

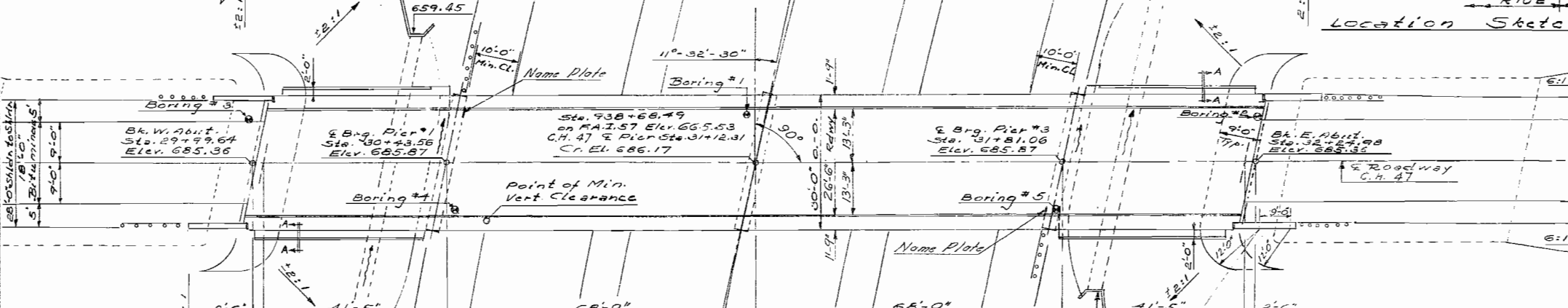
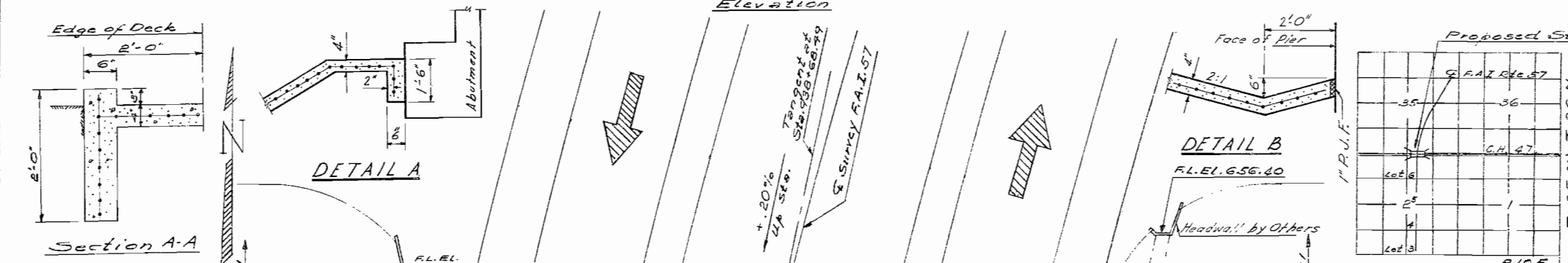
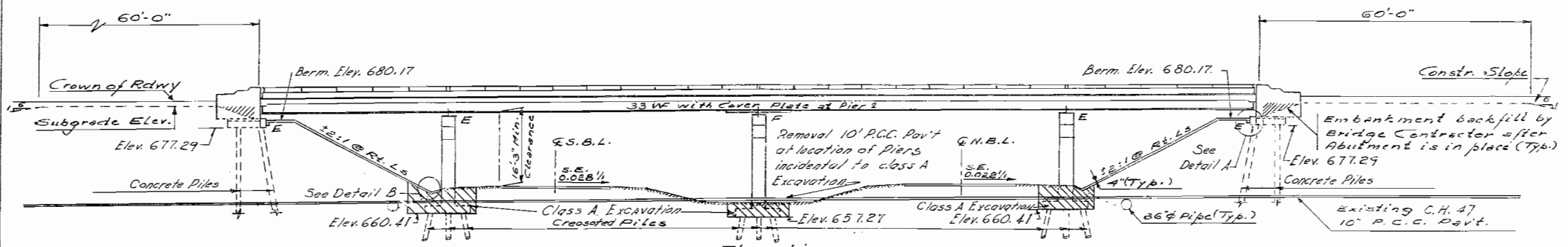
B.M.: #9 USGS Mon Stamping Delay 1959
Sta. 40+20 - 29' Lt El 664.58

