

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

TABLE OF FOUNDATION LOADS - 0° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	54	21	75	104	57	21	78	108
45		59	23	82	114	62	23	85	118
50		64	24	88	122	68	24	92	127
55	20	68	25	93	129	73	25	98	135
60		73	26	99	137	78	26	104	143
65		78	27	105	145	83	27	110	151
70	24	83	28	111	153	89	28	117	160
75		88	29	117	161	94	29	123	168
80		93	30	123	169	99	30	129	176
85		98	30	128	175	104	30	134	183

TABLE OF FOUNDATION LOADS - 15° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	54	21	75	104	57	21	78	108
45		59	23	82	114	63	23	86	119
50		64	24	88	122	68	24	92	127
55	20	69	25	94	130	73	25	98	135
60		74	26	100	138	78	26	104	143
65		79	27	106	146	84	27	111	152
70	24	83	28	111	153	89	28	117	160
75		88	29	117	161	94	29	123	168
80		93	30	123	169	100	30	130	178
85		98	30	128	175	105	30	135	184

TABLE OF FOUNDATION LOADS - 30° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	55	21	76	106	58	21	79	109
45		60	23	83	115	64	23	87	120
50		65	24	89	123	69	24	93	128
55	20	70	25	95	131	74	25	99	136
60		75	26	101	139	79	26	105	144
65		80	27	107	147	85	27	112	154
70	24	84	28	112	154	90	28	118	162
75		89	29	118	162	95	29	124	170
80		94	30	124	170	101	30	131	179
85		99	30	129	176	106	30	136	185

TABLE OF FOUNDATION LOADS - 45° SKEW									
Span Average	Minimum Concrete Pile Size	Tx28, Tx34 & Tx40 GIRDERS				Tx46 & Tx54 GIRDERS			
		Pile Loads				Pile Loads			
		DC	LL	Service I (1)	Strength I (2)	DC	LL	Service I (1)	Strength I (2)
Ft	In.	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile	Tons/Pile
40	18	57	21	78	108	60	21	81	112
45		62	23	85	118	66	23	89	123
50		67	24	91	126	71	24	95	131
55	20	72	25	97	134	76	25	101	139
60		77	26	103	142	82	26	108	148
65		82	27	109	150	87	27	114	156
70	24	87	28	115	158	92	28	120	164
75		91	29	120	165	97	29	126	172
80		96	30	126	173	103	30	133	181
85		101	30	131	179	108	30	138	188

- (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.
Pile foundation loads based on exposed height of 24 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 trestle bents shown on the standards BTIG-32, BTIG-32-15, BTIG-32-30, and BTIG-32-45.

NOT A STANDARD / NOT FOR INCLUSION IN THE PLANS.

HL93 LOADING

				Bridge Division Standard	
TRESTLE BENT FOUNDATION LOADS PRESTR CONCRETE I-GIRDERS 32' ROADWAY IG-BTFL32-24					
FILE: IG-BTFL32-24.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT	
©TxDOT	May 2024	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY	SHEET NO.	

DATE:
FILE: