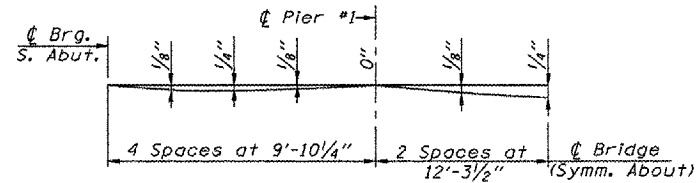


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

|                       |         |          |                  |           |
|-----------------------|---------|----------|------------------|-----------|
| ROUTE NO.             | SECTION | COUNTY   | TOTAL SHEETS     | SHEET NO. |
| F.A.P. 656            | (11)    | TAZEWELL | 32               | 15        |
| FED. ROAD DIST. NO. 4 |         | ILLINOIS | FED. AID PROJECT |           |
| CONTRACT NO. 68024    |         |          |                  |           |

SHEET NO. 4  
OF 18 SHEETS



**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 below.



**FILLET HEIGHTS**

To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the 'Theoretical Grade Elevations Adjusted for Dead Load Deflections' minus slab thickness, equals the fillet heights "t" above top flange of beams.

| BEAM 1          |           |        |                             |  |
|-----------------|-----------|--------|-----------------------------|--|
| Location        | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.    | 165+76.74 | 14.90' | 525.42                      | 525.42   |
| ☉ Brg. S. Abut. | 165+79.07 | 14.90' | 525.43                      | 525.43   |
| A               | 165+89.07 | 14.90' | 525.45                      | 525.46   |
| B               | 165+99.07 | 14.90' | 525.47                      | 525.48   |
| C               | 166+09.07 | 14.90' | 525.48                      | 525.48   |
| ☉ Brg. Pier 1   | 166+18.49 | 14.90' | 525.49                      | 525.49   |
| D               | 166+28.49 | 14.90' | 525.50                      | 525.51   |
| E               | 166+38.49 | 14.90' | 525.50                      | 525.52   |
| F               | 166+48.49 | 14.90' | 525.51                      | 525.52   |
| G               | 166+58.49 | 14.90' | 525.50                      | 525.51   |
| ☉ Brg. Pier 2   | 166+67.65 | 14.90' | 525.50                      | 525.50   |
| H               | 166+77.65 | 14.90' | 525.49                      | 525.50   |
| I               | 166+87.65 | 14.90' | 525.48                      | 525.49   |
| J               | 166+97.65 | 14.90' | 525.47                      | 525.48   |
| ☉ Brg. N. Abut. | 167+07.07 | 14.90' | 525.45                      | 525.45   |
| Bk. N. Abut.    | 167+09.40 | 14.90' | 525.45                      | 525.45   |

| BEAM 2          |           |        |                             |  |
|-----------------|-----------|--------|-----------------------------|--|
| Location        | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.    | 165+80.91 | 8.94'  | 525.54                      | 525.54   |
| ☉ Brg. S. Abut. | 165+83.24 | 8.94'  | 525.55                      | 525.55   |
| A               | 165+93.24 | 8.94'  | 525.57                      | 525.57   |
| B               | 166+03.24 | 8.94'  | 525.58                      | 525.59   |
| C               | 166+13.24 | 8.94'  | 525.59                      | 525.60   |
| ☉ Brg. Pier 1   | 166+22.66 | 8.94'  | 525.60                      | 525.60   |
| D               | 166+32.66 | 8.94'  | 525.61                      | 525.62   |
| E               | 166+42.66 | 8.94'  | 525.61                      | 525.63   |
| F               | 166+52.66 | 8.94'  | 525.61                      | 525.63   |
| G               | 166+62.66 | 8.94'  | 525.61                      | 525.62   |
| ☉ Brg. Pier 2   | 166+71.82 | 8.94'  | 525.60                      | 525.60   |
| H               | 166+81.82 | 8.94'  | 525.60                      | 525.60   |
| I               | 166+91.82 | 8.94'  | 525.58                      | 525.60   |
| J               | 167+01.82 | 8.94'  | 525.57                      | 525.58   |
| ☉ Brg. N. Abut. | 167+11.24 | 8.94'  | 525.55                      | 525.55   |
| Bk. N. Abut.    | 167+13.57 | 8.94'  | 525.55                      | 525.55   |