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

ROUTE NO.	SECTION	DATE	TOTAL SHEETS	SHEET NO.	SHEET NO. /
38-6HB	IROQUOIS	27	12	11	SHEETS

GENERAL NOTES

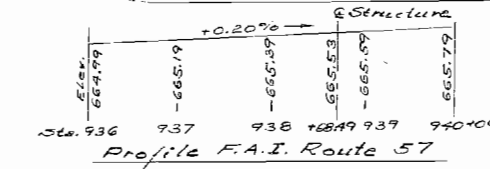
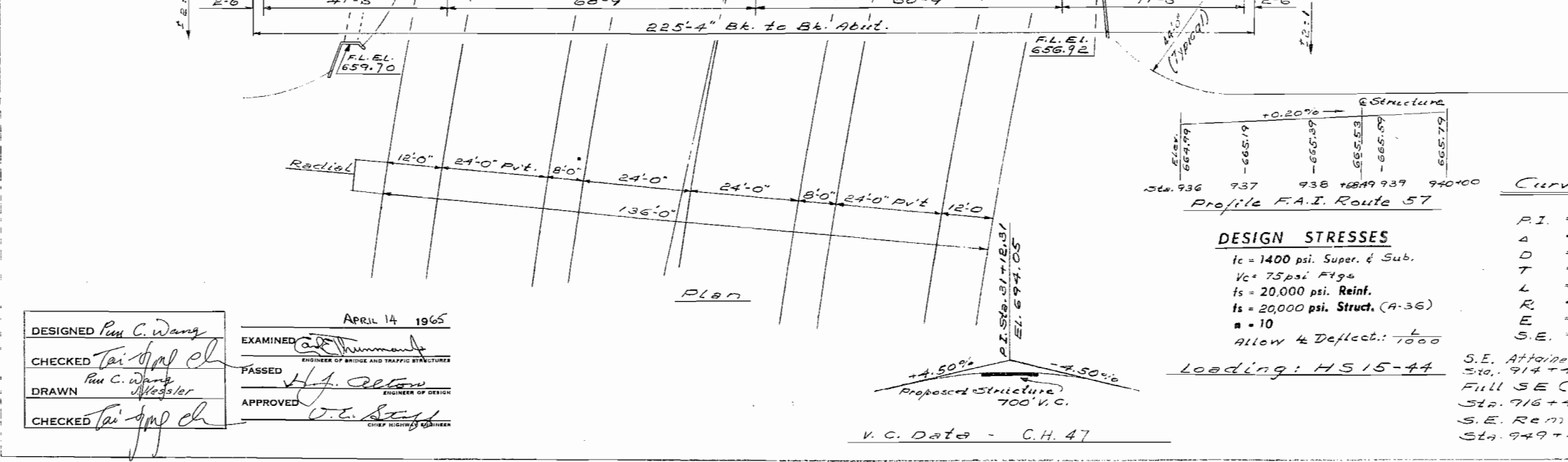
Permanent forms will not be permitted in forming the concrete floor.
Excavation for portions of structure in the embankment shall not be classified.
Coarse aggregate to be used in parapet handrails and end posts must be free of chert, flint, limonite, lignite and soft sandstone.
The concrete floor slab shall be finished in accordance with Art. 51.9 of the Standard Specifications.
Slope Wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58 # per 100 Sq.Ft.
All reinforcement bars shall be lapped 20 diameters unless otherwise shown.
All structural steel shall conform to A.S.T.M. Designation A-36. Rivets 3/4", Open Holes 1/2", unless otherwise noted.
Anchor bolts shall be set before fastening diaphragms over supports.
Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint. Anchor studs shall not be painted.
Expansion devices are included in the quantity of structural steel. Est. weight = 690 Lbs.
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.
Concrete piles at abutments shall be driven in holes prepared thru the embankment in accordance with Article 60.9 (c) of the Standard Specifications.
The contractor shall drive one concrete test pile at the East Abutment, in a permanent location, and one timber test pile in the vicinity of Pier # 2 as directed by the Engineer before ordering the remainder of piles.



