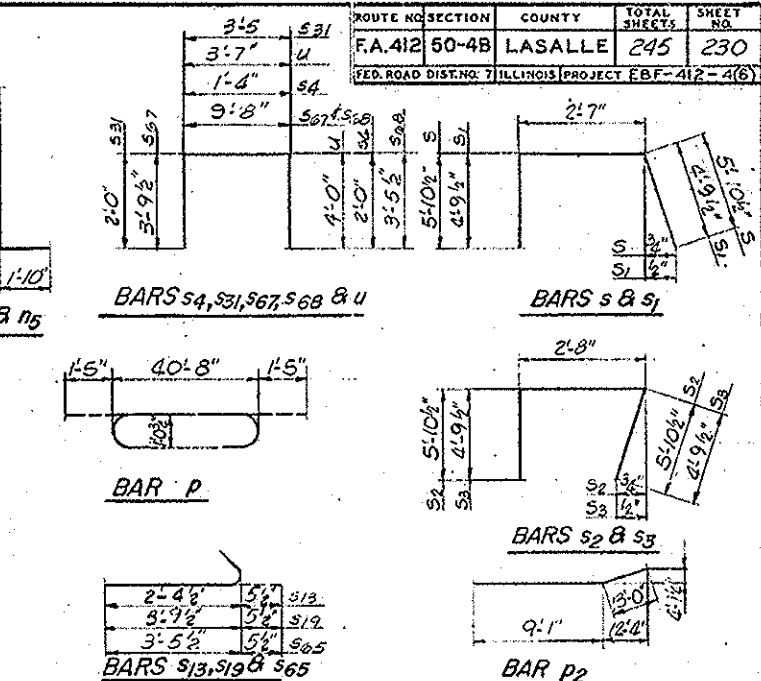
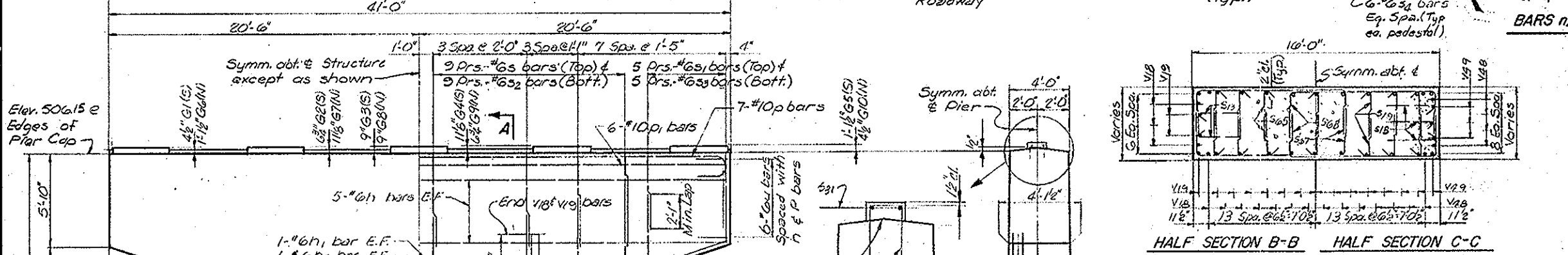
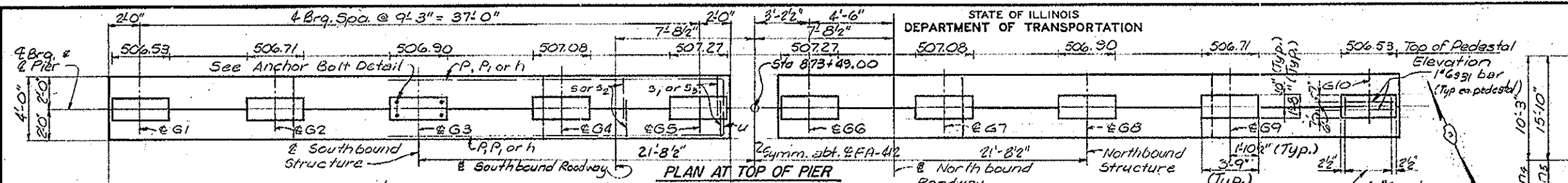
DESIGNED: M. Schaefer
 CHECKED: M. Bello
 DRAWN: J. Corley
 CHECKED: T. Ritzheimer

Notes: Space reinforcement in cap to miss anchor bolts. All edges shall have a standard 3/8" chamfer. E.F. indicates Each Face.

Notes: Pile spacing shown is measured at bottom of footing. All exterior piles are battered as shown, symm. abt. & footing.

ANCHOR BOLT DETAIL (Typ. ea. pedestal)

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
 PIER 38 NORTHBOUND & SOUTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CO.



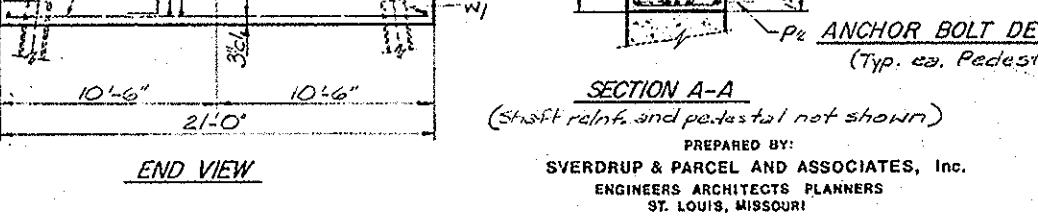
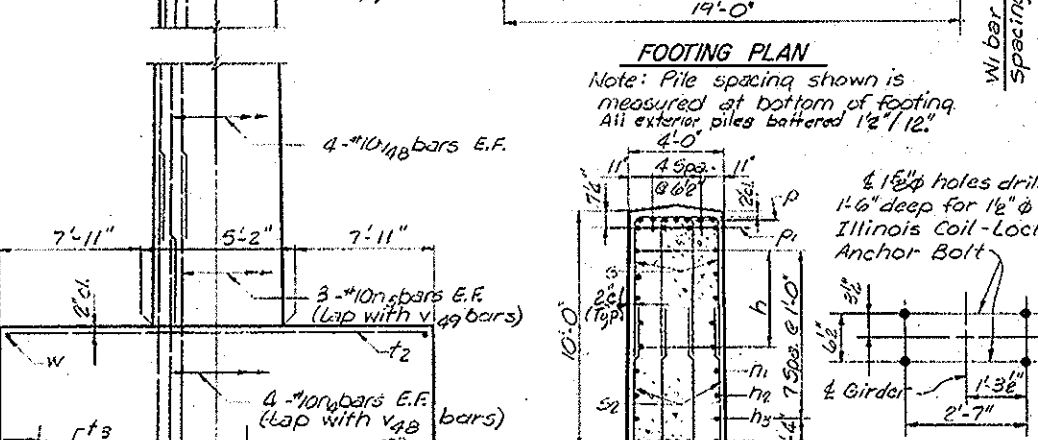
PILE DATA
Type: HP 14x89
Capacity: Driven to Refusal*
Est. Length: 62'-0"
No. Req'd: 24 (12 @ Pier 40N, 12 @ Pier 40S & 1 Test Pile @ Pier 40S)
↓ Indicates direction of batter.
* See Special Provisions

DESIGNED
M. Schaefer

CHECKED
M. Bello

DRAWN
J. Corley

CHECKED
J. Ritzheimer



BILL OF MATERIAL

PIER 40 NORTHBOUND					PIER 40 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h1	10	#6	40'-8"	—	h1	10	#6	40'-8"	—
h2	2	#6	35'-0"	—	h2	2	#6	35'-0"	—
h3	2	#6	28'-11"	—	h3	2	#6	28'-11"	—
h4	2	#6	22'-10"	—	h4	2	#6	22'-10"	—
n4	36	#10	12'-1"	L	n4	36	#10	12'-1"	L
n5	36	#10	17'-8"	L	n5	36	#10	17'-8"	L
p	7	#10	43'-6"	—	p	7	#10	43'-6"	—
p1	6	#10	40'-8"	—	p1	6	#10	40'-8"	—
p2	10	#6	22'-1"	—	p2	10	#6	22'-1"	—
s	36	#6	14'-4"	—	s	36	#6	14'-4"	—
s1	20	#6	12'-2"	—	s1	20	#6	12'-2"	—
s2	36	#6	14'-5"	—	s2	36	#6	14'-5"	—
s3	20	#6	12'-3"	—	s3	20	#6	12'-3"	—
s4	30	#6	5'-0"	—	s4	30	#6	5'-0"	—
s13	238	#5	2'-10"	—	s13	238	#5	2'-10"	—
s19	350	#5	4'-3"	—	s19	350	#5	4'-3"	—
s31	10	#6	7'-5"	—	s31	10	#6	7'-5"	—
s65	308	#5	3'-11"	—	s65	308	#5	3'-11"	—
s67	104	#5	17'-3"	—	s67	104	#5	17'-3"	—
s68	88	#5	16'-7"	—	s68	88	#5	16'-7"	—
t2	19	#5	20'-6"	—	t2	19	#5	20'-6"	—
t3	26	#10	20'-6"	—	t3	26	#10	20'-6"	—
u	12	#6	11'-7"	—	u	12	#6	11'-7"	—
v12	34	#9	24'-8"	—	v12	34	#9	24'-8"	—
v19	34	#9	20'-3"	—	v19	34	#9	20'-3"	—
v48	36	#10	29'-5"	—	v48	36	#10	29'-5"	—
v49	36	#10	28'-3"	—	v49	36	#10	28'-3"	—
w	21	#5	18'-6"	—	w	21	#5	18'-6"	—
w1	25	#5	18'-6"	—	w1	25	#5	18'-6"	—

NORTH APPROACH

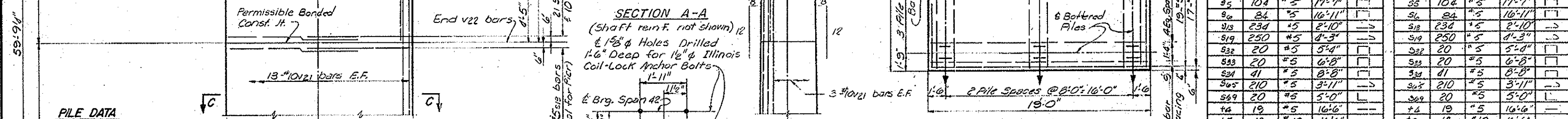
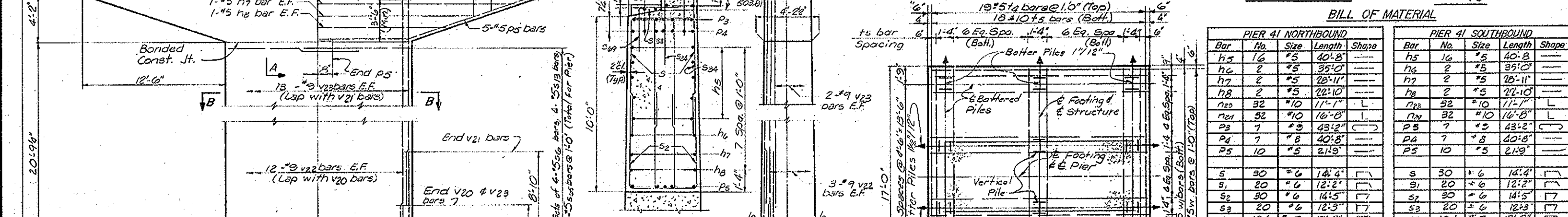
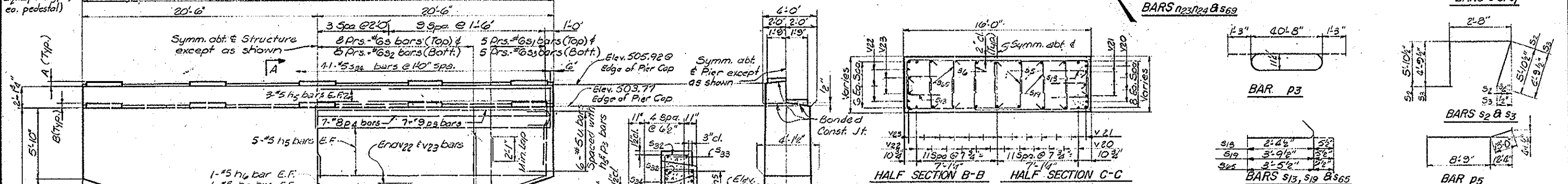
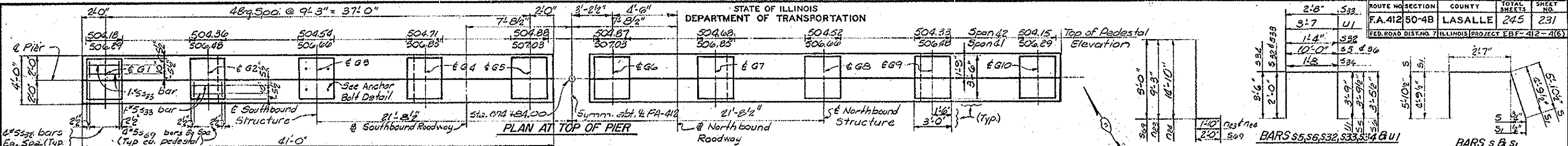
STRUCTURAL STEEL ALTERNATE

PIER 40 NORTHBOUND & SOUTHBOUND

FA-412 OVER ILLINOIS RIVER

SECTION 50-4B PROJECT EBF-412-4(6)

STA. 863+16.00 (FA-412) LASALLE CO.

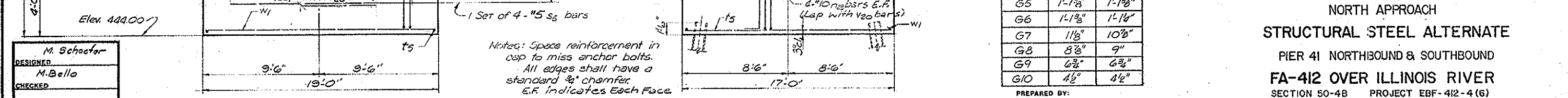


BILL OF MATERIAL

PIER 41 NORTHBOUND					PIER 41 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h5	16	#5	40'-8"	---	h5	16	#5	40'-8"	---
h6	2	#5	35'-0"	---	h6	2	#5	35'-0"	---
h7	2	#5	28'-11"	---	h7	2	#5	28'-11"	---
h8	2	#5	22'-10"	---	h8	2	#5	22'-10"	---
n20	32	#10	11'-1"	L	n20	32	#10	11'-1"	L
n21	32	#10	16'-8"	L	n21	32	#10	16'-8"	L
p3	7	#5	43'-2"	---	p3	7	#5	43'-2"	---
p4	7	#8	40'-8"	---	p4	7	#8	40'-8"	---
p5	10	#5	21'-9"	---	p5	10	#5	21'-9"	---
s	30	#6	14'-4"	---	s	30	#6	14'-4"	---
s1	20	#6	12'-2"	---	s1	20	#6	12'-2"	---
s2	30	#6	14'-5"	---	s2	30	#6	14'-5"	---
s3	20	#6	12'-3"	---	s3	20	#6	12'-3"	---
s5	104	#5	17'-7"	---	s5	104	#5	17'-7"	---
s6	84	#5	16'-11"	---	s6	84	#5	16'-11"	---
s13	234	#5	2'-10"	---	s13	234	#5	2'-10"	---
s19	250	#5	4'-3"	---	s19	250	#5	4'-3"	---
s32	20	#5	5'-4"	---	s32	20	#5	5'-4"	---
s33	20	#5	6'-8"	---	s33	20	#5	6'-8"	---
s34	41	#5	8'-8"	---	s34	41	#5	8'-8"	---
s65	210	#5	3'-11"	---	s65	210	#5	3'-11"	---
s69	20	#5	5'-0"	---	s69	20	#5	5'-0"	---
t4	19	#5	16'-6"	---	t4	19	#5	16'-6"	---
t5	18	#10	16'-6"	---	t5	18	#10	16'-6"	---
w1	12	#5	11'-1"	---	w1	12	#5	11'-1"	---
w2	32	#10	29'-5"	---	w2	32	#10	29'-5"	---
w3	32	#10	28'-3"	---	w3	32	#10	28'-3"	---
w22	30	#9	24'-5"	---	w22	30	#9	24'-5"	---
w23	30	#9	20'-0"	---	w23	30	#9	20'-0"	---
w	17	#5	18'-6"	---	w	17	#5	18'-6"	---
w1	19	#5	18'-6"	---	w1	19	#5	18'-6"	---

PEDESTAL HEIGHTS

Girders	A	B
G1	4 1/2"	4 1/2"
G2	6 3/4"	7 1/8"
G3	8 3/8"	9 1/4"
G4	11 1/8"	11 1/4"
G5	1-1 3/8"	1-1 3/8"
G6	1-1 3/8"	1-1 3/8"
G7	11 3/8"	10 5/8"
G8	8 3/8"	9"
G9	6 3/8"	6 3/4"
G10	4 1/2"	4 1/2"

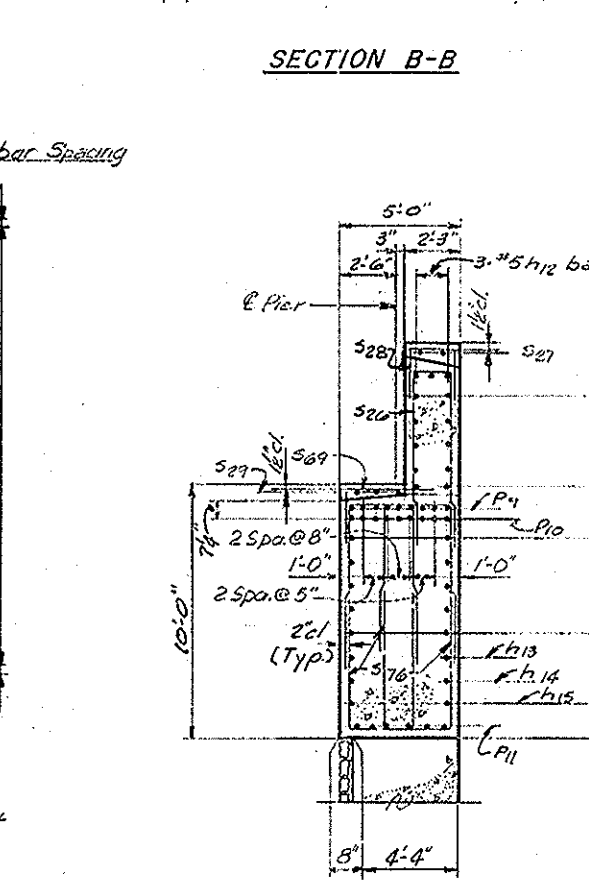
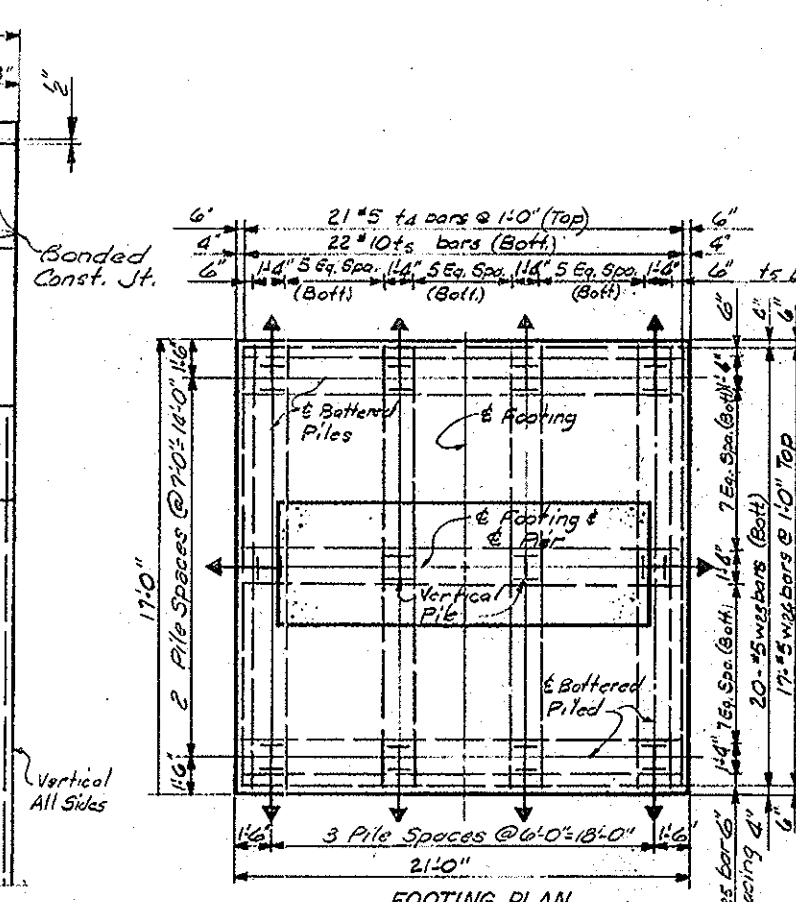
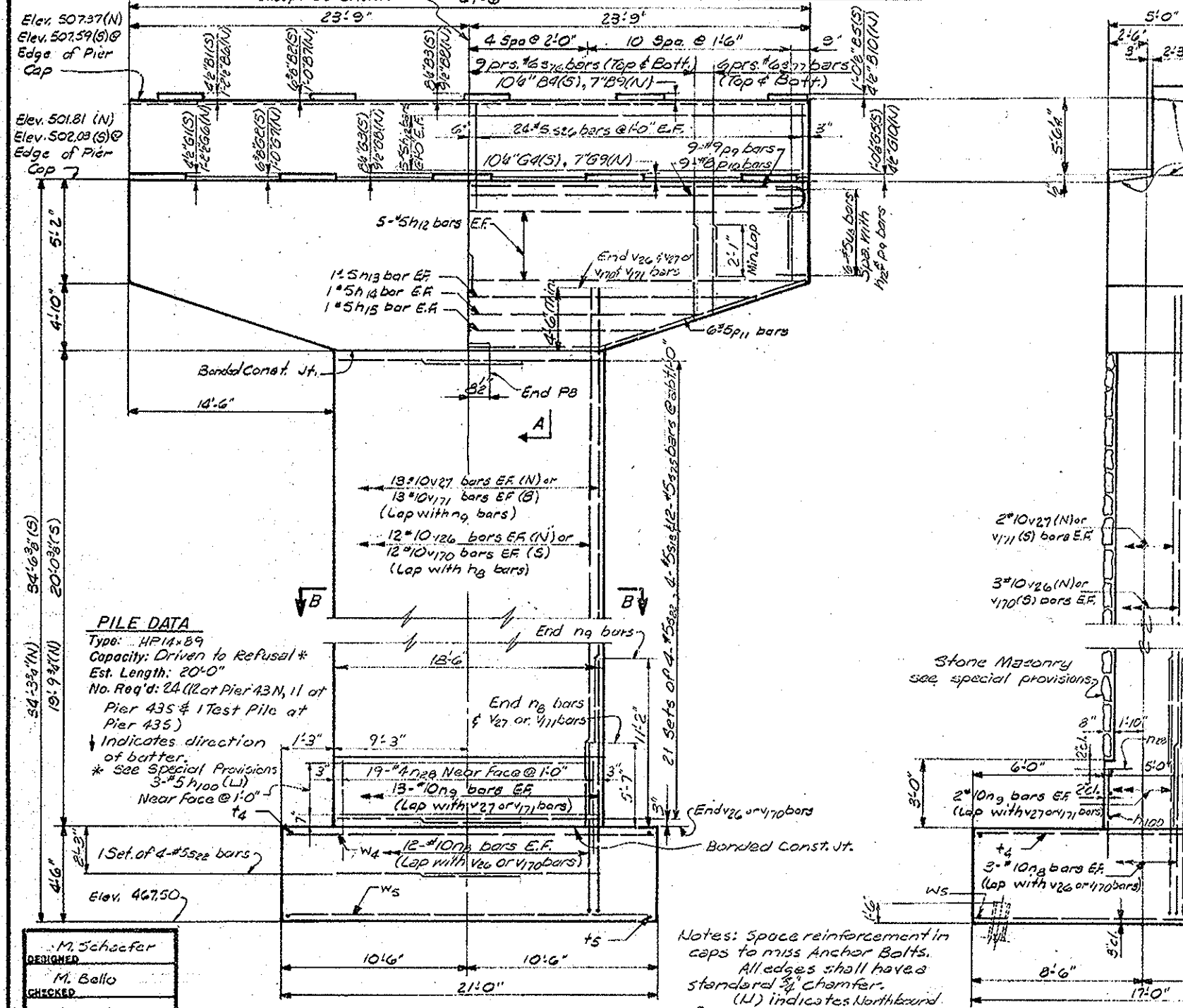
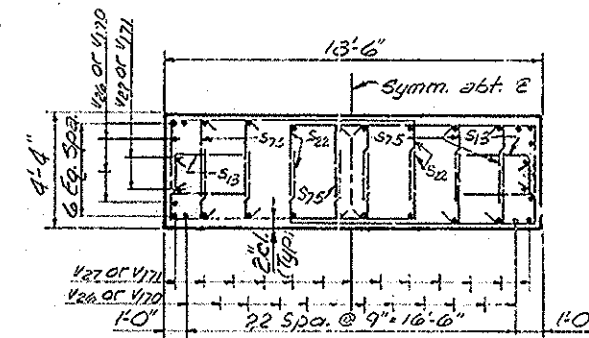
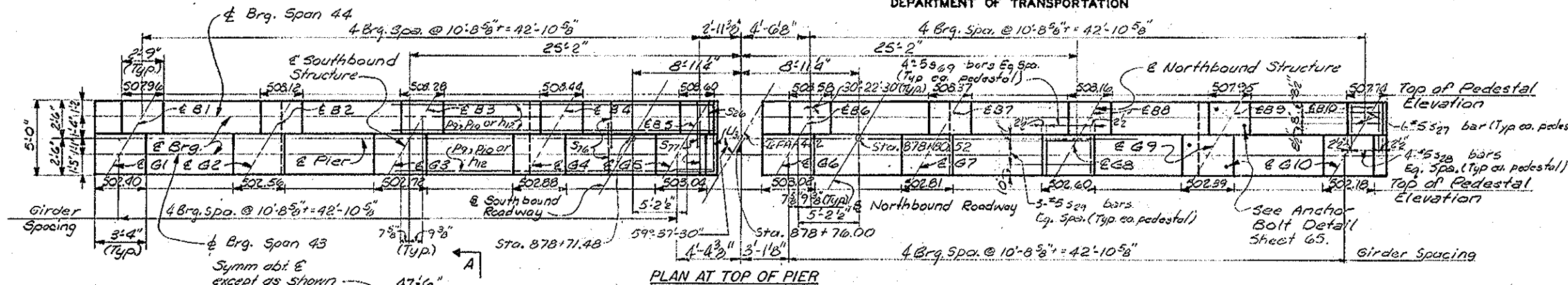


DESIGNED: M. Schoeber
CHECKED: M. Bello
DRAWN: J. Carley
CHECKED: T. Ritzheimer

PREPARED BY: SVDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 41 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.
SHEET NO. 62 OF 76



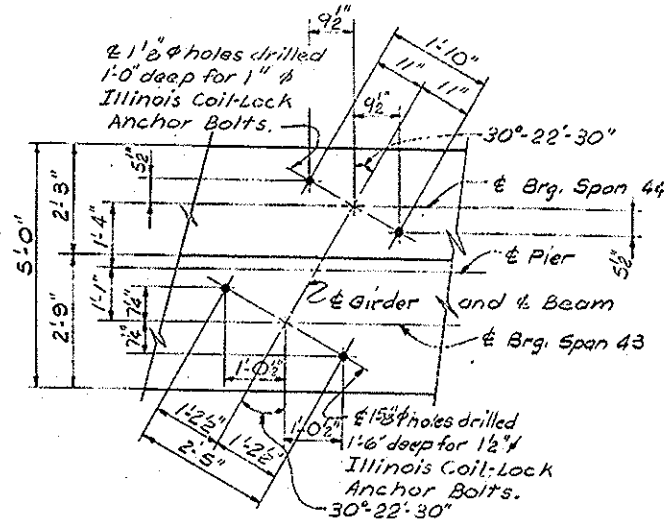
M. Schaefer
DESIGNED
M. Bollo
CHECKED
J. Corley
DRAWN
T. Ritzheimer
CHECKED

Notes: Space reinforcement in caps to miss Anchor Bolts. All edges shall have a standard 3/4" Chamfer. (N) indicates Northbound Pier. (S) indicates Southbound Pier. E.F. indicates Each Face.

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

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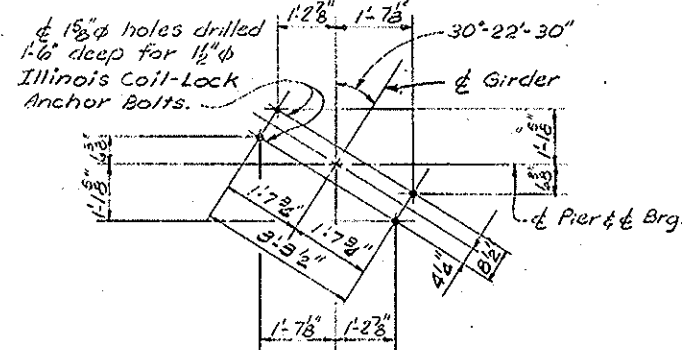
NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIER 43 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.



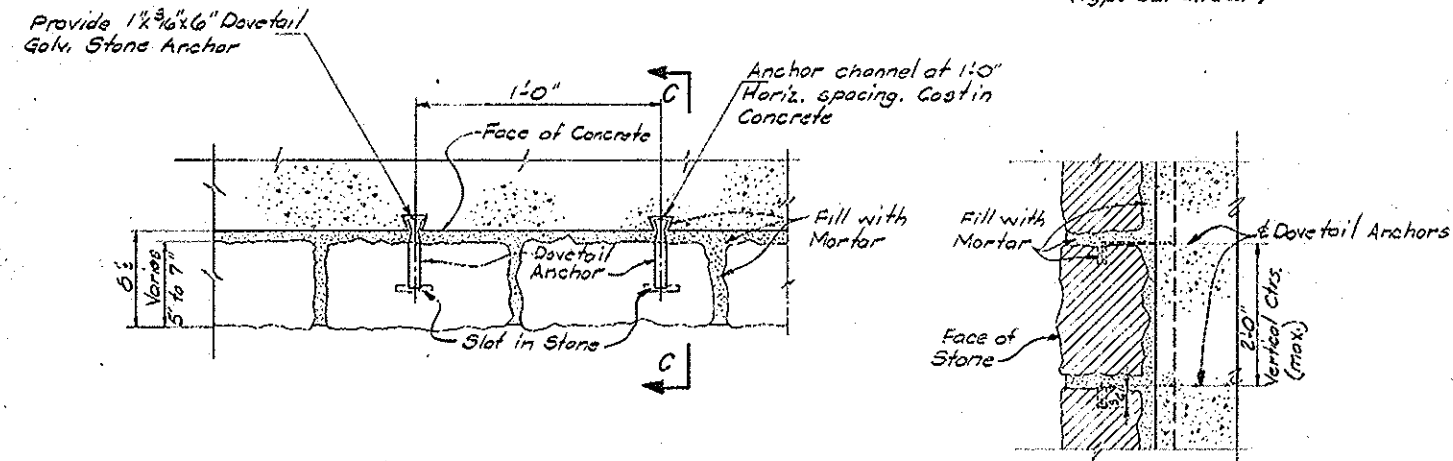
**PIER 43
ANCHOR BOLT DETAIL**
(Typ. ea. Girder and Beam)

5'-3"	S26, S27
1'-11"	S26
3'-1"	S25
2'-0"	S28
2'-6"	S27
12'-4"	S22
3'-2 1/2"	S22
1'-9"	S26
6'-4"	S26
4'-11"	S26
5'-11"	S26
3'-2 1/2"	S22
1'-9"	S26
6'-4"	S26
4'-11"	S26
5'-11"	S26

