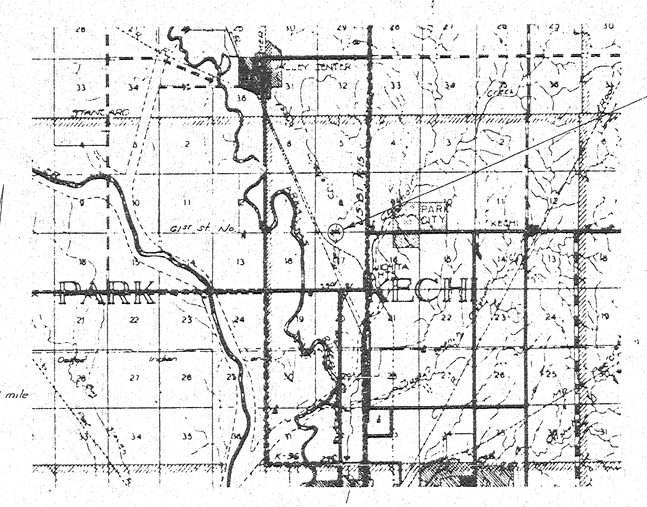
	STATE	PROJECT NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
	KANSAS				

SEDGWICK COUNTY HIGHWAY DEPARTMENT

INDEX OF SHEETS



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	5348.55	FT	1.013 MILES
NET LENGTH OF BRIDGES	182.0	FT	0.034 MILES
NET LENGTH OF ROAD	5166.55	FT	0.979 MILES
EXCEPTIONS	NONE	FT	NONE MILES
ADDITONS	NONE	FT	NONE MILES
GROSS LENGTH OF PROJECT	5348.55	FT	1.013 MILES

PLANS PREPARED BY
SEDGWICK COUNTY ENGR DEPT.
DATE

APPROVED
COUNTY ENGINEER
DATE

APPROVED DATE
CHAIRMAN
BOARD OF COUNTY COMMISSIONERS

APPROVED DATE

61st & W. Branch

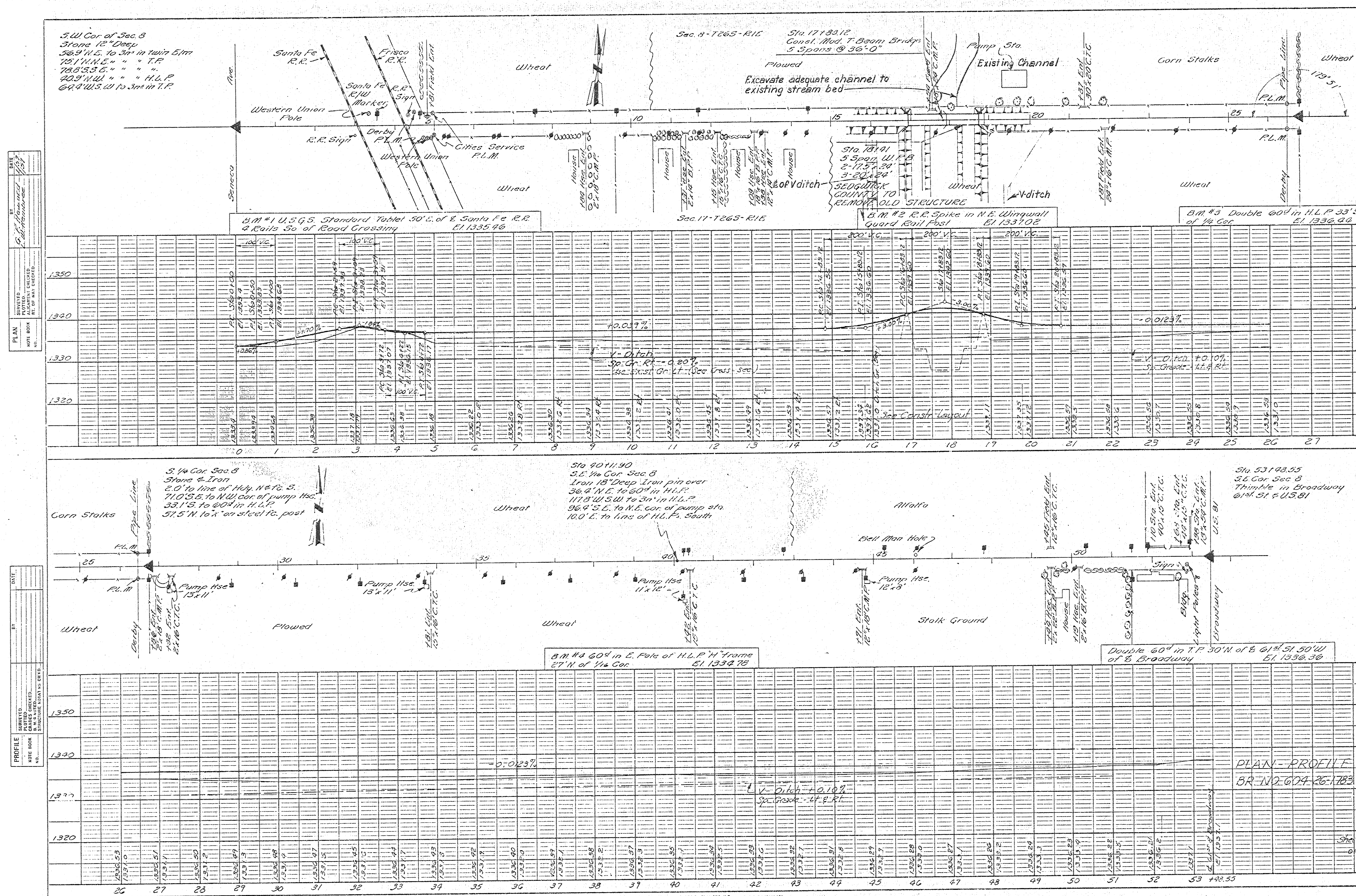
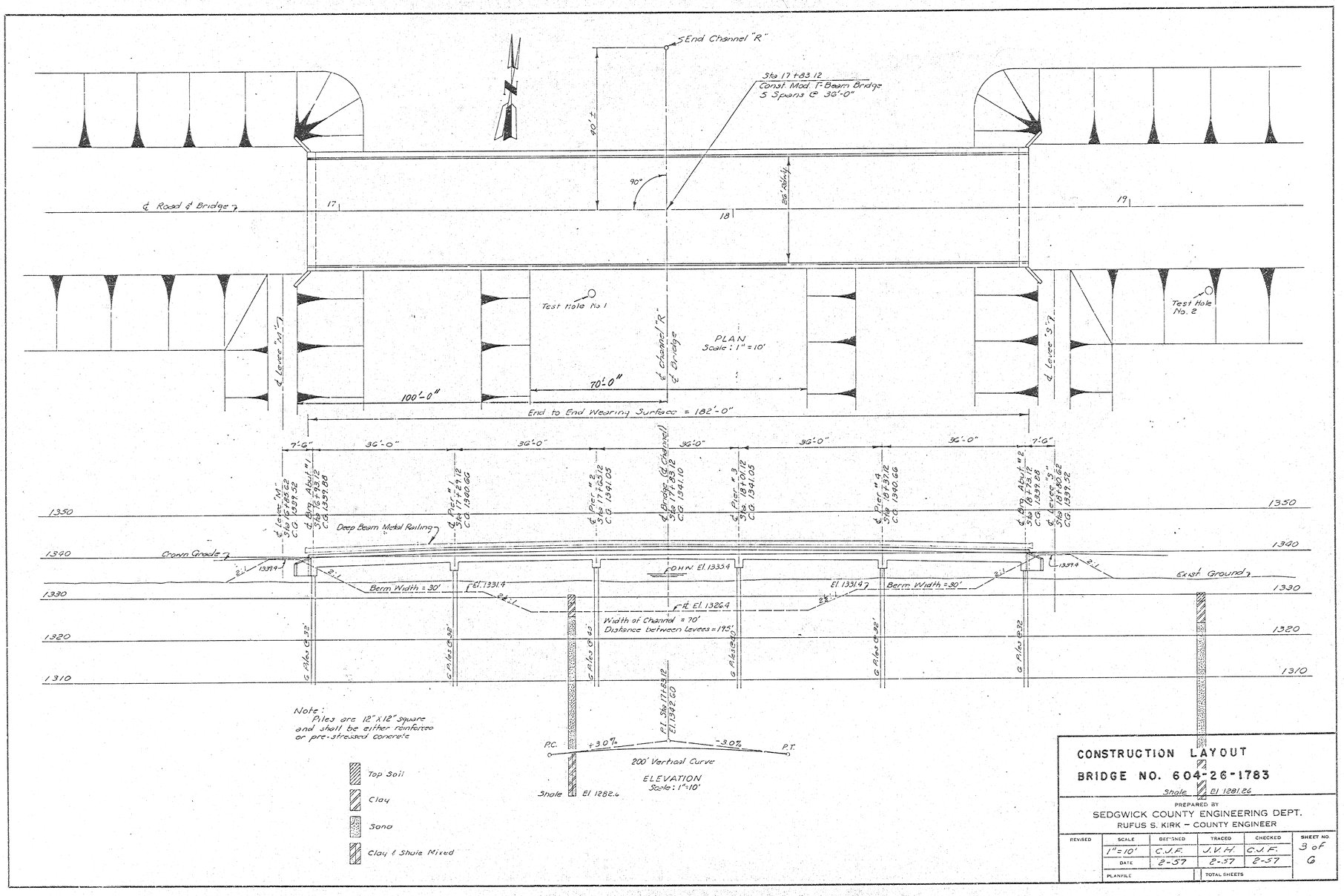


