	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	KANSAS				

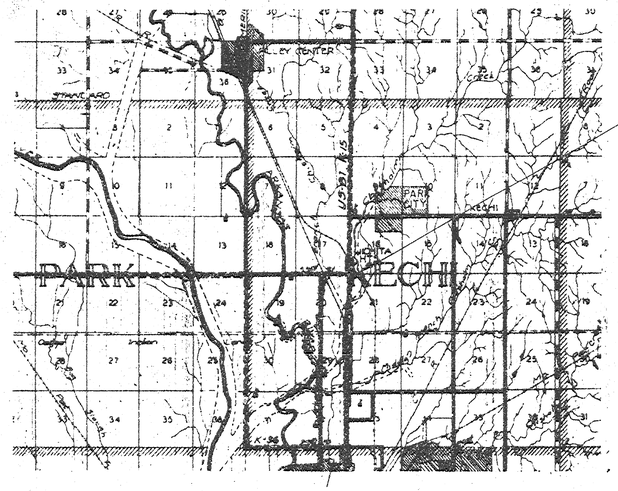
SEDGWICK COUNTY HIGHWAY DEPARTMENT



BRIDGE - GRADING & RIP-RAP

INDEX OF SHEETS

SHEET NO.	TITLE SHEET
SHEET NO. 1	TITLE SHEET
SHEET NO. 2	PLAN - PROFILE AND RIP-RAP PLAN
SHEET NO. 3	CONSTRUCTION LAYOUT
SHEET NO. 4	CONCRETE FLOOR DETAILS
SHEET NO. 5	STEEL LAYOUT & CONCRETE DETAILS
SHEET NO. 6	ABUTMENT, PIER, AND AUXILIARY DETAILS
SHEET NO. 7	BAR DIAGRAMS & REINFORCING STEEL QUANTITIES
SHEET NO. 8	STANDARD PILE DETAILS
SHEET NO. 9	CROSS SECTIONS



CONSTRUCT BRIDGE NO. 606-27-983 (92°-12'-20" LT. SKEW)
CONTINUOUS STEEL BEAM WITH
CONCRETE DECK - 48'-0" RDWY.
WITH ALUMINUM HANDRAIL.
SPANS: 30'-9@42'-6"-30'.

TRAFFIC COUNT - 600 CARS PER DAY

INCLOSURE WITH LETTER DATED 19 Dec 57
FROM: CO. Engr. Wichita

RECD DEC 19 1957

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	750	FT.	.142 MILES
NET LENGTH OF BRIDGES	232'-8"	FT.	.044 MILES
NET LENGTH OF ROAD	517.33	FT.	.098 MILES
EXCEPTIONS	None	FT.	— MILES
ADDITONS	None	FT.	— MILES
GROSS LENGTH OF PROJECT	750	FT.	.142 MILES

PLANS PREPARED BY
SEDGWICK CO. ENGR. DEPT.
DATE NOVEMBER 1957

APPROVED
COUNTY ENGINEER
DATE NOVEMBER 1957

APPROVED DATE
CHAIRMAN
BOARD OF COUNTY COMMISSIONERS

APPROVED DATE

RECD JAN 16 1958
From Tulsa Office

@ COUNTY CROSSINGS
53 RD & MAIN BRANCH

E.B. Smith 1-55-46

Sec. 16 Kechi T-26-S R-1-E

Sec. 21 Kechi T-26-S R-1-E

Echo Hills Golf Course

¼ Sec. Cor.
Stone & Iron
Line of Hedge N. & S.
30.4' N. to steel pipe line marker.
29.4' S. to 2 nails in hedge.
52.1' SW. to 3 nails in hedge.
35.3' SE to steel pipe line marker.

Scale 1" = 25'

℄ Levee "T"

℄ Levee "N"

Limits of excess Fill

V-Ditch

Ramp

120.00'

Flow

Rock Toe "B"

20' Min Berm

Bag 1.7% grade

Existing Ground

℄ V-Ditch

R/W 35' ℄

36"-24" C.M.P. to be supplied by Sedgwick Co. and installed by Contractor

Overflow Pipe Line

Edge of Fill-Ramp

Rock Toe "A"

Pipe Line

Note.
The finished channel shall be excavated a min. of 50' upstream & downstream from the ℄ of the bridge or to the limits of the current construction at the time that this bridge is constructed.

R.R. Ditch
Clean out and grade Gr. 0.13% to 18" C.M.P. in W.V.F.C. Levee
Invert El. 1332.0

0+00
Thimble at ℄ 53rd & Broadway - US 81

BM #1 El 1334.33 RR Spike in HLP 20' W. & 30' N. of Frisco main track

BM #2 El 1360.63 RR Spike in HLP - 25' Rt Sta 17+40

1. All easements, borrow pit locations & R/W for construction of this project to be furnished by Sedg. Co.
2. All encroachments such as fences, telephone, telegraph or power lines, shall be removed beyond the limits of construction by owners or by Sedgwick County.
3. All stop, curve, direction signs and hazard markers to be supplied by Sedgwick County. All flasher and blinker lights also to be furnished by the contractor, and all signs, hazard markers and lights are to be installed, arranged, and maintained by the contractor in good condition as approved by the engineer.
4. In the interest of public safety, all fair, gasoline, oil, & water lines shall be removed beyond the limits of the right of way or adequate provision for their retention has been noted or approved. Operational clearance for all lines which are permitted to remain in place, shall be adjusted to conform with the lines and grade of the proposed improvement.
5. In excavating pilot channel to obtain necessary earth for construction of roadway, the finished channel grade shall be brought to proper elevation for riprap. There will be no separate bid item for riprap excavation.

Sta 0+00 El 1334.33
Sta 1+00 El 1335.80
Sta 2+00 El 1339.10
Sta 3+00 El 1342.40
Sta 4+00 El 1345.70
Sta 5+00 El 1349.00
Sta 6+00 El 1352.30
Sta 7+00 El 1355.60
Sta 8+00 El 1358.90
Sta 9+00 El 1362.20
Sta 10+00 El 1365.50
Sta 11+00 El 1368.80
Sta 12+00 El 1372.10
Sta 13+00 El 1375.40
Sta 14+00 El 1378.70

Levee "T" El 1340.17

Levee "N" El 1340.81

Berm El 1339.29

DHW 1336.27

Ed 1337.0

Sp. Ditch Gr. 0.30%

Proposed Channel

Existing Channel

South Ditch - Maintain Exist. Gr.

North Ditch - Maintain Exist. Gr.

1'-0" Dumped Rip-Rap

6" Sand & Gravel Backing

Top of Slope

ROCK TOE "B"

Bottom of Channel

ROCK TOE "A"

PLAN, PROFILE & RIP-RAP PLAN

Sheet 2 of 7

FEB DEC. 1 9 1955

PLATE 1—PLAN-PROFILE & R.R.R.C. STANDARD
KEUFFEL & ESSER CO., NEW YORK

53rd St. & Main Br. Chisholm Creek 606-27-923

PLAN — SURVEYED: Howard Dabbin; PLOTTED; QUANTITIES CHECKED; NOTE BOOK; PLAT OF R/W CHECKED; NO.

PROFILE — SURVEYED; PLOTTED; QUANTITIES CHECKED; NOTE BOOK; NO. NOTED; STRUCTURE NOTES CHECKED; NO.

