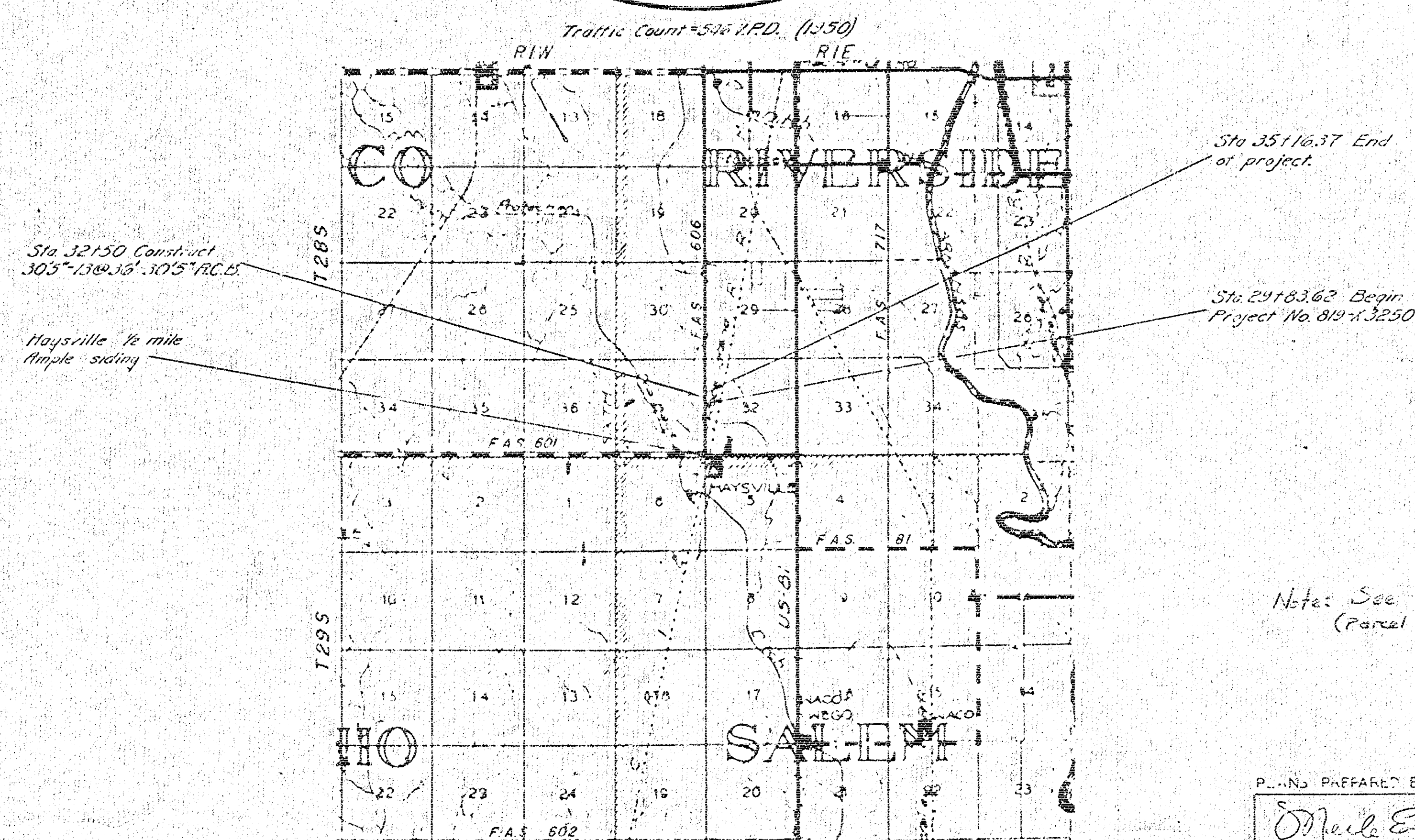


INDEX OF SHEETS	
SHEET NO.	TITLE SHEET
" 2	Topography
" 3	Plan & Profile
" 4	Construction Layout
" 5	General Details
" 6	Auxiliary Details
" 7	Reinforcing Detail
" 8	Piling Detail



Notes: See Letter Dtd 7 Jan, 1952 concerning County rip-rap
(Parcel A) File

CONVENTIONAL SIGNS

COUNTY LINE.....

SECTION LINE.....

WIRE FENCE.....

HEDGE ROW.....

RAILROADS.....

SURVEY LINE.....

RIGHT OF WAY.....

TELEPHONE POLE.....

POWER POLE.....

TRAVELED WAY.....

NET LENGTH OF PROJECT	532.75	FT.	10	MILES
NET LENGTH OF BRIDGES	532.75	FT.	10	MILES
NET LENGTH OF ROAD		FT.		MILES
EXCEPTIONS		FT.		MILES
ADDITIONS		FT.		MILES
GROSS LENGTH OF PROJECT	532.75	FT.	10	MILES

P...ING AFFAIRS" BY

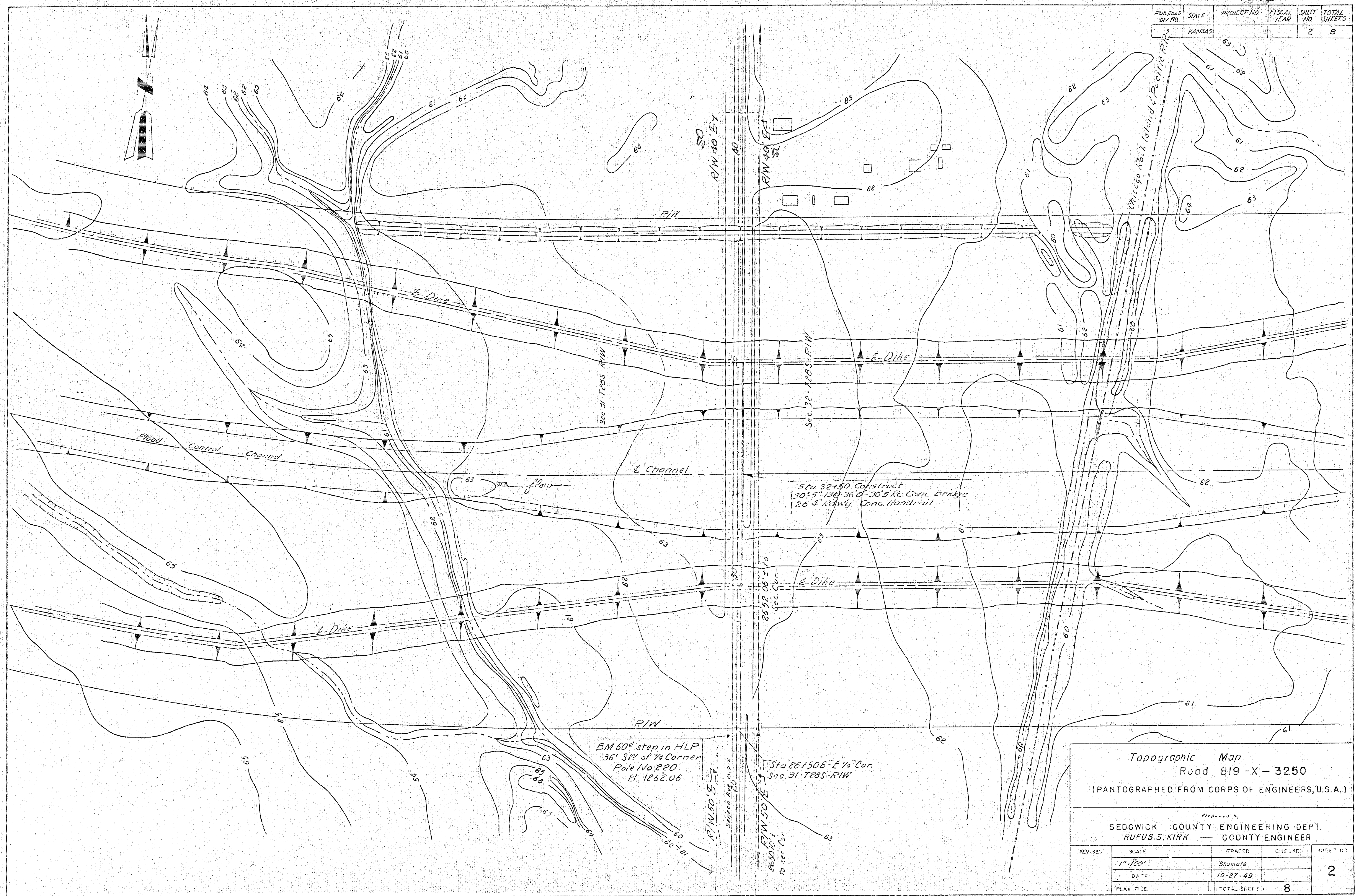
Orville E. Schuch

County Design Engineer

DATE

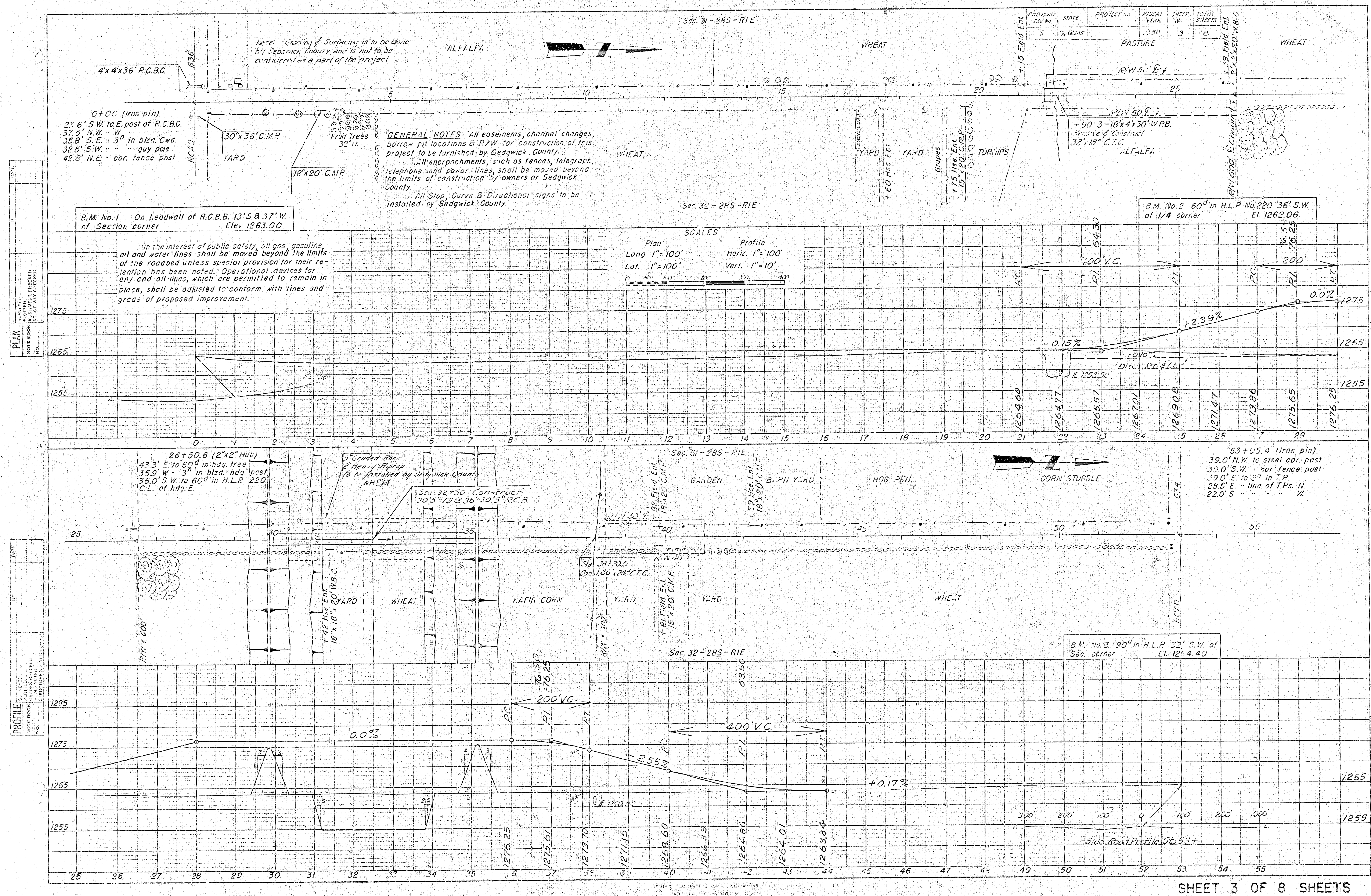
APPROVED DATE

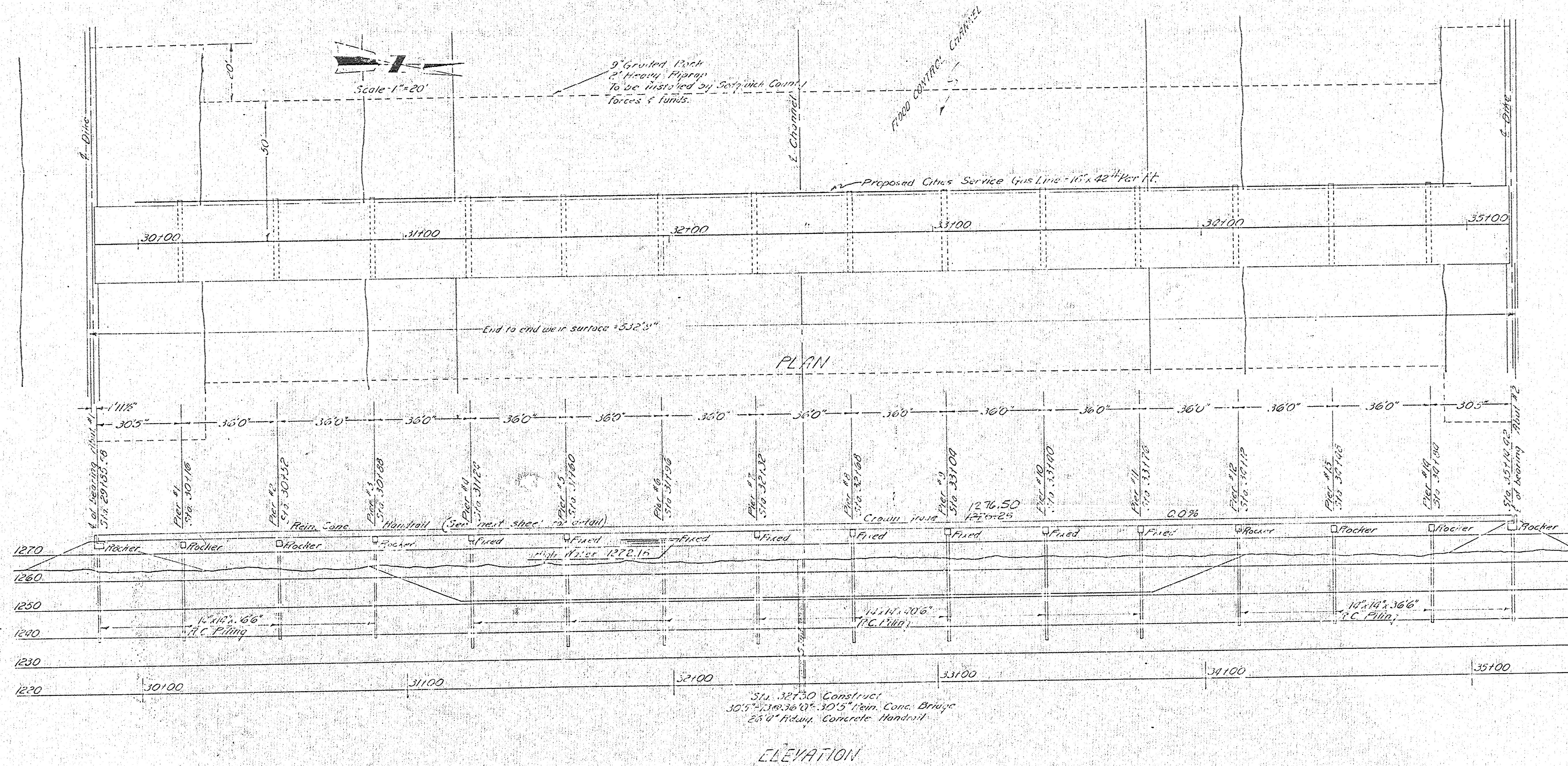
APPROVED	
<i>Refused</i>	
COUNTY	ENGINEER
DATE	
APPROVED	DATE



PUB. MAP DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	KANSAS			2	8

Topographic Map Road 819-X-3250 (PANTOGRAPHED FROM CORPS OF ENGINEERS, U.S.A.)				
Prepared by SEDGWICK COUNTY ENGINEERING DEPT. RUFUS S. KIRK COUNTY ENGINEER				
REVISED	SCALE	TRADED	CHECKED	SHEET NO.
	1"=100'		Shumate	2
	DATE		10-27-49	
	PLAN FILE		TOTAL SHEETS	8





FLOODWAY DATA

Top of left bank elevation 1275.72 1276.22 } 4/452
 Top of right bank elevation 1274.73 1275.23 }
 Bottom of channel elevation 1254.52
 Highway elevation 1272.15
 Width of channel at bottom 60'
 Side slopes of channel 1 on 2.5
 Side slopes of levee 1 on 3
 Width of floodway center to center of levee 533' 559' } 4/452
 Estimated flow 46,500 cfs
 Estimated velocity 8 ft/sec

GENERAL NOTES

Design: According to A.A.S.H.O. Specifications, edition of 1958, 14-20-30, loading, 14-20-000 psi, 14-1000 psi.

Soundings: Taken by Sedgwick County with 48 ft. pole.

Piling: Concrete piling 14" dia driven to a compacted 18" dia sand core pile.

Concrete: Use Class A(III) concrete throughout. Bored all exposed edges with 1/4" triangular marking.

Forms: Contractor shall use preformed 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.

CONSTRUCTION LAYOUT BRIDGE NO. 819-X-3250

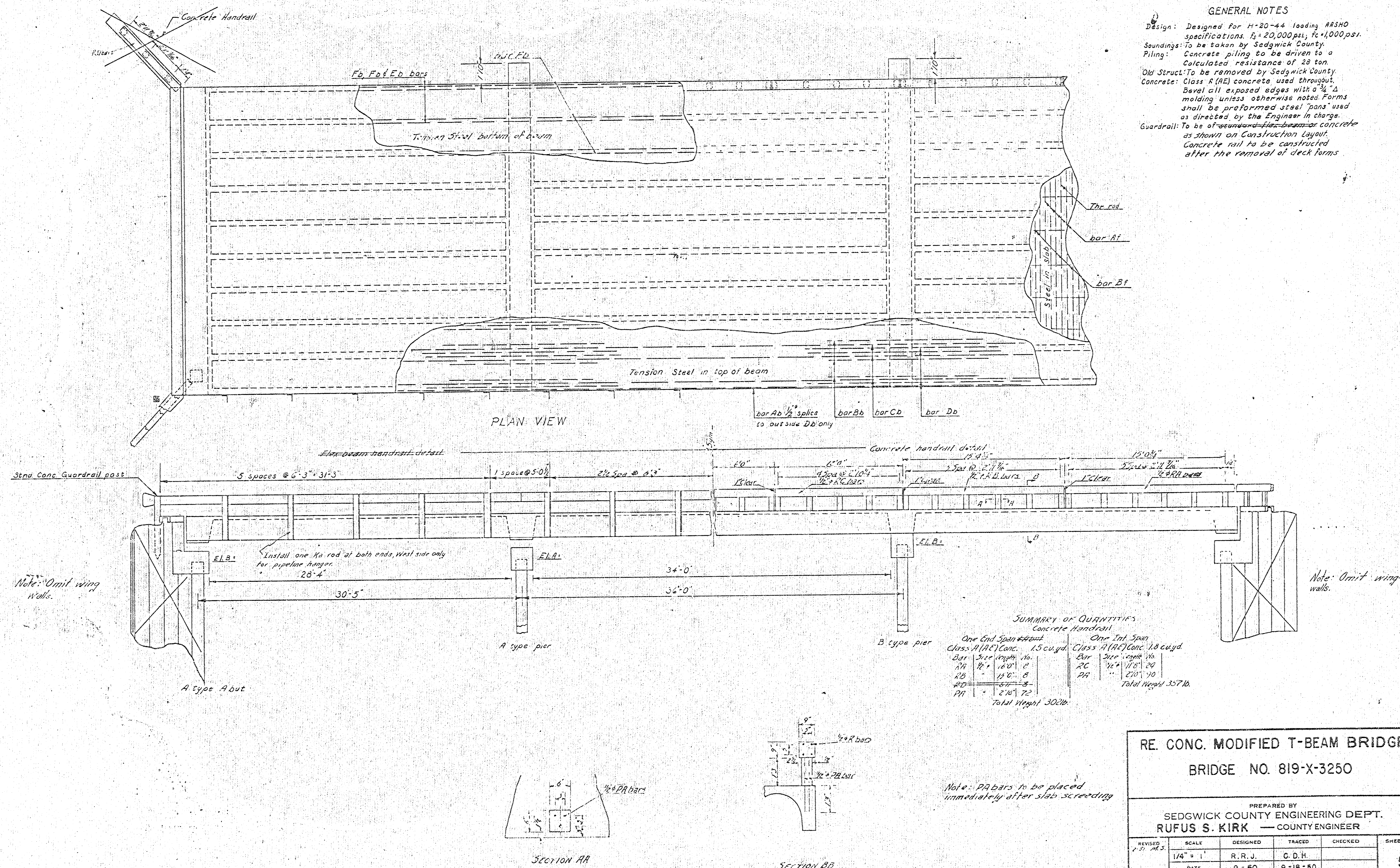
PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK — COUNTY ENGINEER

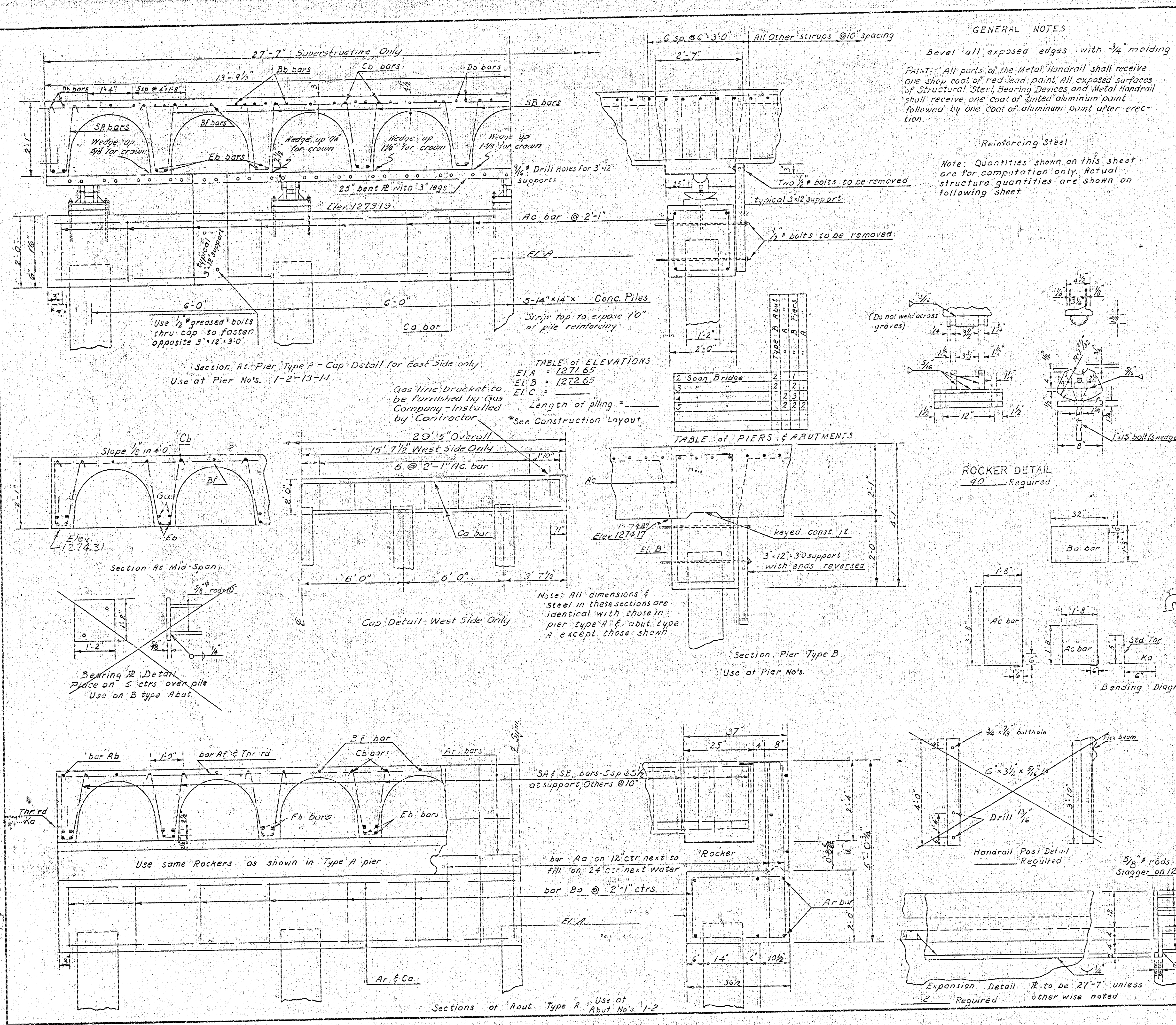
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=20'	M.E.S.	L.W.H.		4
DATE					
PLANFILE			TOTAL SHEETS	8	

Pub. Rd. Div. No.	State	Project No.	Fiscal Year	Sheet No.	Total Sheets
5	Kansas			5	8

GENERAL NOTES

Design: Designed for H-20-44 loading AASHTO specifications. $R_s = 20,000$ psi, $R_c = 4,000$ psi.
Soundings: To be taken by Sedgwick County.
Piling: Concrete piling to be driven to a calculated resistance of 28 ton.
Old Struct: To be removed by Sedgwick County.
Concrete: Class R (R2) concrete used throughout.
Bases: All exposed edges with $\frac{1}{4}$ " x 2" molding unless otherwise noted. Forms shall be preformed steel "pans" used as directed by the Engineer in charge.
Guardrail: To be of unreinforced concrete as shown on Construction Layout. Concrete rail to be constructed after the removal of deck forms.





GENERAL NOTES

Bevel all exposed edges with 3/4" molding

PAINT: All parts of the Metal Handrail shall receive one shop coat of red lead paint. All exposed surfaces of Structural Steel Bearing Devices and Metal Handrail shall receive one coat of tinted aluminum paint followed by one coat of aluminum paint after erection.

