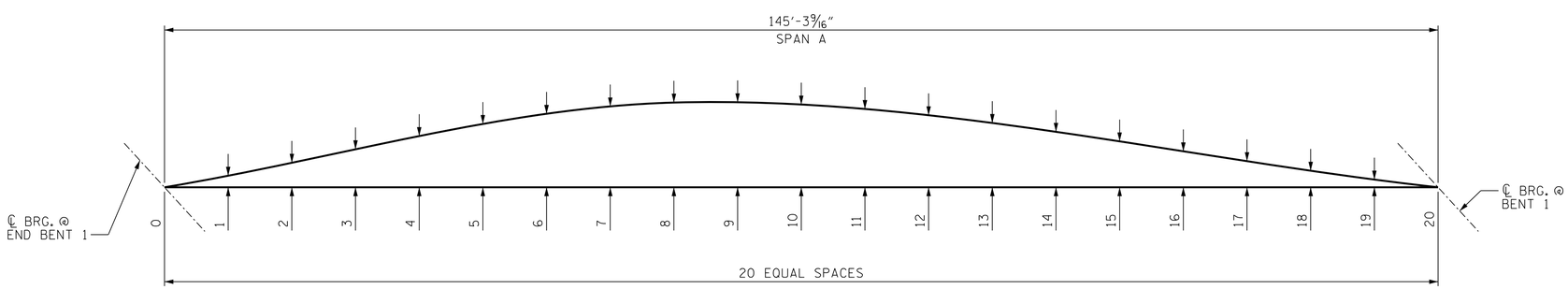
DEAD LOAD DEFLECTION AND CAMBER

GIRDER		SPAN A																				
	TWENTIETH POINTS	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 & 7	DEFLECTION DUE TO WT. OF STEEL	0	0.011	0.021	0.030	0.038	0.044	0.048	0.051	0.052	0.051	0.049	0.045	0.040	0.033	0.027	0.020	0.013	0.008	0.004	0.001	0
	DEFLECTION DUE TO WT. OF SLAB*	0	0.052	0.099	0.143	0.179	0.209	0.230	0.243	0.248	0.243	0.232	0.212	0.188	0.157	0.126	0.092	0.062	0.036	0.016	0.005	0
	DEFLECTION DUE TO WT. OF RAIL	0	0.005	0.010	0.014	0.018	0.021	0.023	0.025	0.025	0.025	0.024	0.022	0.020	0.017	0.014	0.010	0.007	0.004	0.002	0.001	0
	TOTAL DEAD LOAD DEFLECTION	0	0.068	0.130	0.187	0.235	0.274	0.301	0.319	0.325	0.319	0.305	0.279	0.248	0.207	0.167	0.122	0.082	0.048	0.022	0.007	0
	VERTICAL CURVE ORDINATE	0	0.059	0.112	0.159	0.200	0.234	0.262	0.284	0.299	0.309	0.312	0.309	0.299	0.284	0.262	0.234	0.200	0.159	0.112	0.059	0
	SUPERELEVATION ORDINATE	0	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
	REQUIRED CAMBER	0	1 1/2"	2 7/8"	4 1/8"	5 1/4"	6 1/8"	6 3/4"	7 1/4"	7 1/2"	7 9/16"	7 3/8"	7 1/16"	6 9/16"	5 7/8"	5 1/8"	4 1/4"	3 3/8"	2 1/2"	1 5/8"	13/16"	0
2 & 6	DEFLECTION DUE TO WT. OF STEEL	0	0.011	0.022	0.032	0.040	0.046	0.051	0.054	0.055	0.054	0.052	0.047	0.042	0.035	0.028	0.021	0.014	0.008	0.004	0.001	0
	DEFLECTION DUE TO WT. OF SLAB*	0	0.052	0.099	0.143	0.179	0.209	0.230	0.243	0.248	0.243	0.232	0.212	0.188	0.157	0.126	0.092	0.062	0.036	0.016	0.005	0
	DEFLECTION DUE TO WT. OF RAIL	0	0.004	0.007	0.010	0.013	0.015	0.017	0.018	0.018	0.018	0.017	0.016	0.014	0.012	0.010	0.007	0.005	0.003	0.001	0.000	0
	TOTAL DEAD LOAD DEFLECTION	0	0.067	0.128	0.185	0.232	0.270	0.298	0.315	0.321	0.315	0.301	0.275	0.244	0.204	0.164	0.120	0.081	0.047	0.021	0.006	0
	VERTICAL CURVE ORDINATE	0	0.059	0.112	0.159	0.200	0.234	0.262	0.284	0.299	0.309	0.312	0.309	0.299	0.284	0.262	0.234	0.200	0.159	0.112	0.059	0
	SUPERELEVATION ORDINATE	0	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
