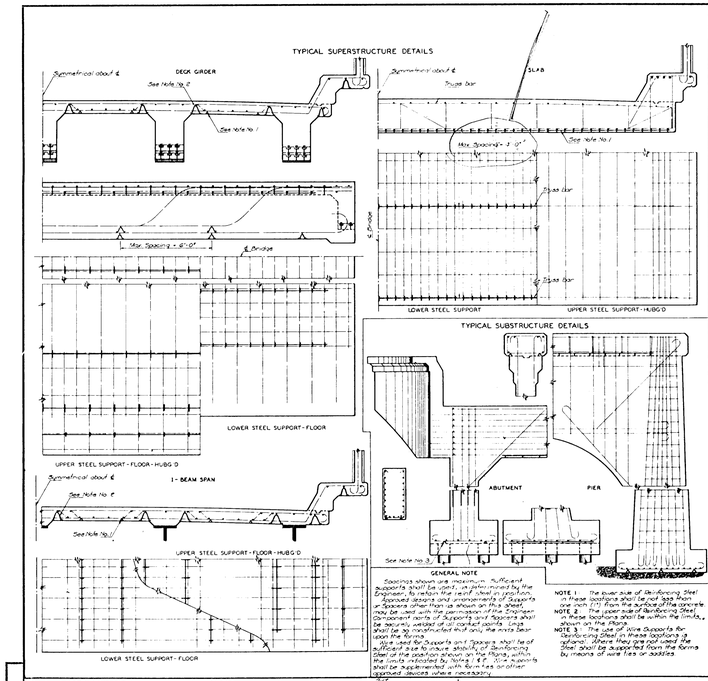
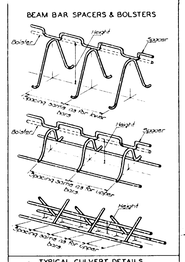
	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	KANSAS		19		

TYPICAL SUPERSTRUCTURE DETAILS

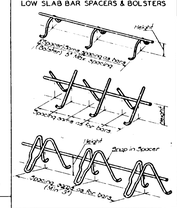


BEAM BAR SPACERS & BOLSTERS

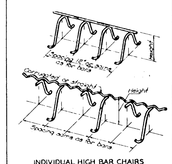


TYPICAL CULVERT DETAILS

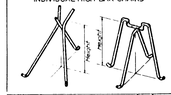
LOW SLAB BAR SPACERS & BOLSTERS



HIGH SLAB BAR SPACERS & BOLSTERS



INDIVIDUAL HIGH BAR CHAIRS



TYPICAL SUBSTRUCTURE DETAILS

GENERAL NOTE

Spacings shown are maximum. Sufficient supports shall be used, in addition, as may be required by the Engineer, to retain the reinforcing steel in position.

Approved designs and arrangements of Supports or Spacers other than as shown on this sheet, may be used with the permission of the Engineer. Component parts of Supports and Spacers shall be securely welded at all contact points. Legs of Supports shall be notched short only the extra bar upon the Support.

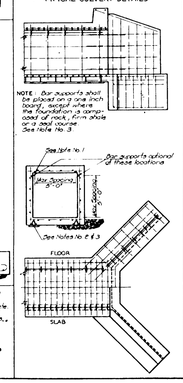
Wire used for Supports and Spacers shall be of sufficient size to insure stability of Reinforcing Steel at the position shown on the Plans, within the limits indicated by Note 1 & 2. All joints shall be supplemented with fillet ties or other approved devices where necessary.

NOTE 1. The lower size of Reinforcing Steel in these locations shall be not less than one inch (1") from the surface of the concrete.

NOTE 2. The upper size of Reinforcing Steel in these locations shall be within the limits shown in the Standard Specifications.

NOTE 3. The use of Wire Supports for Reinforcing Steel in these locations is optional. Where they are not used the Steel shall be supported from the forms by means of wire ties or saddles.

NOTE. Bar supports shall be placed on a one inch board, except where the foundation is composed of rock, firm shale or a seal course. See note No. 3.



Bar supports optional at these locations

S	d dia	Conforms to 1936 Specifications	14 K & K
4	0.120	Conforms to 1920 Specs	40 AISA
48	1.693	REVISED	61 SAE

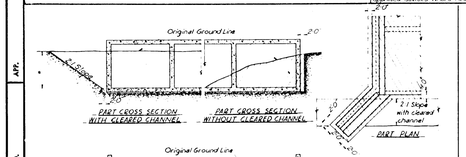
STATE HIGHWAY COMMISSION OF KANSAS

SUPPORTS AND SPACERS FOR REINFORCING STEEL

STD. NO. 610 SCALE No Scale

DESIGNED 2-1-44 CHECKED 7-15-44 APPROVED 7-15-44 Chief Engr.

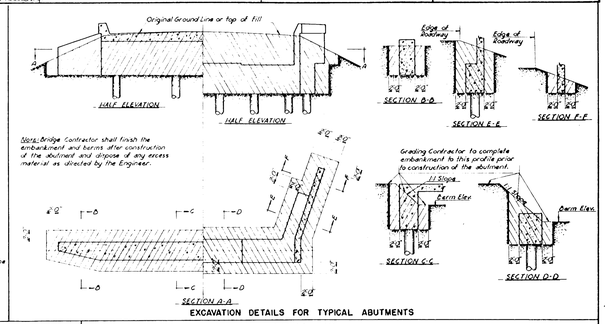
DRAWN BY C.T. APPROVED 7-15-44 Asst. Chief Engr.