Sec 15, T 26S, R 1E
Kochi

Sta 9+83.24 ℄ Rd. = Sta 1294+45.98 "B" - Construct 30'-3@ 42'-6"-30' continuous steel beam bridge on concrete pile bents

32° 43°-18'-20" ℄ Skew

20' (min) Berm

30' (min) Berm

N

℄ Levee "N"

℄ Rd. 7-26S-27E

℄ Levee "T"

℄ Bridge ℄ Sec. Lines

Sta 1293+40.07 "B"

TH #1

TH #2

TH #3

12.37'

120'

70'

9+00

10+00

11+00

48'-0" R/W

Sec. 21, T 26S, R 1E

℄ Channel "B"

30' (min) Berm

PLAN
Scale: 1" = 10'

232'-4" End to end of wearing surface

2" | 30'-0" | 42'-6" | 42'-6" | 42'-6" | 42'-6" | 30'-0" | 2"

1'-1" | 1'-4"

Sta 8+37.29 ℄ Piling Abut "1" Sta 8+58.84 C.G. 1340.26

℄ Pier "1" Sta 9+78.32 C.G. 1341.30

℄ Pier "2" Sta 10+98.80 C.G. 1342.04

℄ Pier "3" Sta 11+98.80 C.G. 1342.59

℄ Pier "4" Sta 10+98.80 C.G. 1342.15

℄ Pier "5" Sta 10+98.80 C.G. 1343.15

℄ Piling Abut "2" Sta 10+98.80 C.G. 1343.27

Sta 11+21.05

Aluminum Handrail

℄ Levee "T"

℄ Levee "N"

Crown Grade

El 1322.17

Exist. Ground

Fill

Riprap

El 1339.24 ℄ bridge

El 1322.25 (u.s. ℄ br.

El 1339.20 ℄ br.

Exist. Channel

Rock Toe "A"

Rock Toe "A"

Gr. Elev. 1336.27

El 1320.27

Gr. Elev. line - top of channel

Gr. Elev. line - top of channel

2.5%

2.5%

3:1

3:1

1:1

1:1

4

Test Hole #1

Test Hole #3

Abut #1 *5 Pile @ 34°

Pier #1 *7 Pile @ 34°

Pier #2 *7 Pile @ 32°

Pier #3 *7 Pile @ 32°

Pier #4 *7 Pile @ 32°

Pier #5 *7 Pile @ 32°

Abut #2 *5 Pile @ 32°

Shale

1330
1320
1310
1300
1290

See Sheet No. 2 for Rip-Rap Plan

*See sheet No. 8 for type of pile

P.I. El 1342.50
+0.38.32%
+3.50%
P.C.
P.T.
300' V.C.
℄ Sta 9+00

℄ Channel "B" 4' ℄ Bridge

SECTION THRU ℄ RD.
Scale: 1" = 10'