BARS S22, S26, S27, S28, S29, S76 & S77



**PIER 42
ANCHOR BOLT DETAIL**
(Typ. ea. Girder)

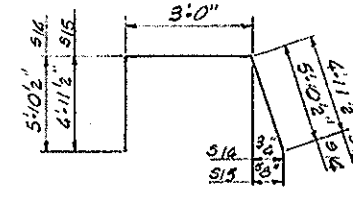


STONE MASONRY DETAIL
(On Span 43 Side of Pier only)

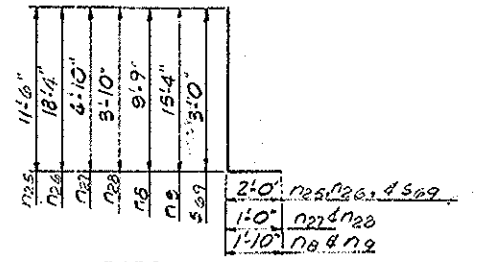
SECTION C-C

11'-10"	U3
4'-3"	U2
4'-0"	S20
3'-2"	S21
4'-0"	S20
2'-0"	S20
3'-1 1/2"	S20
3'-4"	S20
2'-0"	head

BARS h100, S20, S21, S73, S74, U2 & U3



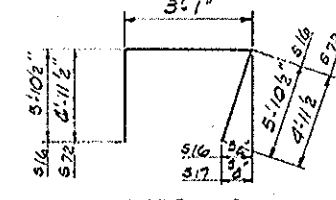
BARS S14 & S15



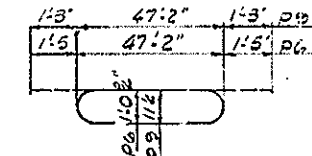
BARS n8, n9, n25, n26, n27, n28 & s69

3'-7 1/2"	S70
3'-4 1/2"	S71
2'-4 1/2"	S71
3'-2 1/2"	S75

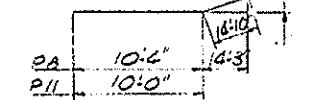
BARS S13 S70 S71 & S75



BARS S16 & S72



BARS p6 & p9



BARS p8 & p11

BILL OF MATERIAL

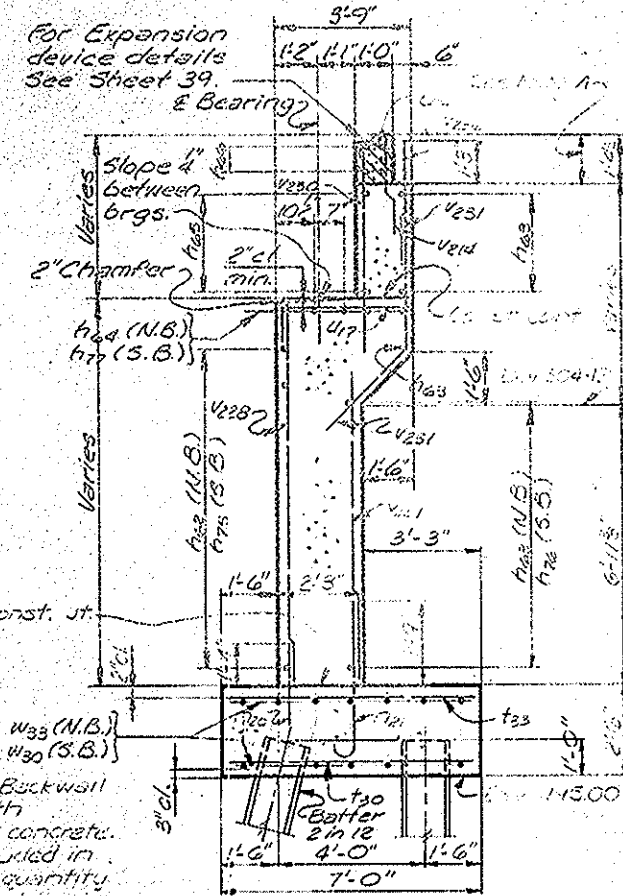
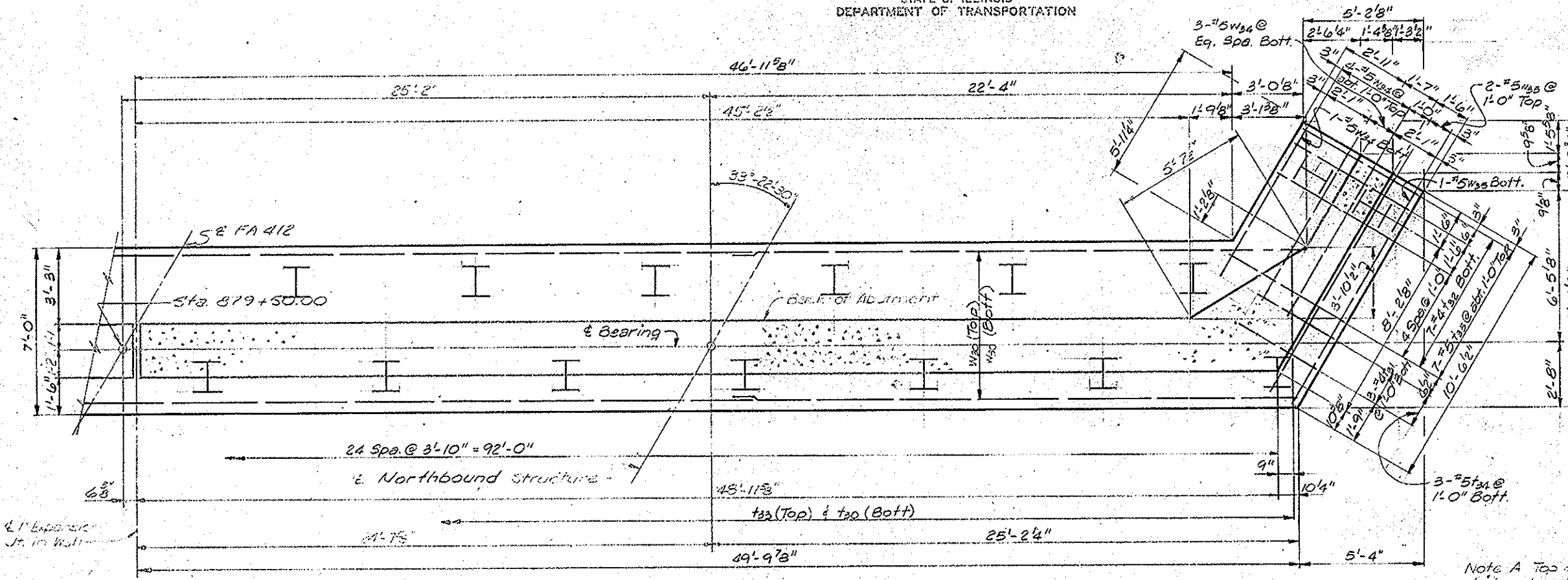
PIER 42 NORTHBOUND					PIER 42 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h4	10	#6	47'-2"	---	h4	10	#6	47'-2"	---
h9	2	#6	41'-10"	---	h9	2	#6	41'-10"	---
h10	2	#6	35'-10"	---	h10	2	#6	35'-10"	---
h11	2	#6	29'-10"	---	h11	2	#6	29'-10"	---
h100	4	#5	22'-2"	L	h100	4	#5	22'-2"	L
n25	50	#11	13'-6"	L	n25	50	#11	13'-6"	L
n26	50	#11	20'-4"	L	n26	50	#11	20'-4"	L
n27	19	#4	5'-10"	L	n27	19	#4	5'-10"	L
p6	10	#10	50'-0"	C	p6	10	#10	50'-0"	C
p7	10	#10	47'-2"	---	p7	10	#10	47'-2"	---
p8	12	#6	25'-2"	---	p8	12	#6	25'-2"	---
s13	230	#5	2'-10"	---	s13	230	#5	2'-10"	---
s14	44	#6	14'-9"	---	s14	44	#6	14'-9"	---
s15	20	#6	12'-11"	---	s15	20	#6	12'-11"	---
s16	44	#6	14'-10"	---	s16	44	#6	14'-10"	---
s20	15	#6	8'-0"	---	s20	15	#6	8'-0"	---
s21	25	#6	7'-2"	---	s21	25	#6	7'-2"	---
s20	400	#5	4'-1"	---	s20	400	#5	4'-1"	---
s21	320	#5	3'-10"	---	s21	320	#5	3'-10"	---
s22	20	#6	13'-0"	---	s22	20	#6	13'-0"	---
s23	104	#5	19'-1"	---	s23	104	#5	19'-1"	---
s24	80	#5	18'-7"	---	s24	80	#5	18'-7"	---
t8	26	#5	22'-6"	---	t8	26	#5	22'-6"	---
t9	46	#10	22'-6"	---	t9	46	#10	22'-6"	---
u2	12	#6	12'-3"	---	u2	12	#6	12'-3"	---
v30	48	#10	24'-0"	---	v32	48	#10	24'-3"	---
v31	48	#10	18'-5"	---	v33	48	#10	18'-3"	---
v40	50	#11	30'-7"	---	v40	50	#11	30'-7"	---
v41	50	#11	29'-4"	---	v41	50	#11	29'-4"	---
w2	23	#5	25'-6"	---	w2	23	#5	25'-6"	---
w3	28	#8	25'-6"	---	w3	28	#8	25'-6"	---
Class X Concrete Cu.Yds. 326.6					Class X Concrete Cu.Yds. 329.6				
Reinforcement Bars Lbs. 57,767					Reinforcement Bars Lbs. 57,870				
Steel Piles HP14x89 Lin.Ft. 543					Steel Piles HP14x89 Lin.Ft. 576				
Metal Shoes (Steel HP14x89) Each 1					Metal Shoes Each 18				
Cofferdam Each 17					Cofferdam Each 1				
Cofferdam Excav. Cu.Yds. 270					Cofferdam Excav. Cu.Yds. 270				
Lannon Weather-Edge Sq. 152					Lannon Weather-Edge Sq. 752				
Stone Masonry (Piers 42&43) Ft.					Stone Masonry (Piers 42&43) Ft.				

Note: Work this Sheet with Sheets 63 & 64.

PIER 43 NORTHBOUND					PIER 43 SOUTHBOUND				
Bar	No.	Size	Length	Shape	Bar	No.	Size	Length	Shape
h12	10	#5	47'-2"	---	h12	10	#5	47'-2"	---
h13	2	#5	41'-0"	---	h13	2	#5	41'-0"	---
h14	2	#5	35'-10"	---	h14	2	#5	35'-10"	---
h15	2	#5	29'-10"	---	h15	2	#5	29'-10"	---
h100	3	#5	22'-2"	L	h100	3	#5	22'-2"	L
n8	30	#10	11'-7"	L	n8	30	#10	11'-7"	L
n9	30	#10	17'-2"	L	n9	30	#10	17'-2"	L
n28	19	#4	4'-10"	L	n28	19	#4	4'-10"	L
p9	9	#9	49'-8"	C	p9	9	#9	49'-8"	C
p10	9	#8	47'-2"	---	p10	9	#8	47'-2"	---
p11	12	#5	24'-10"	---	p11	12	#5	24'-10"	---
s13	84	#5	2'-10"	---	s13	84	#5	2'-10"	---
s22	88	#5	18'-9"	---	s22	88	#5	18'-9"	---
s26	48	#5	14'-7"	---	s26	48	#5	14'-7"	---
s27	10	#5	6'-0"	---	s27	10	#5	6'-0"	---
s28	20	#5	5'-6"	---	s28	20	#5	5'-6"	---
s29	15	#5	6'-1"	---	s29	15	#5	6'-1"	---
s69	20	#5	5'-0"	---	s69	20	#5	5'-0"	---
s75	252	#5	3'-8"	---	s75	252	#5	3'-8"	---
s76	68	#6	15'-1"	---	s76	68	#6	15'-1"	---
s77	48	#6	13'-1"	---	s77	48	#6	13'-1"	---
t4	21	#5	16'-6"	---	t4	21	#5	16'-6"	---
t5	22	#10	16'-6"	---	t5	22	#10	16'-6"	---
u3	12	#5	12'-6"	---	u3	12	#5	12'-6"	---
v170	30	#10	24'-9"	---	v170	30	#10	24'-9"	---
v171	30	#10	19'-0"	---	v171	30	#10	19'-0"	---
w4	17	#5	20'-6"	---	w4	17	#5	20'-6"	---
w5	20	#5	20'-4"	---	w5	20	#5	20'-4"	---
Class X Concrete Cu.Yds. 218.9					Class X Concrete Cu.Yds. 219.2				
Reinforcement Bars Lbs. 22,473					Reinforcement Bars Lbs. 22,538				
Steel Piles HP14x89 Lin.Ft. 240					Steel Piles HP14x89 Lin.Ft. 220				
Metal Shoes (Steel HP14x89) Each 1					Metal Shoes (Steel HP14x89) Each 1				
Cofferdam Each 12					Cofferdam Each 11				
Structure Excav. Cu.Yds. 185					Structure Excav. Cu.Yds. 185				
Lannon Weather-Edge Sq. 513					Lannon Weather-Edge Sq. 513				
Stone Masonry (Piers 43&44) Ft.					Stone Masonry (Piers 43&44) Ft.				

**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
PIERS 42&43 NORTHBOUND & SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**

M. Schaefer
DESIGNED
M. Ballo
CHECKED
J. Carley
DRAWN
T. Ritzheimer
CHECKED

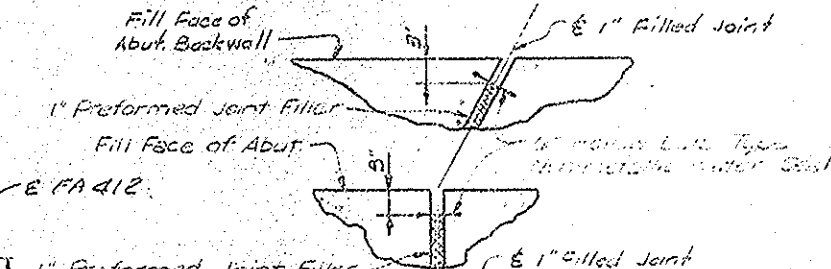


FOOTING PLAN
NORTH ABUTMENT NORTHBOUND

NORTHBOUND ABUTMENT - PILE DATA

TYPE: HP14 x 89
CAPACITY: Drive to refusal *
EST. LENGTH: 20' (N.B.) 20' (S.B.)
NO. REQD.: 15 + 1 Test Pile (N.B.) 15 (S.B.)
*See Special Provisions

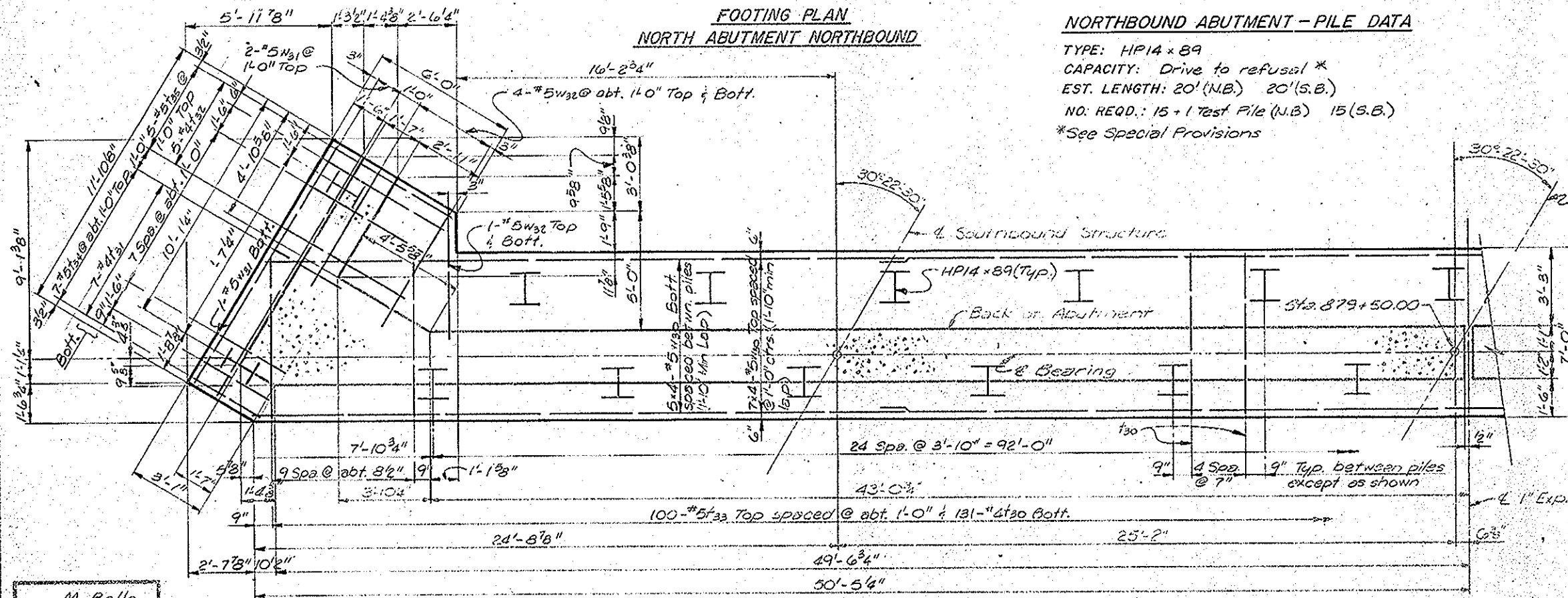
Note: A Top of Backwall to be placed with superstructure concrete. Quantity is included in superstructure quantity for Class 4 Concrete.



