

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 (LRFR) SUMMARY FOR PRESTRESSED CONCRETE GIRDERS

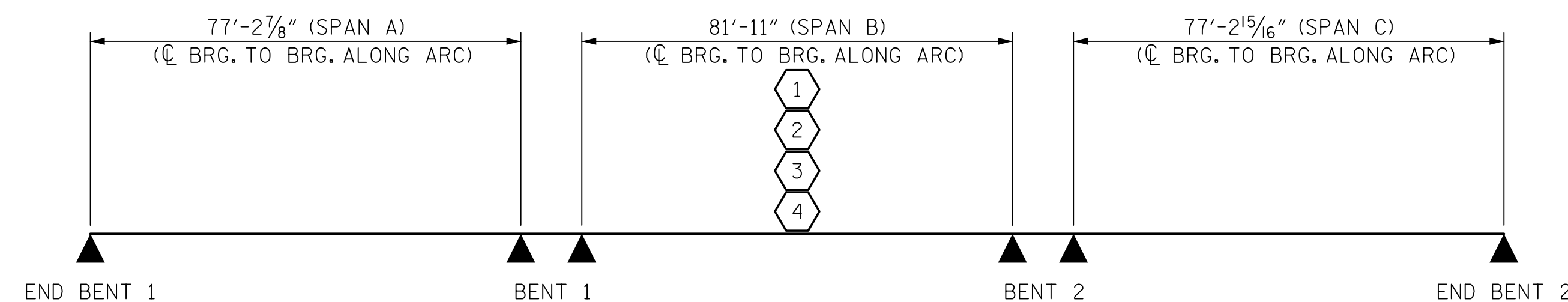
LEVEL	VEHICLE	WEIGHT (W) (TONS)	CONTROLLING LOAD RATING #	MINIMUM RATING FACTORS (RF)	TONS = W x RF	STRENGTH I LIMIT STATE										SERVICE III LIMIT STATE					COMMENT NUMBER			
						LIVE-LOAD FACTORS ( $\gamma_{LL}$ )	MOMENT					SHEAR					LIVE-LOAD FACTORS ( $\gamma_{LL}$ )	MOMENT						
							DISTRIBUTION 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	HL-93 (INVENTORY)	N/A	①	1.08	--	1.75	0.870	1.34	B	EL	40.95	1.016	1.51	A	I	15.02	0.80	0.833	1.08	B	I	40.95		
	HL-93 (OPERATING)	N/A		1.74	--	1.35	0.870	1.74	B	EL	40.95	1.016	1.97	A	I	15.02	N/A	--	--	--	--	--		
	HS-20 (INVENTORY)	36.000	②	1.46	52.560	1.75	0.870	1.80	B	EL	40.95	1.016	1.97	A	I	62.22	0.80	0.833	1.46	B	I	40.95		
	HS-20 (OPERATING)	36.000		2.34	84.240	1.35	0.870	2.34	B	EL	40.95	1.016	2.57	A	I	62.22	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SNSH	13.500		3.38	45.630	1.40	0.870	5.22	B	EL	40.95	1.016	6.07	A	I	62.22	0.80	0.833	3.38	B	I	40.95	
		SNGARBS2	20.000		2.48	49.600	1.40	0.870	3.84	B	EL	40.95	1.016	4.26	A	I	62.22	0.80	0.833	2.48	B	I	40.95	
		SNAGRIS2	22.000		2.34	51.480	1.40	0.870	3.61	B	EL	40.95	1.016	3.94	A	I	62.22	0.80	0.833	2.34	B	I	40.95	
		SNCOTTS3	27.250		1.68	45.780	1.40	0.870	2.60	B	EL	40.95	1.016	2.94	A	I	62.22	0.80	0.833	1.68	B	I	40.95	
		SNAGGRS4	34.925		1.39	48.546	1.40	0.870	2.15	B	EL	40.95	1.016	2.53	A	I	15.02	0.80	0.833	1.39	B	I	40.95	
		SNS5A	35.550		1.36	48.348	1.40	0.870	2.10	B	EL	40.95	1.016	2.50	A	I	62.22	0.80	0.833	1.36	B	I	40.95	
		SNS6A	39.950		1.24	49.538	1.40	0.870	1.92	B	EL	40.95	1.016	2.32	A	I	15.02	0.80	0.833	1.24	B	I	40.95	
		SNS7B	42.000		1.18	49.560	1.40	0.870	1.83	B	EL	40.95	1.016	2.23	A	I	62.22	0.80	0.833	1.18	B	I	40.95	
	TRUCK TRACTOR SEMI-TRAILER (TTST)	TNAGRIT3	33.000		1.51	49.830	1.40	0.870	2.34	B	EL	40.95	1.016	2.87	A	I	62.22	0.80	0.833	1.51	B	I	40.95	
		TNT4A	33.075		1.52	50.274	1.40	0.870	2.35	B	EL	40.95	1.016	2.62	A	I	62.22	0.80	0.833	1.52	B	I	40.95	
		TNT6A	41.600		1.24	51.584	1.40	0.870	1.91	B	EL	40.95	1.016	2.28	A	I	72.47	0.80	0.833	1.24	B	I	40.95	
		TNT7A	42.000		1.24	52.080	1.40	0.870	1.91	B	EL	40.95	1.016	2.30	A	I	15.02	0.80	0.833	1.24	B	I	40.95	
		TNT7B	42.000		1.27	53.340	1.40	0.870	1.97	B	EL	40.95	1.016	2.19	A	I	62.22	0.80	0.833	1.27	B	I	40.95	
		TNAGRIT4	43.000		1.22	52.460	1.40	0.870	1.88	B	EL	40.95	1.016	2.08	A	I	62.22	0.80	0.833	1.22	B	I	40.95	
EMERGENCY VEHICLE (EV)	EV2	28.750		1.84	52.900	1.30	0.870	3.04	B	EL	40.95	1.016	3.51	A	I	15.02	0.80	0.833	1.84	B	I	40.95		
	EV3	43.000	④	1.24	53.320	1.30	0.870	2.05	B	EL	40.95	1.016	2.40	A	I	62.22	0.80	0.833	1.24	B	I	40.95		

