ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) D	PEORIA AND TAZEWELL	97	1
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BR-F-49(39)		

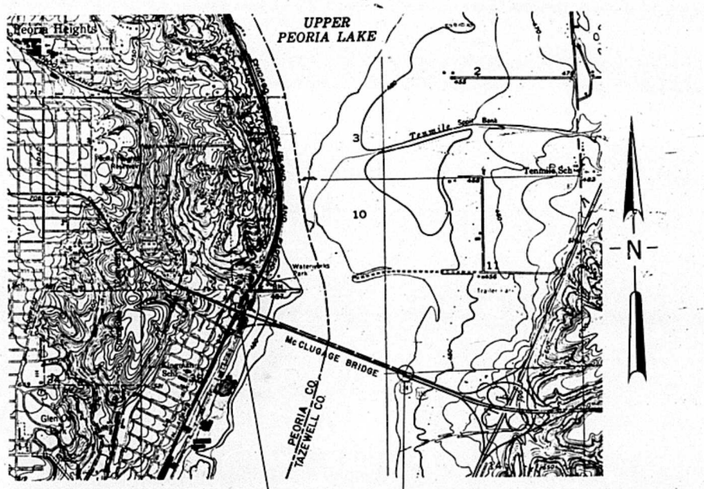
P-94-156-69

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
F.A. ROUTE 49
SECTION (15B-1) D
PROJECT BR-F-49(39)
PEORIA-TAZEWELL COUNTIES

C-94-108-80

SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	TOTAL	PEORIA COUNTY	TAZEWELL COUNTY
406013	BIT. CONC. S. C. MIX. D, CL. I	TON	378.4	378.4	
407004	INCIDENTAL BITUMINOUS SURFACING	TONS	23	23	
501024	CONCRETE REMOVAL	CU.YDS.	79.7	79.7	
503001	FLOOR DRAINS	EACH	502	304	198
503003	PROTECTIVE COAT	SQ.YDS.	27,574	15,474	12,100
504003	CLASS X CONCRETE	CU.YDS.	7580.3	4640.7	2939.6
507004	FURNISHING & ERECTING STRUCTURAL STEEL	POUND	14,640	14,640	
507005	STUD SHEAR CONNECTORS	EACH	6324	6324	
X04195	STEEL RAILING	LIN.FT.	52	52	
512001	REINFORCEMENT BARS	LBS.	1012620	696640	315980
512002	REINFORCEMENT BARS (EPOXY COATED)	LBS.	1103860	626105	477755
514001	NAME PLATES	EACH	1	.5	.5
517010	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ.YDS.	286.3	286.3	
X04733	CONCRETE MEDIAN REMOVAL	SQ.FT.	552	552	
X07324	REMOVE & REINSTALL BRIDGE RAIL (SINGLE RAIL)	LIN.FT.	90	90	
628033	TRAFFIC BARRIER TERMINAL TYPE 3	EACH	1	1	
633006	S.P.B.G.R. REMOVAL, SINGLE RAIL	LIN.FT.	406	406	
646004	ENGINEER'S FIELD OFFICE, TYPE A	CAL.MO.	27	14	13
648037	TRAFFIC CONTROL COMPLETE	L.SUM	1	1	
750102	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	LIN.FT.	12400	7100	5300
750105	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	LIN.FT.	480	480	
750202	PAINT PAVEMENT MARKING - LINE 4"	LIN.FT.	11600	6300	5300
750205	PAINT PAVEMENT MARKING - LINE 8"	LIN.FT.	740	740	
X07325	HIGH STRENGTH BOLT TIGHTENING	L.SUM	1	1	
X07326	REMOVAL OF EXISTING DECK DRAINS	L.SUM	1	1	
X07327	CURB PLATE REMOVAL	LIN.FT.	1023.9	1023.9	
X07328	EXISTING RAIL REMOVAL	LIN.FT.	254	254	
X07329	ALTERED RAIL REMOVAL	LIN.FT.	1023.6	1023.6	
X07330	IMPACT ATTENUATOR SYSTEM COMPLETE	L.SUM	1	1	
X04347	NAVIGATION LIGHT SYSTEM	L.SUM	1	5	.5
X07331	INSTALLATION OF NAVIGATION LIGHTING SAFETY CAGES	EACH	5	2.5	2.5
X07332	BLAST PLATE REMOVAL	L.SUM	1	1	
X04743	MOBILIZATION	L.SUM	1	.5	.5
X50313	PREFORMED JOINT SEAL (2 1/2")	LIN.FT.	4.0	4.0	
X62844	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1	
X06960	BRIDGE DRAINAGE SYSTEM (SPANS 4, 5 & 6)	L.SUM	1	1	
Z10193	DRAINAGE SCUPPERS	EACH	39	25	14
Z10240	FURNISHING & MAINTAINING AUTOMOTIVE VEHICLES	VEH.MO.	37	19	18
Z10279	NEOPRENE EXPANSION JOINT (2")	LIN.FT.	367.5	183.8	183.7
Z10280	NEOPRENE EXPANSION JOINT (2 1/2")	LIN.FT.	101.7	61.9	39.8
Z10281	NEOPRENE EXPANSION JOINT (4")	LIN.FT.	58.4	58.4	
Z10282	NEOPRENE EXPANSION JOINT (6 1/2")	LIN.FT.	246.8	165.1	81.7
Z10283	NEOPRENE EXPANSION JOINT (9")	LIN.FT.	122.5	81.7	40.8
Z10284	NEOPRENE EXPANSION JOINT (13")	LIN.FT.	95.2	54.4	40.8
Z10286	NEOPRENE EXPANSION JOINT (LONGITUDINAL)	LIN.FT.	846.8	846.8	
Z10369	REMOVAL & REPLACEMENT EXPANSION JOINT	LIN.FT.	27	27	
Z10530	WATERPROOFING MEMBRANE SYSTEM	SQ.YDS.	4035.7	4035.7	
X07333	BRIDGE RAIL (SINGLE RAIL)	LIN.FT.	1154	1154	
X07334	BRIDGE RAIL (DOUBLE RAIL)	LIN.FT.	94	94	
Z10527	TRAINEES	HOUR	4,000	2,000	2,000
X61640	TEMPORARY CONCRETE BARRIER	LIN FT	1,130	1,130	
X61641	TEMPORARY CONCRETE BARRIER, TERMINAL SECTION	EACH	1	1	
X61642	RELOCATE TEMPORARY CONCRETE BARRIER	LIN.FT.	2,774	2,774	



PROPOSED PROJECT BR-F-49(39) BEGINS STA. 199+00.77

PROPOSED PROJECT BR-F-49(39) ENDS STA. 246+46.02

NET LENGTH OF PROPOSED IMPROVEMENT
7285.21 LIN. FT. (INCLUDING RAMPS)

LAYOUT
SCALE = 1" = 2000'

THE PROPOSED IMPROVEMENT INCLUDES THE CONSTRUCTION OF THE CONCRETE DECK OF THE WEST BOUND STRUCTURE CARRYING F.A. ROUTE 49 OVER THE ILLINOIS RIVER AT PEORIA. ALSO INCLUDED IS THE "OFF" RAMP CONNECTION TO ADAMS ST. THE IMPROVEMENT FURTHER PROVIDES FOR A CONCRETE DECK WITH A WATER-PROOFED BITUMINOUS CONCRETE SURFACE FOR THE "ON" RAMP FROM ADAMS ST. IN PEORIA TO THE EXISTING STRUCTURE THAT WILL CARRY THE EAST BOUND TRAFFIC OF F.A. ROUTE 49.

LOCATION OF SECTION INDICATED THUS ➡

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 8-29 19 80
Hattabaugh
DISTRICT ENGINEER

EXAMINED Oct 6 19 80
[illegible]
ENGINEER OF PLANS AND CONTRACTS

PASSED Oct 6 19 80
Thomas R Bryant
ENGINEER OF DESIGN

APPROVED Oct 6 19 80
[illegible]
DIRECTOR OF HIGHWAYS

SUBMITTED August 27, 1980
[illegible]
DIST. DESIGN ENGR.

EXAMINED [illegible]
DIST. CONST. ENGR.

EXAMINED August 27, 1980
H.C. Baubie
DIST. MAINT. ENGR.

EXAMINED August 27 1980
[illegible]
DIST. TRAFFIC ENGR.

Entire section inspected and approved as to policy.

DATE 8-[illegible]
Hattabaugh
DISTRICT ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

DESIGN DESIGNATION
3996 (94) MAJOR (PCC-20)

CONTRACT NO. 34778

Rev. 12-30-80

Revised Rev. 10-27-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) D	PEORIA AND TAZEWELL	97	1
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT BR-F-49(39)		

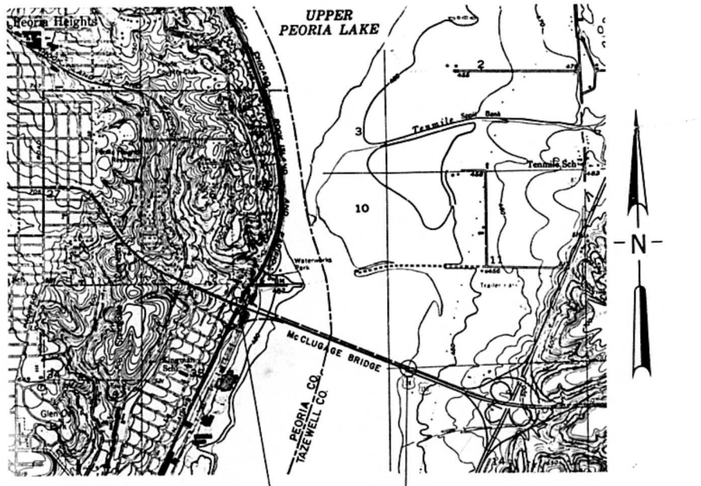
P-94-156-69

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY
F.A. ROUTE 49
SECTION (15B-1) D
PROJECT BR-F-49(39)
PEORIA-TAZEWELL COUNTIES

C-94-108-80

SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	TOTAL	PEORIA COUNTY	TAZEWELL COUNTY
406013	BIT. CONC. S. C. MIX. D, CL. I	TON	244.2	244.2	
407004	INCIDENTAL BITUMINOUS SURFACING	TONS	23	23	
501024	CONCRETE REMOVAL	CU.YDS.	79.7	79.7	
503001	FLOOR DRAINS	EACH	502	304	198
503003	PROTECTIVE COAT	SQ.YDS.	29,234	16,470	12,764
504003	CLASS X CONCRETE	CU.YDS.	7,541.9	4,617.7	2,924.2
507004	FURNISHING & ERECTING STRUCTURAL STEEL	POUND	14,640	14,640	
507005	STUD SHEAR CONNECTORS	EACH	6324	6324	
X04195	STEEL RAILING	LIN.FT.	52	52	
512001	REINFORCEMENT BARS	LBS.	933,070	648,910	284,160
512002	REINFORCEMENT BARS (EPOXY COATED)	LBS.	1,197,930	682,547	515,383
514001	NAME PLATES	EACH	1	.5	.5
617010	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ.YDS.	296.3	286.3	
X61733	CONCRETE MEDIAN REMOVAL	SQ.FT.	552	552	
X07324	REMOVE & REINSTALL BRIDGE RAIL (SINGLE RAIL)	LIN.FT.	90	90	
628033	TRAFFIC BARRIER TERMINAL TYPE 3	EACH	1	1	
633006	S.P.B.G.R. REMOVAL, SINGLE RAIL	LIN.FT.	406	406	
646004	ENGINEER'S FIELD OFFICE, TYPE A	CAL.MO.	27	14	13
648037	TRAFFIC CONTROL COMPLETE	L.SUM	1	1	
T50102	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	LIN.FT.	12400	7100	5300
T50105	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	LIN.FT.	480	480	
T50202	PAINT PAVEMENT MARKING - LINE 4"	LIN.FT.	11600	6300	5300
T50205	PAINT PAVEMENT MARKING - LINE 8"	LIN.FT.	740	740	
X07325	HIGH STRENGTH BOLT TIGHTENING	L.SUM	1	1	
X07326	REMOVAL OF EXISTING DECK DRAINS	L.SUM	1	1	
X07327	CURB PLATE REMOVAL	LIN.FT.	1023.9	1023.9	
X07328	EXISTING RAIL REMOVAL	LIN.FT.	254	254	
X07329	ALTERED RAIL REMOVAL	LIN.FT.	1023.6	1023.6	
X07330	IMPACT ATTENUATOR SYSTEM COMPLETE	L.SUM	1	1	
L04947	NAVIGATION LIGHT SYSTEM	L.SUM	1	.5	.5
X07331	INSTALLATION OF NAVIGATION LIGHTING SAFETY CAGES	EACH	5	2.5	2.5
X07332	BLAST PLATE REMOVAL	L.SUM	1	1	
X04743	MOBILIZATION	L.SUM	1	.5	.5
X50313	PREFORMED JOINT SEAL (2 1/2")	LIN.FT.	4.0	4.0	
X62844	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1	
X06960	BRIDGE DRAINAGE SYSTEM (SPANS 4, 5 & 6)	L.SUM	1	1	
Z10193	DRAINAGE SCUPPERS	EACH	39	25	14
Z10240	FURNISHING & MAINTAINING AUTOMOTIVE VEHICLES	VEH.MO.	37	19	18
Z10279	NEOPRENE EXPANSION JOINT (2")	LIN.FT.	367.5	183.8	183.7
Z10280	NEOPRENE EXPANSION JOINT (2 1/2")	LIN.FT.	101.7	61.9	39.8
Z10281	NEOPRENE EXPANSION JOINT (4")	LIN.FT.	58.4	58.4	
Z10282	NEOPRENE EXPANSION JOINT (6 1/2")	LIN.FT.	246.6	165.1	81.7
Z10283	NEOPRENE EXPANSION JOINT (9")	LIN.FT.	122.5	81.7	40.8
Z10284	NEOPRENE EXPANSION JOINT (13")	LIN.FT.	95.2	54.4	40.8
Z10286	NEOPRENE EXPANSION JOINT (LONGITUDINAL)	LIN.FT.	846.8	846.8	
Z10369	REMOVAL & REPLACEMENT EXPANSION JOINT	LIN.FT.	27	27	
Z10530	WATERPROOFING MEMBRANE SYSTEM	SQ.YDS.	2,379.8	2,379.8	
X07333	BRIDGE RAIL (SINGLE RAIL)	LIN.FT.	1154	1154	
X07334	BRIDGE RAIL (DOUBLE RAIL)	LIN.FT.	94	94	
Z10527	TRAINEES	HOUR	4,000	2,000	2,000
X61640	TEMPORARY CONCRETE BARRIER	LIN FT.	1,130	1,130	
X61641	TEMPORARY CONCRETE BARRIER, TERMINAL SECTION	EACH	1	1	
X61642	RELOCATE TEMPORARY CONCRETE BARRIER	LIN.FT.	2,774	2,774	



PROPOSED PROJECT BR-F-49(39) BEGINS STA. 199+00.77

PROPOSED PROJECT BR-F-49(39) ENDS STA. 246+46.02

NET LENGTH OF PROPOSED IMPROVEMENT
7285.21 LIN. FT. (INCLUDING RAMPS)

LAYOUT
SCALE = 1" = 2000'

THE PROPOSED IMPROVEMENT INCLUDES THE CONSTRUCTION OF THE CONCRETE DECK OF THE WEST BOUND STRUCTURE CARRYING F.A. ROUTE 49 OVER THE ILLINOIS RIVER AT PEORIA. ALSO INCLUDED IS THE "OFF" RAMP CONNECTION TO ADAMS ST. THE IMPROVEMENT FURTHER PROVIDES FOR A CONCRETE DECK WITH A WATER-PROOFED BITUMINOUS CONCRETE SURFACE FOR THE "ON" RAMP FROM ADAMS ST. IN PEORIA TO THE EXISTING STRUCTURE THAT WILL CARRY THE EAST BOUND TRAFFIC OF F.A. ROUTE 49.

LOCATION OF SECTION INDICATED THUS →

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 8-24 19 80
J H Harland Jr
DISTRICT ENGINEER

EXAMINED Oct 6 19 80
W Wilson
ENGINEER OF PLANS AND CONTRACTS

PASSED Oct 6 19 80
Thomas R Bryant
ENGINEER OF DESIGN

APPROVED Oct 6 19 80
Lowell Bowersox
DIRECTOR OF HIGHWAYS

SUBMITTED August 27, 1980
D3K
DIST. DESIGN ENGR.

EXAMINED August 27 1980
DIST. CONST. ENGR.

EXAMINED August 27, 1980
H C Bourdier
DIST. MAINT ENGR.

EXAMINED August 27 1980
DIST. TRAFFIC ENGR.

Entire section inspected and approved as to policy.

DATE 8-27-80
J H Harland Jr
DISTRICT ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

DIVISION ADMINISTRATOR DATE

DESIGN DESIGNATION
3996 (94) MAJOR (PCC-20)

CONTRACT NO. 34778

Revised
Rev. 10-27-80

Rev. 12-30-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-49	158-1) -D	PEORIA & TAZEWELL	97	2
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

INDEX OF SHEETS

STANDARDS: 2298-5, 2299-8, 2300-2, 2302-4, 2303-5, 2308-3, 2315-5, 2316-6, 2338, 2341-1, 2378, 2383-1

INDEX OF SHEETS

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DES'D'ED
CHK'D J.J.B
DRA'N
CHK'D M.L.B

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO.			SHEET NO.	SHEETS
F.A. 49			97	2A
FED. ROAD DIST. NO.	ILLINOIS	PROJECT		

INDEX OF SHEETS

STANDARDS: 2298-5 2299-8 2300-2 2302-4
2303-5 2308-3 2315-5 2316-6
2338 2341-1 2378 2383-1

AS REVISED

INDEX OF SHEETS

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

J.J.B.
M.L.B.

HANSON ENGINEERS INCORPORATED

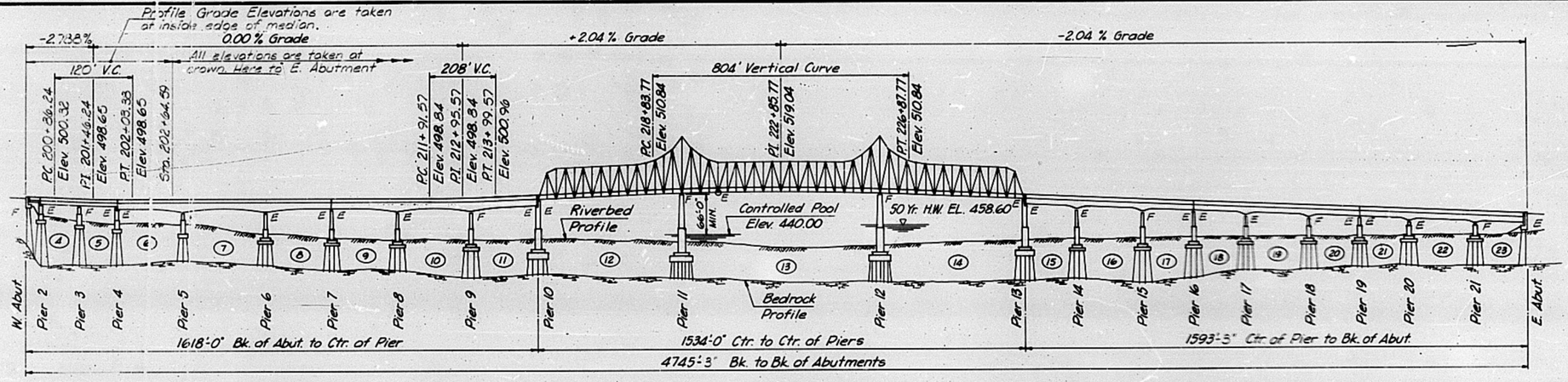
74001

8-22-8

AS Revised 5-27-81 L.W.

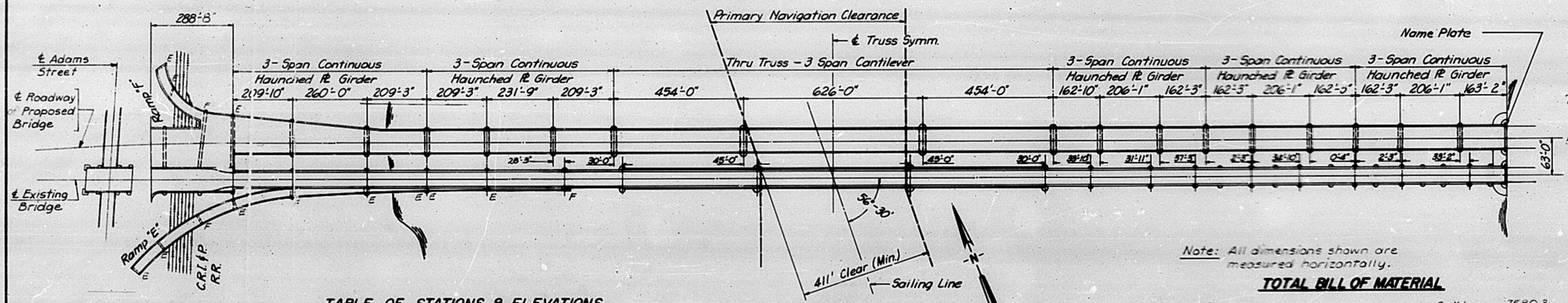
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	158-1) -D	PEORIA AND TAZEWELL	97	3
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

Sheet 1 of 88

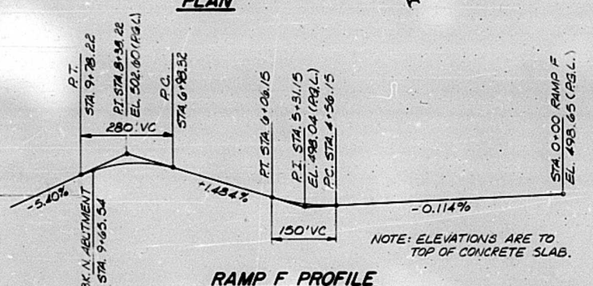


ELEVATION

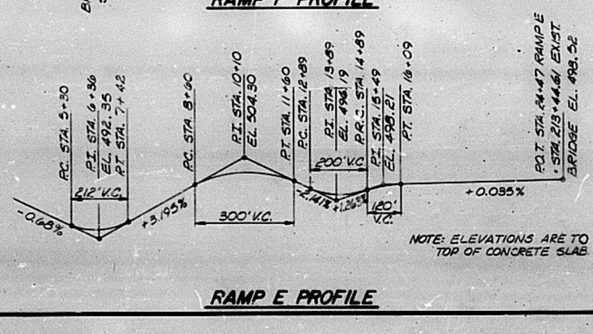
Note:
Station Equation
Sta. 201+67.45 Back =
Sta. 201+64.59 Forward



PLAN



RAMP F PROFILE



RAMP E PROFILE

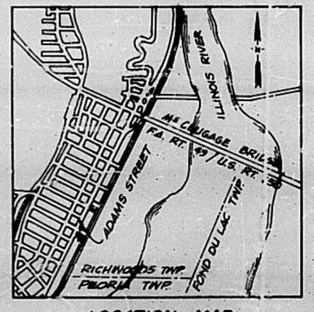
THESE ELEVATIONS ARE TO TOP OF CLASS I SURFACE

TABLE OF STATIONS & ELEVATIONS

SUBSTRUCTURE	STATION	℄ RDWY. EL.	P.G. EL.
BK. W. ABUTMENT	199+05.24		505.45
PIER 2	199+54.80		504.00
3	200+75.17		500.66
4	201+89.44		498.67
5	203+99.27	498.84	
6	206+59.27	498.84	
7	208+68.52	498.84	
8	210+77.77	498.84	
9	213+09.52	499.52	
10	215+18.77	503.89	
11	219+72.77	512.45	
12	225+98.77	512.45	
13	230+52.77	503.39	
14	232+15.60	500.07	
15	234+21.69	495.87	
16	235+83.94	492.56	
17	237+46.19	489.25	
18	239+52.27	485.04	
19	241+14.52	481.73	
20	242+76.77	478.42	
21	244+82.85	474.22	
BK. E. ABUTMENT	246+46.02	470.89	
BK. N. ABUTMENT	9+65.54		495.71
PIER 2F	8+55.80		499.81
BK. S. ABUTMENT	8+58.50		499.59
PIER 2E	9+93		502.31
3E	11+60		501.22
4E	12+92.88		498.37
5E	14+96.68		497.67
6E	17+56.74		498.41
7E	19+66.04		498.48
8E	21+75.38		498.55
9E	24+35.39		498.64

STATION 222+85.77
BUILT 198_ BY
STATE OF ILLINOIS
F.A. RT. 49 SEC. 15B-1
F.A. PROJ. BR-F-49(39)
LOADING HS20
STR. NO. 090-0115

LETTERING FOR NAME PLATE
(See Standard 2113)



LOCATION MAP

GENERAL NOTES

1. Fasteners shall be high strength bolts. Bolts 1"ϕ, open holes 1 1/16"ϕ unless otherwise noted.
2. 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.
3. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
4. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is to be applied.
5. All reinforcement bars in the slab and curbs shall be AASHTO M 31 or M 53 Gr. 60.
6. A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for Parapets and Curbs.
7. The basic lead silico chromate paint system shall be used for shop and spot painting of Structural Steel & Steel Railing.
8. All field drilled holes shall be Incidental to this Contract except as noted.
9. Calculated weight of Str. Steel = 14,640 Lbs. (M 183)
10. The Parapet and Curb Concrete above the mandatory construction joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

Note: All dimensions shown are measured horizontally.

TOTAL BILL OF MATERIAL

Class X Concrete	Cu.Yds.	7580.3
Reinforcement Bars	Lbs.	1,012,620
Reinforcement Bars (Epoxy Coated)	Lbs.	1,103,860
Structural Steel	Lbs.	14,640
Waterproofing Membrane System	Sq.Yds.	4035.1
Bit. Conc. S.C. Mix. D. (1.)	Tons	378.4
Protective Coat	Sq.Yds.	27,573.7
High Strength Bolt Tightening	Lump Sum	1
Removal of Existing Deck Drains	Lump Sum	1
Steel Railing	Lin.Ft.	52
Neoprene Expansion Joint (Longitudinal)	Lin.Ft.	1,312.4
Preformed Joint Seal (2½")	Lin.Ft.	4.0
Neoprene Expansion Joint (2")	Lin.Ft.	367.5
Neoprene Expansion Joint (2½")	Lin.Ft.	101.7
Neoprene Expansion Joint (4")	Lin.Ft.	58.4
Neoprene Expansion Joint (6½")	Lin.Ft.	246.8
Neoprene Expansion Joint (9")	Lin.Ft.	122.5
Neoprene Expansion Joint (13")	Lin.Ft.	95.2
Concrete Removal	Cu.Yds.	79.7
Bituminous Concrete Surface Removal	Sq.Yds.	286.3
Curb Plate Removal	Lin.Ft.	1023.9
Existing Rail Removal	Lin.Ft.	254
Rem. & Replacement Expansion Joint	Lin.Ft.	27.0
Bridge Drainage System (Spans 4,5 & 6)	Lump Sum	1
Drainage Scuppers	Each	39
Floor Drains	Each	502
Altered Rail Removal	Lin.Ft.	1023.6
Impact Attenuator System Complete	Lump Sum	1
Name Plate	Each	1
Stud Shear Connectors	Each	6824
S.P.B.G.R. Removal Single Rail	Lin.Ft.	406
Bridge Rail (Single)	Lin.Ft.	1154
Bridge Rail (Double)	Lin.Ft.	94
Navigation Lighting System	Lump Sum	1
Inst. of Navigation Safety Cage	Each	5
Blast Plate Removal	Lump Sum	1
Removal & Reinstallation of Bridge Rail (Single Rail)	Lin.Ft.	90
Traffic Barrier Terminal, Type 3	Each	1
Traffic Barrier Terminal, Type 6	Each	1

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Bridge & Traffic Structures

EUGENE R. WILKINSON
2969
REGISTERED STRUCTURAL ENGINEER OF ILLINOIS
9-19-80

DESIGN STRESSES

STRUCTURAL STEEL THICKNESS OF PLATES	M183 ALL	M223 UP TO 2"	M222 UP TO 4"
f_s	20,000 PS.I.	27,000 PS.I	27,000 PS.I.

REINFORCEMENT BARS M31 or M53 f_y = 60,000 PS.I.
CONCRETE f'_c = 3500 PS.I.
LOADING H S 20 - 44 & Future Wearing Surface of 25 lbs./Sq.Ft.
A.A.S.H.T.O. SPECIFICATIONS 1973 & INTERIM 1974.

GENERAL PLAN & ELEVATION

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	U.R.N.
CHECKED	R.A.H.
DRAWN	R.A.H.
QUANTITIES	C.A.W.

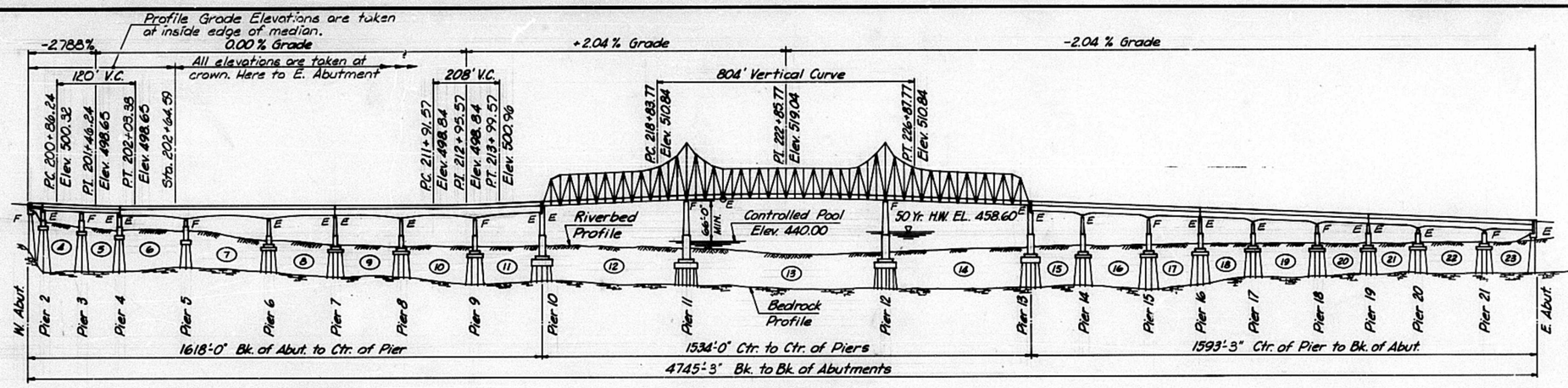
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74063
DATE 8-22-80
Revised

Rev. 12-30-80

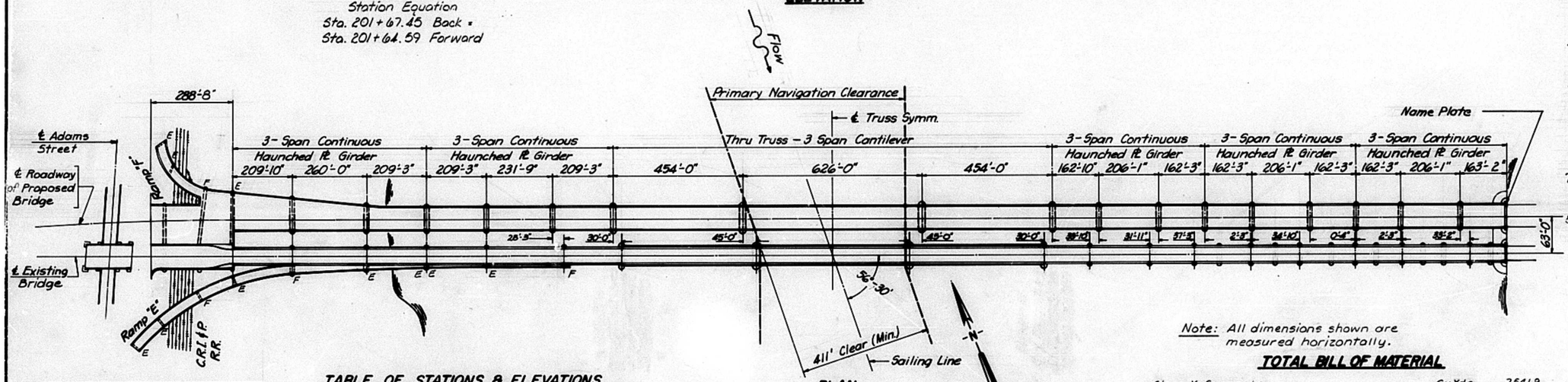
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(BR-1) -B	PEORIA AND TAZEWELL	97	3A
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

Sheet 1A of 88

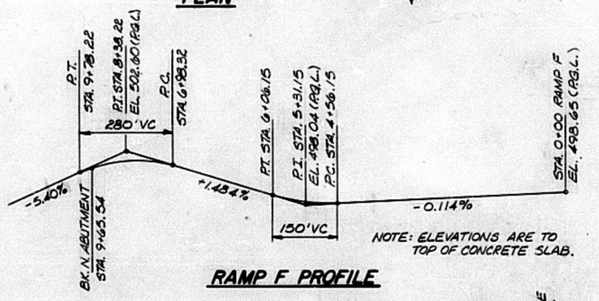


ELEVATION

Note:
Station Equation
Sta. 201+67.45 Back =
Sta. 201+64.59 Forward

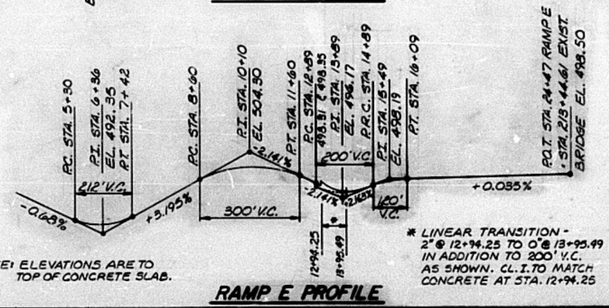


PLAN



NOTE: ELEVATIONS ARE TO TOP OF CONCRETE SLAB.

RAMP F PROFILE



NOTE: ELEVATIONS ARE TO TOP OF CONCRETE SLAB.

* LINEAR TRANSITION - 2°@ 12+94.25 TO 0°@ 13+95.99 IN ADDITION TO 200' V.C. AS SHOWN. CL. I. TO MATCH CONCRETE AT STA. 12+94.25

RAMP E PROFILE

TABLE OF STATIONS & ELEVATIONS

SUBSTRUCTURE	STATION	℄ RDWY. EL.	RG. EL.
BK. W. ABUTMENT	199+03.24		505.45
PIER 2	199+54.80		504.00
3	200+75.17		500.66
4	201+89.44		498.67
5	203+99.27	498.84	
6	206+59.27	498.84	
7	208+68.58	498.84	
8	210+77.77	498.84	
9	213+09.52	499.52	
10	215+18.77	508.89	
11	219+78.77	512.45	
12	225+98.77	512.45	
13	230+52.77	503.39	
14	232+15.60	500.07	
15	234+21.69	495.87	
16	235+83.94	492.56	
17	237+46.19	489.25	
18	239+52.27	485.04	
19	241+14.52	481.73	
20	242+76.77	478.42	
21	244+82.85	474.22	
BK. E. ABUTMENT	246+46.02	470.89	
BK. N. ABUTMENT	9+65.54		495.71
PIER 2F	8+55.80		499.81
BK. S. ABUTMENT	8+58.50		499.59
PIER 2E	9+93		502.31
3E	11+60		501.22
4E	12+92.88	498.37	
4E	12+92.88	498.37	
5E	14+96.68	498.50	
6E	17+56.74	498.24	
7E	19+66.04	498.31	
8E	21+75.33	498.38	
9E	24+85.39	498.47	

THESE ELEVATIONS ARE TO TOP OF CONCRETE SLAB

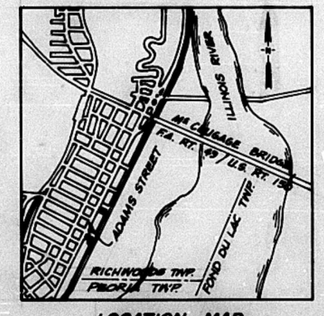
TO TOP OF CONCRETE SLAB

TO TOP OF CL. I. SURFACE

STATION 222+85.77
BUILT 198_ BY
STATE OF ILLINOIS
F.A. RT. 49 SEC. 15 B-1
F.A. PROJ. BR-F-49(39)
LOADING HS20
STR. NO. 090-0115

LETTERING FOR NAME PLATE

(See Standard 2113)



LOCATION MAP

GENERAL NOTES

1. Fasteners shall be high strength bolts. Bolts 1"Φ, open holes 1 1/16"Φ unless otherwise noted.
2. 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.
3. Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
4. Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is to be applied.
5. All reinforcement bars in the slab and curbs shall be AASHTO M 31 or M 53 Gr. 60.
6. A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for Parapets and Curbs.
7. The basic lead silico chromate paint system shall be used for shop and spot painting of Structural Steel & Steel Railing.
8. All field drilled holes shall be Incidental to this Contract except as noted.
9. Calculated weight of Str. Steel = 14,640 Lbs. (M 183)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Engineer of Bridge & Traffic Structures

EUGENE R. WILKINSON
2969
REGISTERED STRUCTURAL ENGINEER
OF ILLINOIS
9-19-80

Note: All dimensions shown are measured horizontally.

TOTAL BILL OF MATERIAL

Class X Concrete	Cu.Yds.	7,541.9
Reinforcement Bars	Lbs.	933,070
Reinforcement Bars (Epoxy Coated)	Lbs.	1,197,930
Structural Steel	Lbs.	14,640
Waterproofing Membrane System	Sq.Yds.	2,379.8
Bit. Conc. S.C. Mix. D. Cl. I.	Tons	244.2
Protective Coat	Sq.Yds.	29,234
High Strength Bolt Tightening	Lump Sum	1
Removal of Existing Deck Drains	Lump Sum	1
Steel Railing	Lin Ft.	52
Neoprene Expansion Joint (Longitudinal)	Lin. Ft.	1,312.4
Preformed Joint Seal (2½")	Lin. Ft.	4.0
Neoprene Expansion Joint (2")	Lin. Ft.	367.5
Neoprene Expansion Joint (2½")	Lin. Ft.	101.7
Neoprene Expansion Joint (4")	Lin. Ft.	58.4
Neoprene Expansion Joint (6½")	Lin. Ft.	246.8
Neoprene Expansion Joint (9")	Lin. Ft.	122.5
Neoprene Expansion Joint (13")	Lin. Ft.	95.2
Concrete Removal	Cu.Yds.	79.7
Bituminous Concrete Surface Removal	Sq.Yds.	286.3
Curb Plate Removal	Lin.Ft.	1023.9
Existing Rail Removal	Lin.Ft.	254
Rem. & Replacement Expansion Joint	Lin. Ft.	27.0
Bridge Drainage System (Spans 4, 5 & 6)	Lump Sum	1
Drainage Scuppers	Each	39
Floor Drains	Each	502
Altered Rail Removal	Lin.Ft.	1023.6
Impact Attenuator System Complete	Lump Sum	1
Name Plate	Each	1
Stud Shear Connectors	Each	6324
S.P.B.G.R. Removal Single Rail	Lin.Ft.	406
Bridge Rail (Single)	Lin.Ft.	1154
Bridge Rail (Double)	Lin.Ft.	94
Navigation Lighting System	Lump Sum	1
Inst. of Navigation Safety Cage	Each	5
Blast Plate Removal	Lump Sum	1
Removal & Reinstallation of Bridge Rail (Single Rail)	Lin Ft.	90
Traffic Barrier Terminal, Type 3	Each	1
Traffic Barrier Terminal, Type 6	Each	1

DESIGN STRESSES

STRUCTURAL STEEL THICKNESS OF PLATES fs	M183 ALL 20,000 PS.I.	M223 UP TO 2" 27,000 PS.I.	M222 UP TO 4" 27,000 PS.I.

REINFORCEMENT BARS M31 OR M53 f'y = 60,000 PS.I.
CONCRETE f'c = 3500 PS.I.
LOADING HS 20-44 & Future Wearing Surface of 25 lbs./Sq.Ft.
A.A.S.H.T.O. SPECIFICATIONS 1973 & INTERIM 1974.

GENERAL PLAN & ELEVATION

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. 115B-1)-D PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.	HANSON ENGINEERS INCORPORATED	FILE NO. 74001
CHECKED R.A.H.		
DRAWN R.A.H.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 8-22-80
CHECKED C.R.N.		revised

STATE ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA AND TAZEWELL	97	4
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

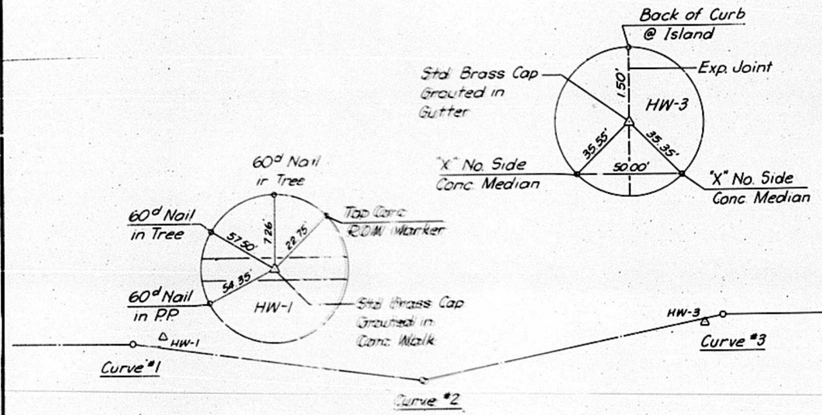
Sheet 2 of 88

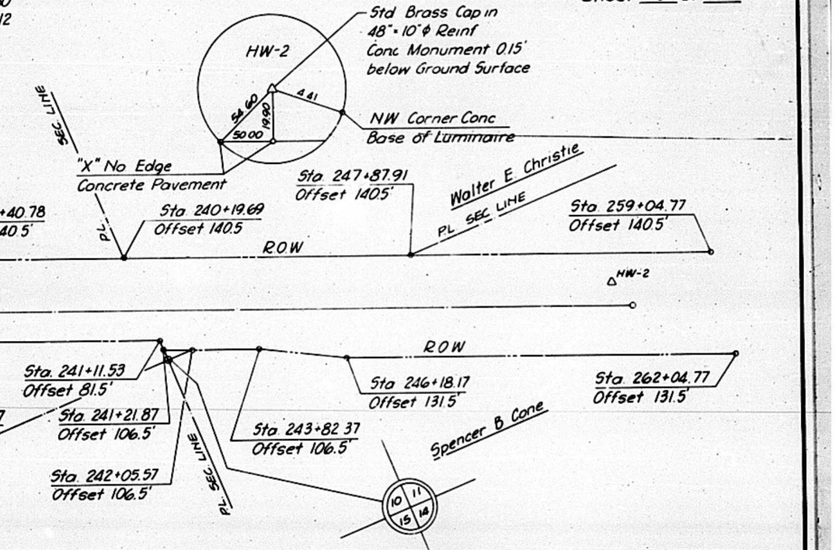
Cuvre #1
PI - 183+00.081
Δ - 4°-00'-00"
D - 1°-00'-00"
T - 200.081'
R - 5729.578'
L - 400.00'

Curve #2
PI - 191+00.637
Δ - 10°-00'-00"
D - 2°-00'-00"
T - 250.637'
R - 2864.789'
L - 500.00'

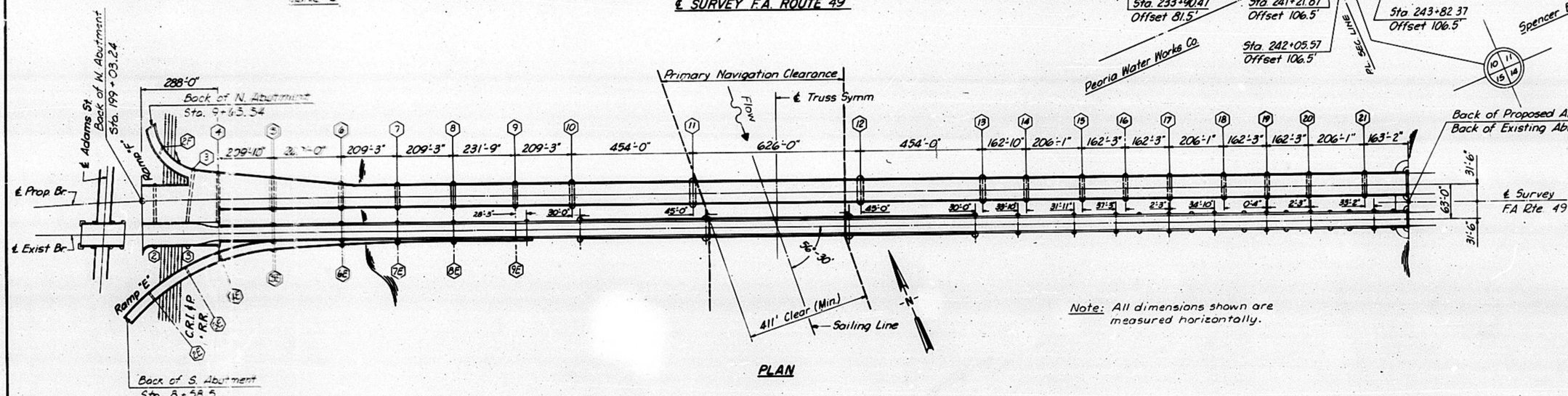
Curve #3
PI - 199+35.06
Δ - 6°-00'-00"
D - 2°-00'-00"
T - 150.137'
R - 2864.789'
L - 300.00'

Bench Mark Data
HW-1 – Elev 562.11
HW-2 – Elev 461.60
HW-3 – Elev 504.12





℄ SURVEY F.A. ROUTE 49



Note: All dimensions shown are measured horizontally.

PLAN

⬡ Denotes Pier No.

RAMP F CURVE DATA

P.I. - 8+74.623
Δ - 91°-59-00.68"
D - 27°-56-56.98"
T - 212.223'
R - 205.0'
L - 329.110'

RAMP E CURVE DATA

P.I.	-	9+3.15	P.I.	-	13+6.99
Δ	-	53°-30'-58.01"	Δ	-	29°-08'-50.90"
D	-	12°-00'-00"	D	-	7°-30'-00"
T	-	240.746'	T	-	198.619'
R	-	477.465'	R	-	763.944'
L	-	445.968'	L	-	388.633'

HORIZONTAL CONTROL, BENCH MARKS & R.O.W.

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED CRN
CHECKED DLB
DRAWN RAH
CHECKED CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

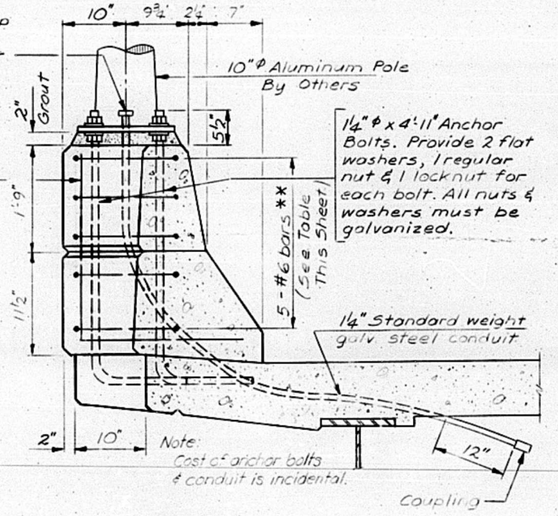
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATIO'
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 49	(158-1) -D	Peoria & Tazewell	97	5
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

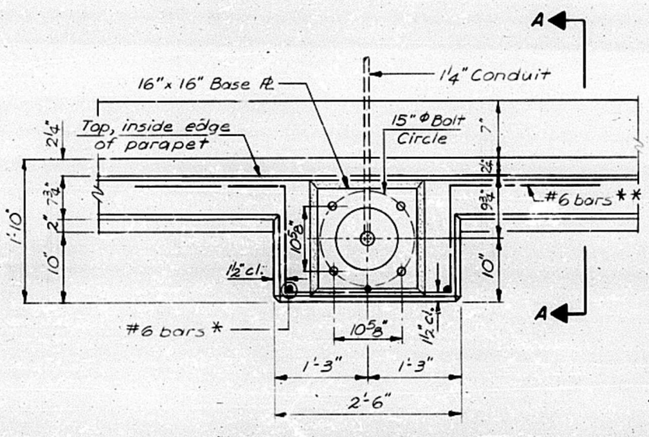
Sheet 3 of 88

Thread and cap end of conduit. When ready for wiring replace with bushing.



SECTION A-A

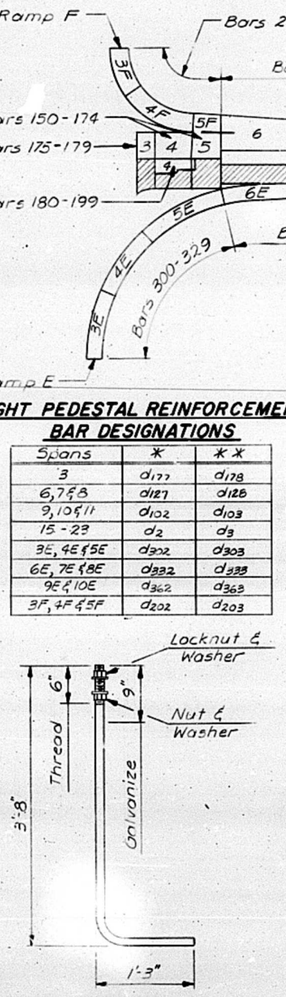
Note: Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump. By others.



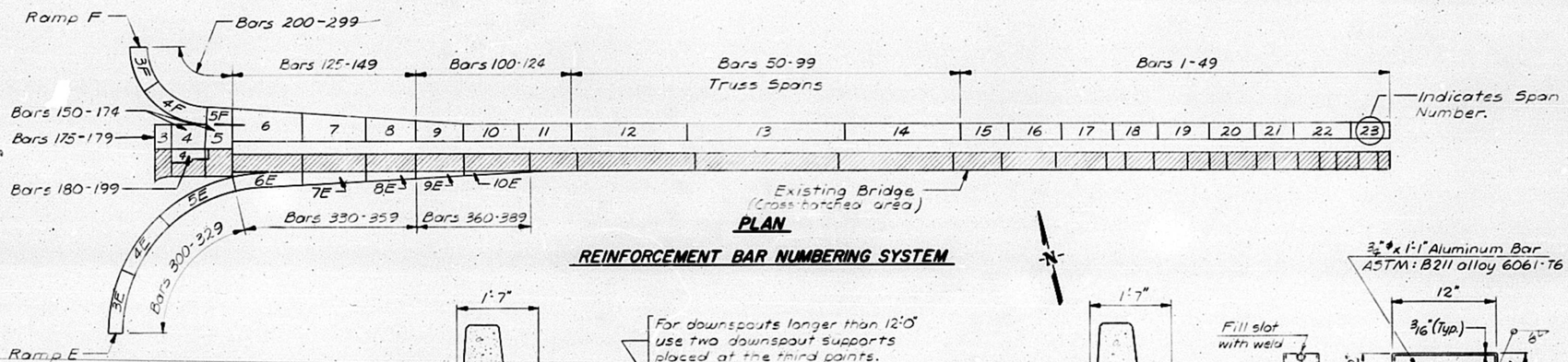
PLAN

LIGHT PEDESTAL DETAILS

See Individual Bill of Materials for d bar designations, quantities & bar details.



1¼" ϕ ANCHOR BOLT

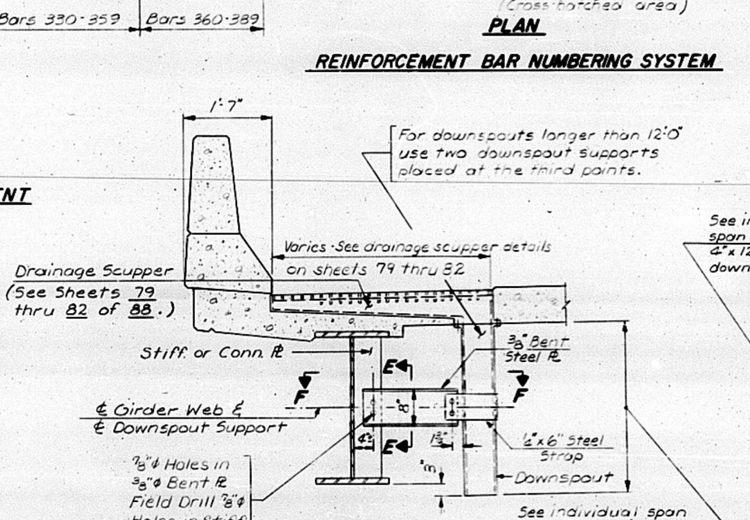


PLAN

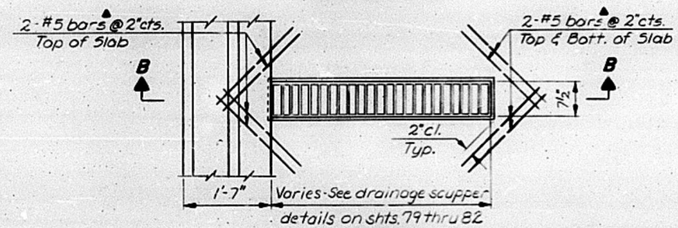
REINFORCEMENT BAR NUMBERING SYSTEM

LIGHT PEDESTAL REINFORCEMENT BAR DESIGNATIONS

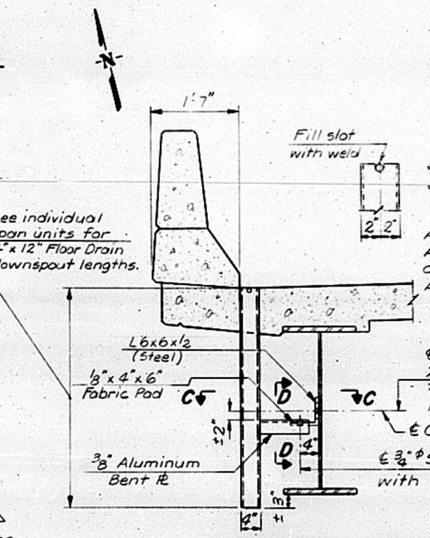
Spans	*	**
3	d_{177}	d_{178}
6,7 & 8	d_{127}	d_{128}
9,10 & 11	d_{102}	d_{103}
15 - 23	d_2	d_3
3E, 4E & 5E	d_{302}	d_{303}
6E, 7E & 8E	d_{332}	d_{338}
9E & 10E	d_{362}	d_{363}
3F, 4F & 5F	d_{202}	d_{203}



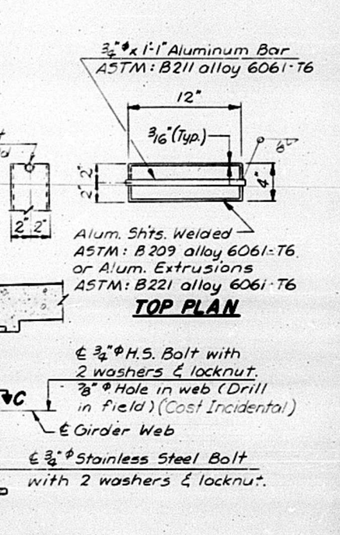
SECTION B-B

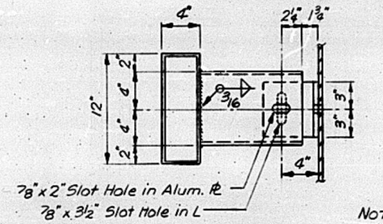


PLAN



SECTION THRU PARAPET



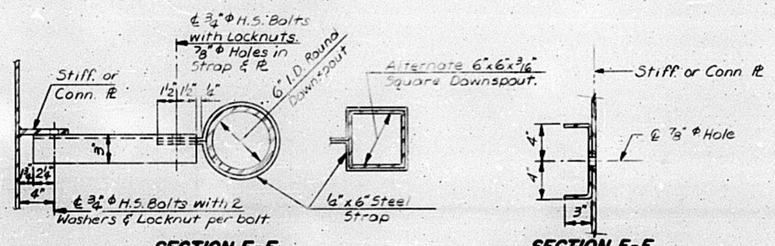


SECTION C-C

SECTION D-D

4"x 12" FLOOR DRAIN DETAILS

Note: No. 4"x 12" Floor drains required = 502

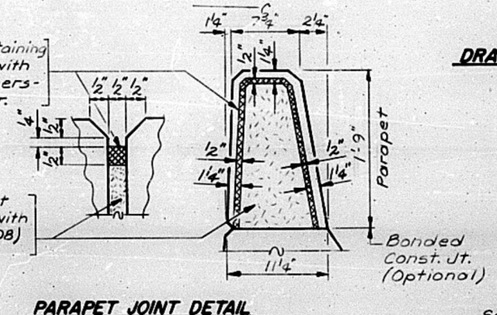


SECTION F-F

SECTION E-E

DRAINAGE SCUPPER DETAILS

Note: ⅜" Bent Plate & ¼" x 3" Steel Strap to be furnished & installed by "Deck" contractor. Cost shall be included in unit price "each" for scuppers.



PARAPET JOINT DETAIL

DRAINAGE SCUPPER REINFORCEMENT BAR DESIGNATIONS

Spans	▲
4 & 5	a_{153} (E)
6, 7 & 8	a_{140} (E)
9, 10 & 11	a_{104} (E)
12, 13 & 14	a_{56} (E)
15 thru 23	a_4 (E)
6E, 7E & 8E	a_{348}
9E & 10E	a_{375}
3F, 4F & 5F	a_{211} (E)

See individual Bills of Material for "a" bar designations, quantities & bar details.

SUPERSTRUCTURE DETAILS

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED CRN
CHECKED WDL
DRAWN DAN
CHECKED CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80

Rev. 12/3/80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

CODE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 49	(15B-1) D	PEORIA & TAZEWELL	97	6
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 4 of 88

Note: All dimensions shown are measured horizontally.

CURVE INFORMATION

RAMP B
R = 2877.794
T = 151.672
L = 303.063
Δ = 6°-02'-01.9"
D = 1°-59'-27.5"
P.C. Sta 0+86.01
P.T. Sta. 3+89.08

℄ W.B. LANE, ℄ SURVEY, ℄ E.B. LANE
R = 2864.789
T = 150.137
L = 300.000
Δ = 6°-00'-00"
D = 2°-00'-00"

	℄ W.B.L.	℄ SURVEY	℄ E.B.L.
P.C. Sta.	198+67.44	197+84.92	197+02.39
P.T. Sta.	201+67.44	200+84.92	200+02.39

Cut to match pavement crown of .2"/Ft.

SECTION C-C

Existing Const. Joint

Cut to match pavement crown of .2"/Ft.

SECTION D-D

N

51'-4½" SPAN 3

120'-2⅛" @ ℄ Rdwy. SPAN 4

117'-1¼" @ ℄ Rdwy. SPAN 5

2½" opening (@50°F.) for 2½" Neoprene Expansion Joint.

2¼"

4½" opening (@50°F.) for 6½" Neoprene Exp. Joint.

6¾"

Sta. 3+49.94

Sta. 2+98.54

Ramp "B"

18'-4⅜" 16'-0" 17'-04" 15'-7¾" 14'-3⅜" 12'-11" 11'-6½" 10'-2⅛"

Sta. 1+77.31

8'-3½" 34'-0" 7'-5¼" 6'-0⅜" 85'-6" 4'-3⅜" 13'-2¾"

Sta. 7+10.18

7'-0" 16'-0"

P.C. Ramp "F" Sta. 6+62.4 (Sta. 201+22 ℄ Survey)

Sta. 5+94.86

51'-6½" 26'-7½"

Offsets @ 25' intervals

P.C. Ramp B Sta. 0+86.01 = Sta. 201+64.59 ℄ Survey

℄ Pier 4 & Footing Sta. 201+89.44

202+00

℄ Pier 3 Sta. 200+75.17

201+00

Note: Offsets shown are measured perpendicular (⊥) to the edge of the west bound lane.

Proposed Structure

200+00

℄ Pier 2 Sta. 199+54.80

℄ W.B. Lanes

63'-0"

24'-0" 12'-0" 12'-0"

P.T. ℄ W.B. Lane Sta. 201+67.45 Back = Sta. 201+64.59 Ahead = 31.5' Lt. ℄ Survey Sta. 201+64.59

Profile Grade El. 498.66

56'-5"

Bk. West Abutment Sta. 199+03.24 Profile Grade El. 505.45

Profile Grade El. 504.00

2'-0" Shoulder

Profile Grade El. 500.66

6'-0" Shoulder

Remove Exist Ornamental Handrail ± 254' (See Sht. 72 of 88 for Pay Item)

Continue W.B. Lane S.E. for Shoulder - Spans 3, 4 & 5.

2°-40'

P.T. & Proposed F.A. Route 49 Sta. 200+84.92

Slope varies

Sta. 201+64.59

Proposed ℄ F.A. Route 49

A B C D

Existing Safety Curb

1" open joint

Remove safety curb, 11½" Cl. I ℄ slab in hatched area - see existing Spans 3, 4 & 5 for pay item (Sht. 75)

33'-9⅜"

Existing Construction Joint

57'-0"

5'-0"

Remove Steel Plate Beam Guard Rail (Single). Placed under contract 15B-2 (See Sht. 75 of 88 for Pay Item)

Sta. 201+61.73 Back = Sta. 201+64.59 Ahead = 31.5' Rt. ℄ Survey Sta. 201+64.59

28'-2" 31'-6"

27'-11"

Removal of curb, slab & supporting steel in shaded area performed under contract for Sec. 15 B-2.

Existing Structure

Existing ℄ F.A. Route 49

PT ℄ Proposed E.B. Lane Sta. 200+02.39

Existing ℄ F.A. Route 49

Existing Traffic Divider to remain in place.

℄ Proposed East Bound Lanes

East Bound Traffic

Saw cut existing concrete slab & extend existing reinforcement 2'-0" into replacement slab.

118'-7½" Span 4

118'-8" Span 5

51'-4½" Span 3

1½" Cl. I Surfacing for Temporary Crossover

Neoprene Expansion Joint (Longitudinal) See Sheet 8 for details

Slope Varies Slope varies Replacement Slab Proposed Slab 1" opening Existing Slab & Sidewalk

SECTION A-A

Match top of proposed slab with top of existing sidewalk.

1" open joint 3'-11" minimum 14'-11" maximum 1'-5" 3" Proposed Superstructure Existing Structure & Girder

SECTION B-B

GEOMETRICS — SPANS 3, 4, 5

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED S.C.O.
DRAWN R.J.E.
CHECKED C.R.N.

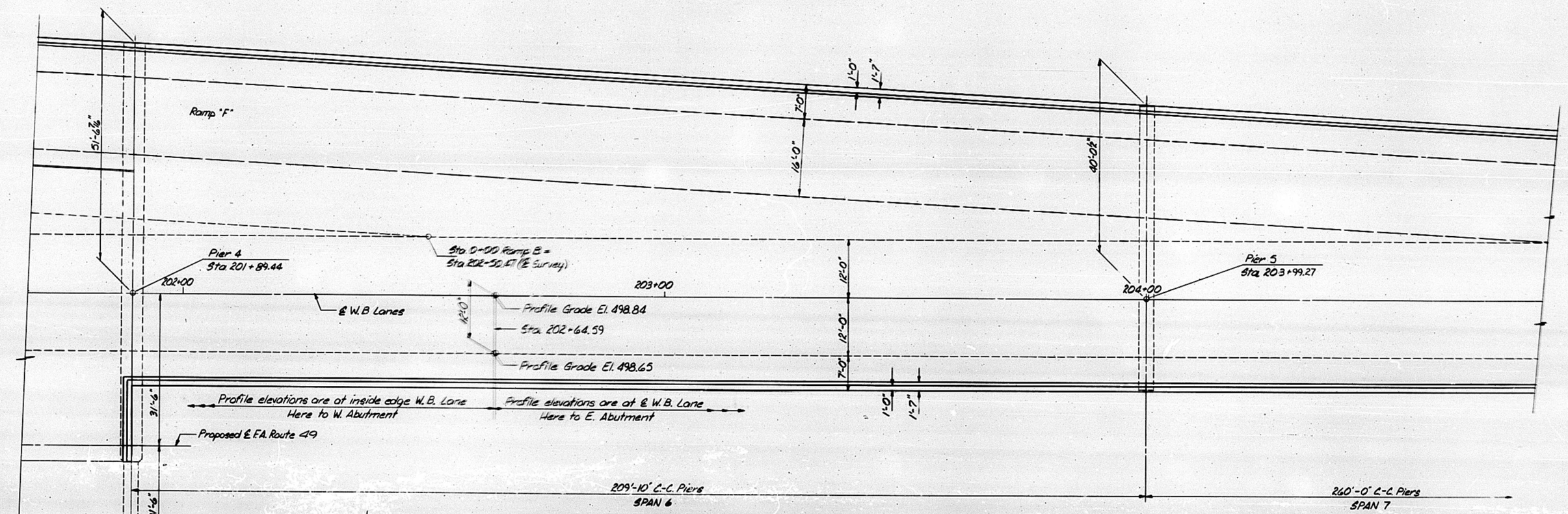
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

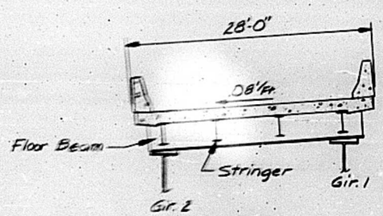
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	7

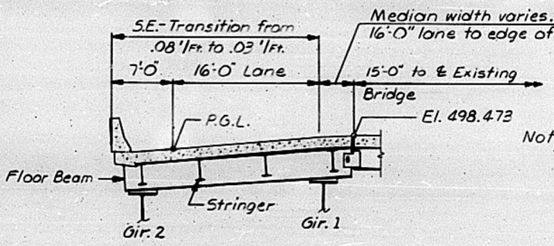
Sheet 5 of 88





VIEW A-A

(Showing Section @ P. 4E - Span 6E)

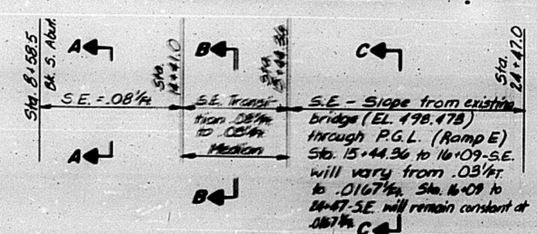


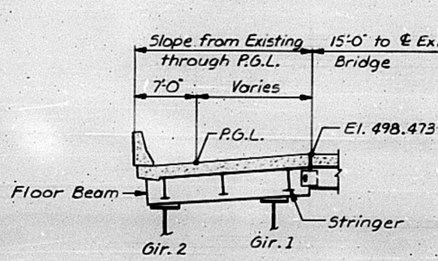
VIEW B-B

Note: Longitudinal Expansion Jt. has been omitted from Views B-B & C-C for clarity.

* Note location of station equation.

SUPERELEVATION (on Ramp E)





VIEW C-C

SUPERELEVATION (on Structure)

W.B. Lane
Attain Sta. 202+64.59 to Sta. 201+17.45*
Full (.0375'/Ft.) Sta. 201+17.45 to W. Abut

E.B. Lane (Future Const.)
Attain Sta. 201+02.39 to Sta. 199+52.39
Full (.0375'/Ft.) Sta. 199+52.39 to W. Abut.

Ramp F
Attain Sta. 5+76.40 to Sta. 7+06.40
Sta. 9+67.51 to Sta. 10+79.51
Full (.08'/Ft.) Sta. 7+06.40 to Sta. 9+47.51

Ramp B
Attain Sta. 0+00 to Sta. 1+36.09
Full (.0375'/Ft.) Sta. 1+36.09 to W. Abut.

Note: All dimensions shown are measured horizontally.

GEOMETRICS — SPANS 6,7

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED S.C.O.
DRAWN R.J.F.
CHECKED C.R.N.

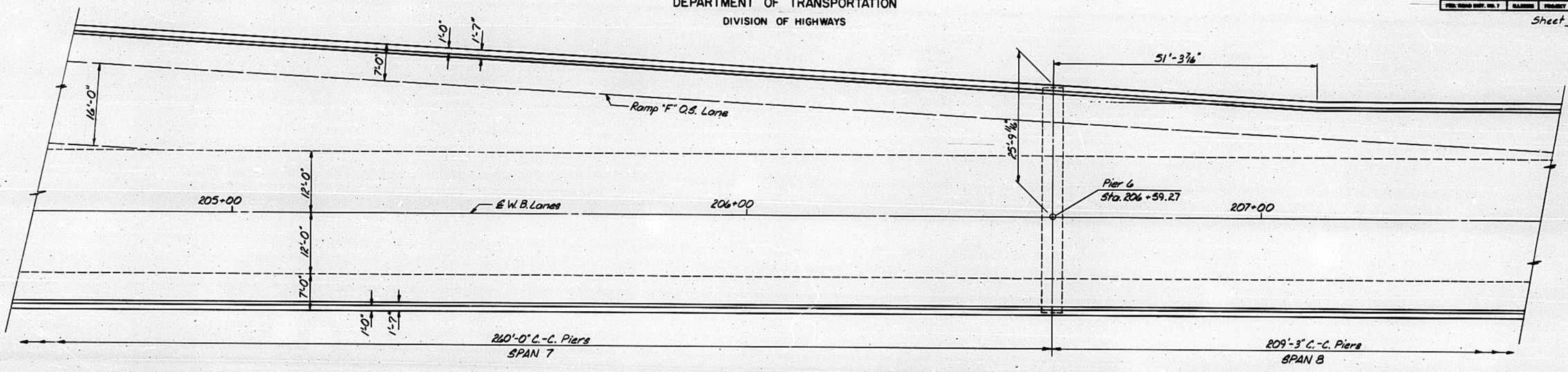
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

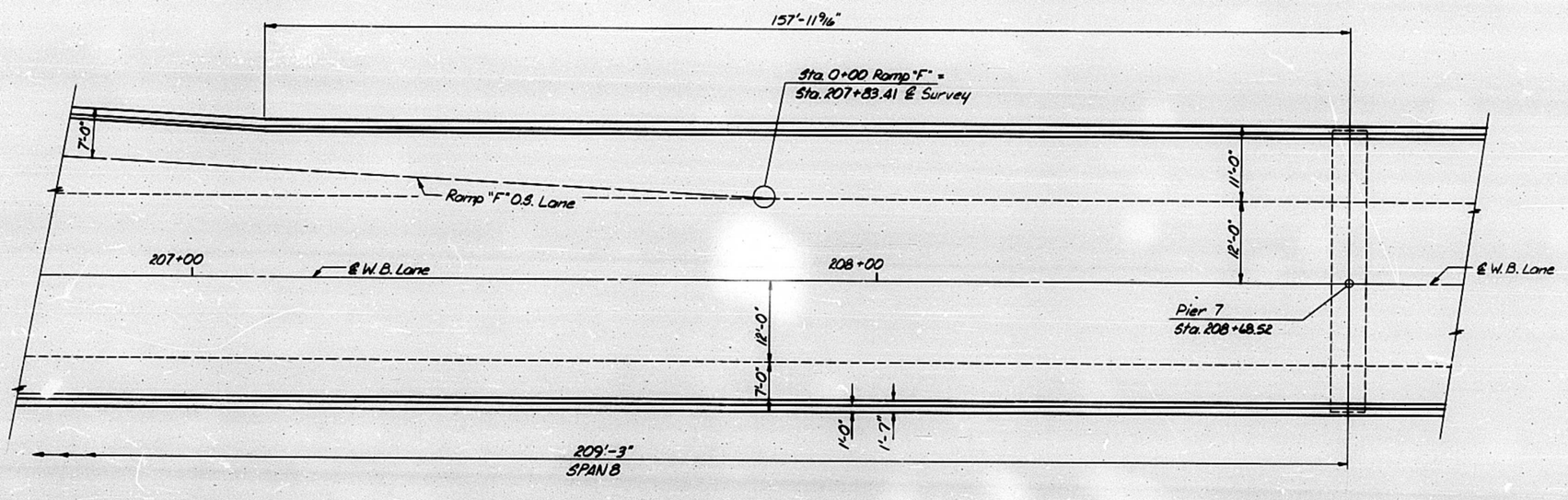
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SHEET NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	8
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 6 of 88





Note: All dimensions shown are measured horizontally.

GEOMETRICS — SPANS 7,8

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED S.C.O.
DRAWN R.J.E.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

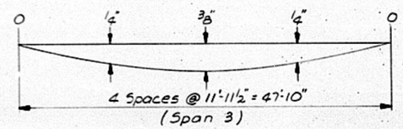
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO
F.A.-49	(158-1) -D	PEORIA & TAZEWELL	97	9
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

	STATION	GIRDER 1 ELEV. A	ELEV. B	STATION	GIRDER 2 ELEV. A	ELEV. B	STATION	GIRDER 3 ELEV. A	ELEV. B	STATION	GIRDER 4 ELEV. A	ELEV. B
℄ Bearing West Abutment	199+09.005	507.125	507.125	199+08.250	506.830	506.830	199+07.492	506.535	506.535	199+06.728	506.240	506.240
a	199+18.838	506.817	506.829	199+18.112	506.522	506.534	199+17.382	506.226	506.238	199+16.647	505.930	505.942
b	199+28.677	506.511	506.531	199+27.980	506.215	506.235	199+27.278	505.918	505.938	199+26.572	505.622	505.642
c	199+38.522	506.206	506.224	199+37.853	505.909	505.927	199+37.180	505.611	505.629	199+36.503	505.314	505.332
d	199+48.372	505.902	505.912	199+47.732	505.604	505.614	199+47.087	505.306	505.316	199+46.440	505.007	505.017
℄ West Bearing Pier 2	199+56.092	505.665	505.665	199+55.474	505.366	505.366	199+54.852	505.067	505.067	199+54.227	504.768	504.768

	STATION	GIRDER 1 ELEV. A	ELEV. B	STATION	GIRDER 2 ELEV. A	ELEV. B	STATION	GIRDER 3 ELEV. A	ELEV. B	STATION	GIRDER 4 ELEV. A	ELEV. B
℄ East Bearing Pier 2	199+57.896	505.610	505.610	199+57.283	505.310	505.310	199+56.667	505.011	505.011	199+56.047	504.713	504.713
e	199+67.756	505.308	505.359	199+67.172	505.008	505.039	199+66.585	504.708	504.739	199+65.994	504.408	504.439
f	199+77.621	505.007	505.104	199+77.066	504.707	504.766	199+76.507	504.405	504.464	199+75.945	504.105	504.164
g	199+87.491	504.708	504.840	199+86.964	504.407	504.486	199+86.434	504.105	504.184	199+85.901	503.803	503.882
h	199+97.364	504.410	504.566	199+96.866	504.108	504.200	199+96.366	503.805	503.897	199+95.862	503.502	503.594
i	200+07.242	504.113	504.278	200+06.773	503.809	503.903	200+06.301	503.506	503.600	200+05.826	503.203	503.297
j	200+17.124	503.817	503.977	200+16.684	503.513	503.601	200+16.241	503.209	503.297	200+15.795	502.904	502.992
k	200+27.009	503.522	503.665	200+26.598	503.218	503.293	200+26.184	502.912	502.987	200+25.767	502.607	502.682
l	200+36.898	503.230	503.345	200+36.515	502.923	502.978	200+36.130	502.617	502.672	200+35.743	502.311	502.366
m	200+46.789	502.937	503.018	200+46.436	502.630	502.664	200+46.080	502.323	502.357	200+45.722	502.016	502.050
n	200+56.684	502.646	502.692	200+56.359	502.338	502.353	200+56.032	502.030	502.045	200+55.704	501.722	501.737
o	200+66.581	502.215	502.232	200+66.285	502.047	502.050	200+65.988	501.739	501.742	200+65.688	501.430	501.433
℄ Bearing Pier 3	200+77.308	501.867	501.867	200+76.575	501.747	501.747	200+75.915	501.450	501.450	200+75.252	501.151	501.151
p	200+87.135	501.607	501.595	200+86.506	501.459	501.464	200+85.875	501.160	501.165	200+85.241	500.862	500.867
q	200+97.039	501.362	501.348	200+96.438	501.185	501.203	200+95.837	500.883	500.901	200+95.232	500.582	500.600
r	201+06.944	501.140	501.134	201+06.373	500.934	500.972	201+05.801	500.631	500.669	201+05.225	500.327	500.365
s	201+16.844	500.927	500.934	201+16.306	500.703	500.761	201+15.766	500.402	500.462	201+15.220	500.096	500.156
t	201+26.746	500.687	500.708	201+26.241	500.431	500.509	201+25.732	500.154	500.232	201+25.215	499.866	499.944
u	201+36.651	500.451	500.484	201+36.178	500.177	500.267	201+35.700	499.922	500.012	201+35.212	499.653	499.743
v	201+46.559	500.229	500.269	201+46.116	499.947	500.042	201+45.668	499.715	499.810	201+45.210	499.466	499.561
w	201+56.469	500.022	500.064	201+56.056	499.744	499.834	201+55.636	499.532	499.622	201+55.208	499.303	499.393
x	201+66.381	499.825	499.863	201+65.997	499.563	499.639	201+65.606	499.374	499.450	201+65.206	499.163	499.239
y	201+73.508	499.637	499.665	201+73.131	499.409	499.463	201+72.740	499.239	499.293	201+72.346	499.049	499.103
z	201+83.505	499.459	499.472	201+83.130	499.279	499.304	201+82.740	499.127	499.152	201+82.346	498.957	498.982
℄ West Bearing Pier 4	201+88.770	499.369	499.369	201+88.770	499.213	499.213	201+88.770	499.070	499.070	201+88.770	498.910	498.910



DEAD LOAD DEFLECTION DIAGRAM (SPAN 3)

(Includes weight of concrete slab)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflection (Elev. B) as shown in "Elevations-Top of Concrete" table.

	STATION	GIRDER 5 ELEV. A	ELEV. B	STATION	GIRDER 6 ELEV. A	ELEV. B	STATION	GIRDER 7 ELEV. A	ELEV. B	STATION	GIRDER 8 ELEV. A	ELEV. B
℄ Bearing West Abutment	199+05.961	505.946	505.946	199+05.188	505.652	505.652	199+04.412	505.358	505.358	199+03.630	503.909	503.909
a	199+15.908	505.635	505.647	199+15.165	505.340	505.352	199+12.418	505.045	505.056	199+13.666	503.621	503.632
b	199+25.862	505.325	505.345	199+25.148	505.029	505.049	199+24.430	504.656	504.674	199+23.708	503.341	503.359
c	199+35.822	505.017	505.035	199+35.137	504.720	504.738	199+34.448	504.266	504.283	199+33.756	503.067	503.084
d	199+45.788	504.709	504.719	199+45.132	504.411	504.421	199+44.473	503.897	503.906	199+43.809	502.797	502.806
℄ West Bearing Pier 2	199+53.598	504.468	504.468	199+52.965	504.171	504.171	199+52.329	503.623	503.623	199+51.688	502.588	502.588

	STATION	GIRDER 5 ELEV. A	ELEV. B	STATION	GIRDER 6 ELEV. A	ELEV. B	STATION	GIRDER 7 ELEV. A	ELEV. B	STATION	GIRDER 8 ELEV. A	ELEV. B
℄ East Bearing Pier 2	199+55.423	504.413	504.413	199+54.796	504.115	504.115	199+54.165	503.547	503.547	199+53.530	502.520	502.520
e	199+65.399	504.108	504.139	199+64.801	503.809	503.831	199+64.200	503.210	503.229	199+63.594	502.396	502.410
f	199+75.380	503.804	503.863	199+74.811	503.504	503.545	199+74.239	502.880	502.915	199+73.664	502.339	502.364
g	199+85.365	503.501	503.580	199+84.826	503.199	503.254	199+84.283	502.560	502.607	199+83.738	502.283	502.318
h	199+95.355	503.200	503.292	199+94.845	502.897	502.961	199+94.332	502.239	502.294	199+93.816	502.205	502.245
i	200+05.349	502.899	502.993	200+04.868	502.596	502.662	200+04.385	501.957	502.014	200+03.899	502.124	502.165
j	200+15.347	502.599	502.687	200+14.896	502.296	502.358	200+14.442	501.890	501.944	200+13.986	502.032	502.071
k	200+25.348	502.302	502.377	200+24.927	501.996	502.049	200+24.503	501.815	501.861	200+24.077	501.925	501.958
l	200+35.354	502.005	502.060	200+34.962	501.699	501.739	200+34.568	501.710	501.744	200+34.171	501.794	501.819
m	200+45.362	501.710	501.744	200+45.000	501.403	501.428	200+44.636	501.467	501.488	200+44.269	501.616	501.632
n	200+55.373	501.414	501.429	200+55.041	501.105	501.117	200+54.706	501.210	501.220	200+54.370	501.405	501.412
o	200+65.387	501.121	501.124	200+65.084	500.812	500.815	200+64.780	500.927	500.929	200+64.473	501.135	501.137
℄ Bearing Pier 3	200+74.584	500.854	500.854	200+73.913	500.552	500.552	200+73.238	500.561	500.561	200+72.558	500.637	500.637
p	200+84.603	500.563	500.568	200+83.961	500.260	500.264	200+83.316	500.220	500.223	200+82.666	500.237	500.239
q	200+94.624	500.281	500.299	200+94.012	499.977	499.991	200+93.396	499.986	455.998	200+92.776	500.065	500.074
r	201+04.646	500.024	500.062	201+04.064	499.718	499.746	201+03.478	499.773	499.797	201+02.888	499.910	499.927
s	201+14.670	499.791	499.851	201+14.117	499.485	499.528	201+13.561	499.582	499.619	201+13.002	499.774	499.801
t	201+24.695	499.575	499.653	201+24.172	499.281	499.336	201+23.646	499.418	499.465	201+23.117	499.657	499.691
u	201+34.722	499.382	499.472	201+34.228	499.107	499.171	201+33.732	499.279	499.334	201+33.233	499.558	499.598
v	201+44.749	499.214	499.309	201+44.285	498.959	499.025	201+43.819	499.162	499.219	201+43.350	499.475	499.516
w	201+54.776	499.071	499.161	201+54.343	498.836	498.899	201+53.906	499.062	499.116	201+53.467	499.400	499.439
x	201+64.804	498.951	499.027	201+64.400	498.736	498.789	201+63.994	498.977	499.022	201+63.585	499.330	499.363
y	201+71.952	498.857	498.910	201+71.558	498.664	498.701	201+71.164	498.910	498.942	201+70.770	499.265	499.288
z	201+81.952	498.785	498.810	201+81.558	498.611	498.628	201+81.164	498.856	498.871	201+80.770	499.204	499.215
℄ West Bearing Pier 4	201+88.770	498.745	498.749	201+88.770	498.589	498.589	201+88.770	498.821	498.821	201+88.770	499.151	499.151

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

NOTES:

See Sheet 11 of 88 for Dead Load Deflection Diagrams for Spans 4 & 5.

See Sheet 11 of 88 for Diagrammatic Plan of Top of Slab Elevations for Spans 3, 4 & 5.

See Sheet 30 of 88 for Method of Determining Fillet Heights.

TOP OF SLAB ELEVATIONS SPANS 3, 4 & 5

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (158-1)-D

PEORIA & TAZEWELL COUNTIES

DESIGNED	S.C.O.
CHECKED	W.D.L.
DRAWN	D.A.N.
CHECKED	W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	113B-1-D	Peoria & Tazewell	97	10
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

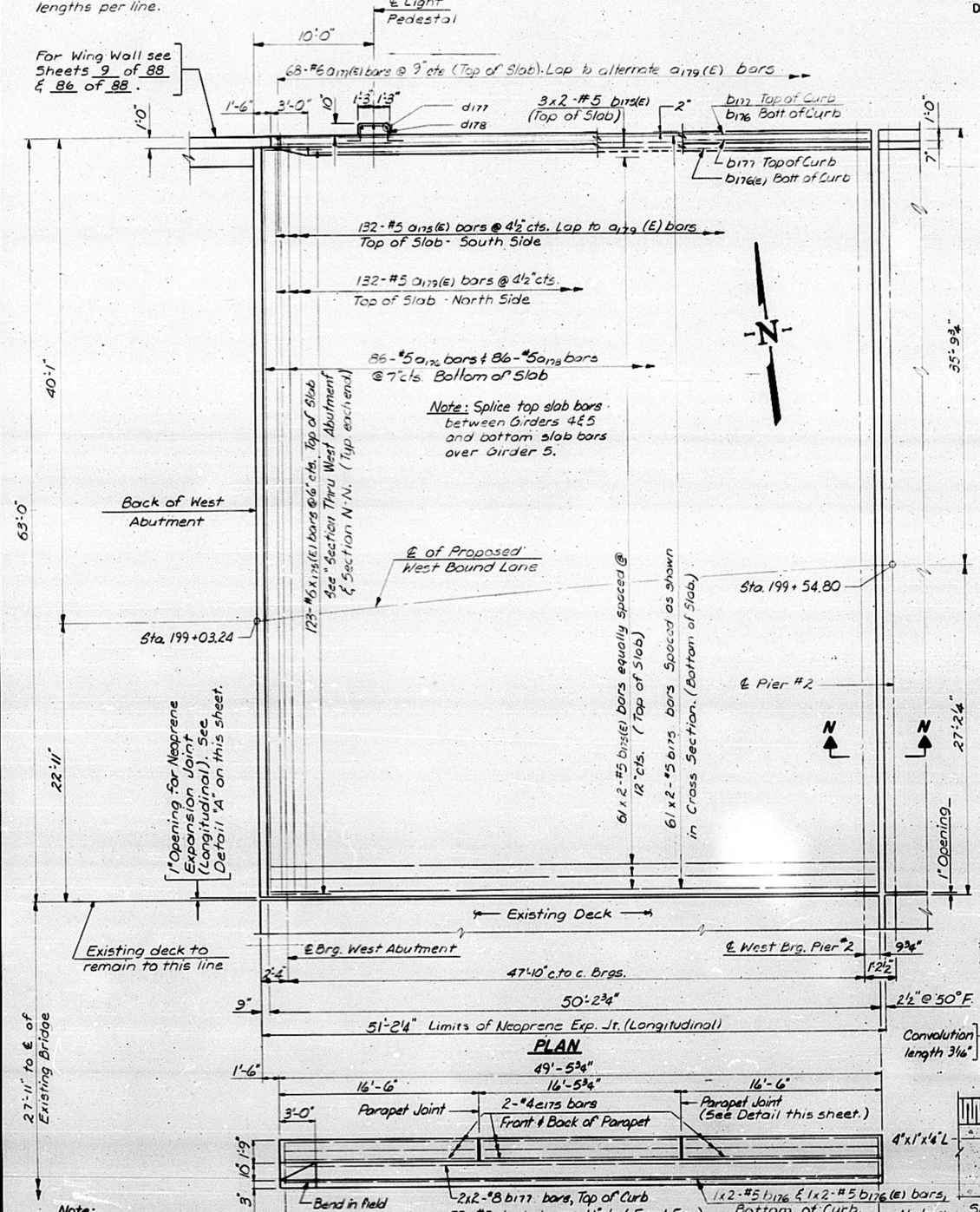
Sheet 8 of 88

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

Note: Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

Notes:
- For Light Pedestal Details see Sheet 3 of 88.
- For Section N-N see Sheet 9 of 88.
- All dimensions shown are measured horizontally.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

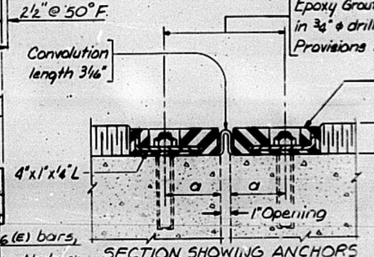


PLAN

ELEVATION - CURB & PARAPET

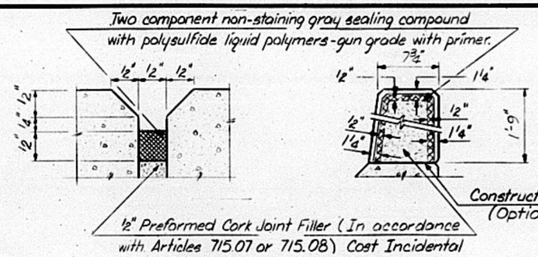
Also see "Section Thru Curb" on Sheet 9 of 88.

Note: Class X Concrete and Reinforcement bars for concrete rail are included in "Bill of Material," sheet 9 of 88.

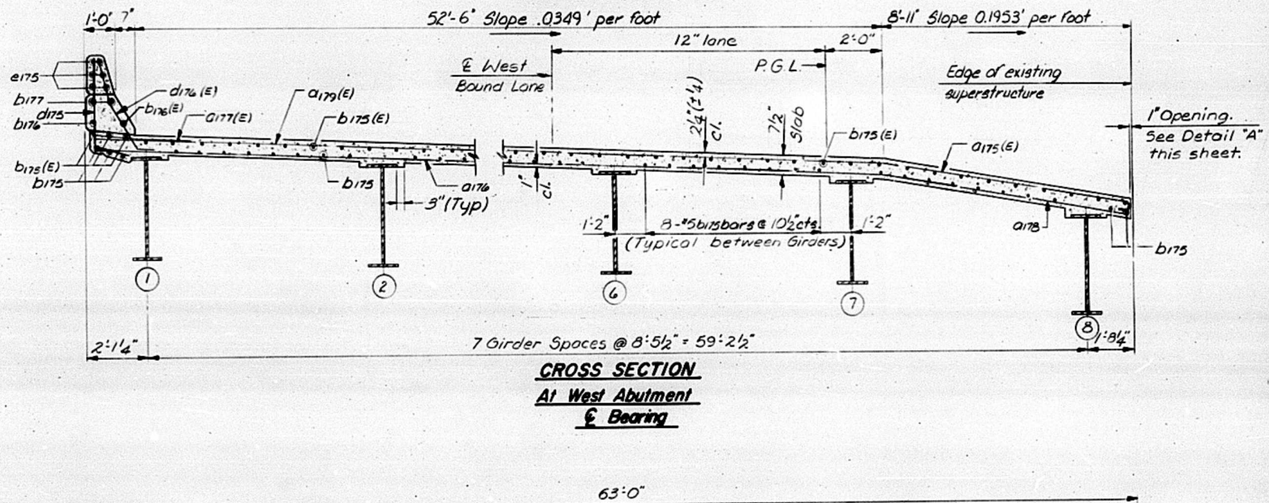


SECTION SHOWING ANCHORS

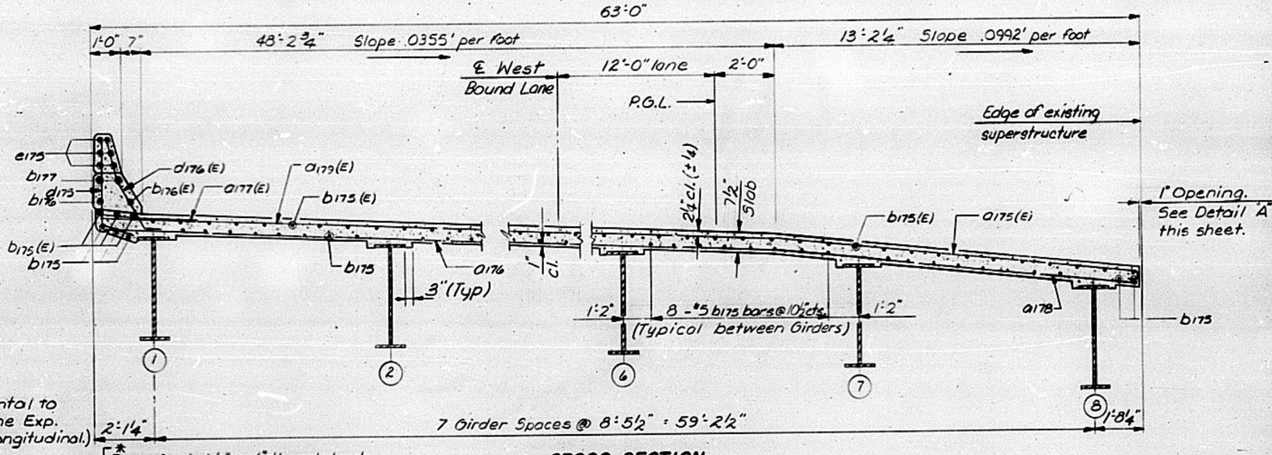
Notes:
* Bolt channel shall be filled with approved epoxy grout.
For placement of Neoprene Exp. Joint (Longitudinal) see Sheet 75 & 77 of 88.



PARAPET JOINT DETAILS



CROSS SECTION At West Abutment ℄ Bearing



CROSS SECTION At Pier 2 ℄ West Bearing

* Epoxy Grouted ½" ø x 6" threaded rods in ¾" ø drilled holes. See Special Provisions for Epoxy Grouting.

'Neoprene Expansion Joint (Longitudinal) See Special Provisions.

Cl. I Surfacing for Temporary Crossover.

ALTERNATE NEOPRENE EXPANSION JOINTS (LONGITUDINAL):
Fel-Pro Building Products, Inc. - Fel-Span Model T-30 (a = 3¼")
Watson Bowman Assoc., Inc. - Wabo Elastodam Type 300 (a = 3½")
Structural Accessories, Inc. - Low Profile Onflex (a = 2⅞")*

DETAIL "A"

SUPERSTRUCTURE - SPAN 3

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.N.
CHECKED S.C.Q.
DRAWN DAN
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

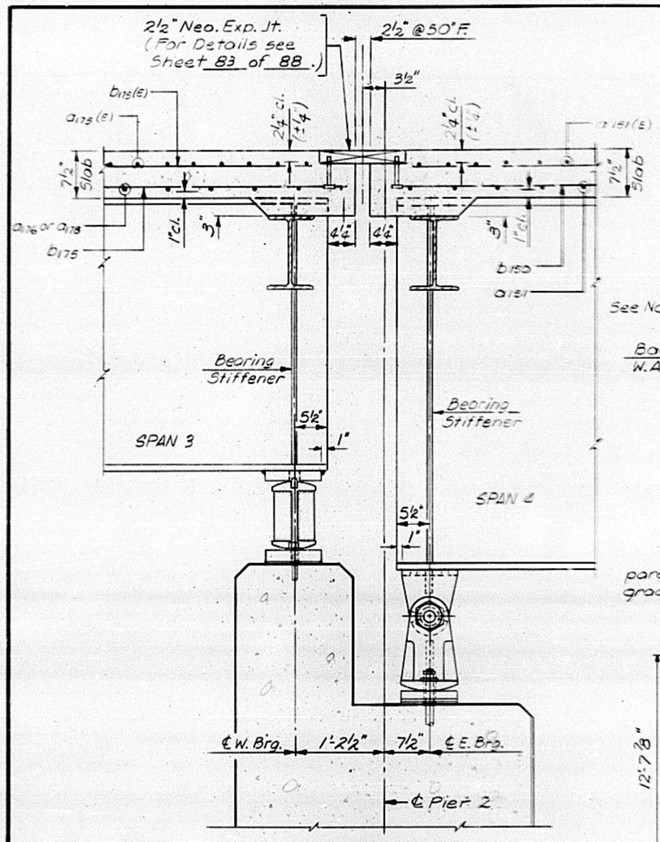
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

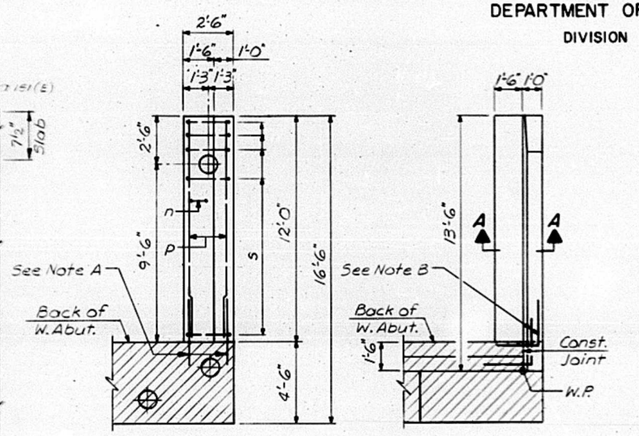
ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(158-1)-D	Peoria & Tazewell	97	11
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 9 of 88

Note:
Reinforcement for wingwall at West Abut shall be supplied with deck contract. Construction of wingwall at West Abut is not included in deck contract

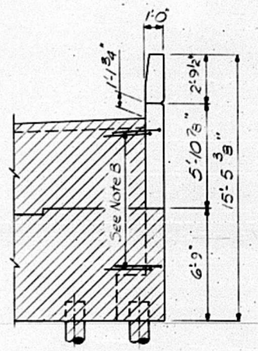


SECTION N-N
(From Sheet 8 of 88)

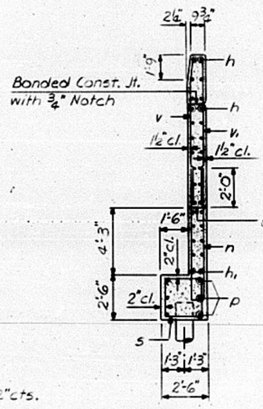


PLAN-PILE CAP

TOP VIEW



FRONT VIEW



SECTION A-A

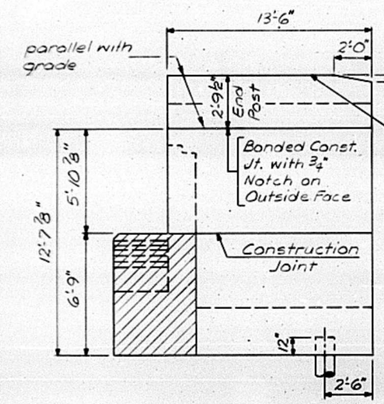
Note A Existing p1 bars in W. Abut. (See Sheet 86 of 88.) Lap with p bars in wing wall pile cap.

Note B Existing h2 bars in W. Abut. (See Sheet 86 of 88.) Lap with h bars in wing wall.

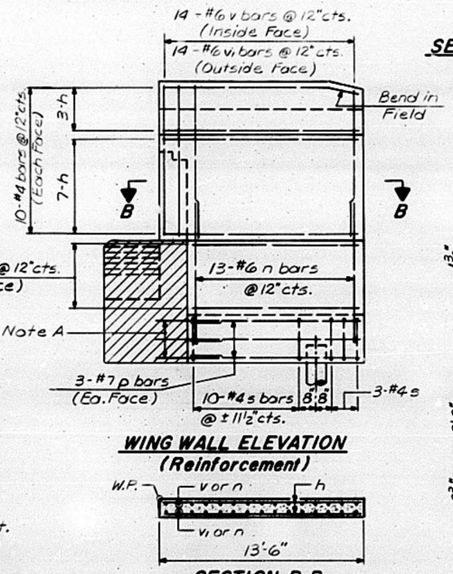
SPAN 3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a175(E)	132	#5	32'-7"	
a176	86	#5	37'-6"	
a177(E)	68	#6	4'-0"	
a178	86	#5	28'-9"	
a179(E)	132	#5	32'-4"	
b175	122	#5	25'-10"	
b175(E)	128	#5	25'-10"	
b176	2	#5	25'-6"	
b176(E)	2	#5	25'-6"	
b177	4	#8	26'-4"	
d175	50	#4	4'-4"	
d176(E)	55	#5	3'-11"	
d177	3	#6	4'-5"	
d178	5	#6	8'-11"	
e175	18	#4	16'-3"	
h	20	#4	13'-2"	
h1	10	#4	11'-8"	
n	13	#6	15'-11"	
s	13	#4	9'-5"	
v	14	#6	8'-6"	
v1	14	#6	8'-6"	
x175(E)	246	#6	4'-9"	
Neoprene Exp. Jt. (Long.)			Lin. Ft.	51.2
Class X Concrete			Cu. Yds.	101.9
Reinforcement Bars			Lbs.	11,010
Reinforcement Bars (Epoxy Coated)			Lbs.	14,830
2½" Neo. Exp. Joint			Lin. Ft.	61.9
Protective Coat			Sq. Yds.	363.0

Neoprene Expansion Joint listed on Existing Spans 3A, 4, 5 Bill of Material (Sheet 75 of 88.)



WING WALL ELEVATION
(Dimensions)

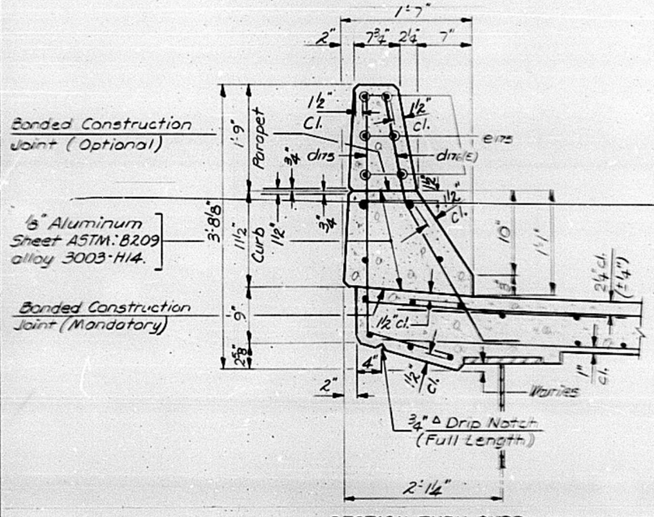


WING WALL ELEVATION
(Reinforcement)

SECTION B-B

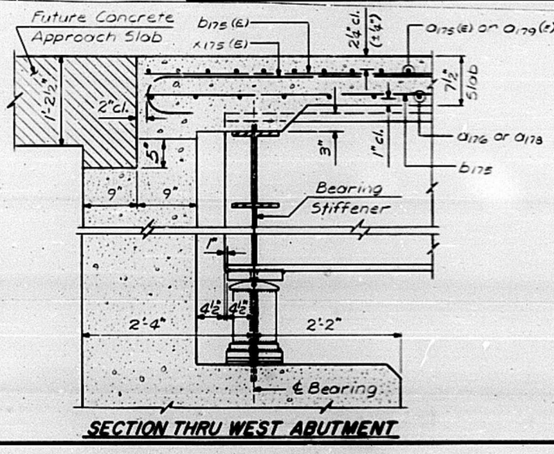
Indicates Existing Portions of West Abutment.

DETAILS OF NORTHWEST WING WALL AT WEST ABUTMENT

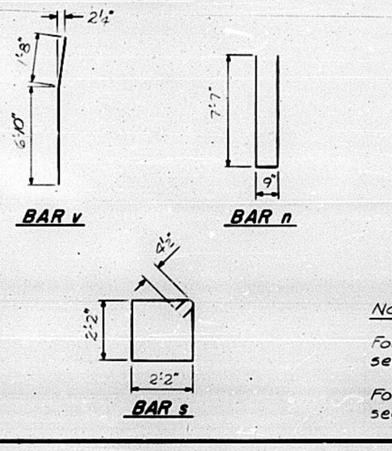


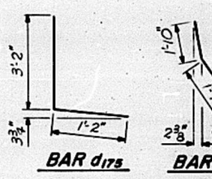
SECTION THRU CURB

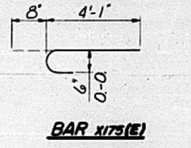
Cost of Aluminum Sheets shall be incidental to Class X Concrete.

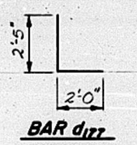


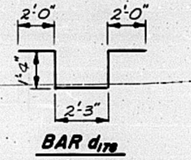
SECTION THRU WEST ABUTMENT

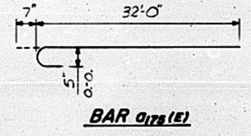












Note For location of Bars d177 & d178 see Sheet 8 of 88.

Notes

For Diagrammatic Plan - Top of Slab Elev's, see Sheet 11 of 88.

For Top of Slab Elevations - Spans 3, 4 & 5 see Sheet 7 of 88.

SUPERSTRUCTURE DETAILS
SPAN 3

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED C.R.W.
CHECKED S.C.O.
DRAWN DAN
CHECKED C.R.W.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	Peoria & Tazewell	97	12
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

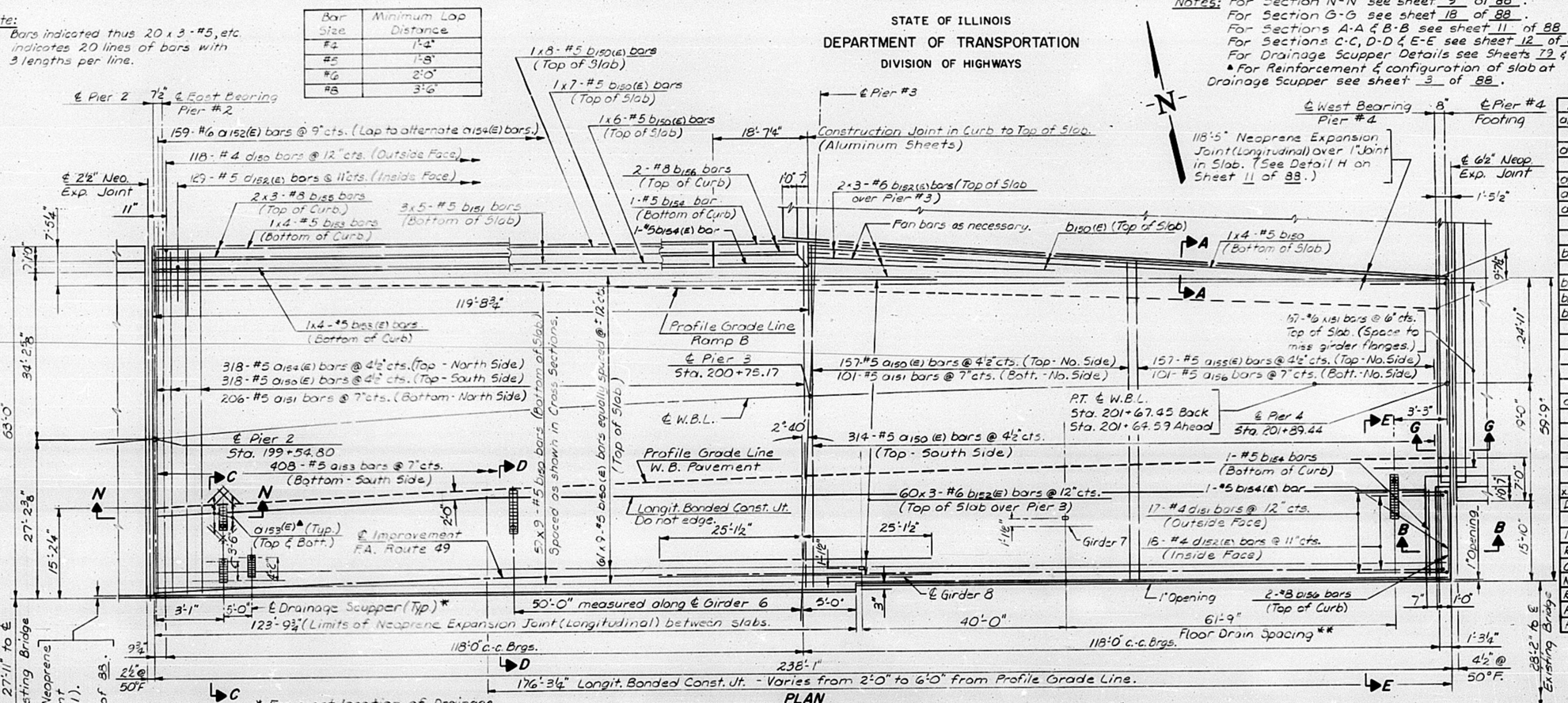
Sheet 10 of 88

Note:
Bars indicated thus 20 x 3 - #5, etc. indicates 20 lines of bars with 3 lengths per line.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Notes: For Section N-N see sheet 9 of 88.
For Section G-G see sheet 18 of 88.
For Sections A-A & B-B see sheet 11 of 88.
For Sections C-C, D-D & E-E see sheet 12 of 88.
For Drainage Scupper Details see Sheets 79 & 80 of 88.
▲ For Reinforcement & configuration of slab at Drainage Scupper see sheet 3 of 88.



* For exact location of Drainage Scuppers see Drainage System Spans 4 & 5 (Sheet 12 of 88.)

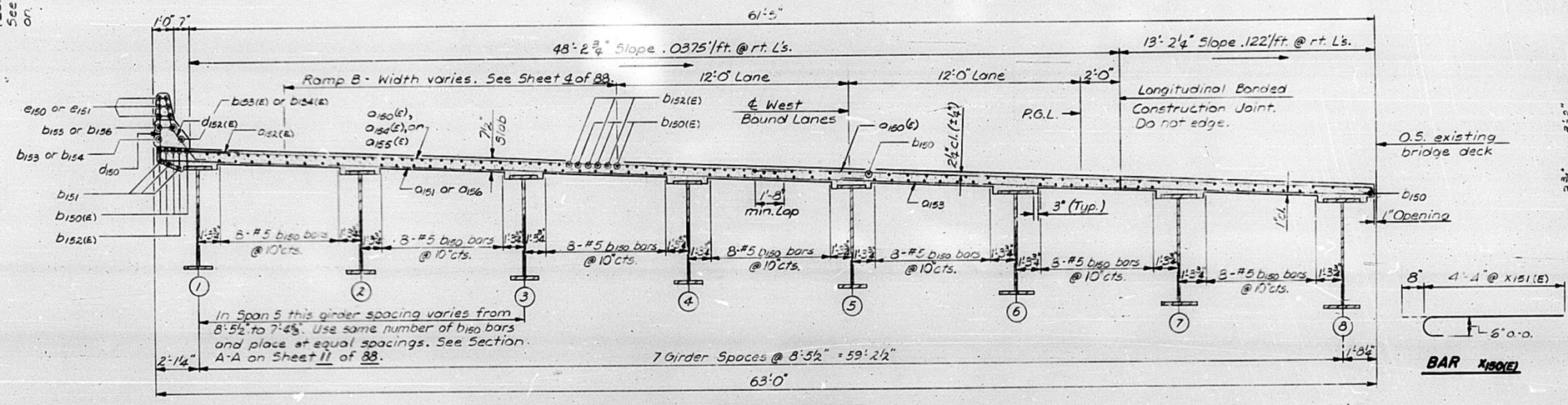
PLAN

Note: All dimensions shown are measured horizontally.

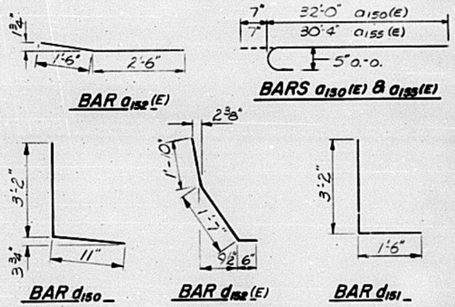
** For Connection & Details see Sht 3 of 88

SPANS 4 & 5
BILL OF MATERIAL

Bar	No.	Bar	No	Size	Length	Shape
a150(E)	789			#5	32'-7"	
		a151	307	#5	36'-0"	
a152(E)	159			#6	4'-0"	
		a153	408	#5	27'-9"	
a153(E)	36			#5	2'-0"	
a154(E)	318			#5	32'-4"	
a155(E)	157			#5	30'-11"	
		a156	101	#5	34'-4"	
b150(E)	570	b150	517	#5	28'-0"	
		b151	15	#5	25'-3"	
b152(E)	186			#6	18'-7"	
b153(E)	4	b153	4	#5	26'-2"	
b154(E)	2	b154	2	#5	17'-3"	
		b155	6	#8	35'-11"	
		b156	4	#8	16'-10"	
		d150	118	#4	4'-1"	
		d151	17	#4	4'-8"	
d152(E)	147			#5	3'-11"	
		e150	42	#4	16'-3"	
		e151	6	#4	17'-6"	
x151(E)	67			#6	5'-0"	
Drainage System Complete					Lump Sum	1
Neoprene Expansion Jt. (Long.)					Lin. Ft.	242.2
Reinforcement Bars					Lbs.	44,250
Class X Concrete					Cu. Yds.	378.3
Neoprene Expansion Joint 66"					Lin. Ft.	69.0
Reinforcement Bars (Epoxy Coated)					Lbs.	66,710
Protective Coat					Sq. Yds.	1,205.4
Floor Drains					Each	2



CROSS SECTION
Along ℄ East Bearing of Pier 2
Looking East



SUPERSTRUCTURE
SPANS 4 & 5

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED DLB
CHECKED CRN
DRAWN DAN
CHECKED CRN

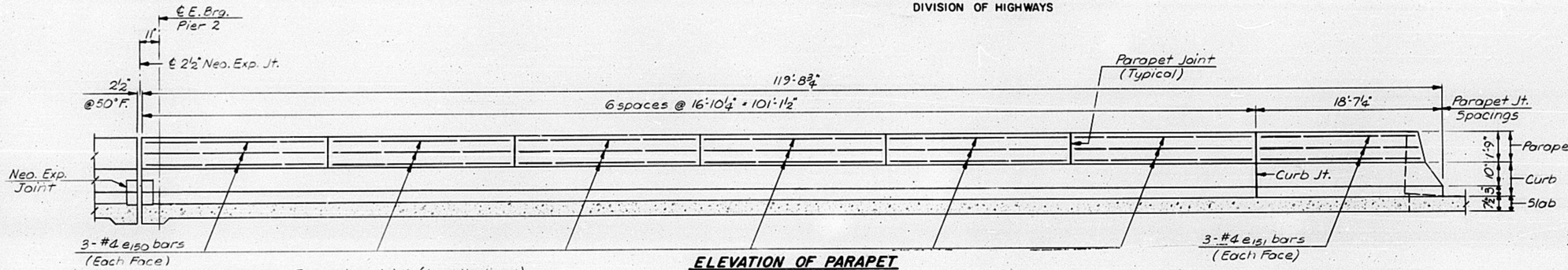
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

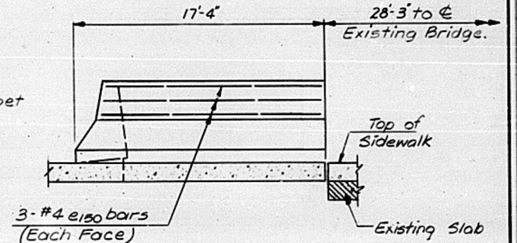
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	18
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 11 of 88

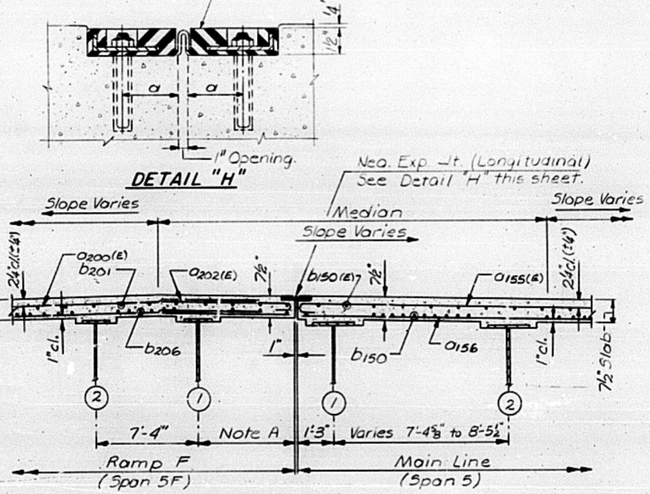


ELEVATION OF PARAPET (SPAN 4)

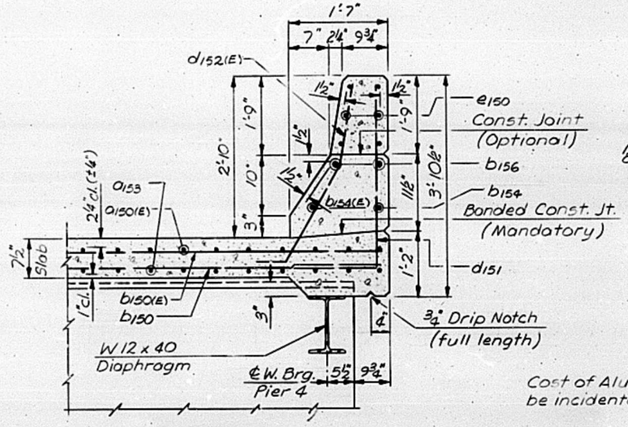


ELEVATION OF PARAPET (SPAN 5)

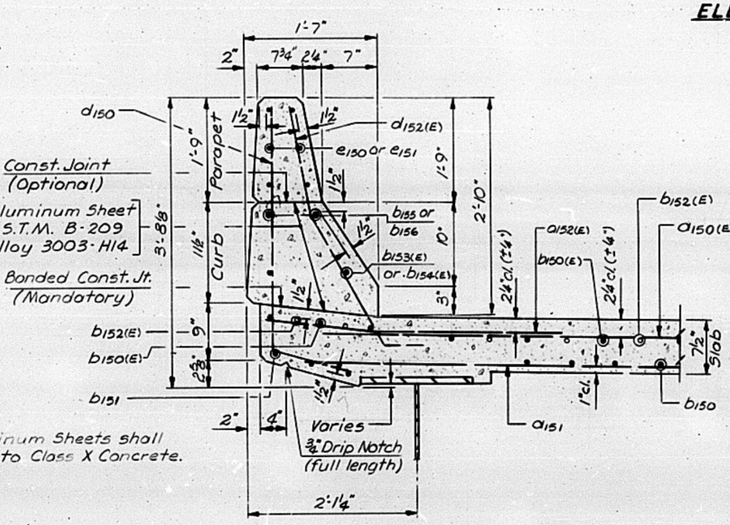
PARAPET DETAILS



SECTION A-A
(From Sheet 10 of 88.)

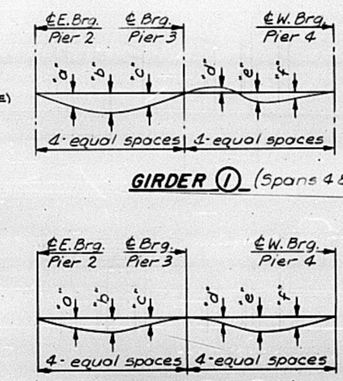


SECTION B-B
(From Sheet 10 of 88.)



Cost of Aluminum Sheets shall be incidental to Class X Concrete.

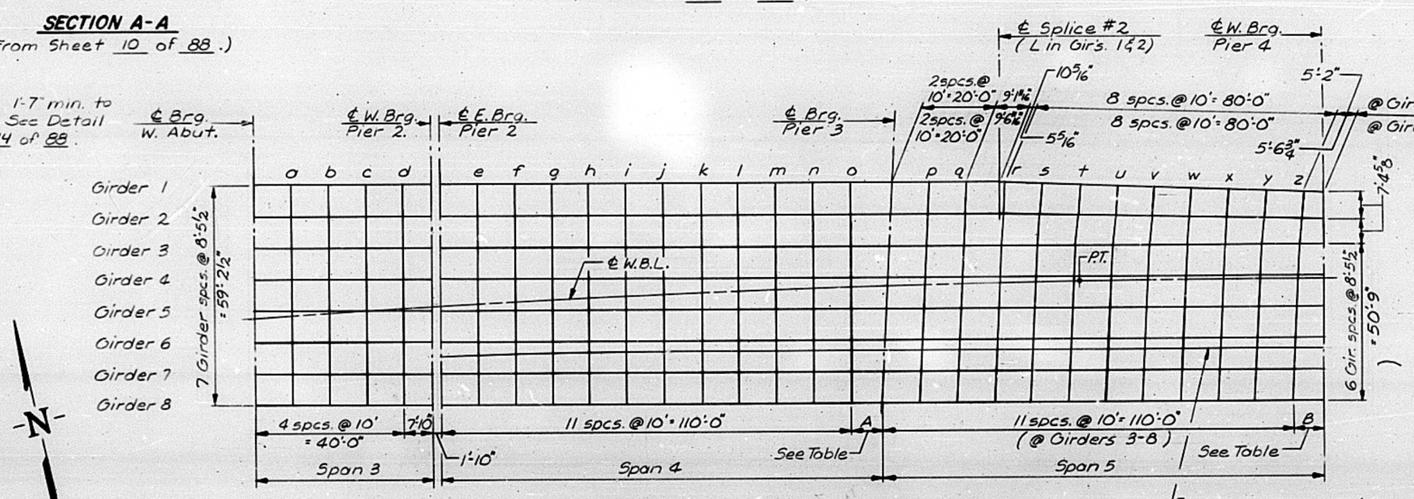
SECTION THRU CURB
(Span 4)



GIRDER ① (Spans 4 & 5)

GIRDERS ② - ⑧ (Spans 4 & 5)

Note A: Varies from 1'-7" min. to 10'-11¾" max. See Detail J on Sht. 44 of 88.



DIAGRAMMATIC PLAN - TOP OF SLAB ELEVATIONS
Note: All dimensions shown in plan are measured horizontally.

Longitudinal Bonded Constr. Jt. See Sht 10 of 88 for dimensions.

TABLE FOR DIMENSIONS A & B

Gir. No.	A	B
1	10'-10"	——
2	10'-5¼"	——
3	10'-0½"	5'-11½"
4	9'-7⅞"	6'-4³⁄₁₆"
5	9'-3⅛"	6'-8⁵⁄₁₆"
6	8'-10⅝"	7'-1⅝"
7	8'-5⅝"	7'-6⅝"
8	8'-0¹⁵⁄₁₆"	7'-11⅛"

DEAD LOAD DEFLECTION DIAGRAMS
(Includes weight of Concrete only.)

TABLE OF DEAD LOAD DEFLECTIONS

Girder No.	Deflections "a"	"b"	"c"	"d"	"e"	"f"
1	1⁹⁄₁₆"	1⁵⁄₁₆"	1"	1⁄₁₆"	5⁄₁₆"	7⁄₁₆"
2	1³⁄₁₆"	1⅛"	7⁄₁₆"	7⁄₁₆"	1⅛"	1⁵⁄₁₆"
3	"	"	"	"	"	"
4	"	"	"	"	"	"
5	"	"	"	"	"	"
6	1⅛"	¾"	5⁄₁₆"	5⁄₁₆"	¾"	1⅛"
7	9⁄₁₆"	1⅛"	5⁄₁₆"	5⁄₁₆"	1⅛"	9⁄₁₆"
8	7⁄₁₆"	½"	5⁄₁₆"	5⁄₁₆"	½"	7⁄₁₆"

SUPERSTRUCTURE DETAILS SPANS 4 & 5

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (158-1)-D

PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED W.D.L.
DRAWN D.A.N.
CHECKED W.D.L.

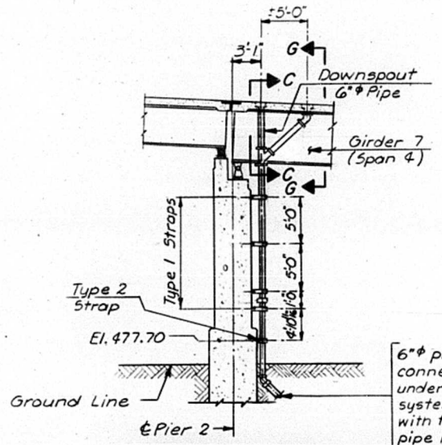
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

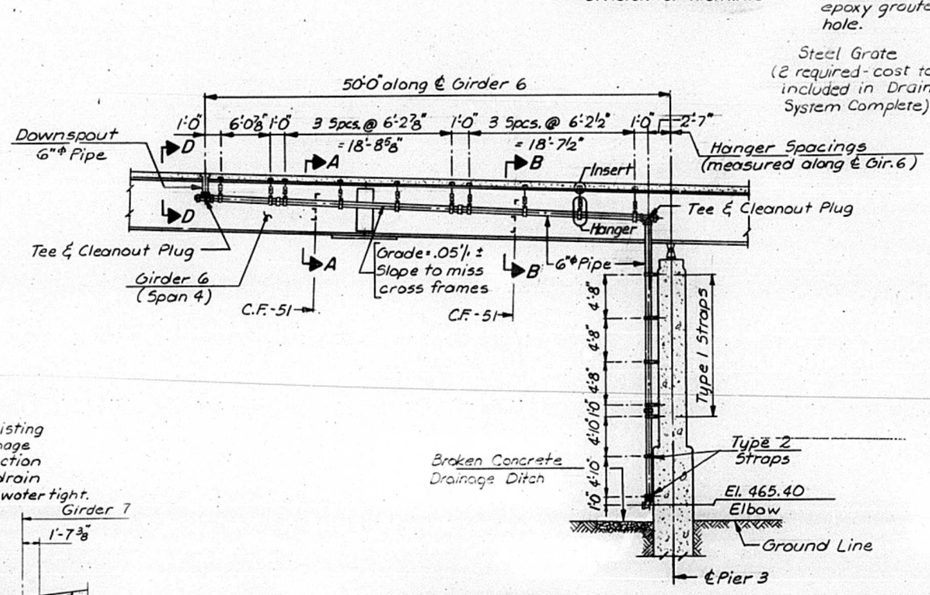
ROUTE NO.	SEC.	COUNTY	SHEET NO.	TOTAL SHEETS
F.A. 49	115B-1) -B	Peoria & Tazewell	97	114
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 12 of 88

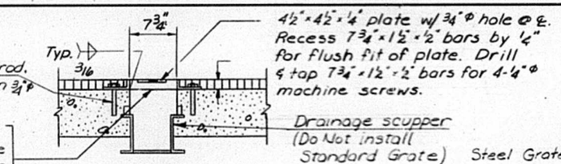


6"ϕ pipe to be connected into existing underground drainage system. The connection with the existing drain pipe is to be made water tight.

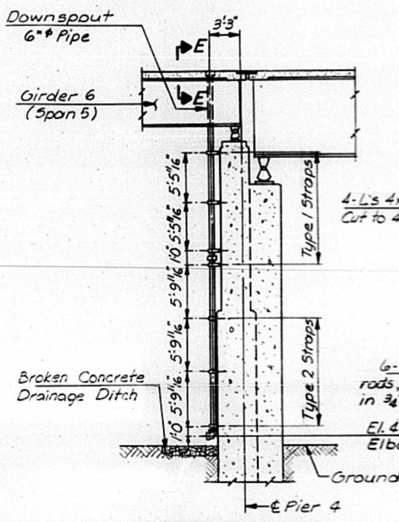
SECTION AT PIER 2 DRAINAGE DETAILS



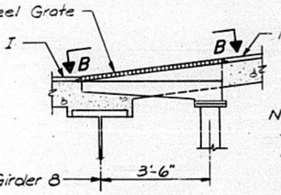
SECTION AT PIER 3 DRAINAGE DETAILS



SECTION C-C

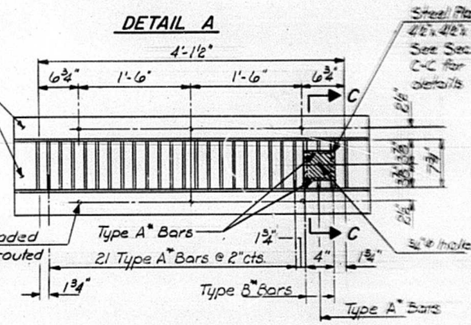


SECTION AT PIER 4 DRAINAGE DETAILS



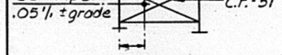
Note: Place grate such that 4½"×4½"×¼" plate is above dumpst.

DETAIL A

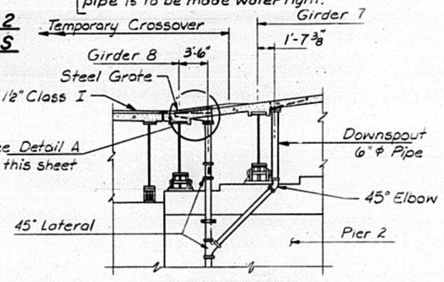


VIEW B-B

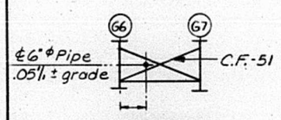
* Type A = 1½" x ⅜"
Type B = 1½" x ½"



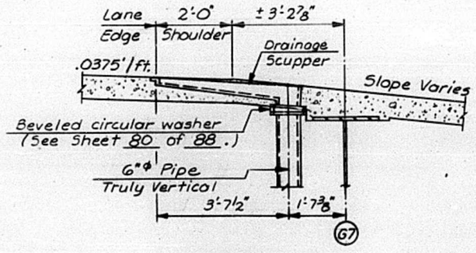
SEC. A-A



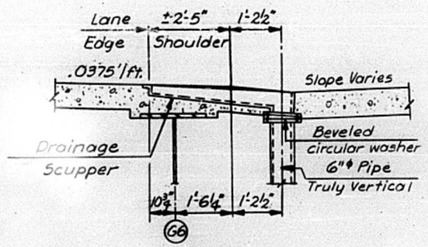
SECTION G-G



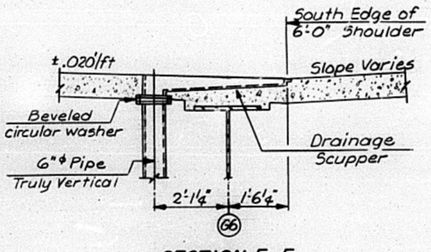
SEC. B-B



SECTION C-C

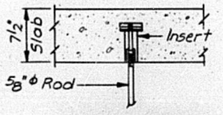


SECTION D-D

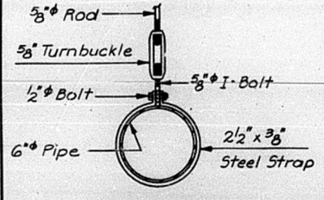


SECTION E-E

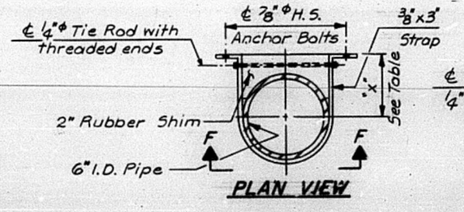
Note: Also see Sheet 10 of 88 for Sections C-C, D-D, & E-E.



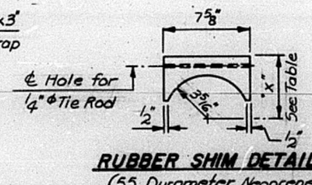
INSERT DETAIL



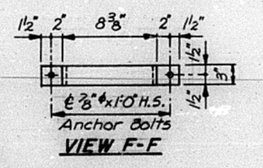
HANGER DETAIL



PLAN VIEW



RUBBER SHIM DETAIL
(55 Durometer Neoprene)



VIEW F-F

STRAP DETAILS

TABLE FOR DIMENSION "X"	
Strap	"x"
Type 1	1'-1"
Type 2	6"

NOTES

All structural steel shall meet the requirements of AASHTO M-183 unless otherwise shown.

All High Strength Bolts and Anchor Bolts shall meet the requirements of AASHTO M-164.

Broken Concrete Drainage Ditches shall be placed as directed by the Engineer.

All dimensions shown are measured horizontally.

Pay item Drainage System Complete shall include providing and installing 12"ϕ pipe, 6"ϕ pipe, saddles, elbows, tees, sleeves, inserts, hangers, straps, cleanouts, and all other necessary items to complete the underdeck drainage.

DRAINAGE SYSTEM SPANS 4 & 5

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (115B-1)-B

PEORIA & TAZEWELL COUNTIES

DESIGNED	N.D.L.	HANSON ENGINEERS INCORPORATED	74001
CHECKED	S.C.O.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	
DRAWN	D.A.N.		5-22-80
CHECKED	S.C.O.		

Rev. 12-30-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(15B-1)-D	PEORIA & TAZEWELL	97	15
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 13 of 88

GIRDER 1

	STATION	ELEV. A	ELEV.B
℄ East Bearing Pier 4	20191.690	498.858	498.858
a	20201.273	498.746	498.784
b	20211.273	498.643	498.719
c	20221.273	498.536	498.643
d	20231.273	498.438	498.576
e	20241.273	498.352	498.511
f	20251.273	498.276	498.455
g	20261.273	498.211	498.400
h	20271.273	498.156	498.351
i	20281.273	498.113	498.305
j	20291.273	498.079	498.265
k	20301.273	498.057	498.230
l	20311.273	498.045	498.202
m	20321.273	498.044	498.181
n	20331.273	498.054	498.168
o	20341.273	498.065	498.156
p	20351.273	498.077	498.144
q	20361.273	498.088	498.134
r	20371.273	498.100	498.129
s	20381.273	498.111	498.126
t	20391.273	498.122	498.128
℄ Bearing Pier 5	20399.273	498.132	498.132
u	20409.273	498.143	498.146
v	20419.273	498.154	498.161
w	20429.273	498.166	498.181
x	20439.273	498.177	498.208
y	20449.273	498.189	498.236
z	20459.273	498.200	498.269
a_1	20469.273	498.211	498.303
b_1	20479.273	498.223	498.339
c_1	20489.273	498.234	498.371
d_1	20499.273	498.246	498.405
e_1	20509.273	498.257	498.431
f_1	20519.273	498.268	498.452
g_1	20529.273	498.280	498.474
h_1	20539.273	498.291	498.480
i_1	20549.273	498.303	498.486
j_1	20559.273	498.314	498.487
k_1	20569.273	498.325	498.479
l_1	20579.273	498.337	498.472
m_1	20589.273	498.348	498.460
n_1	20599.273	498.360	498.448
o_1	20609.273	498.371	498.436
p_1	20619.273	498.382	498.429
q_1	20629.273	498.394	498.422
r_1	20639.273	498.405	498.421
s_1	20649.273	498.417	498.425
℄ Bearing Pier 6	20659.273	498.428	498.428
t_1	20669.273	498.439	498.441
u_1	20679.273	498.451	498.456
v_1	20689.273	498.462	498.478
w_1	20699.273	498.473	498.501
x_1	20709.273	498.485	498.530
y_1	20719.273	498.486	498.549
z_1	20729.273	498.486	498.570
a_2	20739.273	498.486	498.591
b_2	20749.273	498.486	498.608
c_2	20759.273	498.486	498.624
d_2	20769.273	498.486	498.634
e_2	20779.273	498.486	498.642
f_2	20789.273	498.486	498.643
g_2	20799.273	498.486	498.638
h_2	20809.273	498.486	498.629
i_2	20819.273	498.486	498.614
j_2	20829.273	498.486	498.595
k_2	20839.273	498.486	498.570
l_2	20849.273	498.486	498.543
m_2	20859.273	498.486	498.511
℄ West Bearing Pier 7	20867.273	498.486	498.486

STRINGER 1

STATION	ELEV. A	ELEV.B
20191.690	499.156	499.168
20201.273	498.985	499.037
20211.273	498.838	498.929
20221.273	498.718	498.840
20231.273	498.610	498.760
20241.273	498.512	498.682
20251.273	498.425	498.614
20261.273	498.348	498.546
20271.273	498.282	498.485
20281.273	498.227	498.427
20291.273	498.182	498.374
20301.273	498.149	498.328
20311.273	498.125	498.287
20321.273	498.113	498.255

STRINGER 2

STATION	ELEV. A	ELEV.B
20191.690	499.407	499.429
20201.273	499.144	499.207
20211.273	499.024	499.127
20221.273	498.906	499.039
20231.273	498.797	498.958
20241.273	498.699	498.880
20251.273	498.612	498.811
20261.273	498.535	498.743
20271.273	498.469	498.682
20281.273	498.414	498.624
20291.273	498.370	498.573
20301.273	498.336	498.527
20311.273	498.313	498.487
20321.273	498.300	498.454
20331.273	498.299	498.429
20341.273	498.299	498.405
20351.273	498.299	498.380
20361.273	498.299	498.358
20371.273	498.299	498.341
20381.273	498.299	498.326
20391.273	498.299	498.317
20399.273	498.299	498.310
20409.273	498.299	498.313
20419.273	498.299	498.315
20429.273	498.299	498.322
20439.273	498.299	498.337
20449.273	498.299	498.352
20459.273	498.299	498.373
20469.273	498.299	498.396
20479.273	498.299	498.420
20489.273	498.299	498.441

STRINGER 3

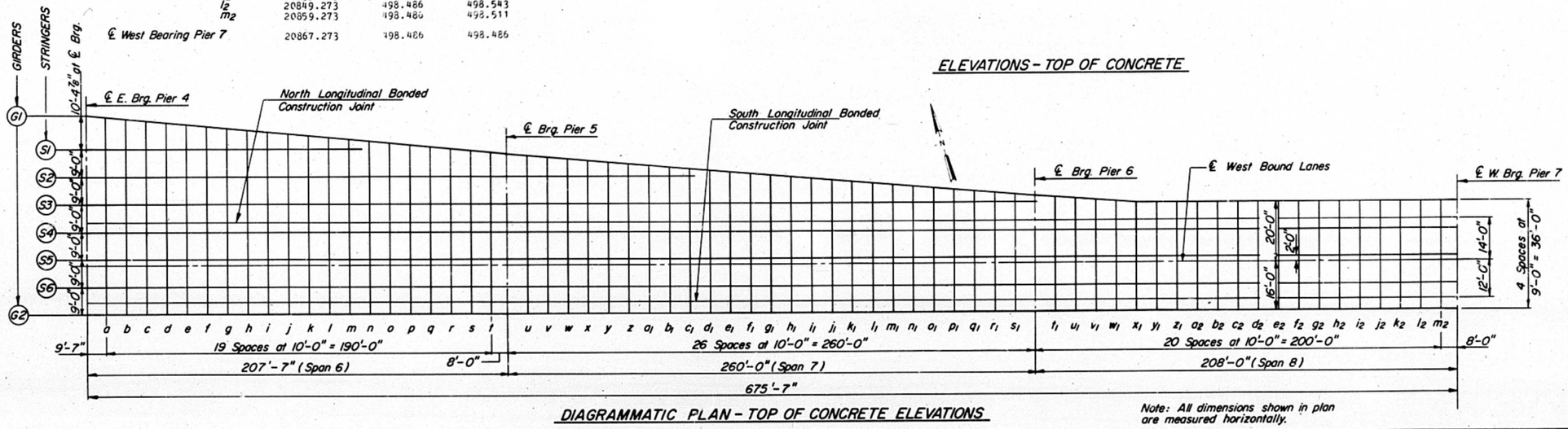
STATION	ELEV. A	ELEV.B
20191.690	499.261	499.288
20201.273	499.135	499.203
20211.273	499.020	499.129
20221.273	498.932	499.071
20231.273	498.850	499.017
20241.273	498.773	498.960
20251.273	498.704	498.909
20261.273	498.640	498.853
20271.273	498.596	498.814
20281.273	498.564	498.779
20291.273	498.536	498.745
20301.273	498.513	498.711
20311.273	498.496	498.678
20321.273	498.487	498.648
20331.273	498.486	498.623
20341.273	498.486	498.599
20351.273	498.486	498.575
20361.273	498.486	498.553
20371.273	498.486	498.535
20381.273	498.486	498.520
20391.273	498.486	498.513
20399.273	498.486	498.507
20409.273	498.486	498.509
20419.273	498.486	498.511
20429.273	498.486	498.518
20439.273	498.486	498.533
20449.273	498.486	498.547
20459.273	498.486	498.569
20469.273	498.486	498.591
20479.273	498.486	498.615
20489.273	498.486	498.638
20499.273	498.486	498.660
20509.273	498.486	498.674
20519.273	498.486	498.683
20529.273	498.486	498.692
20539.273	498.486	498.686
20549.273	498.486	498.679
20559.273	498.486	498.667
20569.273	498.486	498.647
20579.273	498.486	498.628
20589.273	498.486	498.605
20599.273	498.486	498.580
20609.273	498.486	498.556
20619.273	498.486	498.538
20629.273	498.486	498.518
20639.273	498.486	498.506
20649.273	498.486	498.498
20659.273	498.486	498.490

NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT

STATION	ELEV. A	ELEV.B
20191.690	499.129	499.155
20201.273	499.064	499.132
20211.273	498.939	499.048
20221.273	498.923	499.062
20231.273	498.853	499.020
20241.273	498.787	498.974
20251.273	498.725	498.930
20261.273	498.664	498.877
20271.273	498.638	498.857
20281.273	498.630	498.845
20291.273	498.623	498.833
20301.273	498.616	498.818
20311.273	498.613	498.797
20321.273	498.611	498.774
20331.273	498.611	498.750
20341.273	498.611	498.726
20351.273	498.611	498.702
20361.273	498.611	498.680
20371.273	498.611	498.662
20381.273	498.611	498.647
20391.273	498.611	498.640
20399.273	498.611	498.634
20409.273	498.611	498.636
20419.273	498.611	498.639
20429.273	498.611	498.646
20439.273	498.611	498.661
20449.273	498.611	498.675
20459.273	498.611	498.697
20469.273	498.611	498.719
20479.273	498.611	498.744
20489.273	498.611	498.767
20499.273	498.611	498.789
20509.273	498.611	498.803
20519.273	498.611	498.812
20529.273	498.611	498.821
20539.273	498.611	498.815
20549.273	498.611	498.808
20559.273	498.611	498.795
20569.273	498.611	498.776
20579.273	498.611	498.758
20589.273	498.611	498.735
20599.273	498.611	498.711
20609.273	498.611	498.687
20619.273	498.611	498.668
20629.273	498.611	498.648
20639.273	498.611	498.636
20649.273	498.611	498.628
20659.273	498.611	498.621
20669.273	498.611	498.621
20679.273	498.611	498.623
20689.273	498.611	498.633
20699.273	498.611	498.645
20709.273	498.611	498.662
20719.273	498.611	498.680
20729.273	498.611	498.700
20739.273	498.611	498.721
20749.273	498.611	498.738
20759.273	498.611	498.754
20769.273	498.611	498.765
20779.273	498.611	498.772
20789.273	498.611	498.773
20799.273	498.611	498.769
20809.273	498.611	498.760
20819.273	498.611	498.744
20829.273	498.611	498.726
20839.273	498.611	498.700
20849.273	498.611	498.673
20859.273	498.611	498.640
20867.273	498.611	498.614

Note:
Elev. A = Theoretical Grade Elevations
Elev. B = Theoretical Grade Elevations Adjusted For Dead Load Deflection.

ELEVATIONS - TOP OF CONCRETE



DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

Note: All dimensions shown in plan are measured horizontally.

TOP OF SLAB ELEVATIONS
SPANS 6, 7 & 8

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED W.D.L.
DRAWN R.J.F.
CHECKED W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

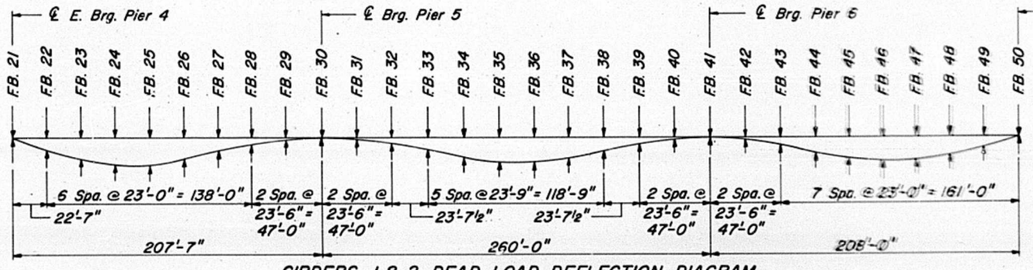
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(15B-1)-D	PEORIA & TAZEWELL	97	16
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 14 of 88

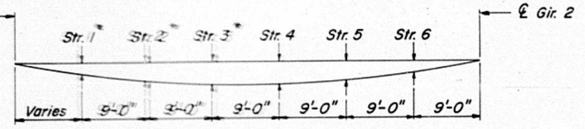
	STRINGER 4			STRINGER 5			STRINGER 6			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT			GIRDER 2		
	STATION	ELEV. A	ELEV.B	STATION	ELEV. A	ELEV.B	STATION	ELEV. A	ELEV.B	STATION	ELEV. A	ELEV.B	STATION	ELEV. A	ELEV.B
℄ East Bearing Pier 4	20191.690	499.091	499.117	20191.690	498.926	498.947	20191.690	498.761	498.772	20191.690	498.670	498.675	20191.690	498.590	498.596
a	20201.273	499.017	499.084	20201.273	498.875	498.937	20201.273	498.732	498.783	20201.273	498.653	498.697	20201.273	498.590	498.628
b	20211.273	498.961	499.070	20211.273	498.860	498.963	20211.273	498.731	498.821	20211.273	498.652	498.734	20211.273	498.569	498.645
c	20221.273	498.906	499.045	20221.273	498.852	498.985	20221.273	498.731	498.853	20221.273	498.652	498.765	20221.273	498.569	498.676
d	20231.273	498.851	499.018	20231.273	498.842	499.004	20231.273	498.731	498.882	20231.273	498.652	498.796	20231.273	498.569	498.707
e	20241.273	498.796	498.983	20241.273	498.832	499.014	20241.273	498.731	498.903	20241.273	498.652	498.817	20241.273	498.569	498.728
f	20251.273	498.741	498.946	20251.273	498.822	499.023	20251.273	498.731	498.922	20251.273	498.652	498.837	20251.273	498.569	498.748
g	20261.273	498.686	498.900	20261.273	498.812	499.022	20261.273	498.731	498.932	20261.273	498.652	498.846	20261.273	498.569	498.758
h	20271.273	498.668	498.887	20271.273	498.806	499.024	20271.273	498.731	498.938	20271.273	498.652	498.852	20271.273	498.569	498.764
i	20281.273	498.668	498.884	20281.273	498.806	499.021	20281.273	498.731	498.934	20281.273	498.652	498.849	20281.273	498.569	498.761
j	20291.273	498.668	498.879	20291.273	498.805	499.015	20291.273	498.731	498.928	20291.273	498.652	498.843	20291.273	498.569	498.755
k	20301.273	498.668	498.868	20301.273	498.804	499.004	20301.273	498.731	498.917	20301.273	498.652	498.831	20301.273	498.569	498.742
l	20311.273	498.668	498.852	20311.273	498.804	498.988	20311.273	498.731	498.901	20311.273	498.652	498.814	20311.273	498.569	498.726
m	20321.273	498.668	498.832	20321.273	498.804	498.967	20321.273	498.731	498.880	20321.273	498.652	498.794	20321.273	498.569	498.706
n	20331.273	498.668	498.808	20331.273	498.804	498.944	20331.273	498.731	498.857	20331.273	498.652	498.771	20331.273	498.569	498.683
o	20341.273	498.668	498.784	20341.273	498.804	498.921	20341.273	498.731	498.834	20341.273	498.652	498.748	20341.273	498.569	498.660
p	20351.273	498.668	498.760	20351.273	498.804	498.897	20351.273	498.731	498.810	20351.273	498.652	498.724	20351.273	498.569	498.636
q	20361.273	498.668	498.738	20361.273	498.804	498.875	20361.273	498.731	498.789	20361.273	498.652	498.703	20361.273	498.569	498.615
r	20371.273	498.668	498.720	20371.273	498.804	498.858	20371.273	498.731	498.772	20371.273	498.652	498.687	20371.273	498.569	498.599
s	20381.273	498.668	498.705	20381.273	498.804	498.843	20381.273	498.731	498.758	20381.273	498.652	498.672	20381.273	498.569	498.584
t	20391.273	498.668	498.698	20391.273	498.805	498.836	20391.273	498.731	498.749	20391.273	498.652	498.664	20391.273	498.569	498.575
℄ Bearing Pier 5	20399.273	498.668	498.692	20399.273	498.805	498.830	20399.273	498.731	498.743	20399.273	498.652	498.657	20399.273	498.569	498.569
u	20409.273	498.668	498.695	20409.273	498.805	498.833	20409.273	498.731	498.746	20409.273	498.652	498.661	20409.273	498.569	498.572
v	20419.273	498.668	498.697	20419.273	498.805	498.836	20419.273	498.731	498.750	20419.273	498.652	498.664	20419.273	498.569	498.576
w	20429.273	498.668	498.704	20429.273	498.804	498.844	20429.273	498.731	498.758	20429.273	498.652	498.672	20429.273	498.569	498.584
x	20439.273	498.668	498.719	20439.273	498.804	498.859	20439.273	498.731	498.773	20439.273	498.652	498.688	20439.273	498.569	498.600
y	20449.273	498.668	498.734	20449.273	498.804	498.873	20449.273	498.731	498.788	20449.273	498.652	498.703	20449.273	498.569	498.616
z	20459.273	498.668	498.755	20459.273	498.804	498.895	20459.273	498.731	498.810	20459.273	498.652	498.725	20459.273	498.569	498.638
g_1	20469.273	498.668	498.778	20469.273	498.804	498.917	20469.273	498.731	498.833	20469.273	498.652	498.748	20469.273	498.569	498.661
b_1	20479.273	498.668	498.803	20479.273	498.804	498.942	20479.273	498.731	498.857	20479.273	498.652	498.772	20479.273	498.569	498.685
c_1	20489.273	498.668	498.826	20489.273	498.804	498.966	20489.273	498.731	498.880	20489.273	498.652	498.794	20489.273	498.569	498.706
d_1	20499.273	498.668	498.848	20499.273	498.804	498.988	20499.273	498.731	498.902	20499.273	498.652	498.817	20499.273	498.569	498.728
e_1	20509.273	498.668	498.862	20509.273	498.804	499.002	20509.273	498.731	498.917	20509.273	498.652	498.831	20509.273	498.569	498.743
f_1	20519.273	498.668	498.871	20519.273	498.804	499.012	20519.273	498.731	498.927	20519.273	498.652	498.841	20519.273	498.569	498.753
g_1	20529.273	498.668	498.880	20529.273	498.804	499.021	20529.273	498.731	498.936	20529.273	498.652	498.851	20529.273	498.569	498.763
h_1	20539.273	498.668	498.874	20539.273	498.804	499.014	20539.273	498.731	498.930	20539.273	498.652	498.845	20539.273	498.569	498.758
i_1	20549.273	498.668	498.867	20549.273	498.804	499.007	20549.273	498.731	498.924	20549.273	498.652	498.839	20549.273	498.569	498.752
j_1	20559.273	498.668	498.855	20559.273	498.804	498.995	20559.273	498.731	498.912	20559.273	498.652	498.828	20559.273	498.569	498.742
k_1	20569.273	498.668	498.835	20569.273	498.804	498.976	20569.273	498.731	498.893	20569.273	498.652	498.809	20569.273	498.569	498.723
l_1	20579.273	498.668	498.817	20579.273	498.804	498.959	20579.273	498.731	498.875	20579.273	498.652	498.791	20579.273	498.569	498.704
m_1	20589.273	498.668	498.795	20589.273	498.804	498.937	20589.273	498.731	498.853	20589.273	498.652	498.768	20589.273	498.569	498.681
n_1	20599.273	498.668	498.770	20599.273	498.804	498.912	20599.273	498.731	498.829	20599.273	498.652	498.744	20599.273	498.569	498.657
o_1	20609.273	498.668	498.746	20609.273	498.804	498.888	20609.273	498.731	498.805	20609.273	498.652	498.721	20609.273	498.569	498.634
p_1	20619.273	498.668	498.727	20619.273	498.804	498.869	20619.273	498.731	498.787	20619.273	498.652	498.703	20619.273	498.569	498.616
q_1	20629.273	498.668	498.708	20629.273	498.804	498.850	20629.273	498.731	498.767	20629.273	498.652	498.684	20629.273	498.569	498.597
r_1	20639.273	498.668	498.695	20639.273	498.804	498.838	20639.273	498.731	498.756	20639.273	498.652	498.672	20639.273	498.569	498.585
s_1	20649.273	498.668	498.688	20649.273	498.805	498.831	20649.273	498.731	498.749	20649.273	498.652	498.664	20649.273	498.569	498.577
℄ Bearing Pier 6	20659.273	498.668	498.681	20659.273	498.805	498.825	20659.273	498.731	498.742	20659.273	498.652	498.657	20659.273	498.569	498.569
t_1	20669.273	498.668	498.682	20669.273	498.805	498.826	20669.273	498.731	498.743	20669.273	498.652	498.659	20669.273	498.569	498.571
u_1	20679.273	498.668	498.683	20679.273	498.805	498.827	20679.273	498.731	498.744	20679.273	498.652	498.660	20679.273	498.569	498.574
v_1	20689.273	498.668	498.694	20689.273	498.805	498.838	20689.273	498.731	498.755	20689.273	498.652	498.672	20689.273	498.569	498.585
w_1	20699.273	498.668	498.705	20699.273	498.805	498.849	20699.273	498.731	498.767	20699.273	498.652	498.684	20699.273	498.569	498.597
x_1	20709.273	498.668	498.722	20709.273	498.805	498.866	20709.273	498.731	498.784	20709.273	498.652	498.701	20709.273	498.569	498.614
y_1	20719.273	498.668	498.740	20719.273	498.805	498.884	20719.273	498.731	498.802	20719.273	498.652	498.719	20719.273	498.569	498.632
z_1	20729.273	498.668	498.760	20729.273	498.805	498.904	20729.273	498.731	498.823	20729.273	498.652	498.739	20729.273	498.569	498.653
a_2	20739.273	498.668	498.781	20739.273	498.805	498.925	20739.273	498.731	498.844	20739.273	498.652	498.760	20739.273	498.569	498.674
b_2	20749.273	498.668	498.798	20749.273	498.805	498.942	20749.273	498.731	498.861	20749.273	498.652	498.777	20749.273	498.569	498.691
c_2	20759.273	498.668	498.814	20759.273	498.805	498.958	20759.273	498.731	498.877	20759.273	498.652	498.793	20759.273	498.569	498.707
d_2	20769.273	498.668	498.824	20769.273	498.805	498.968	20769.273	498.731	498.887	20769.273	498.652	498.804	20769.273	498.569	498.717
e_2	20779.273	498.668	498.832	20779.273	498.805	498.976	20779.273	498.731	498.895	20779.273	498.652	498.811	20779.273	498.569	498.725
f_2	20789.273	498.668	498.833	20789.273	498.805	498.977	20789.273	498.731	498.896	20789.273	498.652	498.812	20789.273	498.569	498.726
g_2	20799.273	498.668	498.828	20799.273	498.805	498.972	20799.273	498.731	498.891	20799.273	498.652	498.808	20799.273	498.569	498.721
h_2	20809.273	498.668	498.819	20809.273	498.804	498.963	20809.273	498.731	498.882	20809.273	498.652	498.799	20809.273	498.569	498.712
i_2	20819.273	498.668	498.804	20819.273	498.804	498.948	20819.273	498.731	498.867	20819.273	498.652	498.783	20819.273	498.569	498.697
j_2	20829.273	498.668	498.785	20829.273	498.804	498.930	20829.273	498.731	498.848	20829.273	498.652	498.765	20829.273	498.569	498.678
k_2	20839.273	498.668	498.760	20839.273	498.805	498.906	20839.273	498.731	498.823	20839.273	498.652	498.739	20839.273	498.569	498.653
l_2	20849.273	498.668	498.733	20849.273	498.805	498.878	20849.273	498.731	498.796	20849.273	498.652	498.712	20849.273	498.569	498.626
m_2	20859.273	498.668	498.698	20859.273	498.809	498.842	20859.273	498.731	498.761	20859.273	498.652	498.679	20859.273	498.569	498.594
℄ West Bearing Pier 7	20867.273	498.668	498.672	20867.273	498.809	498.814	20867.273	498.731	498.735	20867.273	498.652	498.654	20867.273	498.569	498.569

ELEVATIONS - TOP OF CONCRETE



GIRDERS 1 & 2 DEAD LOAD DEFLECTION DIAGRAM
(Includes Weight of Concrete Slab)

Floor Beam No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Deflection (Inches)	0	1 1/16	1 7/8	2 5/16	2 3/8	2	1 7/16	3/4	1/4	0	1/8	1/2	1 1/8	1 13/16	2 1/4	2 5/16	2	1 3/8	11/16	3/16	0	1/8	7/16	1	1 9/16	1 7/8	1 7/8	1 1/2	7/8	0



FLOOR BEAM DEFLECTION DIAGRAM
* Str. 1, Str. 2, & Str. 3 end at the various floor beams indicated below.

Floor Beam No.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Deflection (Inches)																														
Str. 1	1/8	3/16	1/8	1/8	1/16	1/16	1/16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Str. 2	1/4	5/16	1/4	1/4	3/16	3/16	3/16	1/8	1/8	1/8	1/16	1/16	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Str. 3	5/16	3/8	5/16	5/16	1/4	5/16	1/4	1/4	1/4	3/16	3/16	3/16	1/8	1/8	1/16	1/16	1/16	1/16	–	–	–	–	–	–	–	–	–	–	–	–
Str. 4	5/16	3/8	5/16	5/16	1/4	5/16	5/16	5/16	1/4	1/4	1/4	1/4	1/4	1/4	3/16	3/16	3/16	3/16	1/8	3/16	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/16
Str. 5	1/4	5/16	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	3/16	3/16	3/16	3/16	1/8	3/16	3/16	1/8	1/8	1/8	1/8	1/8	1/8	3/16	1/16	
Str. 6	1/8	3/16	3/16	1/8	1/8	3/16	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/16		

Note : The girder deflections and the floor beam deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in "Elevations – Top of Concrete" tables.

Note:
Elev. A = Theoretical Grade Elevations
Elev. B = Theoretical Grade Elevations Adjusted For Dead Load Deflection.
For notes on method of determining fillet heights "t" see sheet 30 of 88.

TOP OF SLAB ELEVATIONS SPANS 6, 7 & 8

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	S.C.O.	HANSON ENGINEERS INCORPORATED	FILE NO. 74001
CHECKED	W.D.L.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 8-22-80
DRAWN	R.J.E.		
CHECKED	W.D.L.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Bar Size	Min. Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.:49	(15B-1) -D	Peoria & Tazewell	97	17
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 15 of 88

679 - #4 d125 bars @ 12" cts. Outside Face Both Curbs.
741 - #5 d126(E) bars @ 11" cts. Inside Face Each Curb.

℄ Pier 4 Footing

⊥ to Face of Curb (typ.)

℄ Drainage Scupper (Typical)

50'-9 3/4" | 20'-11 5/8" | 18'-11 5/8" | 19'-11 5/8" | 19'-11 5/8" | 9'-11 3/16" | 18'-11 5/8" | 23'-11 9/16" | 18'-11 5/8" | 6'-3 1/4"

Drainage Scupper Spacings (along ℄ Survey)

2x6-#8 b124 bars Top of curb (Typ. ea. curb)
1x6-#5 b130 bars Bott. of curb (Typ. ea. curb)
1x6-#5 b130(E) bars Bott. of curb (Typ. ea. curb)

a140(E) (typ.)

℄ Light Pedestal
℄ Pier 5
2-#8 b124 bars Top of curb (Typ. ea. curb)
1x2-#5 b128 & #5 b128(E) bars Bott. of curb (Typ. ea. curb)
1'-3" | 1'-3" | 10" | 21'-4"
d128 | d127

67-#5 b128(E) bars @ 12" cts. Top
33-#5 d128(E) bars @ 6" cts. Space between 5 bars
68-#5 b125 bars @ 10" cts. Bott. (10 @ fanned bay)
65-#5 b128(E) bars @ 12" cts. Top
65-#5 b125 bars @ 10" cts. Bott. (13 @ fanned bay)
66-#5 b128(E) bars @ 12" cts. Top
66-#5 b125 bars @ 10" cts. Bott. (13 @ fanned bay)
64-#5 b128(E) bars @ 12" cts. Top
62-#5 b125 bars @ 10" cts. Bott. (14 @ fanned bay)
63-#5 b128(E) bars @ 12" cts. Top
60-#5 b125 bars @ 10" cts. Bott. (12 @ fanned bay)
61-#5 b128(E) bars @ 12" cts. Top
59-#5 b128(E) bars @ 12" cts. Top
58-#5 b125 bars @ 10" cts. Bott. (10 @ fanned bay)
58 x 3-#6 b136(E) bars @ 12" cts. Top of Slab over Pier 5
57-#5 b128(E) bars @ 12" cts. Top
56-#5 b125 bars @ 10" cts. Bott. (13 @ fanned bay)
55-#5 b128(E) bars @ 12" cts. Top
55-#5 b125 bars @ 10" cts. Bott. (7 @ fanned bay)

70'-5 3/4" c. to c. deck
51'-5 3/8"
19'-0"
1'-0" | 7" | 10"

F | F | G | G

℄ E. Brg. Pier 4 Sta. 201+91.69
107-#5 a128(E) & a127(E) @ 4" cts. Top - lap between S3 & S4
68-#5 a130 & a125 @ 6 2/3 cts. Bott. Bars - lap over S4

110 x 2-#5 a128(E) @ 4" cts. Top - lap between S3 & S4
68-#5 a130 & a128 @ 6 2/3 cts. Bott. Bars - lap over S4

110-#5 a128(E) & a129(E) @ 4" cts. Top - lap between S3 & S4
68-#5 a130 & a127 @ 6 2/3 cts. Bott. Bars - lap over S4

110-#5 a128(E) & a130(E) @ 4" cts. Top - lap between S3 & S4
68-#5 a130 & a128 @ 6 2/3 cts. Bott. Bars - lap over S4

110-#5 a128(E) & a131(E) @ 4" cts. Top - lap between S3 & S4
68-#5 a130 & a129 @ 6 2/3 cts. Bott. Bars - lap over S4

110-#5 a128(E) & a132(E) @ 4" cts. Top - lap between S3 & S4
68 x 2-#5 a130 @ 6 2/3 cts. Bott. Bars - lap over S4

℄ Rdwy. N. Bd. Lane
40'-0 1/2" c. to c. deck
59'-0 1/2" c. to c. deck
19'-0"

℄ Pier 5 Sta. 203+99.27

2x7-#5 b125 bars Bott. of Slab (Typ. Ea. Side)
3x7-#5 b125(E) bars Top of Slab (Typ. Ea. Side)

13 - Floor Drain Spaces @ 15'-0" = 195'-0"

7'-5" | 7'-5"

4"x12" Floor Drain Spacing @ South Side of Span Only (See Sht. 18 of 88 for Length & Details)

1'-3 1/4" | 11 3/4" @ 50°F

℄ E. Brg. Pier 4

677'-9 3/4" end to end of deck

170'-4 1/4"

42'-9" | 38'-6"

209'-10"

1013 - #6 a139(E) bars @ 8" cts. Lap to alternate a (E) bars (Typ. Ea. Side)

Const. Jts. in curb to top of slab (1/8 Alum. Sheets) typ.

PLAN - SPAN 6

Out to out of deck varies from 70'-5 3/4" to 42'-0"
Face to face of parapet varies from 68'-5 3/4" to 40'-0"
Varies from 51'-5 3/8" to 23'-0"

1'-0" | 7" | 5'-5" | 16'-0" Lane Width (RAMP 'F') | Median Varies | 12'-0" Lane Width | 12'-0" Lane Width | 5'-5" | 7" | 1'-0"

19'-0"

Superelevation varies throughout cross section. See Sht. 5 of 88 for superelevation details.

(Typ.) 2" | 7 3/4" | 2 1/4"

d124(E) | d128 | a139(E) | 2"

a127(E) | b125(E) | a125 | 7 3/4" Slab | 2 1/4" (1 1/2")

b128(E) | 3" (Typ.) | 1"℄ | a128(E) | b125(E) | a130 | Longitudinal Bonded Construction Jt. - do not edge - (Optional) | 2'-0" | Profile grade | b130(E) | b125(E)

℄ Rdwy. W. Bd. Lanes

e bars | b124 | b130 | b128(E) | b128

See Plan - Span 6 for number of fanned bars. Varies - min. 2'-1 5/8" max. 2'-8 3/8"

10-#5 b125 bars @ 10" cts. Typ. between stringers

8-#5 b125 bars @ 10" cts. Typ. between stringers & girders

9" | 9" | 9" | 2'-5"

℄ Right angles to fascia

3'-0" | Varies | 9'-0" | 9'-0" | 9'-0" | 9'-0" | 2'-0" | 7'-0" | 9'-0" | 3'-0"

S1 | S2 | S3 | S4 | S5 | S6

G1 | G2

Note: All dimensions shown are measured horizontally.

CROSS SECTION A-A
(Looking East)

TOTAL CROWN DROP

	North of ℄ Rdwy.	South of ℄ Rdwy.
℄ E. Brg. Pier 4	7/8"	3 3/8"
℄ Pier 5	8 3/8"	3 5/8"

Bars indicated thus: 20 x 3-#5 etc indicates 20 lines of bars with 3 lengths per line.
For Section F-F see Sheet 45 of 88.
For Section G-G see Sheet 16 of 88.
For Light Pedestal Details see Sht. 3 of 88.
For Drainage Scupper Details see Sheets 79 and 80.
For Reinforcement & configuration of slab @ Scupper see Sheet 3 of 88.
For Details of 4"x12" Floor Drain see Sheet 3 & 18 of 88.
Reinforcement Bars Designated (E) shall be epoxy coated. See Special Provisions.

SUPERSTRUCTURE
SPAN 6

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED S.C.Q.
DRAWN P.M.
CHECKED W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS | PEORIA, ILLINOIS

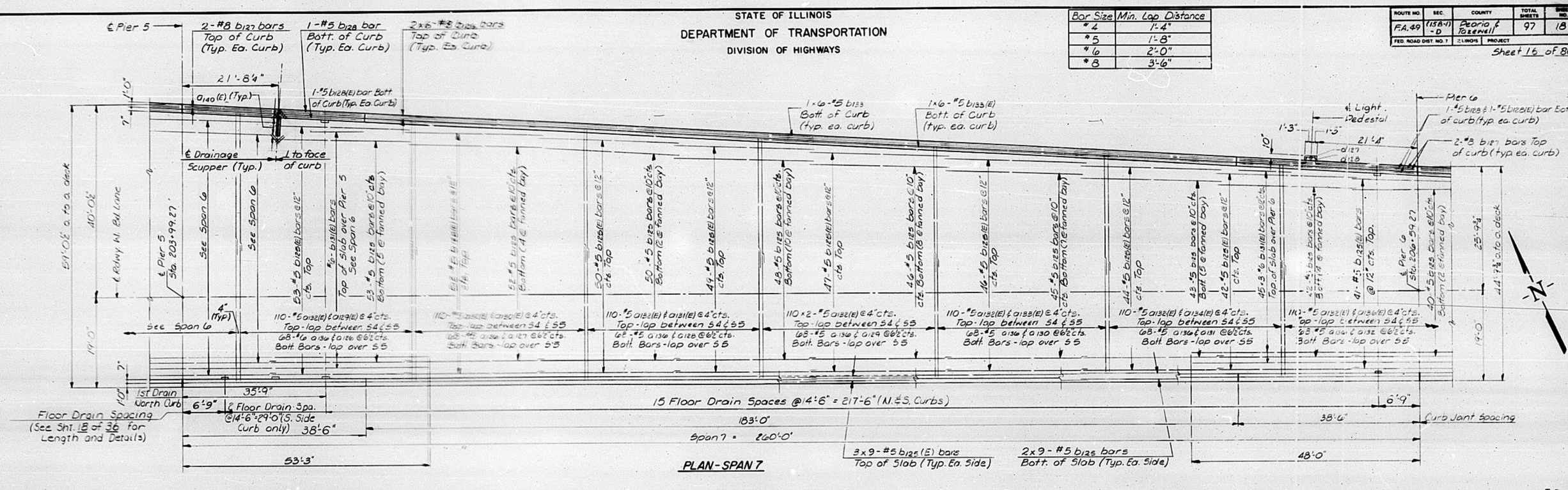
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

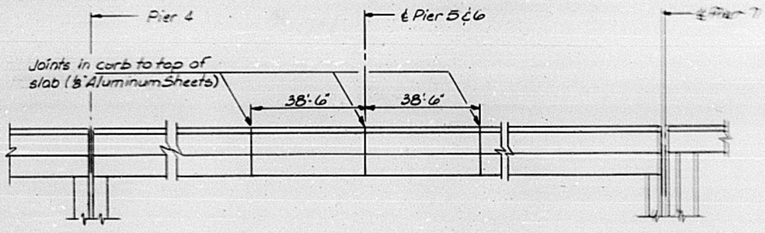
Bar Size	Min. Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(15B-1) -D	Peoria & Tazewell	97	18
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

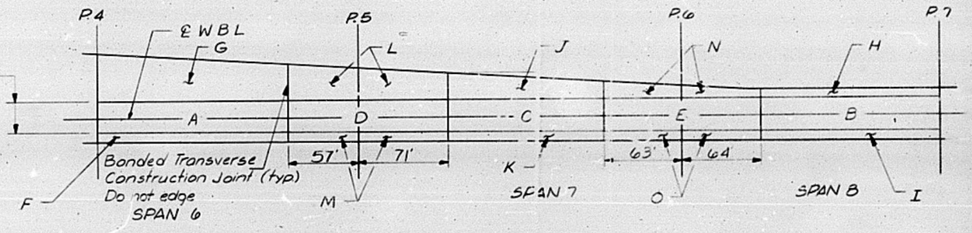
Sheet 16 of 88

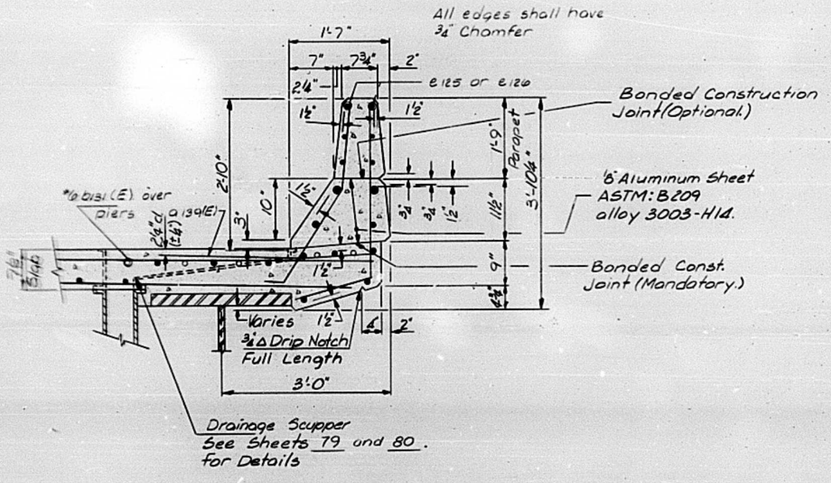


PLAN - SPAN 7



PLAN OF CURB JOINTS





CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete

SLAB POURING SEQUENCE

Note: The concrete floor slab shall be poured in one continuous operation between construction joints. The pouring shall be done in the following order: 1) A-B, 2) C, 3) F-G, 4) H-I, 5) J-K, 6) D-E, 7) L-M, 8) N-O. DLM & ENO must not be poured before AFG, BHI, & CJK. If the area C is not poured on the same day as A and B, then there should be a seven (7) day time lapse between pours.

SUPERSTRUCTURE
SPAN 7

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED S.C.O.
DRAWN P.M.
CHECK W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

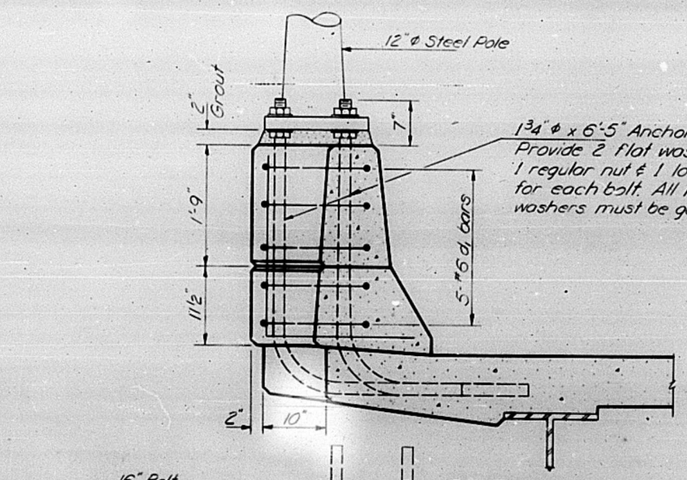
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

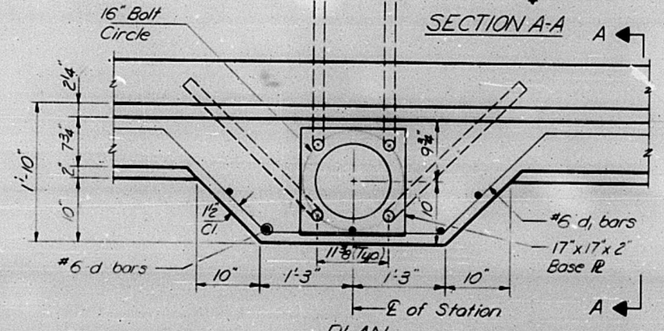
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 49	(158-1) -D	Peoria Tazewell	97	18-1
PROJ. ROAD DIST. NO. 7				

SHEET NO. 16-1
88 SHEETS

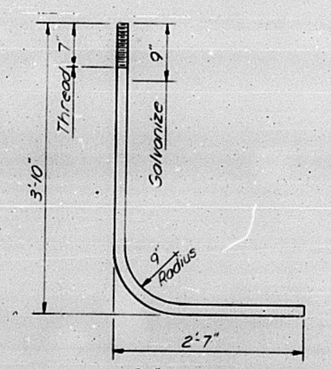
Note: Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump, cost incidental to pole.



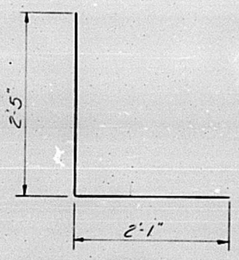
SECTION A-A



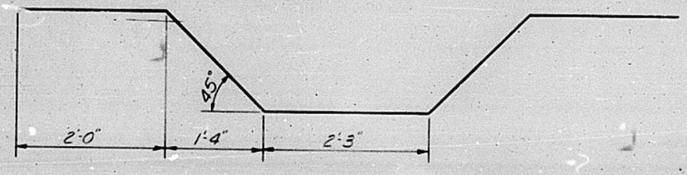
PLAN



1 3/4" ϕ ANCHOR BOLT
fy (min.) = 55,000 psi



BAR d



BAR d1

DESIGNED	Marvin Lindsey
CHECKED	L. Warnken
DRAWN	L. Warnken
CHECKED	Marvin Lindsey

EXAMINED	19
PASSED	BUREAU OF BRIDGES AND STRUCTURE ENGINEERING
APPROVED	BUREAU OF BRIDGES
	BUREAU OF HIGHWAYS

AS REVISED

LOCATIONS (2 FOUNDATIONS @ EACH STATION)
Station 206+00 West-Bound
Station 213+00 West Bound
Station 230+60 West Bound

SIGN POST MOUNT DETAILS
McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC (158-1)-D
PEORIA & TAZEWELL COUNTIES

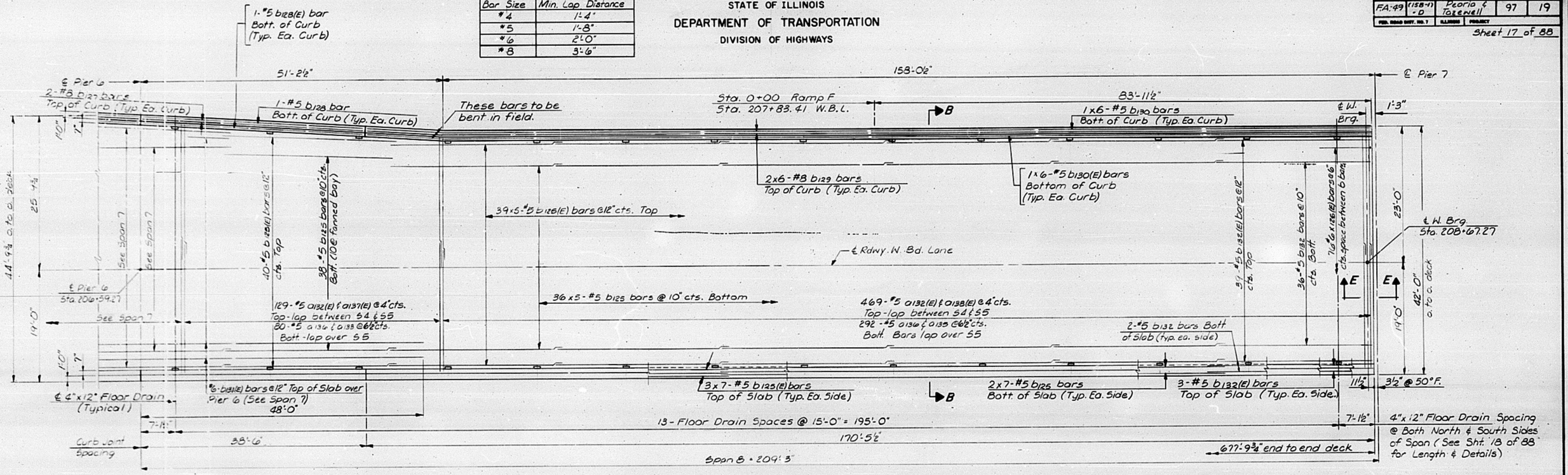
AS Revised 5 27-81 L.W.

Bar Size	Min. Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

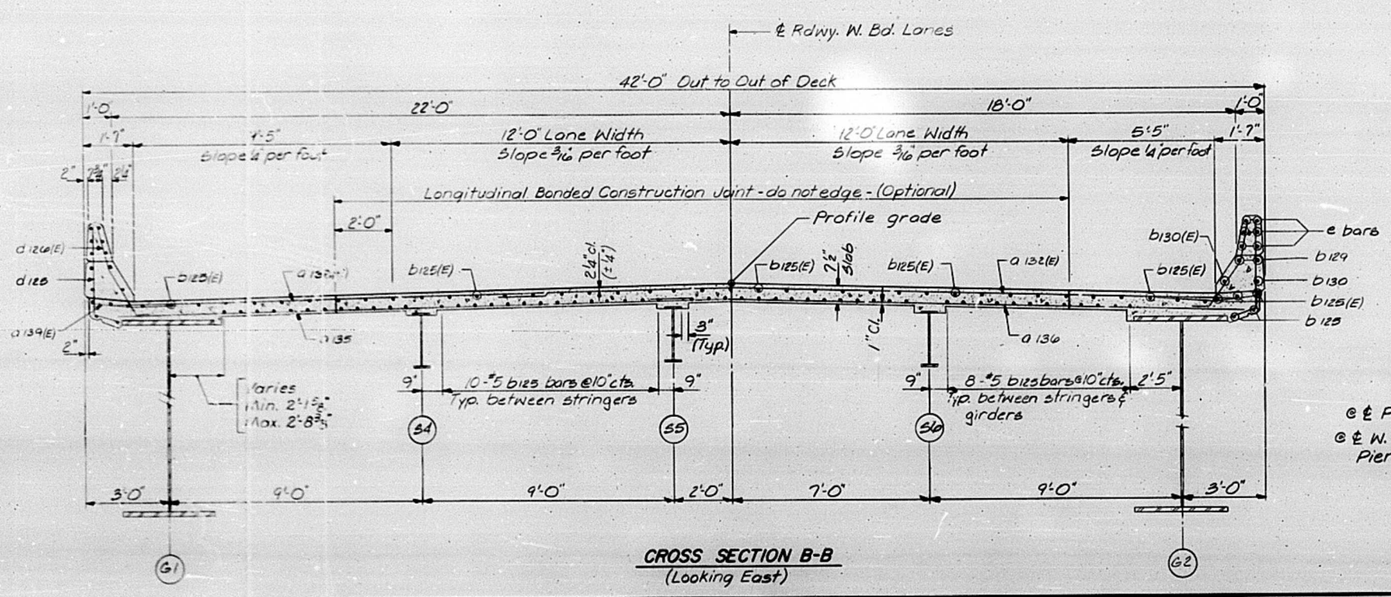
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA:49	(158-1) -D	Peoria & Tazewell	97	19
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 17 of 88



PLAN-SPAN 8



CROSS SECTION B-B
(Looking East)

TOTAL CROWN DROP

	North of ℄ Rdwy.	South of ℄ Rdwy.
@ ℄ Pier 6	5⅜"	3⅝"
@ ℄ W. Brg. Pier 7	4⅝"	3⅝"

SUPERSTRUCTURE
SPAN 8

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

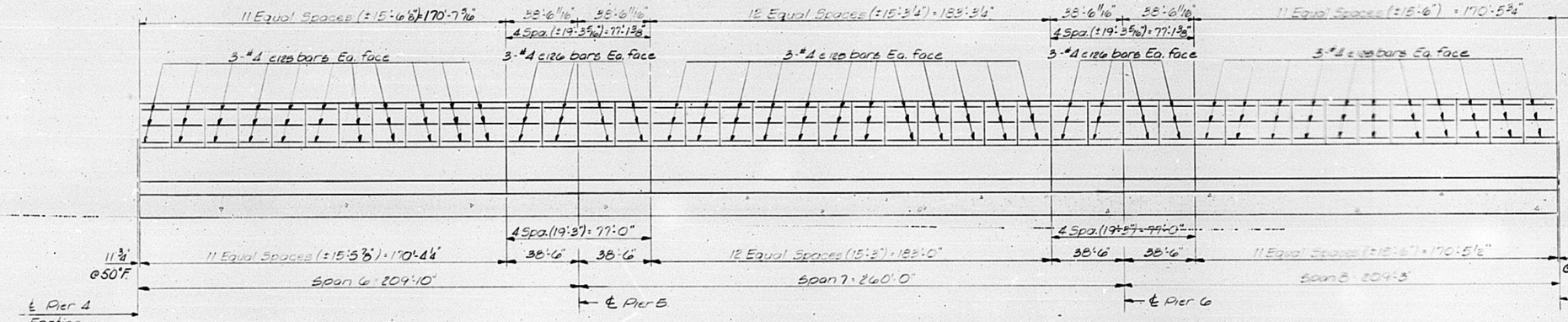
DESIGNED	W.D.L.	FILE NO.	74001
CHECKED	S.C.Q.	DATE	8-22-80
DRAWN	P.M.		
CHECKED	W.D.L.		

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1)-D	Peoria & Tazewell	97	20
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT:		

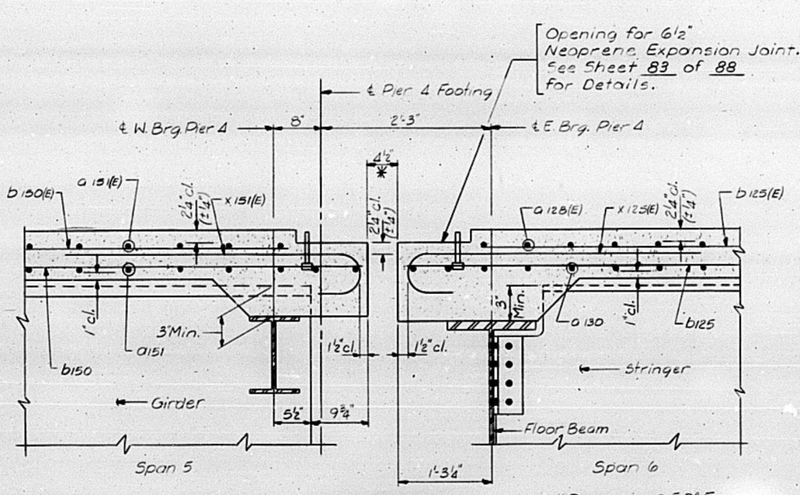
Sheet 18 of 88



Notes:
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.
For Section C-C see Sheet 3 of 88.
For Section D-D see Sheet 3 of 88.

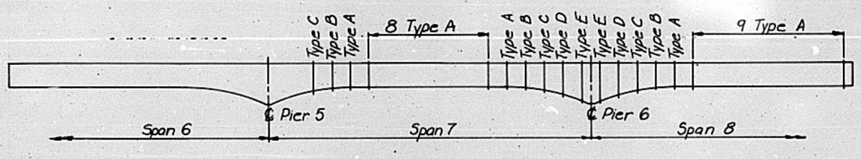
ELEVATION-CURB & PARAPET

Note: All dimensions shown are measured horizontally.

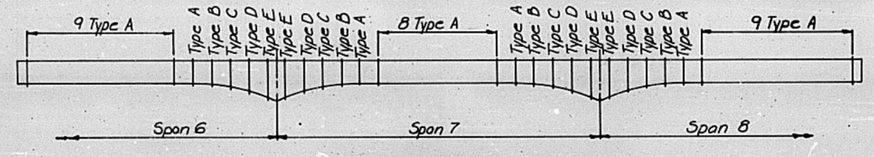


SECTION G-G
(From Sheets 10 & 15.)

* Dimension @ 50°F

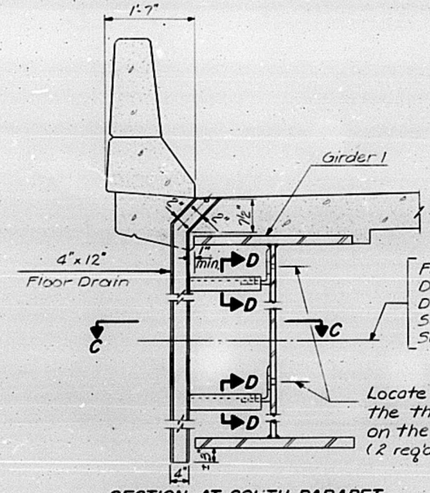


ELEVATION NEAR GIRDER 1



ELEVATION NEAR GIRDER 2

DIAGRAM OF DOWNSPOUT LENGTHS

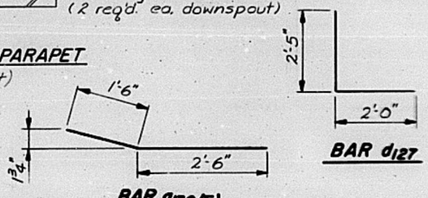


SECTION AT SOUTH PARAPET
(Looking West)

4" x 12" FLOOR DRAIN DOWNSPOUT LENGTHS (SPANS 6,7&8)

Type	Length	No.
A	10'-9"	50
B	11'-4"	7
C	12'-6"	7
D	14'-2"	6
E	16'-6"	6

Note: Drains shall be located clear of all diaphragms, floor beams, lateral bracing & drainage scuppers



SPANS 6,7&8 BILL OF MATERIAL

Bar	No.	Bar	No.	Size	Length	Shape
		a126	68	#5	40'-0"	
		a126	136	#5	38'-0"	
a127(E)	107	a127	136	#5	36'-0"	
a128(E)	767	a128	136	#5	34'-9"	
a129(E)	220	a129	136	#5	32'-6"	
a130(E)	220	a130	544	#5	30'-6"	
a131(E)	220	a131	68	#5	28'-6"	
a132(E)	1588	a132	68	#5	26'-0"	
a133(E)	110	a133	80	#5	24'-6"	
a134(E)	110			#5	22'-6"	
		a136	292	#5	21'-6"	
a136(E)	110	a136	848	#5	20'-6"	
a137(E)	129			#5	18'-6"	
a138(E)	469			#5	16'-3"	
a139(E)	2026			#6	4'-0"	
a140(E)	120			#5	2'-0"	
b125(E)	1287	b125	1217	#5	30'-6"	
b126(E)	12	b126	12	#5	35'-1"	
		b127	16	#8	33'-3"	
b128(E)	16	b128	16	#5	19'-11"	
		b129	48	#8	31'-4"	
b130(E)	24	b130	24	#5	29'-7"	
b131(E)	309			#6	33'-2"	
b132(E)	45	b132	40	#5	22'-0"	
		b133	24	#8	33'-3"	
		d125	1358	#4	4'-6"	
d126(E)	1482			#5	3'-11"	
		d127	6	#6	4'-5"	
		d128	10	#6	8'-11"	
		e125	408	#4	15'-0"	
		e126	96	#4	19'-0"	
				#6	4'-5"	
x125(E)	209			#5	3'-11"	
Reinforcement Bars (Epoxy Coated)					Lbs.	193,090
Reinforcement Bars					Lbs.	129,230
Class X Concrete					Cu. Yds.	4209.3
Neoprene Expansion Joint (6½")					Lin. Ft.	69.3
Floor Drains					Each	76
Protective Coat					Sq. Yds.	43563

SUPERSTRUCTURE DETAILS SPANS 6,7,8

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

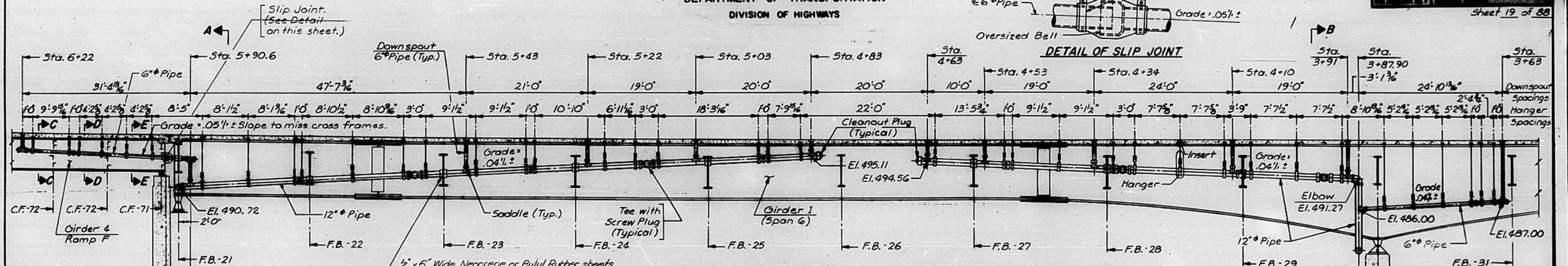
DESIGNED W.D.L.
CHECKED S.C.O.
DRAWN P.M.
CHECKED W.D.L.

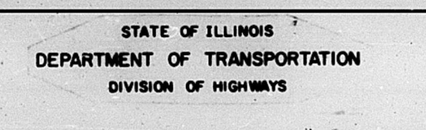
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

PROJ. NO. 74001
DATE 8-22-80

Rev. 12-30-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

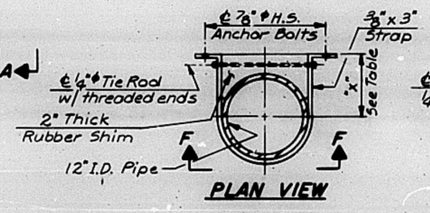




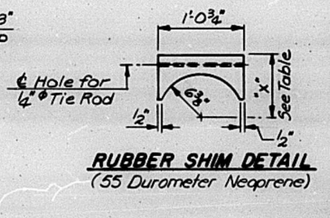
DETAIL OF SLIP JOINT

SECTIONAL ELEVATION

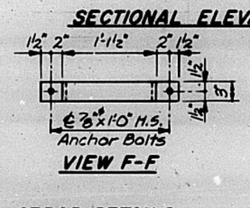
Note: All dimensions shown are measured horizontally.



PLAN VIEW



RUBBER SHIM DETAIL
(55 Durometer Neoprene)



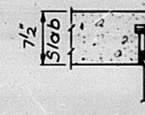
VIEW F-F

TABLE FOR DIMENSION "X"	
Strap	"x"
Type 1	1'-5"
Type 2	10"
Type 3	11½"
Type 4	10¼"
Type 5	7½"

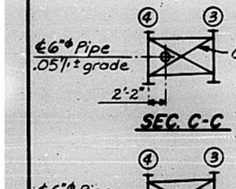
NOTES

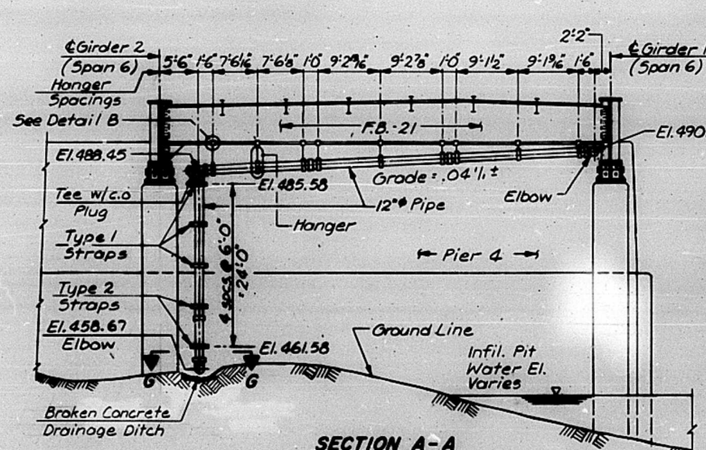
Pay Item Drainage System Complete shall include providing and installing 12"ϕ pipe, 6"ϕ pipe, saddles, elbows, tees, sleeves, cleanouts, inserts, hangers, straps, and all other necessary items to complete the underdeck drainage.
c.o. = cleanout.

All steel hardware such as hangers, straps and bolts shall be galvanized in accordance with AASHTO - M232.

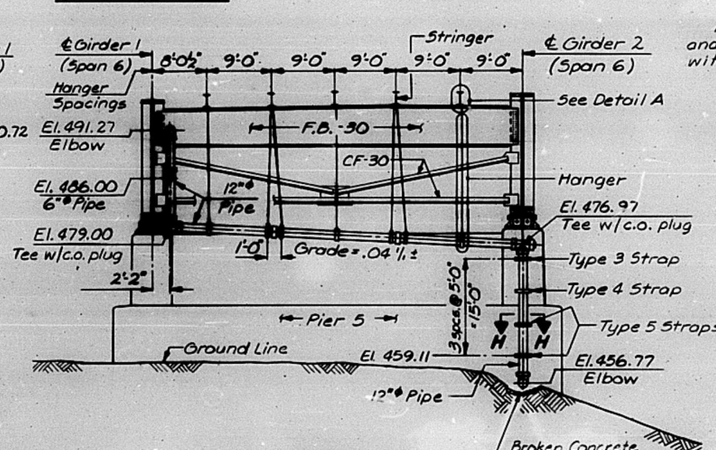


INSERT DETAIL

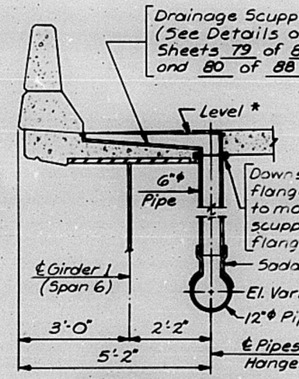




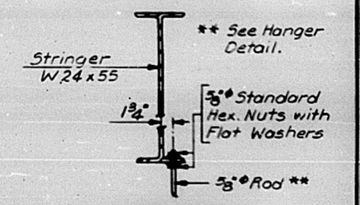
SECTION A-A



SECTION B-B



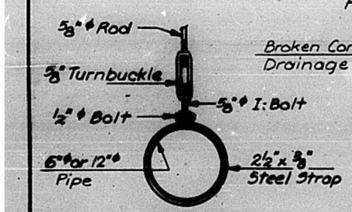
SECTION THRU CURB
* Applies only to scuppers shown on this sheet.



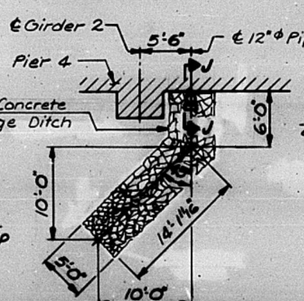
DETAIL A

NOTES

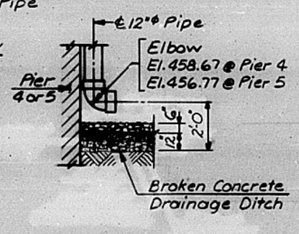
All structural steel shall meet the requirements of A.A.S.H.T.O. M-183 unless otherwise noted.
All High Strength Bolts and Anchor Bolts shall meet the requirements of A.A.S.H.T.O. M-164 unless otherwise noted.
Broken Concrete Drainage Ditches shall be placed as shown or as directed by the Engineer.



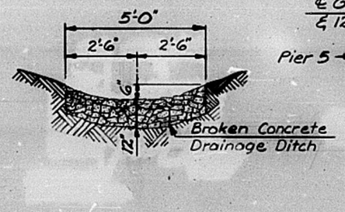
HANGER DETAIL



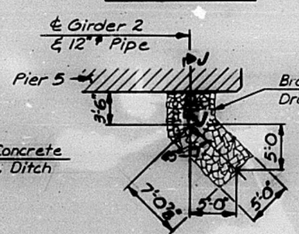
SECTION G-G



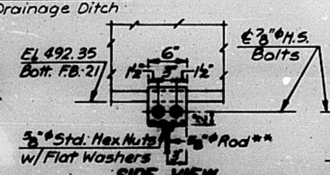
SECTION J-J



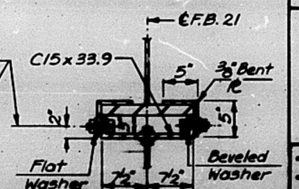
SECTION THRU DRAINAGE DITCH



SECTION H-H



SIDE VIEW



SEC. THRU F.B.-21

DETAIL B

DRAINAGE SYSTEM
SPAN 6

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

I.S.C.O.	HANSON ENGINEERS INCORPORATED SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	FILE NO. 74001
W.D.L.		
D.A.N.		DATE 8-22-80
W.D.L.		

Rev. 12-30-80

Rev. 12/2/81

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-49	(158-1)-D	PEORIA & TAZEWELL	97	22
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 20 of 80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GIRDER 1

	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ East Bearing Pier 7	208+69.770	498.486	498.486
a	208+79.770	498.486	498.523
b	208+89.770	498.486	498.559
c	208+99.770	498.486	498.596
d	209+09.770	498.486	498.633
e	209+19.770	498.486	498.669
f	209+29.770	498.486	498.682
g	209+39.770	498.486	498.689
h	209+49.770	498.486	498.696
i	209+59.770	498.486	498.703
j	209+69.770	498.486	498.710
k	209+79.770	498.486	498.699
l	209+89.770	498.486	498.677
m	209+99.770	498.486	498.655
n	210+09.770	498.486	498.632
o	210+19.770	498.486	498.610
p	210+29.770	498.486	498.588
q	210+39.770	498.486	498.567
r	210+49.770	498.486	498.546
s	210+59.770	498.486	498.524
t	210+69.770	498.486	498.503
℄ Bearing Pier 8	210+77.770	498.486	498.486
u	210+87.770	498.486	498.486
v	210+97.770	498.486	498.486
w	211+07.770	498.486	498.487
x	211+17.770	498.486	498.487
y	211+27.770	498.486	498.487
z	211+37.770	498.486	498.489
a_1	211+47.770	498.486	498.496
b_1	211+57.770	498.486	498.504
c_1	211+67.770	498.486	498.511
d_1	211+77.770	498.486	498.518
e_1	211+87.770	498.486	498.526
f_1	211+97.770	498.486	498.527
g_1	212+07.770	498.499	498.533
h_1	212+17.770	498.519	498.546
i_1	212+27.770	498.550	498.569
j_1	212+37.770	498.591	498.602
k_1	212+47.770	498.641	498.645
l_1	212+57.770	498.701	498.702
m_1	212+67.770	498.771	498.772
n_1	212+77.770	498.850	498.851
o_1	212+87.770	498.940	498.940
p_1	212+97.770	499.039	499.039
℄ Bearing Pier 9	213+09.520	499.168	499.168
q_1	213+19.520	499.289	499.310
r_1	213+29.520	499.419	499.461
s_1	213+39.520	499.559	499.623
t_1	213+49.520	499.709	499.794
u_1	213+59.520	499.869	499.975
v_1	213+69.520	500.039	500.167
w_1	213+79.520	500.218	500.368
x_1	213+89.520	500.407	500.579
y_1	213+99.520	500.606	500.800
z_1	214+09.520	500.811	501.027
a_2	214+19.520	501.015	501.235
b_2	214+29.520	501.219	501.432
c_2	214+39.520	501.423	501.629
d_2	214+49.520	501.627	501.827
e_2	214+59.520	501.831	502.024
f_2	214+69.520	502.035	502.208
g_2	214+79.520	502.239	502.376
h_2	214+89.520	502.443	502.543
i_2	214+99.520	502.647	502.711
j_2	215+09.520	502.851	502.878
℄ West Bearing Pier 10	215+17.020	503.004	503.004

STRINGER 1

	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ East Bearing Pier 7	208+69.770	498.668	498.668
a	208+79.770	498.668	498.705
b	208+89.770	498.668	498.742
c	208+99.770	498.668	498.778
d	209+09.770	498.668	498.815
e	209+19.770	498.668	498.852
f	209+29.770	498.668	498.864
g	209+39.770	498.668	498.871
h	209+49.770	498.668	498.878
i	209+59.770	498.668	498.885
j	209+69.770	498.668	498.892
k	209+79.770	498.668	498.881
l	209+89.770	498.668	498.859
m	209+99.770	498.668	498.837
n	210+09.770	498.668	498.815
o	210+19.770	498.668	498.792
p	210+29.770	498.668	498.770
q	210+39.770	498.668	498.749
r	210+49.770	498.668	498.728
s	210+59.770	498.668	498.706
t	210+69.770	498.668	498.685
℄ Bearing Pier 8	210+77.770	498.668	498.668
u	210+87.770	498.668	498.668
v	210+97.770	498.668	498.669
w	211+07.770	498.668	498.669
x	211+17.770	498.668	498.669
y	211+27.770	498.668	498.670
z	211+37.770	498.668	498.671
a_1	211+47.770	498.668	498.679
b_1	211+57.770	498.668	498.686
c_1	211+67.770	498.668	498.693
d_1	211+77.770	498.668	498.701
e_1	211+87.770	498.668	498.708
f_1	211+97.770	498.668	498.709
g_1	212+07.770	498.681	498.715
h_1	212+17.770	498.702	498.728
i_1	212+27.770	498.732	498.752
j_1	212+37.770	498.773	498.785
k_1	212+47.770	498.823	498.827
l_1	212+57.770	498.883	498.885
m_1	212+67.770	498.953	498.954
n_1	212+77.770	499.033	499.033
o_1	212+87.770	499.122	499.123
p_1	212+97.770	499.221	499.222
℄ Bearing Pier 9	213+09.520	499.350	499.350
q_1	213+19.520	499.471	499.492
r_1	213+29.520	499.601	499.644
s_1	213+39.520	499.742	499.805
t_1	213+49.520	499.892	499.976
u_1	213+59.520	500.051	500.157
v_1	213+69.520	500.221	500.349
w_1	213+79.520	500.400	500.550
x_1	213+89.520	500.590	500.762
y_1	213+99.520	500.789	500.983
z_1	214+09.520	500.993	501.209
a_2	214+19.520	501.197	501.417
b_2	214+29.520	501.401	501.614
c_2	214+39.520	501.605	501.812
d_2	214+49.520	501.809	502.009
e_2	214+59.520	502.013	502.206
f_2	214+69.520	502.217	502.390
g_2	214+79.520	502.421	502.558
h_2	214+89.520	502.625	502.725
i_2	214+99.520	502.829	502.893
j_2	215+09.520	503.033	503.060
℄ West Bearing Pier 10	215+17.020	503.186	503.186

STRINGER 2

	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ East Bearing Pier 7	208+69.770	498.809	498.809
a	208+79.770	498.809	498.845
b	208+89.770	498.809	498.882
c	208+99.770	498.809	498.919
d	209+09.770	498.809	498.956
e	209+19.770	498.809	498.992
f	209+29.770	498.809	499.005
g	209+39.770	498.809	499.012
h	209+49.770	498.809	499.019
i	209+59.770	498.809	499.026
j	209+69.770	498.809	499.033
k	209+79.770	498.809	499.022
l	209+89.770	498.809	499.000
m	209+99.770	498.809	498.978
n	210+09.770	498.809	498.955
o	210+19.770	498.809	498.933
p	210+29.770	498.809	498.911
q	210+39.770	498.809	498.890
r	210+49.770	498.809	498.868
s	210+59.770	498.809	498.847
t	210+69.770	498.809	498.826
℄ Bearing Pier 8	210+77.770	498.809	498.809
u	210+87.770	498.809	498.809
v	210+97.770	498.809	498.809
w	211+07.770	498.809	498.810
x	211+17.770	498.809	498.810
y	211+27.770	498.809	498.810
z	211+37.770	498.809	498.812
a_1	211+47.770	498.809	498.819
b_1	211+57.770	498.809	498.827
c_1	211+67.770	498.809	498.834
d_1	211+77.770	498.809	498.841
e_1	211+87.770	498.809	498.849
f_1	211+97.770	498.809	498.850
g_1	212+07.770	498.822	498.855
h_1	212+17.770	498.842	498.869
i_1	212+27.770	498.873	498.892
j_1	212+37.770	498.913	498.925
k_1	212+47.770	498.964	498.968
l_1	212+57.770	499.024	499.025
m_1	212+67.770	499.093	499.095
n_1	212+77.770	499.173	499.174
o_1	212+87.770	499.263	499.263
p_1	212+97.770	499.362	499.362
℄ Bearing Pier 9	213+09.520	499.491	499.491
q_1	213+19.520	499.612	499.633
r_1	213+29.520	499.742	499.784
s_1	213+39.520	499.882	499.946
t_1	213+49.520	500.032	500.117
u_1	213+59.520	500.192	500.298
v_1	213+69.520	500.362	500.489
w_1	213+79.520	500.541	500.691
x_1	213+89.520	500.730	500.902
y_1	213+99.520	500.929	501.123
z_1	214+09.520	501.134	501.350
a_2	214+19.520	501.338	501.558
b_2	214+29.520	501.542	501.755
c_2	214+39.520	501.746	501.952
d_2	214+49.520	501.950	502.149
e_2	214+59.520	502.154	502.347
f_2	214+69.520	502.358	502.531
g_2	214+79.520	502.562	502.698
h_2	214+89.520	502.766	502.866
i_2	214+99.520	502.970	503.034
j_2	215+09.520	503.174	503.201
℄ West Bearing Pier 10	215+17.020	503.327	503.327

STRINGER 3

	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ East Bearing Pier 7	208+69.770	498.731	498.731
a	208+79.770	498.731	498.767
b	208+89.770	498.731	498.804
c	208+99.770	498.731	498.841
d	209+09.770	498.731	498.877
e	209+19.770	498.731	498.914
f	209+29.770	498.731	498.927
g	209+39.770	498.731	498.934
h	209+49.770	498.731	498.941
i	209+59.770	498.731	498.948
j	209+69.770	498.731	498.955
k	209+79.770	498.731	498.944
l	209+89.770	498.731	498.922
m	209+99.770	498.731	498.899
n	210+09.770	498.731	498.877
o	210+19.770	498.731	498.855
p	210+29.770	498.731	498.833
q	210+39.770	498.731	498.812
r	210+49.770	498.731	498.790
s	210+59.770	498.731	498.769
t	210+69.770	498.731	498.748
℄ Bearing Pier 8	210+77.770	498.731	498.731
u	210+87.770	498.731	498.731
v	210+97.770	498.731	498.731
w	211+07.770	498.731	498.731
x	211+17.770	498.731	498.732
y	211+27.770	498.731	498.732
z	211+37.770	498.731	498.734
a_1	211+47.770	498.731	498.741
b_1	211+57.770	498.731	498.748
c_1	211+67.770	498.731	498.756
d_1	211+77.770	498.731	498.763
e_1	211+87.770	498.731	498.770
f_1	211+97.770	498.731	498.772
g_1	212+07.770	498.743	498.777
h_1	212+17.770	498.764	498.791
i_1	212+27.770	498.795	498.814
j_1	212+37.770	498.835	498.847
k_1	212+47.770	498.886	498.890
l_1	212+57.770	498.946	498.947
m_1	212+67.770	499.015	499.017
n_1	212+77.770	499.095	499.096
o_1	212+87.770	499.184	499.185
p_1	212+97.770	499.284	499.284
℄ Bearing Pier 9	213+09.520	499.413	499.413
q_1	213+19.520	499.533	499.555
r_1	213+29.520	499.664	499.706
s_1	213+39.520	499.804	499.868
t_1	213+49.520	499.954	500.039
u_1	213+59.520	500.114	500.220
v_1	213+69.520	500.263	500.411
w_1	213+79.520	500.463	500.613
x_1	213+89.520	500.652	500.824
y_1	213+99.520	500.851	501.045
z_1	214+09.520	501.056	501.272
a_2	214+19.520	501.260	501.480
b_2	214+29.520	501.464	501.677
c_2	214+39.520	501.668	501.874
d_2	214+49.520	501.872	502.071
e_2	214+59.520	502.076	502.269
f_2	214+69.520	502.280	502.453
g_2	214+79.520	502.484	502.620
h_2	214+89.520	502.688	502.788
i_2	214+99.520	502.892	502.955
j_2	215+09.520	503.096	503.123
℄ West Bearing Pier 10	215+17.020	503.249	503.249

GIRDER 2

	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ East Bearing Pier 7	208+69.770	498.569	498.569
a	208+79.770	498.569	498.606
b	208+89.770	498.569	498.643
c	208+99.770	498.569	498.679
d	209+09.770	498.569	498.716
e	209+19.770	498.569	498.753
f	209+29.770	498.569	498.766
g	209+39.770	498.569	498.772
h	209+49.770	498.569	498.779
i	209+59.770	498.569	498.786
j	209+69.770	498.569	498.793
k	209+79.770	498.569	498.782
l	209+39.770	498.569	498.760
m	209+99.770	498.569	498.738
n	210+09.770	498.569	498.716
o	210+19.770	498.569	498.693
p	210+29.770	498.569	498.671
q	210+39.770	498.569	498.650
r	210+49.770	498.569	498.629
s	210+59.770	498.569	498.608
t	210+69.770	498.569	498.586
℄ Bearing Pier 8	210+77.770	498.569	498.569
u	210+87.770	498.569	498.569
v	210+97.770	498.569	498.570
w	211+07.770	498.569	498.570
x	211+17.770	498.569	498.570
y	211+27.770	498.569	498.571
z	211+37.770	498.569	498.572
a_1	211+47.770	498.569	498.580
b_1	211+57.770	498.569	498.587
c_1	211+67.770	498.569	498.594
d_1	211+77.770	498.569	498.602
e_1	211+87.770	498.569	498.609
f_1	211+97.770	498.569	498.610
g_1	212+07.770	498.582	498.616
h_1	212+17.770	498.603	498.629
i_1	212+27.770	498.633	498.653
j_1	212+37.770	498.674	498.686
k_1	212+47.770	498.724	498.729
l_1	212+57.770	498.784	498.786
m_1	212+67.770	498.854	498.855
n_1	212+77.770	498.934	498.934
o_1	212+87.770	499.023	499.024
p_1	212+97.770	499.122	499.123
℄ Bearing Pier 9	213+09.520	499.251	499.251
q_1	213+19.520	499.372	499.393
r_1	213+29.520	499.502	499.545
s_1	213+39.520	499.643	499.706
t_1	213+49.520	499.793	499.877
u_1	213+59.520	499.952	500.058
v_1	213+69.520	500.122	500.250
w_1	213+79.520	500.301	500.451
x_1	213+89.520	500.491	500.663
y_1	213+99.520	500.690	500.884
z_1	214+09.520	500.894	501.110
a_2	214+19.520	501.098	501.318
b_2	214+29.520	501.302	501.515
c_2	214+39.520	501.506	501.713
d_2	214+49.520	501.710	501.910
e_2	214+59.520	501.914	502.107
f_2	214+69.520	502.118	502.291
g_2	214+79.520	502.322	502.459
h_2	214+89.520	502.526	502.626
i_2	214+99.520	502.730	502.794
j_2	215+09.520	502.934	502.961
℄ West Bearing Pier 10	215+17.020	503.087	503.087

ELEVATIONS - TOP OF CONCRETE

Note: See sh. 21 of 88 for diagrammatic plan of top of slab elevations.

TOP OF SLAB ELEVATIONS
SPANS 9, 10 & 11

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED S.C.O.
DRAWN D.A.N.
CHECKED S.C.O.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FA Rte.	Section	County	Total Sheets	Sheet No.
FA-49	[illegible]	[illegible]	97	23

Sheet 21 of 88

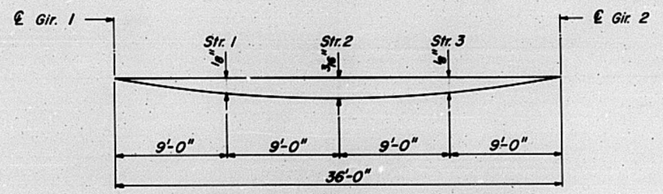
NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT

	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ East Bearing Pier 7	208+69.770	498.611	498.611
a	208+79.770	498.611	498.648
b	208+89.770	498.611	498.684
c	208+99.770	498.611	498.721
d	209+09.770	498.611	498.758
e	209+19.770	498.611	498.794
f	209+29.770	498.611	498.807
g	209+39.770	498.611	498.814
h	209+49.770	498.611	498.821
i	209+59.770	498.611	498.828
j	209+69.770	498.611	498.835
k	209+79.770	498.611	498.824
l	209+89.770	498.611	498.802
m	209+99.770	498.611	498.780
n	210+09.770	498.611	498.757
o	210+19.770	498.611	498.735
p	210+29.770	498.611	498.713
q	210+39.770	498.611	498.692
r	210+49.770	498.611	498.671
s	210+59.770	498.611	498.649
t	210+69.770	498.611	498.628
℄ Bearing Pier 8	210+77.770	498.611	498.611
u	210+87.770	498.611	498.611
v	210+97.770	498.611	498.611
w	211+07.770	498.611	498.612
x	211+17.770	498.611	498.612
y	211+27.770	498.611	498.612
z	211+37.770	498.611	498.614
a_1	211+47.770	498.611	498.621
b_1	211+57.770	498.611	498.629
c_1	211+67.770	498.611	498.636
d_1	211+77.770	498.611	498.643
e_1	211+87.770	498.611	498.651
f_1	211+97.770	498.611	498.652
g_1	212+07.770	498.624	498.658
h_1	212+17.770	498.644	498.671
i_1	212+27.770	498.675	498.694
j_1	212+37.770	498.716	498.727
k_1	212+47.770	498.766	498.770
l_1	212+57.770	498.826	498.827
m_1	212+67.770	498.896	498.897
n_1	212+77.770	498.975	498.976
o_1	212+87.770	499.065	499.065
p_1	212+97.770	499.164	499.164
℄ Bearing Pier 9	213+09.520	499.293	499.293
q_1	213+19.520	499.414	499.435
r_1	213+29.520	499.544	499.586
s_1	213+39.520	499.684	499.748
t_1	213+49.520	499.834	499.919
u_1	213+59.520	499.994	500.100
v_1	213+69.520	500.164	500.292
w_1	213+79.520	500.343	500.493
x_1	213+89.520	500.532	500.704
y_1	213+99.520	500.731	500.925
z_1	214+09.520	500.936	501.152
a_2	214+19.520	501.160	501.360
b_2	214+29.520	501.344	501.557
c_2	214+39.520	501.548	501.754
d_2	214+49.520	501.752	501.952
e_2	214+59.520	501.956	502.149
f_2	214+69.520	502.160	502.333
g_2	214+79.520	502.364	502.501
h_2	214+89.520	502.568	502.668
i_2	214+99.520	502.772	502.836
j_2	215+09.520	502.976	503.003
℄ West Bearing Pier 10	215+17.020	503.129	503.129

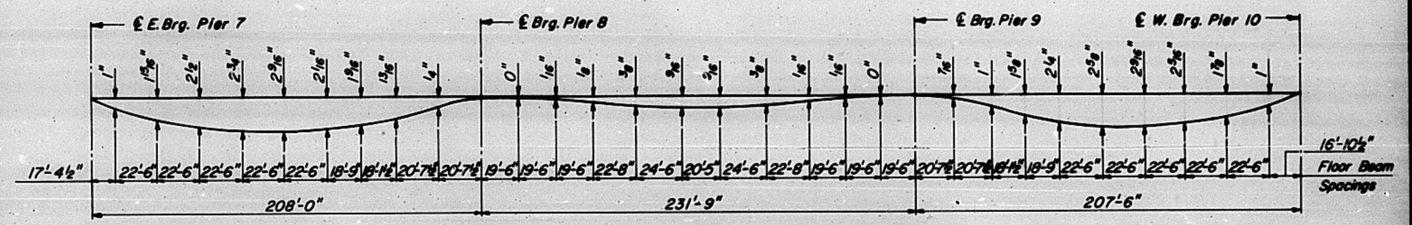
SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT

STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
208+69.770	498.652	498.652
208+79.770	498.652	498.689
208+89.770	498.652	498.726
208+99.770	498.652	498.763
209+09.770	498.652	498.799
209+19.770	498.652	498.836
209+29.770	498.652	498.849
209+39.770	498.652	498.856
209+49.770	498.652	498.863
209+59.770	498.652	498.870
209+69.770	498.652	498.876
209+79.770	498.652	498.866
209+89.770	498.652	498.844
209+99.770	498.652	498.821
210+09.770	498.652	498.799
210+19.770	498.652	498.777
210+29.770	498.652	498.755
210+39.770	498.652	498.733
210+49.770	498.652	498.712
210+59.770	498.652	498.691
210+69.770	498.652	498.670
210+77.770	498.652	498.652
210+87.770	498.652	498.653
210+97.770	498.652	498.653
211+07.770	498.652	498.653
211+17.770	498.652	498.654
211+27.770	498.652	498.654
211+37.770	498.652	498.656
211+47.770	498.652	498.663
211+57.770	498.652	498.670
211+67.770	498.652	498.678
211+77.770	498.652	498.685
211+87.770	498.652	498.692
211+97.770	498.652	498.694
212+07.770	498.665	498.699
212+17.770	498.686	498.713
212+27.770	498.717	498.736
212+37.770	498.757	498.769
212+47.770	498.807	498.812
212+57.770	498.867	498.869
212+67.770	498.937	498.938
212+77.770	499.017	499.018
212+87.770	499.106	499.107
212+97.770	499.206	499.206
213+09.520	499.335	499.335
213+19.520	499.455	499.477
213+29.520	499.586	499.628
213+39.520	499.726	499.790
213+49.520	499.876	499.961
213+59.520	500.036	500.142
213+69.520	500.205	500.333
213+79.520	500.385	500.535
213+89.520	500.574	500.746
213+99.520	500.773	500.967
214+09.520	500.977	501.193
214+19.520	501.181	501.401
214+29.520	501.385	501.599
214+39.520	501.589	501.796
214+49.520	501.793	501.993
214+59.520	501.997	502.190
214+69.520	502.201	502.375
214+79.520	502.405	502.542
214+89.520	502.609	502.710
214+99.520	502.813	502.877
215+09.520	503.017	503.045
215+17.020	503.170	503.170

ELEVATIONS - TOP OF CONCRETE



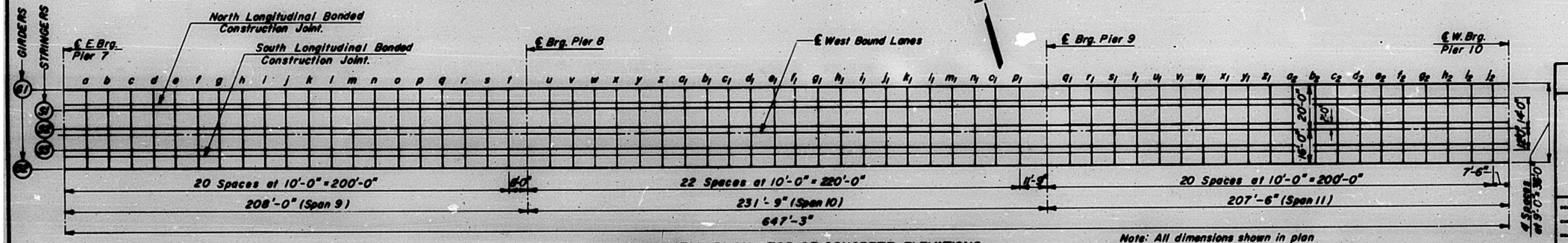
FLOOR BEAM DEFLECTION DIAGRAM



GIRDERS 1 & 2 DEAD LOAD DEFLECTION DIAGRAM
(Includes Weight of Concrete Slab)

Note: The girder deflections and the floor beam deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in "Elevations - Top of Concrete" tables.

Note: For notes on method of determining fillet heights "t" see sheet 30 of 88.



DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

Note: All dimensions shown in plan are measured horizontally.

TOP OF SLAB ELEVATIONS
SPANS 9, 10 & 11

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 115R-11-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
C.R.N.
D.A.N.
S.C.O.

HAMMON, RENZ & ASSOCIATES
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

File No. 74001
Date 8-22-[illegible]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	24
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 22 of 88

650 - #4 d100 bars @ 12"cts. Outside Face
709 - #5 d101(E) bars @ 11"cts. Inside Face

℄ Light Pedestal

Floor Drain Spacing (For Length & Details See Sht. 23 of 88)

7'-11½" | 13 Space @ 15'-0" = 195'-0" | 7'-11½" | 7'-9" | 14 Spaces @ 15'-0" = 210'-0" | 14'-0" | 4'-7½" | 8 Spaces @ 25'-0" = 200'-0" | 4'-7½"

℄ W. Brg. Pier 7 | ℄ E. Brg. Pier 7

33'-3" | 82'-2¾" | 98'-3¼"

2x6 - #8 b103 bars Top of Curb
2 - #8 b107 bars Top of Curb
2x5 - #8 b106 bars Top of Curb
2 - #8 b107 bars Top of Curb
2x6 - #8 b105 bars Top of Curb

1'-3" | 1'-3" | 10" | d102 | d103

1x7 - #5 b102(E) bars Bottom of Curb
1x7 - #5 b102 bars Bottom of Curb
1 - #5 b103 bar Bottom of Curb
1 - #5 b103(E) bar Bottom of Curb
1 - #5 b103 bar Bottom of Curb
1x7 - #5 b102 bars Bottom of Curb

76 - #6 x100(E) bars @ 6"cts. Top of Slab Each End Lap to b100 bars

℄ Light Pedestal
d104(E)
1x6 - #5 b103 bars Bottom of Curb
1x6 - #5 b103(E) bars Bottom of Curb
1 - #5 b103(E) bar Bottom of Curb
℄ Light Pedestal.
1x7 - #5 b102(E) bars Bottom of Curb

E E D D

1939 - #5 a105(E) @ 4"cts. Top of Slab Lap to a106(E) bars between S2 & S3

℄ Roadway W. Bd. Lanes

1939 - #5 a106(E) @ 4"cts. Top of Slab Lap to a105(E) bars

1198 Ea. - #5 a101 & a102 bars @ 6½"cts. Bottom of Slab (lap over S1)

℄ Pier 7 Sta. 208+68.52
℄ Pier 8 Sta. 210+77.77
℄ Pier 9 Sta. 213+09.52
℄ Pier 10 Sta. 215+18.77
℄ W. Brg.
℄ E. Brg.

38 x 3 - #6 b101(E) bars @ ±12"cts. Top of Slab over piers 8 & 9.
39 x 23 - #5 b100(E) bars @ ±12"cts. Top of Slab
4 4 x 23 - #5 b100 bars spaced as shown in Cross Section. Bottom of Slab.

42'-0" | 23'-0" | 19'-0" | 2" | 1'-0"

73'-0" | 196'-4½" | 11'-1½"

39'-0" | 49'-9" | 49'-9" | 39'-0"

Drainage Scupper Spacings (See Curb Section for Length)

969 - #6 a103(E) bars @ 8"cts. Top of Slab. (Each Side) Lap to alternate a(E) bars

2 x 3 - #6 b101(E) bars Top of Slab
3 x 23 - #5 b100(E) bars Top of Slab (ea. side)

1'-8¼" | 3½" | 1'-3" | 1'-3" (Girder Brg.) | 178'-11½" | 208'-0" c.-c. Brg. | 30'-0" | 30'-0" | 171'-9" | 231'-9" c.-c. Brg. | 30'-0" | 30'-0" | 179'-0" | 207'-6" c.-c. Brg. | 1'-2 11/16" | 3" | 1'-9" | 1'-9"

7" @ 50°F | 6" @ 50°F

649'-8½" o-o. Paropet
Const. Jts. in curb to top of slab (⅛" Alum. Sheets) Typ.

Note: All dimensions shown are measured horizontally.

NOTES

Bars indicated thus: 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
For Section D-D see Sht. 23 of 88.
For Section E-E see Sht. 23 of 88.
See Sheet 23 of 88 for Bill of Material for Spans 9,10 & 11.
For Light Pedestal Details see Sheet 3 & 18 of 88.
For Drainage Scupper Details see Sheets 79 and 80.
For Reinforcement & configuration of Slab @ Scupper see Sht. 3 of 88.
For Details of 4"x12" Floor Drain see Sheet 3 & 18 of 88.

PLAN - SPANS 9 THRU 11

℄ Rdwy. W. Bd. Lanes
31'-6" to ℄ Survey F.A. Route 49
42'-0" Out - Out of Deck

1'-0" | 22'-0" | 18'-0" | 1'-0"
1'-7" | 9'-5" | 12'-0" Lane Width | 12'-0" Lane Width | 5'-5" | 1'-7"
Slope ¼" per foot. | Slope 3/16" per foot. | Slope 3/16" per foot. | Slope ¼" per foot.
Longitudinal Bonded Construction Joint - do not edge. (Optional)

Note: For placement of bars e100 or e101 see sheet 23 of 88

Total Drop = 4½" | Total Drop = 3½"
2'-0"
Profile Grade
7½" Slab

e100 or e101
b107
b103
b101(E)
b103(E)
a103(E)
b100(E)
b101(E)
a105(E)
a106(E)
b100(E)
a103(E)
d101(E)
b102(E)
d100
b105 or b106
b102 or b103
b100(E)
b100

22½" c.l. (TYP)
a101
a102
3" (Typ)
1'-7"
1⅛" Shim Pl.
⅞" Shim Pl.

1'-7" | 9 - #5 b100 bars @10"cts. | 9 | 9 | 10 - #5 b100 bars @10"cts. | 9 | 9 | 10 - #5 b100 bars @10"cts. | 9 | 9 | 9 - #5 b100 bars @10"cts. | 1'-7"

3'-0" | 9'-0" | 9'-0" | 2'-0" | 7'-0" | 9'-0" | 3'-0"

S1 S2 S3 61 62

NEAR PIER | NEAR MIDSPAN

CROSS SECTION
(Looking East)

Bonded Construction Joint (Optional)
⅛" Aluminum Sheet ASTM: B209 alloy 3003 - H14
Bonded Construction Joint (Mandatory)

1'-7" | 7" | 7¾" | 2" | 2¼" | 1½" | e100 or e101 | d101(E) | d100 | 2'-10" | 10" | 3" | ½" | ¾" | 3" | ½" | 1'-9" | 3'-10½" | 11½" | 9" | 43½" | 1½" | Varies 1½" | 4" | 2" | 3'-0"

10'-6" See Sht. 3 of 88 for Conn. Details.

¾" Drip Notch Full Length
Drainage Scupper

CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

SUPERSTRUCTURE
SPANS 9, 10, & 11

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.D.
CHECKED W.D.L.
DRAWN D.A.N.
CHECKED C.R.N.

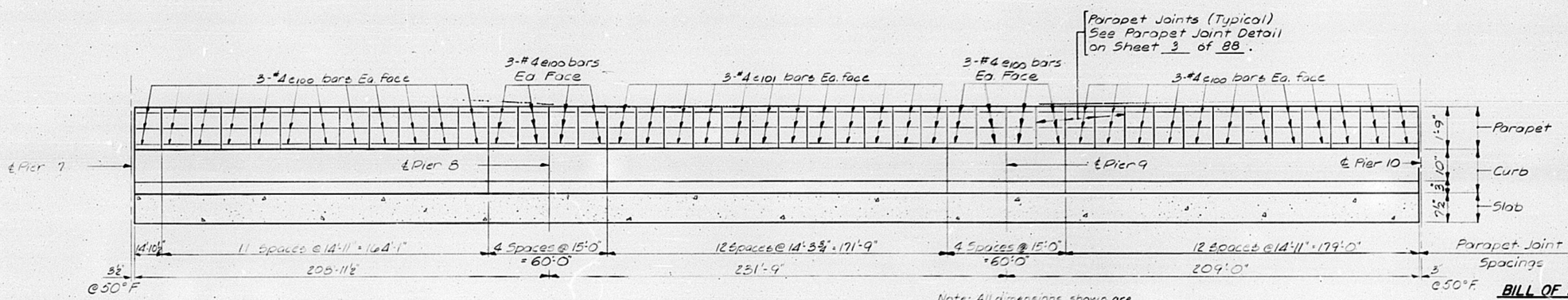
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS | PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

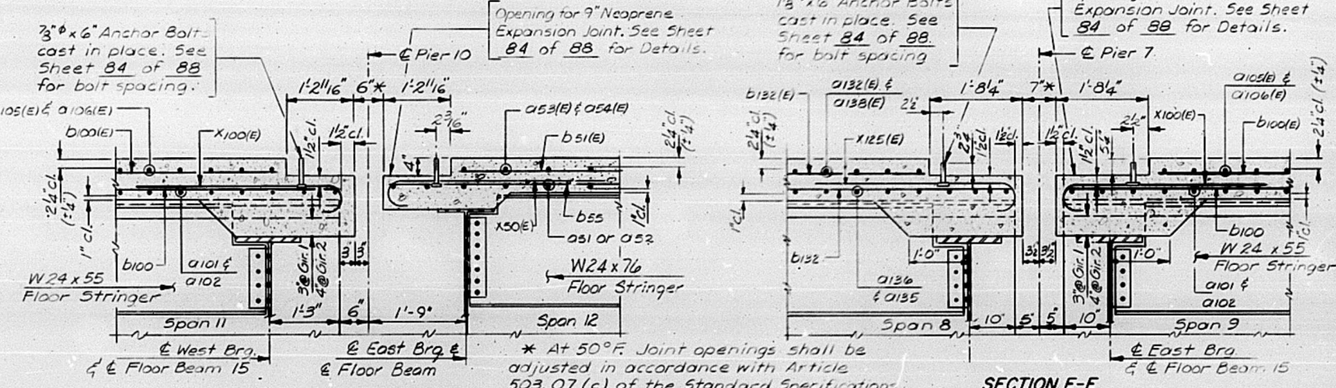
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	1158-11-D	PEORIA & TAZEWELL	97	25
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 23 of 88



ELEVATION - CURB & PARAPET

Note: All dimensions shown are measured horizontally.

