GIRDER 5W MOMENT TABLE

		0.4 Span 1	Pier 24	0.5 Span 2	Pier 25	0.5 Span 3	Pier 26	0.5 Span 4	Pier 27	0.6 Span 5
I_s	(in^4)	211,175	398,895	211,175	398,895	211,175	429,447	211,175	459,997	211,175
$I_c(n)$	(in^4)	408,332	424,921	408,332	424,921	416,509	460,595	439,207	494,329	445,039
$I_c(3n)$	(in^4)	299,765	424,921	299,765	424,921	304,788	460,595	319,530	494,329	323,520
S_s	(in^3)	4,097	6,879	4,097	6,879	4,097	7,416	4,097	7,953	4,097
$S_c(n)$	(in^3)	5,362	7,621	5,362	7,621	5,397	8,317	5,489	8,957	5,512
$S_c(3n)$	(in^3)	4,787	7,621	4,787	7,621	4,820	8,317	4,910	8,957	4,933
S_{xt}	(in^3)	81	202	81	202	81	240	81	282	81
DC1	(k/')	1.28	1.48	1.28	1.48	1.33	1.66	1.48	1.79	1.52
M_{DC1}	('k)	3,569	9,055	3,250	9,207	3,378	10,214	3,681	11,178	4,222
DC2	(k/')	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
M_{DC2}	('k)	493	1,160	455	1,185	470	1,215	459	1,224	513
DW	(k/')	0.33	0.33	0.33	0.33	0.35	0.39	0.42	0.43	0.43
M_{DW}	('k)	937	2,213	870	2,244	898	2,647	1,124	3,037	1,277
M_{LL+IM}	('k)	3,344	4,281	3,504	4,637	3,843	5,267	4,301	5,470	4,335
M_u (Strength I) *	('k)	12,953	24,758	12,672	25,694	13,526	28,847	15,107	31,112	16,193
M_{bl}	('k)	14	19	26	19	34	22	32	24	14
f_s DC1	(ksi)	10.46	15.80	9.52	16.06	9.90	16.53	10.78	16.87	12.37
f_s DC2	(ksi)	1.24	1.83	1.14	1.87	1.17	1.75	1.12	1.64	1.25
f_s DW	(ksi)	2.35	3.48	2.18	3.53	2.24	3.82	2.75	4.07	3.11
f_s 1.3(LL+IM)	(ksi)	9.73	8.76	10.20	9.49	11.11	9.88	12.22	9.53	12.27
f_l	(ksi)	2.06	1.10	3.84	1.14	5.04	1.11	4.74	1.03	2.05
f_s (Service II)	(ksi)	23.77	29.87	23.04	30.95	24.41	31.98	26.87	32.10	28.99
f_s (Total)(Strength I)*	(ksi)	32.80	41.00	31.84	42.51	33.75	43.97	37.23	44.16	40.11
F_{cr} (Service II)	(ksi)	39.35	47.91	39.35	47.91	39.35	47.77	39.35	47.65	39.35
V_f	(k)	29.70	40.97	31.46	41.83	32.91	42.00	29.91	38.29	30.32
F_{cr}	(ksi)	50.00	49.60	50.00	49.60	50.00	49.60	50.00	49.60	50.00

* LRFD Strength I Load Combinations include an Operational Importance Factor, η_I = 1.05

