DocuSign Envelope ID: 8B9D7C66-0EB9-44C8-B305-62EE7BA2C531

DEAD LOAD DEFLECTION TABLE

0.6" Ø LOW RELAXATION	SPANS A AND B																				
	EXTERIOR GIRDERS																				
TWENTIETH POINTS	0	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
CAMBER (GIRDER ALONE IN PLACE) ↑	0.0	0.020	0.039	0.058	0.074	0.089	0.102	0.112	0.119	0.124	0.125	0.124	0.119	0.112	0.102	0.089	0.074	0.058	0.039	0.020	0.0
✱ DEFLECTION DUE TO D.L. ↓	0.0	-0.013	-0.024	-0.038	-0.048	-0.059	-0.067	-0.074	-0.079	-0.082	-0.083	-0.082	-0.079	-0.074	-0.067	-0.059	-0.048	-0.038	-0.024	-0.013	0.0
FINAL CAMBER ↑	0	1/16"	3/16"	1/4"	5/16"	3/8"	7/16"	7/16"	1/2"	1/2"	1/2"	1/2"	1/2"	7/16"	7/16"	3/8"	5/16"	1/4"	3/16"	1/16"	0
	INTERIOR GIRDERS																				
TWENTIETH POINTS	0	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
CAMBER (GIRDER ALONE IN PLACE) ↑	0.0	0.020	0.039	0.058	0.074	0.089	0.102	0.112	0.119	0.124	0.125	0.124	0.119	0.112	0.102	0.089	0.074	0.058	0.039	0.020	0.0
✱ DEFLECTION DUE TO D.L. ↓	0.0	-0.015	-0.028	-0.044	-0.056	-0.069	-0.078	-0.086	-0.092	-0.095	-0.096	-0.095	-0.092	-0.086	-0.078	-0.069	-0.056	-0.044	-0.028	-0.015	0.0
FINAL CAMBER ↑	0	1/16"	1/8"	3/16"	3/16"	1/4"	5/16"	5/16"	5/16"	3/8"	3/8"	3/8"	5/16"	5/16"	5/16"	1/4"	3/16"	3/16"	1/8"	1/16"	0

✱ INCLUDES FUTURE WEARING SURFACE

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

NOTES:

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

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

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

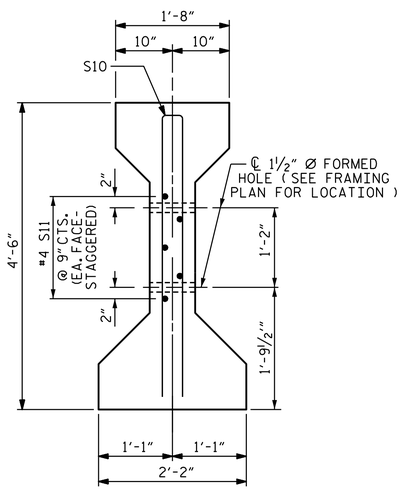
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

ALL PRESTRESSED 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 5000 PSI.

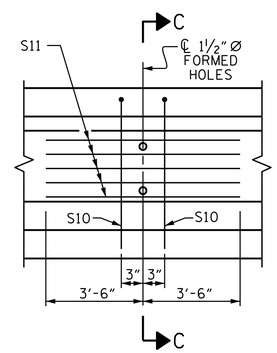
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TOP SURFACE OF THE GIRDER SHALL BE RAKED TO A DEPTH OF 1/4" EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER AND WHERE NOTED ON THE GIRDER SHEET.



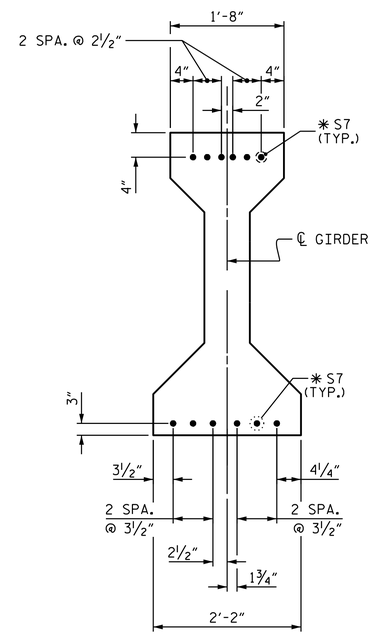
SECTION C-C

(S1 BARS NOT SHOWN)



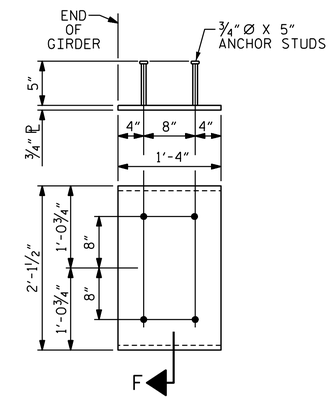
PARTIAL ELEVATION

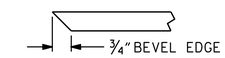
SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDERS



DETAIL "A"

(FOR AASHTO TYPE IV GIRDERS)





SECTION "F"

(SEE NOTES)

EMBEDDED PLATE "B-1" DETAILS

(2 REQ'D PER GIRDER)

PROJECT NO. I-5987B

ROBESON COUNTY

STATION: 24+76.86 -Y4-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

DEAD LOAD DEFLECTION TABLES AND PRESTRESSED CONCRETE GIRDER DETAILS

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLANS PREPARED BY:
MOTT MACDONALD
PO Box 700
Fuquay-Varina, NC 27526
(919) 552-2253
www.mottmac.com
LICENSE NO. F-0669

NORTH CAROLINA PROFESSIONAL SEAL 043301 ENGINEER JONATHAN T. WILLIAMS

DocuSigned by: Jonathan T. Williams
CF8834B85D82449...
21 March 2022

REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

SHEET NO. S4-13

TOTAL SHEETS 29

DRAWN BY: R. L. DICKE DATE: 5-2021
CHECKED BY: J. M. ROBINSON DATE: 8-2021
DESIGN ENGINEER OF RECORD: J. T. WILLIAMS DATE: 8-2021

w1157077
G:\50100191_NV5.I-5987B\I-5987B\Structures\Plans\I-5987B_SMU_G2_770154.dgn
3/18/2022 10:52:37 AM