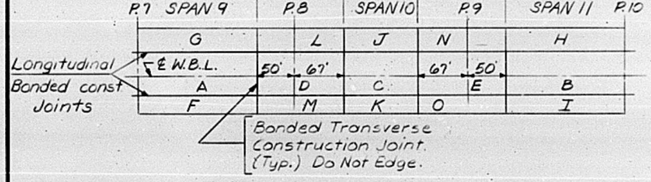


* At 50°F. Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications if the deck is poured at an ambient temperature other than 50°F.

SECTION D-D

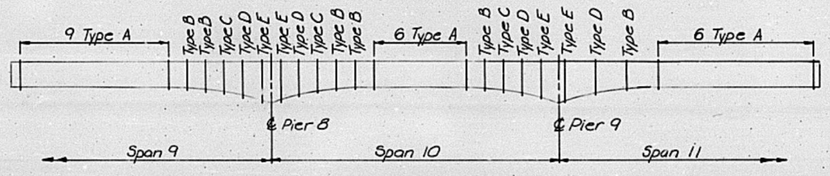
(From sheet 22 of 88 & From sheet 26 of 88)

SECTION E-E



Note: The concrete floor slab shall be poured in one continuous operation between construction joints. The pouring shall be done in the following order: 1) A-B 2) C 3) F-G 4) H-I 5) J-K 6) D-E 7) L-M 8) N-O DLM & ENO must not be poured before AFG, BHI & CJK. If the area C is not poured on the same day as A and B, then there should be a seven (7) day time lapse between pours.

SLAB POURING SEQUENCE



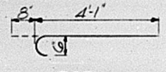
ELEVATION 4"x 12" FLOOR DRAIN DOWNSPOUTS

Note: See Slab Plan for spacing of 4" x 12" Floor Drains.

Note: Drains shall be located along both N & S. curbs and clear of all diaphragms, floor beams, lateral bracing & Drainage Scuppers.

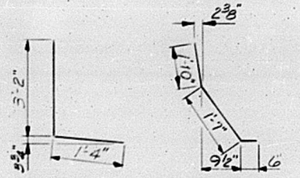
4" x 12" FLOOR DRAIN DOWNSPOUT LENGTHS (SPANS 9,10&11)		
Type	Length	No.
A	10'-9"	42
B	11'-2"	12
C	12'-5"	6
D	14'-1"	8
E	16'-9"	8

Two braces required for 4"x12" floor drain downspouts. See sht. 18 of 88 for location of braces.



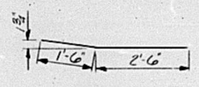
BAR x100(E)

Note: For location of d102 & d103 bars see Sheet 22 of 88.

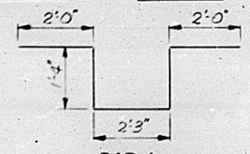


BAR d100

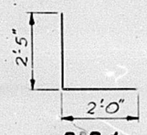
BAR d101(E)



BAR a103(E)



BAR d103



BAR d102

BILL OF MATERIAL SPANS 9, 10 & 11

BAR	NO.	BAR	NO.	SIZE	LENGTH	SHAPE
—	—	a101	1198	#5	12'-0"	——
—	—	a102	1198	#5	30'-0"	——
a103(E)	969	—	—	#6	4'-0"	——
a104(E)	48	—	—	#5	2'-0"	——
a105(E)	1939	—	—	#5	25'-9"	——
a106(E)	1939	—	—	#5	16'-9"	——
b100(E)	1085	b100	1012	#5	29'-8"	——
b101(E)	252	—	—	#6	30'-11"	——
b102(E)	28	b102	28	#5	27'-0"	——
b103(E)	20	b103	20	#5	29'-10"	——
—	—	b105	48	#8	32'-8"	——
—	—	b106	20	#8	37'-0"	——
—	—	b107	16	#8	29'-9"	——
—	—	d100	1300	#4	4'-6"	L
d101(E)	1418	—	—	#5	3'-11"	——
—	—	d102	9	#6	4'-5"	L
—	—	d103	15	#6	8'-11"	⊓
x100(E)	152	—	—	#6	4'-9"	⊂
—	—	e100	384	#4	14'-8"	——
—	—	e101	144	#4	14'-1"	——

Reinforcement Bars	Lbs.	101,930
Reinforcement Bars (Epoxy Coated)	Lbs.	143,930
Class X Concrete	Cu.Yds.	812.3
Neoprene Exp. Joint 9"	Lin.Ft.	40.8
Neoprene Exp. Joint 13"	Lin.Ft.	40.8
Drainage Scuppers	Ea.	4
Floor Drain	Ea.	76
Protective Coat	Sq.Yd.	3,333.2

SUPERSTRUCTURE DETAILS SPANS 9,10,& 11

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED W.D.L.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

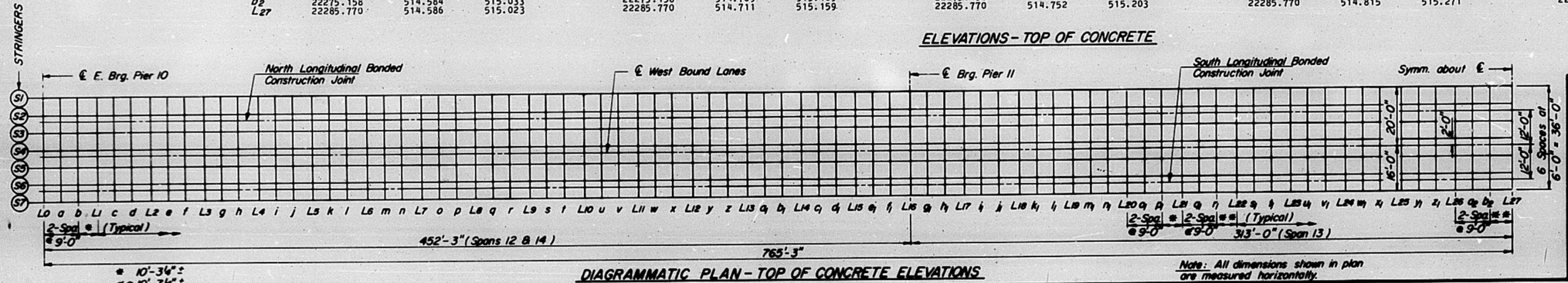
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(15B-1)-D	PEORIA & TAZEWELL	97	26
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 24 of 88

		STRINGER 1			STRINGER 2			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			STRINGER 3			STRINGER 4		
		STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
℄ East Bearing Pier 10	L_0	21520.520	503.076	503.083	21520.520	503.201	503.219	21520.520	503.242	503.263	21520.520	503.305	503.331	21520.520	503.399	503.427
	a	21529.520	503.259	503.301	21529.520	503.384	503.437	21529.520	503.425	503.481	21529.520	503.488	503.549	21529.520	503.582	503.645
	b	21538.520	503.443	503.507	21538.520	503.568	503.643	21538.520	503.609	503.687	21538.520	503.672	503.755	21538.520	503.766	503.851
	L_1	21548.786	503.652	503.724	21548.786	503.777	503.860	21548.786	503.818	503.904	21548.786	503.881	503.972	21548.786	503.975	504.068
	c	21557.786	503.836	503.939	21557.786	503.961	504.075	21557.786	504.002	504.119	21557.786	504.065	504.187	21557.786	504.159	504.283
	d	21566.786	504.020	504.142	21566.786	504.145	504.278	21566.786	504.186	504.322	21566.786	504.249	504.390	21566.786	504.343	504.486
	L_2	21577.051	504.229	504.355	21577.051	504.354	504.491	21577.051	504.395	504.535	21577.051	504.458	504.603	21577.051	504.552	504.699
	e	21586.051	504.413	504.568	21586.051	504.538	504.704	21586.051	504.579	504.748	21586.051	504.642	504.816	21586.051	504.736	504.912
	f	21595.051	504.596	504.770	21595.051	504.721	504.906	21595.051	504.762	504.950	21595.051	504.825	505.018	21595.051	504.919	505.114
	L_3	21605.317	504.806	504.982	21605.317	504.931	505.118	21605.317	504.972	505.162	21605.317	505.035	505.230	21605.317	505.129	505.326
	g	21614.317	504.989	505.191	21614.317	505.114	505.327	21614.317	505.155	505.371	21614.317	505.218	505.439	21614.317	505.312	505.535
	h	21623.317	505.173	505.389	21623.317	505.298	505.525	21623.317	505.339	505.569	21623.317	505.402	505.637	21623.317	505.496	505.733
	L_4	21633.582	505.382	505.596	21633.582	505.507	505.732	21633.582	505.548	505.776	21633.582	505.611	505.844	21633.582	505.705	505.940
	i	21642.582	505.566	505.803	21642.582	505.691	505.939	21642.582	505.732	505.983	21642.582	505.795	506.051	21642.582	505.889	506.147
	j	21651.582	505.749	505.997	21651.582	505.874	506.133	21651.582	505.915	506.177	21651.582	505.978	506.245	21651.582	506.072	506.341
	L_5	21661.848	505.959	506.201	21661.848	506.084	506.337	21661.848	506.125	506.381	21661.848	506.188	506.449	21661.848	506.282	506.545
	k	21670.848	506.142	506.400	21670.848	506.267	506.536	21670.848	506.308	506.580	21670.848	506.371	506.648	21670.848	506.465	506.744
	l	21679.848	506.326	506.588	21679.848	506.451	506.724	21679.848	506.492	506.768	21679.848	506.555	506.836	21679.848	506.649	506.932
	L_6	21690.114	506.535	506.783	21690.114	506.660	506.919	21690.114	506.701	506.963	21690.114	506.764	507.031	21690.114	506.858	507.127
	m	21699.114	506.719	506.980	21699.114	506.844	507.116	21699.114	506.885	507.160	21699.114	506.948	507.228	21699.114	507.042	507.324
	n	21708.114	506.903	507.164	21708.114	507.028	507.300	21708.114	507.069	507.344	21708.114	507.132	507.412	21708.114	507.226	507.508
	L_7	21718.379	507.112	507.356	21718.379	507.237	507.492	21718.379	507.278	507.536	21718.379	507.341	507.604	21718.379	507.435	507.700
	o	21727.379	507.296	507.549	21727.379	507.421	507.685	21727.379	507.462	507.729	21727.379	507.525	507.797	21727.379	507.619	507.893
	p	21736.379	507.479	507.729	21736.379	507.604	507.865	21736.379	507.645	507.909	21736.379	507.708	507.977	21736.379	507.802	508.073
	L_8	21746.645	507.689	507.917	21746.645	507.814	508.053	21746.645	507.855	508.097	21746.645	507.918	508.165	21746.645	508.012	508.261
	q	21755.645	507.872	508.106	21755.645	507.997	508.242	21755.645	508.038	508.286	21755.645	508.101	508.354	21755.645	508.195	508.450
	r	21764.645	508.056	508.283	21764.645	508.181	508.419	21764.645	508.222	508.463	21764.645	508.285	508.531	21764.645	508.379	508.627
	L_9	21774.910	508.265	508.466	21774.910	508.390	508.602	21774.910	508.431	508.646	21774.910	508.494	508.714	21774.910	508.588	508.810
	s	21783.910	508.449	508.653	21783.910	508.574	508.789	21783.910	508.615	508.833	21783.910	508.678	508.901	21783.910	508.772	508.997
	t	21792.910	508.632	508.828	21792.910	508.757	508.964	21792.910	508.798	509.008	21792.910	508.861	509.076	21792.910	508.955	509.172
	L_{10}	21803.176	508.842	509.009	21803.176	508.967	509.145	21803.176	509.008	509.189	21803.176	509.071	509.257	21803.176	509.165	509.353
	u	21812.176	509.025	509.196	21812.176	509.150	509.332	21812.176	509.191	509.376	21812.176	509.254	509.444	21812.176	509.348	509.540
	v	21821.176	509.209	509.370	21821.176	509.334	509.506	21821.176	509.375	509.550	21821.176	509.438	509.618	21821.176	509.532	509.714
	L_{11}	21831.442	509.419	509.552	21831.442	509.544	509.688	21831.442	509.585	509.732	21831.442	509.648	509.800	21831.442	509.742	509.896
	w	21840.442	509.602	509.737	21840.442	509.727	509.873	21840.442	509.768	509.917	21840.442	509.831	509.985	21840.442	509.925	510.081
	x	21849.442	509.786	509.911	21849.442	509.911	510.047	21849.442	509.952	510.091	21849.442	510.015	510.159	21849.442	510.109	510.255
	L_{12}	21859.707	509.995	510.091	21859.707	510.120	510.227	21859.707	510.161	510.271	21859.707	510.224	510.339	21859.707	510.318	510.435
	y	21868.707	510.179	510.279	21868.707	510.304	510.415	21868.707	510.345	510.459	21868.707	510.408	510.527	21868.707	510.623	510.623
	z	21877.707	510.362	510.455	21877.707	510.487	510.591	21877.707	510.528	510.635	21877.707	510.591	510.703	21877.707	510.685	510.799
	L_{13}	21887.973	510.571	510.636	21887.973	510.696	510.772	21887.973	510.737	510.816	21887.973	510.800	510.884	21887.973	510.894	510.980
	a_1	21896.973	510.751	510.822	21896.973	510.876	510.958	21896.973	510.917	511.002	21896.973	510.980	511.070	21896.973	511.074	511.166
	b_1	21905.973	510.926	510.991	21905.973	511.051	511.127	21905.973	511.092	511.171	21905.973	511.155	511.239	21905.973	511.249	511.335
	L_{14}	21916.238	511.122	511.161	21916.238	511.247	511.297	21916.238	511.288	511.341	21916.238	511.351	511.409	21916.238	511.445	511.505
	c_1	21925.238	511.288	511.334	21925.238	511.413	511.470	21925.238	511.454	511.514	21925.238	511.517	511.582	21925.238	511.611	511.678
	d_1	21934.238	511.451	511.492	21934.238	511.576	511.628	21934.238	511.617	511.672	21934.238	511.680	511.740	21934.238	511.774	511.836
	L_{15}	21944.504	511.631	511.648	21944.504	511.756	511.784	21944.504	511.797	511.828	21944.504	511.860	511.896	21944.504	511.954	511.992
	e	21953.504	511.785	511.813	21953.504	511.910	511.949	21953.504	511.951	511.993	21953.504	512.014	512.061	21953.504	512.108	512.157
	f	21962.504	511.935	511.962	21962.504	512.060	512.098	21962.504	512.101	512.142	21962.504	512.164	512.210	21962.504	512.258	512.306
℄ Bearing Pier 11	L_{16}	21972.770	512.101	512.108	21972.770	512.226	512.244	21972.770	512.267	512.288	21972.770	512.330	512.356	21972.770	512.424	512.452
	g_1	21981.770	512.242	512.270	21981.770	512.367	512.406	21981.770	512.408	512.450	21981.770	512.471	512.518	21981.770	512.565	512.614
	h_1	21990.770	512.378	512.417	21990.770	512.503	512.553	21990.770	512.544	512.597	21990.770	512.607	512.665	21990.770	512.701	512.761
	L_{17}	22001.036	512.529	512.560	22001.036	512.654	512.696	22001.036	512.695	512.740	22001.036	512.758	512.808	22001.036	512.852	512.904
	i_1	22010.036	512.657	512.713	22010.036	512.782	512.849	22010.036	512.823	512.893	22010.036	512.886	512.961	22010.036	512.980	513.057
	j_1	22019.036	512.781	512.849	22019.036	512.906	512.985	22019.036	512.947	513.029	22019.036	513.010	513.097	22019.036	513.104	513.193
	L_{18}	22029.301	512.917	512.981	22029.301	513.042	513.117	22029.301	513.083	513.161	22029.301	513.146	513.229	22029.301	513.240	513.325
	k_1	22038.301	513.033	513.123	22038.301	513.158	513.259	22038.301	513.199	513.303	22038.301	513.262	513.371	22038.301	513.356	513.457
	l_1	22047.301	513.143	513.249	22047.301	513.268	513.385	22047.301	513.309	513.429	22047.301	513.372	513.497	22047.301	513.466	513.593
	L_{19}	22057.567	513.265	513.369	22057.567	513.390	513.505	22057.567	513.431	513.549	22057.567	513.494	513.617	22057.567	513.588	513.713
	m_1	22066.567	513.367	513.499	22066.567	513.492	513.635	22066.567	513.533	513.679	22066.567	513.596	513.747	22066.567	513.690	513.843
	n_1	22075.567	513.465	513.613	22075.567	513.590	513.749	22075.567	513.631	513.793	22075.567	513.694	513.861	22075.567	513.788	513.957
	L_{20}	22085.832	513.572	513.719	22085.832	513.697	513.855	22085.832	513.738	513.899	22085.832	513.801	513.967	22085.832	513.895	514.063
	o_1	22094.832	513.661	513.841	22094.832	513.786	513.977	22094.832	513.827	514.021	22094.832	513.890	514.089	22094.832	513.984	514.185
	p_1	22103.832	513.747	513.946	22103.832	513.872	514.082	22103.832	513.913	514.126	22103.832	513.976	514.194	22103.832	514.070	514.290
	L_{21}	22114.098	513.839	514.044	22114.098	513.964	514.188	22114.098	514.005	514.224	22114.098	514.068	514.292	22114.098	514.162	514.388
	q_1	22123.098	513.915	514.153	22123.098	514.040	514.289	22123.098	514.081	514.333	22123.098	514.144	514.401	22123.098	514.238	514.497
	r_1	22132.098	513.987	514.247	22132.098	514.112	514.383	22132.098	514.153	514.427	22132.098	514.216	514.495	22132.098	514.310	514.591
	L_{22}	22142.710	514.067	514.334	22142.710	514.192	514.470	22142.710	514.233	514.514	22142.710	514.296	514.582	22142.710	514.390	514.678
	s_1	22151.710	514.130	514.428	22151.710	514.255	514.564	22151.710	514.296	514.608	22151.710	514.359	514.676	22151.710	514.453	514.772
	t_1	22160.710	514.190	514.505	22160.710	514.315	514.641	22160.710	514.356	514.685	22160.710	514.419	514.753	22160.710	514.513	514.849
	L_{23}	22171.322	514.254	514.573	22171.322	514.379	514.709	22171.322	514.420	514.753	22171.322	514.483	514.821	22171.322	514.577	514.917
	u_1	22180.322	514.304	514.651	22180.322	514.429	514.787	22180.322	514.470	514.831	22180.322	514.533	514.899	22180.322	514.627	514.995
	v_1	22189.322	514.350	514.714	22189.322	514.475	514.850	22189.322	514.516	514.894	22189.322	514.579	514.962	22189.322	514.673	515.058
	L_{24}	22199.934	514.399	514.763	22199.934	514.524	514.899	22199.934	514.565	514.943	22199.934	514.628	515.011	22199.934	514.722	515.107
	w_1	22208.934	514.437	514.828	22208.934	514.562	514.964	22208.934	514.603	515.008	22208.934	514.666	515.076	22208.934	514.760	515.172
	x_1	22217.934	514.470	514.876	22217.934	514.595	515.012	22217.934	514.636	515.056	22217.934	514.699	515.124	22217.934	514.793	515.220
	L_{25}	22228.546	514.503	514.909	22228.546	514.628	515.045	22228.546	514.669	515.089	22228.546	514.732	515.157	22228.546	514.826	515.253
	y_1	22237.546	514.527	514.954	22237.546	514.652	515.090	22237.546	514.693	515.134	22237.546	514.756	515.202	22237.546	514.850	515.298
	z_1	22246.546	514.547	514.983	22246.546	514.672	515.119	22246.546	514.713	515.163	22246.546	514.776	515.231	22246.546	514.870	515.327
	L_{26}	22257.158	514.566	514.994	22257.158	514.691	515.130	22257.158	514.732	515.174	22257.158	514.795	515.242	22257.158	514.889	515.338
	a_2	22266.158	514.577	515.021	22266.158	514.702	515.157	22266.158	514.743	515.201	22266.158	514.806	515.269	22266.158	514.900	515.365
	b_2	22275.158	514.584	515.033	22275.158	514.709	515.169	22275.158	514.750	515.213	22275.158	514.813	515.281	22275.158	514.907	515.377
	L_{27}	22285.770	514.586	515.023	22285.770	514.711	515.159	22285.770	514.752	515.203	22285.770	514.815	515.271	22285.770	514.909	515.367

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

ELEVATIONS - TOP OF CONCRETE



DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

Note: All dimensions shown in plan are measured horizontally.

TOP OF SLAB ELEVATIONS
SPANS 12, 13 & 14

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED R.W.C.
DRAWN R.J.E.
CHECKED W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

FILE NO. 74001
DATE 8-22-80

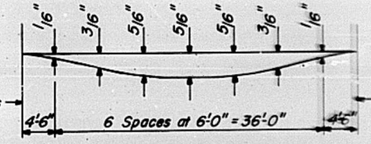
ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	37	27
FED ROAD DIST NO 7	ILLINOIS	PROJECT		

Sheet 254 of 388

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT

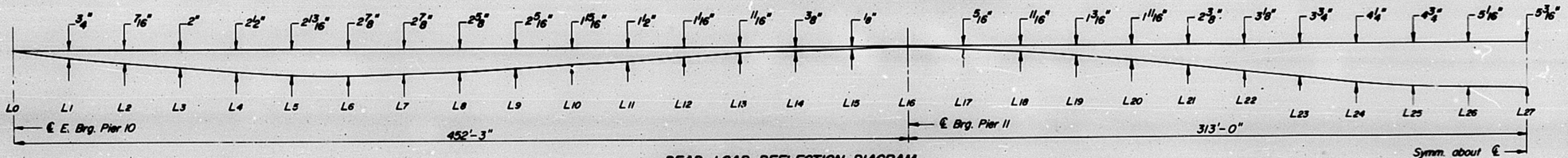
		STRINGER 5			STRINGER 6			STRINGER 7		
		STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
℄ East Bearing Pier 10	L_0	21520.520	503.368	503.394	21520.520	503.274	503.292	21520.520	503.242	503.256	21520.520	503.159	503.166
	a	21529.520	503.551	503.612	21529.520	503.457	503.510	21529.520	503.425	503.474	21529.520	503.342	503.384
	b	21538.520	503.735	503.818	21538.520	503.641	503.716	21538.520	503.609	503.680	21538.520	503.526	503.590
	L_1	21548.786	503.944	504.035	21548.786	503.850	503.933	21548.786	503.818	503.897	21548.786	503.735	503.807
	c	21557.786	504.128	504.250	21557.786	504.034	504.148	21557.786	504.002	504.112	21557.786	503.919	504.022
	d	21566.786	504.312	504.453	21566.786	504.218	504.351	21566.786	504.186	504.315	21566.786	504.103	504.225
	L_2	21577.051	504.521	504.666	21577.051	504.427	504.564	21577.051	504.395	504.528	21577.051	504.312	504.438
	e	21586.051	504.705	504.879	21586.051	504.611	504.777	21586.051	504.579	504.741	21586.051	504.496	504.651
	f	21595.051	504.888	505.081	21595.051	504.794	504.979	21595.051	504.762	504.943	21595.051	504.679	504.853
	L_3	21605.317	505.098	505.293	21605.317	505.004	505.191	21605.317	504.972	505.155	21605.317	504.889	505.065
	g	21614.317	505.281	505.502	21614.317	505.187	505.400	21614.317	505.155	505.364	21614.317	505.072	505.274
	h	21623.317	505.465	505.700	21623.317	505.371	505.598	21623.317	505.339	505.562	21623.317	505.256	505.472
	L_4	21633.582	505.674	505.907	21633.582	505.580	505.805	21633.582	505.548	505.769	21633.582	505.465	505.679
	i	21642.582	505.858	506.114	21642.582	505.764	506.012	21642.582	505.732	505.976	21642.582	505.649	505.886
	j	21651.582	506.041	506.308	21651.582	505.947	506.206	21651.582	505.915	506.170	21651.582	505.832	506.080
	L_5	21661.848	506.251	506.512	21661.848	506.157	506.410	21661.848	506.125	506.374	21661.848	506.042	506.284
	k	21670.848	506.434	506.711	21670.848	506.340	506.609	21670.848	506.308	506.573	21670.848	506.225	506.483
	l	21679.848	506.618	506.899	21679.848	506.524	506.797	21679.848	506.492	506.761	21679.848	506.409	506.671
	L_6	21690.114	506.827	507.094	21690.114	506.733	506.992	21690.114	506.701	506.956	21690.114	506.618	506.866
	m	21699.114	507.011	507.291	21699.114	506.917	507.189	21699.114	506.885	507.153	21699.114	506.802	507.063
	n	21708.114	507.195	507.475	21708.114	507.101	507.373	21708.114	507.069	507.337	21708.114	506.986	507.247
	L_7	21718.379	507.404	507.667	21718.379	507.310	507.565	21718.379	507.278	507.529	21718.379	507.195	507.439
	o	21727.379	507.588	507.860	21727.379	507.494	507.758	21727.379	507.462	507.722	21727.379	507.379	507.632
	p	21736.379	507.771	508.040	21736.379	507.677	507.938	21736.379	507.645	507.902	21736.379	507.562	507.812
	L_8	21746.645	507.981	508.228	21746.645	507.887	508.126	21746.645	507.855	508.090	21746.645	507.772	508.000
	q	21755.645	508.164	508.417	21755.645	508.070	508.315	21755.645	508.038	508.279	21755.645	507.955	508.189
	r	21764.645	508.348	508.594	21764.645	508.254	508.492	21764.645	508.222	508.456	21764.645	508.139	508.366
	L_9	21774.910	508.557	508.777	21774.910	508.463	508.675	21774.910	508.431	508.639	21774.910	508.348	508.549
	s	21783.910	508.741	508.964	21783.910	508.647	508.862	21783.910	508.615	508.826	21783.910	508.532	508.736
	t	21792.910	508.924	509.139	21792.910	508.830	509.037	21792.910	508.798	509.001	21792.910	508.715	508.911
	L_{10}	21803.176	509.134	509.320	21803.176	509.040	509.218	21803.176	509.008	509.182	21803.176	508.925	509.092
	u	21812.176	509.317	509.507	21812.176	509.223	509.405	21812.176	509.191	509.369	21812.176	509.108	509.279
	v	21821.176	509.501	509.681	21821.176	509.407	509.579	21821.176	509.375	509.543	21821.176	509.292	509.453
	L_{11}	21831.442	509.711	509.863	21831.442	509.617	509.761	21831.442	509.585	509.725	21831.442	509.502	509.635
	w	21840.442	509.894	510.048	21840.442	509.800	509.946	21840.442	509.768	509.910	21840.442	509.685	509.820
	x	21849.442	510.078	510.222	21849.442	509.984	510.120	21849.442	509.952	510.084	21849.442	509.869	509.994
	L_{12}	21859.707	510.287	510.402	21859.707	510.193	510.300	21859.707	510.161	510.264	21859.707	510.078	510.174
	y	21868.707	510.471	510.590	21868.707	510.377	510.488	21868.707	510.345	510.452	21868.707	510.262	510.362
	z	21877.707	510.654	510.766	21877.707	510.560	510.664	21877.707	510.528	510.628	21877.707	510.445	510.538
	L_{13}	21887.973	510.863	510.947	21887.973	510.769	510.845	21887.973	510.737	510.809	21887.973	510.654	510.719
	a_1	21896.973	511.043	511.133	21896.973	510.949	511.031	21896.973	510.917	510.995	21896.973	510.834	510.905
	b_1	21905.973	511.218	511.302	21905.973	511.124	511.200	21905.973	511.092	511.164	21905.973	511.009	511.074
	L_{14}	21916.238	511.414	511.472	21916.238	511.320	511.370	21916.238	511.288	511.334	21916.238	511.205	511.244
	c_1	21925.238	511.580	511.645	21925.238	511.486	511.543	21925.238	511.454	511.507	21925.238	511.371	511.417
	d_1	21934.238	511.743	511.803	21934.238	511.649	511.701	21934.238	511.617	511.665	21934.238	511.534	511.575
	L_{15}	21944.504	511.923	511.959	21944.504	511.829	511.857	21944.504	511.797	511.821	21944.504	511.714	511.731
	e_1	21953.504	512.077	512.124	21953.504	511.983	512.022	21953.504	511.951	511.986	21953.504	511.868	511.896
	f_1	21962.504	512.227	512.273	21962.504	512.133	512.171	21962.504	512.101	512.135	21962.504	512.018	512.045
℄ Bearing Pier 11	L_{16}	21972.770	512.393	512.419	21972.770	512.299	512.317	21972.770	512.267	512.281	21972.770	512.184	512.191
	g_1	21981.770	512.534	512.581	21981.770	512.440	512.479	21981.770	512.408	512.443	21981.770	512.325	512.353
	h_1	21990.770	512.670	512.728	21990.770	512.576	512.626	21990.770	512.544	512.590	21990.770	512.461	512.500
	L_{17}	22001.036	512.821	512.871	22001.036	512.727	512.769	22001.036	512.695	512.733	22001.036	512.612	512.643
	i_1	22010.036	512.949	513.024	22010.036	512.855	512.922	22010.036	512.823	512.886	22010.036	512.740	512.796
	j_1	22019.036	513.073	513.160	22019.036	512.979	513.058	22019.036	512.947	513.022	22019.036	512.864	512.932
	L_{18}	22029.301	513.209	513.292	22029.301	513.115	513.190	22029.301	513.083	513.154	22029.301	513.000	513.064
	k_1	22038.301	513.325	513.434	22038.301	513.231	513.332	22038.301	513.199	513.296	22038.301	513.116	513.206
	l_1	22047.301	513.435	513.560	22047.301	513.341	513.458	22047.301	513.309	513.422	22047.301	513.226	513.332
	L_{19}	22057.567	513.557	513.680	22057.567	513.463	513.578	22057.567	513.431	513.542	22057.567	513.348	513.452
	m_1	22066.567	513.659	513.810	22066.567	513.565	513.708	22066.567	513.533	513.672	22066.567	513.450	513.582
	n_1	22075.567	513.757	513.924	22075.567	513.663	513.822	22075.567	513.631	513.786	22075.567	513.548	513.696
	L_{20}	22085.832	513.864	514.030	22085.832	513.770	513.928	22085.832	513.738	513.892	22085.832	513.655	513.802
	o_1	22094.832	513.953	514.152	22094.832	513.859	514.050	22094.832	513.827	514.014	22094.832	513.744	513.924
	p_1	22103.832	514.039	514.257	22103.832	513.945	514.155	22103.832	513.913	514.119	22103.832	513.830	514.029
	L_{21}	22114.098	514.131	514.355	22114.098	514.037	514.253	22114.098	514.005	514.217	22114.098	513.922	514.127
	q_1	22123.098	514.207	514.464	22123.098	514.113	514.362	22123.098	514.081	514.326	22123.098	513.998	514.236
	r_1	22132.098	514.279	514.558	22132.098	514.185	514.456	22132.098	514.153	514.420	22132.098	514.070	514.330
	L_{22}	22142.710	514.359	514.645	22142.710	514.265	514.543	22142.710	514.233	514.507	22142.710	514.150	514.417
	s_1	22151.710	514.422	514.739	22151.710	514.328	514.637	22151.710	514.296	514.601	22151.710	514.213	514.511
	t_1	22160.710	514.482	514.816	22160.710	514.388	514.714	22160.710	514.356	514.678	22160.710	514.273	514.588
	L_{23}	22171.322	514.546	514.884	22171.322	514.452	514.782	22171.322	514.420	514.746	22171.322	514.337	514.656
	u_1	22180.322	514.596	514.962	22180.322	514.502	514.860	22180.322	514.470	514.824	22180.322	514.387	514.734
	v_1	22189.322	514.642	515.025	22189.322	514.548	514.923	22189.322	514.516	514.887	22189.322	514.433	514.797
	L_{24}	22199.934	514.691	515.074	22199.934	514.597	514.972	22199.934	514.565	514.936	22199.934	514.482	514.846
	w_1	22208.934	514.729	515.139	22208.934	514.635	515.037	22208.934	514.603	515.001	22208.934	514.520	514.911
	x_1	22217.934	514.762	515.187	22217.934	514.668	515.085	22217.934	514.636	515.049	22217.934	514.553	514.959
	L_{25}	22228.546	514.795	515.220	22228.546	514.701	515.118	22228.546	514.669	515.082	22228.546	514.586	514.992
	y_1	22237.546	514.819	515.265	22237.546	514.725	515.163	22237.546	514.693	515.127	22237.546	514.610	515.037
	z_1	22246.546	514.839	515.294	22246.546	514.745	515.192	22246.546	514.713	515.156	22246.546	514.630	515.066
	L_{26}	22257.158	514.858	515.305	22257.158	514.764	515.203	22257.158	514.732	515.167	22257.158	514.649	515.077
	a_2	22266.158	514.869	515.332	22266.158	514.775	515.230	22266.158	514.743	515.194	22266.158	514.660	515.104
	b_2	22275.158	514.876	515.344	22275.158	514.782	515.242	22275.158	514.750	515.206	22275.158	514.667	515.116
	L_{27}	22285.770	514.878	515.334	22285.770	514.784	515.232	22285.770	514.752	515.196	22285.770	514.669	515.106



FLOOR BEAM
DEAD LOAD DEFLECTION DIAGRAM

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

ELEVATIONS - TOP OF CONCRETE



DEAD LOAD DEFLECTION DIAGRAM
(Includes Weight of Concrete Slab)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in "Elevations – Top of Concrete" tables.

Note: For notes on method of determining fillet heights "f" see sheet 30 of 88.

TOP OF SLAB ELEVATIONS
SPANS 12, 13 & 14

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.
CHECKED	R.W.C.
DRAWN	R.J.F.
CHECKED	W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

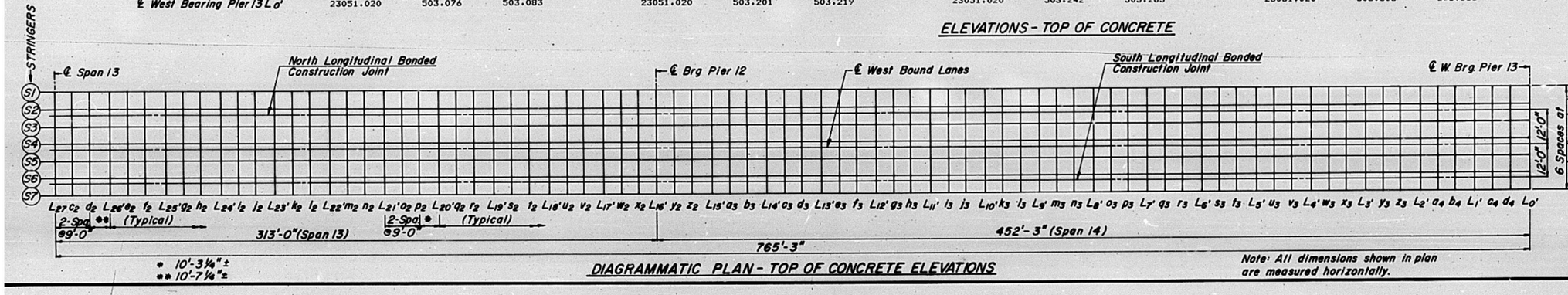
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-49	058-U -D	PEORIA & TAZEWELL	97	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 65 of 88

		STRINGER 1			STRINGER 2			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			STRINGER 3			STRINGER 4		
		STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
	C_2	22294.770	514.584	515.032	22294.770	514.709	515.168	22294.770	514.750	515.212	22294.770	514.813	515.280	22294.770	514.907	515.376
	d_2	22303.770	514.578	515.025	22303.770	514.703	515.161	22303.770	514.744	515.205	22303.770	514.807	515.273	22303.770	514.901	515.369
	$L_{26'}$	22314.382	514.566	514.994	22314.382	514.691	515.130	22314.382	514.732	515.174	22314.382	514.795	515.242	22314.382	514.889	515.338
	g_2	22323.382	514.550	514.986	22323.382	514.675	515.122	22323.382	514.716	515.166	22323.382	514.779	515.234	22323.382	514.873	515.330
	f_2	22332.382	514.531	514.961	22332.382	514.656	515.097	22332.382	514.697	515.141	22332.382	514.760	515.209	22332.382	514.854	515.305
	$L_{25'}$	22342.994	514.503	514.909	22342.994	514.628	515.045	22342.994	514.669	515.089	22342.994	514.732	515.157	22342.994	514.826	515.253
	q_2	22351.994	514.475	514.882	22351.994	514.600	515.018	22351.994	514.641	515.062	22351.994	514.704	515.130	22351.994	514.798	515.226
	h_2	22360.994	514.443	514.838	22360.994	514.568	514.974	22360.994	514.609	515.018	22360.994	514.672	515.086	22360.994	514.766	515.182
	$L_{24'}$	22371.606	514.399	514.763	22371.606	514.524	514.899	22371.606	514.565	514.943	22371.606	514.628	515.011	22371.606	514.722	515.107
	i_2	22380.606	514.358	514.722	22380.606	514.483	514.858	22380.606	514.524	514.902	22380.606	514.587	514.970	22380.606	514.681	515.066
	j_2	22389.606	514.313	514.661	22389.606	514.438	514.800	22389.606	514.479	514.844	22389.606	514.542	514.912	22389.606	514.636	515.008
	$L_{23'}$	22400.218	514.254	514.573	22400.218	514.379	514.709	22400.218	514.420	514.753	22400.218	514.483	514.821	22400.218	514.577	514.917
	k_2	22409.218	514.200	514.516	22409.218	514.325	514.652	22409.218	514.366	514.696	22409.218	514.429	514.764	22409.218	514.523	514.860
	l_2	22418.218	514.141	514.444	22418.218	514.266	514.580	22418.218	514.307	514.624	22418.218	514.370	514.692	22418.218	514.464	514.788
	$L_{22'}$	22428.830	514.067	514.334	22428.830	514.192	514.470	22428.830	514.233	514.514	22428.830	514.296	514.582	22428.830	514.390	514.678
	m_2	22437.830	514.000	514.261	22437.830	514.125	514.397	22437.830	514.166	514.441	22437.830	514.229	514.509	22437.830	514.323	514.605
	n_2	22446.830	513.928	514.172	22446.830	514.053	514.308	22446.830	514.094	514.352	22446.830	514.157	514.420	22446.830	514.251	514.516
	$L_{21'}$	22457.441	513.839	514.044	22457.441	513.964	514.180	22457.441	514.005	514.224	22457.441	514.068	514.292	22457.441	514.162	514.388
	o_2	22466.441	513.758	513.959	22466.441	513.883	514.095	22466.441	513.924	514.139	22466.441	513.987	514.207	22466.441	514.081	514.303
	p_2	22475.441	513.674	513.858	22475.441	513.799	513.994	22475.441	513.840	514.038	22475.441	513.903	514.106	22475.441	513.997	514.202
	$L_{20'}$	22485.707	513.572	513.719	22485.707	513.697	513.855	22485.707	513.738	513.899	22485.707	513.801	513.967	22485.707	513.895	514.063
	q_2	22494.707	513.479	513.626	22494.707	513.604	513.762	22494.707	513.645	513.806	22494.707	513.708	513.874	22494.707	513.802	513.970
	r_2	22503.707	513.381	513.517	22503.707	513.506	513.653	22503.707	513.547	513.697	22503.707	513.610	513.765	22503.707	513.704	513.861
	$L_{19'}$	22513.973	513.265	513.369	22513.973	513.390	513.505	22513.973	513.431	513.549	22513.973	513.494	513.617	22513.973	513.588	513.713
	s_2	22522.973	513.159	513.264	22522.973	513.284	513.400	22522.973	513.325	513.444	22522.973	513.388	513.512	22522.973	513.482	513.608
	t_2	22531.973	513.048	513.143	22531.973	513.173	513.279	22531.973	513.214	513.323	22531.973	513.277	513.391	22531.973	513.371	513.487
	$L_{18'}$	22542.238	512.917	512.981	22542.238	513.042	513.117	22542.238	513.083	513.141	22542.238	513.146	513.229	22542.238	513.240	513.325
	u_2	22551.238	512.798	512.866	22551.238	512.923	513.002	22551.238	512.964	513.046	22551.238	513.027	513.114	22551.238	513.121	513.210
	v_2	22560.238	512.675	512.734	22560.238	512.800	512.870	22560.238	512.841	512.914	22560.238	512.904	512.982	22560.238	512.998	513.078
	$L_{17'}$	22570.504	512.529	512.560	22570.504	512.654	512.696	22570.504	512.695	512.740	22570.504	512.758	512.808	22570.504	512.852	512.904
	w_2	22579.504	512.397	512.435	22579.504	512.522	512.571	22579.504	512.563	512.615	22579.504	512.626	512.683	22579.504	512.720	512.779
	x_2	22588.504	512.261	512.293	22588.504	512.386	512.429	22588.504	512.427	512.473	22588.504	512.490	512.541	22588.504	512.584	512.637
℄ Bearing Pier 12	$L_{16'}$	22598.770	512.101	512.108	22598.770	512.226	512.244	22598.770	512.267	512.288	22598.770	512.330	512.356	22598.770	512.424	512.452
	y_2	22607.770	511.956	511.980	22607.770	512.081	512.116	22607.770	512.122	512.160	22607.770	512.185	512.228	22607.770	512.279	512.324
	z_2	22616.770	511.806	511.836	22616.770	511.931	511.972	22616.770	511.972	512.016	22616.770	512.035	512.084	22616.770	512.129	512.180
	$L_{15'}$	22627.035	511.631	511.648	22627.035	511.756	511.784	22627.035	511.797	511.828	22627.035	511.860	511.896	22627.035	511.954	511.992
	a_3	22636.035	511.473	511.511	22636.035	511.598	511.647	22636.035	511.639	511.691	22636.035	511.702	511.759	22636.035	511.796	511.855
	b_3	22645.035	511.311	511.358	22645.035	511.436	511.494	22645.035	511.477	511.538	22645.035	511.540	511.606	22645.035	511.634	511.702
	$L_{14'}$	22655.301	511.122	511.161	22655.301	511.247	511.297	22655.301	511.288	511.341	22655.301	511.351	511.409	22655.301	511.445	511.505
	c_3	22664.301	510.951	511.012	22664.301	511.076	511.148	22664.301	511.117	511.192	22664.301	511.180	511.260	22664.301	511.274	511.356
	d_3	22673.301	510.776	510.847	22673.301	510.901	510.983	22673.301	510.942	511.027	22673.301	511.005	511.095	22673.301	511.099	511.191
	$L_{13'}$	22683.566	510.571	510.636	22683.566	510.696	510.772	22683.566	510.737	510.816	22683.566	510.800	510.884	22683.566	510.894	510.980
	e_3	22692.566	510.388	510.477	22692.566	510.513	510.613	22692.566	510.554	510.657	22692.566	510.617	510.725	22692.566	510.711	510.821
	f_3	22701.566	510.205	510.305	22701.566	510.330	510.441	22701.566	510.371	510.485	22701.566	510.434	510.553	22701.566	510.528	510.649
	$L_{12'}$	22711.832	509.995	510.091	22711.832	510.120	510.227	22711.832	510.161	510.271	22711.832	510.224	510.339	22711.832	510.318	510.435
	g_3	22720.832	509.811	509.933	22720.832	509.936	510.069	22720.832	509.977	510.113	22720.832	510.040	510.181	22720.832	510.134	510.277
	h_3	22729.832	509.628	509.763	22729.832	509.753	509.899	22729.832	509.794	509.943	22729.832	509.857	510.011	22729.832	509.951	510.107
	$L_{11'}$	22740.098	509.418	509.551	22740.098	509.543	509.687	22740.098	509.584	509.731	22740.098	509.647	509.799	22740.098	509.741	509.895
	i_3	22749.098	509.235	509.393	22749.098	509.360	509.529	22749.098	509.401	509.573	22749.098	509.464	509.641	22749.098	509.558	509.737
	j_3	22758.098	509.051	509.222	22758.098	509.176	509.358	22758.098	509.217	509.402	22758.098	509.280	509.470	22758.098	509.374	509.566
	$L_{10'}$	22768.363	508.842	509.009	22768.363	508.967	509.145	22768.363	509.008	509.189	22768.363	509.071	509.257	22768.363	509.165	509.353
	k_3	22777.363	508.658	508.850	22777.363	508.783	508.986	22777.363	508.824	509.030	22777.363	508.887	509.098	22777.363	508.981	509.194
	l_3	22786.363	508.475	508.679	22786.363	508.600	508.815	22786.363	508.641	508.859	22786.363	508.704	508.927	22786.363	508.798	509.023
	$L_{9'}$	22796.629	508.265	508.466	22796.629	508.390	508.602	22796.629	508.431	508.646	22796.629	508.494	508.714	22796.629	508.588	508.810
	m_3	22805.629	508.082	508.305	22805.629	508.207	508.441	22805.629	508.248	508.485	22805.629	508.311	508.553	22805.629	508.405	508.649
	n_3	22814.629	507.898	508.132	22814.629	508.023	508.268	22814.629	508.064	508.312	22814.629	508.127	508.380	22814.629	508.221	508.476
	$L_{8'}$	22824.894	507.689	507.917	22824.894	507.814	508.053	22824.894	507.855	508.097	22824.894	507.918	508.165	22824.894	508.012	508.261
	o_3	22833.894	507.505	507.752	22833.894	507.630	507.888	22833.894	507.671	507.932	22833.894	507.734	508.000	22833.894	507.828	508.096
	p_3	22842.894	507.321	507.576	22842.894	507.446	507.712	22842.894	507.487	507.756	22842.894	507.550	507.824	22842.894	507.644	507.920
	$L_{7'}$	22853.160	507.112	507.356	22853.160	507.237	507.492	22853.160	507.278	507.536	22853.160	507.341	507.604	22853.160	507.435	507.700
	q_3	22862.160	506.928	507.188	22862.160	507.053	507.324	22862.160	507.094	507.368	22862.160	507.157	507.436	22862.160	507.251	507.532
	r_3	22871.160	506.745	507.007	22871.160	506.870	507.143	22871.160	506.911	507.187	22871.160	506.974	507.255	22871.160	507.068	507.351
	$L_{6'}$	22881.426	506.535	506.783	22881.426	506.660	506.919	22881.426	506.701	506.963	22881.426	506.764	507.031	22881.426	506.858	507.127
	s_3	22890.426	506.352	506.612	22890.426	506.477	506.748	22890.426	506.518	506.792	22890.426	506.581	506.860	22890.426	506.675	506.956
	t_3	22899.426	506.168	506.428	22899.426	506.293	506.564	22899.426	506.334	506.608	22899.426	506.397	506.676	22899.426	506.491	506.772
	$L_{5'}$	22909.691	505.959	506.201	22909.691	506.084	506.337	22909.691	506.125	506.381	22909.691	506.188	506.449	22909.691	506.282	506.545
	u_3	22918.691	505.775	506.022	22918.691	505.900	506.158	22918.691	505.941	506.202	22918.691	506.004	506.270	22918.691	506.098	506.366
	v_3	22927.691	505.592	505.832	22927.691	505.717	505.968	22927.691	505.758	506.012	22927.691	505.821	506.080	22927.691	505.915	506.176
	$L_{4'}$	22937.957	505.382	505.596	22937.957	505.507	505.732	22937.957	505.548	505.776	22937.957	505.611	505.844	22937.957	505.705	505.940
	w_3	22946.957	505.199	505.414	22946.957	505.324	505.550	22946.957	505.365	505.594	22946.957	505.428	505.662	22946.957	505.522	505.758
	x_3	22955.957	505.015	505.221	22955.957	505.140	505.357	22955.957	505.181	505.401	22955.957	505.244	505.469	22955.957	505.338	505.565
	$L_{3'}$	22966.222	504.806	504.982	22966.222	504.931	505.118	22966.222	504.972	505.162	22966.222	505.035	505.230	22966.222	505.129	505.326
	y_3	22975.222	504.622	504.796	22975.222	504.747	504.932	22975.222	504.788	504.976	22975.222	504.851	505.044	22975.222	504.945	505.140
	z_3	22984.222	504.438	504.598	22984.222	504.563	504.734	22984.222	504.604	504.778	22984.222	504.667	504.846	22984.222	504.761	504.942
	$L_{2'}$	22994.488	504.229	504.355	22994.488	504.354	504.491	22994.488	504.395	504.535	22994.488	504.458	504.603	22994.488	504.552	504.699
	a_4	23003.488	504.045	504.168	23003.488	504.170	504.304	23003.488	504.211	504.348	23003.488	504.274	504.416	23003.488	504.368	504.512
	b_4	23012.488	503.862	503.969	23012.488	503.987	504.105	23012.488	504.028	504.149	23012.488	504.091	504.217	23012.488	504.185	504.313
	$L_{1'}$	23022.754	503.652	503.724	23022.754	503.777	503.860	23022.754	503.818	503.904	23022.754	503.881	503.972	23022.754	503.975	504.068
	c_4	23031.754	503.469	503.534	23031.754	503.594	503.670	23031.754	503.635	503.714	23031.754	503.698	503.782	23031.754	503.792	503.878
	d_4	23040.754	503.285	503.332	23040.754	503.410	503.468	23040.754	503.451	503.512	23040.754	503.514	503.580	23040.754	503.608	503.676
℄ West Bearing Pier 13	$L_{0'}$	23051.020	503.076	503.083	23051.020	503.201	503.219	23051.020	503.242	503.263	23051.020	503.305	503.331	23051.020	503.399	503.427

ELEVATIONS - TOP OF CONCRETE

ELEV. A = THEORETICAL GRADE ELEVATIONS
ELEV. B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION



* 10'-3¼" ±
** 10'-7¼" ±

DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

Note: All dimensions shown in plan are measured horizontally.

TOP OF SLAB ELEVATIONS SPANS 12, 13 & 14

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (058-U)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.O.
M.L.B.
S.C.O.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

74001

8-22-80

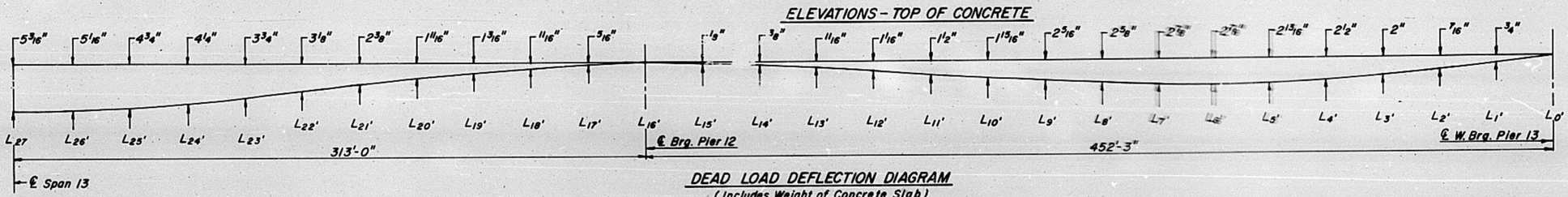
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-49	(15B-1) -D	PEORIA & TAZEWELL	97	29
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 250 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

		STRINGER 5			STRINGER 6			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT			STRINGER 7		
		STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
	c_2	22294.770	514.876	515.343	22294.770	514.782	515.241	22294.770	514.750	515.205	22294.770	514.667	515.115
	d_2	22303.770	514.870	515.336	22303.770	514.776	515.234	22303.770	514.744	515.198	22303.770	514.661	515.108
	$L_{26'}$	22314.382	514.858	515.305	22314.382	514.764	515.203	22314.382	514.732	515.167	22314.382	514.649	513.077
	g_2	22323.382	514.842	515.297	22323.382	514.748	515.195	22323.382	514.716	515.159	22323.382	514.633	515.069
	f_2	22332.382	514.823	515.272	22332.382	514.729	515.170	22332.382	514.697	515.134	22332.382	514.614	515.044
	$L_{25'}$	22342.994	514.795	515.220	22342.994	514.701	515.118	22342.994	514.669	515.082	22342.994	514.586	514.992
	q_2	22351.994	514.767	515.193	22351.994	514.673	515.091	22351.994	514.641	515.055	22351.994	514.558	514.965
	h_2	22360.994	514.735	515.149	22360.994	514.641	515.047	22360.994	514.609	515.011	22360.994	514.526	514.921
	$L_{24'}$	22371.606	514.691	515.074	22371.606	514.597	514.972	22371.606	514.565	514.936	22371.606	514.482	514.846
	l_2	22380.606	514.650	515.033	22380.606	514.556	514.931	22380.606	514.524	514.895	22380.606	514.441	514.805
	j_2	22389.606	514.605	514.975	22389.606	514.511	514.873	22389.606	514.479	514.837	22389.606	514.396	514.747
	$L_{23'}$	22400.218	514.546	514.884	22400.218	514.452	514.782	22400.218	514.420	514.746	22400.218	514.337	514.656
	k_2	22409.218	514.492	514.827	22409.218	514.398	514.725	22409.218	514.366	514.689	22409.218	514.283	514.599
	l_2	22418.218	514.433	514.755	22418.218	514.339	514.653	22418.218	514.307	514.617	22418.218	514.224	514.527
	$L_{22'}$	22428.830	514.359	514.645	22428.830	514.265	514.543	22428.830	514.233	514.507	22428.830	514.150	514.417
	m_2	22437.830	514.292	514.572	22437.830	514.198	514.470	22437.830	514.166	514.434	22437.830	514.083	514.344
	n_2	22446.830	514.220	514.483	22446.830	514.126	514.381	22446.830	514.094	514.345	22446.830	514.011	514.255
	$L_{21'}$	22457.441	514.131	514.355	22457.441	514.037	514.253	22457.441	514.005	514.217	22457.441	513.922	514.127
	o_2	22466.441	514.050	514.270	22466.441	513.956	514.168	22466.441	513.924	514.132	22466.441	513.841	514.042
	p_2	22475.441	513.966	514.169	22475.441	513.872	514.067	22475.441	513.840	514.031	22475.441	513.757	513.941
	$L_{20'}$	22485.707	513.864	514.030	22485.707	513.770	513.928	22485.707	513.738	513.892	22485.707	513.655	513.802
	q_2	22494.707	513.771	513.937	22494.707	513.677	513.835	22494.707	513.645	513.799	22494.707	513.562	513.709
	r_2	22503.707	513.673	513.828	22503.707	513.579	513.726	22503.707	513.547	513.690	22503.707	513.464	513.600
	$L_{19'}$	22513.973	513.557	513.680	22513.973	513.463	513.578	22513.973	513.431	513.542	22513.973	513.348	513.452
	s_2	22522.973	513.451	513.575	22522.973	513.357	513.473	22522.973	513.325	513.437	22522.973	513.242	513.347
	t_2	22531.973	513.340	513.454	22531.973	513.246	513.352	22531.973	513.214	513.316	22531.973	513.131	513.226
	$L_{18'}$	22542.238	513.209	513.292	22542.238	513.115	513.190	22542.238	513.083	513.154	22542.238	513.000	513.064
	u_2	22551.238	513.090	513.177	22551.238	512.996	513.075	22551.238	512.964	513.039	22551.238	512.881	512.949
	v_2	22560.238	512.967	513.045	22560.238	512.873	512.943	22560.238	512.841	512.907	22560.238	512.758	512.817
	$L_{17'}$	22570.504	512.821	512.871	22570.504	512.727	512.769	22570.504	512.695	512.733	22570.504	512.612	512.643
	w_2	22579.504	512.689	512.746	22579.504	512.595	512.644	22579.504	512.563	512.608	22579.504	512.480	512.518
	x_2	22588.504	512.553	512.604	22588.504	512.459	512.502	22588.504	512.427	512.466	22588.504	512.344	512.376
℄ Bearing Pier 12	$L_{16'}$	22598.770	512.393	512.419	22598.770	512.299	512.317	22598.770	512.267	512.281	22598.770	512.184	512.191
	y_2	22607.770	512.248	512.291	22607.770	512.154	512.189	22607.770	512.122	512.153	22607.770	512.039	512.063
	z_2	22616.770	512.098	512.147	22616.770	512.004	512.045	22616.770	511.972	512.009	22616.770	511.889	511.919
	$L_{15'}$	22627.035	511.923	511.959	22627.035	511.829	511.857	22627.035	511.797	511.821	22627.035	511.714	511.731
	q_3	22636.035	511.765	511.822	22636.035	511.671	511.720	22636.035	511.639	511.684	22636.035	511.556	511.594
	b_3	22645.035	511.603	511.669	22645.035	511.509	511.567	22645.035	511.477	511.531	22645.035	511.394	511.441
	$L_{3'}$	22655.301	511.414	511.472	22655.301	511.320	511.370	22655.301	511.288	511.334	22655.301	511.205	511.244
	$L_{14'}$	22664.301	511.243	511.323	22664.301	511.149	511.221	22664.301	511.117	511.185	22664.301	511.034	511.095
	c_3	22673.301	511.068	511.158	22673.301	510.974	511.056	22673.301	510.942	511.020	22673.301	510.859	510.930
	d_3	22683.566	510.863	510.947	22683.566	510.769	510.845	22683.566	510.737	510.809	22683.566	510.654	510.719
	$L_{13'}$	22692.566	510.680	510.788	22692.566	510.586	510.686	22692.566	510.554	510.650	22692.566	510.471	510.560
	g_3	22701.566	510.497	510.616	22701.566	510.403	510.514	22701.566	510.371	510.478	22701.566	510.288	510.388
	f_3	22711.832	510.287	510.402	22711.832	510.193	510.300	22711.832	510.161	510.264	22711.832	510.078	510.174
	$L_{3'}$	22720.832	510.103	510.244	22720.832	510.009	510.142	22720.832	509.977	510.106	22720.832	509.894	510.016
	$L_{12'}$	22729.832	509.920	510.074	22729.832	509.826	509.972	22729.832	509.794	509.936	22729.832	509.711	509.846
	q_3	22740.098	509.710	509.862	22740.098	509.616	509.760	22740.098	509.584	509.724	22740.098	509.501	509.634
	h_3	22749.098	509.527	509.704	22749.098	509.433	509.602	22749.098	509.401	509.566	22749.098	509.318	509.476
	$L_{11'}$	22758.098	509.343	509.533	22758.098	509.249	509.431	22758.098	509.217	509.395	22758.098	509.134	509.305
	l_3	22768.363	509.134	509.320	22768.363	509.040	509.218	22768.363	509.008	509.182	22768.363	508.925	509.092
	j_3	22777.363	508.950	509.161	22777.363	508.856	509.059	22777.363	508.824	509.023	22777.363	508.741	508.933
	$L_{10'}$	22786.363	508.767	508.990	22786.363	508.673	508.888	22786.363	508.641	508.852	22786.363	508.558	508.762
	k_3	22796.629	508.557	508.777	22796.629	508.463	508.675	22796.629	508.431	508.639	22796.629	508.348	508.549
	l_3	22805.629	508.374	508.616	22805.629	508.280	508.514	22805.629	508.248	508.478	22805.629	508.165	508.388
	$L_{9'}$	22814.629	508.190	508.443	22814.629	508.096	508.341	22814.629	508.064	508.305	22814.629	507.981	508.215
	m_3	22824.894	507.981	508.228	22824.894	507.887	508.126	22824.894	507.855	508.090	22824.894	507.772	508.000
	n_3	22833.894	507.797	508.063	22833.894	507.703	507.961	22833.894	507.671	507.925	22833.894	507.588	507.835
	$L_{8'}$	22842.894	507.613	507.887	22842.894	507.519	507.785	22842.894	507.487	507.749	22842.894	507.404	507.659
	o_3	22853.160	507.404	507.667	22853.160	507.310	507.565	22853.160	507.278	507.529	22853.160	507.195	507.439
	p_3	22862.160	507.220	507.499	22862.160	507.126	507.397	22862.160	507.094	507.361	22862.160	507.011	507.271
	$L_{7'}$	22871.160	507.037	507.318	22871.160	506.943	507.216	22871.160	506.911	507.180	22871.160	506.828	507.090
	q_3	22881.426	506.827	507.094	22881.426	506.733	506.992	22881.426	506.701	506.956	22881.426	506.618	506.866
	r_3	22890.426	506.644	506.923	22890.426	506.550	506.821	22890.426	506.518	506.785	22890.426	506.435	506.695
	$L_{6'}$	22899.426	506.460	506.739	22899.426	506.366	506.637	22899.426	506.334	506.601	22899.426	506.251	506.511
	s_3	22909.691	506.251	506.512	22909.691	506.157	506.410	22909.691	506.125	506.374	22909.691	506.042	506.284
	f_3	22918.691	506.067	506.333	22918.691	505.973	506.231	22918.691	505.941	506.195	22918.691	505.858	506.105
	$L_{5'}$	22927.691	505.884	506.143	22927.691	505.790	506.041	22927.691	505.758	506.005	22927.691	505.675	505.915
	u_3	22937.957	505.674	505.907	22937.957	505.580	505.805	22937.957	505.548	505.769	22937.957	505.465	505.679
	v_3	22946.957	505.491	505.725	22946.957	505.397	505.623	22946.957	505.365	505.587	22946.957	505.282	505.497
	$L_{4'}$	22955.957	505.307	505.532	22955.957	505.213	505.430	22955.957	505.181	505.394	22955.957	505.098	505.304
	w_3	22966.222	505.098	505.293	22966.222	505.004	505.191	22966.222	504.972	505.155	22966.222	504.889	505.065
	x_3	22975.222	504.914	505.107	22975.222	504.820	505.005	22975.222	504.788	504.969	22975.222	504.705	504.879
	$L_{3'}$	22984.222	504.730	504.909	22984.222	504.636	504.807	22984.222	504.604	504.771	22984.222	504.521	504.681
	y_3	22994.488	504.521	504.666	22994.488	504.427	504.564	22994.488	504.395	504.528	22994.488	504.312	504.438
	$L_{2'}$	23003.488	504.337	504.479	23003.488	504.243	504.377	23003.488	504.211	504.341	23003.488	504.128	504.251
	z_3	23012.488	504.154	504.280	23012.488	504.060	504.178	23012.488	504.028	504.142	23012.488	503.945	504.052
	q_4	23022.754	503.944	504.035	23022.754	503.850	503.933	23022.754	503.818	503.867	23022.754	503.735	503.807
	b_4	23031.754	503.761	503.845	23031.754	503.667	503.743	23031.754	503.635	503.707	23031.754	503.552	503.617
	$L_{1'}$	23040.754	503.577	503.643	23040.754	503.483	503.541	23040.754	503.451	503.505	23040.754	503.368	503.415
	c_4	23031.754	503.761	503.845	23031.754	503.667	503.743	23031.754	503.635	503.707	23040.754	503.552	503.617
	d_4	23040.754	503.577	503.643	23040.754	503.483	503.541	23040.754	503.451	503.505	23051.020	503.159	503.166
℄ West Bearing Pier 13	$L_{0'}$	23051.020	503.368	503.394	23051.020	503.274	503.292	23051.020	503.242	503.256			

ELEVATIONS – TOP OF CONCRETE



DEAD LOAD DEFLECTION DIAGRAM
(Includes Weight of Concrete Slab)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in "Elevations – Top of Concrete" tables.

Note: For notes on method of determining fillet heights "i" see sheet 30 of 88.

ELEV. A = THEORETICAL GRADE ELEVATIONS
ELEV. B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

TOP OF SLAB ELEVATIONS
SPANS 12, 13 & 14

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
DRAWN S.C.Q.
TRACED M.L.B.
CHECKED S.C.C.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

FILE NO. 74001
DATE 8-22-80

NOTES:
All dimensions shown are measured horizontally.
Bars indicated thus: 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
See sheets 27 & 28 for superstructure details & Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

NOTES:
For Sections A-A, A'-A', B-B & C-C see sheet 28 of 88.
For Section D-D see sheet 23 of 88.
For Section @ Lo see Section A-A on sheet 27 of 88.
For curb & parapet details see sheet 27 of 88.

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	30
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 26 of 88

℄ Brg. Pier 10
Sta. 215+20.52
or ℄ Brg. Pier 13
Sta. 230+51.02

42'-0" o to o deck
19'-0"
23'-0"
66-#6 x 50(E) bars @ 6"cts. Top of slab, space to miss SH's

113-#6 ass(E) bars @ 12"cts. Top - each side
(Lap to alternate as3(E) & as4(E) bars)
226-#5 as3(E) bars @ 6"cts. Top - this side
226-#5 as4(E) bars @ 6"cts. Top - far side
153-#5 as1 bars @ 9"cts. Bottom - this side
153-#5 as2 bars @ 9"cts. Bottom - far side
UNIT A

39x4-#5 bs1(E) bars @ 12"cts Top of slab
36x4-#5 bss bars spaced as shown in cross section on sheet 27 of 88 - Bott. of slab

38-#6 bs6(E) bars @ 12"cts. Top of slab
Alternate between bs1(E) bars at all floor beams except Lo&Lo', L4&L4', L8&L8', L12&L12', L21&L21', L25&L25'.

5'-6" 5'-6"

C C B B

*Typ. Floor Beam Location & Aluminum Sheeted Construction Joint in base of Parapet.

2" Neop. Exp. Jt.

3x4-#5 bs1(E) bars Top of slab

112-#6 ass(E) bars @ 12"cts. Top - each side
(Lap to alternate as3(E) & as4(E) bars)
224-#5 as3(E) bars @ 6"cts. Top - this side
224-#5 as4(E) bars @ 6"cts. Top - far side
153-#5 as1 bars @ 9"cts. Bottom - this side
153-#5 as2 bars @ 9"cts. Bottom - far side
UNIT B

39x4-#5 bs1(E) bars @ Top of slab
36x4-#5 bs1 bars spaced as shown in cross section on sheet 27 of 88 - Bott. of slab

38-#6 bs6(E) bars @ 12"cts. Top of slab. Alternate between bs1(E) bars at all floor beams except Lo&Lo', L4&L4', L8&L8', L12&L12', L21&L21', L25&L25'.

5'-6" 5'-6"

2" Neop. Exp. Jt.

7¾" 2" 4" 7" 10"

℄ West Bound Lanes

UNIT B
Same Reinforcement as that shown for Unit B at left.

1'-2¼" @ Lo
1'-8¼" @ Lo'
3" @ 50°F @ Lo
5½" @ 50°F @ Lo'

116-#4 dso bars @ 12"cts. (outside face) & 126-#5 ds1(E) bars @ 11"cts. (inside face) both curbs.
±29'-9¼" @ Lo
±29'-6½" @ Lo'
115'-0⅜" @ Lo & 114'-10¼" @ Lo'
1,533'-3½" End to End of Deck @ Truss.

± 28'-3¼" ± 28'-3¼" ± 28'-9¼"

L1 L2 L3 L4 2" @ 50°F L5 L6

114-#4 dso bars @ 12"cts. (outside face) & 124-#5 ds1(E) bars @ 11"cts. (inside face) both curbs.
± 27'-7¼" ± 28'-3¼" ± 28'-3¼" ± 28'-9¼"
112'-10¾"

L7 L8 2" @ 50°F L9 L10

114-#4 dso bars @ 12"cts. (outside face) &
± 27'-7¼" ± 28'-3¼"
112'-10¾"
Curb Joint Locations

℄ Pier 10 ℄ Brg. & Lo 1'-9"

2" Neop. Exp. Jt.

℄ Brg. Pier 11 or Pier 12

3x9-#5 bs1(E) bars Top of slab

251 (L12-L21) & 252 (L12'-L21') ass(E) bars @ 12"cts. Top - each side
(Lap to alternate as3(E) & as4(E) bars)
502 (L12-L21) & 504 (L12'-L21') as3(E) bars @ 6"cts. Top - this side
502 (L12-L21) & 504 (L12'-L21') as4(E) bars @ 6"cts. Top - far side
337-#5 as1 bars @ 9"cts. Bottom - this side.
337-#5 as2 bars @ 9"cts. Bottom - far side.
UNIT B

UNIT C
℄ Brg. Pier 11
Sta. 219+72.77
or ℄ Brg. Pier 12
Sta. 225+98.77

39x9-#5 bs6(E) (L12'to L21') @ 12"cts. Top
39x9-#5 bs1(E) (L12'-L21') @ 12"cts. Top
36x9-#5 bs1 bars spaced as shown in cross section on sheet 27 of 88 - Bott. of slab

38-#6 bs6(E) bars @ 12"cts. Top of slab. Alternate between bs1(E) or bs6(E) bars at all floor beams except Lo&Lo', L4&L4', L8&L8', L12&L12', L21&L21', L25&L25'.

5'-6" 5'-6"

℄ West Bound Lanes

& 124-#5 ds1(E) bars @ 11"cts. (inside face) both curbs
± 28'-3¼" ± 28'-9¼"
112'-10¾"

254-#4 dso bars @ 12"cts. (outside face) & 276-#5 ds1(E) bars @ 11"cts. (inside face) both curbs.
± 27'-7¼" ± 28'-3¼" ± 28'-3¼" ± 28'-3¼" ± 28'-3¼" ± 28'-3¼" ± 28'-3¼" ± 28'-3¼"
Curb Joint Locations
252'-7⅞" @ L21 & 252'-9⅝" @ L21'

L10 L11 L12 2" @ 50°F L13 L14 L15 L16 L17 L18 L19 L20

For Details & Deck Drain Spacing See Sh. 28 of 88

4'-9⅜" 4'-2¾"

2" Neop. Exp. Jt. @ L21' (2" opng.)
9" Neop. Exp. Jt. @ L21 (6" opng.)

3x4-#5 bss(E) bars Top of slab

3x4-#5 bs6(E) bars Top of slab

2" Neop. Exp. Jt.

2" Neop. Exp. Jt.

66-#6 x 50(E) bars @ 6"cts. Top of slab - each side of joint

A' @ L21'
A @ L21

39x4-#5 bss bars @ 12"cts. Top

36x4-#5 bss bars spaced as shown in cross section on sht. 27 of 88 Bott. of slab

38-#6 bs6(E) bars @ 12"cts. Top of Slab Alternate between bs1(E) or bss(E) bars at all floor beams except Lo&Lo', L4&L4', L8&L8', L12&L12', L21&L21', L25&L25'.

5'-6" 5'-6"

114 (L21-L25) & 115 (L21'-L25') #6 ass(E) bars @ 12"cts. Top - each side.
(Lap to alternate as3(E) & as4(E) bars.)
228 (L21-L25) & 230 (L21'-L25') #5 as3(E) bars @ 6"cts. Top - this side.
228 (L21-L25) & 230 (L21'-L25') #5 as4(E) bars @ 6"cts. Top - far side.
154-#5 as1 bars @ 9"cts. Bottom - this side.
154-#5 as2 bars @ 9"cts. Bottom - far side.
UNIT C

A' @ L21'
A @ L21

39x4-#5 bss bars @ 12"cts. Top
bs1(E) L21-L25 & bss(E) L21'-L25'

UNIT D

112-#6 ass(E) bars @ 12"cts. Top - each side.
(Lap to alternate as3(E) & as4(E) bars.)
224-#5 as3(E) bars @ 6"cts. Top - this side.
224-#5 as4(E) bars @ 6"cts. Top - far side.
151-#5 as1 bars @ 9"cts. Bottom - this side.
151-#5 as2 bars @ 9"cts. Bottom - far side.
UNIT E

39x4-#5 bs6(E) bars @ 12"cts. Top of slab
36x4-#5 bs1 bars spaced as shown in cross section on sheet 27 of 88 - Bott. of slab

38-#6 bs6(E) bars @ 12"cts. Top of slab. Alternate between bs6(E) bars at all floor beams except Lo&Lo', L4&L4', L8&L8', L12&L12', L21&L21', L25&L25'.

5'-6" 5'-6"

℄ West Bound Lanes

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

115-#4 dso bars @ 12"cts. (outside face) & 125-#5 ds1(E) bars @ 11"cts. (inside face) both curbs
± 29'-3" @ L21 & ± 29'-5" @ L21'
115'-6⅜" @ L21 & 115'-8⅜" @ L21'

114-#4 dso bars @ 12"cts. (outside face) & 124-#5 ds1(E) bars @ 11"cts. (inside face) both curbs
± 27'-11¼" ± 28'-7¼" ± 28'-7¼" ± 27'-11¼"
56'-6⅝" 56'-6 11/16"

Curb Joint Locations
± 27'-1¼" @ L21 & ± 27'-3¼" @ L21'
± 28'-7¼" ± 29'-1¼"

L20 L21 6" @ 50°F @ L21 2" @ 50°F @ L21' L22 L23 L24 L25 2" @ 50°F L26 L27 L26 L25 2" @ 50°F.

Symmetrical about ℄ except as noted

PLAN
Lo' to L27' same as Lo to L27 except as noted.

SUPERSTRUCTURE
TRUSS — SPANS 12, 13, & 14

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN R.J.F.
CHECKED W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

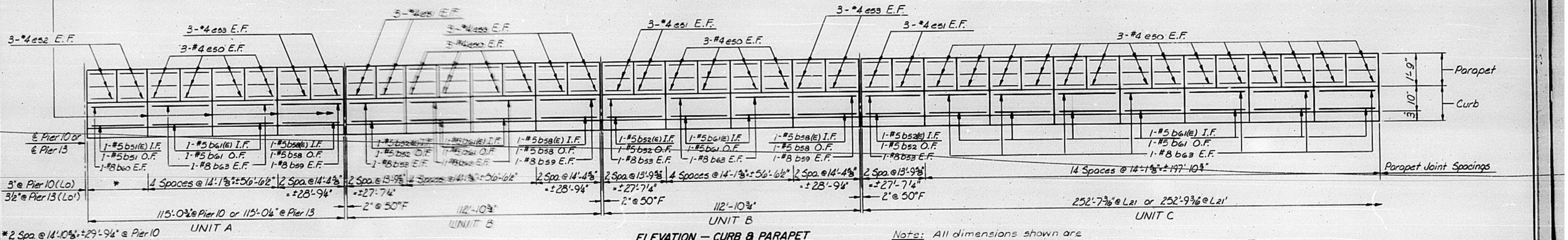
FILE NO. 74001
DATE 8-22-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA:49	(158-1) -D	PEORIA & TAZEWELL	97	31
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Sheet 27 of 88

Joints in curb from top of slab to bottom of parapet over floor beams at these locations. Provide ⅛" aluminum sheets at each location.



*2 Spa. @ 14'-10⅝" = ±29'-9¼" @ Pier 10
2 Spa. @ 14'-10⅜" = ±29'-8¾" @ Pier 13

ELEVATION — CURB & PARAPET
Lo to L20

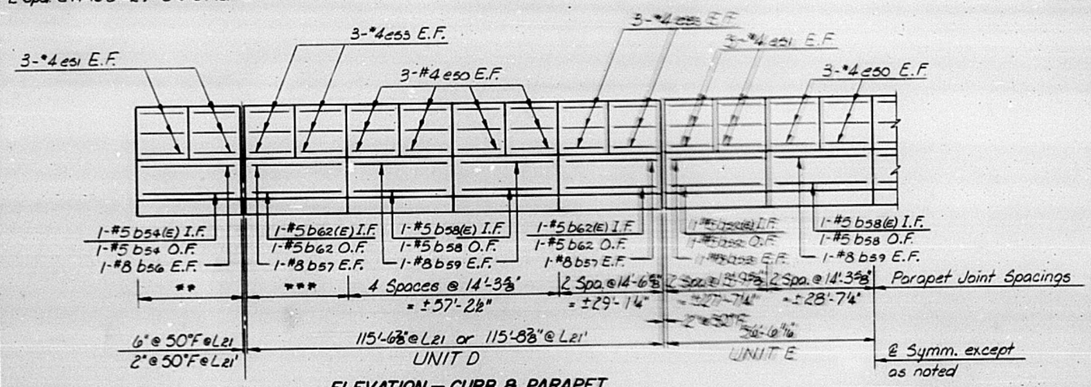
Note: All dimensions shown are measured horizontally.

DRAINAGE SCUPPER SPACING TABLE

NORTH GUTTER	SOUTH GUTTER
Sta. 217+92	Sta. 217+92
227+79	227+79

Note: Drains shall be located clear of all diaphragms, floorbeams & lateral bracing.

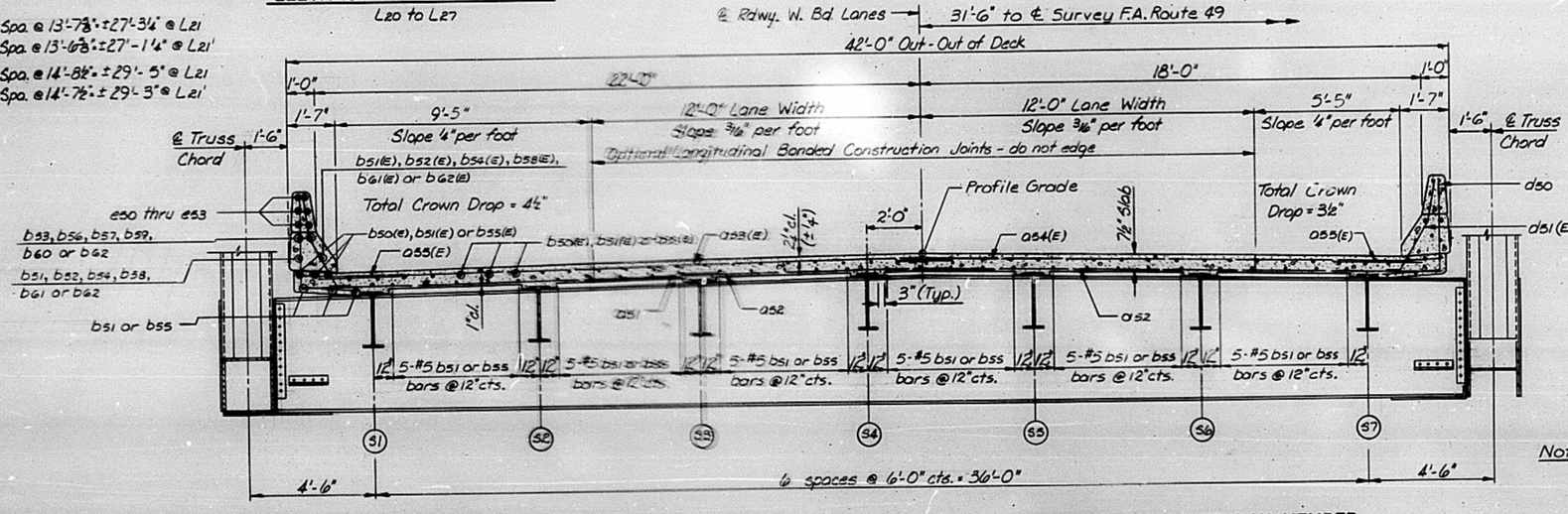
8" x 3'-0" Drainage Scupper. See Sheets 79 of 88 and 80 of 88 for Details.



ELEVATION — CURB & PARAPET
L20 to L27

Note: Drains shall be located clear of all diaphragms, floorbeams & lateral bracing.

** 2 Spa. @ 13'-7⅜" = ±27'-3¼" @ L21
2 Spa. @ 13'-6⅜" = ±27'-1¼" @ L21'
*** 2 Spa. @ 14'-8½" = ±29'-5" @ L21
2 Spa. @ 14'-7½" = ±29'-3" @ L21'

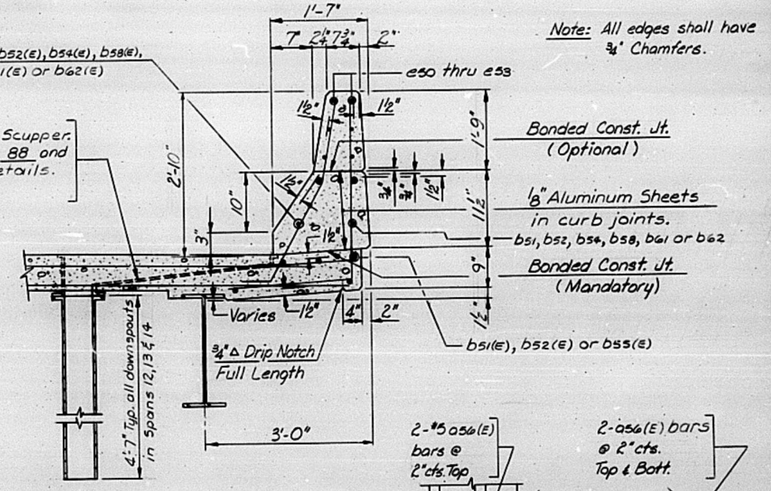


AT BOTTOM CHORD COMPRESSION MEMBER

AT BOTTOM CHORD TENSION MEMBER

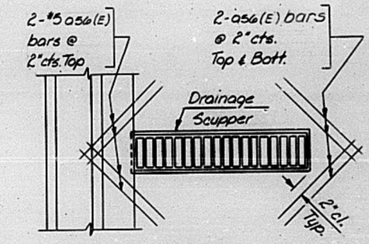
CROSS SECTION
(Looking East)

Note: Cost of ⅛" Aluminum Sheets in curb joints shall be incidental to price per cubic yard for Class X Concrete.



Note: All edges shall have ¾" Chamfers.

CURB SECTION



PLAN
REINF. AT DRAINAGE SCUPPERS

CURB & PARAPET
TRUSS — SPANS 12, 13, & 14

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-11-D
PEORIA & TAZEWELL COUNTIES

DESIGNED R.N.C.
CHECKED W.D.L.
DRAWN R.L.F.
CHECKED W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

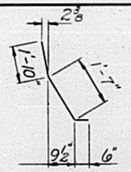
FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80

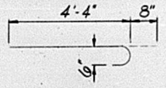
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 49	(15B-1) -D	PEORIA & TAZEWELL	97	32
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 28 of 88

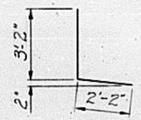
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



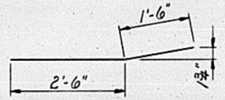
BAR d51(E)



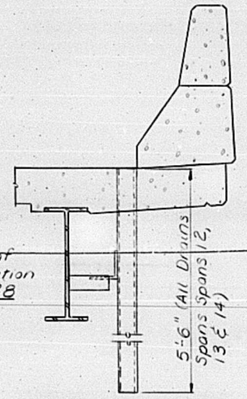
BAR x50(E)



BAR d50



BAR d55(E)



SECTION THRU CURB

DECK DRAIN SPACING TABLE

SPAN 12	W. & SPAN 13	E. & SPAN 13	SPAN 14
Sta. 215+31	Sta. 219+81	Sta. 222+90	Sta 226+15
215+56	220+06	223+05	226+40
215+81	220+31	223+20	226+65
216+06	220+56	223+35	226+90
216+31	220+81	223+50	227+15
216+56	221+06	223+65	227+40
216+81	221+31	223+90	227+65
217+06	221+56	224+15	227+90
217+31	221+81	224+40	228+15
217+56	222+06	224+65	228+40
217+81	222+21	224+90	228+65
218+06	222+36	225+15	228+90
218+31	222+51	225+40	229+15
218+56	222+66	225+65	229+40
218+81	222+81	225+90	229+65
219+06			229+90
219+31			230+15
219+56			230+40

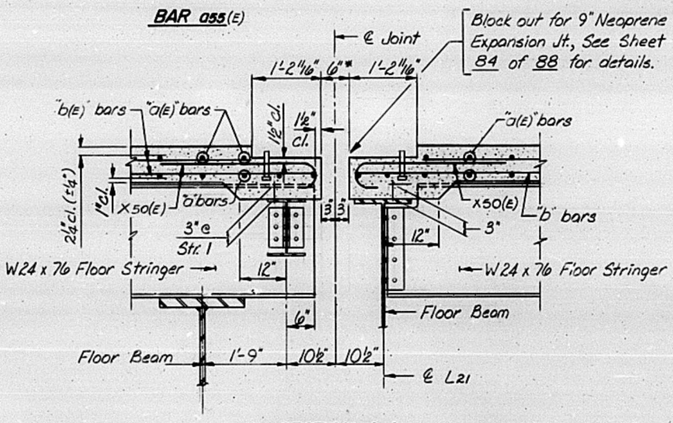
Note: Drains shall be located along both N.B.S. curbs and clear of all diaphragms, floor beams, lateral bracing & Drainage Scuppers.

BILL OF MATERIAL
TRUSS - SPANS 12, 13 & 14

Bar	No.	Bar	No.	Size	Length	Shape
		a51	1714	#5	15'-0"	
		a52	1714	#5	27'-0"	
a53(E)	3036			#5	24'-0"	
a54(E)	3036			#5	18'-0"	
a55(E)	3036			#6	4'-0"	
a56(E)	48			#5	2'-0"	
b50(E)	1131			#5	29'-4"	
		b51	1368	#5	29'-7"	
b51(E)	1027			#5	29'-7"	
		b52	16	#5	27'-4"	
b52(E)	40			#5	27'-4"	
		b53	24	#8	27'-4"	
		b54	4	#5	26'-11"	
b54(E)	4			#5	26'-11"	
		b55	288	#5	30'-0"	
b55(E)	252			#5	30'-0"	
		b56	8	#8	26'-11"	
		b57	16	#8	28'-11"	
		b58	24	#5	28'-4"	
b58(E)	24			#5	28'-4"	
		b59	48	#8	28'-4"	
		b60	8	#8	29'-6"	
		b61	52	#5	28'-1"	
b61(E)	52			#5	28'-1"	
		b62	8	#5	28'-11"	
b62(E)	8			#5	28'-11"	
		b63	104	#8	28'-1"	
b64(E)	1634			#6	11'-0"	
		d50	3080	#4	5'-4"	
d51(E)	3348			#5	3'-11"	
		e50	768	#4	13'-3"	
		e51	240	#4	13'-4"	
		e52	48	#4	14'-6"	
		e53	240	#4	14'-1"	
x50(E)	396			#6	5'-0"	

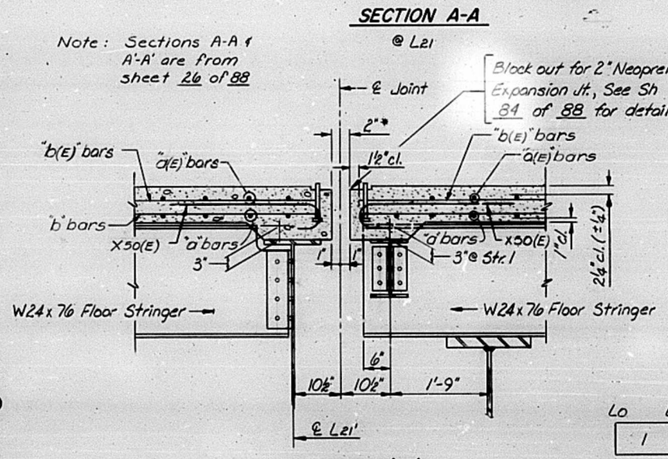
Reinforcement Bars	Lbs.	167,800
Reinforcement Bars (Epoxy C't'd)	Lbs.	272,890
Class X Concrete	Cu. Yds.	1866.3 ⊛
Neoprene Expansion Joint 2"	Lin. Ft.	367.5
Neoprene Expansion Joint 9"	Lin. Ft.	81.7
Drainage Scuppers	Each	4
Floor Drains	Each	132
Protective Coat	Sq. Yds.	78570

⊛ Includes 152.1 Cu. Yds. of Parapet Concrete.

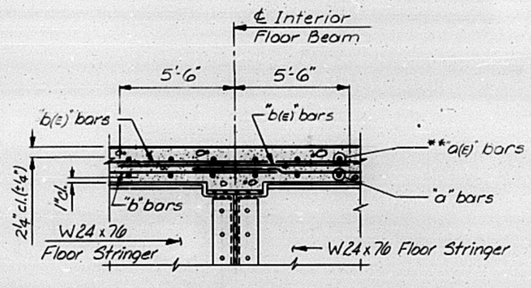


SECTION A-A
@ L21

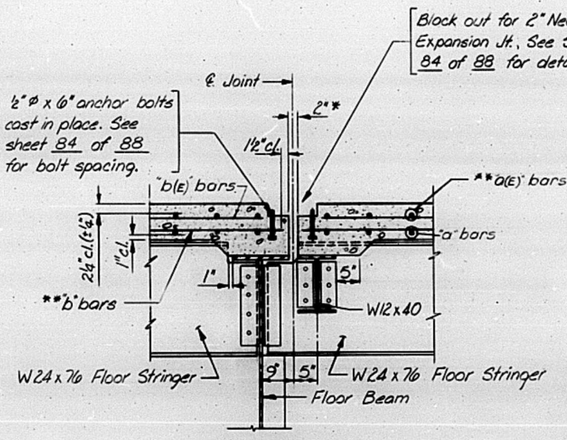
Note: Sections A-A & A'-A' are from sheet 26 of 88



SECTION A'-A'
@ L21'



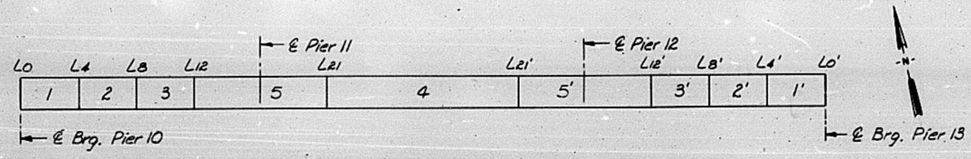
SECTION B-B
(From Sheet 26 of 88.)
REINFORCEMENT OVER FLOOR BEAMS AT
L1-L3, L5-L7, L9-L11, L13-L20, L22-L24, L26-L27



SECTION C-C
(From Sheet 26 of 88.)
TYPICAL DECK EXP. JOINT
@ L4, L8, L12 & L25

* At 50°F. Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications if the deck is poured at an ambient temperature other than 50°F.

** For Bar, Size, No. & Spacing see Sheet 26 of 88.



TRUSS - SLAB POURING SEQUENCE

The floor slab from L12 to L21 and from L12' to L21' shall not be poured until 1,2,3,3',2' & 1' are poured. If 4 is not poured on same day as 1,2,3,3',2' & 1' then 7 day must lapse before it is poured.

SUPERSTRUCTURE DETAILS
TRUSS — SPANS 12, 13 & 14

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED R.W.C.
CHECKED W.D.L.
DRAWN R.L.E.
CHECKED W.D.L.

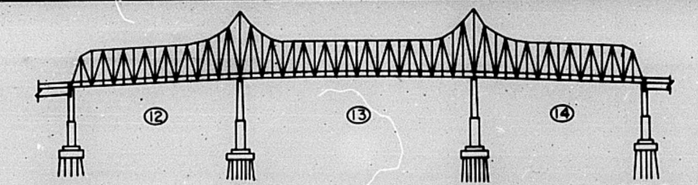
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

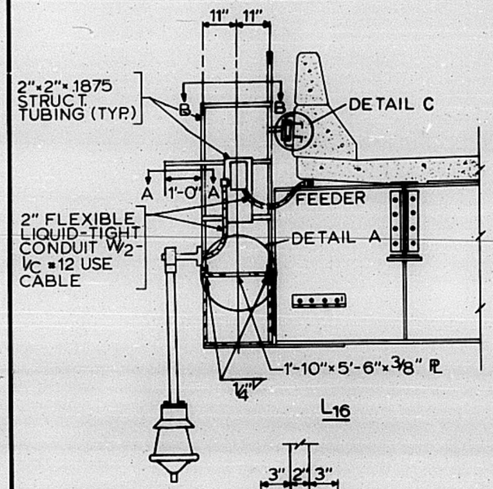
FILE NO. 74001
DATE 8-22-80

NOTE: PERMANENT NAVIGATIONAL LIGHTS WILL BE FURNISHED AND ERECTED BY THE DECKING CONTRACTOR. THE SAFETY CAGE WILL BE FURNISHED UNDER THE FABRICATION CONTRACT AND STORED AT THE LOCATION DESIGNATED BY THE ENGINEER. IT IS TO BE ERECTED BY THE DECKING CONTRACTOR.

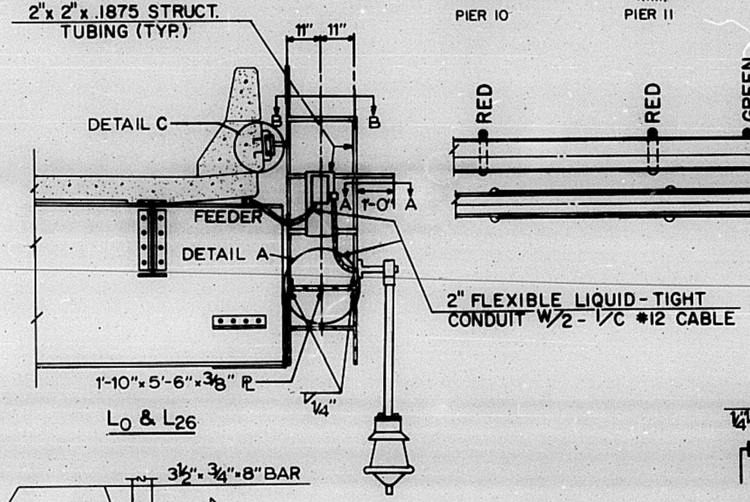
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.P. (15B-1) -D | 97 | 33

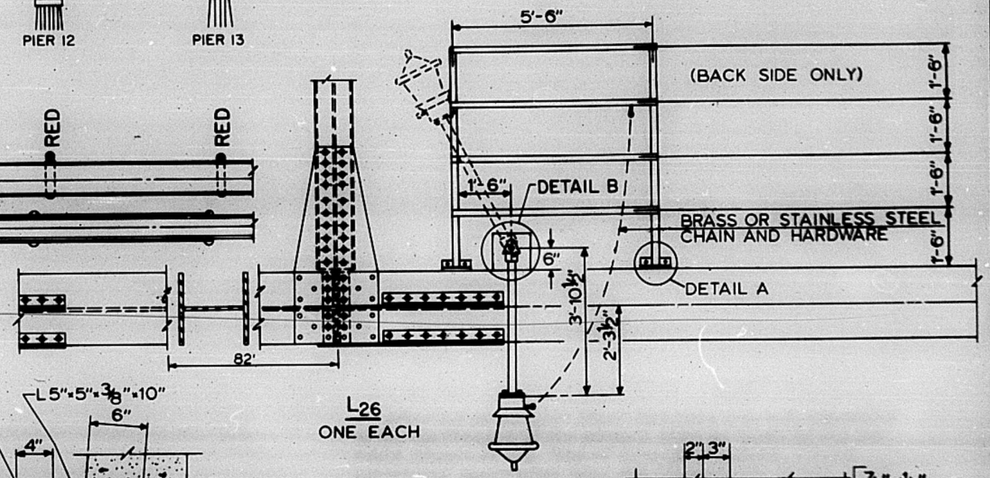




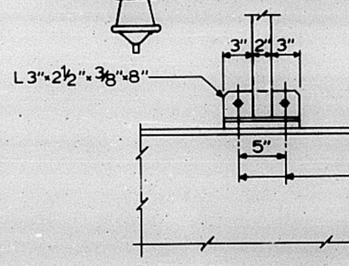
L16

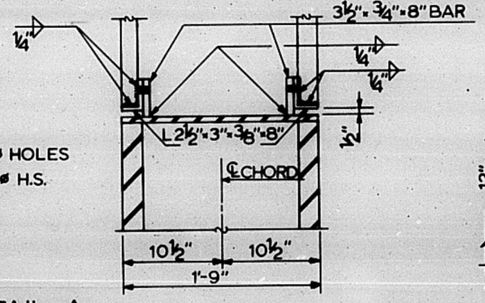


L0 & L26

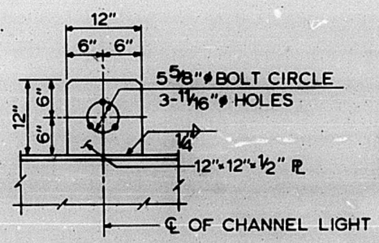


L26
ONE EACH

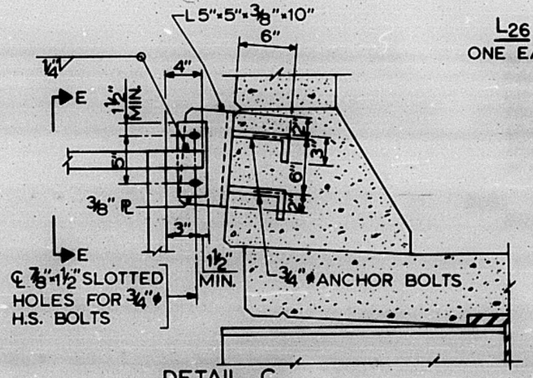




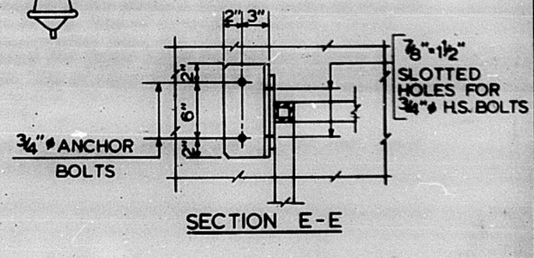
DETAIL A



DETAIL B

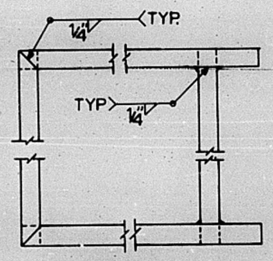


DETAIL C

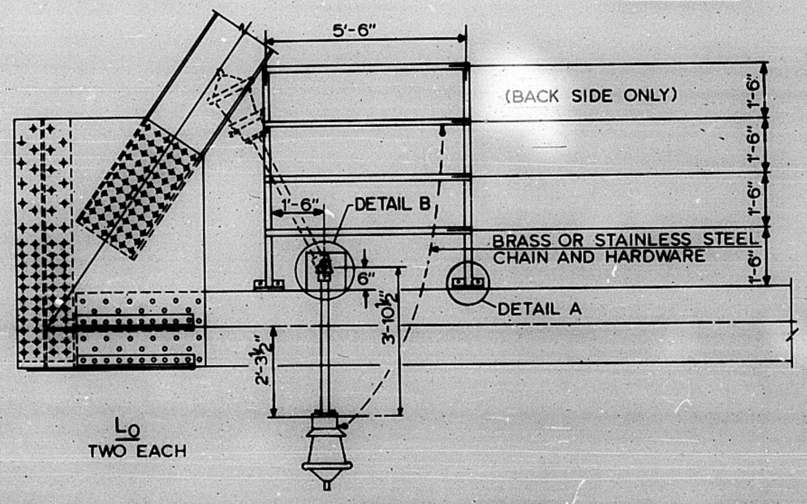


SECTION E-E

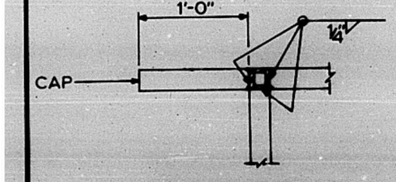
BILL OF MATERIAL		
ITEM	UNIT	NO.
FURN. & INST. NAVIGATIONAL LIGHTS	LUMP SUM	1
INSTALLATION OF NAVIGATIONAL SAFETY CAGE	EACH	5



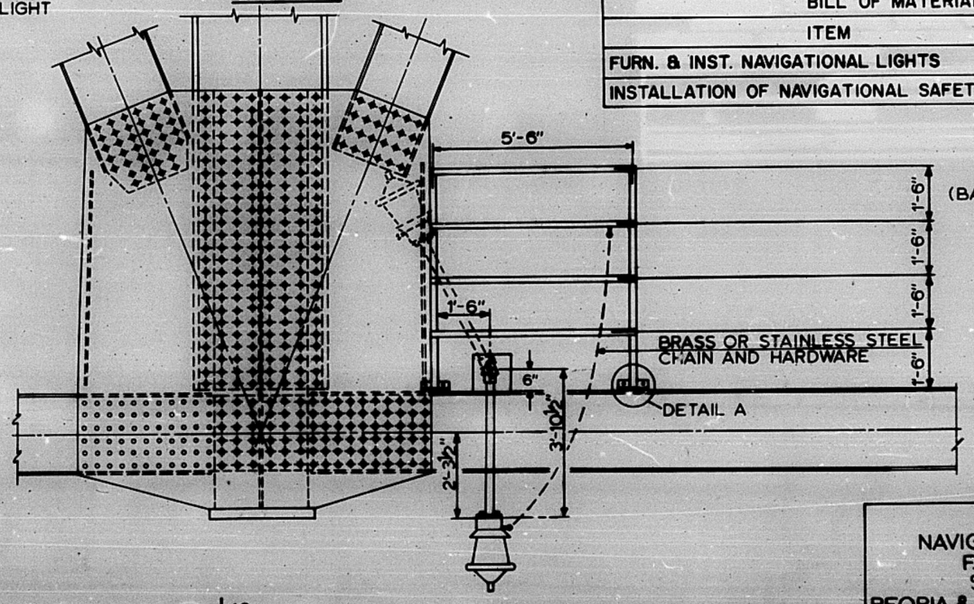
VIEW B-B
(SHOWING WELD DETAILS)



L0
TWO EACH



SECTION A-A
(SHOWING WELD DETAILS)



L16
TWO EACH

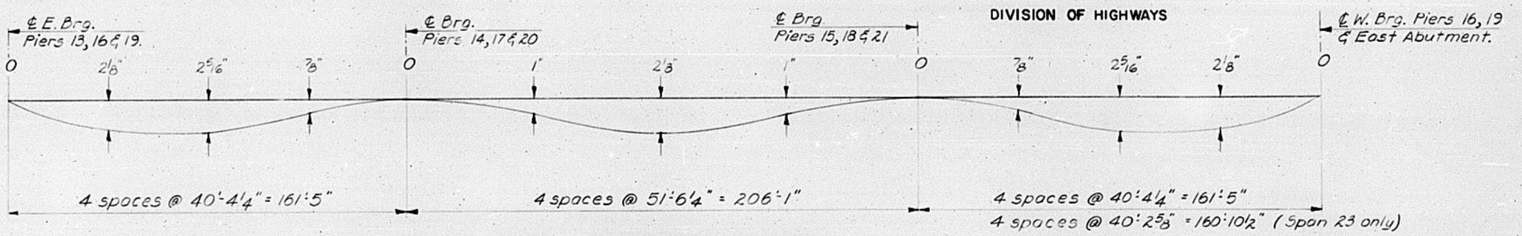
DETAIL
NAVIGATIONAL LIGHTS
F.A. ROUTE 49
SECTION (15B-1)-D
PEORIA & TAZEWELL COUNTIES

8-22-8

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

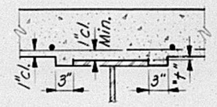
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1)-D	Peoria & Tazewell	97	34
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 30 of 88

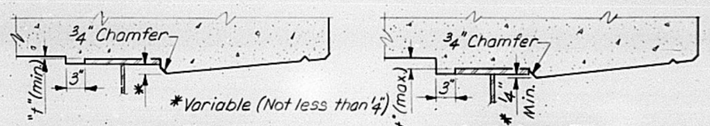


DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete slab.)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations (Elev. B) of the "Top of Concrete" tables on sheets 31 of 88 thru 33 of 88.



INTERIOR BEAMS



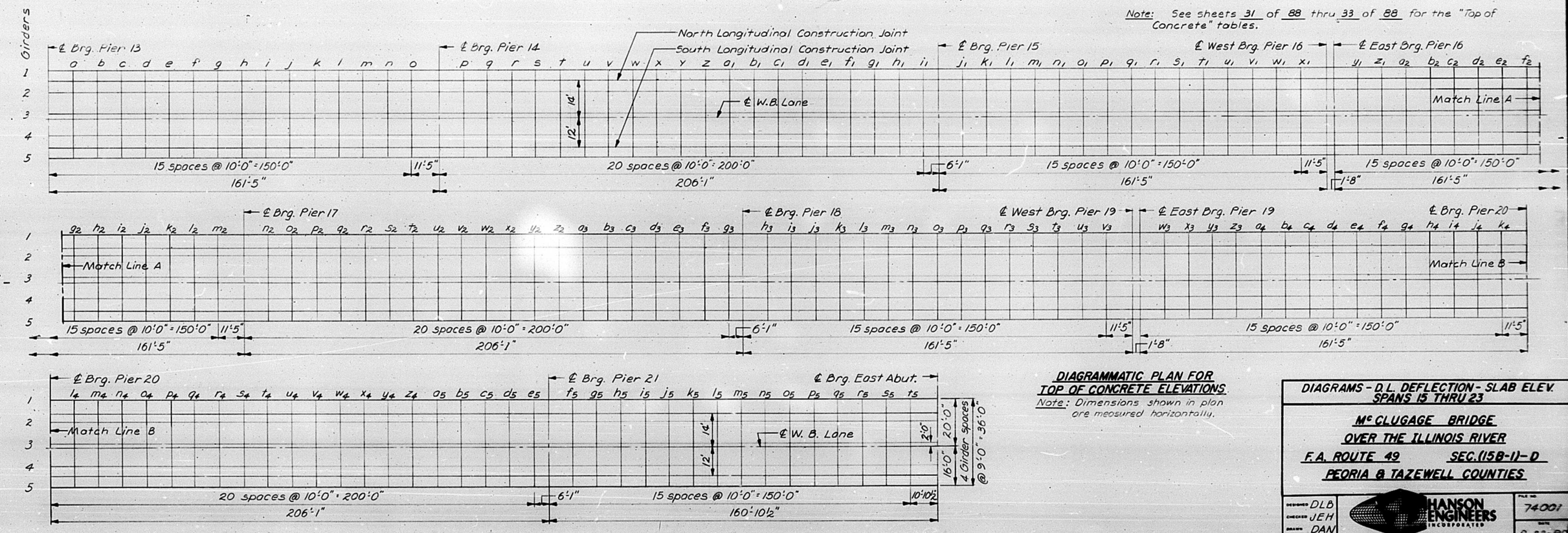
At Minimum Fillet **At Maximum Fillet**

EXTERIOR BEAMS

METHOD OF DETERMING FILLET HEIGHTS "t"

After all Structural Steel has been erected, elevations of the top flanges of the girders shall be taken at the stations shown in the "Top of Concrete" tables. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" (Elev. B) shown in the "Top of Concrete" tables, minus the concrete slab thickness equals the fillet heights above the top flanges of the girders.

Note: See sheets 31 of 88 thru 33 of 88 for the "Top of Concrete" tables.



DIAGRAMMATIC PLAN FOR TOP OF CONCRETE ELEVATIONS

Note: Dimensions shown in plan are measured horizontally.

DIAGRAMS - D.L. DEFLECTION - SLAB ELEV. SPANS 15 THRU 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	DLB
CHECKED	JEH
DRAWN	DAN
CHECKED	CRN

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SHEET NO.	REG.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.49	1158-1-D	Peoria & Tazewell	97	35
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 31 of 88

	GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4			GIRDER 5			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT		
	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B
℄E. Brg. Pier 13	230+54.190	503.010	503.010	230+54.190	503.192	503.192	230+54.190	503.333	503.333	230+54.190	503.255	503.255	230+54.190	503.093	503.093	230+54.190	503.135	503.135	230+54.190	503.177	503.177
a	230+64.190	502.806	502.850	230+64.190	502.988	503.033	230+64.190	503.129	503.173	230+64.190	503.051	503.095	230+64.190	502.889	502.934	230+64.190	502.931	502.975	230+64.190	502.973	503.017
b	230+74.190	502.602	502.691	230+74.190	502.784	502.873	230+74.190	502.925	503.014	230+74.190	502.847	502.935	230+74.190	502.685	502.774	230+74.190	502.727	502.816	230+74.190	502.769	502.857
c	230+84.190	502.398	502.531	230+84.190	502.580	502.713	230+84.190	502.721	502.854	230+84.190	502.643	502.776	230+84.190	502.481	502.614	230+84.190	502.523	502.656	230+84.190	502.565	502.698
d	230+94.190	502.194	502.371	230+94.190	502.376	502.554	230+94.190	502.517	502.694	230+94.190	502.439	502.616	230+94.190	502.277	502.455	230+94.190	502.319	502.496	230+94.190	502.361	502.538
e	231+04.190	501.990	502.173	231+04.190	502.172	502.355	231+04.190	502.313	502.496	231+04.190	502.235	502.417	231+04.190	502.073	502.256	231+04.190	502.115	502.298	231+04.190	502.139	502.339
f	231+14.190	501.786	501.972	231+14.190	501.968	502.155	231+14.190	502.109	502.295	231+14.190	502.031	502.217	231+14.190	501.869	502.056	231+14.190	501.911	502.097	231+14.190	501.953	502.139
g	231+24.190	501.582	501.772	231+24.190	501.764	501.954	231+24.190	501.905	502.095	231+24.190	501.827	502.017	231+24.190	501.665	501.855	231+24.190	501.707	501.897	231+24.190	501.749	501.939
h	231+34.190	501.378	501.572	231+34.190	501.560	501.754	231+34.190	501.701	501.895	231+34.190	501.623	501.817	231+34.190	501.461	501.655	231+34.190	501.503	501.697	231+34.190	501.545	501.738
i	231+44.190	501.174	501.340	231+44.190	501.356	501.522	231+44.190	501.497	501.663	231+44.190	501.419	501.585	231+44.190	501.257	501.424	231+44.190	501.299	501.465	231+44.190	501.341	501.507
j	231+54.190	500.970	501.106	231+54.190	501.152	501.289	231+54.190	501.293	501.429	231+54.190	501.215	501.351	231+54.190	501.053	501.190	231+54.190	501.095	501.231	231+54.190	501.137	501.273
k	231+64.190	500.766	500.872	231+64.190	500.948	501.055	231+64.190	501.089	501.195	231+64.190	501.011	501.117	231+64.190	500.849	500.956	231+64.190	500.891	500.997	231+64.190	500.933	501.039
l	231+74.190	500.562	500.638	231+74.190	500.744	500.821	231+74.190	500.885	500.961	231+74.190	500.807	500.883	231+74.190	500.645	500.722	231+74.190	500.687	500.763	231+74.190	500.729	500.805
m	231+84.190	500.358	500.415	231+84.190	500.540	500.597	231+84.190	500.681	500.738	231+84.190	500.603	500.660	231+84.190	500.441	500.498	231+84.190	500.483	500.540	231+84.190	500.525	500.582
n	231+94.190	500.154	500.193	231+94.190	500.336	500.375	231+94.190	500.477	500.516	231+94.190	500.399	500.438	231+94.190	500.237	500.276	231+94.190	500.279	500.318	231+94.190	500.321	500.359
o	232+04.190	499.950	499.971	232+04.190	500.132	500.153	232+04.190	500.273	500.294	232+04.190	500.195	500.215	232+04.190	500.033	500.054	232+04.190	500.075	500.096	232+04.190	500.117	500.137
℄ Brg. Pier 14	232+15.600	499.717	499.717	232+15.600	499.899	499.899	232+15.600	500.040	500.040	232+15.600	499.962	499.962	232+15.600	499.800	499.800	232+15.600	499.842	499.842	232+15.600	499.884	499.884
p	232+25.600	499.513	499.529	232+25.600	499.695	499.711	232+25.600	499.836	499.852	232+25.600	499.758	499.774	232+25.600	499.596	499.612	232+25.600	499.638	499.654	232+25.600	499.680	499.696
q	232+35.600	499.309	499.341	232+35.600	499.491	499.523	232+35.600	499.632	499.664	232+35.600	499.554	499.586	232+35.600	499.392	499.424	232+35.600	499.434	499.466	232+35.600	499.476	499.507
r	232+45.600	499.105	499.153	232+45.600	499.287	499.335	232+45.600	499.428	499.476	232+45.600	499.350	499.397	232+45.600	499.188	499.236	232+45.600	499.230	499.278	232+45.600	499.272	499.319
s	232+55.600	498.901	498.965	232+55.600	499.083	499.147	232+55.600	499.224	499.287	232+55.600	499.146	499.209	232+55.600	498.984	499.048	232+55.600	499.026	499.090	232+55.600	499.068	499.131
t	232+65.600	498.697	498.776	232+65.600	498.879	498.959	232+65.600	499.020	499.099	232+65.600	498.942	499.021	232+65.600	498.780	498.860	232+65.600	498.822	498.901	232+65.600	498.864	498.943
u	232+75.600	498.493	498.592	232+75.600	498.675	498.774	232+75.600	498.816	498.915	232+75.600	498.738	498.836	232+75.600	498.576	498.675	232+75.600	498.618	498.717	232+75.600	498.660	498.758
v	232+85.600	498.289	498.408	232+85.600	498.471	498.590	232+85.600	498.612	498.730	232+85.600	498.534	498.652	232+85.600	498.372	498.491	232+85.600	498.414	498.533	232+85.600	498.456	498.574
w	232+95.600	498.085	498.223	232+95.600	498.267	498.406	232+95.600	498.408	498.546	232+95.600	498.330	498.468	232+95.600	498.168	498.307	232+95.600	498.210	498.348	232+95.600	498.252	498.390
x	233+05.600	497.881	498.039	233+05.600	498.063	498.222	233+05.600	498.204	498.362	233+05.600	498.126	498.284	233+05.600	497.964	498.123	233+05.600	498.006	498.164	233+05.600	498.048	498.206
y	233+15.600	497.677	497.855	233+15.600	497.859	498.038	233+15.600	498.000	498.178	233+15.600	497.922	498.100	233+15.600	497.760	497.939	233+15.600	497.802	497.980	233+15.600	497.844	498.022
z	233+25.600	497.473	497.643	233+25.600	497.655	497.826	233+25.600	497.796	497.966	233+25.600	497.718	497.888	233+25.600	497.556	497.727	233+25.600	497.598	497.768	233+25.600	497.640	497.810
aa	233+35.600	497.269	497.420	233+35.600	497.451	497.602	233+35.600	497.592	497.742	233+35.600	497.514	497.664	233+35.600	497.352	497.503	233+35.600	497.394	497.545	233+35.600	497.436	497.586
ab	233+45.600	497.065	497.196	233+45.600	497.247	497.378	233+45.600	497.388	497.519	233+45.600	497.310	497.440	233+45.600	497.148	497.279	233+45.600	497.190	497.321	233+45.600	497.232	497.362
ac	233+55.600	496.861	496.972	233+55.600	497.043	497.154	233+55.600	497.184	497.295	233+55.600	497.106	497.217	233+55.600	496.944	497.055	233+55.600	496.986	497.097	233+55.600	497.028	497.138
ad	233+65.600	496.657	496.748	233+65.600	496.839	496.930	233+65.600	496.980	497.071	233+65.600	496.902	496.993	233+65.600	496.740	496.831	233+65.600	496.782	496.873	233+65.600	496.824	496.915
ae	233+75.600	496.453	496.526	233+75.600	496.635	496.708	233+75.600	496.776	496.849	233+75.600	496.698	496.771	233+75.600	496.536	496.609	233+75.600	496.578	496.651	233+75.600	496.620	496.693
af	233+85.600	496.249	496.306	233+85.600	496.431	496.489	233+85.600	496.572	496.629	233+85.600	496.494	496.551	233+85.600	496.332	496.390	233+85.600	496.374	496.431	233+85.600	496.416	496.473
ag	233+95.600	496.045	496.086	233+95.600	496.227	496.269	233+95.600	496.368	496.409	233+95.600	496.290	496.331	233+95.600	496.128	496.170	233+95.600	496.170	496.211	233+95.600	496.212	496.253
ah	234+05.600	495.841	495.867	234+05.600	496.023	496.049	234+05.600	496.164	496.190	234+05.600	496.086	496.111	234+05.600	495.924	495.950	234+05.600	495.966	495.992	234+05.600	496.008	496.033
ai	234+15.600	495.637	495.647	234+15.600	495.819	495.829	234+15.600	495.960	495.970	234+15.600	495.882	495.892	234+15.600	495.720	495.730	234+15.600	495.762	495.772	234+15.600	495.804	495.813
℄ Brg. Pier 15	234+21.690	495.513	495.513	234+21.690	495.695	495.695	234+21.690	495.836	495.836	234+21.690	495.758	495.758	234+21.690	495.596	495.596	234+21.690	495.638	495.638	234+21.690	495.680	495.680
aj	234+31.690	495.309	495.327	234+31.690	495.491	495.509	234+31.690	495.632	495.650	234+31.690	495.554	495.572	234+31.690	495.392	495.410	234+31.690	495.434	495.452	234+31.690	495.476	495.494
ak	234+41.690	495.105	495.141	234+41.690	495.287	495.324	234+41.690	495.428	495.464	234+41.690	495.350	495.386	234+41.690	495.188	495.225	234+41.690	495.230	495.266	234+41.690	495.272	495.308
al	234+51.690	494.901	494.955	234+51.690	495.083	495.138	234+51.690	495.224	495.278	234+51.690	495.146	495.200	234+51.690	494.984	495.039	234+51.690	495.026	495.080	234+51.690	495.068	495.122
am	234+61.690	494.697	494.770	234+61.690	494.879	494.952	234+61.690	495.020	495.092	234+61.690	494.942	495.014	234+61.690	494.780	494.853	234+61.690	494.822	494.895	234+61.690	494.864	494.936
an	234+71.690	494.493	494.595	234+71.690	494.675	494.777	234+71.690	494.816	494.918	234+71.690	494.738	494.840	234+71.690	494.576	494.678	234+71.690	494.618	494.720	234+71.690	494.660	494.762
ao	234+81.690	494.289	494.421	234+81.690	494.471	494.603	234+81.690	494.612	494.744	234+81.690	494.534	494.666	234+81.690	494.372	494.504	234+81.690	494.414	494.546	234+81.690	494.456	494.588
ap	234+91.690	494.085	494.247	234+91.690	494.267	494.429	234+91.690	494.408	494.570	234+91.690	494.330	494.492	234+91.690	494.168	494.330	234+91.690	494.210	494.372	234+91.690	494.252	494.414
aq	235+01.690	493.881	494.073	235+01.690	494.063	494.255	235+01.690	494.204	494.396	235+01.690	494.126	494.318	235+01.690	493.964	494.156	235+01.690	494.006	494.198	235+01.690	494.048	494.240
ar	235+11.690	493.677	493.868	235+11.690	493.859	494.050	235+11.690	494.000	494.190	235+11.690	493.922	494.112	235+11.690	493.760	493.951	235+11.690	493.802	493.993	235+11.690	493.844	494.034
as	235+21.690	493.473	493.660	235+21.690	493.655	493.842	235+21.690	493.796	493.983	235+21.690	493.718	493.905	235+21.690	493.556	493.743	235+21.690	493.598	493.785	235+21.690	493.640	493.827
at	235+31.690	493.269	493.452	235+31.690	493.451	493.634	235+31.690	493.592	493.775	235+31.690	493.514	493.697	235+31.690	493.352	493.535	235+31.690	493.394	493.577	235+31.690	493.436	493.619
au	235+41.690	493.065	493.244	235+41.690	493.247	493.427	235+41.690	493.388	493.567	235+41.690	493.310	493.489	235+41.690	493.148	493.328	235+41.690	493.190	493.369	235+41.690	493.232	493.411
av	235+51.690	492.861	493.000	235+51.690	493.043	493.183	235+51.690	493.184	493.323	235+51.690	493.106	493.245	235+51.690	492.944	493.084	235+51.690	492.986	493.125	235+51.690	493.028	493.167
aw	235+61.690	492.657	492.752	235+61.690	492.839	492.934	235+61.690	492.980	493.075	235+61.690	492.902	492.997	235+61.690	492.740	492.835	235+61.690	492.782	492.877	235+61.690	492.824	492.919
ax	235+71.690	492.453	492.504	235+71.690	492.635	492.686	235+71.690	492.776	492.826	235+71.690	492.698	492.748	235+71.690	492.536	492.587	235+71.690	492.578	492.629	235+71.690	492.620	492.670
℄ W. Brg. Pier 16	235+83.110	492.220	492.220	235+83.110	492.402	492.402	235+83.110	492.543	492.543	235+83.110	492.465	492.465	235+83.110	492.303	492.303	235+83.110	492.345	492.345	235+83.110	492.387	492.387

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

Note: Work these Elevations with the Diagrammatic Plan on Sheet 30 of 88.

