

STATE OF KANSAS
STATE HIGHWAY COMMISSION
SEDGWICK COUNTY

PLAN AND PROFILE
PROJECT F. C. 314 (B)

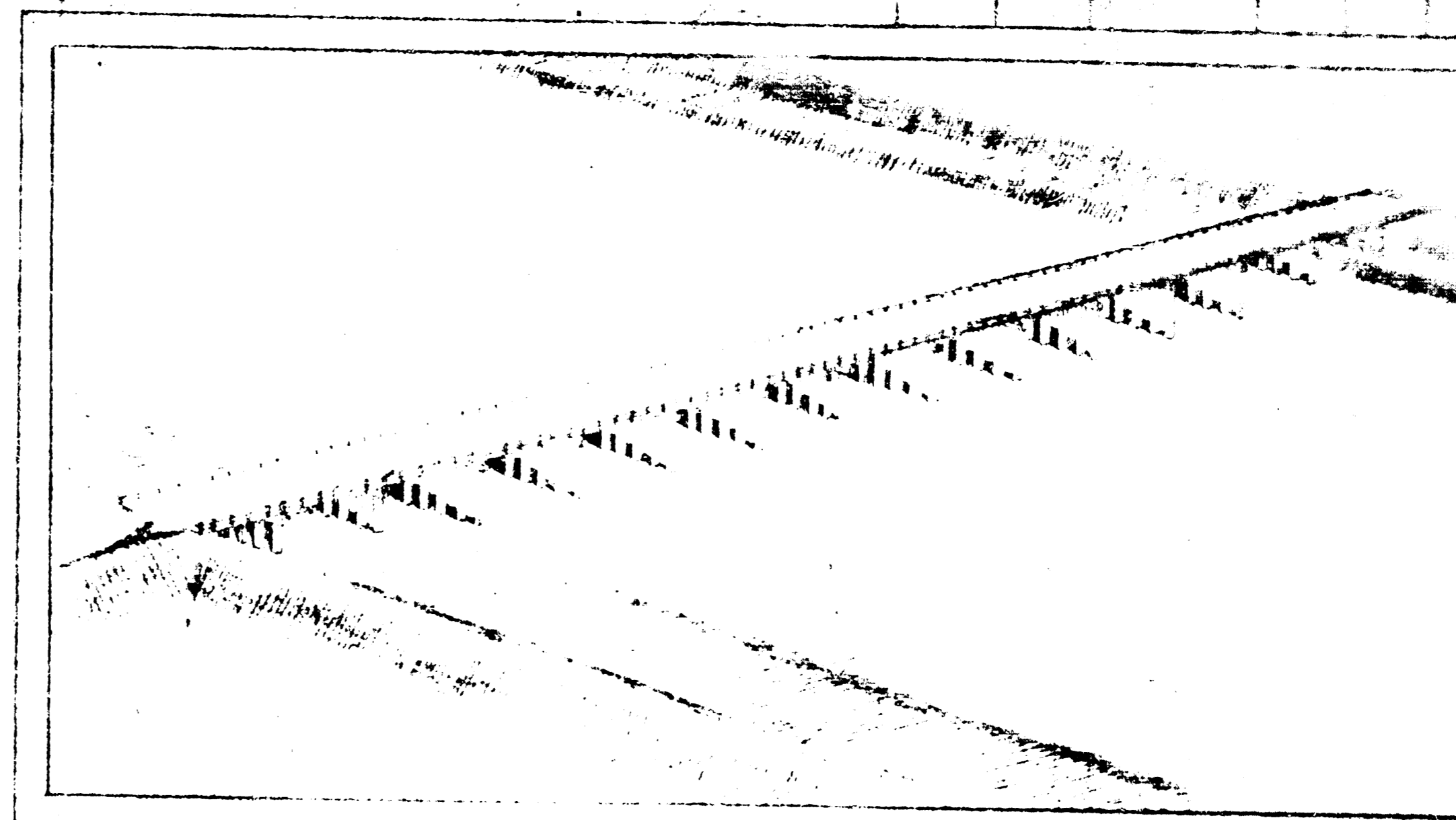
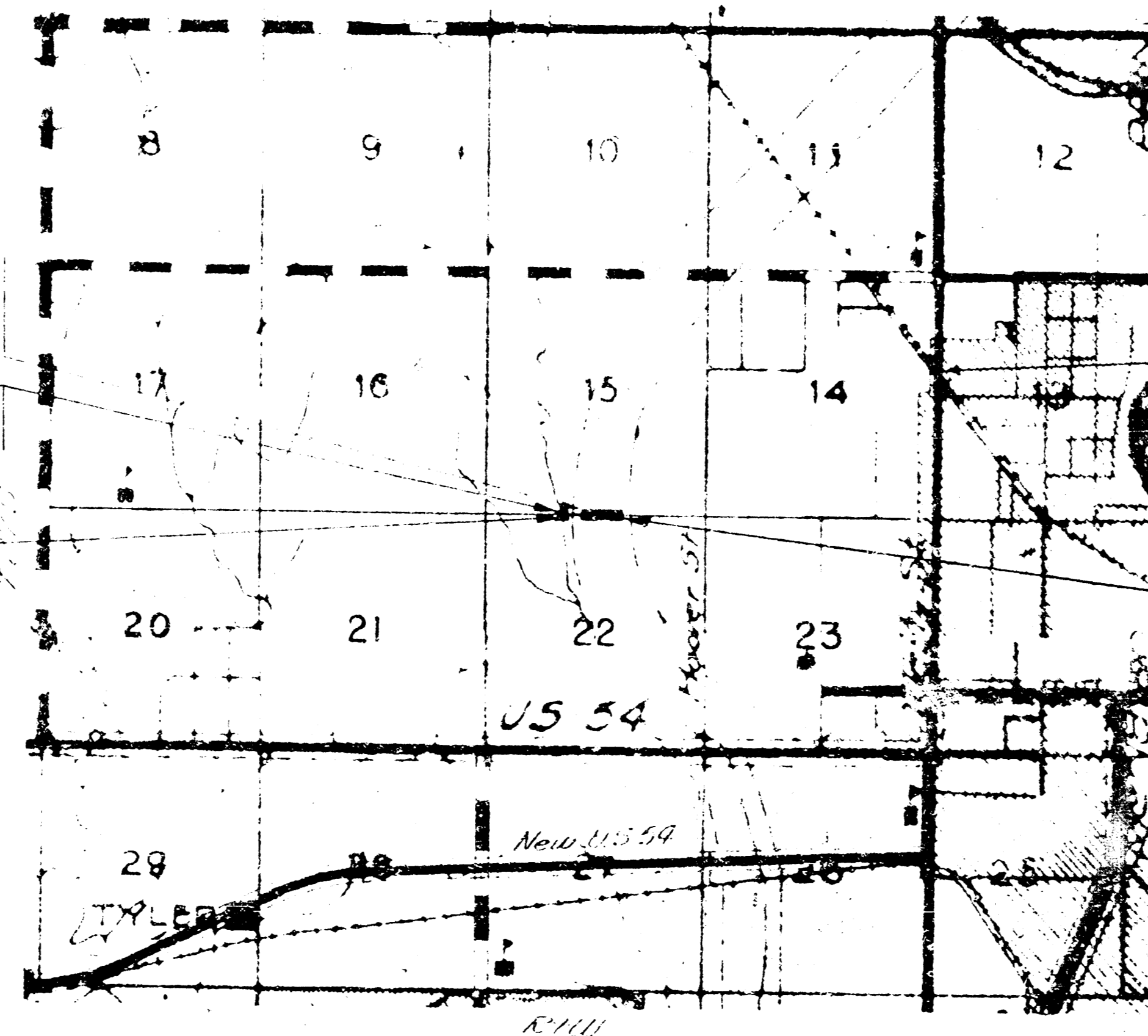
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(COMBINED)	
Concrete Class A (4E)	794.1 CY
Reinforcing Steel	169,100 Lb
14" x 14" Conc. Piling	4,070 LF
Bearing Devices	7,570 Lb
Metal Handrail	1,291.5 LF
Structural Steel	22,150 Lb

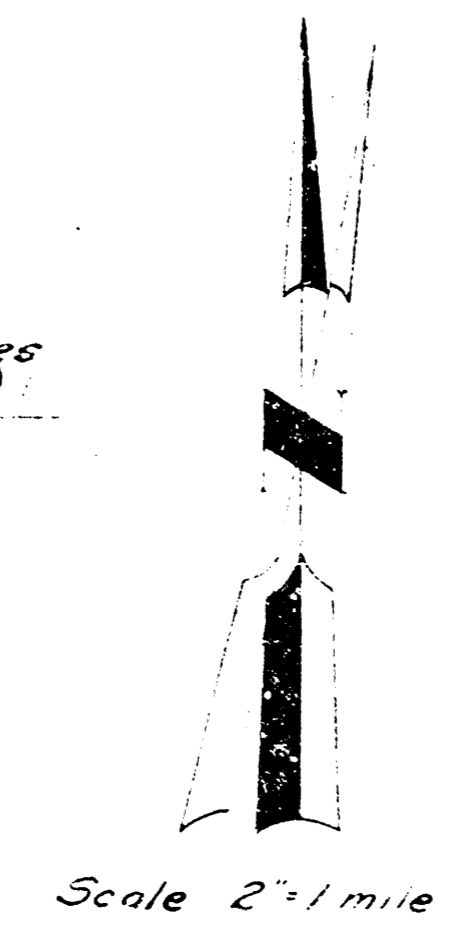
Sta 18+56 Const
30'5" x 30'0" x 30'5" PCB

