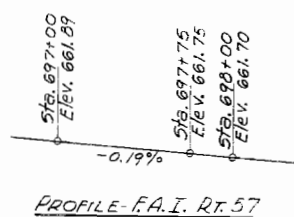
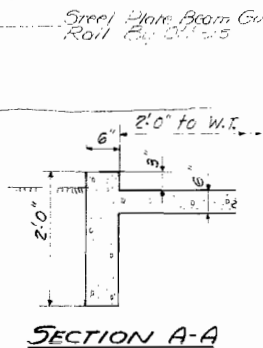
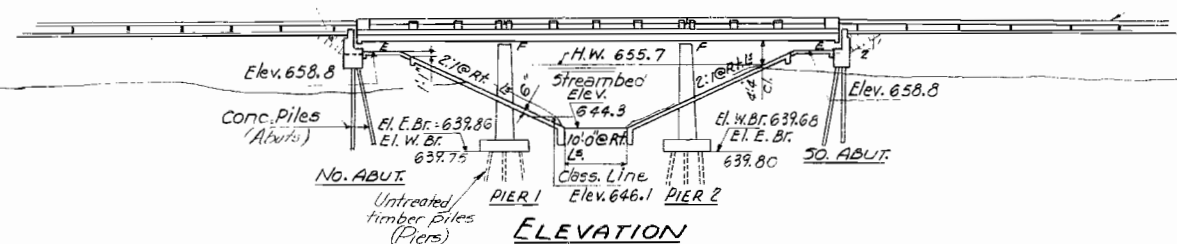


B.M. 56.8 R.R. Spike in Tel. Pole
Sta. 39+42 E.T.R. RT. 56, 25' Rt. Elev. 654.33

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

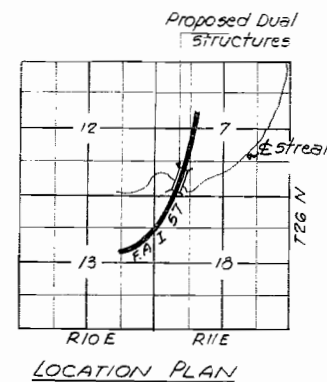
ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
57	38-5B	IROQUOIS	JULY 20 1963	1

This portion of Embankment to be placed after Abut. is built



GENERAL NOTES

Class-X Concrete shall be used throughout except in parapets and piers.
Class-A Concrete shall be used in piers.
Handrail Concrete shall be used in handrails.
The concrete floor slab shall be finished in accordance with Art. 51.19 of the Standard Specifications.
Slope Wall shall be reinforced with welded wire fabric 2x6 mesh, #4 wires weighing 58 lbs. per 100 sq. ft.
Layout of Slope Walls may be varied to suit ground conditions in the field as directed by the Engineer.
The handrail concrete in the rail posts and railing shall be poured in separate operations.
All Reinforcement Bars shall be lapped 20 diameters unless otherwise shown.
The exposed surfaces of the expansion guards shall be given two shop coats of red lead paint. The contact surfaces shall be given one coat of red lead paint. The anchor studs shall not be painted.
Expansion Guards are included in the quantity of Structural Steel. Estimated weight - 4980 Lbs.
All rollers, bearing plates, steel plates, pintles and anchor bolts shall be fabricated and set in accordance with Art. 51.16 of Standard Specifications and are included in quantity of Structural Steel. Estimated weight - 12560 Lbs.
Except as otherwise provided, all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint. See Art. 56.1 to 56.5 inclusive of the Standard Specifications.
The Contractor shall drive two concrete test piles and two timber test piles in permanent locations, as directed by the Engineer, before ordering the remainder of piles. One concrete test pile at the North Abutment of the East Bridge, one concrete test pile at the South Abutment of the West Bridge, one timber test pile at Pier 2 of the East Bridge, and one timber test pile at Pier 1 of the West Bridge.
EXCAVATION FOR PORTIONS OF STRUCTURES IN THE EMBANKMENTS SHALL NOT BE CLASSIFIED.



