

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.

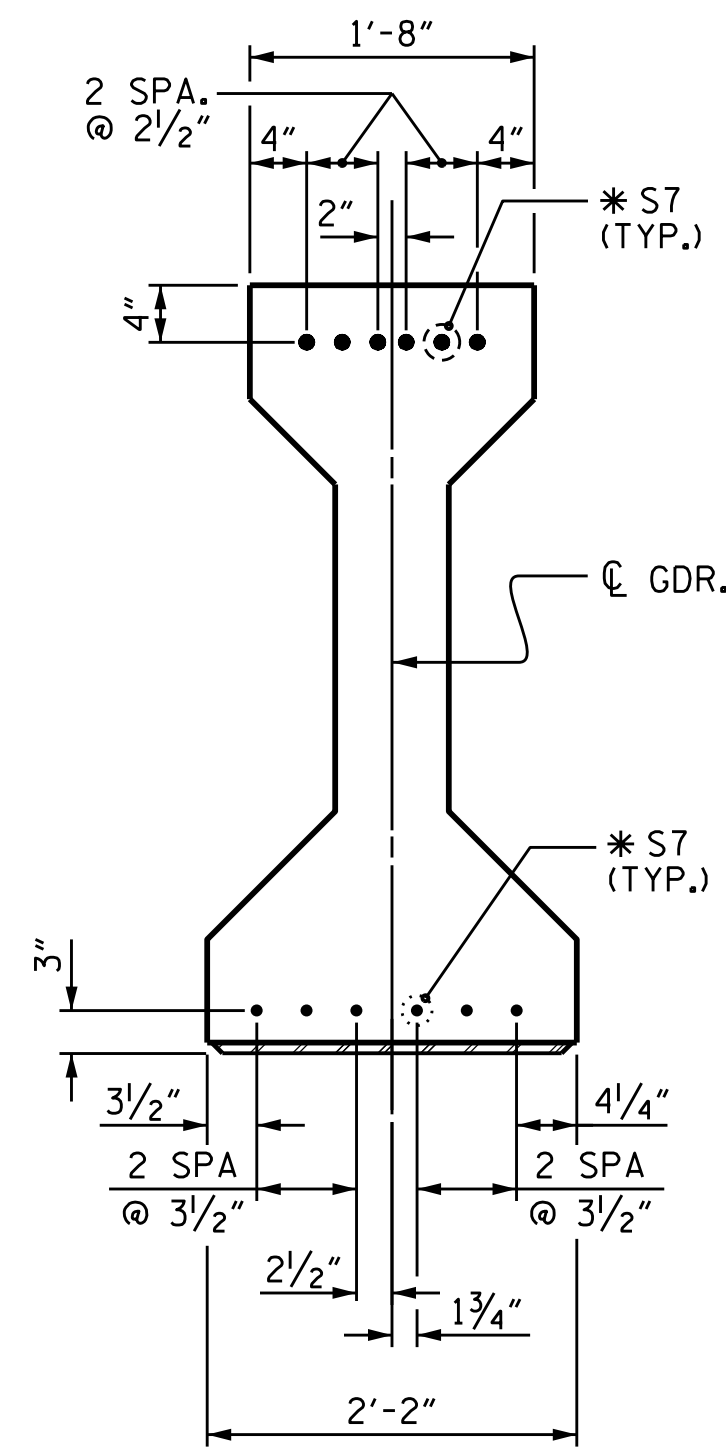
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

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 4000 PSI FOR SPAN A AND 5200 PSI FOR SPANS B & C.

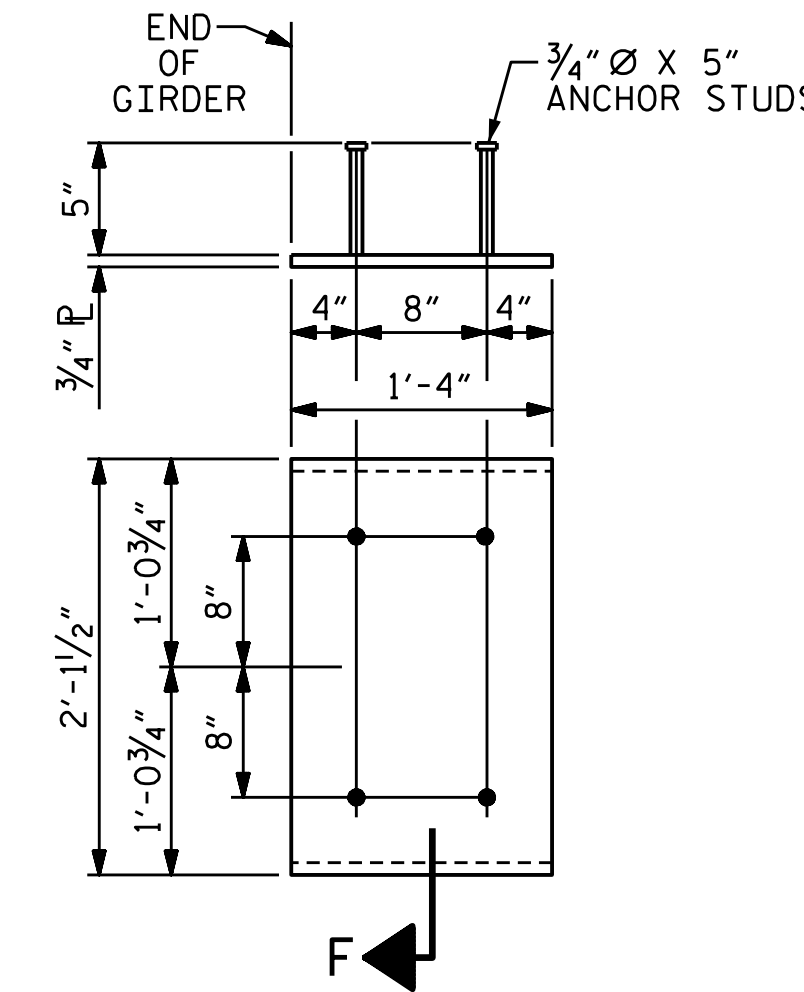
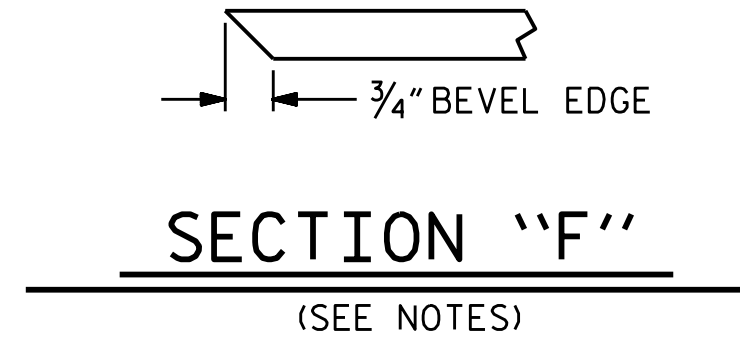
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

