

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.



To determine "Y": 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 algebraically from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet height "Y". A positive value of "Y" equals the fillet height above the top of the beam. A negative value of "Y", not to exceed 2", equals the embedment of the beam above the theoretical bottom of slab elevation.

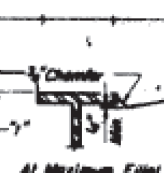
FILLET HEIGHTS

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Beams W.Appr. Bent	1	2100+000	83.444	650.217	650.217
	2	2100+000	76.047	650.448	650.448
	3	2100+000	69.250	650.678	650.678
	4	2100+000	61.750	650.908	650.908
	5	2100+000	54.250	651.138	651.138
	6	2100+000	46.750	651.440	651.440
	7	2100+000	39.250	651.693	651.693
	8	2100+000	39.250	651.418	651.418
	9	2100+000	46.750	651.667	651.667
	10	2100+000	54.250	651.916	651.916
	11	2100+000	61.750	652.164	652.164
	12	2100+000	69.250	652.412	652.412
A	13	2100+000	76.750	652.660	652.660
	1	2100+000	83.046	650.180	650.180
	2	2100+000	76.147	650.434	650.434
	3	2100+000	69.250	650.689	650.689
	4	2100+000	61.750	650.944	650.944
	5	2100+000	54.250	651.199	651.199
	6	2100+000	46.750	651.454	651.454
	7	2100+000	39.250	651.709	651.709
	8	2100+000	39.250	651.412	651.412
	9	2100+000	46.750	651.667	651.667
	10	2100+000	54.250	651.922	651.922
	11	2100+000	61.750	652.177	652.177
12	2100+000	69.250	652.432	652.432	
B	13	2100+000	76.750	652.687	652.687
	1	2100+000	83.240	650.398	650.398
	2	2100+000	76.250	650.653	650.653
	3	2100+000	69.250	650.908	650.908
	4	2100+000	61.750	651.163	651.163
	5	2100+000	54.250	651.418	651.418
	6	2100+000	46.750	651.673	651.673
	7	2100+000	39.250	651.928	651.928
	8	2100+000	39.250	651.603	651.603
	9	2100+000	46.750	651.858	651.858
	10	2100+000	54.250	652.113	652.113
	11	2100+000	61.750	652.368	652.368
12	2100+000	69.250	652.623	652.623	
13	2100+000	76.750	652.878	652.878	

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
End of Beams W. Abut.	1	2100+7957	83.448	650.126	650.125
	2	2100+7957	76.349	650.369	650.369
	3	2100+7957	69.250	650.613	650.613
	4	2100+7957	61.750	650.857	650.857
	5	2100+7957	54.250	651.101	651.101
	6	2100+7957	46.750	651.345	651.345
	7	2100+7957	39.250	651.589	651.589
	8	2100+7957	39.250	651.312	651.312
	9	2100+7957	46.750	651.556	651.556
	10	2100+7957	54.250	651.800	651.800
	11	2100+7957	61.750	652.044	652.044
	12	2100+7957	69.250	652.288	652.288
13	2100+7957	76.750	652.532	652.532	

Note: Offsets are measured from tangent to & FA 405 at Sta. 2100+88.04. Elevations are to top of concrete deck.

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
d Brg. W. Abut.	1	2100+8004	82.628	650.147	650.147
	J1.1	2100+7807	78.674	650.285	650.285
	2	2100+7821	75.854	650.385	650.385
	3	2100+7876	68.813	650.485	650.485
	4	2100+7971	61.804	650.585	650.585
	5	2100+8026	54.896	650.685	650.685
	6	2100+8081	47.988	650.785	650.785
	J1.2	2100+8092	48.000	651.507	651.507
	7	2100+8092	39.979	651.610	651.610
	8	2100+8092	39.979	651.414	651.414
	J1.3	2100+8092	43.000	651.817	651.817
	9	2100+8092	47.188	651.957	651.957
	10	2100+8092	54.396	652.097	652.097
11	2100+8092	61.604	652.237	652.237	
12	2100+8092	68.813	652.377	652.377	
J1.4	2100+8092	72.000	652.482	652.482	
13	2100+8092	79.021	652.623	652.623	



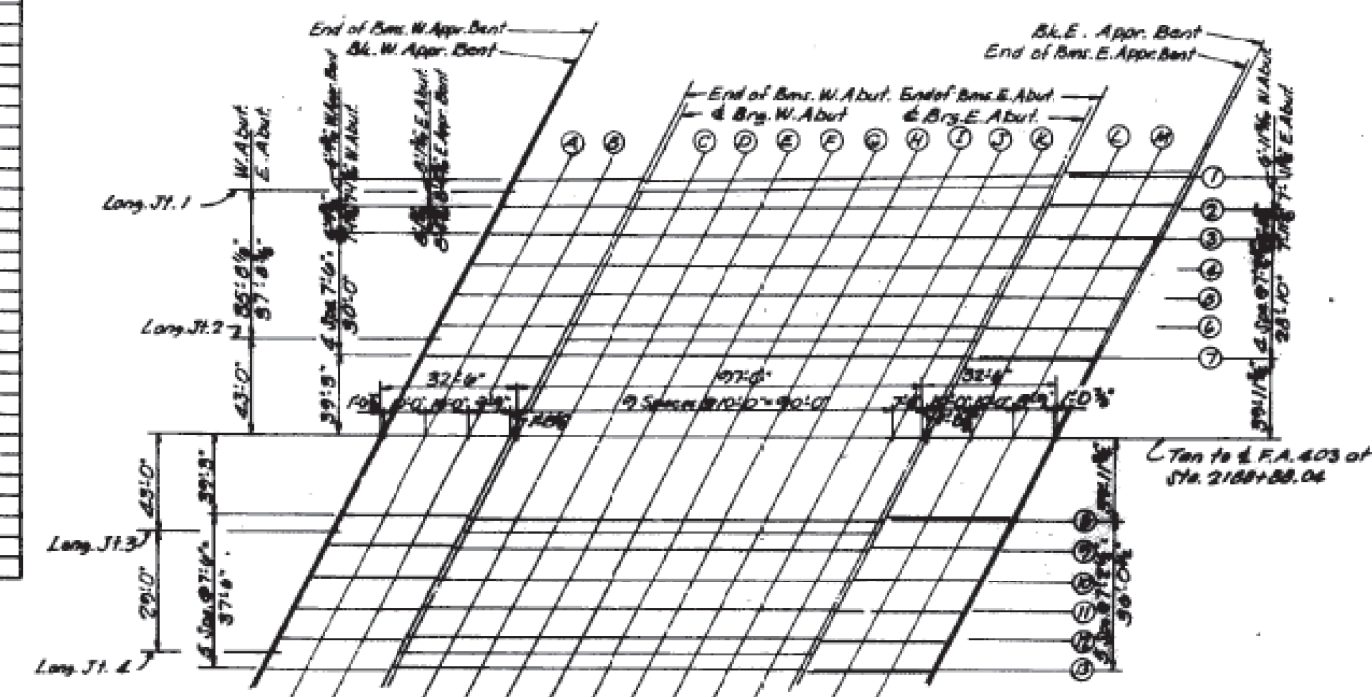
To determine "Y": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet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

FILLET HEIGHTS

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
C	1	2100+8076	82.900	650.045	650.108
	J1.1	2100+8077	78.884	650.249	650.312
	2	2100+8120	75.854	650.354	650.417
	3	2100+8173	68.813	650.459	650.522
	4	2100+8226	61.804	650.564	650.627
	5	2100+8279	54.896	650.669	650.732
	6	2100+8332	47.988	650.774	650.837
	J1.2	2100+8343	48.000	651.497	651.560
	7	2100+8343	39.979	651.600	651.663
	8	2100+8343	39.979	651.404	651.467
	J1.3	2100+8343	43.000	651.807	651.870
	9	2100+8343	47.188	651.947	652.010
10	2100+8343	54.396	652.087	652.247	
11	2100+8343	61.604	652.227	652.394	
12	2100+8343	68.813	652.367	652.534	
J1.4	2100+8343	72.000	652.472	652.642	
13	2100+8343	79.021	652.613	652.774	
D	1	2100+8343	82.102	650.072	650.135
	J1.1	2100+8343	78.086	650.276	650.339
	2	2100+8343	75.056	650.381	650.444
	3	2100+8343	68.015	650.486	650.551
	4	2100+8343	61.004	650.591	650.656
	5	2100+8343	54.096	650.696	650.761
	6	2100+8343	47.188	650.801	650.866
	J1.2	2100+8343	43.000	651.523	651.586
	7	2100+8343	39.979	651.628	651.693
	8	2100+8343	39.979	651.432	651.497
	J1.3	2100+8343	43.000	651.835	651.898
	9	2100+8343	47.188	651.975	652.038
10	2100+8343	54.396	652.115	652.178	
11	2100+8343	61.604	652.255	652.318	
12	2100+8343	68.813	652.395	652.458	
J1.4	2100+8343	72.000	652.500	652.563	
E	13	2100+8343	79.021	652.641	652.704
	J1.1	2100+8343	75.005	650.171	650.234
	2	2100+8343	72.007	650.276	650.339
	3	2100+8343	69.013	650.381	650.444
	4	2100+8343	66.004	650.486	650.551
	5	2100+8343	63.096	650.591	650.656
	6	2100+8343	60.188	650.696	650.761
	J1.2	2100+8343	56.000	651.419	651.482
	7	2100+8343	52.979	651.524	651.587
	8	2100+8343	52.979	651.328	651.531
	J1.3	2100+8343	49.000	651.731	651.794
	9	2100+8343	47.188	651.871	652.034
10	2100+8343	54.396	652.011	652.274	
11	2100+8343	61.604	652.151	652.414	
12	2100+8343	68.813	652.291	652.554	
J1.4	2100+8343	72.000	652.406	652.609	
13	2100+8343	79.021	652.547	652.743	

ELEVATIONS

F.A. RTE. 405 - SEC. 195 - 2105-3
 WHITESIDE COUNTY
 STATION 2100+88.04



DESIGNED C.D.C.
 CHECKED N.M.W.
 DRAWN P.G. BIRN & C.D.C.
 CHECKED L.M.W.
 E-5 8-1-65

DESIGNED -	REVISED -
DRAWN -	REVISED -
CHECKED -	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING
 BRIDGE PLANS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
88	D2 BRIDGE PAINTING 2014-5	WHITESIDE	12	8
			CONTRACT NO. 64K12	