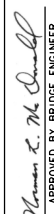



DEAD LOAD DEFLECTION DIAGRAM

- 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 | | | | | |
| | | 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 | | |
| DC1 | 0.74* 0.72* | 129 | 120 | 167 | 155 | 279 | 259 | 16 | 15 | 55 | 51 | | |
| DC2 | 0.14 0.14 | 24 | 24 | 35 | 35 | 38 | 38 | 3 | 3 | 9 | 9 | | |
| DW | 0.15 0.15 | 25 | 25 | 37 | 36 | 39 | 39 | 3 | 3 | 9 | 9 | | |
| LIVE LOAD + IMPACT HL-93 | DISTRIBUTION FACTOR | MOMENT | MOMENT | 538 | 577 | 606 | 699 | 339 | 380 | 69 | 61 | 101 | 89 |
| | | 0.635 | 0.681 | | | | | | | | | | |
| | REACTION | REACTION | - | - | - | - | - | - | - | - | - | - | - |
| TOTAL | | - | - | - | - | 695 | 716 | 91 | 82 | 174 | 158 | | |

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

| | | | |
|----------------------|--|--|-------------|
| LATEST REVISION DATE |  APPROVED BY BRIDGE ENGINEER |  Iowa Department of Transportation Highway Division | |
| | | STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010 | |
| | | BEAM DEFLECTIONS 160'-0 BRIDGE | RS40-061-10 |