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 **
④	EMERGENCY VEHICLE LOAD RATING **
** SEE CHART FOR VEHICLE TYPE	
GIRDER LOCATION	
I - INTERIOR GIRDER EL - EXTERIOR LEFT GIRDER ER - EXTERIOR RIGHT GIRDER	

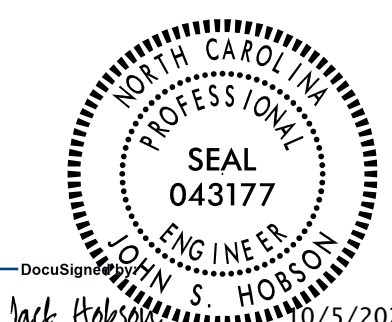


LRFR SUMMARY

PROJECT NO. U-5808  
UNION COUNTY  
STATION: 55+00.96 -L2-



111 E. Hargett Street  
Suite 300  
Raleigh, NC 27601  
919-714-8670  
meadhunt.com  
NC License No. F-1235



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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:	S-06
1			3			TOTAL SHEETS
2			4			56

ASSEMBLED BY : J.S. HOBSON	DATE : 03/16/22
CHECKED BY : C.C. CAMPBELL	DATE : 06/16/23
DESIGN E.O.R. : J.S. HOBSON	DATE : 08/30/23
DRAWN BY : MAA 1/08	REV. 11/12/08RR MAA/GM
CHECKED BY : GM/DI 2/08	REV. 10/1/11 MAA/GM
	REV. 04/23 BNB/AAI