PLATE 2—PLAN-PROFILE O.P.R. & R.C. STANDARD
THE FREDERICK POST CO., CHICAGO



CONSTRUCTION LAYOUT

BRIDGE NO. 604-26-1783

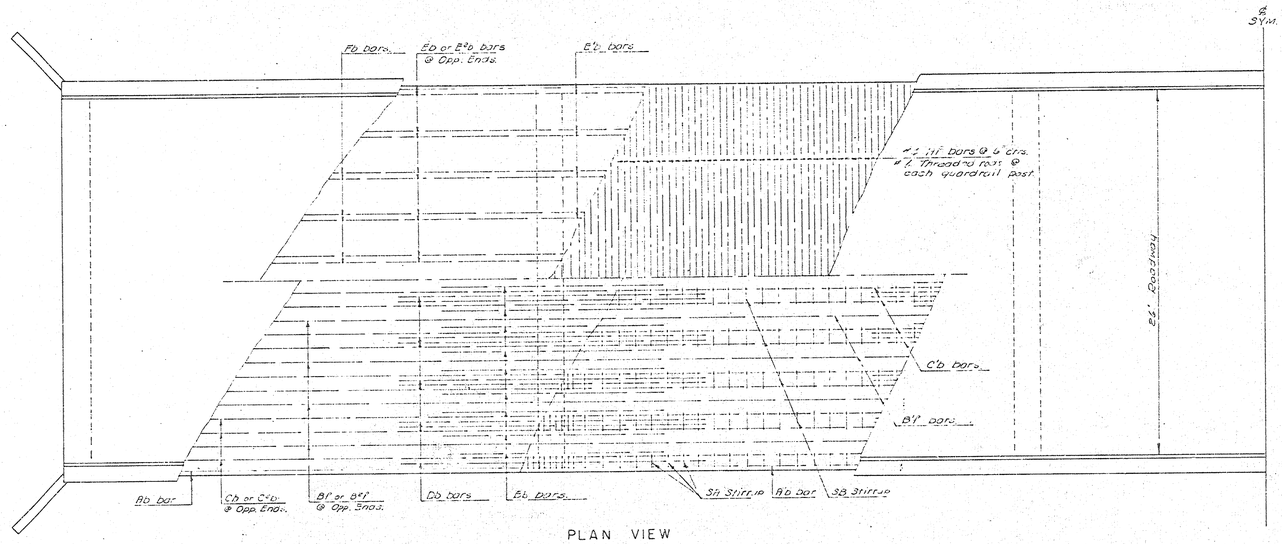
Shale El 1281.26

PREPARED BY

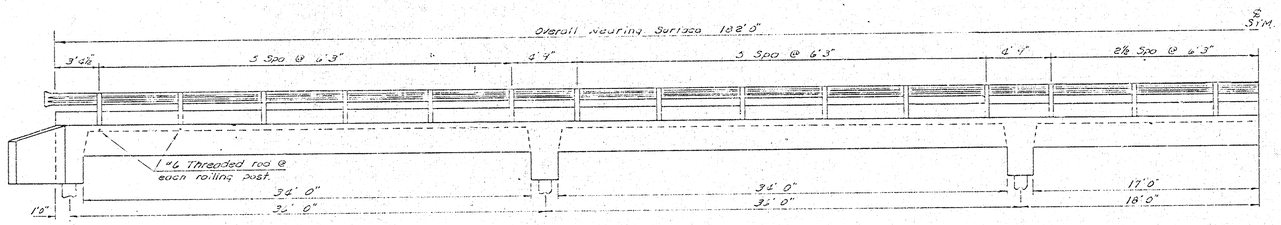
SEDGWICK COUNTY ENGINEERING DEPT.

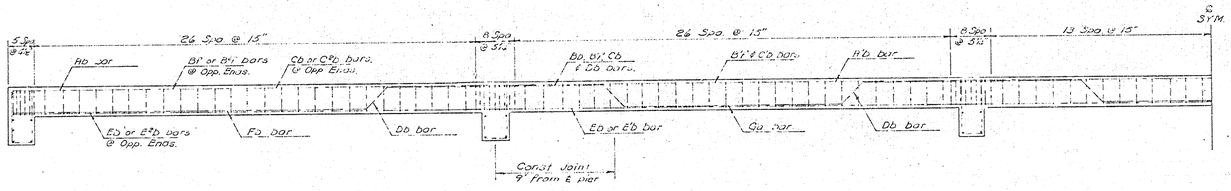
RUFUS S. KIRK – COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO
	1"=10'	C.J.F.	J.V.H.	C.J.F.	3 of 6
	DATE	2-57	2-57	2-57	
	PLANFILE		TOTAL SHEETS		



PLAN VIEW





GENERAL NOTES

DESIGN - Designed for H-20-44 loading AASHO Specifications. f_s - 20,000 psi ; f_c - 1,200 psi.

SOUNDING - To be taken by Sedg Co. Engr. Dept.

PILING - Concrete precast or prestressed piling to be driven to a calculated resistance of 25 ton.

OLD STRUCT. - To be removed by Sedg Co.

CONCRETE - Class A (HE) concrete used throughout. Bevel all exposed edges with a ¾" Δ molding unless otherwise noted. Forms shall be preformed steel "pans" used as directed by the Engr. in charge.

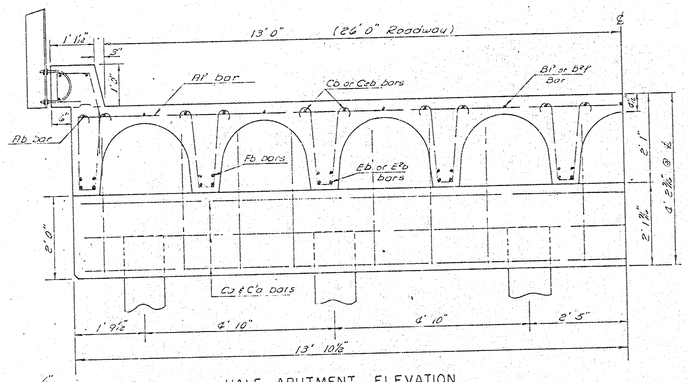
GUARDRAILING - To be standard Deep Beam guardrail as shown on const. layout.

PAINT - All parts of the Metal Handrail shall receive one shop coat of red lead paint. All exposed surfaces of structural steel and metal handrail shall receive one coat of tinted aluminum paint followed by one coat of aluminum paint after erection.

