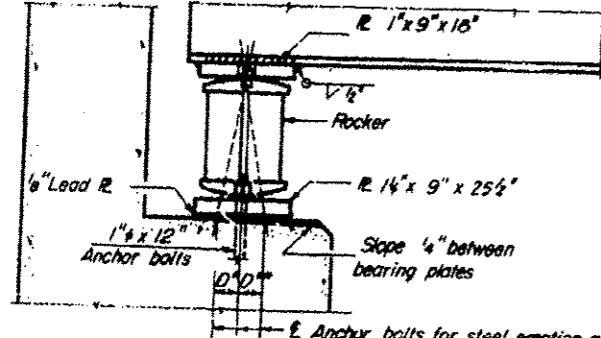


# FOR INFORMATION ONLY

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

PROJECT NO.	195	DATE	11-27-57	SHEET NO.	12 of 19
EA. 403	3486	WRITE SIDE	-50-	-27-	

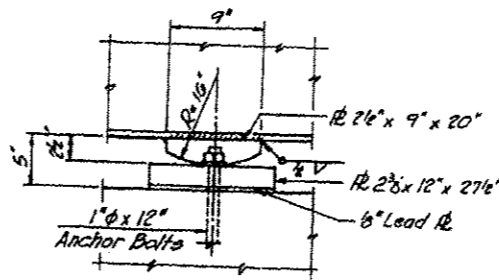


**SECTION**

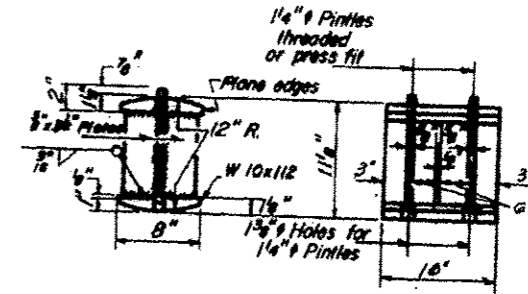
### SHIM PLATES

Shim plates are required as indicated below.

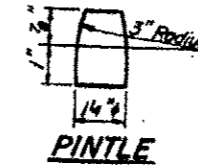
LOCATION	SIZE
W. Abut. Dim. #8	1/4"
Pier Dim. #1	3/8"
E. Abut. Dim. #5	3/16"