TOP OF SLAB ELEVATIONS
SPANS 15, 16 & 17

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15 B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED J.E.H.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA 49	(15B-1) -D	PEORIA & TAZEWELL	97	36
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 32 of 88

	GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4			GIRDER 5			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT		
	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B
℄ E. Brg. Pier 16	235+84.770	492.186	492.186	235+84.770	492.368	492.368	235+84.770	492.509	492.509	235+84.770	492.431	492.431	235+84.770	492.269	492.269	235+84.770	492.311	492.311	235+84.770	492.353	492.353
y1	235+94.770	491.982	492.026	235+94.770	492.164	492.209	235+94.770	492.305	492.349	235+94.770	492.227	492.271	235+94.770	492.065	492.110	235+94.770	492.107	492.151	235+94.770	492.149	492.193
z1	236+04.770	491.778	491.867	236+04.770	491.960	492.049	236+04.770	492.101	492.190	236+04.770	492.023	492.112	236+04.770	491.861	491.950	236+04.770	491.903	491.992	236+04.770	491.945	492.033
G1	236+14.770	491.574	491.707	236+14.770	491.756	491.890	236+14.770	491.897	492.030	236+14.770	491.819	491.952	236+14.770	491.657	491.791	236+14.770	491.699	491.832	236+14.770	491.741	491.874
b1	236+24.770	491.370	491.548	236+24.770	491.552	491.730	236+24.770	491.693	491.871	236+24.770	491.615	491.792	236+24.770	491.453	491.631	236+24.770	491.495	491.673	236+24.770	491.537	491.714
C1	236+34.770	491.166	491.349	236+34.770	491.348	491.531	236+34.770	491.489	491.672	236+34.770	491.411	491.594	236+34.770	491.249	491.432	236+34.770	491.291	491.474	236+34.770	491.333	491.515
d1	236+44.770	490.962	491.149	236+44.770	491.144	491.331	236+44.770	491.285	491.471	236+44.770	491.207	491.393	236+44.770	491.045	491.232	236+44.770	491.087	491.274	236+44.770	491.129	491.315
e1	236+54.770	490.758	490.948	236+54.770	490.940	491.131	236+54.770	491.081	491.271	236+54.770	491.003	491.193	236+54.770	490.841	491.032	236+54.770	490.883	491.073	236+54.770	490.925	491.115
g1	236+64.770	490.554	490.748	236+64.770	490.736	490.930	236+64.770	490.877	491.071	236+64.770	490.799	490.993	236+64.770	490.637	490.831	236+64.770	490.679	490.873	236+64.770	490.721	490.915
f1	236+74.770	490.350	490.516	236+74.770	490.532	490.699	236+74.770	490.673	490.839	236+74.770	490.595	490.761	236+74.770	490.433	490.600	236+74.770	490.475	490.641	236+74.770	490.517	490.683
h1	236+84.770	490.146	490.282	236+84.770	490.328	490.465	236+84.770	490.469	490.605	236+84.770	490.391	490.527	236+84.770	490.229	490.366	236+84.770	490.271	490.407	236+84.770	490.313	490.449
i1	236+94.770	489.942	490.048	236+94.770	490.124	490.231	236+94.770	490.265	490.371	236+94.770	490.187	490.293	236+94.770	490.025	490.132	236+94.770	490.067	490.173	236+94.770	490.109	490.215
j1	237+04.770	489.738	489.815	237+04.770	489.920	489.997	237+04.770	490.061	490.137	237+04.770	489.983	490.059	237+04.770	489.821	489.898	237+04.770	489.863	489.940	237+04.770	489.905	489.981
k1	237+14.770	489.534	489.591	237+14.770	489.716	489.773	237+14.770	489.857	489.914	237+14.770	489.779	489.836	237+14.770	489.617	489.674	237+14.770	489.659	489.716	237+14.770	489.701	489.758
l1	237+24.770	489.330	489.369	237+24.770	489.512	489.551	237+24.770	489.653	489.692	237+24.770	489.575	489.614	237+24.770	489.413	489.452	237+24.770	489.455	489.494	237+24.770	489.497	489.536
m1	237+34.770	489.126	489.147	237+34.770	489.308	489.329	237+34.770	489.449	489.470	237+34.770	489.371	489.392	237+34.770	489.209	489.230	237+34.770	489.251	489.272	237+34.770	489.293	489.313
℄ Brg. Pier 17	237+46.190	488.893	488.893	237+46.190	489.075	489.075	237+46.190	489.216	489.216	237+46.190	489.138	489.138	237+46.190	488.976	488.976	237+46.190	489.018	489.018	237+46.190	489.060	489.060
n2	237+56.190	488.689	488.705	237+56.190	488.871	488.887	237+56.190	489.012	489.028	237+56.190	488.934	488.950	237+56.190	488.772	488.788	237+56.190	488.814	488.830	237+56.190	488.856	488.872
o2	237+66.190	488.485	488.517	237+66.190	488.667	488.699	237+66.190	488.808	488.840	237+66.190	488.730	488.762	237+66.190	488.568	488.600	237+66.190	488.610	488.642	237+66.190	488.652	488.683
p2	237+76.190	488.281	488.329	237+76.190	488.463	488.511	237+76.190	488.604	488.652	237+76.190	488.526	488.573	237+76.190	488.364	488.412	237+76.190	488.406	488.454	237+76.190	488.448	488.495
Q2	237+86.190	488.077	488.140	237+86.190	488.259	488.323	237+86.190	488.400	488.463	237+86.190	488.322	488.385	237+86.190	488.160	488.224	237+86.190	488.202	488.265	237+86.190	488.244	488.307
r2	237+96.190	487.873	487.952	237+96.190	488.055	488.135	237+96.190	488.196	488.275	237+96.190	488.118	488.197	237+96.190	487.956	488.036	237+96.190	487.994	488.077	237+96.190	488.040	488.119
S2	238+06.190	487.669	487.768	238+06.190	487.851	487.950	238+06.190	487.992	488.091	238+06.190	487.914	488.012	238+06.190	487.752	487.851	238+06.190	487.794	487.893	238+06.190	487.893	487.934
t2	238+16.190	487.465	487.583	238+16.190	487.647	487.766	238+16.190	487.788	487.906	238+16.190	487.710	487.828	238+16.190	487.548	487.667	238+16.190	487.590	487.708	238+16.190	487.632	487.750
u2	238+26.190	487.261	487.399	238+26.190	487.443	487.582	238+26.190	487.584	487.722	238+26.190	487.506	487.644	238+26.190	487.344	487.483	238+26.190	487.386	487.524	238+26.190	487.428	487.566
v2	238+36.190	487.057	487.215	238+36.190	487.239	487.398	238+36.190	487.380	487.538	238+36.190	487.302	487.460	238+36.190	487.140	487.299	238+36.190	487.182	487.340	238+36.190	487.224	487.382
W2	238+46.190	486.853	487.031	238+46.190	487.035	487.213	238+46.190	487.176	487.354	238+46.190	487.098	487.276	238+46.190	486.936	487.115	238+46.190	486.978	487.156	238+46.190	487.020	487.198
X2	238+56.190	486.649	486.819	238+56.190	486.831	487.002	238+56.190	486.972	487.142	238+56.190	486.894	487.064	238+56.190	486.732	486.903	238+56.190	486.774	486.944	238+56.190	486.816	486.986
Y2	238+66.190	486.445	486.595	238+66.190	486.627	486.778	238+66.190	486.768	486.918	238+66.190	486.690	486.840	238+66.190	486.528	486.679	238+66.190	486.570	486.720	238+66.190	486.612	486.762
Z2	238+76.190	486.241	486.372	238+76.190	486.423	486.554	238+76.190	486.564	486.695	238+76.190	486.486	486.616	238+76.190	486.324	486.455	238+76.190	486.366	486.497	238+76.190	486.408	486.538
a3	238+86.190	486.037	486.148	238+86.190	486.219	486.330	238+86.190	486.360	486.471	238+86.190	486.282	486.392	238+86.190	486.120	486.231	238+86.190	486.162	486.273	238+86.190	486.273	486.314
b3	238+96.190	485.833	485.924	238+96.190	486.015	486.106	238+96.190	486.156	486.247	238+96.190	486.078	486.169	238+96.190	485.916	486.007	238+96.190	485.958	486.049	238+96.190	486.000	486.090
c3	239+06.190	485.629	485.702	239+06.190	485.811	485.884	239+06.190	485.952	486.025	239+06.190	485.874	485.947	239+06.190	485.712	485.785	239+06.190	485.754	485.827	239+06.190	485.796	485.869
d3	239+16.190	485.425	485.482	239+16.190	485.607	485.665	239+16.190	485.748	485.805	239+16.190	485.670	485.727	239+16.190	485.508	485.566	239+16.190	485.550	485.607	239+16.190	485.592	485.649
e3	239+25.190	485.221	485.262	239+26.190	485.403	485.445	239+26.190	485.466	485.507	239+26.190	485.304	485.507	239+26.190	485.304	485.346	239+26.190	485.346	485.387	239+26.190	485.388	485.429
f3	239+36.190	485.017	485.043	239+36.190	485.199	485.225	239+36.190	485.340	485.365	239+36.190	485.262	485.287	239+36.190	485.100	485.126	239+36.190	485.142	485.168	239+36.190	485.184	485.209
g3	239+46.190	484.813	484.823	239+46.190	484.995	485.005	239+46.190	485.136	485.146	239+46.190	485.058	485.067	239+46.190	484.896	484.906	239+46.190	484.938	484.948	239+46.190	484.980	484.989
℄ Brg. Pier 18	239+52.270	484.689	484.689	239+52.270	484.871	484.871	239+52.270	485.012	485.012	239+52.270	484.934	484.934	239+52.270	484.772	484.772	239+52.270	484.814	484.814	239+52.270	484.856	484.856
h3	239+62.270	484.485	484.503	239+62.270	484.667	484.685	239+62.270	484.808	484.826	239+62.270	484.730	484.748	239+62.270	484.568	484.587	239+62.270	484.610	484.628	239+62.270	484.652	484.670
i3	239+72.270	484.281	484.317	239+72.270	484.463	484.500	239+72.270	484.604	484.640	239+72.270	484.526	484.562	239+72.270	484.364	484.401	239+72.270	484.406	484.442	239+72.270	484.448	484.484
j3	239+82.270	484.077	484.132	239+82.270	484.259	484.314	239+82.270	484.400	484.454	239+82.270	484.322	484.376	239+82.270	484.160	484.215	239+82.270	484.202	484.257	239+82.270	484.244	484.298
k3	239+92.270	483.873	483.946	239+92.270	484.055	484.128	239+92.270	484.196	484.269	239+92.270	484.118	484.191	239+92.270	483.956	484.029	239+92.270	483.998	484.071	239+92.270	484.040	484.112
l3	240+02.270	483.669	483.771	240+02.270	483.851	483.954	240+02.270	483.992	484.094	240+02.270	483.914	484.016	240+02.270	483.752	483.855	240+02.270	483.794	483.896	240+02.270	483.836	483.938
m3	240+12.270	483.465	483.597	240+12.270	483.647	483.779	240+12.270	483.788	483.920	240+12.270	483.710	483.842	240+12.270	483.546	483.681	240+12.270	483.590	483.722	240+12.270	483.632	483.764
n3	240+22.270	483.261	483.423	240+22.270	483.443	483.605	240+22.270	483.584	483.746	240+22.270	483.506	483.668	240+22.270	483.344	483.506	240+22.270	483.386	483.548	240+22.270	483.428	483.590
o3	240+32.270	483.057	483.249	240+32.270	483.239	483.431	240+32.270	483.380	483.572	240+32.270	483.302	483.494	240+32.270	483.140	483.332	240+32.270	483.182	483.374	240+32.270	483.224	483.416
p3	240+42.270	482.853	483.044	240+42.270	483.035	483.226	240+42.270	483.176	483.367	240+42.270	483.098	483.289	240+42.270	482.936	483.127	240+42.270	482.978	483.169	240+42.270	483.210	483.403
q3	240+52.270	482.649	482.836	240+52.270	482.831	483.018	240+52.270	482.972	483.159	240+52.270	482.894	483.081	240+52.270	482.732	482.919	240+52.270	482.774	482.961	240+52.270	482.816	483.003
r3	240+62.270	482.445	482.628	240+62.270	482.627	482.811	240+62.270	482.768	482.951	240+62.270	482.690	482.873	240+62.270	482.528	482.712	240+62.270	482.570	482.753	240+62.270	482.612	482.795
s3	240+72.270	482.241	482.421	240+72.270	482.423	482.603	240+72.270	482.564	482.744	240+72.270	482.486	482.665	240+72.270	482.324	482.504	240+72.270	482.366	482.546	240+72.270	482.408	482.587
t3	240+82.270	482.037	482.177	240+82.270	482.219	482.359	240+82.270	482.360	482.499	240+82.270	482.282	482.421	240+82.270	482.120	482.260	240+82.270	482.162	482.302	240+82.270	482.204	482.343
u3	240+92.270	481.833	481.928	240+92.270	482.015	482.110	240+92.270	482.156	482.251	240+92.270	482.078	482.173	240+92.270	481.916	482.011	240+92.270	481.954	482.053	240+92.270	482.000	482.095
v3	241+02.270	481.629	481.680	241+02.270	481.811	481.862	241+02.270	481.952	482.003	241+02.270	481.874	481.925	241+02.270	481.712	481.763	241+02.270	481.754	481.805	241+02.270	481.796	481.846
℄ W. Brg. Pier 19	241+13.690	481.396	481.396	241+13.690	481.578	481.578	241+13.690	481.719	481.719	241+13.690	481.641	481.641	241+13.690	481.479	481.479	241+13.690	481.521	481.521	241+13.690	481.563	481.563

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

Note: Work these Elevations with the Diagrammatic Plan on Sheet 30 of 88.

TOP OF SLAB ELEVATIONS
SPANS 18, 19 & 20

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED J.E.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SECTION	ROUTE	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	Peoria & Tazewell	97	37
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 33 of 88

		GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4			GIRDER 5			NORTH LONGITUDINAL BONDED CONSTRUCTION JOINT			SOUTH LONGITUDINAL BONDED CONSTRUCTION JOINT		
	STATION	ELEV. A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B	STATION	ELEV A	ELEV B
℄ E. Brg. Pier 19	241+15.350	481.362	481.362	241+15.350	481.544	481.544	241+15.350	481.685	481.685	241+15.350	481.607	481.607	241+15.350	481.446	481.446	241+15.350	481.487	481.487	241+15.350	481.529	481.529
ws	241+25.350	481.158	481.203	241+25.350	481.340	481.385	241+25.350	481.481	481.526	241+25.350	481.403	481.447	241+25.350	481.242	481.286	241+25.350	481.283	481.328	241+25.350	481.325	481.369
xs	241+35.350	480.954	481.043	241+35.350	481.136	481.225	241+35.350	481.277	481.366	241+35.350	481.199	481.288	241+35.350	481.038	481.126	241+35.350	481.079	481.168	241+35.350	481.121	481.210
ys	241+45.350	480.750	480.883	241+45.350	480.932	481.066	241+45.350	481.073	481.206	241+45.350	480.995	481.128	241+45.350	480.834	480.967	241+45.350	480.875	481.008	241+45.350	480.917	481.050
zs	241+55.350	480.546	480.724	241+55.350	480.728	480.906	241+55.350	480.869	481.047	241+55.350	480.791	480.969	241+55.350	480.630	480.807	241+55.350	480.671	480.849	241+55.350	480.713	480.890
da	241+65.350	480.342	480.525	241+65.350	480.524	480.707	241+65.350	480.665	480.848	241+65.350	480.587	480.770	241+65.350	480.426	480.608	241+65.350	480.467	480.650	241+65.350	480.509	480.692
ba	241+75.350	480.138	480.325	241+75.350	480.320	480.507	241+75.350	480.461	480.648	241+75.350	480.383	480.569	241+75.350	480.222	480.408	241+75.350	480.263	480.450	241+75.350	480.305	480.491
ca	241+85.350	479.934	480.124	241+85.350	480.116	480.307	241+85.350	480.257	480.447	241+85.350	480.179	480.369	241+85.350	480.018	480.208	241+85.350	480.059	480.249	241+85.350	480.101	480.291
da	241+95.350	479.730	479.924	241+95.350	479.912	480.106	241+95.350	480.053	480.247	241+95.350	479.975	480.169	241+95.350	479.814	480.007	241+95.350	479.855	480.049	241+95.350	479.897	480.091
ea	242+05.350	479.526	479.693	242+05.350	479.708	479.875	242+05.350	479.849	480.015	242+05.350	479.771	479.937	242+05.350	479.610	479.776	242+05.350	479.651	479.818	242+05.350	479.693	479.859
fa	242+15.350	479.322	479.459	242+15.350	479.504	479.641	242+15.350	479.645	479.782	242+15.350	479.567	479.703	242+15.350	479.406	479.542	242+15.350	479.447	479.584	242+15.350	479.489	479.625
ga	242+25.350	479.118	479.225	242+25.350	479.300	479.407	242+25.350	479.441	479.548	242+25.350	479.363	479.469	242+25.350	479.202	479.308	242+25.350	479.243	479.350	242+25.350	479.285	479.391
ha	242+35.350	478.914	478.991	242+35.350	479.096	479.173	242+35.350	479.237	479.314	242+35.350	479.159	479.236	242+35.350	478.998	479.074	242+35.350	479.039	479.116	242+35.350	479.081	479.157
ia	242+45.350	478.710	478.767	242+45.350	478.892	478.950	242+45.350	479.033	479.090	242+45.350	478.955	479.012	242+45.350	478.794	478.851	242+45.350	478.831	478.892	242+45.350	478.877	478.934
ja	242+55.350	478.506	478.545	242+55.350	478.688	478.727	242+55.350	478.829	478.868	242+55.350	478.751	478.790	242+55.350	478.590	478.628	242+55.350	478.631	478.670	242+55.350	478.673	478.712
ka	242+65.350	478.302	478.323	242+65.350	478.484	478.505	242+65.350	478.625	478.646	242+65.350	478.547	478.568	242+65.350	478.386	478.406	242+65.350	478.427	478.448	242+65.350	478.469	478.490
℄ Brg. Pier 20	242+76.770	478.069	478.069	242+76.770	478.252	478.252	242+76.770	478.392	478.392	242+76.770	478.314	478.314	242+76.770	478.153	478.153	242+76.770	478.194	478.194	242+76.770	478.236	478.236
la	242+86.770	477.865	477.881	242+86.770	478.048	478.063	242+86.770	478.188	478.204	242+86.770	478.110	478.126	242+86.770	477.949	477.964	242+86.770	477.990	478.006	242+86.770	478.032	478.048
ma	242+96.770	477.661	477.693	242+96.770	477.844	477.875	242+96.770	477.984	478.016	242+96.770	477.906	477.938	242+96.770	477.745	477.776	242+96.770	477.786	477.818	242+96.770	477.828	477.860
na	243+06.770	477.457	477.505	243+06.770	477.640	477.687	243+06.770	477.780	477.828	243+06.770	477.702	477.750	243+06.770	477.541	477.588	243+06.770	477.582	477.630	243+06.770	477.624	477.671
oa	243+16.770	477.253	477.317	243+16.770	477.436	477.499	243+16.770	477.576	477.640	243+16.770	477.498	477.561	243+16.770	477.337	477.400	243+16.770	477.378	477.442	243+16.770	477.420	477.483
pa	243+26.770	477.049	477.128	243+26.770	477.232	477.311	243+26.770	477.372	477.451	243+26.770	477.294	477.373	243+26.770	477.133	477.212	243+26.770	477.174	477.253	243+26.770	477.216	477.295
qa	243+36.770	476.845	476.944	243+36.770	477.028	477.126	243+36.770	477.168	477.267	243+36.770	477.090	477.189	243+36.770	476.929	477.027	243+36.770	476.970	477.069	243+36.770	477.012	477.110
ra	243+46.770	476.641	476.760	243+46.770	476.824	476.942	243+46.770	476.964	477.083	243+46.770	476.886	477.004	243+46.770	476.725	476.843	243+46.770	476.766	476.885	243+46.770	476.808	476.926
sa	243+56.770	476.437	476.576	243+56.770	476.620	476.758	243+56.770	476.760	476.898	243+56.770	476.682	476.820	243+56.770	476.521	476.659	243+56.770	476.562	476.701	243+56.770	476.604	476.742
ta	243+66.770	476.233	476.391	243+66.770	476.416	476.574	243+66.770	476.556	476.714	243+66.770	476.478	476.636	243+66.770	476.317	476.475	243+66.770	476.358	476.516	243+66.770	476.400	476.558
ua	243+76.770	476.029	476.207	243+76.770	476.212	476.390	243+76.770	476.352	476.530	243+76.770	476.274	476.452	243+76.770	476.113	476.291	243+76.770	476.154	476.332	243+76.770	476.196	476.374
va	243+86.770	475.825	475.996	243+86.770	476.008	476.178	243+86.770	476.148	476.318	243+86.770	476.070	476.240	243+86.770	475.909	476.079	243+86.770	475.950	476.121	243+86.770	475.992	476.162
wa	243+96.770	475.621	475.772	243+96.770	475.804	475.954	243+96.770	475.944	476.095	243+96.770	475.866	476.016	243+96.770	475.705	475.855	243+96.770	475.746	475.897	243+96.770	475.788	475.938
xa	244+06.770	475.417	475.548	244+06.770	475.600	475.730	244+06.770	475.740	475.871	244+06.770	475.662	475.793	244+06.770	475.501	475.631	244+06.770	475.542	475.673	244+06.770	475.584	475.714
ya	244+16.770	475.213	475.324	244+16.770	475.396	475.506	244+16.770	475.536	475.647	244+16.770	475.458	475.569	244+16.770	475.297	475.407	244+16.770	475.338	475.449	244+16.770	475.380	475.491
za	244+26.770	475.009	475.100	244+26.770	475.192	475.282	244+26.770	475.332	475.423	244+26.770	475.254	475.345	244+26.770	475.093	475.183	244+26.770	475.134	475.225	244+26.770	475.176	475.267
ab	244+36.770	474.805	474.878	244+36.770	474.988	475.061	244+36.770	475.128	475.201	244+36.770	475.050	475.123	244+36.770	474.889	474.962	244+36.770	474.930	475.003	244+36.770	474.972	475.045
bb	244+46.770	474.601	474.658	244+46.770	474.784	474.841	244+46.770	474.924	474.981	244+46.770	474.846	474.903	244+46.770	474.685	474.742	244+46.770	474.726	474.783	244+46.770	474.768	474.825
cb	244+56.770	474.397	474.439	244+56.770	474.580	474.621	244+56.770	474.720	474.761	244+56.770	474.642	474.683	244+56.770	474.481	474.522	244+56.770	474.522	474.564	244+56.770	474.564	474.605
db	244+66.770	474.193	474.219	244+66.770	474.376	474.401	244+66.770	474.516	474.542	244+66.770	474.438	474.464	244+66.770	474.277	474.302	244+66.770	474.318	474.344	244+66.770	474.360	474.385
eb	244+76.770	473.989	473.999	244+76.770	474.172	474.181	244+76.770	474.312	474.322	244+76.770	474.234	474.244	244+76.770	474.073	474.082	244+76.770	474.114	474.124	244+76.770	474.156	474.166
℄ Brg. Pier 21	244+82.850	473.865	473.865	244+82.850	474.047	474.047	244+82.850	474.188	474.188	244+82.850	474.110	474.110	244+82.850	473.949	473.949	244+82.850	473.990	473.990	244+82.850	474.032	474.032
fs	244+92.850	473.661	473.679	244+92.850	473.843	473.862	244+92.850	473.984	474.002	244+92.850	473.906	473.924	244+92.850	473.745	473.763	244+92.850	473.786	473.804	244+92.850	473.828	473.846
gs	245+02.850	473.457	473.494	245+02.850	473.639	473.676	245+02.850	473.780	473.817	245+02.850	473.702	473.738	245+02.850	473.541	473.577	245+02.850	47..582	473.619	245+02.850	473.624	473.660
hs	245+12.850	473.253	473.308	245+12.850	473.435	473.490	245+12.850	473.576	473.631	245+12.850	473.498	473.553	245+12.850	473.337	473.391	245+12.850	473.378	473.433	245+12.850	473.420	473.475
is	245+22.850	473.049	473.122	245+22.850	473.231	473.304	245+22.850	473.372	473.445	245+22.850	473.294	473.367	245+22.850	473.133	473.205	245+22.850	473.174	473.247	245+22.850	473.216	473.289
js	245+32.850	472.845	472.948	245+32.850	473.027	473.130	245+32.850	473.168	473.271	245+32.850	473.090	473.193	245+32.850	472.929	473.031	245+32.850	472.970	473.073	245+32.850	473.012	473.115
ks	245+42.850	472.641	472.774	245+42.850	472.823	472.956	245+42.850	472.964	473.097	245+42.850	472.886	473.019	245+42.850	472.725	472.857	245+42.850	472.766	472.899	245+42.850	472.808	472.941
ls	245+52.850	472.437	472.600	245+52.850	472.619	472.782	245+52.850	472.760	472.923	245+52.850	472.682	472.845	245+52.850	472.521	472.683	245+52.850	472.562	472.725	245+52.850	472.604	472.767
ms	245+62.850	472.233	472.426	245+62.850	472.415	472.608	245+62.850	472.556	472.749	245+62.850	472.478	472.671	245+62.850	472.317	472.509	245+62.850	472.358	472.551	245+62.850	472.400	472.593
ns	245+72.850	472.029	472.220	245+72.850	472.211	472.402	245+72.850	472.352	472.543	245+72.850	472.274	472.465	245+72.850	472.113	472.303	245+72.850	472.154	472.345	245+72.850	472.196	472.386
os	245+82.850	471.825	472.012	245+82.850	472.007	472.194	245+82.850	472.148	472.335	245+82.850	472.070	472.257	245+82.850	471.909	472.095	245+82.850	471.950	472.137	245+82.850	471.992	472.179
ps	245+92.850	471.621	471.804	245+92.850	471.803	471.987	245+92.850	471.944	472.127	245+92.850	471.866	472.049	245+92.850	471.705	471.888	245+92.850	471.746	471.929	245+92.850	471.788	471.971
qs	246+02.850	471.417	471.597	246+02.850	471.599	471.779	246+02.850	471.740	471.920	246+02.850	471.662	471.841	246+02.850	471.501	471.680	246+02.850	471.542	471.722	246+02.850	471.584	471.763
rs	246+12.850	471.213	471.351	246+12.850	471.395	471.533	246+12.850	471.536	471.674	246+12.850	471.458	471.596	246+12.850	471.297	471.434	246+12.850	471.338	471.476	246+12.850	471.380	471.517
ss	246+22.850	471.009	471.102	246+22.850	471.191	471.285	246+22.850	471.332	471.425	246+22.850	471.254	471.347	246+22.850	471.093	471.186	246+22.850	471.134	471.227	246+22.850	471.176	471.269
ts	246+32.850	470.805	470.854	246+32.850	470.987	471.036	246+32.850	471.128	471.177	246+32.850	471.050	471.098	246+32.850	470.889	470.937	246+32.850	470.930	470.979	246+32.850	470.972	471.020
℄ Brg. E. Abut.	246+43.730	470.583	470.583	246+43.730	470.766	470.766	246+43.730	470.906	470.906	246+43.730	470.828	470.828	246+43.730	470.667	470.667	246+43.730	470.708	470.708	246+43.730	470.750	470.750

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION

Note: Work these Elevations with the Diagrammatic Plan on Sheet 30 of 88.

TOP OF SLAB ELEVATIONS
SPANS 21, 22 & 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.L.B.
CHECKED J.E.M.
DRAWN D.A.N.
CHECKED C.R.N.

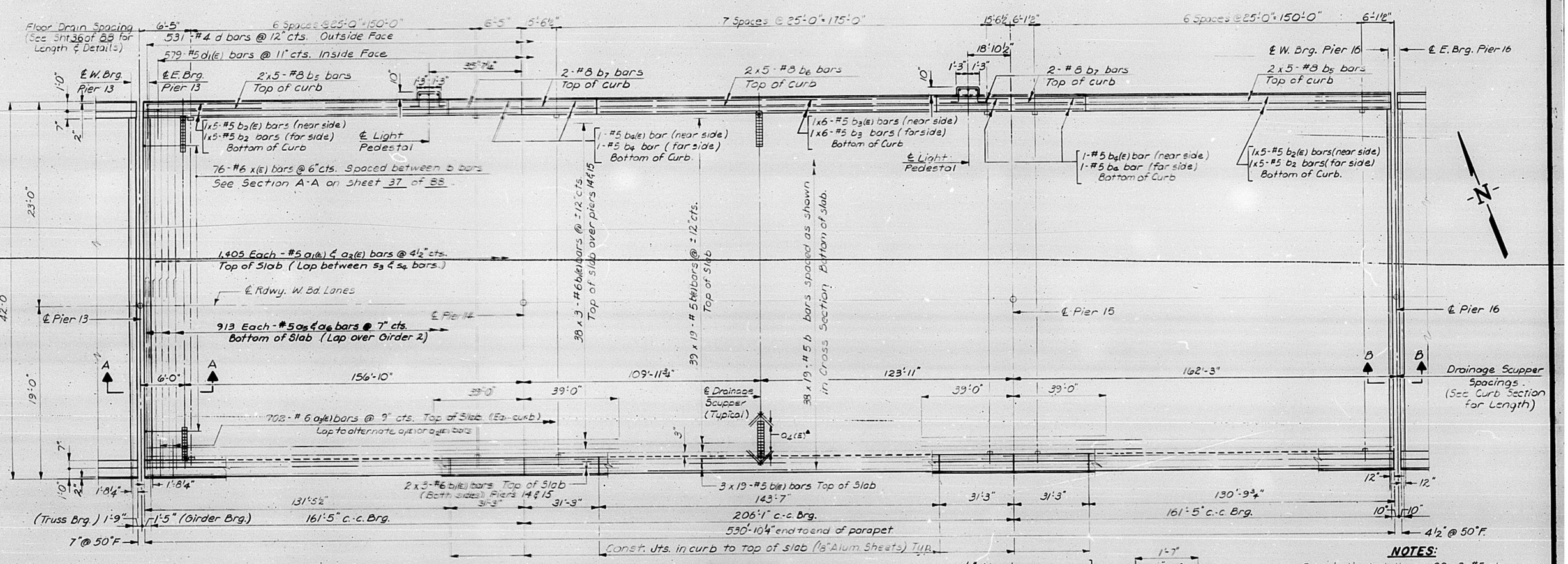
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

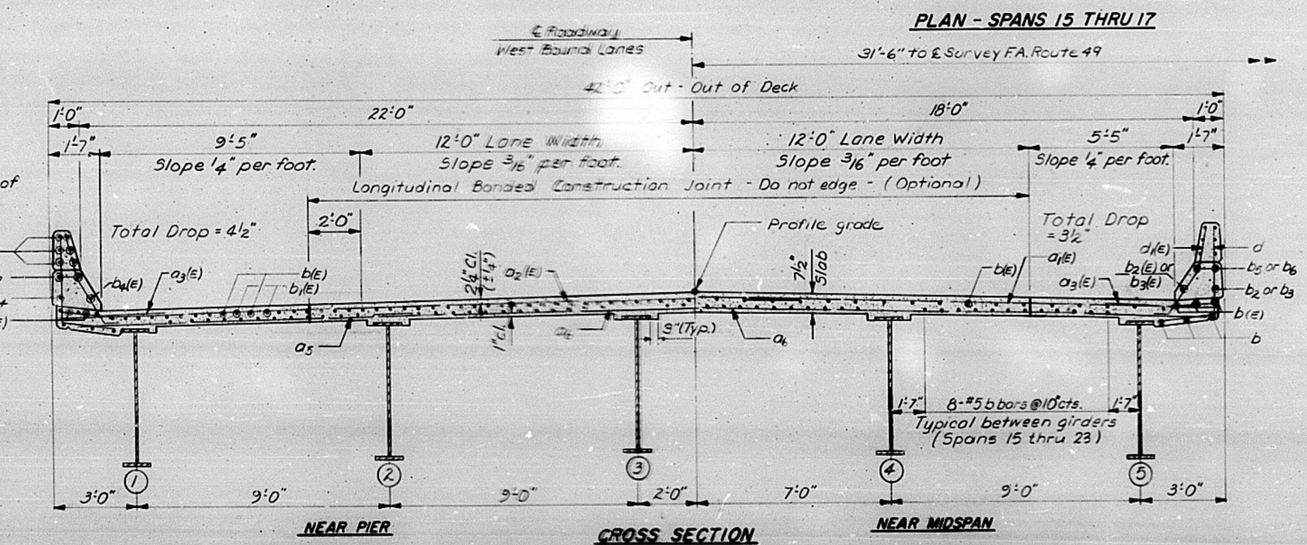
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHT. NO.
F.A. 49	(158-1) D	Peoria & Tazewell	97	38
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 34 of 88



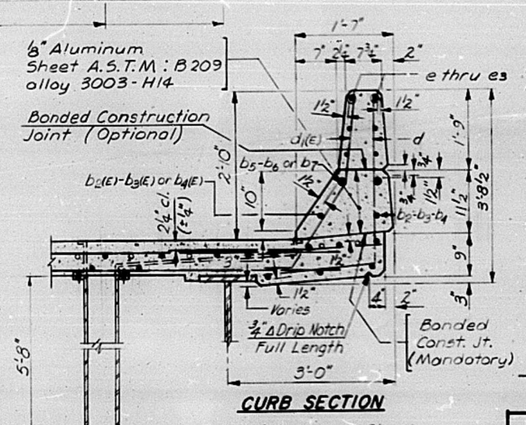
PLAN - SPANS 15 THRU 17



NEAR PIER — NEAR MIDSPAN

CROSS SECTION
LOOKING EAST

Note: For placement of bars e thru e3 see sheet 38 of 88.



CURB SECTION

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

Bar Size	Minimum Lap Distance
#4	1'-9"
#5	1'-8"
#6	2'-0"
#8	3'-6"

NOTES:

Bars indicated thus: 20 x 3 - #5 etc indicates 20 lines of bars with 3 lengths per line.

See Sheet 37 of 88 for Bill of Material for Spans 15-23 incl.

For Section A-A see Sheet 37 of 88.

For Section B-B see Sheet 35 of 88.

For Light Pedestal Details see Sheet 3 of 88.

For Drainage Scupper Details see Sheets 79 and 80.

*For Reinforcement & configuration of slab @ Scupper see Sheet 3 of 88.

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

All dimensions shown are measured horizontally.

SUPERSTRUCTURE
SPANS 15 THRU 17

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N.
CHECKED S.C.O.
DRAWN D.A.N.
CHECKED S.C.O.

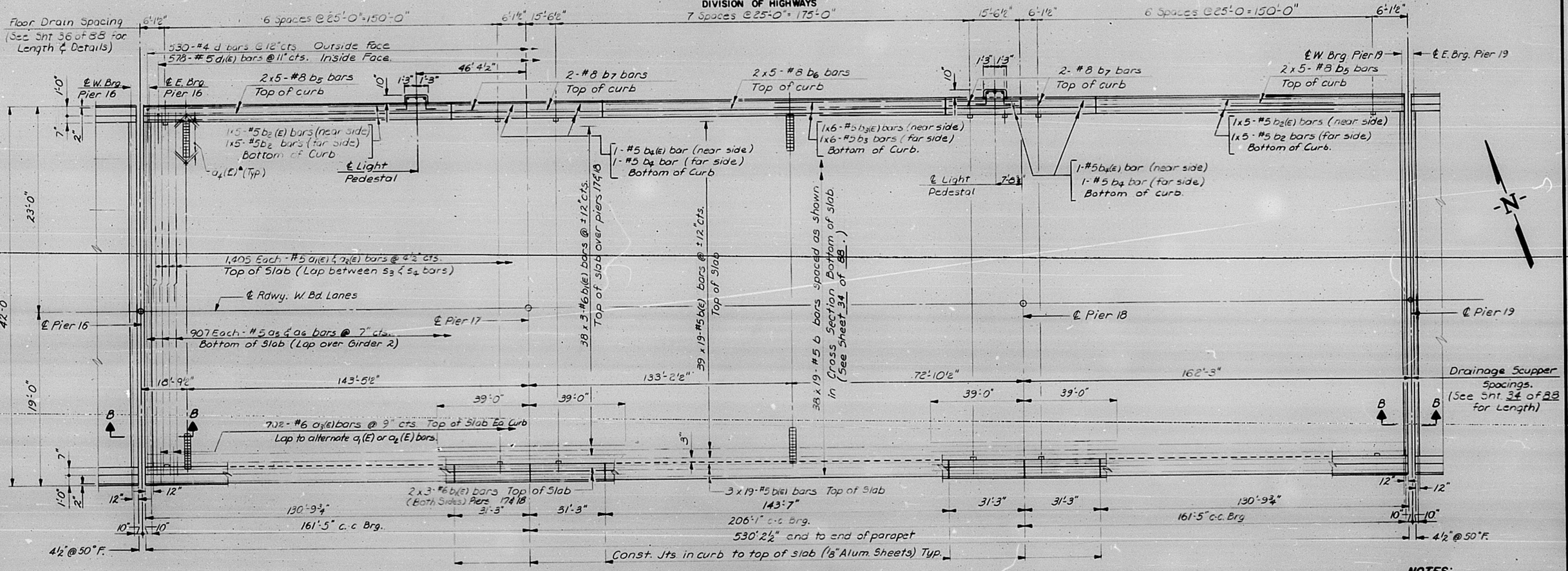
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

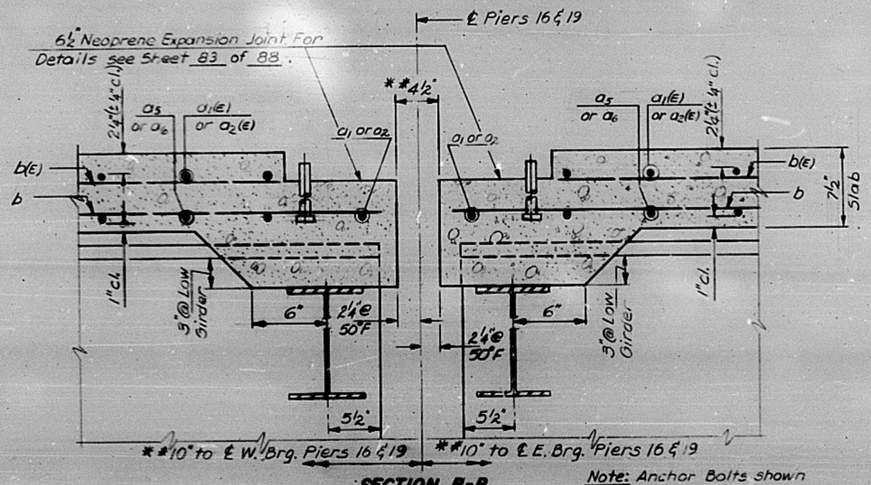
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A. Route	Section	County	Total Sheets	Sheet No.
F.A.49	118B-1)D	Peoria & Tazewell	97	39

Sheet 35 of 88



PLAN - SPANS 18 THRU 20



SECTION B-B
** Dimensions @ 50° F.

Note: Anchor Bolts shown are Std. ⅞" ø x 6" & cast in place.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

NOTES:

Bars indicated thus: 20 x 3 #5 etc. indicates 20 lines of bars with 3 lengths per line.
See Sheet 37 of 88 for Bill of Material for Spans 15-23 incl.
For Light Pedestal Details see Sht. 3 of 88.
For Drainage Scupper Details see Sheets 79 and 80.
▲For Reinforcement & configuration of slab @ Scupper see Sheet 3 of 88.
For details of Curb Section See Sh. 34 of 88
All dimensions shown are measured horizontally.
For cross Section See Sheet 34 of 88

SUPERSTRUCTURE SPANS 18 THRU 20

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (15B-1)-D

PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N. CHECKED S.C.O. DRAWN D.A.N. CHECKED S.C.O.

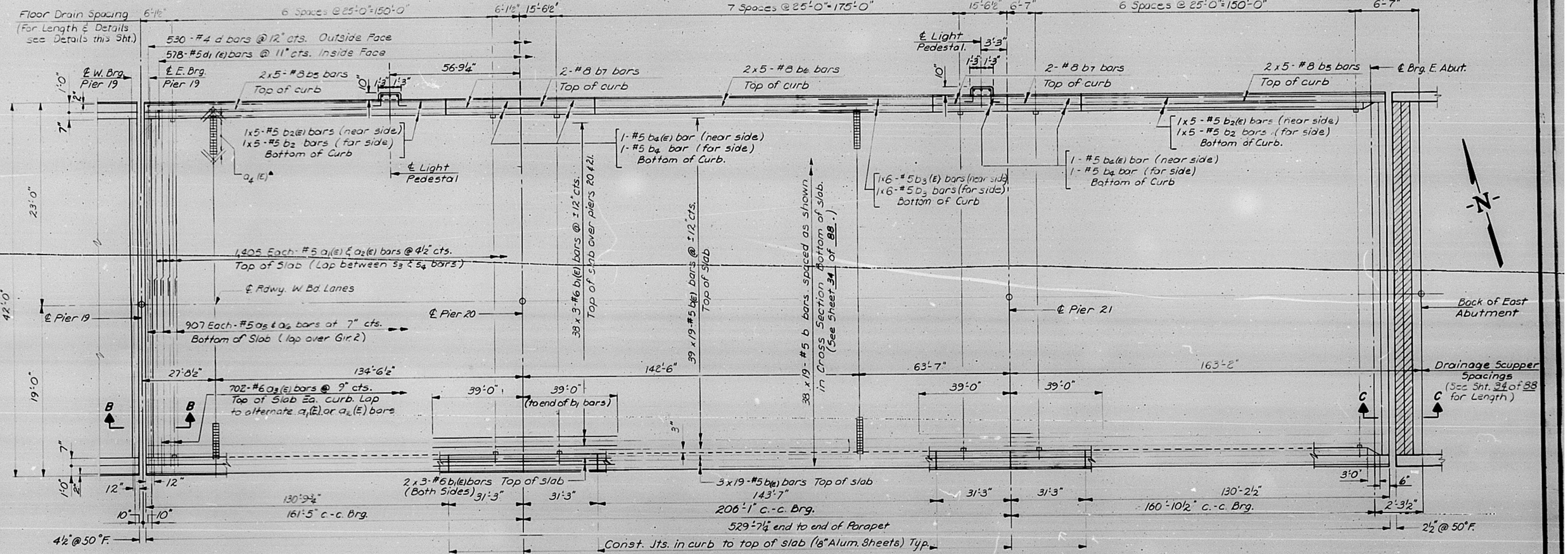
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

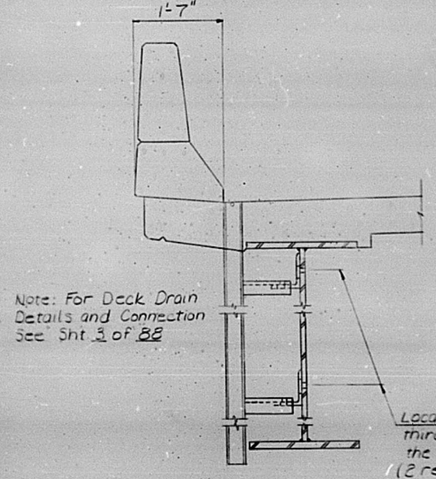
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1)-D	Peoria & Tazewell	97	40
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

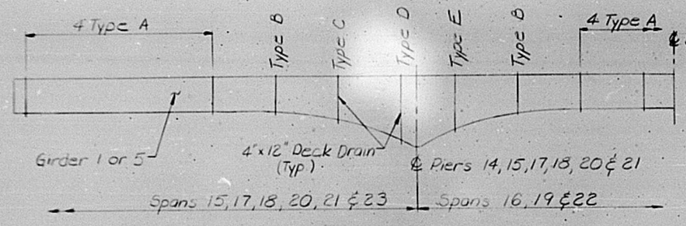
Sheet 36 of 88





Note: For Deck Drain Details and Connection See Sht. 3 of 88

SECTION THRU CURB



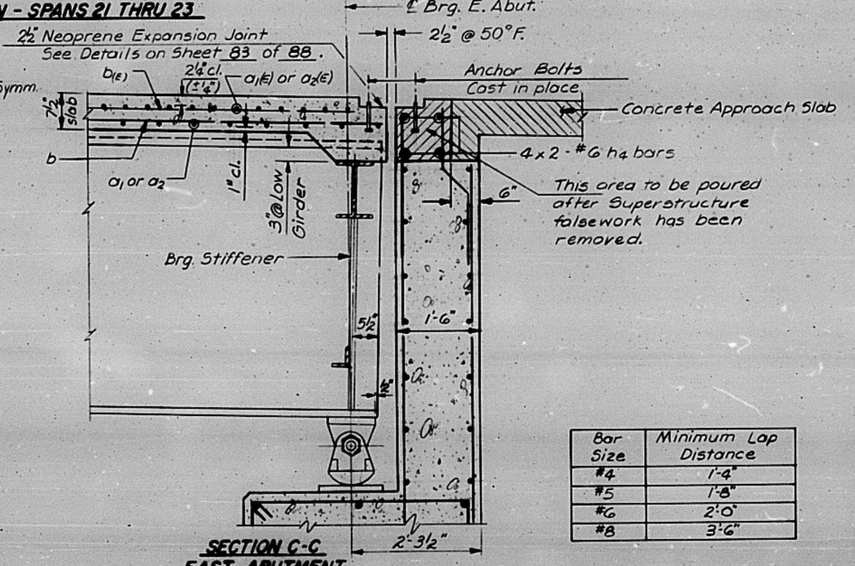
ELEVATION
4"x12" FLOOR DRAIN DOWNSPOUTS

DOWNSPOUT LENGTHS

Type	Length	No.
A	6'-0"	72
B	6'-4"	24
C	7'-0"	12
D	9'-10"	12
E	8'-7"	12

Note: Drains shall be located along both N.& S. curbs and clear of all diaphragms, floor beams, lateral bracing & Drainage Scuppers.

PLAN - SPANS 21 THRU 23



SECTION C-C
EAST ABUTMENT

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

NOTES:

Bars indicated thus: 20 x 3 #5 etc indicates 20 lines of bars with 3 lengths per line.

See Sheet 37 of 88 for Bill of Material for Spans 15-23 incl.

For Section B-B see Sheet 35 of 88.

For Light Pedestal Details see Sheet 3 of 88.

For Drainage Scupper Details see Sheets 79 and 80

For Reinforcement & configuration of slab @ Scupper see Sheet 3 of 88.

for cross section and curb section See Sh. 34 of 88

All dimensions shown are measured horizontally.

SUPERSTRUCTURE
SPANS 21 THRU 23

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

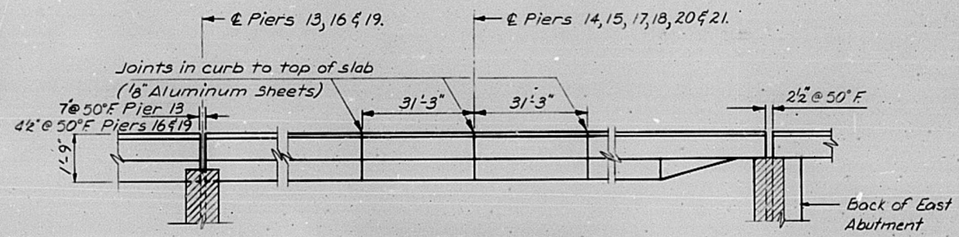
DESIGNED	D.A.N.	FILE NO.	74001
CHECKED	S.C.O.		
DRAWN	D.A.N.	DATE	8-22-80
CHECKED	S.C.O.		

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

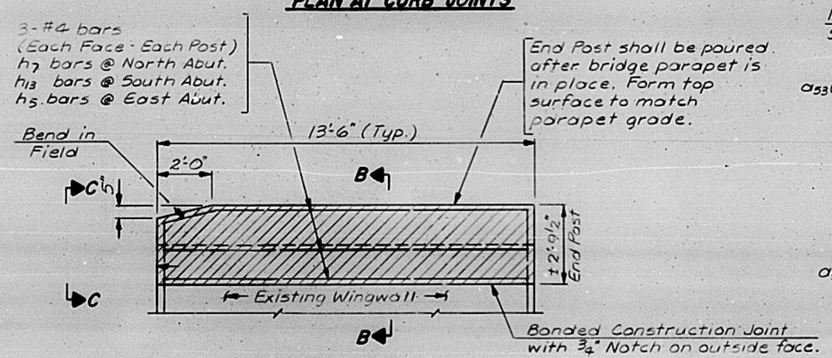
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FA 49	158-1-D	Peoria & Tazewell	97	41

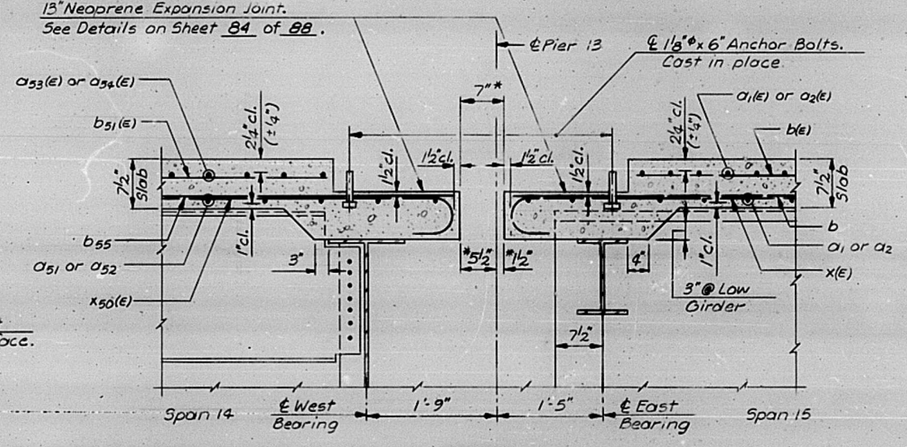
Sheet 37 of 88



PLAN AT CURB JOINTS



ELEVATION OF END POST
(Showing Outside Face)



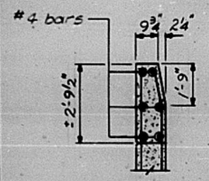
SECTION A-A
(*@50°F.)
(From sheet 34 of 88 & from sheet 26 of 88.)

BILL OF MATERIAL
SPANS 15 THRU 23

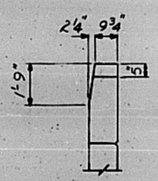
Bar	No.	Bar	No.	Size	Length	Shape
		h_4	8	#6	20'-9"	
		h_5	12	#4	15'-3"	**
a_1(E)	4215			#5	16'-9"	
a_2(E)	4215			#5	25'-9"	
a_3(E)	4212			#6	4'-0"	
a_4(E)	144			#5	2'-0"	
		a_5	2727	#5	12'-0"	
		a_6	2727	#5	30'-0"	
b(E)	2565	b	2166	#5	29'-4"	
b_1(E)	756			#6	27'-4"	
b_2(E)	60	b_2	60	#5	27'-2"	
b_3(E)	36	b_3	36	#5	24'-11"	
b_4(E)	60	b_4	60	#5	31'-0"	
		b_5	120	#8	29'-0"	
		b_6	60	#8	31'-5"	
		b_7	48	#8	31'-0"	
		d	3182	#4	4'-9"	
d_1(E)	3470			#5	3'-11"	
		d_2	18	#6	4'-5"	
		d_3	30	#6	8'-11"	
		e	96	#4	15'-11"	
		e_1	288	#4	15'-4"	
		e_2	324	#4	15'-8"	
		e_3	480	#4	16'-0"	
x(E)	76			#6	4'-9"	

Class X-Concrete	Cu.Yds.	2,006.4
Reinforcement Bars	Lbs.	232,080
Reinforcement Bars (Epoxy Coated)	Lbs.	341,310
Drainage Scuppers	Each	12
2 1/2" Neoprene Expansion Joint	Lin.Ft.	39.8
6 1/2" Neoprene Expansion Joint	Lin.Ft.	81.7
13" Neoprene Expansion Joint	Lin.Ft.	40.8
Protective Coat	Sq.Yd.	8,171.6
Floor Drains	Each	132

** See End Post Detail on this sheet.

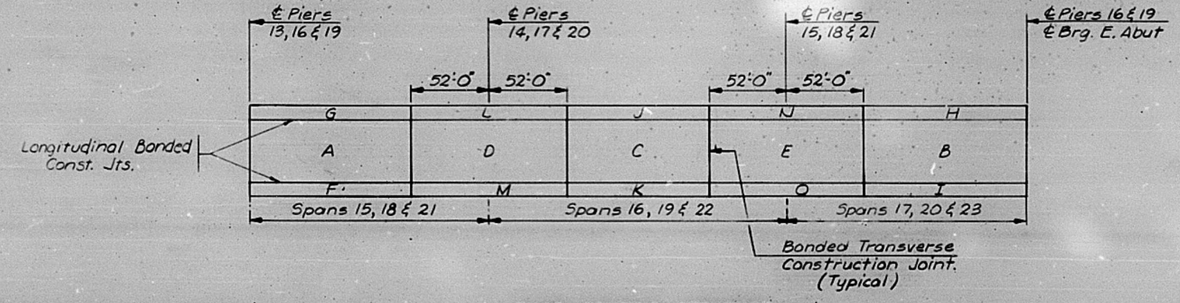


SECTION B-B



VIEW C-C

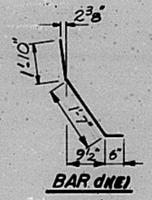
DETAIL OF END POSTS AT NORTH, SOUTH & EAST ABUTMENTS

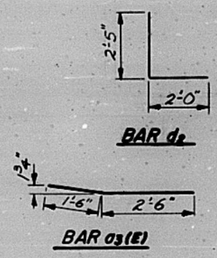


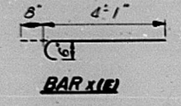
SLAB POURING SEQUENCE

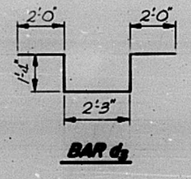
The concrete floor slab shall be poured in one continuous operation between construction joints.

The pouring shall be done in the following order:
1) A-B 2) C 3) F-G 4) H-I 5) J-K 6) D-E 7) L-M 8) N-O.
DLM & ENO must not be poured before AFG, BHI & CJK.
If the area C is not poured on the same day as A and B, then there should be a seven (7) day time lapse between pours.









SUPERSTRUCTURE DETAILS
SPANS 15 THRU 23

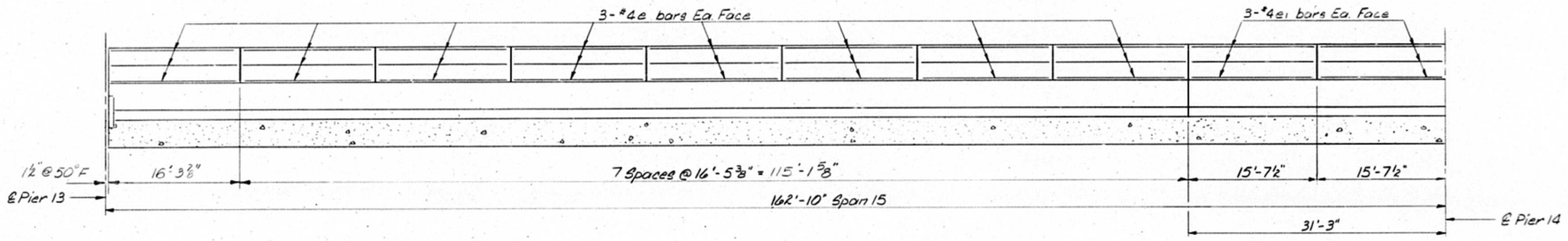
McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(158-1)-D
PEORIA & TAZEWELL COUNTIES

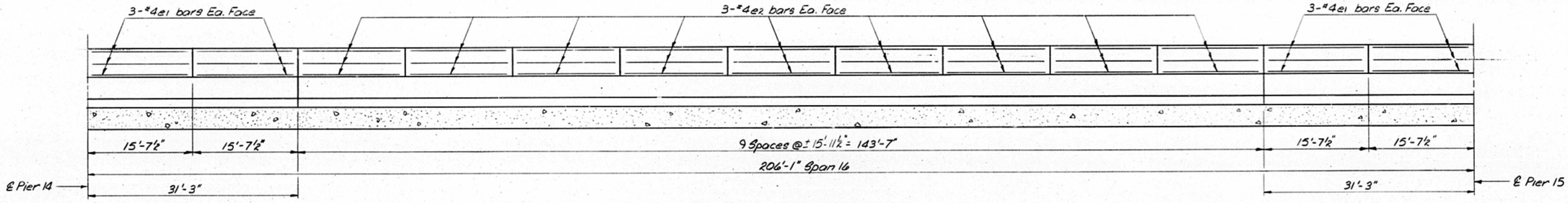
DAN	HANSON ENGINEERS INCORPORATED	FILE NO. 74001
SCO	SPRINGFIELD, ILLINOIS — PEORIA, ILLINOIS	DATE 8-22-80
DAN		
SCO		

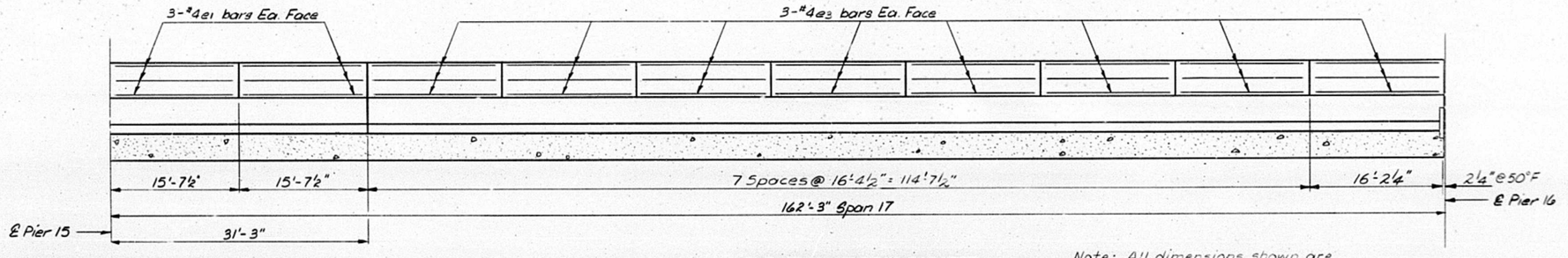
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.49	158-1) D	PEORIA & TAZEWELL	97	42
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 38 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS







ELEVATION – CURB & PARAPET
Showing inside face – Spans 15 thru 17

Note: All dimensions shown are measured horizontally.

CURB & PARAPET — SPANS 15,16,17

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	R.J.F.
CHECKED	S.C.O.
DRAWN	R.J.F.
CHECKED	W.E.B.

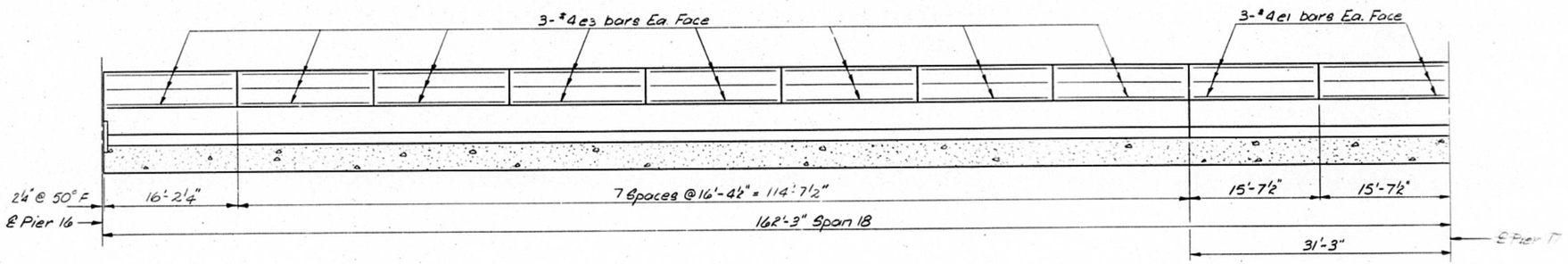
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

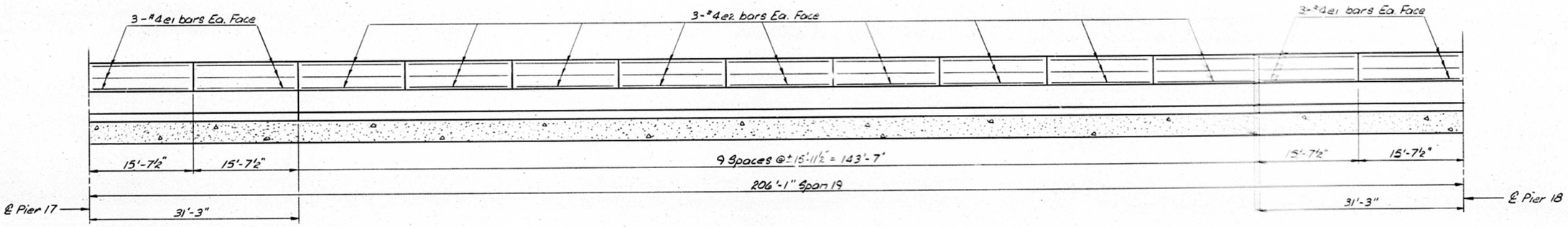
FILE NO. 74001
DATE 8-22-80

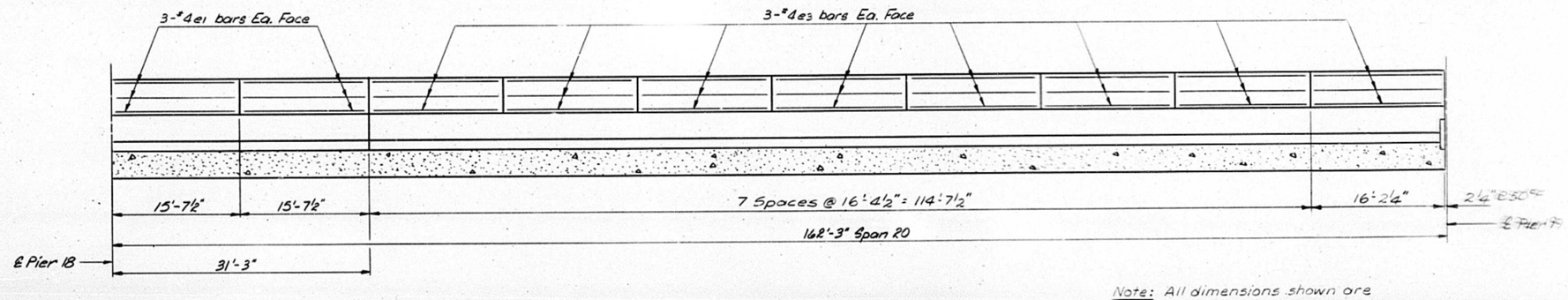
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	158-1) D	PEORIA & TAZEWELL	97	43
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 39 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS







ELEVATION - CURB & PARAPET
Showing inside face - Spans 18 thru 20

Note: All dimensions shown are measured horizontally.

CURB & PARAPET — SPANS 18, 19, 20

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	R.J.F.
CHECKED	S.C.O.
DRAWN	R.J.F.
CHECKED	W.E.B.

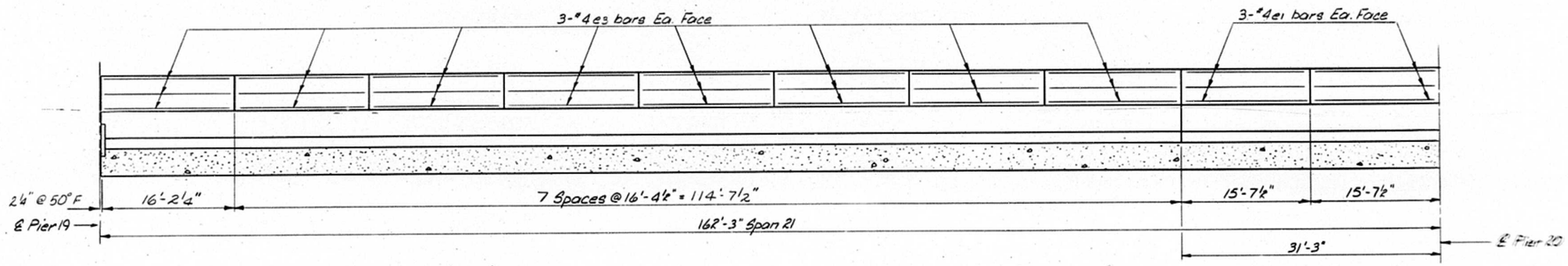
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

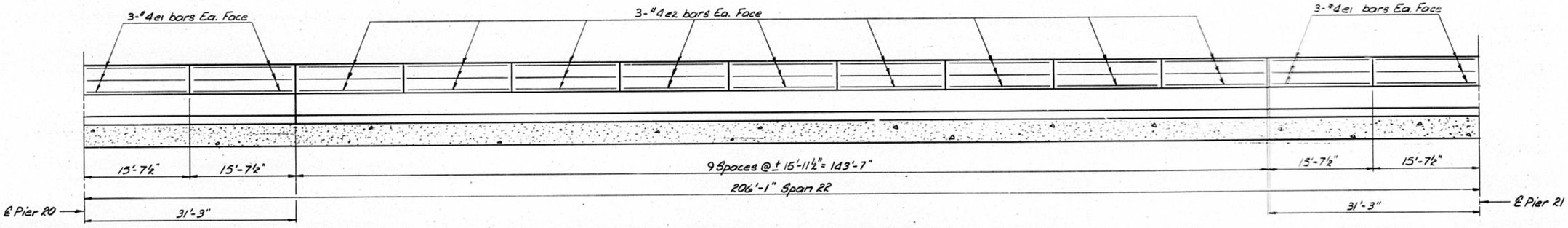
FILE NO. 74001
DATE 8-22-80

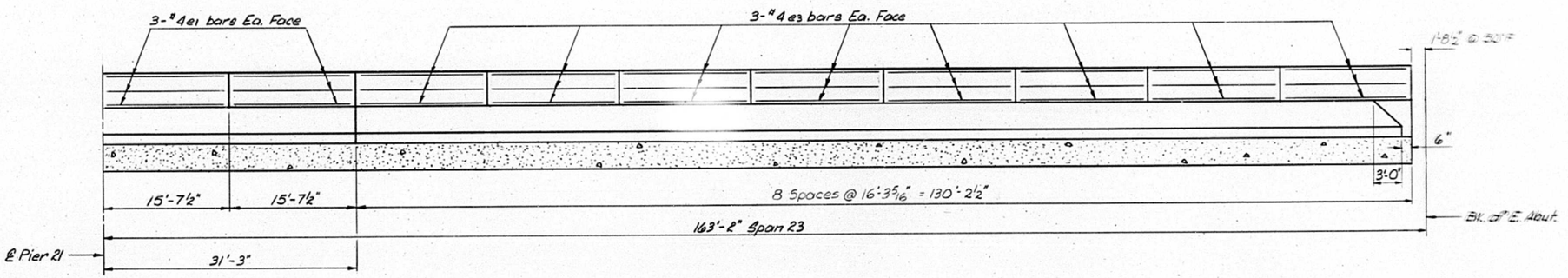
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	44
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 40 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS







ELEVATION - CURB & PARAPET
Showing inside face - Spans 21 thru 23

Note: All dimensions shown are measured horizontally.

CURB & PARAPET — SPANS 21, 22, 23

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 (SEC. 158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	R.J.F.
CHECKED	S.C.O.
DRAWN	R.J.F.
CHECKED	W.E.B.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

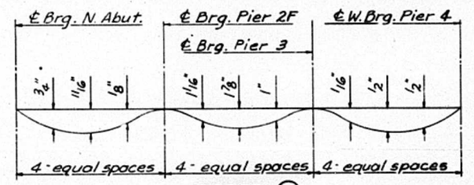
FILE NO. 74001
DATE 8-22-80

ROUTE NO	SEC	COUNTY	TOTAL SHEETS	SHEET NO
F.A.-49	(15B-1) -D	PEORIA AND TAZEWELL	97	45
FED ROAD DIST NO 7	ILLINOIS	PROJECT		

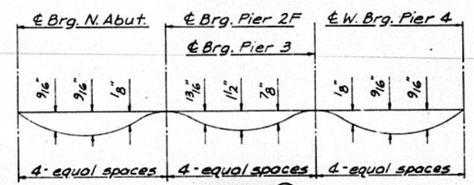
Sheet 41 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

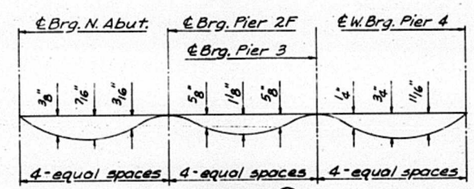
	GIRDER 1			GIRDER 2			GIRDER 3			GIRDER 4		
	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION	STATION	THEORETICAL GRADE ELEVATIONS	THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ W. Brg. Pier 4	5+94.544	499.432	499.432	5+94.946	499.313	499.313	5+95.347	499.104	499.104	5+95.749	498.892	498.892
	6+04.544	499.625	499.643	6+04.946	499.503	499.523	6+05.347	499.262	499.284	6+05.749	499.017	499.042
	6+14.544	499.835	499.868	6+14.946	499.701	499.738	6+15.347	499.425	499.467	6+15.749	499.147	499.193
	6+24.544	500.049	500.092	6+24.946	499.897	499.946	6+25.347	499.589	499.645	6+25.749	499.278	499.340
	6+34.544	500.267	500.314	6+34.946	500.094	500.149	6+35.347	499.752	499.815	6+35.749	499.407	499.479
	6+44.544	500.490	500.534	6+44.946	500.291	500.345	6+45.347	499.916	499.980	6+45.749	499.538	499.611
Spaces @ 10'-0" cts. Along ℄ Girder	6+54.544	500.716	500.753	6+54.946	500.488	500.535	6+55.347	500.079	500.136	6+55.749	499.668	499.735
	6+64.372	500.943	500.968	6+64.820	500.683	500.718	6+65.300	500.242	500.287	6+65.816	499.799	499.854
	6+73.564	501.158	501.169	6+74.326	500.870	500.891	6+75.140	500.403	500.433	6+76.015	499.932	499.971
	6+82.757	501.372	501.372	6+83.831	501.057	501.065	6+84.980	500.564	500.579	6+86.214	500.065	500.088
	6+91.950	501.588	501.583	6+93.336	501.244	501.244	6+94.820	500.725	500.729	6+96.413	500.198	500.207
	7+01.142	501.805	501.800	7+02.842	501.428	501.427						
℄ Brg. Pier 3	7+06.118	501.912	501.912	7+07.689	501.509	501.509	7+09.373	500.944	500.944	7+11.184	500.378	500.378
	7+15.311	502.184	502.199	7+17.194	501.617	501.629	7+19.213	501.051	501.058	7+21.383	500.484	500.486
	7+24.504	502.271	502.306	7+26.700	501.702	501.731	7+29.053	501.134	501.155	7+31.582	500.565	500.577
	7+33.697	502.338	502.400	7+36.205	501.766	501.819	7+38.893	501.194	501.234	7+41.781	500.619	500.645
	7+42.890	502.384	502.476	7+45.711	501.807	501.885	7+48.733	501.229	501.290	7+51.980	500.649	500.690
	7+52.083	502.409	502.528	7+55.216	501.826	501.926	7+58.573	501.241	501.319	7+62.179	500.653	500.708
	7+61.275	502.415	502.554	7+64.721	501.823	501.940	7+68.413	501.229	501.320	7+72.378	500.631	500.696
Spaces @ 10'-0" cts. Along ℄ Girder	7+70.468	502.387	502.550	7+74.227	501.797	501.922	7+78.253	501.194	501.290	7+82.577	500.583	500.654
	7+79.661	502.360	502.514	7+83.732	501.749	501.875	7+88.093	501.134	501.229	7+92.776	500.510	500.580
	7+88.854	502.302	502.446	7+93.238	501.680	501.794	7+97.933	501.051	501.138	8+02.975	500.412	500.476
	7+98.047	502.225	502.348	8+02.743	501.587	501.683	8+07.773	500.944	500.016	8+13.174	500.288	500.342
	8+07.239	502.125	502.221	8+12.248	501.473	501.546	8+17.613	500.813	500.867	8+23.373	500.138	500.178
	8+16.432	502.005	502.070	8+21.754	501.337	501.386	8+27.453	500.658	500.692	8+33.572	499.963	499.989
	8+25.625	501.862	501.901	8+31.259	501.178	501.204	8+37.293	500.480	500.498	8+43.771	499.762	499.775
	8+34.818	501.700	501.717	8+40.765	500.997	501.008	8+47.133	500.277	500.283			
℄ Brg. Pier 2F	8+45.508	501.485	501.485	8+49.457	500.812	500.812	8+53.735	500.128	500.128	8+58.387	499.430	499.430
	8+54.700	501.278	501.276	8+58.962	500.588	500.586	8+63.575	499.886	499.886	8+68.586	499.167	499.166
	8+63.893	501.051	501.051	8+68.468	500.343	500.346	8+73.415	499.620	499.624	8+78.785	498.878	498.881
	8+73.086	500.802	500.812	8+77.973	500.075	500.088	8+83.255	499.330	499.344	8+88.984	498.564	498.576
	8+82.279	500.533	500.559	8+87.479	499.785	499.812	8+93.095	499.017	499.043	8+99.183	498.224	498.245
Spaces @ 10'-0" cts. Along ℄ Girder	8+91.472	500.245	500.286	8+96.984	499.472	499.513	9+02.935	498.679	498.715	9+09.382	497.859	497.887
	9+00.664	499.935	499.981	9+06.489	499.138	499.188	9+12.775	498.318	498.360	9+19.581	497.468	497.500
	9+09.857	499.601	499.667	9+15.995	498.781	498.835	9+22.615	497.933	497.975	9+29.780	497.051	497.083
	9+19.050	499.249	499.316	9+25.500	498.402	498.453	9+32.455	497.525	497.562	9+39.979	496.609	496.636
	9+28.243	498.876	498.935	9+35.006	498.001	498.042	9+42.295	497.092	497.120	9+50.178	496.147	496.165
	9+37.436	498.482	498.525	9+44.511	497.578	497.604	9+52.135	496.629	496.643			
	9+46.629	498.067	498.088									
℄ Brg. No. Abut	9+54.059	497.664	497.664	9+57.318	496.925	496.925	9+60.834	496.192	496.192	9+64.642	495.465	495.465



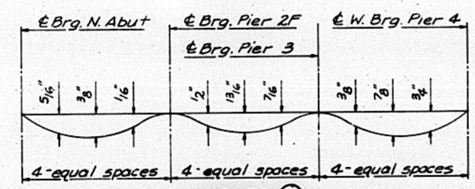
GIRDER (1)



GIRDER (2)



GIRDER (3)



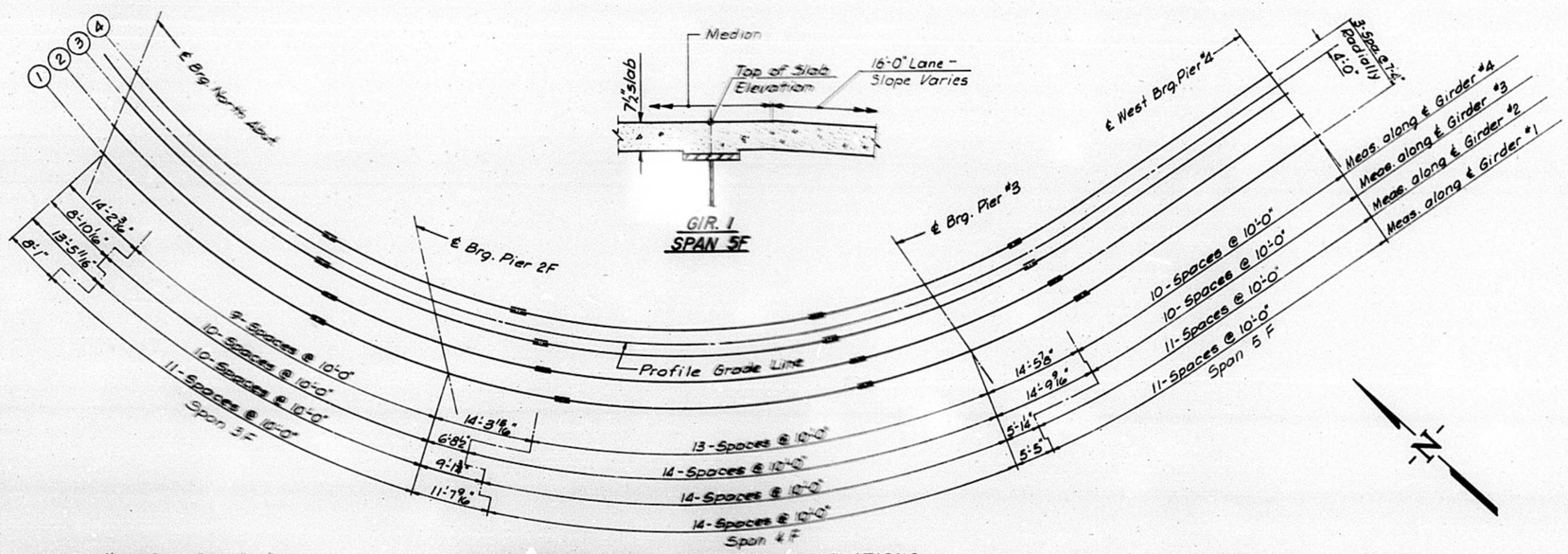
GIRDER (4)

DEAD LOAD DEFLECTION DIAGRAMS

(INCLUDES WEIGHT OF CONCRETE ONLY)

Note: The above deflections are not to be used in the field if the engineer is working from the slab elevations adjusted for dead load deflection shown in table above.

ELEVATIONS - TOP OF CONCRETE



GIR. 1
SPAN 5F

Note: All dimensions shown in plan are measured horizontally

DIAGRAMMATIC PLAN - TOP OF SLAB ELEVATIONS

Note: For notes on method of determining fillet heights "y" see Sheet 30 of 88

TOP OF SLAB ELEVATIONS RAMP F - SPANS 3F, 4F & 5F

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (15B-1)-D

PEORIA & TAZEWELL COUNTIES

DESIGN	WDL
CHECKED	RAH
DRAWN	RAH, DAN
CHECKED	WDL

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

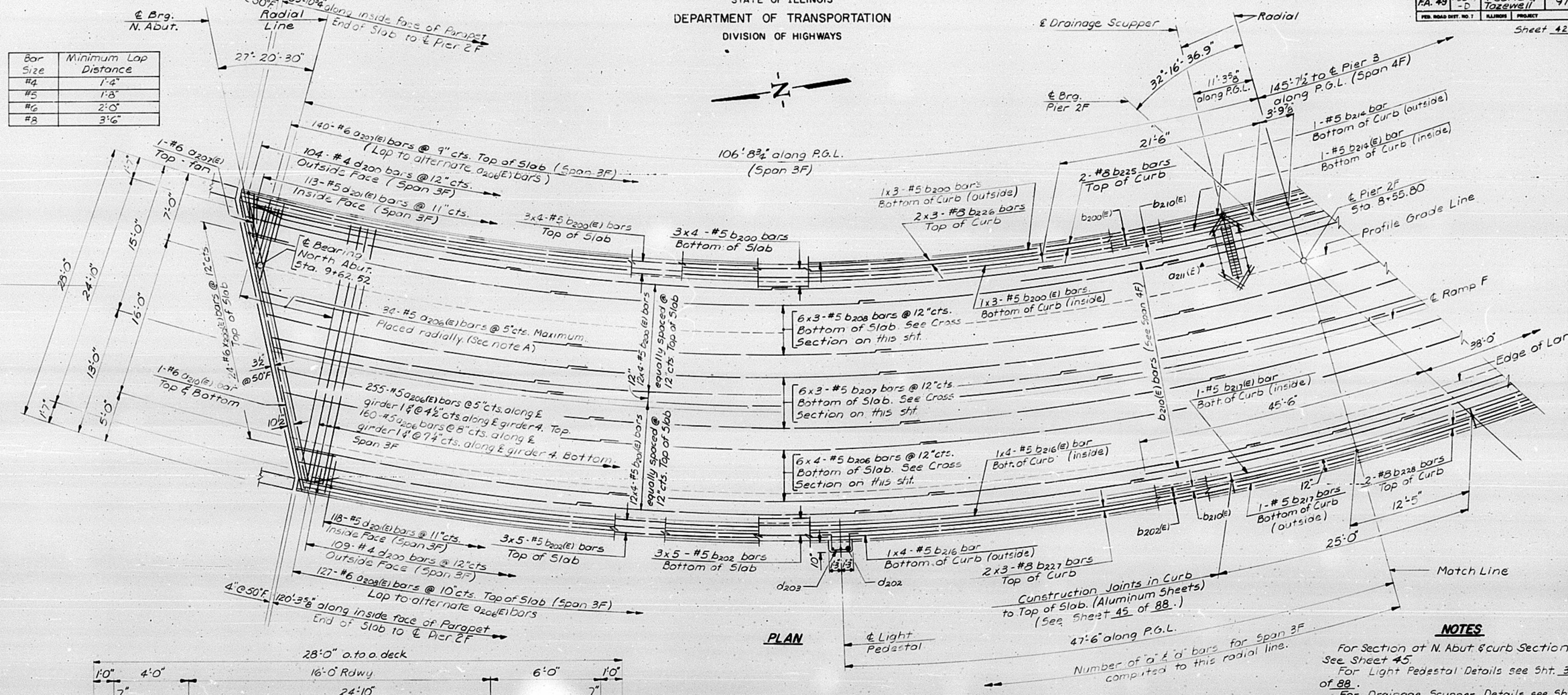
FILE NO 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

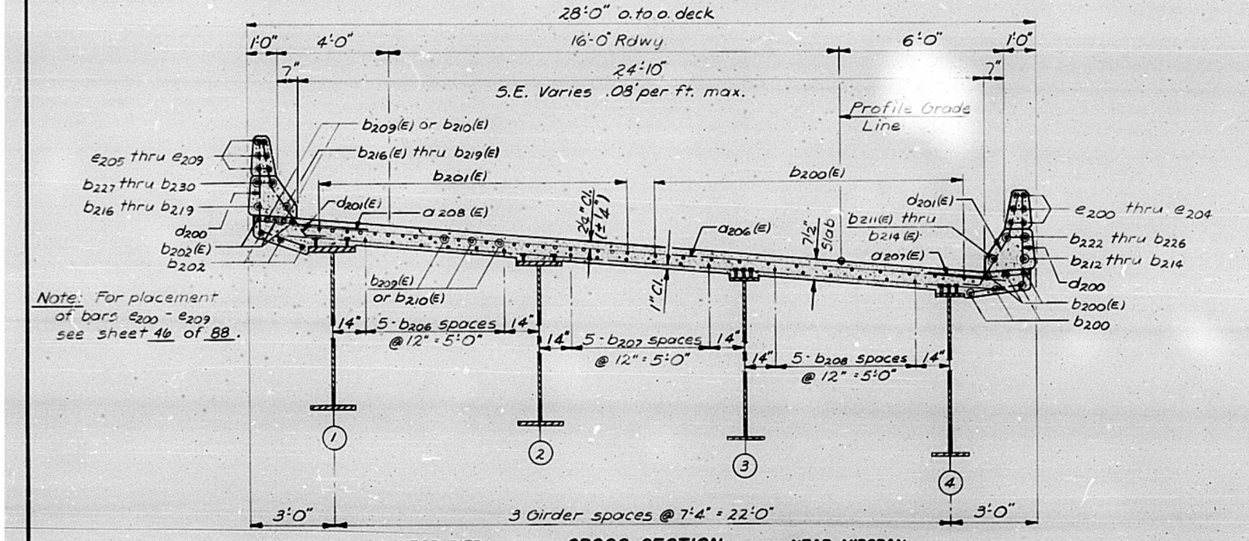
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	Peoria & Tazewell	97	46
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 42 of 88

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

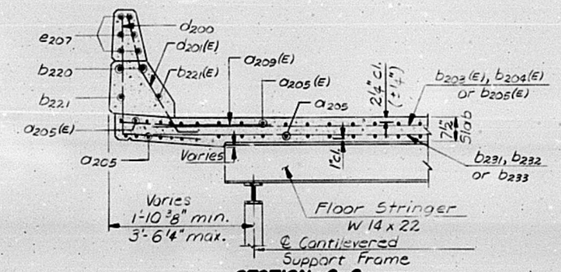


PLAN



Note: For placement of bars e200 - e209 see sheet 46 of 88.

NEAR PIER CROSS SECTION NEAR MIDSPAN
(LOOKING IN THE DIRECTION OF RAMP F STATIONING.)



SECTION C-C
(From Sheet 44 of 88.)

NOTES

For Section at N. Abut & Curb Section See Sheet 45.

For Light Pedestal Details see Sht. 3 of 88.

For Drainage Scupper Details see Shts 79 & 80.

For Reinforcement & configuration of slab at Scupper see Sheet 3 of 88.

Bars indicated thus: 20x3-#5, etc. indicates 20 lines of bars with 3 lengths per line.

Note A: Order a206(E) bars full length, cut bars in field to fit skew and use remainder of bars in bottom of slab. See Special Provisions for the procedure for epoxy coating of cut reinforcement bars.

All dimensions shown are measured horizontally.

RAMP F SUPERSTRUCTURE SPAN 3F

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED DAN
CHECKED WDL
DRAWN D.A.N.
CHECKED C.R.M.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	Peoria & Tazewell	97	47
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 43 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Note:
Bars indicated thus: 20 x 3 - #5, etc. indicates 20 lines of bars with 3 stirrups per line.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

145'-8 3/8" along inside face of East Parapet ℄ Pier 2F to ℄ Pier 3F

Radial Line

℄ Brg. Pier 2F

32°-16'-36.9"

189-#6 $a_{207(E)}$ bars @ 9" cts. Top of Slab (Span 4F)
(Lap to alternate $a_{206(E)}$ bars)

142-#4 d_{200} bars @ 12" cts. Outside Face (Span 4F)

154-#5 $d_{201(E)}$ bars @ 11" cts. Inside Face (Span 4F)

1-#5 b_{214} bars Bottom of Curb (outside)

2-#8 b_{228} bars Top of Curb

Construction Joints in Curb to Top of Slab (Aluminum Sheets) (See Sheet 45 of 88.)

2x3-#6 $b_{210(E)}$ bars Top of Slab

2x3-#8 b_{224} bars Top of Curb

1x4-#5 b_{213} bars Bottom of Curb (outside)

3x6-#5 $b_{200(E)}$ bars Top of Slab

3x6-#5 b_{200} bars Bottom of Slab.

1-#5 $b_{214(E)}$ bar Bott. of Curb (inside) Sta. 8+55.80

℄ Ramp F

Edge of Lane

Match Line

378-#5 $a_{206(E)}$ bars @ 5" cts. along ℄ Girder 1 & 4 237-#5 a_{206} bars @ 8" cts along ℄ Girder 4 (top) & 74 @ cts along ℄ Girder 4 (bottom) SPAN 4F

1-#5 $b_{217(E)}$ bar Bott. of Curb (inside)

23-#6 $b_{210(E)}$ bars @ 12" cts. Top of Slab - Over Pier

1-#5 b_{217} bar Bott. of Curb (outside)

2x3-#6 $b_{210(E)}$ bars Top of Slab

1x4-#5 $b_{218(E)}$ bars Bottom of Curb (inside)

1x4-#5 b_{218} bars Bottom of Curb (outside)

2x3-#8 b_{229} bars Top of Curb

2-#8 b_{228} bars Top of Curb

116-#5 $d_{201(E)}$ bars @ 11" cts. Inside Face (Span 4F)

162-#4 d_{200} bars @ 12" cts. Outside Face (Span 4F)

184-#5 $a_{206(E)}$ bars @ 10" cts. Top of Slab (Span 4F)
(Lap to alternate $a_{206(E)}$ bars)

145'-7 1/2" along P.G.L. (Span 4F)

Number of a-4-3 bars for Span 4F computed to this radial line.

Radial Line

Match Line

13°-09'-20.7"

℄ Pier 3

1'-5 3/4"

1-#5 $b_{213(E)}$ bar (far side)

1-#5 b_{212} bar (near side)

Bottom of Curb

23'-0"

$b_{200(E)}$

$b_{209(E)}$

2-#8 b_{228} bars Top of Curb

℄ Brg. Pier 3 Sta. 7+10.18

$a_{200(E)}$

6x5-#5 b_{208} bars @ 12" cts. Bottom of Slab. See Cross Section on Sheet 42 of 88.

6x5-#5 b_{207} bars @ 12" cts. Bottom of Slab See Cross Section on Sheet 42 of 88.

6x5-#5 b_{206} bars @ 12" cts. Bottom of Slab. See Cross Section on Sheet 42 of 88.

$b_{209(E)}$ bars (See Span 5F)

40'-6"

41'-6"

1-#5 $b_{213(E)}$ bar Bott. of Curb (inside)

19'-9 1/4"

149'-10" along inside face West Parapet (To ℄ Pier 2F

2-#8 b_{230} bars Top of Curb

1-#5 $b_{214(E)}$ bar (far side)

1-#5 b_{212} bar (near side)

Bottom of Curb

2-#8 b_{220} bars Top of Curb

12'-5"

25'-0"

38'-0"

28'-0"

24'-10"

16'-0"

15'-0"

13'-0"

1'-5"

1'-7"

1'-7"

7'-0"

7'-0"

12"

12"

12x6-#5 $b_{206(E)}$ bars equally spaced @ 12" cts. Top of Slab

12x6-#5 $b_{201(E)}$ bars equally spaced @ 12" cts. Top of Slab

103'-7 7/8"

3'-9 3/8"

21'-6"

$b_{200(E)}$

$b_{209(E)}$

b_{220}

b_{230}

Top of Slab

$b_{221(E)}$ or b_{221}

$b_{219(E)}$ or b_{219}

VIEW G-G

1/2" 1:2" ℄ Girder

1" Max.

3/8" ℄

1/4

1/2"x5"x8" ℄

Top of Pier

Face of Pier

1" ø x 8" Long Anchor Bolts Drill and Grout into Pier (After removal of Hold Down Assembly, patch Anchor Bolt Holes in accordance with the Standard Spec's.)

1/2" Typ.

3/8"x6" ℄

3'-6" ℄ Gir. 1 - Pier 2F
1'-6" ℄ Gir. 4 - Pier 2F
2'-6" ℄ Gir. 4 - Pier 3

1'-0 1/2"

3" 6" 6"

HOLD DOWN ASSEMBLY
3 Req'd - 1℄ Gir. 1 Pier 2F
1℄ Gir. 4 Pier 2F
1℄ Gir. 4 Pier 3
(Cost Incidental to Class X Conc.)

Note:
Place hold down assembly on Gir. 4 ℄ Pier 3 and Gir. 1 & 4 ℄ Pier 2F prior to placement of deck concrete. Start placement of deck concrete at the North Abutment and place continuous to Pier 4. All 3 Spans shall be completed in 1 day.

NOTES

For Drainage Scupper Details see Shts. 79 and 80.

For Reinforcement & configuration of slab at Scupper see Sheet 3 of 88.

All dimensions shown are measured horizontally.

PLAN

Profile Grade Line

Varies: 5'-11 3/4" min. 12'-3 1/4" max

Neoprene Expansion Joint (Longitudinal) See Detail 'A' on Sheet 8 of 88.

16'-0" 6'-0" 1'-0"

21'-5"

S.E. Varies (See Sh. 5 of 88)

b_{201} b_{200}

$b_{203(E)}$ $a_{205(E)}$ $b_{204(E)}$ $b_{205(E)}$ $b_{209(E)}$ $a_{200(E)}$ $a_{207(E)}$ d_{200}

7 1/2" Slab

1'-6" Min.

Shear Stud Connectors

7 1/2" Slab

2 1/2" Cl. (Typ.)

2 1/2" Cl.

1" Cl.

7"

a_{205} b_{231} b_{232} b_{233} b_{206} a_{200} b_{207} b_{208}

Floor Stringer W14 x 22

Contilevered Support Frame

Cross Frame (Typ.)

3 Girder spaces @ 7'-4" = 22'-0"

3'-0"

e_{200} thru e_{204}
b_{222} thru b_{226}
b_{211} thru b_{215}
$d_{201(E)}$
$b_{209(E)}$
$b_{200(E)}$
b_{200}

Note: For location of Section B-B see sheet 44 of 88.
See Detail 'J' Sh. 44 of 88.

Varies: 3'-11 3/4" min. 10'-3 1/4" max.

SECTION B-B

RAMP F SUPERSTRUCTURE SPAN 4F

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (158-1)-D

PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N.
CHECKED W.D.L.
DRAWN D.A.N.
CHECKED C.R.N.

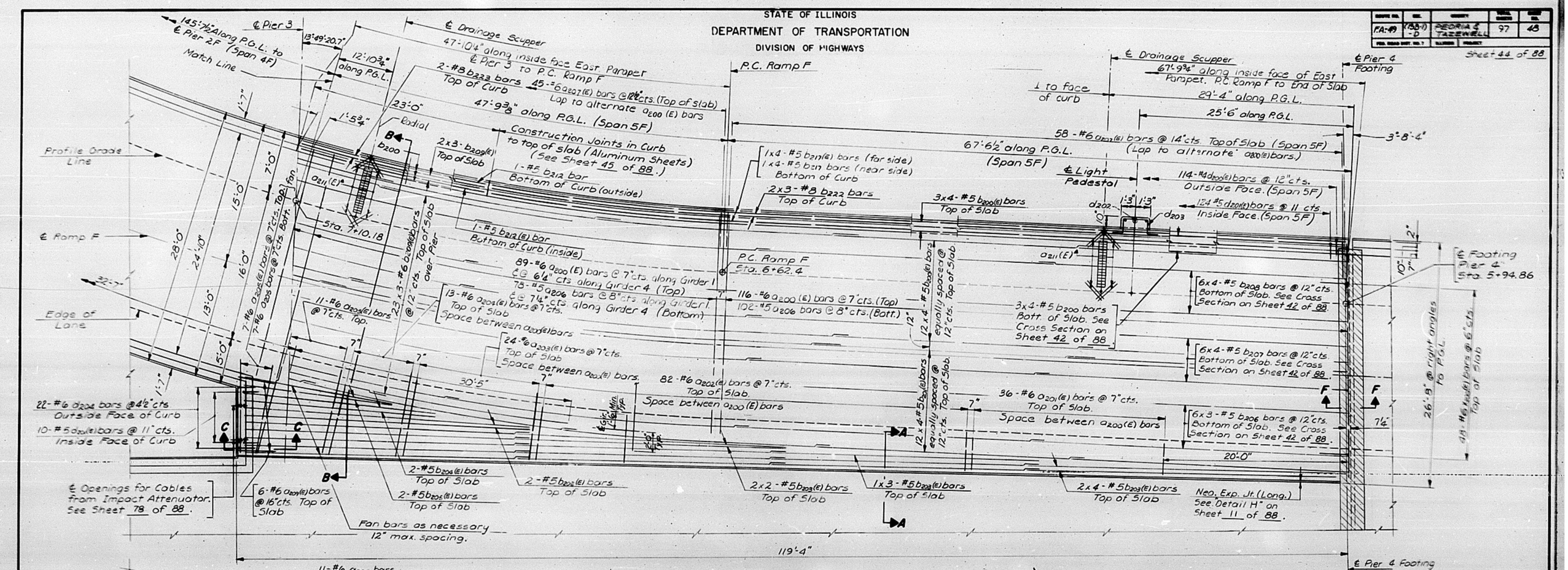
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.:49	(15B-1) -D	PEORIA & TAZEWELL	97	48
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

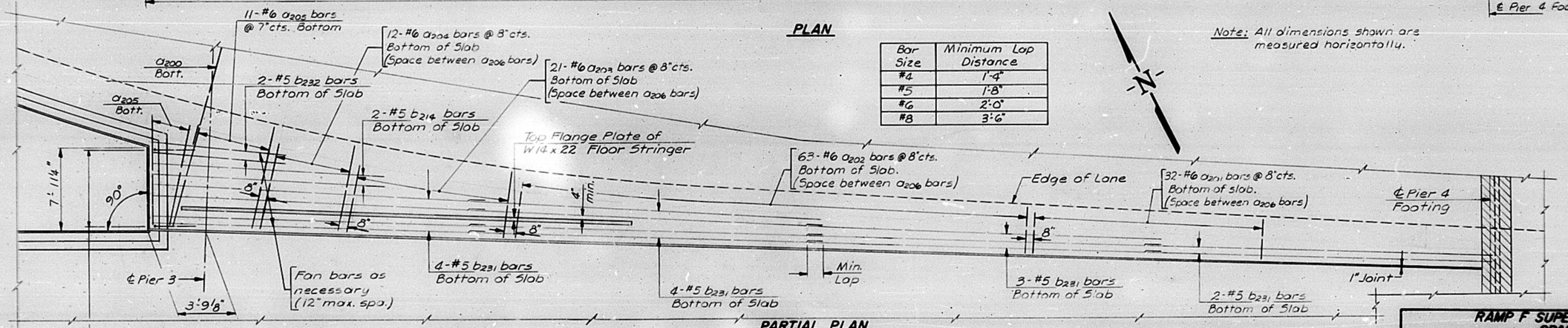
Sheet 44 of 88



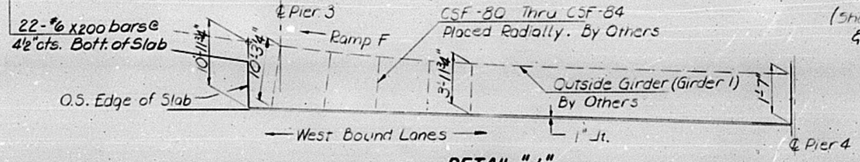
PLAN

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

Note: All dimensions shown are measured horizontally.



PARTIAL PLAN
(Showing Bottom Longitudinal & Transverse Reinforcement)



DETAIL "J"

NOTES

Bars indicated thus: 20 x 3 - #5, etc. indicates 20 lines of bars with 3 lengths per line.

For Light Pedestal Details see Sheet 3 of 88.

For Section A-A see Sheet 11 of 88.
For Section B-B see Sheet 43 of 88.
For Section C-C see Sheet 42 of 88.
For Section F-F see Sheet 45 of 88.
For Scupper Details see Shts. 79 & 80.
*For Reinforcement & configuration of slab at Scupper see Sheet 3 of 88.

RAMP F SUPERSTRUCTURE SPAN 5F

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DRAWN D.A.N.
CHECKED W.D.L.
DESIGN D.A.N.
CHECKED C.R.N.

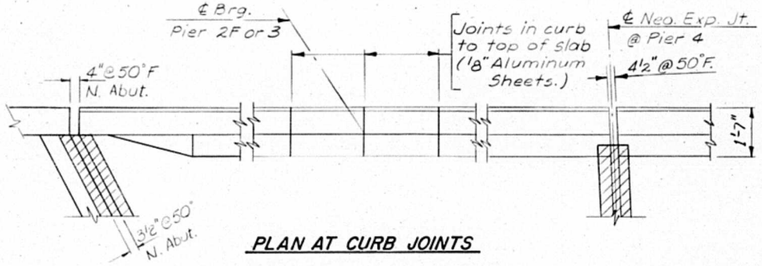
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 5-30-80

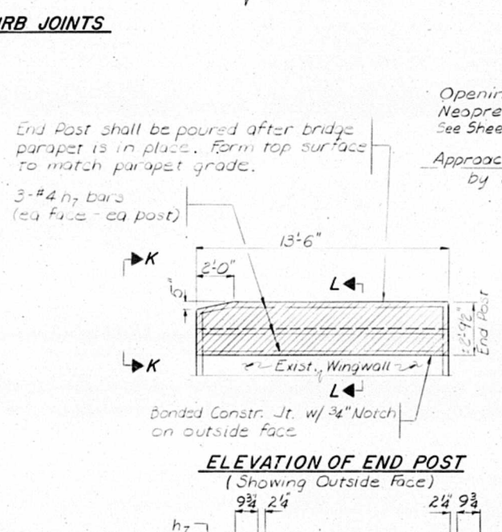
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	49
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 45 of 88

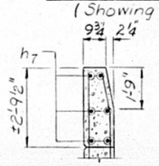


PLAN AT CURB JOINTS

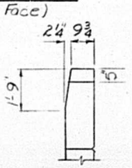


SECTION AT NORTH ABUTMENT
(* = Dimension @ 50°F.)
(From Sheet 42 of 88)

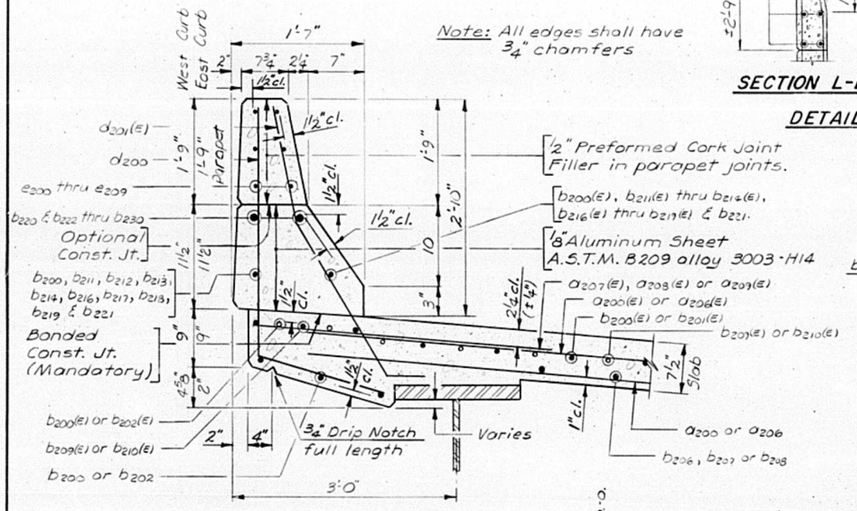
ELEVATION OF END POST
(Showing Outside Face)



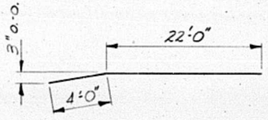
SECTION L-L



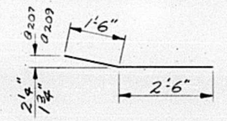
VIEW K-K



SECTION THRU CURB
Cost of Aluminum Sheets shall be incidental to cost of Class X Concrete.

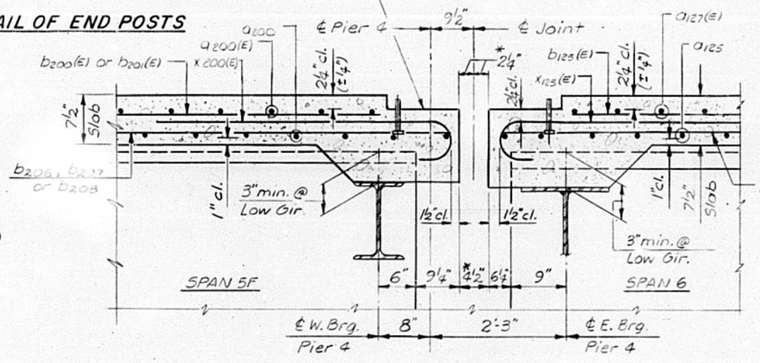


BAR a200(E)

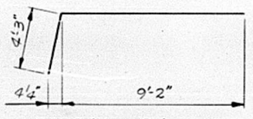


BARS a207(E) & a209(E)

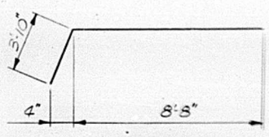
DETAIL OF END POSTS



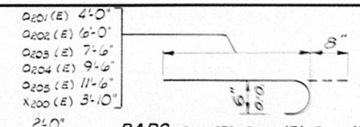
SECTION F-F
(* = Dimension @ 50°F.)
(From Sheet 44 of 88)



BARS b221 & b221(E)

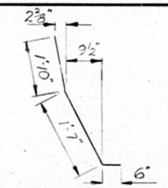


BAR b220

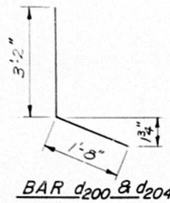


BAR d203

BARS a201(E), a202(E), a203(E), a204(E), a205(E), x200 & x200(E)



BAR d201(E)



BAR d200 & d204

RAMP F
BILL OF MATERIAL

BAR	NO.	BAR	NO.	SIZE	LENGTH	SHAPE
		h6	3	#6	28'-11"	
		h7	12	#7	13'-3"	
a200(E)	205			#9	26'-0"	
a201(E)	36	a201	22	#9	4'-8"	
a202(E)	82	a202	68	#9	6'-8"	
a203(E)	24	a203	21	#9	8'-8"	
a204(E)	13	a204	12	#9	10'-2"	
a205(E)	18	a205	18	#9	12'-2"	
a206(E)	667	a206	577	#5	26'-0"	
a207(E)	482			#6	4'-0"	
a208(E)	316			#6	4'-0"	
a209(E)	6			#6	4'-0"	
a210(E)	2			#6	29'-7"	
a211(E)	48			#5	2'-0"	
b200(E)	213	b200	42	#5	28'-3"	
b201(E)	168			#5	29'-3"	
b202(E)	30	b202	30	#5	28'-8"	
b203(E)	17			#5	30'-6"	
b204(E)	2			#6	18'-0"	
b205(E)	2			#5	13'-0"	
		b206	72	#5	33'-8"	
		b207	72	#5	33'-0"	
		b208	72	#5	32'-5"	
b209(E)	75			#6	28'-8"	
b210(E)	81			#6	29'-3"	
b212(E)	2	b212	2	#5	22'-8"	
b213(E)	4	b213	4	#5	26'-3"	
b214(E)	2	b214	4	#5	21'-2"	
b216(E)	4	b216	4	#5	24'-11"	
b217(E)	6	b217	6	#5	24'-8"	
b218(E)	4	b218	4	#5	27'-1"	
b219(E)	1	b219	1	#5	19'-8"	
		b220	2	#3	12'-6"	
b221(E)	1	b221	1	#5	13'-5"	
		b222	6	#3	33'-6"	
		b223	4	#3	22'-8"	

RAMP F
BILL OF MATERIAL (Cont'd.)

BAR	NO.	BAR	NO.	SIZE	LENGTH	SHAPE
		b224	6	#8	36'-9"	
		b225	4	#8	21'-2"	
		b226	6	#8	30'-6"	
		b227	6	#8	32'-11"	
		b228	4	#8	24'-8"	
		b229	6	#8	36'-8"	
		b230	2	#8	19'-8"	
		b231	13	#5	30'-10"	
		b232	2	#5	12'-0"	
		d200	640	#4	4'-10"	L
d201(E)	695			#5	3'-11"	L
		d202	6	#6	4'-5"	L
		d203	10	#6	8'-11"	⊤L
		d204	22	#6	4'-10"	L
		e200	30	#4	18'-2"	
		e201	24	#4	11'-0"	
		e202	66	#4	16'-0"	
		e203	24	#4	10'-3"	
		e205	24	#4	12'-0"	
		e206	6	#4	20'-3"	
		e207	6	#4	7'-9"	
		e208	36	#4	15'-3"	
		e209	36	#4	16'-9"	
x200(E)	72	x200	22	#6	4'-6"	C

Class 'X' Concrete	Cu.Yds.	324.8
Reinforcement Bars	Lbs.	36,710
Reinforcement Bars (Epoxy Coated)	Lbs.	56,160
Neoprene Expansion Joint (4")	Lin. Ft.	31.4
Drainage Scuppers	Each	3
Stud Shear Connectors	Each	2,730
Protective Coat	Sq.Yds.	1,876.3

▲ Bars a201(E), a202(E), a203(E), a204(E), & a205(E) are detailed in "Length" and "Shape" columns. For a201, a202, a203, a204, & a205 bars see table below:

BAR	LENGTH	SHAPE
a201	4'-0"	
a202	6'-0"	
a203	7'-6"	
a204	9'-6"	
a205	11'-6"	

NOTES

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

See Sheets 42 & 44 for location of Light Pedestal Reinforcement Bars a202 & a203.

RAMP F
SUPERSTRUCTURE DETAILS

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

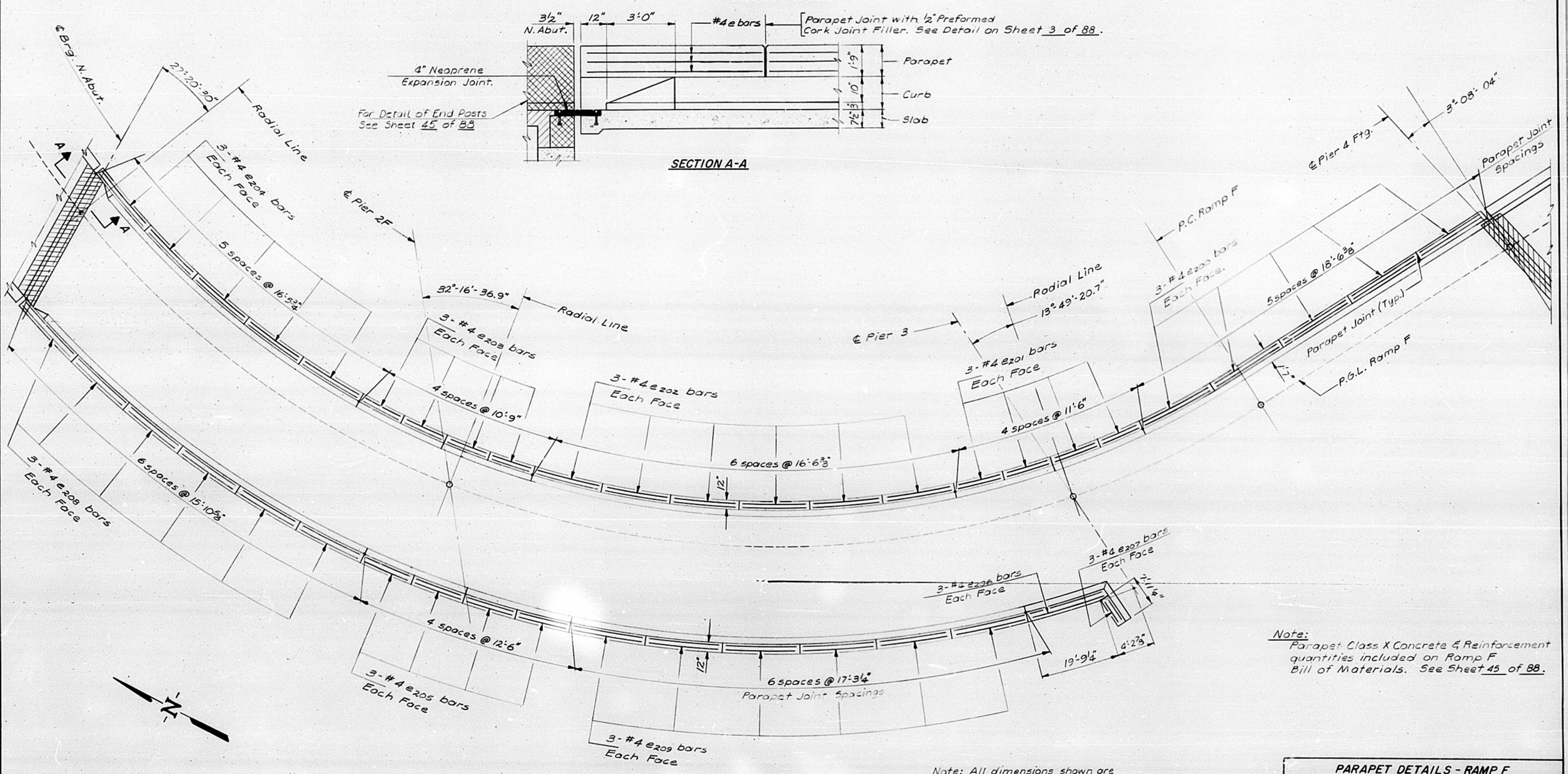
FILE NO. 74001
DATE 8-22-80

ECK. 12-30-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	15B-1) -D	PEORIA & TAZEWELL	97	50
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 46 of 88



PLAN - JOINTS IN PARAPET

SECTION A-A

Note: All dimensions shown are measured horizontally.

Note:
Parapet Class X Concrete & Reinforcement quantities included on Ramp F Bill of Materials. See Sheet 45 of 88.

PARAPET DETAILS - RAMP F

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. 15B-11-D
PEORIA & TAZEWELL COUNTIES

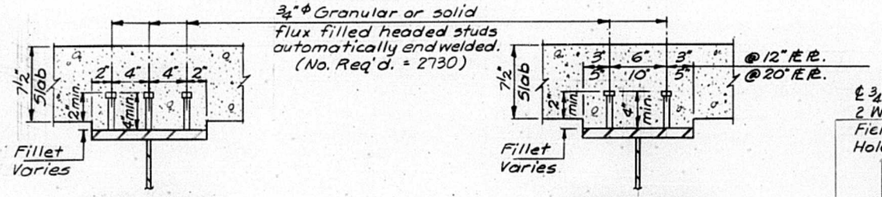
DESIGNED D.A.N.
CHECKED C.R.N
DRAWN D.A.N.
CHECKED C.R.N

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

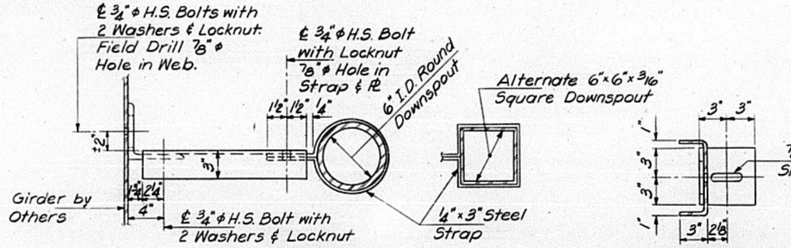
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.R.	(15B-1) -D			97	51



SHEAR STUDS
PIER 4 to SPLICE 1
SPLICE 2 to SPLICE 3
SPLICE 4 to N. ABUT.

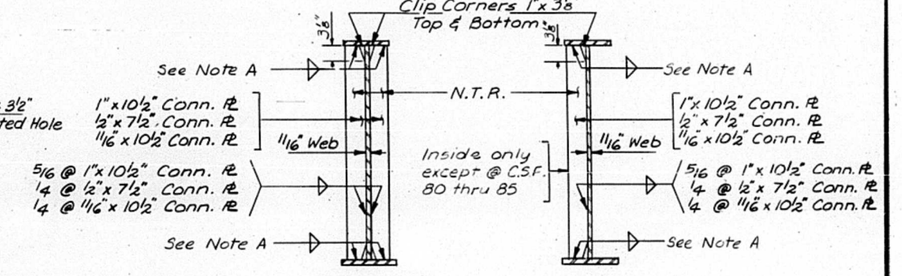
SHEAR STUDS
SPLICE 1 to SPLICE 2
SPLICE 3 to SPLICE 4



SECTION A-A

SECTION B-B

DRAINAGE SCUPPER DETAILS



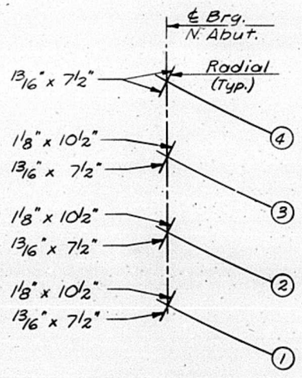
At Girders 2 & 3 **At Girders 1 & 4**

CONNECTING PLATES

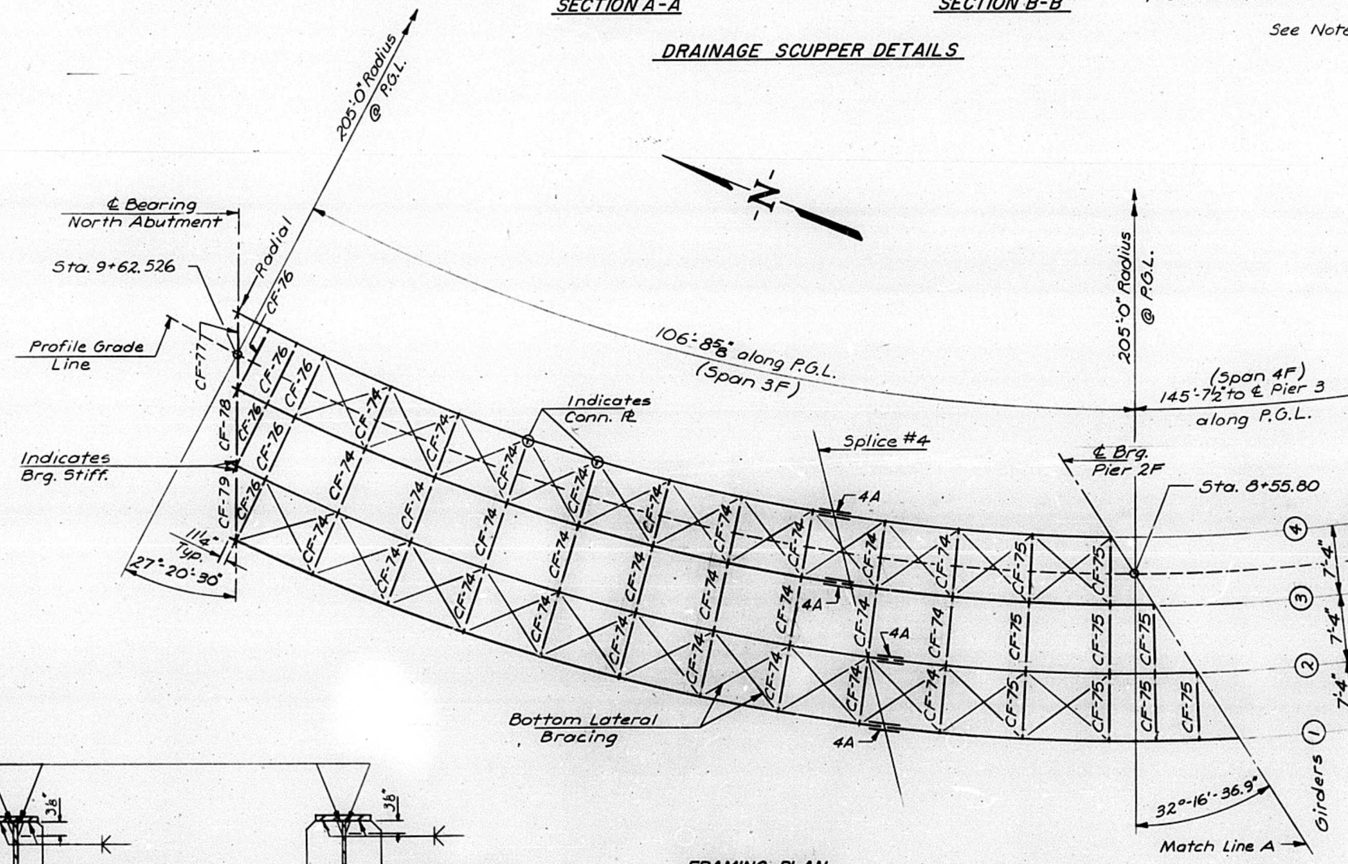
For locations of Conn. ℞'s see Ramp F - Girder Details.

All Conn. ℞'s - M183 Steel

Note A:
9/16 @ 1" Conn ℞
5/16 & ½" Conn ℞
⅜ @ 11/16" Conn ℞

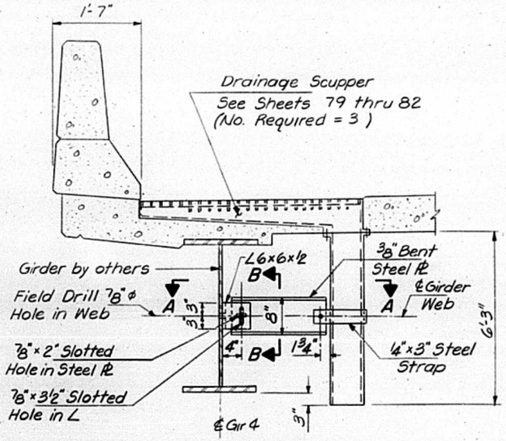


BEARING STIFFENERS AT NORTH ABUTMENT



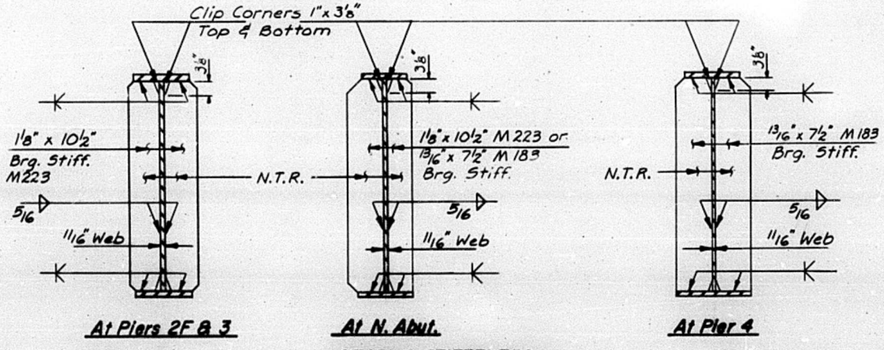
FRAMING PLAN
(Span 3F)

Note: All dimensions shown are measured horizontally.



All connection steel - M183 steel

SECTION AT DRAINAGE SCUPPER



At Piers 2F & 3 **At N. Abut.** **At Pier 4**

BEARING STIFFENERS
For locations of Brg. Stiff's. see Ramp F - Girder Details.

NOTES

All work on this Sheet is by others except Stud Shear Connectors and Scupper Details.

STRUCTURAL STEEL FRAMING PLAN
RAMP F - SPAN 3F

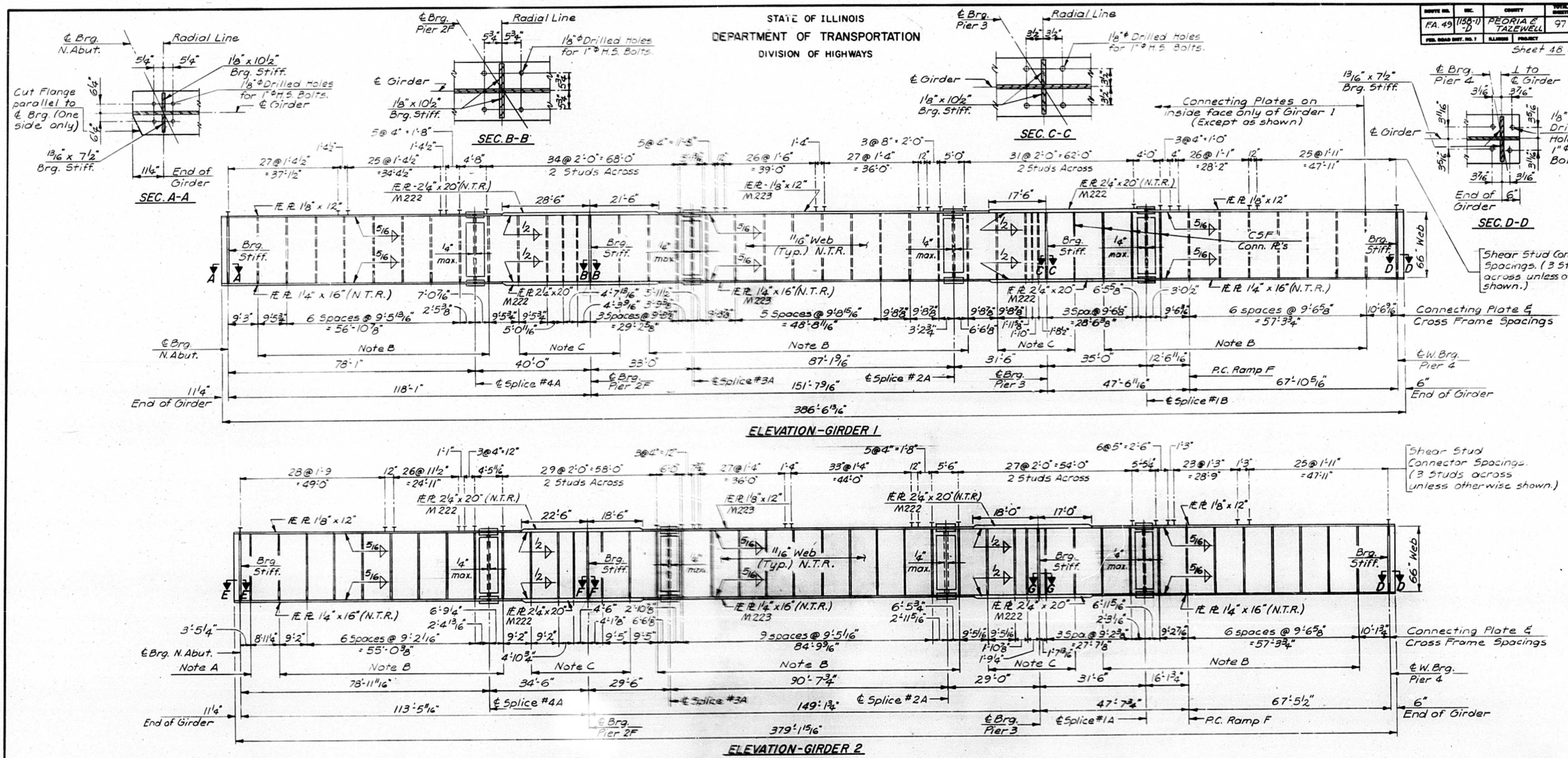
McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

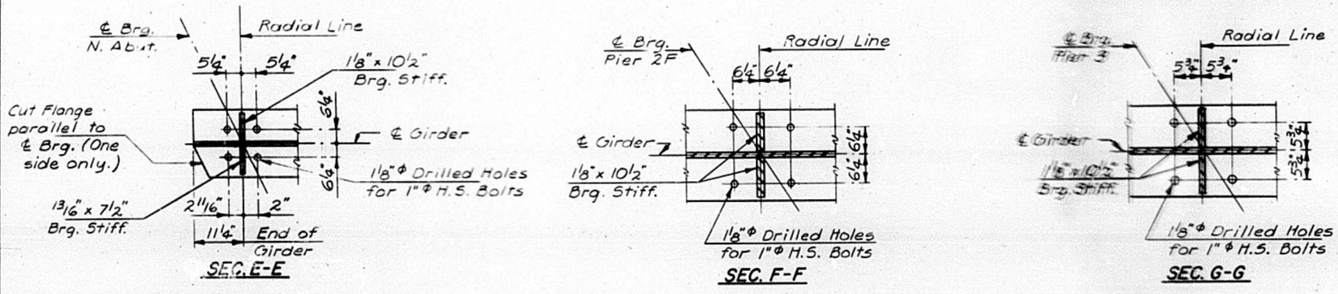
DESIGNED W.D.L.	HANSON ENGINEERS INCORPORATED
DRAWN C.R.N.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS
TRACED D.A.N.	FILE NO. 74001
CHECKED C.R.N.	DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 49 (15B-1)-D	PEORIA & TAZEWELL	97	52
FED. ROAD DIST. NO. 7 ILLINOIS	PROJECT		

Sheet 48 of 86





Notes

All dimensions are measured along ℄ Girder.

N.T.R. refers to the Supplemental Requirements for Notch Toughness.

Note A: 1" x 10½" Connecting Plates.

Note B: ½" x 7½" Connecting Plates.

Note C: 11/16" x 10½" Connecting Plates.

Steel Specifications this sheet shall be AASHTO M183 Steel unless otherwise noted.

All dimensions shown are measured horizontally.

All work on this sheet is by others except Stud Shear Connectors.

RAMP F - GIRDER DETAILS

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
C.R.N.
D.A.N.
C.R.N.

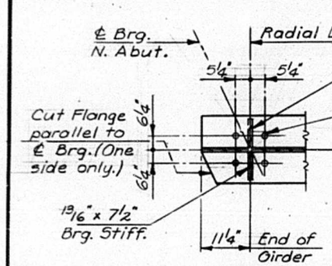
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

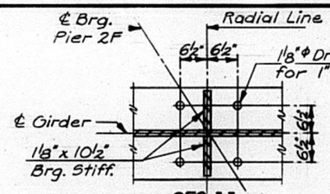
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 49	(15B-1)-D	PEORIA & TAZEWELL	97	53
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

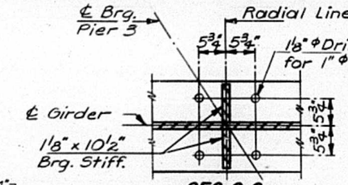
Sheet 42 of 88



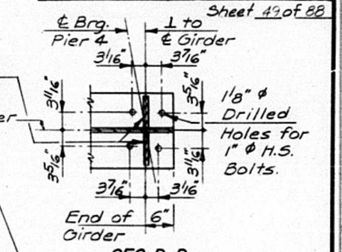
SEC. H-H



SEC. I-I

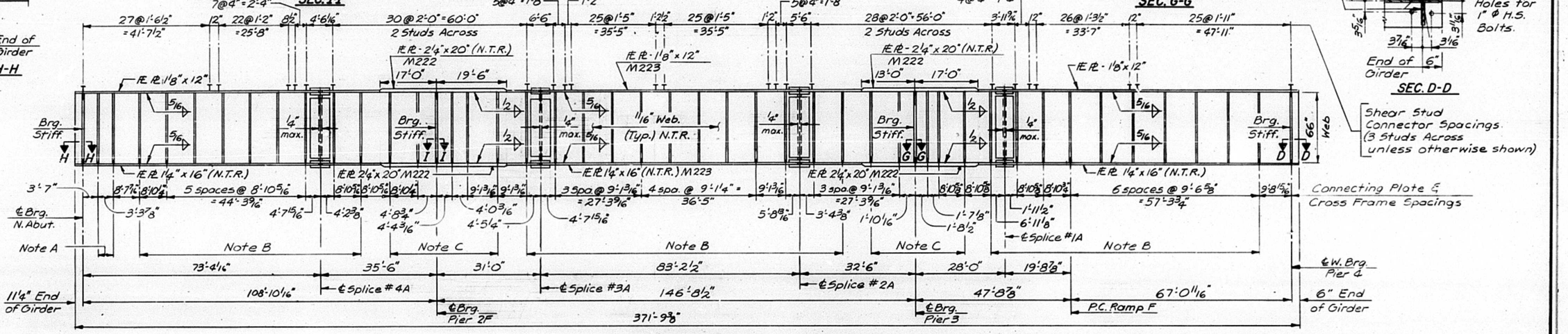


SEC. G-G



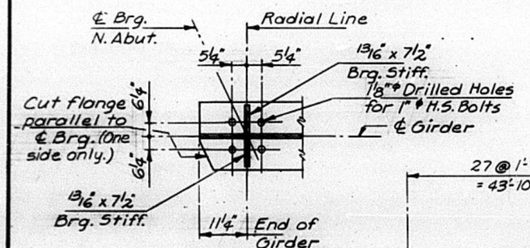
SEC. D-D

Shear Stud Connector Spacings. (3 Studs Across unless otherwise shown)

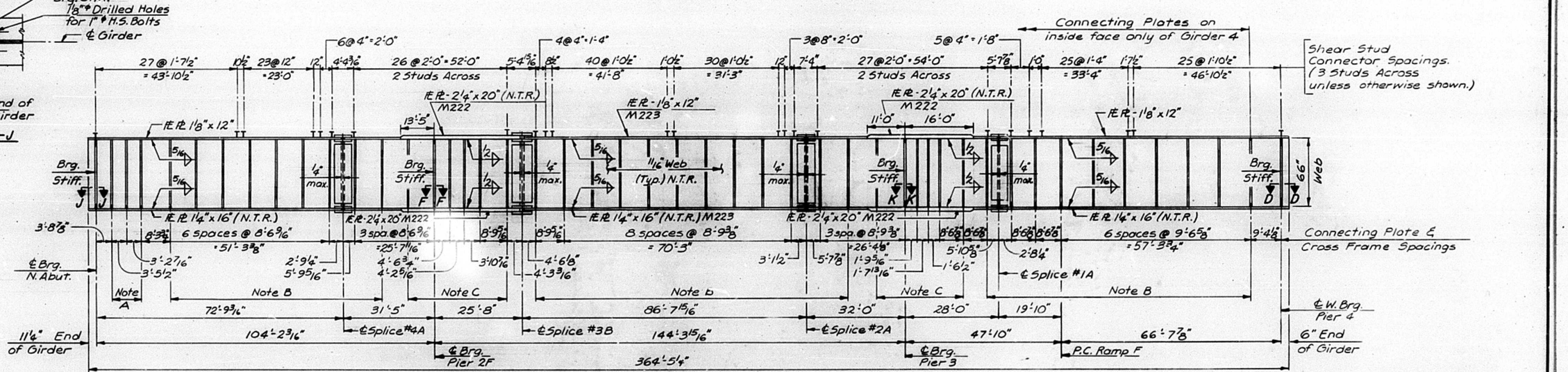


ELEVATION - GIRDER 3

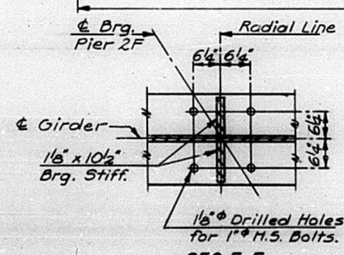
Note: All dimensions shown are measured horizontally.



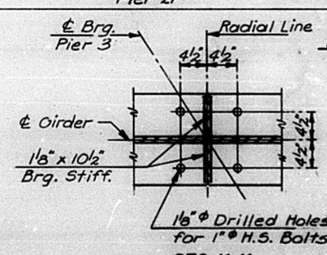
SEC. J-J



ELEVATION - GIRDER 4



SEC. F-F



SEC. K-K

Notes

All dimensions are measured along ℄ Girder.

N.T.R. refers to the Supplemental Requirements for Notch Toughness.

Note A: 1" x 10½" Connecting Plates.

Note B: ½" x 7½" Connecting Plates.

Note C: 11/16" x 10½" Connecting Plates.

Steel Specifications this sheet shall be AASHTO M183 Steel unless otherwise noted.
All work on this sheet is by others except Stud Shear Connectors.

RAMP F - GIRDER DETAILS

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
C.R.N.
D.A.N.
C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

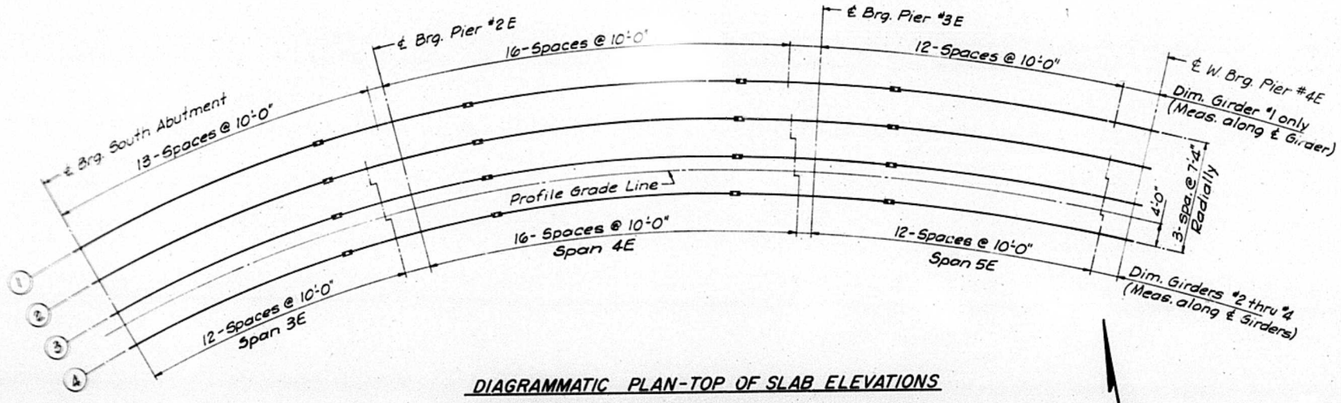
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(15B-1) -D	PEORIA AND TAZEWELL	97	54
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 50 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

	STATION	GIRDER 1 THEORETICAL GRADE ELEVATIONS	GIRDER 1 THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION	STATION	GIRDER 2 THEORETICAL GRADE ELEVATIONS	GIRDER 2 THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION	STATION	GIRDER 3 THEORETICAL GRADE ELEVATIONS	GIRDER 3 THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION	STATION	GIRDER 4 THEORETICAL GRADE ELEVATIONS	GIRDER 4 THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION
℄ Brg. So. Abut.	8+61.500	500.998	500.998	8+61.500	500.411	500.411	8+61.500	499.824	499.824	8+61.500	499.238	499.238
	8+71.137	501.295	501.347	8+71.281	500.712	500.755	8+71.431	500.130	500.164	8+71.584	499.548	499.574
	8+80.773	501.575	501.679	8+81.063	500.997	501.083	8+81.361	500.419	500.487	8+81.669	499.841	499.892
	8+90.410	501.839	501.995	8+90.844	501.264	501.393	8+91.292	500.689	500.792	8+91.753	500.115	500.192
	9+00.047	502.087	502.262	9+00.626	501.515	501.659	9+01.223	500.943	501.059	9+01.838	500.371	500.459
	9+09.684	502.318	502.500	9+10.407	501.748	501.898	9+11.153	501.178	501.299	9+11.922	500.609	500.700
	9+19.320	502.532	502.721	9+20.189	501.964	502.120	9+21.084	501.396	501.522	9+22.007	500.829	500.924
Spaces @ 10'-0" cts. Along ℄ Girder	9+28.957	502.730	502.909	9+29.970	502.164	502.312	9+31.015	501.597	501.716	9+32.091	501.031	501.121
	9+38.594	502.912	503.059	9+39.752	502.346	502.468	9+40.945	501.780	501.878	9+42.176	501.215	501.289
	9+48.230	503.077	503.192	9+49.533	502.511	502.607	9+50.876	501.946	502.022	9+52.260	501.381	501.438
	9+57.867	503.225	503.309	9+59.315	502.659	502.730	9+60.807	502.094	502.150	9+62.345	501.528	501.570
	9+67.504	503.357	503.414	9+69.096	502.791	502.838	9+70.737	502.224	502.262	9+72.429	501.658	501.686
	9+77.140	503.472	503.503	9+78.878	502.905	502.930	9+80.668	502.337	502.357	9+82.514	501.769	501.785
	9+86.777	503.571	503.575									
℄ Brg. Pier 2E	9+93.000	503.626	503.626	9+93.000	503.040	503.040	9+93.000	502.453	502.453	9+93.000	501.866	501.866
	10+02.637	503.698	503.716	10+02.781	503.112	503.130	10+02.931	502.526	502.542	10+03.084	501.941	501.957
	10+12.273	503.753	503.789	10+12.563	503.168	503.203	10+12.861	502.582	502.616	10+13.169	501.997	502.029
	10+21.910	503.792	503.846	10+22.344	503.206	503.258	10+22.792	502.621	502.671	10+23.253	502.036	502.083
	10+31.547	503.814	503.886	10+32.126	503.228	503.297	10+32.723	502.642	502.708	10+33.338	502.056	502.119
	10+41.184	503.819	503.911	10+41.907	503.232	503.319	10+42.653	502.645	502.727	10+43.422	502.058	502.135
	10+50.820	503.808	503.920	10+51.689	503.220	503.324	10+52.584	502.631	502.728	10+53.507	502.042	502.131
Spaces @ 10'-0" cts. Along ℄ Girder	10+60.457	503.781	503.913	10+61.470	503.191	503.312	10+62.515	502.600	502.711	10+63.591	502.009	502.110
	10+70.094	503.737	503.888	10+71.252	503.144	503.283	10+72.445	502.550	502.677	10+73.676	501.956	502.070
	10+79.730	503.677	503.823	10+81.033	503.080	503.215	10+82.376	502.484	502.606	10+83.760	501.886	501.996
	10+89.367	503.600	503.729	10+90.815	503.000	503.118	10+92.307	502.399	502.507	10+93.845	501.798	501.895
	10+99.004	503.506	503.617	11+00.596	502.902	503.005	11+02.237	502.298	502.391	11+03.929	501.692	501.776
	11+08.641	503.396	503.492	11+10.378	502.788	502.875	11+12.168	502.178	502.258	11+14.014	501.567	501.639
	11+18.410	503.268	503.345	11+20.240	502.655	502.725	11+22.124	502.041	502.105	11+24.066	501.426	501.483
	11+28.180	503.122	503.179	11+30.102	502.505	502.557	11+32.081	501.886	501.933	11+34.119	501.266	501.307
	11+37.950	502.960	502.997	11+39.964	502.338	502.371	11+42.037	501.714	501.743	11+44.172	501.088	501.114
	11+47.720	502.781	502.798	11+49.827	502.153	502.168	11+51.994	501.523	501.536	11+54.224	500.892	500.902
℄ Brg. Pier 3E	11+60.000	502.531	502.531	11+60.000	501.944	501.944	11+60.000	501.358	501.358	11+60.000	500.771	500.771
	11+69.770	502.322	502.338	11+69.862	501.733	501.748	11+69.957	501.144	501.158	11+70.053	500.556	500.567
	11+79.540	502.113	502.145	11+79.725	501.522	501.551	11+79.913	500.931	500.958	11+80.105	500.341	500.363
	11+89.309	501.903	501.952	11+89.587	501.311	501.355	11+89.870	500.718	500.758	11+90.158	500.125	500.160
	11+99.079	501.694	501.763	11+99.449	501.100	501.162	11+99.826	500.505	500.560	12+00.211	499.910	499.958
Spaces @ 10'-0" cts. Along ℄ Girder	12+08.849	501.485	501.576	12+09.311	500.889	500.969	12+09.783	500.292	500.363	12+10.263	499.695	499.756
	12+18.619	501.276	501.388	12+19.174	500.677	500.777	12+19.739	500.079	500.167	12+20.316	499.480	499.555
	12+28.389	501.067	501.190	12+29.036	500.466	500.576	12+29.696	499.865	499.962	12+30.368	499.264	499.347
	12+38.158	500.858	500.977	12+38.898	500.255	500.361	12+39.652	499.652	499.745	12+40.421	499.049	499.129
	12+47.928	500.648	500.764	12+48.761	500.044	500.146	12+49.609	499.439	499.529	12+50.474	498.834	498.911
	12+57.698	500.439	500.546	12+58.623	499.833	499.927	12+59.566	499.226	499.310	12+60.526	498.619	498.690
	12+67.468	500.230	500.303	12+68.485	499.622	499.686	12+69.522	499.013	499.070	12+70.579	498.404	498.452
	12+77.238	500.021	500.060	12+78.348	499.411	499.445	12+79.479	498.800	498.830	12+80.632	498.188	498.214
℄ W. Brg. Pier 4E	12+91.500	499.716	499.716	12+91.500	499.129	499.129	12+91.500	498.542	498.542	12+91.500	497.956	497.956

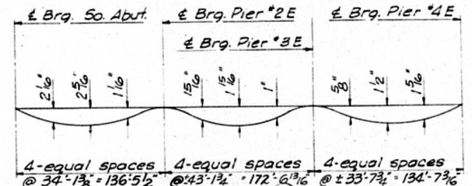
ELEVATIONS - TOP OF CONCRETE

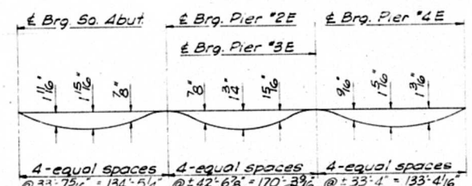


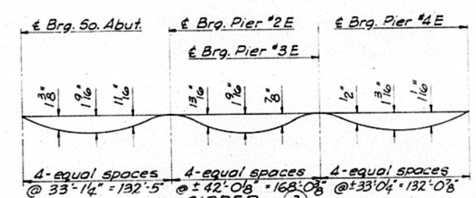
DIAGRAMMATIC PLAN - TOP OF SLAB ELEVATIONS

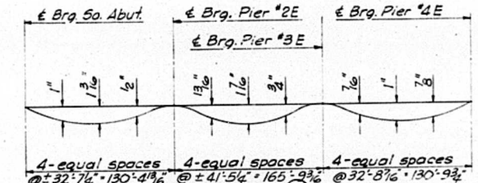
Note: For notes on method of determining filler heights "t" Sheet 30 of 88

Note: All dimensions shown in plan are measured horizontally.









DEAD LOAD DEFLECTION DIAGRAMS
(INCLUDES WEIGHT OF CONCRETE AND CL. I ONLY)

Note: The above deflections are not to be used in the field if the engineer is working from the slab elevations adjusted for dead load deflection shown in table above.

TOP OF SLAB ELEVATIONS RAMP E - SPANS 3E, 4E & 5E

McCLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (15B-1)-D

PEORIA & TAZEWELL COUNTIES

DESIGNED WDL	HANSON ENGINEERS INCORPORATED	FILE NO	74001
CHECKED R.W.C.			
DRAWN RAH	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE	8-22-80
CHECKED WDL			

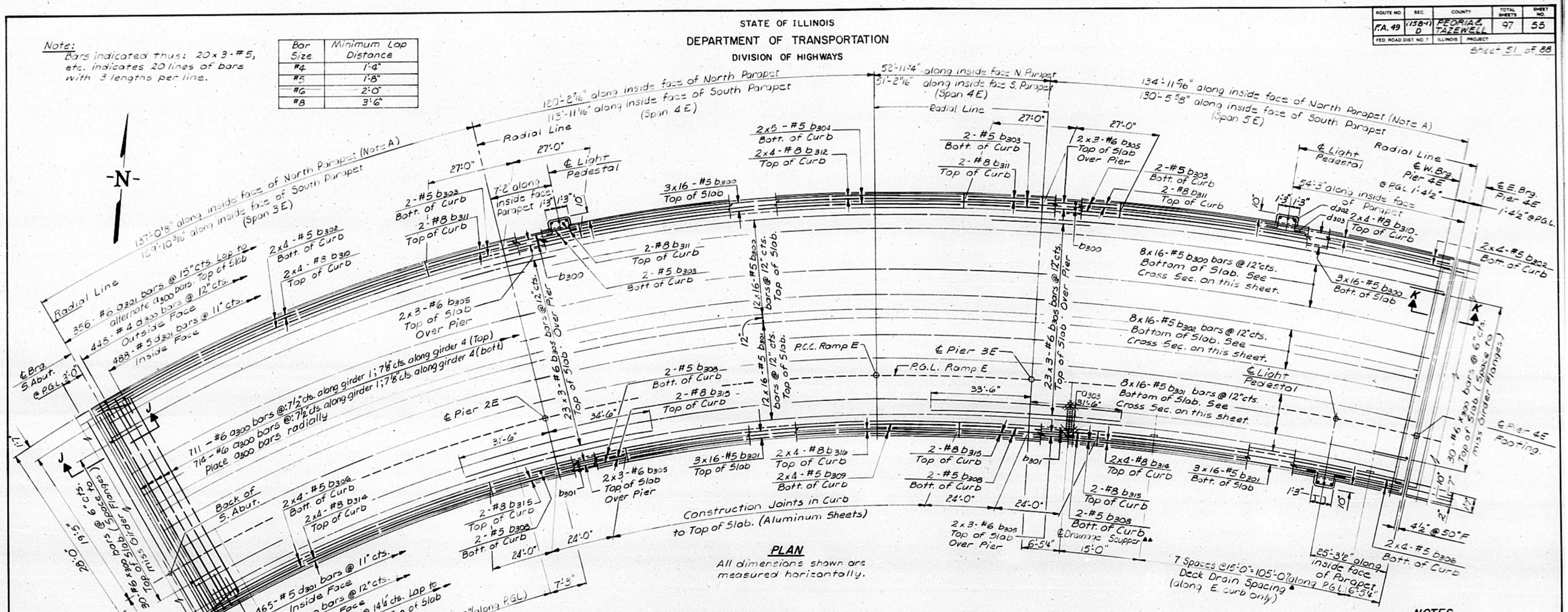
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) D	PEORIA & TAZEWELL	97	55
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 51 of 88

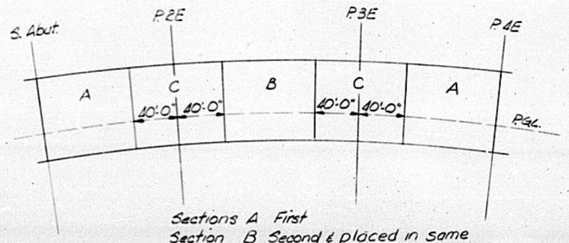
Note:
Bars indicated thus: 20 x 3 - #5, etc. indicates 20 lines of bars with 3 lengths per line.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"



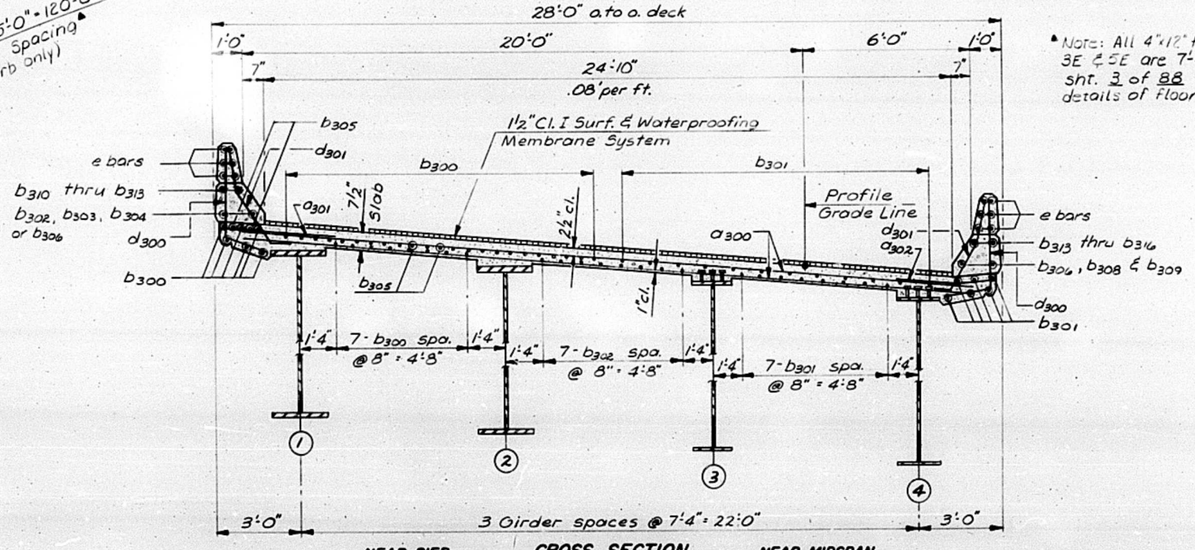
PLAN

All dimensions shown are measured horizontally.



Sections A First
Section B Second & placed in same day as A or minimum 7 days later
Sections C Last

SLAB POURING SEQUENCE



NEAR PIER CROSS SECTION NEAR MIDSPAN
(LOOKING IN THE DIRECTION OF RAMP E STATIONING)

▲ Note: All 4"x12" floor drains in spans 3E & 5E are 7'-4" in length. See sht. 3 of 88 for connection and details of floor drains.

NOTES

For Light Pedestal Details & Reinforcement placement see Sheet 3 of 88.
For placement of Bars e300 thru e307 see Sheet 53 of 88.
For Sections J-J and K-K see Sheet 52 of 88.
Note A: Inside face of parapet is as shown in Detail B on Sht 53 of 88.
▲▲ For Reinforcement and configuration of slab at Scupper see sht 47 of 88.
For details of Scupper see shts 81 & 82 of 88. Scupper downspout length = 6'-7". See sht. 47 of 88 for connection details.

SUPERSTRUCTURE
RAMP E - SPANS 3E, 4E & 5E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.M.
CHECKED R.W.C.

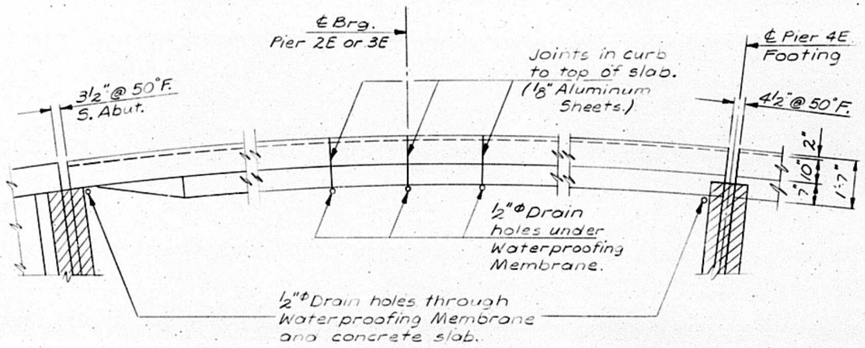
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

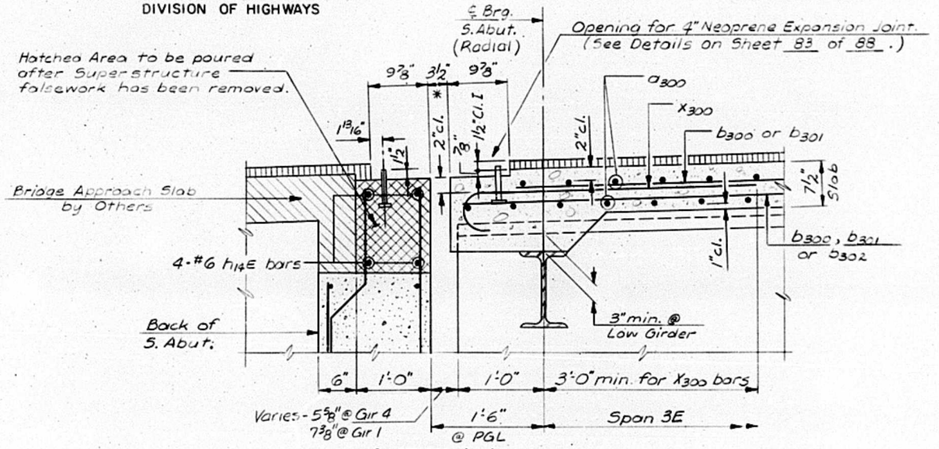
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	56
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

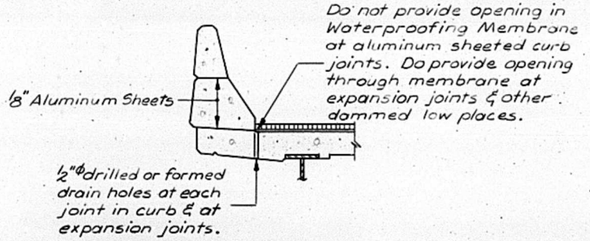
Sheet 52 of 88



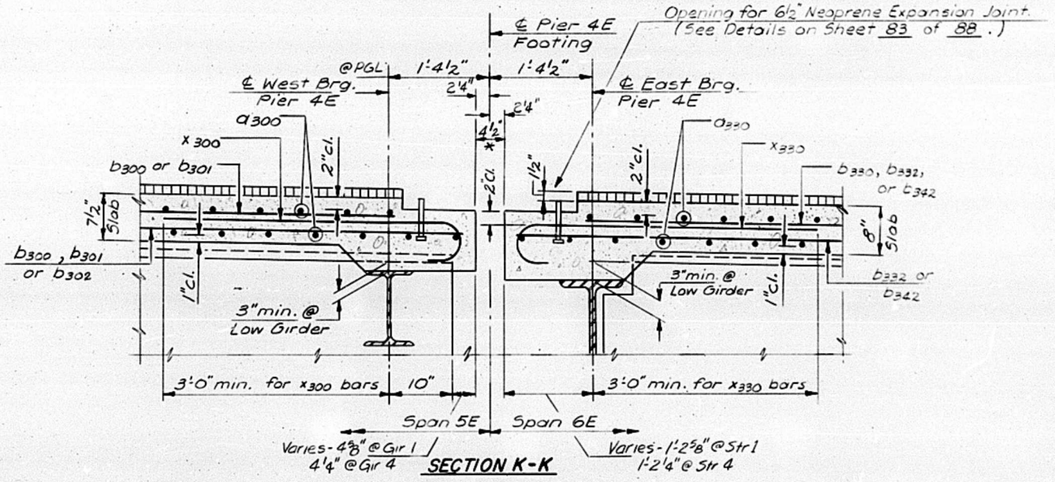
PLAN
Typical each Curb.



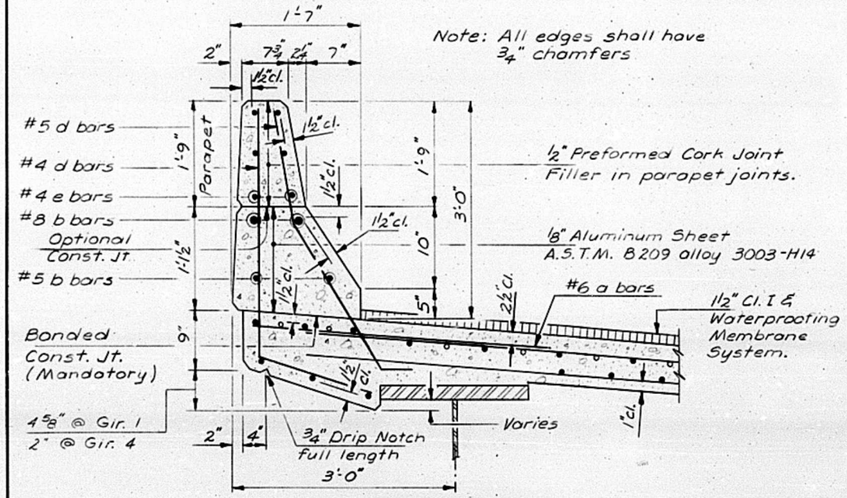
SECTION J-J
*Dimension @ 50°F.
(From Sht. 51 of 88.)



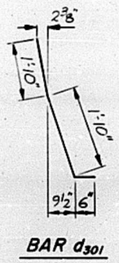
SECTION AT CURB JOINTS



SECTION K-K
*Dimension @ 50°F.
(From Sht. 51 of 88)

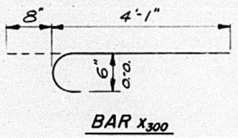


SECTION THRU CURB
Cost of Aluminum Sheets shall be incidental to Class X Concrete.

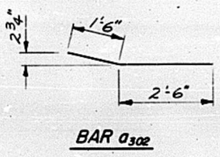


BAR d_{301}

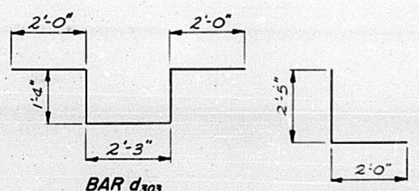
BAR d_{300}



BAR x_{300}



BAR d_{302}



BAR d_{303} **BAR d_{302}**

Note: See Sheet 3 of 88 for placement of bars d_{302} & d_{303}

** See End Post Detail on Sheet 37 of 88

BILL OF MATERIAL
RAMP E - SPANS 3E, 4E, & 5E

	BAR	No.	SIZE	LENGTH	SHAPE
**	h_{13}	12	#4	13'-3"	——
	h_{14}	4	#6	25'-10"	——
	a_{300}	1425	#6	26'-0"	——
	a_{301}	356	#6	4'-0"	——
	a_{302}	356	#6	4'-0"	——
	a_{303}	12	#5	2'-0"	——
	b_{300}	416	#5	29'-5"	——
	b_{301}	416	#5	28'-9"	——
	b_{302}	144	#5	29'-0"	——
	b_{303}	8	#5	26'-8"	——
	b_{304}	10	#5	25'-3"	——
	b_{305}	162	#6	23'-4"	——
	b_{306}	16	#5	27'-11"	——
	b_{309}	8	#5	23'-8"	——
	b_{309}	8	#5	30'-3"	——
	b_{310}	16	#8	30'-4"	——
	b_{311}	8	#8	26'-8"	——
	b_{312}	8	#8	32'-11"	——
	b_{314}	16	#8	29'-3"	——
	b_{315}	8	#8	23'-8"	——
	b_{316}	8	#8	32'-0"	——
	d_{300}	875	#4	4'-11"	⌐
	d_{301}	953	#5	4'-2"	⌐
	d_{302}	9	#6	4'-5"	L
	d_{303}	15	#6	8'-11"	⊥
	e_{300}	48	#4	13'-2"	——
	e_{301}	48	#4	11'-8"	——
	e_{302}	42	#4	16'-8"	——
	e_{303}	42	#4	15'-7"	——
	e_{304}	42	#4	15'-3"	——
	e_{305}	42	#4	14'-11"	——
	e_{306}	36	#4	19'-2"	——
	e_{307}	36	#4	17'-7"	——
	x_{300}	60	#6	4'-9"	⊂⊃
	Drainage Scupper		Each		1
	Protective Coat		Sq. Yds.		362
	Reinforcement Bars		Lbs.		113,020
	Class X Concrete		Cu. Yds.		399.2
	Waterprf. Membrane Sys.		Sq. Yds.		1,203
	Stud Shear Connectors		Each		2,244
	Neo. Exp. Joint (4")		Lin. Ft.		27.0
	Neo. Exp. Joint (6½")		Lin. Ft.		26.8
	Bit. Conc. Sc. Mix. D. Cl. I.		Ton		97.5
	Floor Drains		Each		17

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 3E, 4E, & 5E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED WDL
CHECKED R.W.C.
DRAWN D.A.N.
CHECKED R.W.C.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

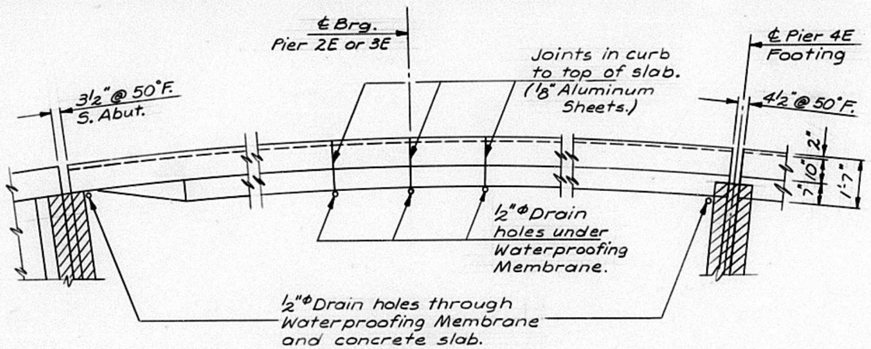
FILE NO. 74001
DATE 6-22-80

Rev. 12-30-80

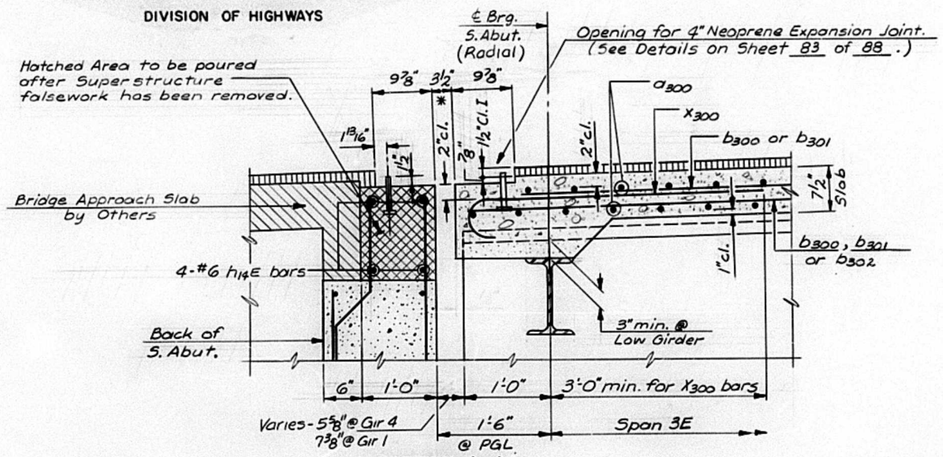
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	56A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

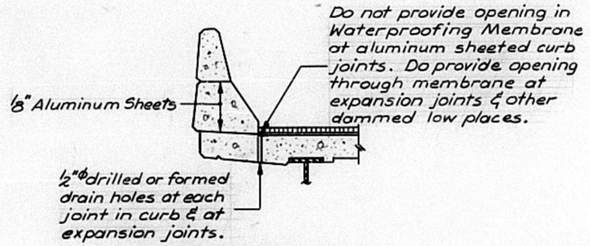
Sheet 52A of 88



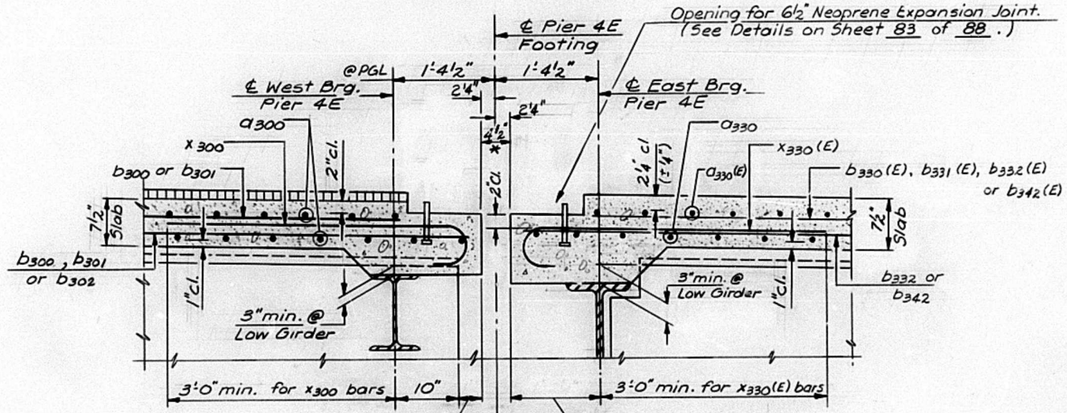
PLAN
Typical each Curb.



SECTION J-J
*Dimension @ 50°F.
(From Sht. 51 of 88.)

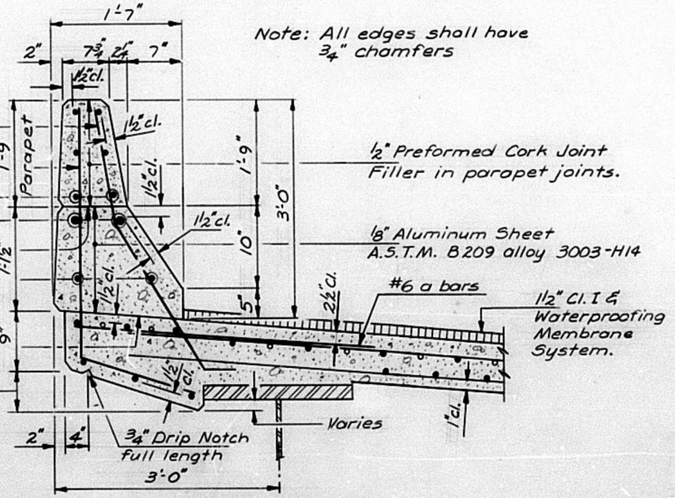


SECTION AT CURB JOINTS

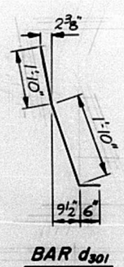


SECTION K-K
* Dimension @ 50°F.
(From Sht. 51 of 88)

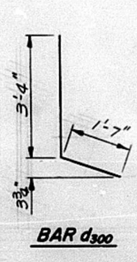
** See End Post Detail on Sheet 37 of 88



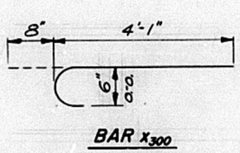
SECTION THRU CURB
Cost of Aluminum Sheets shall be incidental to Class X Concrete.



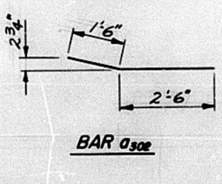
BAR d_{301}



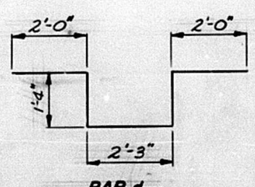
BAR d_{300}



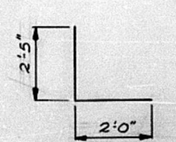
BAR x_{300}



BAR a_{302}



BAR d_{303}



BAR d_{302}

Note: See Sheet 3 of 88 for placement of bars d_{302} & d_{303}

BILL OF MATERIAL
RAMP E - SPANS 3E, 4E, & 5E

	BAR	No.	SIZE	LENGTH	SHAPE
**	h_{13}	12	#4	13'-3"	——
	h_{14}	4	#6	25'-10"	——
	a_{300}	1425	#6	26'-0"	——
	a_{301}	356	#6	4'-0"	——
	a_{302}	356	#6	4'-0"	——
	a_{303}	12	#5	2'-0"	——
	b_{300}	416	#5	29'-5"	——
	b_{301}	416	#5	28'-9"	——
	b_{302}	144	#5	29'-0"	——
	b_{303}	8	#5	26'-8"	——
	b_{304}	10	#5	25'-3"	——
	b_{305}	162	#6	23'-4"	——
	b_{306}	16	#5	27'-11"	——
	b_{308}	8	#5	23'-8"	——
	b_{309}	8	#5	30'-3"	——
	b_{310}	16	#8	30'-4"	——
	b_{311}	8	#8	26'-8"	——
	b_{312}	8	#8	32'-11"	——
	b_{314}	16	#8	29'-3"	——
	b_{315}	8	#8	23'-8"	——
	b_{316}	8	#8	32'-0"	——
	d_{300}	875	#4	4'-11"	⌐
	d_{301}	953	#5	4'-2"	⌐
	d_{302}	9	#6	4'-5"	L
	d_{303}	15	#6	8'-11"	⊔
	e_{300}	48	#4	13'-2"	——
	e_{301}	48	#4	11'-8"	——
	e_{302}	42	#4	16'-8"	——
	e_{303}	42	#4	15'-7"	——
	e_{304}	42	#4	15'-3"	——
	e_{305}	42	#4	14'-11"	——
	e_{306}	36	#4	19'-2"	——
	e_{307}	36	#4	17'-7"	——
	x_{300}	60	#6	4'-9"	⊂
	Drainage Scupper			Each	1
	Protective Coat			Sq.Yds.	362
	Reinforcement Bars			Lbs.	113,020
	Class X Concrete			Cu.Yds.	399.2
	Waterprf. Membrane Sys.			Sq.Yds.	1,203
	Stud Shear Connectors			Each	2,244
	Neo. Exp. Joint (4")			L.in. Ft.	27.0
	Neo. Exp. Joint (6 1/2")			Lin. Ft.	26.8
	Bit. Conc. Sc. Mix. D. Cl. I.			Ton	97.5
	Floor Drains			Each	17

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 3E, 4E, & 5E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED WDL
CHECKED R.W.C.
DRAWN D.A.M.
CHECKED R.W.C.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

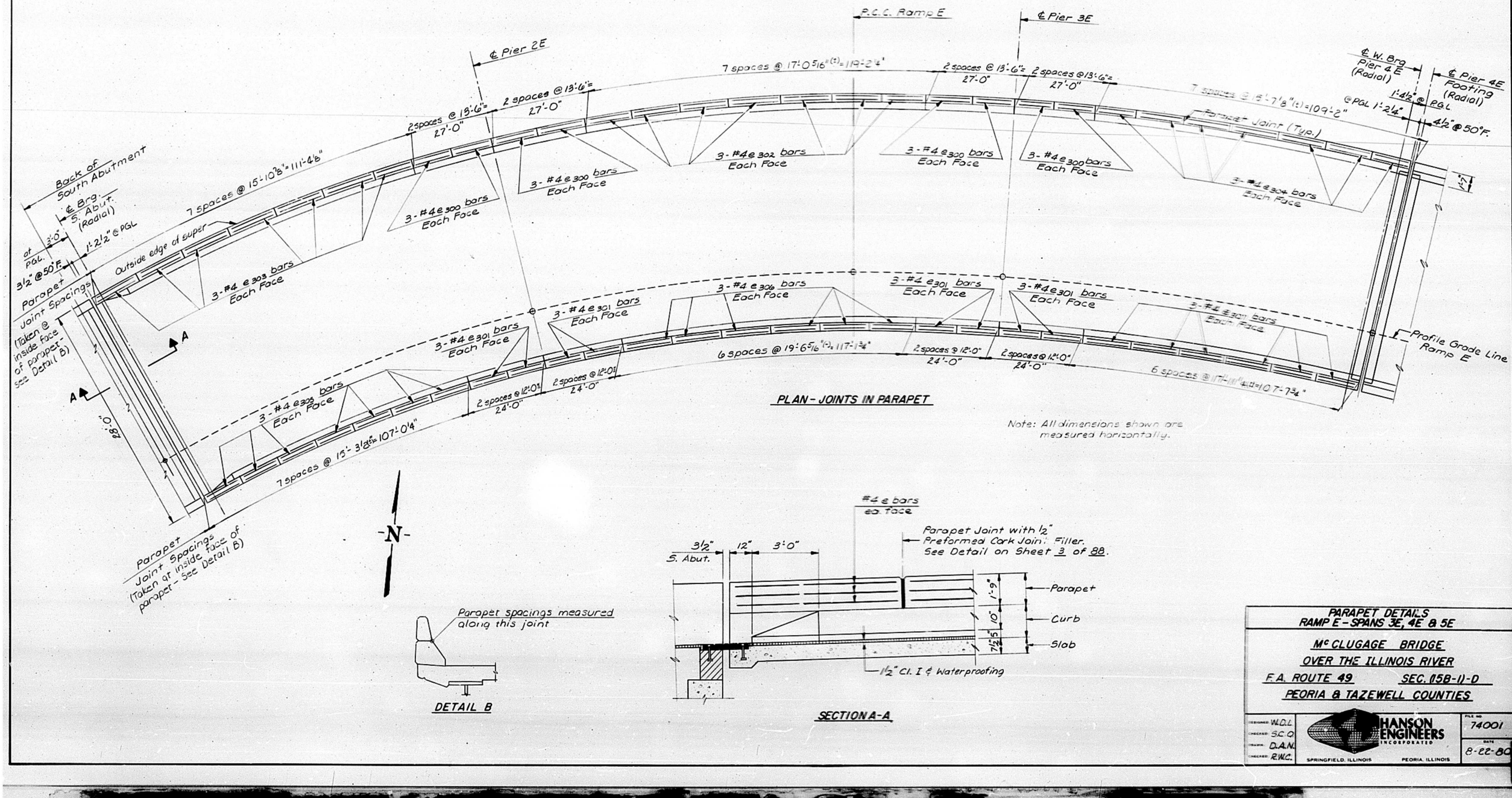
FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80 Rev. 6-24-82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(15B-1) -D	PEORIA & TAZEWELL	97	57
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 53 of 88



PLAN - JOINTS IN PARAPET

Note: All dimensions shown are measured horizontally.

DETAIL B

SECTION A-A

PARAPET DETAILS
RAMP E - SPANS 3E, 4E & 5E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.	HANSON ENGINEERS INCORPORATED
CHECKED S.C.O.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS
DRAWN D.A.N.	FILE NO. 74001
CHECKED R.W.C.	DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

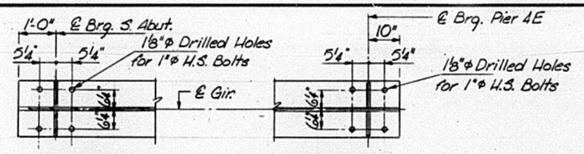
Note:
Steel Specifications this sheet
(Unless otherwise noted)

Flanges	1⅝" x 18"	AASHTO	M223
	1⅜" x 18"	AASHTO	M223
	2¼" x 24"	AASHTO	M222
Web	11/16" x 68"	AASHTO	M183
Bearing Stiffners	—	AASHTO	M223

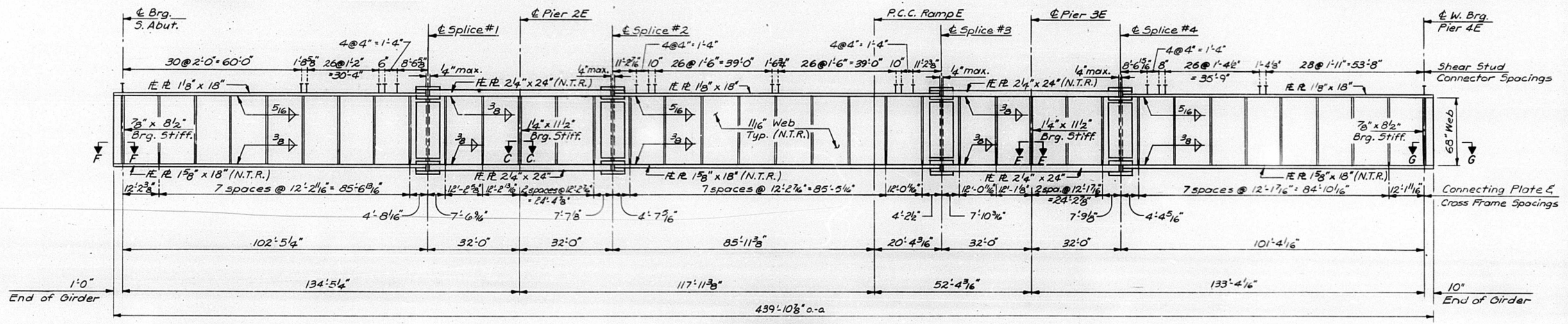
Notes:
All dimensions shown are measured horizontally ℄ along ℄ Girder.

All work on this Sheet is by others except shear stud connectors.

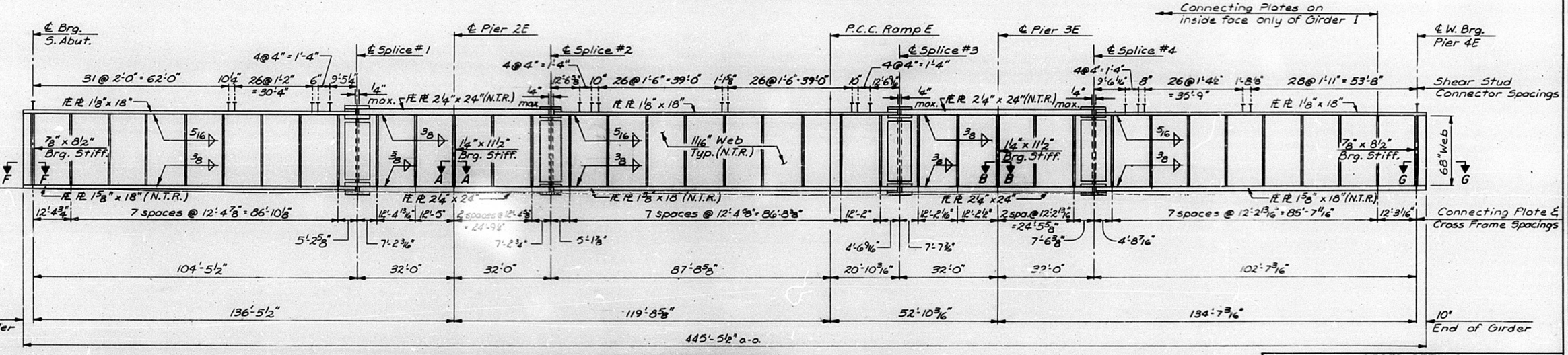
Sheet 54 of 88



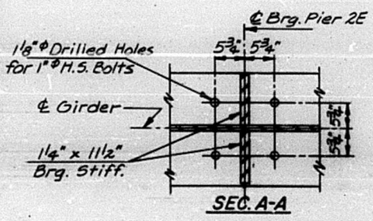
SECTION F-F SECTION G-G



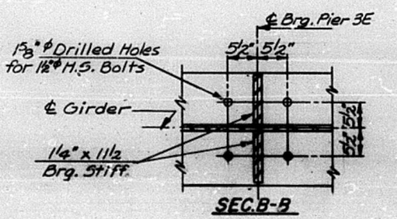
ELEVATION-GIRDER 2



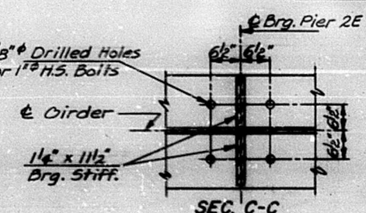
ELEVATION-GIRDER 1



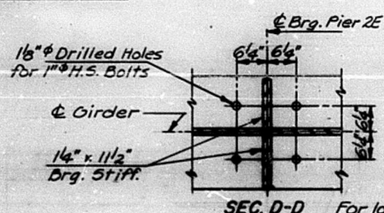
SEC. A-A



SEC. B-B

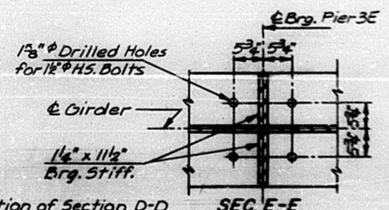


SEC. C-C



SEC. D-D

For location of Section D-D see Sheet 55 of 88



SEC. E-E

GIRDER DETAILS
RAMP E - SPANS 3E, 4E & 5E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.O.
D.A.M.
R.W.C.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	59
REG. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

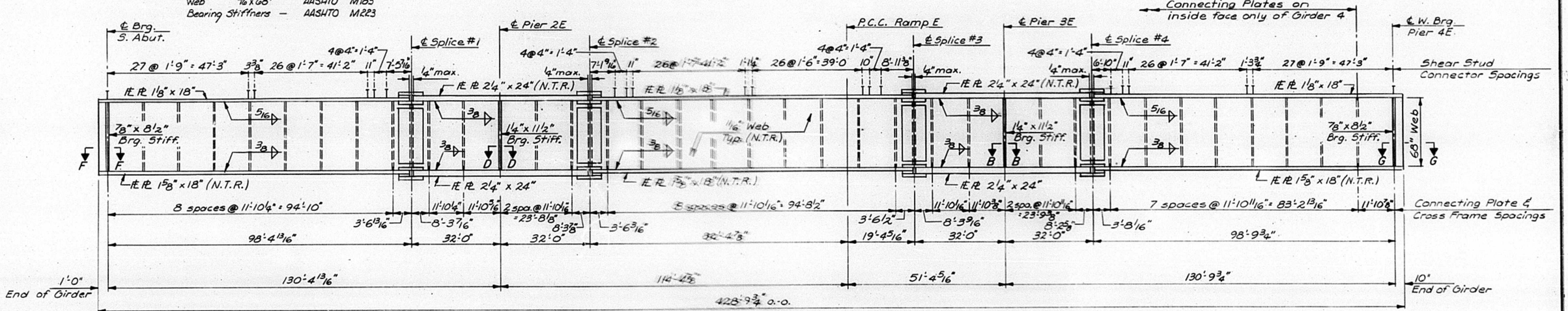
Sheet 55 of 88

Note:
Steel Specifications this sheet.
(Unless otherwise noted)

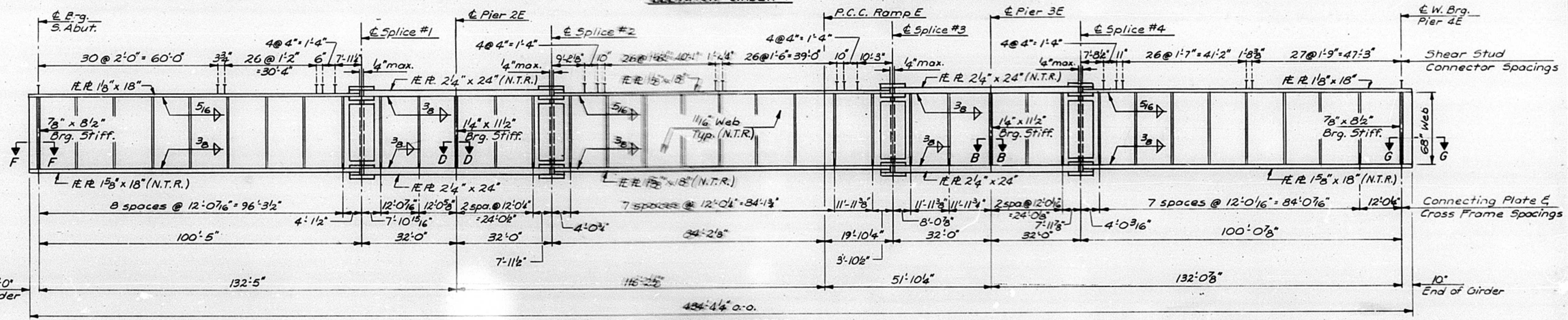
Flanges	1⅛" x 18"	AASHTO	M223
	1⅜" x 18"	AASHTO	M223
	2¼" x 24"	AASHTO	M222
Web	7/16" x 68"	AASHTO	M183
Bearing Stiffners	—	AASHTO	M223

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

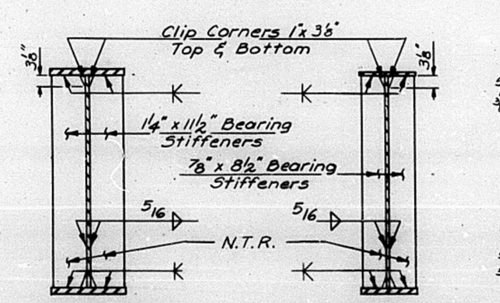
Note: For Sections B-B, D-D, F-F & G-G see Sheet 51 of 88.



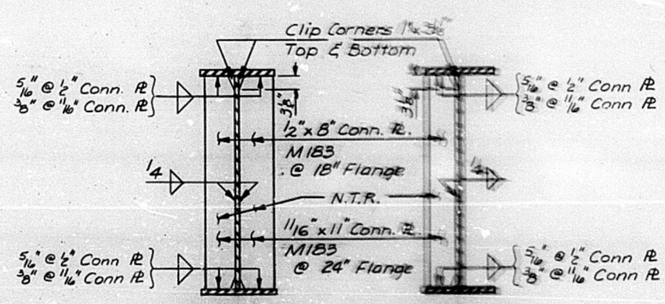
ELEVATION - GIRDER 4



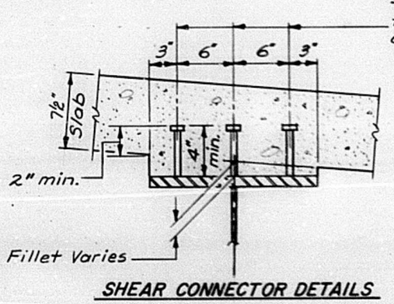
ELEVATION - GIRDER 3



BEARING STIFFENERS



CONNECTING PLATES



SHEAR CONNECTOR DETAILS

¾" Φ Granular or solid flux filled headed studs automatically end welded. (No. Required = 2244)

Notes:
All work on this sheet is done by others except shear stud connectors.
All dimensions shown are measured horizontally & along ℄ Girder.

GIRDER DETAILS
RAMP E - SPANS 3E, 4E & 5E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.
CHECKED	S.C.O.
DRAWN	D.A.N.
CHECKED	K.W.C.

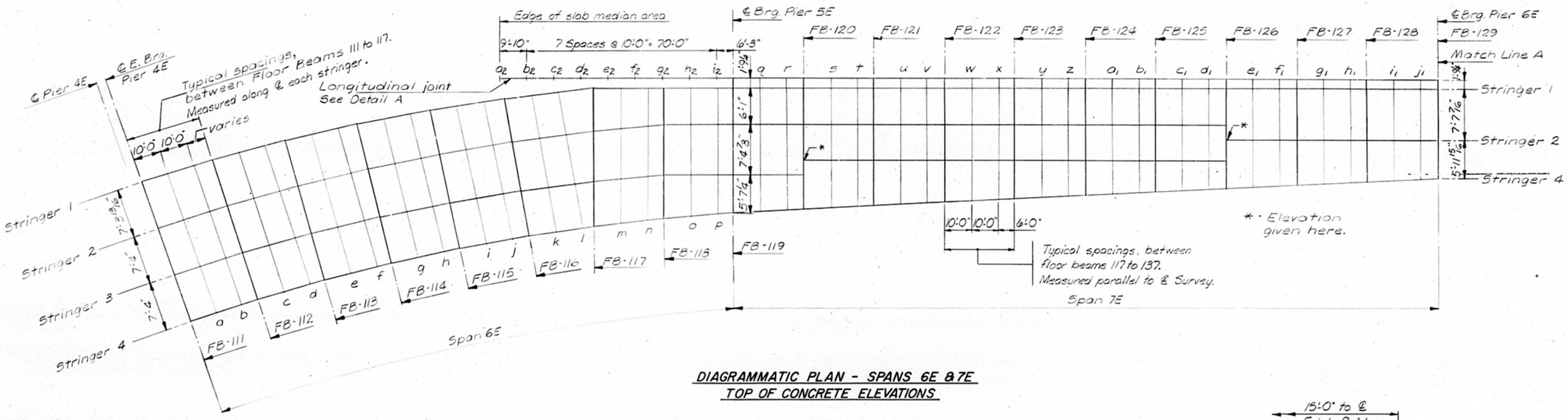
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

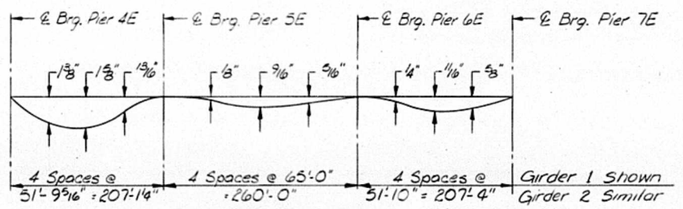
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	60
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 56 of 88

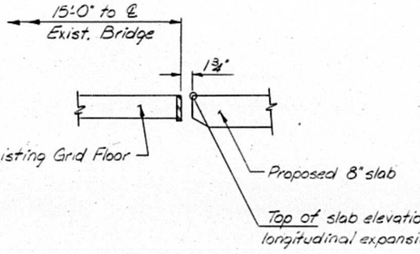


DIAGRAMMATIC PLAN - SPANS 6E & 7E
TOP OF CONCRETE ELEVATIONS

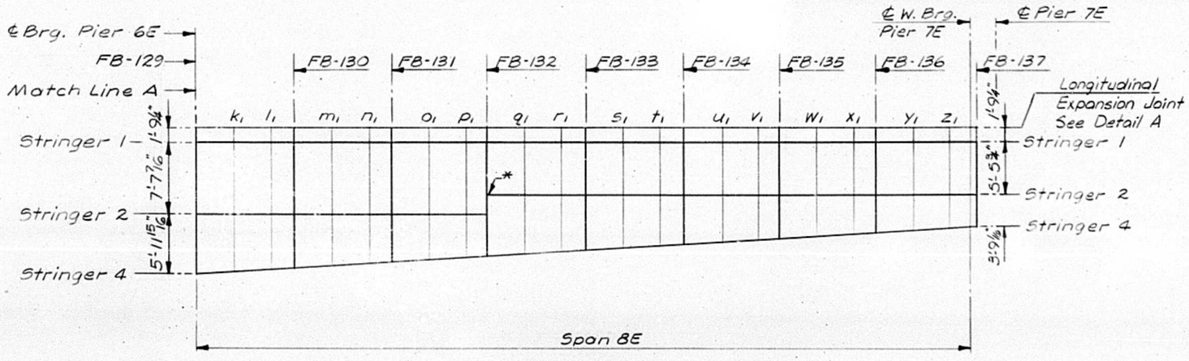


DEAD LOAD DEFLECTION DIAGRAM
(Includes Weight of Concrete Slab & Cl. I)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in "Elevations - Top of Concrete" tables.



DETAIL A



DIAGRAMMATIC PLAN - SPAN 8E
TOP OF CONCRETE ELEVATIONS

Note: For notes on method of determining fillet heights "T" see sheet 30 of 88.

NOTES

F.B's 111 thru 116 are radial, therefore stringer stationing, shown on next sheet, is the same for all stringers at each F.B.

Points a thru l are not radial, therefore stringer stationing will be different at each point.

F.B.'s 117 thru 137 & points m thru z, have been adjusted for individual stringer stationing. Stations shown are stations of the intersection of F.B.'s & section lines with the profile grade line.

All dimensions shown are measured horizontally.

TOP OF SLAB ELEVATIONS
RAMP E - SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.
CHECKED	S.C.O.
DRAWN	D.A.N.
CHECKED	S.C.O.

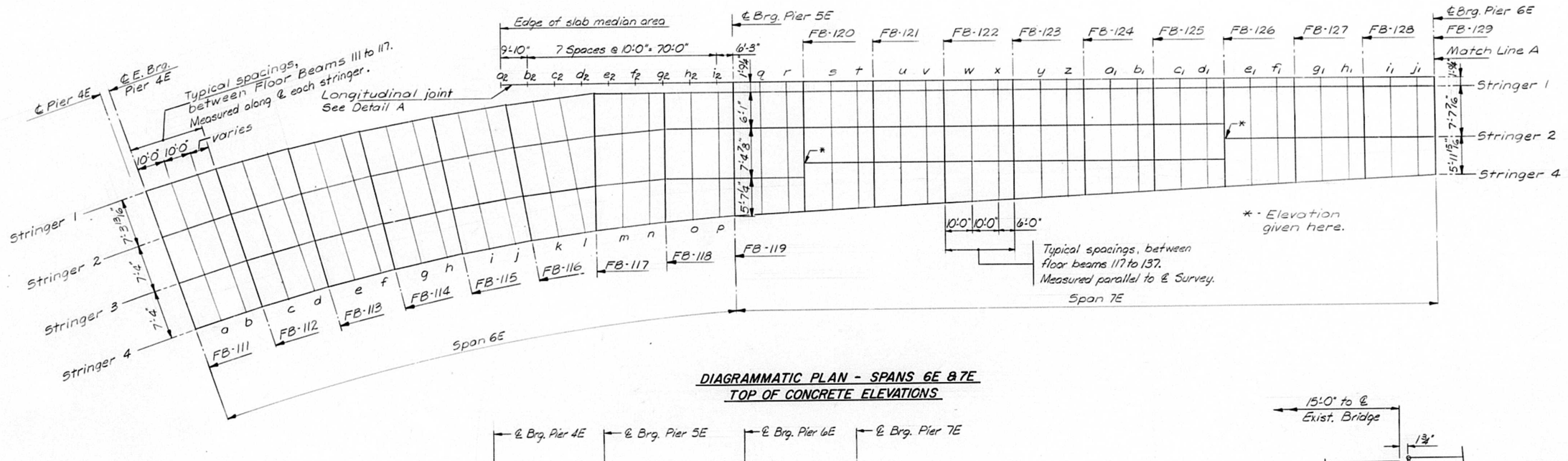
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-

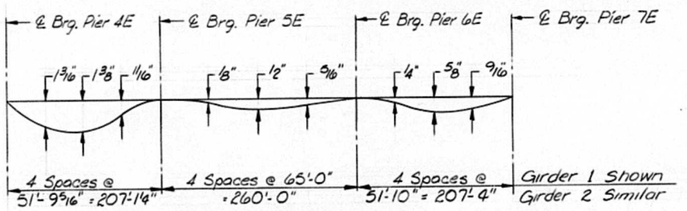
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	60A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 56A of 88

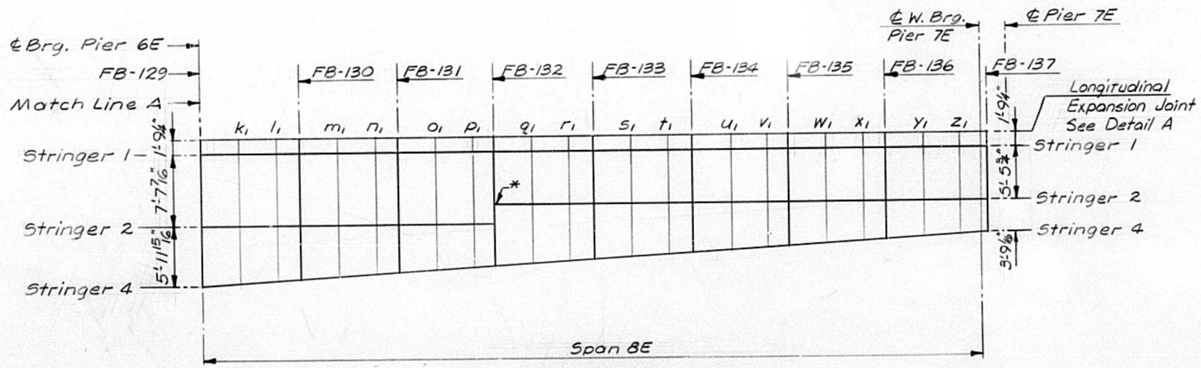


DIAGRAMMATIC PLAN - SPANS 6E & 7E TOP OF CONCRETE ELEVATIONS



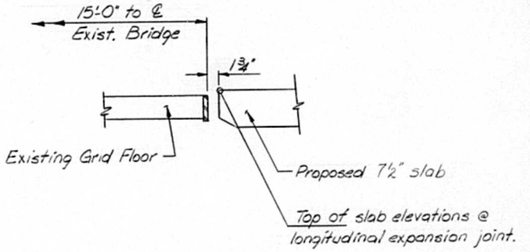
DEAD LOAD DEFLECTION DIAGRAM
(Includes Weight of Concrete Slab)

Note: The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown in "Elevations - Top of Concrete" tables.



DIAGRAMMATIC PLAN - SPAN 8E TOP OF CONCRETE ELEVATIONS

Note: For notes on method of determining fillet heights 't' see sheet 30 of 88.



DETAIL A

NOTES

F.B.'s 111 thru 116 are radial, therefore stringer stationing, shown on next sheet, is the same for all stringers at each F.B.

Points a thru l are not radial, therefore stringer stationing will be different at each point.

F.B.'s 117 thru 137 & points m thru z, have been adjusted for individual stringer stationing. Stations shown are stations of the intersection of F.B.'s & section lines with the profile grade line.

All dimensions shown are measured horizontally.

TOP OF SLAB ELEVATIONS
RAMP E - SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED S.C.O.
DRAWN D.A.N.
CHECKED S.C.O.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FA: 49	(15B-1) -D	PEORIA & TAZEWELL	97	61
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 57 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ELEVATIONS - TOP OF CONCRETE

	STRINGER 4			STRINGER 3			STRINGER 2			STRINGER 1			LONGITUDINAL EXPANSION JOINT			
	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	
℄ East Bearing Pier 4E (FB - 111)	12+94.25	497.900	497.900	12+94.25	498.487	498.487	12+94.25	499.073	499.073	12+94.25	499.660	499.660				
a	13+04.30	497.702	497.727	13+04.21	498.291	498.316	13+04.11	498.879	498.904	13+04.02	499.468	499.493				
b	13+14.36	497.522	497.571	13+14.16	498.112	498.161	13+13.96	498.701	498.750	13+13.79	499.292	499.341				
FB - 112	13+18.72	497.449	497.513	13+18.72	498.036	498.100	13+18.72	498.622	498.686	13+18.72	499.209	499.273				
c	13+28.77	497.293	497.376	13+28.67	497.882	497.965	13+28.58	498.469	498.552	13+28.49	499.057	499.140				
d	13+38.82	497.155	497.257	13+38.63	497.744	497.846	13+38.44	498.332	498.434	13+38.26	498.922	499.024				
FB - 113	13+44.30	497.086	497.200	13+44.30	497.673	497.787	13+44.30	498.259	498.373	13+44.30	498.846	498.960				
e	13+54.35	496.974	497.098	13+54.25	497.562	497.686	13+54.16	498.149	498.273	13+54.07	498.737	498.861				
f	13+64.40	496.879	497.012	13+64.21	497.468	497.601	13+64.02	498.056	498.189	13+63.84	498.644	498.777				
FB - 114	13+69.89	496.835	496.974	13+69.89	497.422	497.561	13+69.89	498.008	498.147	13+69.89	498.595	498.734				
g	13+79.94	496.767	496.905	13+79.84	497.354	497.492	13+79.75	497.941	498.079	13+79.66	498.528	498.666				
h	13+89.99	496.716	496.853	13+89.80	497.304	497.441	13+89.61	497.890	498.027	13+89.43	498.478	498.615				
FB - 115	13+95.49	496.695	496.831	13+95.49	497.282	497.418	13+95.49	497.868	498.004	13+95.49	498.455	498.591				
i	14+05.55	496.671	496.796	14+05.45	497.258	497.383	14+05.36	497.844	497.969	14+05.26	498.431	498.556				
j	14+15.60	496.663	496.777	14+15.41	497.250	497.364	14+15.22	497.836	497.950	14+15.03	498.423	498.537				
FB - 116	14+21.11	496.667	496.775	14+21.11	497.254	497.362	14+21.11	497.840	497.948	14+21.11	498.427	498.535	14+10.28	498.473	498.590	a_2
k	14+31.17	496.698	496.790	14+31.07	497.270	497.362	14+30.98	497.843	497.935	14+30.88	498.411	498.503	14+20.20	498.473	498.578	b_2
l	14+41.22	496.731	496.807	14+41.03	497.289	497.365	14+40.84	497.849	497.925	14+40.65	498.396	498.472	14+30.27	498.473	498.562	c_2
FB - 117	14+44.59	496.741	496.807	14+44.59	497.296	497.362	14+44.59	497.851	497.917	14+44.59	498.388	498.454	14+40.32	498.473	498.546	d_2
m	14+54.62	496.833	496.883	14+54.62	497.342	497.392	14+54.62	497.871	497.921	14+54.62	498.357	498.407	14+50.36	498.473	498.530	e_2
n	14+64.65	496.926	496.960	14+64.65	497.389	397.423	14+64.65	497.892	497.926	14+64.65	498.326	498.360	14+60.39	498.473	498.514	f_2
FB - 118	14+70.66	496.982	497.007	14+70.66	497.417	497.442	14+70.66	497.904	497.929	14+70.66	498.307	498.332	14+70.41	498.473	498.498	g_2
o	14+80.67	497.116	497.131	14+80.67	497.499	497.514	14+80.67	497.950	497.965	14+80.67	498.322	498.337	14+80.42	498.473	498.488	h_2
p	14+90.68	497.250	497.254	14+90.68	497.580	497.584	14+90.68	497.996	498.000	14+90.68	498.337	498.341	14+90.43	498.473	498.477	i_2
℄ Bearing Pier 5E (FB - 119)	14+96.68	497.331	497.329	14+96.68	497.629	497.627	14+96.68	498.023	498.021	14+96.68	498.346	498.344	14+96.68	498.473	498.471	
q	15+06.68	497.456	497.451	15+06.68	497.718	497.713	15+06.68	498.076	498.071	15+06.68	498.369	498.364	15+06.68	498.473	498.468	
r	15+16.68	497.580	497.572	15+16.68	497.807	497.799	15+16.68	498.128	498.120	15+16.68	498.392	498.384	15+16.68	498.473	498.465	
FB - 120	15+22.69	497.655	497.645	15+22.69	497.941	497.931	15+22.69	498.160	498.150	15+22.69	498.406	498.396	15+22.69	498.473	498.463	
s	15+32.69	497.752	497.746	15+32.69	497.999	497.993	15+32.69	498.193	498.187	15+32.69	498.411	498.405	15+32.69	498.473	498.467	
FB - 121	15+42.69	497.850	497.847	15+42.69	498.058	498.055	15+42.69	498.226	498.223	15+42.69	498.416	498.413	15+42.69	498.473	498.470	
t	15+48.69	497.908	497.908	15+48.69	498.093	498.093	15+48.69	498.246	498.246	15+48.69	498.419	498.419	15+48.69	498.473	498.473	
u	15+58.69	497.972	497.980	15+58.69	498.133	498.141	15+58.69	498.270	498.278	15+58.69	498.425	498.433	15+58.69	498.473	498.481	
v	15+68.69	498.036	498.051	15+68.69	498.173	498.188	15+68.69	498.294	498.309	15+68.69	498.431	498.446	15+68.69	498.473	498.488	
FB - 122	15+74.70	498.075	498.095	15+74.70	498.197	498.217	15+74.70	498.309	498.329	15+74.70	498.434	498.454	15+74.70	498.473	498.493	
w	15+84.70	498.107	498.134	15+84.70	498.217	498.244	15+84.70	498.321	498.348	15+84.70	498.437	498.464	15+84.70	498.473	498.500	
x	15+94.70	498.138	498.172	15+94.70	498.236	498.270	15+94.70	498.332	498.366	15+94.70	498.439	498.473	15+94.70	498.473	498.507	
FB - 123	16+00.70	498.157	498.195	16+00.70	498.248	498.286	16+00.70	498.339	498.377	16+00.70	498.441	498.479	16+00.70	498.473	498.511	
y	16+10.70	498.162	498.204	16+10.70	498.248	498.290	16+10.70	498.339	498.381	16+10.70	498.441	498.483	16+10.70	498.473	498.515	
z	16+20.70	498.166	498.212	16+20.70	498.249	498.295	16+20.70	498.339	498.385	16+20.70	498.441	498.487	16+20.70	498.473	498.519	
FB - 124	16+26.71	498.169	498.218	16+26.71	498.249	498.298	16+26.71	498.339	498.388	16+26.71	498.441	498.490	16+26.71	498.473	498.522	
a_1	16+36.71	498.173	498.222	16+36.71	498.249	498.298	16+36.71	498.339	498.388	16+36.71	498.441	498.490	16+36.71	498.473	498.522	
b_1	16+46.71	498.176	498.224	16+46.71	498.249	498.297	16+46.71	498.339	498.387	16+46.71	498.441	498.489	16+46.71	498.473	498.521	
FB - 125	16+52.71	498.178	498.226	16+52.71	498.249	498.297	16+52.71	498.339	498.387	16+52.71	498.441	498.489	16+52.71	498.473	498.521	
c_1	16+62.71	498.182	498.225	16+62.71	498.249	498.292	16+62.71	498.339	498.382	16+62.71	498.441	498.484	16+62.71	498.473	498.516	
d_1	16+72.71	498.186	498.225	16+72.71	498.249	498.288	16+72.71	498.339	498.378	16+72.71	498.441	498.480	16+72.71	498.473	498.512	
FB - 126	16+78.72	498.187	498.223	16+78.72	498.249	498.285	16+78.72	498.314	498.350	16+78.72	498.441	498.477	16+78.72	498.473	498.509	
e_1	16+88.72	498.191	498.220				16+88.72	498.314	498.343	16+88.72	498.441	498.470	16+88.72	498.473	498.502	
f_1	16+98.72	498.195	498.218				16+98.72	498.314	498.337	16+98.72	498.441	498.464	16+98.72	498.473	498.496	
FB - 127	17+04.73	498.196	498.215				17+04.73	498.314	498.333	17+04.73	498.441	498.460	17+04.73	498.473	498.492	
g_1	17+14.73	498.200	498.213				17+14.73	498.314	498.327	17+14.73	498.441	498.454	17+14.73	498.473	498.486	
h_1	17+24.73	498.204	498.211				17+24.73	498.314	498.321	17+24.73	498.441	498.448	17+24.73	498.473	498.480	
FB - 128	17+30.73	498.206	498.210				17+30.73	498.314	498.318	17+30.73	498.441	498.445	17+30.73	498.473	498.477	
i_1	17+40.73	498.209	498.211				17+40.73	498.314	498.316	17+40.73	498.441	498.443	17+40.73	498.473	498.475	
j_1	17+50.73	498.213	498.213				17+50.73	498.314	498.314	17+50.73	498.441	498.441	17+50.73	498.473	498.473	
℄ Bearing Pier 6E (FB - 129)	17+56.74	498.215	498.214				17+56.74	498.314	498.313	17+56.74	498.441	498.440	17+56.74	498.473	498.472	
k_1	17+66.74	498.218	498.220				17+66.74	498.314	498.316	17+66.74	498.441	498.443	17+66.74	498.473	498.475	
l_1	17+76.74	498.222	498.226				17+76.74	498.314	498.318	17+76.74	498.441	498.445	17+76.74	498.473	498.477	
FB - 130	17+82.74	498.224	498.230				17+82.74	498.314	498.320	17+82.74	498.441	498.447	17+82.74	498.473	498.479	
m_1	17+92.74	498.228	498.241				17+92.74	498.314	498.327	17+92.74	498.441	498.454	17+92.74	498.473	498.486	
n_1	18+02.74	498.231	498.250				18+02.74	498.314	498.333	18+02.74	498.441	498.460	18+02.74	498.473	498.492	
FB - 131	18+08.75	498.233	498.256				18+09.75	494.314	498.337	18+08.75	498.441	498.464	18+08.75	498.473	498.496	
o_1	18+18.75	498.237	498.268				18+18.75	498.314	498.345	18+18.75	498.441	498.472	18+18.75	498.473	498.504	
p_1	18+28.75	498.240	498.278				18+28.75	498.314	498.352	18+28.75	498.441	498.479	18+28.75	498.473	498.511	
FB - 132	18+34.76	498.242	498.285				18+34.76	498.350	498.393	18+34.76	498.441	498.484	18+34.76	498.473	498.516	
q_1	18+44.76	498.246	498.295				18+44.76	498.350	498.399	18+44.76	498.441	498.490	18+44.76	498.473	498.522	
r_1	18+54.76	498.249	498.304				18+54.76	498.350	498.405	18+54.76	498.441	498.496	18+54.76	498.473	498.528	
FB - 133	18+60.76	498.251	498.309				18+60.76	498.350	498.408	18+60.76	498.441	498.499	18+60.76	498.473	498.531	
s_1	18+70.76	498.255	498.315				18+70.76	498.350	498.410	18+70.76	498.441	498.501	18+70.76	498.473	498.533	
t_1	18+80.76	498.258	498.319				18+80.76	498.350	494.411	18+80.76	498.441	498.502	18+80.76	498.473	498.534	
FB - 134	18+86.77	498.260	498.322				18+86.77	498.350	498.412	18+86.77	498.441	498.503	18+86.77	498.473	498.535	
u_1	18+96.77	498.264	498.322				18+96.77	498.350	498.408	18+96.77	498.441	498.499	18+96.77	498.473	498.531	
v_1	19+06.77	498.267	498.321				19+06.77	498.350	498.404	19+06.77	498.441	498.495	19+06.77	498.473	498.527	
FB - 135	19+12.77	498.269	498.321				19+12.77	498.350	498.402	19+12.77	498.441	498.493	19+12.77	498.473	498.525	
w_1	19+22.77	498.273	498.317				19+22.77	498.350	498.394	19+22.77	498.441	498.485	19+22.77	498.473	498.517	
x_1	19+32.77	498.277	498.312				19+32.77	498.350	498.385	19+32.77	498.441	498.476	19+32.77	498.473	498.508	
FB - 136	19+38.78	498.278	498.308				19+38.78	498.350	498.380	19+38.78	498.441	498.471	19+38.78	498.473	498.503	
y_1	19+48.78	498.282	498.300				19+48.78	498.350	498.368	19+48.78	498.441	498.459	19+48.78	498.473	498.491	
z_1	19+58.78	498.286	498.293				19+58.78	498.350	498.357	19+58.78	498.441	498.448	19+58.78	498.473	498.480	
FB - 137	19+64.78	498.287	498.288				19+64.78	498.350	498.351	19+64.78	498.441	498.442	19+64.78	498.473	498.474	
℄ West Bearing Pier 7E	19+64.12	498.287	498.288				19+64.12	498.350	498.351	19+64.12	498.441	498.442	19+64.12	498.473	498.474	

℄ Bearing Pier 4E (FB.-119)

See Sheet 30 for Method of Determining Fillet Heights.

Note:
Elev. A = Theoretical Grade Elevations
Elev. B = Theoretical Grade Elevations Adjusted For Dead Load Deflection.

TOP OF SLAB ELEVATIONS
RAMP E - SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	S.C.O.	FILE NO.	74001
CHECKED	W.D.L.		
DRAWN	R.J.F.	DATE	8-22-80
CHECKED	W.D.L.		

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(15B-1)-D	PEORIA & TAZEWELL	97	61A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 57A of 88.

ELEVATIONS - TOP OF CONCRETE

	STRINGER 4			STRINGER 3			STRINGER 2			STRINGER 1		
	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
℄ East Bearing Pier 4E (F.B.-111)	12+94.25	498.025	498.025	12+94.25	498.612	498.612	12+94.25	499.198	499.198	12+94.25	499.785	499.785
a	13+04.30	497.810	497.831	13+04.21	498.399	498.420	13+04.11	498.987	499.008	13+04.02	499.576	499.597
b	13+14.36	497.612	497.654	13+14.16	498.202	498.244	13+13.98	498.791	498.833	13+13.79	499.382	499.424
F.B.-112	13+18.72	497.532	497.586	13+18.72	498.119	498.173	13+18.72	498.705	498.759	13+18.72	499.292	499.346
c	13+28.77	497.360	497.430	13+28.67	497.949	498.019	13+28.58	498.536	498.606	13+28.49	499.124	499.194
d	13+38.82	497.205	497.292	13+38.63	497.794	497.881	13+38.44	498.382	498.469	13+38.26	498.972	499.059
F.B.-113	13+44.30	497.127	497.224	13+44.30	497.714	497.811	13+44.30	498.300	490.397	13+44.30	498.887	498.984
e	13+54.35	496.999	497.104	13+54.25	497.587	497.692	13+54.16	498.174	498.279	13+54.07	498.762	498.867
f	13+64.40	496.888	497.001	13+64.21	497.477	497.590	13+64.02	498.065	498.178	13+63.81	498.653	498.766
F.B.-114	13+69.89	496.835	496.953	13+69.89	497.422	497.540	13+69.89	498.008	498.126	13+69.89	498.595	498.713
g	13+79.94	496.750	496.867	13+79.84	497.337	497.454	13+79.75	497.924	498.041	13+79.66	498.511	498.628
h	13+89.99	496.683	496.799	13+89.80	497.271	497.387	13+89.61	497.857	497.973	13+89.43	498.445	498.561
F.B.-115	13+95.49	496.653	496.769	13+95.49	497.240	497.356	13+95.49	497.826	497.942	13+95.49	498.413	498.529
i	14+05.55	496.629	496.735	14+05.45	497.216	497.322	14+05.36	497.802	497.908	14+05.26	498.389	498.495
j	14+15.60	496.621	496.718	14+15.41	497.208	497.305	14+15.22	497.794	497.891	14+15.03	498.381	498.478
F.B.-116	14+21.11	496.625	496.717	14+21.11	497.212	497.304	14+21.11	497.798	497.890	14+21.11	498.385	498.477
k	14+31.17	496.656	496.734	14+31.07	497.228	497.306	14+30.98	497.801	497.879	14+30.88	498.369	498.447
l	14+41.22	496.689	496.754	14+41.03	497.247	497.312	14+40.84	497.807	497.872	14+40.65	498.354	498.419
F.B.-117	14+44.59	496.699	496.755	14+44.59	497.254	497.310	14+44.59	497.865	497.865	14+44.59	498.346	498.402
m	14+54.62	496.791	496.833	14+54.62	497.300	497.342	14+54.62	497.829	497.871	14+54.62	498.315	498.357
n	14+64.65	496.884	496.913	14+64.65	497.347	497.376	14+64.65	497.850	497.879	14+64.65	498.284	498.313
F.B.-118	14+70.66	496.940	496.961	14+70.66	497.375	497.396	14+70.66	497.862	497.883	14+70.66	498.265	498.286
o	14+80.67	497.074	497.087	14+80.67	497.457	497.470	14+80.67	497.908	497.921	14+80.67	498.280	498.293
p	14+90.68	497.208	497.211	14+90.68	497.538	497.541	14+90.68	497.954	497.957	14+90.68	498.295	490.298
℄ Bearing Pier 5E (F.B.-119)	14+96.68	497.289	497.287	14+96.68	497.587	497.585	14+96.68	497.981	497.979	14+96.68	498.304	498.302
q	15+06.68	497.414	497.410	15+06.68	497.676	497.672	15+06.68	498.034	498.030	15+06.68	498.327	498.323
r	15+16.68	497.538	497.531	15+16.68	497.765	497.758	15+16.68	498.086	498.079	15+16.68	498.350	498.343
F.B.-120	15+22.69	497.613	497.604	15+22.69	497.899	497.890	15+22.69	498.118	498.109	15+22.69	498.364	498.355
s	15+32.69	497.710	497.705	15+32.69	497.957	497.952	15+32.69	498.151	498.146	15+32.69	498.369	498.364
t	15+42.69	497.808	497.805	15+42.69	498.016	498.013	15+42.69	498.184	498.181	15+42.69	498.374	498.371
F.B.-121	15+48.69	497.866	497.866	15+48.69	498.051	498.051	15+48.69	498.204	498.204	15+48.69	498.377	498.377
u	15+58.69	497.930	497.937	15+58.69	498.091	498.098	15+58.69	498.228	498.235	15+58.69	498.383	498.390
v	15+68.69	497.994	498.007	15+68.69	498.131	498.144	15+68.69	498.252	498.265	15+68.69	498.389	498.402
F.B.-122	15+74.70	498.033	498.050	15+74.70	498.155	498.172	15+74.70	498.267	498.284	15+74.70	498.392	498.409
w	15+84.70	498.065	498.088	15+84.70	498.175	498.198	15+84.70	498.279	498.302	15+84.70	498.395	498.418
x	15+94.70	498.096	498.125	15+94.70	498.194	498.223	15+94.70	498.290	498.319	15+94.70	498.397	498.426
F.B.-123	16+00.70	498.115	498.147	16+00.70	498.206	498.238	16+00.70	498.297	498.329	16+00.70	498.399	498.431
y	16+10.70	498.120	498.156	16+10.70	498.206	498.242	16+10.70	498.297	498.333	16+10.70	498.399	498.435
z	16+20.70	498.124	498.163	16+20.70	498.207	498.246	16+20.70	498.297	498.336	16+20.70	498.399	498.438
F.B.-124	16+26.71	498.127	498.169	16+26.71	498.207	498.249	16+26.71	498.297	498.339	16+26.71	498.399	498.441
a_1	16+36.71	498.131	498.173	16+36.71	498.207	498.249	16+36.71	498.297	498.339	16+36.71	498.399	498.441
b_1	16+46.71	498.134	498.175	16+46.71	498.207	498.248	16+46.71	498.297	498.338	16+46.71	498.399	498.440
F.B.-125	16+52.71	498.136	498.177	16+52.71	498.207	498.248	16+52.71	498.297	498.338	16+52.71	498.399	498.440
c_1	16+62.71	498.140	498.177	16+62.71	498.207	498.244	16+62.71	498.297	498.334	16+62.71	498.399	498.436
d_1	16+72.71	498.144	498.177	16+72.71	498.207	498.240	16+72.71	498.297	498.330	16+72.71	498.399	498.432
F.B.-126	16+78.72	498.145	498.176	16+78.72	498.207	498.228	16+78.72	498.272	498.303	16+78.72	498.399	498.430
e_1	16+88.72	498.149	498.174				16+88.72	498.272	498.297	16+88.72	498.399	498.424
f_1	16+98.72	498.153	498.173				16+98.72	498.272	498.292	16+98.72	498.399	498.419
F.B.-127	17+04.73	498.154	498.170				17+04.73	498.272	498.288	17+04.73	498.399	498.415
g_1	17+14.73	498.158	498.169				17+14.73	498.272	498.283	17+14.73	498.399	498.410
h_1	17+24.73	498.162	498.168				17+24.73	498.272	498.278	17+24.73	498.399	498.405
F.B.-128	17+30.73	498.164	498.167				17+30.73	498.272	498.275	17+30.73	498.399	498.402
i_1	17+40.73	498.167	498.169				17+40.73	498.272	498.274	17+40.73	498.399	498.401
j_1	17+50.73	498.171	498.171				17+50.73	498.272	498.272	17+50.73	498.399	498.399
℄ Bearing Pier 6E (F.B.-129)	17+56.74	498.173	498.172				17+56.74	490.272	498.271	17+56.74	498.399	498.398
k_1	17+66.74	498.176	498.178				17+66.74	498.272	498.274	17+66.74	498.399	498.401
l_1	17+76.74	498.180	498.183				17+76.74	498.272	498.275	17+76.74	498.399	498.402
F.B.-130	17+82.74	498.182	498.187				17+82.74	498.272	498.277	17+82.74	498.399	498.404
m_1	17+92.74	498.186	498.197				17+93.74	498.272	498.283	17+92.74	498.399	498.410
n_1	18+02.74	498.189	498.205				18+02.74	498.272	498.288	18+02.74	498.399	498.415
F.B.-131	18+08.75	498.191	498.211				18+08.75	494.272	498.292	18+08.75	498.399	498.419
o_1	18+18.75	498.195	498.221				18+18.75	498.272	498.298	18+18.75	498.399	498.425
p_1	18+28.75	498.198	498.230				18+28.75	498.272	498.304	18+28.75	498.399	498.431
F.B.-132	18+34.76	498.200	498.237				18+34.76	498.308	498.345	18+34.76	498.399	498.436
q_1	18+44.76	498.204	498.246				18+44.76	498.308	498.350	18+44.76	498.399	498.441
r_1	18+54.76	498.207	498.254				18+54.76	498.308	498.355	18+54.76	498.399	498.446
F.B.-133	18+60.76	498.209	498.258				18+60.76	498.308	498.357	18+60.76	498.399	498.448
s_1	18+70.76	498.213	498.264				18+70.76	498.308	498.359	18+70.76	498.399	498.450
t_1	18+80.76	498.216	498.268				18+80.76	498.308	498.360	18+80.76	498.399	498.451
F.B.-134	18+86.77	498.218	498.271				18+86.77	498.308	498.361	18+86.77	498.399	498.452
u_1	18+96.77	498.222	498.271				18+96.77	498.308	498.357	18+96.77	498.399	498.448
v_1	19+06.77	498.225	498.271				19+06.77	498.308	498.354	19+06.77	498.399	498.445
F.B.-135	19+12.77	498.227	498.271				19+12.77	498.308	498.352	19+12.77	498.399	498.443
w_1	19+22.77	498.231	498.268				19+22.77	498.308	498.345	19+22.77	498.399	498.436
x_1	19+32.77	498.235	498.265				19+32.77	498.308	498.338	19+32.77	498.399	498.429
F.B.-136	19+38.78	498.236	498.262				19+38.78	498.308	498.334	19+38.78	498.399	498.425
y_1	19+48.78	498.240	498.256				19+48.78	498.308	498.323	19+48.78	498.399	498.414
z_1	19+58.78	498.244	498.250				19+58.78	498.308	498.314	19+58.78	498.399	498.405
F.B.-137	19+64.78	498.245	498.246				19+64.78	498.308	498.309	19+64.78	498.399	498.400
℄ West Bearing Pier 7E	19+64.12	498.245	498.245				19+64.12	498.308	498.308	19+64.12	498.399	498.399

LONGITUDINAL EXPANSION JOINT

STATION	ELEV. A	ELEV. B	
14+10.28	498.431	498.530	a_2
14+20.28	498.431	498.520	b_2
14+30.27	498.431	498.507	c_2
14+40.32	498.431	498.493	d_2
14+50.36	498.431	498.479	e_2
14+60.39	498.431	498.466	f_2
14+70.41	498.431	498.452	g_2
14+80.42	498.431	498.444	h_2
14+90.43	498.431	498.434	i_2
14+96.68	498.431	498.429	℄ Bearing Pier 4E (F.B.-119)
15+06.68	498.431	498.427	
15+16.68	498.431	498.424	
15+22.69	498.431	498.422	
15+32.69	498.431	498.426	
15+42.69	498.431	498.428	
15+48.69	498.431	498.431	
15+58.69	498.431	498.438	
15+68.69	498.431	498.444	
15+74.70	498.431	498.448	
15+84.70	498.431	498.454	
15+94.70	498.431	498.460	
16+00.70	498.431	498.463	
16+10.70	498.431	498.467	
16+20.70	498.431	498.470	
16+26.71	498.431	498.473	
16+36.71	498.431	498.473	
16+46.71	498.431	498.472	
16+52.71	498.431	498.472	
16+62.71	498.431	498.468	
16+72.71	498.431	498.464	
16+78.72	498.431	498.462	
16+88.72	498.431	498.456	
16+98.72	498.431	498.451	
17+04.73	498.431	498.447	
17+14.73	498.431	498.442	
17+24.73	498.431	498.437	
17+30.73	498.431	498.434	
17+40.73	498.431	498.433	
17+50.73	498.431	498.431	
17+56.74	498.431	498.430	
17+66.74	498.431	498.433	
17+76.74	498.431	498.434	
17+82.74	498.431	498.436	
17+92.74	498.431	498.442	
18+02.74	498.321	498.447	
18+08.75	498.431	498.451	
18+18.75	498.431	498.457	
18+28.75	498.431	498.463	
18+34.76	498.431	498.468	
18+44.76	498.431	498.473	
18+54.76	498.431	498.478	
18+60.76	498.431	498.480	
18+70.76	498.431	498.482	
18+80.76	498.431	498.483	
18+86.77	498.431	498.484	
18+96.77	498.431	498.480	
19+06.77	498.431	498.477	
19+12.77	498.431	498.475	
19+22.77	498.431	498.468	
19+32.77	498.431	498.461	
19+38.78	498.431	498.457	
19+48.78	498.431	498.446	
19+58.78	498.431	498.437	
19+64.78	498.431	498.432	
19+64.12	498.431	498.431	

See Sheet 30 for Method of Determining Fillet Heights.

Note:
Elev. A = Theoretical Grade Elevations
Elev. B = Theoretical Grade Elevations Adjusted For Dead Load Deflection.

TOP OF SLAB ELEVATIONS
RAMP E - SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED WDL
DRAWN R.J.F
CHECKED WDL

HANSON ENGINEERS INCORPORATED
SPRINGFIELD ILLINOIS PEORIA ILLINOIS

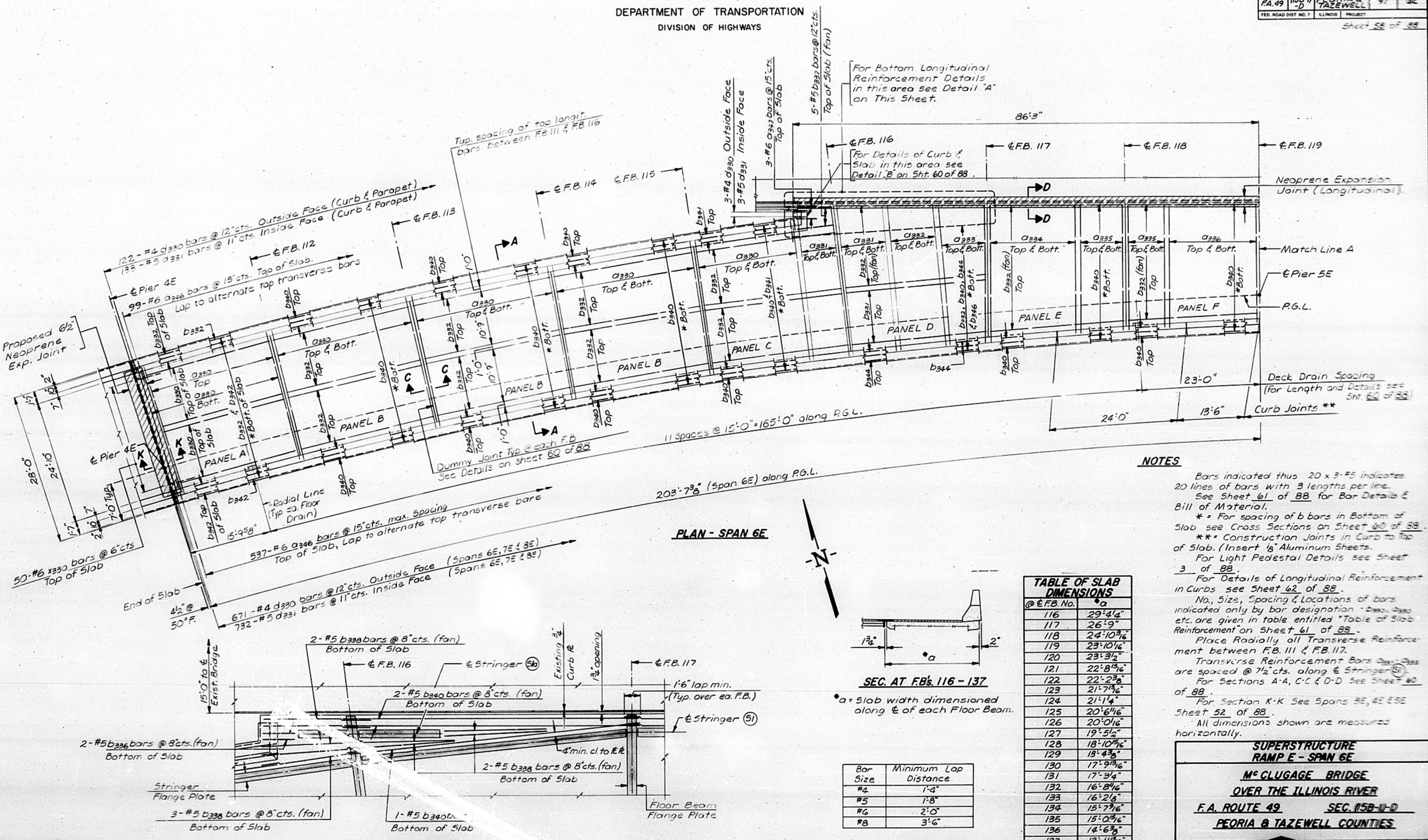
FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	92
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 58 of 88



PLAN - SPAN 6E

DETAIL - A
PARTIAL PLAN
(Showing Bottom Longitudinal Reinforcement Only.)

SEC. AT F.B's. 116 - 137

•a = Slab width dimensioned along ℄ of each Floor Beam.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

TABLE OF SLAB DIMENSIONS	
@ ℄ F.B. No.	•a
116	29'-4¼"
117	26'-9"
118	24'-10³⁄₁₆"
119	23'-10⅛"
120	23'-3½"
121	22'-8¹⁵⁄₁₆"
122	22'-2⅜"
123	21'-7¹⁵⁄₁₆"
124	21'-1¼"
125	20'-6¹¹⁄₁₆"
126	20'-0⅛"
127	19'-5½"
128	18'-10⁹⁄₁₆"
129	18'-4⅜"
130	17'-9¹³⁄₁₆"
131	17'-3¼"
132	16'-8¹⁄₁₆"
133	16'-2⅛"
134	15'-7⁹⁄₁₆"
135	15'-0⅝"
136	14'-6⅜"
137	13'-11¹⁵⁄₁₆"

NOTES

Bars indicated thus 20 x 3-#5 indicates 20 lines of bars with 3 lengths per line.

See Sheet 61 of 88 for Bar Details & Bill of Material.

* = For spacing of b bars in Bottom of Slab see Cross Sections on Sheet 60 of 88.

** = Construction Joints in Curb to Top of Slab. (Insert ⅛" Aluminum Sheets.

For Light Pedestal Details see Sheet 3 of 88.

For Details of Longitudinal Reinforcement in Curbs see Sheet 62 of 88.

No., Size, Spacing & Locations of bars indicated only by bar designation - b330, a330 etc. are given in table entitled "Table of Slab Reinforcement" on Sheet 61 of 88.

Place Radially all Transverse Reinforcement between F.B. 111 & F.B. 117.

Transverse Reinforcement Bars a330 - a333 are spaced @ 7½"cts. along ℄ Stringer (S1).

For Sections A-A, C-C & D-D See Sheet 60 of 88.

For Section K-K See Spans 3E, 4E & 5E Sheet 52 of 88.

All dimensions shown are measured horizontally.

SUPERSTRUCTURE
RAMP E - SPAN 6E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

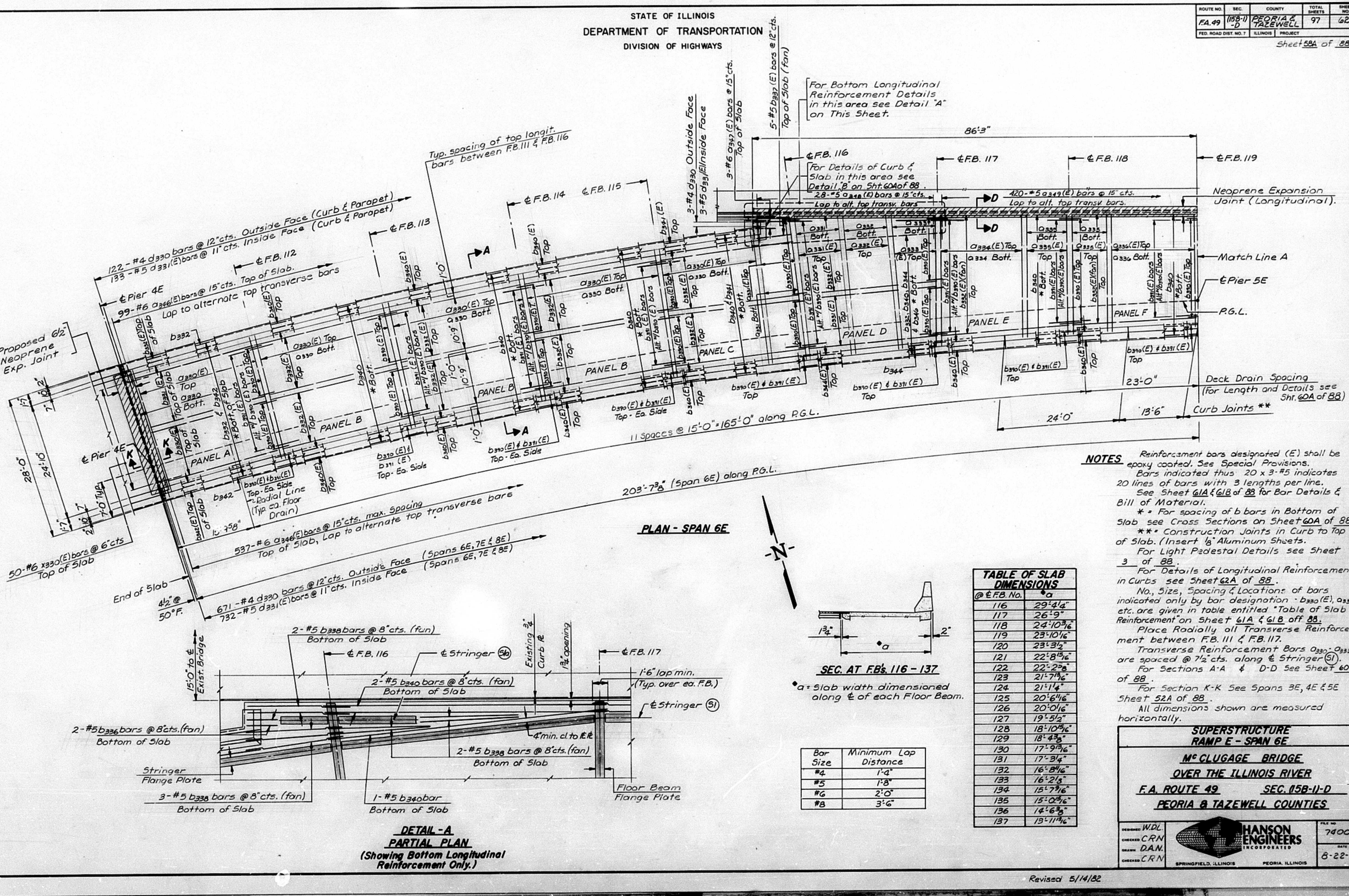
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

PROJ. NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	62A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 58A of 88



PLAN - SPAN 6E

DETAIL - A
PARTIAL PLAN
(Showing Bottom Longitudinal Reinforcement Only.)

SEC. AT F.B's. 116 - 137

•a = Slab width dimensioned along ℄ of each Floor Beam.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

TABLE OF SLAB DIMENSIONS	
@ ℄ F.B. No.	•a
116	29'-4¼"
117	26'-9"
118	24'-10 3/16"
119	23'-10 1/16"
120	23'-3½"
121	22'-8 15/16"
122	22'-2⅝"
123	21'-7 13/16"
124	21'-1¼"
125	20'-6 11/16"
126	20'-0 1/16"
127	19'-5½"
128	18'-10 5/16"
129	18'-4⅜"
130	17'-9 13/16"
131	17'-3¼"
132	16'-8 1/16"
133	16'-2⅛"
134	15'-7 9/16"
135	15'-0 5/16"
136	14'-6 3/8"
137	13'-11 7/16"

NOTES

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

Bars indicated thus 20 x 3-#5 indicates 20 lines of bars with 3 lengths per line.

See Sheet 61A & 61B of 88 for Bar Details & Bill of Material.

* = For spacing of b bars in Bottom of Slab see Cross Sections on Sheet 60A of 88.

** = Construction Joints in Curb to Top of Slab. (Insert ⅛" Aluminum Sheets.

For Light Pedestal Details see Sheet 3 of 88.

For Details of Longitudinal Reinforcement in Curbs see Sheet 62A of 88.

No., Size, Spacing & Locations of bars indicated only by bar designation - b330(E), a330 etc. are given in table entitled "Table of Slab Reinforcement" on Sheet 61A & 61B off 88.

Place Radially all Transverse Reinforcement between F.B. 111 & F.B. 117.

Transverse Reinforcement Bars a330 - a333 are spaced @ 7½" cts. along ℄ Stringer (S1).

For Sections A-A & D-D See Sheet 60A of 88.

For Section K-K See Spans 3E, 4E & 5E Sheet 52A of 88.

All dimensions shown are measured horizontally.

SUPERSTRUCTURE
RAMP E - SPAN 6E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

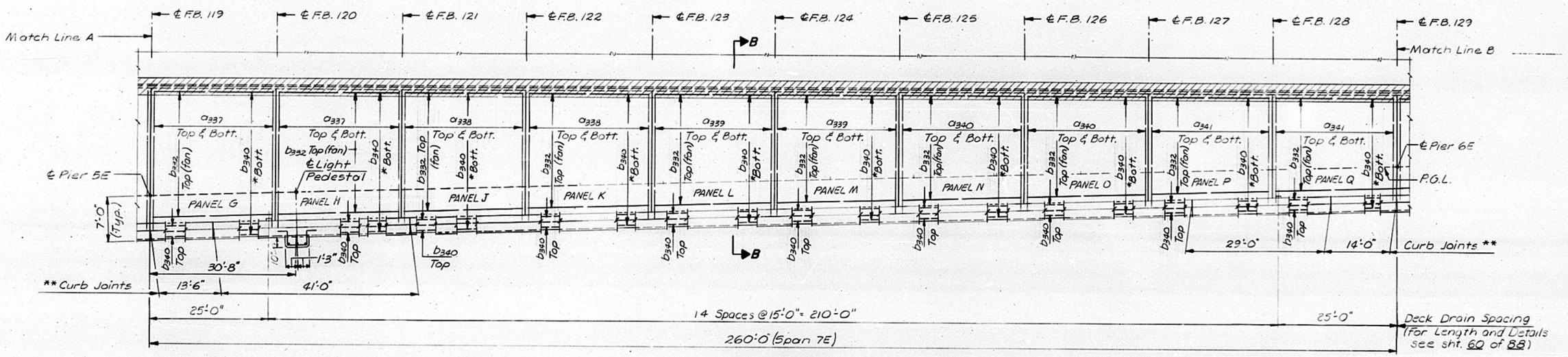
FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

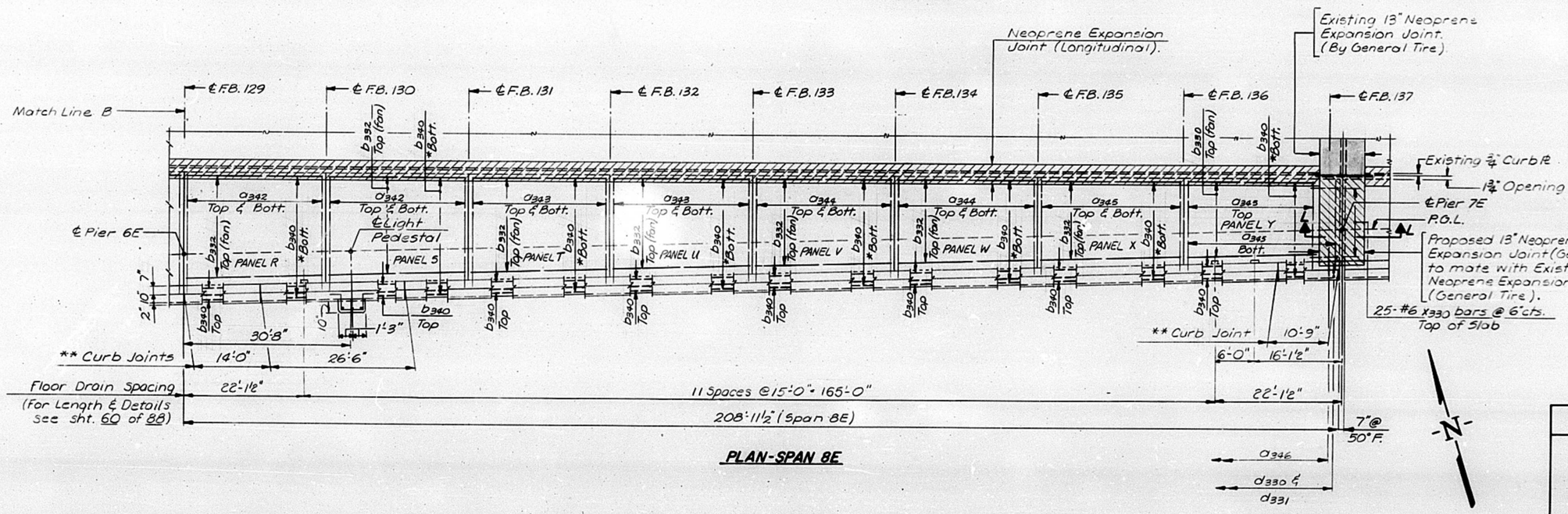
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	63
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 59 of 88



PLAN-SPAN 7E



PLAN-SPAN 8E

NOTES

For Section B-B see Sheet 60 of 88.
For Section L-L see Sheet 67 of 88.
For Light Pedestal Details see Sheet 3 of 88.
All dimensions shown are measured horizontally.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

SUPERSTRUCTURE RAMP E - SPANS 7E & 8E

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

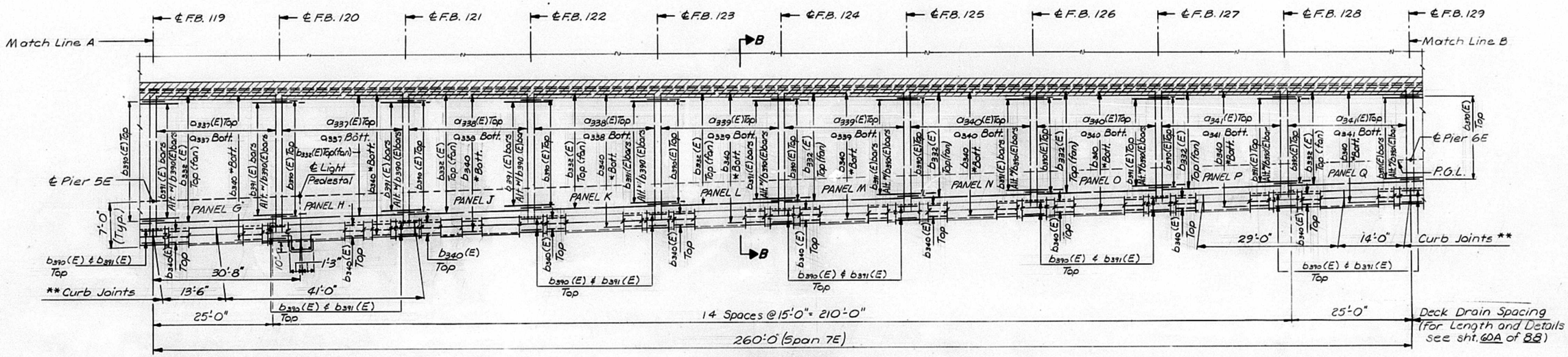
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

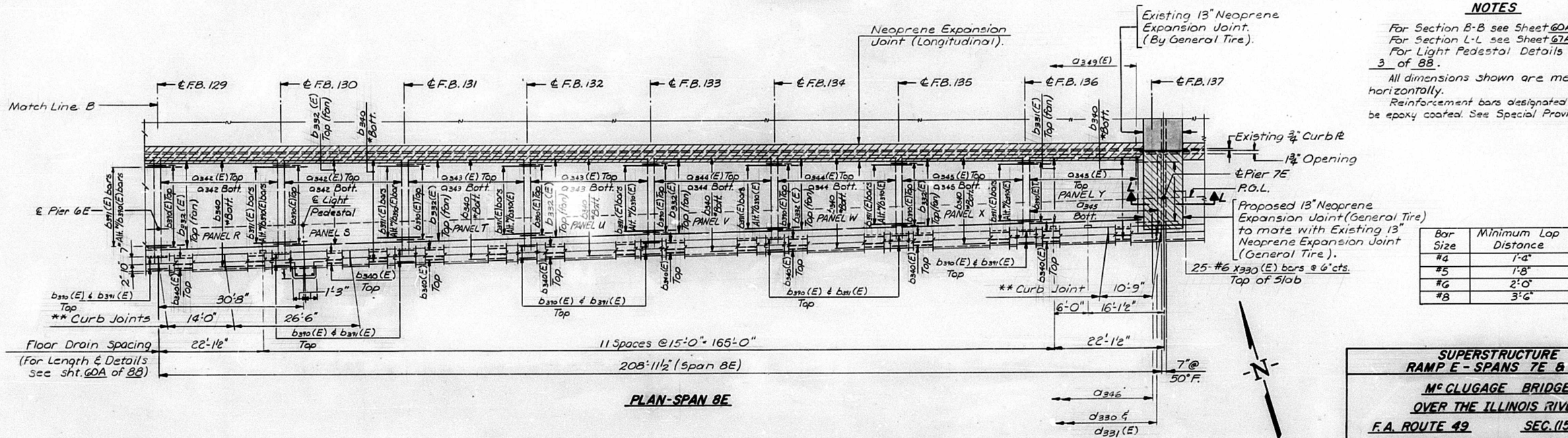
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(158-1) -D	PEORIA & TAZEWELL	97	63.9
FED. ROAD DIST. NO. 1	ILLINOIS	PROJECT		

Sheet 59A of 88



PLAN-SPAN 7E



PLAN-SPAN 8E

NOTES

For Section B-B see Sheet 60A of 88.
For Section L-L see Sheet 67A of 88.
For Light Pedestal Details see Sheet 3 of 88.
All dimensions shown are measured horizontally.
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

SUPERSTRUCTURE
RAMP E - SPANS 7E & 8E
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

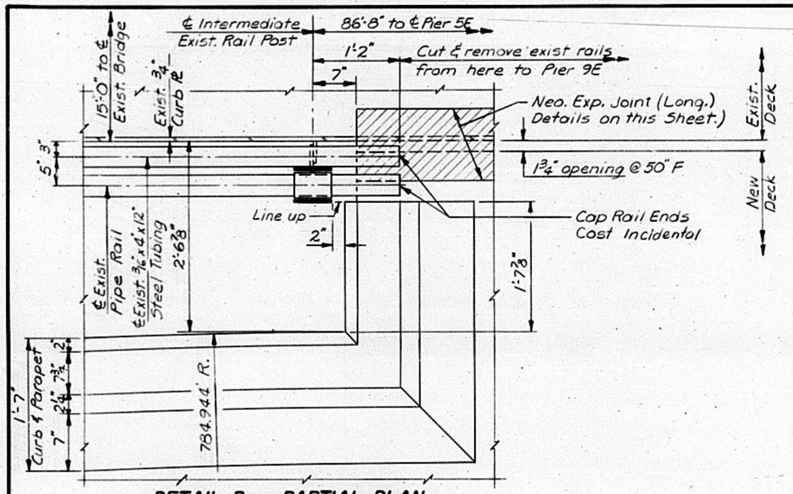
Revised 3/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE/NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA. 49	(15B-1) -D	PEORIA & TAZEWELL	97	64
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

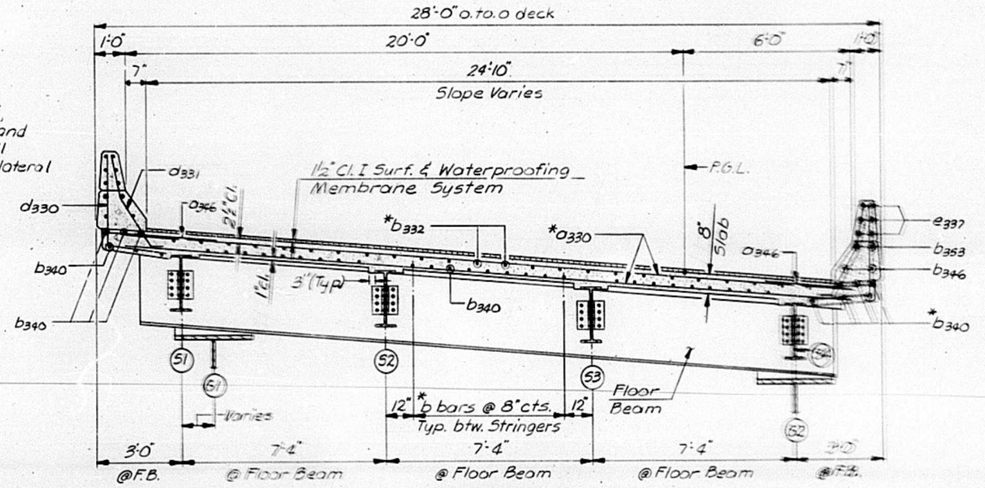
Sheet 60 of 88

* For bar, size, No. & spacing see "Table of Slab Reinf." on Sheet 61 of 88.



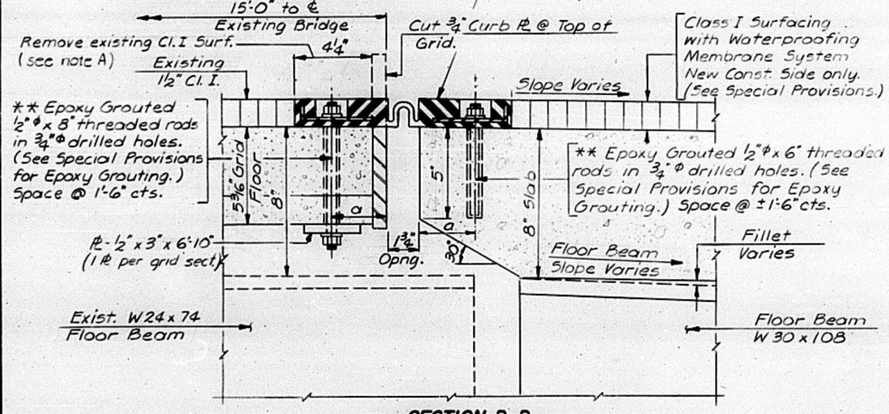
DETAIL B - PARTIAL PLAN
(Showing Curb & Slab at Junction Ramp E with Existing Bridge.)

SECTION THRU SOUTH PARAPET



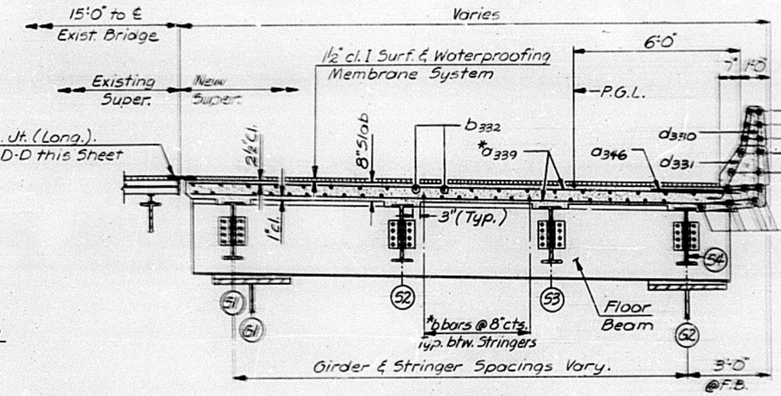
SECTION A-A
(Typ. at Floor Beams 111 - 115)

Neoprene Expansion Joint (Longitudinal). See Detail "A" on Sheet 8 of 88.



SECTION D-D
(See Sheet 58 of 88.)

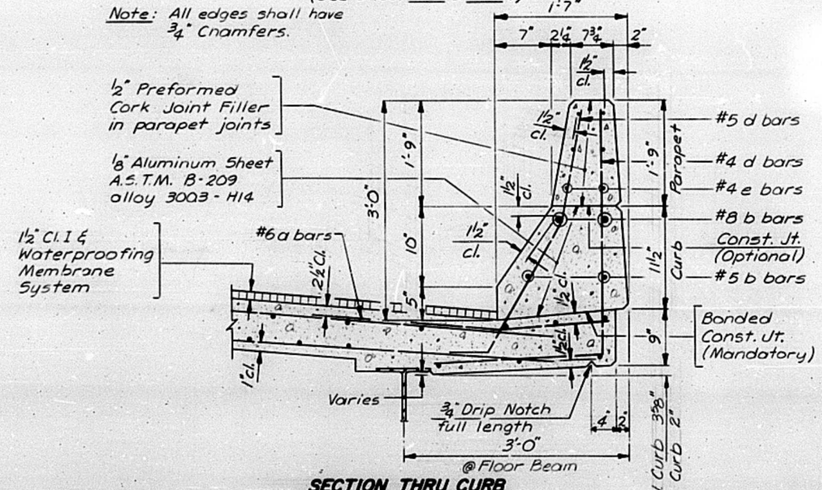
Note A: CL. I to be removed shall be saw cut 4¼" from inside face of curb plate. The vertical face of the remaining CL I shall be sealed with an approved epoxy sealant.



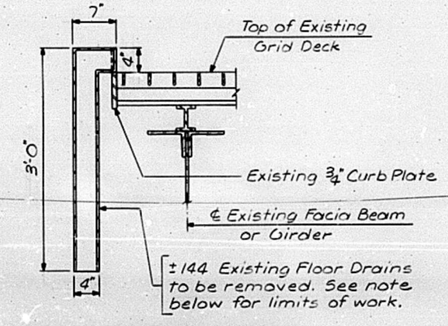
Note: For placement of e bars in parapet see sheet 63 of 88.
For placement of b bars in curb see sheet 62 of 88.

SECTION B-B
(Typ. at Floor Beams 116 - 137)

Note: All edges shall have ¾" Chamfers.

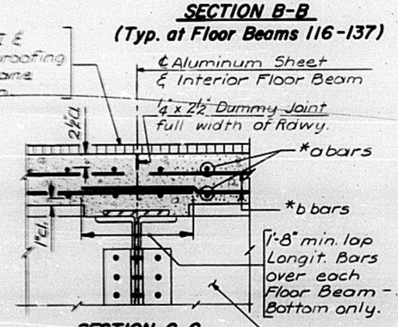


SECTION THRU CURB
Cost of Aluminum Sheets shall be incidental to Class X Concrete.



SECTION SHOWING REMOVAL OF EXISTING FLOOR DRAINS

Remove ±144 Existing Floor Drains from the South Side of the Existing Bridge starting at ±86'-3" West of ℄ Pier 5E and ending at ±2'-4" East of ℄ Pier 9E for a total distance of ±998'-10".



SECTION C-C
(See Sheet 58 of 88.)

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 6E, 7E & 8E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED WOL
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

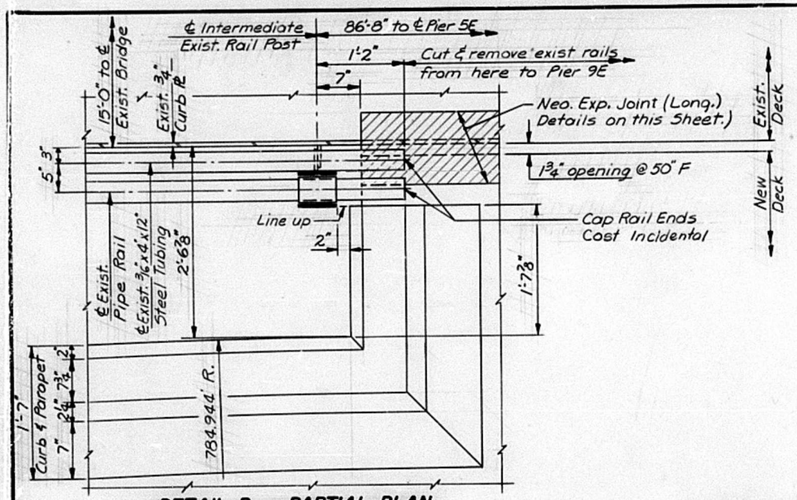
FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

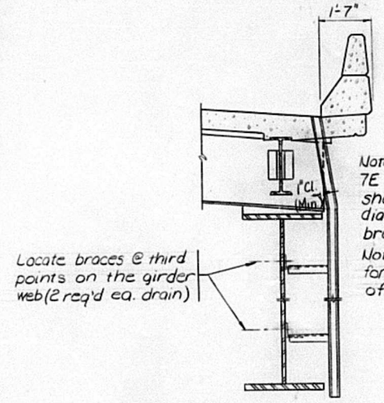
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA:49	(15B-1) -D	PEORIA & TAZEWELL	97	64A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 60A of 88

* - For bar, size, No. & spacing see "Table of Slab Reinf." on sheet 61A & 61B of 88.

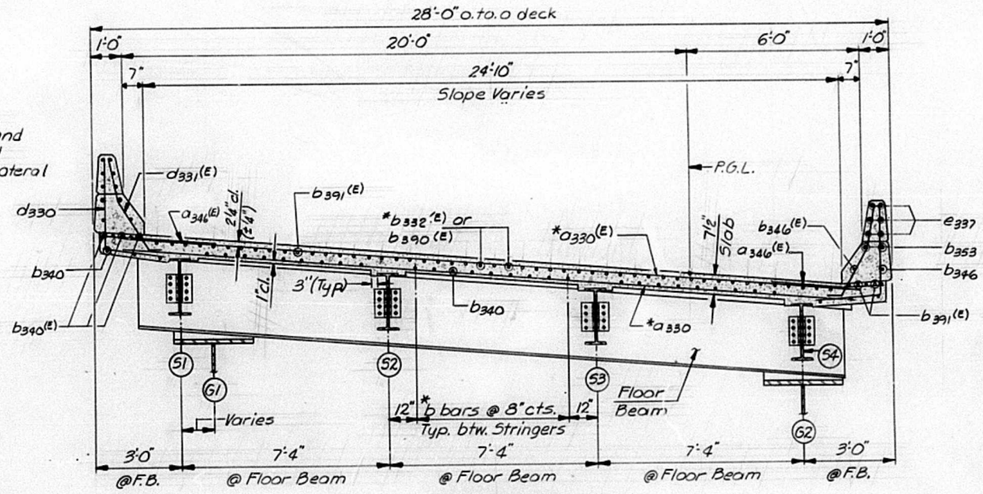


DETAIL B - PARTIAL PLAN
(Showing Curb & Slab at Junction Ramp E with Existing Bridge.)

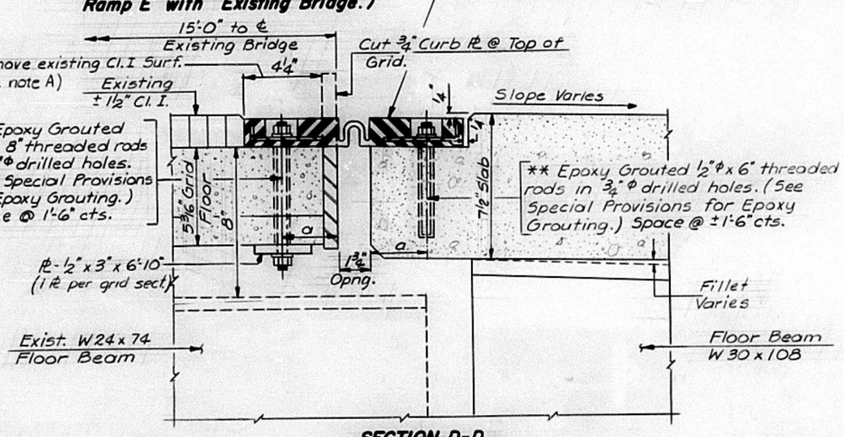


Note: All Floor Drains spans 6E, 7E & 8E shall be 16'-4" long and shall be located clear of all diaphragms, floor beams & lateral bracing.
Note: See sht 3 of 88 for additional details of floor Drains.

SECTION THRU SOUTH PARAPET

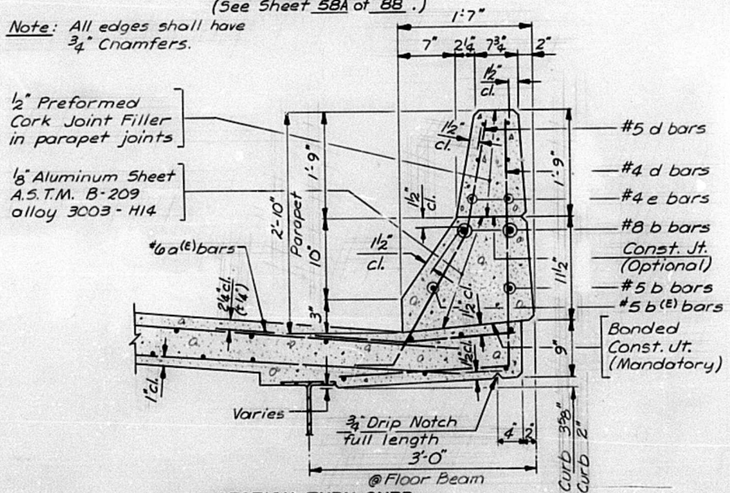


SECTION A-A
(Typ. at Floor Beams 111 - 115)

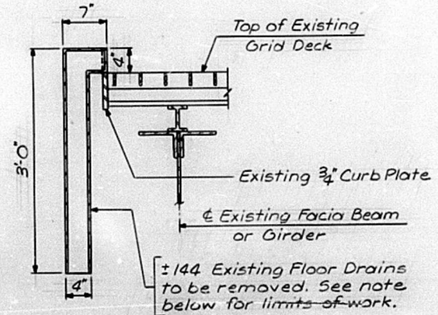


SECTION D-D
(See Sheet 58A of 88.)

Note A: CL I to be removed shall be saw cut 4¼" from inside face of curb plate. The vertical face of the remaining CL I shall be sealed with an approved epoxy sealant.

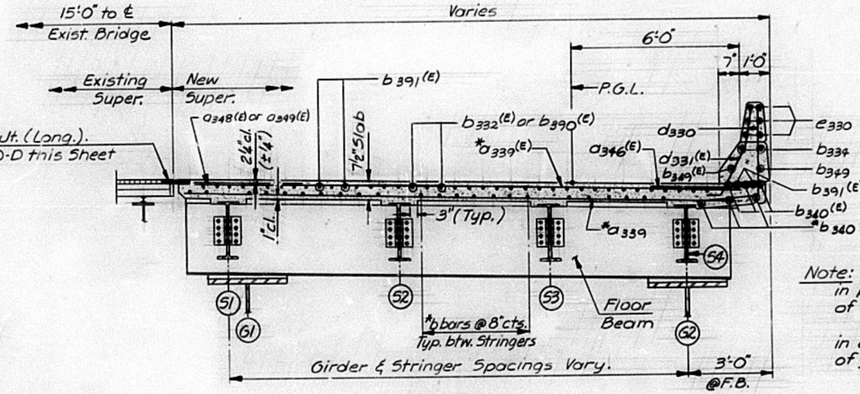


SECTION THRU CURB
Cost of Aluminum Sheets shall be incidental to Class X Concrete.



SECTION SHOWING REMOVAL OF EXISTING FLOOR DRAINS

Remove ± 144 Existing Floor Drains from the South Side of the Existing Bridge starting at ± 86'-3" West of ℄ Pier 5E and ending at ± 2'-4" East of ℄ Pier 9E for a total distance of ± 998'-10"



Note: For placement of e bars in paropet see sheet 63A of 88.
For placement of b bars in curb see sheet 62A of 88.

SECTION B-B
(Typ. at Floor Beams 116 - 137)

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 6E, 7E & 8E
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.O.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-8[illegible]

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	115B-1) -D	PEORIA & TAZEWELL	97	65
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 61 of 88

TABLE OF SLAB REINFORCEMENT

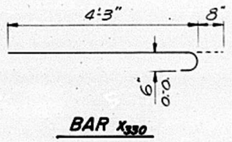
Panel	Bar	Top or Bott. of Slab	Location	Size & Spacing	No.
A	a_{330}	Top	See Plan	#6@7½"	38
"	a_{330}	Bott.	"	"	40
"	b_{332}	Top	"	#5-2 e.s.	3
"	b_{330}	"	"	#5@12"	12
"	b_{331}	"	"	"	12
"	b_{342}	"	"	#5-2 e.s.	3
"	b_{342}	Bott.	Under N.Curb	"	3
"	b_{332}	"	Betw. 53 & 54	#5@8"	9
"	b_{332}	"	Betw. 51 & 52	"	9
"	b_{332}	"	Betw. 52 & 53	"	9
"	b_{342}	"	Under S.Curb	#5-2 e.s.	3
B	a_{330}	Top	See Plan	#6@7½"	42
"	a_{330}	Bott.	"	"	42
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{332}	"	"	#5@12"	12
"	b_{332}	"	"	"	12
"	b_{340}	"	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 53 & 54	#5@8"	9
"	b_{340}	"	Betw. 51 & 52	"	9
"	b_{340}	"	Under N.Curb	#5-2 e.s.	3
"	b_{340}	"	Under S.Curb	"	3
"	b_{340}	"	Betw. 52 & 53	#5@8"	9
C	a_{330}	Top	See Plan	#6@7½"	28
"	a_{330}	Bott.	"	"	28
"	a_{331}	Top	"	"	14
"	a_{331}	Bott.	"	"	14
"	b_{332}	Top	"	#5@12"	12
"	b_{332}	"	"	"	12
"	a_{341}	"	"	#5-2 e.s.	3
"	b_{340}	"	"	#5-2 e.s.	3
"	b_{337}	"	"	#5@12"	5*
"	b_{340}	Bott.	Betw. 53 & 54	#5@8"	9
"	b_{340}	"	Betw. 51 & 52	"	9
"	b_{341}	"	Under N.Curb	#5-2 e.s.	3
"	b_{340}	"	Under S.Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 52 & 53	#5@8"	9
D	a_{331}	Top	See Plan	#6@7½"	14
"	a_{331}	Bott.	"	"	14
"	a_{332}	Top	"	"	14
"	a_{332}	Bott.	"	"	14
"	a_{333}	Top	"	"	14
"	a_{333}	Bott.	"	"	14
"	b_{332}	Top	"	#5@12"	12*
"	b_{332}	Bott.	Betw. 53 & 54	#5@8"	10*
"	b_{331}	Top	See Plan	#5@12"	12
"	b_{344}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	9*
"	b_{344}	"	Under S.Curb	#5-2 e.s.	3
"	b_{346}	"	Betw. 52 & 53	#5@8"	10*
E	a_{334}	Top	See Plan	#6@7½"	28
"	a_{334}	Bott.	"	"	28
"	a_{335}	Top	"	"	14
"	a_{335}	Bott.	"	"	14
"	b_{332}	Top	"	#5@12"	22*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	11*
"	b_{340}	"	Betw. 52 & 53	#5@8"	10*
"	b_{340}	"	Betw. 53 & 54	#5@8"	10*
"	b_{340}	"	Under S.Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
F	a_{335}	Top	See Plan	#6@7½"	14
"	a_{335}	Bott.	"	"	14
"	a_{336}	Top	"	"	28
"	a_{336}	Bott.	"	"	28
"	b_{332}	Top	"	#5@12"	22*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	Bott.	Betw. 52 & 53	#5@8"	10

Panel	Bar	Top or Bott of Slab	Location	Size & Spacing	No.
F	b_{340}	Bott.	Betw. 53 & 54	#5@8"	9*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
G	a_{337}	Top	See Plan	#6@7½"	42
"	a_{337}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	22*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	10
"	b_{340}	"	Betw. 53 & 54	"	7
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
H	a_{337}	Top	See Plan	#6@7½"	42
"	a_{337}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	21*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7*
"	b_{340}	"	Betw. 53 & 54	"	9*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
J	a_{338}	Top	See Plan	#6@7½"	42
"	a_{338}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	21*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	8
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
K	a_{338}	Top	See Plan	#6@7½"	42
"	a_{338}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	20*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	8*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
L	a_{339}	Top	See Plan	#6@7½"	42
"	a_{339}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	20*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	7*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
M	a_{339}	Top	See Plan	#6@7½"	42
"	a_{339}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	19*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	5*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
N	a_{340}	Top	See Plan	#6@7½"	42
"	a_{340}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	19*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8*
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	5
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
O	a_{340}	Top	See Plan	#6@7½"	42
"	a_{340}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	18*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10*
"	b_{340}	Bott.	Betw. 52 & 54	"	10

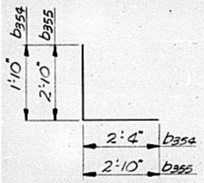
Panel	Bar	Top or Bott of Slab	Location	Size & Spacing	No.
O	b_{340}	Bott.	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
P	a_{341}	Top	See Plan	#6@7½"	42
"	a_{341}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	17*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	10
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
Q	a_{341}	Top	See Plan	#6@7½"	42
"	a_{341}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	17*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	8
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
R	a_{342}	Top	See Plan	#6@7½"	42
"	a_{342}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	16*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	8*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
S	a_{342}	Top	See Plan	#6@7½"	42
"	a_{342}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	16*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	7*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
T	a_{343}	Top	See Plan	#6@7½"	42
"	a_{343}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	15*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	6
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
U	a_{343}	Top	See Plan	#6@7½"	42
"	a_{343}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	15*
"	b_{330}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	9*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
V	a_{344}	Top	See Plan	#6@7½"	42
"	a_{344}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	14*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	8*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
W	a_{344}	Top	See Plan	#6@7½"	42
"	a_{344}	Bott.	"	"	42
"	b_{332}	Top	"	#5@8"	14*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	7*
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
X	a_{345}	Top	See Plan	#6@7½"	42
"	a_{345}	Bott.	"	"	42
"	b_{332}	Top	"	#5@12"	13*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	Bott.	Betw. 52 & 54	"	6*

Panel	Bar	Top or Bott of Slab	Location	Size & Spacing	No.
X	b_{340}	Bott.	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
Y	a_{345}	Top	See Plan	#6@7½"	41
"	a_{345}	Bott.	"	"	43
"	b_{331}	Top	"	#5@12"	13*
"	b_{340}	Top	"	#5-2 e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	5
"	b_{340}	"	Under S. Curb	#5-2 e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2

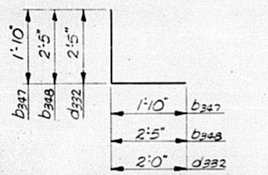
Note: 2 e.s. = 2 Equal Spaces
* = Fan re-bars as required.



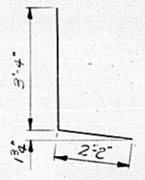
BAR x_{330}



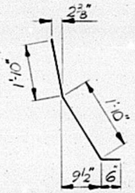
BARS b_{354} & b_{355}



BARS b_{347}, b_{348} & d_{332}

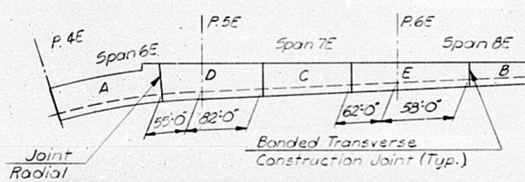


BAR d_{330}



BAR d_{331}

BAR a_{346}

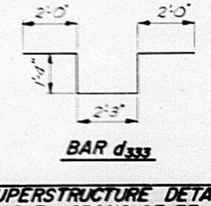


SLAB POURING SEQUENCE

Note: The concrete floor slab shall be poured in one continuous operation between construction joints.

The pouring shall be done in alphabetical order. If the area C is not poured on the same day as A and B, then there should be a seven (7) day time lapse between pours.

BAR e_{333}



BAR d_{333}

BILL OF MATERIAL
RAMP E – SPANS 6E, 7E & 8E

Bar	No.	Size	Length	Shape
a_{330}	986	#6	26'-0"	
a_{331}	56	#6	28'-8"	
a_{332}	28	#6	27'-1"	
a_{333}	28	#6	25'-6"	
a_{334}	56	#6	25'-0"	
a_{335}	56	#6	24'-6"	
a_{336}	56	#6	22'-11"	
a_{337}	168	#6	22'-1"	
a_{338}	168	#6	21'-0"	
a_{339}	168	#6	19'-11"	
a_{340}	168	#6	18'-10"	
a_{341}	168	#6	17'-9"	
a_{342}	168	#6	16'-7"	
a_{343}	168	#6	15'-6"	
a_{344}	168	#6	14'-5"	
a_{345}	168	#6	13'-4"	
a_{346}	636	#6	4'-0"	
a_{347}	3	#6	4'-0"	
b_{330}	14	#5	23'-6"	
b_{331}	37	#5	24'-5"	
b_{332}	492	#5	25'-10"	
b_{333}	2	#8	40'-8"	
b_{334}	10	#8	35'-3"	
b_{335}	2	#8	28'-9"	
b_{336}	2	#5	3'-0"	
b_{337}	5	#5	8'-0"	
b_{338}	11	#5	10'-3"	
b_{339}	2	#8	26'-2"	
b_{340}	728	#5	27'-9"	
b_{341}	6	#5	19'-10"	
b_{342}	6	#5	26'-3"	
b_{343}	10	#8	34'-3"	
b_{344}	6	#5	24'-6"	
b_{345}	2	#8	10'-5"	
b_{346}	22	#5	26'-3"	
b_{347}	1	#5	3'-8"	L
b_{348}	1	#5	4'-10"	L

Bar	No.	Size	Length	Shape
b_{349}	26	#5	28'-10"	
b_{350}	4	#5	13'-1"	
b_{351}	4	#5	21'-1"	
b_{352}	4	#5	13'-8"	
b_{353}	8	#8	33'-5"	
b_{354}	1	#8	4'-2"	L
b_{355}	1	#8	5'-8"	L
b_{356}	10	#8	35'-1"	
b_{357}	2	#8	23'-6"	
b_{358}	8	#8	13'-2"	
d_{330}	796	#4	5'-6"	L
d_{331}	868	#5	4'-2"	L
d_{332}	6	#6	4'-5"	L
d_{333}	10	#6	8'-11"	
e_{330}	132	#4	14'-4"	
e_{331}	12	#4	11'-7"	
e_{332}	6	#4	13'-0"	
e_{333}	6	#4	3'-2"	L
e_{334}	90	#4	13'-8"	
e_{335}	36	#4	12'-11"	
e_{336}	6	#4	10'-5"	
e_{337}	48	#4	15'-3"	
x_{330}	75	#6	4'-11"	
Rem of Exist. Deck Drains			Lump Sum	1
Class X Concrete			Cu. Yds.	454.7
Reinforcement Bars			Lbs.	122,540
Neo. Exp. Joint (3")			Lin. Ft.	13.6
Neo. Exp. Joint (Long)			Lin. Ft.	553.4
Bit. Conc. Sc. Mix. D (2)			Tons	116.2
Waterprf. Membrane Sys.			Sq. Yds.	1,434.1
Floor Drains			Each	40
Bituminous Concrete Surface Removal			Sq. Yds.	21.8
Altered Rail Fem.			Lin. Ft.	554.3
Curb Plate Removal			Lin. Ft.	556.6
Protective Coat			Sq. Yd.	329.0

SUPERSTRUCTURE DETAILS
RAMP E – SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.
CHECKED	C.R.N.
DRAWN	D.A.N.
CHECKED	C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	65A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 61A of 88

TABLE OF SLAB REINFORCEMENT

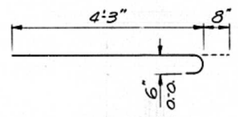
Panel	Bar	Top or Bott. of Slab	Location	Size & Spacing	No.
A	a_{330}	(E) Top	See Plan	#6@7½"	38
"	a_{330}	Bott.	"	"	40
"	b_{332}	(E) Top	"	#5·2e.s.	3
"	b_{330}	(E) "	"	#5@12"	12
"	b_{331}	(E) "	"	"	12
"	b_{342}	(E) "	"	#5·2e.s.	3
"	b_{332}	Bott.	Under N.Curb	"	3
"	b_{332}	"	Betw. 53 & 54	#5@8"	9
"	b_{332}	"	Betw. 51 & 52	"	9
"	b_{332}	"	Betw 52 & 53	"	9
"	b_{342}	"	Under S.Curb	#5·2e.s.	3
B	a_{330}	(E) Top	See Plan	#6@7½"	42
"	a_{330}	Bott.	"	"	42
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{332}	(E) "	"	#5@12"	12
"	b_{332}	(E) "	"	"	12
"	b_{340}	(E) "	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 53 & 54	#5@8"	9
"	b_{340}	"	Betw. 51 & 52	"	9
"	b_{340}	"	Under N. Curb	#5·2e.s.	3
"	b_{340}	"	Under S. Curb	"	3
"	b_{340}	"	Betw. 52 & 53	#5@8"	9
C	a_{330}	(E) Top	See Plan	#6@7½"	28
"	a_{330}	Bott.	"	"	28
"	a_{331}	(E) Top	"	"	14
"	a_{331}	Bott.	"	"	14
"	b_{332}	(E) Top	"	#5@12"	12
"	b_{332}	(E) "	"	"	12
"	b_{341}	(E) "	"	#5·2e.s.	3
"	b_{340}	(E) "	"	#5@12"	3
"	b_{337}	(E) "	"	"	5*
"	b_{340}	Bott.	Betw. 53 & 54	#5@8"	9
"	b_{340}	"	Betw. 51 & 52	"	9
"	b_{341}	"	Under N. Curb	#5·2e.s.	3
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 52 & 53	#5@8"	9
D	a_{331}	(E) Top	See Plan	#6@7½"	14
"	a_{331}	Bott.	"	"	14
"	a_{332}	(E) Top	"	"	14
"	a_{332}	Bott.	"	"	14
"	a_{333}	(E) Top	"	"	14
"	a_{338}	Bott.	"	"	14
"	b_{332}	(E) Top	"	#5@12"	12*
"	b_{332}	Bott.	Betw. 53 & 54	#5@8"	10*
"	b_{331}	(E) Top	See Plan	#5@12"	12
"	b_{344}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	9*
"	b_{344}	"	Under S.Curb	#5·2e.s.	3
"	b_{346}	"	Betw. 52 & 53	#5@8"	10*
E	a_{334}	(E) Top	See Plan	#6@7½"	28
"	a_{334}	Bott.	"	"	28
"	a_{335}	(E) Top	"	"	14
"	a_{335}	Bott.	"	"	14
"	b_{332}	(E) Top	"	#5@12"	22*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	11*
"	b_{340}	"	Betw. 52 & 53	#5@8"	10*
"	b_{340}	"	Betw. 53 & 54	#5@8"	10*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
F	a_{335}	(E) Top	See Plan	#6@7½"	14
"	a_{335}	Bott.	"	"	14
"	a_{336}	(E) Top	"	"	28
"	a_{336}	Bott.	"	"	28
"	b_{332}	(E) Top	"	#5@12"	22*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	Bott.	Betw. 52 & 53	#5@8"	10

Panel	Bar	Top or Bott. of Slab	Location	Size & Spacing	No.
F	b_{340}	Bott.	Betw. 53 & 54	#5@8"	9*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
G	a_{337}	(E) Top	See Plan	#6@7½"	42
"	a_{337}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	22*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	10
"	b_{340}	"	Betw. 53 & 54	"	7
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
H	a_{337}	(E) Top	See Plan	#6@7½"	42
"	a_{337}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	21*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7*
"	b_{340}	"	Betw. 53 & 54	"	9*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
J	a_{338}	(E) Top	See Plan	#6@7½"	42
"	a_{338}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	21*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	8
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
K	a_{338}	(E) Top	See Plan	#6@7½"	42
"	a_{338}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	20*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	8
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
L	a_{339}	(E) Top	See Plan	#6@7½"	42
"	a_{339}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	20*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	7*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
M	a_{339}	(E) Top	See Plan	#6@7½"	42
"	a_{339}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	19*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	5*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
N	a_{340}	(E) Top	See Plan	#6@7½"	42
"	a_{340}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	19*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	8*
"	b_{340}	"	Betw. 52 & 53	"	7
"	b_{340}	"	Betw. 53 & 54	"	8
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
O	a_{340}	(E) Top	See Plan	#6@7½"	42
"	a_{340}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	18*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10*
"	b_{340}	Bott.	Betw. 52 & 54	"	10

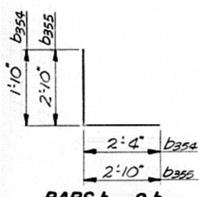
Panel	Bar	Top or Bott. of Slab	Location	Size & Spacing	No.
O	b_{340}	Bott.	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
P	a_{341}	(E) Top	See Plan	#6@7½"	42
"	a_{341}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	17*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	10
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
Q	a_{331}	(E) Top	See Plan	#6@7½"	42
"	a_{341}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	17*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	8
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
R	a_{342}	(E) Top	See Plan	#6@7½"	42
"	a_{342}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	16*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	8*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
S	a_{342}	(E) Top	See Plan	#6@7½"	42
"	a_{342}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	16*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	7*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
T	a_{343}	(E) Top	See Plan	#6@7½"	42
"	a_{343}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	15*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	10
"	b_{340}	"	Betw. 52 & 54	"	6
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
U	a_{343}	(E) Top	See Plan	#6@7½"	42
"	a_{343}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	15*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	9*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
V	a_{344}	(E) Top	See Plan	#6@7½"	42
"	a_{344}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	14*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	8*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
W	a_{344}	(E) Top	See Plan	#6@7½"	42
"	a_{344}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@8"	14*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	7*
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
X	a_{345}	(E) Top	See Plan	#6@7½"	42
"	a_{345}	Bott.	"	"	42
"	b_{332}	(E) Top	"	#5@12"	13*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	Bott.	Betw. 52 & 54	"	6*

Panel	Bar	Top or Bott. of Slab	Location	Size & Spacing	No.
X	b_{340}	Bott.	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2
Y	a_{345}	(E) Top	See Plan	#6@7½"	41
"	a_{345}	Bott.	"	"	43
"	b_{331}	(E) Top	"	#5@12"	13*
"	b_{340}	(E) Top	"	#5·2e.s.	3
"	b_{340}	Bott.	Betw. 51 & 52	#5@8"	7
"	b_{340}	"	Betw. 52 & 54	"	5
"	b_{340}	"	Under S. Curb	#5·2e.s.	3
"	b_{340}	"	Betw. 51 & Jt.	#5@8"	2

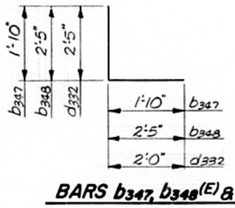
Note: 2e.s. = 2 Equal Spaces
* = Fan re-bars as required.



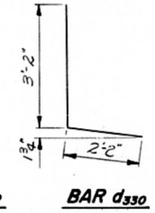
BAR x_{330}(E)



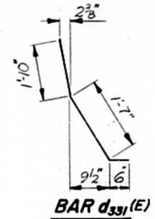
BARS b_{354} & b_{355}



BARS b_{347}, b_{348}(E) & d_{332}

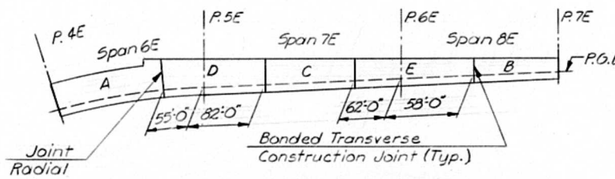


BAR d_{330}



BAR d_{331}(E)

BAR a_{346}(E)



SLAB POURING SEQUENCE

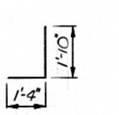
Note: The concrete floor slab shall be poured in one continuous operation between construction joints.

The pouring shall be done in alphabeticol order. If the area C is not poured on the same day as A and B, then there should be a seven (7) day time lapse between pours.

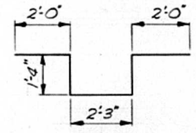
BILL OF MATERIAL
RAMP E - SPANS 6E, 7E & 8E

Bar	No.	Size	Length	Shape
a_{330}	386	#6	26'-0"	——
a_{331}	56	#6	28'-8"	——
a_{332}	28	#6	27'-1"	——
a_{333}	28	#6	25'-6"	——
a_{334}	56	#6	25'-0"	——
a_{335}	56	#6	24'-6"	——
a_{336}	56	#6	22'-11"	——
a_{337}	168	#6	22'-1"	——
a_{338}	168	#6	21'-0"	——
a_{339}	168	#6	19'-11"	——
a_{340}	168	#6	18'-10"	——
a_{341}	168	#6	17'-9"	——
a_{342}	168	#6	16'-7"	——
a_{343}	168	#6	15'-6"	——
a_{344}	168	#6	14'-5"	——
a_{345}	168	#6	13'-4"	——
a_{346}	636	#6	4'-0"	——
a_{347}	3	#6	4'-0"	——
b_{330}	14	#5	23'-6"	——
b_{331}	37	#5	24'-5"	——
b_{332}	492	#5	25'-10"	——
b_{333}	2	#8	40'-8"	——
b_{334}	10	#8	35'-3"	——
b_{335}	2	#8	28'-9"	——
b_{336}	2	#5	3'-0"	——
b_{337}	5	#5	8'-0"	——
b_{338}	11	#5	10'-3"	——
b_{339}	2	#8	26'-2"	——
b_{340}	728	#8	27'-9"	——
b_{341}	6	#5	19'-10"	——
b_{342}	6	#5	26'-3"	——
b_{343}	10	#8	34'-3"	——
b_{344}	6	#8	10'-5"	——
b_{345}	2	#8	10'-5"	——
b_{346}	22	#5	26'-3"	——
b_{347}	1	#5	3'-8"	L
b_{348}	1	#5	4'-10"	L

Bar	No.	Size	Length	Shape
b_{349}	26	#5	28'-10"	——
b_{350}	4	#5	13'-1"	——
b_{351}	4	#5	21'-1"	——
b_{352}	4	#5	13'-8"	——
b_{353}	8	#8	33'-5"	——
b_{354}	1	#8	4'-2"	L
b_{355}	1	#8	5'-8"	L
b_{356}	10	#8	35'-1"	——
b_{357}	2	#8	23'-6"	——
b_{358}	8	#8	13'-2"	——
d_{330}	796	#4	5'-6"	L
d_{331}	848	#5	4'-2"	L
d_{332}	6	#6	4'-5"	L
d_{333}	10	#6	8'-11"	⊓
e_{330}	132	#4	14'-4"	——
e_{331}	12	#4	11'-7"	——
e_{332}	6	#4	13'-0"	——
e_{333}	6	#4	3'-2"	L
e_{334}	90	#4	13'-8"	——
e_{335}	36	#4	12'-11"	——
e_{336}	6	#4	10'-5"	——
e_{337}	48	#4	15'-3"	——
x_{330}	75	#6	4'-11"	C
Rem. of Exist. Deck Drains			Lump Sum	1
Class X Concrete			Cu.Yds.	454.7
Reinforcement Bars			Lbs.	122,540
Neo. Exp. Joint (13")			Lin. Ft.	13.6
Neo. Exp. Joint (Long.)			Lin. Ft.	55.4
Bit. Conc. Sc. Mix. D. C.I.			Tons	116.2
Waterprf. Membrane Sys.			Sq. Yds.	1,434.1
Floor Drains			Each	40
Bituminous Concrete Surface Removal			Sq. Yds.	21.8
Altered Rail Rem.			Lin. Ft.	55.3
Curb Plate Removal			Lin. Ft.	55.6
Protective Coat			Sq. Yd.	32.0



BAR e_{333}



BAR d_{333}

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 6E, 7E & 8E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158)-11-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.
CHECKED	C.R.N.
DRAWN	D.A.N.
CHECKED	C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	65B
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 61B of 88

TABLE OF SLAB REINFORCEMENT

Floor BM. No.	Bar	Top or Bott. of Slab	Location	Size & Spacing	No.
112-115	b_{390}(E)	Top	See Plan	#5@12"	24
	b_{390}(E)	"	Under Curbs	#5-2 eq. spa.	6
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	23
	b_{391}(E)	"	Under Curbs	"	4
116-117	b_{390}(E)	"	See Plan	lap w/b_{331}(E) & b_{332}(E)	24
	b_{390}(E)	"	Under Curb	lap w/b_{334}(E) & b_{345}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	23
	b_{391}(E)	"	Under Curb	"	2
118-120	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	22
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	21
	b_{391}(E)	"	Under Curb	"	2
121-122	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	21
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	20
	b_{391}(E)	"	Under Curb	"	2
123-124	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	20
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	19
	b_{391}(E)	"	Under Curb	"	2
125-126	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	19
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	18
	b_{391}(E)	"	Under Curb	"	2
127	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	18
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	17
	b_{391}(E)	"	Under Curb	"	2
128-129	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	17
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	16
	b_{391}(E)	"	Under Curb	"	2
130-131	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	16
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	15
	b_{391}(E)	"	Under Curb	"	2
132-133	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	15
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	14
	b_{391}(E)	"	Under Curb	"	2
134-135	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	14
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	13
	b_{391}(E)	"	Under Curb	"	2
136	b_{390}(E)	"	See Plan	lap w/b_{332}(E)	13
	b_{390}(E)	"	Under Curb	lap w/b_{340}(E)	3
	b_{391}(E)	"	See Plan	Alt. w/b_{390}(E)	12
	b_{391}(E)	"	Under Curb	"	2

BILL OF MATERIAL
RAMP E – SPANS 6E, 7E & 8E

Bar	No.	Bar	No.	Size	Length	Shape
a_{330}(E)	192	a_{330}	194	#6	26'-0"	——
a_{331}(E)	28	a_{331}	28	#6	28'-8"	——
a_{332}(E)	14	a_{332}	14	#6	27'-1"	——
a_{333}(E)	14	a_{333}	14	#6	25'-6"	——
a_{334}(E)	28	a_{334}	28	#6	25'-0"	——
a_{335}(E)	28	a_{335}	28	#6	24'-6"	——
a_{336}(E)	28	a_{336}	28	#6	22'-11"	——
a_{337}(E)	84	a_{337}	84	#6	22'-1"	——
a_{338}(E)	84	a_{338}	84	#6	21'-0"	——
a_{339}(E)	84	a_{339}	84	#6	19'-11"	——
a_{340}(E)	84	a_{340}	84	#6	18'-10"	——
a_{341}(E)	84	a_{341}	84	#6	17'-9"	——
a_{342}(E)	84	a_{342}	84	#6	16'-7"	——
a_{343}(E)	84	a_{343}	84	#6	15'-6"	——
a_{344}(E)	84	a_{344}	84	#6	14'-5"	——
a_{345}(E)	83	a_{345}	85	#6	13'-4"	——
a_{346}(E)	636			#6	4'-0"	——
a_{347}(E)	3			#6	4'-0"	——
a_{348}(E)	28			#5	6'-0"	——
a_{349}(E)	420			#5	3'-11"	——
b_{330}(E)	13	b_{330}	1	#5	23'-6"	——
b_{331}(E)	37			#5	24'-5"	——
b_{332}(E)	452	b_{332}	40	#5	25'-10"	——
		b_{333}	2	#8	40'-8"	——
		b_{334}	10	#8	35'-3"	——
		b_{335}	2	#8	28'-9"	——
		b_{336}	2	#5	3'-0"	——
b_{337}(E)	5			#5	8'-0"	——
b_{338}(E)	1	b_{338}	10	#5	10'-3"	——
		b_{339}	2	#8	26'-2"	——
b_{340}(E)	87	b_{340}	641	#5	27'-9"	——
b_{341}(E)	3	b_{341}	3	#5	19'-10"	——
b_{342}(E)	3	b_{342}	3	#5	26'-3"	——
		b_{343}	10	#8	34'-3"	——
b_{344}(E)	3	b_{344}	3	#5	24'-6"	——
		b_{345}	2	#8	10'-5"	——
b_{346}(E)	6	b_{346}	16	#5	26'-3"	——
		b_{347}	1	#5	3'-8"	L
b_{348}(E)	1			#5	4'-10"	L
b_{349}(E)	13	b_{349}	13	#5	28'-10"	——
b_{350}(E)	2	b_{350}	2	#5	13'-1"	——
b_{351}(E)	2	b_{351}	2	#5	21'-1"	——
b_{352}(E)	2	b_{352}	2	#5	13'-8"	——
		b_{353}	8	#8	33'-5"	——
		b_{354}	1	#8	4'-2"	L
		b_{355}	1	#8	5'-8"	L
		b_{356}	10	#8	35'-1"	——
		b_{357}	2	#8	23'-6"	——
		b_{358}	8	#8	13'-2"	——
b_{390}(E)	572			#5	2'-6"	——
b_{391}(E)	518			#6	13'-0"	——

BILL OF MATERIAL
RAMP E – SPANS 6E, 7E & 8E

Bar	No.	Bar	No.	Size	Length	Shape
		d_{330}	796	#4	5'-4"	L
d_{33}(E)	868			#5	3'-11"	L
		d_{332}	6	#6	4'-5"	L
		d_{333}	10	#6	8'-11"	⌐⌙
		e_{330}	132	#4	14'-4"	——
		e_{331}	12	#4	11'-7"	——
		e_{332}	6	#4	13'-0"	——
		e_{333}	6	#4	3'-2"	L
		e_{334}	90	#4	13'-8"	——
		e_{335}	36	#4	12'-11"	——
		e_{336}	6	#4	10'-5"	——
		e_{337}	48	#4	15'-3"	——
x_{330}(E)	75			#6	4'-11"	⊂

Rem. of Exist. Deck Drains	Lump Sum	1
Class X Concrete	Cu. Yds.	426.5
Reinforcement Bars	Lbs.	64590
Reinf. Bars (Epoxy Coated)	Lbs.	71280
Neo. Exp. Joint (13")	Lin. Ft.	13.6
Neo. Exp. Joint (Long.)	Lin. Ft.	553.4
Floor Drains	Each	40
Bituminous Concrete Surface Rem.	Sq. Yds.	21.8
Altered Rail Removal	Lin. Ft.	554.3
Curb Plate Removal	Lin. Ft.	556.6
Protective Coat	Sq. Yd.	1748.1

SUPERSTRUCTURE DETAILS
RAMP E – SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED C.R.N.
DRAWN P.M.M.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

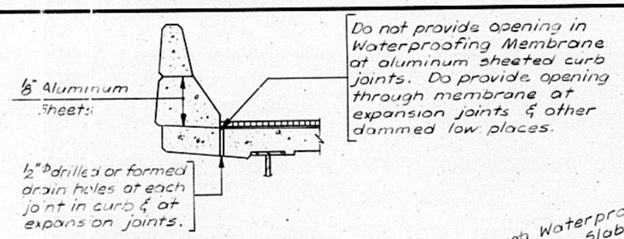
FILE NO. 74001
DATE 5-14-82

Added 5/14/82

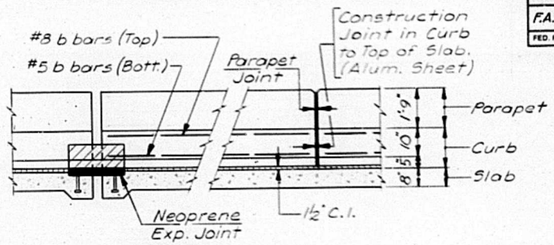
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	66
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 62 of 88

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS



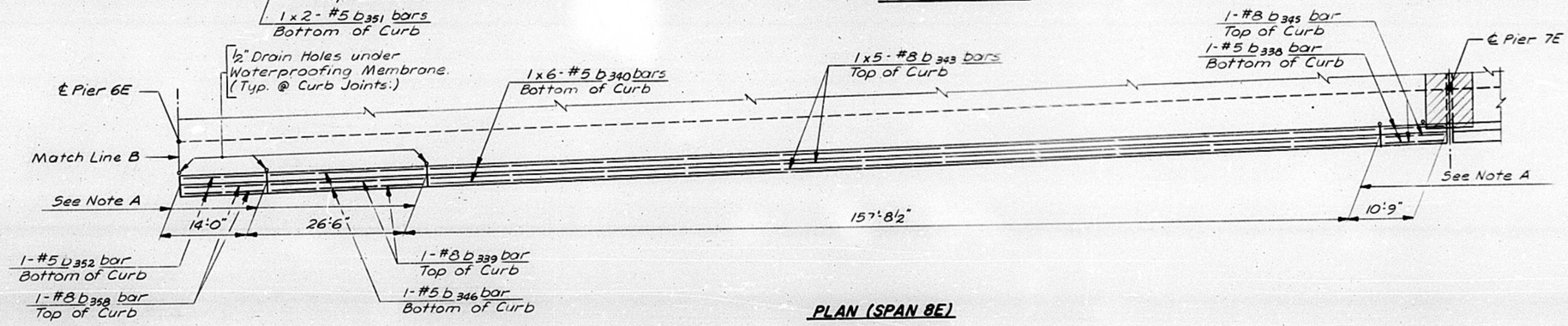
SECTION AT CURB JOINTS



SECTION A-A

PLAN (SPAN 6E)

PLAN (SPAN 7E)



PLAN (SPAN 8E)

Notes:

Note A: Construction Joints in Curb to Top of Slab. (Aluminum Sheets.)

Curb Class X Concrete & Reinforcement quantities included in Ramp E - Spans 6E, 7E & 8E Bill of Material. See Sheet 61 of 88.

All dimensions shown are measured horizontally & Parallel to ℄ Survey unless otherwise shown.

CURB DETAILS
RAMP E - SPANS 6E, 7E & 8E
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	D.A.M.
CHECKED	C.R.N.
DRAWN	D.A.M.
CHECKED	C.R.N.

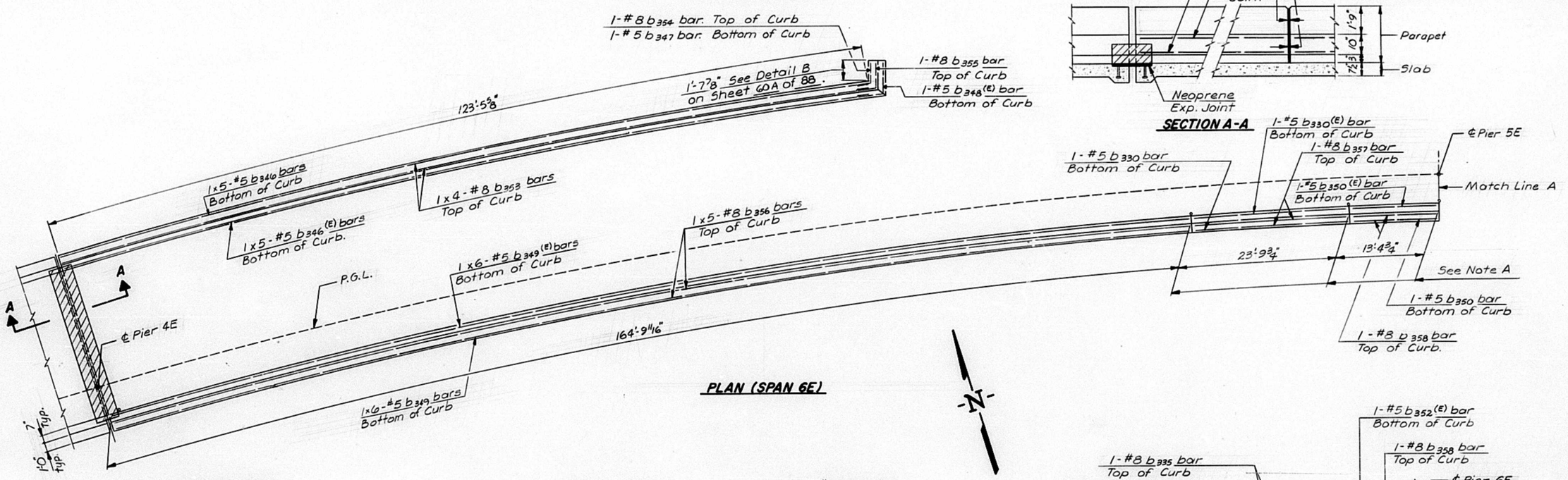
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

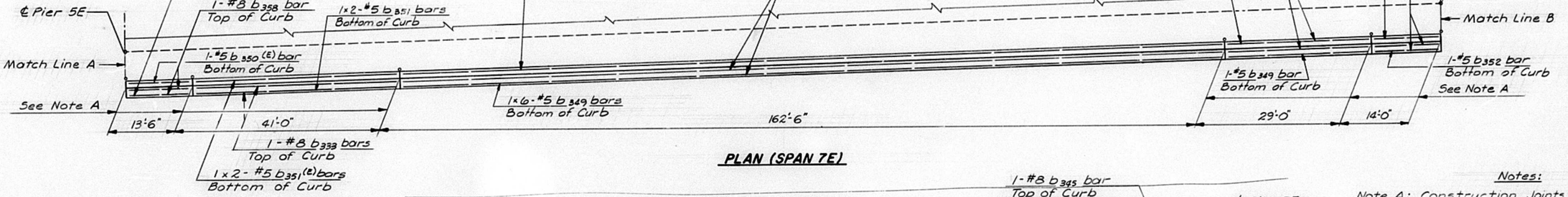
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	66A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 62A of 88

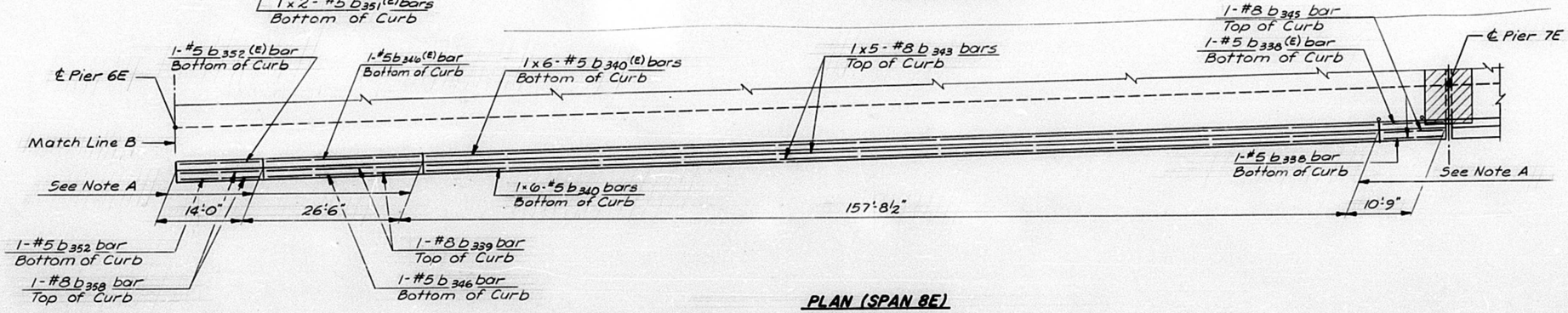


PLAN (SPAN 6E)

SECTION A-A



PLAN (SPAN 7E)



PLAN (SPAN 8E)

Notes:

Note A: Construction Joints in Curb to Top of Slab. (Aluminum Sheets.)

Curb Class X Concrete & Reinforcement quantities included in Ramp E - Spans 6E, 7E & 8E Bill of Materiol. See Sheet 61A & 61B of 88

All dimensions shown are measured horizontally & Parallel to ℄ Survey unless otherwise shown.

CURB DETAILS
RAMP E - SPANS 6E, 7E & 8E
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

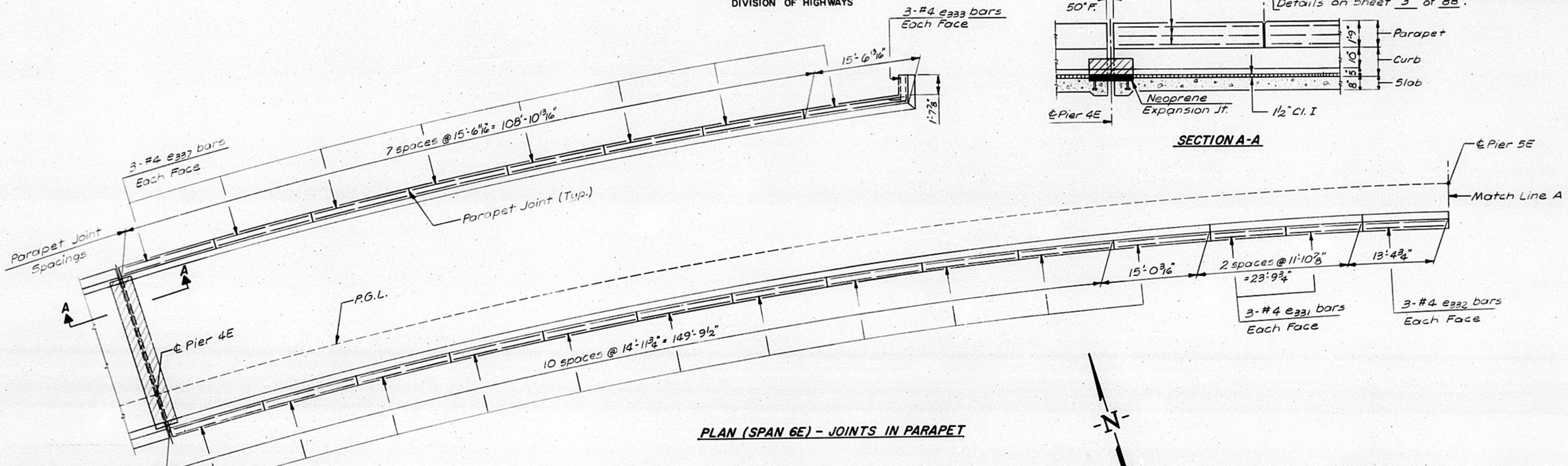
FILE NO. 74001
DATE 8-22-83

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

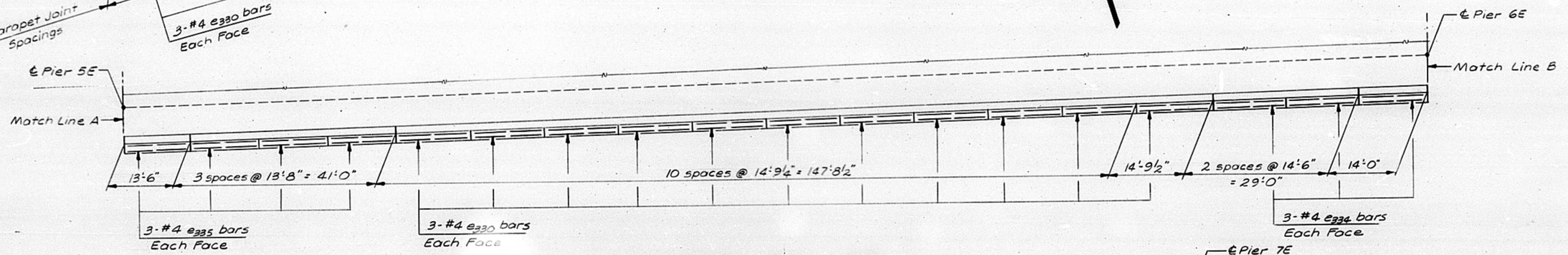
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	158-1)-D	PEORIA & TAZEWELL	97	67
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 63 of 88

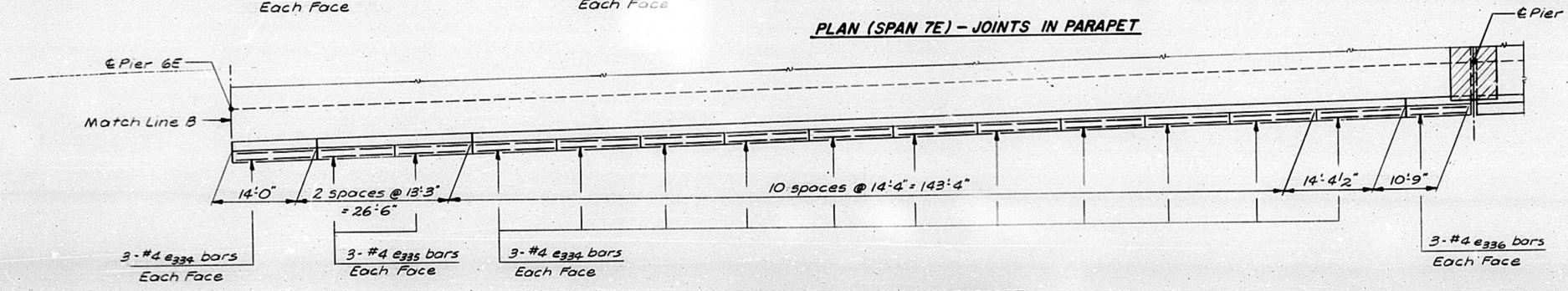


PLAN (SPAN 6E) – JOINTS IN PARAPET

SECTION A-A



PLAN (SPAN 7E) – JOINTS IN PARAPET



PLAN (SPAN 8E) – JOINTS IN PARAPET

Note: All dimensions shown are measured horizontally & parallel to ℄ Survey unless otherwise shown

Note:
Parapet Class X Concrete & Reinforcement quantities included in Ramp E-Spans 6E, 7E & 8E Bill of Material.
See Sheet 61 of 88.

PARAPET DETAILS
RAMP E – SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

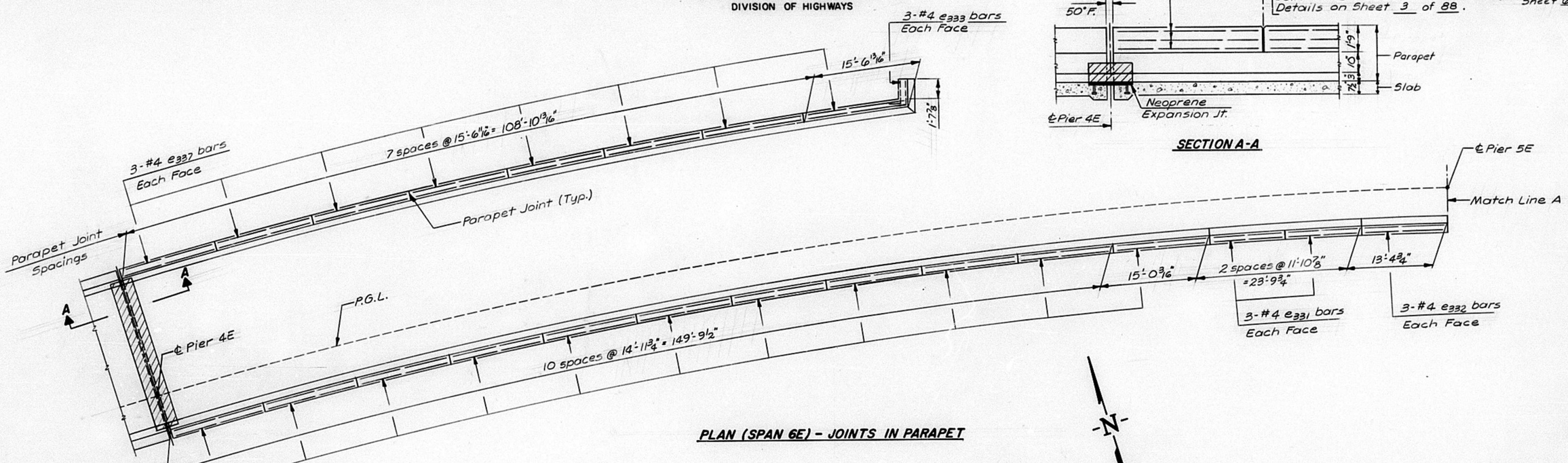
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

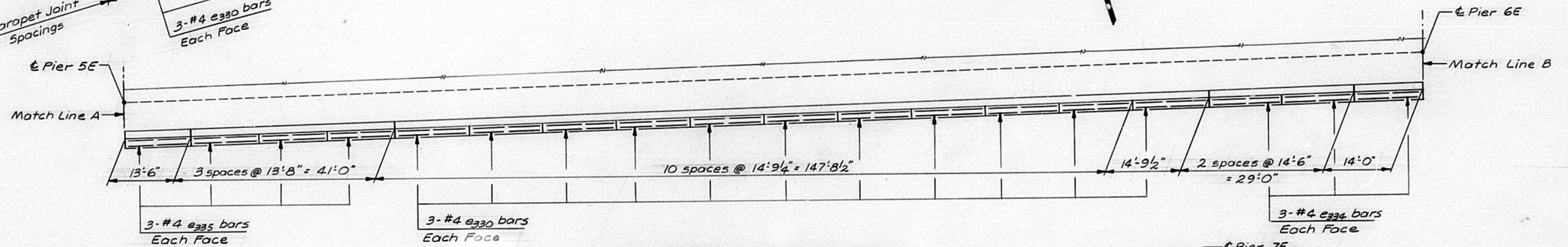
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(158-1) -D	PEORIA & TAZEWELL	97	67A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 63A of 88

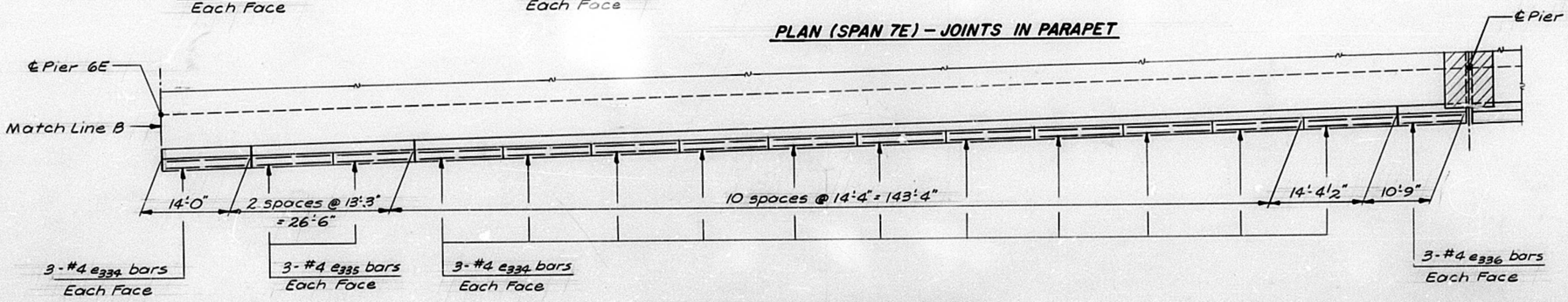


PLAN (SPAN 6E) - JOINTS IN PARAPET

SECTION A-A



PLAN (SPAN 7E) - JOINTS IN PARAPET



PLAN (SPAN 8E) - JOINTS IN PARAPET

Note: All dimensions shown are measured horizontally & parallel to ℄ Survey unless otherwise shown.

Note:
Parapet Class X Concrete & Reinforcement quantities included in Ramp E-Spans 6E, 7E & 8E Bill of Material. See Sheet 61A & 61B of 88.

PARAPET DETAILS
RAMP E - SPANS 6E, 7E & 8E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED D.A.N.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

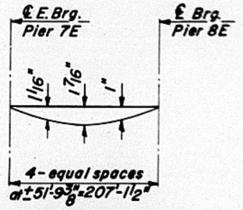
FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

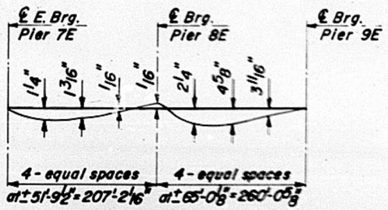
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(15B-1) -D	Peoria & Tazewell	97	68
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 64 of 68



GIRDER 1



GIRDER 2

DEAD LOAD DEFLECTION DIAGRAMS

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 Deflection (Elev. B) of the adjacent tables.

Note: Span IOE adjusted elevations include girder deflection plus additional adjustment due to rotation of pin connected floor beams.

STRINGER 1

	STATION	ELEV. A	ELEV. B
F.B.-150	19+67.284	498.442	498.442
a	19+77.286	498.442	498.460
b	19+87.288	498.442	498.477
F.B.-151	19+93.289	498.442	498.488
c	20+03.291	498.442	498.503
d	20+13.293	498.442	498.518
F.B.-152	20+19.294	498.442	498.527
e	20+29.296	498.442	498.537
f	20+39.298	498.442	498.547
F.B.-153	20+45.300	498.442	498.553
g	20+55.302	498.442	498.557
h	20+65.304	498.442	498.561
F.B.-154	20+71.305	498.442	498.564
i	20+81.307	498.442	498.561
j	20+91.309	498.442	498.559
F.B.-155	20+97.310	498.442	498.557
k	21+07.312	498.442	498.549
l	21+17.314	498.442	498.541
F.B.-156	21+23.315	498.442	498.535
m	21+33.317	498.442	498.520
n	21+43.319	498.442	498.505
F.B.-157	21+49.320	498.442	498.496
o	21+59.322	498.442	498.475
p	21+69.324	498.442	498.454
F.B.-158	21+75.326	498.442	498.442
q	21+85.328	498.442	498.445
r	21+95.330	498.442	498.448
F.B.-159	22+01.331	498.442	498.450
s	22+11.333	498.442	498.458
t	22+21.335	498.442	498.466
F.B.-160	22+27.336	498.442	498.470
u	22+37.338	498.442	498.480
v	22+47.340	498.442	498.490
F.B.-161	22+53.341	498.442	498.495
w	22+63.343	498.442	498.505
x	22+73.345	498.442	498.515
F.B.-162	22+79.346	498.442	498.520
y	22+89.348	498.442	498.532
z	22+99.350	498.442	498.544
F.B.-163	23+05.352	498.442	498.550
a_1	23+15.354	498.442	498.567
b_1	23+25.356	498.442	498.584
F.B.-164	23+31.357	498.442	498.595
c_1	23+41.359	498.442	498.608
d_1	23+51.361	498.442	498.621
F.B.-165	23+57.362	498.442	498.630
e_1	23+67.364	498.442	498.626
f_1	23+77.366	498.442	498.622
F.B.-166	23+83.367	498.442	498.620
g_1	23+93.369	498.442	498.620
h_1	24+03.371	498.442	498.620
F.B.-167	24+09.372	498.442	498.620
i_1			
j_1			
F.B.-168			

STRINGER 2

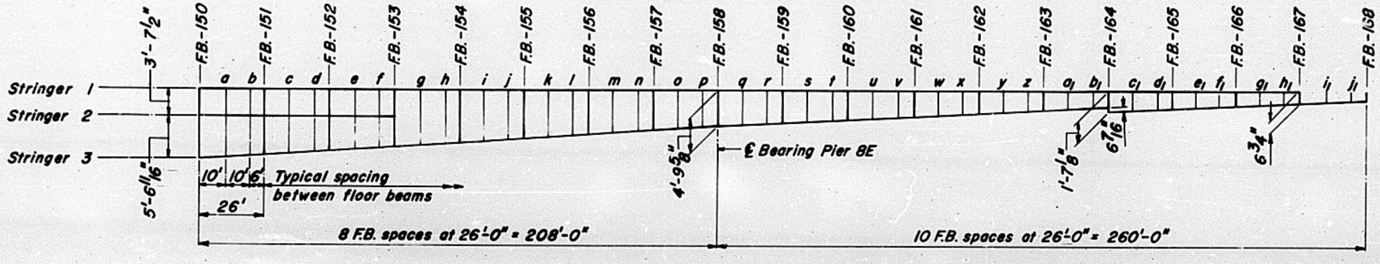
STATION	ELEV. A	ELEV. B
19+67.284	498.381	498.381
19+77.286	498.381	498.402
19+87.288	498.381	498.423
19+93.289	498.381	498.435
20+03.291	498.381	498.451
20+13.293	498.381	498.467
20+19.294	498.381	498.476
20+29.296	498.381	498.484
20+39.298	498.381	498.492
20+45.300	498.381	498.496

STRINGER 3

STATION	ELEV. A	ELEV. B
19+67.284	498.288	498.288
19+77.286	498.291	498.316
19+87.288	498.295	498.344
19+93.289	498.297	498.361
20+03.291	498.300	498.381
20+13.293	498.304	498.401
20+19.294	498.306	498.413
20+29.296	498.309	498.421
20+39.298	498.313	498.429
20+45.300	498.315	498.435
20+55.302	498.318	498.430
20+65.304	498.322	498.425
20+71.305	498.324	498.423
20+81.307	498.328	498.410
20+91.309	498.331	498.397
20+97.310	498.333	498.388
21+07.312	498.337	498.373
21+17.314	498.340	498.358
21+23.315	498.342	498.350
21+38.317	498.346	498.343
21+43.319	498.350	498.336
21+49.320	498.352	498.333
21+59.322	498.355	498.341
21+69.324	498.359	498.349
21+75.326	498.361	498.355
21+85.328	498.364	498.380
21+95.330	498.368	498.405
22+01.331	498.370	498.420
22+11.333	498.373	498.455
22+21.335	498.377	498.490
22+27.336	498.379	498.510
22+37.338	498.382	498.556
22+47.340	498.386	498.602
22+53.341	498.388	498.630
22+63.343	498.391	498.669
22+73.345	498.395	498.708
22+79.346	498.397	498.730
22+89.348	498.400	498.761
22+99.350	498.404	498.792
23+05.352	498.406	498.810
23+15.354	498.409	498.841
23+25.356	498.412	498.872
23+31.357	498.414	498.980
23+41.359	498.409	498.997
23+51.361	498.412	499.014
23+57.362	498.414	499.025
23+67.364	498.418	498.958
23+77.366	498.421	498.891
23+83.367	498.423	498.850
23+93.369	498.426	498.819
24+03.371	498.430	498.788
24+09.372	498.432	498.770
24+19.374	498.435	498.643
24+29.376	498.438	498.516
24+35.390	498.440	498.440

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION



DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

Note: All dimensions shown in plan are measured horizontally.

NOTES:

F.B's. 150 thru 168 & points a thru j_1 have been adjusted for individual stringer stationing. Stations shown are stations of the intersection of F.B's. & section lines with the profile grade line.

See Sheet 30 for Method of Determining Fillet Heights.

TOP OF SLAB ELEVATIONS
RAMP E - SPANS 9E & 10E

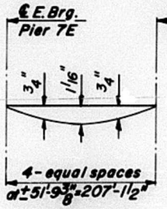
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L	HANSON ENGINEERS INCORPORATED	FILE NO	74001
CHECKED S.C.A			
DRAWN D.A.N.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE	8-22-80
CHECKED W.D.L			

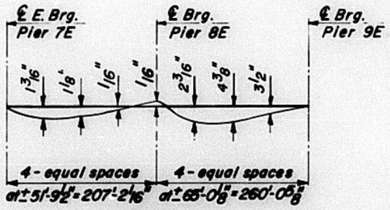
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA-49	(15B-1)-D	Peoria & Tazewell	97	64A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 64A of 88.



GIRDER 1



GIRDER 2

DEAD LOAD DEFLECTION DIAGRAMS

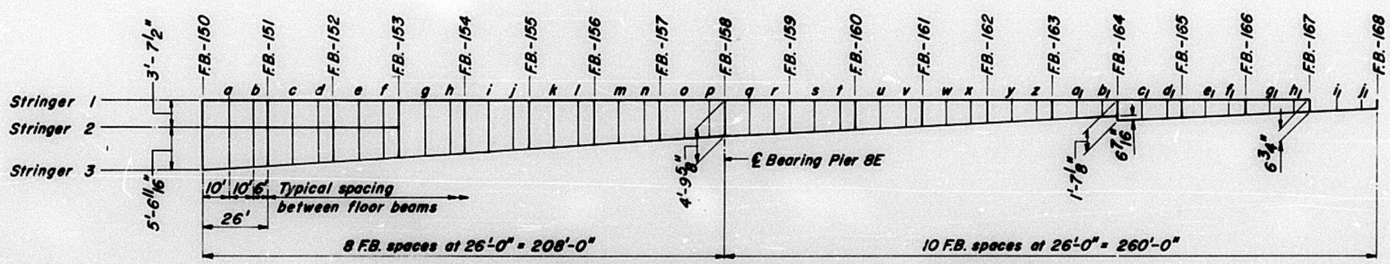
Note: The above deflections are not to be used in the field if the Engineer is working from The Theoretical Grade Elevations Adjusted for Dead Load Deflection (Elev. B) of the adjacent tables.

Note: Span 10E adjusted elevations include girder deflection plus additional adjustment due to rotation of pin connected floor beams.

	STRINGER 1			STRINGER 2			STRINGER 3		
	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B	STATION	ELEV. A	ELEV. B
F.B.-150	19+67.284	498.400	498.400	19+67.284	498.339	498.339	19+67.284	498.246	498.246
a	19+77.286	498.400	498.413	19+77.286	498.339	498.356	19+77.286	498.249	498.273
b	19+87.288	498.400	498.427	19+87.288	498.339	498.374	19+87.288	498.253	498.299
F.B.-151	19+93.289	498.400	498.435	19+93.289	498.339	498.385	19+93.289	498.255	498.315
c	20+03.291	498.400	498.446	20+03.291	498.339	498.398	20+03.291	498.258	498.334
d	20+13.293	498.400	498.457	20+13.293	498.339	498.411	20+13.293	498.262	498.353
F.B.-152	20+19.294	498.400	498.463	20+19.294	498.339	498.419	20+19.294	498.264	498.365
e	20+29.296	498.400	498.470	20+29.296	498.339	498.425	20+29.296	498.267	498.372
f	20+39.298	498.400	498.477	20+39.298	498.339	498.431	20+39.296	498.271	498.380
F.B.-153	20+45.300	498.400	498.481	20+45.300	498.339	498.435	20+45.300	498.273	498.386
g	20+55.302	498.400	498.483				20+55.302	498.276	498.381
h	20+65.304	498.400	498.485				20+65.304	498.280	498.377
F.B.-154	20+71.305	498.400	498.486				20+71.305	498.282	498.375
i	20+81.307	498.400	498.483				20+81.307	498.286	498.363
j	20+91.309	498.400	498.481				20+91.309	498.289	498.351
F.B.-155	20+97.310	498.400	498.479				20+97.310	498.291	498.343
k	21+07.312	498.400	498.472				21+07.312	498.295	498.329
l	21+17.314	498.400	498.464				21+17.314	498.298	498.315
F.B.-156	21+23.315	498.400	498.460				21+23.315	498.300	498.308
m	21+33.317	498.400	498.450				21+33.317	498.304	498.301
n	21+43.319	498.400	498.439				21+43.319	498.308	498.295
F.B.-157	21+49.320	498.400	498.433				21+49.320	498.310	498.292
o	21+59.322	498.400	498.420				21+59.322	498.313	498.300
p	21+69.324	498.400	498.408				21+69.324	498.317	498.308
F.B.-158	21+75.326	498.400	498.400				21+75.326	498.319	498.313
q	21+85.328	498.400	498.404				21+85.328	498.322	498.335
r	21+95.330	498.400	498.408				21+95.330	498.326	498.357
F.B.-159	22+01.331	498.400	498.410				22+01.331	498.328	498.370
s	22+11.333	498.400	498.418				22+11.333	498.331	498.405
t	22+21.335	498.400	498.425				22+21.335	498.335	498.439
F.B.-160	22+27.336	498.400	498.430				22+27.336	498.337	498.460
u	22+37.338	498.400	498.434				22+37.338	498.340	498.502
v	22+47.340	498.400	498.438				22+47.340	498.344	498.544
F.B.-161	22+53.341	498.400	498.440				22+53.341	498.346	498.570
w	22+63.343	498.400	498.455				22+63.343	498.349	498.605
x	22+73.345	498.400	498.471				22+73.345	498.353	498.639
F.B.-162	22+79.346	498.400	498.480				22+79.346	498.355	498.660
y	22+89.348	498.400	498.488				22+89.348	498.358	498.683
z	22+99.350	498.400	498.495				22+99.350	498.362	498.706
F.B.-163	23+05.352	498.400	498.500				23+05.352	498.364	498.720
a_1	23+15.354	498.400	498.508				23+15.354	498.367	498.758
b_1	23+25.356	498.400	498.515				23+25.356	498.370	498.797
F.B.-164	23+31.357	498.400	498.520				23+31.357	498.372	498.820
c_1	23+41.359	498.400	498.528				23+41.359	498.367	498.835
d_1	23+51.361	498.400	498.535				23+51.361	498.370	498.851
F.B.-165	23+57.362	498.400	498.540				23+57.362	498.372	498.860
e_1	23+67.364	498.400	498.536				23+67.364	498.376	498.806
f_1	23+77.366	498.400	498.532				23+77.366	498.379	498.752
F.B.-166	23+83.367	498.400	498.530				23+83.367	498.381	498.720
g_1	23+93.369	498.400	498.530				23+93.369	498.384	498.689
h_1	24+03.371	498.400	498.530				24+03.371	498.388	498.658
F.B.-167	24+09.372	498.400	498.530				24+09.372	498.390	498.640
i_1							24+19.374	498.393	498.547
j_1							24+29.376	498.396	498.454
F.B.-168							24+35.390	498.398	498.398

ELEVATIONS - TOP OF CONCRETE

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION



DIAGRAMMATIC PLAN - TOP OF CONCRETE ELEVATIONS

Note: All dimensions shown in plan are measured horizontally.

NOTES:

F.B's. 150 thru 168 & points a thru j_1 have been adjusted for individual stringer stationing. Stations shown are stations of the intersection of F.B's. & section lines with the profile grade line.

See Sheet 30 of 88 for Method of Determining Fillet Heights.

TOP OF SLAB ELEVATIONS
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
DRAWN D.A.N.
CHECKED W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.49	(15B-1)-D	PEORIA & TAZEWELL	97	69
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 65 of 88

Proposed 13" Neoprene Expansion Joint (General Tire) to mate with Existing 13" Neoprene Expansion Joint (General Tire).

Existing 13" Neoprene Expansion Joint (By General Tire).

Existing ¾" Curb ℄

Neoprene Expansion Joint (Longitudinal)

Existing Grid Floor System

SECTION A-A

SECTION B-B

SECTION C-C

℄ F.B. 150 ℄ F.B. 151 ℄ F.B. 152 ℄ F.B. 153 ℄ F.B. 154 ℄ F.B. 155 ℄ F.B. 156 ℄ F.B. 157 ℄ F.B. 158 ℄ F.B. 159

Typical @ ea. F.B. for all Longit. Reinf.

Typ. @ F.B's. 151-155 incl. & 161-167 incl.

Neoprene Expansion Joint (Longitudinal) See Section D-D on Sheet 60 of 88.

71'-6" for b_{366} bars

58'-9" to end of b_{366} bars

℄ Pier 7E ℄ Pier 8E

P.G.L.

Match Line A

Const. Jt. **

42'-0"

32'-0" to next joint in curb.

72'-0" to Break in Curb

208'-11½"

81'-2½" to end of parapet

13 - Floor Drains @ 15'-0" = 180'-0"

End of slab, curb & parapet

7" @ 50° F.

455 - #5 d_{361} bars @ 11" cts. (Inside Face)
318 - #6 a_{372} bars @ 15" cts. (Lap to alternate top transverse bars.)
418 - #4 d_{360} bars @ 12" cts. (Outside Face)
416'-11½" End to end of parapet.
471'-3½" End to end of slab.
(Measured parallel to ℄ Survey)

PARTIAL PLAN

58'-9" to ℄ Pier 8E (b_{366})

Match Line A

N

℄ F.B. 159 ℄ F.B. 160 ℄ F.B. 161 ℄ F.B. 162 ℄ F.B. 163 ℄ F.B. 164 ℄ F.B. 165 ℄ F.B. 166 ℄ F.B. 167 ℄ F.B. 168

℄ Pier 9E (Final Position)

22'-0" to ℄ Pier 8E & joint in curb

Const. Jt. **

Break in Curb

72'-0" to ℄ Pier 8E

4 - Floor Drains @ 15'-0" = 45'-0"

15'-0"

5 - Floor Drains @ 15'-0" = 60'-0" (Connect to outside face of Girder 2)

15'-0"

4 - Floor Drains @ 15'-0" = 45'-0" (Connect to inside face of Girder 2)

6'-6"

End of Concrete Curb & Parapet

136'-0"

Floor Drain Spacing (For Length & Details See Sht 67 of 88. Steel Railing - For Details see Sheet 68 of 88

52'-0"

2'-4"

(2½") Preformed Joint Seal.

NOTES

Bars indicated thus 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.

See Sheet 67 of 88 for Bill of Material & Bar Details.

For spacing of b_{361} & b_{362} bars in bottom of slab see Sheet 66 of 88.

** Construction Joints in Curb to top of Slab. (Insert ⅛" Aluminum Sheets.)

For Curb & Parapet Details & Reinforcement see Sheet 69 of 88.

Bend Reinforcement Bars in field to fit Transition in Curb & Parapet.

For Light Pedestal Details & Reinforcement see Sheet 3 of 88.

For Section A-A see this Sheet

For Section L-L see Sheet 67 of 88.

PARTIAL PLAN

DETAILS OF TRANSITION AT CURB & PARAPET

SEC. AT F.B's. 150 - 161

SEC. AT F.B's. 162 - 165

SEC. AT F.B's. 166 - 168

TABLE OF DIMENSIONS SLAB

F.B. No.	a	b	c
150	14'-1 3/16"	2"	N.A.
151	13'-6 5/8"	2"	N.A.
152	13'-0 1/16"	2"	N.A.
153	12'-5½"	2"	N.A.
154	11'-10 9/16"	2"	N.A.
155	11'-4 5/16"	2"	N.A.
156	10'-9 3/4"	2"	N.A.
157	10'-3 3/16"	2"	N.A.
158	9'-8 5/8"	2"	N.A.
159	9'-2 1/16"	2"	N.A.
160	8'-7½"	2"	N.A.
Break	8'-2 7/16"	2"	N.A.
161	8'-0"	1 9/16"	N.A.
162	7'-1 3/16"	N.A.	3"
163	6'-5 3/16"	N.A.	2 5/16"
164	5'-8 9/16"	N.A.	1 7/16"
165	4'-11 7/8"	N.A.	6 5/16"
166	4'-3 1/4"	N.A.	1'-7 3/8"
167	3'-6 5/8"	N.A.	1'-10 7/16"
168	2'-10"	N.A.	2'-3"

Note: All dimensions shown are measured horizontally & parallel to ℄ Survey unless otherwise shown.

Bar Size	Minimum Lap Distance
#4	1'-6"
#5	1'-8"
#6	2'-0"
#8	3'-6"

SUPERSTRUCTURE
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-84

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS
F.A.49	(158-1) -D	PEORIA & TAZEWELL	97
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	

Sheet 68A of

7½" Slab

SECTION B-B

℄ F.B. 157 ℄ F.B. 158 ℄ F.B. 159

58'-9" to end of b_{366}(E) bars

9-#5 b_{362}(E) @ 12" cts. Top

℄ Pier 8E

8-#5 b_{362}(E) @ 12" cts. Top

P.G.L.

9'-3½"

83-#6 a_{363}(E) bars @ 7½" cts. Top
83-#6 a_{363} bars @ 7½" cts. Bottom

83-#6 a_{364}(E) bars @ 7½" cts. Top
83-#6 a_{364} bars @ 7½" cts. Bott.

Const. Jt. **

42'-0"

Const. Jt. **

9x5-#6 b_{366}(E) bars @ 12" cts. Top of Slab over Pier 8E (Fan as required & alternate with b_{362}(E) bars).

32'-0" to next joint in curb.

180'-0"

22'-1½"

21'-6"

4 Flr. D. @ 15'-0

208'-11½"

72'-0" to Break in Curb

PARTIAL PLAN

℄ F.B. 162
42-#6 a_{366}(E) @ 7½" cts. Top
42-#6 a_{366} @ 7½" cts. Bott.

℄ F.B. 163
42-#6 a_{367}(E) @ 7½" cts. Top
42-#6 a_{367} @ 7½" cts. Bott.

6-#6 b_{367}(E) @ 12" cts. Top-Alt. with b_{362}(E)

℄ F.B. 164
42-#6 a_{368}(E) @ 7½" cts. Top
42-#6 a_{368} @ 7½" cts. Bott.
4-#5 b_{362}(E) @ 12" cts. Top

℄ F.B. 165
42-#6 a_{369}(E) @ 7½" cts. Top
42-#6 a_{374} @ 7½" cts. Bott.
a_{375}(E)
5-#6 b_{367}(E) @ 12" cts. Top-Alt. with b_{362}(E)

℄ F.B. 166
42-#6 a_{370}(E) @ 7½" cts. Top
42-#6 a_{370} @ 7½" cts. Bott.
7½" typ.
P.G.L.
4'-3⅝"
3-#6 b_{367}(E) bar. Top.

℄ F.B. 167
42-#6 a_{371}(E) @ 7½" cts. Top
42-#6 a_{371} @ 7½" cts. Bott.

℄ F.B. 168
℄ Pier 9E (Final Position)

58'-9" to ℄ Pier 8E (b_{366})(E)

Match Line A

8-#5 b_{362}(E) @ 12" cts. Top

b_{366}(E)

8'-2½"

83-#6 a_{365}(E) bars @ 7½" cts. Top
83-#6 a_{365} bars @ 7½" cts. Bott.

a_{364}(E) & a_{364}

o.s. of slab

7-#5 b_{362}(E) 12" cts. Top

8-#6 b_{367}(E) @ 12" cts. Top-Alt. with b_{362}(E) over floor beam.

5-#5 b_{362}(E) @ 12" cts. Top

5-#5 b_{362}(E) @ 12" cts. Top

o.s. of slab

o.s. of curb

a_{372}(E)

℄ Light Pedestal

127'-9¼" to ℄ Pier 9E

3-#5 b_{362}(E) @ 12" cts. Top
d_{360} & d_{361}(E)

10'-0" Transition

21-#4 a_{373}(E) bars @ 15" cts.
(Lap to alternate top transverse bars)

1'-3"

3-#6 b_{367}(E) Top

8'-8"

3-#5 b_{362}(E) @ 12" cts. Top

2-#5 b_{362}(E) @ 12" cts. Top
3x3-#5 b_{362}(E) Top

42-#4 a_{373}(E) bars @ 15" cts.
(Lap to alternate top transverse bars)

4'-0"

(2½" Prefor Joint Seal

32'-0" to ℄ Pier 8E & joint in curb

Const. Jt. **

Break in Curb

15'-0"

4-Floor Drains @ 15'-0" = 45'-0"

72'-0" to ℄ Pier 8E

5-Floor Drains @ 15'-0" = 60'-0"
(Connect to outside face of Girder 2)

15'-0"

4-Floor Drains @ 15'-0" = 45'-0"
(Connect to inside face of Girder 2)

136'-0"

6'-6"

End of Concrete Curb & Parapet

Floor Drain Spacing (For Length & Details See Sht 67A of 88. Steel Railing - For Details see Sheet 68A of 88

52'-0"

2'-4"

NOTES

Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

See Sheet 67A of 88 for Bill of Material & Bar Details.

For spacing of b_{361} & b_{362} bars in bottom of slab see Sheet 66A of 88.

** Construction Joints in Curb to top of Slab. (Insert ⅛" Aluminum Sheets.)

For Curb & Parapet Details & Reinforcement see Sheet 69A of 88.

Bend Reinforcement Bars in field to fit Transition in Curb & Parapet.

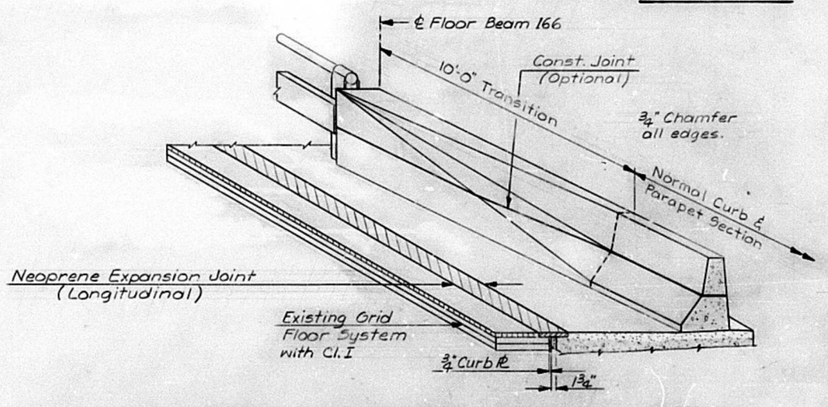
For Light Pedestal Details & Reinforcement see Sheet 3 of 88.

For Section A-A see this Sheet.

For Section L-L see Sheet 67A of 88.

Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.

PARTIAL PLAN



DETAILS OF TRANSITION AT CURB & PARAPET

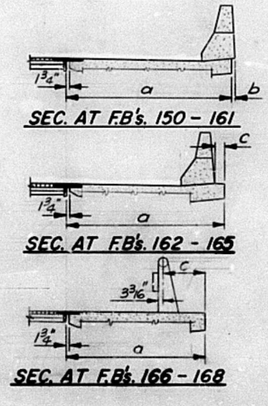


TABLE OF DIMENSIONS SLAB

F.B. No.	a	b	c
150	14'-1 3/16"	2"	N.A.
151	13'-6 5/8"	2"	N.A.
152	13'-0 1/16"	2"	N.A.
153	12'-5½"	2"	N.A.
154	11'-10 15/16"	2"	N.A.
155	11'-4 5/16"	2"	N.A.
156	10'-9¾"	2"	N.A.
157	10'-3 3/16"	2"	N.A.
158	9'-8 5/8"	2"	N.A.
159	9'-2 1/16"	2"	N.A.
160	8'-7½"	2"	N.A.
Break	8'-2 1/16"	2"	N.A.
161	8'-0"	1 9/16"	N.A.
162	7'-1 13/16"	N.A.	3⅛"
163	6'-5 3/16"	N.A.	2 5/16"
164	5'-8 9/16"	N.A.	4 1/4"
165	4'-11 7/8"	N.A.	6 3/16"
166	4'-3 1/4"	N.A.	1'-7 7/8"
167	3'-6 5/8"	N.A.	1'-10 7/16"
168	2'-10"	N.A.	2'-3"

Note: All dimensions shown are measured horizontally & parallel to ℄ Survey unless otherwise shown.

Bar Size	Minimum Lap Distance
#4	1'-6"
#5	1'-8"
#6	2'-0"
#8	3'-6"

SUPERSTRUCTURE
RAMP E - SPANS 9E & 10E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED WDL
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

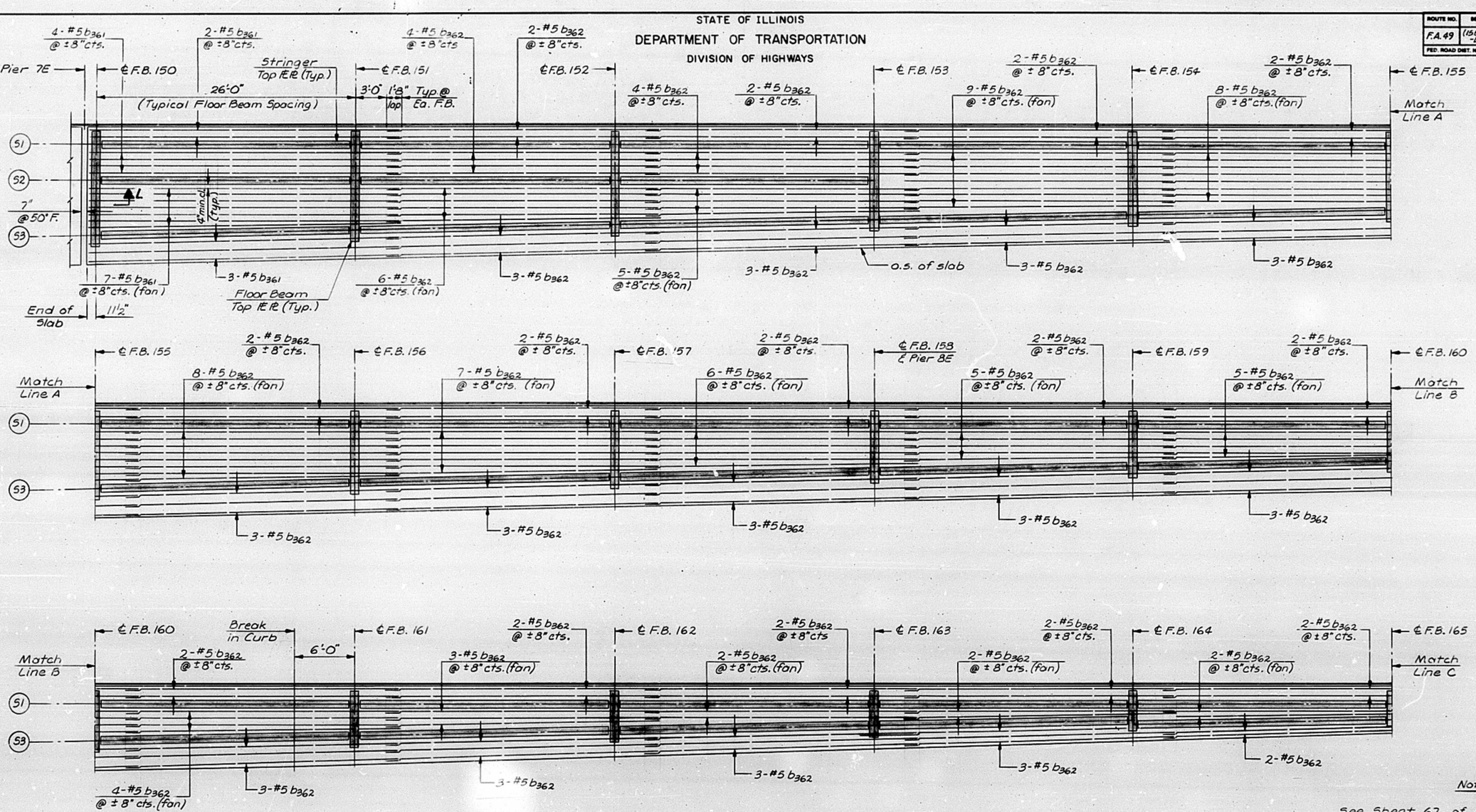
FILE NO. 740
DATE 8-82

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1)-D	Peoria & Tazewell	97	70
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 66 of 88



PLAN OF SLAB
(Showing Bottom Longitudinal Reinforcement Only.)

Notes:

See Sheet 67 of 88 for Bill of Material & Bar Details.

All other slab reinforcement is shown on Sheet 65 of 88.

For Section L-L see Sheet 67 of 88.

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 9E & 10E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

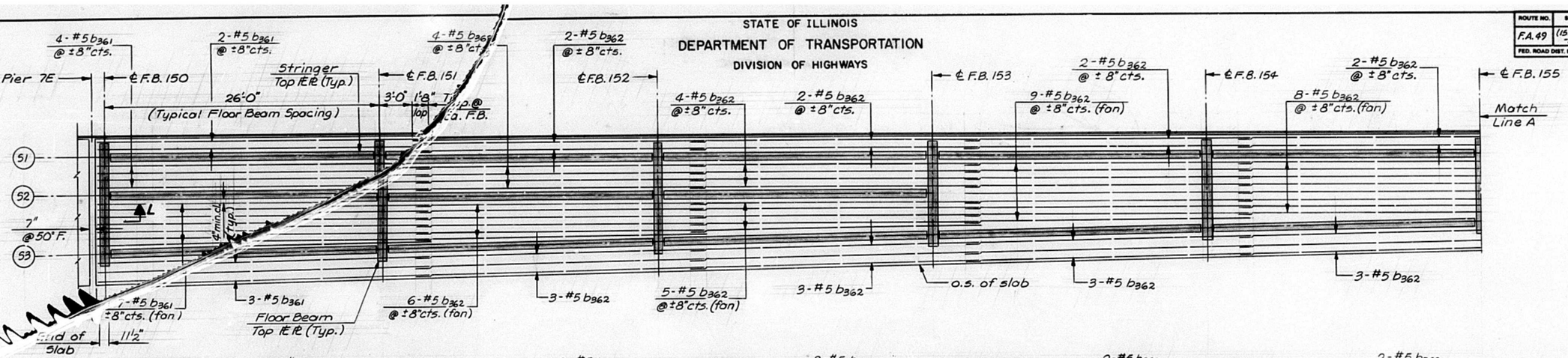
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

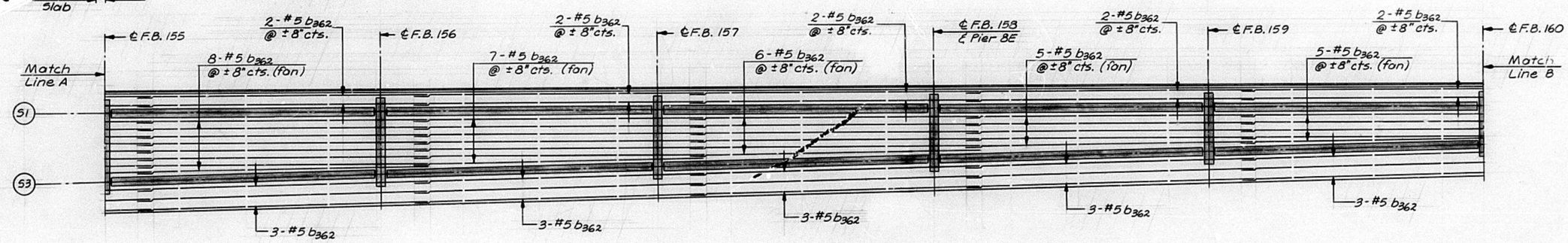
FILE NO. 74001
DATE 8-22-80

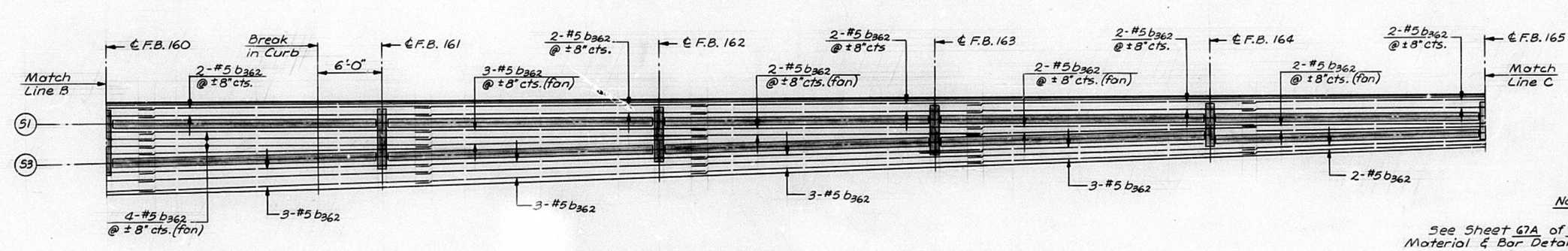
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

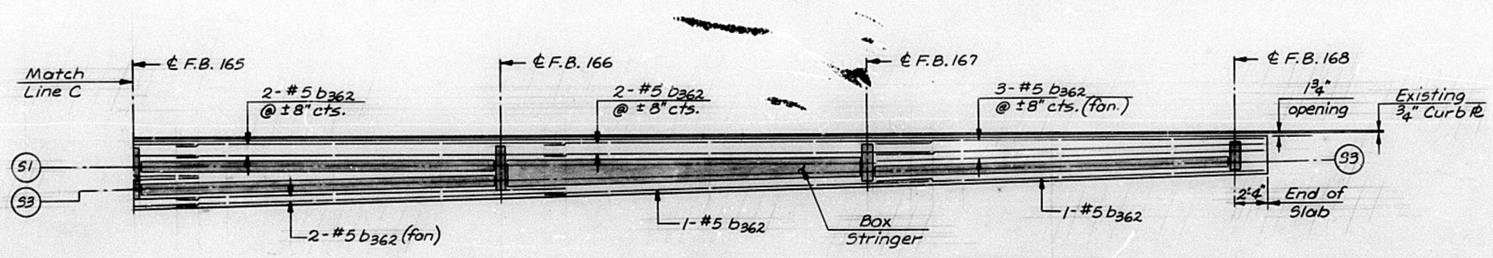
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	Peoria & Tazewell	97	70A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 66A of 88









PLAN OF SLAB
(Showing Bottom Longitudinal Reinforcement Only.)

Notes:

See Sheet 67A of 88 for Bill of Material & Bar Details.

All other slab reinforcement is shown on Sheet 65A of 88.

For Section L-L see Sheet 67A of 88.

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 9E & 10E

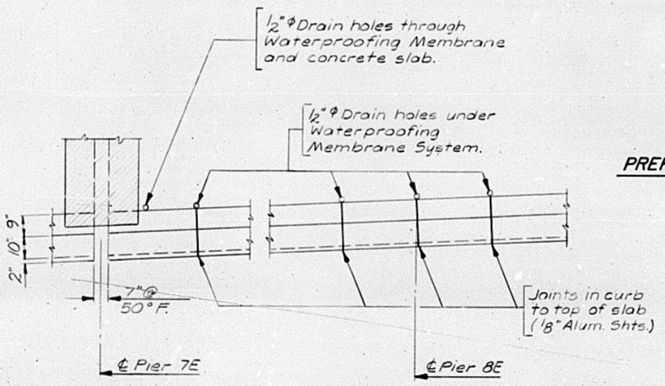
McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.	HANSON ENGINEERS INCORPORATED	FILE NO. 74001
CHECKED	C.R.N.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 8-22-80
DRAWN	D.A.N.		
CHECKED	C.R.N.		

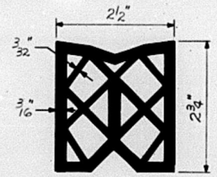
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(158-1) -D	PEORIA & TAZEWELL	88	71
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

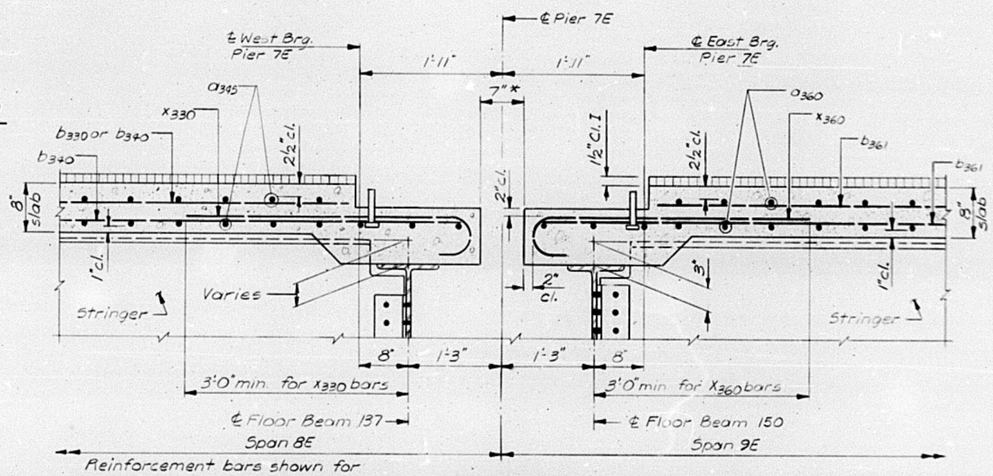
Sheet 67 of 88



PLAN

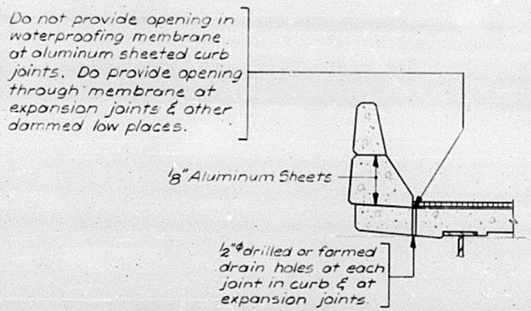


PREFORMED JOINT SEALER (2½")



Reinforcement bars shown for span 8E are listed on sheet 61 of 88.

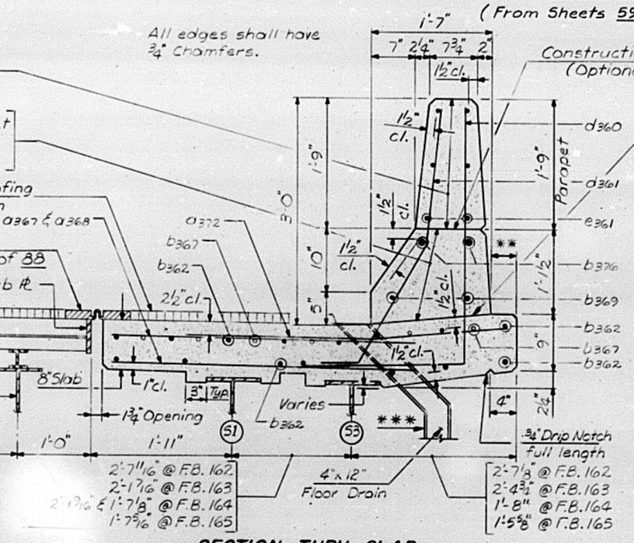
SECTION L - L
(From Sheets 59, 65 & 66 of 88)



SECTION AT CURB JOINTS

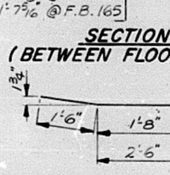
SECTION THRU SLAB
(BETWEEN FLOOR BEAMS 150 & 161)

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

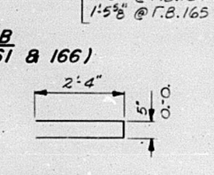


SECTION THRU SLAB
(BETWEEN FLOOR BEAMS 161 & 166)

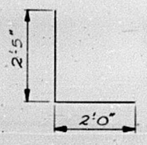
* = Varies - See Dimension "b" in Table of Slab Dimensions on Sht. 65 of 88.
** = Varies - See Dimension "c" in Table of Slab Dimensions on Sht. 65 of 88.
*** = All Floor Drains in Spans 9E & 10E shall be 16'-4" long and shall be located clear of all diaphragms, floor beams, & lateral bracing. See Sht. 3 & 60 of 88 for additional details of Floor Drains.



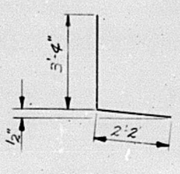
BARS a369 & a372



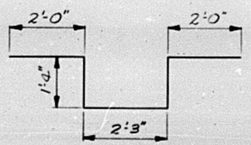
BARS a373 & a373(E)



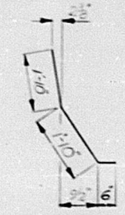
BAR d362



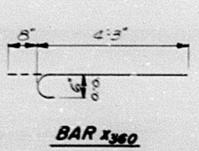
BAR d360



BAR d363



BAR d361



BAR x360

BILL OF MATERIAL (CONT'D)
RAMP E - SPANS 9E & 10E

Class X Concrete	130.5 Cu.Yds.
Reinforcement Bars	41,320 Lbs.
Reinforcement Bars (Epoxy Coated)	930 Lbs.
Preformed Joint Seal (2½")	4.0 Lin.Ft.
Neo. Exp. Jt. (Long.)	465.6 Lin.Ft.
4"x12" Floor Drains	27 Each
Bituminous Concrete Surface Removal	18.5 Sq.Yds.
Altered Rail Removal	469.3 Lin.Ft.
Steel Railing	52.0 Lin.Ft.
Stud Shear Connectors	1,350 Each
Bit. Conc. Sc. Mix. D. Cl.	18.0 Tons
Waterproofing Membrane System	221.8 Sq.Yds.
Curb Plate Removal	467.3 Lin.Ft.
High Strength Bolt Tightening	1 Lump Sum
Protective Coat	193.7 Sq.Yds.

BILL OF MATERIAL
RAMP E - SPANS 9E & 10E

BAR	NO.	BAR	NO.	SIZE	LENGTH	SHAPE
		a360	167	#6	12'-3"	
		a361	166	#6	11'-2"	
		a362	166	#6	10'-1"	
		a363	166	#6	8'-11"	
		a364	166	#6	7'-4"	
		a365	166	#6	6'-10"	
		a366	84	#6	5'-10"	
		a367	84	#6	4'-1"	
		a368	84	#6	3'-2"	
		a369	42	#6	3'-2"	
		a370	42	#6	2'-11"	
a370(E)	42			#6	2'-11"	
		a371	42	#6	2'-2"	
a371(E)	42			#6	2'-2"	
		a372	313	#6	4'-0"	
		a373	21	#4	5'-1"	
a373(E)	42			#4	5'-1"	
		a374	42	#6	3'-9"	
		b361	32	#5	29'-11"	
		b362	322	#5	27'-8"	
b362(E)	14			#5	27'-8"	
		b366	45	#6	27'-8"	
		b367	96	#6	13'-0"	
b367(E)	6			#6	13'-0"	
		b368	2	#5	9'-8"	
		b369	10	#5	26'-6"	
		b370	4	#5	20'-6"	
		b371	4	#5	16'-7"	
		b372	4	#5	21'-8"	
		b373	12	#5	28'-9"	
		b374	2	#5	2'-2"	
		b375	2	#8	9'-8"	
		b376	8	#8	34'-0"	
		b377	4	#8	21'-7"	
		b378	2	#8	31'-8"	
		b379	4	#8	22'-7"	
		b380	10	#8	35'-8"	
		b381	2	#8	2'-2"	
		d360	418	#4	5'-6"	
		d361	455	#5	4'-2"	
		d362	6	#6	4'-8"	
		d363	10	#6	8'-11"	
		e360	6	#4	9'-8"	
		e361	42	#4	17'-8"	
		e362	12	#4	19'-8"	
		e363	12	#4	15'-8"	
		e364	18	#4	13'-8"	
		e365	60	#4	16'-1"	
		e366	6	#4	2'-2"	
		x360	25	#6	4'-11"	

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(158-1)-D
PEORIA & TAZEWELL COUNTIES

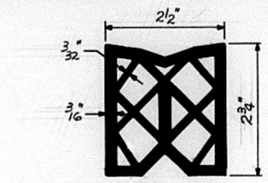
DESIGNED	W.D.L.	HANSON ENGINEERS INCORPORATED	PROJECT NO. 7402.11
CHECKED	C.R.N.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 8-22-80
DRAWN	D.A.N.		
CHECKED	C.R.N.		

Rev. 12-30-80

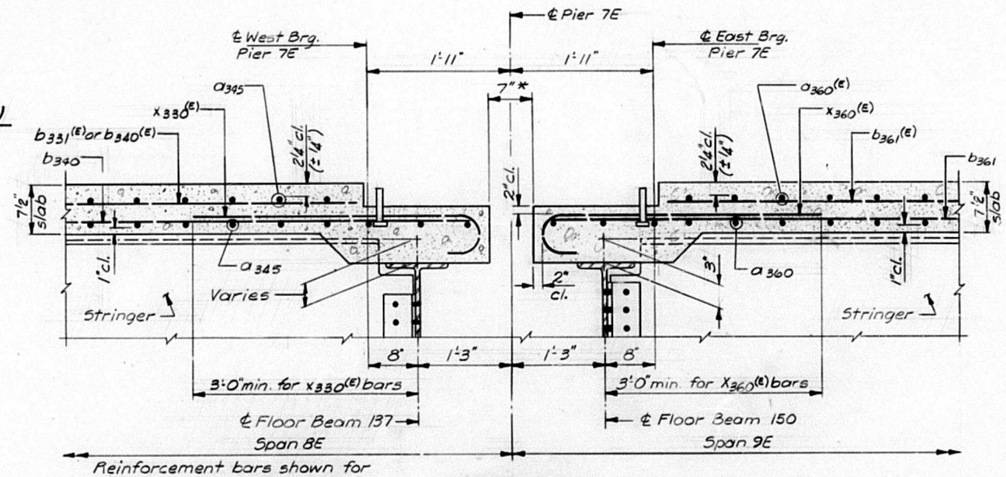
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(15B-1) -D	PEORIA & TAZEWELL	97	71A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 67A of 88



PREFORMED JOINT SEAL (2½")

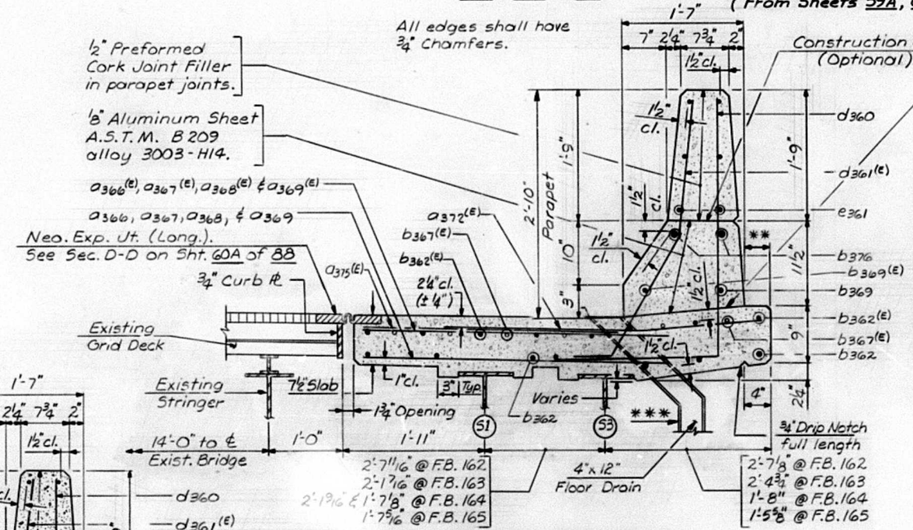


*@ 50°F.

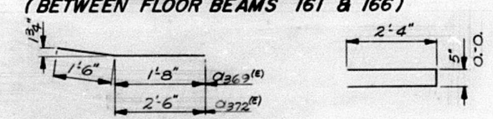
Reinforcement bars shown for span 8E are listed on sheets 61A & 61B of 88.

SECTION L-L

(From Sheets 59A, 65A & 66A of 88).



SECTION THRU SLAB
(BETWEEN FLOOR BEAMS 161 & 166)



BARS a369(E) & a372(E)

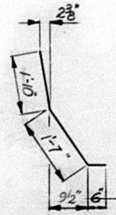
BAR a373(E)

* = Varies - See Dimension "b" in Table of Slab Dimensions on Sht. 65A of 88.
** = Varies - See Dimension "c" in Table of Slab Dimensions on Sht. 65A of 88.
*** = All Floor Drains in Spans 9E & 10E shall be 16'-4" long and shall be located clear of all diaphragms, floor beams, & lateral bracing. See Sht. 3 & 60A of 88 for additional details of Floor Drains

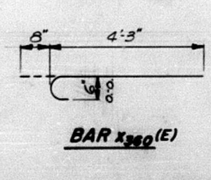
BAR d362

BAR d360

BAR d363



BAR d361(E)



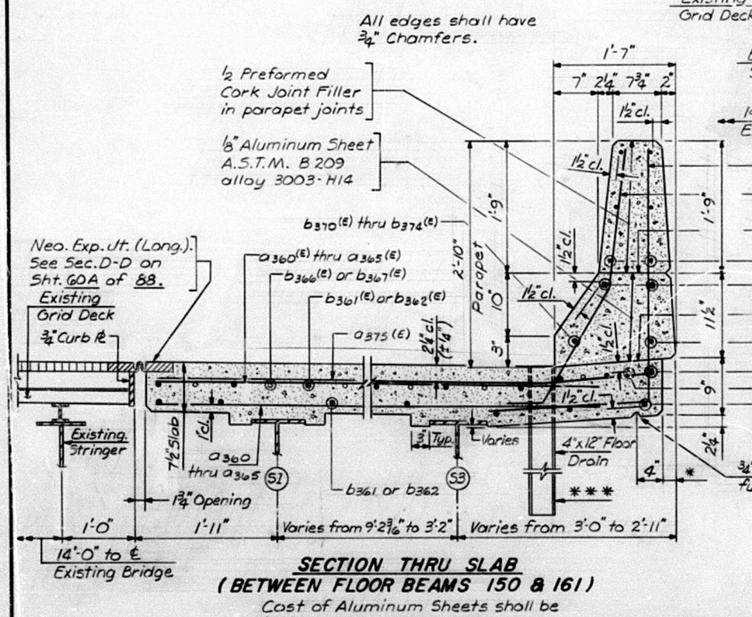
BAR x360(E)

BILL OF MATERIAL
RAMP E - SPANS 9E & 10E

BAR	NO.	BAR	NO.	SIZE	LENGTH	SHAPE
a360(E)	82	a360	85	#6	12'-3"	—
a361(E)	83	a361	83	#6	11'-2"	—
a362(E)	83	a362	83	#6	10'-1"	—
a363(E)	83	a363	83	#6	8'-11"	—
a364(E)	83	a364	83	#6	7'-4"	—
a365(E)	83	a365	83	#6	6'-10"	—
a366(E)	42	a366	42	#6	5'-10"	—
a367(E)	42	a367	42	#6	4'-1"	—
a368(E)	42	a368	42	#6	3'-2"	—
a369(E)	42			#6	3'-2"	⌐
		a370	42	#6	2'-11"	—
a370(E)	42			#6	2'-11"	—
		a371	42	#6	2'-2"	—
a371(E)	42			#6	2'-2"	—
a372(E)	313			#6	4'-0"	⌐
a373(E)	63			#4	5'-1"	⊐⊏
		a374	42	#6	3'-9"	—
a375(E)	333			#5	3'-11"	—
b361(E)	16	b361	16	#5	29'-11"	—
		b362	160	#5	27'-8"	—
b362(E)	176			#5	27'-8"	—
b306(E)	45			#6	27'-8"	—
b367(E)	102			#6	13'-0"	—
b368(E)	1	b368	1	#5	9'-8"	—
b369(E)	5	b369	5	#5	26'-6"	—
b370(E)	2	b370	2	#5	20'-6"	—
b371(E)	2	b371	2	#5	16'-7"	—
b372(E)	2	b372	2	#5	21'-8"	—
b373(E)	6	b373	6	#5	28'-9"	—
b374(E)	1	b374	1	#5	2'-2"	—
		b375	2	#8	9'-8"	—
		b376	8	#8	34'-0"	—
		b377	4	#8	21'-7"	—
		b378	2	#8	31'-8"	—
		b379	4	#8	22'-7"	—
		b380	10	#8	35'-8"	—
		b381	2	#8	2'-2"	—
		d360	418	#4	5'-4"	⌐
d361(E)	455			#5	3'-11"	⌐
		d362	6	#6	4'-8"	⌐
		d363	10	#6	8'-11"	⊔
		e360	6	#4	9'-8"	—
		e361	42	#4	17'-8"	—
		e362	12	#4	19'-8"	—
		e363	12	#4	15'-8"	—
		e364	18	#4	13'-8"	—
		e365	60	#4	16'-1"	—
		e366	6	#4	2'-2"	—
x360(E)	25			#6	4'-11"	⊔

BILL OF MATERIAL (CONT'D.)
RAMP E - SPANS 9E & 10E

Class X Concrete	Cu.Yds.	120.3
Reinforcement Bars	Lbs.	19,720
Reinforcement Bars (Epoxy Coated)	Lbs.	23,770
Preformed Joint Seal (2½")	Lin.Ft.	4.0
Neo. Exp. Jt. (Long.)	Lin.Ft.	465.6
4"x12" Floor Drains	Each	27
Bituminous Concrete Surface Removal	Sq.Yds.	18.5
Altered Rail Removal	Lin.Ft.	469.3
Steel Railing	Lin.Ft.	52.0
Stud Shear Connectors	Each	1,350
Curb Plate Removal	Lin.Ft.	467.3
High Strength Bolt Tightening	Lump Sum	1
Protective Coat	Sq.Yds.	434.8



SECTION THRU SLAB
(BETWEEN FLOOR BEAMS 150 & 161)

Cost of Aluminum Sheets shall be incidental to Class X Concrete.

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

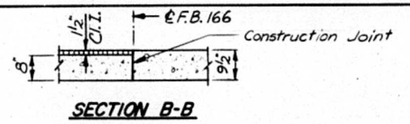
FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

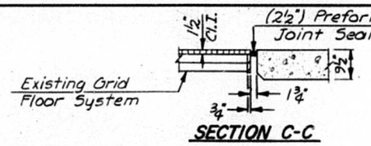
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	Peoria & Tazewell	97	72
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

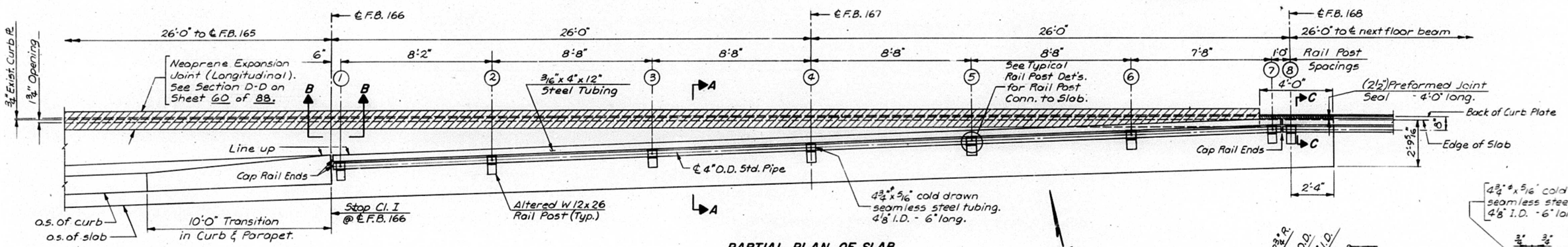
Sheet 68 of 88



SECTION B-B

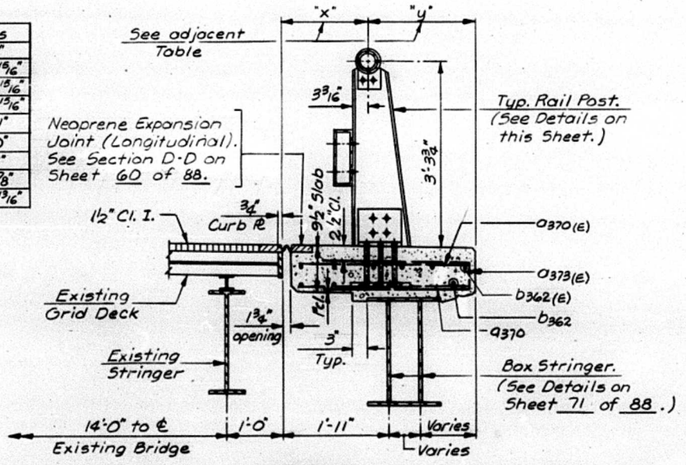


SECTION C-C

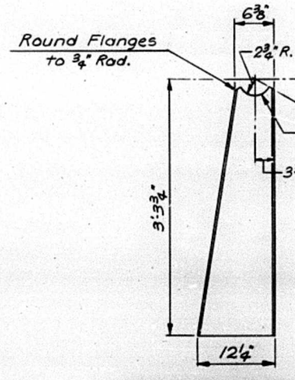


PARTIAL PLAN OF SLAB

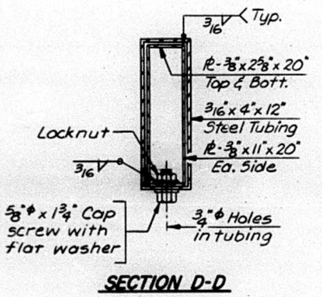
Rail Post No.	Dimensions "x"	"y"
1	2'-7⅛"	1'-7 15/16"
2	2'-3 7/16"	1'-8 1/16"
3	1'-11 9/16"	1'-9 13/16"
4	1'-7⅝"	1'-11"
5	1'-3⅜"	2'-0"
6	0'-11⅛"	2'-1"
7	0'-8 7/16"	2'-1⅜"
8	0'-8 3/16"	2'-1 13/16"



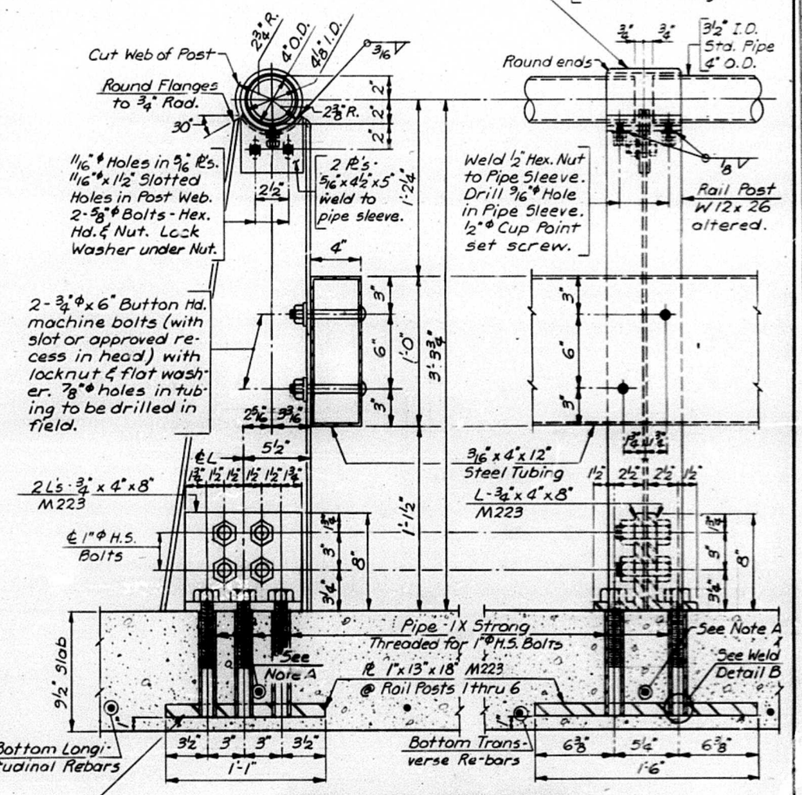
SECTION A-A



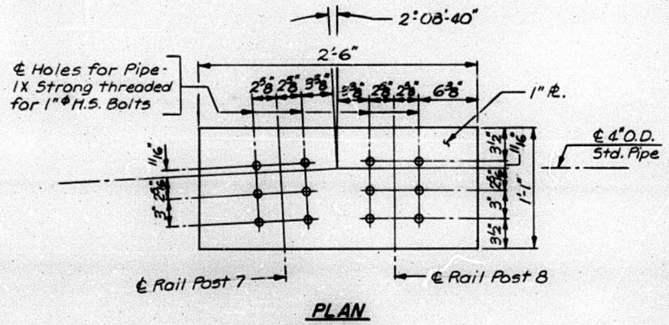
RAIL POST DIMENSIONS (ALTERED W12 x 26)



SECTION D-D



TYPICAL RAIL POST DETAILS



PLAN
DETAIL C
(Single Plate for Rail Posts 7 & 8.)

Notes:

All dimensions shown are measured horizontally.

Note A: Bottom Longitudinal & Transverse Reinforcement Bars that fall in line with 1"x 13"x 18" Plates shall be placed over the plates.

Pipes - 1X Strong shall be plugged during pouring of concrete. Upper end plugs shall be temporary & lower end plugs may be permanent.

Hollow structural steel tubing shall conform to the requirements of A.S.T.M. A-500 Grade B Structural Steel Tubing.

All other steel shapes & plates shall conform to the requirements of AASHTO M-183 unless otherwise noted.

Provide one ⅛" and one ¼" shim plate 6½" x 12", per post, to align rail box section.

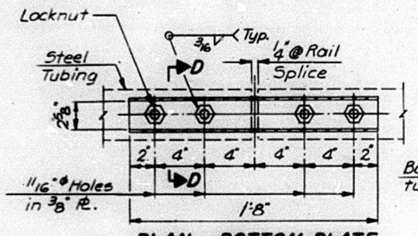
See General Note 7 on Sheet 1 of 88 for Painting.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM A-307 except for high strength bolts, nuts & washers noted which shall conform to AASHTO M-164.

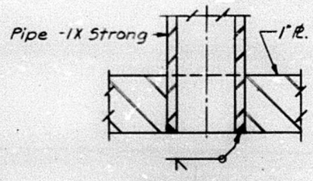
Railing shall be in accordance with Sec. 508 of the Std. Spec., except as noted, & paid for at the contract unit price per Lin. Ft. for Steel Railing.

Railing shall be adjusted to true vertical and horizontal alignment after erection.

Cap all rail ends as noted.



PLAN - BOTTOM PLATE
RAIL SPLICE DETAILS



WELD DETAIL B

1 Single Plate for both Rail Posts 7 & 8. Size = 1"x 13"x 30" M223 (See Det. C this Sht.)

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

S.C.O.
C.R.N.
D.A.N.
C.R.N.

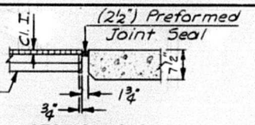
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

File No. 74001
Date 8-22-80

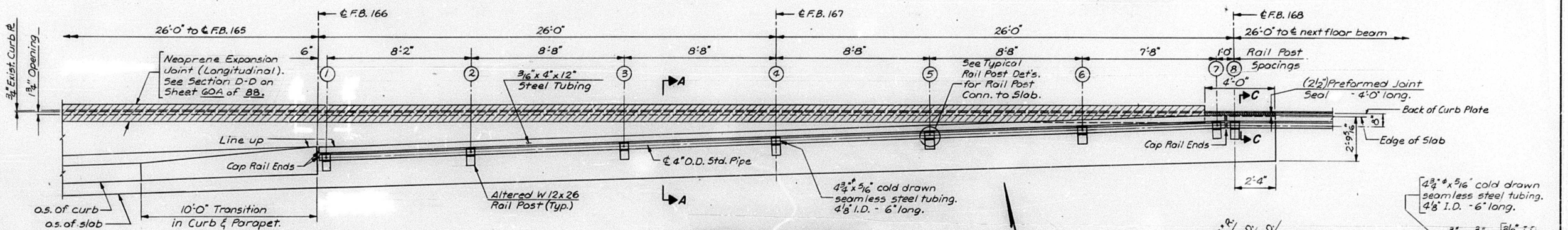
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	Peoria & Tazewell	97	72A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 68A of 88

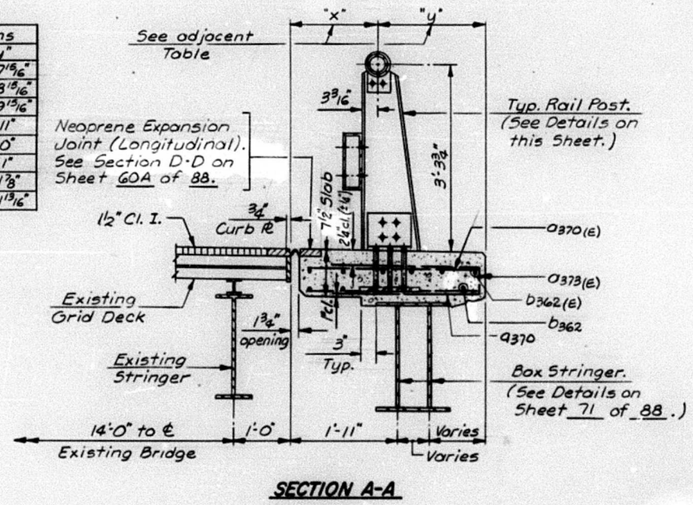


SECTION C-C

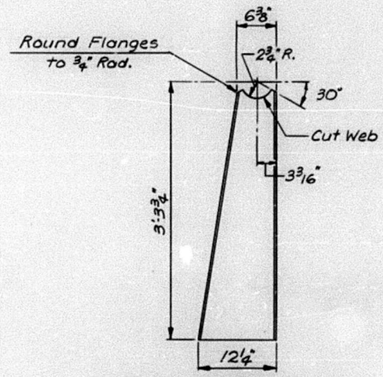


PARTIAL PLAN OF SLAB

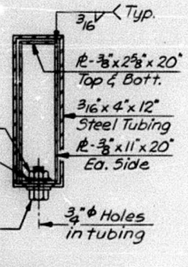
Rail Post No.	Dimensions "x"	"y"
1	2'-7⅛"	1'-7 5/16"
2	2'-3 3/16"	1'-8 5/16"
3	1'-11 9/16"	1'-9 5/16"
4	1'-7⅝"	1'-11"
5	1'-3¾"	2'-0"
6	0'-11⅞"	2'-1"
7	0'-8 7/16"	2'-1⅞"
8	0'-8 3/16"	2'-1 13/16"



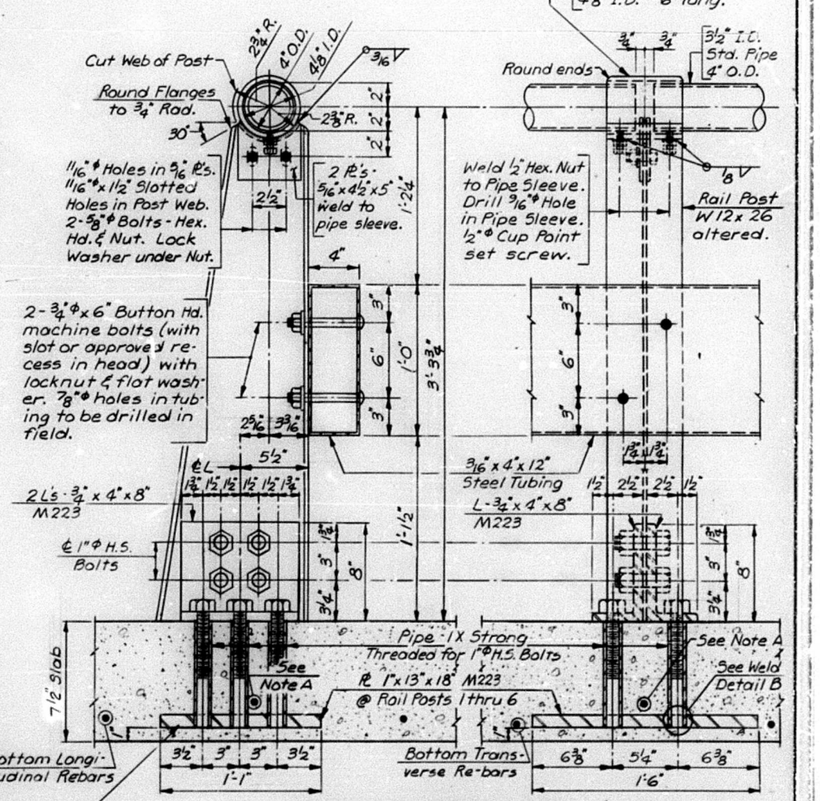
SECTION A-A



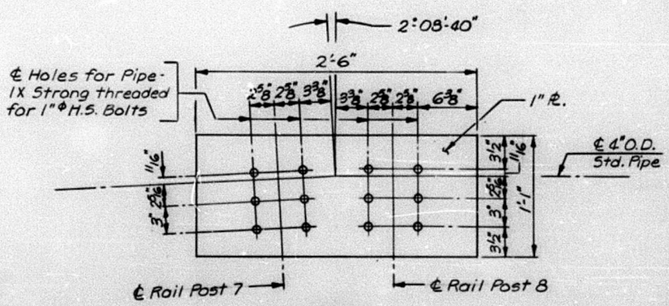
RAIL POST DIMENSIONS (ALTERED W12 x26)



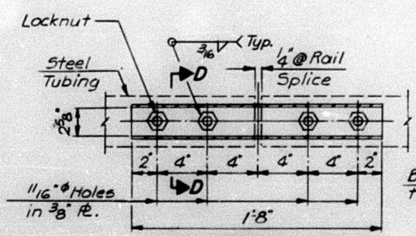
SECTION D-D



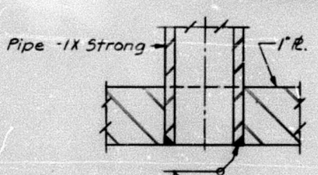
TYPICAL RAIL POST DETAILS



PLAN
DETAIL C
(Single Plate for Rail Posts 7 & 8.)



PLAN - BOTTOM PLATE
RAIL SPLICE DETAILS



WELD DETAIL B

Notes:

All dimensions shown are measured horizontally.

Note A: Bottom Longitudinal & Transverse Reinforcement Bars that fall in line with 1"x13"x18" Plates shall be placed over the plates.

Pipes - 1X Strong shall be plugged during pouring of concrete. Upper end plugs shall be temporary & lower end plugs may be permanent.

Hollow structural steel tubing shall conform to the requirements of A.S.T.M. A-500 Grade B Structural Steel Tubing.

All other steel shapes & plates shall conform to the requirements of AASHTO M-183 unless otherwise noted.

Provide one ⅛" and one ¼" shim plate 6½" x 12", per post, to align rail box section.

See General Note 7 on Sheet 1 of 88 for Painting.

Bolts, cap screws, and nuts shall conform to the requirements of ASTM A-307 except for high strength bolts, nuts & washers noted which shall conform to AASHTO M-164

Railing shall be in accordance with Sec. 508 of the Std. Spec., except as noted, & paid for at the contract unit price per Lin. Ft. for Steel Railing.

Railing shall be adjusted to true vertical and horizontal alignment after erection.

Cap all rail ends as noted.

1 Single Plate for both Rail Posts 7 & 8. Size = 1"x 13"x 30" M223 (See Det. C this Sht.)

SUPERSTRUCTURE DETAILS
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.D.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

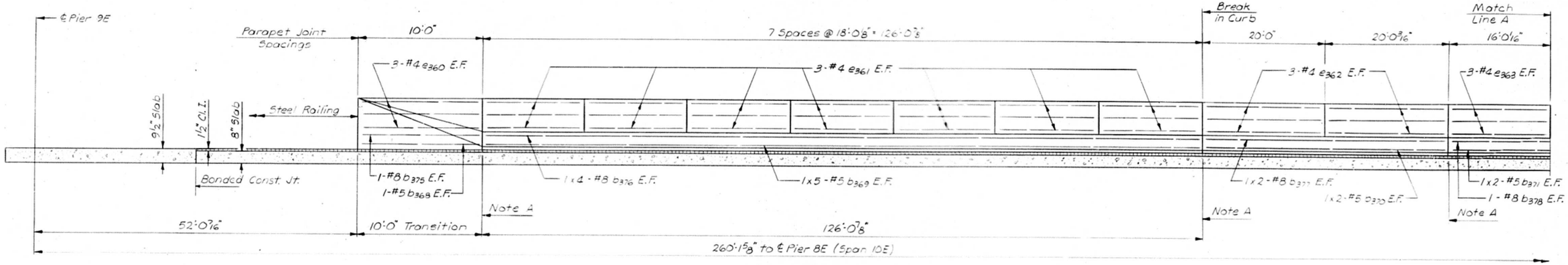
FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

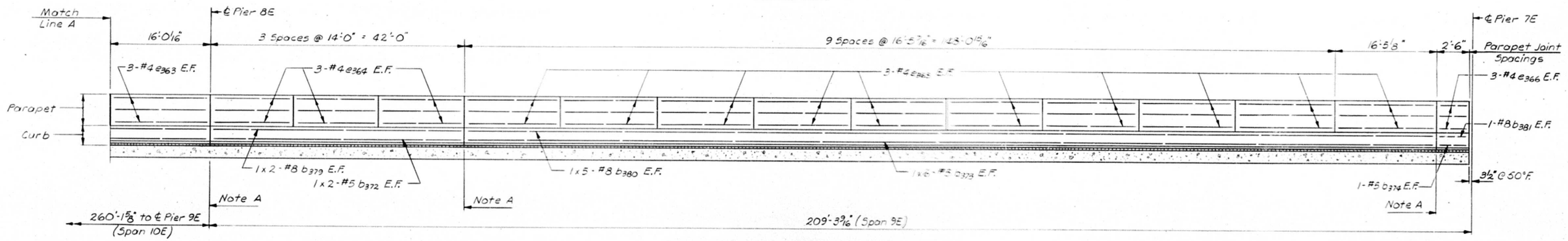
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	Peoria & Tazewell	97	73
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

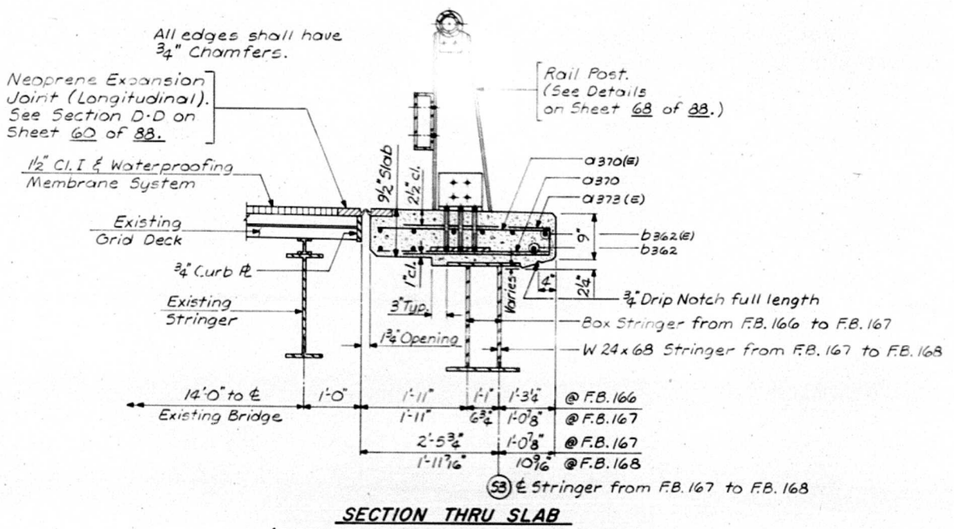
Sheet 69 of 88



INSIDE ELEVATION OF CURB & PARAPET
(SPAN 10E)



INSIDE ELEVATION OF CURB & PARAPET
(SPAN 9E)



SECTION THRU SLAB
(BETWEEN FLOOR BEAMS 166 & 168)

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

Notes:

Note A - Aluminum Shected Construction Joints in Curb to Top of Slab.

All dimensions shown in Elevation are measured along the outside edge of the curb.

For Bill of Material & Bar Shapes see Sheet 67 of 88.

For Section thru Slab @ Pier 7E (Section L-L) see Sheet 67 of 88.

For Parapet Joint Details see Sheet 3 of 88.

For Section thru Curb & Parapet see Sheet 67 of 88.

For Details of Transition @ Curb & Parapet see Sheet 65 of 88.

Bend Reinforcement Bars in field to fit Transition @ Curb & Parapet.

All dimensions shown are measured horizontally.

CURB & PARAPET DETAILS
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.Q.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

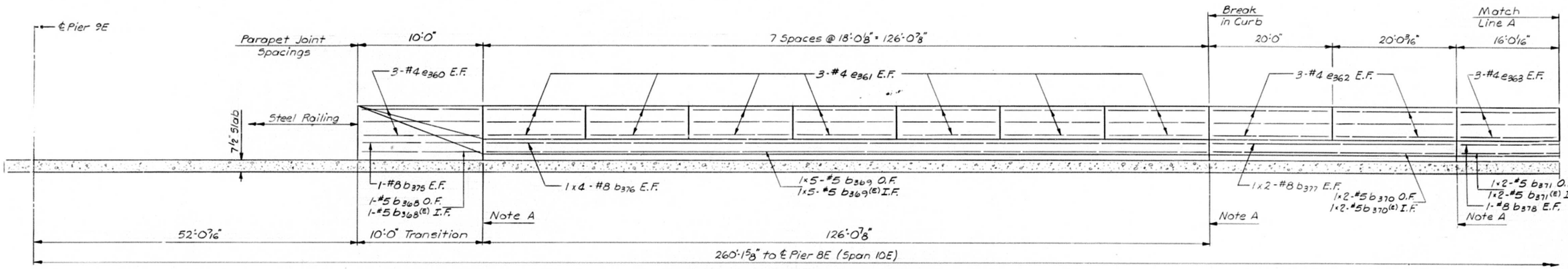
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

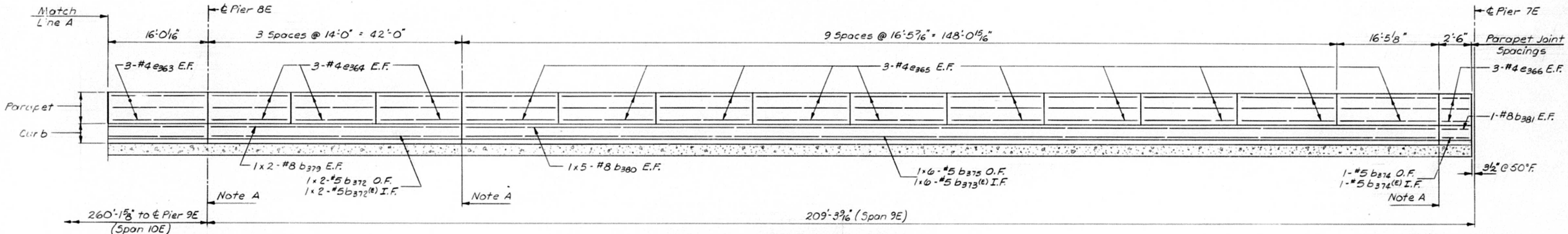
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	Peoria & Tazewell	97	73A
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 69A of 88

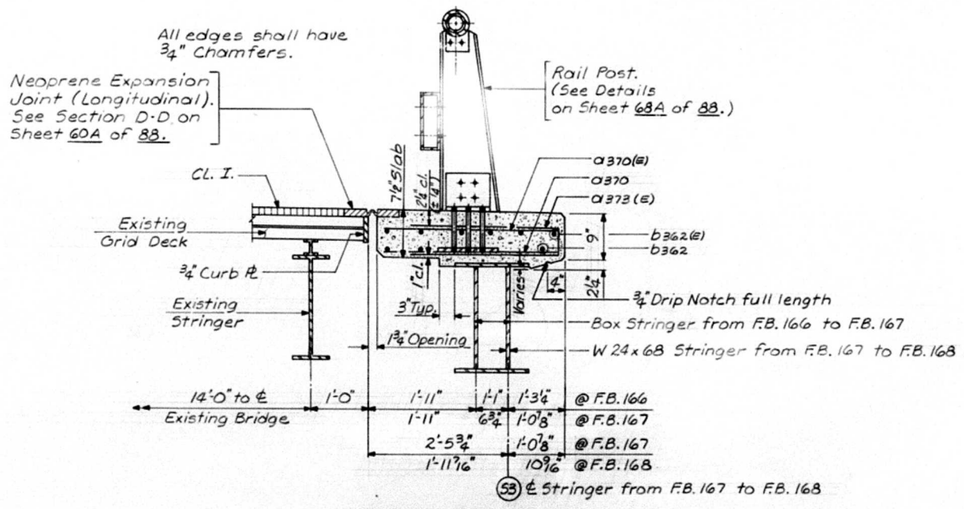


INSIDE ELEVATION OF CURB & PARAPET (SPAN 10E)

O.F. - Outside Face
I.F. - Inside Face
E.F. - Each Face



INSIDE ELEVATION OF CURB & PARAPET (SPAN 9E)



SECTION THRU SLAB (BETWEEN FLOOR BEAMS 166 & 168)

Bar Size	Minimum Lap Distance
#4	1'-4"
#5	1'-8"
#6	2'-0"
#8	3'-6"

Notes:

Note A - Aluminum Sheeted Construction Joints in Curb to Top of Slab.

All dimensions shown in Elevation are measured along the outside edge of the curb.

For Bill of Material & Bar Shapes see Sheet 67A of 88.

For Section thru Slab @ Pier 7E (Section L-L) see Sheet 67A of 88.

For Parapet Joint Details see Sheet 3 of 88.

For Section thru Curb & Parapet see Sheet 67A of 88.

For Details of Transition @ Curb & Parapet see Sheet 65A of 88.

Bend Reinforcement Bars in field to fit Transition @ Curb & Parapet.

All dimensions shown are measured horizontally.

CURB & PARAPET DETAILS
RAMP E - SPANS 9E & 10E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.O.
CHECKED C.R.N.
DRAWN D.A.N.
CHECKED C.R.N.

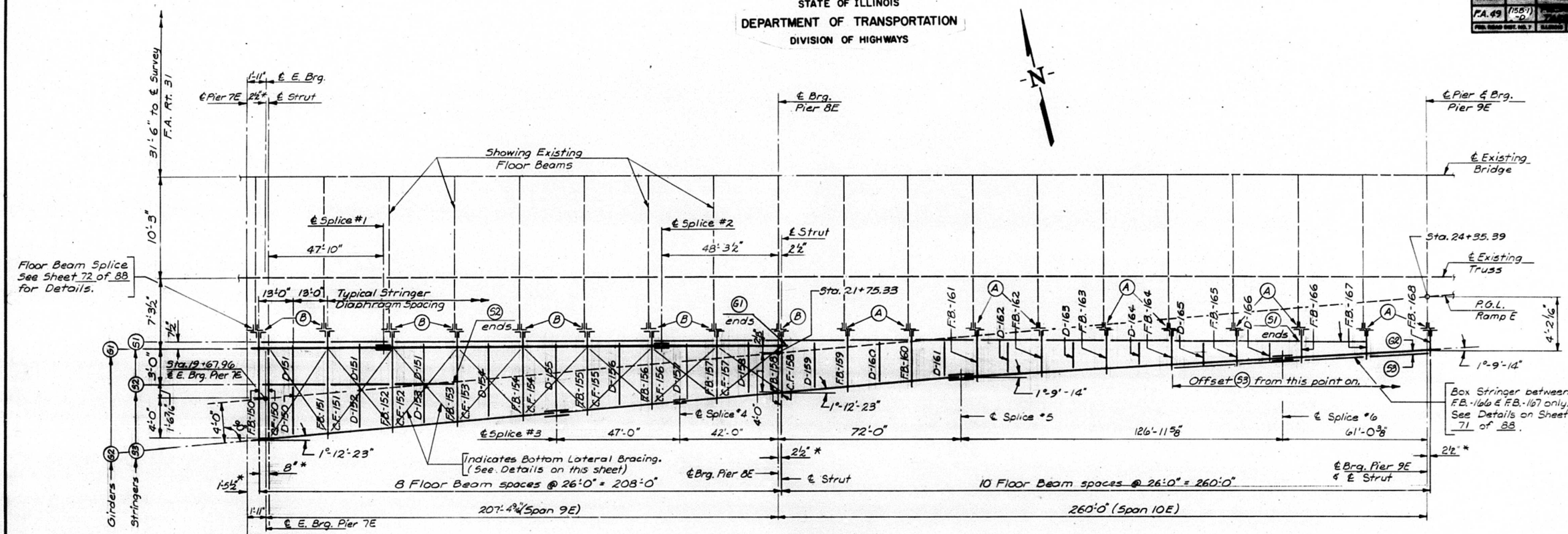
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

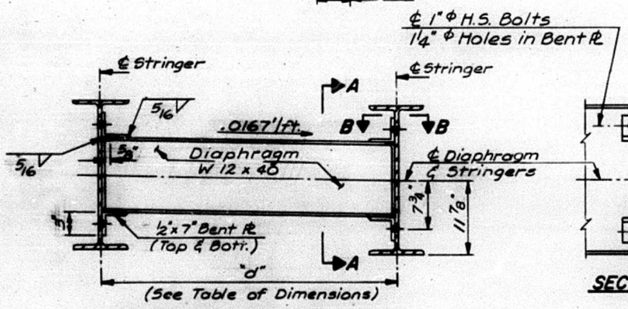
FILE NO. 74001
DATE 8-22-80

Revised 5/14/82

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A. 49 (158-1)-D

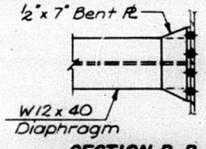




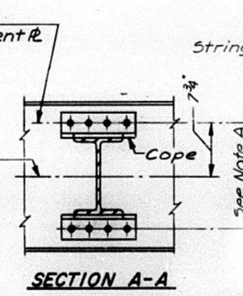
DIAPHRAGMS D-150 THRU D-166

TABLE OF DIMENSIONS DIAPHRAGMS D-150 - D-166	
Diaphragm No.	Dimension "d"
D-150	5'-3 7/16"
D-151	3'-7½"
D-152	4'-8 7/8"
D-153	4'-2 5/16"
D-154	7'-3¼"
D-155	6'-8 5/8"
D-156	6'-2 1/16"
D-157	5'-7½"
D-158	5'-0 15/16"
D-159	4'-6 3/8"
D-160	3'-11 13/16"
D-161	3'-5¼"
D-162	2'-10 7/8"
D-163	2'-4 9/16"
D-164	1'-10 5/8"
D-165	1'-10 7/16"
D-166	1'-4 3/16"

Note: Hardened washers shall be required over 1'4"Φ holes in Bent Plates.

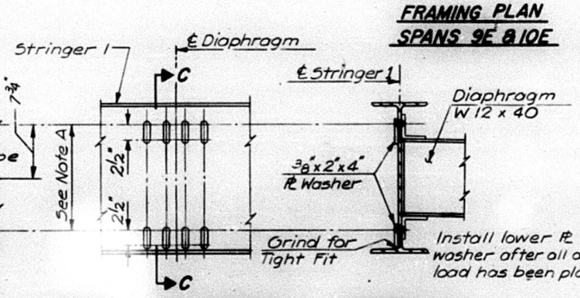


SECTION B-B



SECTION A-A

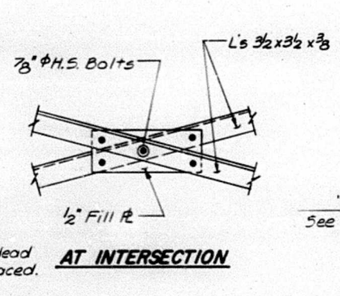
FRAMING PLAN SPANS 9E & 10E



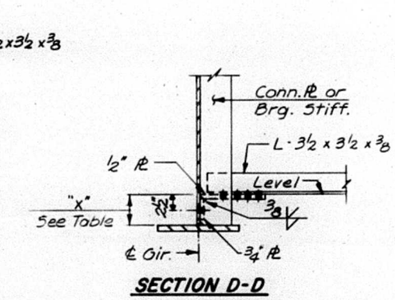
DETAIL AT STRINGER 1 SECTION C-C

NOTE A

℄ 1" Φ H.S. Bolts after all dead load is in place. Use 2½" slotted hole in all stringer 1 connections. Note that for the installation of diaphragms, the ℄ of the 1" Φ H.S. bolts will be near the bottom of the slots. All 1" Φ H.S. bolts used in the stringer 1 connection should have self-locking nuts. The nuts should be installed onto the bolts but not tightened, so that the stringer may be free to move as additional dead load deflects the girder-stringer system. The nuts should have the self-locking device in use during construction to prevent them from backing off of the bolt. After all dead load has been placed, the nuts on the stringer 1 connections should then be tightened by the deck contractor.



AT INTERSECTION



SECTION D-D

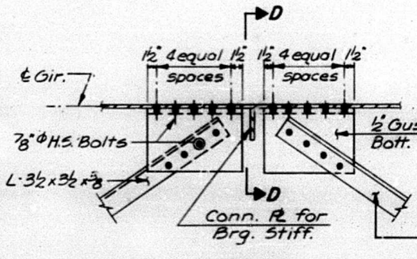
NOTES

* ℄ all Ramp E floor beams (spans 9E & 10E) will initially be offset 2½" East of ℄ of existing floor beams. After all dead load has been placed, offset will range from 0" to ⅛" East of existing floor beams.

All structural steel shall conform to AASHTO M183 unless otherwise noted.

All dimensions are measured horizontally and parallel or perpendicular to the centerline of survey unless otherwise shown.

All work on this sheet is by others except for Note A.



PLAN

BOTTOM LATERAL BRACING DETAILS

TABLE OF "X" DIMENSIONS		
C.F. No.	Gir. 1	Gir. 2
150	5"	6½"
151	5"	6 3/8"
152	5"	6¼"
153	5"	6⅛"
154	5"	6"
155	5"	5 15/16"
156	5"	5 13/16"
157	5"	5 11/16"
158	5"	5 9/16"

STRUCTURAL STEEL PLAN
RAMP E - SPANS 9E & 10E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(158-1)-D
PEORIA & TAZEWELL COUNTIES

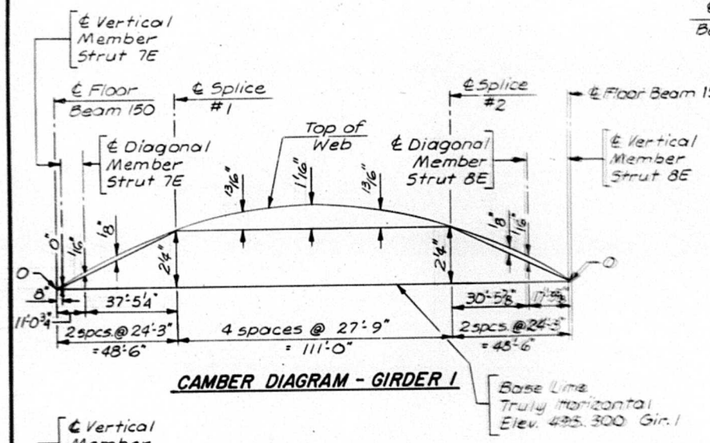
S.C.D.
C.R.N.
D.A.M.
S.C.D.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

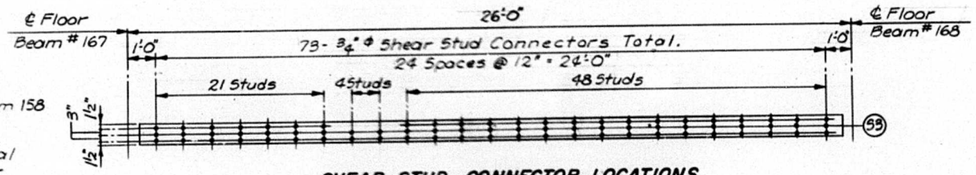
File No. 74001
Date 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

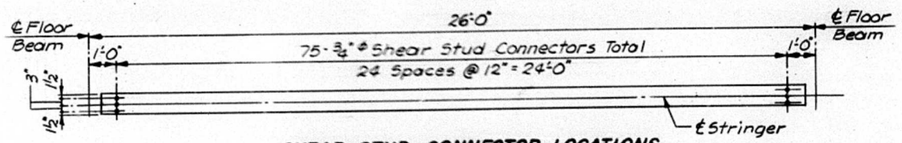
F.A. 49	(15B-1)-D		



CAMBER DIAGRAM - GIRDER 1



SHEAR STUD CONNECTOR LOCATIONS
(On Stringer 59 between Floor Beams 167 & 168.)

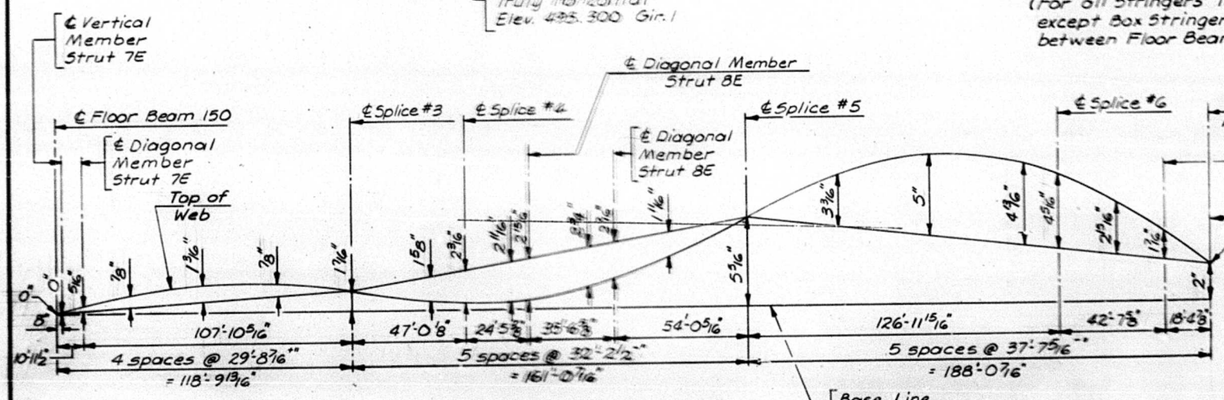


SHEAR STUD CONNECTOR LOCATIONS
(For all Stringers in Span 10E except Box Stringer & Stringer between Floor Beams 167 & 168.)

GIRDER MOMENT TABLE

	Girder 1	Girder 2			
	Span 9E	Span 9E		Span 10E	
	.5pt.	.375pt.	.91pt.	.07pt.	.6pt.
I (in⁴)	506,657	288,435	457,715	457,715	319,109
℘* (K/1)	1.845	1.538	1.549	1.643	1.527
M℘ (ik)	9,219	3,123	8,258	7,687	6,783
M℄ (ik)	2,048	1,470	1,337	1,285	1,031
Imp. (ik)	287	206	187	180	145
M TOTAL (ik)	11,554	4,799	9,782	9,152	7,959
fs (ksi)	19.9	14.4	18.6	17.4	21.5

* Due to varying super width, this figure is only an average of varying dead load.



CAMBER DIAGRAM - GIRDER 2

GIRDER 2 REACTION TABLE

	Pier 7E	Pier 8E	Pier 9E
R℘ (K)	105.9	466.1	145.8
R℄ (K)	41.8	77.7	14.1
Imp. (K)	5.8	10.9	2.0
R TOTAL (K)	153.5	554.7	161.9

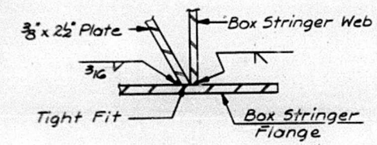
GIRDER 1 REACTION TABLE

	Pier 7E	Pier 8E
R℘ (K)	176.5	189.3
R℄ (K)	43.7	41.6
Imp (K)	6.2	5.8
R TOTAL (K)	226.4	236.7

TOP OF WEB ELEVATIONS **

	Girder 1	Girder 2
℄ Vertical Member Strut 7E	495.300	495.179
℄ Diagonal Member Strut 7E	495.348	495.216
℄ Splice #1	495.488	N.A.
℄ Splice #3	N.A.	495.299
℄ Splice #2	495.488	N.A.
℄ Splice #4	N.A.	495.622
℄ Diagonal Member Strut 8E	495.374	495.197
℄ Vertical Member Strut 8E	495.300	N.A.
℄ Diagonal Member Strut 8E	N.A.	495.310
℄ Splice #5	N.A.	495.622
℄ Splice #6	N.A.	495.795
℄ Diagonal Member Strut 9E	N.A.	495.493
℄ Vertical Member Strut 9E	N.A.	495.340

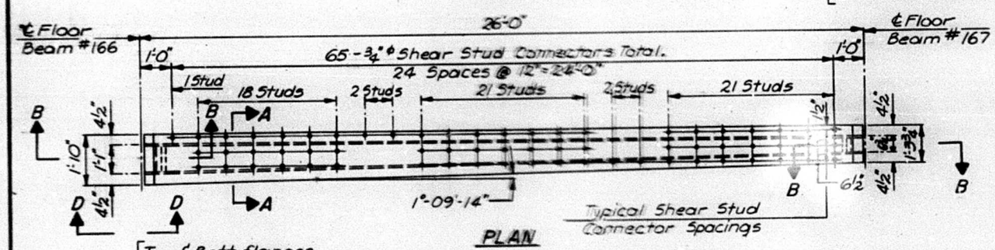
** Elevations include camber for dead load deflections and are for fabrication only. N.A. denotes not applicable.



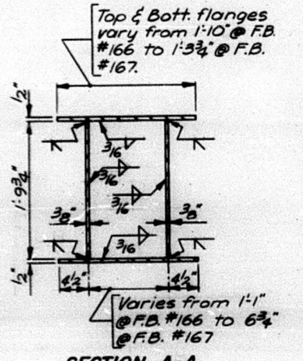
DETAIL F

TABLE OF "t" DIMENSIONS

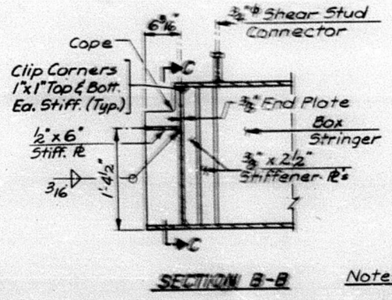
Fl. Bm. No.	Str. 1	Str. 3
166	7/8"	1 15/16"
167	–	1 3/4"
168	–	1 1/2"



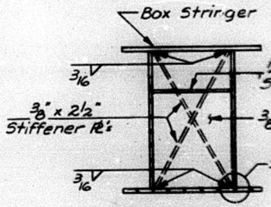
PLAN



SECTION A-A



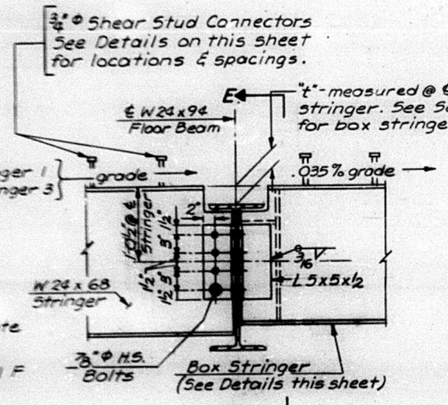
SECTION B-B



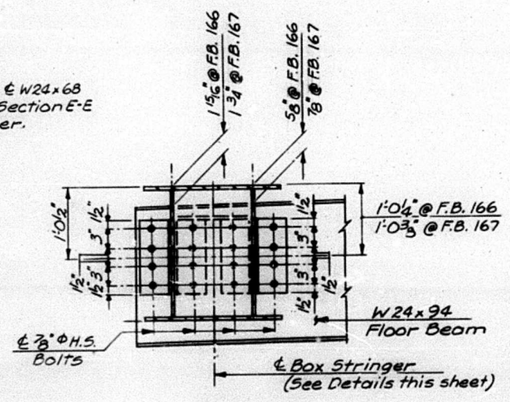
SECTION C-C

Notes:
Structural steel shall meet the requirements of AASHTO M-183.
Box Stringer shall be subject to the Supplemental Requirements for Notch Toughness.

BOX STRINGER DETAILS

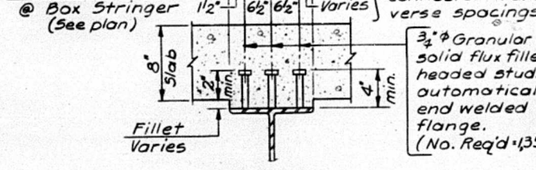


VIEW D-D



SECTION E-E

BOX STRINGER CONNECTION DETAILS



SHEAR STUD CONNECTOR DETAILS

All work on this sheet except Stud Shear Connectors is by others.

STRUCTURAL STEEL DETAILS
RAMP E - SPANS 9E & 10E
Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 **SEC. (15B-1)-D**
PEORIA & TAZEWELL COUNTIES

DESIGNED	S.C.Q.
CHECKED	W.D.L.
DRAWN	D.A.N.
CHECKED	S.C.Q.

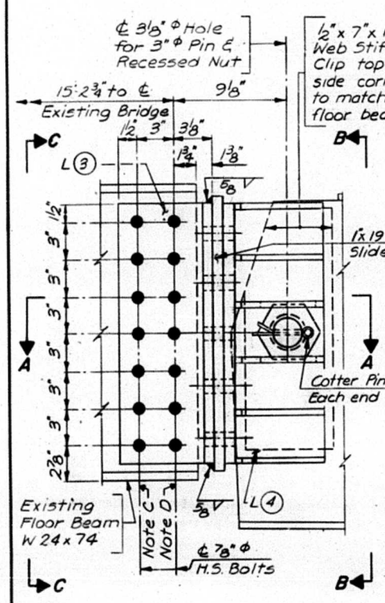
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

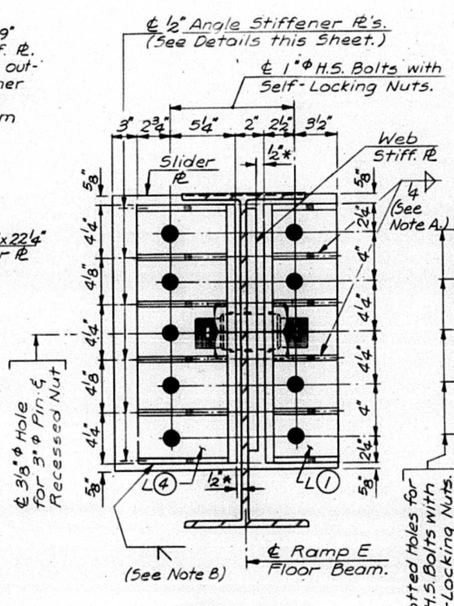
FAI-474	(158-1)-D		97	76

Sheet 72 of 88

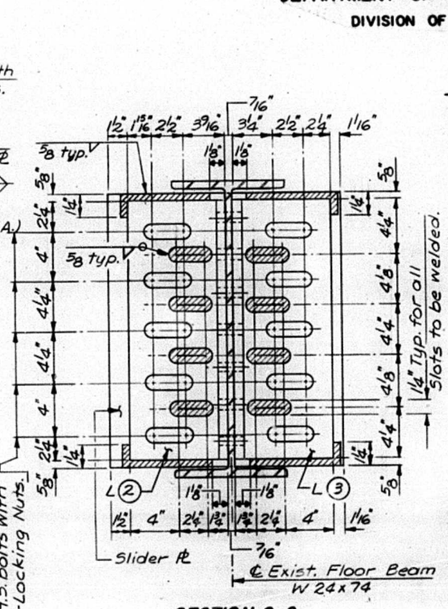


ELEVATION

FLOOR BEAM SPLICE TYPE A



SECTION B-B



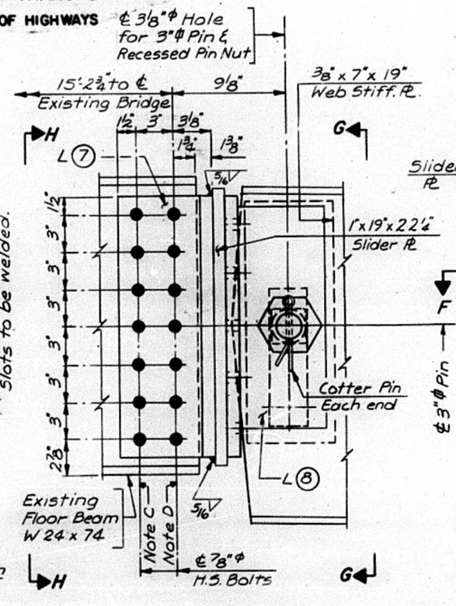
SECTION C-C

Note A: Typical for both legs of all angle interior stiffener plates.

Note B: Typical for both legs of all angle exterior stiffener plates.

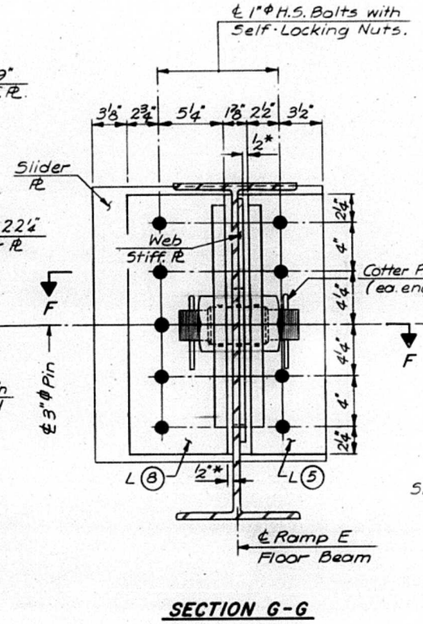
Note C: ℄ field drilled holes for ⅞"Φ high strength bolts.

Note D: ℄ of existing ⅞"Φ rivet holes after removal of 6" stanchion rail post.

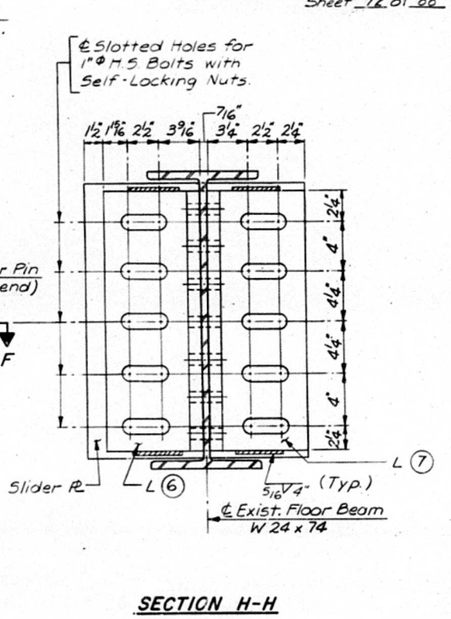


ELEVATION

FLOOR BEAM SPLICE TYPE B



SECTION G-G



SECTION H-H

Notes:

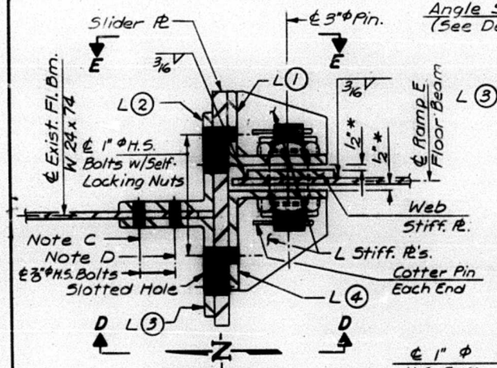
The 3"Φ pin and angles 1 & 4 of floor beam splice type A shall be installed to the floor beams before removing from the shop.

No field welding shall be allowed for floor beam splices.

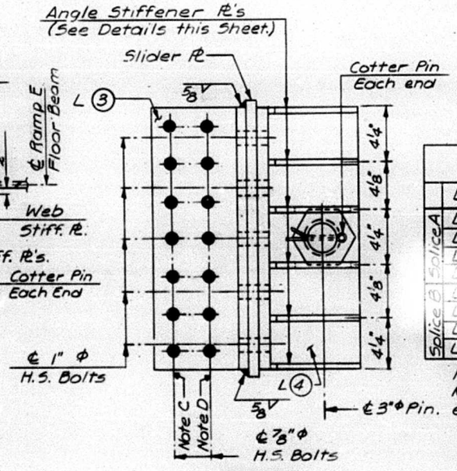
Note E: During the construction phase, the 1"Φ H.S. bolts of splice type A and the 1"Φ H.S. bolts of splice type B shall be installed with the locking nut just making contact with the part to be joined. The nuts should then be locked into this position. After all dead load has been placed, i.e. final dead load movement has taken place, the bolts are to be fully tightened and locked into position by the deck contractor.

L 2, L 3, L 6, & L 7 are to receive ½"x 3"x 6" plate washers over the slotted holes for the H.S. bolts. L 2 & L 6 should have the plate washers installed with the H.S. bolts. L 3 & L 7 cannot have the plate washers installed until all dead load is in place and final dead load movement has occurred. They should then be installed before final bolt tightening.

* Maintain ½" gap after all dead load has been placed.



SECTION A-A



VIEW D-D

Note: VIEW E-E reverse of VIEW D-D.

TABLE OF ANGLE SIZES				
	L No.	L Size	Cut from L	Steel Spec.
Splice A	L 1	8"x6"x¾"	N.A.	M183
	L 2	8"x7⅞"x⅜"	8"x5"x⅜"	M183
	L 3	8"x7⅞"x⅜"	8"x5"x⅜"	M183
	L 4	8"x8"x⅜"	N.A.	M183
Splice B	L 5	8"x6"x1"	N.A.	M183
	L 6	8"x7⅞"x1"	8"x8"x1"	M223
	L 7	8"x7⅞"x1"	8"x8"x1"	M223
	L 8	8"x8"x1"	N.A.	M183

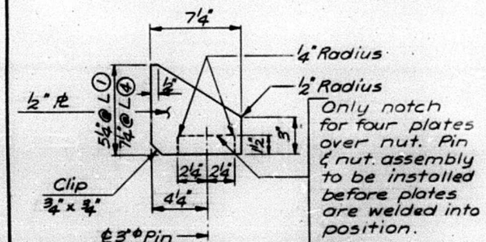
N.A. = Not Applicable
Note Ls ② ③ ⑥ & ⑦ clipped ⅜" to clear exist. stringer to floor beam conn.

Steel Specifications This Sheet:

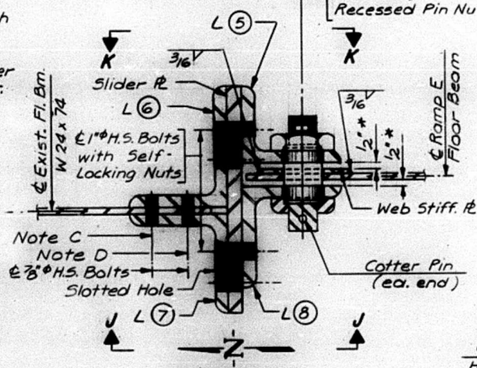
All structural steel shall meet the requirements of AASHTO M183 unless otherwise noted.

All high strength bolts shall meet the requirements of AASHTO M164.

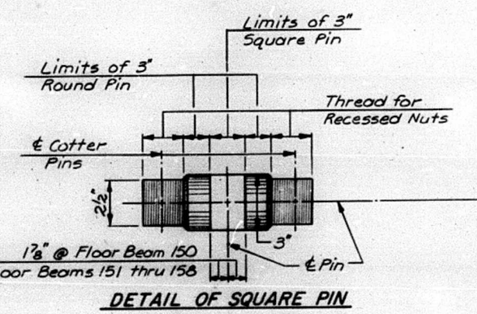
3" Pins shall meet the requirements of AASHTO M169.



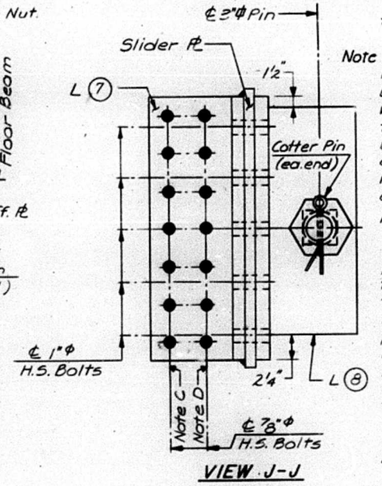
ANGLE STIFFENER PLATE DETAILS



SECTION F-F

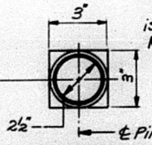


DETAIL OF SQUARE PIN



VIEW J-J

Note: VIEW K-K reverse of VIEW J-J.



END VIEW

All work on this sht. is by others except for Note E.

FLOOR BEAM SPLICE TYPES A & B
RAMP E - SPANS 9E & 10E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

S.C.O.	
W.D.L.	
D.A.M.	
W.W.L.	

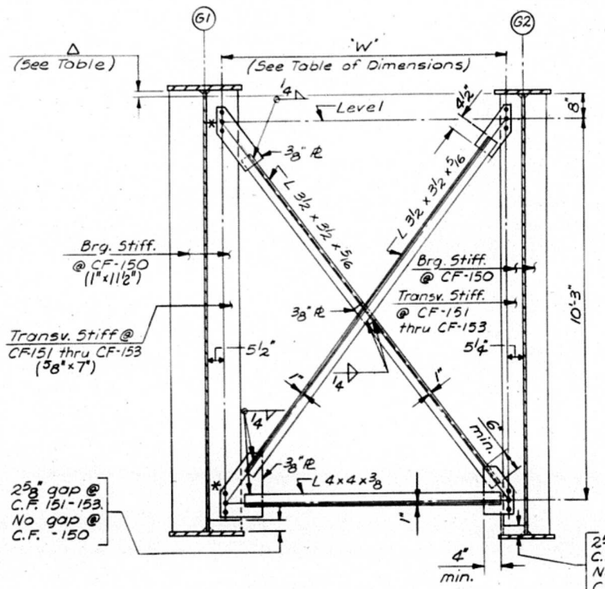
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

File No. 74001
Date 8-22-80

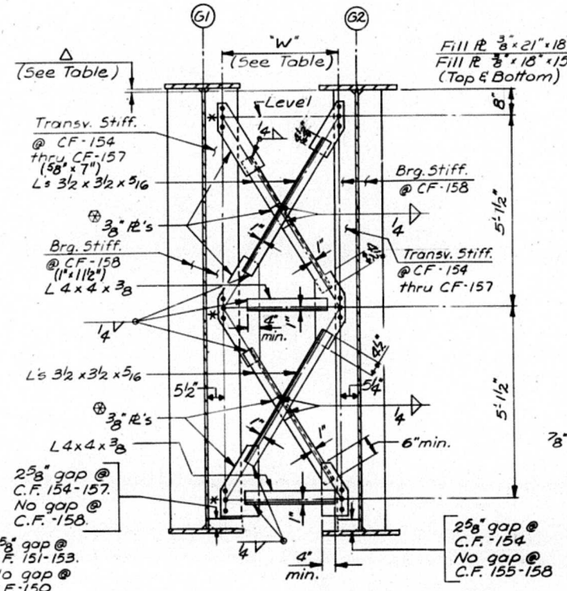
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(158-1)-D	PEORIA & TAZEWELL	97	77
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 73 of 88



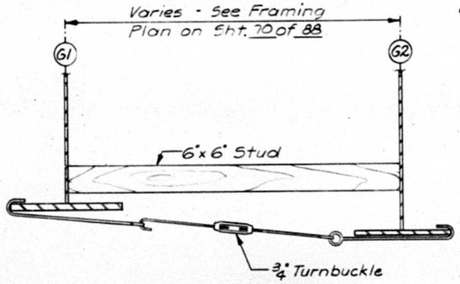
CROSS FRAMES C.F.-150 THRU C.F.-153



CROSS FRAMES C.F.-154 THRU C.F.-158

Note: 1 1/16"Φ holes in gusset PL's for 7/8"Φ H.S. Bolts.

Hardened washers shall be required over holes in gusset PL's.



SUGGESTED TEMPORARY GIRDER BRACING DETAIL

Temporary girder bracing shall be used during the construction of Span 9E. As shown in the suggested temporary girder bracing detail, the bottom flange of the girder shall be braced against both inward and outward movements. The temporary bracing shall be installed adjacent to all cross frames at ± 26 ft. intervals and spaced to miss all girder splices and transverse stiffeners. Note that the cross frames shall initially be installed only to girder 2. After all dead load has been placed, the holes in the bearing or transverse stiffeners of girder 1 will match those holes in the gusset plates of the cross frames. The cross frames should then be bolted to girder 1 by the deck contractor. The cost of the temporary girder bracing & installation shall be incidental to the cost of the F & E Contract. Cost of removal is the responsibility of the Deck Contractor & they will be his property.

The 7/8"Φ bolts and hardened washers used in connecting the cross frames to girder 1 shall be supplied by the deck contractor and are incidental to the cost of the Contract.

TABLE OF DIMENSIONS CROSS FRAMES

Cross Frame No.	Dimension "W"	△
C.F. 150	7'-7¼"	1½"
C.F. 151	7'-0 15/16"	13/16"
C.F. 152	6'-6 3/8"	1¼"
C.F. 153	5'-11 13/16"	1⅛"
C.F. 154	5'-5¼"	1"
C.F. 155	4'-10 11/16"	15/16"
C.F. 156	4'-4 1/16"	13/16"
C.F. 157	3'-9½"	11/16"
C.F. 158	3'-2 15/16"	9/16"

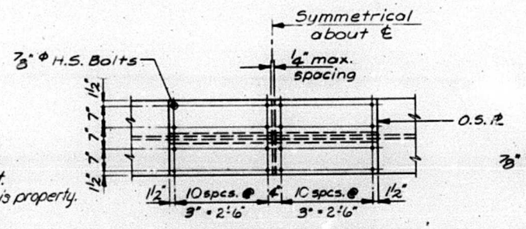
* See note with Suggested Temporary Girder Bracing Detail on this sheet.

⊛ 3/8" Bent Plate shall be used @ C.F.-158.

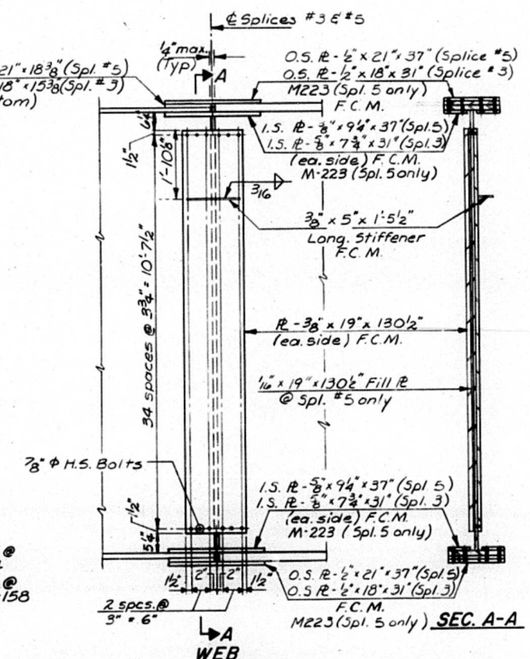
Steel Specifications This Sheet:

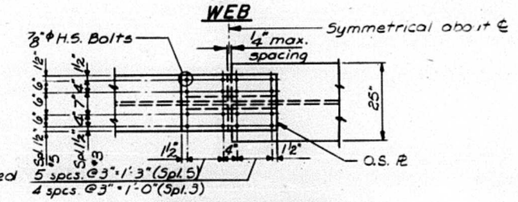
All structural steel shall meet the requirements of AASHTO M-183 unless otherwise noted.

All high strength bolts shall meet the requirements of AASHTO M-164.

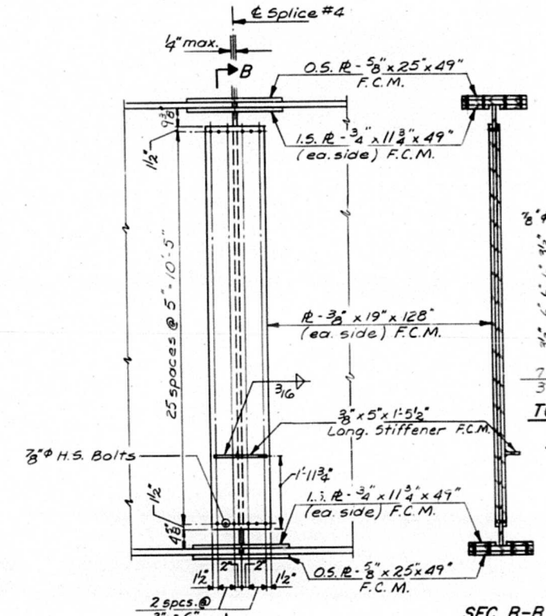


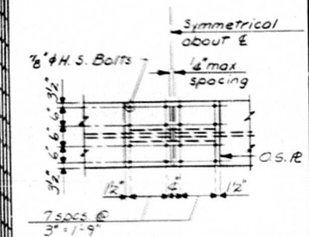
TOP & BOTTOM FLANGES DETAIL OF SPLICES 1 & 2



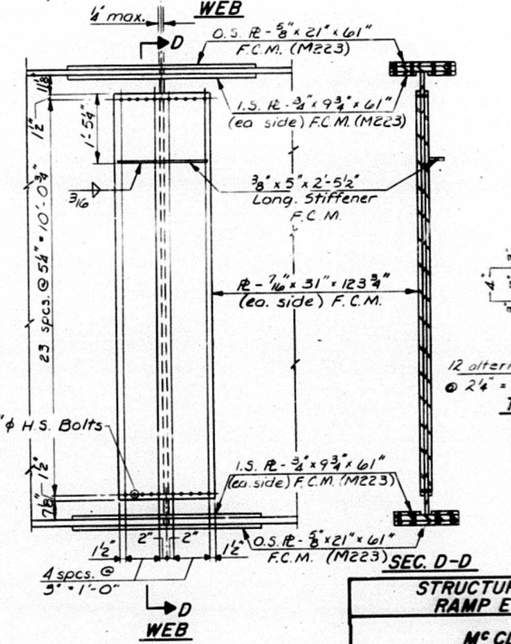


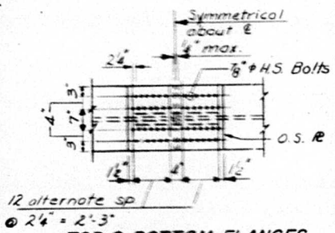
TOP & BOTTOM FLANGES DETAIL OF SPLICES 3 & 5





TOP & BOTTOM FLANGES DETAIL OF SPLICE 4





TOP & BOTTOM FLANGES DETAIL OF SPLICE 6

Note: Bolts shall be incidental to cost of project.

STRUCTURAL STEEL DETAILS
RAMP E - SPANS 9E & 10E

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	S.C.O.
CHECKED	R.W.C.
DRAWN	D.A.N.
CHECKED	S.C.O.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA:49 (158-1) -D	Peoria & Tazewell	37	28
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT	

Sheet 28 of 38

GIRDER 1

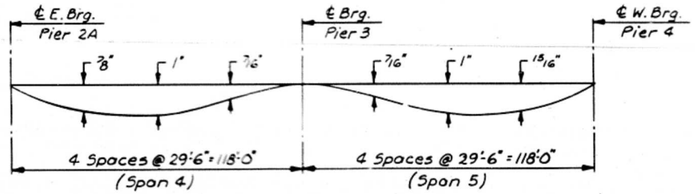
	STATION	ELEV. A	ELEV. B
℄ East Bearing Pier 2A	199+48.000	502.523	502.523
a	199+58.000	502.481	502.501
b	199+68.000	502.441	502.477
c	199+78.000	502.375	502.423
d	199+88.000	502.284	502.339
e	199+98.000	502.192	502.248
f	200+08.000	502.085	502.137
g	200+18.000	501.957	501.999
h	200+28.000	501.828	501.858
i	200+38.000	501.658	501.674
j	200+48.000	501.457	501.462
k	200+58.000	501.193	501.193
℄ Bearing Pier 3	200+66.000	500.806	500.806
l	200+71.000	500.303	500.303

GIRDER 2

STATION	ELEV. A	ELEV. B
199+48.000	502.713	502.713
199+58.000	502.713	502.742
199+68.000	502.711	502.765
199+78.000	502.635	502.708
199+88.000	502.512	502.597
199+98.000	502.386	502.473
200+08.000	502.254	502.336
200+18.000	502.090	502.160
200+28.000	501.913	501.965
200+38.000	501.635	501.667
200+48.000	501.288	501.302
200+58.000	501.961	500.964
200+66.000	500.735	500.735
200+71.000	500.378	500.379

GIRDER 3

	STATION	ELEV. A	ELEV. B
℄ East Bearing Pier 2A	199+48.000	502.892	502.892
g	199+58.000	502.931	502.960
b	199+68.000	502.965	503.019
c	199+78.000	502.872	502.945
d	199+88.000	502.681	502.766
e	199+98.000	502.489	502.576
f	200+08.000	502.225	502.307
g	200+18.000	501.882	501.952
g1	200+24.500	501.428	501.489



DEAD LOAD DEFLECTION DIAGRAM

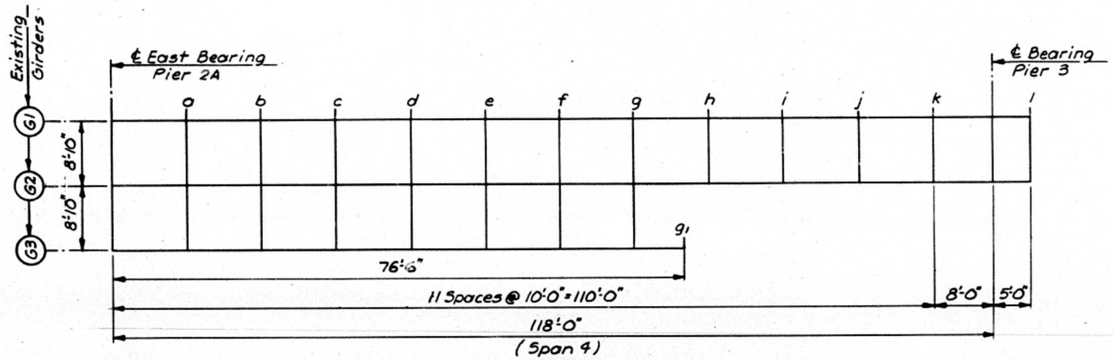
(Includes Weight of Concrete Slab & Cl. I)

Note: The above deflections are not to be used in the field if the Engineer is working from the Grade Elevations Adjusted for Dead Load Deflections (Elev. B) as shown in table of Top of Concrete Elevations.

Note: Stations used above are existing bridge stations.

TOP OF CONCRETE ELEVATIONS

ELEV A = THEORETICAL GRADE ELEVATIONS
ELEV B = THEORETICAL GRADE ELEVATIONS ADJUSTED FOR DEAD LOAD DEFLECTION



DIAGRAMMATIC PLAN

Note: See Sheet 30 for Method of Determining Fillet Heights.

TOP OF SLAB ELEVATIONS
EXISTING SPAN 4

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 **SEC. (158-1)-D**
PEORIA & TAZEWELL COUNTIES

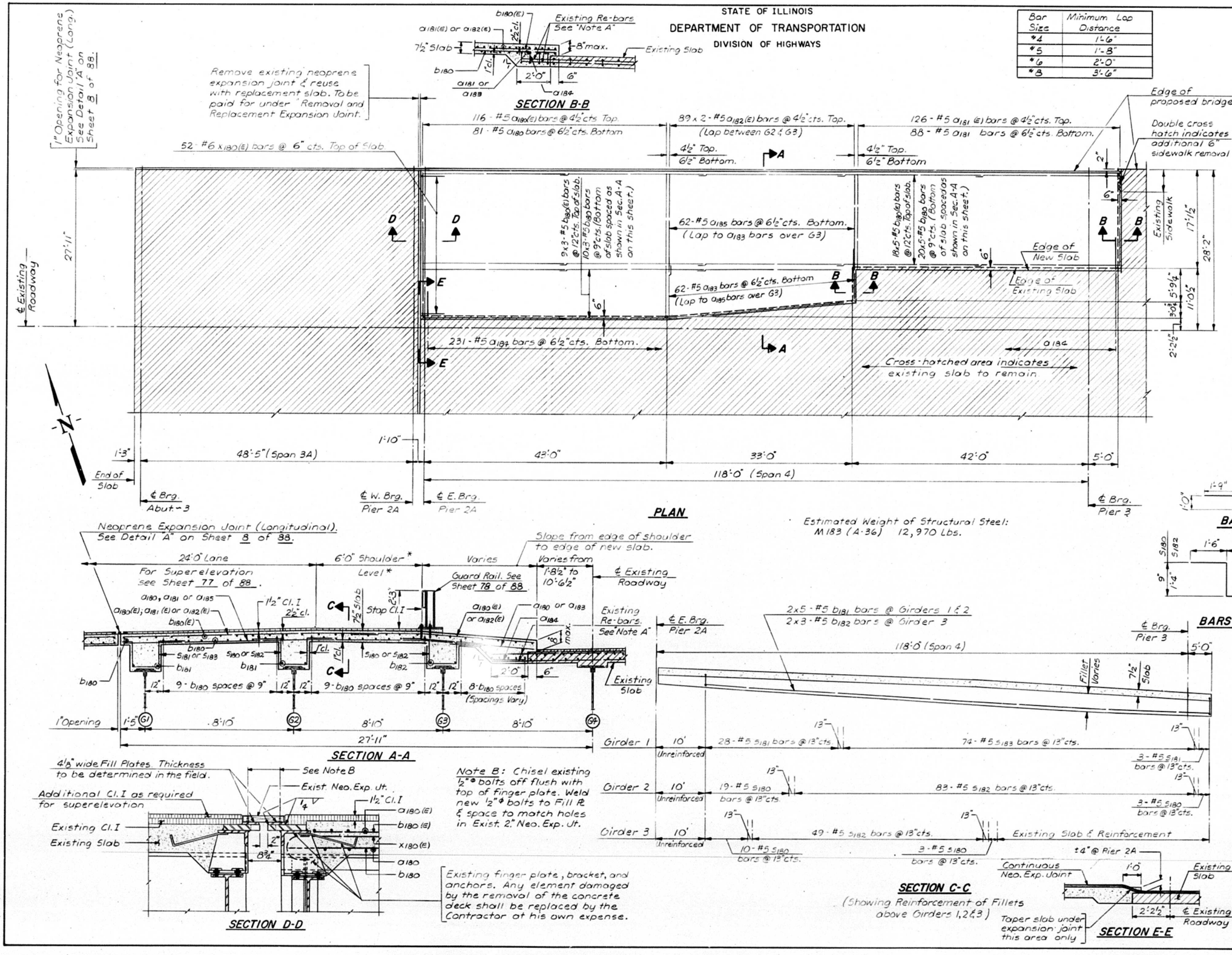
DESIGNED S.C.A.	HANSON ENGINEERS INCORPORATED	JOB NO. 74001
CHECKED C.R.N.		
DRAWN D.A.N.	SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS	DATE 3-22-80
CHECKED S.C.O.		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(15B-1) -D	Peoria & Tazewell	97	79
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 75 of 88

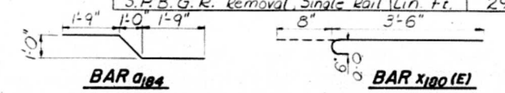
Bar Size	Minimum Lap Distance
#4	1'-6"
#5	1'-8"
#6	2'-0"
#8	3'-6"



SECTION B-B

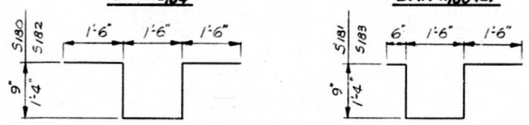
BILL OF MATERIAL
EXISTING SPANS 3A, 4&5

BAR	NO.	BAR	NO.	SIZE	LENGTH	SHAPE
a180(E)	116	a180	81	#5	25'-10"	
a181(E)	126	a181	88	#5	17'-0"	
a182(E)	178			#5	13'-8"	
		a183	62	#5	7'-9"	
		a184	231	#5	4'-11"	
		a185	62	#5	19'-8"	
b180(E)	117	b180	130	#5	26'-2"	
		b181	20	#5	23'-10"	
		b182	6	#5	23'-2"	
		S180	35	#6	6'-0"	
		S181	31	#6	5'-0"	
		S182	132	#6	7'-2"	
		S183	74	#6	6'-2"	
x180(E)	52			#6	4'-2"	
Bituminous Conc. Surf. Removal					Sq. Yds.	246
Class X Concrete					Cu. Yds.	96.0
Reinforcement Bars					Lbs.	12,730
Reinforcement Bars (Epoxy Coated)					Lbs.	11,420
Rem. & Repl. Expan. Jt.					Lin. Ft.	27.0
Structural Steel					Lump Sum	1
Concrete Removal					Cu. Yds.	79.7
Blast Plate Removal					Lump Sum	1
Protective Coat					Sq. Yds.	26.2
Existing Rail Removal					Lin. Ft.	25.4
S.P.B.G.R. Removal, Single Rail					Lin. Ft.	299



BAR a184

BAR x180(E)



BARS S180 & S182

BARS S181 & S183

Estimated Weight of Structural Steel:
M183 (A-36) 12,970 Lbs.

PLAN

SECTION A-A

Notes:
Bars indicated thus 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.
Reinforcement bars designated (E) shall be epoxy coated. See Special Provisions.
* = For limits of shoulder transition & for shoulder superelevation see Sheet 77 of 88.
"Note A": Leave 1'-10" extension length on existing reinforcement bars and clean for reimbedment.

SECTION D-D

Note B: Chisel existing ½"ø bolts off flush with top of finger plate. Weld new ½"ø bolts to Fill Pl. & space to match holes in Exist. 2" Neo. Exp. Jt.

Existing finger plate, bracket, and anchors. Any element damaged by the removal of the concrete deck shall be replaced by the Contractor at his own expense.

SECTION C-C
(Showing Reinforcement of Fillets above Girders 1, 2 & 3)

SECTION E-E

SUPERSTRUCTURE
EXISTING SPANS 3A, 4&5

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED WDL
CHECKED S.C.O.
DRAWN D.A.N.
CHECKED S.C.O.

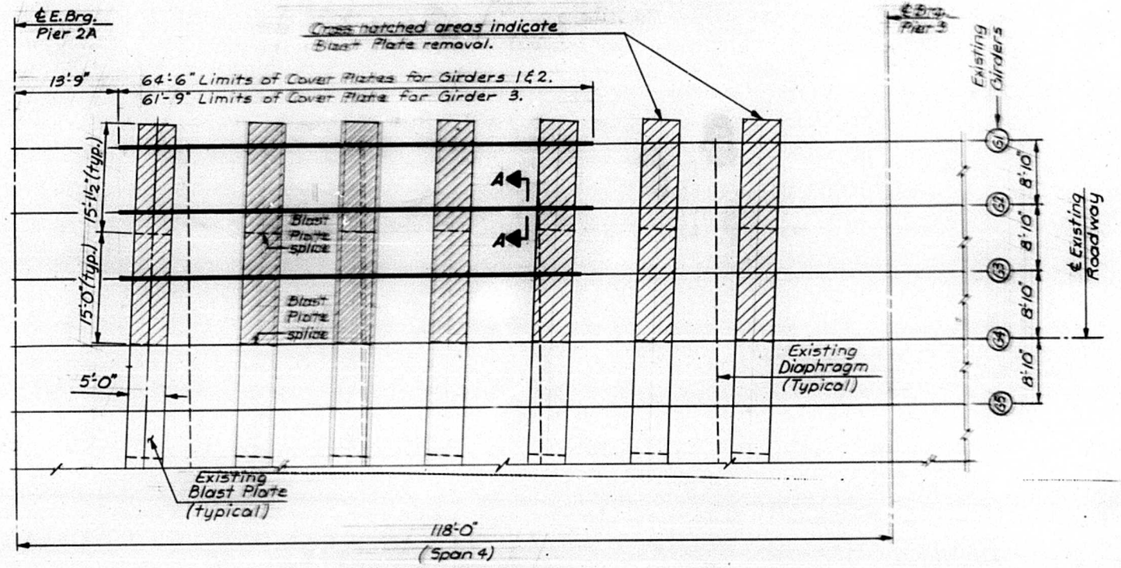
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

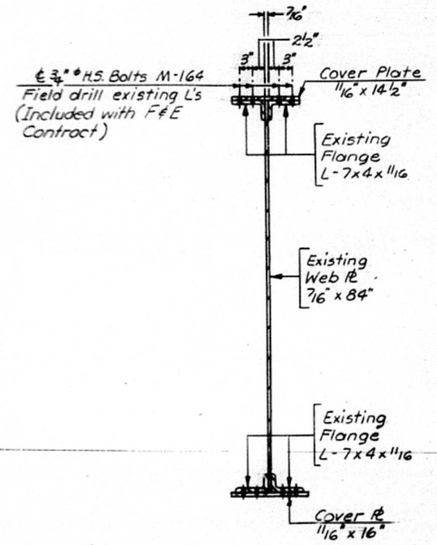
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	158-1) -D	Peoria & Tazewell	97	80
FED. ROAD/DIST. NO. 7	ILLINOIS	PROJECT		

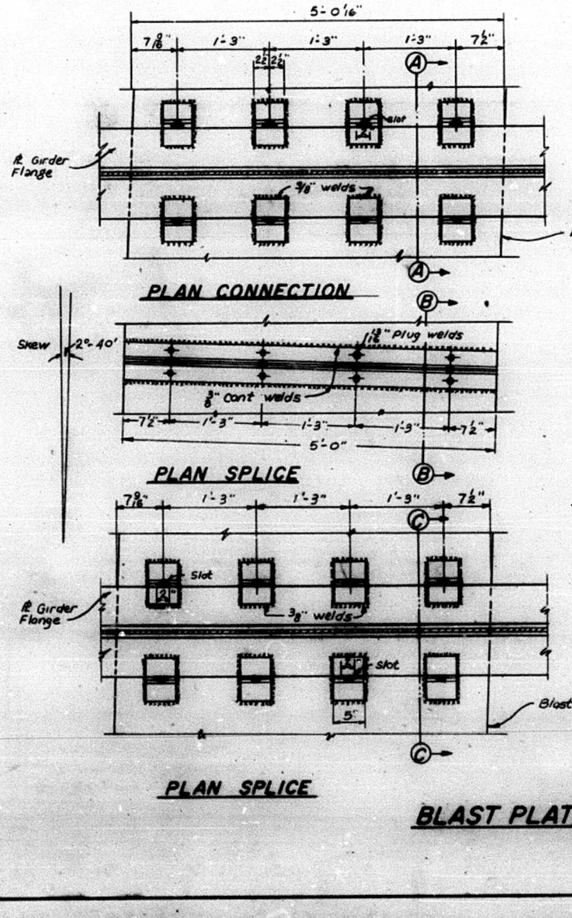
Sheet 76 of 88



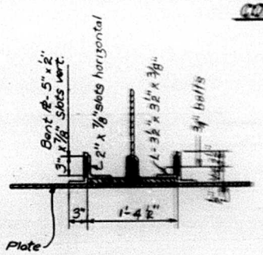
COVER PLATE LAYOUT



SECTION A-A
TYPICAL - SPAN 4 - GIRDERS 1,2&3

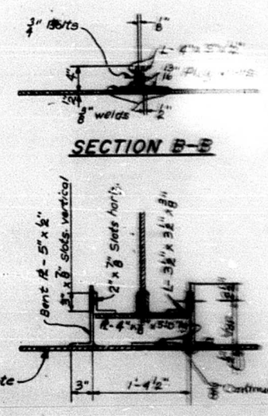


PLAN CONNECTION



SECTION A-A

PLAN SPLICE

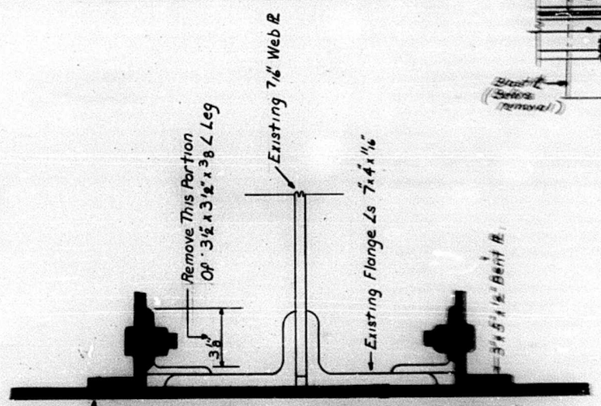


SECTION B-B

PLAN SPLICE

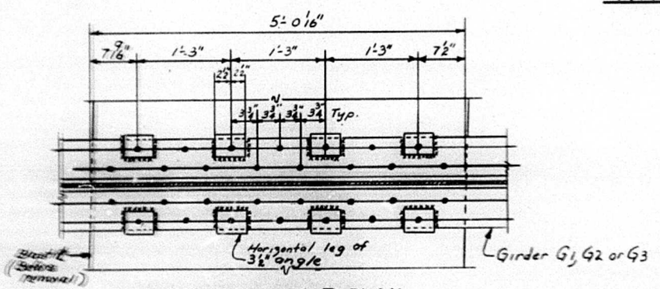
SECTION C-C

BLAST PLATE DETAILS



Note: Removal Of Vertical Leg Of 3½" x 3½" x ⅜" L Applies Only To Existing Girders G1, G2 & G3 For The Specified Length Of New Cover Plates Shown On Plans (Number To Be Removed - 120 @ 5" Long)

BLAST PLATE CONNECTION REMOVAL



COVER PLATE BOLT PLAN

Note: Calculated weight of Structural Steel = 14,640 Lbs. (M183)

Note: Cover plates shall be made of M183 steel.

