

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.

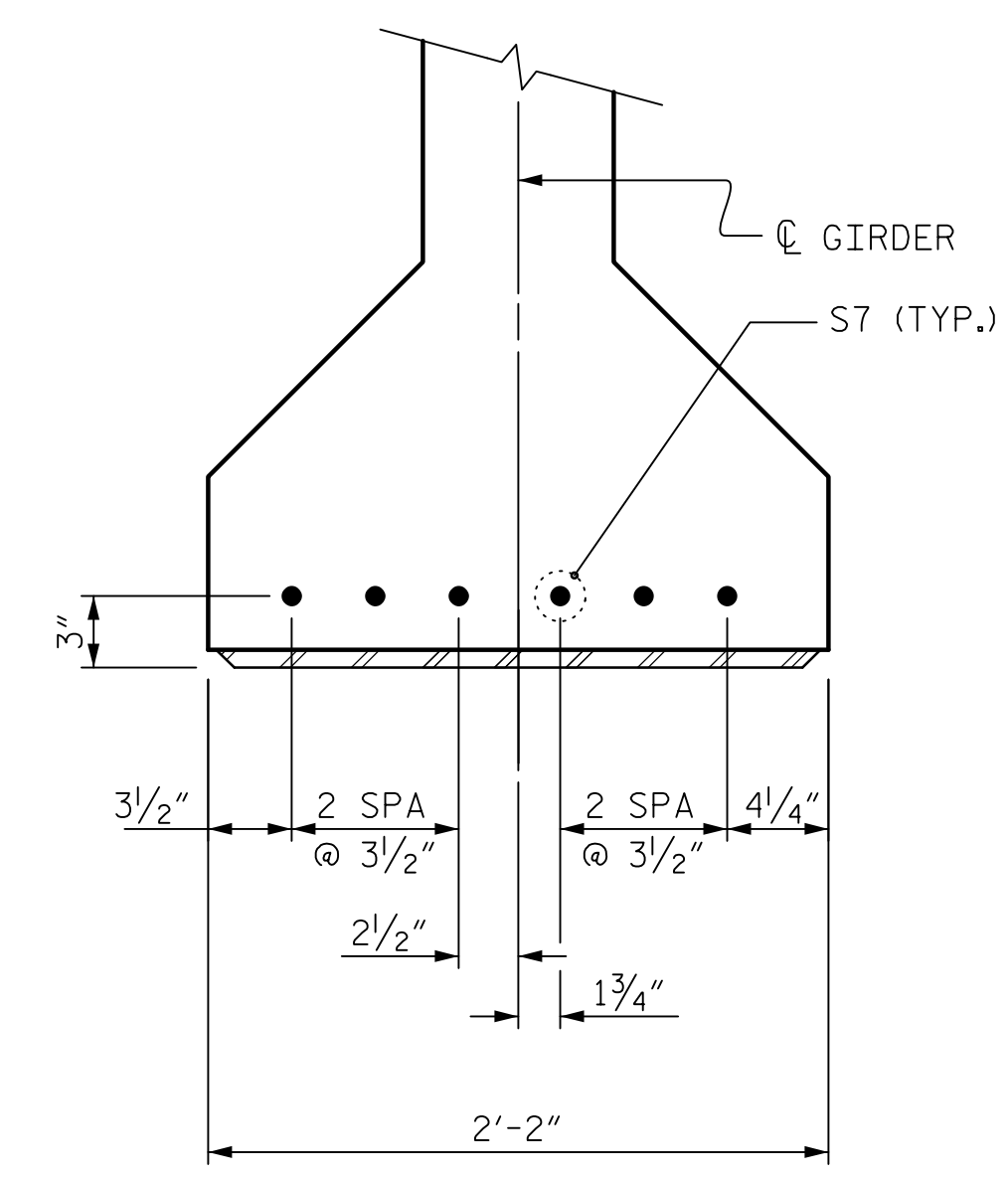
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

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 4500 PSI FOR SPAN A & C, AND 5500 PSI FOR SPAN B.

