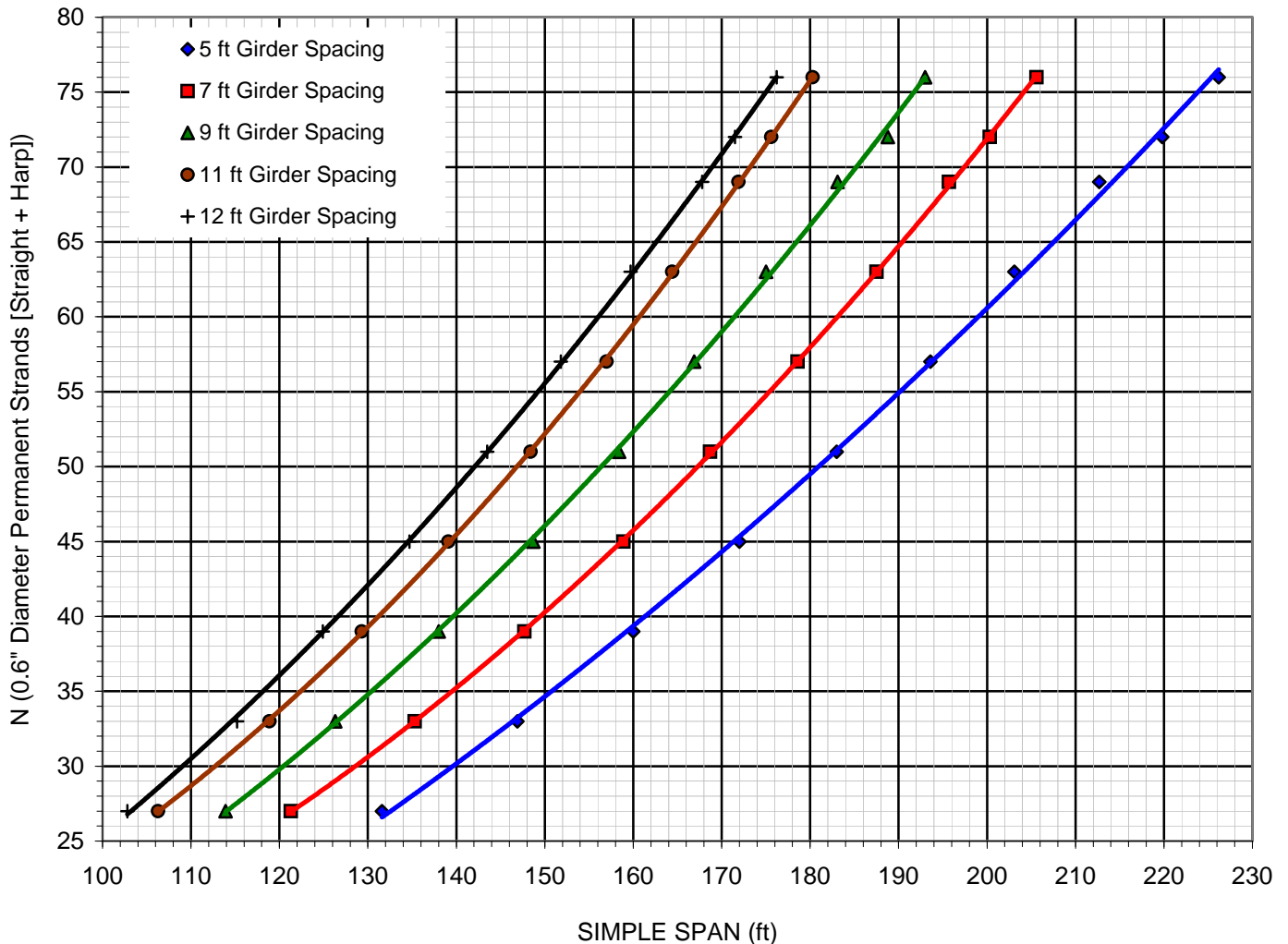
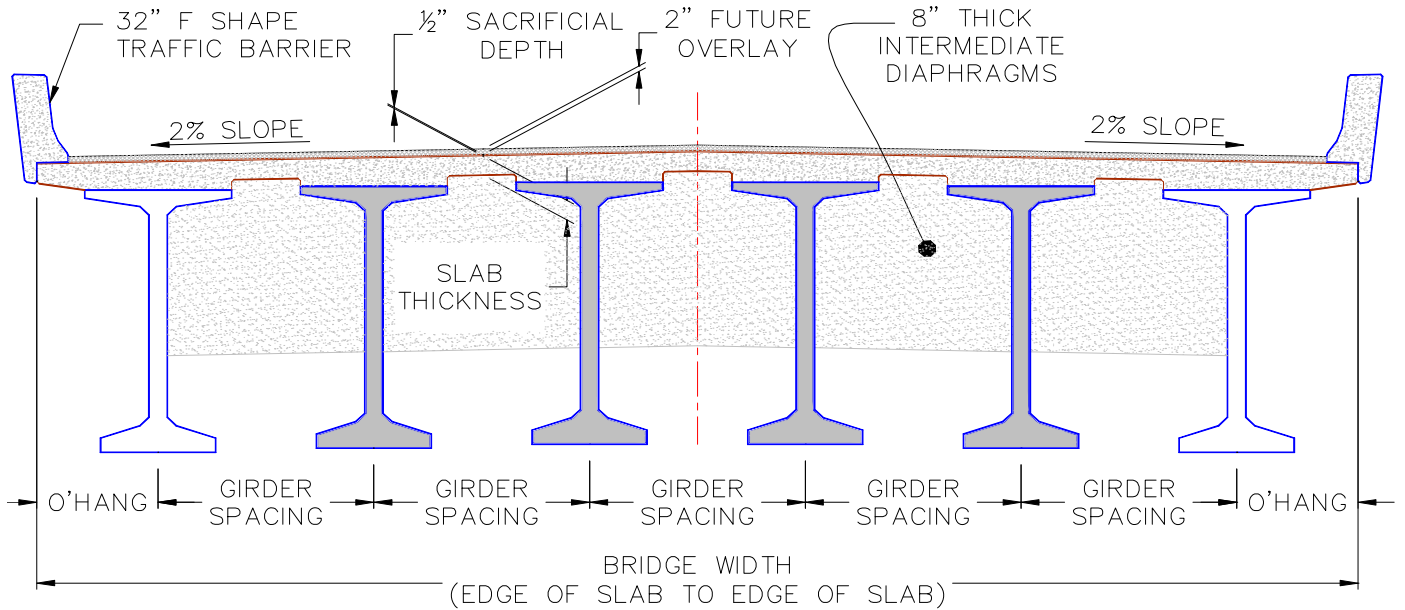