EXPANSION JOINT

Note: Water Seal is to be continuous from Top of Footing to Top of Backwall. Max. Design Pressure 550PSF. Key Abutment to be continuous.

NOTES
Work this sheet with sheets 67, 68 & 69.



FOOTING PLAN
NORTH ABUTMENT SOUTHBOUND

NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
NORTH ABUTMENT
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED M. Bello
CHECKED M. Schaefer
DRAWN J. Sims
CHECKED A. Myers

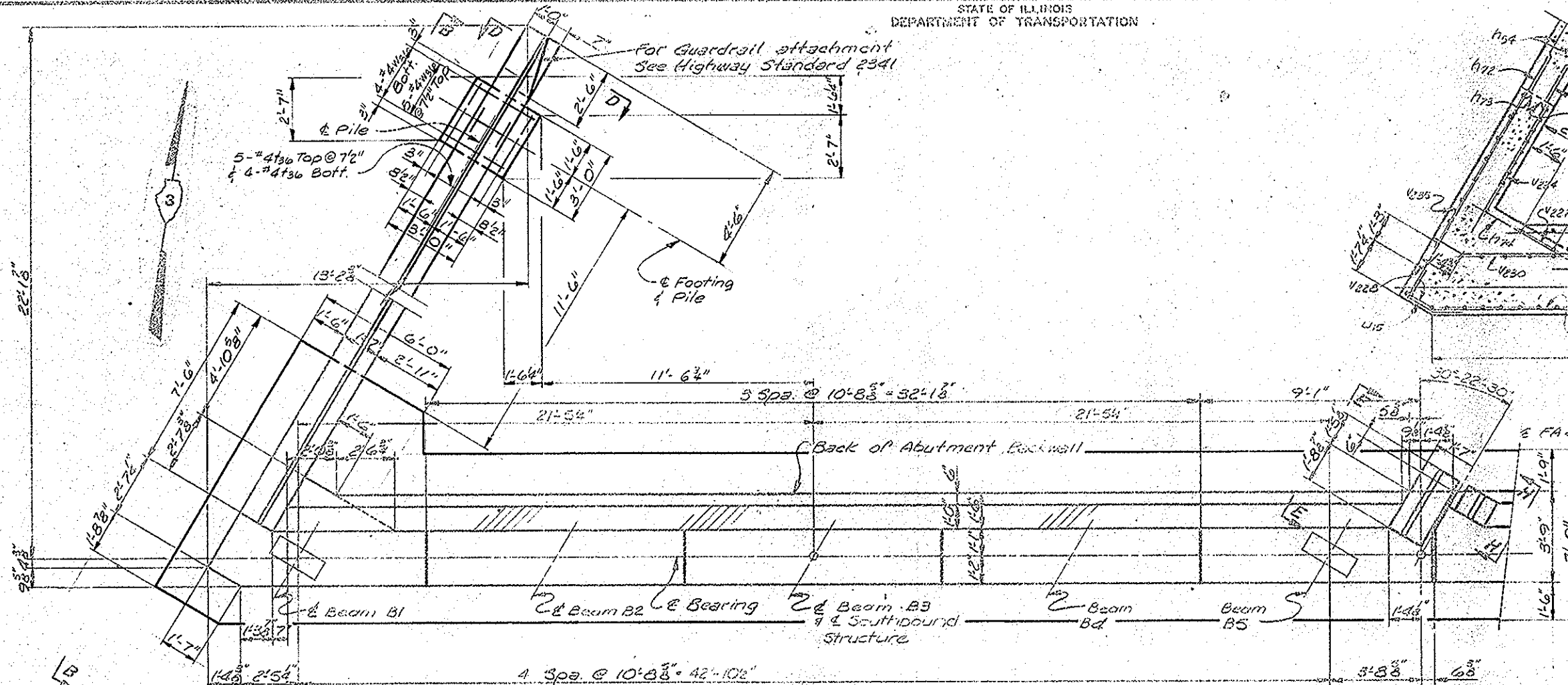
AS REVISED

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO 66 OF 76

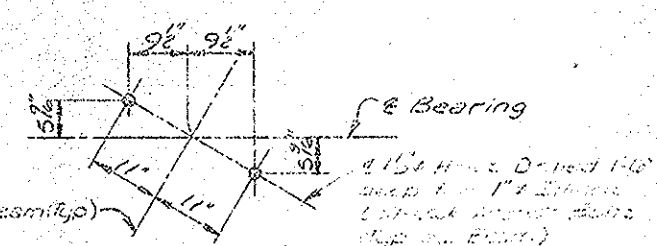
As revised 4-30-85



SECTION F-F

Note A: Top of Backfill to be placed with superstructure concrete. Quantity is included in superstructure quantity for Class 1 concrete.

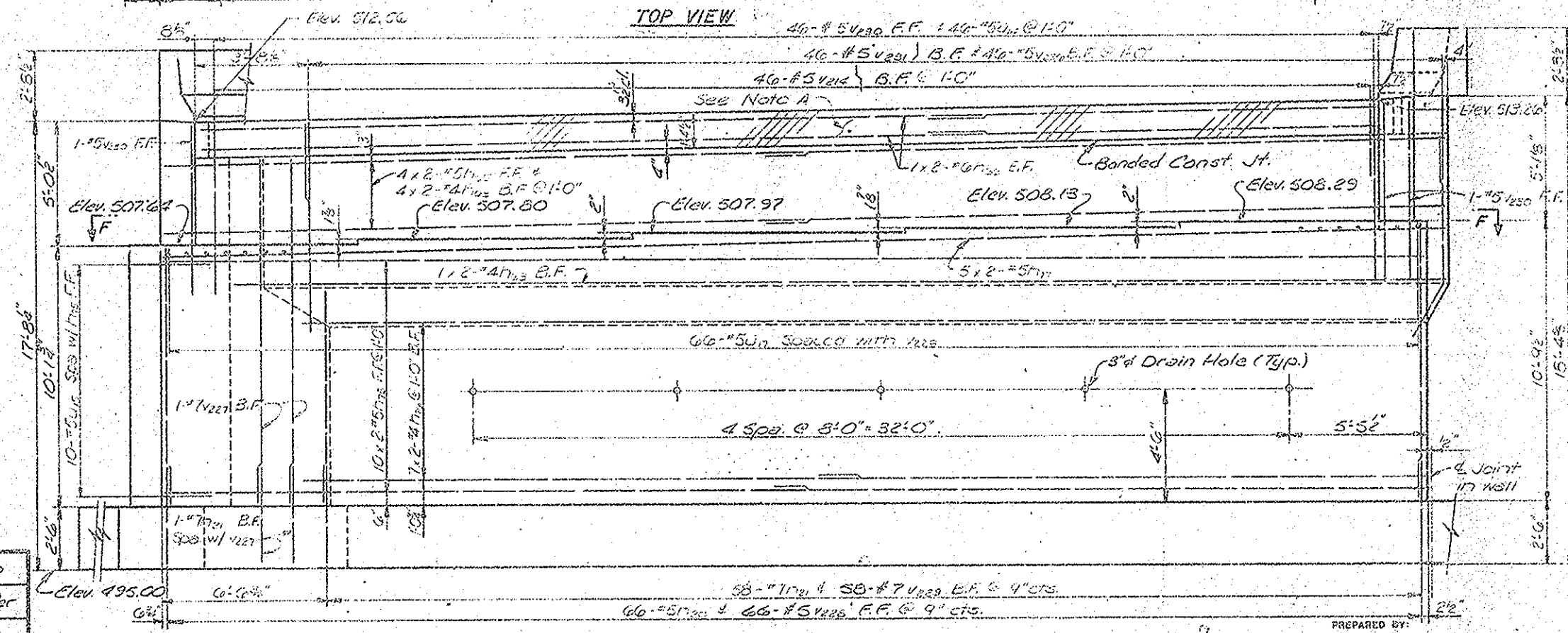
Note B: Bars indicated from 7-2-14, 11-1-14, 7 lines of bars with 6 lengths per line.



ANCHOR BOLT DETAIL
Shift up bars in field as required to clear anchor bolt holes.

NOTES
Work this sheet with sheet 66, 68 & 69.
E.F. indicates Each Face
F.F. indicates Front Face
B.F. indicates Back Face
Outer layer of reinforcement shall be 2" clear of concrete face except as otherwise shown.
Minimum Laps
Bars #4 = 1'-0"
#5 = 1'-8"
#6 = 2'-1"
#7 = 2'-8"
Expansion joint notches not shown, see sheet 39.

**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
NORTH ABUTMENT-SOUTHBOUND
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.**



ELEVATION

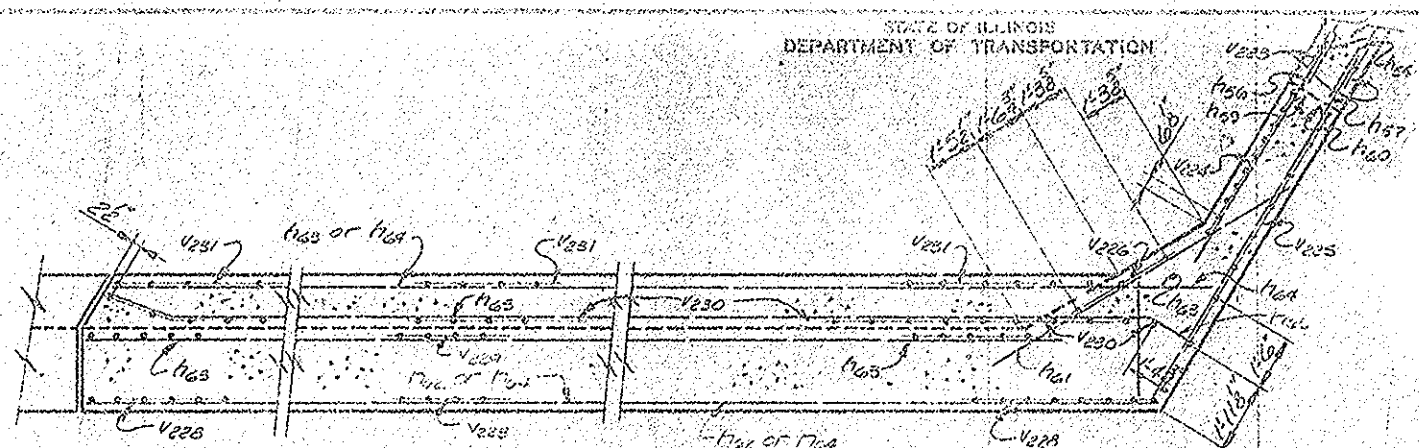
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

DESIGNED: M. Bello
CHECKED: M. Schaefer
DRAWN: J. Sims
CHECKED: A. Myers

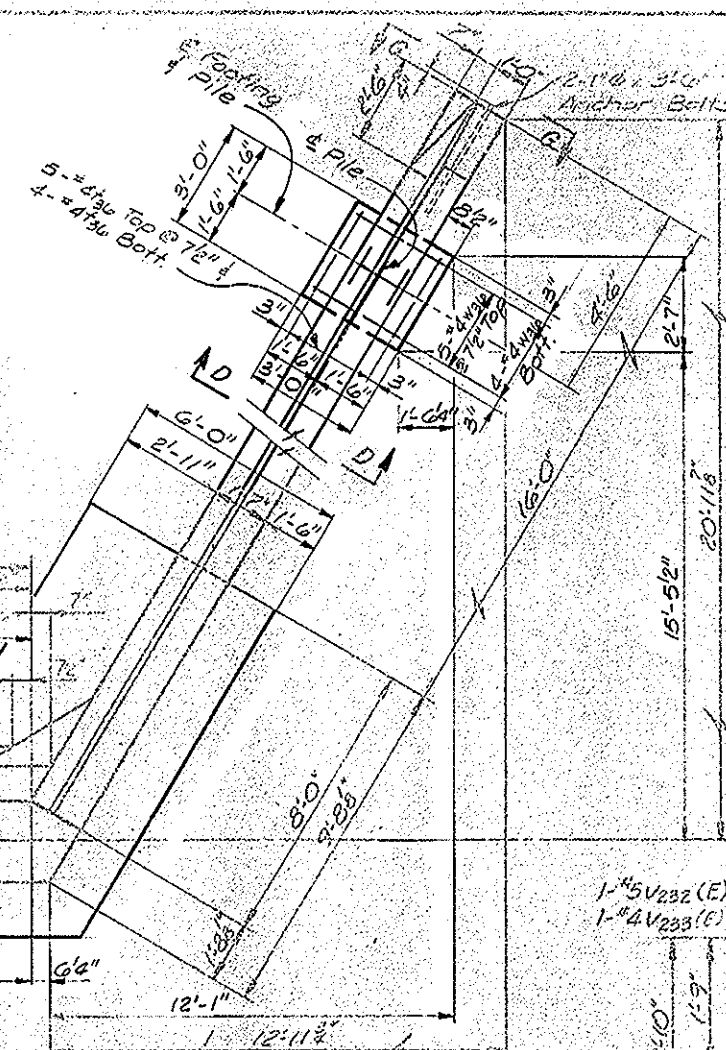
AS REVISED

PREPARED BY:
SVDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

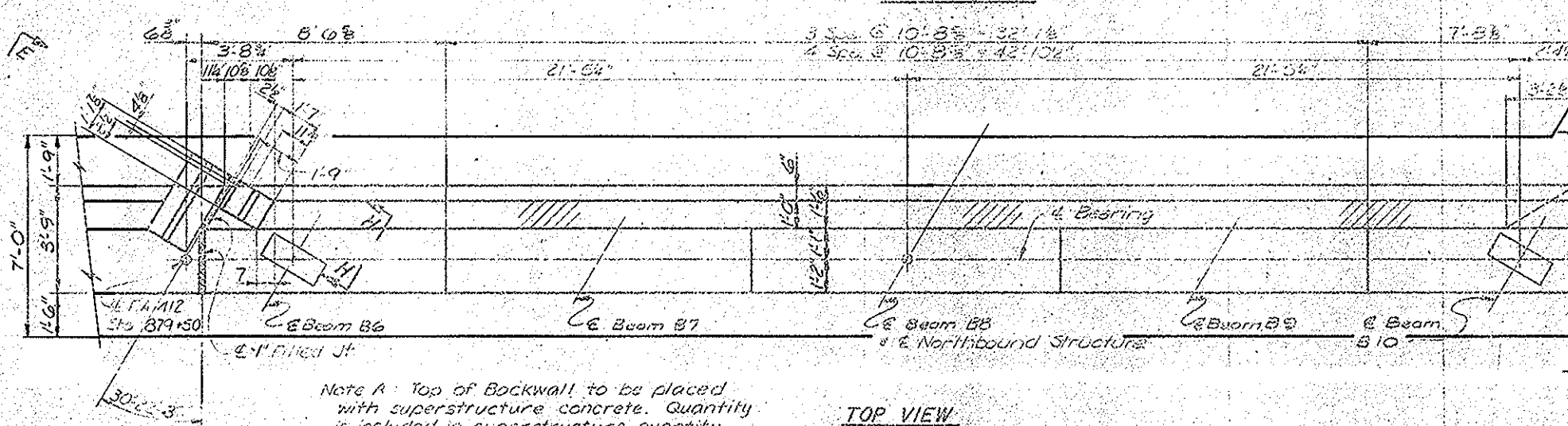
As revised 4-30-85



SECTION C-C

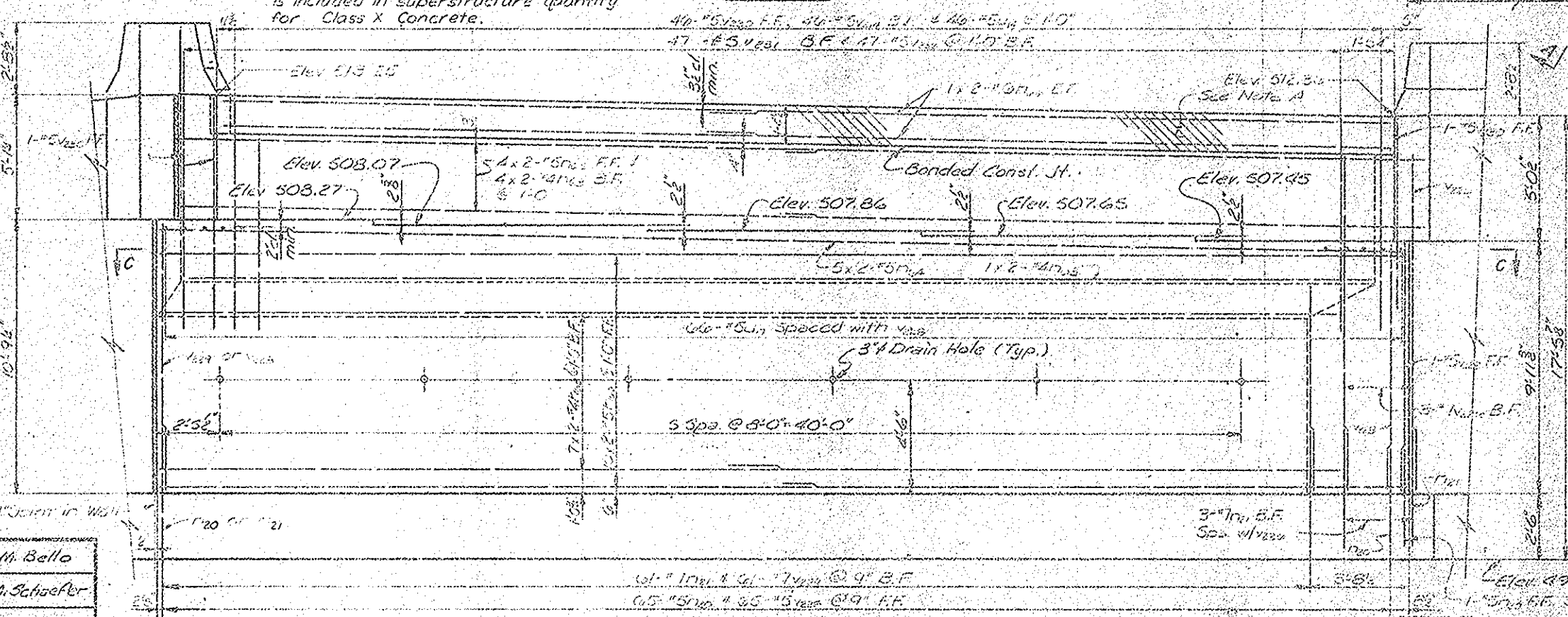


VIEW H-H

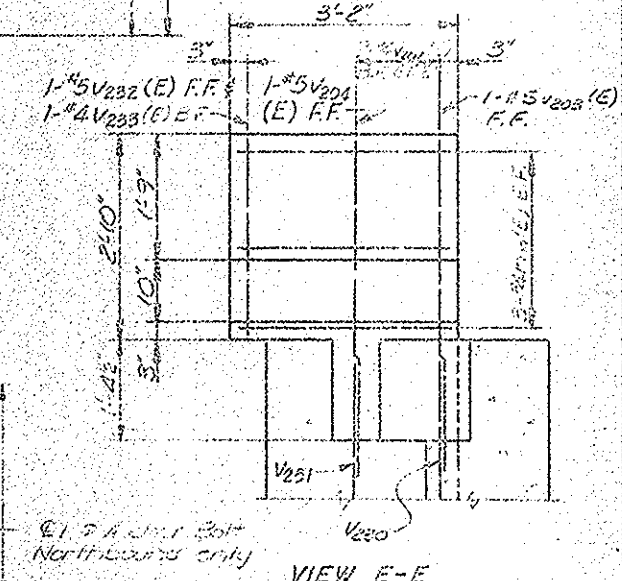


TOP VIEW

Note A: Top of Backwall to be placed with superstructure concrete. Quantity is included in superstructure quantity for Class X Concrete.



ELEVATION



VIEW E-E



VIEW G-G

NOTES
 Work this Sheet with Sheet 66, 67 & 69.
 E.F. indicates Each Face
 F.F. indicates Front Face
 B.F. indicates Back Face
 Minimum Laps
 Bars #4-#10
 #5-1'8"
 #6-2'1"
 #7-2'8"
 Expansion joint notches not shown, See Sheet 39.

NORTH APPROACH
 STRUCTURAL STEEL ALTERNATE
 NORTH ABUTMENT-NORTHBOUND
 FA-412 OVER ILLINOIS RIVER
 SECTION 50-4B PROJECT EBF-412-4(6)
 STA. 863+16.00 (FA-412) LASALLE CG.

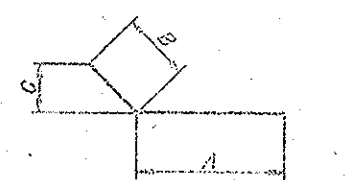
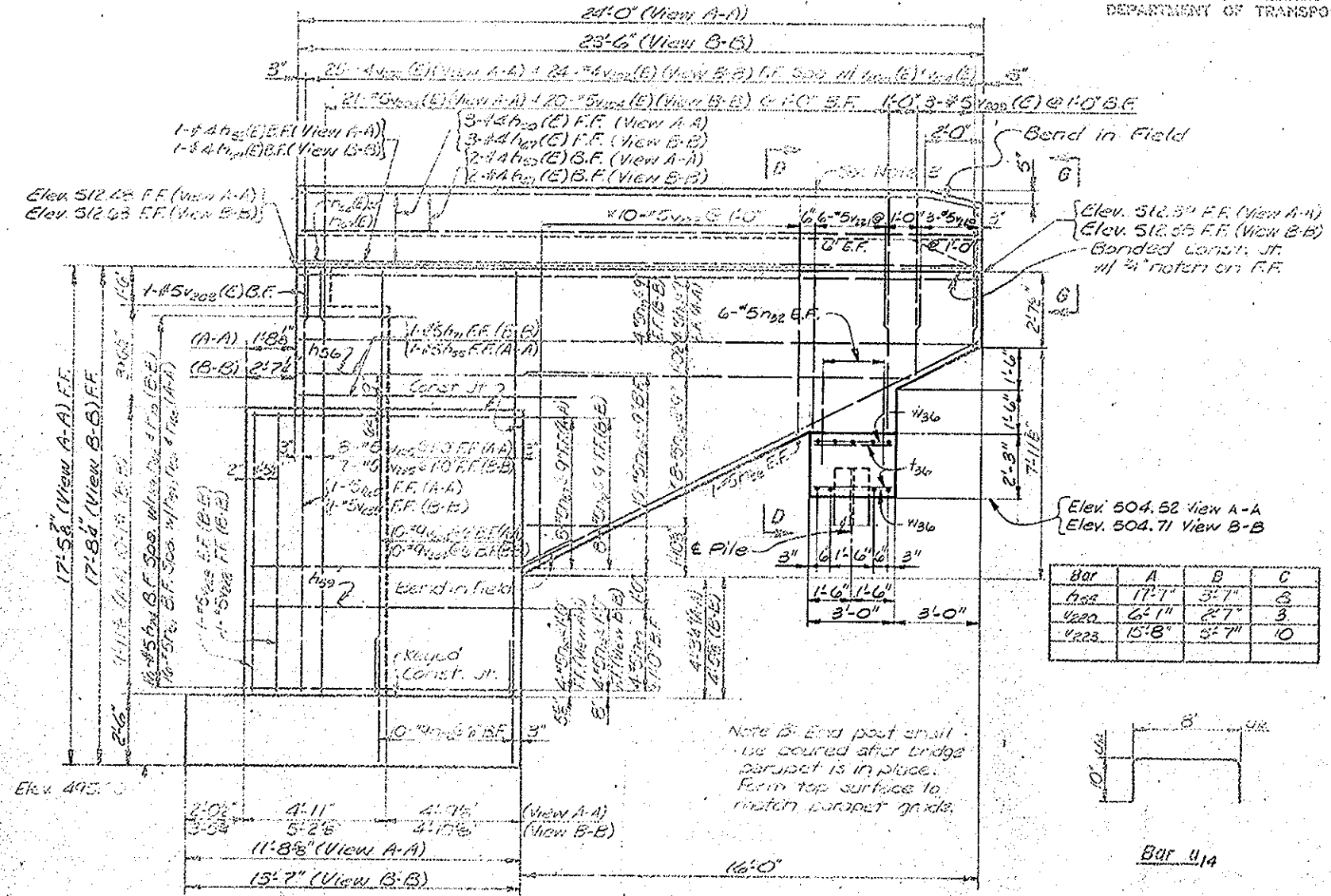
DESIGNED BY
M. Bello
 CHECKED BY
M. Schaefer
 DRAWN BY
J. Sims
 CHECKED BY
A. Myers

AS REVISED

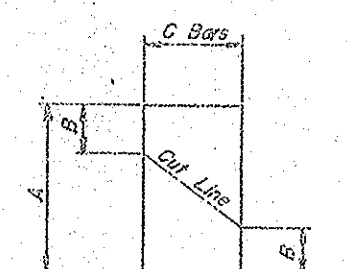
PREPARED BY
 OVERDRUP & PARCEL AND ASSOCIATES, Inc.
 ENGINEERS ARCHITECTS PLANNERS
 ST. LOUIS, MISSOURI

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

As revised 4-30-85

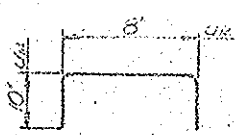


Bar	A	B	C
h52	20-11"	2-5"	6-8"
h53	24-1"	1-5"	8-3"
h54	20-5"	2-5"	6-8"
v220	4-11"	3-9"	2-7"
v221	1-10"	1-0"	3-8"

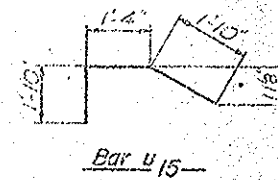


FIELD CUTTING DIAGRAM
* Order h52, v220 & v221 bars full length. Cut to fit as shown and use remainder of bars in other face.

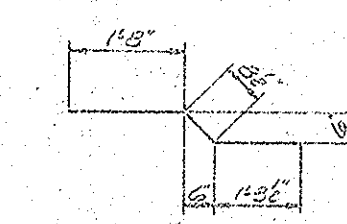
Bar	A	B	C
h52	17-7"	3-7"	3
v220	6-7"	2-7"	3
v221	13-8"	3-7"	10



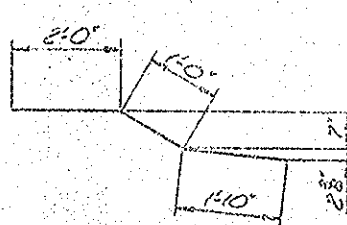
Bar U14



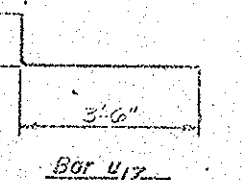
Bar U15



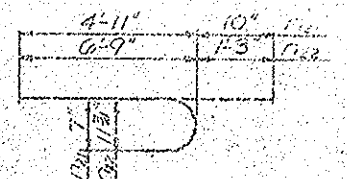
Bar V214



Bar V204(E)



Bar U17



Bar U21 & U22

BILL OF MATERIAL

North Abutment - Northbound				
Bar	No.	Size	Length	Shape
h52	5	#4	23-10"	---
h53	1	#4	23-4"	---
h54	5	#5	23-10"	---
h55	8	#5	17-7"	---
h56	2	#5	10-4"	---
h57	10	#5	8-9"	---
h58	8	#5	18-0"	---
h59	2	#5	17-8"	---
h60	4	#5	6-3"	---
h61	4	#5	9-6"	---
h62	16	#5	8-6"	---
h63	20	#5	23-2"	---
h64	24	#4	24-3"	---
h65	10	#5	25-10"	---
h66	8	#5	25-6"	---
h67	8	#6	24-1"	---
h68	6	#4	1-0"	---
h69	66	#4	6-8"	---
h70	3	#4	3-2"	---
h71	7	#4	5-8"	---
h72	50	#5	6-8"	---
h73	3	#5	3-2"	---
h74	7	#5	5-8"	---
h75	9	#4	2-10"	---
h76	40	#5	2-4"	---
h77	66	#5	5-11"	---
v220	27	#4	3-10"	---
v221	6	#5	4-8"	---
v222	21	#5	4-10"	---
v223	46	#5	3-8"	---
v224	3	#5	6-1"	---
v225	12	#5	5-7"	---
v226	10	#5	11-8"	---
v227	10	#9	16-11"	---
v228	9	#5	12-11"	---
v229	3	#7	12-5"	---
v230	66	#5	4-10"	---
v231	61	#7	3-7"	---
v232	49	#5	6-0"	---
v233	47	#5	8-5"	---
v234	47	#5	3-5"	---
v235	24	#5	26-5"	---
v236	10	#5	6-0"	---
v237	9	#4	2-10"	---
v238	66	#5	2-4"	---
v239	60	#7	5-9"	---
v240	10	#9	8-0"	---
v241	10	#9	8-0"	---
v242	12	#5	3-0"	---
Reinforcement Bars Lbs. 9,479				
Class X Concrete Cu. Yds. 116.6				
Reinforcement Bars (Epoxy Coated) Lbs. 307				
Porous Granular Backfill Cu. Yds. 108				
Structural Exc. Cu. Yds. 29				
Rock Excavation Cu. Yds. 73				

BILL OF MATERIAL

North Abutment - Southbound				
Bar	No.	Size	Length	Shape
h52	8	#5	17-1"	---
h53	10	#5	17-5"	---
h54	2	#5	17-5"	---
h55	4	#5	6-3"	---
h56	10	#4	24-5"	---
h57	8	#5	25-6"	---
h58	5	#6	24-1"	---
h59	5	#4	23-3"	---
h60	1	#4	22-10"	---
h61	8	#5	23-4"	---
h62	2	#5	9-9"	---
h63	8	#5	12-4"	---
h64	4	#5	9-11"	---
h65	16	#5	7-5"	---
h66	20	#5	25-4"	---
h67	14	#4	22-9"	---
h68	10	#5	26-3"	---
h69	6	#4	3-0"	---
h70	65	#4	6-8"	---
h71	7	#4	3-2"	---
h72	7	#4	5-8"	---
h73	50	#5	6-8"	---
h74	7	#5	3-2"	---
h75	5	#5	5-8"	---
h76	9	#4	2-10"	---
h77	46	#5	2-4"	---
h78	10	#5	3-0"	---
h79	66	#5	5-11"	---
v220	26	#4	3-0"	---
v221	5	#5	4-8"	---
v222	21	#5	4-10"	---
v223	46	#5	3-8"	---
v224	3	#5	6-1"	---
v225	12	#5	5-7"	---
v226	10	#5	15-8"	---
v227	2	#7	13-8"	---
v228	69	#5	9-10"	---
v229	58	#7	3-7"	---
v230	49	#5	6-0"	---
v231	46	#5	8-8"	---
v232	1	#5	2-10"	---
v233	1	#4	2-7"	---
v234	10	#9	15-1"	---
v235	8	#5	15-1"	---
v236	44	#5	3-2"	---
v237	24	#5	26-5"	---
v238	3	#5	11-7"	---
v239	10	#5	6-0"	---
v240	9	#4	2-10"	---
v241	66	#5	2-4"	---
v242	60	#7	5-9"	---
v243	10	#9	8-0"	---
v244	12	#5	3-0"	---
Reinforcement Bars Lbs. 9,479				
Class X Concrete Cu. Yds. 116.6				
Reinforcement Bars (Epoxy Coated) Lbs. 307				
Porous Granular Backfill Cu. Yds. 108				
Structural Exc. Cu. Yds. 29				
Rock Excavation Cu. Yds. 72				