TOTAL BILL OF MATERIAL

ITEMS	UNIT	SUPER	SUB	TOTAL
Class A Excavation for Structures	Cu. Yds.		115	115
Class X Concrete	Cu. Yds.	197.9	201.4	399.3
Structural Steel	Lbs.	62,220		62,220
Aluminum Handrail	Lin. Ft.	344		344
Reinforcement Bars	Lbs.	44,720	16,390	61,110
Creosoted Piles (16" to 20")	Lin. Ft.		1080	1080
Test Piles (Timber)	Eq.		1	1
Concrete Piles	Lin. Ft.		680	680
Test Piles (Concrete)	Eq.		1	1
Name Plates	Eq.			2
Slope Wall (2')	Sq. Yds.			342
Protective Coat	Sq. Yds.			342

Note: Field welding of construction accessories to beams or girders will not be permitted on the bottom flanges and for distance 1/2 of the span each way from pier supports on top flanges. Field welding in other areas will be permitted only when approved by the Engineer.



DESIGN STRESSES

fc = 1400 psi. Super. & Sub.
Vc = 75 psi. Figs
fs = 20,000 psi. Reinf.
n = 10
Allow & Deflect.: 1/1000

Curve Data - F.A.I. 57

P.I. = 933 + 44.66
A = 34° - 16' - 24.11"
D = 01° - 00' - 00"
T = 1766.66'
L = 3427.34'
R = 5729.58'
E = 266.18'
S.E. = 0.028 1/4

STATION 938 + 68.49
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT 57 SEC. 38-6HB
F.A. PROJ. I-576(89)
LOADING HS15

NAME PLATE

(See S-10: 21/3-1)