| BEAM 3          |           |        |                             |  |
|-----------------|-----------|--------|-----------------------------|--|
| Location        | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.    | 165+85.08 | 2.98'  | 525.64                      | 525.64   |
| ☉ Brg. S. Abut. | 165+87.41 | 2.98'  | 525.65                      | 525.65   |
| A               | 165+97.41 | 2.98'  | 525.67                      | 525.67   |
| B               | 166+07.41 | 2.98'  | 525.68                      | 525.69   |
| C               | 166+17.41 | 2.98'  | 525.69                      | 525.69   |
| ☉ Brg. Pier 1   | 166+26.83 | 2.98'  | 525.70                      | 525.70   |
| D               | 166+36.83 | 2.98'  | 525.70                      | 525.71   |
| E               | 166+46.83 | 2.98'  | 525.71                      | 525.72   |
| F               | 166+56.83 | 2.98'  | 525.71                      | 525.72   |
| G               | 166+66.83 | 2.98'  | 525.70                      | 525.71   |
| ☉ Brg. Pier 2   | 166+75.99 | 2.98'  | 525.69                      | 525.69   |
| H               | 166+85.99 | 2.98'  | 525.68                      | 525.69   |
| I               | 166+95.99 | 2.98'  | 525.67                      | 525.68   |
| J               | 167+05.99 | 2.98'  | 525.66                      | 525.66   |
| ☉ Brg. N. Abut. | 167+15.41 | 2.98'  | 525.64                      | 525.64   |
| Bk. N. Abut.    | 167+17.74 | 2.98'  | 525.63                      | 525.63   |

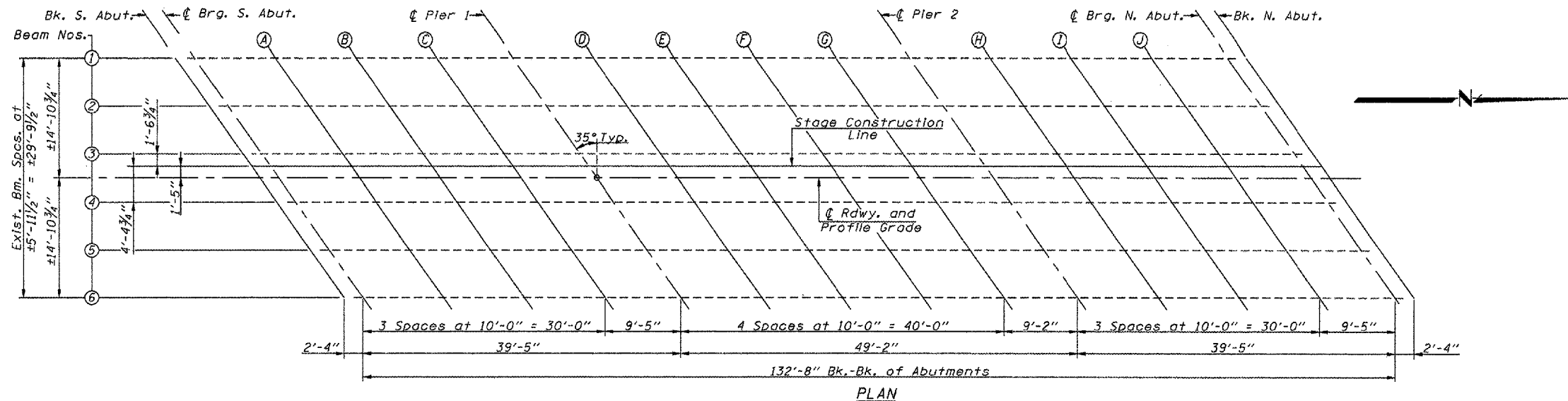
| STAGE CONSTRUCTION JOINT |           |        |                             |  |
|--------------------------|-----------|--------|-----------------------------|--|
| Location                 | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.             | 165+86.18 | 1.42'  | 525.67                      | 525.67   |
| ☉ Brg. S. Abut.          | 165+88.51 | 1.42'  | 525.67                      | 525.67   |
| A                        | 165+98.51 | 1.42'  | 525.69                      | 525.70   |
| B                        | 166+08.51 | 1.42'  | 525.71                      | 525.72   |
| C                        | 166+18.51 | 1.42'  | 525.72                      | 525.72   |
| ☉ Brg. Pier 1            | 166+27.93 | 1.42'  | 525.72                      | 525.72   |
| D                        | 166+37.93 | 1.42'  | 525.73                      | 525.74   |
| E                        | 166+47.93 | 1.42'  | 525.73                      | 525.75   |
| F                        | 166+57.93 | 1.42'  | 525.73                      | 525.74   |
| G                        | 166+67.93 | 1.42'  | 525.73                      | 525.73   |
| ☉ Brg. Pier 2            | 166+77.09 | 1.42'  | 525.72                      | 525.72   |
| H                        | 166+87.09 | 1.42'  | 525.71                      | 525.71   |
| I                        | 166+97.09 | 1.42'  | 525.69                      | 525.71   |
| J                        | 167+07.09 | 1.42'  | 525.68                      | 525.69   |
| ☉ Brg. N. Abut.          | 167+16.51 | 1.42'  | 525.66                      | 525.66   |
| Bk. N. Abut.             | 167+18.84 | 1.42'  | 525.65                      | 525.65   |