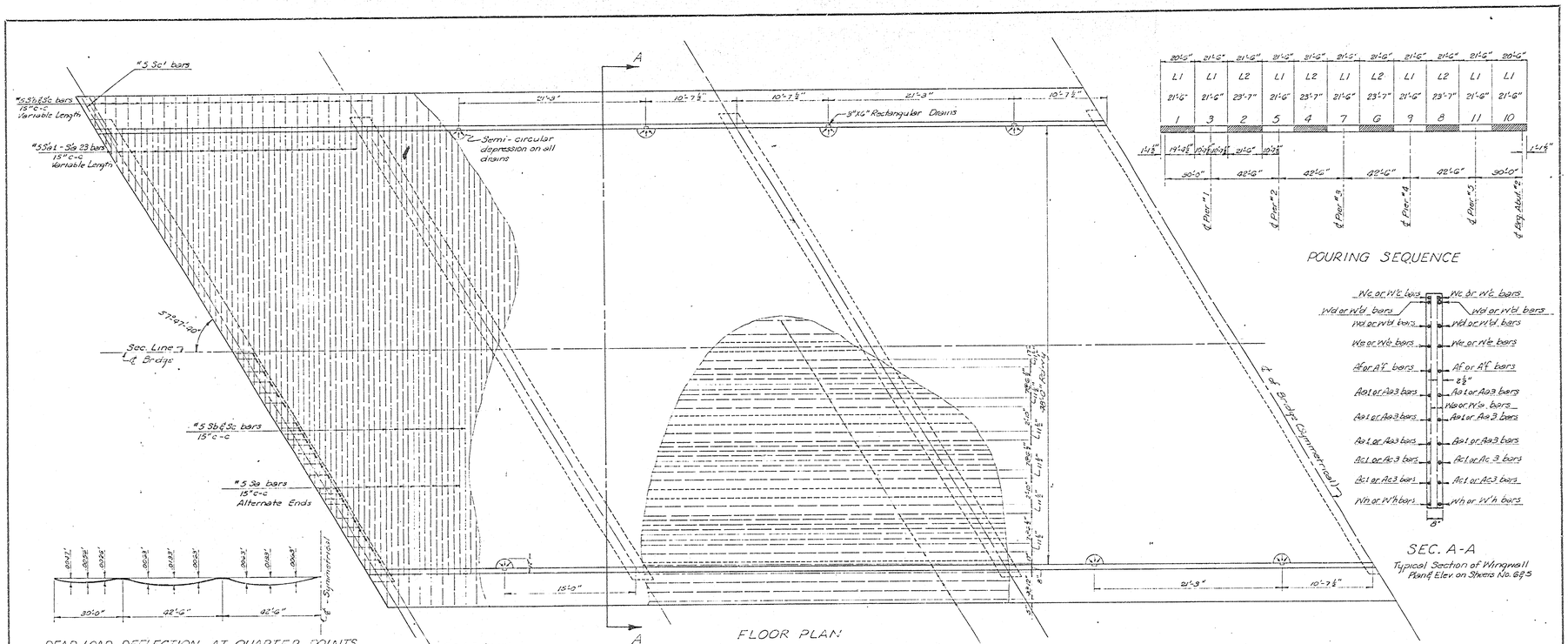
Note:
Type of piling to be of the types shown on Sheet No. 7. (Pile may be 14"/14" pre-cast or 12"/12" pre-stressed concrete or 10"/0 pipe pile as designated.) Batter second pile from each end on abutments, as shown.

REC'D DEC 19 1957

CONSTRUCTION LAYOUT
BRIDGE NO. 60G-27-983
53rd St. ℄ Main Br. Chisholm Creek

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

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1"=10'	J.V.H.	J.V.H.	C.J.F.	3
	DATE	9-57	9-57	9-57	OF
	PLANFILE		TOTAL SHEETS		8