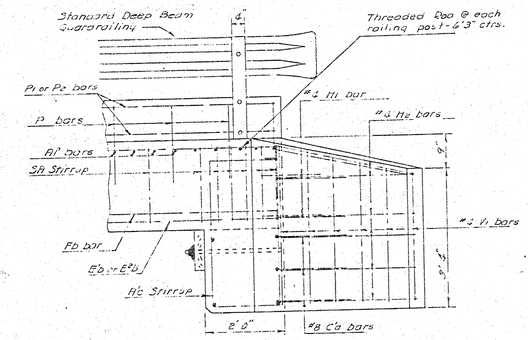
RE CONC. MODIFIED T-BEAM BRIDGE REINFORCING DETAIL BRIDGE NO. 604-26-1783

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

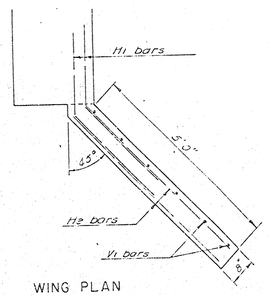
REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	1/8" = 1'	M.D.	M.D.	C.J.F.	4 of 6
	DATE	1-57	Jan. 57	2-57	
	PLANFILE		TOTAL SHEETS		



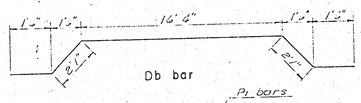
HALF ABUTMENT ELEVATION



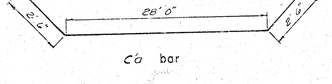
WING ELEVATION



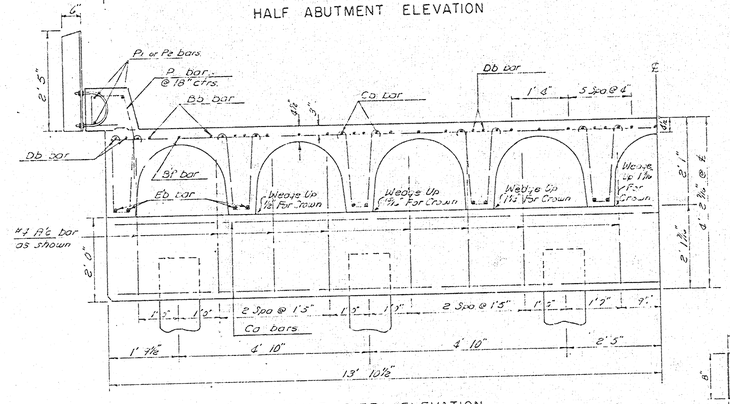
WING PLAN



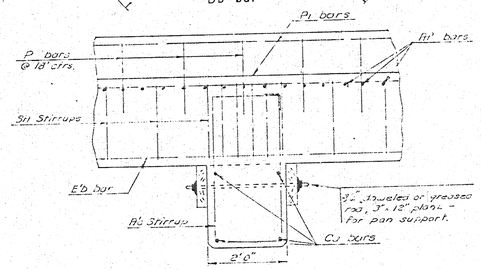
Db bar



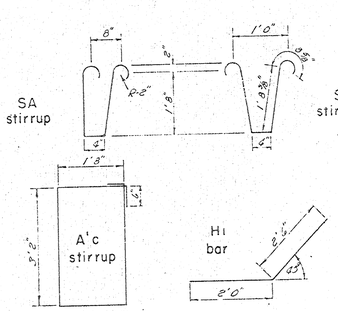
C6 bar

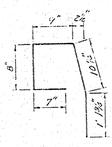


HALF PIER ELEVATION

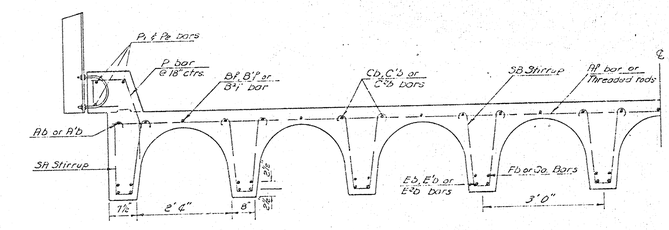


PIER SECTION

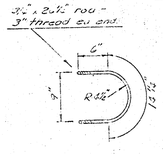




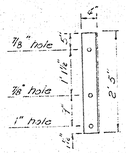
P bar



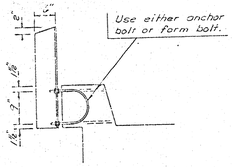
MID-SPAN ELEVATION



HANDRAIL ANCHOR BOLT



RAILING POST



SUMMARY OF QUANTITIES — 5 Spans @ 31'0" — Metal Handrail

BAR	Ab	A'b	A'c	Af	Bb	Bf	B1'	Co	C'b	C6	C'6	C26	Db	Eb	E'b	E'2b	Fb	Ga	H1	H2	P	P1	P2	V1	Threads
NO.	4	4	102	342	78	9	27	4	20	6	18	54	18	80	20	60	20	40	20	4	4	4	4	4	6
SIZE	4	4	4	4	9	4	4	4	8	8	7	7	7	9	9	8	9	10	8	4	4	4	4	4	6
LENGTH	30'8"	23'0"	10'8"	27'5"	17'0"	45'2"	38'0"	27'3"	27'3"	27'3"	33'4"	48'2"	38'0"	27'3"	27'3"	27'3"	48'2"	38'0"	27'3"	27'3"	16'0"	6'6"	5'0"	6'0"	37'0"	38'0"	3'6"	28'3"

Concrete Class H	241.8 Cu. Yds.	Deep Beam Guardrailing	364 Lin. Ft.
12"x12" Prestressed Piling-1248 Lin. Ft.		Railing Posts	60 Ea.
Reinforcing Steel	49,725.7 Lbs.	Railing Hardware	
		Guardrailing Ends	4 ea.

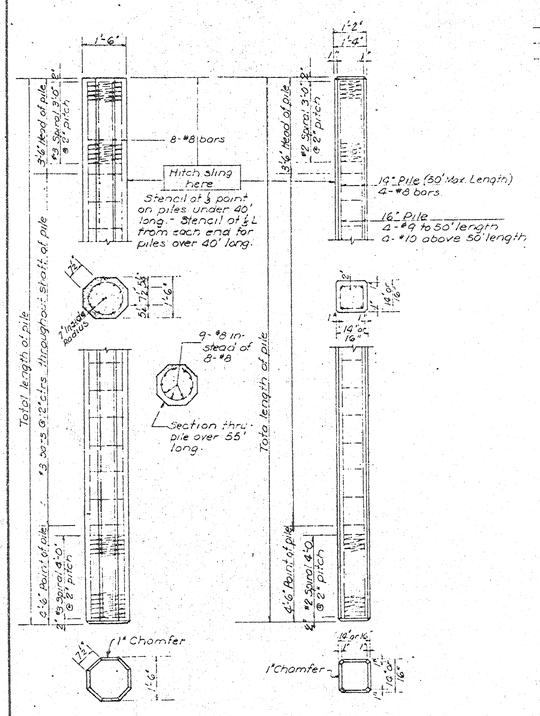
* Decrease from 3'9" to 3'0", dec. 1½" ea., cut 4 of ea.

RE CONC. MODIFIED T-BEAM BRIDGE AUXILIARY DETAILS BRIDGE NO. 604-26-1783

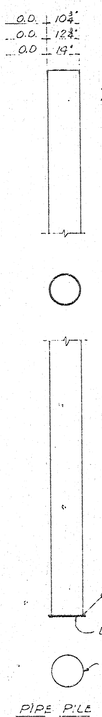
PREPARED BY
SEDGWICK COUNTY ENGINEERING DEPT.
RUFUS S. KIRK – COUNTY ENGINEER

REVISED	SCALE	DESIGNED	TRACED	CHECKED	SHEET NO.
	3/4"=1'	MD	MD	C.J.F.	5 of 6
	DATE	2-57	Jan. 57	2-57	
	PLANFILE		TOTAL SHEETS		