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)



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

(2 REQ'D PER GIRDER)

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

0.6" Ø LOW RELAXATION		SPAN A (INTERIOR)																					
TWENTIETH POINTS		0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.007	0.014	0.020	0.026	0.031	0.036	0.039	0.042	0.043	0.044	0.043	0.042	0.039	0.036	0.031	0.026	0.020	0.014	0.007	0.000	
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.003	0.005	0.008	0.010	0.013	0.014	0.016	0.017	0.018	0.018	0.018	0.017	0.016	0.014	0.013	0.010	0.008	0.005	0.003	0.000	
FINAL CAMBER	↑	0	1/16"	1/8"	1/8"	3/16"	1/4"	1/4"	1/4"	5/16"	5/16"	5/16"	5/16"	5/16"	5/16"	1/4"	1/4"	1/4"	3/16"	1/8"	1/8"	1/16"	0
0.6" Ø LOW RELAXATION		SPAN A (EXTERIOR)																					
TWENTIETH POINTS		0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.007	0.014	0.020	0.026	0.031	0.036	0.039	0.042	0.043	0.044	0.043	0.042	0.039	0.036	0.031	0.026	0.020	0.014	0.007	0.000	
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.002	0.004	0.007	0.009	0.011	0.013	0.014	0.015	0.015	0.016	0.015	0.015	0.014	0.013	0.011	0.009	0.007	0.004	0.002	0.000	
FINAL CAMBER	↑	0	1/16"	1/8"	1/8"	3/16"	1/4"	1/4"	5/16"	5/16"	5/16"	5/16"	5/16"	5/16"	5/16"	1/4"	1/4"	3/16"	1/8"	1/8"	1/16"	0	
0.6" Ø LOW RELAXATION		SPAN B (INTERIOR)																					
TWENTIETH POINTS		0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.032	0.062	0.092	0.118	0.142	0.162	0.178	0.189	0.197	0.199	0.197	0.189	0.178	0.162	0.142	0.118	0.092	0.062	0.032	0.000	
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.027	0.050	0.078	0.099	0.121	0.137	0.151	0.161	0.167	0.169	0.167	0.161	0.151	0.137	0.121	0.099	0.078	0.050	0.027	0.000	
FINAL CAMBER	↑	0	1/16"	1/8"	3/16"	1/4"	1/4"	5/16"	5/16"	5/16"	3/8"	3/8"	3/8"	5/16"	5/16"	5/16"	1/4"	1/4"	3/16"	1/8"	1/16"	0	
0.6" Ø LOW RELAXATION		SPAN B (EXTERIOR)																					
TWENTIETH POINTS		0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.00	
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.032	0.062	0.092	0.118	0.142	0.162	0.178	0.189	0.197	0.199	0.197	0.189	0.178	0.162	0.142	0.118	0.092	0.062	0.032	0.000	
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.024	0.044	0.068	0.087	0.106	0.120	0.133	0.141	0.147	0.149	0.147	0.141	0.133	0.120	0.106	0.087	0.068	0.044	0.024	0.000	
FINAL CAMBER	↑	0	1/8"	1/4"	1/4"	3/8"	7/16"	1/2"	9/16"	9/16"	5/8"	5/8"	5/8"	9/16"	9/16"	1/2"	7/16"	3/8"	1/4"	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. R-2561CA
COLUMBUS COUNTY
STATION: 71+06.00 -L-

SHEET 3 OF 3

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

DocuSigned by:
[Signature]
DB3C8E45B06498
SEAL
14114
ENGINEER
ROBERT C. LARSON
8/15/2022

DESIGN ENGINEER OF RECORD	DATE :	8/15/2022
ASSEMBLED BY : R. C. LARSON	DATE :	06/24/20
CHECKED BY : R. F. DECOLA	DATE :	11/10/20
DRAWN BY : ELR 11/91	REV. 1/15	MAA/TMC
CHECKED BY : GRP 11/91	REV. 2/15	MAA/TMG
	REV. 12/17	MAA/THC

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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KCI Associates
of North Carolina, P.A.
450 Falls of Neuse Road, Suite 400, Raleigh, NC 27609-5270 Phone: (919) 783-5241

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S4- 12
1			3			TOTAL SHEETS
2			4			29

STD. NO. PCG9 (Sht. 3a)

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