



SECTION A-A

Location	℄ Brg. N. Abut.	℄ Brg. S. Abut.
BEAM 1	389.10	389.10
BEAM 2	389.20	389.20
BEAM 3	389.30	389.30
BEAM 4	389.30	389.30
BEAM 5	389.20	389.20
BEAM 6	389.10	389.10

TOP OF BEAM ELEVATIONS  
(For Fabrication only)  
(Does not include Dead Load Deflections)

INTERIOR GIRDER MOMENT TABLE		0.5 Sp. 1
$I_s$	(in <sup>4</sup> )	8,160
$I_c(n)$	(in <sup>4</sup> )	20,616
$I_c(3n)$	(in <sup>4</sup> )	14,987
$S_s$	(in <sup>3</sup> )	487
$S_c(n)$	(in <sup>3</sup> )	699
$S_c(3n)$	(in <sup>3</sup> )	629
DC1	(k/')	0.797
M <sub>DC1</sub>	(k)	568
DC2	(k/')	0.150
M <sub>DC2</sub>	(k)	107
DW	(k/')	0.296
M <sub>DW</sub>	(k)	211
$M_L + IM$	(k)	1,015
$M_u$ (Strength I)	(k)	2,937
$\phi_r M_n, \phi_r M_{nc}$	(k)	3,322
$f_s$ DC1	(ksi)	14.0
$f_s$ DC2	(ksi)	2.0
$f_s$ DW	(ksi)	4.0
$f_s$ 1.3(L+IM)	(ksi)	22.7
$f_s$ (Service II)	(ksi)	42.7
$V_r$	(k)	23.4

\* Compact sections

INTERIOR GIRDER REACTION TABLE		Abut.
R <sub>DC1</sub>	(k)	30.1
R <sub>DC2</sub>	(k)	5.7
R <sub>DW</sub>	(k)	11.2
R <sub>L + IM</sub>	(k)	71.8
R <sub>Total</sub>	(k)	118.8

$I_s, S_s$ : Non-composite moment of inertia and section modulus of the steel section used for computing  $f_s$  (Total-Strength I, and Service II) due to non-composite dead loads (In.4 and In.3).

$I_c(n), S_c(n)$ : Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing  $f_s$  (Total-Strength I, and Service II) due to short-term composite live loads (In.4 and In.3).

$I_c(3n), S_c(3n)$ : 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-Strength I, and Service II) due to long-term composite (superimposed) dead loads (In.4 and In.3).

DC1: Un-factored non-composite dead load (kips/ft.).

M<sub>DC1</sub>: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M<sub>DC2</sub>: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M<sub>DW</sub>: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_L + IM$ : Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

$M_u$  (Strength I): Factored design moment (kip-ft.).

$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + IM$

$\phi_r M_n$ : Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

$\phi_r M_{nc}$ : Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).

$f_s$  (Service II): Sum of stresses as computed from the moments below (ksi).

$f_s$  (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).

$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L + IM$

$V_r$ : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

Notes:  
Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.  
All steel beams shall be M270 Grade 50. All other structural steel shall be M270 Grade 36.  
All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.  
For Structural Steel details see sheet 17 of 22.