

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

SPAN "N" - GIRDER 1																					
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.006	0.010	0.015	0.019	0.022	0.025	0.026	0.027	0.027	0.026	0.024	0.021	0.018	0.015	0.011	0.008	0.004	0.002	0.001	0.000
DEFLECTION DUE TO WEIGHT OF SLAB *	0.000	0.022	0.041	0.059	0.075	0.088	0.097	0.103	0.106	0.105	0.100	0.093	0.082	0.070	0.056	0.042	0.029	0.017	0.008	0.003	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	0.000	0.002	0.004	0.005	0.007	0.008	0.009	0.010	0.010	0.010	0.010	0.009	0.008	0.007	0.006	0.004	0.003	0.002	0.001	0.000	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.030	0.055	0.079	0.101	0.118	0.131	0.139	0.143	0.142	0.136	0.126	0.111	0.095	0.077	0.057	0.040	0.023	0.011	0.004	0.000
VERTICAL CURVE ORDINATE	0.000	0.024	0.049	0.073	0.097	0.122	0.146	0.170	0.195	0.219	0.242	0.257	0.264	0.261	0.250	0.230	0.202	0.164	0.118	0.064	0.000
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING **	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0	5/8	1/4	1 1/16	2 3/8	2 7/8	3 5/16	3 11/16	4 1/16	4 5/16	4 9/16	4 3/8	4 1/2	4 1/4	3 5/16	3 1/16	2 7/8	2 1/4	1 5/8	1 1/16	0

SPAN "N" - GIRDER 2																					
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.006	0.011	0.016	0.021	0.024	0.027	0.028	0.029	0.029	0.028	0.026	0.023	0.019	0.016	0.012	0.008	0.005	0.002	0.001	0.000
DEFLECTION DUE TO WEIGHT OF SLAB *	0.000	0.024	0.046	0.066	0.084	0.099	0.109	0.116	0.119	0.117	0.113	0.104	0.092	0.079	0.063	0.048	0.033	0.019	0.010	0.003	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	0.000	0.002	0.004	0.006	0.007	0.009	0.010	0.010	0.011	0.011	0.010	0.009	0.009	0.007	0.006	0.005	0.003	0.002	0.001	0.000	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.032	0.061	0.088	0.112	0.132	0.146	0.154	0.159	0.157	0.151	0.139	0.124	0.105	0.085	0.065	0.044	0.026	0.013	0.004	0.000
VERTICAL CURVE ORDINATE	0.000	0.024	0.049	0.073	0.097	0.122	0.146	0.170	0.195	0.219	0.242	0.257	0.264	0.261	0.250	0.230	0.202	0.164	0.118	0.064	0.000
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING **	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0	1 1/16	1 5/16	1 5/8	2 1/2	3 1/16	3 1/2	3 7/8	4 1/4	4 1/2	4 11/16	4 3/4	4 5/8	4 3/8	4	3 3/16	2 5/16	2 1/4	1 5/8	1 1/16	0

SPAN "N" - GIRDER 3																					
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.006	0.012	0.017	0.022	0.026	0.028	0.030	0.031	0.031	0.029	0.027	0.024	0.021	0.017	0.013	0.009	0.005	0.003	0.001	0.000
DEFLECTION DUE TO WEIGHT OF SLAB *	0.000	0.026	0.050	0.071	0.091	0.106	0.117	0.124	0.127	0.126	0.121	0.112	0.099	0.085	0.068	0.051	0.036	0.021	0.011	0.004	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	0.000	0.002	0.004	0.006	0.008	0.009	0.010	0.011	0.011	0.011	0.011	0.010	0.009	0.008	0.006	0.005	0.003	0.002	0.001	0.000	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.034	0.066	0.094	0.121	0.141	0.155	0.165	0.169	0.168	0.161	0.149	0.132	0.114	0.091	0.069	0.048	0.028	0.015	0.005	0.000
VERTICAL CURVE ORDINATE	0.000	0.024	0.049	0.073	0.097	0.122	0.146	0.170	0.195	0.219	0.242	0.257	0.264	0.261	0.250	0.230	0.202	0.164	0.118	0.064	0.000
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING **	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0	1 1/16	1 3/8	2	2 5/8	3 1/8	3 5/8	4	4 3/8	4 5/8	4 13/16	4 7/8	4 3/4	4 1/2	4 1/16	3 3/16	3	2 5/16	1 5/8	1 1/16	0

SPAN "N" - GIRDER 4																					
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.007	0.013	0.018	0.023	0.027	0.030	0.032	0.033	0.032	0.031	0.029	0.026	0.022	0.018	0.013	0.009	0.005	0.003	0.001	0.000
DEFLECTION DUE TO WEIGHT OF SLAB *	0.000	0.027	0.052	0.075	0.095	0.111	0.123	0.130	0.133	0.132	0.127	0.117	0.104	0.089	0.071	0.054	0.037	0.022	0.011	0.004	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	0.000	0.002	0.005	0.007	0.008	0.010	0.011	0.012	0.012	0.012	0.011	0.011	0.010	0.008	0.007	0.005	0.003	0.002	0.001	0.000	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.036	0.070	0.100	0.126	0.148	0.164	0.174	0.178	0.176	0.169	0.157	0.140	0.119	0.096	0.072	0.049	0.029	0.015	0.005	0.000
VERTICAL CURVE ORDINATE	0.000	0.024	0.049	0.073	0.097	0.122	0.146	0.170	0.195	0.219	0.242	0.257	0.264	0.261	0.250	0.230	0.202	0.164	0.118	0.064	0.000
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING **	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0	3/4	1 1/16	2 1/16	2 11/16	3 1/4	3 3/4	4 1/8	4 1/2	4 3/4	4 5/16	4 5/16	4 7/8	4 9/16	4 1/8	3 5/8	3	2 5/16	1 5/8	1 1/16	0

