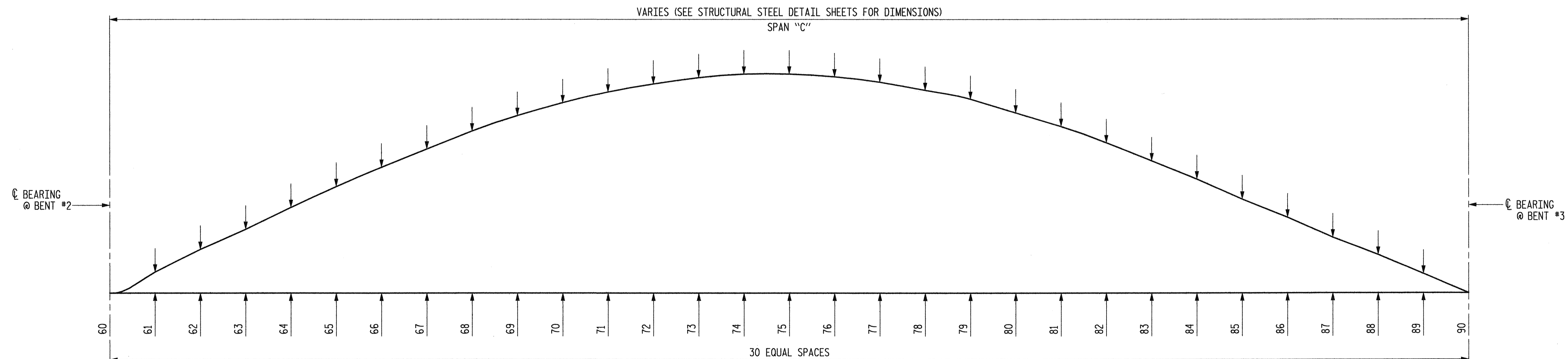


DEAD LOAD DEFLECTION AND CAMBER

GIRDER	SPAN "C"																																						
	THIRTIETH POINTS									60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89
1	DEFLECTION DUE TO WT. OF STEEL	0	.001	.001	.002	.003	.004	.005	.006	.007	.008	.009	.010	.011	.012	.013	.014	.014	.014	.014	.013	.012	.011	.009	.008	.006	.004	.003	.001	.000	.000	.000	.000	.000	0				
	DEFLECTION DUE TO WT. OF SLAB	0	.000	.004	.007	.011	.016	.021	.026	.032	.037	.041	.046	.048	.050	.051	.051	.050	.047	.044	.040	.035	.030	.024	.018	.013	.008	.004	.001	.000	.004	.001	.000	.000	0				
	DEFLECTION DUE TO WT. OF RAIL	0	.000	.001	.001	.002	.002	.003	.003	.005	.005	.006	.006	.006	.007	.007	.007	.007	.006	.006	.006	.005	.004	.003	.003	.002	.001	.001	.001	.000	.000	.000	.000	.000	0				
	TOTAL DEAD LOAD DEFLECTION	0	.001	.006	.010	.016	.023	.030	.036	.046	.053	.059	.065	.068	.071	.072	.072	.071	.066	.062	.057	.049	.042	.033	.025	.018	.010	.005	.001	.000	.000	.000	.000	0					
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0					
	VERTICAL CURVE ORDINATE	0	.022	.042	.060	.078	.093	.107	.120	.131	.141	.149	.156	.161	.165	.167	.168	.167	.165	.161	.156	.149	.141	.131	.120	.107	.093	.078	.060	.042	.022	0							
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0					
REQUIRED CAMBER	0	23	48	70	94	116	137	156	177	194	208	221	229	236	239	240	238	231	223	213	198	183	164	145	125	103	83	61	42	21	0								
2	DEFLECTION DUE TO WT. OF STEEL	0	.001	.001	.002	.004	.005	.007	.008	.010	.012	.013	.014	.015	.015	.015	.015	.014	.013	.012	.010	.008	.007	.005	.003	.002	.001	.000	.000	.000	.000	.000	0						
	DEFLECTION DUE TO WT. OF SLAB	0	.001	.005	.009	.013	.019	.024	.030	.036	.041	.045	.050	.052	.054	.055	.055	.054	.051	.048	.043	.038	.033	.027	.020	.015	.010	.005	.002	.000	.000	.000	0						
	DEFLECTION DUE TO WT. OF RAIL	0	.000	.001	.001	.002	.002	.003	.004	.005	.005	.006	.006	.007	.007	.007	.007	.007	.006	.006	.006	.005	.005	.003	.003	.002	.002	.001	.001	.000	.000	.000	0						
	TOTAL DEAD LOAD DEFLECTION	0	.002	.007	.012	.019	.026	.034	.042	.051	.058	.064	.070	.074	.076	.077	.077	.076	.072	.067	.061	.053	.046	.037	.028	.020	.014	.007	.003	.000	.000	.000	0						
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0						
	VERTICAL CURVE ORDINATE	0	.022	.042	.060	.078	.093	.107	.120	.131	.141	.149	.156	.161	.165	.167	.168	.167	.165	.161	.156	.149	.141	.131	.120	.107	.093	.078	.060	.042	.022	0							
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0						
REQUIRED CAMBER	0	24	49	72	97	119	141	162	182	199	213	226	235	241	244	245	243	237	228	217	202	187	168	148	127	107	85	63	42	22	0								
3	DEFLECTION DUE TO WT. OF STEEL	0	.001	.002	.003	.004	.006	.008	.009	.011	.013	.014	.015	.016	.016	.017	.016	.016	.015	.014	.013	.011	.009	.008	.006	.004	.002	.001	.000	.000	.000	.000	0						
	DEFLECTION DUE TO WT. OF SLAB	0	.002	.006	.010	.015	.022	.027	.033	.040	.045	.049	.054	.056	.058	.059	.059	.057	.054	.051	.047	.041	.035	.029	.022	.017	.012	.006	.003	.001	.000	.000	0						
	DEFLECTION DUE TO WT. OF RAIL	0	.000	.001	.001	.002	.003	.003	.004	.005	.006	.006	.007	.007	.007	.007	.007	.007	.006	.006	.006	.005	.005	.004	.003	.002	.002	.001	.001	.000	.000	.000	0						
	TOTAL DEAD LOAD DEFLECTION	0	.003	.009	.014	.021	.031	.038	.046	.056	.064	.069	.076	.079	.081	.083	.082	.080	.076	.071	.066	.057	.049	.041	.031	.023	.016	.008	.004	.001	.000	.000	0						
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0						
	VERTICAL CURVE ORDINATE	0	.022	.042	.060	.078	.093	.107	.120	.131	.141	.149	.156	.161	.165	.167	.168	.167	.165	.161	.156	.149	.141	.131	.120	.107	.093	.078	.060	.042	.022	0							
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0						
REQUIRED CAMBER	0	25	51	74	99	124	145	166	187	205	218	232	240	246	250	250	247	241	232	222	206	190	172	151	130	109	86	64	43	22	0								
4	DEFLECTION DUE TO WT. OF STEEL	0	.001	.002	.003	.005	.007	.009	.010	.012	.014	.015	.016	.017	.017	.018	.017	.017	.016	.015	.013	.012	.010	.008	.006	.005	.003	.001	.000	.000	.000	.000	0						
	DEFLECTION DUE TO WT. OF SLAB	0	.002	.008	.012	.018	.024	.030	.036	.043	.048	.053	.057	.060	.062	.063	.062	.061	.058	.054	.050	.044	.038	.032	.025	.019	.013	.007	.004	.001	.000	.000	0						
	DEFLECTION DUE TO WT. OF RAIL	0	.001	.001	.002	.002	.003	.004	.005	.005	.006	.006	.007	.007	.007	.007	.008	.008	.007	.007	.007	.006	.006	.005	.004	.003	.002	.001	.001	.000	.000	.000	0						
	TOTAL DEAD LOAD DEFLECTION	0	.004	.011	.017	.025	.034	.043	.051	.060	.068	.074	.080	.084	.086	.089	.087	.085	.081	.076	.069	.062	.053	.044	.034	.026	.018	.009	.005	.001	.000	.000	0						
	CAMBER DISSIPATION	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0						
	VERTICAL CURVE ORDINATE	0	.022	.042	.060	.078	.093	.107	.120	.131	.141	.149	.156	.161	.165	.167	.168	.167	.165	.161	.156	.149	.141	.131	.120	.107	.093	.078	.060	.042	.022	0							
	SUPERELEVATION ORDINATE	0	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	0						
REQUIRED CAMBER	0	26	53	77	103	127	150	171	191	209	223	236	245	251	256	255	252	246	237	225	211	194	175	154	133	111	87	65	43	22	0								



