

LOAD FACTORS:

DESIGN LOAD RATING FACTORS	LIMIT STATE	γ_{DC}	γ_{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			
						MOMENT					SHEAR					MOMENT								
						LIVE-LOAD FACTORS (γ_{LL})	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)	LIVE-LOAD FACTORS (γ_{LL})	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL-93(Inv)	N/A	1	1.02	--	1.75	0.884	1.52	A	EL	47.966	0.943	1.41	A	EL	28.78	0.80	0.884	1.02	A	EL	47.966		
	HL-93(0pr)	N/A	--	1.83	--	1.35	0.884	1.97	A	EL	47.966	0.943	1.83	A	EL	28.78	N/A	--	--	--	--	--		
	HS-20(Inv)	36.000	2	1.41	50.630	1.75	0.884	2.11	A	EL	47.966	0.943	1.74	A	EL	38.373	0.80	0.884	1.41	A	EL	47.966		
	HS-20(0pr)	36.000	--	2.26	81.380	1.35	0.884	2.73	A	EL	47.966	0.943	2.26	A	EL	38.373	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SNSH	13.500	--	3.32	44.844	1.40	0.884	6.22	A	EL	47.966	0.943	5.1	A	EL	38.373	0.80	0.884	3.32	A	EL	47.966	
		SNGARBS2	20.000	--	2.41	48.227	1.40	0.884	4.51	A	EL	47.966	0.943	3.65	A	EL	38.373	0.80	0.884	2.41	A	EL	47.966	
		SNAGRIS2	22.000	--	2.26	49.669	1.40	0.884	4.23	A	EL	47.966	0.943	3.4	A	EL	38.373	0.80	0.884	2.26	A	EL	47.966	
		SNCOTTS3	27.250	--	1.65	44.993	1.40	0.884	3.09	A	EL	47.966	0.943	2.55	A	EL	38.373	0.80	0.884	1.65	A	EL	47.966	
		SNAGGRS4	34.925	--	1.36	47.328	1.40	0.884	2.54	A	EL	47.966	0.943	2.13	A	EL	38.373	0.80	0.884	1.36	A	EL	47.966	
		SNS5A	35.550	--	1.33	47.168	1.40	0.884	2.48	A	EL	47.966	0.943	2.17	A	EL	38.373	0.80	0.884	1.33	A	EL	47.966	
		SNS6A	39.950	--	1.21	48.231	1.40	0.884	2.26	A	EL	47.966	0.943	1.99	A	EL	38.373	0.80	0.884	1.21	A	EL	47.966	
	TRUCK TRACTOR SEMI-TRAILER (TTST)	SNS7B	42.000	--	1.15	48.272	1.40	0.884	2.15	A	EL	47.966	0.943	1.97	A	EL	38.373	0.80	0.884	1.15	A	EL	47.966	
		TNAGRIT3	33.000	--	1.47	48.485	1.40	0.884	2.75	A	EL	47.966	0.943	2.36	A	EL	38.373	0.80	0.884	1.47	A	EL	47.966	
		TNT4A	33.075	--	1.47	48.720	1.40	0.884	2.76	A	EL	47.966	0.943	2.29	A	EL	38.373	0.80	0.884	1.47	A	EL	47.966	
		TNT6A	41.600	--	1.20	49.710	1.40	0.884	2.24	A	EL	47.966	0.943	2.10	A	EL	28.78	0.80	0.884	1.19	A	EL	47.966	
		TNT7A	42.000	--	1.20	50.229	1.40	0.884	2.24	A	EL	47.966	0.943	2.06	A	EL	28.78	0.80	0.884	1.20	A	EL	47.966	
		TNT7B	42.000	--	1.23	51.454	1.40	0.884	2.29	A	EL	47.966	0.943	1.91	A	EL	38.373	0.80	0.884	1.23	A	EL	47.966	
		TNAGRIT4	43.000	--	1.17	50.500	1.40	0.884	2.20	A	EL	47.966	0.943	1.85	A	EL	38.373	0.80	0.884	1.17	A	EL	47.966	
TNAGT5A	45.000	--	1.11	50.022	1.40	0.884	2.08	A	EL	47.966	0.943	1.85	A	EL	38.373	0.80	0.884	1.11	A	EL	47.966			
TNAGT5B	45.000	3	1.10	49.588	1.40	0.884	2.06	A	EL	47.966	0.943	1.76	A	EL	38.373	0.80	0.884	1.10	A	EL	47.966			

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)

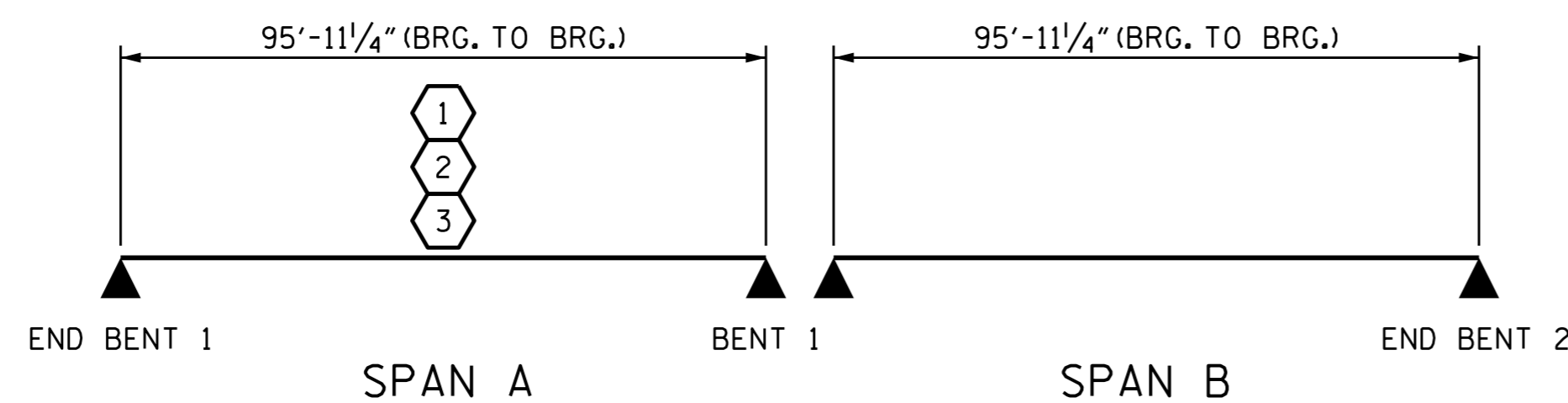
2 DESIGN LOAD RATING (HS-20)

3 LEGAL LOAD RATING **

** SEE CHART FOR VEHICLE TYPE

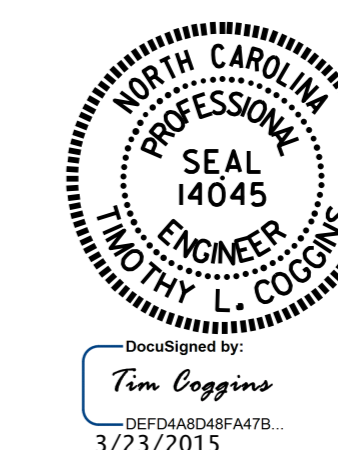
GIRDER LOCATION

I - INTERIOR GIRDER
EL - EXTERIOR LEFT GIRDER
ER - EXTERIOR RIGHT GIRDER



LRFR SUMMARY

PROJECT NO. R-2514D
JONES & CRAVEN COUNTY
 STATION: 19+43.00 - Y10RPA-



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

REVISIONS						SHEET NO. S17-004
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 32
2			4			

ASSEMBLED BY : N. Ruffin DATE : 7/5/13
 CHECKED BY : M. D. PISO DATE : 3/14/14
 DRAWN BY : MAA 1/08
 CHECKED BY : GM/DI 2/08

REV. 11/12/08RR MAA/GM
 REV. 10/1/11 MAA/GM
 ENGINEER OF RECORD: N. RUFFIN DATE : 1/28/15