

### TABLE OF FOUNDATION LOADS - 0° SKEW

Span Average	Drilled Shaft Loads				Pile Load												
					3 Pile Ftg				4 Pile Ftg				5 Pile Ftg				
	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	
Ft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	83	28	111	153	31	10	41	56	24	7	31	42	20	6	26	36	
45	90	30	120	165	34	10	44	60	26	8	34	47	22	6	28	38	
50	97	31	128	176	36	11	47	64	28	8	36	49	23	7	30	41	
55	104	33	137	188	38	11	49	67	29	9	38	52	24	7	31	42	
60	110	34	144	197	40	12	52	71	31	9	40	55	26	7	33	45	
65	117	35	152	208	43	12	55	75	33	9	42	57	27	7	34	46	
70	124	37	161	220	45	13	58	79	35	10	45	61	28	8	36	49	
75	131	38	169	230	47	13	60	82	36	10	46	63	30	8	38	52	
80	138	39	177	241	49	13	62	84	38	10	48	65	31	8	39	53	
85	145	40	185	251	52	14	66	90	40	10	50	68	33	8	41	55	
90	151	42	193	262	54	14	68	92	41	11	52	71	34	9	43	58	
95	158	43	201	273	56	15	71	96	43	11	54	73	35	9	44	60	
100	165	44	209	283	59	15	74	100	45	11	56	76	37	9	46	62	
105	172	45	217	294	61	15	76	103	47	12	59	80	38	9	47	63	
110	179	46	225	304	63	16	79	107	48	12	60	81	39	10	49	66	
115	186	47	233	315	65	16	81	109	50	12	62	84	41	10	51	69	
120	192	49	241	326	68	17	85	115	52	13	65	88	42	10	52	70	

### TABLE OF FOUNDATION LOADS - 15° SKEW

Span Average	Drilled Shaft Loads				Pile Load												
					3 Pile Ftg				4 Pile Ftg				5 Pile Ftg				
	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	
Ft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	83	28	111	153	31	10	41	56	24	7	31	42	20	6	26	36	
45	90	30	120	165	34	10	44	60	26	8	34	47	22	6	28	38	
50	97	31	128	176	36	11	47	64	28	8	36	49	23	7	30	41	
55	104	33	137	188	38	11	49	67	29	9	38	52	24	7	31	42	
60	111	34	145	198	40	12	52	71	31	9	40	55	26	7	33	45	
65	118	35	153	209	43	12	55	75	33	9	42	57	27	7	34	46	
70	124	37	161	220	45	13	58	79	35	10	45	61	28	8	36	49	
75	131	38	169	230	47	13	60	82	36	10	46	63	30	8	38	52	
80	138	39	177	241	50	13	63	85	38	10	48	65	31	8	39	53	
85	145	40	185	251	52	14	66	90	40	10	50	68	33	8	41	55	
90	152	42	194	264	54	14	68	92	41	11	52	71	34	9	43	58	
95	159	43	202	274	56	15	71	96	43	11	54	73	35	9	44	60	
100	165	44	209	283	59	15	74	100	45	11	56	76	37	9	46	62	
105	172	45	217	294	61	15	76	103	47	12	59	80	38	9	47	63	
110	179	46	225	304	63	16	79	107	48	12	60	81	39	10	49	66	
115	186	47	233	315	65	16	81	109	50	12	62	84	41	10	51	69	
120	193	49	242	327	68	17	85	115	52	13	65	88	42	10	52	70	

### TABLE OF FOUNDATION LOADS - 30° SKEW

Span Average	Drilled Shaft Loads				Pile Load												
					3 Pile Ftg				4 Pile Ftg				5 Pile Ftg				
	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	
Ft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	85	28	113	155	32	10	42	58	25	7	32	44	21	6	27	37	
45	92	30	122	168	34	10	44	60	26	8	34	47	22	6	28	38	
50	99	31	130	178	36	11	47	64	28	8	36	49	23	7	30	41	
55	105	33	138	189	39	11	50	68	30	9	39	53	25	7	32	44	
60	112	34	146	200	41	12	53	72	32	9	41	56	26	7	33	45	
65	119	35	154	210	43	12	55	75	33	9	42	57	27	7	34	46	
70	126	37	163	222	46	13	59	80	35	10	45	61	29	8	37	50	
75	133	38	171	233	48	13	61	83	37	10	47	64	30	8	38	52	
80	140	39	179	243	50	13	63	85	38	10	48	65	32	8	40	54	
85	146	40	186	253	52	14	66	90	40	10	50	68	33	8	41	55	
90	153	42	195	265	55	14	69	93	42	11	53	72	34	9	43	58	
95	160	43	203	275	57	15	72	98	44	11	55	74	36	9	45	61	
100	167	44	211	286	59	15	74	100	45	11	56	76	37	9	46	62	
105	174	45	219	296	61	15	76	103	47	12	59	80	38	9	47	63	
110	181	46	227	307	64	16	80	108	49	12	61	82	40	10	50	68	
115	187	47	234	316	66	16	82	111	50	12	62	84	41	10	51	69	
120	194	49	243	328	68	17	85	115	52	13	65	88	42	10	52	70	

### TABLE OF FOUNDATION LOADS - 45° SKEW

Span Average	Drilled Shaft Loads				Pile Load												
					3 Pile Ftg				4 Pile Ftg				5 Pile Ftg				
	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)	
Ft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Shaft	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	88	28	116	159	33	10	43	59	25	7	32	44	21	6	27	37	
45	94	30	124	170	35	10	45	61	27	8	35	48	23	6	29	39	
50	101	31	132	181	37	11	48	66	29	8	37	50	24	7	31	42	
55	108	33	141	193	40	11	51	69	31	9	40	55	25	7	32	44	
60	115	34	149	203	42	12	54	74	32	9	41	56	27	7	34	46	
65	122	35	157	214	44	12	56	76	34	9	43	58	28	7	35	47	
70	129	37	166	226	46	13	59	80	36	10	46	63	29	8	37	50	
75	135	38	173	235	49	13	62	84	37	10	47	64	31	8	39	53	
80	142	39	181	246	51	13	64	87	39	10	49	66	32	8	40	54	
85	149	40	189	256	53	14	67	91	41	10	51	69	33	8	41	55	
90	156	42	198	269	55	14	69	93	42	11	53	72	35	9	44	60	
95	163	43	206	279	58	15	73	99	44	11	55	74	36	9	45	61	
100	169	44	213	288	60	15	75	101	46	11	57	77	38	9	47	63	
105	176	45	221	299	62	15	77	104	48	12	60	81	39	9	48	65	
110	183	46	229	309	65	16	81	109	49	12	61	82	40	10	50	68	
115	190	47	237	320	67	16	83	112	51	12	63	85	42	10	52	70	
120	197	49	246	332	69	17	86	116	53	13	66	89	43	10	53	71	

- (1) 1.00DC + 1.00LL (all other loads not included)
- (2) 1.25DC + 1.75LL (all other loads not included)

**GENERAL NOTES:**  
 Designed according to AASHTO LRFD Bridge Design Specifications.  
 Foundation loads based on "H" = 36 ft.

FOR DESIGNER'S INFORMATION ONLY.  
 Loads included here within are to be added to the Foundation Notes sheet.

The values shown on these sheets are applicable for use only with the I-girder bents shown on the standards BIG-30, BIG-30-15, BIG-30-30, and BIG-30-45.

NOT A STANDARD / NOT FOR INCLUSION IN THE PLANS.

**HL93 LOADING**



**BENT FOUNDATION LOADS**  
**PRESTR CONCRETE I-GIRDERS**  
**TYPE Tx28 - Tx54**  
**30' ROADWAY**  
**IG-BFL30-24**

FILE: IG-BFL30-24.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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REVISIONS	DIST	COUNTY	SHEET NO.	