



DEAD LOAD DEFLECTION DIAGRAM

- NOTES:
 1. ENCIRCLED NUMBERS INDICATE ANTICIPATED DEFLECTION DUE TO CONCRETE ONLY.
 2. DEFLECTIONS ARE IN INCHES.

		MOMENT - foot-kips						MOMENT AND REACTION TABLE						REACTION - kips			
LOAD NAME	LOAD - k/ft	POSITIVE MOMENT				NEGATIVE MOMENT				REACTION							
		0.4 PT. END SPAN		0.5 PT. CENTER SPAN		PIER	PIER	ABUTMENT	ABUTMENT	PIER	PIER						
		INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR	INTERIOR	EXTERIOR				
D.L. NO. 1	0.74*	0.72*		161	158	202	197	354	346	17	16	61	60				
D.L. NO. 2	0.29	0.29		61	59	86	81	102	107	6	6	20	20				
LIVE LOAD + IMPACT HS20-44 DISTRIBUTION FACTOR	TRUCK	MOMENT	MOMENT	522	487	606	559	-	-	57	47	65	-				
		1.35	1.27														
		REACTION	REACTION	-	-	-	-	326	319	-	-	-	58				
		1.65	1.05	-	-	-	-	782	772	80	69	146	138				
TOTAL	-	-	-	-	-	-	-	-	-	-	-	-	-				

* LOAD VALUES DO NOT INCLUDE GIRDER WEIGHT.
 MOMENT AND REACTION VALUES DO INCLUDE GIRDER WEIGHT.
 MOMENTS AND REACTIONS SHOWN ARE UNFACTORED.

03-07 LATEST REVISION DATE <i>Thomas E. M. Smith</i> APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES FEBRUARY, 2004
	BEAM DEFLECTIONS 180'-0 BRIDGE
RS40-47-04	