CURVE DATA - F.A.I. RT. 57

R.I. Sta. 691+70.81

Δ = 43° 01' 08.10"

D = 1° 00' 00"

T = 2258.03

L = 4301.89'

R = 5729.58'

E = 428.89'

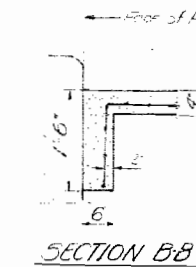
S.E. = 0.01 1/11

S.E. attained (Remove Crown)

Sta. 668+62.78 to Sta. 669+62.78

Sta. 711+64.67 to Sta. 712+64.67

Full S.E. Sta. 669+62.78 to Sta. 711+64.67



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUBST.	TOTAL
Class-A Excavation for Structures	Cu.Yds.	340	340
Class-B Excavation for Structures	Cu.Yds.	680	680
Handrail Concrete	Cu.Yds.	7.7	7.7
Class-X Concrete	Cu.Yds.	570.4	580.0
Class-A Concrete	Cu.Yds.	405.0	405.0
Reinforcement Bars	Lbs.	24710	24710
Structural Steel	Lbs.	17540	17540
Concrete Piles	Lin. Ft.	680	680
Test Piles, Concrete	Each	2	2
Untreated Piles	Lin. Ft.	980	1960
Test Piles, Timber	Each	2	2
Name Plates	Each	2	2
Slope Wall	Sq.Yds.	2195	2195
Protective Coat	Sq.Yds.	908	908
Bridge Seal Sealant	Lumps	1	1
* Apply at Abut. only			

WATERWAY INFORMATION

Drainage Area 3000 Acres

Character - Level Cultivated Farm Tile

Required Opening - (50 Yr. Flood) 250 Sq. Ft.

Proposed Opening 340 Sq. Ft.

Ordinary Water Elev. 646.2

Low Water Elev. 645.1

DESIGN STRESSES

Fc - 1400 #/sq. Super. E. Sub.

Fs - 20000 #/sq. Reinf.

Vc - 75 #/sq. Ftq.

n - 10

GENERAL PLAN & ELEVATION
ONARGA-RIDGELAND No. 1 (MAIN DITCH)
F.A.I. RT. 57- SEC. 38-5B

IROQUOIS COUNTY
STATION 697+75

Loading H520-44 E. Alt.

STATION 697+75
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 57- SEC. 38-5B
F.A. PROJ. I-15, 57-601
LOADING H520 E. ALT.
NAME PLATE
See Sta. 2113-1

DESIGNED	W. J. Miller	EXAMINED	J. E. Miller
CHECKED	W. J. Miller	PASSED	J. E. Miller
DRAWN	M. Miller	APPROVED	J. E. Miller
CHECKED	W. J. Miller		

Rev. 12-30-62, N.P.C. Guard rail added, changed Handrail Concrete from 18" to 24" thick, changed Print Size from 18" x 12" to 24" x 18".

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

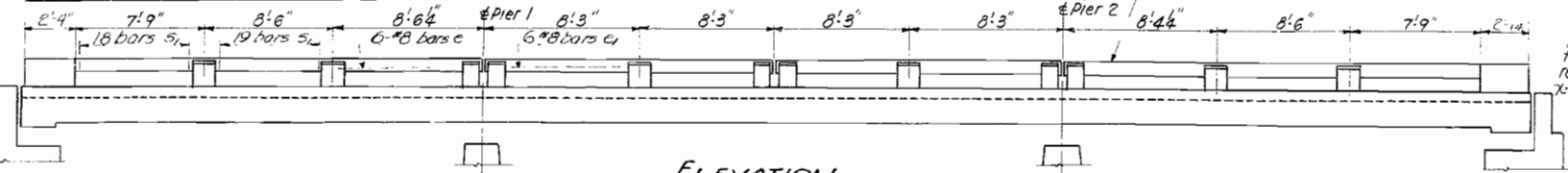
CONCRETE HANDRAIL STANDARD 2070 RC (MODIFIED)

7/8" holes @ 12" cts. for 3/4" bolts
set on normal gage line. All bolts
shall be burned sawed or clipped off
flush with back of angles after
forms are removed.

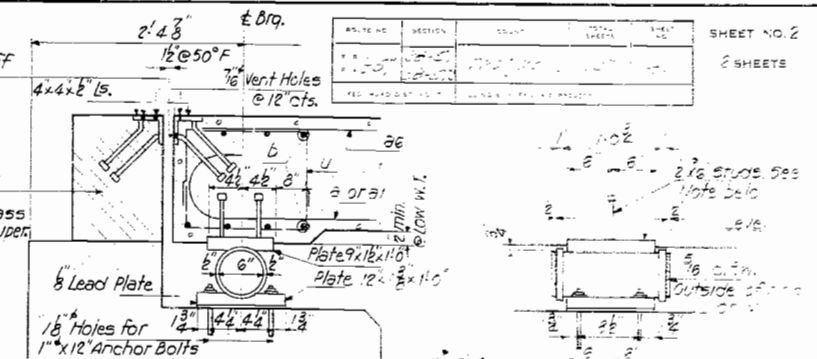
Hatched area to be
poured after superstr.
falsework has been
removed. Quantity of Class
X Concrete included in Super.