*Road Excavation (Channel cut prior to construction of bridge)

Note: Class III Excavation (for bridges) shall be only that excavation below original ground line or the channel slopes as shown, whichever is the lowest.

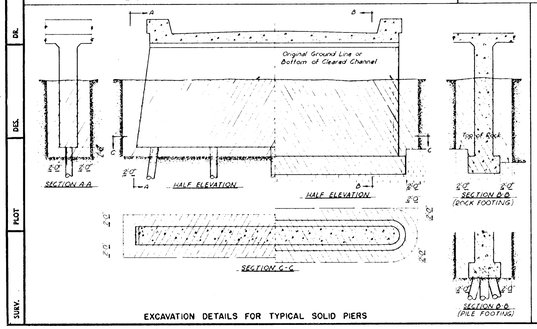
EXCAVATION DETAILS FOR TYPICAL MULTIPLE BOX



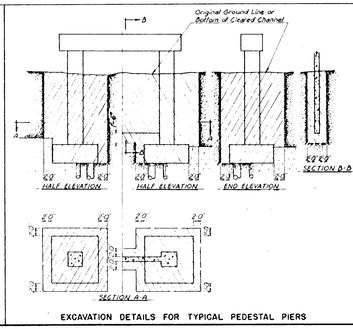
Note: Bridge Contractor shall finish the embankment and berms after construction of the abutment and dispose of any excess material as directed by the Engineer.

Grading Contractor to complete embankment to this profile prior to construction of the abutment.

EXCAVATION DETAILS FOR TYPICAL ABUTMENTS



EXCAVATION DETAILS FOR TYPICAL SOLID PIERS



Note: Sides of trenches in hard or compacted soil including embankments shall be shored, sheeted, braced or otherwise supported when the trench is more than 5 feet in depth and 8 feet or more in length. In lieu of the shoring, the sides of the trench above 5 foot level may be sloped to preclude collapse. The slope for average soils shall be 1:1. If the angle of repose of the soil is less, flatter slopes shall be required.

Note: All bridge excavation shall be computed on the basis of cross-hatched areas and boundary lines indicated on this sheet.

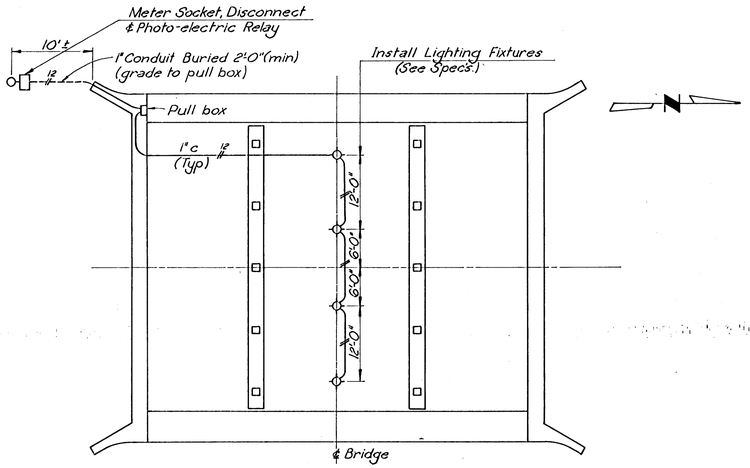
EXCAVATION DETAILS FOR TYPICAL PEDESTAL PIERS

BRIDGE EXCAVATION

DFS DELAMATER, FREUND & SCHERER, P.A. ENGINEERS & ARCHITECTS WICHITA, KANSAS

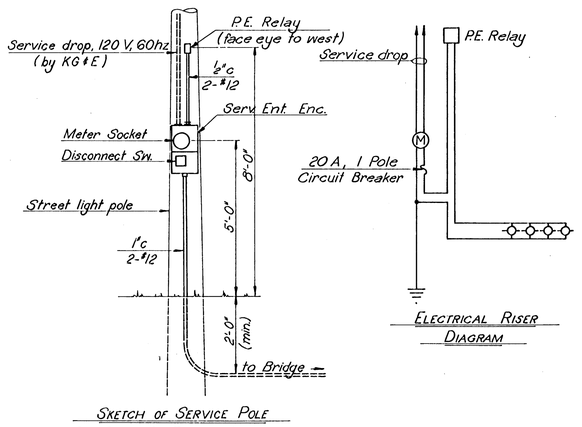
PLOT NOVEMBER, 1975

APP. CKD. TRL DSL. DES. PLOT SURV.



ELECTRICAL LAYOUT

Reflected View under Bridge



SKETCH OF SERVICE POLE

See Spec's for Equipment

ELECTRICAL RISER DIAGRAM

CITY OF WICHITA, KANSAS
R. W. LINN, P.E., CITY ENGINEER

VASSAR STREET BRIDGE
OVER SLEEPY HOLLOW CREEK

BAR SUPPORTS, BRIDGE EXCAVATION & ELECTRIC LIGHTING

DFS DELAMATER, FREUND & SCHERER, P.A.
ENGINEERS & ARCHITECTS
WICHITA, KANSAS

SCALE | DATE December, 1975 | DWG. NO. 79-R-9