GENERAL PLAN & ELEVATION

C.H. 47 OVER F.A.I. 57
PROJ. I-57-6 (89) 278
F.A.I. RT 57 SEC. 38-6HB
IROQUOIS COUNTY
STA. 938+68.49

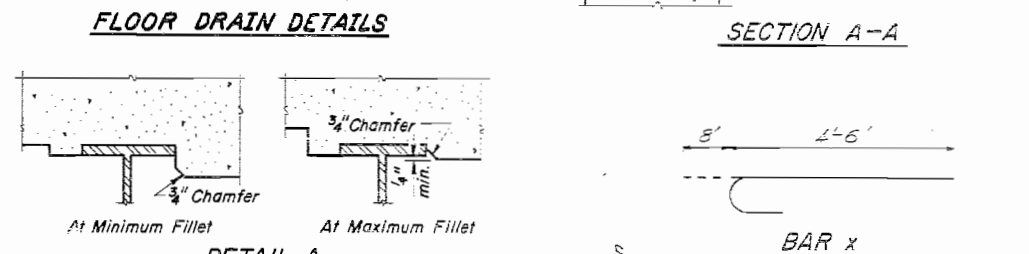
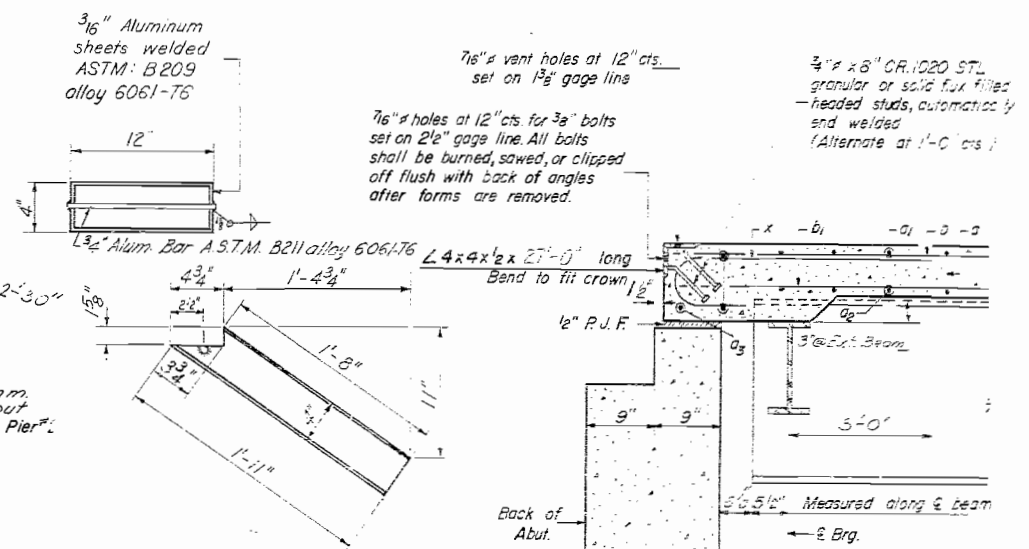
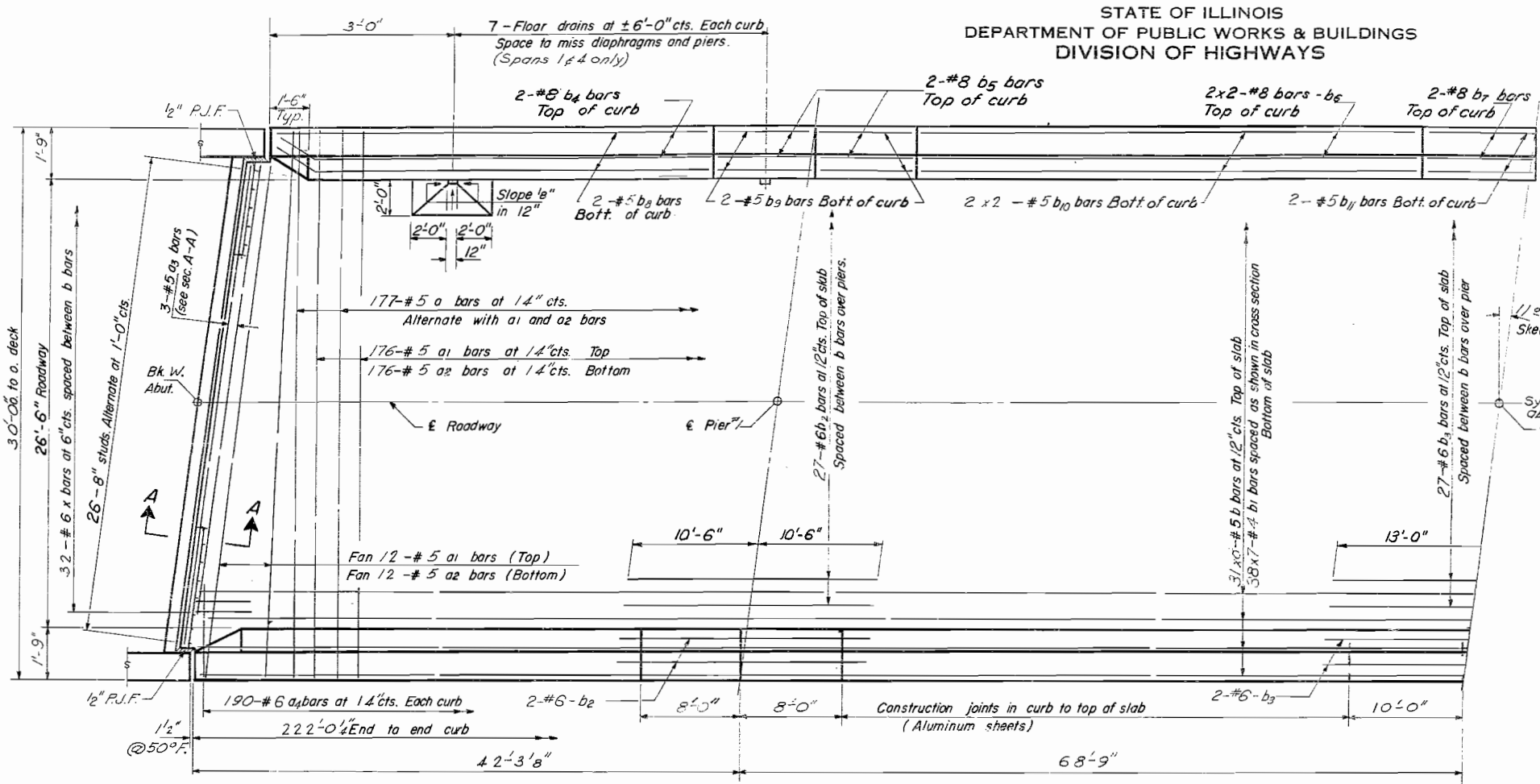
DESIGNED *Pen C. Wang*
CHECKED *Tai Jmp ch*
DRAWN *Pen C. Wang*
CHECKED *Tai Jmp ch*

