

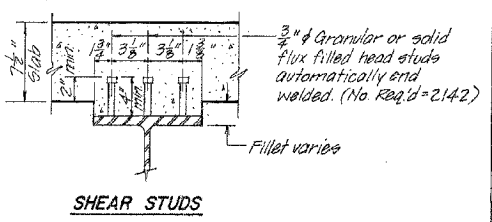
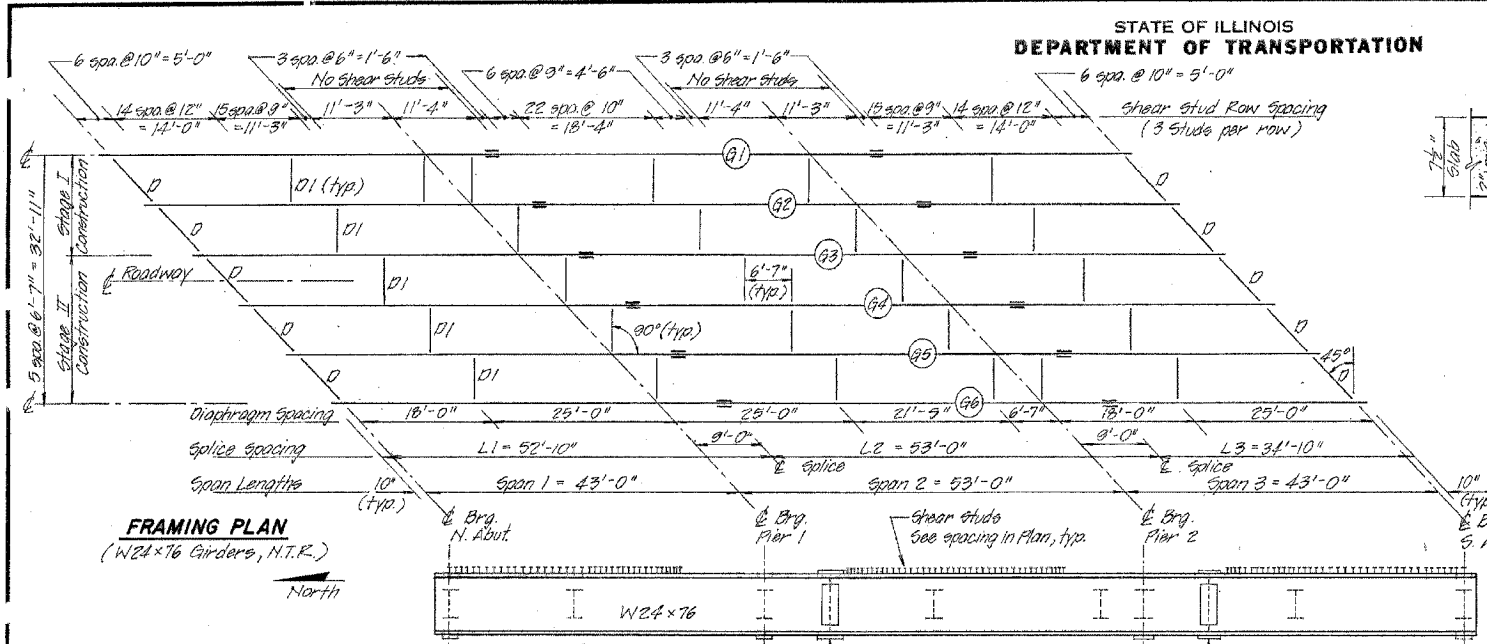
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 116		RICHLAND	31	29
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

* D-7 Joint Repairs 2006-3

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.A. 1160	123	RICHLAND	18	12
P.A. 116	BR-2			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. 8
SHEETS 11



INTERIOR GIRDER REACTION TABLE

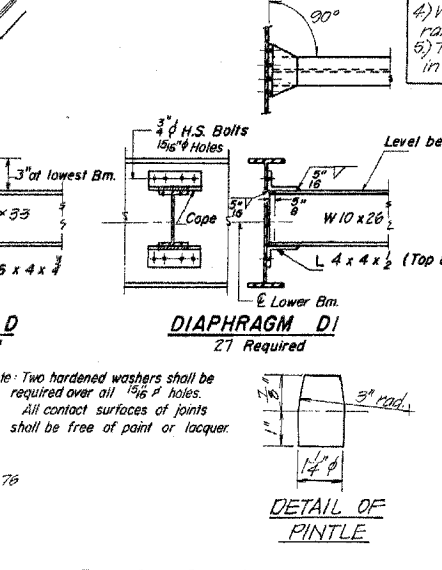
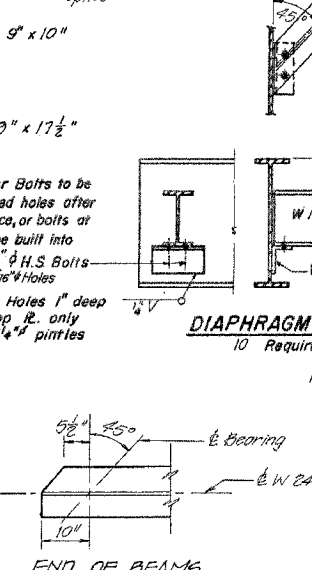
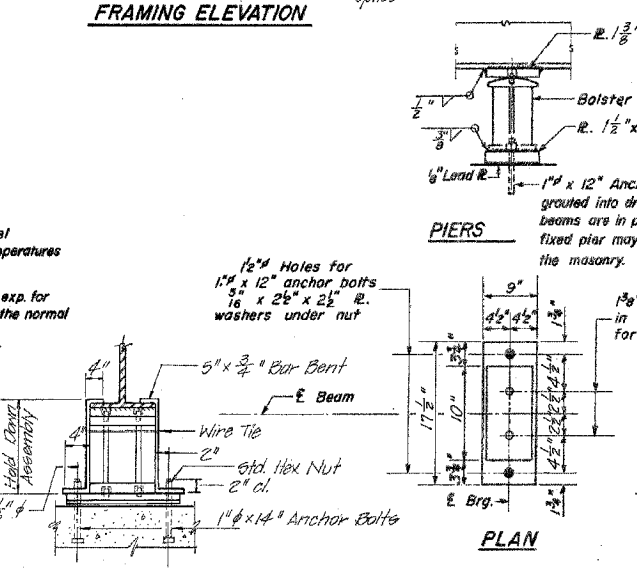
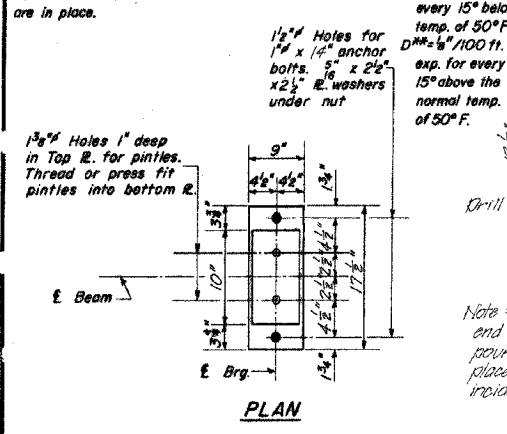
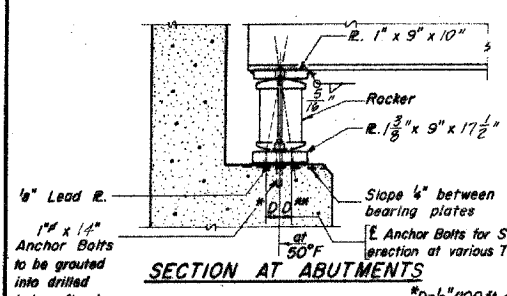
	Abut.	Pier
R L (K)	19.9	70.6
R R (K)	32.5	40.5
R LMD (K)	9.8	12.1
R TOTAL (K)	62.2	123.2

Note: Reactions given are for Service Load conditions before Load Factor application.

