

9/11/2015 10:16:44 AM G:\Projects\2014\U-3109A\Structures\Site 2\Site 2-Str 2 Bridge 436 (SBL)\Drawings\Final\402_U3109A_smu_d.dgn

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPANS A, B & C																						
0.6" Ø LOW RELAXATION																						
GIRDER 1																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.045	0.088	0.130	0.167	0.201	0.229	0.252	0.268	0.278	0.268	0.252	0.229	0.201	0.167	0.130	0.088	0.045	0	0	
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.032	0.066	0.099	0.129	0.155	0.178	0.196	0.209	0.217	0.220	0.217	0.209	0.196	0.178	0.155	0.129	0.099	0.066	0.032	0
FINAL CAMBER	↑	0	3/16"	1/4"	3/8"	7/16"	9/16"	5/8"	11/16"	11/16"	3/4"	3/4"	3/4"	11/16"	11/16"	5/8"	7/16"	3/8"	1/4"	3/16"	0	
SPANS A, B & C																						
0.6" Ø LOW RELAXATION																						
GIRDERS 2 & 3																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.045	0.088	0.130	0.167	0.201	0.229	0.252	0.268	0.278	0.282	0.278	0.268	0.252	0.229	0.201	0.167	0.130	0.088	0.045	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.033	0.070	0.104	0.135	0.163	0.187	0.206	0.220	0.228	0.231	0.228	0.220	0.206	0.187	0.163	0.135	0.104	0.070	0.033	0
FINAL CAMBER	↑	0	1/8"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	9/16"	5/8"	5/8"	5/8"	9/16"	9/16"	1/2"	7/16"	3/8"	5/16"	1/4"	1/8"	0
SPANS A, B & C																						
0.6" Ø LOW RELAXATION																						
GIRDER 4																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.045	0.088	0.130	0.167	0.201	0.229	0.252	0.268	0.278	0.282	0.278	0.268	0.252	0.229	0.201	0.167	0.130	0.088	0.045	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.031	0.065	0.097	0.127	0.153	0.175	0.193	0.206	0.214	0.217	0.214	0.206	0.193	0.175	0.153	0.127	0.097	0.065	0.031	0
FINAL CAMBER	↑	0	3/16"	1/4"	3/8"	1/2"	9/16"	5/8"	11/16"	3/4"	3/4"	13/16"	3/4"	3/4"	11/16"	5/8"	9/16"	1/2"	3/8"	1/4"	3/16"	0

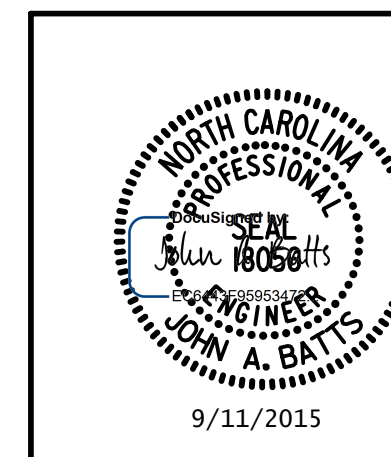
DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN D																						
0.6" Ø LOW RELAXATION																						
GIRDER 1																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.026	0.051	0.075	0.097	0.117	0.133	0.146	0.156	0.162	0.164	0.162	0.156	0.146	0.133	0.117	0.097	0.075	0.051	0.026	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.014	0.029	0.044	0.058	0.070	0.080	0.088	0.094	0.098	0.099	0.098	0.094	0.088	0.080	0.070	0.058	0.044	0.029	0.014	0
FINAL CAMBER	↑	0	1/8"	1/4"	3/8"	1/2"	9/16"	5/8"	11/16"	3/4"	3/4"	13/16"	3/4"	3/4"	11/16"	5/8"	9/16"	1/2"	3/8"	1/4"	1/8"	0
SPAN D																						
0.6" Ø LOW RELAXATION																						
GIRDERS 2 & 3																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.026	0.051	0.075	0.097	0.117	0.133	0.146	0.156	0.162	0.164	0.162	0.156	0.146	0.133	0.117	0.097	0.075	0.051	0.026	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.014	0.031	0.046	0.061	0.073	0.084	0.093	0.099	0.103	0.104	0.103	0.099	0.093	0.084	0.073	0.061	0.046	0.031	0.014	0
FINAL CAMBER	↑	0	1/8"	1/4"	3/8"	7/16"	1/2"	9/16"	5/8"	11/16"	11/16"	3/4"	11/16"	11/16"	5/8"	9/16"	1/2"	7/16"	3/8"	1/4"	1/8"	0
SPAN D																						
0.6" Ø LOW RELAXATION																						
GIRDER 4																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.026	0.051	0.075	0.097	0.117	0.133	0.146	0.156	0.162	0.164	0.162	0.156	0.146	0.133	0.117	0.097	0.075	0.051	0.026	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.014	0.029	0.043	0.057	0.069	0.079	0.087	0.093	0.096	0.098	0.096	0.093	0.087	0.079	0.069	0.057	0.043	0.029	0.014	0
FINAL CAMBER	↑	0	1/8"	1/4"	3/8"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	13/16"	13/16"	3/4"	11/16"	5/8"	9/16"	1/2"	3/8"	1/4"	1/8"	0

* INCLUDES FUTURE WEARING SURFACE.
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER" WHICH IS GIVEN IN INCHES (FRACTION FORM).

PROJECT NO. U-3109A
ALAMANCE COUNTY
STATION: 146+61.35 -L-

DRAWN BY: T. BANKOVICH DATE: 9-15
CHECKED BY: J.A. BATTS DATE: 9-15
DESIGN ENGINEER OF RECORD: J.A. BATTS DATE: 9-15

PLANS PREPARED BY:
SIMPSON ENGINEERS & ASSOCIATES
5640 Dillard Drive
Suite 200
Cary, NC 27518
(919) 852-0468
(919) 852-0598 (Fax)
www.simpsonengr.com
LICENSURE NO. C-2521



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE

DEAD LOAD DEFLECTION
AND GIRDER CAMBER

(SBL)

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S02-25	
1			3			TOTAL SHEETS	
2			4			S02-51	

STR. #2