WSDOT WF95G GIRDER

AASHTO LRFD SPECIFICATIONS - ZERO TENSION - INTERIOR GIRDERS





WSDOT WF95G GIRDER SERIES SPAN CAPABILITY DATA - INTERIOR GIRDER - 5ft SPACING

Interior Girder w/barrier load (6 girder bridge)
Simple Span lengths are CL bearing to CL bearing
Normal Exposure & 75% humidity
No Horizontal or Vertical Curve
2% roadway crown slope
End Type "A" Connections

Simple Span Length (ft)	Girder Length (ft)	Girder Weight (kips)	Strand Qty.			Girder f_{ci} For Design (psi)	Girder f_c For Design (psi)	Girder Spacing (ft)	Bridge Width (ft)	Overhang (ft)	A' Dim used for Design (in)	A' Dim Required (in)	Required f_{ci} @ Release (psi)	Lift Point from Ends (ft)	Required f_c @ Hauling (psi)	Bunk Point from Ends (ft)	Truck Rotational Stiffness, $K\theta$	Clear Span Between Bunks (ft)
			Straight	Harped	Temp Top													
131.60	135.02	157.5	18	9	6	7,500	10,000	5.00	31.75	3.375	9.25	9.02	2,706	3.00	4,087	12.00	36,000	111.0
146.90	150.32	175.4	22	11	6	7,500	10,000	5.00	31.75	3.375	9.25	9.15	3,272	3.00	5,018	17.00	40,000	116.3
160.00	163.42	190.7	26	13	6	7,500	10,000	5.00	31.75	3.375	9.50	9.29	3,831	3.00	5,904	20.25	44,000	122.9
172.00	175.42	204.7	30	15	6	7,500	10,000	5.00	31.75	3.375	9.50	9.42	4,661	7.25	6,308	15.00	80,000	145.4
183.00	186.42	217.5	34	17	6	7,500	10,000	5.00	31.75	3.375	9.75	9.54	5,516	11.50	7,143	15.00	80,000	156.4
193.60	197.02	229.9	38	19	6	7,500	10,000	5.00	31.75	3.375	9.75	9.66	6,358	15.50	7,994	15.00	80,000	167.0
203.10	206.52	241.0	42	21	6	7,500	10,000	5.00	31.75	3.375	10.00	9.76	7,190	19.00	8,876	15.00	80,000	176.5
212.70	216.12	252.2	46	23	8	7,500	10,000	5.00	31.75	3.375	9.75	9.63	7,865	21.75	9,671	17.75	80,000	180.6
219.80	223.22	260.4	46	26	8	8,000	10,000	5.00	31.75	3.375	9.25	9.10	8,254	23.75	10,139	21.25	80,000	180.7
226.20	229.62	267.9	46	30	8	8,000	10,000	5.00	31.75	3.375	9.00	8.82	8,778	26.00	10,645	27.50	80,000	174.6

Simple Span Length (ft)	Girder Length (ft)	Girder Weight (kips)	Capacity / Demand Ratios											Qty. of Intermediate Diaphragms	Lifting		Hauling	
			Service I Release	Service I Erect	Service I Stage I	Service I Stage 2	Service I Stage 3	Service IA Stage 3	Service III Stage 3	Flexure	Shear	Horizontal Shear	Longitudinal Shear		F _{Scr}	F _{SF}	F _{Scr}	F _{Scroll}
131.60	135.02	157.5	2.95	1.39	1.37	3.09	3.35	3.45	1.00	1.08	1.67	6.98	1.25	3	3.19	2.43	1.54	1.50
146.90	150.32	175.4	2.43	1.46	1.44	2.54	2.74	2.87	1.00	1.14	1.68	6.34	1.27	3	2.13	1.67	1.45	1.50
160.00	163.42	190.7	2.06	1.54	1.51	2.17	2.33	2.46	1.00	1.19	1.56	5.87	1.29	3	1.55	1.24	1.35	1.50
172.00	175.42	204.7	1.77	1.61	1.58	1.89	2.02	2.16	1.00	1.23	1.48	5.48	1.29	4	1.51	1.22	1.80	2.12
183.00	186.42	217.5	1.56	1.48	1.58	1.68	1.79	1.93	1.00	1.26	1.42	5.18	1.29	4	1.52	1.24	1.48	1.92
193.60	197.02	229.9	1.39	1.33	1.43	1.52	1.60	1.75	1.00	1.28	1.37	4.93	1.29	4	1.52	1.26	1.23	1.74
203.10	206.52	241.0	1.25	1.21	1.30	1.38	1.45	1.59	1.00	1.29	1.32	4.71	1.29	4	1.52	1.28	1.03	1.58
212.70	216.12	252.2	1.16	1.11	1.20	1.27	1.33	1.47	1.00	1.30	1.29	4.53	1.29	4	1.50	1.24	1.05	1.51
219.80	223.22	260.4	1.23	1.10	1.18	1.25	1.27	1.40	1.00	1.29	1.27	4.44	1.28	4	1.50	1.24	1.00	1.51
226.20	229.62	267.9	1.22	1.09	1.17	1.19	1.20	1.33	1.00	1.28	1.24	4.35	1.24	4	1.51	1.26	1.00	1.61



WSDOT WF95G GIRDER SERIES

SPAN CAPABILITY DATA - INTERIOR GIRDER - 12ft SPACING

Interior Girder w/barrier load (6 girder bridge)
 Simple Span lengths are CL bearing to CL bearing
 Normal Exposure & 75% humidity
 No Horizontal or Vertical Curve
 2% roadway crown slope
 End Type "A" Connections

Simple Span Length (ft)	Girder Length (ft)	Girder Weight (kips)	Strand Qty.			Girder f_{ci} For Design (psi)	Girder f_c For Design (psi)	Girder Spacing (ft)	Bridge Width (ft)	Overhang (ft)	A' Dim used for Design (in)	A' Dim Required (in)	Required f_{ci} @ Release (psi)	Lift Point from Ends (ft)	Required f_c @ Hauling (psi)	Bunk Point from Ends (ft)	Truck Rotational Stiffness, $K\theta$	Clear Span Between Bunks (ft)
			Straight	Harped	Temp Top													
102.80	106.22	123.9	18	9	6	7,500	10,000	12.00	66.75	3.375	10.00	9.73	3,259	1.75	4,124	20.25	28,000	65.7
115.20	118.62	138.4	22	11	6	7,500	10,000	12.00	66.75	3.375	10.00	9.97	3,950	1.75	4,981	12.00	32,000	94.6
124.90	128.32	149.7	26	13	6	7,500	10,000	12.00	66.75	3.375	10.25	10.21	4,705	3.00	5,823	12.00	36,000	104.3
134.70	138.12	161.2	30	15	6	7,500	10,000	12.00	66.75	3.375	10.50	10.49	5,356	3.00	6,728	15.00	36,000	108.1
143.50	146.92	171.4	34	17	6	7,500	10,000	12.00	66.75	3.375	11.00	10.79	5,990	3.00	7,517	14.25	40,000	118.4
151.80	155.22	181.1	38	19	6	7,500	10,000	12.00	66.75	3.375	11.25	11.09	6,599	3.00	8,280	14.25	44,000	126.7
159.70	163.12	190.3	42	21	8	7,500	10,000	12.00	66.75	3.375	11.50	11.29	7,145	3.25	9,050	20.00	44,000	123.1
167.80	171.22	199.8	46	23	8	8,000	10,000	12.00	66.75	3.375	11.50	11.28	7,916	6.00	9,809	20.00	48,000	131.2
171.50	174.92	204.1	46	26	8	8,000	10,000	12.00	66.75	3.375	11.50	11.29	8,300	7.50	9,706	12.00	80,000	150.9
176.20	179.62	209.6	46	30	8	8,000	10,000	12.00	66.75	3.375	11.50	11.30	8,809	9.50	10,186	12.00	80,000	155.6

Simple Span Length (ft)	Girder Length (ft)	Girder Weight (kips)	Capacity / Demand Ratios											Qty. of Intermediate Diaphragms	Lifting		Hauling	
			Service I Release	Service I Erect	Service I Stage I	Service I Stage 2	Service I Stage 3	Service IA Stage 3	Service III Stage 3	Flexure	Shear	Horizontal Shear	Longitudinal Shear		FScr	FSF	FScr	Fscroll
102.80	106.22	123.9	2.27	0.95	1.36	3.08	3.93	3.97	1.00	1.04	0.94	3.68	1.08	2	6.41	4.92	2.07	1.61
115.20	118.62	138.4	1.94	0.99	1.43	2.53	3.20	3.29	1.00	1.12	0.99	3.42	1.15	2	4.31	3.42	1.64	1.57
124.90	128.32	149.7	1.65	1.02	1.50	2.16	2.69	2.82	1.00	1.18	1.01	3.18	1.20	3	3.53	2.87	1.51	1.58
134.70	138.12	161.2	1.44	1.09	1.56	1.89	2.33	2.47	1.00	1.23	1.03	2.98	1.22	3	2.68	2.22	1.29	1.50
143.50	146.92	171.4	1.29	1.15	1.58	1.68	2.05	2.19	1.00	1.28	1.05	2.82	1.24	3	2.12	1.78	1.16	1.50
151.80	155.22	181.1	1.17	1.16	1.43	1.52	1.83	1.98	1.00	1.30	1.05	2.68	1.26	3	1.72	1.46	1.04	1.50
159.70	163.12	190.3	1.08	1.07	1.30	1.38	1.65	1.80	1.00	1.31	1.01	2.57	1.27	3	1.50	1.24	1.13	1.50
167.80	171.22	199.8	1.07	0.99	1.19	1.26	1.49	1.64	1.00	1.30	0.97	2.45	1.26	4	1.50	1.25	1.03	1.50
171.50	174.92	204.1	1.03	0.96	1.18	1.25	1.42	1.57	1.00	1.30	0.95	2.40	1.26	4	1.50	1.26	1.43	2.03
176.20	179.62	209.6	0.98	0.92	1.17	1.24	1.35	1.49	1.00	1.30	0.94	2.35	1.26	4	1.52	1.28	1.30	1.95