



FRAMING PLAN



GIRDER MOMENT TABLE *

	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
I_s (in ⁴)	586	586	586	586	586	586	586
I_c (n) (in ⁴)	2,346	-	2,346	-	2,346	-	2,346
I_c (3n) (in ⁴)	1,755	-	1,755	-	1,755	-	1,755
S_s (in ⁻³)	72.7	72.7	72.7	72.7	72.7	72.7	72.7
S_c (n) (in ⁻³)	117	-	117	-	117	-	117
S_c (3n) (in ⁻³)	133	-	133	-	133	-	133
Z (in ⁻³)	-	82.3	-	82.3	-	82.3	-
W (k/ft.)	0.65	1.07	0.65	1.07	0.65	1.07	0.65
M_D (k)	46.4	98.6	24.7	77.2	24.7	98.6	46.4
s_D (k/ft.)	0.417	-	0.417	-	0.417	-	0.417
M_{sD} (k)	34.6	-	23.6	-	23.6	-	34.6
M_L (k)	130	65	114	60	114	65	130
M (Imp) (k)	39	19	34	18	34	19	39
$5_3[M_L + M(imp)]$ (k)	282	140	247	130	247	140	282
M_a (k)	471	312	385	269	385	312	471
M_u (k)	732	343	732	343	732	343	732
f_s^D (non-comp) (k.s.i.)	7.7	16.3	4.1	12.7	4.1	16.3	7.7
f_s^D (comp) (k.s.i.)	3.1	-	2.1	-	2.1	-	3.1
$f_s^{5_3}$ (4+Imp) (k.s.i.)	28.9	23.1	25.3	21.5	25.3	23.1	28.9
f_s (Overload) (k.s.i.)	39.7	39.4	31.5	34.2	31.5	39.4	39.7
f_s (Total) (k.s.i.)	-	-	-	-	-	-	-
VR (k)	38.5	-	27.7	-	27.7	-	38.5

GIRDER REACTION TABLE *

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
R_D (k)	13.1	37.2	32.7	37.2	13.1
R_L (k)	26.3	32.6	32.3	32.6	26.3
Imp. (k)	7.89	9.78	9.69	9.78	7.89
R (Total) (k)	47.29	79.58	74.69	79.58	47.29

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total & Overload).
 $I_{c(n)}$ and $S_{c(n)}$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_{c(3n)}$ and $S_{c(3n)}$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (See AASHTO 10.38)
 VR is the maximum Live Load + Impact shear range in span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 M_a (Applied Moment) = $1.3[M_D + M_{sD} + 5_3(M_L + M(imp))]$.
 The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 f_s (Overload) is the sum of the stresses due to $M_D + M_{sD} + 5_3(M_L + M(imp))$.
 f_s (Total) (Non-compaction section) is the sum of the stresses due to $1.3[M_D + M_{sD} + 5_3(M_L + M(imp))]$.

* Exterior Girder Controls design.

TOP OF BEAM ELEVATIONS (For Fabrication Use Only)

LOCATION	Ø BRG. WEST ABUT.	Ø BRG. EAST ABUT.	PIER 1	PIER 2	PIER 3	SPLICE
Beam 1	646.14	648.90	646.80	647.49	648.21	647.58
Beam 2	646.23	648.98	646.89	647.58	648.30	647.67
Beam 3	646.31	649.07	646.98	647.66	648.39	647.76
Beam 4	646.31	649.07	646.98	647.66	648.39	647.76
Beam 5	646.23	648.98	646.89	647.58	648.30	647.67
Beam 6	646.14	648.90	646.80	647.49	648.21	647.58
** Anticipated Fillet Height (±) (Inches)	0.50"	0.50"	0.72"	0.96"	0.72"	*0.50"

* Fillet above top of splice plate

** Anticipated fillet heights are approximate and are provided for Fabrication use only.

NOTES:

All material shall be AASHTO M270 Grade 50.

NTR indicates notch toughness requirements.

See Sheet S-11 for typical beam elevation and framing details.

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.

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

DESIGNED	KMA
CHECKED	AEU
DRAWN	WJH
CHECKED	RGD

DRAWN: WJH, SMY, RSB, G. GARDNER
 CHECKED: AEU, WJH, RGD
 DATE: 11-16-2007