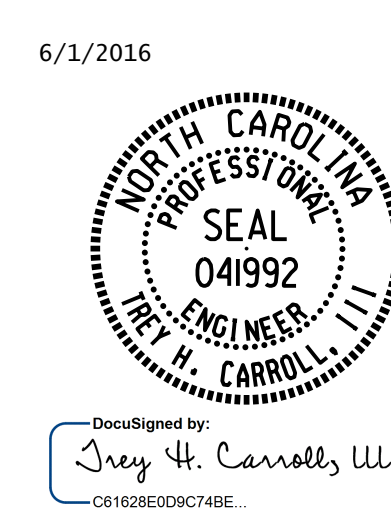
SPAN "N" - GIRDER 5																					
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1
DEFLECTION DUE TO WEIGHT OF GIRDER	0.000	0.007	0.014	0.020	0.025	0.029	0.032	0.034	0.035	0.035	0.033	0.031	0.027	0.023	0.019	0.014	0.010	0.006	0.003	0.001	0.000
DEFLECTION DUE TO WEIGHT OF SLAB *	0.000	0.028	0.054	0.077	0.098	0.115	0.127	0.135	0.138	0.137	0.131	0.120	0.107	0.091	0.073	0.055	0.038	0.022	0.011	0.004	0.000
DEFLECTION DUE TO WEIGHT OF BARRIER RAIL	0.000	0.003	0.005	0.007	0.009	0.011	0.012	0.013	0.013	0.013	0.012	0.011	0.010	0.009	0.007	0.005	0.004	0.002	0.001	0.000	0.000
TOTAL DEAD LOAD DEFLECTION	0.000	0.038	0.073	0.104	0.132	0.155	0.171	0.182	0.186	0.185	0.176	0.162	0.144	0.123	0.099	0.074	0.052	0.030	0.015	0.005	0.000
VERTICAL CURVE ORDINATE	0.000	0.024	0.049	0.073	0.097	0.122	0.146	0.170	0.195	0.219	0.242	0.257	0.264	0.261	0.250	0.230	0.202	0.164	0.118	0.064	0.000
SUPERELEVATION ORDINATE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAMBER DUE TO DISSIPATION RESULTING FROM HEAT CURVING **	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	0	3/4	1 1/16	2 1/8	2 3/4	3 5/16	3 13/16	4 1/4	4 9/16	4 7/8	5	5	4 7/8	4 5/8	4 3/16	3 5/8	3 1/16	2 5/16	1 5/8	1 1/16	0

NOTES:

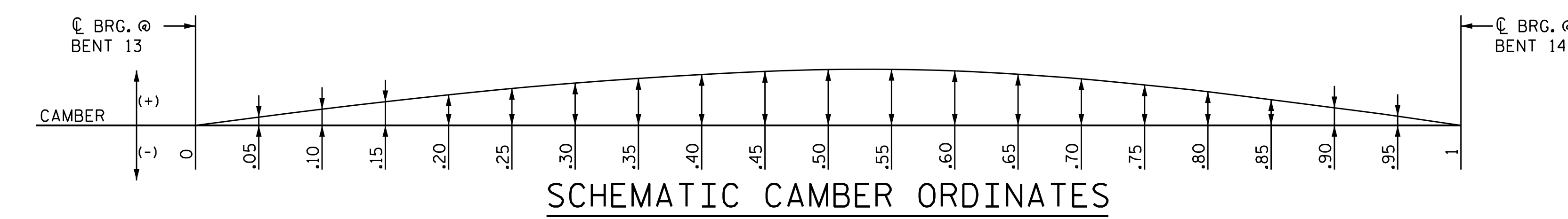
SLOPE FOR ZERO CAMBER BASE LINE VARIES.
 TWENTIETH POINTS SHOWN ARE MEASURED ALONG
 C GIRDER FOR EACH GIRDER.
 DOWNWARD DEFLECTIONS ARE SHOWN AS POSITIVE.
 VERTICAL CURVE AND SUPERELEVATION ORDINATES
 THAT INCREASE CAMBER ARE SHOWN AS POSITIVE.

ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT
 " FINAL CAMBER ", WHICH IS GIVEN IN INCHES (FRACTION FORM).
 * INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
 ** HEAT CURVING METHOD IS ALLOWED. CAMBER DISSIPATION RESULTING
 FROM HEAT CURVING IS ZERO FOR ALL GIRDERS.

PROJECT NO. B-4929
PENDER COUNTY
 STATION: 38+13.81 -L2-
 SHEET 1 OF 9 STEEL ALTERNATE



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 DEAD LOAD DEFLECTIONS
 SPAN "N"



DRAWN BY : K. WHITE DATE : FEB 2016
 CHECKED BY : T. H. CARROLL DATE : FEB 2016
 DESIGN ENGINEER OF RECORD : T. H. CARROLL DATE : MAY 2016

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S-244
2			4			TOTAL SHEETS 278