4 equal spcs. = 26'4" 4 equal spaces = 33'0" 4 equal spcs. = 26'4"

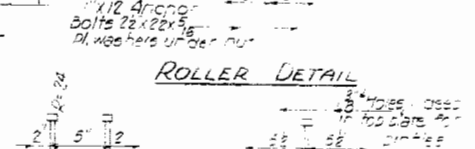
DEAD LOAD DEFLECTION DIAGRAM



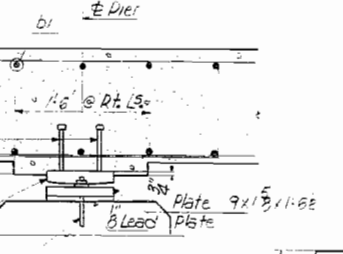
ELEVATION



SECTION AT ABUTMENT



ROLLER DETAIL

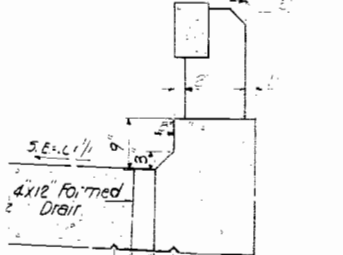


SECTION AT PIER



ROCKER PLATE DETAILS

PINTLE DETAIL



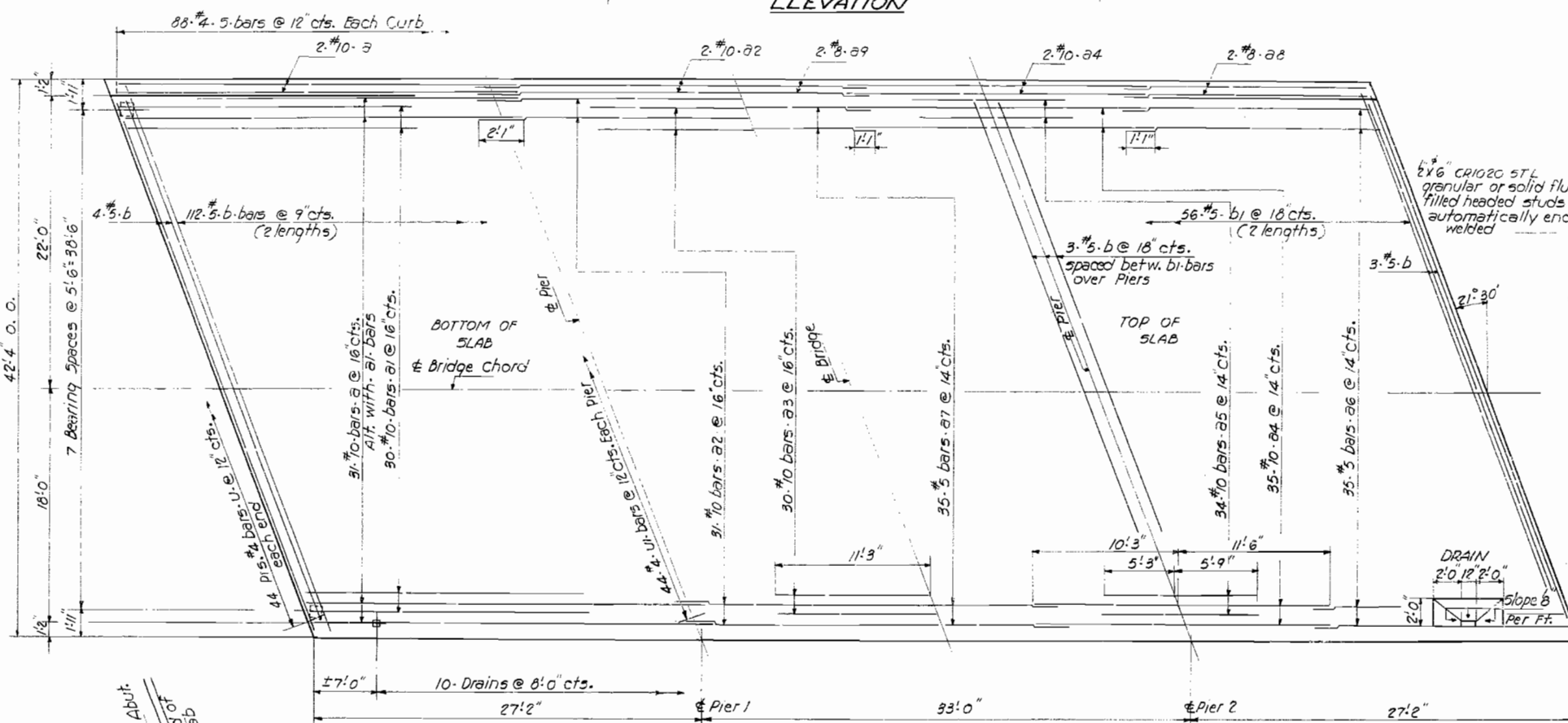
CURB & DRAIN DETAIL
DRAIN AT LOW CURB ONLY

