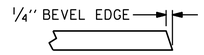
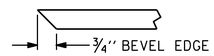
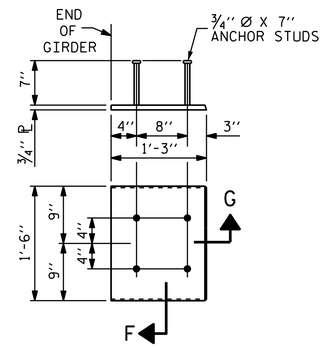


SECTION "G"



SECTION "F"

(SEE NOTES)



EMBEDDED PLATE "B-1" DETAILS
FOR AASHTO TYPE II GIRDER

(2 REQ'D PER GIRDER)

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 4,000 PSI FOR SPANS A & C AND 4,500 PSI FOR 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".

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6"Ø LOW RELAXATION	SPANS A & C																						
	INTERIOR GIRDERS											EXTERIOR GIRDERS											
TENTH POINTS	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.008	0.015	0.021	0.024	0.026	0.024	0.021	0.015	0.008	0.000	0.000	0.008	0.015	0.021	0.024	0.026	0.024	0.021	0.015	0.008	0.000
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.000	0.002	0.004	0.005	0.006	0.007	0.006	0.005	0.004	0.002	0.000	0.000	0.002	0.003	0.004	0.005	0.005	0.005	0.004	0.003	0.002	0.000
FINAL CAMBER ↑	0	1/16"	1/8"	3/16"	3/16"	1/4"	3/16"	3/16"	1/8"	1/16"	0	0	1/16"	1/8"	3/16"	1/4"	1/4"	1/4"	3/16"	1/8"	1/16"	0

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6"Ø LOW RELAXATION	SPAN B																						
	INTERIOR GIRDERS											EXTERIOR GIRDERS											
TENTH POINTS	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	0.0
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.030	0.056	0.077	0.090	0.095	0.090	0.077	0.056	0.030	0.000	0.000	0.030	0.056	0.077	0.090	0.095	0.090	0.077	0.056	0.030	0.000
* DEFLECTION DUE TO SUPERIMPOSED D.L. ↓	0.000	0.012	0.023	0.031	0.037	0.038	0.037	0.031	0.023	0.012	0.000	0.000	0.010	0.018	0.025	0.029	0.031	0.029	0.025	0.018	0.010	0.000
FINAL CAMBER ↑	0	3/16"	3/8"	9/16"	5/8"	11/16"	5/8"	9/16"	3/8"	3/16"	0	0	1/4"	7/16"	5/8"	3/4"	3/4"	3/4"	5/8"	7/16"	1/4"	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. R-4903
BLADEN COUNTY
STATION: 67+16.50 -L-

SHEET 3 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 10730 ENGINEER D. ANDRE DAVENPORT, JR.

DocuSigned by: D. Andre Davenport, Jr. 8950C284F664495...
10/28/2014

REVISIONS									SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:				S-14
1			3						TOTAL SHEETS
2			4						92

STR. #1

STD. NO. PCG9

ASSEMBLED BY : J.P. ADAMS DATE : 7/16/12
CHECKED BY : K.D. LAYNE DATE : 8/15/12

DRAWN BY : ELR 11/91
CHECKED BY : GRP 11/91

REV. 7/10/01 RR LES/RDR
REV. 5/1/06 TLA/GM
REV. 10/1/11 MAA/GM

DESIGN ENGINEER OF RECORD:
B.N. GRADY DATE : 04/11/13

27-OCT-2014 09:22
R:\Structures\Plans\Str*1\R4903_SD_GS_01.dgn
dadavenport