APRIL 14 1965

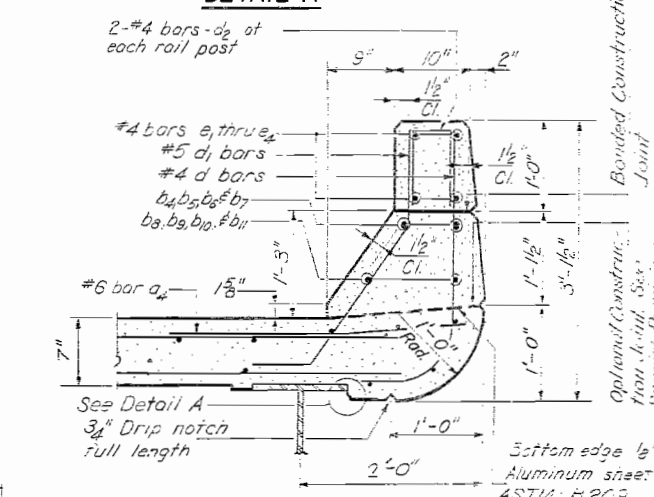
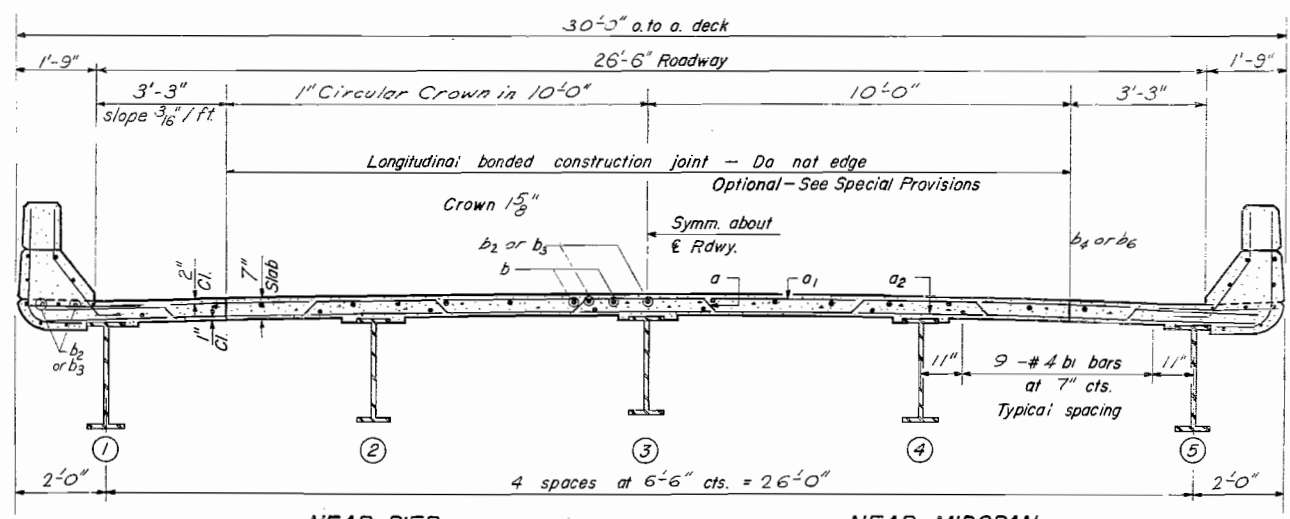
EXAMINED *[Signature]*
PASSED *[Signature]*
APPROVED *[Signature]*

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

ROUTE NO. 38-6HB IROQUOIS 27 14 11 SHEETS
SHEET NO. 3



HALF PLAN



BILL OF MATERIAL

Bar No.	Size	Length	Splice
a	177	#5	33'-11"
a1	176	#5	29'-9"
a2	176	#5	29'-9"
a3	5	#5	24'-3"
a4	39	#6	4'-5"
a5	243	#5	29'-9"
b1	266	#1	33'-5"
b2	52	#6	8'-0"
b3	31	#6	25'-0"
b4	3	#2	3'-0"
b5	16	#8	7'-9"
b6	16	#8	25'-5"
b7	3	#2	9'-0"
b8	3	#5	3'-0"
b9	16	#5	7'-9"
b10	16	#5	25'-0"
b11	3	#5	9'-5"
d	446	#4	5'-9"
d1	446	#5	3'-5"
d2	12	#4	2'-0"
x	64	#6	5'-2"

Reinforcement Bars 43.55
Structural Steel 11.20
Class X Concrete 188.5

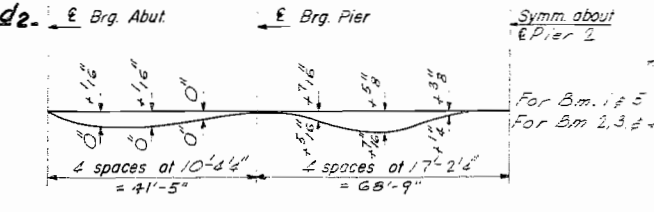
Note:
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
Min bar laps = 20 dia.

