

**DEAD LOAD DEFLECTION DIAGRAM**

(Includes weight of concrete only.)

**Note:**

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on SG14 & SG15.

**BEAM A1**

| Location          | Station  | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-------------------|----------|--------|------------------------------|--|
| Bk. S. Abut.      | 27+96.18 | -31.32 | 626.37                       | 626.37   |
| CL Brg. S. Abut.  | 27+98.68 | -31.37 | 626.36                       | 626.36   |
| 1A                | 28+08.68 | -31.57 | 626.31                       | 626.33   |
| 1B                | 28+18.68 | -31.77 | 626.27                       | 626.30   |
| 1C                | 28+28.68 | -31.97 | 626.23                       | 626.25   |
| 1D                | 28+38.68 | -32.17 | 626.19                       | 626.20   |
| CL Brg. Pier 1    | 28+49.68 | -32.39 | 626.14                       | 626.14   |
| 2A                | 28+59.68 | -32.59 | 626.10                       | 626.10   |
| 2B                | 28+69.68 | -32.79 | 626.06                       | 626.07   |
| 2C                | 28+79.68 | -32.99 | 626.01                       | 626.04   |
| 2D                | 28+89.68 | -33.19 | 625.97                       | 625.99   |
| CL S. Brg. Pier 2 | 28+99.68 | -33.40 | 625.93                       | 625.93   |
| CL Pier 2         | 29+00.68 | -33.42 | 625.93                       | 625.93   |

**BEAM A2**

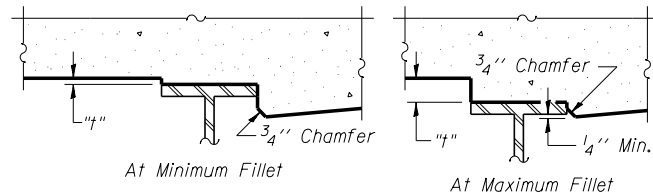
| Location          | Station  | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-------------------|----------|--------|------------------------------|--|
| Bk. S. Abut.      | 27+95.94 | -26.00 | 626.47                       | 626.47   |
| CL Brg. S. Abut.  | 27+98.44 | -26.00 | 626.46                       | 626.46   |
| 1A                | 28+08.44 | -26.00 | 626.43                       | 626.44   |
| 1B                | 28+18.44 | -26.00 | 626.39                       | 626.41   |
| 1C                | 28+28.44 | -26.00 | 626.35                       | 626.37   |
| 1D                | 28+38.44 | -26.00 | 626.31                       | 626.32   |
| CL Brg. Pier 1    | 28+49.44 | -26.00 | 626.27                       | 626.27   |
| 2A                | 28+59.44 | -26.00 | 626.23                       | 626.24   |
| 2B                | 28+69.44 | -26.00 | 626.19                       | 626.21   |
| 2C                | 28+79.44 | -26.00 | 626.15                       | 626.18   |
| 2D                | 28+89.44 | -26.00 | 626.12                       | 626.13   |
| CL S. Brg. Pier 2 | 28+99.44 | -26.00 | 626.08                       | 626.08   |
| CL Pier 2         | 29+00.44 | -26.00 | 626.07                       | 626.07   |

**BEAM A3**

| Location          | Station  | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-------------------|----------|--------|------------------------------|--|
| Bk. S. Abut.      | 27+94.33 | -19.00 | 626.62                       | 626.62   |
| CL Brg. S. Abut.  | 27+96.83 | -19.00 | 626.61                       | 626.61   |
| 1A                | 28+06.83 | -19.00 | 626.57                       | 626.59   |
| 1B                | 28+16.83 | -19.00 | 626.53                       | 626.56   |
| 1C                | 28+26.83 | -19.00 | 626.50                       | 626.52   |
| 1D                | 28+36.83 | -19.00 | 626.46                       | 626.47   |
| CL Brg. Pier 1    | 28+47.83 | -19.00 | 626.42                       | 626.42   |
| 2A                | 28+57.83 | -19.00 | 626.38                       | 626.38   |
| 2B                | 28+67.83 | -19.00 | 626.34                       | 626.36   |
| 2C                | 28+77.83 | -19.00 | 626.30                       | 626.32   |
| 2D                | 28+87.83 | -19.00 | 626.26                       | 626.28   |
| CL S. Brg. Pier 2 | 28+97.83 | -19.00 | 626.22                       | 626.22   |
| CL Pier 2         | 28+98.83 | -19.00 | 626.22                       | 626.22   |

**BEAM A4**

| Location          | Station  | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-------------------|----------|--------|------------------------------|--|
| Bk. S. Abut.      | 27+92.71 | -12.00 | 626.77                       | 626.77   |
| CL Brg. S. Abut.  | 27+95.21 | -12.00 | 626.76                       | 626.76   |
| 1A                | 28+05.21 | -12.00 | 626.72                       | 626.73   |
| 1B                | 28+15.21 | -12.00 | 626.68                       | 626.70   |
| 1C                | 28+25.21 | -12.00 | 626.64                       | 626.66   |
| 1D                | 28+35.21 | -12.00 | 626.60                       | 626.61   |
| CL Brg. Pier 1    | 28+46.21 | -12.00 | 626.56                       | 626.56   |
| 2A                | 28+56.21 | -12.00 | 626.52                       | 626.53   |
| 2B                | 28+66.21 | -12.00 | 626.49                       | 626.50   |
| 2C                | 28+76.21 | -12.00 | 626.45                       | 626.47   |
| 2D                | 28+86.21 | -12.00 | 626.41                       | 626.42   |
| CL S. Brg. Pier 2 | 28+96.21 | -12.00 | 626.37                       | 626.37   |
| CL Pier 2         | 28+97.21 | -12.00 | 626.37                       | 626.37   |



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown herein. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown herein, minus slab thickness, equals the fillet heights "t" above top flange of beams.

**FILLET HEIGHTS**

**NOTE:**

Offset measured from @ SB IL-171 & P.G.L.

|             |                                      |              |          |            |     |           |  |
|-------------|--------------------------------------|--------------|----------|------------|-----|-----------|--|
| FILE NAME = | 0160486.60J16.014.TOS.Elev.1and2.dgn | USER NAME =  | jsurber  | DESIGNED - | TJJ | REVISED - |  |
|             |                                      | CHECKED -    | LRB      | REVISIONS  |     |           |  |
|             |                                      | PLOT SCALE = |          | DRAWN -    | TJJ | REVISED - |  |
|             |                                      | PLOT DATE =  | 8/6/2014 | CHECKED -  | LRB | REVISED - |  |

|                           |             |        |              |           |
|---------------------------|-------------|--------|--------------|-----------|
| F.A.P. RTE.               | SECTION     | COUNTY | TOTAL SHEETS | SHEET NO. |
| 373                       | 2013-038B-R | COOK   | 821          | 604       |
| CONTRACT NO.              |             |        | 60J16        |           |
| ILLINOIS FED. AID PROJECT |             |        |              |           |