DEAD LOAD DEFLECTION TABLE - SPAN A

GIRDER	0.6 Ø LOW RELAXATION / TENTH POINTS	℄ BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG.
A1	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.009	0.016	0.022	0.026	0.027	0.026	0.022	0.016	0.009	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.004	0.007	0.010	0.012	0.012	0.011	0.009	0.007	0.003	0
	FINAL CAMBER ▲	0	1/16"	1/8"	1/8"	3/16"	3/16"	3/16"	1/8"	1/8"	1/16"	0
A2	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.008	0.016	0.022	0.026	0.027	0.026	0.022	0.016	0.008	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.004	0.009	0.012	0.014	0.014	0.014	0.011	0.008	0.004	0
	FINAL CAMBER ▲	0	1/16"	1/16"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/16"	0
A3	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.008	0.016	0.022	0.026	0.027	0.026	0.022	0.016	0.008	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.004	0.008	0.011	0.013	0.014	0.013	0.011	0.008	0.004	0
	FINAL CAMBER ▲	0	1/16"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/8"	1/16"	0
A4	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.008	0.016	0.022	0.025	0.027	0.025	0.022	0.016	0.008	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.003	0.006	0.009	0.010	0.011	0.010	0.008	0.006	0.003	0
	FINAL CAMBER ▲	0	1/16"	1/8"	1/8"	3/16"	3/16"	3/16"	3/16"	1/8"	1/16"	0

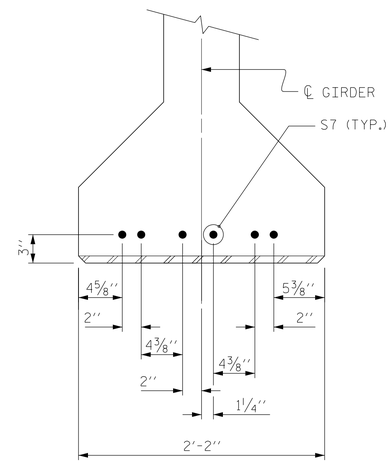
DEAD LOAD DEFLECTION TABLE - SPAN B

GIRDER	0.6 Ø LOW RELAXATION / TENTH POINTS	℄ BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG.
B1	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.065	0.122	0.168	0.196	0.206	0.196	0.168	0.122	0.065	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.051	0.102	0.141	0.167	0.175	0.167	0.141	0.101	0.051	0
	FINAL CAMBER ▲	0	3/16"	1/4"	5/16"	3/8"	3/8"	3/8"	5/16"	1/4"	3/16"	0
B2	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.064	0.122	0.167	0.195	0.205	0.195	0.167	0.122	0.064	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.062	0.122	0.170	0.200	0.210	0.200	0.169	0.121	0.062	0
	FINAL CAMBER ▼	0	0	0	-1/16"	-1/16"	-1/16"	-1/16"	0	0	0	0
B3	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.064	0.121	0.166	0.195	0.205	0.195	0.166	0.121	0.064	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.060	0.118	0.164	0.194	0.204	0.193	0.164	0.118	0.059	0
	FINAL CAMBER ▲	0	1/16"	1/16"	0	0	0	0	0	1/16"	1/16"	0
B4	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.064	0.121	0.166	0.194	0.204	0.194	0.166	0.121	0.064	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.049	0.097	0.135	0.159	0.167	0.159	0.134	0.096	0.049	0
	FINAL CAMBER ▲	0	3/16"	5/16"	3/8"	7/16"	7/16"	7/16"	3/8"	5/16"	3/16"	0

DEAD LOAD DEFLECTION TABLE - SPAN C

GIRDER	0.6 Ø LOW RELAXATION / TENTH POINTS	℄ BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	℄ BRG.
C1	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.029	0.055	0.076	0.089	0.093	0.089	0.076	0.055	0.029	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.016	0.033	0.047	0.056	0.059	0.057	0.048	0.035	0.018	0
	FINAL CAMBER ▲	0	1/8"	1/4"	3/8"	3/8"	7/16"	3/8"	5/16"	1/4"	1/8"	0
C2	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.029	0.055	0.076	0.088	0.093	0.088	0.076	0.055	0.029	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.020	0.040	0.056	0.067	0.071	0.068	0.058	0.041	0.021	0
	FINAL CAMBER ▲	0	1/8"	3/16"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	0
C3	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.029	0.055	0.075	0.088	0.092	0.088	0.075	0.055	0.029	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.019	0.039	0.055	0.065	0.069	0.066	0.056	0.040	0.020	0
	FINAL CAMBER ▲	0	1/8"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	1/8"	0
C4	CAMBER (GIRDER ALONE IN PLACE) ▲	0	0.029	0.055	0.075	0.088	0.092	0.088	0.075	0.055	0.029	0
	✳ DEFLECTION DUE TO SUPERIMPOSED D.L. ▼	0	0.015	0.031	0.044	0.052	0.055	0.053	0.045	0.033	0.016	0
	FINAL CAMBER ▲	0	3/16"	5/16"	3/8"	7/16"	7/16"	7/16"	3/8"	1/4"	1/8"	0

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



DETAIL "A"
(FOR AASHTO TYPE IV GIRDERS)

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN ELEVATION VIEW.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. BEVEL EDGES OF PLATE "B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

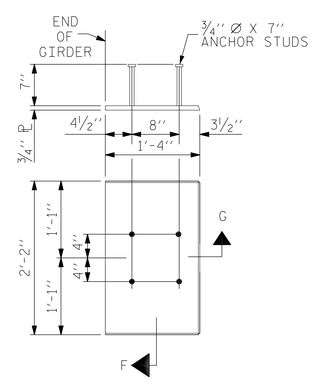
AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2" BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI FOR GIRDERS IN SPANS A AND C AND 6000 PSI FOR GIRDERS IN SPAN B.

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

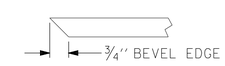
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF 1/4".

THE CONTRACTOR HAS THE OPTION TO PROVIDE, AT NO ADDITIONAL COST TO THE DEPARTMENT, 2 ADDITIONAL STRANDS AT THE TOP OF THE GIRDER TO FACILITATE TYING OF THE REINFORCING STEEL. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4500 lbs.



EMBEDDED PLATE "B-1" DETAILS
FOR AASHTO TYPE IV GIRDER
(2 REQ'D PER GIRDER)

SECTION "G"



SECTION "F"
(SEE NOTES)

PROJECT NO. I-0914BA
VANCE COUNTY
STATION: 21+34.80-Y5SBL-POC

SHEET 4 OF 5

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

DocuSigned by: David Ruggles C46276BDF412422... 11/14/2014

DWG. 17 OF 40

STEWART
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-102
1			3			TOTAL SHEETS
2			4			177

DRAWN BY: H.ASSFOURA DATE: 07/14
CHECKED BY: P.JACOB DATE: 08/14
DESIGN ENGINEER OF RECORD: D. RUGGLES DATE: 08/14

I-914BA SITE 3
11/14/2014
...\403_017_I0914BA_SMU_PCG04.dgn
USER:jloftus