

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	1.394	--	1.75	0.276	1.57	*	EL	**	0.531	1.39	*	EL	**	0.80	0.276	1.44	*	EL	**		
	HL-93(0pr)	N/A	--	1.807	--	1.35	0.276	2.03	*	EL	**	0.531	1.81	*	EL	**	N/A	--	--	--	--	--		
	HS-20(Inv)	36.000	2	1.667	60.007	1.75	0.276	1.95	*	EL	**	0.531	1.67	*	EL	**	0.80	0.276	1.79	*	EL	**		
	HS-20(0pr)	36.000	--	2.161	77.787	1.35	0.276	2.52	*	EL	**	0.531	2.16	*	EL	**	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SV	SNSH	13,500	--	3.635	49.079	1.4	0.276	4.95	*	EL	**	0.531	4.7	*	EL	**	0.80	0.276	3.64	*	EL	**	
		SNGARBS2	20,000	--	2.871	57.42	1.4	0.276	3.91	*	EL	**	0.531	3.42	*	EL	**	0.80	0.276	2.87	*	EL	**	
		SNAGRIS2	22,000	--	2.778	61.109	1.4	0.276	3.78	*	EL	**	0.531	3.21	*	EL	**	0.80	0.276	2.78	*	EL	**	
		SNCOTTS3	27,250	--	1.814	49.418	1.4	0.276	2.47	*	EL	**	0.531	2.36	*	EL	**	0.80	0.276	1.81	*	EL	**	
		SNAGGRS4	34,925	--	1.577	55.063	1.4	0.276	2.15	*	EL	**	0.531	2.01	*	EL	**	0.80	0.276	1.58	*	EL	**	
		SNS5A	35,550	--	1.537	54.657	1.4	0.276	2.09	*	EL	**	0.531	2.07	*	EL	**	0.80	0.276	1.54	*	EL	**	
	TTST	SNS6A	39,950	--	1.438	57.43	1.4	0.276	1.96	*	EL	**	0.531	1.91	*	EL	**	0.80	0.276	1.44	*	EL	**	
		SNS7B	42,000	--	1.370	57.54	1.4	0.276	1.87	*	EL	**	0.531	1.91	*	EL	**	0.80	0.276	1.37	*	EL	**	
		TNAGRIT3	33,000	--	1.761	58.118	1.4	0.276	2.4	*	EL	**	0.531	2.25	*	EL	**	0.80	0.276	1.76	*	EL	**	
		TNT4A	33,075	--	1.777	58.759	1.4	0.276	2.42	*	EL	**	0.531	2.17	*	EL	**	0.80	0.276	1.78	*	EL	**	
		TNT6A	41,600	--	1.480	61.558	1.4	0.276	2.01	*	EL	**	0.531	2.08	*	EL	**	0.80	0.276	1.48	*	EL	**	
		TNT7A	42,000	--	1.502	63.087	1.4	0.276	2.05	*	EL	**	0.531	1.94	*	EL	**	0.80	0.276	1.50	*	EL	**	
TNT7B	42,000	--	1.566	65.773	1.4	0.276	2.13	*	EL	**	0.531	1.84	*	EL	**	0.80	0.276	1.57	*	EL	**			
TNAGRIT4	43,000	--	1.486	63.902	1.4	0.276	2.02	*	EL	**	0.531	1.77	*	EL	**	0.80	0.276	1.49	*	EL	**			
TNAGT5A	45,000	--	1.388	62.47	1.4	0.276	1.89	*	EL	**	0.531	1.8	*	EL	**	0.80	0.276	1.39	*	EL	**			
TNAGT5B	45,000	3	1.360	61.206	1.4	0.276	1.85	*	EL	**	0.531	1.68	*	EL	**	0.80	0.276	1.36	*	EL	**			

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:

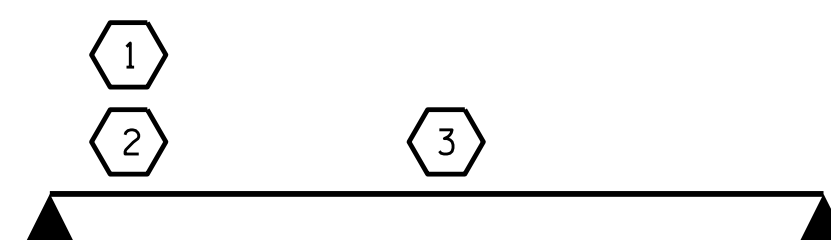
MINIMUM RATING FACTORS ARE BASED ON THE STRENGTH I AND SERVICE III LIMIT STATES.

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

COMMENTS:

- \* BEARING-TO-BEARING GIRDER LENGTH VARIES BY SPAN. SEE PLAN OF SPANS FOR GIRDER LENGTHS.
- \*\* DISTANCE VARIES BY SPAN. THE POINT IS AT MIDSPAN FOR ALL SPANS.
- \*\*\* DISTANCE VARIES BY SPAN. THE POINT IS AT THE FIRST 20TH POINT FOR ALL SPANS.
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⊠ 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

FOR SPANS '0' - 'EE', SKEW RANGE 95°-12'-31" TO 84°-47'-29"

PROJECT NO. B-2500AB

DARE COUNTY

STATION: 3170+75.00 -L-

SHEET 2 OF 2



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

STANDARD

LRFR SUMMARY FOR  
CORED SLAB UNIT  
(NON-INTERSTATE TRAFFIC)

ASSEMBLED BY : E. K. POPE, P.E. DATE : 6/15  
CHECKED BY : B. L. GREEN, P.E. DATE : 6/15

DRAWN BY : CVC 6/10  
CHECKED BY : DNS 6/10

REVISIONS						SHEET NO. S-10
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 44
2			4			

DocuSigned by:  
Elizabeth K. Pope  
8/3/2015