BILL OF MATERIAL

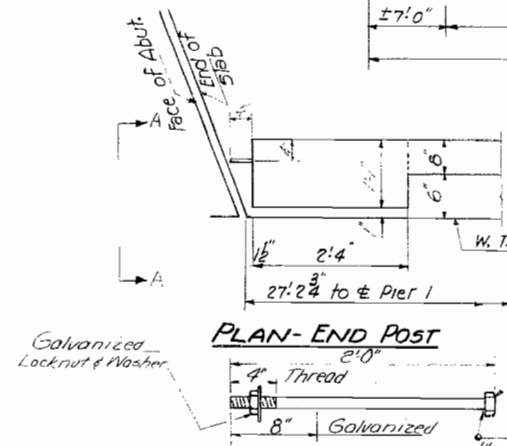
TWO BRIDGES				
BAR	NO.	SIZE	LENGTH	SHAPE
a	140	#10	29'6"	
a1	120	#10	23'3"	
a2	70	#10	35'0"	
a3	60	#10	22'6"	
a4	156	#10	21'9"	
a5	196	#10	11'0"	
a6	140	#5	16'6"	
a7	70	#5	14'9"	
a8	16	#3	17'5"	
a9	5	#3	15'9"	
b	528	#5	21'6"	
b1	224	#5	21'0"	
c	256	#3	3'3"	
d	48	#3	26'6"	
e	48	#3	16'3"	
f	352	#4	5'9"	
g	752	#3	2'11"	
h	352	#4	3'8"	
i	76	#4	5'3"	
j	120	#4	2'6"	