	REQUIRED CAMBER	0	1 1/2"	2 7/8"	4 1/8"	5 3/16"	6 1/16"	6 3/4"	7 3/16"	7 7/16"	7 1/2"	7 3/8"	7"	6 1/2"	5 7/8"	5 1/8"	4 1/4"	3 3/8"	2 1/2"	1 5/8"	3/4"	0
3, 4, & 5	DEFLECTION DUE TO WT. OF STEEL	0	0.011	0.022	0.032	0.040	0.046	0.051	0.054	0.055	0.054	0.052	0.047	0.042	0.035	0.028	0.021	0.014	0.008	0.004	0.001	0
	DEFLECTION DUE TO WT. OF SLAB*	0	0.052	0.099	0.143	0.179	0.209	0.230	0.243	0.248	0.243	0.232	0.212	0.188	0.157	0.126	0.092	0.062	0.036	0.016	0.005	0
	DEFLECTION DUE TO WT. OF RAIL	0	0.003	0.007	0.009	0.012	0.014	0.015	0.016	0.017	0.017	0.016	0.015	0.013	0.011	0.009	0.007	0.005	0.003	0.001	0.000	0
	TOTAL DEAD LOAD DEFLECTION	0	0.066	0.128	0.184	0.231	0.269	0.296	0.313	0.320	0.314	0.300	0.274	0.243	0.203	0.163	0.120	0.081	0.047	0.021	0.006	0
	VERTICAL CURVE ORDINATE	0	0.059	0.112	0.159	0.200	0.234	0.262	0.284	0.299	0.309	0.312	0.309	0.299	0.284	0.262	0.234	0.200	0.159	0.112	0.059	0
	SUPERELEVATION ORDINATE	0	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
	REQUIRED CAMBER	0	1 1/2"	2 7/8"	4 1/8"	5 3/16"	6 1/16"	6 11/16"	7 3/16"	7 7/16"	7 1/2"	7 3/8"	7"	6 1/2"	5 7/8"	5 1/8"	4 1/4"	3 3/8"	2 1/2"	1 5/8"	3/4"	0

* INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "REQUIRED CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).



SCHEMATIC OF CAMBER ORDINATES - SPAN A

FOR CAMBER VALUES AT TWENTIETH POINTS, SEE TABLES.

SLOPE FOR THE ZERO CAMBER LINE VARIES.

PROJECT NO. W-5107
JOHNSTON COUNTY
STATION: 33+45.98 -L-

SHEET 1 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE

CAMBER AND DEAD LOAD DEFLECTIONS SPAN A

NORTH CAROLINA PROFESSIONAL SEAL 027799 ENGINEER ALLYSON K. ORR
11/26/2014

DRAWN BY : J.S. ISRAELNAIM DATE : 03/13
CHECKED BY : A.K. ORR DATE : 04/13
DESIGN ENGINEER OF RECORD : A.K. ORR DATE : 11/14

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS
2			4			70

11/25/2014
2:14:41 PM
User: blanning
Filename: P:\NC Bridges\MI2005 - W-5107 Johnston Co\MI2005_01_Site 1\Structures\401_090_S01_W5107_SMU_DLA.dgn