F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/64	(41-3)HBK	JEFFERSON	518	287
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 98963

INTERIOR GIRDER MOMENT TABLE			
		0.4 Sp. 1	Pier
Is	(in4)	29969	56758
Ic (n)	(in4)	71440	——
Ic (3n)	(in4)	51939	——
Ss	(in3)	1226	1957
Sc (n)	(in3)	1616	——
Sc (3n)	(in3)	1486	——
D	(k/ft.)	1.06	1.53
MD	('k)	1042	3651
sD	(k/ft.)	0.47	——
MsD	('k)	532	——
ML	('k)	1250	1237
M (Imp)	('k)	246	244
5/3[ML+M(Imp)]	('k)	2493	2468
Ma	('k)	5287	7955
fs D non-comp	(k.s.i.)	10.2	22.4
fs D(comp)	(k.s.i.)	4.3	——
fs 5/3(L+Imp)	(k.s.i.)	18.5	15.1
fs (Overload)	(k.s.i.)	33.0	37.5
fs (Total)	(k.s.i.)	42.9	49.0
VR	(k)	70	——

INTERIOR GIRDER REACTION TABLE			
		Abut.	Pier
RD	(k)	69.9	253.3
RL	(k)	53.4	94.9
Imp.	(k)	10.6	18.7
R (Total)	(k)	133.9	366.9

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total and Overload) due to non-composite dead loads (in.4 and in.3).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total and Overload) due to short-term composite live loads (in.4 and in.3).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total and Overload) due to long-term composite (superimposed) dead loads (in.4 and in.3).

D: Un-factored non-composite dead load (kips/ft.).

MD: Un-factored moment due to non-composite dead load (kip-ft.).

sD: Un-factored long-term composite (superimposed) dead load (kips/ft.)

MsD: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

ML: Un-factored live load moment (kip-ft.).

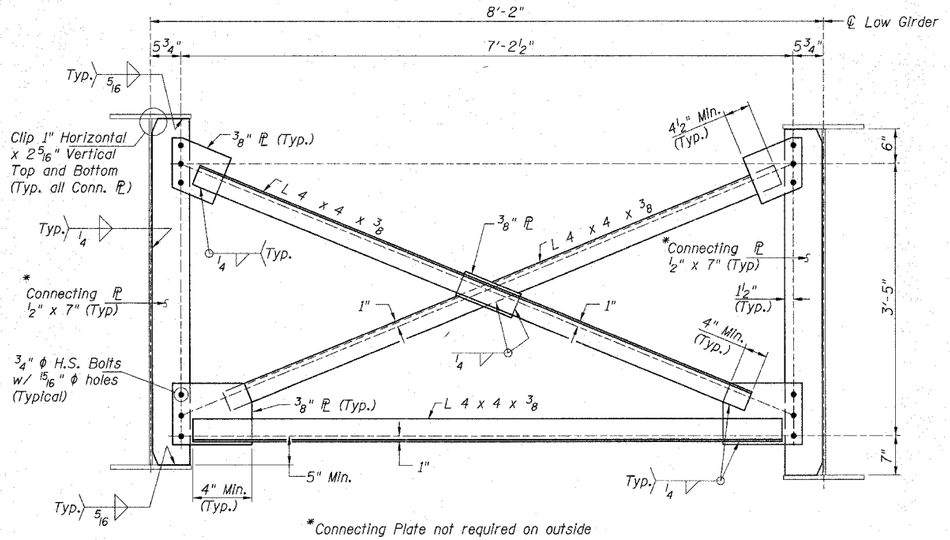
MImp: Un-factored moment due to impact (kip-ft.).

Ma: Factored design moment (kip-ft.).
1.3 [MD + MsD + 5/3 (ML + MImp)]

fs (Overload): Sum of stresses as computed from the moments below (ksi).
MD + MsD + 5/3 (ML + MImp)

fs (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
1.3 [MD + MsD + 5/3 (ML + MImp)]

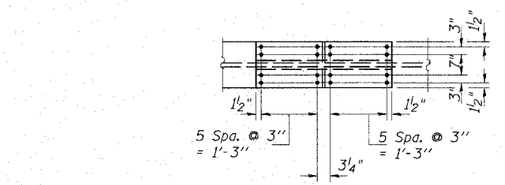
VR: Maximum L + Impact horizontal shear range within the composite portion of the span for stud shear connector design (kips).

