

LOAD FACTORS:

DESIGN LOAD RATING FACTORS	LIMIT STATE	$\gamma_{DC}$	$\gamma_{DW}$
	STRENGTH I	1.25	1.50
	SERVICE III	1.00	1.00

LOAD AND RESISTANCE FACTOR RATING (LRFD) SUMMARY FOR PRESTRESSED CONCRETE GIRDERS

LEVEL	VEHICLE	WEIGHT (W) (TONS)	CONTROLLING LOAD RATING #	MINIMUM RATING FACTORS (RF)	TONS = W X RF	STRENGTH I LIMIT STATE										SERVICE III LIMIT STATE					COMMENT NUMBER			
						LIVELOAD FACTORS	MOMENT					SHEAR					LIVELOAD FACTORS	MOMENT						
							DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)		DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL93(Inv)	N/A	1	1.24	-	1.75	0.806	1.35	A	5	53.872	0.962	1.24	A	5	75.421	0.80	0.806	1.25	A	5	53.872		
	HL93(Opr)	N/A	--	1.61	--	1.35	0.806	1.74	A	5	53.872	0.962	1.61	A	5	75.421	N/A	--	--	--	--	--		
	HS20(Inv)	36.00	2	1.59	57.40	1.75	0.806	1.91	A	5	53.872	0.962	1.59	A	5	75.421	0.80	0.806	1.77	A	5	53.872		
	HS20(Opr)	36.00	--	2.07	74.41	1.35	0.806	2.48	A	5	53.872	0.962	2.07	A	5	75.421	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SV	SNSH	13.50	--	4.25	57.43	1.4	0.806	5.73	A	5	53.872	0.962	4.77	A	5	64.647	0.80	0.806	4.25	A	5	53.872	
		SNGARBS2	20.00	--	3.06	61.23	1.4	0.806	4.12	A	5	53.872	0.962	3.39	A	5	64.647	0.80	0.806	3.06	A	5	53.872	
		SNAGRIS2	22.00	--	2.86	62.83	1.4	0.806	3.85	A	5	53.872	0.962	3.15	A	5	75.421	0.80	0.806	2.86	A	5	53.872	
		SNCOTTS3	27.25	--	2.11	57.60	1.4	0.806	2.85	A	5	53.872	0.962	2.38	A	5	64.647	0.80	0.806	2.11	A	5	53.872	
		SNAGGRS4	34.93	--	1.72	60.22	1.4	0.806	2.32	A	5	53.872	0.962	1.98	A	5	64.647	0.80	0.806	1.72	A	5	53.872	
		SNS5A	35.55	--	1.69	60.04	1.4	0.806	2.27	A	5	53.872	0.962	1.99	A	5	75.421	0.80	0.806	1.69	A	5	53.872	
		SNS6A	39.95	--	1.53	61.23	1.4	0.806	2.06	A	5	53.872	0.962	1.81	A	5	75.421	0.80	0.806	1.53	A	5	53.872	
	TTST	SNS7B	42.00	--	1.46	61.28	1.4	0.806	1.96	A	5	53.872	0.962	1.77	A	5	75.421	0.80	0.806	1.46	A	5	53.872	
		TNAGRIT3	33.00	--	1.86	61.51	1.4	0.806	2.51	A	5	53.872	0.962	2.16	A	5	75.421	0.80	0.806	1.86	A	5	53.872	
		TNT4A	33.08	--	1.87	61.77	1.4	0.806	2.52	A	5	53.872	0.962	2.12	A	5	75.421	0.80	0.806	1.87	A	5	53.872	
		TNT6A	41.60	--	1.51	62.87	1.4	0.806	2.04	A	5	53.872	0.962	1.87	A	5	75.421	0.80	0.806	1.51	A	5	53.872	
		TNT7A	42.00	--	1.51	63.44	1.4	0.806	2.03	A	5	53.872	0.962	1.84	A	5	75.421	0.80	0.806	1.51	A	5	53.872	
		TNT7B	42.00	--	1.54	64.79	1.4	0.806	2.08	A	5	53.872	0.962	1.74	A	5	75.421	0.80	0.806	1.54	A	5	53.872	
		TNAGRIT4	43.00	--	1.48	63.74	1.4	0.806	2.00	A	5	53.872	0.962	1.68	A	5	75.421	0.80	0.806	1.48	A	5	53.872	
EV LOAD RATING	EV2	28.75	--	2.15	61.85	1.3	0.806	3.12	A	5	53.872	0.962	2.56	A	5	64.647	0.80	0.806	2.15	A	5	53.872		
EV3	43.00	--	1.42	61.04	1.3	0.806	2.06	A	5	53.872	0.962	1.73	A	5	64.647	0.80	0.806	1.42	A	5	53.872			

