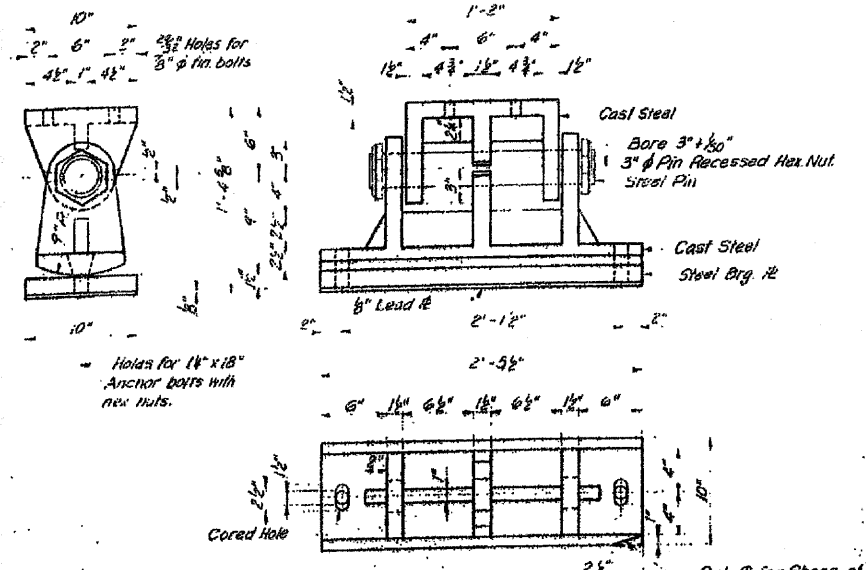


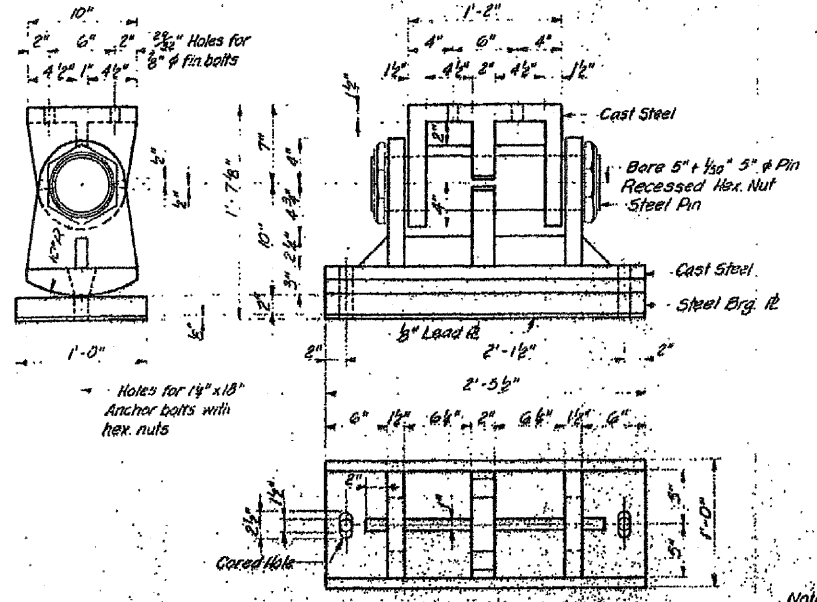
FOR INFORMATION ONLY

SHEET NO. 7
OF 24 SHEETS

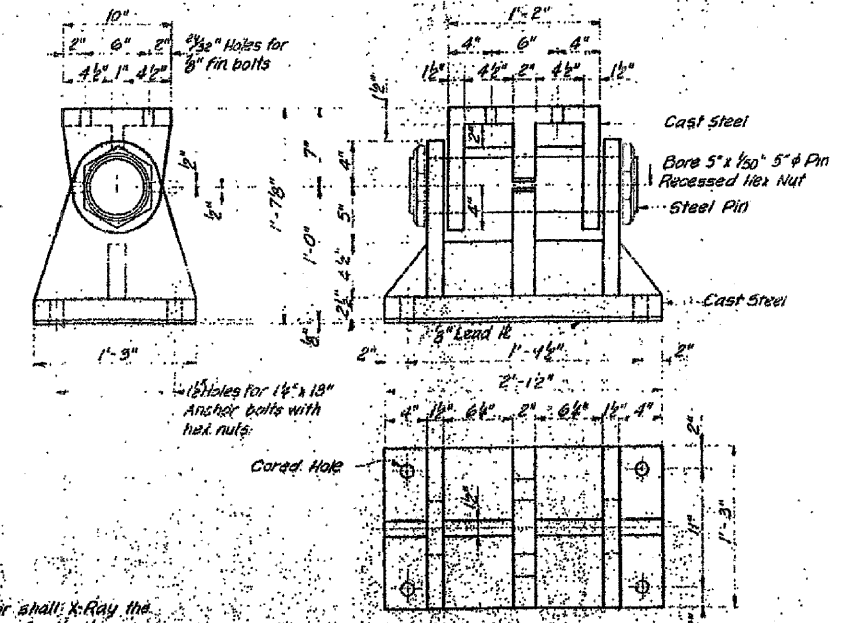
TOTAL SHEETS 57
SHEET NO. 40



DETAIL OF EXPANSION BEARING AT ABUTMENT #1 & PIER #4
10 Required



DETAIL OF EXPANSION BEARING AT PIERS #1 & #3
10 Required



DETAIL OF FIXED BEARING AT PIER #2
5 Required

Note: The Fabricator shall X-Ray the Steel Castings for the bearings and furnish proof to the Engineer that the castings are sound.

MISCELLANEOUS - GIRDER SPANS

TABLE OF MOMENTS, REACTIONS AND SHEARS - INTERIOR GIRDERS

Beam #1 (at Span #)	MOMENTS			REACTIONS			SHEARS				
	Pier #1	Span #2 (at Pier #2)	Pier #2	Abut #1	Pier #1	Pier #2	Span #1 at Abut #1	Span #1 at Pier #1	Span #2 at Pier #2		
D.L.	+803	-1615	+719	-1035	48.9	151.0	-130.5	+43.9	-76.2	+144.0	-133.5
S.D.L.	+833	-1041	+590	-1120	47.2	15.9	-88.9	+47.2	-51.1	+38.5	-53.0
Imp.	+194	-219	+178	-224	10.5	18.0	-17.7	+10.5	-10.8	+11.5	-10.8
Total	+1830	-2875	+1487	-2479	107.6	184.9	-236.1	+102.0	-138.1	+194.0	-197.3

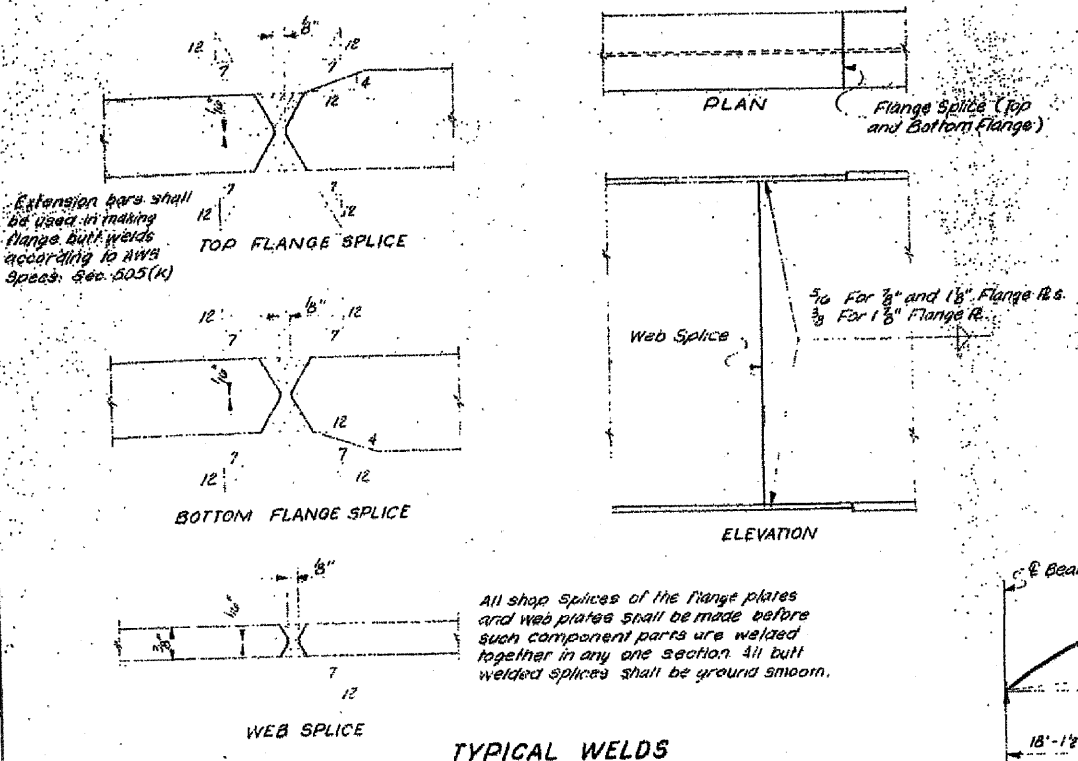
Moments are in Ft.-Kips
Reactions and Shears are in Kips

