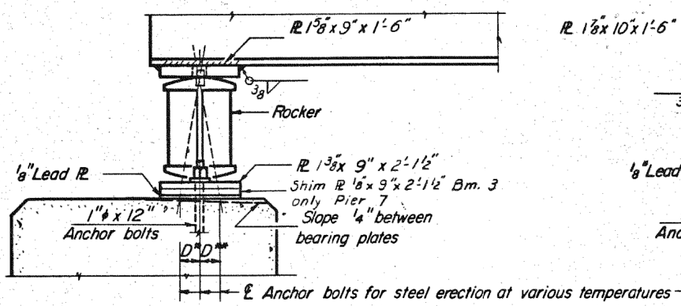
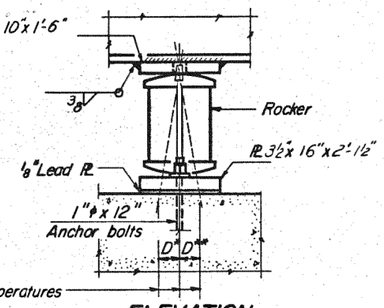
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I-70	*	FAYETTE	60	31
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

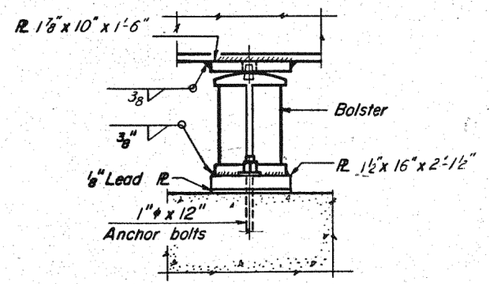
SHEET NO. 19
29 SHEETS
* 26-38-1(3)



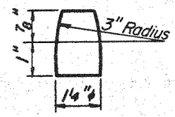
SECTION



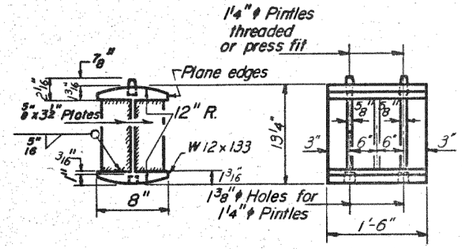
ELEVATION



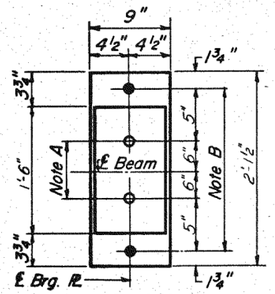
ELEVATION



PINTLE



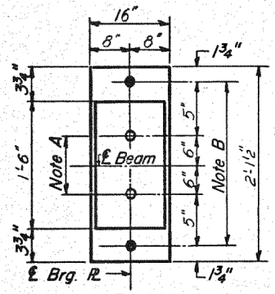
ROCKER
Use A.S.T.M. A-588 Steel



PLAN

AT E. BRG. PIER 7
℄ W. BRG. PIER 10

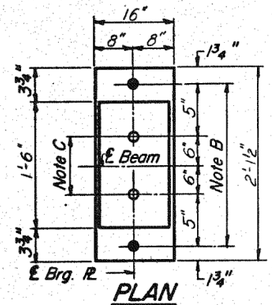
NOTE A
1⅜"ϕ Holes – 1" deep in top PL for pintles. Thread or press fit pintles into bottom PL.



PLAN

AT PIER 8

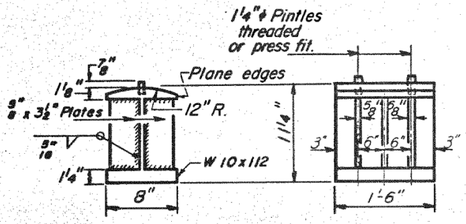
NOTE B
1½"ϕ Holes for 1"ϕ anchor bolts. 5" x 16 x 2½" x 2½" PL. Washers under nut.



PLAN

AT PIER 9

NOTE C
1⅜"ϕ Holes 1" deep in top PL only for 1¼"ϕ pintles.



BOLSTER
Use A.S.T.M. A-588 Steel

BEARING ASSEMBLY DETAILS

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

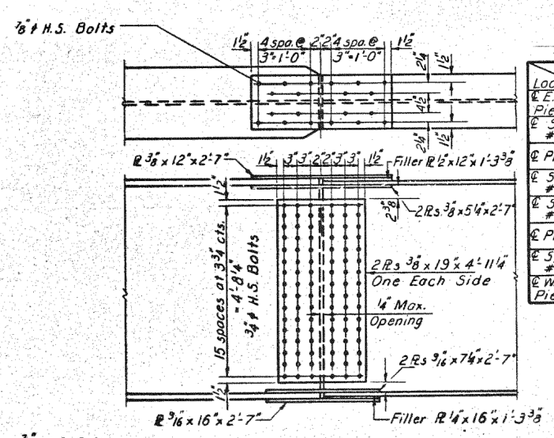
a) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

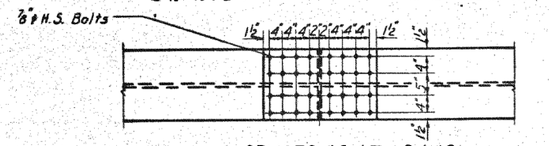
b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts may be built into the masonry.

INTERIOR GIRDER MOMENT TABLE		0.4 Sp. 8	Pier 8	0.5 Sp. 9
I_S	(in^4)	34895	88580	34895
I_C	(in^4)	85862		85862
S_S	(in^3)	1216	2587	1216
S_C	(in^3)	1653		1653
℄	(K/I)	.969	1.449	.995
$M_{℄}$	(I.K)	782	2904	706
$f_{S℄}$	(Ksi)	7.7	13.5	7.0
$S_{℄}$	(K/I)	.454		.454
$M_{S℄}$	(I.K)	435		468
M_{LL}	(I.K)	1000	1113	1050
M_{Imp}	(I.K)	205	215	191
TOTAL	(I.K)	1640	1328	1709
$f_{S℄}+S_{℄}$	(Ksi)	11.9	6.2	12.4
$f_{S\,TOTAL}$	(Ksi)	19.6	19.7	19.4
VR	(K)	58.7		51.2

INTERIOR GIRDER REACTION TABLE		Pier 7	Pier 8
$R_{℄}$	(K)	59.4	217.3
R_{LL}	(K)	42.6	83.2
Imp.	(K)	8.9	16.2
R_{TOTAL}	(K)	110.9	316.7

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 ℄ + Impact shear range.





SPLICES #6, #7, #8 & #9

TOP OF FLANGE ELEVATIONS

Gir. Loc.	1	2	3	4	5	6
℄ E. Brg. Pier 7	497.743	497.896	498.031	498.015	497.951	497.860
℄ Splice #6	497.646	497.779	497.892	497.830	497.714	497.564
℄ Pier 8	497.625	497.758	497.871	497.809	497.692	497.543
℄ Splice #7	497.601	497.734	497.847	497.785	497.668	497.519
℄ Splice #8	497.479	497.613	497.726	497.664	497.548	497.398
℄ Pier 9	497.382	497.516	497.629	497.567	497.451	497.301
℄ Splice #9	497.297	497.431	497.544	497.482	497.366	497.216
℄ W. Brg. Pier 10	497.166	497.301	497.414	497.352	497.236	497.087

STRUCTURAL STEEL
SPANS 8, 9, & 10
F.A.I. RT. 70 SEC. 26-3B-1(3) E. B L.
FAYETTE COUNTY
STATION 543A + 92.91

DESIGNED	R.K. Mathur	
CHECKED	James Power	
R.P.S. DRAWN	P.G. Barnett	
CHECKED	VP	

EXAMINED July 30 1972
PASSED
APPROVED

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

PRINT DRIVER = L90_E.B.dr1
PEN TABLE = I:\DOT_IDB\2016\
MODEL NAME = I:\DOT_IDB\2016\
FILE NAME = D:\74175-sht-r-e-s25.dgn

ESCA CONSULTANTS, INC. CIVIL & STRUCTURAL ENGINEERS	USER NAME = has	DESIGNED - ELH	REVISED -
	ESCA PROJECT NO. 1000.05	DRAWN - HAS	REVISED -
	PLOT SCALE = 0.1667 ' / IN.	CHECKED - RDP	REVISED -
	PLOT DATE = 1/29/2014 2:16:43 PM	DATE - 08/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURE NO. 026-0085 EXISTING BRIDGE PLANS
EB – FOR INFORMATION ONLY

SCALE: | SHEET NO. 13 OF 23 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	(26-3B-1, 3B-1(3))BR	FAYETTE	277	234
		CONTRACT NO. 74175		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		