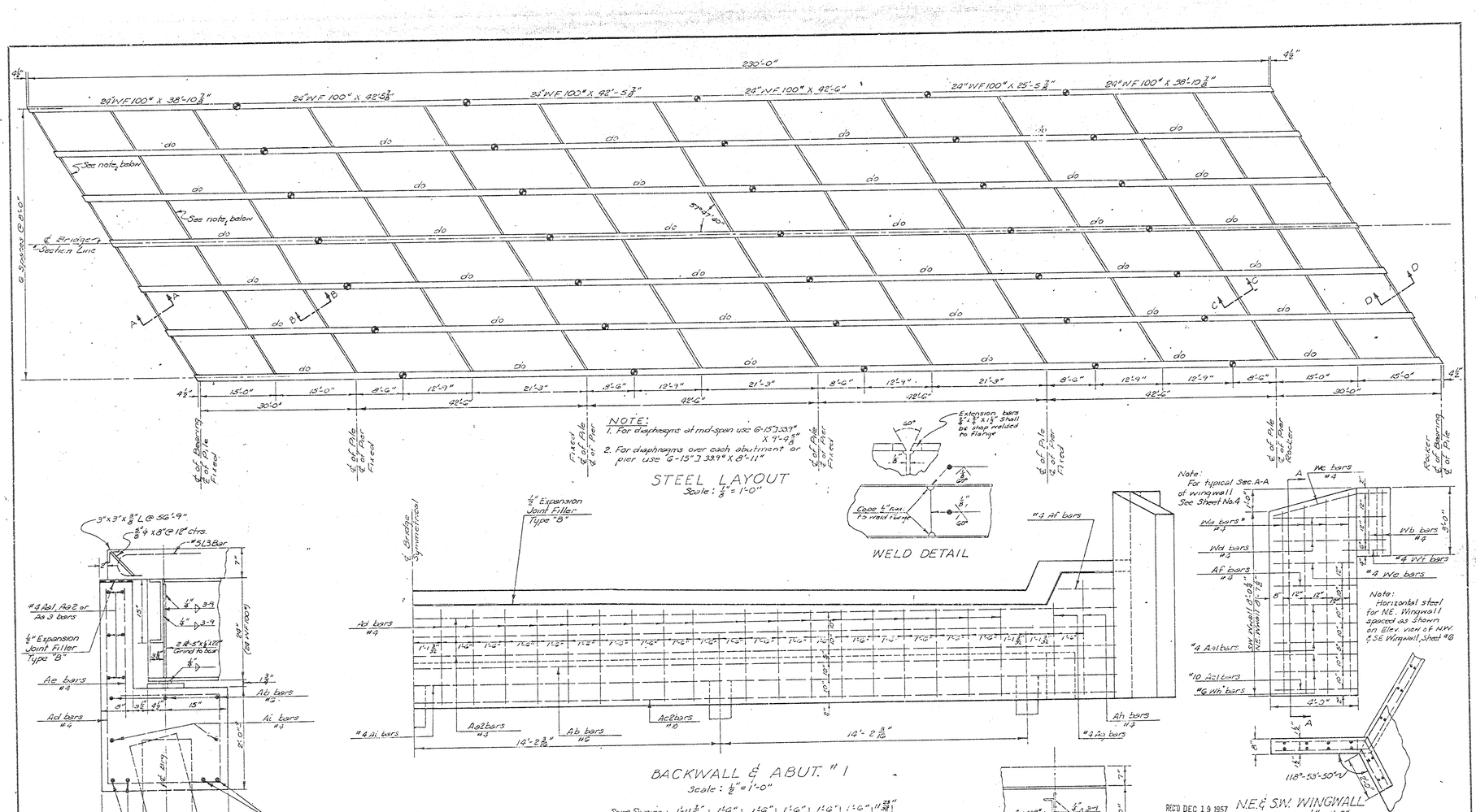


RECD DEC 19 1957

CONCRETE FLOOR DETAILS

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

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO
	As Shown	JVH	JVH	CJF	4 of 8
	DATE	3-57	11-57	11-57	
	PLANFILE		TOTAL SHEETS		