DESIGNED: M. Bello
CHECKED: M. Schaefer
DRAWN: J. Sims
CHECKED: A. Myers

AS REVISED

SECTION D-D

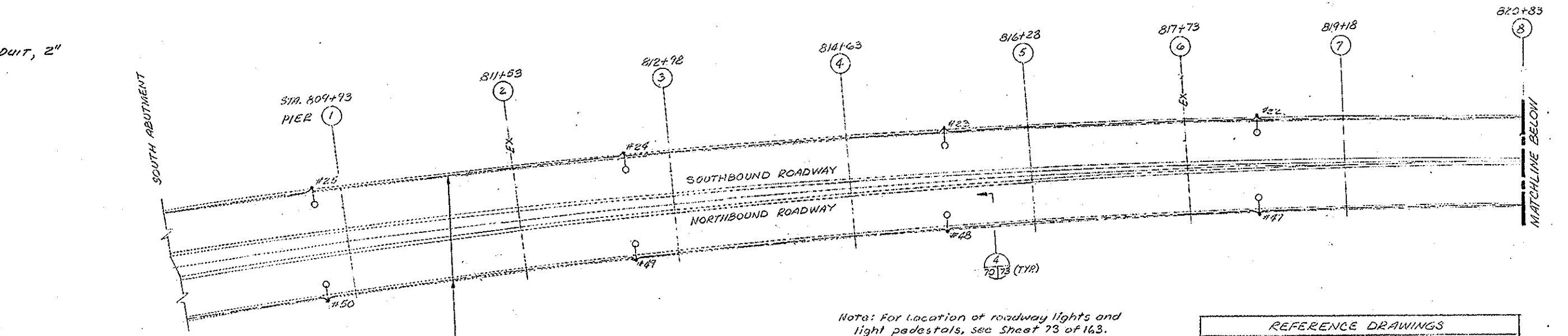
NOTES
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.
Work this Sheet with Sheets 66, 67 & 68.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS, ARCHITECTS, PLANNERS
ST. LOUIS, MISSOURI

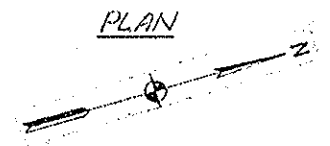
**NORTH APPROACH
STRUCTURAL STEEL ALTERNATE
NORTH ABUTMENT
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 865+16.00 (FA-412) LASALLE CO.**

NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

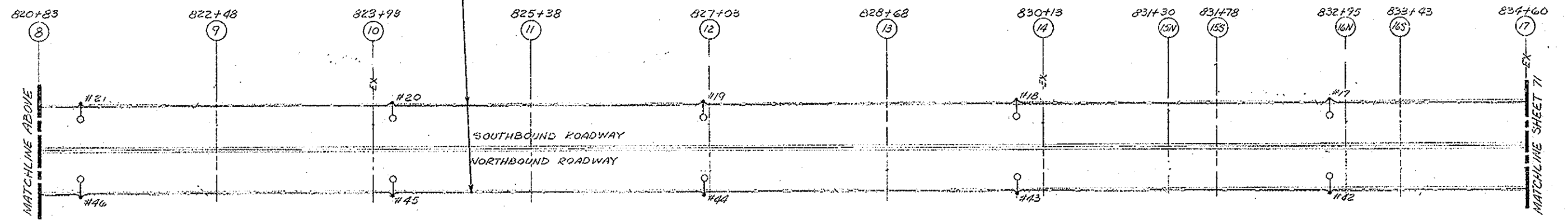
- SYMBOLS**
- 250 WATT HIGH PRESSURE SODIUM LUMINAIRE
 - JUNCTION BOX SURFACE MOUNTED
 - ▣ TRANSFORMER
 - 180° RED PIER LIGHT
 - ⊗ 360° MID CHANNEL LIGHT
 - SCHEDULE 40 PLASTIC CONDUIT, 2"
 - SUBSCRIPT
 - UNIT NO.



ROADWAY LIGHTING
2-1/2 #4 XLP-USE & 1/2 #6 BARE IN
2" SCH. 40 PLASTIC PIPE IN PARAPET



REFERENCE DRAWINGS	
71	ELECTRICAL PLAN
72	ELECTRICAL PLAN
73	DETAILS
74	ELEMENTARY DIAGRAM



NORTH AND SOUTH APPROACHES
STRUCTURAL STEEL ALTERNATE

ELECTRICAL PLAN
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

DESIGNED C. ANDREAS
T.J. NEUENHAUS
CHECKED
DRAWN C. ANDREAS
T.J. NEUENHAUS
CHECKED

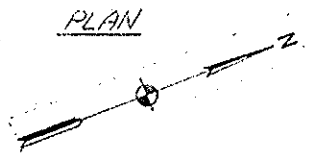
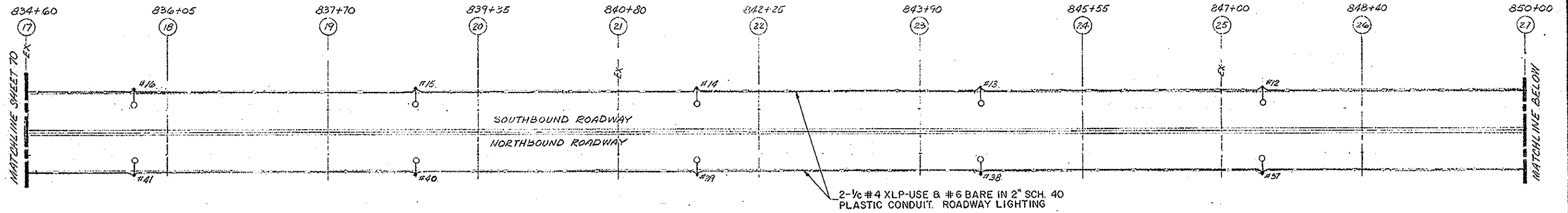
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ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

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SHEET NO. 70 OF 76

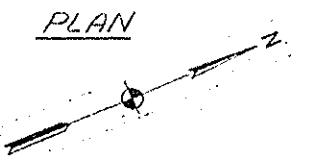
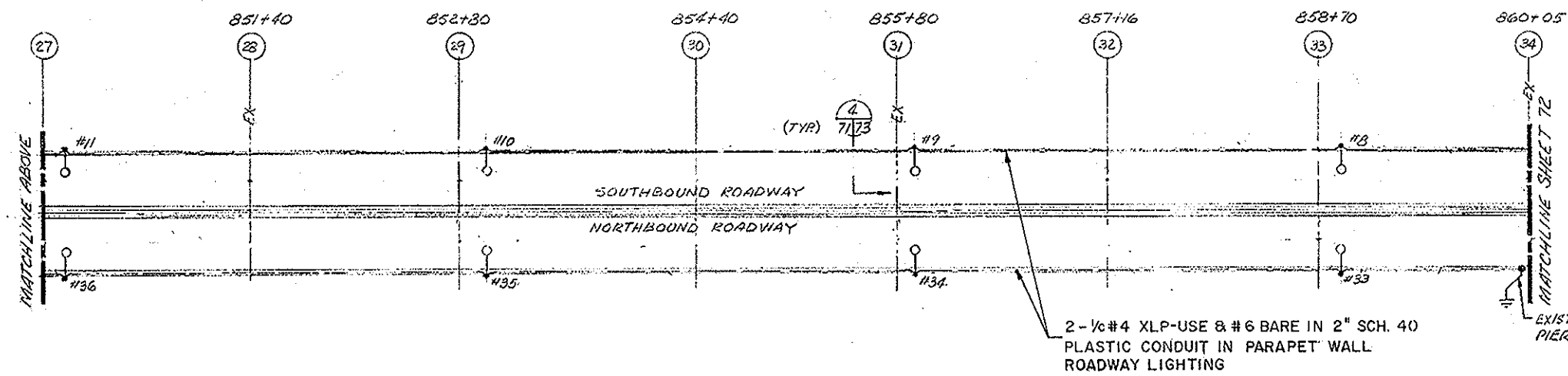
Revised 6-12-84

6692



REFERENCE DRAWINGS	
70	ELECTRICAL PLAN
72	ELECTRICAL PLAN
73	DETAILS
74	ELEMENTARY DIAGRAM

Note: For location of roadway lights and light pedestals, see Sheet 73 of 163.



DESIGNED C. ANDREAS
T.J. NEUENHAUS
CHECKED
DRAWN C. ANDREAS
T.J. NEUENHAUS
CHECKED

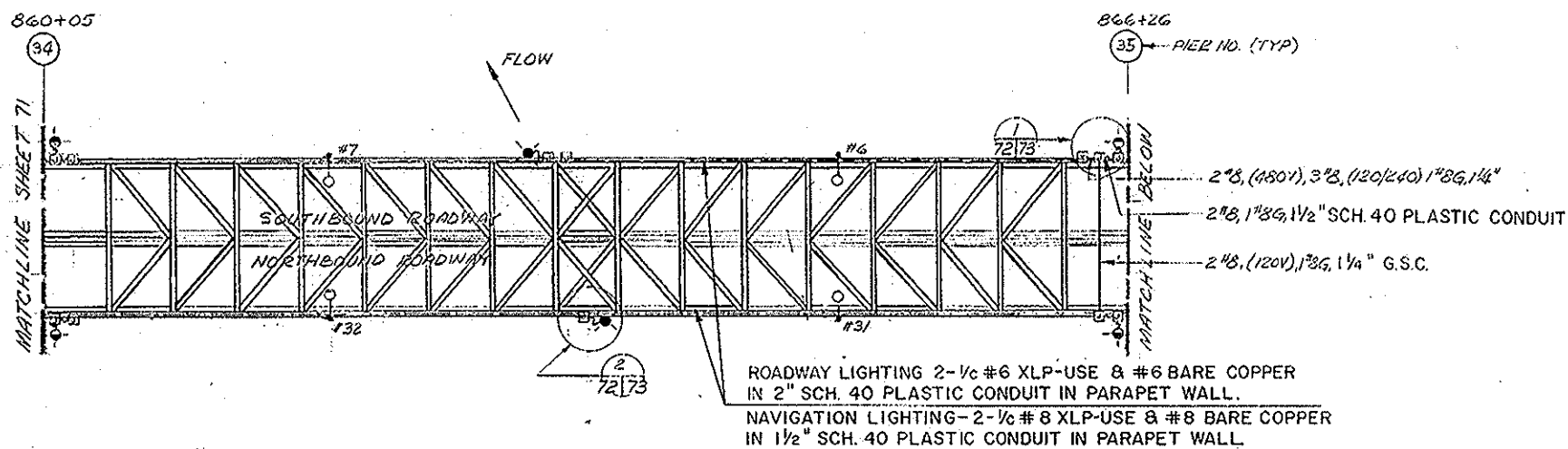
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NORTH AND SOUTH APPROACHES
STRUCTURAL STEEL ALTERNATE
ELECTRICAL PLAN
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

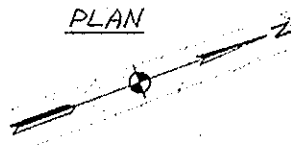
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 71 OF 76

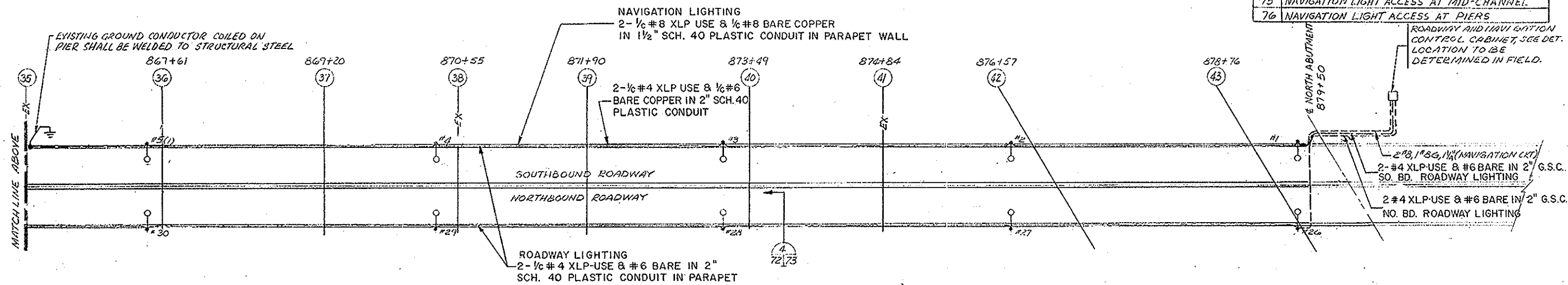
Revised 6-17-84



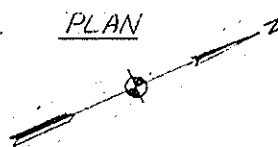
PLAN



REFERENCE DRAWINGS	
70	ELECTRICAL PLAN
71	ELECTRICAL PLAN
73	DETAILS
74	ELEMENTARY DIAGRAM
75	NAVIGATION LIGHT ACCESS AT MID-CHANNEL
76	NAVIGATION LIGHT ACCESS AT PIERS



PLAN



Note: For location of roadway lights and light pedestals, see sheet 34 of 76.

