

**LOAD FACTORS**

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

**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.

**COMMENTS**

1. LEFT EXTERIOR GIRDER IS THE CONTROLLING EXTERIOR GIRDER.

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	SPANS	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	SPANS		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL-93 (INVENTORY)	N/A	1	1.08	--	1.75	0.966	1.21	A	E	43.9	1.109	1.28	A	I	26.1	0.80	0.966	1.08	A	E	43.9	--	
	HL-93 (OPERATING)	N/A		1.57	--	1.35	0.966	1.57	A	E	43.9	1.109	2.01	A	I	17.1	N/A	--	--	--	--	--	--	--
	HS-20 (INVENTORY)	36.000	2	1.47	52.92	1.75	0.966	1.64	A	E	43.9	1.109	1.97	A	I	17.1	0.80	0.966	1.47	A	E	43.9	--	
	HS-20 (OPERATING)	36.000		2.13	76.68	1.35	0.966	2.13	A	E	43.9	1.109	2.59	A	I	17.1	N/A	--	--	--	--	--	--	--
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SNSH	13.500		3.43	46.31	1.40	0.966	4.79	A	E	43.9	1.109	6.17	A	I	17.1	0.80	0.966	3.43	A	E	43.9	--
		SNGARBS2	20.000		2.51	50.20	1.40	0.966	3.50	A	E	43.9	1.109	4.33	A	I	17.1	0.80	0.966	2.51	A	E	43.9	--
		SNAGRIS2	22.000		2.36	51.92	1.40	0.966	3.29	A	E	43.9	1.109	4.01	A	I	17.1	0.80	0.966	2.36	A	E	43.9	--
		SNCOTTS3	27.250		1.70	46.33	1.40	0.966	2.38	A	E	43.9	1.109	3.01	A	I	17.1	0.80	0.966	1.70	A	E	43.9	--
		SNAGGRS4	34.925		1.41	49.24	1.40	0.966	1.96	A	E	43.9	1.109	2.47	A	I	17.1	0.80	0.966	1.41	A	E	43.9	--
		SNS5A	35.550		1.38	49.06	1.40	0.966	1.92	A	E	43.9	1.109	2.49	A	I	17.1	0.80	0.966	1.38	A	E	43.9	--
		SNS6A	39.950		1.26	50.34	1.40	0.966	1.75	A	E	43.9	1.109	2.26	A	I	17.1	0.80	0.966	1.26	A	E	43.9	--
		SNS7B	42.000		1.20	50.40	1.40	0.966	1.67	A	E	43.9	1.109	2.21	A	I	17.1	0.80	0.966	1.20	A	E	43.9	--
	TRUCK TRACTOR SEMI-TRAILER (TTST)	TNAGRIT3	33.000		1.53	50.49	1.40	0.966	2.13	A	E	43.9	1.109	2.71	A	I	17.1	0.80	0.966	1.53	A	E	43.9	--
		TNT4A	33.075		1.53	50.60	1.40	0.966	2.14	A	E	43.9	1.109	2.65	A	I	17.1	0.80	0.966	1.53	A	E	43.9	--
		TNT6A	41.600		1.25	52.00	1.40	0.966	1.74	A	E	43.9	1.109	2.35	A	I	17.1	0.80	0.966	1.25	A	E	43.9	--
		TNT7A	42.000		1.25	52.50	1.40	0.966	1.74	A	E	43.9	1.109	2.30	A	I	17.1	0.80	0.966	1.25	A	E	43.9	--
		TNT7B	42.000		1.28	53.76	1.40	0.966	1.79	A	E	43.9	1.109	2.16	A	I	17.1	0.80	0.966	1.28	A	E	43.9	--
		TNAGRIT4	43.000		1.23	52.89	1.40	0.966	1.71	A	E	43.9	1.109	2.09	A	I	17.1	0.80	0.966	1.23	A	E	43.9	--
	TNAGT5A	45.000		1.16	52.20	1.40	0.966	1.62	A	E	43.9	1.109	2.06	A	I	17.1	0.80	0.966	1.16	A	E	43.9	--	
	TNAGT5B	45.000	3	1.15	51.75	1.40	0.966	1.61	A	E	43.9	1.109	1.98	A	I	17.1	0.80	0.966	1.15	A	E	43.9	--	

