

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		
						MOMENT					SHEAR					MOMENT								
						LIVELOAD FACTORS	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)	LIVELOAD FACTORS	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION		DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL-93(Inv)	N/A	①	1.32	--	1.75	0.281	1.67	A	EL	19.501	0.542	1.32	A	EL	1.95	0.80	0.281	1.42	A	EL	19.501		
	HL-93(0pr)	N/A	--	1.71	--	1.35	0.281	2.16	A	EL	19.501	0.542	1.71	A	EL	1.95	N/A	--	--	--	--	--		
	HS-20(Inv)	36.000	②	1.55	55.627	1.75	0.281	2.09	A	EL	19.501	0.542	1.55	A	EL	1.95	0.80	0.281	1.77	A	EL	19.501		
	HS-20(0pr)	36.000	--	2.00	72.108	1.35	0.281	2.71	A	EL	19.501	0.542	2.00	A	EL	1.95	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SV	SNSH	13.500	--	3.29	44.375	1.40	0.281	4.83	A	EL	19.501	0.542	4.14	A	EL	1.95	0.80	0.281	3.29	A	EL	19.501	
		SNGARBS2	20.000	--	2.71	54.257	1.40	0.281	3.98	A	EL	15.601	0.542	3.08	A	EL	1.95	0.80	0.281	2.71	A	EL	19.501	
		SNAGRIS2	22.000	--	2.68	58.867	1.40	0.281	3.89	A	EL	15.601	0.542	2.92	A	EL	1.95	0.80	0.281	2.68	A	EL	23.402	
		SNCOTTS3	27.250	--	1.64	44.774	1.40	0.281	2.42	A	EL	19.501	0.542	2.08	A	EL	1.95	0.80	0.281	1.64	A	EL	19.501	
		SNAGGRS4	34.925	--	1.48	51.647	1.40	0.281	2.17	A	EL	19.501	0.542	1.82	A	EL	1.95	0.80	0.281	1.48	A	EL	19.501	
		SNS5A	35.550	--	1.44	51.137	1.40	0.281	2.12	A	EL	19.501	0.542	1.9	A	EL	1.95	0.80	0.281	1.44	A	EL	19.501	
		SNS6A	39.950	--	1.37	54.677	1.40	0.281	2.01	A	EL	19.501	0.542	1.78	A	EL	1.95	0.80	0.281	1.37	A	EL	19.501	
	TTST	SNS7B	42.000	③	1.31	54.820	1.40	0.281	1.92	A	EL	19.501	0.542	1.81	A	EL	1.95	0.80	0.281	1.31	A	EL	19.501	
		TNAGRIT3	33.000	--	1.68	55.574	1.40	0.281	2.48	A	EL	19.501	0.542	2.08	A	EL	1.95	0.80	0.281	1.68	A	EL	19.501	
		TNT4A	33.075	--	1.71	56.417	1.40	0.281	2.51	A	EL	19.501	0.542	1.98	A	EL	1.95	0.80	0.281	1.71	A	EL	19.501	
		TNT6A	41.600	--	1.45	60.182	1.40	0.281	2.13	A	EL	19.501	0.542	1.94	A	EL	1.95	0.80	0.281	1.45	A	EL	19.501	
		TNT7A	42.000	--	1.48	62.297	1.40	0.281	2.18	A	EL	19.501	0.542	1.79	A	EL	1.95	0.80	0.281	1.48	A	EL	19.501	
		TNT7B	42.000	--	1.52	63.697	1.40	0.281	2.23	A	EL	19.501	0.542	1.72	A	EL	1.95	0.80	0.281	1.52	A	EL	19.501	
		TNAGRIT4	43.000	--	1.48	63.442	1.40	0.281	2.17	A	EL	15.601	0.542	1.65	A	EL	1.95	0.80	0.281	1.48	A	EL	19.501	
TNAGT5A	45.000	--	1.37	61.439	1.40	0.281	2.01	A	EL	19.501	0.542	1.71	A	EL	1.95	0.80	0.281	1.37	A	EL	19.501			
TNAGT5B	45.000	--	1.33	59.701	1.40	0.281	1.95	A	EL	19.501	0.542	1.56	A	EL	1.95	0.80	0.281	1.33	A	EL	19.501			

NOTES:

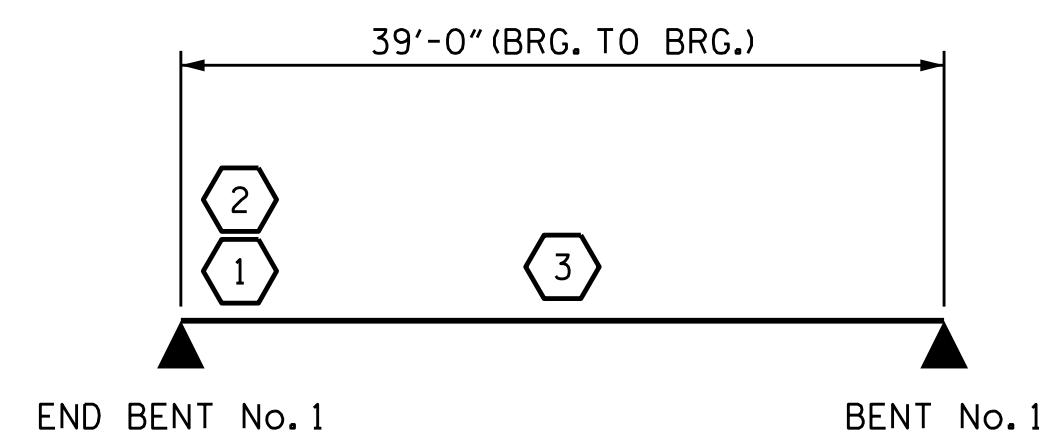
MINIMUM RATING FACTORS ARE BASED ON THE STRENGTH I AND SERVICE III LIMIT STATES.

ALLOWABLE STRESSES FOR SERVICE III LIMIT STATE ARE AS REQUIRED FOR DESIGN.

COMMENTS:

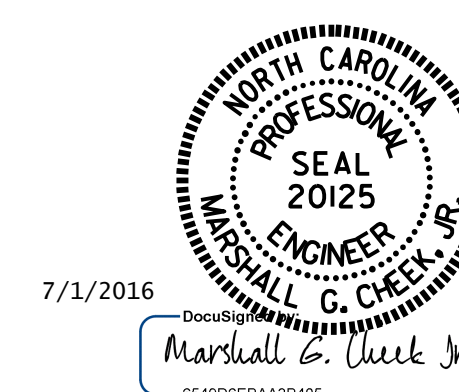
- 1.
- 2.
- 3.
- 4.

#	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	
EL - EXTERIOR LEFT GIRDER	
ER - EXTERIOR RIGHT GIRDER	



LRFR SUMMARY  
SPAN A

PROJECT NO. B-5125  
MACON COUNTY  
 STATION: 13+25.89 -L-



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

LRFR SUMMARY FOR  
 PRESTRESSED  
 CONCRETE GIRDERS  
 SPAN A

ASSEMBLED BY : W.J. HARRIS	DATE : 5/10/16
CHECKED BY : M.G. CHEEK	DATE : 5/10/16
DRAWN BY : MAA 1/08	REV. 11/12/OBRR MAA/GM
CHECKED BY : GM/DI 2/08	REV. 10/1/11 MAA/GM

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS
2			4			43