Begin Project
Sta 18+05.62



Wichita - 2 Miles
(Maple Spring)

End Project
Sta 30+41.38



BRIDGES ONLY

CONVENTIONAL SIGNS

- COUNTY LINE -----
- SECTION LINE -----
- WIRE FENCE -----
- HEDGE ROW -----
- RAILROAD -----
- SURVEY LINE -----
- RIGHT OF WAY -----
- TELEPHONE -----
- POWER POLE -----
- TRAVELED WAY -----
- CITY LIMITS -----
- TOWNSHIP BOUNDARY -----

GROSS LENGTH OF PROJECT	123,576 FT.	0.234 MILES
EXCEPTIONS	60,226 FT.	0.114 "
ADDITIONS		
NET LENGTH OF PROJECT	63,350 FT.	0.120 MILES
NET LENGTH OF BRIDGES	63,350 FT.	0.120 MILES
NET LENGTH OF ROAD	FT.	MILES

PLANS PREPARED BY

COUNTY ENGINEER
DATE _____

APPROVED

COUNTY COMMISSIONER
DATE _____

RECOMMENDED FOR APPROVAL DATE _____

ENGINEER OF SECONDARY ROADS
STATE HIGHWAY COMMISSION OF KANSAS

APPROVED _____ DATE _____

STATE HIGHWAY ENGINEER
STATE HIGHWAY COMMISSION OF KANSAS

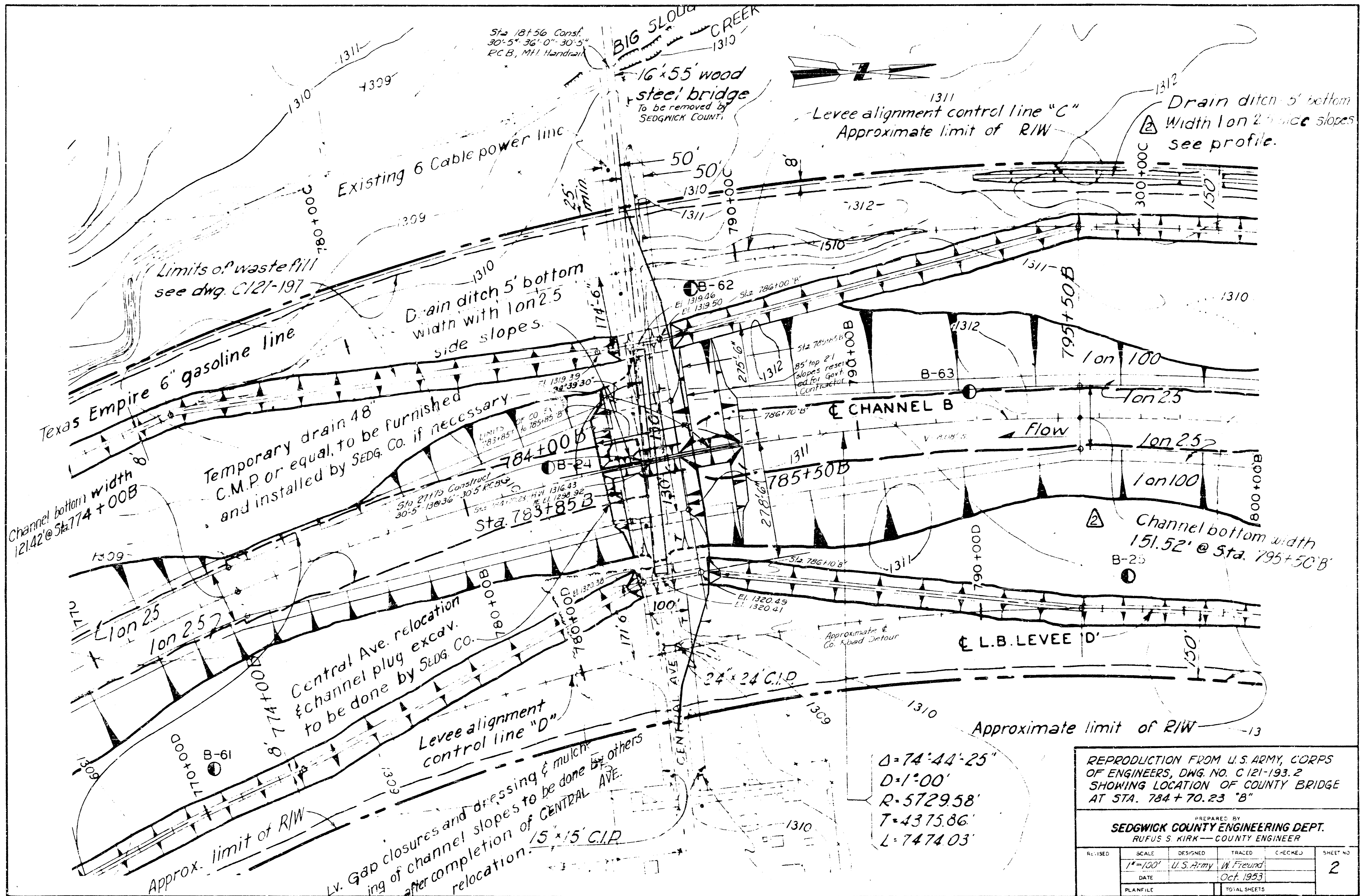
RECOMMENDED FOR APPROVAL DATE _____

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED _____ DATE _____

DIVISION ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

618-22-2775



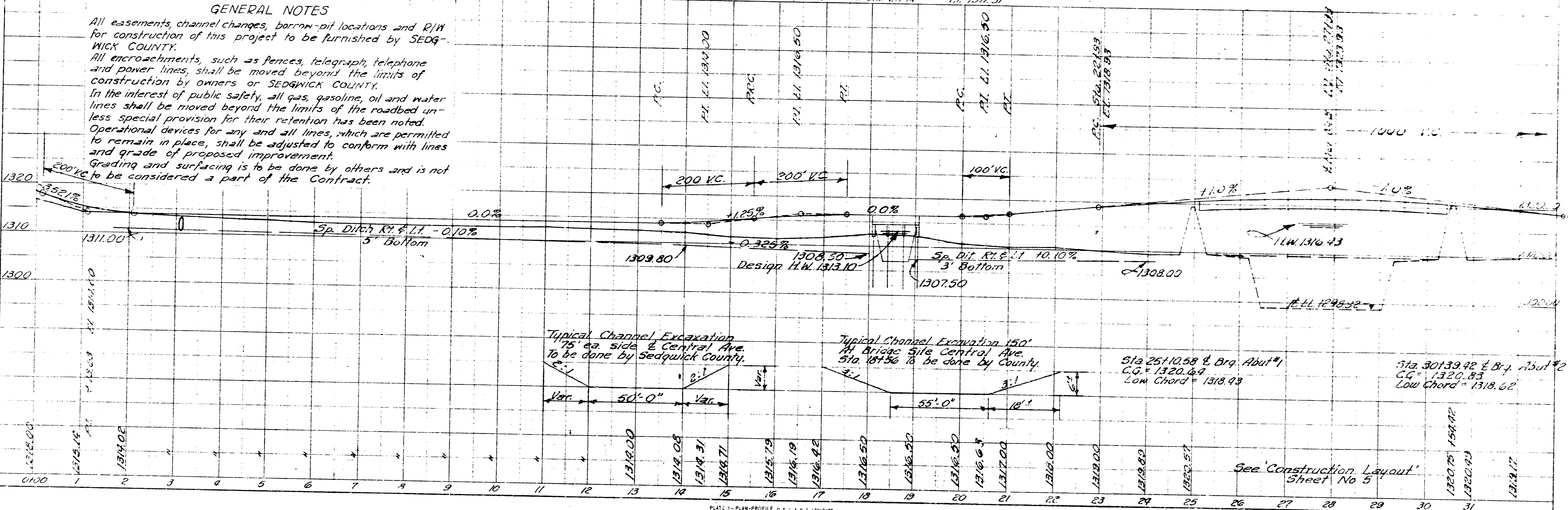
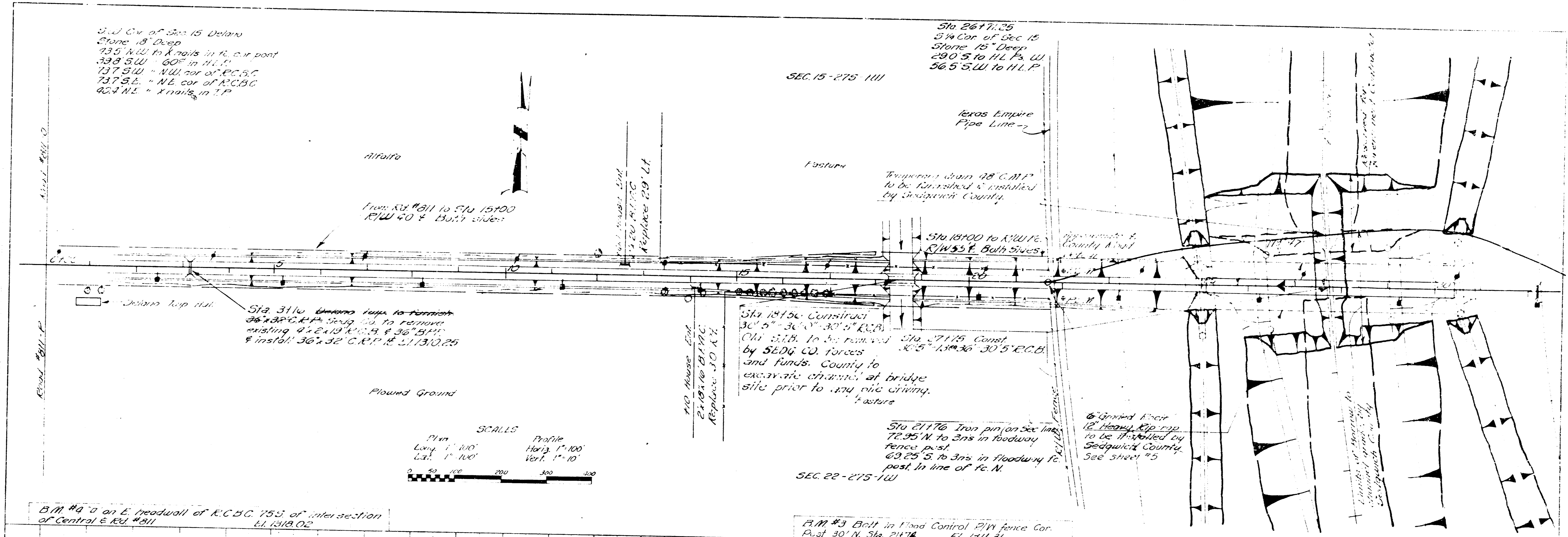
$\Delta = 74^{\circ}44'25''$
 $D = 1^{\circ}00'$
 $R = 5729.58'$
 $T = 4375.86'$
 $L = 7474.03'$

