

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					LIVE-LOAD FACTORS (γ _{LL})	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)		DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION		DISTANCE FROM LEFT END OF SPAN (ft)
DESIGN LOAD RATING		HL-93 (INVENTORY)	N/A	⬡1		--	1.75									0.80		--	--	--	--	--		
		HL-93 (OPERATING)	N/A			--	1.35									N/A	--	--	--	--	--			
		HS-20 (INVENTORY)	36.000	⬡2			1.75									0.80								
		HS-20 (OPERATING)	36.000				1.35									N/A	--	--	--	--	--			
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SH	12,500				1.40									0.80								
		S3C	21,500				1.40									0.80								
		S3A	22,750				1.40									0.80								
		S4A	26,750				1.40									0.80								
		S5A	30,500				1.40									0.80								
		S6A	34,500				1.40									0.80								
		S7B	38,500				1.40									0.80								
		S7A	40,000				1.40									0.80								
	TRUCK TRACTOR SEMI-TRAILER (TTST)	T4A	28,250				1.40									0.80								
		T5B	32,000				1.40									0.80								
		T6A	36,000				1.40									0.80								
		T7A	40,000				1.40									0.80								
T7B		40,000				1.40									0.80									

DESIGN LOAD RATING FACTORS	LIMIT STATE	γ _{DC}	γ _{OW}
	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.

2.

3.

4.

⬡# CONTROLLING LOAD RATING

⬡1 DESIGN LOAD RATING (HL-93)

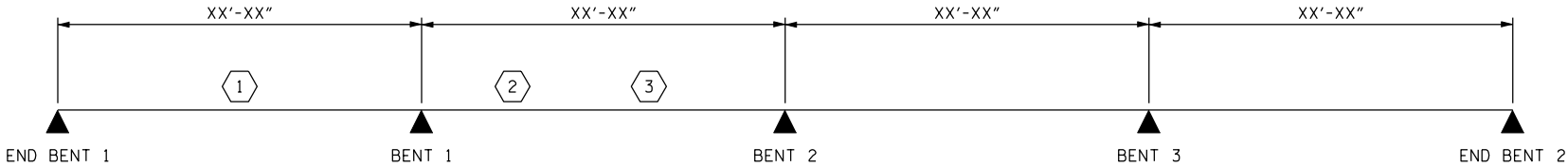
⬡2 DESIGN LOAD RATING (HS-20)

⬡3 LEGAL LOAD RATING **

** SEE CHART FOR VEHICLE TYPE

GIRDER LOCATION

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



PROJECT NO. _____

_____ COUNTY

STATION: _____

ASSEMBLED BY :	DATE :
CHECKED BY :	DATE :
DRAWN BY : MAA 1/08	REV. 11/12/08RR MAA/GM
CHECKED BY : GM/DI 2/08	

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH STANDARD LRFR SUMMARY FOR PRESTRESSED CONCRETE GIRDERS (INTERSTATE TRAFFIC)						SHEET NO.
REVISIONS						TOTAL SHEETS
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			