SCHEMATIC OF CAMBER ORDINATES - SPAN "C"

FOR CAMBER VALUES AT THIRTIETH POINTS, SEE TABLES.

SLOPE FOR ZERO CAMBER LINE VARIES.

NOTES:

VALUES GIVEN IN TABLE ARE AT THIRTIETH POINTS BETWEEN © BEARINGS.

DEFLECTION AND ORDINATE VALUES ARE GIVEN IN METERS (DECIMAL FORM).

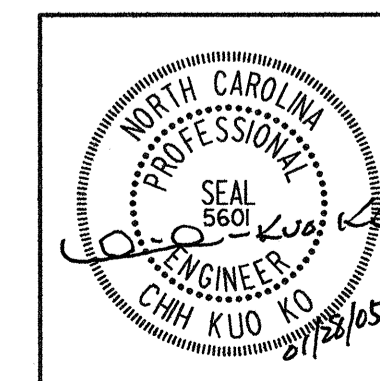
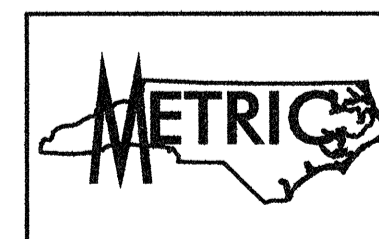
REQUIRED CAMBER VALUES GIVEN IN MILLIMETERS.

PROJECT NO. R-2552AA
WAKE-JOHNSTON COUNTY
 STATION: 27+51.601 -11Y1-

SHEET 3 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 CAMBER AND DEAD LOAD DEFLECTIONS



Plans prepared by:
KO & ASSOCIATES, P.C.
 Consulting Engineers
 1011 SCHAUB DR., SUITE #202
 RALEIGH, N.C. 27606
 For Division of Highways

NO.	REVISIONS			NO.	REVISIONS			SHEET NO.
	BY:	DATE:			BY:	DATE:		
1				3				5-56 TOTAL SHEETS 429
2				4				

DWG. NO. 20

PLOT: 01/28/2005 07:25:58 AM KO & ASSOCIATES, P.C.
 FILE NAME: r1\2552aa.dwg - 82.dgn

DRAWN BY: B.E. LANNING DATE: JAN. 2005
 CHECKED BY: J.C. KO / A.K. ORR DATE: JAN. 2005