Class-X Concrete
Reinforcement Bars
Structural Steel
Handrail Concrete

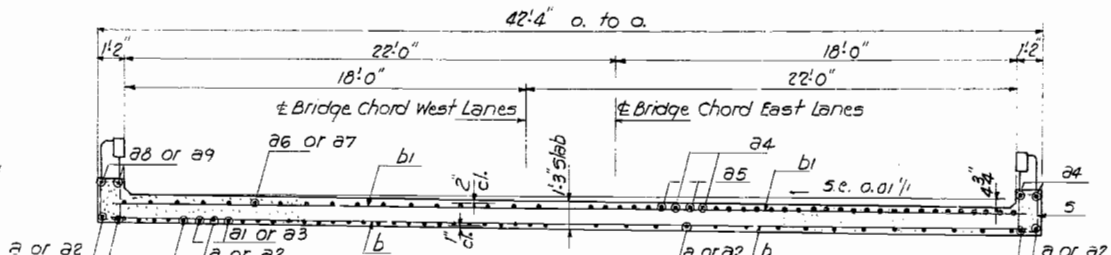
SUPERSTRUCTURE
F.A.I. RT. 57-SEC. 38-5B
IROQUOIS COUNTY
STATION 697+75



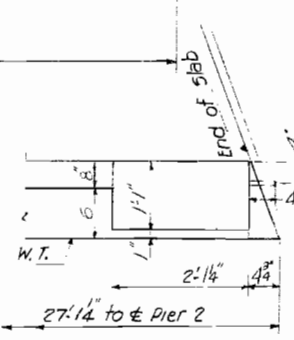
PLAN-EAST LANES



PLAN-END POST



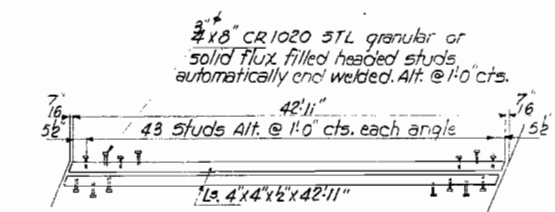
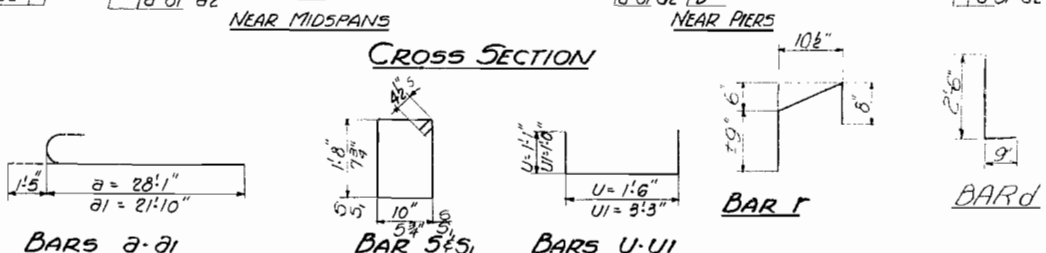
CROSS SECTION



