

NOTES:

↑ = UPWARD DEFLECTION
 ↓ = DOWNWARD DEFLECTION

* INCLUDES FUTURE WEARING SURFACE IN SUPERIMPOSED DEAD LOAD.

ALL VALUES ARE SHOWN IN DECIMAL FEET, EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN FRACTIONAL INCHES.

CAMBERS WERE DEVELOPED USING THE NCDOT EXCEL SPREADSHEET TITLED, "PRESTRESSED CONCRETE GIRDERS - REFINED METHOD FOR CAMBER."

DEAD LOAD DEFLECTION TABLE																						
GIRDERS 1&6																						
FORTIETH POINTS (0.000 - 0.500)	0.000	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475	0.500	
CAMBER (GIRDER ALONE IN PLACE) (FT.)	↑	0.000	0.016	0.033	0.049	0.065	0.080	0.095	0.109	0.122	0.135	0.147	0.158	0.167	0.176	0.184	0.191	0.196	0.200	0.204	0.205	0.206
DEFLECTION DUE TO SUPERIMPOSED D.L. (FT.) *	↓	0.000	0.011	0.022	0.033	0.044	0.055	0.065	0.076	0.085	0.094	0.103	0.111	0.118	0.125	0.131	0.136	0.140	0.143	0.145	0.147	0.147
FINAL CAMBER (IN.)	↑	0"	0 ¹ / ₁₆ "	0 ¹ / ₈ "	0 ³ / ₁₆ "	0 ¹ / ₄ "	0 ⁵ / ₁₆ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ⁷ / ₁₆ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁵ / ₈ "	0 ⁵ / ₈ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "
FORTIETH POINTS (0.500 - 1.000)	0.500	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	1.000	
CAMBER (GIRDER ALONE IN PLACE) (FT.)	↑	0.206	0.205	0.204	0.200	0.196	0.191	0.184	0.176	0.167	0.158	0.147	0.135	0.122	0.109	0.095	0.080	0.065	0.049	0.033	0.016	0.000
DEFLECTION DUE TO SUPERIMPOSED D.L. (FT.) *	↓	0.147	0.147	0.145	0.143	0.140	0.136	0.131	0.125	0.118	0.111	0.103	0.094	0.085	0.076	0.065	0.055	0.044	0.033	0.022	0.011	0.000
FINAL CAMBER (IN.)	↑	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ⁵ / ₁₆ "	0 ⁵ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ⁷ / ₁₆ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ⁵ / ₁₆ "	0 ¹ / ₄ "	0 ³ / ₁₆ "	0 ¹ / ₈ "	0 ¹ / ₁₆ "	0"

DEAD LOAD DEFLECTION TABLE																						
GIRDERS 2&3																						
FORTIETH POINTS (0.000 - 0.500)	0.000	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475	0.500	
CAMBER (GIRDER ALONE IN PLACE) (FT.)	↑	0.000	0.016	0.033	0.049	0.065	0.080	0.095	0.109	0.122	0.135	0.147	0.158	0.167	0.176	0.184	0.191	0.196	0.200	0.204	0.205	0.206
DEFLECTION DUE TO SUPERIMPOSED D.L. (FT.) *	↓	0.000	0.012	0.024	0.036	0.048	0.059	0.071	0.082	0.092	0.102	0.112	0.120	0.128	0.135	0.141	0.147	0.151	0.155	0.157	0.159	0.159
FINAL CAMBER (IN.)	↑	0"	0 ¹ / ₁₆ "	0 ¹ / ₈ "	0 ¹ / ₈ "	0 ³ / ₁₆ "	0 ¹ / ₄ "	0 ⁵ / ₁₆ "	0 ⁵ / ₁₆ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "
FORTIETH POINTS (0.500 - 1.000)	0.500	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	1.000	
CAMBER (GIRDER ALONE IN PLACE) (FT.)	↑	0.206	0.205	0.204	0.200	0.196	0.191	0.184	0.176	0.167	0.158	0.147	0.135	0.122	0.109	0.095	0.080	0.065	0.049	0.033	0.016	0.000
DEFLECTION DUE TO SUPERIMPOSED D.L. (FT.) *	↓	0.159	0.159	0.157	0.155	0.151	0.147	0.141	0.135	0.128	0.120	0.112	0.102	0.092	0.082	0.071	0.059	0.048	0.036	0.024	0.012	0.000
FINAL CAMBER (IN.)	↑	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ⁹ / ₁₆ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ¹ / ₂ "	0 ¹ / ₁₆ "	0 ¹ / ₁₆ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ⁵ / ₁₆ "	0 ⁵ / ₁₆ "	0 ¹ / ₄ "	0 ³ / ₁₆ "	0 ¹ / ₈ "	0 ¹ / ₈ "	0 ¹ / ₁₆ "	0"