DESIGNED C. ANDREAS
T.J. NEUENHAUS CHECKED
DRAWN C. ANDREAS
T.J. NEUENHAUS CHECKED

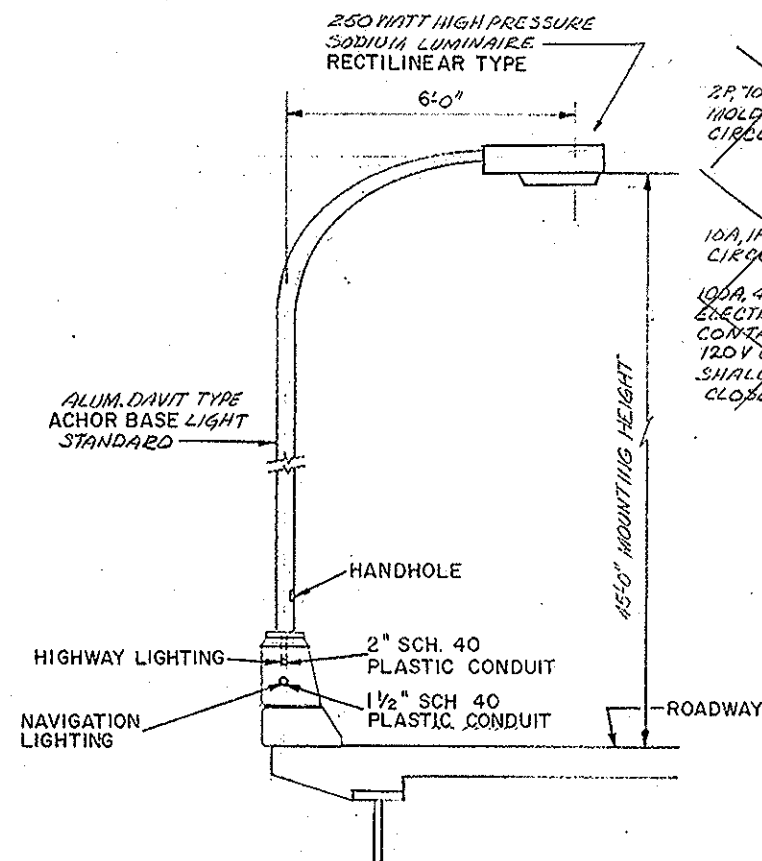
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NORTH AND SOUTH APPROACHES
STRUCTURAL STEEL ALTERNATE
ELECTRICAL PLAN
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

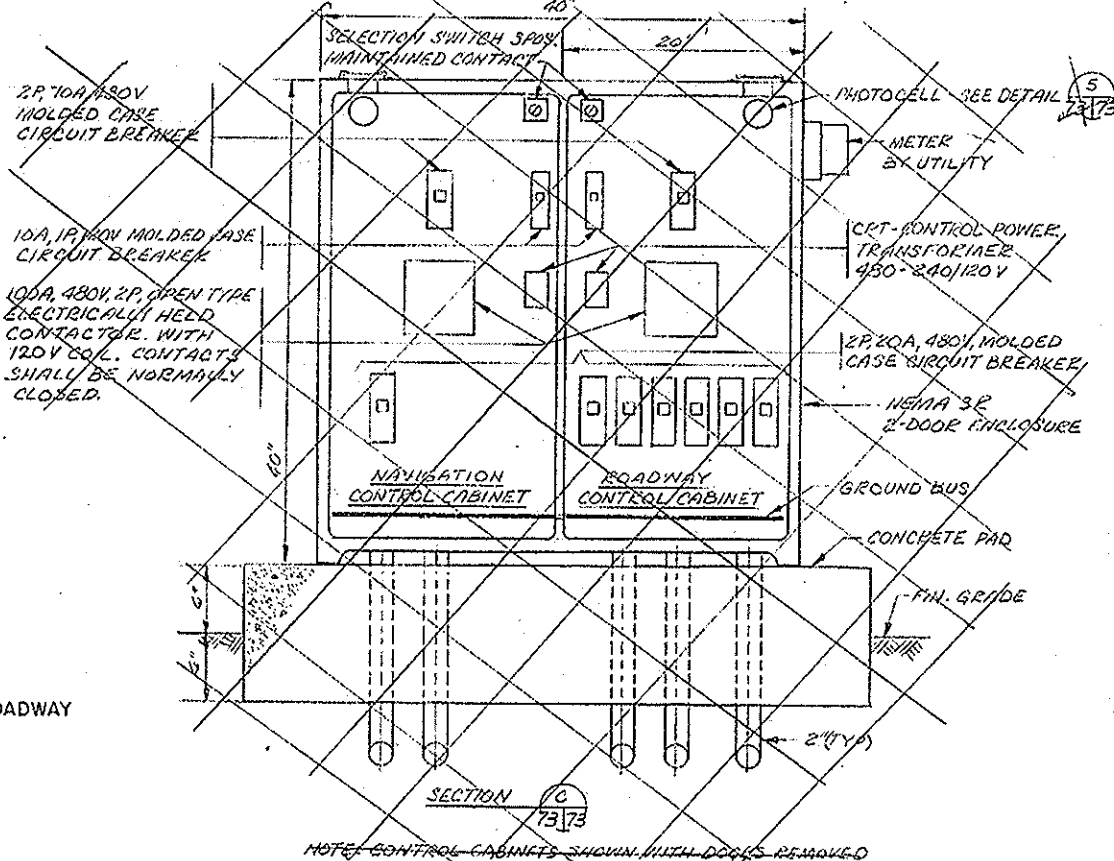
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 72 OF 76

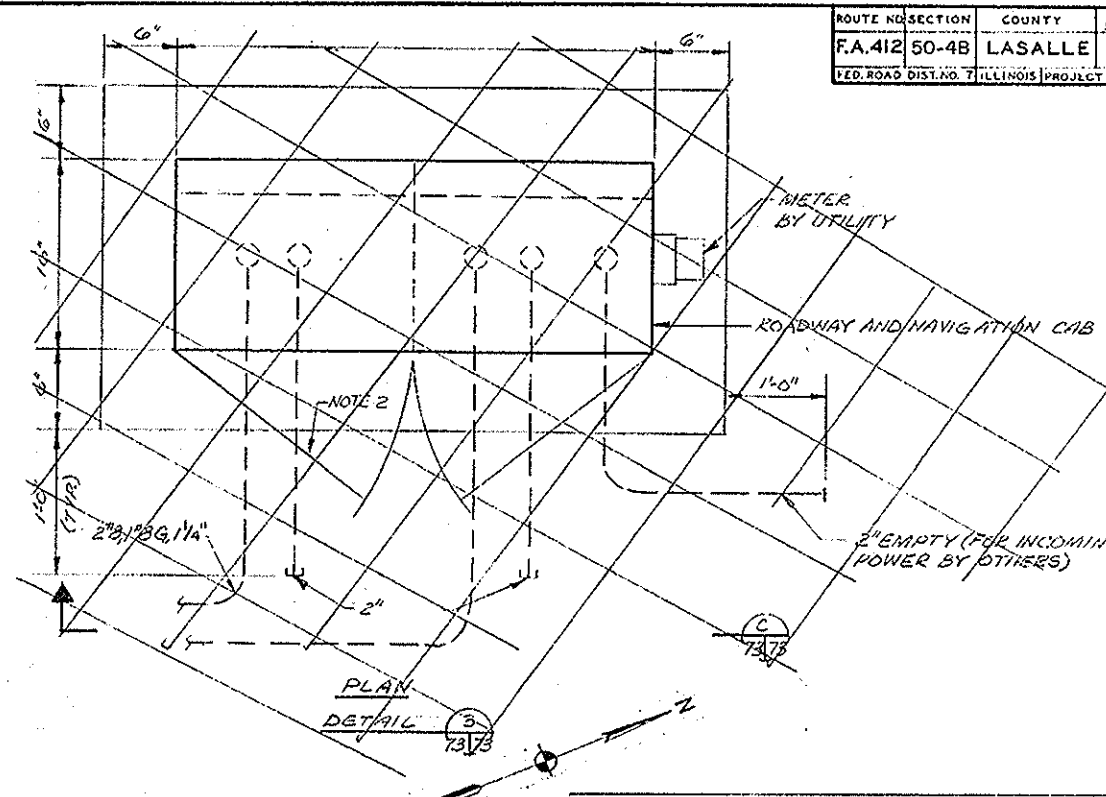
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DETAIL 4
70/73
71
72

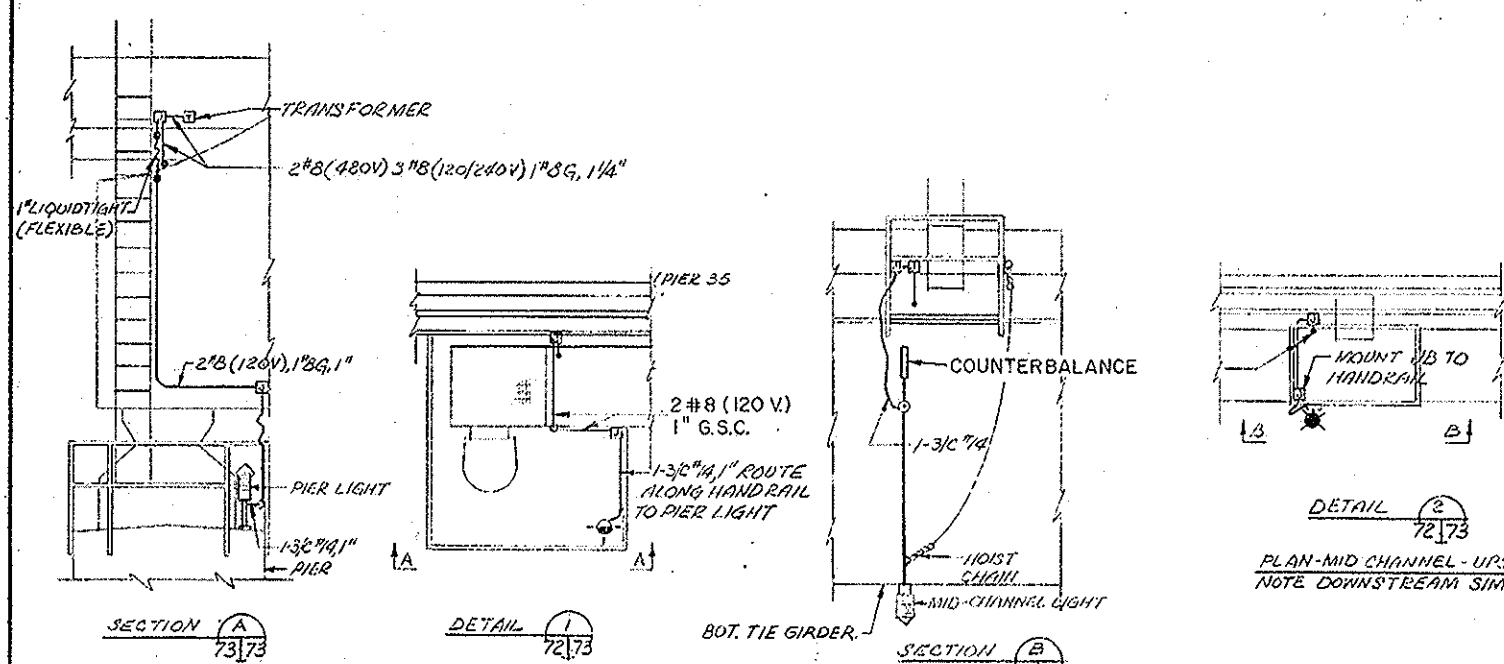


SECTION C
73/73
NOTES: CONTROL CABINETS SHOWN WITH DOORS REMOVED



PLAN
DETAIL 5
73/73

REFERENCE DRAWINGS	
70	ELECTRICAL PLAN
71	ELECTRICAL PLAN
72	ELECTRICAL PLAN
74	ELEMENTARY DIAGRAM
75	NAVIGATION LIGHT ACCESS AT MID-CHANNEL
76	NAVIGATION LIGHT ACCESS AT PIERS



DETAIL 2
72/73
PLAN-MID CHANNEL - UPSTREAM
NOTE DOWNSTREAM SIMILAR

SECTION A
73/73
DETAIL 1
72/73
PLAN - PIER #35 DOWNSTREAM
NOTE PIER #35 UPSTREAM & PIER #34 UPSTREAM & DOWNSTREAM, SIMILAR

NOTES
1. SEE SHEETS 13 OF 163 AND 34 OF 76 FOR POLE FOUNDATIONS.
SEE SHEETS 75 AND 76 OF 76 FOR NAVIGATION LIGHT INSTALLATION.
2. CONTRACTOR SHALL PROVIDE AND INSTALL ON THE INSIDE FACE OF CABINET DOORS AN ELEMENTARY DIAGRAM OF THE ROADWAY LIGHTING SYSTEM AND THE NAVIGATION LIGHTING SYSTEM.

NORTH AND SOUTH APPROACHES
STRUCTURAL STEEL ALTERNATE
ELECTRICAL DETAILS
FA-412 OVER ILLINOIS RIVER
SECTION 50-4B PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

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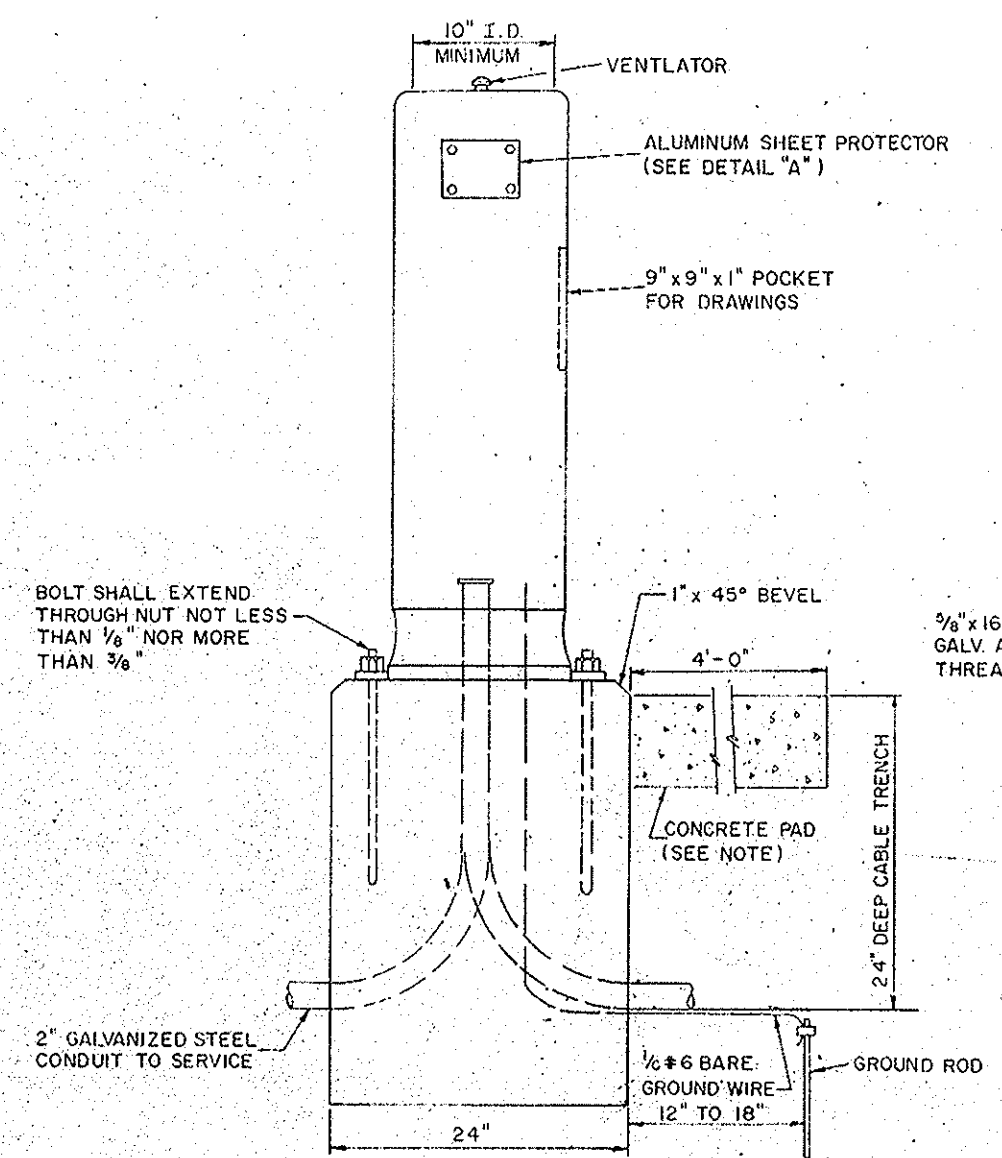
NOTE: DO NOT SCALE THIS DRAWING. FOLLOW DIMENSIONS.