INTERIOR GIRDER MOMENT TABLE (Max. Girder G4)

	0.4 Sp 1 & 3	Pier	0.5 Sp 2
I _s (in ⁴)	2100	2100	2100
I _{c1} (in ⁴) n=27	4916	—	4916
I _{c2} (in ⁴) n=9	6531	—	6531
I _s (in ⁴)	176	176	176
I _{c1} (in ⁴) n=27	251	—	251
I _{c2} (in ⁴) n=9	276	—	276
I _{n.c.} (K)	0.854	0.854	0.854
I _{m.c.} (K)	143	299	131
F _s non-comp (k.s.i)	9.8	17.7	8.9
I _{m.c.} (K)	0.287	0.287	0.287
I _{m.c.} (K)	55	70	61
F _s comp (k.s.i)	2.6	4.8	2.9
I _{m.c.} (K)	560	296	640
I _{m.c.} (K)	167	86	180
Total I _{m.c.} + I _{m.p.} (K)	727	382	820
F _s 4 + I (k.s.i)	31.6	26.0	35.7
F _s Total (k.s.i)	44.0	48.5	47.5
V _R (K)	45.7	—	40.4

Notes:
 1) I_s & I_c are the moment of inertia of section modulus of the steel section used in computing F_s Total.
 2) I_{c1} & I_{c2} (n=27) are the moment of inertia of section modulus of the composite section used in computing F_s Total resulting from composite dead load forces with allowance for long term concrete creep.
 3) I_{c2} & I_{c1} (n=9) are the moment of inertia of section modulus of the composite section used in computing F_s Total resulting from live load plus impact.
 4) V_R is the maximum live load plus impact shear range in span used for shear connector design.
 5) The load factor (1.3) [L + 1/2 (L + IMP)] is used in computing moments & stresses.

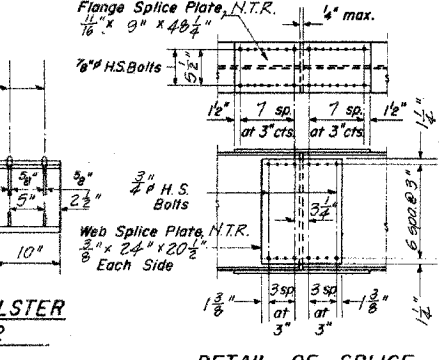
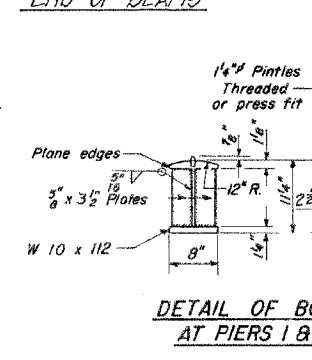
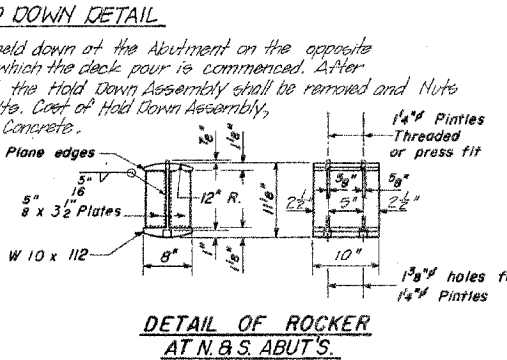


ELEVATION TOP OF W

Girder Number	Top of W Elev.
G1	445.65
G2	445.78
G3	445.88
G4	445.88
G5	445.78
G6	445.65

DESIGNED P.J.L.
 CHECKED C.W.S.
 DRAWN H.V.
 CHECKED P.J.L.

GENERAL NOTES: 1. Shim Plates to be provided for bearing.



GIRDER AND FRAMING DETAILS

ILLINOIS ROUTE 130 OVER
 LONG BRANCH CREEK
 STATION 745+75
 FA. ROUTE 116 SECTION 123 BR-2
 RICHLAND COUNTY