# CONTROLLING LOAD RATING

1 DESIGN LOAD RATING (HL-93)

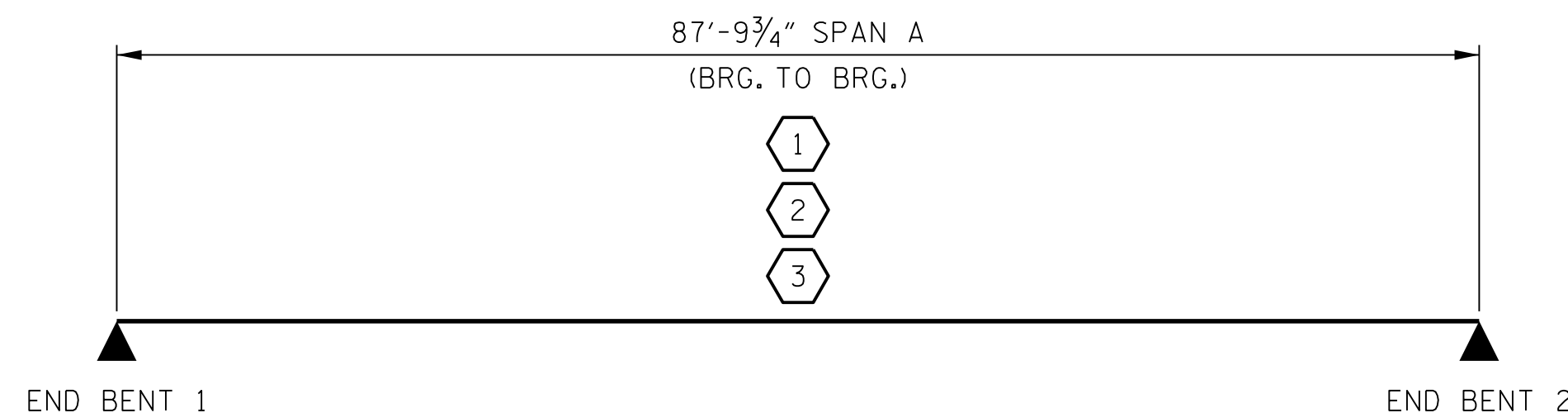
2 DESIGN LOAD RATING (HS-20)

3 LEGAL LOAD RATING \*\*

\*\* SEE CHART FOR VEHICLE TYPE

GIRDER LOCATION

I - INTERIOR GIRDER  
E - EXTERIOR GIRDER (LEFT)

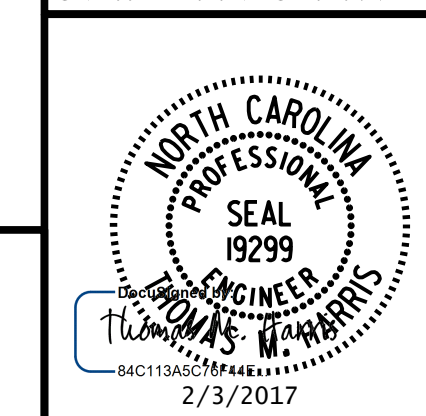


**LRFR SUMMARY**

PROJECT NO. R-2707C  
CLEVELAND COUNTY  
 STATION: 611+32.01 -L-

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 STANDARD  
 LRFR SUMMARY FOR  
 PRESTRESSED CONCRETE GIRDERS  
 (NON-INTERSTATE TRAFFIC)  
 (RIGHT LANE)

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



REVISIONS						SHEET No.
No.	BY:	DATE:	No.	BY:	DATE:	ST-10-4
1			3			TOTAL SHEETS
2			4			25

PLANS PREPARED BY:  
**PARSONS**  
 5540 CenterView Drive, Suite 217  
 Raleigh, NC 27606-3386  
 NC LICENSE No. F-0246

FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ASSEMBLED BY : K. E. LOFTON DATE : 10-16  
 CHECKED BY : A. D. SHAH DATE : 10-16  
 DRAWN BY : MAA 1/08 REV. 11/2/08RR MAA/GM  
 CHECKED BY : GM/DI 2/08 REV. 10/1/11 MAA/GM