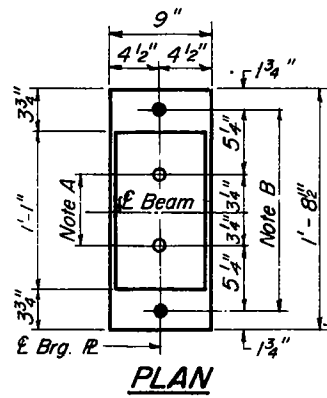
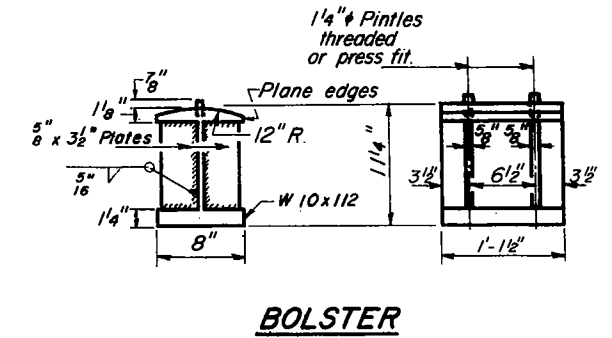
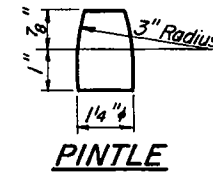
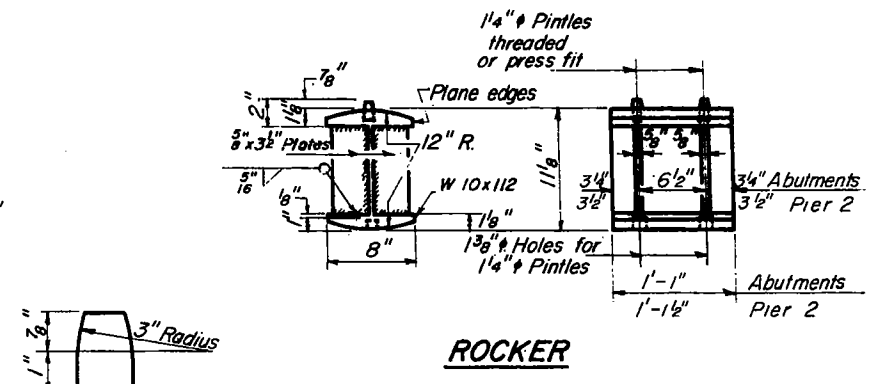
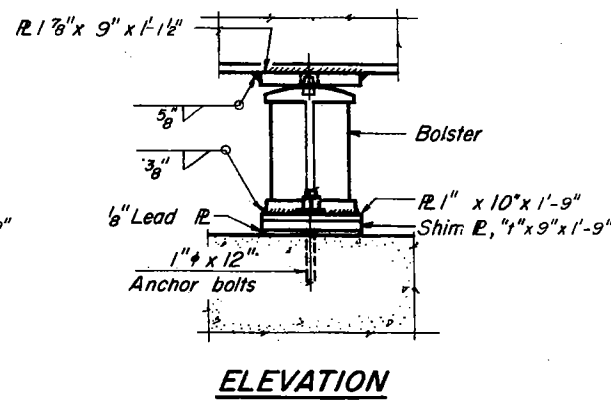
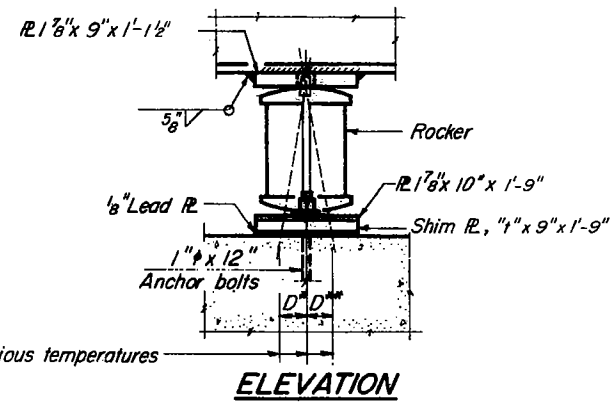
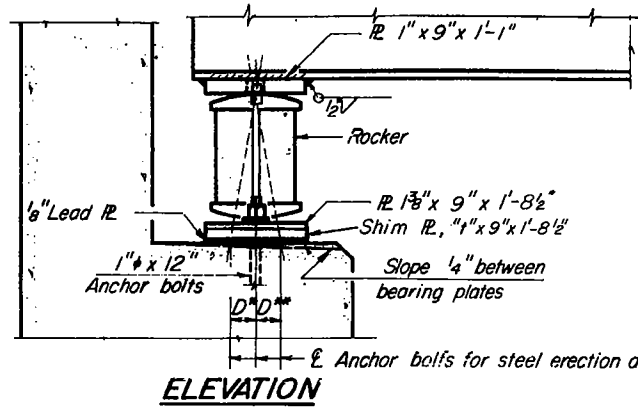
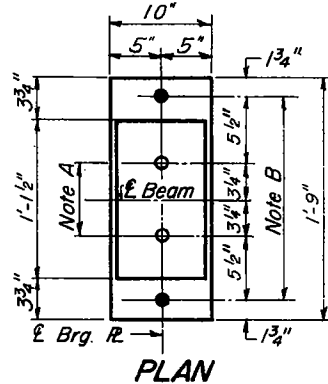


