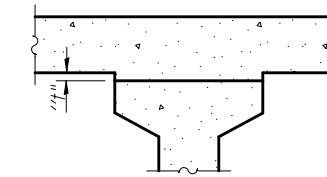


### DEAD LOAD DEFLECTION DIAGRAMS

(Includes weight of concrete, excluding beams).

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.



To determine "t": After all precast prestressed beams have 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" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

### FILLET HEIGHTS

#### Q WEST CURTAIN WALL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+79.37	-25.38	752.53	752.53
Q Brg. S. Bent	19+80.58	-25.36	752.61	752.61
C	19+90.26	-25.26	753.26	753.26
D	19+99.94	-25.28	753.87	753.87
Q Brg. S. Abut.	20+07.51	-25.39	754.33	754.33
Bk. S. Abut.	20+08.23	-25.40	754.37	754.37

#### BEAM 1a

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+79.12	-18.89	752.64	752.64
Q Brg. S. Bent	19+80.34	-18.86	752.72	752.72
C	19+90.10	-18.76	753.38	753.38
D	19+99.86	-18.78	754.00	754.00
Q Brg. S. Abut.	20+07.49	-18.88	754.46	754.46
Bk. S. Abut.	20+08.23	-18.90	754.50	754.50

#### BEAM 2a

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+78.82	-11.22	752.64	752.64
Q Brg. S. Bent	19+80.06	-11.20	752.73	752.73
C	19+89.91	-11.09	753.38	753.39
D	19+99.77	-11.11	754.01	754.02
Q Brg. S. Abut.	20+07.48	-11.22	754.48	754.48
Bk. S. Abut.	20+08.22	-11.23	754.53	754.53

#### BEAM 3a

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+78.52	-3.56	752.51	752.51
Q Brg. S. Bent	19+79.76	-3.54	752.59	752.59
C	19+89.72	-3.43	753.26	753.26
D	19+99.67	-3.44	753.89	753.90
Q Brg. S. Abut.	20+07.46	-3.55	754.37	754.37
Bk. S. Abut.	20+08.21	-3.56	754.41	754.41

#### Q F.A.S. RTE. 1520 (C.H. 50) & PG

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+78.38	0.00	752.45	752.45
Q Brg. S. Bent	19+79.63	0.00	752.53	752.53
C	19+89.63	0.00	753.20	753.20
D	19+99.63	0.00	753.84	753.84
Q Brg. S. Abut.	20+07.46	0.00	754.31	754.31
Bk. S. Abut.	20+08.21	0.00	754.36	754.36

#### BEAM 4a

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+78.21	4.10	752.37	752.37
Q Brg. S. Bent	19+79.47	4.12	752.46	752.46
C	19+89.52	4.24	753.13	753.13
D	19+99.58	4.22	753.77	753.77
Q Brg. S. Abut.	20+07.44	4.12	754.25	754.25
Bk. S. Abut.	20+08.20	4.11	754.30	754.30

#### BEAM 5a

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+77.90	11.76	752.23	752.23
Q Brg. S. Bent	19+79.16	11.79	752.32	752.32
C	19+89.32	11.91	753.00	753.00
D	19+99.48	11.89	753.65	753.65
Q Brg. S. Abut.	20+07.43	11.79	754.14	754.14
Bk. S. Abut.	20+08.19	11.77	754.18	754.18

#### Q EAST CURTAIN WALL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Bent	19+77.62	18.26	752.13	752.13
Q Brg. S. Bent	19+78.90	18.28	752.22	752.22
C	19+89.15	18.41	752.90	752.90
D	19+99.40	18.39	753.56	753.56
Q Brg. S. Abut.	20+07.41	18.29	754.05	754.05
Bk. S. Abut.	20+08.18	18.28	754.09	754.09

DESIGNED - NICHOLAS R. BARNETT  
CHECKED - DEWEY H. COULTAS  
DRAWN - MICHAEL B. MOSSMAN  
CHECKED - D.H.C. / N.R.B.

EXAMINED  
ACTING ENGINEER OF BRIDGE DESIGN  
PASSED  
ACTING ENGINEER OF BRIDGES AND STRUCTURES

DATE - FEBRUARY 25, 2013  
REVISED  
REVISED

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH VAULTED ABUTMENT SLAB ELEVATIONS  
STRUCTURE NO. 010 - 0289

SHEET NO. 9 OF 62 SHEETS

F.A.I. RTE. 74	SECTION 10-4BR	COUNTY CHAMPAIGN	TOTAL SHEETS 290 94
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70700