GIRDER 9 MOMENT TABLE

		0.4 Span 1 or 0.6 Span 3	Pier 1 or Pier 2	0.5 Span 2
Is	(in4)	19,898	40,458	17,341
Ic (n)	(in4)	54,034		44,154
Ic (3n)	(in4)	37,766		31,883
Ic (cr)	(in4)		45,405	
Ss	(in3)	1,177	1,795	916
Sc (n)	(in3)	1,574		1,227
Sc (3n)	(in3)	1,449		1,129
Sc (cr)	(in3)		1,869	
DC1	(k/ft)	0.917	1.039	0.889
M DC1	(k-ft)	1,000	1,856	337
DC2	(k/ft)	0.205	0.205	0.205
M DC2	(k-ft)	229	388	97
DW	(k/ft)	0.240	0.240	0.240
M DW	(k-ft)	268	454	113
M LL+IM	(k-ft)	1,636	1,839	1,317
Mu (Strength I)	(k-ft)	4,801	6,704	3,017
ϕf Mn	(k-ft)	7,260		5,889
fs DC1	(ksi)	10.2	12.4	4.4
fs DC2	(ksi)	1.9	2.5	1.0
fs DW	(ksi)	2.2	2.9	1.2
fs LL+IM	(ksi)	12.5	11.8	12.9
fs (Service II)	(ksi)	30.5	33.2	23.4
0.95 Rh Fyf	(ksi)	47.5	47.5	47.5
fs Total (Strength I)	(ksi)	40.3	43.7	31.1
ϕf Fn	(ksi)		50.0	
Vf	(k)	63.6	62.7	

GIRDER 10 MOMENT TABLE

		0.4 Span 1 or 0.6 Span 3	Pier 1 or Pier 2	0.5 Span 2
Is	(in4)	19,898	40,458	17,341
Ic (n)	(in4)	52,798		43,249
Ic (3n)	(in4)	36,776		31,108
Ic (cr)	(in4)		45,050	
Ss	(in3)	1,177	1,795	916
Sc (n)	(in3)	1,566		1,221
Sc (3n)	(in3)	1,438		1,121
Sc (cr)	(in3)		1,863	
DC1	(k/ft)	0.925	1.047	0.897
M DC1	(k-ft)	1,027	1,826	288
DC2	(k/ft)	0.205	0.205	0.205
M DC2	(k-ft)	233	379	84
DW	(k/ft)	0.240	0.240	0.240
M DW	(k-ft)	273	444	99
M LL+IM	(k-ft)	1,675	1,874	1,338
Mu (Strength I)	(k-ft)	4,916	6,702	2,955
ϕf Mn	(k-ft)	6,966		5,829
fs DC1	(ksi)	10.5	12.2	3.8
fs DC2	(ksi)	1.9	2.4	0.9
fs DW	(ksi)	2.3	2.9	1.1
fs LL+IM	(ksi)	12.8	12.1	13.1
fs (Service II)	(ksi)	31.4	33.2	22.8
0.95 Rh Fyf	(ksi)	47.5	47.5	47.5
fs Total (Strength I)	(ksi)	41.4	43.7	30.4
ϕf Fn	(ksi)		50.0	
Vf	(k)	55.2	55.0	

Is, Ss: Noncomposite moment of inertia and section modulus of the steel section used for computing fs (Strength I and Service II) due to noncomposite dead loads

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 fs (Strength I and Service II) in uncracked sections due to short-term composite live loads

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 fs (Strength I and Service II) in uncracked sections due to long-term composite (superimposed) dead loads

Ic (cr), Sc (cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement used for computing fs (Strength I and Service II) in cracked sections due to both short-term composite live loads and long-term composite dead loads

DC1: Unfactored noncomposite dead load

M DC1: Unfactored moment due to noncomposite dead load

DC2: Unfactored long-term composite (superimposed excluding future wearing surface) dead load

M DC2: Unfactored moment due to long-term composite (superimposed excluding future wearing surface) dead load

DW: Unfactored long-term composite (superimposed future wearing surface only) dead load

M DW: Unfactored moment due to long-term composite (superimposed future wearing surface only) dead load

M LL+IM: Unfactored moment due to live load plus dynamic load allowance (impact)

Mu (Strength I): Factored design moment
1.25 [(M DC1) + (M DC2)] + 1.5 (M DW) + 1.75 (M LL+IM)

ϕf Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1

fs DC1: Unfactored stress at outside face of controlling steel flange due to vertical noncomposite dead loads as calculated below
(M DC1) / Ss

fs DC2: Unfactored stress at outside face of controlling steel flange due to vertical composite dead loads as calculated below
(M DC2) / [Sc (3n)] or (M DC2) / [Sc (cr)] as applicable

fs DW: Unfactored stress at outside face of controlling steel flange due to vertical composite future wearing surface loads as calculated below
(M DW) / [Sc (3n)] or (M DW) / [Sc (cr)] as applicable

fs LL+IM: Unfactored stress at outside face of controlling steel flange due to vertical composite live plus impact loads as calculated below
(M LL+IM) / [Sc (n)] or (M LL+IM) / [Sc (cr)] as applicable

fs (Service II): Sum of stresses as computed below
(fs DC1) + (fs DC2) + (fs DW) + 1.3 (fs LL+IM)

0.95 Rh Fyf: Composite stress capacity for Service II loading according to Article 6.10.4.2

fs Total (Strength I): Sum of stresses as computed below
1.25 [(fs DC1) + (fs DC2)] + 1.5 (fs DW) + 1.75 (fs LL+IM)

ϕf Fn: Composite factored flexural resistance of controlling flange for Strength I loading according to Article 6.10.7.2 or 6.10.8

Vf: Maximum vertical fatigue shear force range under Fatigue I load combination computed according to Article 6.10.10

GIRDER 2 REACTION TABLE

		S. Abut.	Pier 1	Pier 2	N. Abut.
R DC1	(k)	40.1	160.5	160.5	40.1
R DC2	(k)	8.9	33.0	33.0	9.0
R DW	(k)	10.5	38.6	38.6	10.5
R LL+IM	(k)	87.8	180.0	180.0	96.0
R Total	(k)	147.3	412.1	412.0	155.5