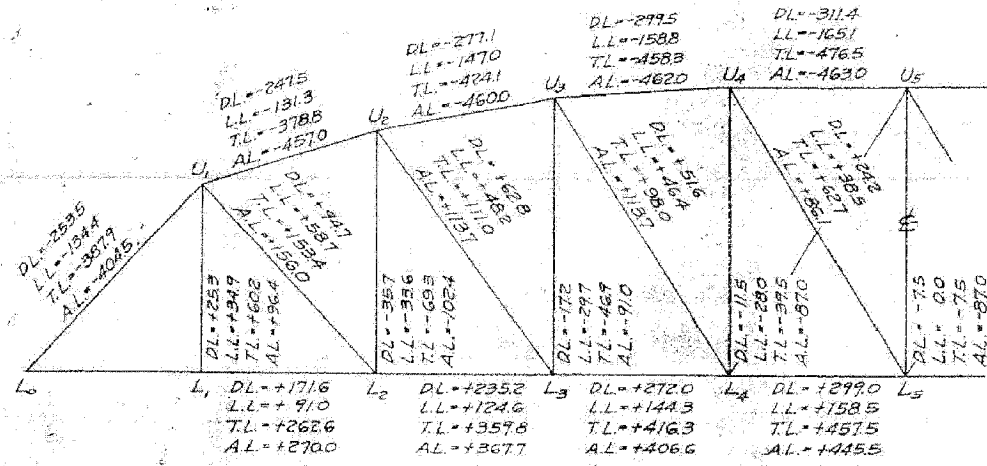


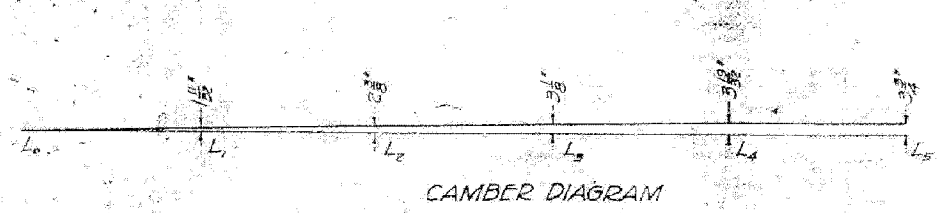
ROUTE No.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 827	12Z-3, 12BR	WABASH, IL GIBSON, IN	158	134
STA.		TO STA.		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SHEET NO. 4
12 SHEETS



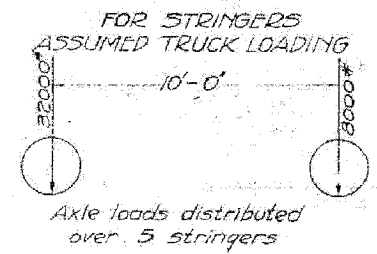
STRESS DIAGRAM
Stresses are in thousands of pounds



CAMBER DIAGRAM

NOTATION
DL = Stress due to weight of steel and floor system.
LL = Stress due to uniform live load of 85 #/ft² of roadway.
TL = Total stress = DL + LL.
AL = Maximum allowable stress.

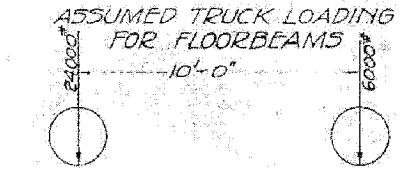
ALLOWABLE UNIT STRESSES
Tension - 16000 #/in²
Compression - 16000 - 12%, but not to exceed 14000 #/in²
Bending - 16000 #/in² on extreme fiber of built up or rolled sections, 24000 #/in² on extreme fiber of pins.
Shearing - 10000 #/in² on shop rivets & pins, 8000 #/in² on field rivets and bolts.
Bearing - 20000 #/in² on shop riv. and pins, 16000 #/in² on field riv. & bolts.



FOR STRINGERS
ASSUMED TRUCK LOADING
Axle loads distributed over 5 stringers

STRINGERS

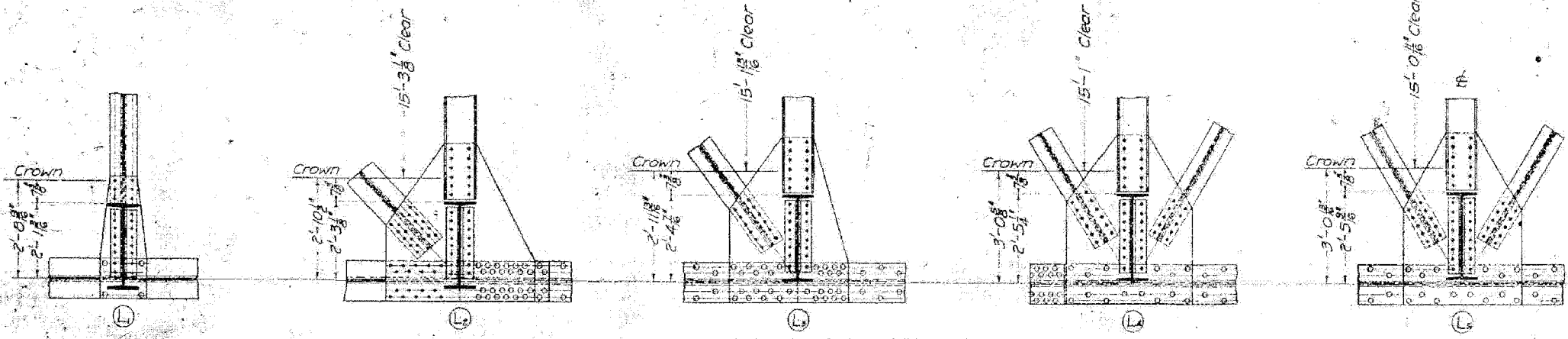
DL End Shear	2500 #
LL "	7290 #
Total "	9790 #
D.L. Moment	14100 #'
LL "	37350 #'
Total "	51450 #'



ASSUMED TRUCK LOADING FOR FLOORBEAMS
Two trucks passing or alternate uniform live load of 125 #/ft² over adjacent panels.
LOADING FOR TRUSSES - 85 #/ft² of Roadway.

FLOORBEAMS

DL End Shear	25960 #	16630 #
LL "	34900 #	27350 #
Total "	60860 #	43980 #
D.L. Moment	165800 #'	106130 #'
LL "	222620 #'	174500 #'
Total "	388420 #'	280630 #'



ELEVATION OF LOWER CHORD SHOWING FLOORBEAM CONNECTIONS FOR SPANS 3 & 4. REMAINDER SIMILAR TO OTHER SPANS.

COMPUTED	W.S. - J.P.C.	EXAMINED	Dec. 20, 1929
CHECKED	G.B.A.	BRIDGE ENGINEER	
DRAWN	J.P.C.		
CHECKED	J.P.C.		
ASSEMBLED		APPROVED	
CHECKED			

Revised 9-5-30 10-6-30
K.T.D. K.T.D.

FOR INFORMATION ONLY

STRESS SHEETS
MOUNT CARMEL BRIDGE
OVER
WABASH RIVER
BETWEEN
ILLINOIS AND INDIANA