DEAD LOAD DEFLECTION TABLE																						
GIRDERS 4&5																						
FORTIETH POINTS (0.000 - 0.500)	0.000	0.025	0.050	0.075	0.100	0.125	0.150	0.175	0.200	0.225	0.250	0.275	0.300	0.325	0.350	0.375	0.400	0.425	0.450	0.475	0.500	
CAMBER (GIRDER ALONE IN PLACE) (FT.)	↑	0.000	0.016	0.033	0.049	0.065	0.080	0.095	0.109	0.122	0.135	0.147	0.158	0.167	0.176	0.184	0.191	0.196	0.200	0.204	0.205	0.206
DEFLECTION DUE TO SUPERIMPOSED D.L. (FT.) *	↓	0.000	0.012	0.025	0.037	0.050	0.062	0.074	0.086	0.097	0.107	0.117	0.126	0.134	0.142	0.148	0.154	0.159	0.162	0.165	0.166	0.167
FINAL CAMBER (IN.)	↑	0"	0 ¹ / ₁₆ "	0 ¹ / ₈ "	0 ¹ / ₈ "	0 ³ / ₁₆ "	0 ³ / ₁₆ "	0 ¹ / ₄ "	0 ¹ / ₄ "	0 ⁵ / ₁₆ "	0 ⁵ / ₁₆ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ¹ / ₂ "
FORTIETH POINTS (0.500 - 1.000)	0.500	0.525	0.550	0.575	0.600	0.625	0.650	0.675	0.700	0.725	0.750	0.775	0.800	0.825	0.850	0.875	0.900	0.925	0.950	0.975	1.000	
CAMBER (GIRDER ALONE IN PLACE) (FT.)	↑	0.206	0.205	0.204	0.200	0.196	0.191	0.184	0.176	0.167	0.158	0.147	0.135	0.122	0.109	0.095	0.080	0.065	0.049	0.033	0.016	0.000
DEFLECTION DUE TO SUPERIMPOSED D.L. (FT.) *	↓	0.167	0.166	0.165	0.162	0.159	0.154	0.148	0.142	0.134	0.126	0.117	0.107	0.097	0.086	0.074	0.062	0.050	0.037	0.025	0.012	0.000
FINAL CAMBER (IN.)	↑	0 ¹ / ₂ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ⁷ / ₁₆ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ³ / ₈ "	0 ⁵ / ₁₆ "	0 ⁵ / ₁₆ "	0 ¹ / ₄ "	0 ¹ / ₄ "	0 ³ / ₁₆ "	0 ³ / ₁₆ "	0 ¹ / ₈ "	0 ¹ / ₈ "	0 ¹ / ₁₆ "	0"

PROJECT NO. BR-0029
MACON COUNTY
 STATION: 15+52.07 -L-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUPERSTRUCTURE
 GIRDER DEAD LOAD
 DEFLECTIONS

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS
33

DRAWN BY : L. YARBROUGH DATE : 08-2021
 CHECKED BY : D. LOFLIN DATE : 09-2021
 DESIGN ENGINEER OF RECORD: VINCENT M. WU DATE : 10-2021

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

DRMP
 4235 SOUTH STREAM BLVD.
 SUITE 150,
 CHARLOTTE, NC 28217
 (704) 332-2289
 NC LICENSE NO. C-2213

2/14/2022