PLAN-END POST

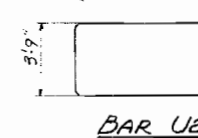
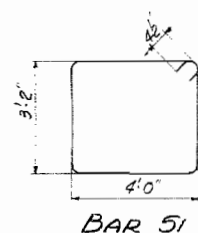
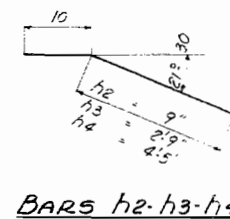
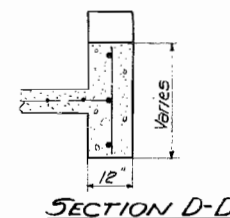
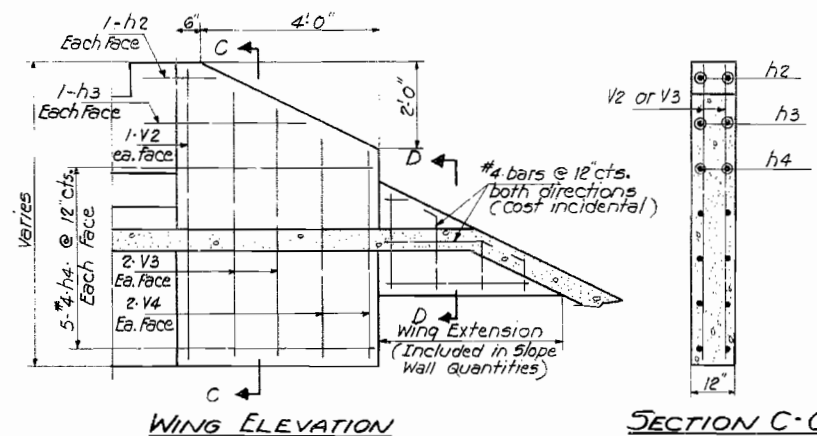
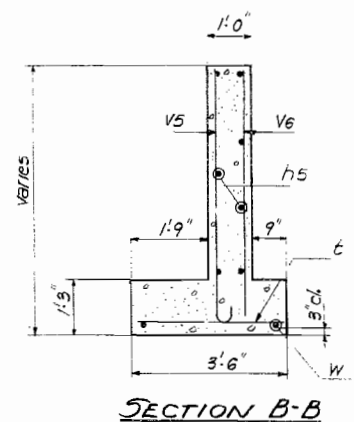
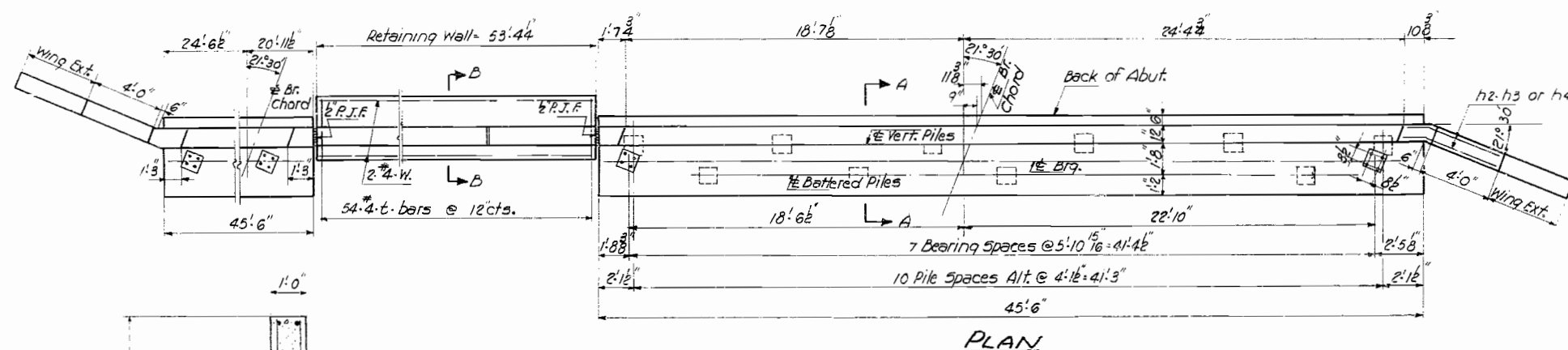
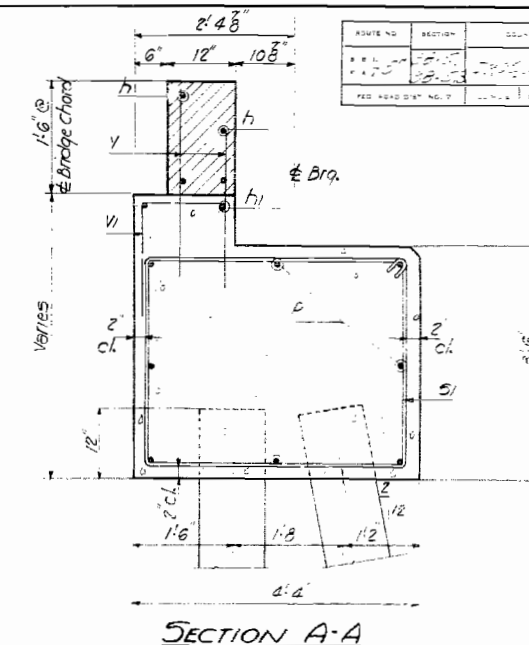
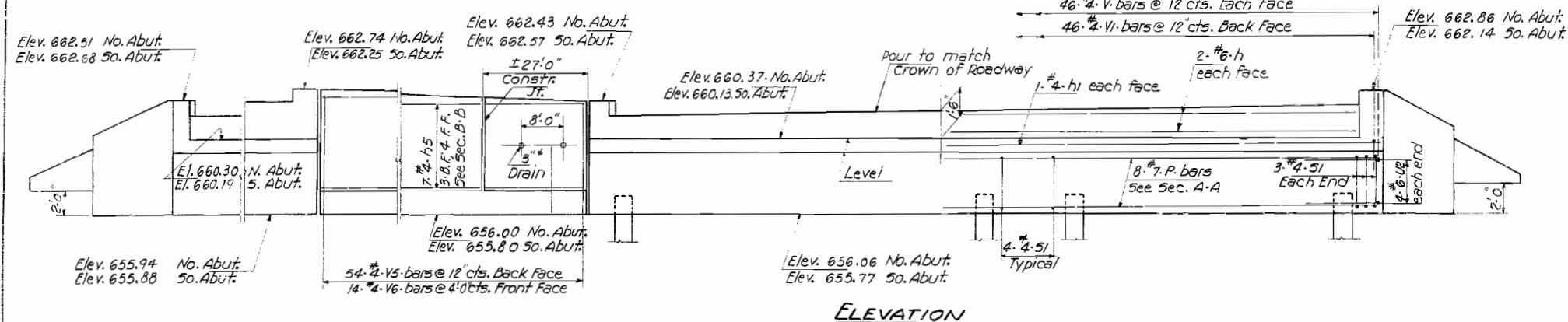
DESIGNED: A. A. A. A.
CHECKED: W. A. A. A.
DRAWN: M. Miller
CHECKED: W. A. A. A.

EXAMINED: W. A. A. A.
PASSED: W. A. A. A.
APPROVED: W. A. A. A.



EXPANSION GUARD DETAIL

Revised 3-30-60 (100) Changed concrete handrail std from 2070 RC-1 to 2070 RC (modified) changed 1/2" x 1/2" opening from 3/4" x 1" to 3/4" x 1" (1/2" x 1/2" opening from 3/4" x 1" to 3/4" x 1")
Changed handrail concrete 7.5 to 7.1 Cu. Yds.



BILL OF MATERIAL				
FOUR ABUTMENTS TWO RETAINING WALLS				
QTY	SIZE	LENGTH	SHAPE	
340	1/2"	#4	23'3"	—
71	3/8"	#4	23'0"	—
12	3/8"	#4	11'7"	—
13	3/8"	#4	31'7"	—
14	40	#4	5'3"	—
15	28	#4	27'0"	—
16	32	#7	45'0"	—
5	152	#4	15'1"	□
5	108	#4	3'3"	—
1/2	32	#6	11'9"	□
1	368	#4	3'3"	—
11	184	#4	2'9"	—
12	8	#4	6'3"	—
13	16	#4	5'6"	—
14	16	#4	4'3"	—
15	108	#4	6'6"	—
16	28	#4	27'0"	—
17	8	#4	27'0"	—
Class X Concrete			Cu. Yds.	150.0
Reinforcement Bars			Lbs.	2315
Concrete Piles			Lin. Ft.	1830
Test Piles Concrete			Each	2

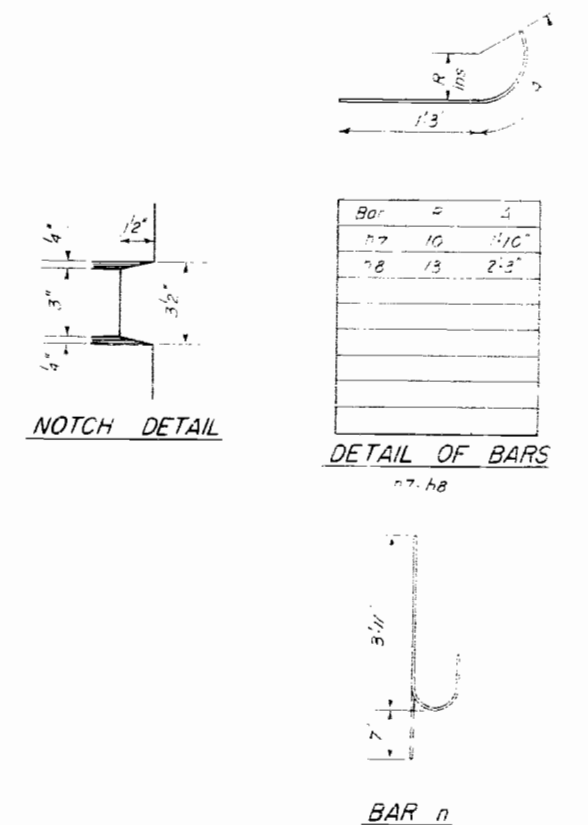
DESIGNED	<i>W. J. Arnold</i>	EXAMINED	<i>W. E. Baumann</i>
CHECKED	<i>Walter Perry</i>	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES	
DRAWN	<i>W. J. M. Miller</i>	PASSED	<i>W. E. Baumann</i>
CHECKED	<i>W. J. P.</i>	ENGINEER OF DESIGN	
		APPROVED	<i>U. E. Ruff</i>
		CIVIL HIGHWAY ENGINEER	

ABUTMENTS & RETAINING WALLS
F.A.I. RT. 57-SEC. 38-5B
IROQUOIS COUNTY
STATION 697+75

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
157	38-5 39-5B	IROQUOIS	137	43
FED. ROAD DIST. NO. 7		FED. - 5 PROJECT		

SHEET NO. 4
6 SHEETS

Type	Untreated
Capacity	20 Tons
Est. Length	22 Ft.
No. Req'd.	92 (includes 2 Test Piles)



PIERS
F.A.I.R.T. 57-SEC. 38-58
IRQUOIS COUNTY
STATION 697+75

DESIGNED	<i>W. A. Sausaman</i>	EXAMINED	<i>W. E. Baumann</i>
CHECKED	<i>Walter Perry</i>	PASSED	<i>E. E. Hunt</i>
DRAWN	<i>W. A. Sausaman</i>	APPROVED	<i>W. E. Baumann</i>
CHECKED	<i>W. A. Sausaman</i>		

Re-drawn 7-21-59 Rev. 11-25-59

CHANGED FILE Embedment from 6" to 12"