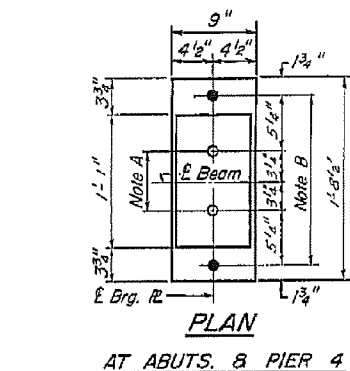
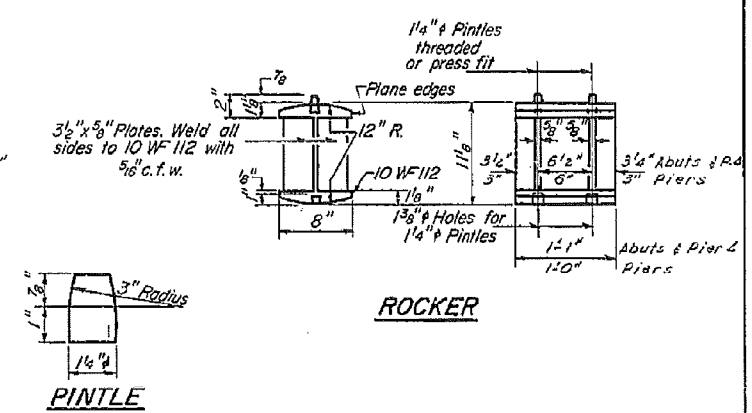
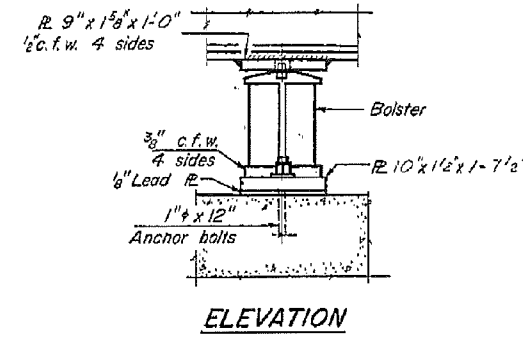
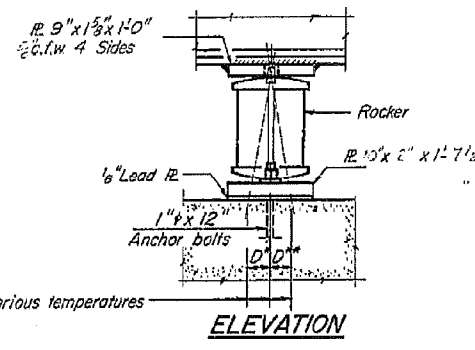
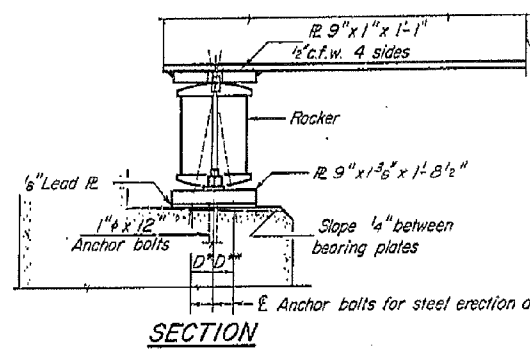
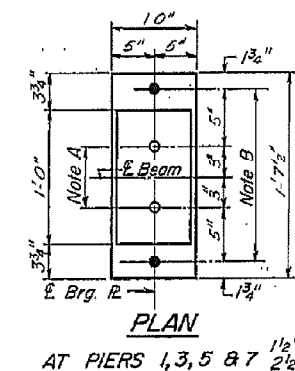


STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

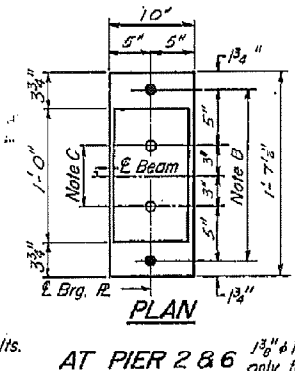
DATE	REVISED	BY	REASON
12-17-65	B	WESSELINK	29
TOTAL SHEETS		29	11
SHEET NO. 7		19 SHEETS	



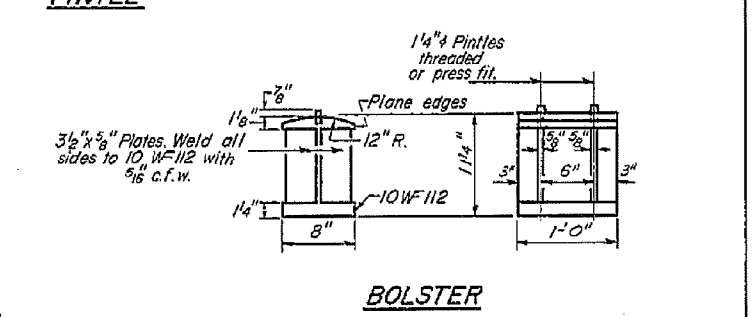
**NOTE A**  
1 3/8" Holes - 1" deep in top R.  
for pintles. Thread or press fit  
pintles into bottom R.



**NOTE B**  
1 1/2" Holes for 1" anchor bolts.  
2 1/2" x 2 1/2" x 1/8" R. Washers  
under nut.



**NOTE C**  
1 3/8" 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**

**TABLE OF MOMENTS & REACTIONS - INTERIOR BEAMS**

	MOMENTS						REACTIONS					
	4Sp.1	Pier 1	5Sp.2	Pier 2	5Sp.3	Pier 3	6Sp.4	W. Abut.	Pier 1	Pier 2	Pier 3	Abut. 2
D.L.	267.9	578.0	250.1	625.4	250.1	578.0	267.9	20.6	72.6	74.2	72.6	20.6
S. D.L.	98.0	188.9	109.9	183.8	109.9	188.9	98.0	7.3	25.3	25.3	25.3	7.3
L.L.	463.2	445.0	567.1	469.8	567.1	445.0	463.8	22.0	52.3	56.4	52.3	22.0
Imp.	117.3	107.2	129.9	107.6	129.9	107.2	117.3	10.6	12.6	12.6	12.6	10.6
Total	947.0	1319.1	1057.0	1386.6	1057.0	1319.1	947.0	50.5	162.8	166.4	162.8	50.5

Moments in ft. kips, Reactions in kips  
Bridge is symm. about E. Pier 4

**PROPERTIES**

Steel Section	I <sub>s</sub>	S <sub>ts</sub>	S <sub>bs</sub>
10, 470, 0	10,470.0	379.1	379.1
Composite Sec.	I <sub>c</sub>	S <sub>tc</sub>	S <sub>bc</sub>
22, 563.6	22,563.6	1,590.1	778.9

I<sub>s</sub> = Moment of Inertia of Steel Section (in<sup>4</sup>)  
S<sub>ts</sub> = Section Modulus top of Steel Section (in<sup>3</sup>)  
S<sub>bs</sub> = Section Modulus bottom of Steel Section (in<sup>3</sup>)  
I<sub>c</sub> = Moment of Inertia of Composite Section (in<sup>4</sup>)  
S<sub>tc</sub> = Section Modulus top of steel (Comp. Sec.) (in<sup>3</sup>)  
S<sub>bc</sub> = Section Modulus bottom of steel (Comp. Sec.) (in<sup>3</sup>)

DESIGNED: *W. W. Wesselink*  
CHECKED: *J. E. Bennett*  
DRAWN: *R. G. Barnett*  
CHECKED: *J. E. Bennett*

EXAMINED: *W. W. Wesselink*  
PASSED: *J. E. Bennett*  
APPROVED: *J. E. Bennett*

JAN. 12 1966

**BEARING DETAILS  
NORTH & SOUTH BRIDGES  
F.A.I. RT. TO SEC. 18-47B  
CUMBERLAND COUNTY  
STATION 158+31**

I-2B 4-1-65