SHEET NO. 73 OF 76

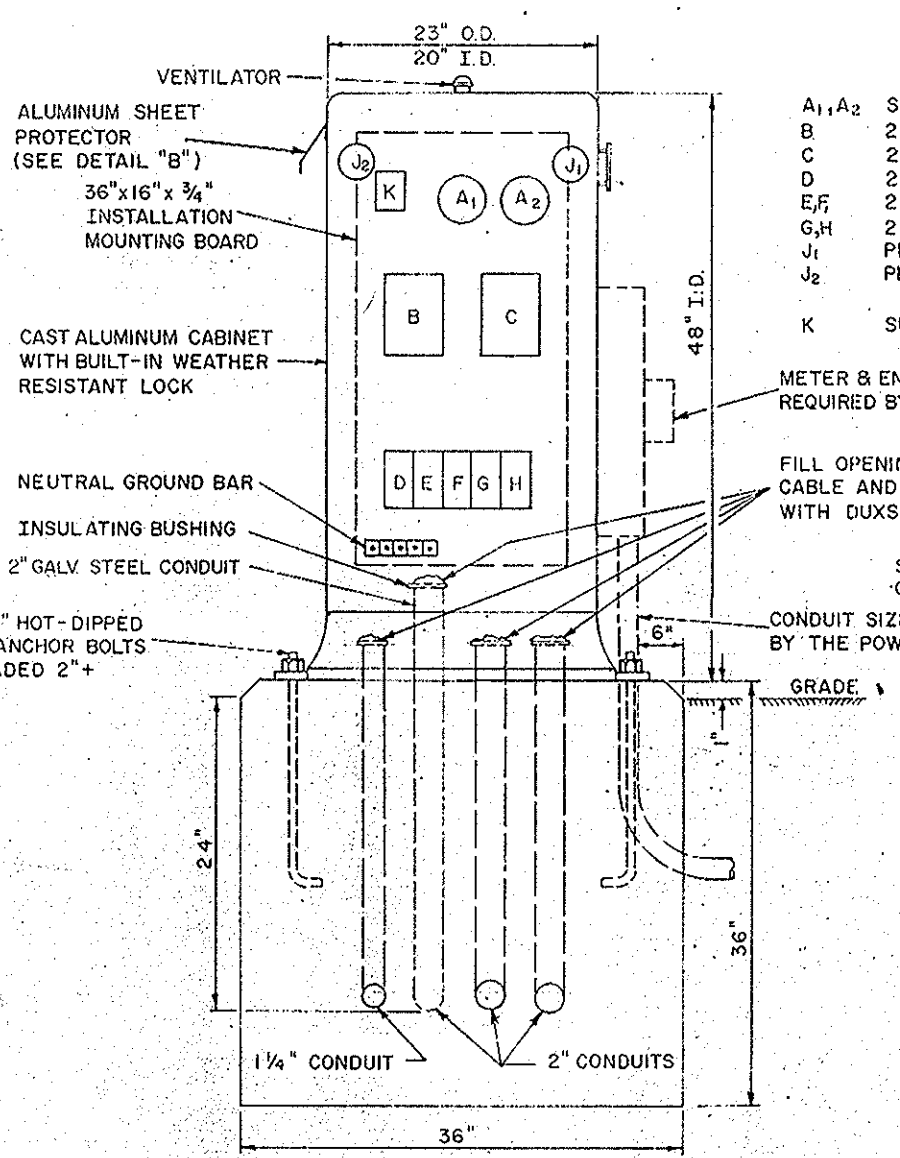
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T.J. NEUENHAUS
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DRAWN C. ANDREAS
T.J. NEUENHAUS
CHECKED

6692

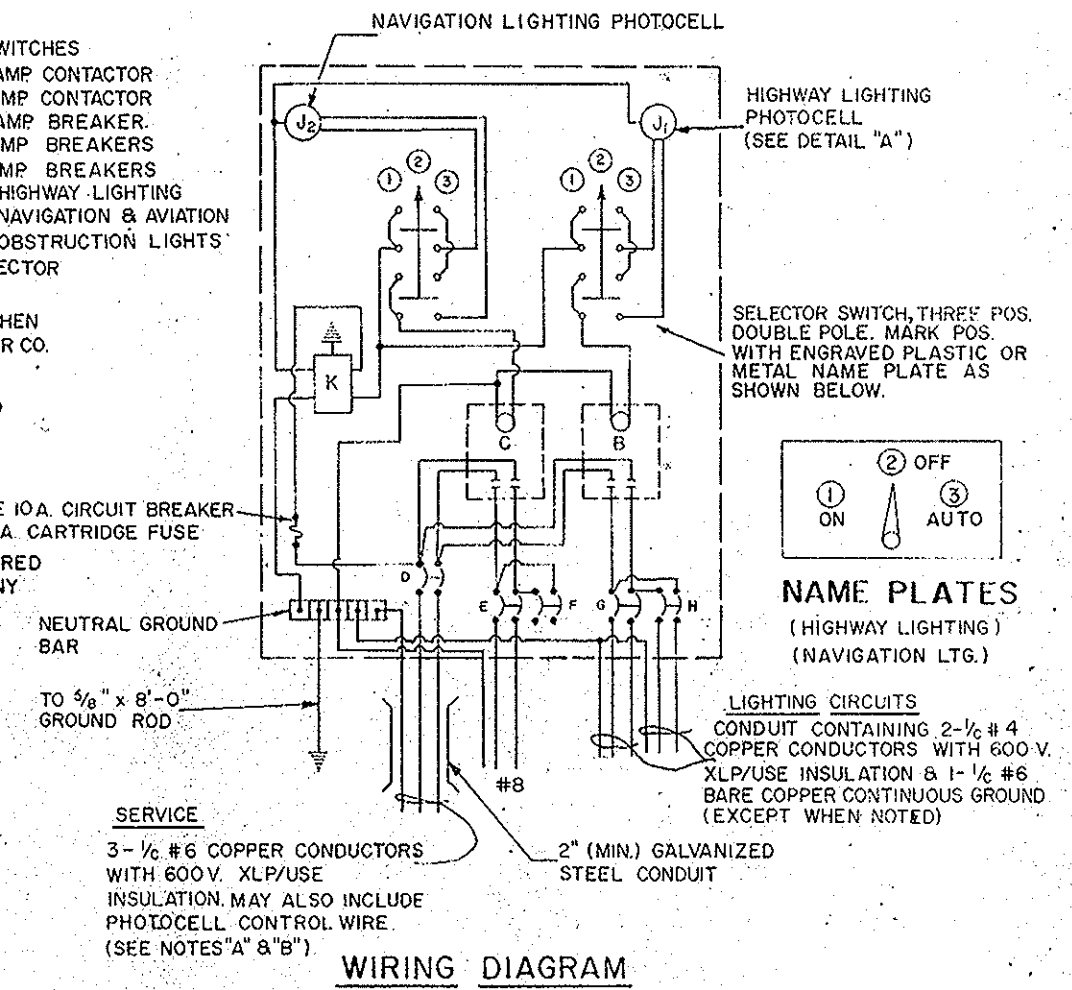


CABINET & FOUNDATION
(SIDE VIEW)



CABINET, FOUNDATION & DIAGRAMMATIC ASSEMBLY
(FRONT VIEW)

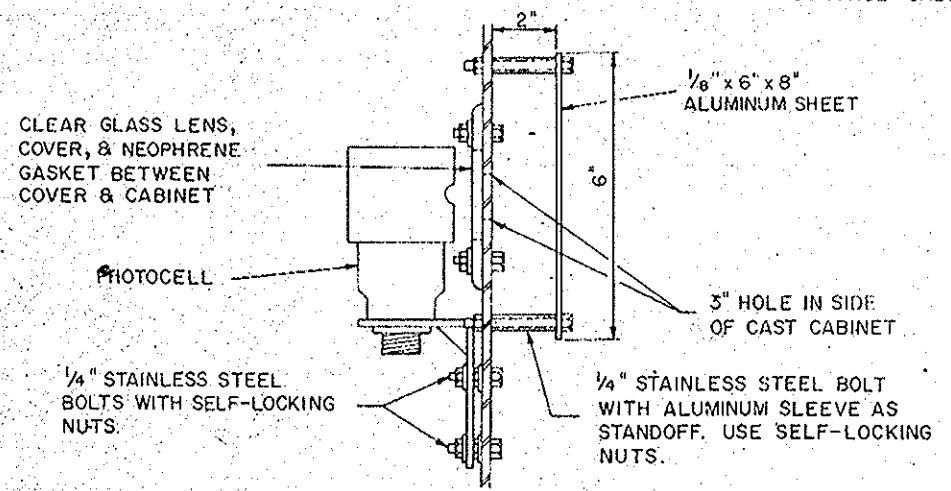
- A₁, A₂ SELECTOR SWITCHES
- B 2 POLE 60 AMP CONTACTOR
- C 2 POLE 30 AMP CONTACTOR
- D 2 POLE 70 AMP BREAKER
- E, F 2 POLE 30 AMP BREAKERS
- G, H 2 POLE 50 AMP BREAKERS
- J₁ PHOTOCELL - HIGHWAY LIGHTING OBSTRUCTION LIGHTS
- J₂ PHOTOCELL - NAVIGATION & AVIATION
- K SURGE PROTECTOR



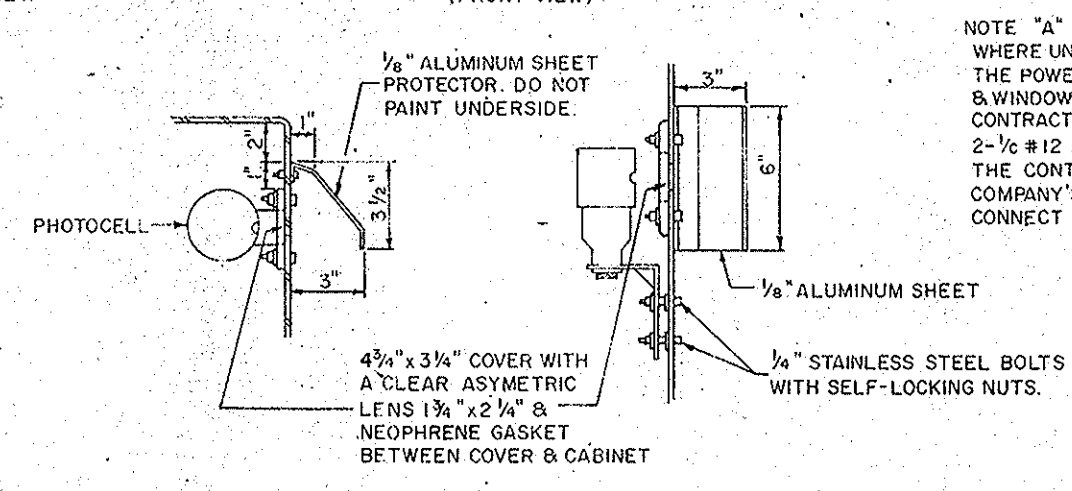
WIRING DIAGRAM

NOTE:
WIRING SHALL BE PANEL BOARD FASHION. ALL BENDS SHALL BE RIGHT ANGLES. ALL RUNS SHALL BE VERTICAL OR PARALLEL TO PANEL BOARD. WIRES SHALL BE GROUPED OR LACED.

NOTE:
LOCATE CONTROL INSTALLATION ADJACENT TO R.O.W. LINE WITH A MINIMUM DISTANCE OF 30' FROM THE EDGE OF PAVEMENT. EXACT LOCATION SHALL BE ESTABLISHED BY THE ENGINEER. NO SERVICE POLE SHALL BE CLOSER THAN 30'.



DETAIL "A"
HIGHWAY LIGHTING PHOTOCELL



DETAIL "B"
NAVIGATION LIGHTING PHOTOCELL

NOTE "A"
WHERE UNMETERED SERVICE IS PROVIDED BY THE POWER COMPANY, THE PHOTOCELL, RECEPT, & WINDOW COVER MAY BE OMITTED. THE CONTRACTOR SHALL FURNISH AND INSTALL 2-1/2" #12 AND AERIAL WIRE IF REQUIRED FROM THE CONTROL INSTALLATION TO THE POWER COMPANY'S PHOTOCELL CONTROL AND CONNECT PER WIRING DIAGRAM.

NOTE "B"
THE UNDERGROUND SERVICE SHALL BE 30' MINIMUM AND 150' MAXIMUM. TOTAL AERIAL & UNDERGROUND SERVICE BETWEEN THE CONTROL INSTALLATION AND PRIMARY TRANSFORMER SHALL BE 250'.

- 240 V. SERVICE
- 480 V. SERVICE

DRAWN	MARCH 1, 1983
BY:	J.L. PUTNAM
J.L.R.	6-22-83
REV. BY	J.L.P. 6-7-84

DUAL CONTROL INSTALLATION
TYPE CB RCS 60
STEEL ALTERNATE

REFERENCE DRAWINGS	
70	ELECTRICAL PLAN
71	ELECTRICAL PLAN
72	ELECTRICAL PLAN
73	DETAILS
75	NAVIGATION LIGHT ACCESS AT MID CHANNEL
76	NAVIGATION LIGHT ACCESS AT PIERS

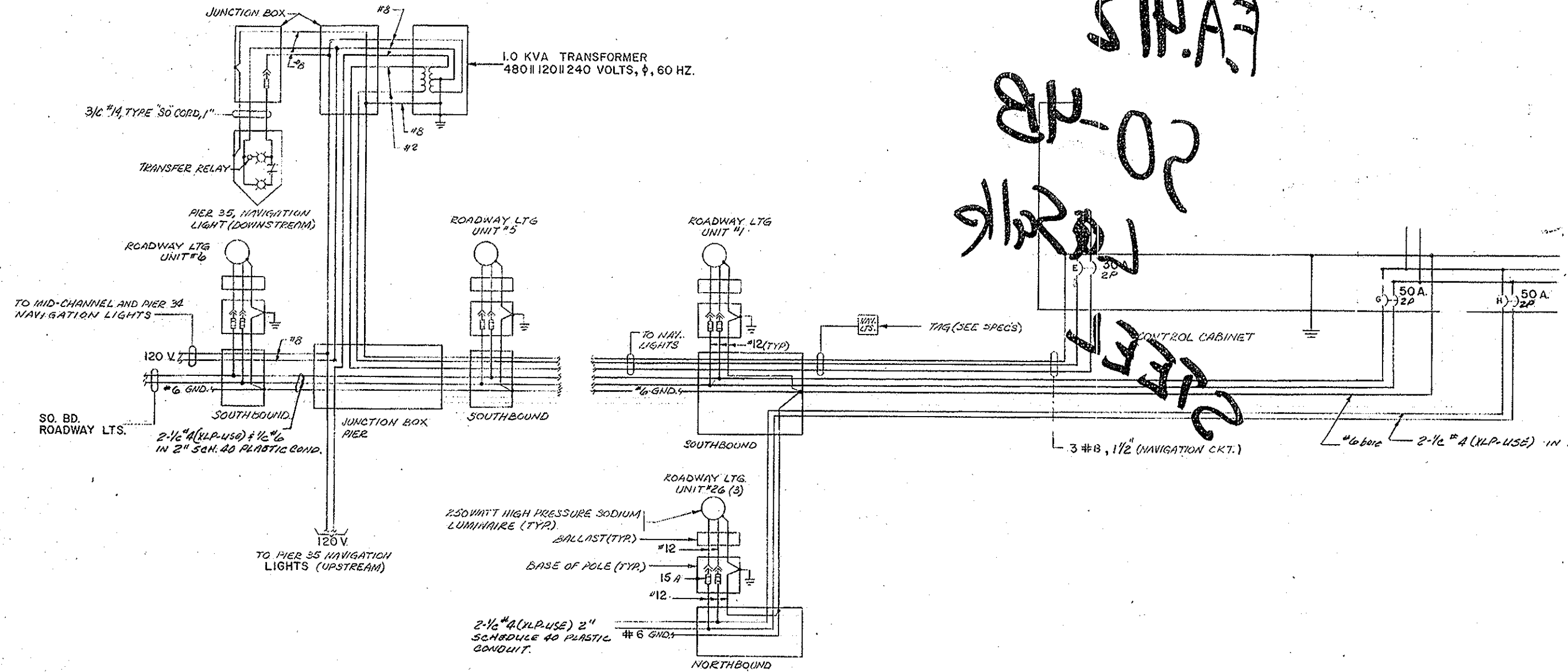
E-15

SIN. A. 7

BR-02

180 DEGREE

P.P.S. 0



DESIGNED C. ANDREAS
T.J. NEUENHAUS
CHECKED

DRAWN C. ANDREAS
T.J. NEUENHAUS
CHECKED

NORTH AND SOUTH APPROACHES
STRUCTURAL STEEL ALTERNATE
ELECTRICAL ELEMENTARY DIAGRAM
FA-412 OVER ILLINOIS RIVER
SECTION 50-48 PROJECT EBF-412-4(6)
STA. 863+16.00 (FA-412) LASALLE CO.

PREPARED BY:
SVERDRUP & PARCEL AND ASSOCIATES, Inc.
ENGINEERS ARCHITECTS PLANNERS
ST. LOUIS, MISSOURI

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