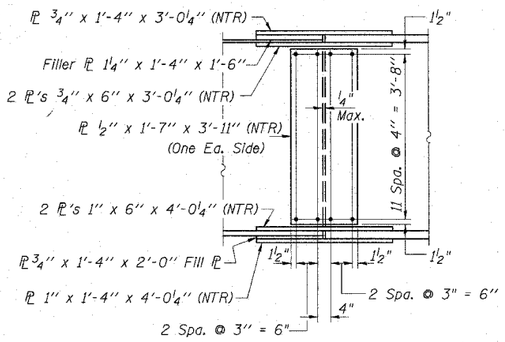


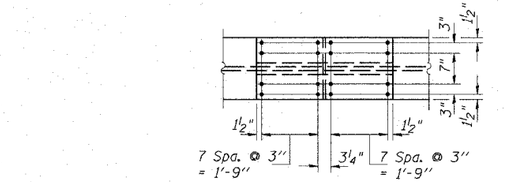
*Connecting Plate not required on outside of exterior girder.

INTERIOR CROSS FRAME CF

(130 Required)

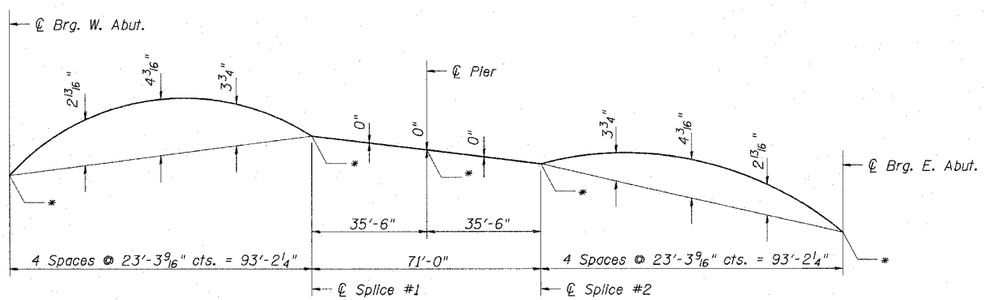






FIELD SPLICE DETAIL

(22 Required)



CAMBER DIAGRAM

* See Table for Top of Web Elevations

** TOP OF WEB ELEVATIONS

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8	Girder 9	Girder 10	Girder 11
℄ Brg. W. Abut.	530.261	530.443	530.625	530.806	530.986	530.946	530.799	530.651	530.503	530.354	530.205
℄ Splice No. 1	530.546	530.709	530.872	531.034	531.195	531.136	530.970	530.803	530.635	530.467	530.299
℄ Brg. Pier	530.444	530.600	530.755	530.909	531.063	530.997	530.823	530.649	530.474	530.299	530.123
℄ Splice No. 2	530.341	530.489	530.637	530.785	530.931	530.858	530.677	530.495	530.313	530.131	529.948
℄ Brg. E. Abut.	529.516	529.646	529.774	529.902	530.030	529.937	529.737	529.536	529.335	529.134	528.931

** For Fabrication Only

Notes:

Use 7/8" ϕ H.S. Bolts with 15/16" ϕ holes. for all Splice Connections.

All splice plate material except fill plates, shall be AASHTO M270 Grade 50.

"NTR" denotes plates to which Notch Toughness Requirements ae applicable.

Use 3/4" ϕ H.S. Bolts with 15/16" ϕ holes in all Cross Frame connections.

Two hardened washers shall be required over all oversized holes.

Load carring components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

STRUCTURAL STEEL DETAILS
VETERANS MEMORIAL DR. over F.A.I. ROUTES 57/64
SECTION (41-3)HBK
JEFFERSON COUNTY
STATION 49+72.27
STRUCTURE NO. 041-0108

HANSON

JOB NO. 98S2019A

DATE 03-14-07

March 2007 Submittal

LAYOUT	LMM	03/12/07	
DRAWN	DAB	03/12/07	
REVIEWED			/ /

LAYOUT	CBR	02/02/04
DRAWN	DAP	02/02/04
REVIEWED	TEH	02/02/04

3/21/2007
I:\98J0\DGS\98J2019a\Struct\Steel\Final Plans 03-19-04\F-01.sht