STRUCTURAL STEEL DETAILS
EXISTING SPAN 4

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.C.
S.C.O.
D.A.N.
S.C.O.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

Rev. 12-30-80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.49	(15B-1) -D	PEORIA & TAZEWELL	97	81
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 77 of 88

℄ TEMPORARY CROSSOVER LAYOUT

	Distance along Tan. Extended	Offset South from Tan. Extended
℄ Pier 4	0'-0"	0
	25'-0"	8 9/16"
	50'-0"	2'-10 3/8"
	75'-0"	6'-5 3/4"
	100'-0"	11'-7"
℄ Pier 3	117'-9 1/2"	16'-11 15/16"
	125'-0"	18'-2 7/8"
P.C.C.	144'-4"	24'-6"
	150'-0"	26'-5 1/4"
	175'-0"	33'-11 11/16"
	200'-0"	39'-11"
	225'-0"	44'-4 1/8"
℄ Pier 2	237'-3 1/2"	45'-11 11/16"
	250'-0"	47'-3 7/16"
	275'-0"	48'-9 7/16"
Bk. West Abut.	288'-8 1/8"	49'-0"

HORIZONTAL CURVE INFORMATION

FOR ℄ TEMPORARY CROSSOVER

Δ = 19°-16'-03"
D = 13°-05'-57"
R = 437.40'
T = 74.25'
L.C. = 147.09'
E = 6.26'
P.C. = Back West Abut.
P.C.C. = See Plan
P.T. = ℄ Pier 4

FOR ℄ EAST BOUND TRAFFIC

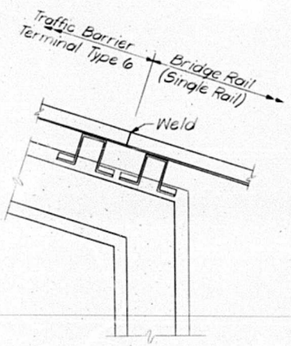
Δ = 6°-03'-50"
D = 5°-07'-45"
R = 1117.04'
T = 59.16'
L.C. = 118.22'
E = 1.56'
P.C. = ℄ East Brg. Pier 2
P.C.C. = See Plan
P.T. = ℄ West Brg. Pier 4

** - North shoulder super-elevation will match super-elevation of slab.

TOP OF CL. I ELEVATIONS TEMPORARY CROSSOVER

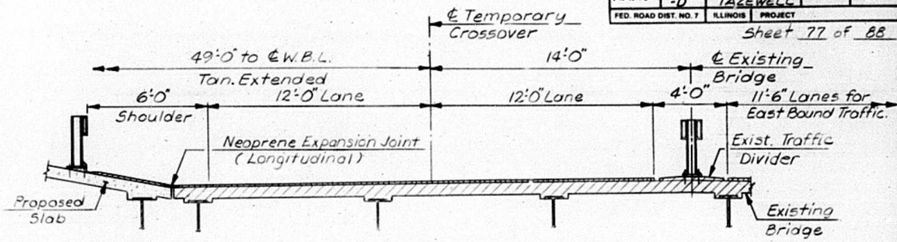
LOCATION		SUPERELEVATION (Ft./Ft.)* Lane	South Shoulder **	TOP OF CL. I ELEVATION AT EDGE OF 24'-0" LANE North Edge	South Edge (Note B)
℄ Brg. W. Abut.	a	+.017	0	503.745	504.153
	b	To Match		503.485	503.893
	c	Exist. Deck		503.225	503.633
	d			502.965	503.373
	e	+.017		502.705	503.113
℄ Pier 2	f	+.021		502.595	503.099
	g	+.026		502.495	503.119
	h	+.030		502.385	503.105
	i	+.026		502.285	502.909
	j	+.021		502.175	502.679
	k	+.017		502.075	502.483
	l	+.013		501.965	502.277
	m	+.009		501.865	502.081
	n	+.004		501.765	501.861
	o	0	0	501.655	501.655
	p	-.004	-.004	501.475	501.379
	q	-.009	-.009	501.305	501.089
℄ Pier 3	r	-.013	-.013	501.135	500.823
	s	-.017	-.017	500.925	500.517
	t	-.021	-.021	500.735	500.231
	u	-.026	-.026	500.545	499.921
	v	-.030	-.030	500.385	499.665
	w	-.030	-.030	500.205	499.485
	x	-.028	-.028	500.035	499.363
	y	-.027	-.027	499.865	499.217
	z	-.025	-.025	499.695	499.095
	aa	-.024	-.024	499.545	498.969
	bb	-.022	-.022	499.405	498.877
	cc	-.021	-.021	499.295	498.791
℄ Pier 4	dd	-.019	-.019	499.245	498.789

* Looking West - + Slope down from left to right.
- Slope down from right to left.

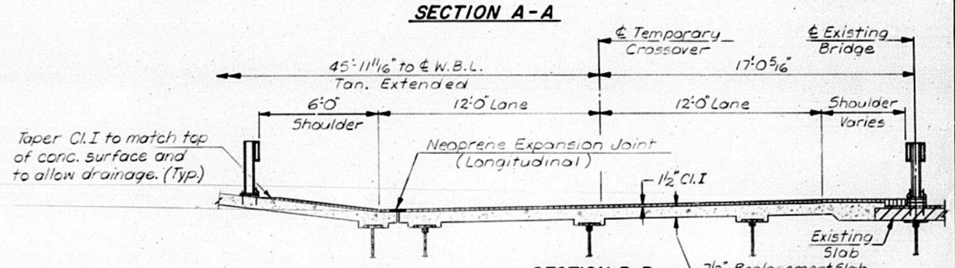


DETAIL A

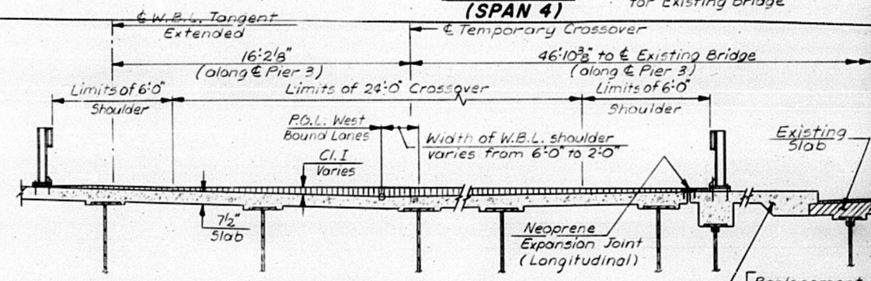
This modification will not be paid for separately. (Incidental in cost)



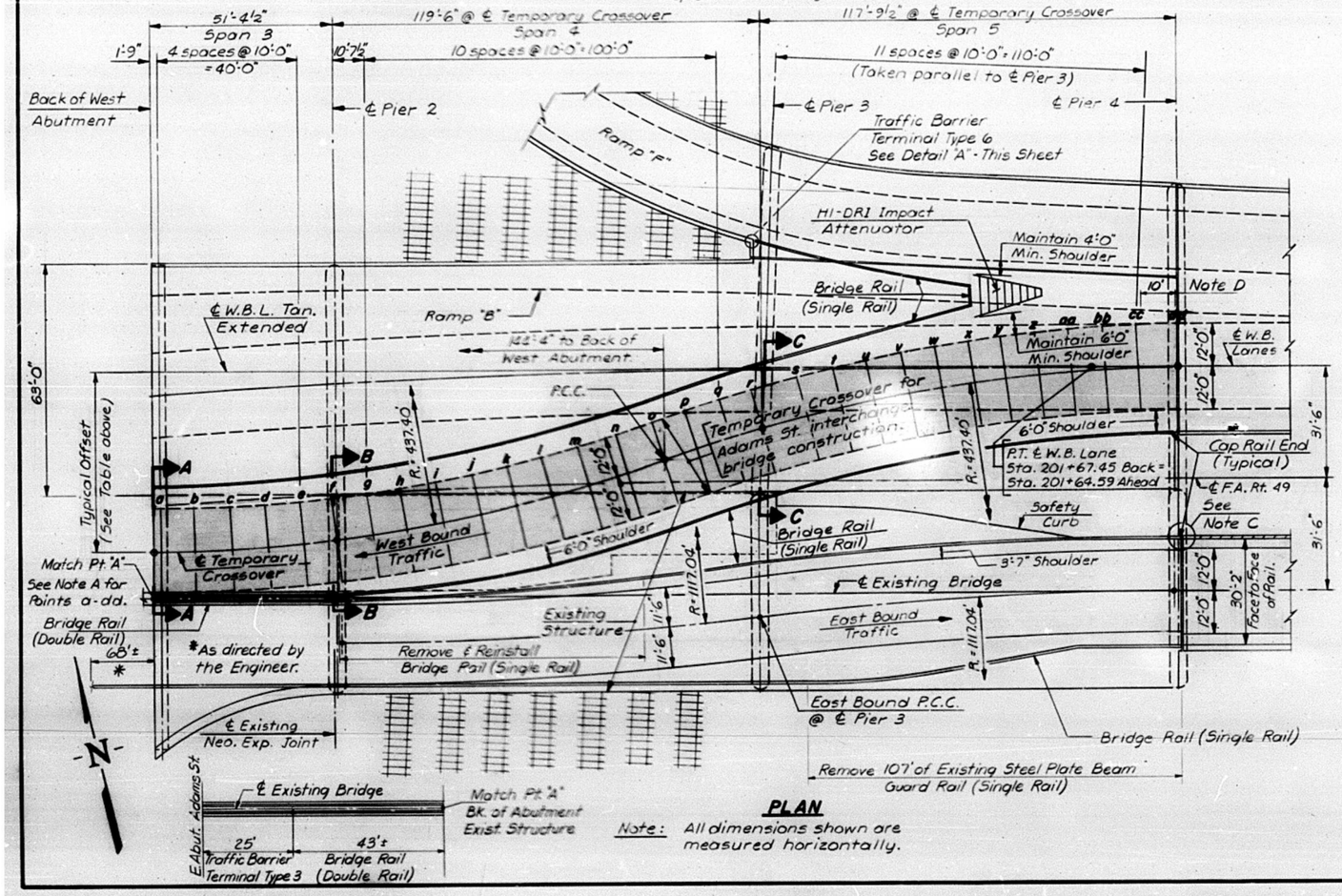
SECTION A-A



SECTION B-B (SPAN 4)



SECTION C-C



PLAN

Note: All dimensions shown are measured horizontally.

NOTES:

Note A: Points a thru dd can be located by intersecting the north edge of the 24'-0" temporary crossover with lines at the spacings shown in the plan view.

Note B: Elevations given along the south edge of the 24'-0" temporary crossover are taken at locations radial to the north edge of the crossover.

Note C: Face of Bridge Rail to match face of 4"x12" rectangular railing in Span 6. Note that the terminal for 4"x12" rectangular railing is to be removed and the end of the railing is to be capped. Cost of removing terminal & supplying cap will be incidental to cost of Bridge Rail.

See Sheet 78 of 88 for details of Impact Attenuator & Bridge Rail.

299' Existing Steel Plate Beam Guard Rail (from West Abut. to Pier 4) to be removed. (Paid for under S.P.B.G.R. Removal Single Rail)

Note D: Taper Cl. I - from 1 1/2" to match top surface of 6 1/2" neoprene expansion joint.

107' Existing Steel Plate Beam Guard Rail (South Curb of Span 5) to be removed. (Paid for under S.P.B.G.R. Removal Single Rail)

BILL OF MATERIAL TEMPORARY CROSSOVER

Item	Unit	Total
Bit. Conc. Sc. Mix. D. Cl. I.	Ton	146.7
Waterprf. Membrane Sys.	Sq. Yds.	1,176.7
Bridge Rail (Single)	Lin. Ft.	1,154
Bridge Rail (Double)	Lin. Ft.	94
Remove & Reinstall Bridge Rail (Single Rail)	Lin. Ft.	90
Traf. Barrier Term. T3	Each	1
Traf. Barrier Term. T6	Each	1
S.P.B.G.R. Rem. Single Rail	Lin. Ft.	107

TEMPORARY CROSSOVER SPANS 3, 4 & 5

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED S.C.Q.
CHECKED W.D.L.
DRAWN D.A.N.
CHECKED W.D.L.

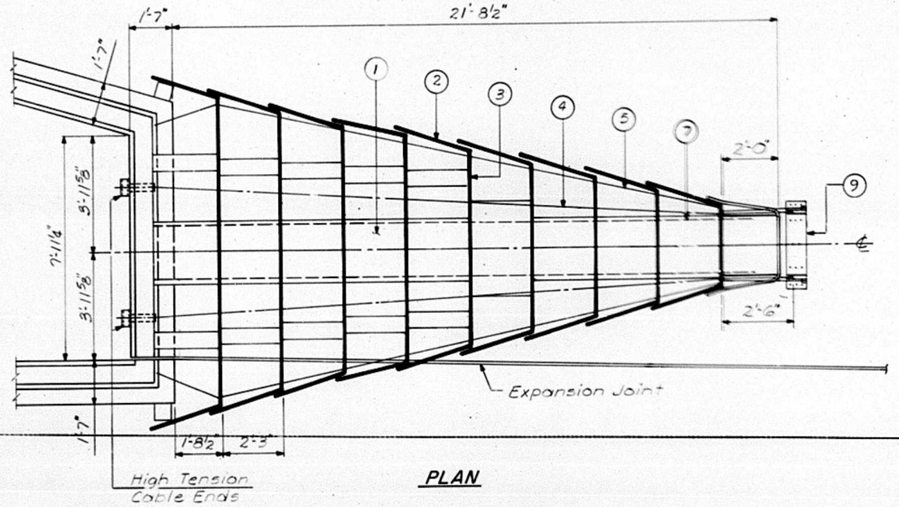
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

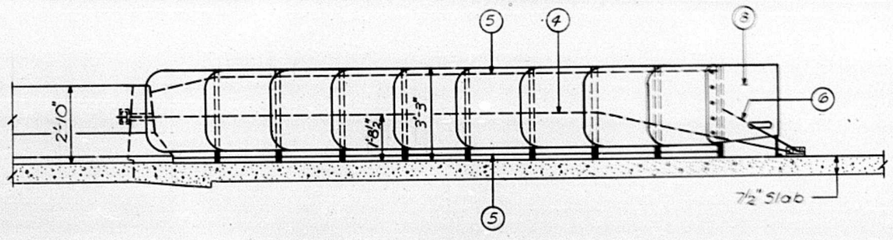
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.49	(188-1) -D	Peoria & Tazewell	97	82
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

Sheet 78 of 88.

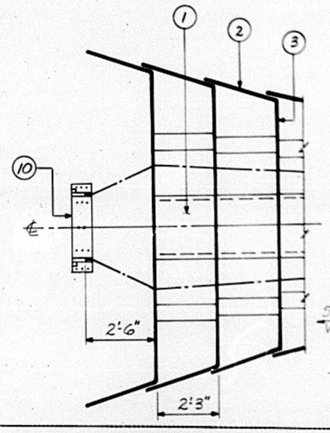


PLAN

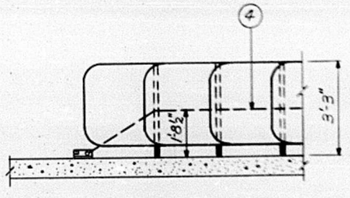


ELEVATION

SHOWING ANCHORAGE AT FINAL LOCATION
(See Sht. 77 For Temp. Location)

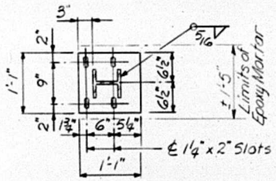


PARTIAL PLAN

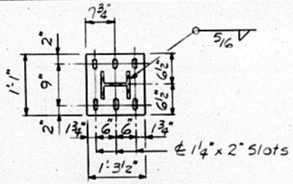


PARTIAL ELEVATION

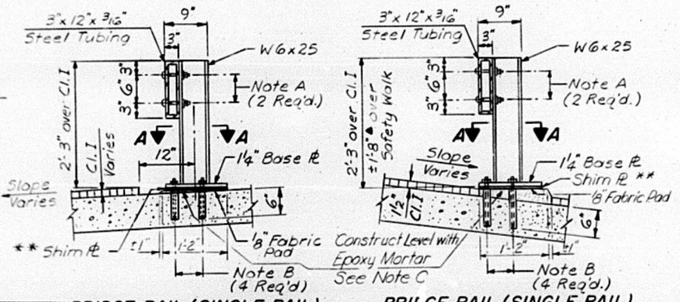
SHOWING ANCHORAGE AT TEMPORARY LOCATION



SECTION A-A

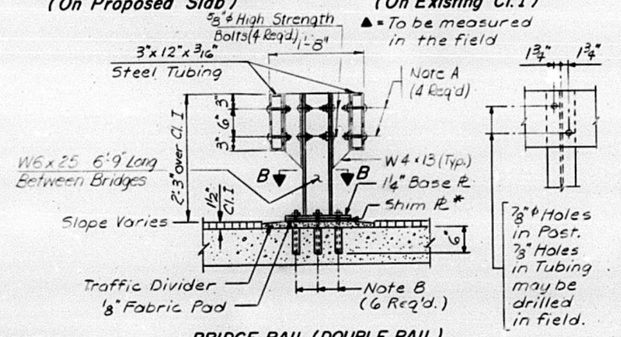


SECTION B-B



BRIDGE RAIL (SINGLE RAIL)
(On Proposed Slab)

BRIDGE RAIL (SINGLE RAIL)
(On Existing Cl. I)



BRIDGE RAIL (DOUBLE RAIL)

BRIDGE RAIL DETAILS

NOTES - BRIDGE RAIL

* Provide 2 - ⅛"x 13"x 1'-3½" Shim Plates for each Double Rail Post.

** Provide 2-⅛" x 13"x 13" shim plates for each Single Rail Post.

Note A: ¾" ϕ x 5" Button Hd. Machine Bolts (with slot or approved recess in head) with locknut & flat washer.

Note B: Drill & Epoxy Grout 1¼" ϕ holes for 1" ϕ H.S. bolts with nut & flat washers. See Spec. Prov.

The portion of the base plate or shim plate that contacts concrete shall recieve two coats of asphalt paint conforming to Section 714.08 Type B or place ⅛" fabric bearing pad between the post and concrete.

Hollow structural steel tubing shall conform to the requirements of A.S.T.M. designation A-500 Grade B Structural Steel Tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO. M-183 except posts and angles shall conform to AASHTO. M-223 Grade 50.

Bolts, cap screws and nuts shall conform to the requirements of A.S.T.M. designation A-307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO. M-164.

All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO. M-232.

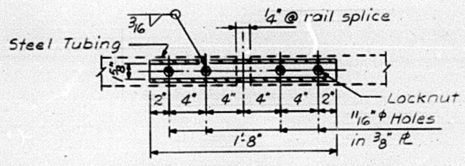
All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with AASHTO. M-111 and A.S.T.M. A-385. Galvanized rail shall not be painted.

Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per linear foot for furnishing and erecting Bridge Rail. All shim plates, paste, blockouts and mounting hardware shall be included in the price per linear foot of Bridge Rail.

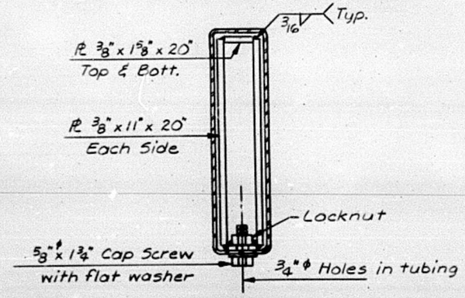
All field drilled holes shall be coated with an approved zinc rich paint before erection.

Maximum rail post spacing shall be 6'-9"

Note C: Remove wearing surface and sandblast the concrete surface clean & free of sealant, loose or unsound concrete and contaminents. The seats shall then be built up with Epoxy Mortar to the dimensions shown. The epoxy mortar shall consist of a 100 percent solids (solvent-free), two-component, fast curing, epoxy-resin system, suitably mixed with a clean, oven-dried aggregate of the type and gradation recommended by the manufacturer of the epoxy. The epoxy mortar shall be mixed, placed, and cured in accordance with the manufacturer's instructions. It shall be capable of bonding to concrete surfaces, provide compressive strength of 6000 psi when fully cured, and recommended by the manufacturer for the use intended. (Cost Incidental)



PLAN - BOTT. SPLICE PL. (TYPICAL)



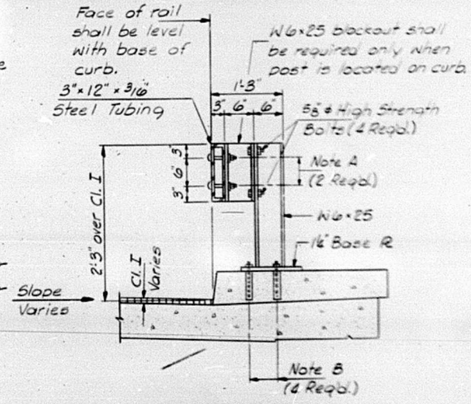
SECTION

BRIDGE RAIL SPLICE

DETAILS OF HI-DRI IMPACT ATTENUATOR SYSTEM
(OPTIONAL EXTRA WIDE ATTENUATOR)

KEY

1. Crushable Cartridge
2. Fender Panel
3. Diaphragm
4. High Tension Cable
5. Pullout Cable
6. Secondary Cable
7. Slide Trap
8. Safety-Flex Belt
9. Front Cable Anchor
10. Rear Cable Anchor



BRIDGE RAIL (SINGLE RAIL)
FOR RAIL ALONG SOUTH EDGE OF EAST BOUND TRAFFIC
Note: W6x25 Posts Not on Bridge shall be 6'-9" in length.
Top of rail shall be 2'-3" above Cl. I surfacing.

IMPACT ATTENUATOR SYSTEM
& BRIDGE RAIL DETAILS
SPANS 3, 4 & 5

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	S.C.O.
CHECKED	W.D.L.
DRAWN	D.A.N.
CHECKED	S.C.O.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, PEORIA & ROCKFORD, ILLINOIS

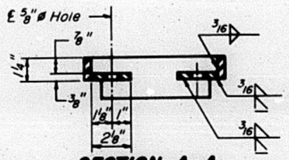
FILE NO. 74001
DATE 8-22-80

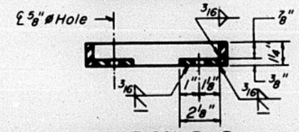
Rev. 12-30-80 Rev. 12/2/80

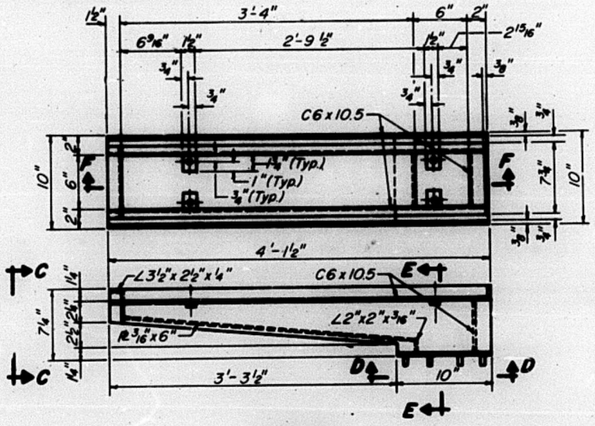
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

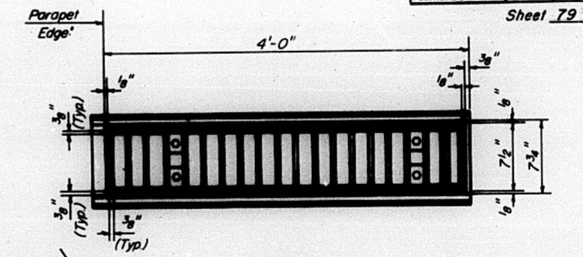
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.-49	(158-1)-D	Peoria & Tazewell	97	83
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

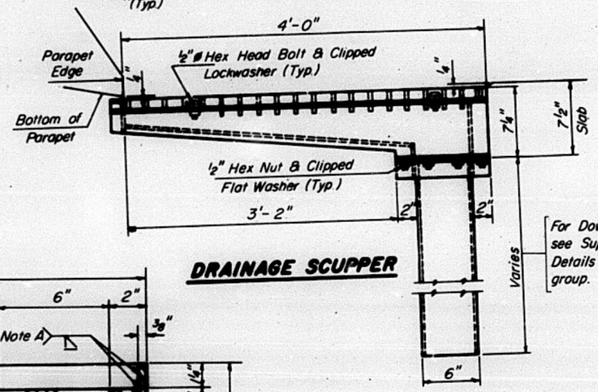
Sheet 79 of 88

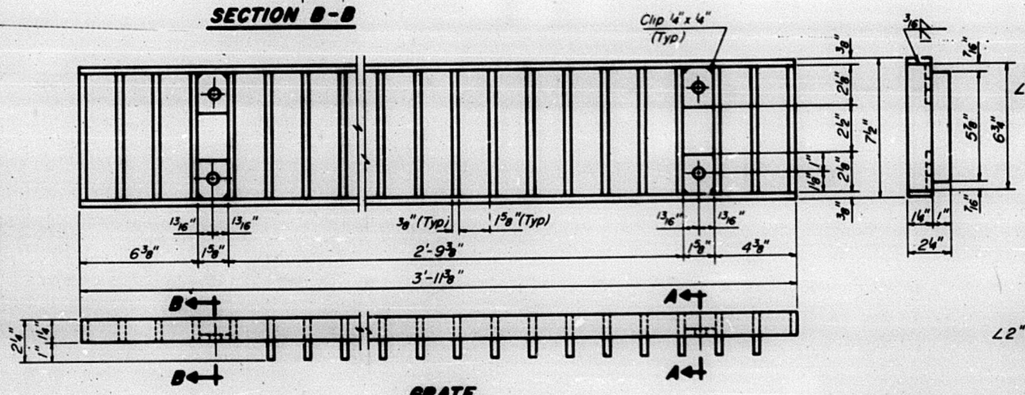


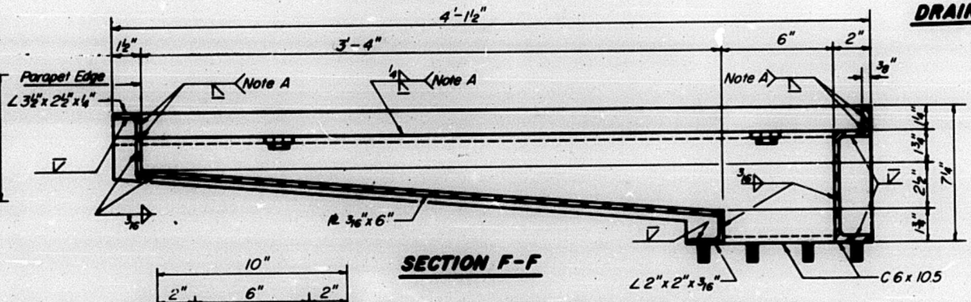


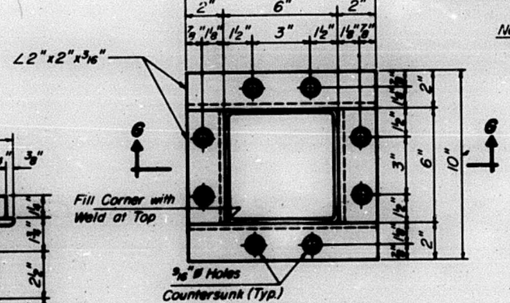


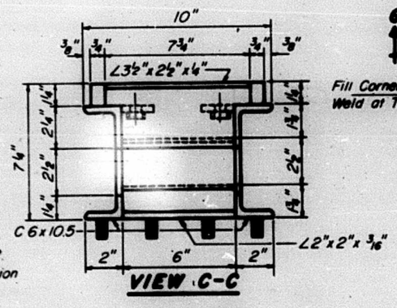


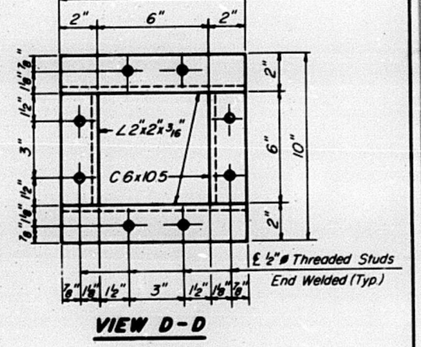


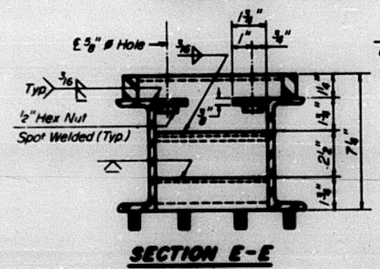


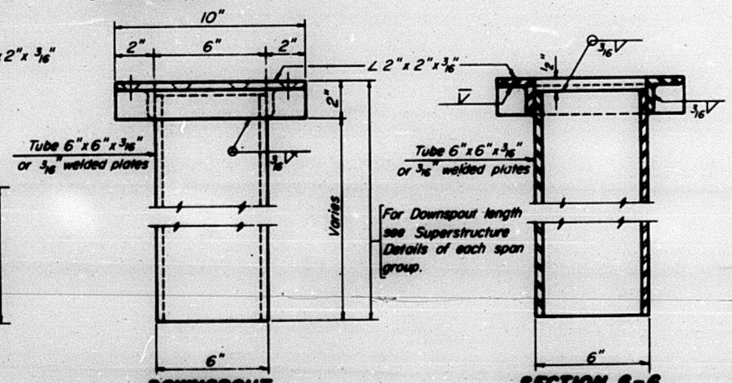












NOTES:

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 AASHTO 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 AASHTO M-111 & A.S.T.M. A-385

All bolts, washers and nuts shall be galvanized in accordance with AASHTO 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"

DRAINAGE SCUPPER
ALL SPANS EXCEPT RAMP E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.O.
R.J.F.
C.R.M.

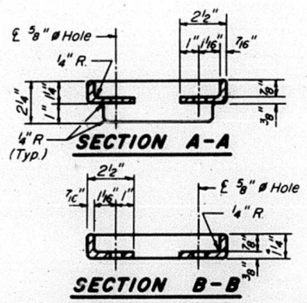
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

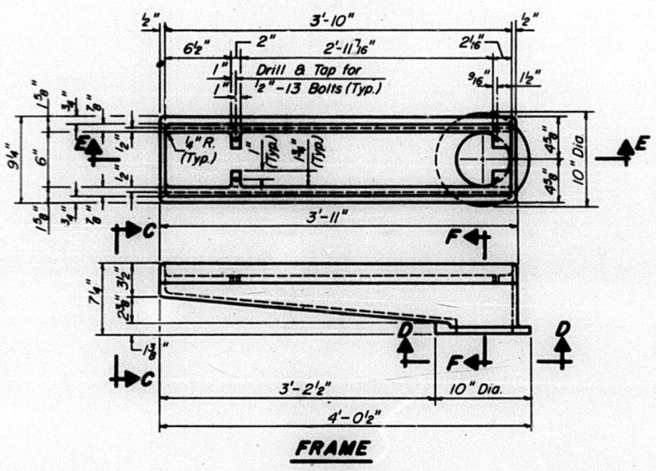
FILE NO. 74001
DATE 8-22-80

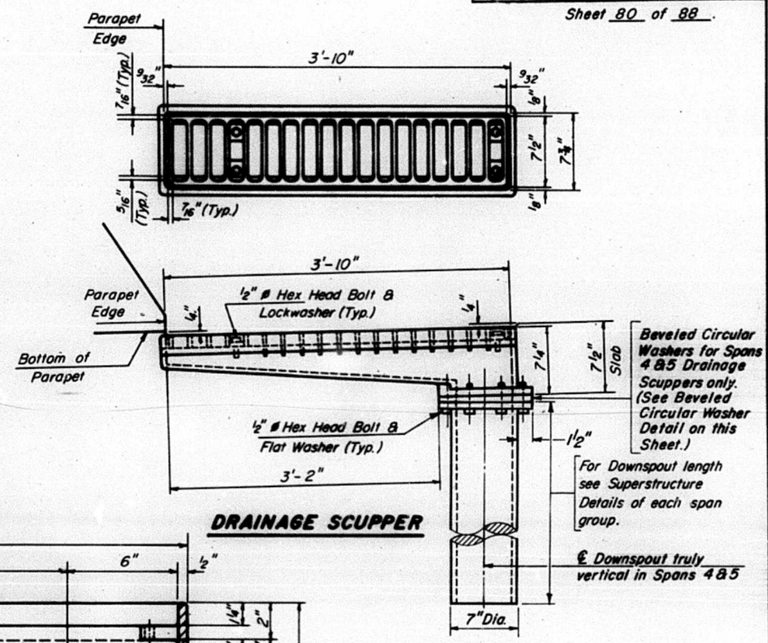
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

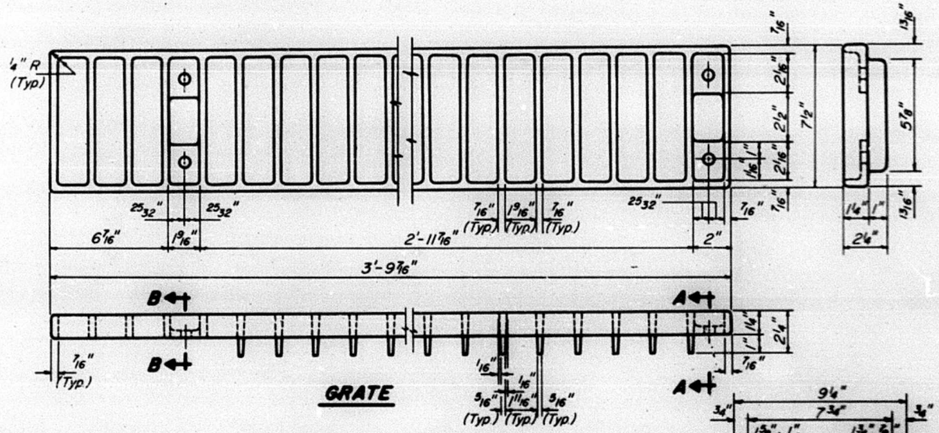
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA:49	(158-1) -D	Peoria & Tazewell	97	84
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

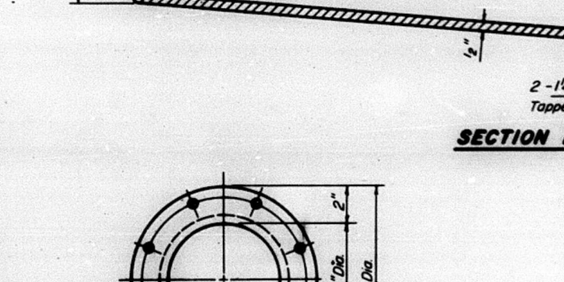
Sheet 80 of 88.

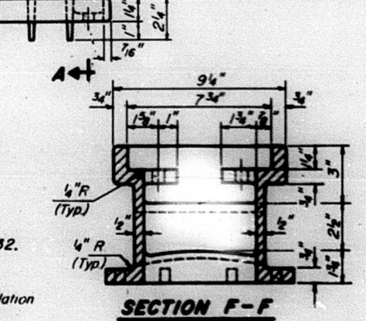


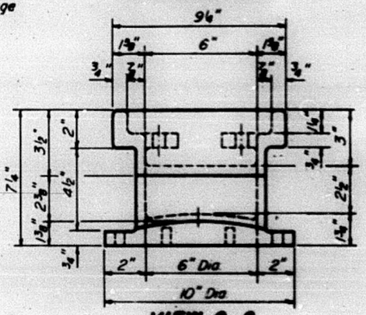


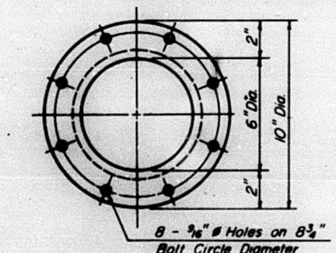


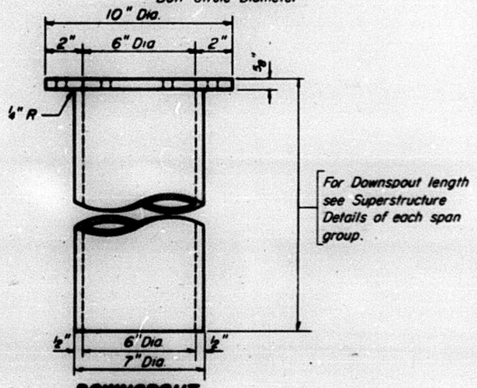


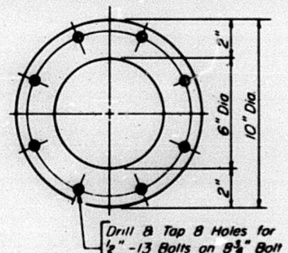




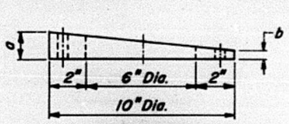








Note: Plan View of Beveled Circular Washer same as View D-D.



SIDE VIEW
(Plan View - same as View D-D)

WASHER LOCATION	a	b
* Downspout closest to Pier 2	1 3/8"	3/8"
* Downspout closest to Pier 3	1 1/8"	3/8"
* Downspout closest to Pier 4	9/16"	3/8"

* See Sheet 12 of 88 for exact downspout locations.

BEVELED CIRCULAR WASHER DETAIL

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.

ALTERNATE - CAST IRON DRAINAGE SCUPPER
ALL SPANS EXCEPT RAMP E

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.O.
R.J.F.
DESIGNED C.R.M.

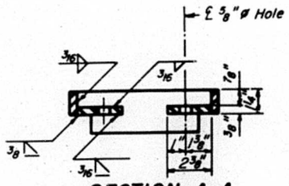
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

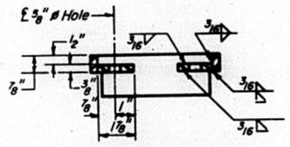
FILE NO. 74001
DATE 6-22-80

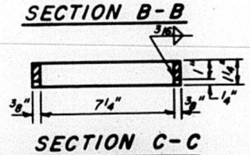
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

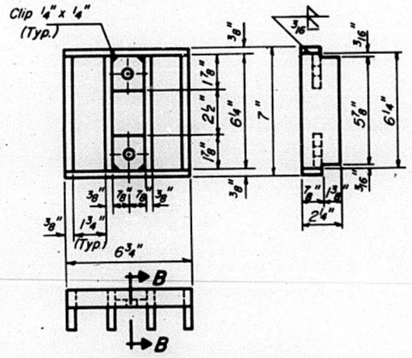
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FA.49	(158-1) -D	Peoria & Tazewell	97	85
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

Sheet 81 of 88

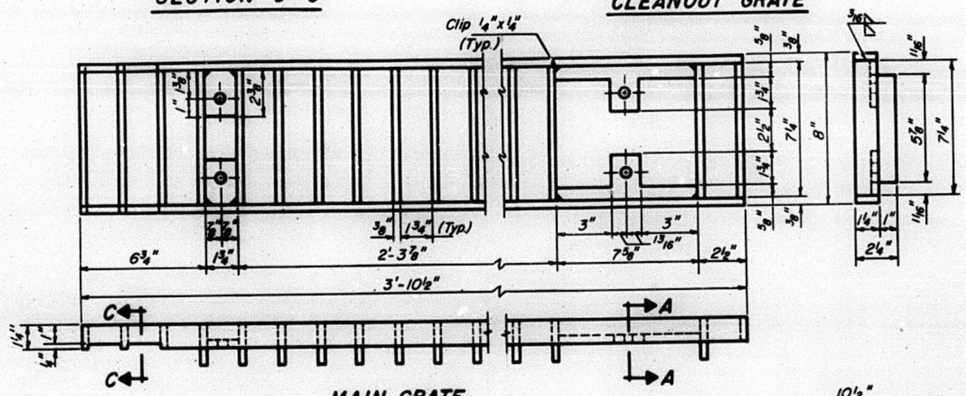




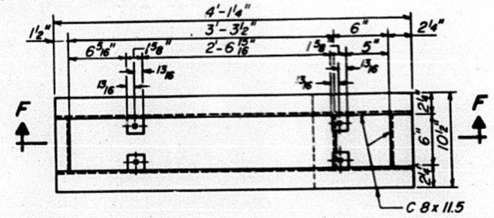


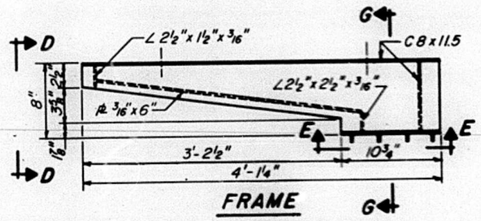


CLEANOUT GRATE

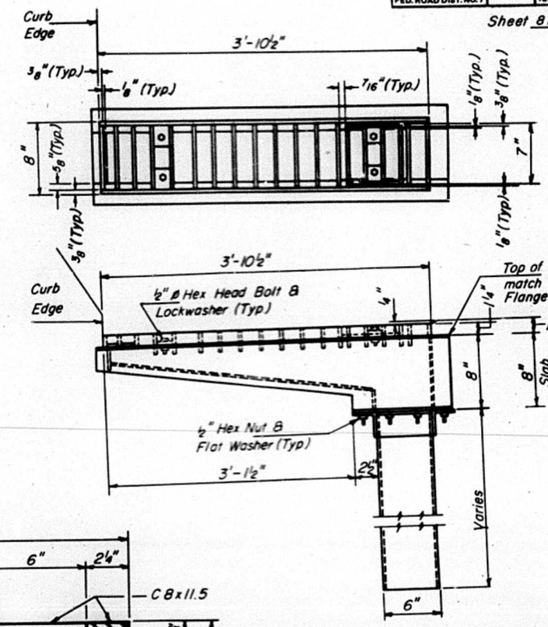


MAIN GRATE

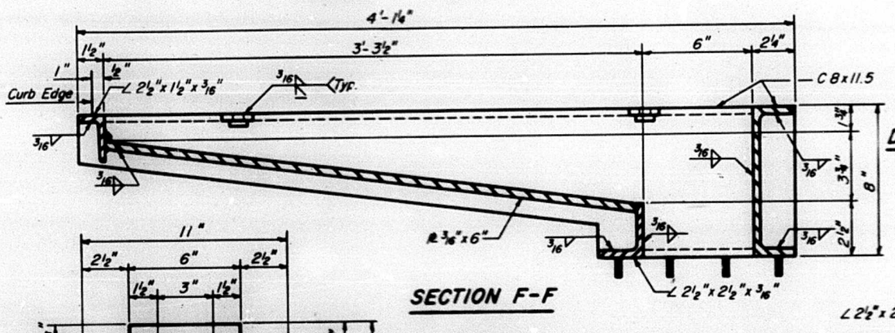




FRAME

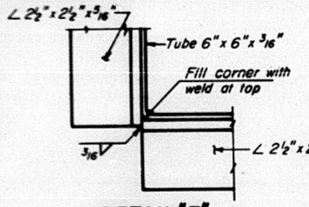


DRAINAGE SCUPPER

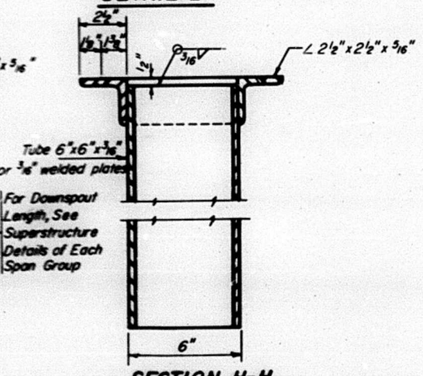


SECTION F-F

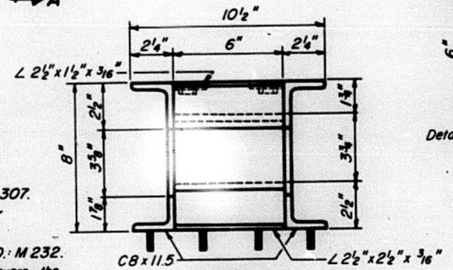
DOWNSPOUT



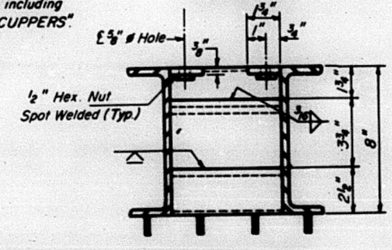
DETAIL "I"



SECTION H-H



VIEW D-D



SECTION G-G

VIEW E-E

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 Main Grate, Cleanout Grate, Frame and Downspout shall be galvanized after shop fabrication in accordance with A.A.S.H.T.O. : M111 & 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.

The Waterproofing Membrane System shall be installed such that the membrane covers the frame flanges and extends down into the frame with the grates placed on top of the membrane.

Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS".

DRAINAGE SCUPPER
RAMP E ONLY

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.O.
P.M.
W.D.L.

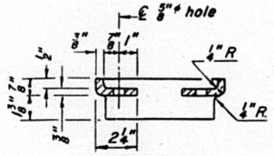
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

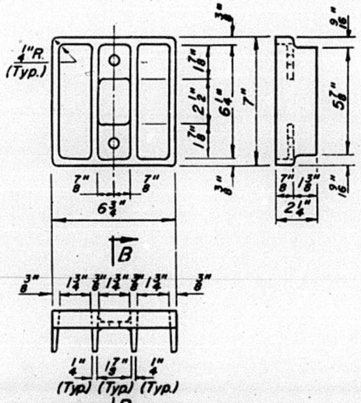
FILE NO. 74001
DATE 8-22-80

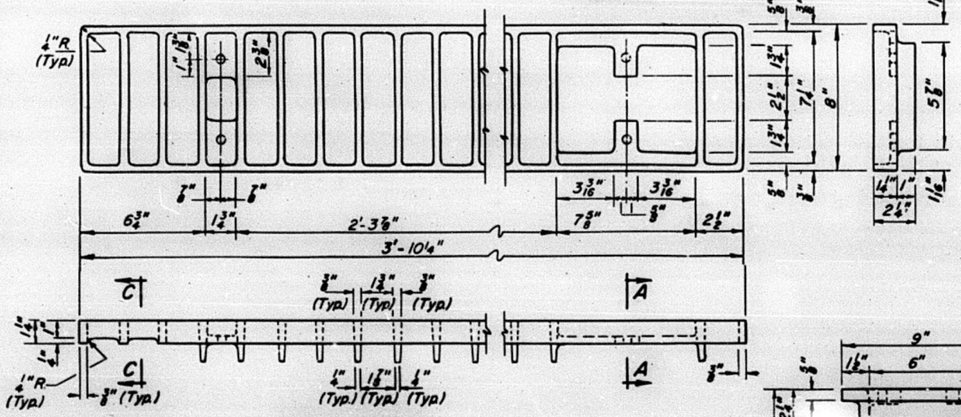
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	Peoria & Tazewell	97	86
FED. ROAD DIST. NO. 7		ILLINOIS PROJECT		

Sheet 82 of 88







NOTES:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 30.

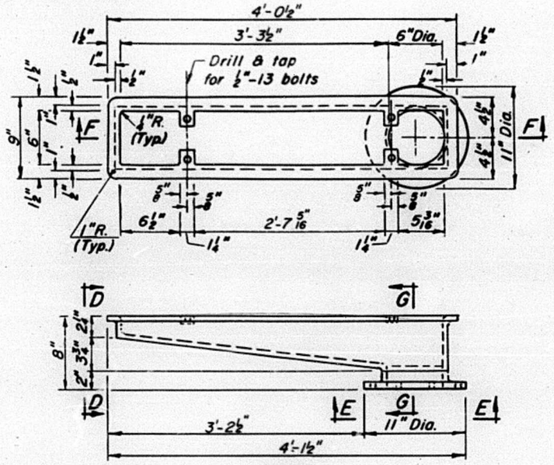
Bolts, washers and nuts shall conform to the requirements of ASTM A-307.

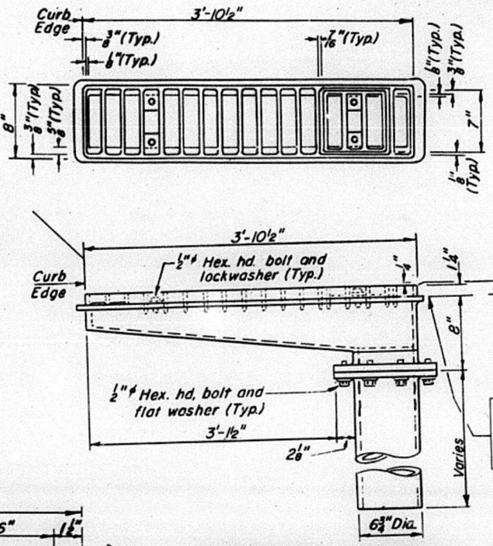
All bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232.

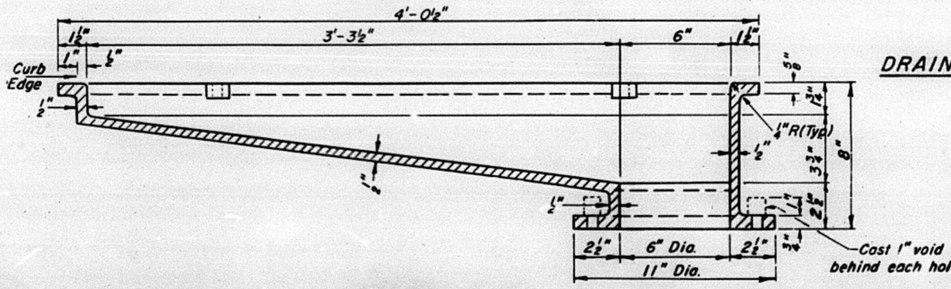
The waterproofing membrane system shall be installed such that the membrane covers the frame flanges and extends down into the frame with the grates placed on top of the membrane.

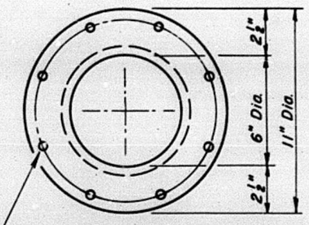
Cost of the Main Grate, Cleanout Grate, Frame, Downspout, Bolts, Washers and Nuts including complete installation of Scupper shall be paid for at the unit bid price for "DRAINAGE SCUPPERS."

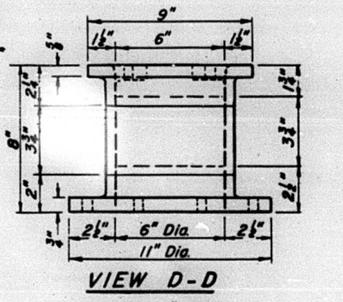
The Contractor may use at his option steel frames and steel grates or cast frames and cast grates, but will not be allowed to use steel grates with cast frames nor cast grates with steel frames.

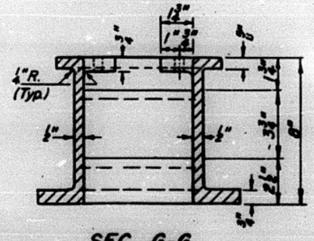


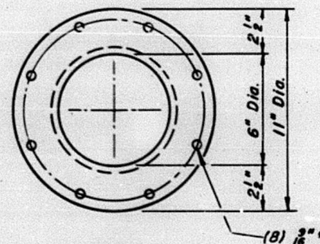


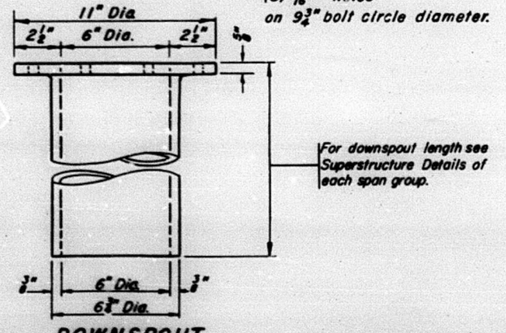












ALTERNATE CAST IRON DRAINAGE SCUPPER
RAMP E ONLY

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

W.D.L.
S.C.O.
P.M.
W.D.L.

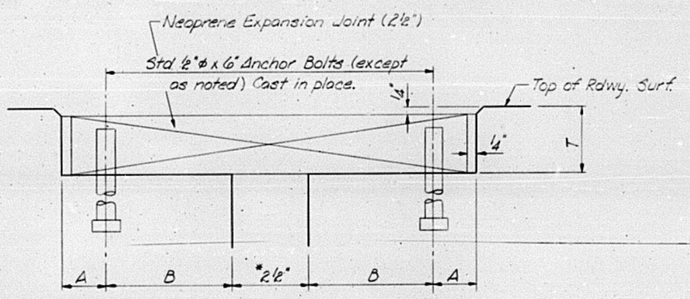
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

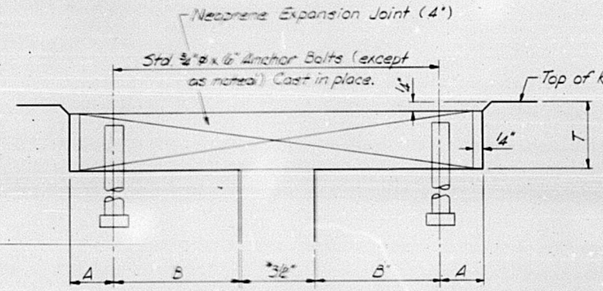
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	87
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

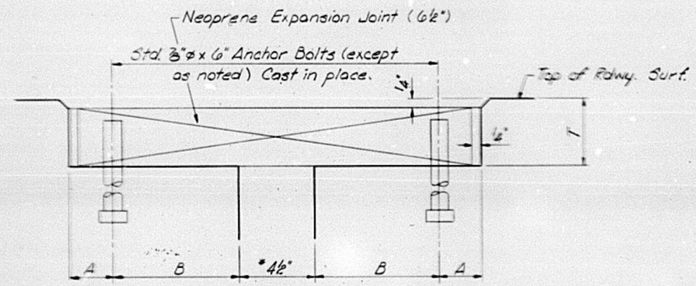
Sheet 83 of 88



CROSS SECTION - 2½" JOINT
E. ABUT. & PIER 2
*At 50°F.
Dimensions are at right angles.



CROSS SECTION - 4" JOINT
N. ABUT. & S. ABUT.
*At 50°F.
Dimensions are at right angles.



CROSS SECTION - 6½" JOINT
PIERS 4, 16, 19 & 4E
*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.

ALTERNATE NEOPRENE EXPANSION JOINTS (2½")
(See Special Provisions)

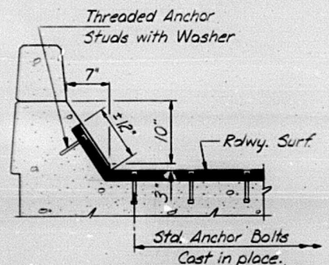
Model	Supplier	Blockout Dimension
TRANSFLEX, MODEL 250 Use ⅝"ø x 6" Anchor Bolts	GENERAL TIRE COMPANY	T=2 1/16", A=1½", B=4¼"
WABOFLEX, MODEL SR 2.5 Use ⅝"ø x 6" Anchor Bolts	WATSON BOWMAN ASSOCIATES, INC.	T=2 1/16", A=1½", B=4¼"
FEL-SPAN, MODEL T-30 Set joint seal 1⅝" at 50°F.	FEL-PRO BUILDING PRODUCTS, INC.	T=1¾", A=2¼", B=2 9/16"
WABO ELASTODAM, Type 300 Set joint seal 1⅝" at 50°F.	WATSON BOWMAN ASSOCIATES, INC.	T=1¾", A=2¼", B=2 9/16"
WABO ALU-STRIP, Type III S300 Set joint seal 1½" at 50°F. Permited for 0° skew only.	WATSON BOWMAN ASSOCIATES, INC.	T=1¾", A=1⅝", B=2½"
LOW PROFILE ONFLEX-25 Set joint seal 1½" at 50°F. Roadway bolt channel shall be filled with approved grout. Permitted for up to 50° skew.	STRUCTURAL ACCESSORIES, INC.	T=1¾", A=1⅝", B=2⅛"

ALTERNATE NEOPRENE EXPANSION JOINTS (4")
(See Special Provisions)

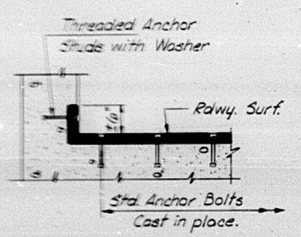
Model	Supplier	Blockout Dimension
TRANSFLEX, MODEL 400A	GENERAL TIRE COMPANY	T=2 3/8", A=1 13/16", B=8 1/16"
WABOFLEX, MODEL SR4	WATSON BOWMAN ASSOCIATES, INC.	T=2 3/8", A=1 13/16", B=8 1/16"
FEL-SPAN, MODEL T-40 Set joint seal 2⅛" at 50°F. Use ½"ø Anchor Bolts Max. expansion length = 300'	FEL-PRO BUILDING PRODUCTS, INC.	T=2 3/8", A=2¼", B=2 9/16"
WABO ELASTODAM, Type 400 Set joint seal 2⅛" at 50°F. Use ½"ø x 6" Anchor Bolts Max. expansion length = 300'	WATSON BOWMAN ASSOCIATES, INC.	T=2 3/8", A=2¼", B=2 9/16"

ALTERNATE NEOPRENE EXPANSION JOINTS (6½")
(See Special Provisions)

Model	Supplier	Blockout Dimension
TRANSFLEX, MODEL 650	GENERAL TIRE COMPANY	T=3¼", A=2⅛", B=9⅜"
WABOFLEX, MODEL SR 6.5 Use ⅞"ø x 6" Anchor Bolts	WATSON BOWMAN ASSOCIATES, INC.	T=3¼", A=2⅛", B=9⅜"



AT CURB



AT ABUTMENT

TYPICAL END TREATMENT

NEOPRENE EXPANSION JOINTS (2½", 4" & 6½")

Mc CLUSAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED W.D.L.
CHECKED S.C.Q.
DRAWN R.J.F.
CHECKED C.R.N.

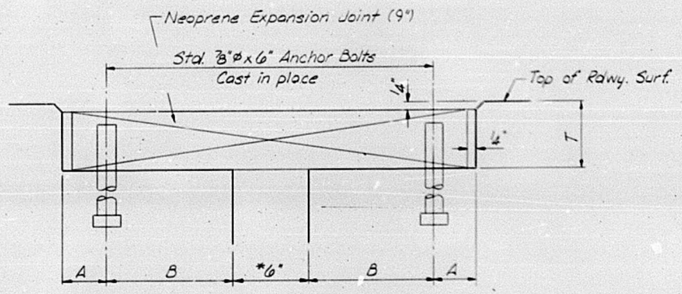
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

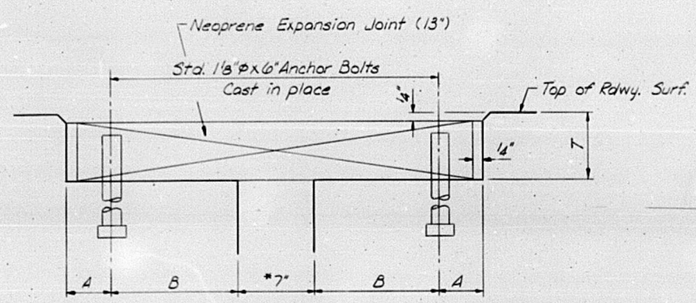
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	88
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

Sheet 84 of 88

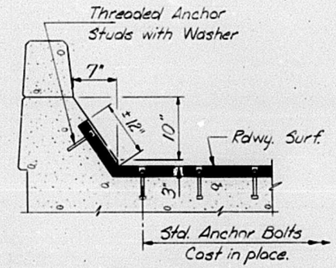


CROSS SECTION - 9" JOINT
PIER 10 & TRUSS L_{21}
*At 50°F.
Dimensions are at right angles.



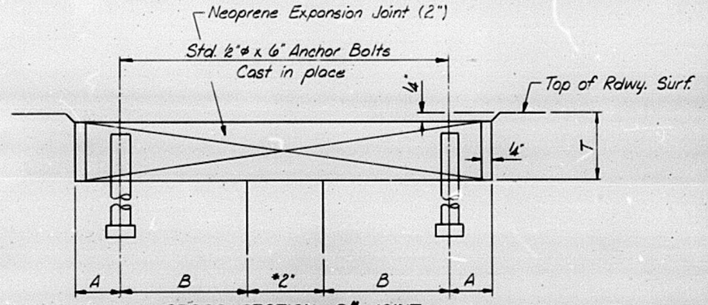
CROSS SECTION - 13" JOINT
PIERS 7, 13 & 7E
*At 50°F.
Dimensions are at right angles.

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.



AT CURB

TYPICAL END TREATMENT



CROSS SECTION - 2" JOINT
PANEL POINTS L_4, L_8, L_{12}, L_{25}, $L_4', L_8', L_{12}', L_{21}'$ & L_{25}'
*AT 50°F.
Dimensions are at right angles.

ALTERNATE NEOPRENE EXPANSION JOINTS (9")
(See Special Provisions)

Model	Supplier	Blockout Dimension
TRANSFLEX, MODEL 900	GENERAL TIRE COMPANY	T=4", A=2 3/16", B=1'-0 1/2"
WABOFLEX, MODEL SR 9	WATSON BOWMAN ASSOCIATES, INC.	T=4", A=2 3/16", B=1'-0 1/2"

ALTERNATE NEOPRENE EXPANSION JOINTS (13")
(See Special Provisions)

Model	Supplier	Blockout Dimension
TRANSFLEX, MODEL 1300	GENERAL TIRE COMPANY	T=5 1/4", A=2 1/2", B=1'-5 3/4"
WABOFLEX, MODEL SR13	WATSON BOWMAN ASSOCIATES, INC.	T=5 1/4", A=2 1/2", B=1'-5 3/4"

ALTERNATE NEOPRENE EXPANSION JOINTS (2")
(See Special Provisions)

Model	Supplier	Blockout Dimension
TRANSFLEX, MODEL 200A	GENERAL TIRE COMPANY	T=1 13/16", A=1 1/8", B=3 5/16"
WABOFLEX, MODEL SR2	WATSON BOWMAN ASSOCIATES, INC.	T=1 13/16", A=1 1/4", B=3 5/16"
FEL-SPAN, MODEL T-30 Set joint seal 1 3/8" at 50°F.	FEL-PRO BUILDING PRODUCTS, INC.	T=1 3/4", A=2 1/4", B=2 13/16"
WABO ELASTODAM, TYPE 300 Set joint seal 1 3/8" at 50°F.	WATSON BOWMAN ASSOCIATES, INC.	T=1 3/4", A=2 1/4", B=2 13/16"
WABO ALU-STRIP, TYPE III S300 Set joint seal 1 1/2" at 50°F. Permitted for 0° skew only.	WATSON BOWMAN ASSOCIATES, INC.	T=1 3/4", A=1 3/8", B=2 3/4"
Low PROFILE ONFLEX-25 Set joint seal 1 1/2" at 50°F. Roadway bolt channel shall be filled with approved grout.	STRUCTURAL ACCESSORIES, INC.	T=1 3/4", A=1 3/8", B=2 3/8"

NEOPRENE EXPANSION JOINTS (2", 9" & 13")

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

DESIGNED	W.D.L.
CHECKED	S.C.Q.
DRAWN	R.J.F.
CHECKED	C.R.N.

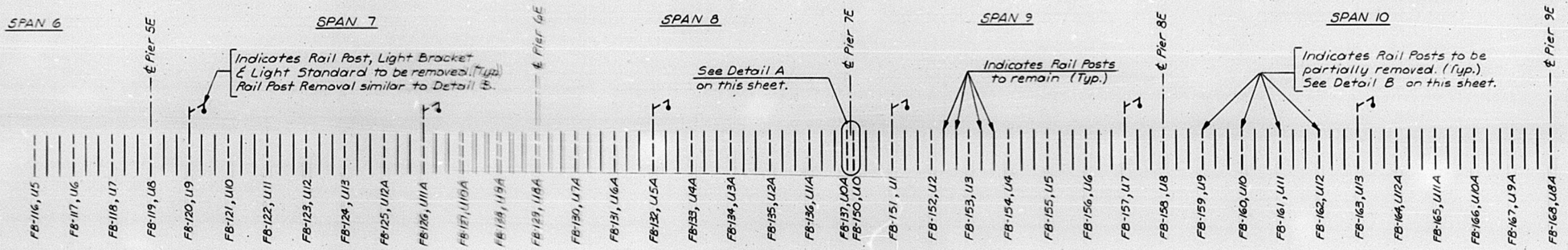
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

FILE NO. 74001
DATE 8-22-80

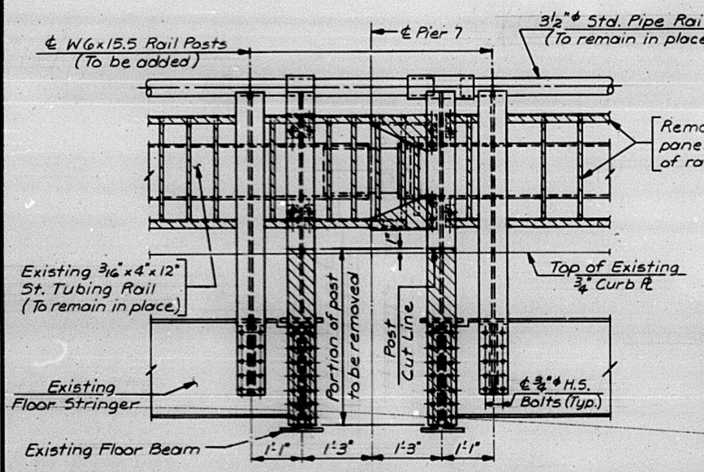
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 49	(15B-1) -D	PEORIA & TAZEWELL	97	89
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

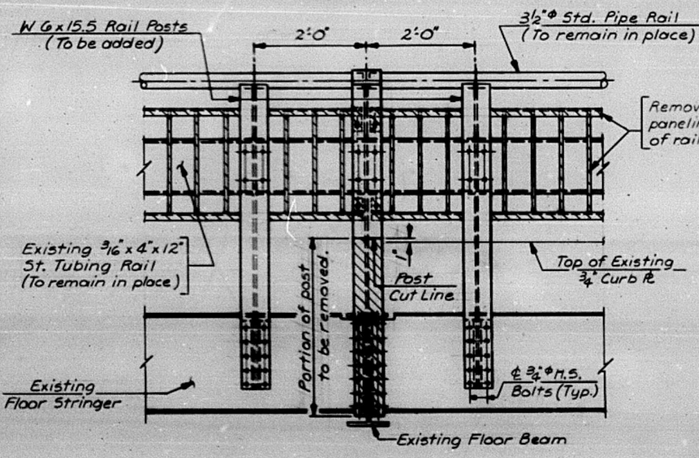
Sheet 85 of 88



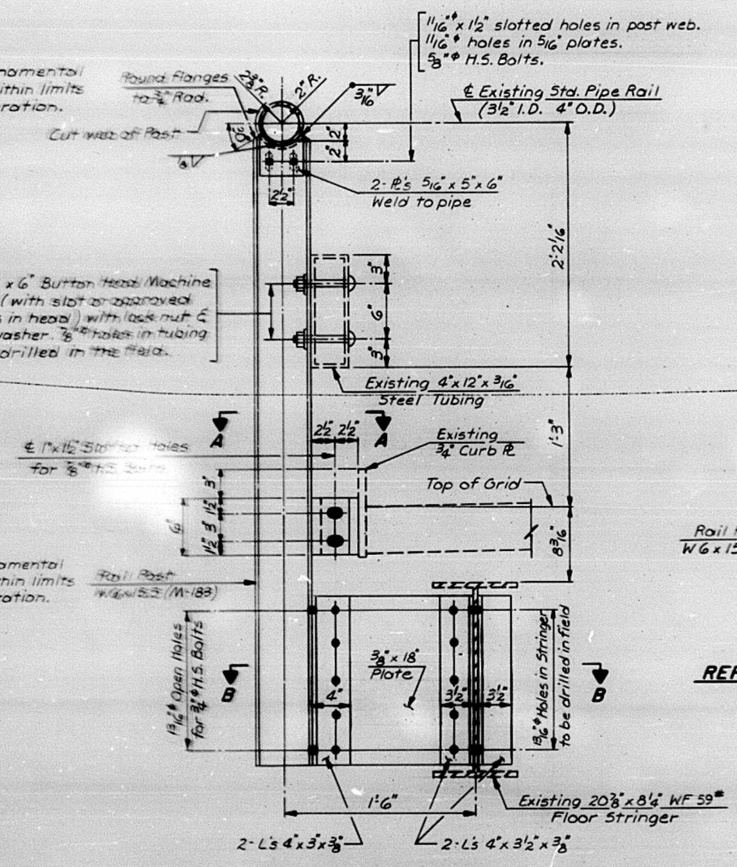
SCHEMATIC OF EXISTING RAIL TO BE ALTERED



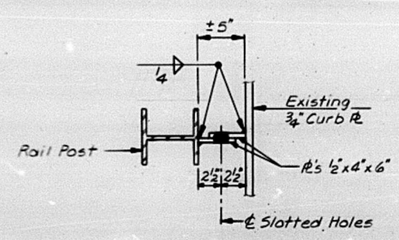
DETAIL A



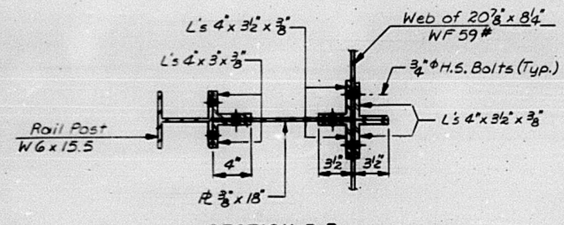
DETAIL B



SECTION AT RAIL POST



SECTION A-A



SECTION B-B

REPLACEMENT HANDRAIL POST CONNECTION

RAIL ALTERATION

117 - Ornamental Rail Panels 8'-8" long to be removed.

1 - Ornamental Rail Panel 2'-6" long to be removed.

35 - Rail Posts to be partially removed.

6 - Combination Rail Posts, Light Standard Brackets & Light Standards to be removed.

80 - New Rail Posts to be added.

Note: This Sheet for Informational Purposes Only. Showing Altered Rail, Rail Posts, and Rail Post Connections to be removed by the Deck Contractor.

EXISTING RAIL ALTERATIONS

McCLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC.(15B-1)-D
PEORIA & TAZEWELL COUNTIES

CRN
S.C.O.
D.A.N.
CRN

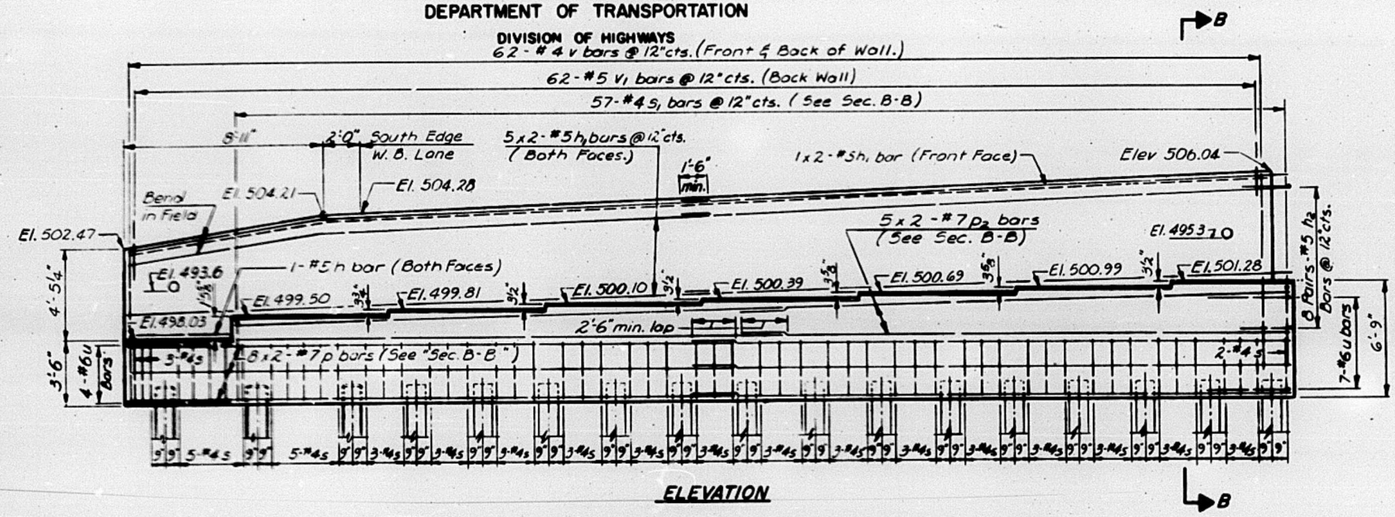
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

PLAN NO. 74001
DATE 8-22-80

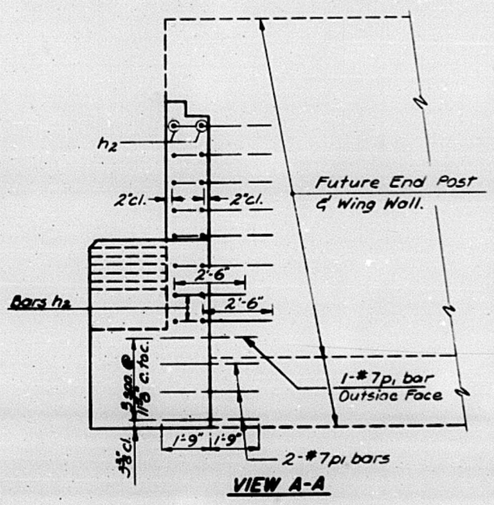
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FA. 49	(15B-1)-D	Peoria & Tazewell	97	90

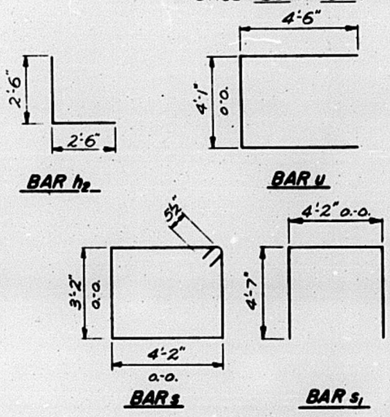
Sheet 86 of 88.

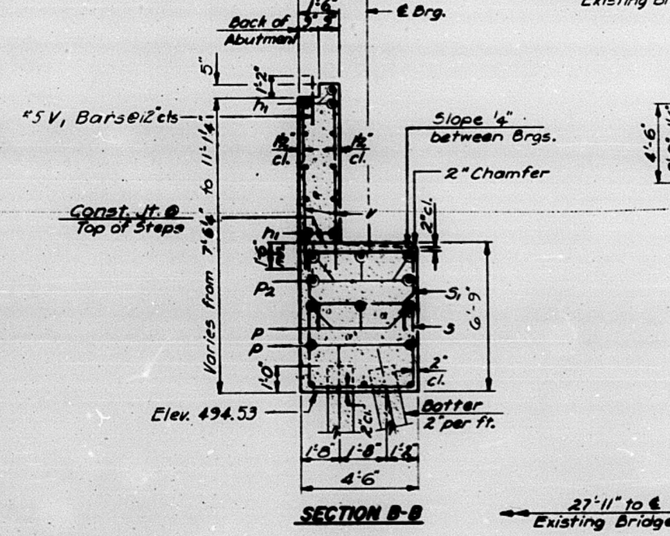


ELEVATION

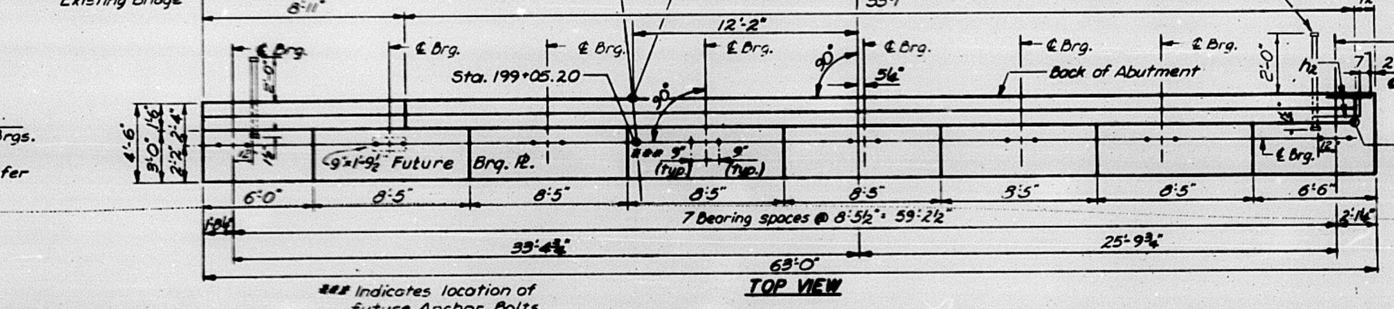


VIEW A-A





SECTION B-B



WEST ABUTMENT BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h	2	#5	5'-6"	
h1	22	#5	32'-0"	
h2	16	#6	5'-0"	L
p	16	#7	32'-6"	
p1	7	#7	3'-6"	
p2	10	#7	29'-6"	
s	57	#4	15'-7"	
s1	57	#4	13'-4"	
u	11	#6	13'-1"	
v	124	#4	6'-0"	
v1	62	#5	2'-8"	
Test Pile 12" Conc.		Each	1	
Class X Concrete		Cu. Yds.	74.4	
Reinforcement Bars		Lbs.	4,530	
Concrete Piles 12"		Lin. Ft.	420	
Structure Excavation		Cu. Yds.	152	
Concrete Removal		Cu. Yds.	9.6	
Steel Sheet Piling		Sq. Ft.	1,482	

WEST ABUTMENT

Mc CLUGAGE BRIDGE OVER THE ILLINOIS RIVER

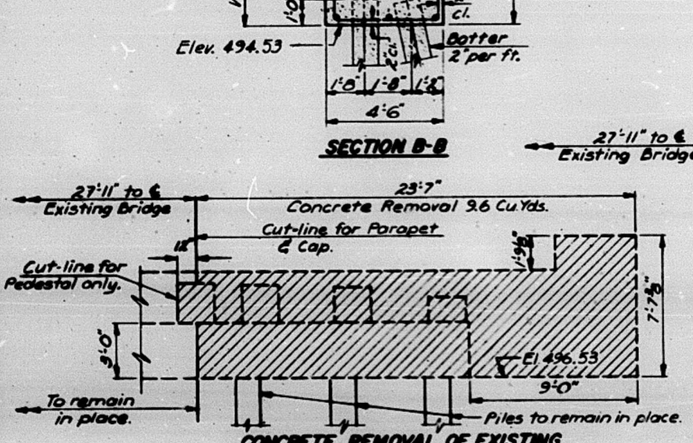
F.A. ROUTE 49 SEC. (15B-1)-D
PEORIA & TAZEWELL COUNTIES

C.R.M.	
J.C.G.	
D.A.N.	
C.R.M.	

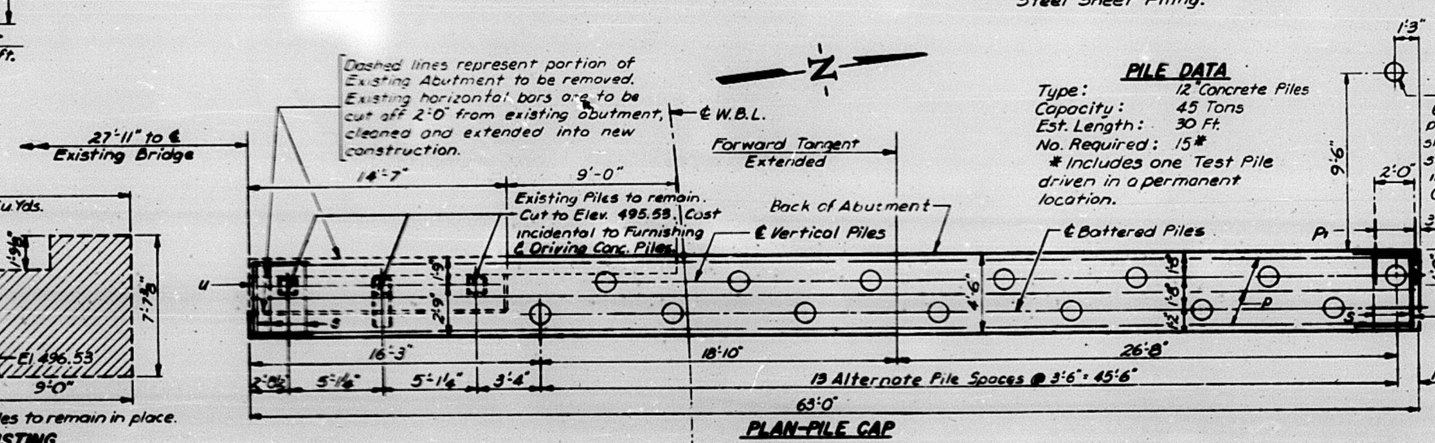
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

P.N. 74001
DATE 8-22-80

Note: See Sheet 87 of 88 for Steel Sheet Piling.



CONCRETE REMOVAL OF EXISTING WEST ABUTMENT PARAPET, CAP & WING



PLAN-PILE CAP

PILE DATA

Type: 12" Concrete Piles
Capacity: 45 Tons
Est. Length: 30 Ft.
No. Required: 15#
* Includes one Test Pile driven in a permanent location.

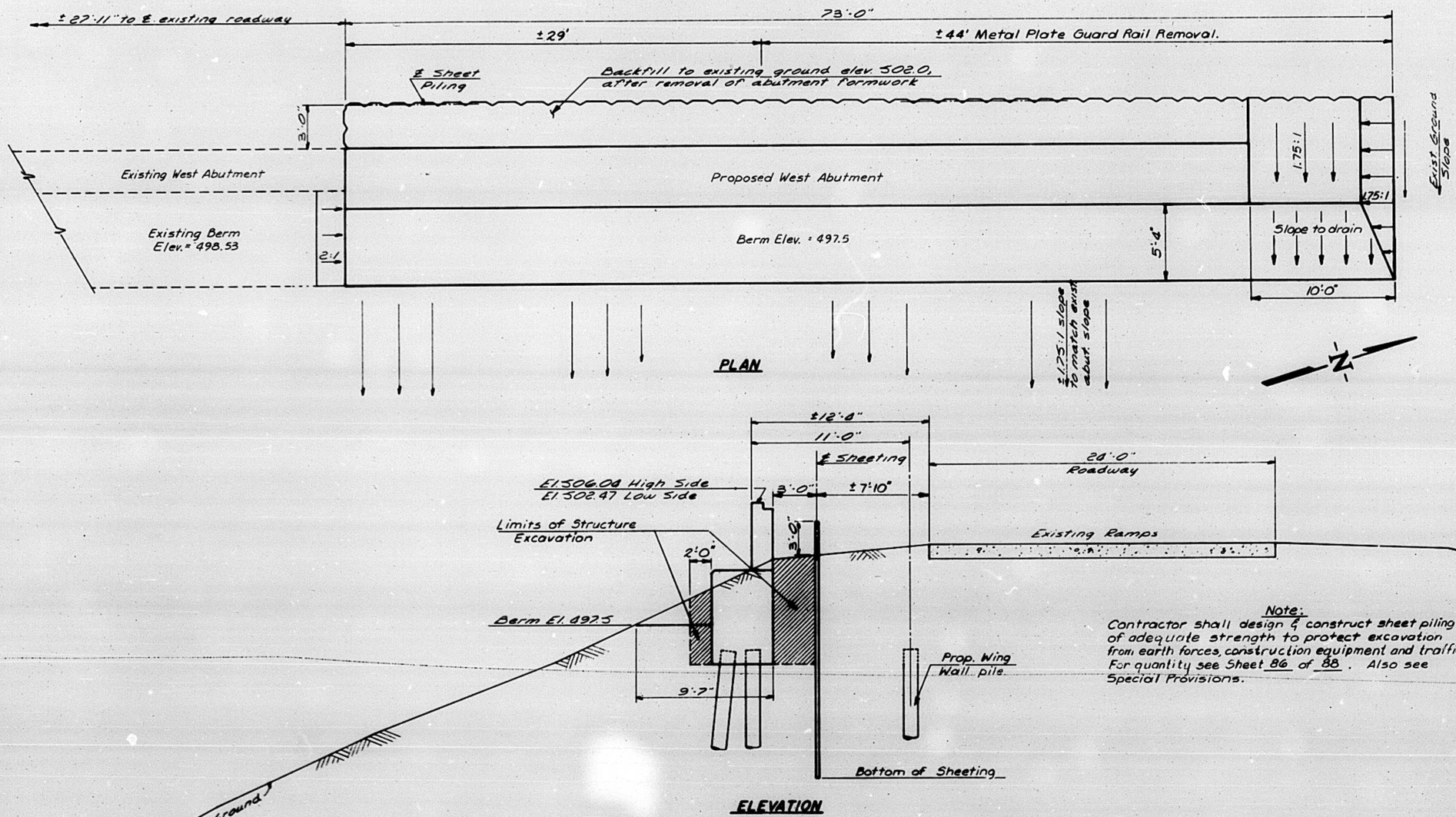
Top of pile @ El. 495.53. After pile is in place, Contractor shall backfill to existing shoulder elevation. Cost incidental to Fur. & Driving Conc. Piles.

FOR INFORMATIONAL PURPOSES ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

F.A.49	(138-11 -D	Peoria & Tazewell	97	91

Sheet 87 of 88.



Note:
Contractor shall design & construct sheet piling of adequate strength to protect excavation from earth forces, construction equipment and traffic. For quantity see Sheet 86 of 88. Also see Special Provisions.

SHEET PILING & EMBANKMENT-WEST ABUT.

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (138-11-D
PEORIA & TAZEWELL COUNTIES

S.C.O.
C.R.N.
C.R.C.
W.D.L.

HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

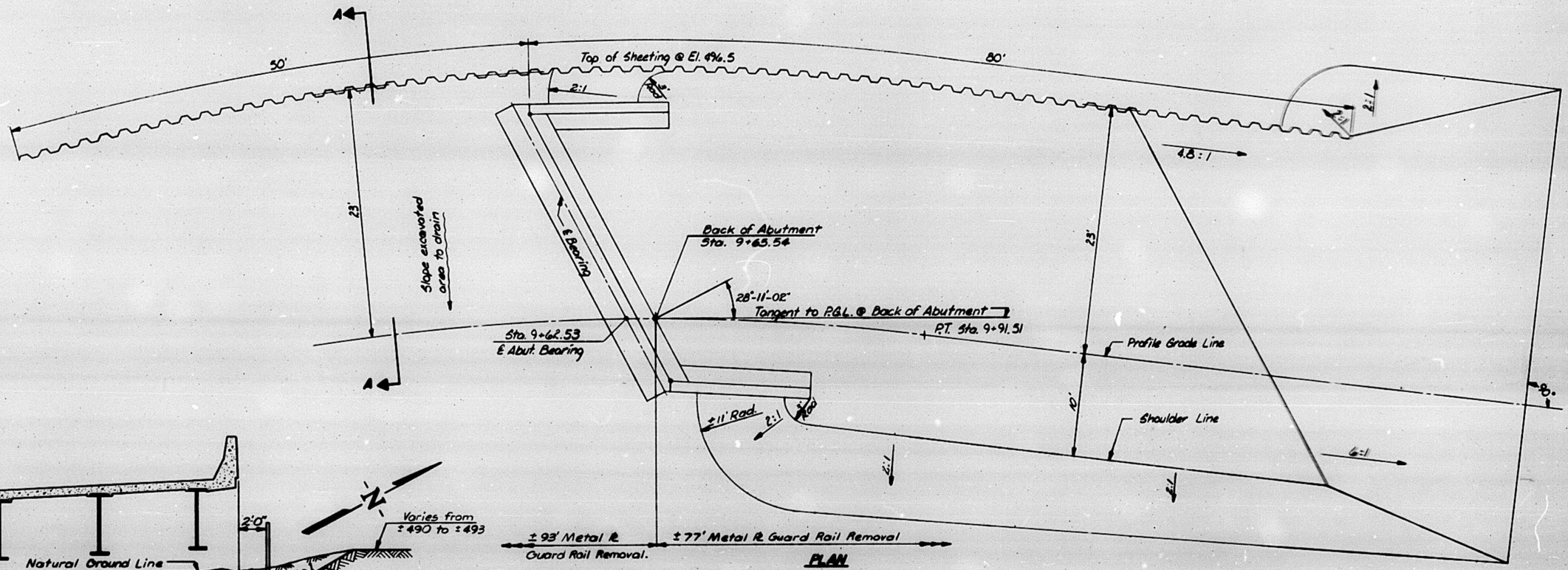
74001
8-22-8

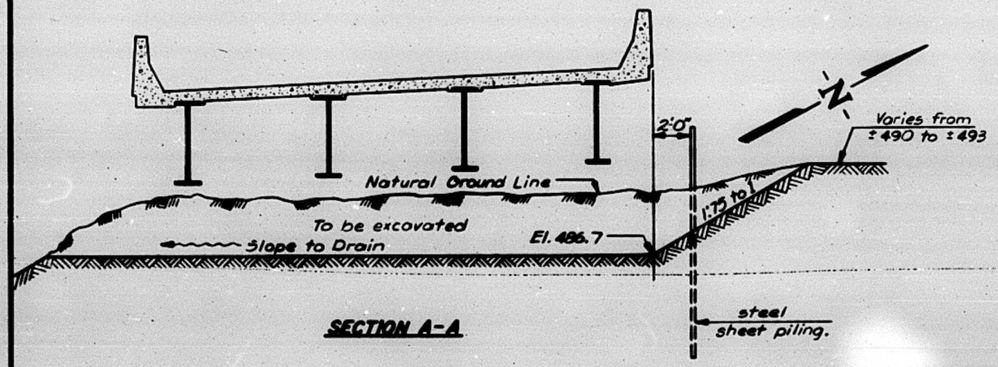
FOR INFORMATIONAL PURPOSES ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

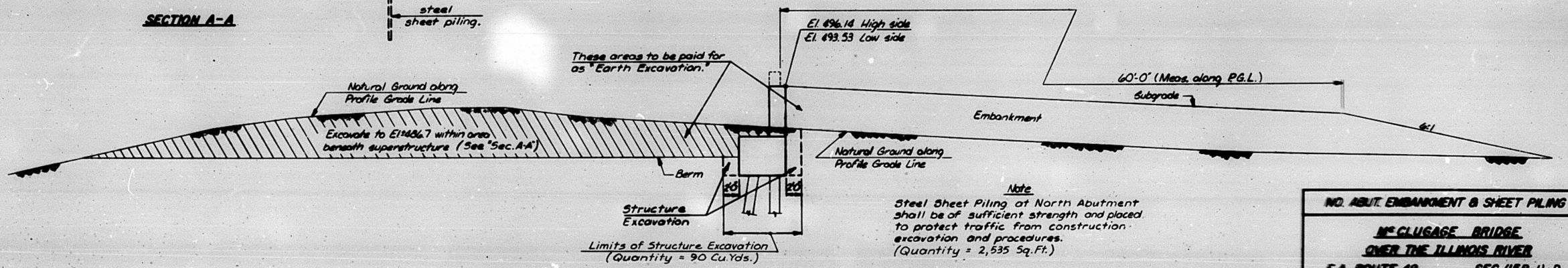
F.A. 49	(158-1) -D	PEORIA & TAZEWELL	97	92

Sheet 88 of 88.





SECTION A-A



ELEVATION

Note
Steel Sheet Piling at North Abutment shall be of sufficient strength and placed to protect traffic from construction excavation and procedures.
(Quantity = 2,535 Sq.Ft.)

NO. ABUT. EMBANKMENT & SHEET PILING

Mc CLUGAGE BRIDGE
OVER THE ILLINOIS RIVER
F.A. ROUTE 49 SEC. (158-1)-D
PEORIA & TAZEWELL COUNTIES

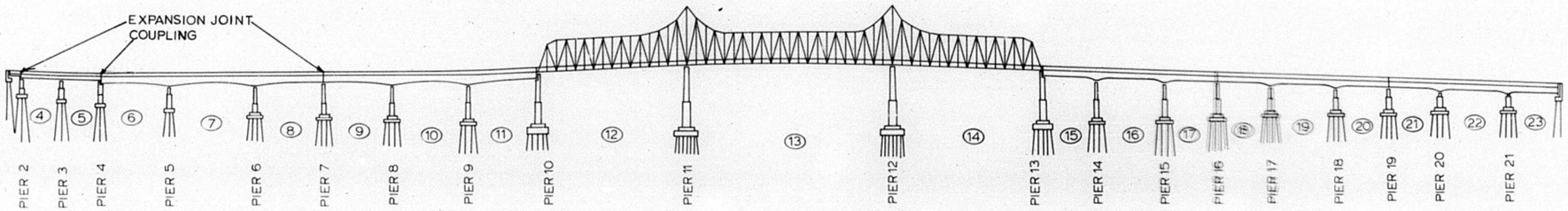
E.R.W.
M.D.L.
R.J.E.
M.D.L.

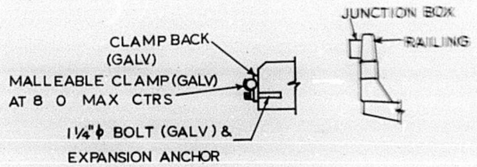
HANSON ENGINEERS INCORPORATED
SPRINGFIELD, ILLINOIS PEORIA, ILLINOIS

PLS No. 74001
DATE 8-22-80

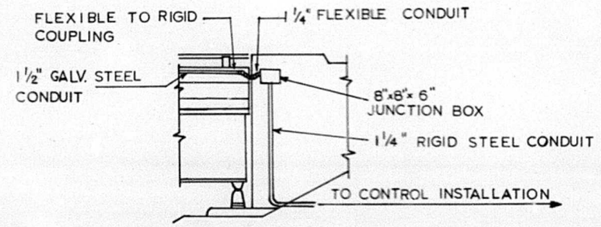
FOR INFORMATIONAL PURPOSES ONLY

DISTRICT	SECTION	COUNTY	SHEET NO.	
			TOTAL	NO.
FA 49	(15B-1)-D	PEORIA TAZEWELL	97	93
		TO STA.		

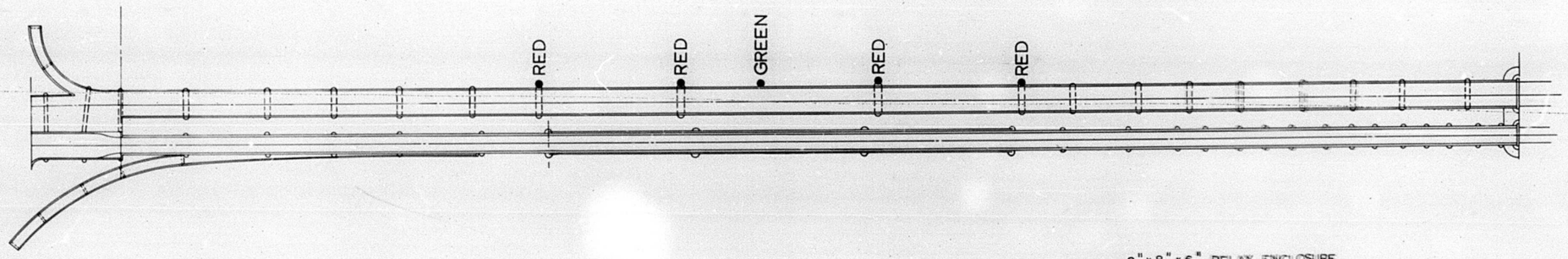


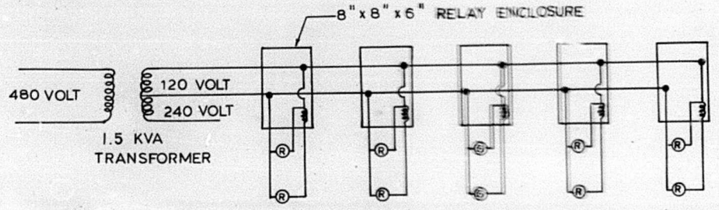


TYPICAL SECTION THROUGH PARAPET



ABUTMENT DETAIL





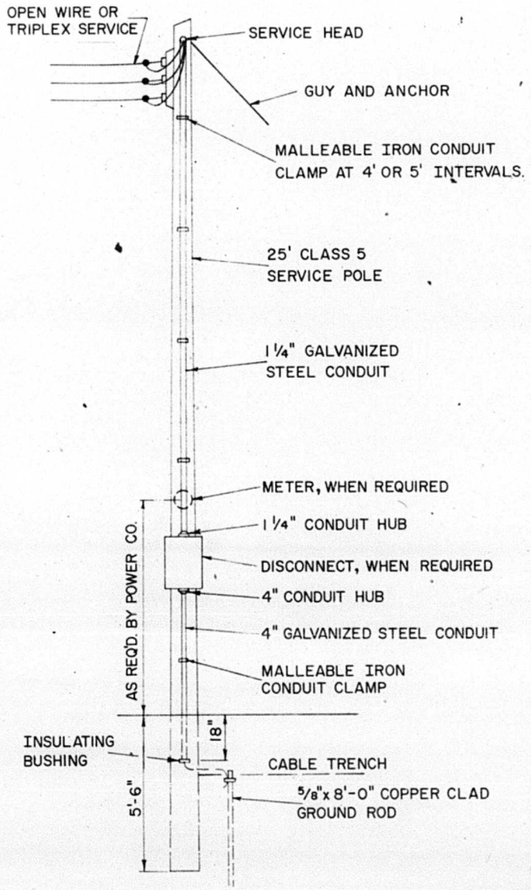
WIRING DIAGRAM

DETAIL
NAVIGATIONAL LIGHTS
F.A. ROUTE 49
SECTION 15B-1
PEORIA & TAZEWELL COUNTIES

ROUTE	SECTION	COUNTY	TOT. SHTS	SHEET #
FA 49	(15B-1)-D	PEORIA-TAZEWELL	97	94

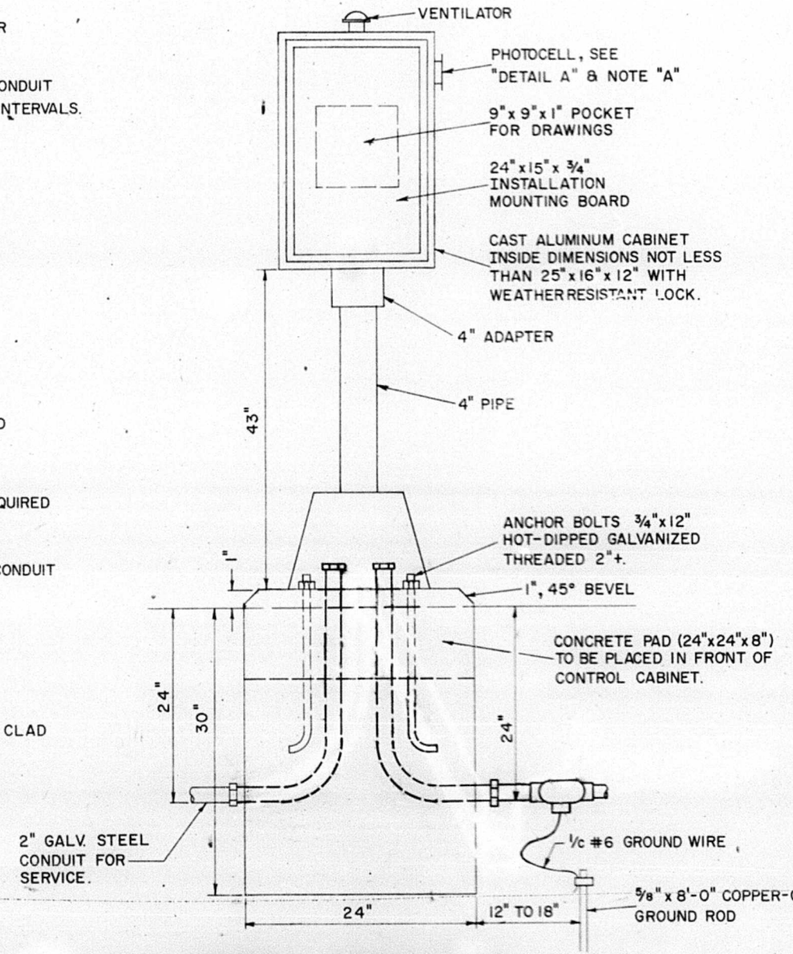
SHEET #

SHEETS

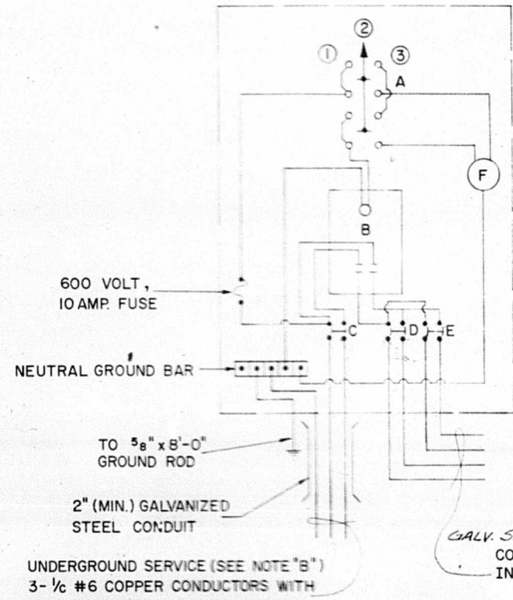


SERVICE POLE (WHEN REQD.)

LOCATE ADJACENT TO R.O.W. LINE

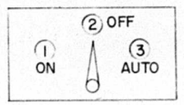


CONTROL INSTALLATION



A- SELECTOR SWITCH
B- 2 POLE 30 AMP. CONTACTOR
C- 2 POLE 70 AMP. BREAKER
D,E- 2 POLE 15 AMP. BREAKERS
F- PHOTOCELL

A. SELECTOR SWITCH, THREE POSITION, DOUBLE POLE. MARK POSITIONS WITH METAL OR ENGRAVED PLASTIC NAME PLATE AS SHOWN.

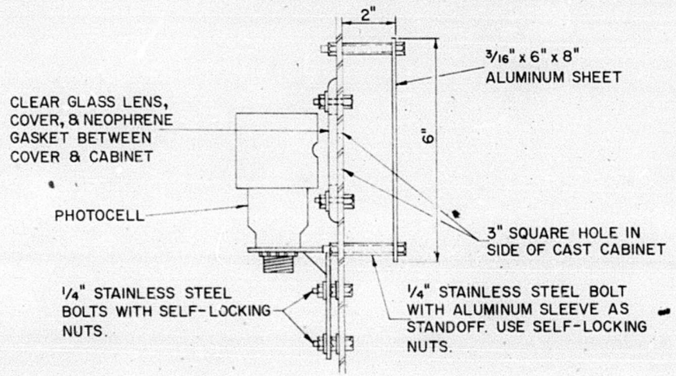


F. PHOTOCELL SEE DETAIL "A" & NOTE "A"

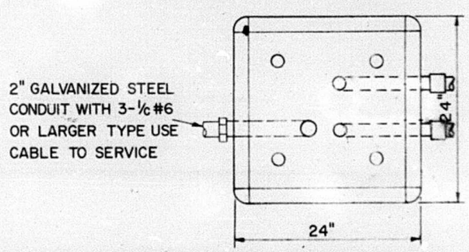
LIGHTING CIRCUITS 2-1 1/2" GALV. S. CONDUIT CONTAINING 2-1/c #6 COPPER CONDUCTORS WITH 600 V. INSULATION

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.

WIRING DIAGRAM



DETAIL "A"



TOP OF FOUNDATION

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/c #12 AERIAL WIRE IF REQUIRED FROM THE CONTROL INSTALLATION TO THE POWER COMPANY'S PHOTOCELL CONTROL AND CONNECT PER WIRING DIAGRAM.

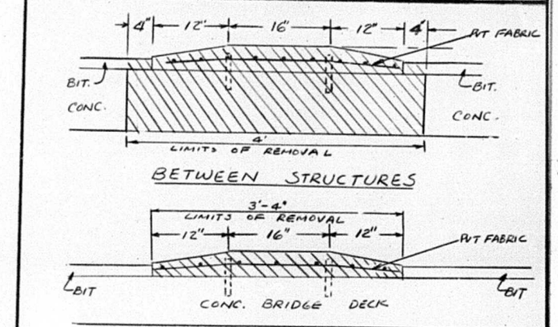
NOTE "B"
THE UNDERGROUND SERVICE SHALL BE 30 FT. MINIMUM AND 150 FT. MAXIMUM. TOTAL AERIAL & UNDERGROUND SERVICE BETWEEN THE CONTROL INSTALLATION AND PRIMARY TRANSFORMER SHALL BE 250 FT.

DRAWN BY J.L.P. FEBRUARY 16, 1979	
3-28-80	J.L.P.
7-24-80	J.L.P.

CONTROL INSTALLATION

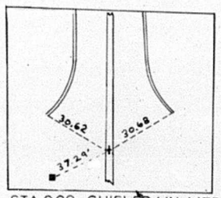
TYPE CB-RCS-60-480

ROUTE	SECTION	COUNTY	
FA 49	(15B-1)-D	PEORIA TAZEWELL	97 95
BRKG.			
PROJ.	STA.	TO STA.	



CONC. MEDIAN REMOVAL DETAIL

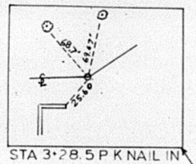
BACK FILL TO LEVEL WITH EXISTING BITUMINOUS SURFACE WITH INCIDENTAL BITUMINOUS SURFACING



STA 0.00 CHISLED + IN MEDIAN

PLACE A "KEEP RIGHT" SIGN (30"x36" BLACK & WHITE) ON FIRST BARREL

BARRELS @ 30' INTERVAL 400'



STA 3+28.5 P K NAIL IN POST

125 LT 3+00 CTR

(SOLID) PVT MARKING 4" YELLOW

CONC MEDIAN REMOVAL 552 S.F. (SEE DETAIL THIS SHEET)

INCIDENTAL BIT. SURFACING 23 TONS

RAMP "A"

TYPE III BARRICADE

BRUSH

DECK REMOVAL AREA

RAMP "F"

BRUSH

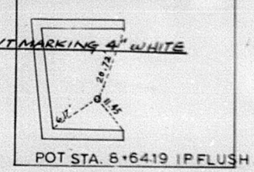
BRICK

PCC

BRIDGE RAIL (SINGLE RAIL)

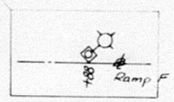
(SKIP-DASH) PVT MARKING 4" YELLOW

(SOLID) PVT MARKING 4" WHITE



POT STA. 8+64.19 IP FLUSH

CTR 150 RT 12+55



POT 12+88

TRAFFIC CONTROL FOR EXISTING BRIDGE DECK REMOVAL AND REPLACEMENT

ROUTE	SECTION	COUNTY	SHEET TOTAL	SHEET NO.
F.A. 49	(158-1)-D	Peoria Tazewell	97	96
MAIN.				
PROJ.	STA.	TO STA.		

MATCH LINE

TRUSS

215

TRUSS

TEMPORARY CONCRETE BARRIER

TYPE III BARRICADE

213+25

RAMP "E"

RAMP "A"

BRUSH

BRUSH

125 LT 3+00 CTR

125' R

422.15'

63+00 = 426-72.35

STA 3+78.55 PK NAIL IN POST

STA 000 CHISELED + IN MEDIAN

POT STA. 6+64.19 I.P. FLUSH

205

210

MATCH LINE

TEMPORARY CONCRETE BARRIER
10Z @10' = 1,020'

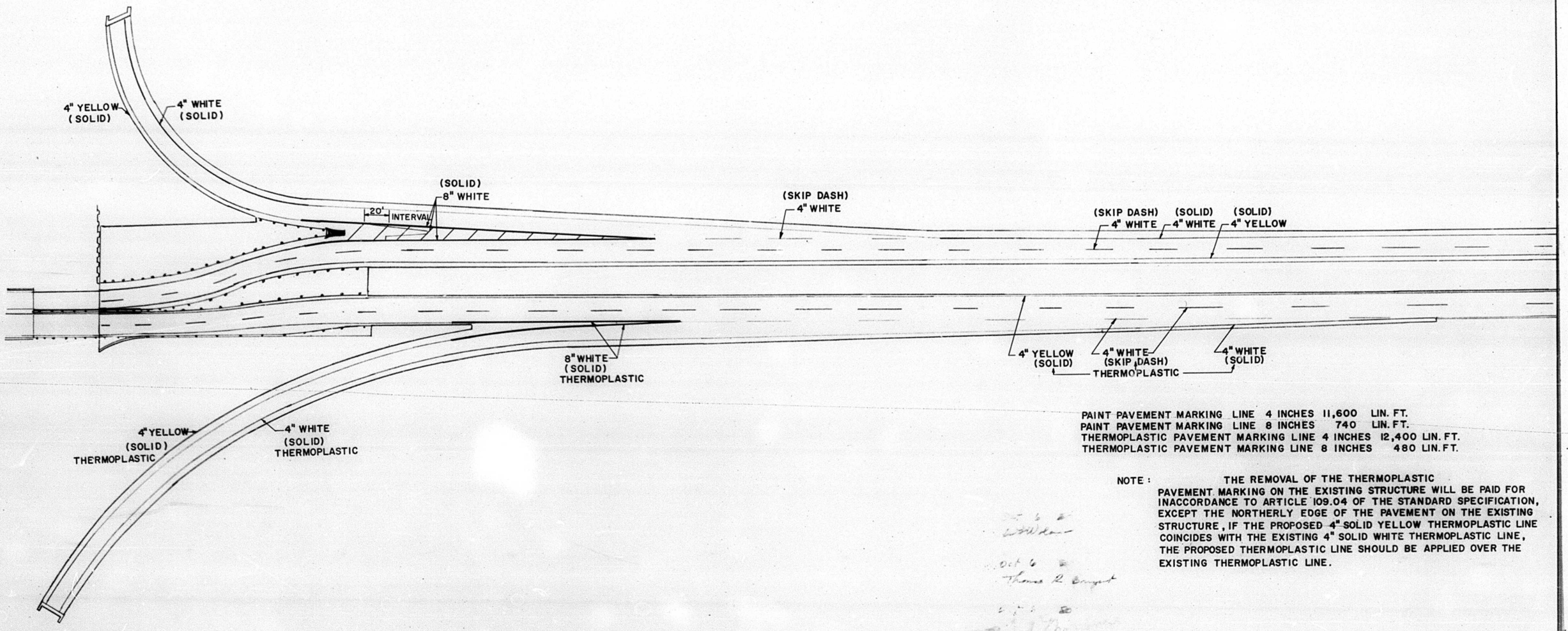
117'
Temp Conc Barrier,
11@10'=110'

TEMPORARY CONCRETE BARRIER,
TERMINAL SECTION

45

TRAFFIC CONTROL FOR RAMP 'E' CONSTRUCTION ADJACENT TO THE EXISTING STRUCTURE

ROUTE	SECTION	COUNTY	SHEET TOTAL	SHEET NO.
FA 49	(15B-1)-D	PEORIA TAZEWELL	97	97
MKD.				
PROJ.	STA.	TO STA.		



PAINT PAVEMENT MARKING LINE 4 INCHES 11,600 LIN. FT.
PAINT PAVEMENT MARKING LINE 8 INCHES 740 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING LINE 4 INCHES 12,400 LIN. FT.
THERMOPLASTIC PAVEMENT MARKING LINE 8 INCHES 480 LIN. FT.

NOTE: THE REMOVAL OF THE THERMOPLASTIC PAVEMENT MARKING ON THE EXISTING STRUCTURE WILL BE PAID FOR INACCORDANCE TO ARTICLE 109.04 OF THE STANDARD SPECIFICATION, EXCEPT THE NORTHERLY EDGE OF THE PAVEMENT ON THE EXISTING STRUCTURE, IF THE PROPOSED 4" SOLID YELLOW THERMOPLASTIC LINE COINCIDES WITH THE EXISTING 4" SOLID WHITE THERMOPLASTIC LINE, THE PROPOSED THERMOPLASTIC LINE SHOULD BE APPLIED OVER THE EXISTING THERMOPLASTIC LINE.

Oct 6

Thomas R. Bryant

PAVEMENT MARKING DETAIL