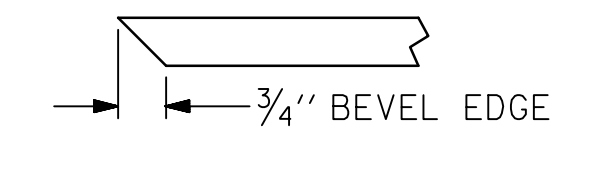
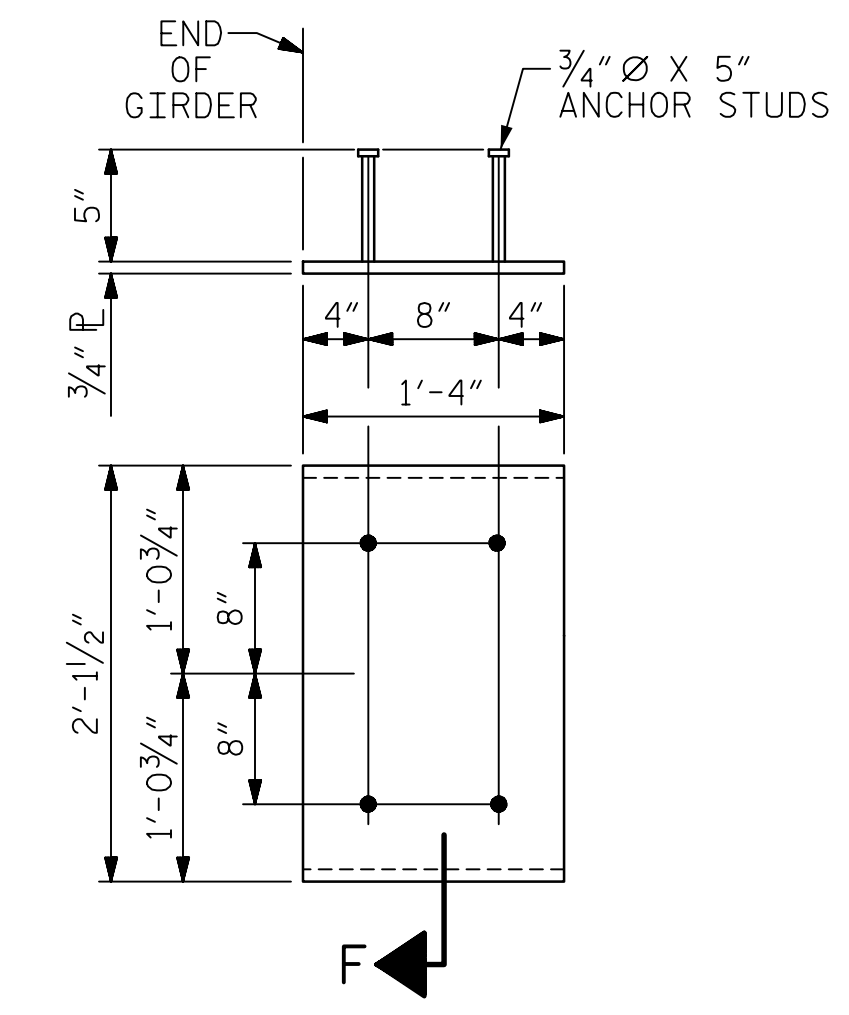
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

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



DETAIL "A"

(FOR AASHTO TYPE IV GIRDERS)



SECTION "F"

(SEE NOTES)

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

(2 REQ'D PER GIRDER)

DEAD LOAD DEFLECTION TABLE FOR GIRDERS											
SPAN A											
GIRDERS 1, 3 - 6, & 8											
TENTH POINTS	BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	BRG.
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.018	0.034	0.047	0.055	0.058	0.055	0.047	0.034	0.018	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.006	0.013	0.018	0.021	0.022	0.021	0.018	0.013	0.006	0.000
FINAL CAMBER (OR DEFLECTION) ↑	0"	1/8"	1/4"	3/8"	7/16"	7/16"	7/16"	3/8"	1/4"	1/8"	0"