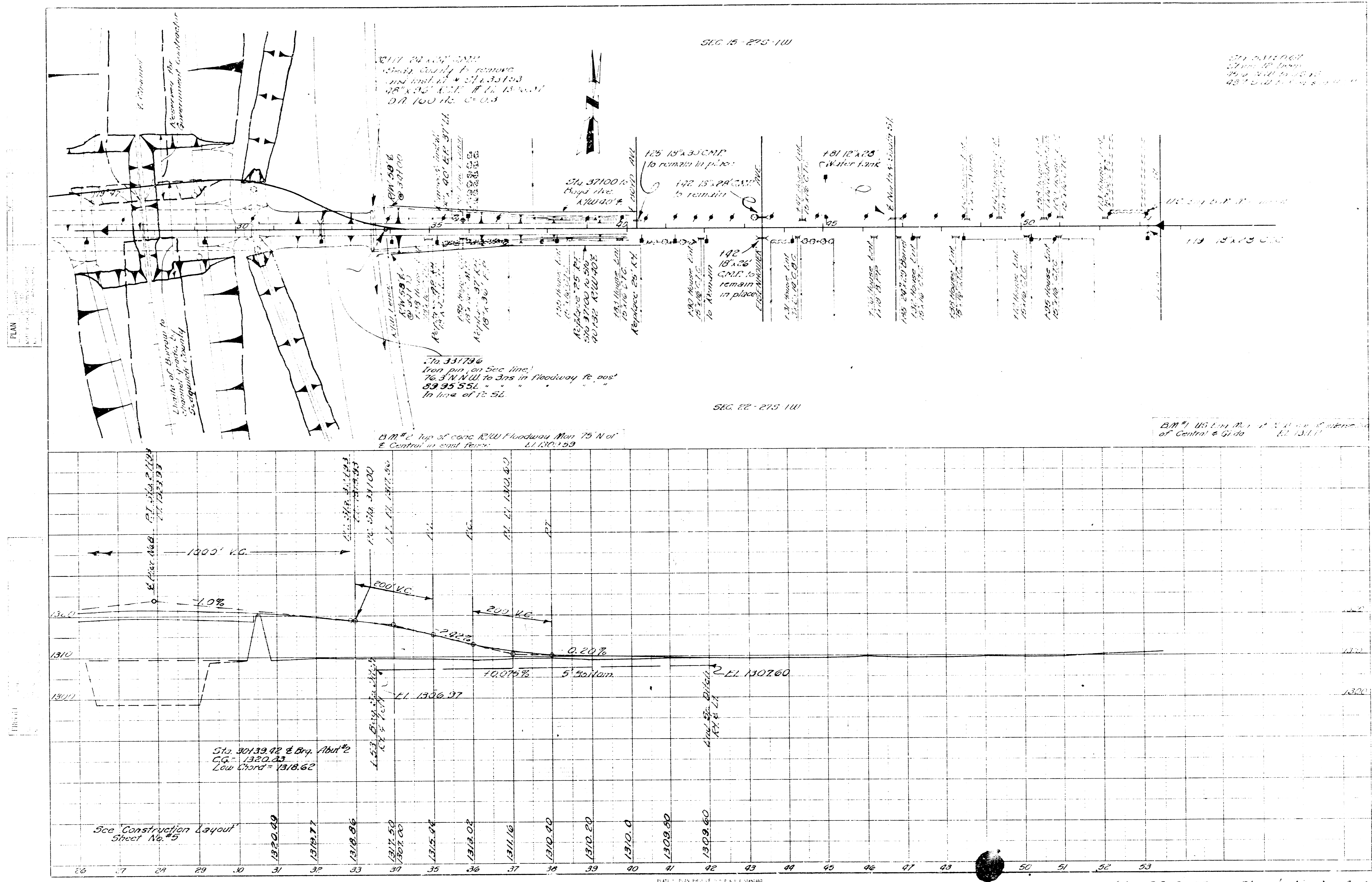
REPRODUCTION FROM U.S. ARMY, CORPS OF ENGINEERS, DWG. NO. C121-193.2 SHOWING LOCATION OF COUNTY BRIDGE AT STA. 784+70.23 "B"

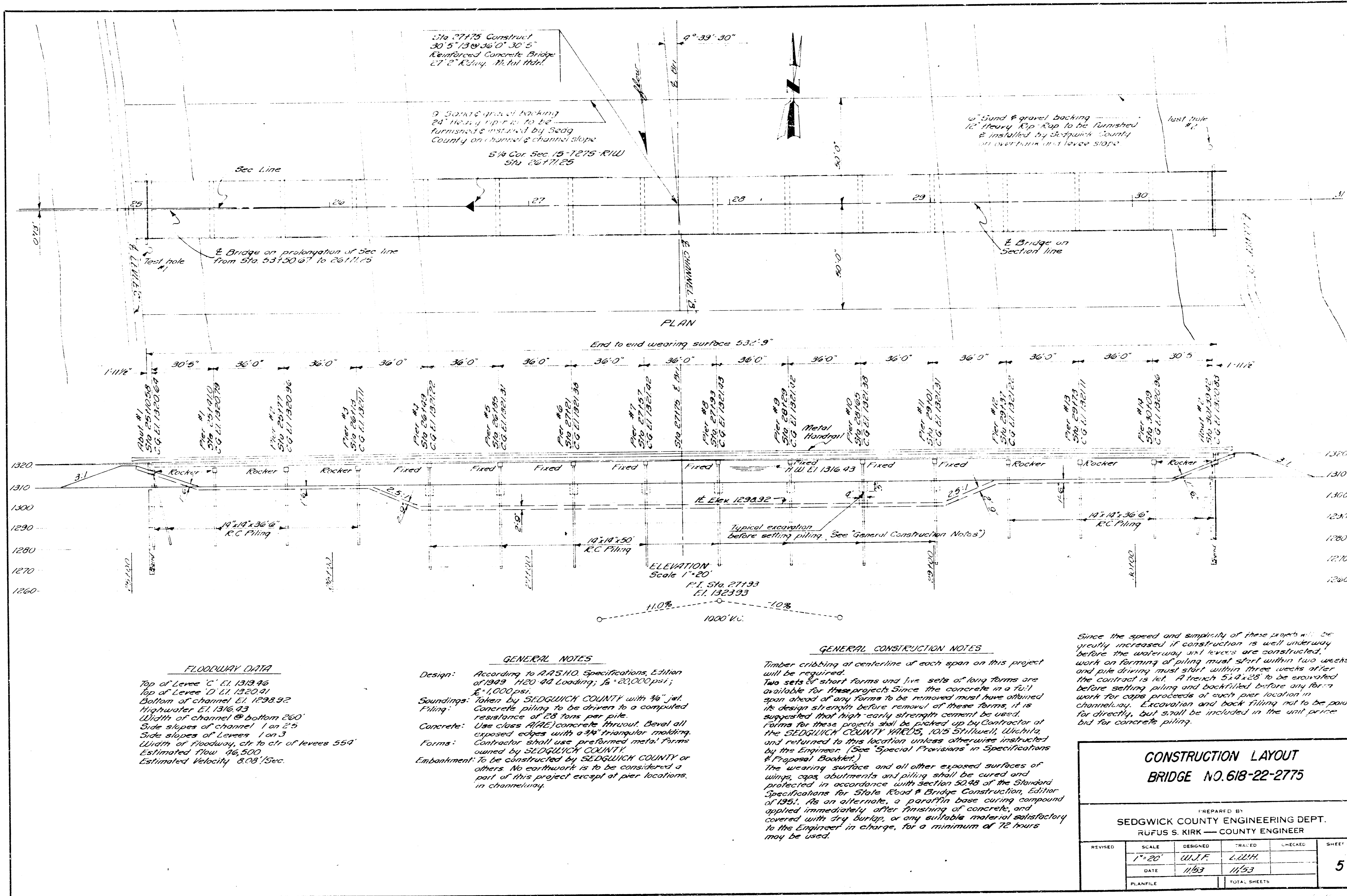
PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
 RUFUS S. KIRK — COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=100'	U.S. Army	W. Freund		2
		DATE	Oct. 1953		
		PLANFILE		TOTAL SHEETS	

112-12-2715







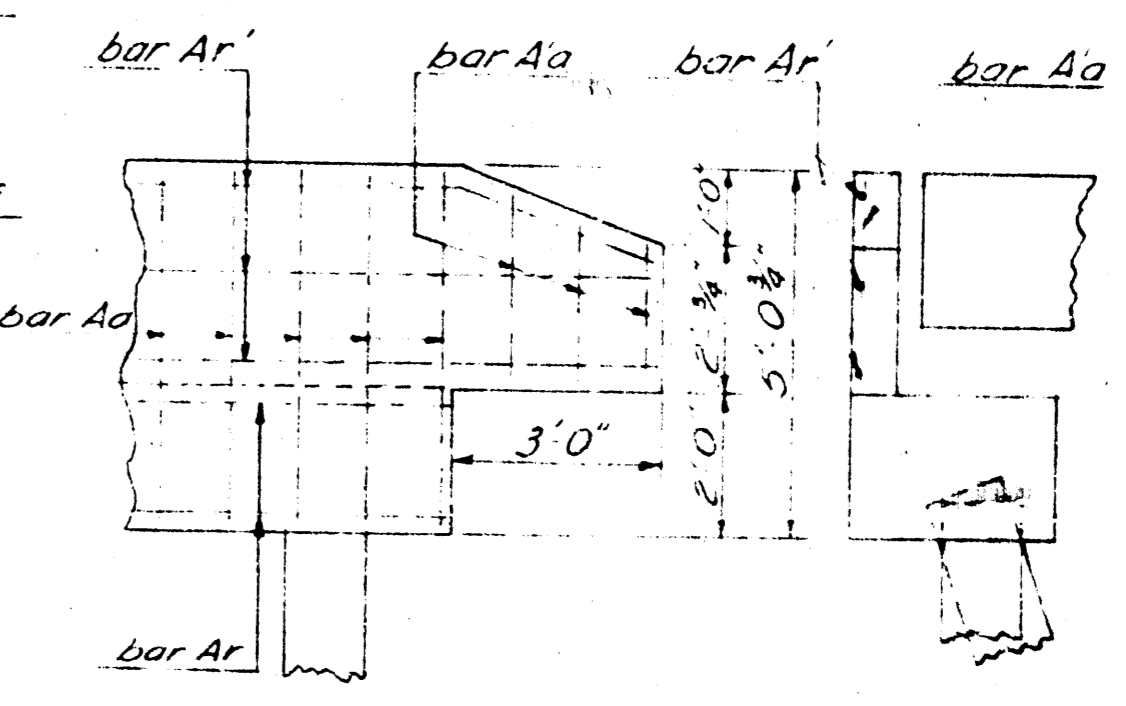
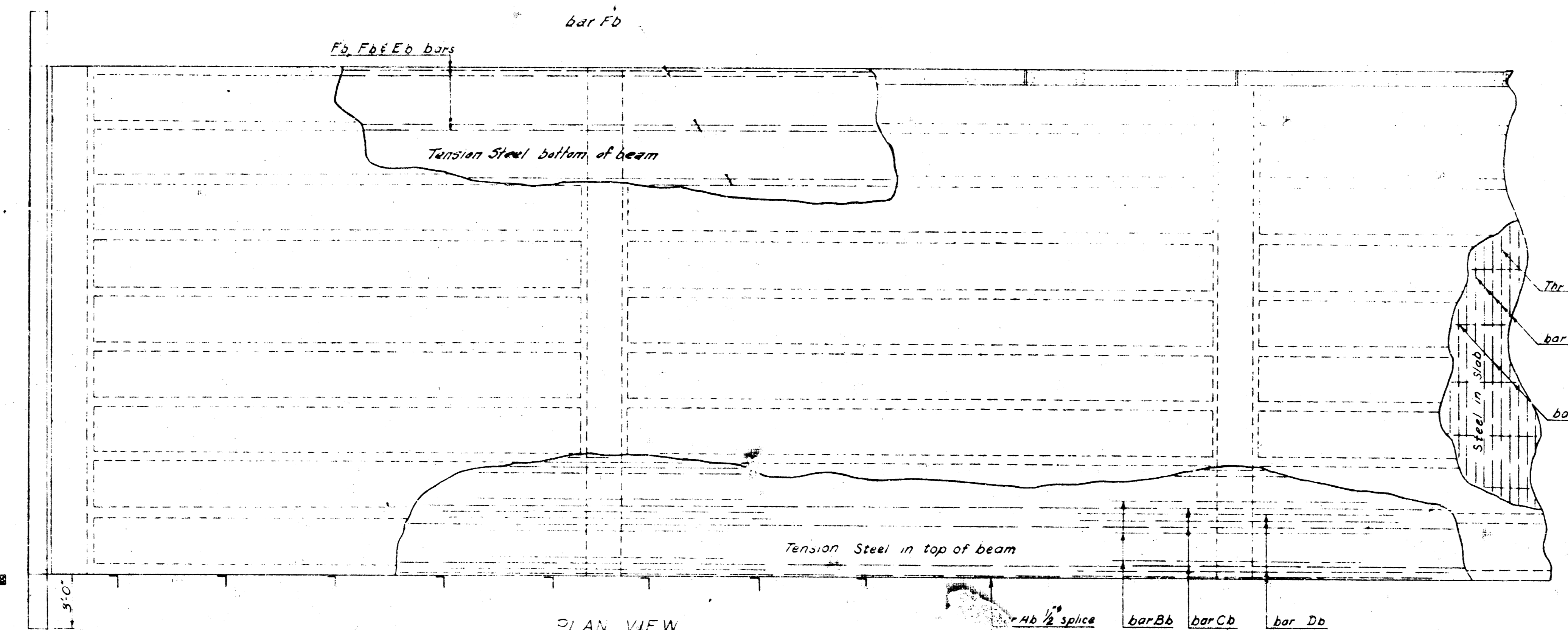


LOCATION OF PILING IN LEVEES				
BRIDGE NO. 618-22-2775				
PREPARED BY SEDGWICK COUNTY ENGINEERING DEPT. RUFUS S. KIRK — COUNTY ENGINEER				
REVISED	SCALE	DESIGNED	TRACED	CHECKED
	1"=10'	W.J.F.	L.W.H.	
	DATE	10/53	11/53	
	PLANFILE	TOTAL SHEETS		SHEET NO
				6

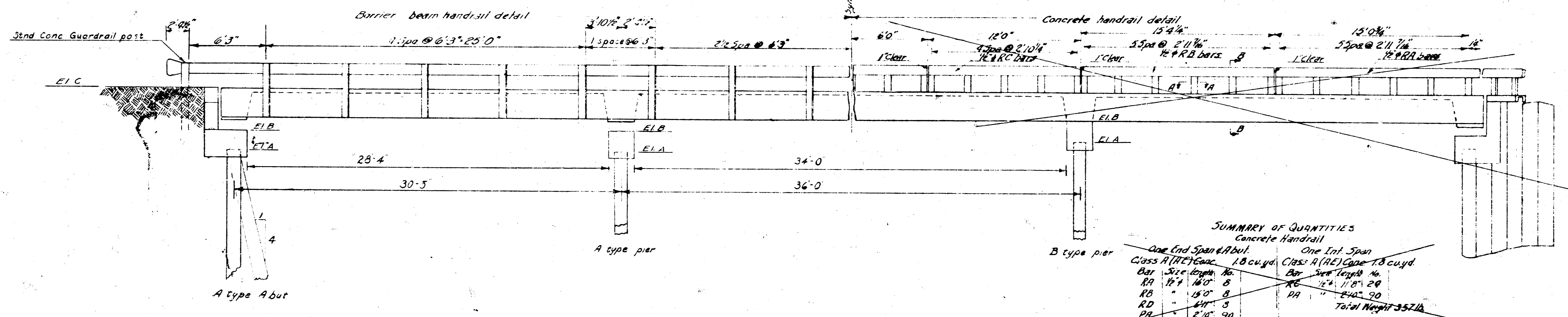
618-22-2775 6 of 12

GENERAL NOTES

Design: Designed for H-20-44 loading AASHTO specifications $f_c = 20,000$ psi, $f_s = 40,000$ psi
 Soundings: To be taken by Sedgwick County
 Piling: Concrete piling to be driven to a calculated resistance of 20 ton
~~Old structure to be removed by Sedgwick County~~
 Concrete: Class A (RE) concrete used throughout
 Bevel all exposed edges with a $\frac{3}{8}$ " Δ molding unless otherwise noted. Forms shall be preformed steel pans used as directed by the Engineer in charge.
 Guardrail: To be of standard barrier type or concrete as shown on construction layout. Concrete rail to be constructed after the removal of deck forms.



