

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.

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.

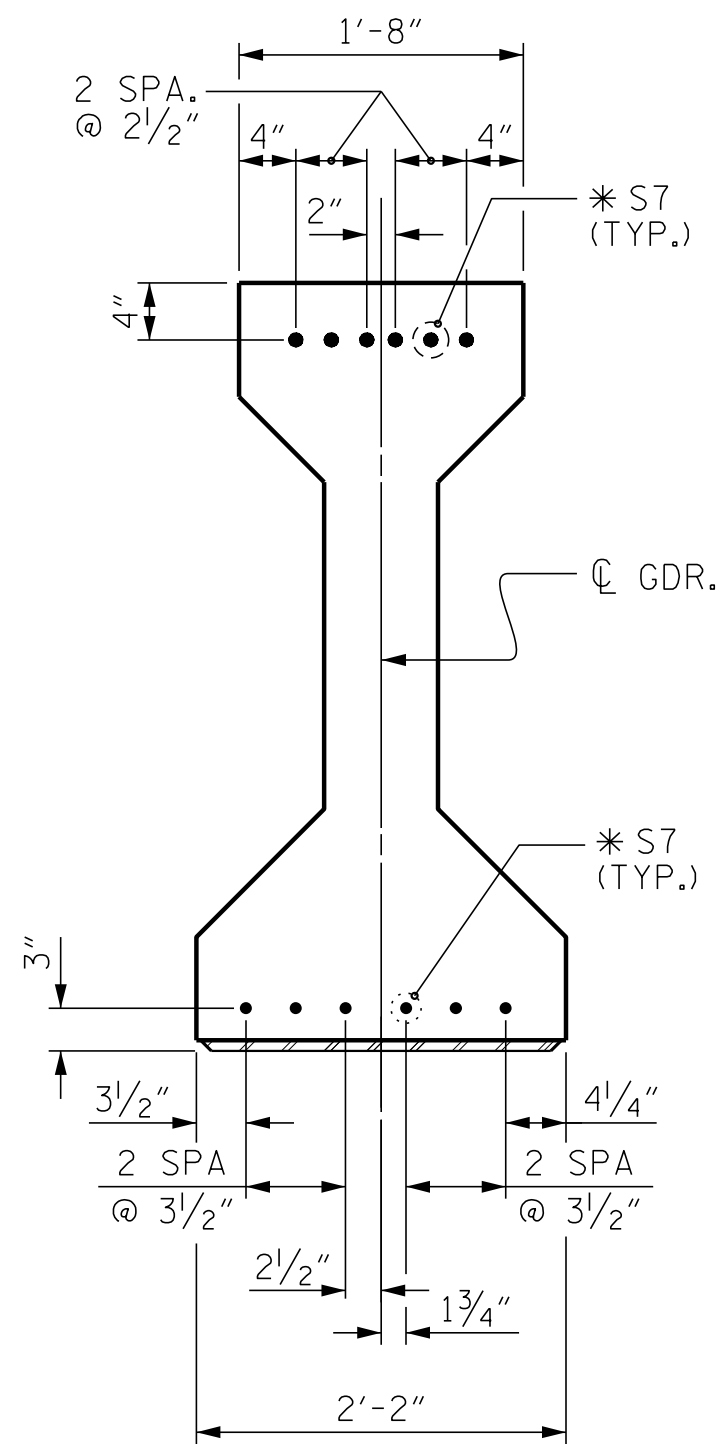
AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2" BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 6400 PSI.

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

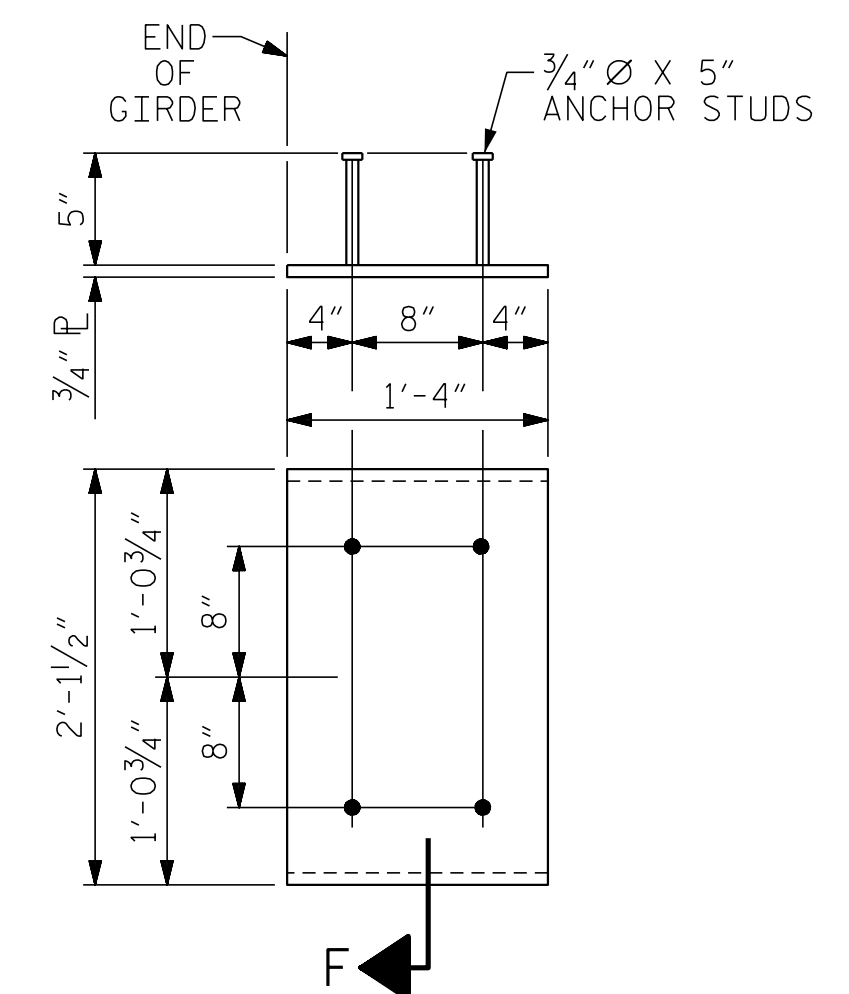
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF 1/4".

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.



DETAIL "A"

(FOR AASHTO TYPE IV GIRDERS)



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

(2 REQ'D PER GIRDER)

— DEAD LOAD DEFLECTION TABLE FOR GIRDERS OF SPANS A & B —

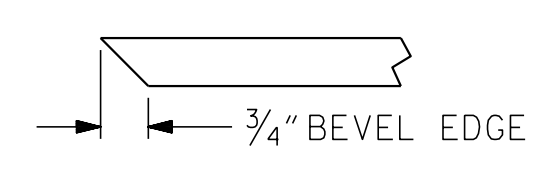
0.6" Ø LOW RELAXATION	GIRDERS 1 & 4											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.079	0.149	0.204	0.239	0.251	0.239	0.204	0.149	0.079	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.050	0.098	0.136	0.160	0.168	0.160	0.136	0.098	0.050	0
FINAL CAMBER	↑	0	3/8"	5/8"	13/16"	15/16"	1"	15/16"	13/16"	5/8"	3/8"	0

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

— DEAD LOAD DEFLECTION TABLE FOR GIRDERS OF SPANS A & B —

0.6" Ø LOW RELAXATION	GIRDERS 2 & 3											
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.079	0.149	0.204	0.239	0.251	0.239	0.204	0.149	0.079	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.057	0.112	0.155	0.182	0.192	0.182	0.155	0.112	0.057	0
FINAL CAMBER	↑	0	1/4"	7/16"	9/16"	11/16"	11/16"	11/16"	9/16"	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).



SECTION "F"

(SEE NOTES)

PROJECT NO. R-5797
COLUMBUS COUNTY
STATION: 30+65.33 -Y1B-

ENGINEER OF RECORD:
8/22/2019
NORTH CAROLINA PROFESSIONAL SEAL 37400
ENGINEER
GREGORY M. GILLAND
Designed by
Gregory M. Gilland
WETHERILL ENGINEERING
1223 Jones Franklin Rd.
Raleigh, N.C. 27606
Bus: 919 851 8077
Fax: 919 851 8107
LICENSE NO. F-0377

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
STANDARD
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-13
1			3			TOTAL SHEETS
2			4			33

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY : D. HODGE	DATE : 1/19
CHECKED BY : G.M. GILLAND	DATE : 1/19
DRAWN BY : ELR 11/91	REV. 1/15 MAA/TMG
CHECKED BY : GRP 11/91	REV. 2/15 MAA/TMG
	REV. 12/17 MAA/THC

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