AASHO GIRDERS
TYPE "B" LOAD TABLE

Normal Weight Concrete

Section Properties						
Designation	A ($in.^2$)	I ($in.^4$)	y_b (in.)	Z_b ($in.^3$)	Z_t ($in.^3$)	wt (plf)
AASHO-II	369	50,979	15.83	3220	2527	384
AASHO-III	560	125,390	20.27	6186	5070	583
AASHO-IV	789	260,741	24.73	10,544	8908	822

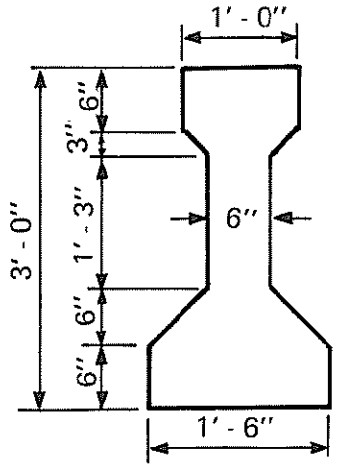
Key

3612 – Safe superimposed load, plf
1.09 – Anticipated initial camber, in.
0.80 – Deflection due to superimposed load shown, in.

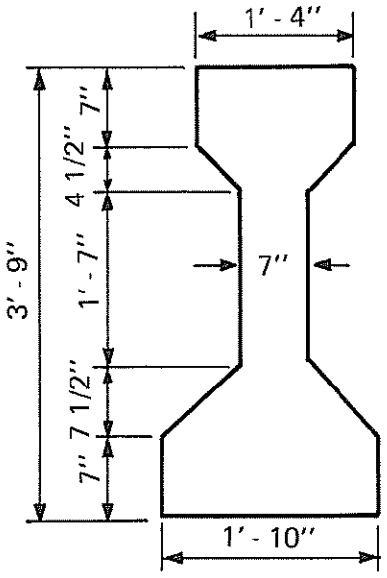
Designation	No. Strand	e_e / e_c	Span, ft.																	
			30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64
AASHO-II	14	7.83 / 13.12	4922	4287	3761	3321	2948	2630	2356	2118	1911	1729	1569							
			0.57	0.64	0.71	0.78	0.85	0.93	1.00	1.08	1.15	1.22	1.27							
			0.41	0.46	0.52	0.57	0.63	0.69	0.75	0.82	0.88	0.95	1.01							
AASHO-III	22	10.27 / 17.50	9996	8727	7676	6795	6049	5412	4864	4390	3975	3612	3291							
			0.48	0.54	0.60	0.67	0.74	0.80	0.88	0.95	1.02	1.09	1.17							
			0.34	0.38	0.43	0.48	0.53	0.58	0.63	0.69	0.75	0.80	0.86							
AASHO-IV	32	2.86 / 21.26						9455	8513	7697	6984	6359	5807	5318	4882	4492	4142	3826	3540	3281
								0.61	0.66	0.72	0.77	0.83	0.89	0.94	1.00	1.05	1.11	1.16	1.21	1.26
								0.49	0.53	0.58	0.63	0.68	0.73	0.78	0.84	0.89	0.94	1.00	1.05	1.11

Notes: All safe loads shown on this sheet are controlled by ultimate.
Additional top reinforcing required.
Strands are harped at 2 points near midspan.
f'_c = 5000 psi f_{pu} = 270,000 psi

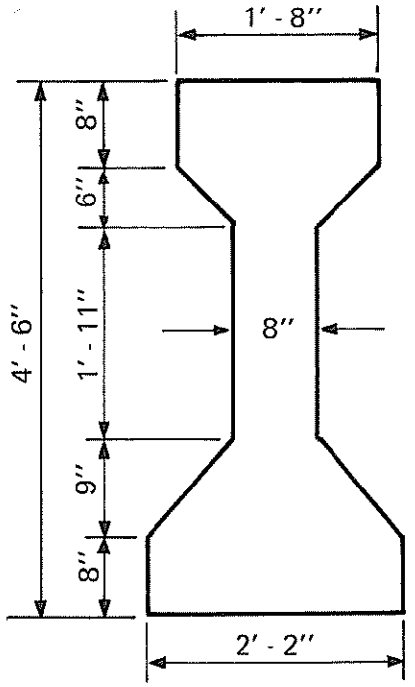
Values below heavy line require release strengths higher than 3500 psi



AASHO-II



AASHO-III



AASHO-IV