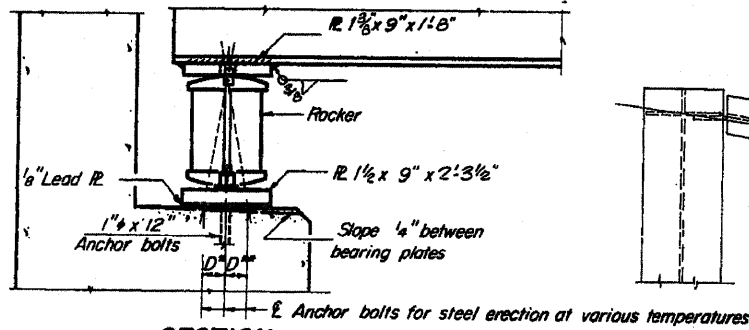


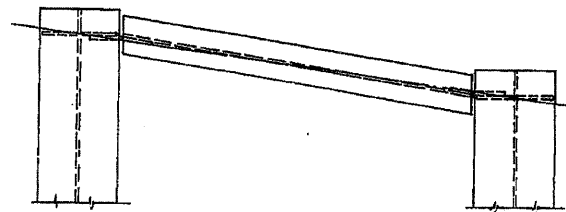
FOR INFORMATION ONLY

STATE OF ILLINOIS
DIVISION OF HIGHWAYS

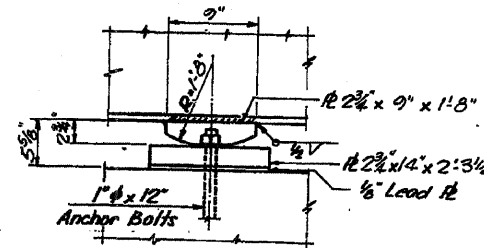
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F.A. 403	195-3	WHITESIDE	583	208
SHEETS				



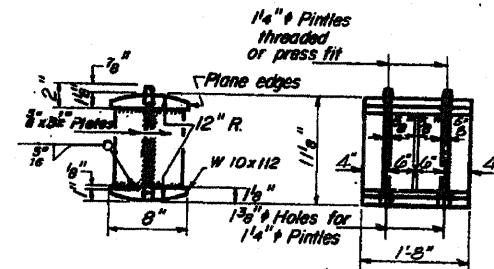
SECTION



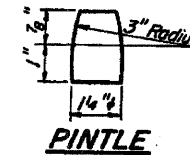
PLAN



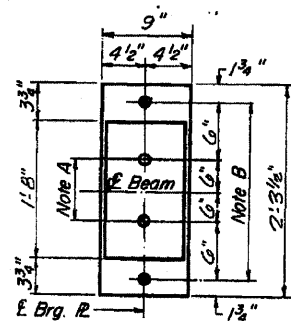
ELEVATION



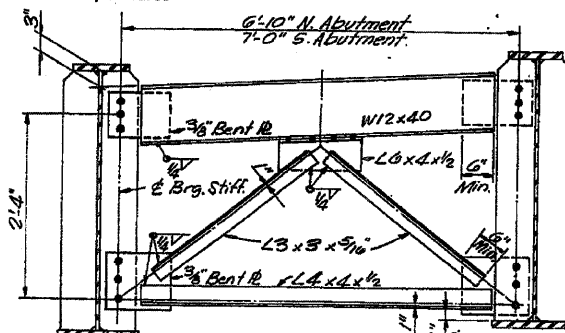
ROCKER



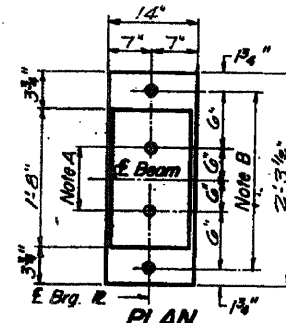
PINTLE



AT ABUTMENT



ELEVATION
CROSS FRAME CF



AT PIER

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

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

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

Note: Secondary stresses due to beam curvature
will increase those shown by 14% (2).

MOMENT & SHEAR TABLE		
	0.4 Span	Pier
I_s	(in ⁴) 22388	68416
S_s	(in ³) 1204	2558
DL	(K) 1.049	1.049
M/DL	(K) 635	1898
I_c	(in ⁴) 6.88	8.91
I_c (n=30)	(in ⁴) 45580	
S_c	(in ³) 1612	
SDL	(K) .480	.480
M/SDL	(K) 367	763
I_c SDL	(ksi) 2.91	3.58
I_c (n=10)	(in ⁴) 62817	
S_c	(in ³) 1648	
MLL	(K) 908	856
WIMP	(K) 195	183
M/TOTAL	(K) 1103	1038
I_c LL	(ksi) 8.03	4.87
I_c TOTAL	(ksi) 17.87	17.56
VR	57.6	

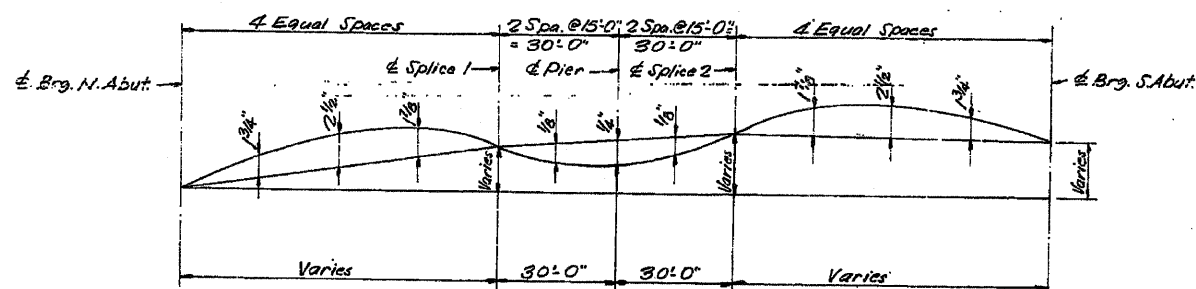
NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- 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
- 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

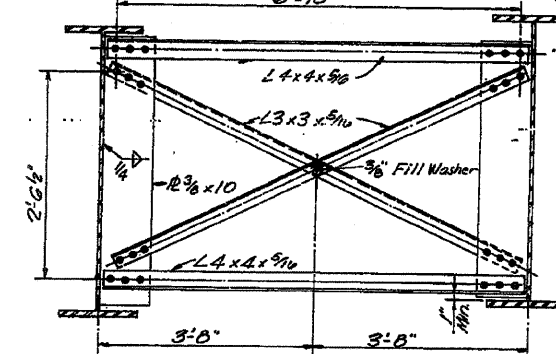
REACTION TABLE		
	Abut.	Pier
R/DL	54.8	214.8
R/L	47.8	74.2
R/IMP	10.3	17.0
R/TOTAL	112.9	311.0

I_s and S_s are the moment of inertia and section modulus of the steel section.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing f_s .
 VR is the maximum $\frac{1}{2}$ impact shear range in the span.



CAMBER DIAGRAM

Includes allowance for Total Dead Load Deflection and Vertical Curvature of the Roadway.



CROSS FRAME CF I

SHOES

F.A. RTE. 403 - SEC. 195-3H8
WHITESIDE COUNTY
STATION 2205+45.83

DESIGNED A.K.C.	EXAMINED
CHECKED S.M.C.K.	PASSED
DRAWN P.G. Barnett & C. DC.	APPROVED
CHECKED S.M.C.K.	

I-2-B 9-1-65, 8-1-70

* FAI Route 88 & FAP Route 309 (I-88 & US 30)
** D2 Bridge Painting 2009-2

098100778

FILE NAME = P:\PAINTING\64E63\PLANeng.dgn	USER NAME = jmkd	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	F.A. RTE. SECTION	COUNTY Whiteside	TOTAL SHEETS 29	SHEET NO. 24
PLOT SCALE = 58.0000' / IN.	PLOT DATE = Fri Dec 05 14:12:31 2008	CHECKED -	REVISED -				FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 64E63	