Reinforcing Steel

Note: Quantities shown on this sheet are for computation only. Actual structure quantities are shown on following sheet

TABLE of PIER & ABUTMENTS

Type	No.	Length	Width	Height
Span Bridge	2	27'-7"	27'-7"	27'-7"
Abutment	1	27'-7"	27'-7"	27'-7"
Pier	13	27'-7"	27'-7"	27'-7"
Pier	14	27'-7"	27'-7"	27'-7"
Pier	15	27'-7"	27'-7"	27'-7"
Pier	16	27'-7"	27'-7"	27'-7"
Pier	17	27'-7"	27'-7"	27'-7"
Pier	18	27'-7"	27'-7"	27'-7"
Pier	19	27'-7"	27'-7"	27'-7"
Pier	20	27'-7"	27'-7"	27'-7"
Pier	21	27'-7"	27'-7"	27'-7"
Pier	22	27'-7"	27'-7"	27'-7"
Pier	23	27'-7"	27'-7"	27'-7"
Pier	24	27'-7"	27'-7"	27'-7"
Pier	25	27'-7"	27'-7"	27'-7"
Pier	26	27'-7"	27'-7"	27'-7"
Pier	27	27'-7"	27'-7"	27'-7"
Pier	28	27'-7"	27'-7"	27'-7"
Pier	29	27'-7"	27'-7"	27'-7"
Pier	30	27'-7"	27'-7"	27'-7"
Pier	31	27'-7"	27'-7"	27'-7"
Pier	32	27'-7"	27'-7"	27'-7"
Pier	33	27'-7"	27'-7"	27'-7"
Pier	34	27'-7"	27'-7"	27'-7"
Pier	35	27'-7"	27'-7"	27'-7"
Pier	36	27'-7"	27'-7"	27'-7"
Pier	37	27'-7"	27'-7"	27'-7"
Pier	38	27'-7"	27'-7"	27'-7"
Pier	39	27'-7"	27'-7"	27'-7"
Pier	40	27'-7"	27'-7"	27'-7"
Pier	41	27'-7"	27'-7"	27'-7"
Pier	42	27'-7"	27'-7"	27'-7"
Pier	43	27'-7"	27'-7"	27'-7"
Pier	44	27'-7"	27'-7"	27'-7"
Pier	45	27'-7"	27'-7"	27'-7"
Pier	46	27'-7"	27'-7"	27'-7"
Pier	47	27'-7"	27'-7"	27'-7"
Pier	48	27'-7"	27'-7"	27'-7"
Pier	49	27'-7"	27'-7"	27'-7"
Pier	50	27'-7"	27'-7"	27'-7"
Pier	51	27'-7"	27'-7"	27'-7"
Pier	52	27'-7"	27'-7"	27'-7"
Pier	53	27'-7"	27'-7"	27'-7"
Pier	54	27'-7"	27'-7"	27'-7"
Pier	55	27'-7"	27'-7"	27'-7"
Pier	56	27'-7"	27'-7"	27'-7"
Pier	57	27'-7"	27'-7"	27'-7"
Pier	58	27'-7"	27'-7"	27'-7"
Pier	59	27'-7"	27'-7"	27'-7"
Pier	60	27'-7"	27'-7"	27'-7"
Pier	61	27'-7"	27'-7"	27'-7"
Pier	62	27'-7"	27'-7"	27'-7"
Pier	63	27'-7"	27'-7"	27'-7"
Pier	64	27'-7"	27'-7"	27'-7"
Pier	65	27'-7"	27'-7"	27'-7"
Pier	66	27'-7"	27'-7"	27'-7"
Pier	67	27'-7"	27'-7"	27'-7"
Pier	68	27'-7"	27'-7"	27'-7"
Pier	69	27'-7"	27'-7"	27'-7"
Pier	70	27'-7"	27'-7"	27'-7"
Pier	71	27'-7"	27'-7"	27'-7"
Pier	72	27'-7"	27'-7"	27'-7"
Pier	73	27'-7"	27'-7"	27'-7"
Pier	74	27'-7"	27'-7"	27'-7"
Pier	75	27'-7"	27'-7"	27'-7"
Pier	76	27'-7"	27'-7"	27'-7"
Pier	77	27'-7"	27'-7"	27'-7"
Pier	78	27'-7"	27'-7"	27'-7"
Pier	79	27'-7"	27'-7"	27'-7"
Pier	80	27'-7"	27'-7"	27'-7"
Pier	81	27'-7"	27'-7"	27'-7"
Pier	82	27'-7"	27'-7"	27'-7"
Pier	83	27'-7"	27'-7"	27'-7"
Pier	84	27'-7"	27'-7"	27'-7"
Pier	85	27'-7"	27'-7"	27'-7"
Pier	86	27'-7"	27'-7"	27'-7"
Pier	87	27'-7"	27'-7"	27'-7"
Pier	88	27'-7"	27'-7"	27'-7"
Pier	89	27'-7"	27'-7"	27'-7"
Pier	90	27'-7"	27'-7"	27'-7"
Pier	91	27'-7"	27'-7"	27'-7"
Pier	92	27'-7"	27'-7"	27'-7"
Pier	93	27'-7"	27'-7"	27'-7"
Pier	94	27'-7"	27'-7"	27'-7"
Pier	95	27'-7"	27'-7"	27'-7"
Pier	96	27'-7"	27'-7"	27'-7"
Pier	97	27'-7"	27'-7"	27'-7"
Pier	98	27'-7"	27'-7"	27'-7"
Pier	99	27'-7"	27'-7"	27'-7"
Pier	100	27'-7"	27'-7"	27'-7"

27'-7" Slab ABUTMENT QUANTITIES

A TYPE

Back wall boards		
Five bearing piling		
44 cu. yd. concrete		
379 lbs. reinforcing steel		
Five bearing devices		
One bent plate		
Bar No	Length	Size
Aa	41	4'-0"
Ab	5	27'-0"
Ac	14	9'-8"
Ca	4	27'-0"

B TYPE

Back wall boards		
Five bearing piling		
44 cu. yd. concrete		
379 lbs. reinforcing steel		
Five bearing devices		
One bent plate		
Bar No	Length	Size
Aa	41	4'-0"
Ab	5	27'-0"
Ac	14	9'-8"
Ca	4	27'-0"

27'-7" Slab PIER QUANTITIES

A TYPE

Five bearing piling		
44 cu. yd. concrete		
384 lbs. reinforcing steel		
5 bearing devices		
One bent plate		
Bar No	Length	Size
Aa	15	7'-8"
Ca	4	28'-10"

B TYPE

Five bearing piling		
44 cu. yd. concrete		
424 lbs. reinforcing steel		
5 bearing devices		
One bent plate		
Bar No	Length	Size
Aa	15	7'-8"
Ca	4	28'-10"