STANDARD FILLET DETAIL

To determine "1": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown on sheet 2. These elevations subtracted from the "Grade Elevations Adjusted for Dead Load Deflections" shown on sheet 2, minus slab thickness, equals the fillet heights "1" above top of beams.

DESIGNED *Paul C. Wang*
CHECKED *Tai-fan Ch*
DRAWN *P.G. Barnett*
APPROVED *J.E. Seay*
APRIL 14 1965
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER

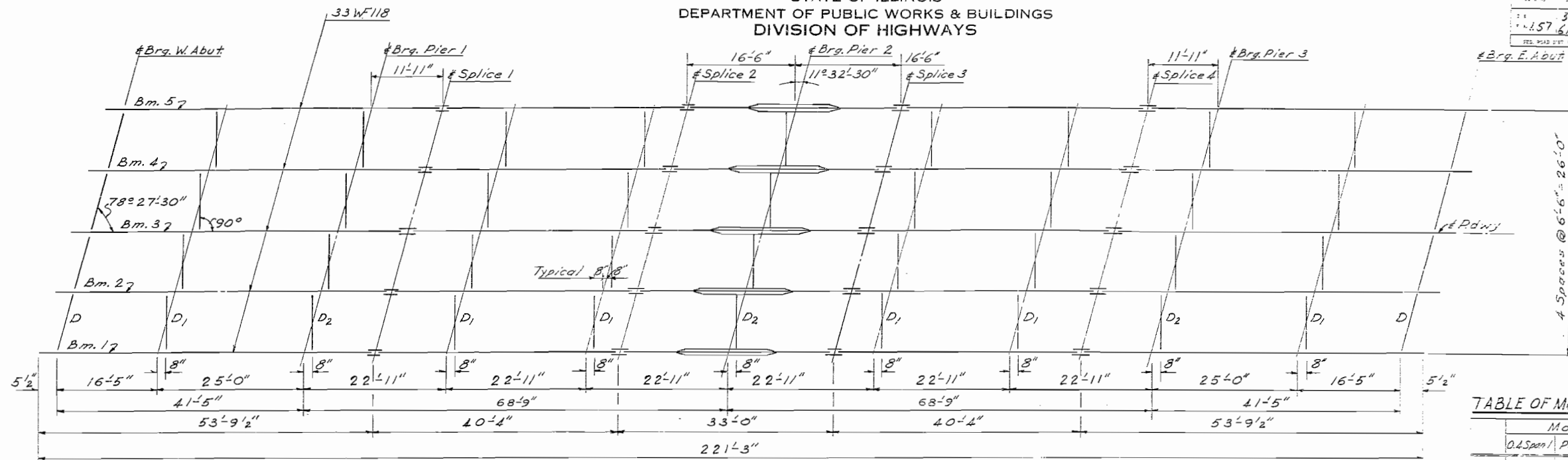
I-5-L (≤ 15°) 10-10-62 Rev. 11-1-63 5-1-64
12-12-1967, J.M.P. Revised.



SUPERSTRUCTURE
F.A.I. RT. 57 SEC 38-6HB
IROQUOIS COUNTY
STA. 938+68.49

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

SHEET NO. 11
SPEETS
38-157-6-3
2,900,015
27 15
I.L. ROAD DIST. NO. 7



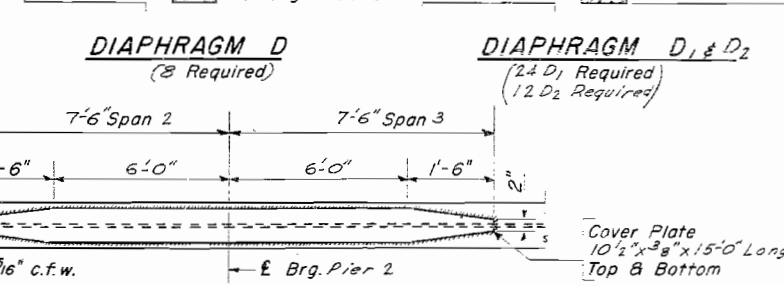
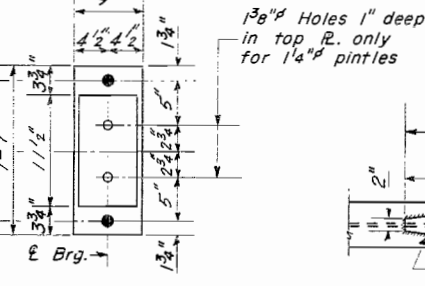
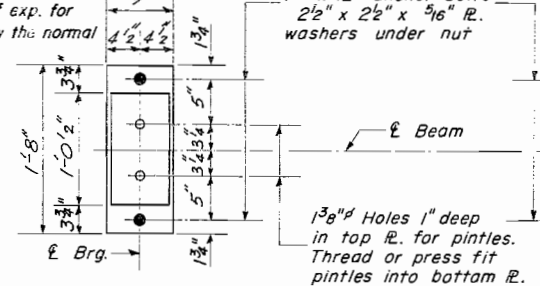
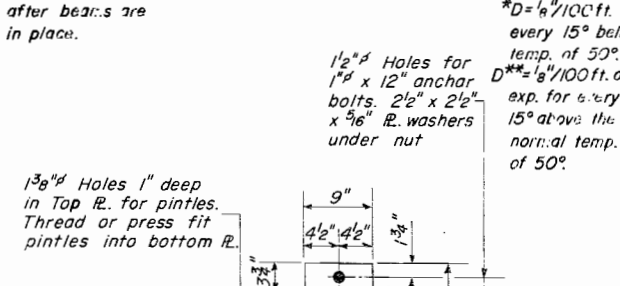
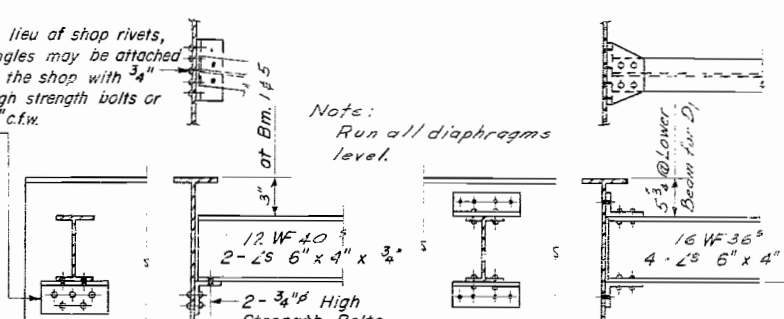
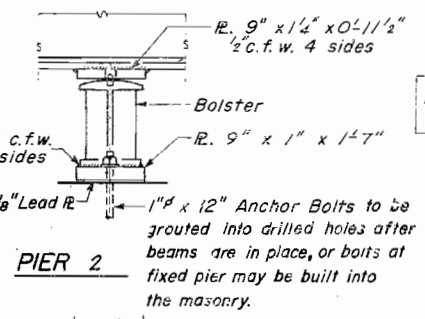
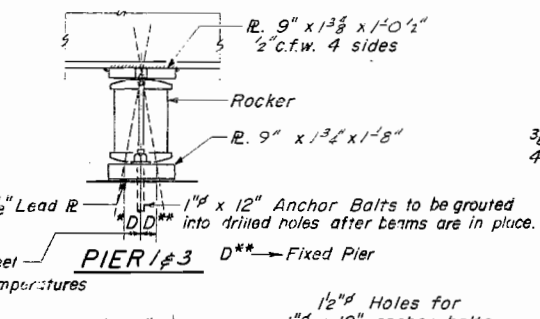
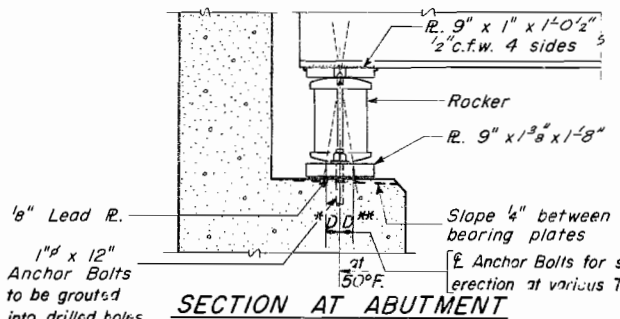
TOP PLATE DETAIL
Table of "t"

W.F. Abut	Pier 1 & 3	Pier 2
t ₁	t ₂	t ₃
1"	1 1/2"	1 1/2"