| ☉ RDWY. & PROFILE GRADE |           |        |                             |  |
|-------------------------|-----------|--------|-----------------------------|--|
| Location                | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.            | 165+85.17 | 0'     | 525.69                      | 525.69   |
| ☉ Brg. S. Abut.         | 165+89.50 | 0'     | 525.70                      | 525.70   |
| A                       | 165+99.50 | 0'     | 525.72                      | 525.72   |
| B                       | 166+09.50 | 0'     | 525.73                      | 525.74   |
| C                       | 166+19.50 | 0'     | 525.74                      | 525.74   |
| ☉ Brg. Pier 1           | 166+28.92 | 0'     | 525.75                      | 525.75   |
| D                       | 166+38.92 | 0'     | 525.75                      | 525.76   |
| E                       | 166+48.92 | 0'     | 525.75                      | 525.77   |
| F                       | 166+58.92 | 0'     | 525.75                      | 525.77   |
| G                       | 166+68.92 | 0'     | 525.75                      | 525.75   |
| ☉ Brg. Pier 2           | 166+78.08 | 0'     | 525.74                      | 525.74   |
| H                       | 166+88.08 | 0'     | 525.73                      | 525.73   |
| I                       | 166+98.08 | 0'     | 525.72                      | 525.73   |
| J                       | 167+08.08 | 0'     | 525.70                      | 525.71   |
| ☉ Brg. N. Abut.         | 167+17.50 | 0'     | 525.68                      | 525.68   |
| Bk. N. Abut.            | 167+19.83 | 0'     | 525.67                      | 525.67   |

| BEAM 4          |           |        |                             |  |
|-----------------|-----------|--------|-----------------------------|--|
| Location        | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.    | 165+89.26 | 2.98'  | 525.65                      | 525.65   |
| ☉ Brg. S. Abut. | 165+91.59 | 2.98'  | 525.66                      | 525.66   |
| A               | 166+01.59 | 2.98'  | 525.67                      | 525.68   |
| B               | 166+11.59 | 2.98'  | 525.68                      | 525.70   |
| C               | 166+21.59 | 2.98'  | 525.69                      | 525.70   |
| ☉ Brg. Pier 1   | 166+31.01 | 2.98'  | 525.70                      | 525.70   |
| D               | 166+41.01 | 2.98'  | 525.71                      | 525.71   |
| E               | 166+51.01 | 2.98'  | 525.71                      | 525.72   |
| F               | 166+61.01 | 2.98'  | 525.70                      | 525.72   |
| G               | 166+71.01 | 2.98'  | 525.70                      | 525.71   |
| ☉ Brg. Pier 2   | 166+80.17 | 2.98'  | 525.69                      | 525.69   |
| H               | 166+90.17 | 2.98'  | 525.68                      | 525.68   |
| I               | 167+00.17 | 2.98'  | 525.67                      | 525.68   |
| J               | 167+10.17 | 2.98'  | 525.65                      | 525.65   |
| ☉ Brg. N. Abut. | 167+19.59 | 2.98'  | 525.63                      | 525.63   |
| Bk. N. Abut.    | 167+21.92 | 2.98'  | 525.62                      | 525.62   |

| BEAM 5          |           |        |                             |  |
|-----------------|-----------|--------|-----------------------------|--|
| Location        | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.    | 165+93.43 | 8.94'  | 525.57                      | 525.57   |
| ☉ Brg. S. Abut. | 165+95.76 | 8.94'  | 525.57                      | 525.57   |
| A               | 166+05.76 | 8.94'  | 525.58                      | 525.59   |
| B               | 166+15.76 | 8.94'  | 525.60                      | 525.61   |
| C               | 166+25.76 | 8.94'  | 525.60                      | 525.61   |
| ☉ Brg. Pier 1   | 166+35.18 | 8.94'  | 525.61                      | 525.61   |
| D               | 166+45.18 | 8.94'  | 525.61                      | 525.62   |
| E               | 166+55.18 | 8.94'  | 525.61                      | 525.63   |
| F               | 166+65.18 | 8.94'  | 525.61                      | 525.62   |
| G               | 166+75.18 | 8.94'  | 525.60                      | 525.61   |
| ☉ Brg. Pier 2   | 166+84.34 | 8.94'  | 525.59                      | 525.59   |
| H               | 166+94.34 | 8.94'  | 525.58                      | 525.58   |
| I               | 167+04.34 | 8.94'  | 525.57                      | 525.58   |
| J               | 167+14.34 | 8.94'  | 525.55                      | 525.55   |
| ☉ Brg. N. Abut. | 167+23.76 | 8.94'  | 525.53                      | 525.53   |
| Bk. N. Abut.    | 167+26.09 | 8.94'  | 525.52                      | 525.52   |

| BEAM 6          |           |        |                             |  |
|-----------------|-----------|--------|-----------------------------|--|
| Location        | Station   | Offset | Theoretical Grade Elevation | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
| Bk. S. Abut.    | 165+97.60 | 14.90' | 525.46                      | 525.46   |
| ☉ Brg. S. Abut. | 165+99.93 | 14.90' | 525.47                      | 525.47   |
| A               | 166+09.93 | 14.90' | 525.48                      | 525.49   |
| B               | 166+19.93 | 14.90' | 525.49                      | 525.50   |
| C               | 166+29.93 | 14.90' | 525.50                      | 525.50   |
| ☉ Brg. Pier 1   | 166+39.35 | 14.90' | 525.50                      | 525.50   |
| D               | 166+49.35 | 14.90' | 525.51                      | 525.51   |
| E               | 166+59.35 | 14.90' | 525.50                      | 525.52   |
| F               | 166+69.35 | 14.90' | 525.50                      | 525.51   |
| G               | 166+79.35 | 14.90' | 525.49                      | 525.50   |
| ☉ Brg. Pier 2   | 166+88.51 | 14.90' | 525.48                      | 525.48   |
| H               | 166+98.51 | 14.90' | 525.47                      | 525.47   |
| I               | 167+08.51 | 14.90' | 525.45                      | 525.46   |
| J               | 167+18.51 | 14.90' | 525.43                      | 525.44   |
| ☉ Brg. N. Abut. | 167+27.93 | 14.90' | 525.41                      | 525.41   |
| Bk. N. Abut.    | 167+30.26 | 14.90' | 525.40                      | 525.40   |



TOP OF SLAB ELEVATIONS  
IL. ROUTE 29 OVER CRANE CREEK  
F.A.P. ROUTE 656 - SECTION (11)  
TAZEWELL COUNTY  
STA. 166+53.50  
S.N. 090-0053