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

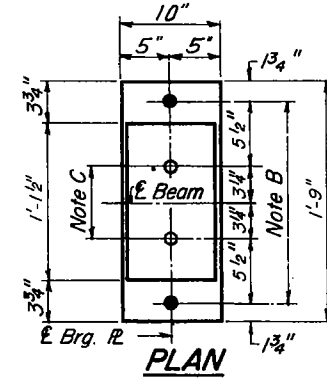
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 9
F.A. 412	103-2B	LEE	203	51	of 17 SHEETS
STA.	TO STA.				
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT			



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.
1/2 x 2 1/2" x 2 1/2" R. Washers
under nut.



NOTE C
1 3/8" Holes 1" deep in top R.
only for 1/4" pintles.

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

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

	0.4 Sp 1 or 3	Pier	0.5 Sp 2
I (in.⁴)	7800	10,500	7800
D (k/ft)	1.14	1.18	1.14
M _D (ik)	220	454	188
M _E (ik)	359	330	354
Imp. (ik)	100	88	91
M total (ik)	679	872	633
f _s (Ksi)	18.6	18.0	17.3

Girder	Abut. S.	F.S. 1 Δ	Pier 1	F.S. 2	F.S. 3	Pier 2	F.S. 4	Abut. N.
1	844.72	845.49	845.74	846.03	846.72	847.06	847.30	848.13
2	844.93	845.70	845.94	846.23	846.93	847.27	847.51	848.33
3	845.10	845.87	846.12	846.41	847.10	847.44	847.68	848.50
4	845.22	845.99	846.24	846.53	847.22	847.56	847.80	848.62
5	845.17	845.94	846.19	846.48	847.17	847.51	847.75	848.55
6	845.09	845.86	846.11	846.40	847.09	847.43	847.67	848.47
7	845.74	846.51	846.75	847.03	847.69	848.02	848.25	849.03
8	845.94	846.71	846.95	847.22	847.87	848.20	848.43	849.21
9	846.11	846.87	847.11	847.39	848.06	848.39	848.61	849.36
10	846.10	846.87	847.11	847.38	848.03	848.36	848.59	849.36
11	846.04	846.81	847.05	847.33	847.97	848.29	848.52	849.29
12	845.95	846.72	846.96	847.23	847.88	848.20	848.42	849.19

A Top of W36x135 C Splices

	Abut.	Pier
R _D (k)	22.0	78.0
R _E (k)	37.1	47.5
Imp. (k)	10.3	12.7
R total (k)	69.4	138.2

Girder	Location	Thickness
4	S. Abut.	5/8"
4	Pier 1	5/8"
4	Pier 2	5/8"
9	Pier 2	1/2"
9	N. Abut.	5/8"

DESIGNED	DNC
CHECKED	W.J.B.
DRAWN	DNC
CHECKED	W.J.B.

FOR INFORMATION ONLY

**BEARING DEVICES AND
DETAILS**
F.A. 412 SECTION 103-2B
F.A. 412 OVER MCKELSON CREEK
LEE COUNTY
STATION: 1167+00.00
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION