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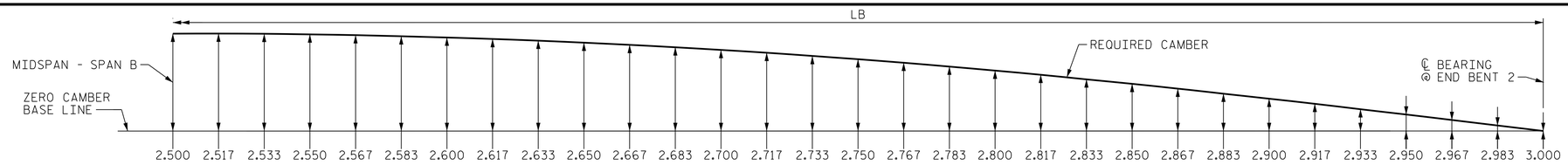


NOTES

SLOPE FOR THE ZERO CAMBER BASE LINE VARIES.

VALUES GIVEN ARE AT SIXTIETH POINTS BETWEEN CENTERLINE OF BEARINGS.

DEFLECTIONS AND ORDINATES ARE IN FEET (DECIMAL FORM).

REQUIRED CAMBER VALUES ARE IN INCHES (FRACTION FORM).

DOWNWARD DEFLECTION IS INDICATED WITH A "-" SIGN.

GIRDER	LB
1	201.281′
2	203.808′
3	206.283′
4	208.711′

SPAN B — GIRDER 1

60TH POINTS	2.500	2.517	2.533	2.550	2.567	2.583	2.600	2.617	2.633	2.650	2.667	2.683	2.700	2.717	2.733	2.750	2.767	2.783	2.800	2.817	2.833	2.850	2.867	2.883	2.900	2.917	2.933	2.950	2.967	2.983	3.000
DEFLECTION DUE TO WEIGHT OF GIRDER	-0.207	-0.208	-0.210	-0.210	-0.210	-0.209	-0.208	-0.206	-0.203	-0.200	-0.196	-0.191	-0.186	-0.180	-0.174	-0.167	-0.159	-0.150	-0.141	-0.132	-0.121	-0.111	-0.100	-0.088	-0.076	-0.064	-0.052	-0.039	-0.026	-0.013	0.000
DEFLECTION DUE TO WEIGHT OF SLAB ✱	-0.454	-0.458	-0.462	-0.462	-0.463	-0.462	-0.459	-0.455	-0.449	-0.442	-0.433	-0.424	-0.412	-0.400	-0.385	-0.370	-0.353	-0.334	-0.314	-0.293	-0.270	-0.247	-0.222	-0.197	-0.170	-0.143	-0.115	-0.087	-0.058	-0.029	0.000
DEFLECTION DUE TO WT. OF BARRIER RAIL	-0.078	-0.079	-0.080	-0.080	-0.080	-0.080	-0.080	-0.079	-0.078	-0.077	-0.075	-0.074	-0.072	-0.070	-0.067	-0.065	-0.062	-0.059	-0.055	-0.052	-0.048	-0.044	-0.039	-0.035	-0.030	-0.026	-0.021	-0.016	-0.011	-0.005	0.000
TOTAL DEAD LOAD DEFLECTION	-0.739	-0.745	-0.751	-0.753	-0.754	-0.751	-0.747	-0.740	-0.730	-0.719	-0.705	-0.689	-0.670	-0.650	-0.626	-0.601	-0.573	-0.543	-0.511	-0.477	-0.440	-0.402	-0.362	-0.320	-0.277	-0.233	-0.187	-0.141	-0.095	-0.047	0.000
VERTICAL CURVE ORDINATE	0.243	0.237	0.229	0.221	0.213	0.205	0.196	0.188	0.180	0.172	0.164	0.156	0.147	0.139	0.131	0.123	0.115	0.107	0.098	0.090	0.082	0.074	0.066	0.057	0.049	0.041	0.033	0.025	0.017	0.008	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	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	11 13/16″	11 13/16″	11 3/4″	11 11/16″	11 5/8″	11 7/16″	11 5/16″	11 1/8″	10 15/16″	10 11/16″	10 7/16″	10 1/8″	9 13/16″	9 1/2″	9 1/16″	8 11/16″	8 1/4″	7 13/16″	7 5/16″	6 13/16″	6 1/4″	5 11/16″	5 1/8″	4 1/2″	3 15/16″	3 5/16″	2 5/8″	2″	1 5/16″	11/16″	0″