DEAD LOAD DEFLECTION TABLE FOR GIRDERS											
SPAN A											
GIRDERS 2 & 7											
TENTH POINTS	BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	BRG.
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.018	0.034	0.047	0.055	0.058	0.055	0.047	0.034	0.018	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.006	0.013	0.018	0.022	0.023	0.022	0.018	0.013	0.006	0.000
FINAL CAMBER (OR DEFLECTION) ↑	0"	1/8"	1/4"	3/8"	3/8"	7/16"	3/8"	3/8"	1/4"	1/8"	0"

DEAD LOAD DEFLECTION TABLE FOR GIRDERS											
SPAN B											
GIRDERS 1, 2, 7, & 8											
TENTH POINTS	BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	BRG.
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.055	0.104	0.143	0.167	0.175	0.167	0.143	0.104	0.055	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.037	0.074	0.102	0.121	0.127	0.121	0.102	0.074	0.037	0.000
FINAL CAMBER (OR DEFLECTION) ↑	0"	3/8"	3/8"	1/2"	9/16"	9/16"	9/16"	1/2"	3/8"	3/16"	0"

DEAD LOAD DEFLECTION TABLE FOR GIRDERS											
SPANS B											
GIRDERS 3 & 6											
TENTH POINTS	BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	BRG.
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.055	0.104	0.143	0.167	0.175	0.167	0.143	0.104	0.055	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.037	0.072	0.101	0.118	0.125	0.118	0.101	0.072	0.037	0.000
FINAL CAMBER (OR DEFLECTION) ↑	0"	1/4"	3/8"	1/2"	9/16"	5/8"	9/16"	1/2"	3/8"	1/4"	0"

DEAD LOAD DEFLECTION TABLE FOR GIRDERS											
SPAN B											
GIRDERS 4 - 5											
TENTH POINTS	BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	BRG.
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.055	0.104	0.143	0.167	0.175	0.167	0.143	0.104	0.055	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.035	0.068	0.095	0.111	0.117	0.111	0.095	0.068	0.035	0.000
FINAL CAMBER (OR DEFLECTION) ↑	0"	1/4"	7/16"	9/16"	11/16"	11/16"	11/16"	9/16"	7/16"	1/4"	0"

DEAD LOAD DEFLECTION TABLE FOR GIRDERS											
SPAN C											
GIRDERS 1 - 8											
TENTH POINTS	BRG.	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	BRG.
CAMBER (GIRDER ALONE IN PLACE) ↑	0.000	0.016	0.030	0.041	0.048	0.050	0.048	0.041	0.030	0.016	0.000
* DEFLECTION DUE TO SUPERIMPOSED DL ↓	0.000	0.004	0.008	0.011	0.013	0.014	0.013	0.011	0.008	0.004	0.000
FINAL CAMBER (OR DEFLECTION) ↑	0"	1/8"	1/4"	3/8"	7/16"	7/16"	7/16"	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-2707

FORSYTH COUNTY

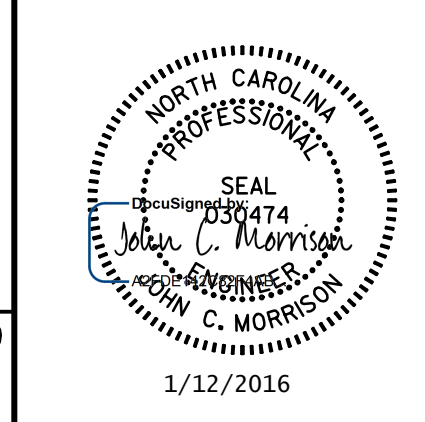
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SHEET 4 OF 5 BRIDGE NO. 109



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD DETAILS
AND DEAD LOAD DEFLECTION TABLES



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-57
1			3			TOTAL SHEETS
2			4			86

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1/12/2016

DATE: 1/12/2016
TIME: 8:55:00 AM

USER: jmc
DIR: R:\Projects\09\090402\02_12707_SML_S57_P0004.dgn

ASSEMBLED BY : MKT	DATE : 12/2015
CHECKED BY : JCM	DATE : 12/2015
DRAWN BY : ELR 11/91	REV. 10/1/11 MAA/GM
CHECKED BY : GRP 11/91	REV. 1/15 MAA/TMG
	REV. 2/15 MAA/TMG