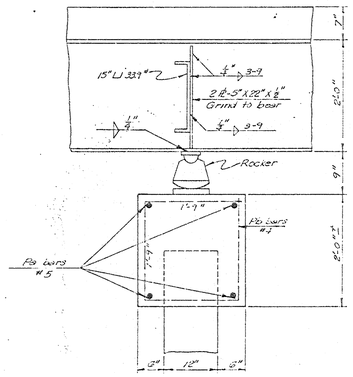


REC'D DEC 19 1957

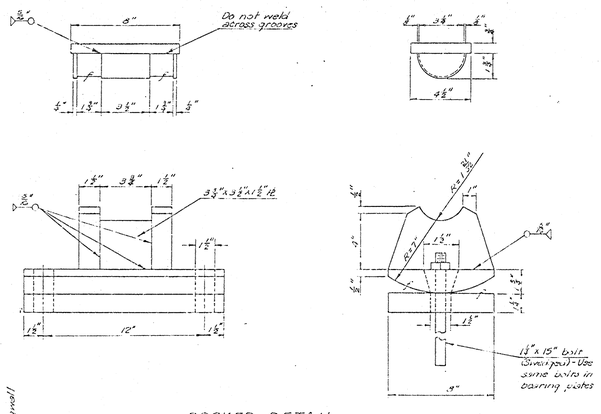
STEEL LAYOUT AND CONCRETE DETAILS

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

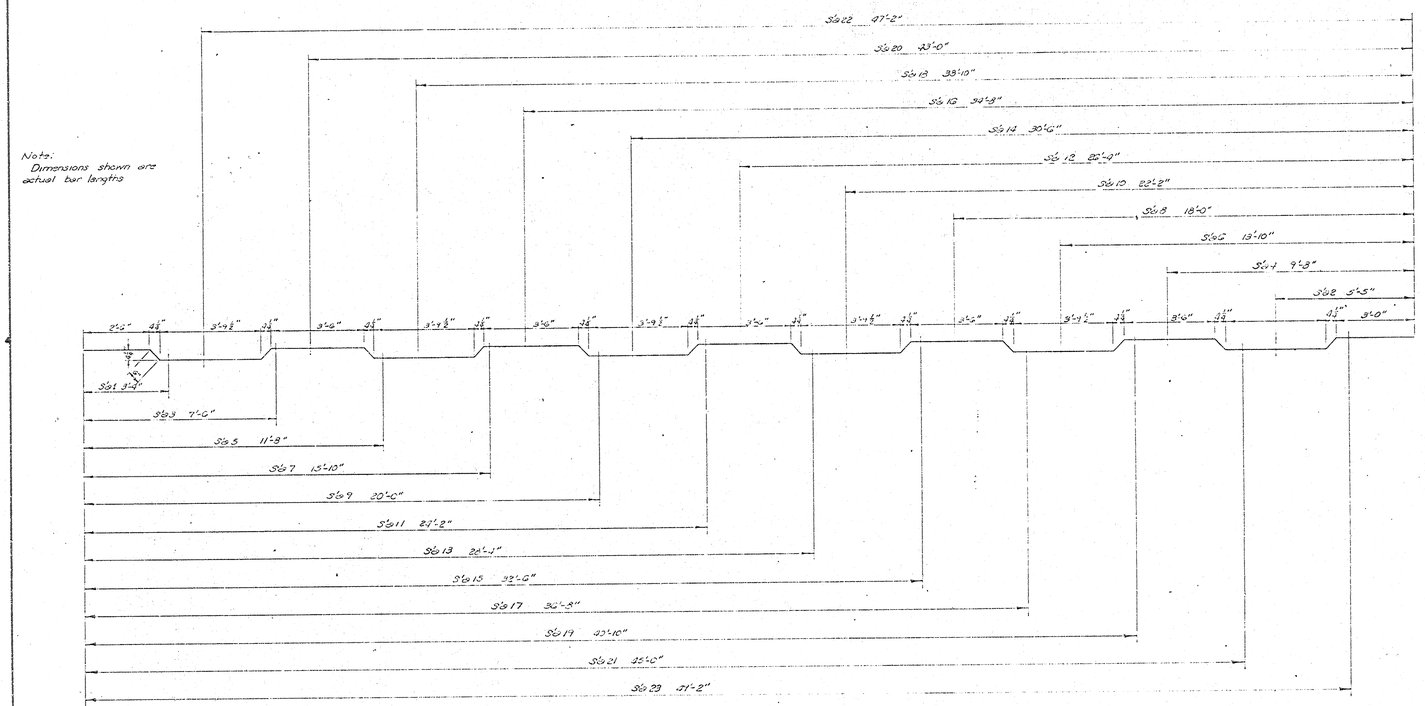
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	As Shown	JVH	JVH	CJF	5 of 8
	DATE	3-57	10-57	11-57	
	PLANFILE		TOTAL SHEETS		



PIER "5
SEC. C-C (Sheet No.5)
Scale: 1"=1'-0"

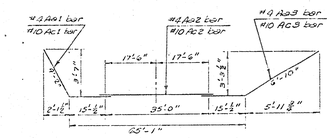

Do not weld across grooves
8"
5"
13"
2½"
3½"
5"
4½"
3⅜"
2"
1½"
3⅜"
1½"
3½"x3½"x1⅛" Pl
1½"
12"
2"
2"
2"
1"
7"
1"
1½"
8½"
2"
1½"
1½"
1½"
1½"
1"
9"
2"
1½"
1½"
1½"
1½

Note:
Dimensions shown are actual bar lengths



Sb 1 through Sb 23 Bar Diagrams (2 Sets Reqd)
Scale: ½"=1'-0"

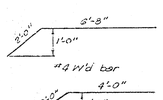
NOTE:
Dimensions of bar lengths are indicated to the nearest inch.



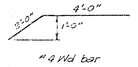
Aa1, Aa2, Aa3, Ac1, Ac2, & Ac3 bars



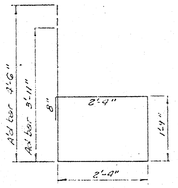
#4 Pb bars



#4 Wd bar



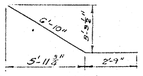
#4 Wd bar



#4 Ae1 & #4 Ae2 bars



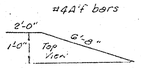
#4 Af bars



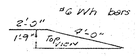
#4 Af bars



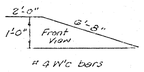
#6 Wh bars



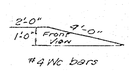
#4 Wc bars



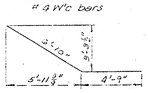
#4 Wc bars



#4 Wc bars



#4 Wc bars



#6 Wh bars

BAR DIAGRAMS
No Scale

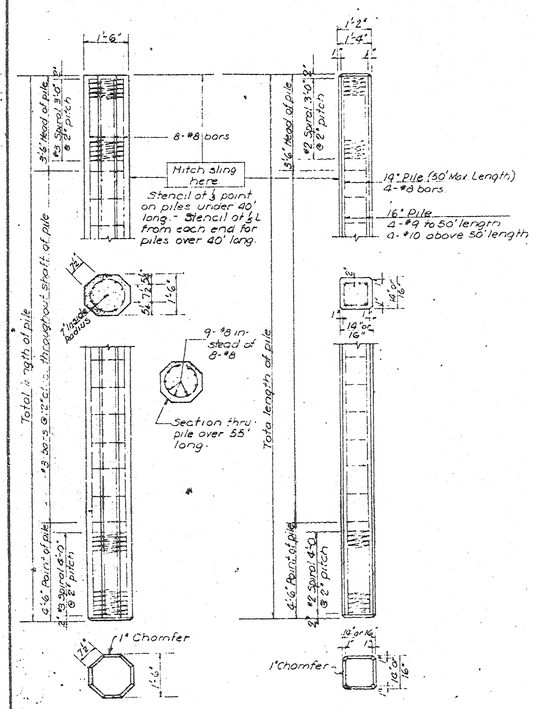
REINFORCING STEEL QUANTITIES

Bar Desig.	Location	Size	No.	Length	Weight	Remarks
Aa1	Bkwall & Wingwalls	#4	12	19'-10"		Bar desg on Sh. #7
Aa2	" " "	#4	12	36'-0"		"
Aa3	" " "	#4	12	22'-6"		"
Ab	Abutment	#6	6	60'-0"	541	Straight bar
Ac1	Abut & Wg walls	#10	4	20'-4"		Bar desg on Sh. #7
Ac2	" " "	#10	4	37'-11"		"
Ac3	" " "	#10	4	23'-10"		"
Ac	Abutment	#10	4	60'-0"	1033	Straight Bar
Ad	Bkwall & Abut.	#4	38	11'-0"		Bar desg. on Sh. #7
Ad1	" " "	#4	38	11'-7"		"
Ae	" " "	#4	36	3'-0"		Straight Bar
Ae1	" " "	#4	36	3'-6"		" "
Af	Bkwall & NE & SW	#4	4	6'-11"		Bar desg. Sh. #7
Af1	Bkwall & NW & SE Wh	#4	4	9'-7"	26	"
Ag	Backwall	#4	8	4'-8"		Straight Bar
Ah	"	#4	8	5'-6"		" "
Ai	Abutment	#4	4	60'-0"	160	" "