27'-7" Slab SPAN QUANTITIES*

ONE END SPAN

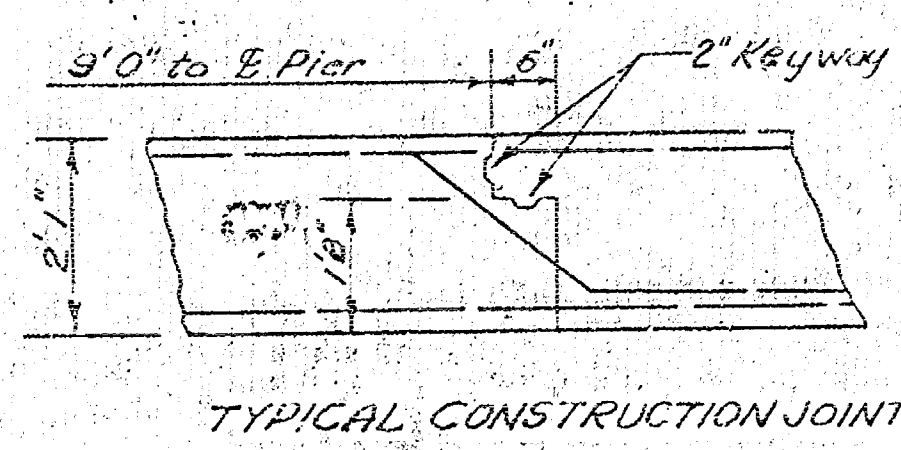
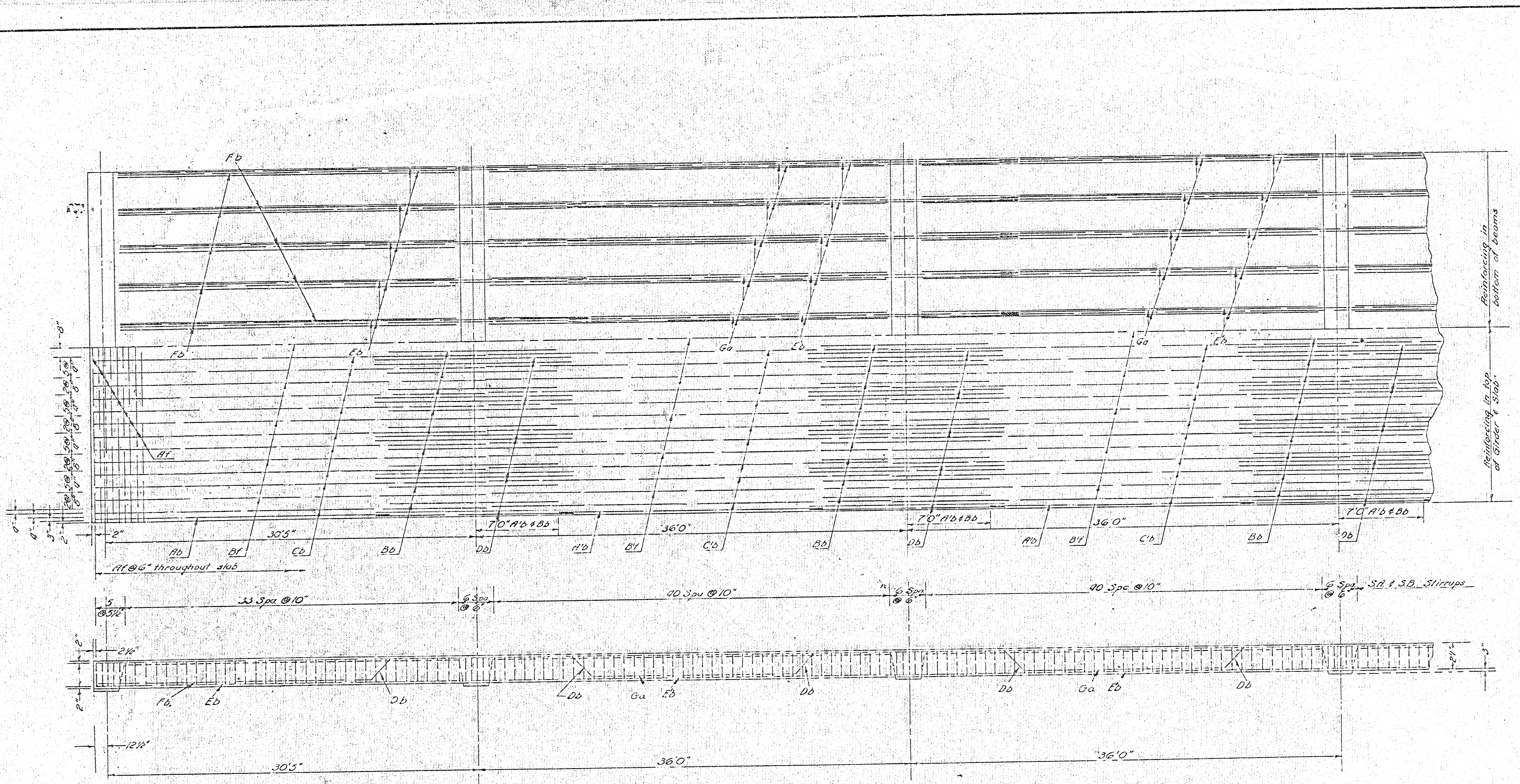
36.4 cu. yd. cone		
8342 lbs. reinforcing steel		
44 cu. yd. concrete		
384 lbs. reinforcing steel		
5 bearing devices		
One bent plate		
Bar No	Length	Size
Aa	63	5'-2"
Ab	332	5'-2"
Ac	20	23'-6"
Ca	20	33'-4"
Ab	2	25'-0"
Ac	12	0'-11"
Ca	66	27'-0"
Ab	9	33'-0"
Ac	18	33'-0"
Ca	18	33'-0"
Ab	9	14'-0"
Ac	6	28'-0"
Ca	20	18'-0"

ONE INT. SPAN

39.6 cu. yd. cone		
8668 lbs. reinforcing steel		
44 cu. yd. concrete		
384 lbs. reinforcing steel		
5 bearing devices		
One bent plate		
Bar No	Length	Size
Aa	63	5'-2"
Ab	332	5'-2"
Ac	20	23'-6"
Ca	20	33'-4"
Ab	2	25'-0"
Ac	12	0'-11"
Ca	66	27'-0"
Ab	9	33'-0"
Ac	18	33'-0"
Ca	18	33'-0"
Ab	9	14'-0"
Ac	6	28'-0"
Ca	20	18'-0"

Bar No	Length	Size	Bar No	Length	Size
SA	92	5'-2"	SA	92	5'-2"
SB	368	5'-2"	SB	368	5'-2"
SC	20	23'-6"	SC	20	23'-6"
SD	20	33'-4"	SD	20	33'-4"
SE	2	25'-0"	SE	2	25'-0"
AF	12	0'-11"	AF	12	0'-11"
AG	66	27'-0"	AG	66	27'-0"
AH	9	33'-0"	AH	9	33'-0"
AI	18	33'-0"	AI	18	33'-0"
BJ	18	33'-0"	BJ	18	33'-0"
CK	9	14'-0"	CK	9	14'-0"
DL	6	28'-0"	DL	6	28'-0"
EM	20	18'-0"	EM	20	18'-0"

* Due to overlapping & duplication quantities shown are not necessarily actual bar numbers, but are factors to be multiplied by the number of each span involved to give total structure quantities. Multiply by number of piers.



SUMMARY OF QUANTITIES

30'5" - 13 @ 36' - 30'5" Continuous Spans: 26		Roadway: Concrete Handrail	
Bar	Au, Bv, Cw, Dx, Ey, Fz, Gg, Hh, Ii, Jj, Kk, Ll, Mm, Nn, Oo, Pp, Qq, Rr, Ss, Tt, Uu, Vv, Ww, Xx, Yy, Zz	Concrete Class II (AE)	6922 Cu Yd
No.	82	Reinforcing Steel	144683 Lb
Size	#2, #3, #4, #5, #6, #7, #8, #9, #10, #11, #12, #13, #14, #15, #16, #17, #18, #19, #20, #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, #51, #52, #53, #54, #55, #56, #57, #58, #59, #60, #61, #62, #63, #64, #65, #66, #67, #68, #69, #70, #71, #72, #73, #74, #75, #76, #77, #78, #79, #80, #81, #82, #83, #84, #85, #86, #87, #88, #89, #90, #91, #92, #93, #94, #95, #96, #97, #98, #99, #100	Structural Steel	16458 Lb
Length	60'0", 61'0", 62'0", 63'0", 64'0", 65'0", 66'0", 67'0", 68'0", 69'0", 70'0", 71'0", 72'0", 73'0", 74'0", 75'0", 76'0", 77'0", 78'0", 79'0", 80'0", 81'0", 82'0", 83'0", 84'0", 85'0", 86'0", 87'0", 88'0", 89'0", 90'0", 91'0", 92'0", 93'0", 94'0", 95'0", 96'0", 97'0", 98'0", 99'0", 100'0"	10" x 14" Conc. Piles	3080 Lin. Ft.
		Bearing Devices	1200 Lb.

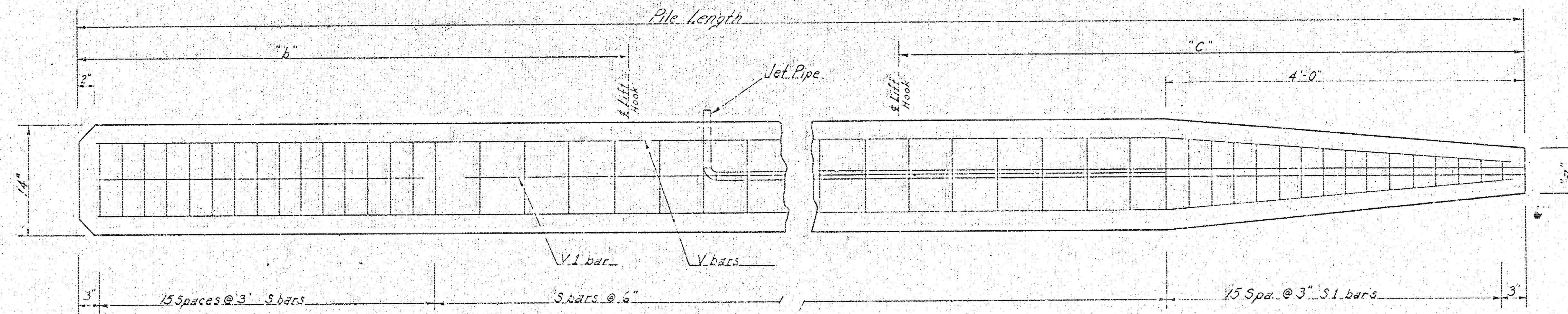
REINFORCING DETAIL

BRIDGE NO. 819-X-3250

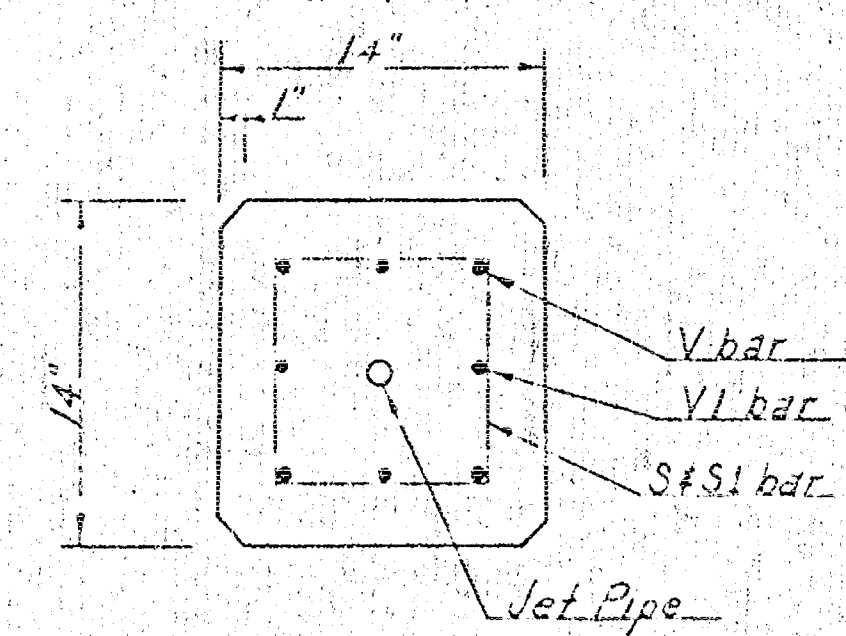
PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK — COUNTY ENGINEER

REVISION	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1/4" = 1'0"	M.E.S.			7
DATE					TOTAL SHEETS 8
PLANFILE					

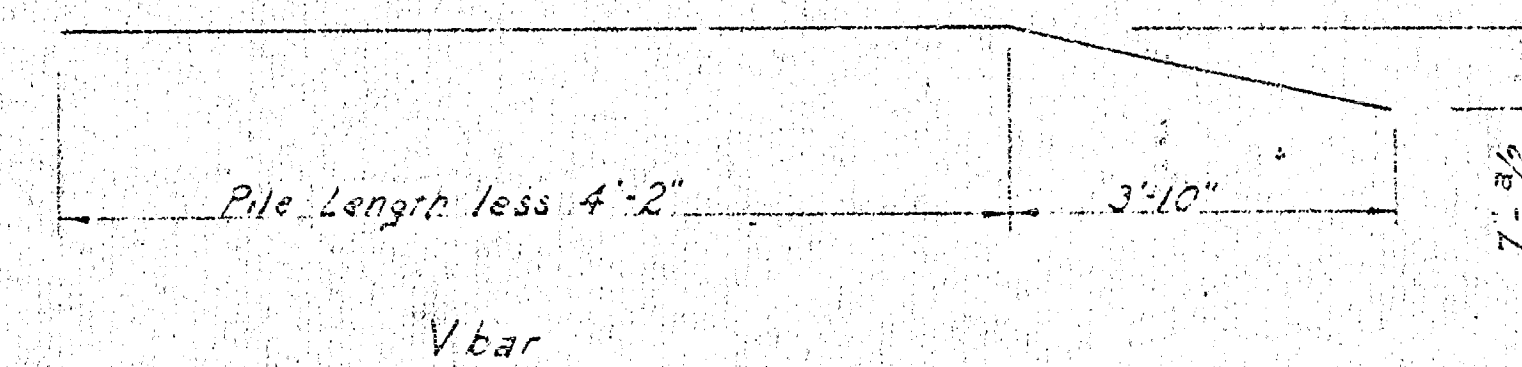
Pub. Rd. Div. No.	State	Project No.	Fiscal Year	Sheet No.	Total Sheets
5	Kansas		1951	8	8



ELEVATION



END VIEW



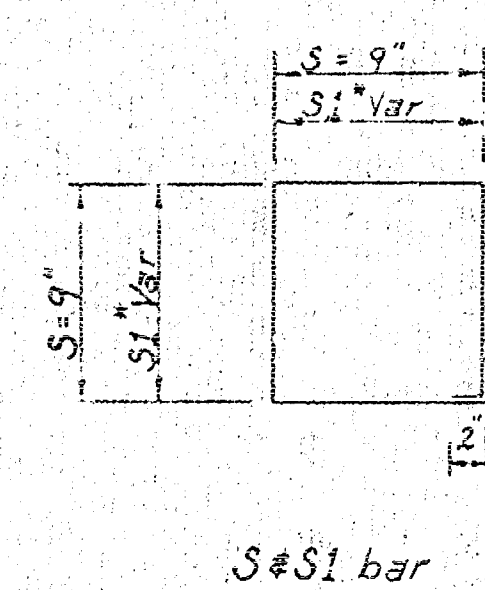
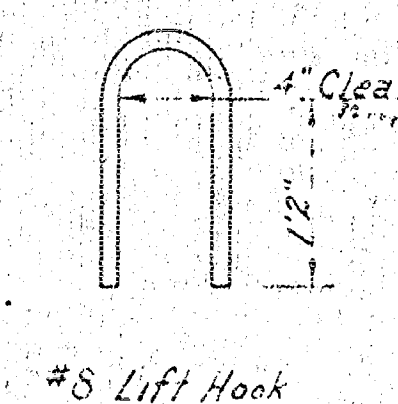
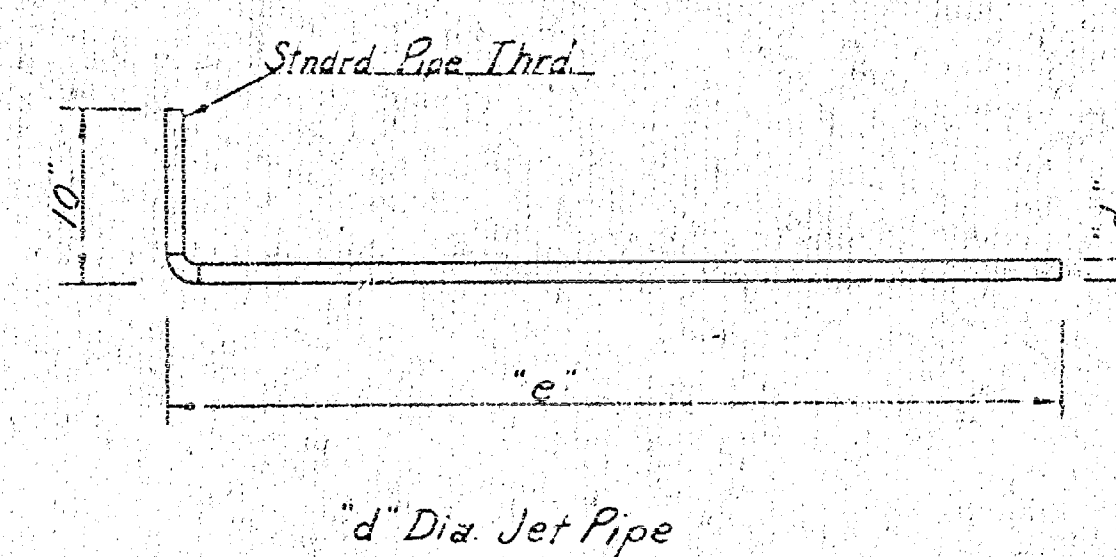
General Notes

Design: According to ARS MO Specifications 1949 Edition 15,000 psi. Fe = 100,000 psi.
Concrete: Use class A throughout if piling are to be encased, or otherwise protected. Use class A (AC) 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 16' of hook location.

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

Pile Length	20'-6"	24'-6"	28'-6"	32'-6"	36'-6"	40'-6"
Bar	Size Length No.	Size Length No.	Size Length No.	Size Length No.	Size Length No.	Size Length No.
V	#7 20'-6" 4	#7 24'-6" 4	#7 28'-6" 4	#7 32'-6" 4	#6 36'-6" 4	#6 40'-6" 4
V.I.	#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
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	1/4" 26'-10" 1	1/4" 30'-0" 1	1/4" 33'-0" 1	1/4" 36'-0" 1	1/4" 39'-0" 1	1/4" 42'-0" 1
a	6"	6"	6"	6"	6"	6"
b	6'-0"	7'-2"	8'-4"	9'-6"	10'-8"	11'-10"
c	8'-0"	1'-2"	10'-4"	11'-6"	12'-8"	13'-10"
d	6"	6"	6"	6"	6"	6"
e	2'-3 3/8" 108.5 cu. yds.	2'-8 3/8" 128.5 cu. yds.	3'-3 3/8" 148.5 cu. yds.	3'-8 3/8" 168.5 cu. yds.	4'-3 3/8" 188.5 cu. yds.	4'-8 3/8" 208.5 cu. yds.
Rebar	209 Lbs.	247 Lbs.	284 Lbs.	321 Lbs.	358 Lbs.	394 Lbs.

Pile Length	37'-0"
Bar	Size Length No.
V	#6 36'-0" 4
V.I.	#2 3'-4" 74
S1	#2 Var. 15
Lift Hook	#8 3'-0" 2
Jet Pipe	1/4" Note 1
a	10"
b	10'-10"
c	11'-11"
d	1'-4"
e	See Note
X-Y	2'-5 3/4" to 2'-7 1/4" by 1/4"
Concrete	1.82 Cu. Yds.
Rebar	452 Lbs.



*S1-15 bars, increase from "x" to "y" by "2" increments

S1 bar

14"x14"x Re. Conc. Piling
BRIDGE NO. 819-x-3250

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

REV.	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
		Schwab	Hausman		8
	DATE	12-51	1-52		
	PLANFILE		TOTAL SHEETS	8	