Details of Cantilevered Wing
Scale $\frac{3}{8}$ " = 1'-0"

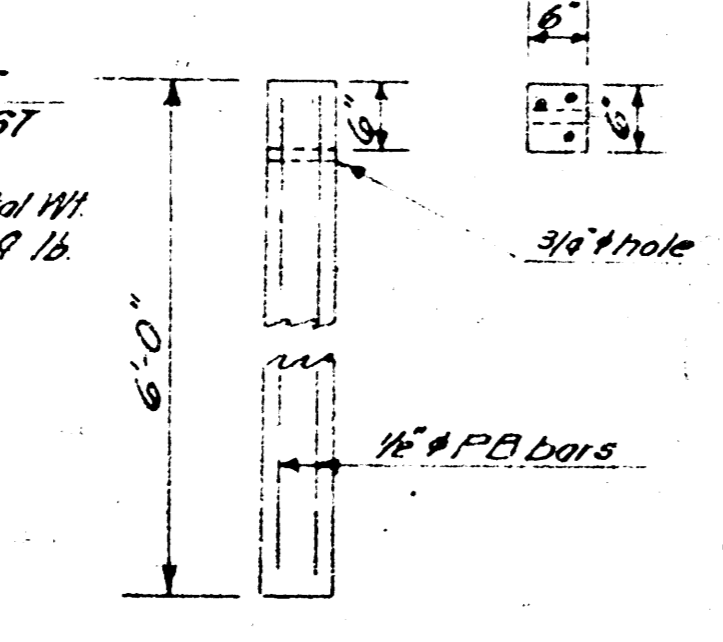


SUMMARY OF QUANTITIES
Concrete Handrail

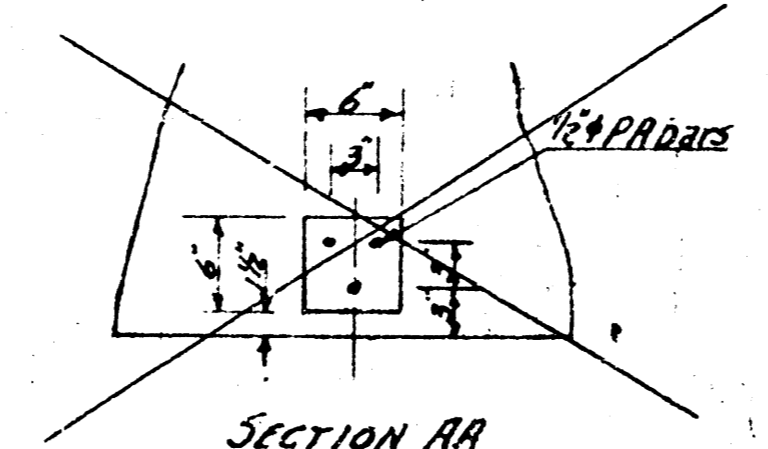
One End Span & Abut.		One Int. Span	
Class A (RE) Conc.	1.8 cu. yd.	Class A (RE) Conc.	1.8 cu. yd.
Bar Size Length No.		Bar Size Length No.	
RA 1/2" 180'	8	RA 1/2" 118'	20
RB 3/4" 180'	8	RB 3/4" 118'	20
RD 1" 180'	5	RD 1" 118'	20
PA 2" 10" 90'		PA 2" 10" 90'	
Total Weight 373 lb.		Total Weight 357 lb.	

SUMMARY OF QUANTITIES
ONE GUARDRAIL POST

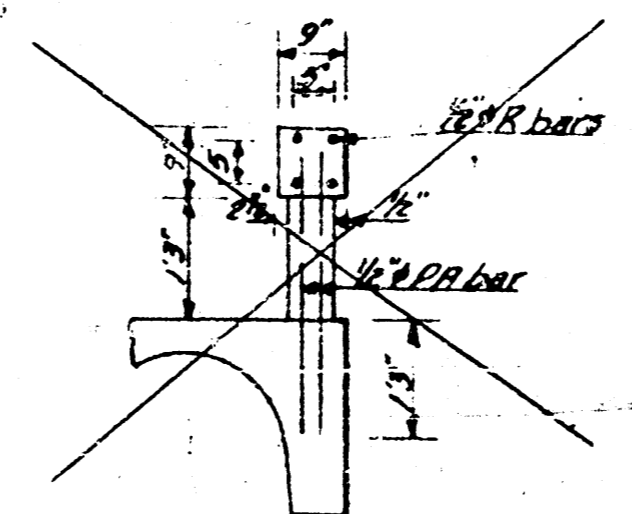
Bar No.	Size	Length	Total Wt.
173	3"	5'-8"	11.9 lb.



STANDARD GUARDRAIL POST DETAIL
4 Required



SECTION AA



SECTION BB

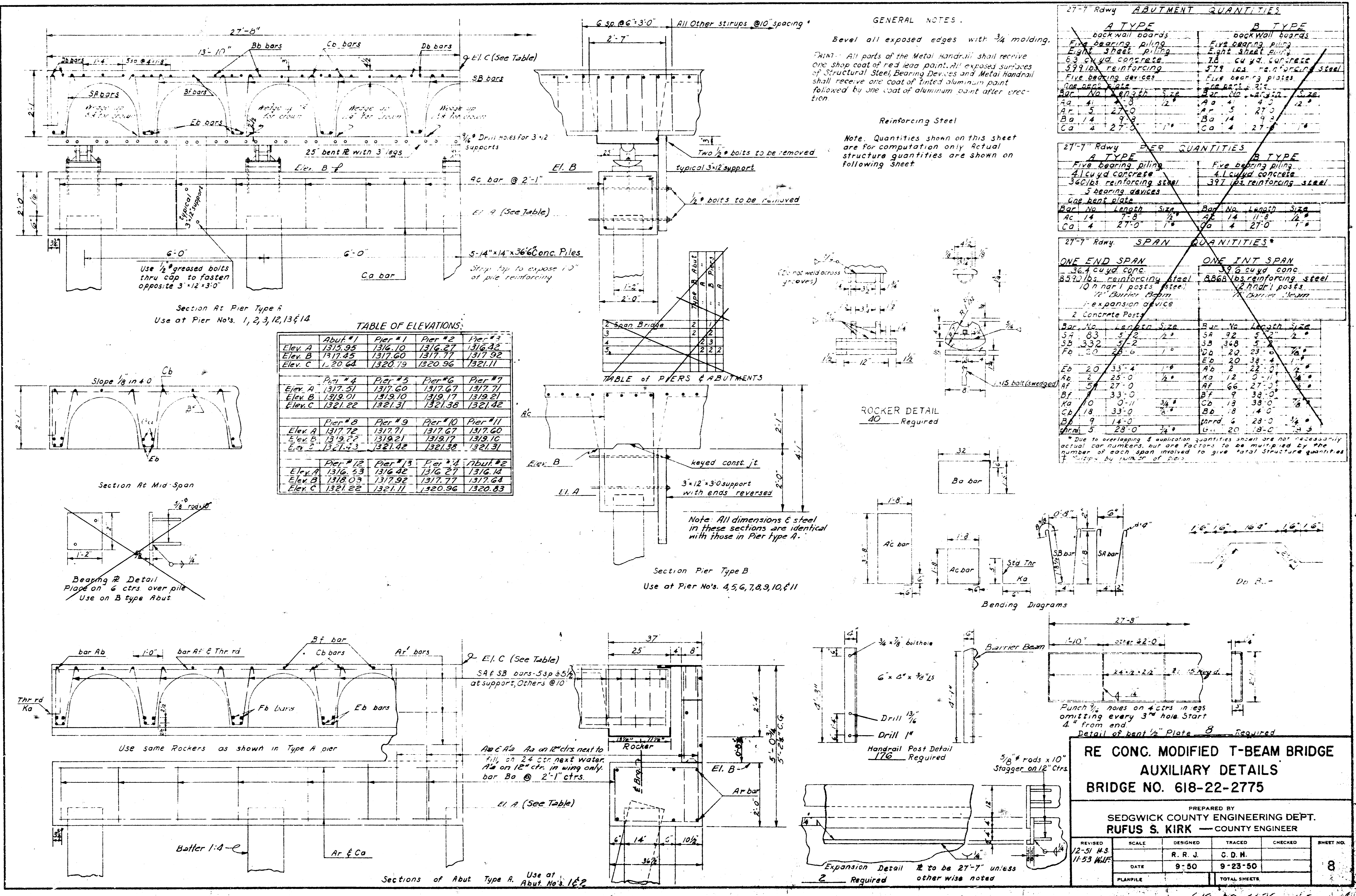
Note: PA bars to be placed immediately after slab concreting.

RE. CONC. MODIFIED T-BEAM BRIDGE
BRIDGE NO. 618-22-2775

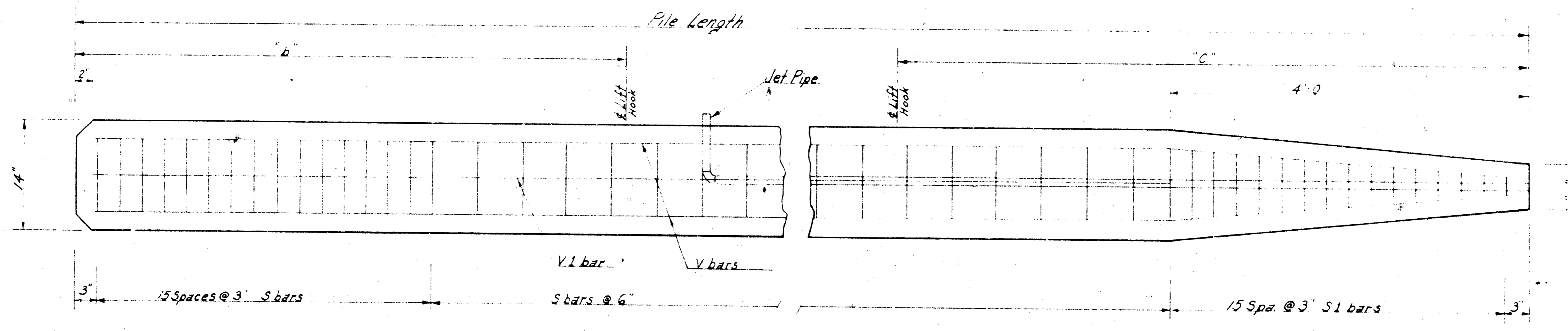
PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK — COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
11-23 C.L.P.	1/4" = 1'	R. R. J.	C. D. H.		7
		DATE	9-20-50	9-18-50	
		PLANFILE	TOTAL SHEETS		