Bar Desig.	Location	Size	No.	Length	Weight	Remarks
L1	Slab	#4	448	21'-6"		Straight Bar
L2	"	#4	256	23'-7"		" "
L3	"	#4	92	8'-6"		Bar desg. Sh. #7
Pa	Cap (Piers)	#5	20	60'-0"		Straight Bar
Pb	" "	#4	190	8'-0"		Bar desg. Sh. #7
Sa	Slab	#5	135	51'-9"		Bar desg. Sh. #4
Sa1 thru Sa23	"	#5	26	3 Sizes	1504	See Remarks Bar desg Sh. #7
Sb	"	#5	134	51'-2"		Bar desg. Sh. #4
Sb1	"	#5	48	58'-2"	1896	See Remarks Bdg. with length 51'-9" wkg. 210.3 lb. to 58'-2" wkg. 234.1 lb.
Sc	"	#5	134	58'-2"		Bar desg. Sh. #4
Sc1	"	#5	50	See Remarks	1982	Bdg with length 51'-9" wkg. 210.3 lb. to 58'-2" wkg. 234.1 lb. 2 Sets of 23 Bars Ea
Sc1	"	#5	1	7'-0"		Bar desg. Sh. #4
Wa	SW Wingwall	#4	8	Bdg at 9'-0" wkg. 3'-6.8"	90	St. bar- 2 Sets reqd
Wa	SE Wingwall	#4	14	Bdg at 11'-0" wkg. 8'-10.6"	168	" "
Wb	All Wingwalls	#4	16	2'-9"	29	Straight Bars
Wc	NE & SW Wingwalls	#4	4	6'-0"		Bar desg. Sh. #7
Wc	NW & SE Wingwalls	#4	4	8'-8"		"

Bar Desig.	Location	Size	No.	Length	Weight	Remarks
Wd	NE & SW Wingwall	#4	8	6'-0"		Bar desg. Sh. #7
We	NW & SE Wingwall	#4	8	8'-8"		"
We	NE & SW Wingwall	#4	4	"		Straight Bar
We	NW & SE Wingwall	#4	4	"		" "
Wf	All Wingwalls	#4	8	2'-2"		" "
Wh	Abut & NE & SW Wall	#6	8	8'-11"		Bar desg. Sh. #7
Wh	Abut & NW & SE Wall	#6	8	11'-7"		"
Wa2	N.E. Wingwall	#4	8	See @ 6'-0" wkg. 3'-6.8" See @ 8'-8" wkg. 5'-0"		Same position Wa
Wa2	N.W. "	#4	14	See @ 6'-0" wkg. 3'-6.8" See @ 8'-8" wkg. 5'-0"		" " Wa

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS		195		


Total length of pile
#3 Bars @ 12" ctrs. throughout shaft of pile
3½" Head of pile
#3 Spiral 3'0" @ 2" pitch
8-#8 bars
Hitch sling here
Stencil at ⅓ point on piles under 40' long. - Stencil at ½ L from each end for piles over 40' long.
1'-6"
Tie wire #16 B.W.G.
9-#8 in stead of 8-#8
Section thru pile over 55' long.
Tote length of pile
4'6" Point of pile
#3 Spiral 4'0" @ 2" pitch
1" Chamfer
1'-2"
1'-6"
19" Pile (80' Max Length) 4-#8 bars
16" Pile 4-#9 to 50' length. 4-#10 above 50' length.
#2 Spiral 3'0" @ 2" pitch
12"x16" or 16" Diam.
1'-4"
1'-6"
1'-8"
1'-0"
1'-4"
1'-6"
1'-8"
1'-0"
1'-4"
1'-6"
1'-8"
1'-0"