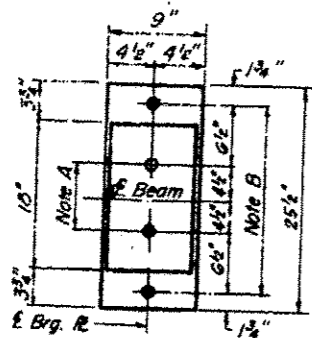
**ELEVATION**



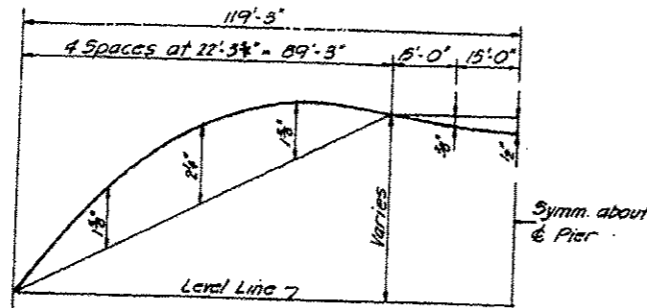
**ROCKER**



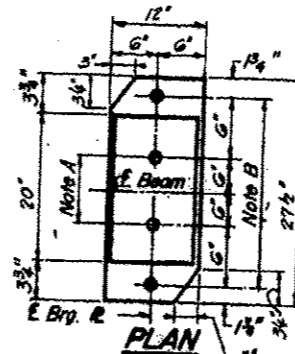
**PINTLE**



**PLAN AT ABUTMENT**



**HALF CAMBER DIAGRAM**  
(Includes Allowance for Vert. Curve)



**PLAN AT PIER**

**NOTE A**  
1 1/2" Holes - 1" deep in top R. for pintles. Thread or press fit pintles into bottom R.

**NOTE B**  
1 1/2" Holes for 1" anchor bolts. 2" x 2" x 2" R. Washers under nut.

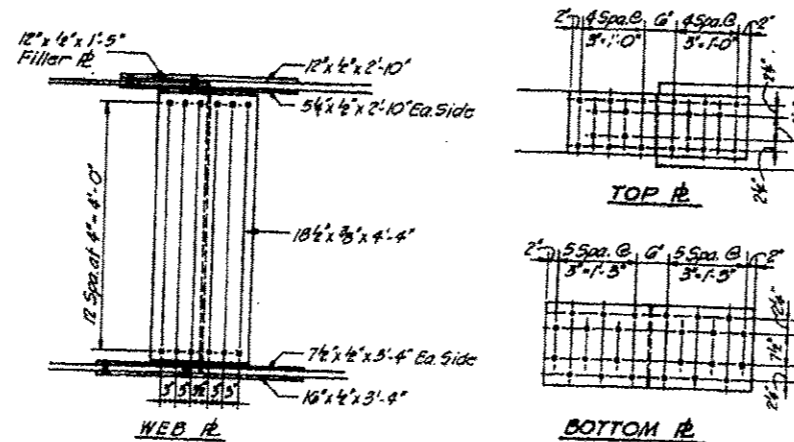
**NOTE C**  
1 1/2" Holes 1" deep in top R. only for 1 1/4" pintles.

### NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- a) D\* (Side of brg away from fixed brg.)  
D\* = 1/8" per each 100' of expansion for every 15° fall below the normal temp. of 50°F
- D\*\* (Side of brg toward fixed brg.)  
D\*\* = 1/8" per each 100' of expansion for every 15° rise above the normal temp. of 50°F

- b) After beams have been erected and dimensions D\* or D\*\* determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

### BEARING ASSEMBLY DETAILS



**SPLICE DETAILS**  
(All Bolts 3/8" H.S.)

	Span 1	Pier
I <sub>2</sub>	27810	71868
S <sub>2</sub>	1205	2916
DL/FT.	938	938
Max.	749	1982
I <sub>2</sub> DL	746	973
I <sub>2</sub> (n=30)	50593	—
S <sub>2</sub>	1921	—
Sp/FT.	510	510
Max.	501	959
I <sub>2</sub> DL	393	473
I <sub>2</sub> (n=10)	7997	—
S <sub>2</sub>	1706	—
Max.	972	910
Min.	200	188
Max.	1172	1090
I <sub>2</sub> DL	624	544
I <sub>2</sub> Total	1568	1992
V <sub>2</sub>	63.8	—

Girder #	W. Abut.	Splice 1	E. Pier	Splice 2	E. Abut.
1	675.578	675.612	675.629	675.614	674.847
2	675.491	675.728	675.609	675.646	675.047
3	675.578	675.872	675.790	675.782	675.215
4	675.547	675.979	675.928	675.910	675.570
5	675.717	676.081	676.022	676.035	675.584
6	675.677	676.074	676.020	676.049	675.581
7	675.577	675.956	675.914	675.934	675.510
8	675.376	675.886	675.807	675.856	675.462
9	675.213	675.707	675.672	675.709	675.378
10	675.080	675.547	675.546	675.610	675.272

\* for fabrication only.

I<sub>2</sub> and S<sub>2</sub> are the moment of inertia and section modulus of the steel section.  
I<sub>2</sub> and S<sub>2</sub> are the moment of inertia and section modulus of the composite section used in computing I<sub>2</sub>.  
VR is the maximum & impact shear range in span.

	Abut.	Pier
R <sub>2L</sub>	67.6	222.5
R <sub>2R</sub>	44.1	78.4
R <sub>2M</sub>	9.0	10.1
R <sub>2Total</sub>	119.6	317

DESIGNED	G. Cummins	EXAMINED	19
CHECKED	S. McKnight	PASSED	
DRAWN	Roberts	APPROVED	
CHECKED	S. McKnight		