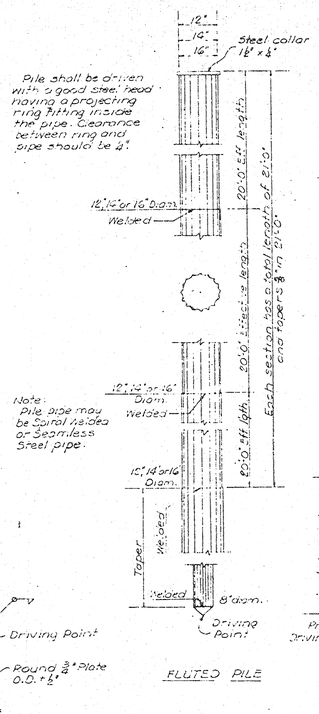
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	KANSAS		195		



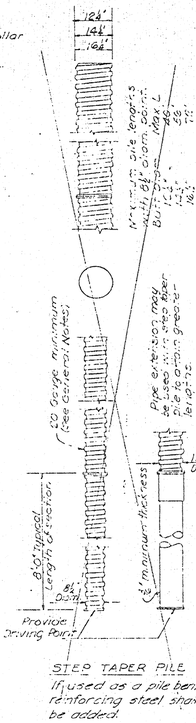
PRECAST PILES



PIPE PILE

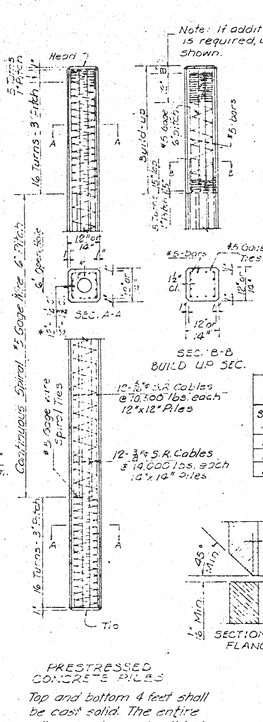


FLUTED PILE



STEP TAPER PILE

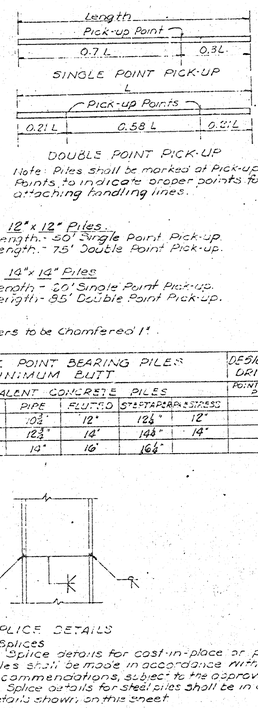
If used as a pile bent reinforcing steel shall be added.



PRESTRESSED CONCRETE PILES

Top and bottom 4 feet shall be cast solid. The entire pile may be cast solid at the option of the Contractor.

Note: If additional driving is required, use 1" pitch as shown.

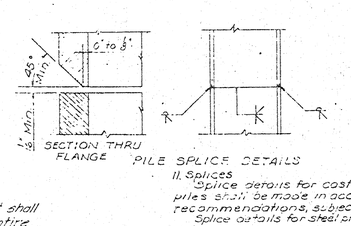


Note: Piles shall be marked at Pick-up Points, to indicate proper points for attaching handling lines.

12"x12" Piles
Max. length - 80' Single Point Pick-up.
Max. length - 75' Double Point Pick-up.

14"x14" Piles
Max. length - 70' Single Point Pick-up.
Max. length - 95' Double Point Pick-up.

Note: All corners to be Chamfered 1".



PILE SPLICE DETAILS

ALTERNATE POINT BEARING PILES MINIMUM BUTT						DESIGN CAPACITY BY DRIVING FORMULA
STEEL PILE	EQUIVALENT CONCRETE PILES					POINT BEARING PILES
	PRECAST	PIPE	FLUTED	STEP TAPER	PRESTRESSED	
10 BP 42	14"	10¾"	12"	12½"	12"	
12 BP 53	15"	12¾"	14"	14½"	14"	
14 BP 73	18"	19"	16"	16½"		

General Notes.