SPAN B — GIRDER 2

60TH POINTS	2.500	2.517	2.533	2.550	2.567	2.583	2.600	2.617	2.633	2.650	2.667	2.683	2.700	2.717	2.733	2.750	2.767	2.783	2.800	2.817	2.833	2.850	2.867	2.883	2.900	2.917	2.933	2.950	2.967	2.983	3.000
DEFLECTION DUE TO WEIGHT OF GIRDER	-0.206	-0.207	-0.208	-0.208	-0.208	-0.207	-0.205	-0.203	-0.200	-0.197	-0.192	-0.188	-0.182	-0.176	-0.169	-0.162	-0.155	-0.146	-0.138	-0.128	-0.118	-0.108	-0.097	-0.086	-0.074	-0.062	-0.050	-0.038	-0.026	-0.013	0.000
DEFLECTION DUE TO WEIGHT OF SLAB ✱	-0.448	-0.452	-0.454	-0.455	-0.455	-0.454	-0.450	-0.446	-0.440	-0.433	-0.424	-0.414	-0.402	-0.389	-0.375	-0.360	-0.343	-0.325	-0.305	-0.285	-0.263	-0.240	-0.216	-0.191	-0.166	-0.139	-0.112	-0.085	-0.057	-0.029	0.000
DEFLECTION DUE TO WT. OF BARRIER RAIL	-0.072	-0.073	-0.073	-0.074	-0.074	-0.074	-0.073	-0.072	-0.071	-0.070	-0.069	-0.067	-0.065	-0.063	-0.061	-0.058	-0.056	-0.053	-0.050	-0.046	-0.043	-0.039	-0.035	-0.031	-0.027	-0.023	-0.018	-0.014	-0.009	-0.005	0.000
TOTAL DEAD LOAD DEFLECTION	-0.726	-0.731	-0.736	-0.737	-0.737	-0.734	-0.728	-0.722	-0.711	-0.700	-0.685	-0.669	-0.649	-0.629	-0.605	-0.580	-0.553	-0.524	-0.493	-0.459	-0.424	-0.387	-0.349	-0.308	-0.267	-0.224	-0.181	-0.136	-0.092	-0.046	0.000
VERTICAL CURVE ORDINATE	0.308	0.303	0.297	0.290	0.283	0.274	0.264	0.254	0.242	0.232	0.220	0.209	0.198	0.187	0.176	0.165	0.154	0.143	0.132	0.121	0.110	0.099	0.088	0.077	0.066	0.055	0.044	0.033	0.022	0.011	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	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	1′ -0 3/8″	1′ -0 7/16″	1′ -0 3/8″	1′ -0 5/16″	1′ -0 1/4″	1′ -0 1/8″	11 15/16″	11 11/16″	11 7/16″	11 3/16″	10 7/8″	10 9/16″	10 3/16″	9 13/16″	9 3/8″	8 15/16″	8 1/2″	8″	7 1/2″	6 15/16″	6 7/16″	5 13/16″	5 1/4″	4 5/8″	4″	3 3/8″	2 11/16″	2 1/16″	1 3/8″	11/16″	0″

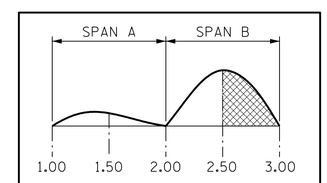
SPAN B — GIRDER 3

60TH POINTS	2.500	2.517	2.533	2.550	2.567	2.583	2.600	2.617	2.633	2.650	2.667	2.683	2.700	2.717	2.733	2.750	2.767	2.783	2.800	2.817	2.833	2.850	2.867	2.883	2.900	2.917	2.933	2.950	2.967	2.983	3.000
DEFLECTION DUE TO WEIGHT OF GIRDER	-0.219	-0.221	-0.222	-0.222	-0.221	-0.221	-0.219	-0.216	-0.213	-0.209	-0.204	-0.199	-0.193	-0.187	-0.180	-0.172	-0.164	-0.154	-0.145	-0.135	-0.124	-0.113	-0.102	-0.090	-0.078	-0.065	-0.053	-0.040	-0.027	-0.013	0.000
DEFLECTION DUE TO WEIGHT OF SLAB ✱	-0.473	-0.478	-0.480	-0.482	-0.481	-0.480	-0.476	-0.472	-0.465	-0.457	-0.447	-0.437	-0.424	-0.410	-0.395	-0.378	-0.360	-0.340	-0.320	-0.298	-0.275	-0.250	-0.225	-0.199	-0.172	-0.145	-0.117	-0.088	-0.059	-0.030	0.000
DEFLECTION DUE TO WT. OF BARRIER RAIL	-0.075	-0.076	-0.076	-0.076	-0.076	-0.076	-0.075	-0.075	-0.073	-0.072	-0.070	-0.069	-0.067	-0.064	-0.062	-0.059	-0.056	-0.053	-0.050	-0.046	-0.043	-0.039	-0.035	-0.031	-0.026	-0.022	-0.018	-0.013	-0.009	-0.004	0.000
TOTAL DEAD LOAD DEFLECTION	-0.767	-0.774	-0.778	-0.780	-0.779	-0.777	-0.770	-0.763	-0.751	-0.739	-0.722	-0.705	-0.684	-0.661	-0.636	-0.609	-0.580	-0.548	-0.515	-0.479	-0.442	-0.402	-0.362	-0.319	-0.277	-0.232	-0.187	-0.141	-0.095	-0.047	0.000
VERTICAL CURVE ORDINATE	0.361	0.358	0.354	0.348	0.342	0.335	0.327	0.317	0.307	0.296	0.283	0.270	0.256	0.242	0.228	0.213	0.199	0.185	0.171	0.156	0.142	0.128	0.114	0.100	0.085	0.071	0.057	0.043	0.028	0.014	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	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	1′ -1 9/16″	1′ -1 9/16″	1′ -1 9/16″	1′ -1 9/16″	1′ -1 7/16″	1′ -1 5/16″	1′ -1 3/16″	1′ -0 15/16″	1′ -0 11/16″	1′ -0 7/16″	1′ -0 1/16″	11 11/16″	11 1/4″	10 13/16″	10 3/8″	9 7/8″	9 3/8″	8 13/16″	8 1/4″	7 5/8″	7″	6 3/8″	5 11/16″	5″	4 5/16″	3 5/8″	2 15/16″	2 3/16″	1 1/2″	3/4″	0″

SPAN B — GIRDER 4

60TH POINTS	2.500	2.517	2.533	2.550	2.567	2.583	2.600	2.617	2.633	2.650	2.667	2.683	2.700	2.717	2.733	2.750	2.767	2.783	2.800	2.817	2.833	2.850	2.867	2.883	2.900	2.917	2.933	2.950	2.967	2.983	3.000
DEFLECTION DUE TO WEIGHT OF GIRDER	-0.241	-0.244	-0.246	-0.247	-0.247	-0.247	-0.246	-0.244	-0.241	-0.237	-0.233	-0.228	-0.222	-0.215	-0.208	-0.199	-0.190	-0.180	-0.170	-0.159	-0.147	-0.134	-0.121	-0.107	-0.093	-0.078	-0.063	-0.048	-0.032	-0.016	0.000
DEFLECTION DUE TO WEIGHT OF SLAB ✱	-0.516	-0.524	-0.528	-0.532	-0.533	-0.533	-0.531	-0.528	-0.522	-0.515	-0.506	-0.495	-0.483	-0.468	-0.452	-0.434	-0.416	-0.394	-0.372	-0.347	-0.322	-0.294	-0.265	-0.235	-0.204	-0.172	-0.138	-0.105	-0.070	-0.035	0.000
DEFLECTION DUE TO WT. OF BARRIER RAIL	-0.084	-0.085	-0.086	-0.087	-0.087	-0.086	-0.086	-0.085	-0.084	-0.083	-0.081	-0.079	-0.077	-0.075	-0.072	-0.069	-0.066	-0.062	-0.059	-0.055	-0.050	-0.046	-0.042	-0.037	-0.032	-0.027	-0.022	-0.016	-0.011	-0.006	0.000
TOTAL DEAD LOAD DEFLECTION	-0.841	-0.853	-0.860	-0.866	-0.867	-0.867	-0.863	-0.857	-0.847	-0.835	-0.820	-0.802	-0.782	-0.757	-0.732	-0.702	-0.672	-0.636	-0.601	-0.560	-0.519	-0.474	-0.428	-0.379	-0.328	-0.276	-0.223	-0.169	-0.113	-0.057	0.000
VERTICAL CURVE ORDINATE	0.405	0.403	0.400	0.396	0.390	0.384	0.377	0.369	0.359	0.349	0.338	0.326	0.312	0.298	0.283	0.266	0.249	0.231	0.214	0.196	0.178	0.160	0.142	0.125	0.107	0.089	0.071	0.054	0.036	0.018	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	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
REQUIRED CAMBER	1′ -2 15/16″	1′ -3/16″	1′ -3/8″	1′ -3/8″	1′ -3/16″	1′ -3″	1′ -2 7/8″	1′ -2 11/16″	1′ -2 1/2″	1′ -2 3/16″	1′ -1 7/8″	1′ -1 9/16″	1′ -1 1/8″	1′ -0 11/16″	1′ -0 3/16″	11 5/8″	11 1/16″	10 7/16″	9 3/4″	9 1/16″	8 3/8″	7 5/8″	6 13/16″	6 1/16″	5 1/4″	4 3/8″	3 9/16″	2 11/16″	1 13/16″	7/8″	0″

✱ = INCLUDES SLAB, BUILDUPS, AND STAY-IN-PLACE FORMS.
✱✱ = HEAT CURVING IS ALLOWED. CAMBER DISSIPATION DUE TO HEAT CURVING IS ZERO FOR ALL GIRDERS.



KEY

PROJECT NO. B-3186/B-5898

HAYWOOD COUNTY

STATION: 27+54.43 -Y1RT-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE DEAD LOAD DEFLECTION AND CAMBER ORDINATES SPAN B

NORTH CAROLINA PROFESSIONAL SEAL 040791 ENGINEER W. BRIAN WATSON

W. Brian Watson 1/24/2022

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS								SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:			S02-26
1	--	--	3	--	--			TOTAL SHEETS
2	--	--	4	--	--			48

DES BY: B. WATSON	DATE: 06/21	DWG BY: B. PETERSON	DATE: 06/21
DES CHK: S. NIFONG	DATE: 06/21	CHK BY: B. WATSON	DATE: 06/21

PLOT DRIVER: NCDOT STRUCTURES DEFAULT PLOTTER.pltt PENTABLE: NCDOT STRUCTURES DEFAULT PEN.tbl
USER: PPETERSO DATE: 1/24/2022 TIME: 1:31:11 PM
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