GIRDER 6W MOMENT TABLE

		0.4 Span 1	Pier 24	0.5 Span 2	Pier 25	0.5 Span 3	Pier 26	0.5 Span 4	Pier 27	0.6 Span 5
I_s	(in^4)	211,175	398,895	211,175	398,895	211,175	429,447	211,175	459,997	211,175
$I_c(n)$	(in^4)	409,747	425,216	409,747	425,216	414,266	458,373	425,928	490,478	429,074
$I_c(3n)$	(in^4)	300,624	425,216	300,624	425,216	303,395	458,373	310,758	490,478	312,798
S_s	(in^3)	4,097	6,879	4,097	6,879	4,097	7,416	4,097	7,953	4,097
$S_c(n)$	(in^3)	5,367	7,629	5,367	7,629	5,387	8,250	5,436	8,839	5,449
$S_c(3n)$	(in^3)	4,793	7,629	4,793	7,629	4,810	8,250	4,856	8,839	4,869
S_{xt}	(in^3)	81	202	81	202	81	240	81	282	81
DC1	(k/')	1.36	1.57	1.36	1.57	1.39	1.68	1.48	1.77	1.50
M_{DC1}	('k)	3,385	9,217	3,173	9,523	3,339	10,487	3,586	11,255	4,033
DC2	(k/')	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
M_{DC2}	('k)	466	1,169	444	1,208	453	1,220	434	1,213	476
DW	(k/')	0.33	0.33	0.33	0.33	0.35	0.39	0.42	0.43	0.43
M_{DW}	('k)	887	2,228	845	2,292	873	2,659	1,056	3,003	1,187
M_{LL+IM}	('k)	4,004	5,311	4,257	5,869	4,549	6,511	4,803	6,503	4,709
M_u (Strength I) *	('k)	13,808	26,901	13,901	28,477	14,711	31,517	15,765	33,043	16,440
M_{bl}	('k)	15	20	28	21	36	24	32	25	14
f_s DC1	(ksi)	9.92	16.08	9.30	16.61	9.78	16.97	10.50	16.98	11.81
f_s DC2	(ksi)	1.17	1.84	1.11	1.90	1.13	1.77	1.07	1.65	1.17
f_s DW	(ksi)	2.22	3.50	2.12	3.61	2.18	3.87	2.61	4.08	2.92
f_s 1.3(LL+IM)	(ksi)	11.64	10.86	12.37	12.00	13.17	12.31	13.79	11.48	13.48
f_l	(ksi)	2.20	1.20	4.22	1.27	5.39	1.18	4.80	1.06	2.08
f_s (Service II)	(ksi)	24.94	32.28	24.90	34.12	26.26	34.92	27.97	34.18	29.39
f_s (Total)(Strength I)*	(ksi)	34.49	44.39	34.48	46.94	36.37	48.09	38.79	47.09	40.71
F_{cr} (Service II)	(ksi)	39.35	47.91	39.35	47.91	39.35	47.77	39.35	47.65	39.35
V_f	(k)	36.75	47.51	35.76	47.56	37.89	54.36	39.76	54.45	42.12
F_{cr}	(ksi)	50.00	49.60	50.00	49.60	50.00	49.60	50.00	49.60	50.00

* LRFD Strength I Load Combinations include an Operational Importance Factor, η_I = 1.05

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 $in.^3$).

S_{xt}: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange ($in.^3$).

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_{LL+IM}: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{LL+IM}$

M_{bl}: Factored lateral bending moment for controlling flange plate (kip-ft.).

f_l: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).
$M_{DC1} + M_{DC2} + M_{DW} + 1.3\ M_{LL+IM}$

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{LL+IM}$

F_{cr} (Service II): Critical flange stress at Service II computed according to Article 6.10.4.2 (ksi).

F_{cr}: Critical flange stress computed according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range computed according to Article 6.10.10.

Note:
M_{LL} and R_{LL} include the effects of centrifugal force and superelevation.

MAXIMUM GIRDER REACTION TABLE

		Pier 23	Pier 24	Pier 25	Pier 26	Pier 27	E. Abut.
R_{DC1}	(k)	116.8	453.9	442.0	487.7	523.3	130.2
R_{DC2}	(k)	15.8	56.9	55.8	56.8	56.5	15.3
R_{DW}	(k)	30.0	108.7	105.9	124.3	139.8	37.9
R_{LL+IM}	(k)	125.4	267.3	268.6	297.2	271.5	117.3
R_{Total}	(k)	288.0	886.7	872.2	966.0	991.1	300.7