1. Specifications
Standard Specifications for State Road and Bridge Construction as currently used by State Highway Commission of Kansas.

2. Choice of Piles
As indicated in the plans, piles will be considered as point bearing piles or as friction piles. Where point bearing piles are specified, the Contractor may elect to use either the steel pile specified on the testing plans or the equivalent precast concrete, cast-in-place concrete or prestressed concrete pile shown in the table on this sheet. Where friction piles are specified the contractor may elect to use either the size and type concrete pile specified on the footing plans or the equivalent precast concrete, cast-in-place concrete or prestressed concrete pile shown in the table on this sheet. Steel piles are not included as an alternate where friction piles are specified. Other types of concrete piles not shown here are subject to the approval of the Engineer.

3. Concrete
All concrete for precast and cast-in-place shall be Class "A" f'c = 3000 p.s.i.. Concrete for Prestressed piles shall be Class AAA. f'c = 4000 p.s.i.

4. Reinforcement
Reinforcing bars shall be new billet steel of intermediate grade without exception. Hoops and spirals may be either plain or deformed bars

5. Precast Piles.
Precast piles shall conform to the requirements of Section 59.310 of the specifications.

6. Cast-in-place Shells
A. Pile shells shall have a minimum thickness as follows:

1. Piles driven without mandrel - 8 gage except fluted pile use 10 gage minimum.
2. Piles driven with mandrel - Shell shall be of sufficient strength and thickness to withstand driving without injury and to resist harmfull distortion and/or buckling due to soil pressure after being driven and the mandrel removed.

B. Pile Shells shall meet the following material requirements:
1. Fluted steel shells and Steel Core - SAE 1016 classification for open hearth steel.
2. Spiral welded steel - A.S.T.M. Designation A252, Grade 2 Electric Fusion-Welded Spiral Seam Steel Pipe.
3. Seamless Steel pipe - A.S.T.M. A252, Welded and Seamless Steel Pipe Piles.
4. Corrugated steel shell - SAE 1020.

C. The contractor shall maintain on the job at all times prior to and during the filling of the shells, a light suitable for their inspection.

D. Improperly driven, broken or otherwise defective shells shall be removed and replaced or otherwise corrected to the satisfaction of the Engineer by removal and replacement or the driving of an additional pile at no extra cost.

7. Steel Piles
Steel pile material shall meet the requirements of A.S.T.M. A7-53T.

8. Pile Points
All cast-in-place piles shall be equipped with a steel driving point of ¼" minimum thickness. Driving points shall be mill welded to the pile shell. Driving points shall be either hot pressed steel meeting the requirements of SAE 1020 for forged steel or cast steel meeting the requirements of A.S.T.M. Serial No. A27-43, Grade 2, or Structural steel meeting the requirements of A.S.T.M. A7-53T.
Steel piles shall have a square cut end only. No driving point is required.

9. Welding
All field welding shall meet the requirements of Section 51.32 of the Specifications.

10. Paint
Shall comply with the Kansas Standard Specifications. (1955 Edition.)

11. Splices
Splice details for cast-in-place or prestressed concrete piles shall be made in accordance with the manufacturers recommendations, subject to the approval of the Engineer.
Splice details for steel piles shall be in accordance with the details shown on this sheet.

12. Driving Formula
Piles shall be driven to the minimum bearing value as specified on the Construction Layout as determined by the driving formulae stipulated in the Specifications.

13. Mill Test Reports
Notarized mill test reports, in triplicate, shall be furnished by the Contractor for all steel pile and cast-in-place pile shells.

14. Payment
Payment for all piles will be made as set forth in the specifications.

15. Test Piles
Test piles shall be driven where called for on the Bridge plans. All test piles shall be located so that they will become part of the Bridge pile system.

NO.	DATE	REVISIONS	BY	APP'D
3				
2				
1				

STATE HIGHWAY COMMISSION OF KANSAS

STANDARD PILE DETAILS

SHEET NO.	OF	SCALE	APP'D
DESIGNED		DETAILED	QUANTITIES
DRAWN		DETAIL CK.	QUAN. CK.
			TRACED
			TRACE CK.