



DEAD LOAD DEFLECTION DIAGRAM

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

		MOMENT - foot-kips						REACTION - kips					
LOAD NAME	LOAD - k/ft	POSITIVE MOMENT				NEGATIVE MOMENT		REACTION					
		INTERIOR	EXTERIOR	0.4 PT. END SPAN	0.5 PT. CENTER SPAN	PIER	PIER	ABUTMENT	ABUTMENT	PIER	PIER		
D.L. NO. 1	0.74*	0.72*	91	88	129	121	152	160	7	7	25	25	
D.L. NO. 2	0.29	0.29											
LIVE LOAD + IMPACT H&S20-44 DISTRIBUTION FACTOR	TRUCK	MOMENT	MOMENT										
		1.35	1.27	661	617	786	721	-	-	58	49	-	-
		REACTION	REACTION										
		1.65	1.05	-	-	-	-	436	431	-	-	69	65
TOTAL	-	-	-	-	-	-	-	1129	1120	86	77	171	165

* 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	 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 220'-0 BRIDGE
		RS40-49-04