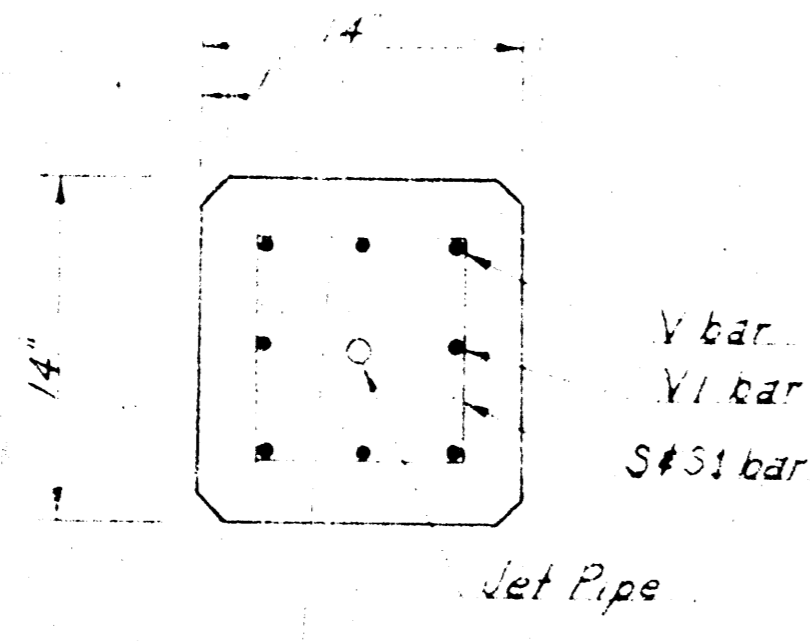
618-22-2775



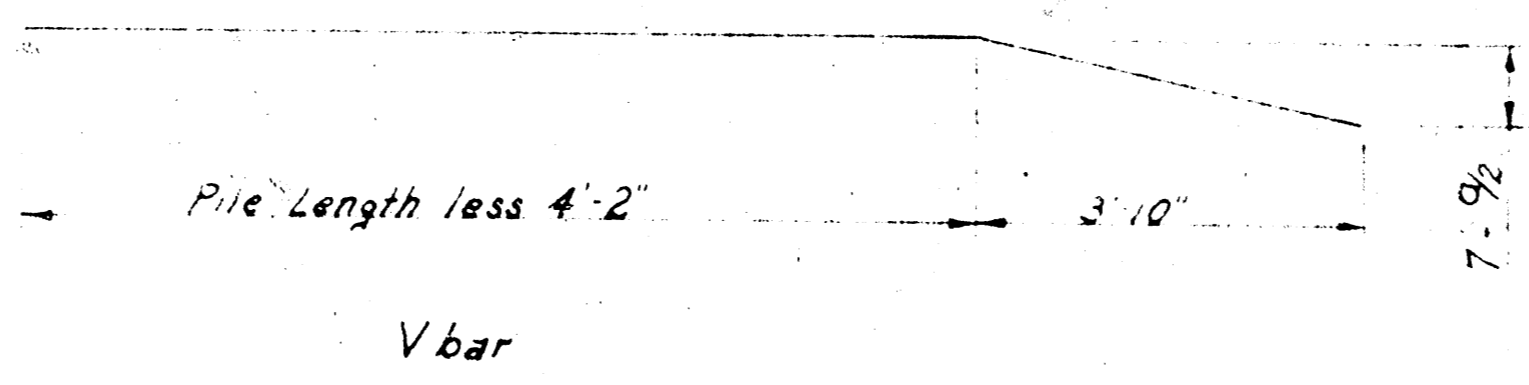
618-22-2775-8-16



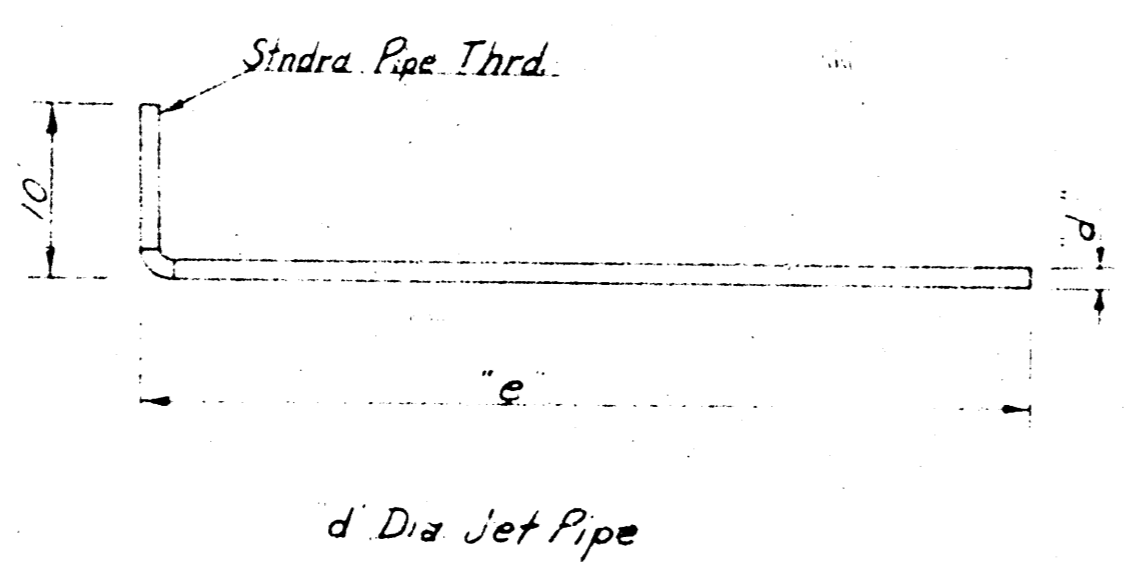
ELEVATION



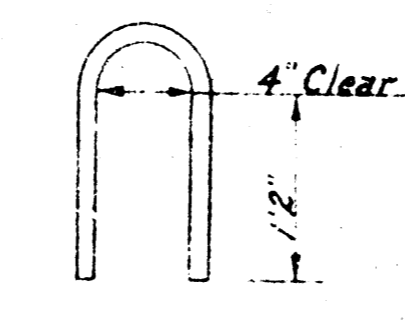
END VIEW



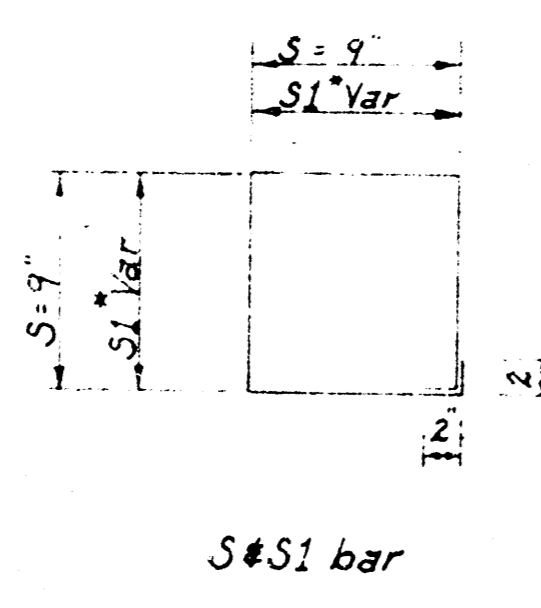
V bar



d Dia Jet Pipe



#8 Lift Hook



#5 bars

*S1 - 15 bars, increase from "x" to "y" by "z" increments

General Notes
 Design: According to ARSMD Specifications, 1949 Edition 12,000 psi; 15,000 psi Concrete. Use class A throughout if piling are to be encased, or otherwise protected. Use class A(AE) if piling are to form open bent, unless otherwise noted.
 Reinforcing: All dimensions are to center of bars, unless otherwise noted.
 Jet Pipe: Standard pipe of Dimensions shown unless otherwise approved by Engineer.
 Curing: Piling shall be left in forms or otherwise properly cured for at least 7 days. Piling shall not be moved until concrete has attained its design strength or a minimum of 4 weeks after casting.
 Payment: The cost of material and labor used for casting and driving of piles shall be included in the unit bid for concrete piles.
 Handling: Piling shall only be lifted by handling hooks or by rigging within 18" of hook location.

Note: Concrete at end of piles shall be removed to expose reinforcing as shown elsewhere on plans. The length, for payment of piles shall be as stated in sect 59.40 of the Standard Specifications of Kansas, 1951 Edition

Bar	Size	Length	No.	Size	Length	No.	Size	Length	No.	Size	Length	No.	Size	Length	No.	Size	Length	No.
Y	#7	20'-6"	4	#7	24'-2"	4	#7	28'-2"	4	#7	32'-2"	4	#7	36'-2"	4	#7	40'-2"	4
Y1	#2	3'-4"	41	#2	3'-4"	49	#2	3'-4"	57	#2	3'-4"	65	#2	3'-4"	73	#2	3'-4"	81
S1	#2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"
Lift Hook	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2
Jet Pipe																		
a		6"		6"		6"		6"		6"		6"		6"		6"		6"
b		6'-0"		7'-2"		8'-4"		9'-6"		10'-8"		12'-0"		13'-2"		14'-4"		15'-6"
c		8'-0"		9'-2"		10'-4"		11'-6"		12'-8"		14'-0"		15'-2"		16'-4"		17'-6"
d																		
e																		
x	4"	2	3	4	2	5	3	6	2	7	3	8	2	9	3	10	2	11
Concrete		.94 Cu Yds.		1.14 Cu Yds.		1.34 Cu Yds.		1.55 Cu Yds.		1.75 Cu Yds.		1.95 Cu Yds.		2.15 Cu Yds.		2.35 Cu Yds.		2.55 Cu Yds.
Rebar		207 Lbs.		247 Lbs.		287 Lbs.		327 Lbs.		367 Lbs.		407 Lbs.		447 Lbs.		487 Lbs.		527 Lbs.