TABLE OF MOMENTS & REACTIONS-INTERIOR BM

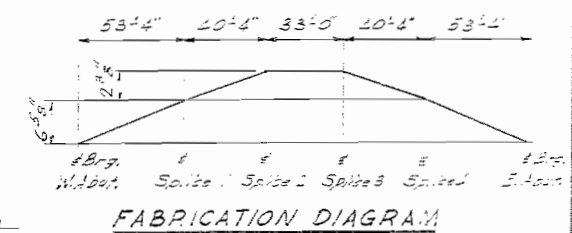
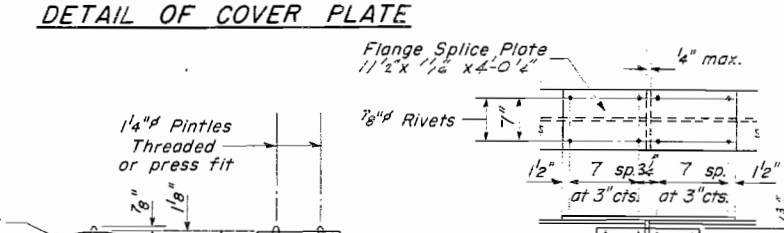
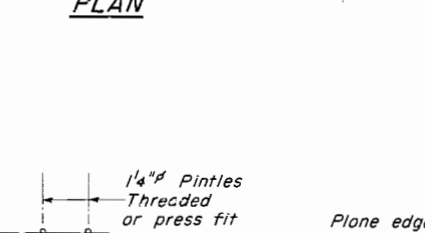
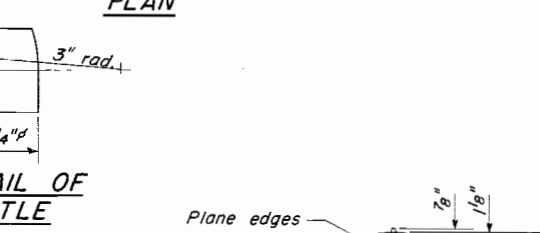
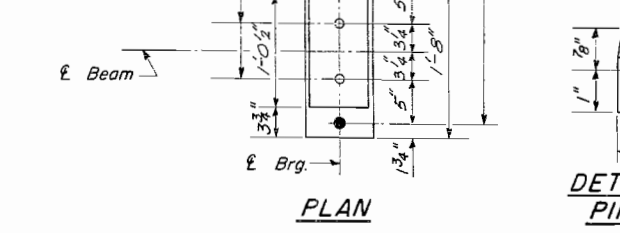
D.L.	Moments (K-Ft)				Reactions (K)			
	0.45 Span	Pier 1	0.55 Span	Pier 2	Abut.	Pier 1	Pier 2	E. Abut.
77.7	274.5	184.0	414.0	12.2	54.5	66.2		
174.0	189.5	250.8	241.0	23.6	30.8	33.5		
Imp.	52.3	56.7	75.2	72.5	7.1	8.6	8.7	
Total	304.0	520.7	510.0	727.5	42.9	93.9	58.4	

STEEL FRAMING PLAN



ELEVATION TOP OF WF (For Fabrication only)

Br. No.	W. Abut.	Pier 1	Splice 1	Splice 2	Pier 2	Splice 3	Splice 4	Pier 3	E. Abut.
#1	684.00	685.10	685.20	685.42	685.42	685.42	685.20	685.10	684.00
#2	684.75	685.25	685.35	685.53	685.53	685.53	685.35	685.25	684.75
#3	684.81	685.25	685.35	685.53	685.53	685.53	685.35	685.25	684.81



DESIGNED *Pau C. Wang*
CHECKED *Lai-hong ch*
DRAWN *W. A. Sausaman Jr.*
APRIL 14 1965
EXAMINED *Carl Thurmond*
PASSED *H. J. ...*
APPROVED *...*

DETAIL OF ROCKER AT PIERS 1-3 & ABUTS (20 Req'd)

DETAIL OF BOLSTER AT PIER 2 (5 Req'd)

DETAIL OF SPLICE

STRUCTURAL STEEL
F.A.I. RT. 57 SEC. 38-6 H.B
TROQUOIS COUNTY
STA. 938+68.49

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
P.O. NO.	38	IROQUOIS	27	160	SHEETS
PLAN NO.	38				
FED. ROAD DIST. NO.					

Note: See Sheet #5 for rail post
5 joint spacing.

