

INTERIOR GIRDER MOMENT TABLE																
	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.5 Sp. 5	Pier 5	0.5 Sp. 6	Pier 6	0.5 Sp. 7	Pier 7	0.6 Sp. 8	
I_s	(in ⁴)	48067	50090	22185	34020	21153	34020	18868	28869	18868	34020	23653	28869	18868	28869	20051
I_c (n)	(in ⁴)	100694	-	58386	-	54700	-	47074	-	47074	-	58762	-	47074	-	50930
I_c (3n)	(in ⁴)	74032	-	42767	-	40410	-	35388	-	35388	-	43419	-	35388	-	37953
S_s	(in ³)	2027.3	1908.2	992.6	1334.1	916.1	1334.1	762.3	1143.3	762.3	1334.1	1013.4	1143.3	762.3	1143.3	839.7
S_c (n)	(in ³)	2505.4	-	1367.7	-	1267.1	-	1065.7	-	1065.7	-	1370.7	-	1065.7	-	1166.5
S_c (3n)	(in ³)	2322.9	-	1258.6	-	1165.2	-	977.3	-	977.3	-	1262.2	-	977.3	-	1071.5
DC1	(k/')	1.17	1.17	1.03	1.09	1.02	1.08	1.01	1.06	1.01	1.09	1.04	1.06	1.01	1.06	1.02
M_{DC1}	(k)	1663	2383	573	1571	646	1596	557	1253	431	1648	866	1319	252	1341	912
DC2	(k/')	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
M_{DC2}	(k)	227	296	119	216	118	212	106	176	87	218	150	180	61	176	150
DW	(k/')	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
M_{DW}	(k)	607	790	318	576	313	566	282	470	231	581	401	479	164	469	400
M_{LL+IM}	(k)	2334	1848	1712	1575	1719	1577	1552	1426	1538	1558	1790	1392	1341	1338	1646
M_u (Strength I)	(k)	7358	7768	4338	5854	4433	5869	3968	4987	3686	5931	5004	5028	2984	4941	4808
* $\phi_r M_n$, $\phi_r M_{nc}$	(k)	11426	8719	6854	6117	6391	6117	5348	5258	5441	6116	6840	5258	5572	5258	5650
f_s DC1	(ksi)	9.84	14.99	6.93	14.13	8.46	14.36	8.77	13.15	6.78	14.82	10.25	13.84	3.97	14.07	13.03
f_s DC2	(ksi)	1.17	1.86	1.13	1.94	1.22	1.91	1.30	1.85	1.07	1.96	1.43	1.89	0.75	1.85	1.68
f_s DW	(ksi)	3.14	4.97	3.03	5.18	3.22	5.09	3.46	4.93	2.84	5.23	3.81	5.03	2.01	4.92	4.48
f_s 1.3 M_{LL+IM}	(ksi)	14.53	15.11	19.53	18.42	21.16	18.44	22.72	19.46	22.51	18.22	20.37	18.99	19.63	18.26	22.01
f_s (Service II)	(ksi)	28.7	36.9	30.6	39.7	34.1	39.8	36.2	39.4	33.2	40.2	35.9	39.8	26.4	39.1	41.2
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
** V_r	(k)	62.8	-	47.1	-	48.2	-	48.3	-	48.8	-	51.4	-	43.1	-	59.2

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 (in⁴ and in³).

$I_c(n), S_c(n)$: 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 (in⁴ and in³).

$I_c(3n), S_c(3n)$: 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 (in⁴ and in³).

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

M_{DC1} : 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_{DC2} : 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_{DW} : 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).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_L + IM$

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.

* Compact Sections
 ** Non-compact and slender sections

INTERIOR GIRDER REACTION TABLE HL93 Loading										
	S. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	N. Abut.	
R_{DC1}	(k)	62.5	176.8	134.7	135.1	119.2	137.8	123.4	124.3	43.3
R_{DC2}	(k)	8.3	23.7	20.1	19.7	18.1	20.1	18.5	18.3	6.7
R_{DW}	(k)	22.0	63.2	53.5	52.5	48.3	53.5	49.3	48.9	17.9
R_{LL+IM}	(k)	105.6	195.2	185.5	185.0	177.1	185.0	177.2	172.2	96.9
R_{Total}	(k)	198.4	458.9	393.8	392.3	362.7	396.4	368.3	363.7	164.8