

11/6/2023 R:\Structures\Culvert\UT\_Lowery\_MillCreek\_Culvert\VDGN\Final\R-2577A\_SMU\_CU.1-2\_330000.dgn

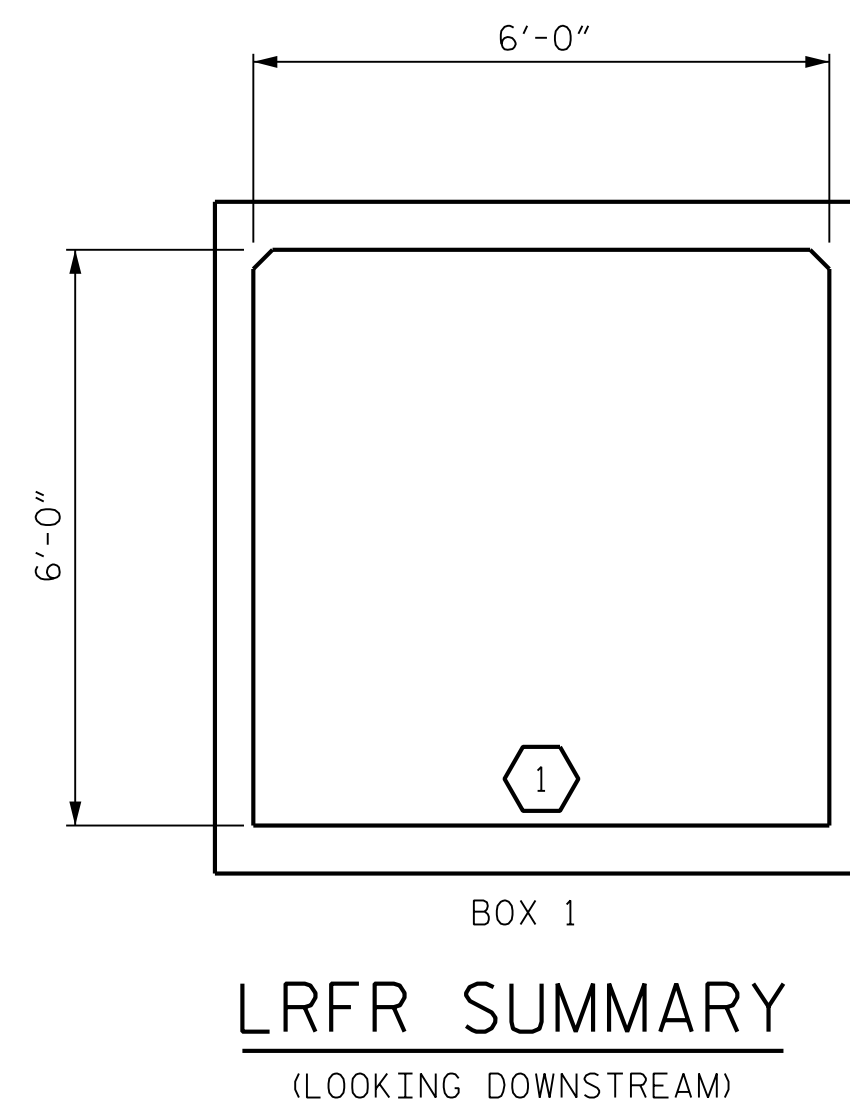
**PERMANENT LOAD FACTORS:**

LOAD TYPE	MAX FACTOR	MIN FACTOR
DC	1.25	0.90
DW	1.50	0.65
EV	1.30	0.90
EH	1.35	0.90
ES	1.35	0.90
WA	1.00	--

LOAD AND RESISTANCE FACTOR RATING (LRFR) SUMMARY FOR REINFORCED CONCRETE BOX CULVERTS										
	CONTROLLING LOAD RATING	MINIMUM RATING FACTOR (RF)	STRENGTH I LIMIT STATE							
			MOMENT				SHEAR			
			RATING FACTOR	BOX NO.	ELEMENT TYPE	DISTANCE FROM LEFT END OF ELEMENT (ft)	RATING FACTOR	BOX NO.	ELEMENT TYPE	DISTANCE FROM LEFT END OF ELEMENT (ft)
PERMANENT LOAD RATING	1	1.20	1.20	1	BOTTOM SLAB	3.0	2.27	1	BOTTOM SLAB	0.1

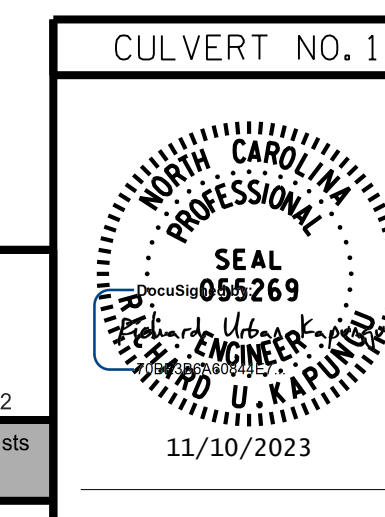
**NOTES:**

RATING FACTORS ARE BASED ON THE STRENGTH I LIMIT STATE.  
 THE EFFECTS OF LIVE LOAD ON DESIGN AND LOAD RATING MAY BE NEGLECTED FOR CULVERTS WITH CERTAIN FILL DEPTHS DESCRIBED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.  
 CULVERTS WITH NEGLIGIBLE LIVE LOAD SHOULD BE LOAD RATED FOR PERMANENT LOADS ONLY IN ACCORDANCE WITH THE AASHTO MANUAL FOR BRIDGE EVALUATION.



PROJECT NO. R-2577A  
FORSYTH COUNTY  
 STATION: 107+57.00 -L-

SHEET 2 OF 9



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STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**STANDARD**  
 LRFR SUMMARY FOR  
 REINFORCED CONCRETE  
 BOX CULVERT  
 (DEEP FILLS)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	CU_1-2
1			3			TOTAL SHEETS
2			4			9

DRAWN BY : B. H. GONFA DATE : NOV 2023  
 CHECKED BY : O. J. PAITEL DATE : NOV 2023  
 DESIGN ENGINEER OF RECORD : R. U. KAPUNGU DATE : NOV 2023

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**