NOTES:

MINIMUM RATING FACTORS ARE BASED ON THE STRENGTH I AND SERVICE III LIMIT STATES.  
ALLOWABLE STRESSES FOR SERVICE III LIMIT STATE ARE AS REQUIRED FOR DESIGN.

# CONTROLLING LOAD RATING

1 DESIGN LOAD RATING (HL-93)

2 DESIGN LOAD RATING (HS-20)

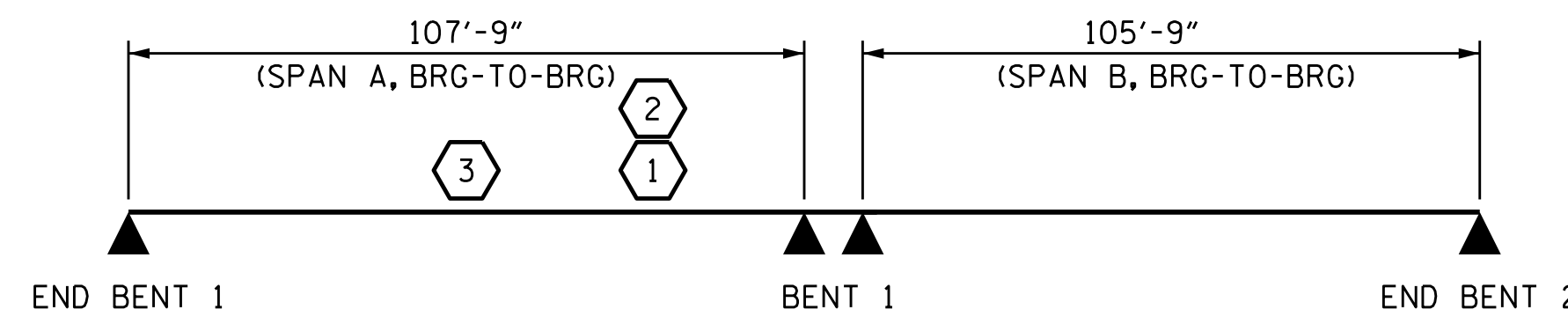
3 LEGAL LOAD RATING \*\*

\*\* SEE CHART FOR VEHICLE TYPE

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GIRDER LOCATION

I - INTERIOR GIRDER  
1 - EXTERIOR LEFT GIRDER  
5 - EXTERIOR RIGHT GIRDER



LRFR SUMMARY

PROJECT NO. BR-0094  
ROCKINGHAM COUNTY  
STATION: 20+38.70 -L-

ASSEMBLED BY : SMMATTA DATE : 09/2022  
CHECKED BY : F. LEA DATE : 09/2022  
DRAWN BY : MAA 1/08 REV. 11/12/08RR MAA/GM  
CHECKED BY : GM/DI 2/08 REV. 10/11/11 MAA/GM



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

STANDARD  
LRFR SUMMARY FOR  
PRESTRESSED  
CONCRETE GIRDERS  
(NON-INTERSTATE TRAFFIC)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	5-05
1			3			TOTAL SHEETS
2			4			30