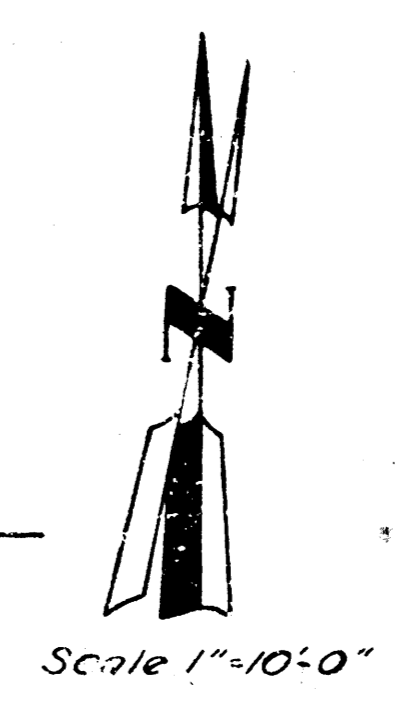
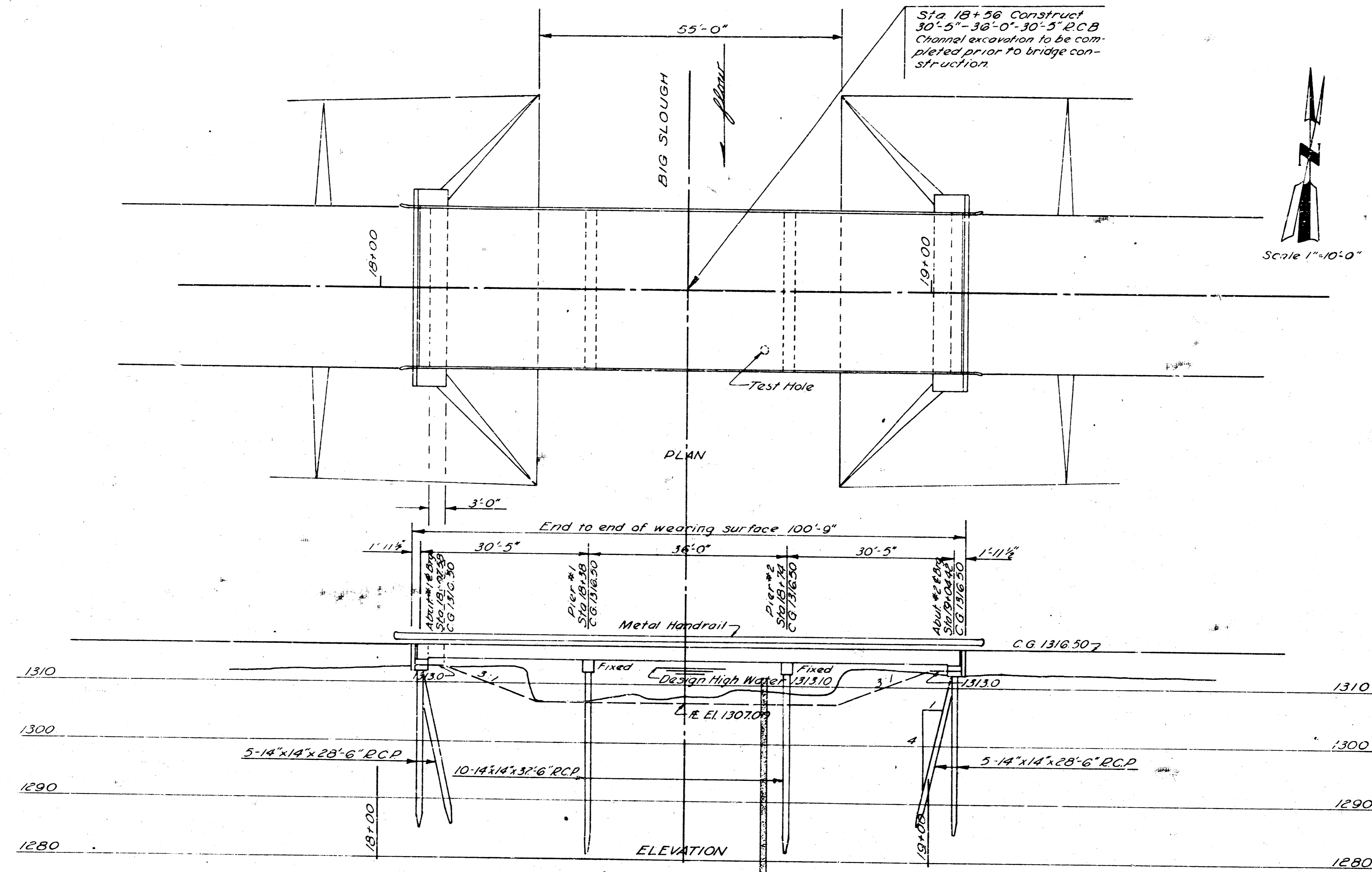
Bar	Size	Length	No.	Size	Length	No.	Size	Length	No.	Size	Length	No.	Size	Length	No.
Y	#6	36'-8"	4	#7	40'-8"	4	#8	44'-8"	4	#9	48'-8"	4	#10	52'-8"	4
Y1	#6	33'-0"	4	#8	45'-0"	4	#10	51'-0"	4	#12	57'-0"	4	#14	63'-0"	4
S	#2	3'-4"	74	#2	3'-4"	100	#2	3'-4"	126	#2	3'-4"	152	#2	3'-4"	178
S1	#2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2	Var. 15"	2
Lift Hook	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2	#8	3'-0"	2
Jet Pipe															
a		10"		6"		6"		6"		6"		6"		6"	
b		10'-0"		11'-0"		12'-0"		13'-0"		14'-0"		15'-0"		16'-0"	
c		11'-0"		12'-0"		13'-0"		14'-0"		15'-0"		16'-0"		17'-0"	
d															
e															
x	4"	2	3	4	2	5	3	6	2	7	3	8	2	9	3
Concrete		1.82 Cu Yds.		2.43 Cu Yds.		3.04 Cu Yds.		3.65 Cu Yds.		4.26 Cu Yds.		4.87 Cu Yds.		5.48 Cu Yds.	
Rebar		482 Lbs.		596 Lbs.		710 Lbs.		824 Lbs.		938 Lbs.		1052 Lbs.		1166 Lbs.	

14"x14"x Re. Conc. Piling
BRIDGE NO. 618-22-2775
& 618-22-1856

PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK — COUNTY ENGINEER

REVISION	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
		Schwab	Housman		10
		12-51	1-52		
				TOTAL SHEETS	

618-22-2775 # 10 of 16



GENERAL NOTES

Design: According to A.A.S.H.O. Specifications, Edition of 1949, H-20-44. Loading: 15,000 psi; 10,000 psi.

Soundings Taken by Sedgwick County with 1/4" jet.

Piling: Concrete Piling to be driven to a computed resistance of 25 tons per pile.

Concrete: Use Class A(AE) concrete thruout. Bevel all exposed edges with a 1/4" triangular moulding.

Forms: Contractor shall use pre-fabricated metal forms owned by SEDGWICK COUNTY.

Embankment: To be constructed by SEDGWICK COUNTY or others. No earthwork is to be considered a part of this project except of pier and abutment locations—the cost of which is to be included in the unit price bid for piling.

GENERAL CONSTRUCTION NOTES

Timber cribbing at the centerline of each span on this project will be required.

Two sets of short forms and five sets of long forms are available for these projects. Since the concrete in full span ahead of any forms to be removed must have attained its design strength before removal of these forms it is suggested that high-early strength concrete be used.

Forms for these projects shall be picked up by the contractor at the Sedgwick County Yards, 1021 Stillwell, Wichita, and returned to this location unless otherwise instructed by the Engineer. (See "Special Provisions" in Specifications and Proposals Book, etc.)

The wearing surface and all other exposed surfaces of wings, caps, abutments, and piling shall be cured and protected in accordance with Sec. 5048 of the Standard Specifications for State Road Bridge Construction, Edition of 1934. As an alternate, a paraffin base curing compound applied immediately after finishing of concrete, and covered with dry burlap, or any suitable material satisfactory to the Engineer in charge, for a minimum of 72 hours may be used.

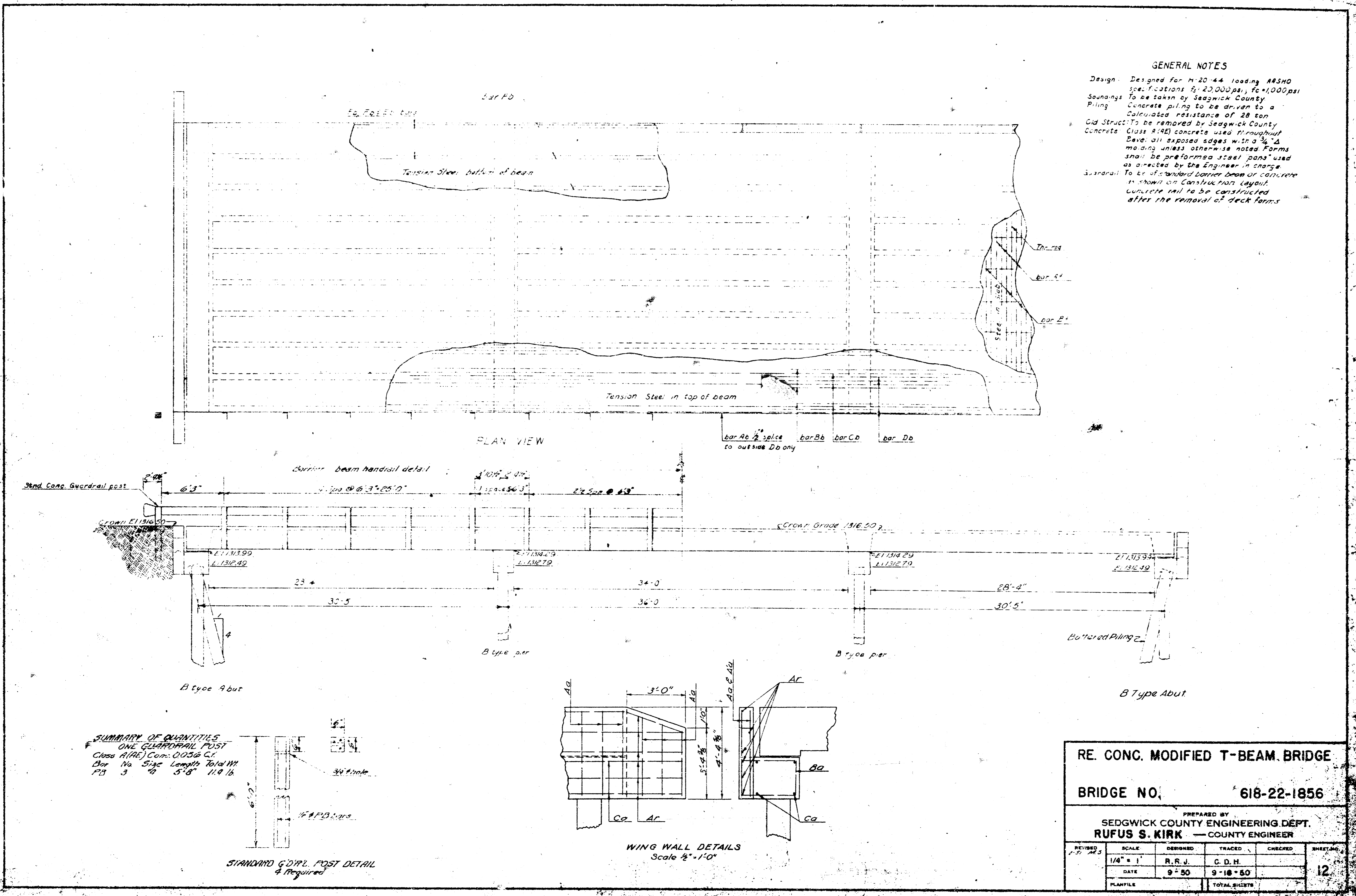
D.A. 30 Square Miles C.O. 25
Waterway provided 414 sq ft

CONSTRUCTION LAYOUT
BRIDGE NO. 618-22-1856

PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK — COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=10'	W.J.F.	C.J.F.		11
		DATE	11-53		
		PLANFILE		TOTAL SHEETS	

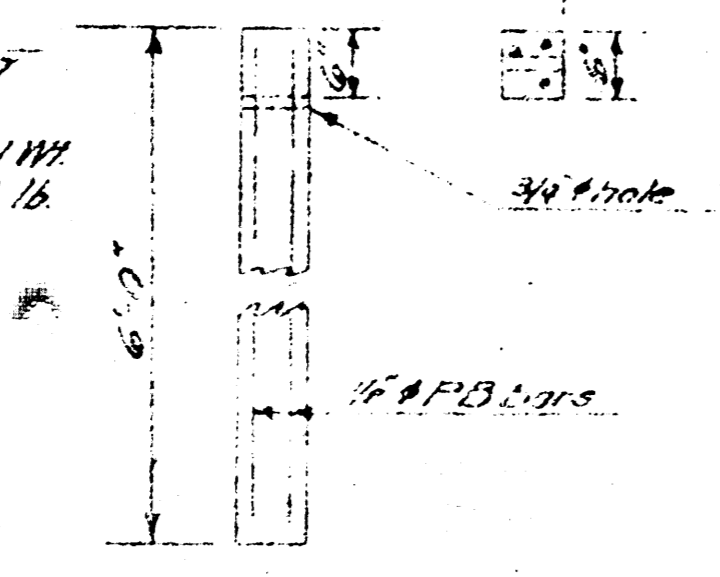
618-22-1856 Sh # 11 of 14



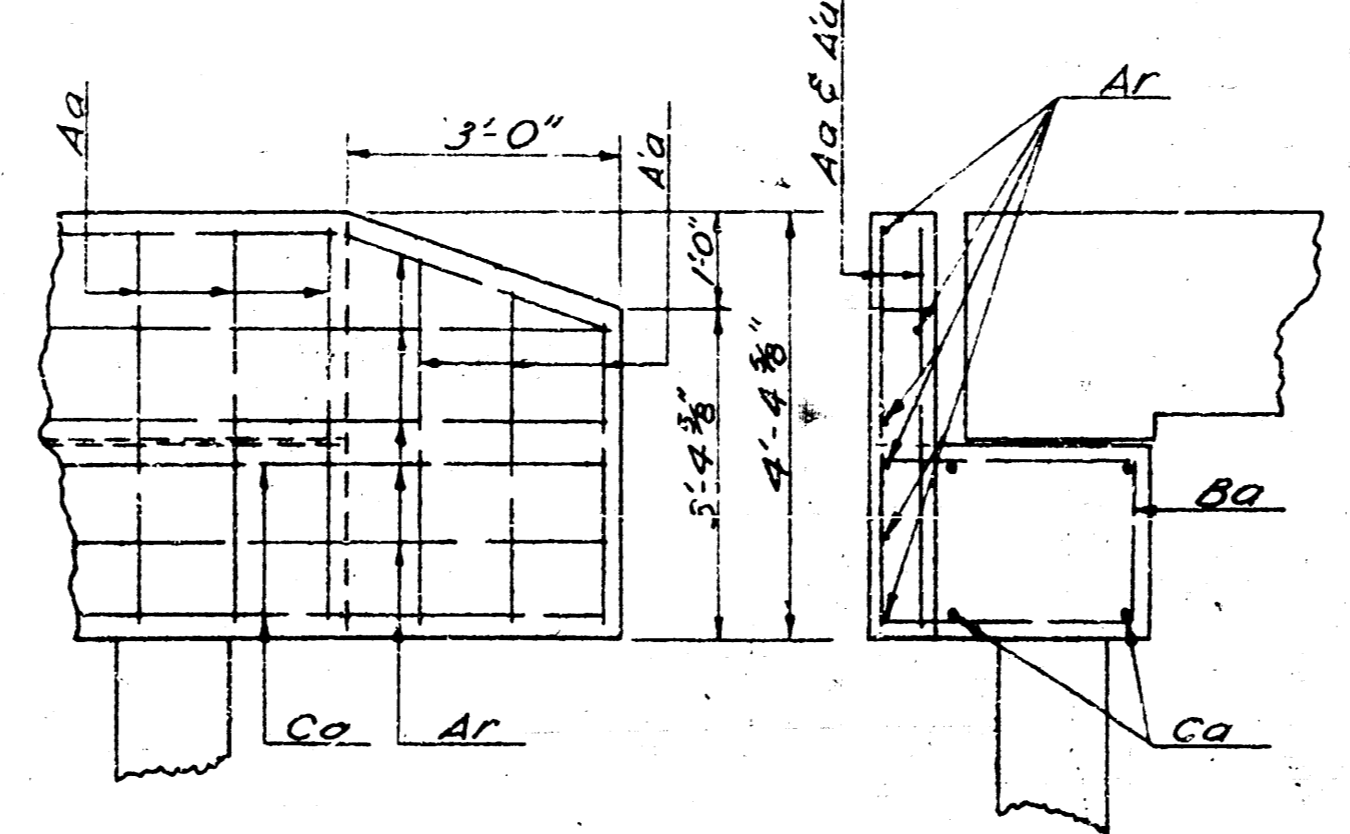
GENERAL NOTES

Design - Designed for H-20-44 loading ARSO
 specifications & 20,000 psi, $f_c = 10,000$ psi
 Soundings - To be taken by Sedgwick County
 Piling - Concrete piling to be driven to a
 calculated resistance of 20 ton
 Old Structures - To be removed by Sedgwick County
 Concrete - Class 4000 concrete used throughout
 Rebar - Devel. all exposed edges with a 3/4" A
 mending unless otherwise noted Forms
 shall be preformed steel pans used
 as directed by the Engineer in charge
 Guardrail - To be standard barrier beam of concrete
 as shown on Construction layout
 Concrete rail to be constructed
 after the removal of deck forms.

SUMMARY OF QUANTITIES
 ONE GUARDRAIL POST
 Class A (RE) Con. 0.03 cu yd
 Bar No. Size Length Total Wt.
 P13 3 #4 5'-8" 11.9 lb



STANDARD GUARDRAIL POST DETAIL
 as Required



WING WALL DETAILS
 Scale 1/4" = 1'-0"

RE. CONC. MODIFIED T-BEAM BRIDGE					
BRIDGE NO.		618-22-1856			
PREPARED BY SEDGWICK COUNTY ENGINEERING DEPT. RUFUS S. KIRK COUNTY ENGINEER					
REVISED 1-5-60	SCALE 1/4" = 1'	DESIGNED R.R.J.	TRACED C.D.H.	CHECKED	SHEET NO. 12
DATE 9-50		9-18-60		TOTAL SHEETS	
PLANFILE		TOTAL SHEETS			

618-22-1856 Sh. 12 of 14