MISCELLANEOUS - BEAM SPANS

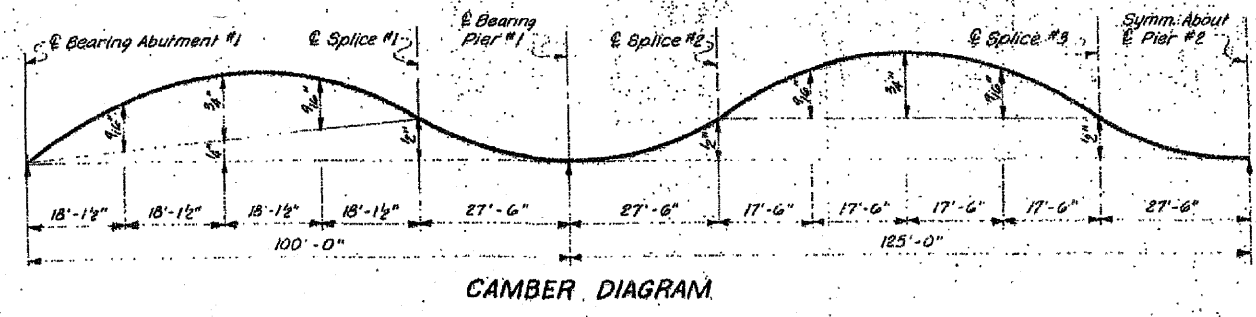
TABLE OF MOMENTS, REACTIONS AND SHEARS INTERIOR BEAMS

Span #1 (at Pier #1)	MOMENTS		REACTIONS	
	Pier #2	Span #2 (at Pier #2)	Pier #1	Pier #2
D.L.	+1355	-1310	25.7	84.2
S.D.L.	+104	-114	7.1	22.6
L.L.	+1045	-515	46.5	67.1
Imp.	+166	-164	11.6	16.1
Total	+2670	-2103	90.9	190.0

Span #1 (at Pier #1)	SHEARS		Span #2 (at Pier #2)	Span #3 (at Pier #3)	Span #4 (at Pier #4)
	Pier #2	Pier #1			
D.L.	+1267	-44	44.8	144.2	0
S.D.L.	+71	-2.2	-11.2	11.4	0
L.L.	+165	-16.4	-21.0	14.9	+21.1
Imp.	+11.6	-1.9	1.2	-11.9	+6.1
Total	+1514	-64.6	-20.0	42.5	27.6



TYPICAL WELDS



CAMBER DIAGRAM

FOR INFORMATION ONLY

PROPERTIES

30 W150 Bottom flange 11" x 6" concrete slab 8" x 7"	STEEL SECTION	
	I _x	10,430 in ⁴
	S _x	534 in ³
	S _{xy}	649 in ³
	COMPOSITE SECTION	
I _c	25,460 in ⁴	
S _{xc}	1,790 in ³	
S _{yc}	876 in ³	

STRUCTURAL STEEL

REVISIONS	MACON COUNTY	DATE
NO. DATE INITIAL	F.A.S. RT. 1539	SECTION 37 Q
	HOMER L. CHASTAIN & ASSOCIATES	CONSULTING ENGINEERS
	DECATUR, ILLINOIS	