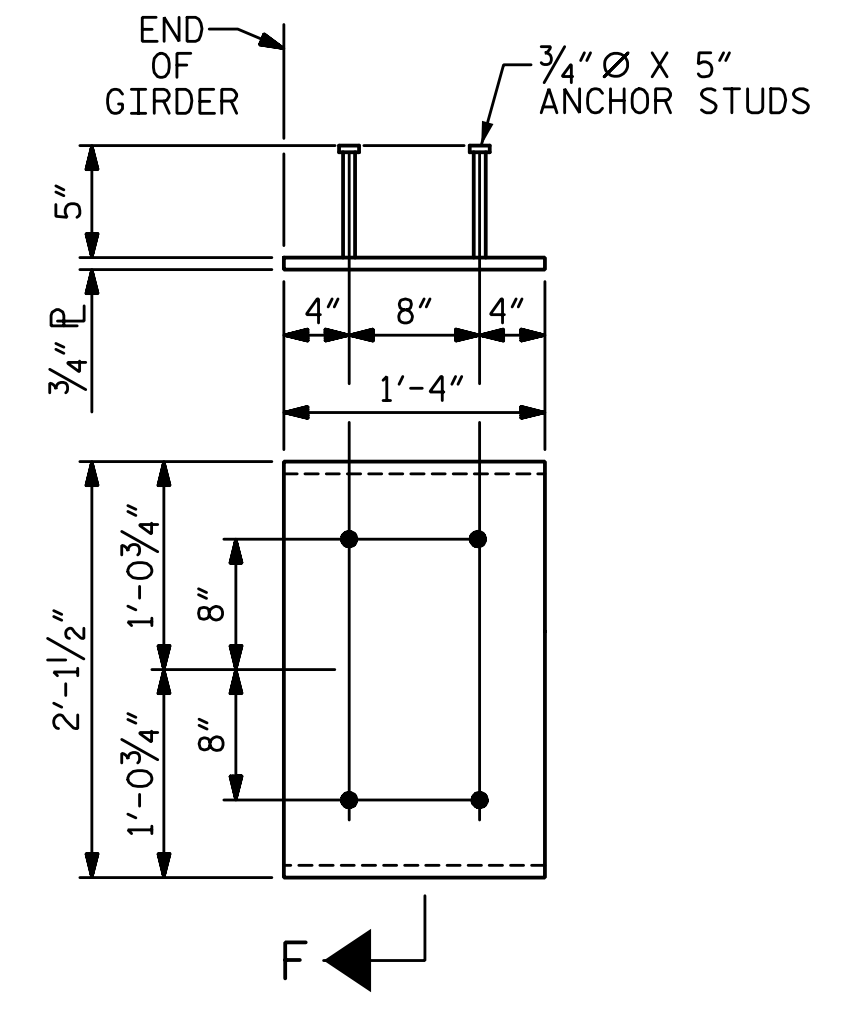
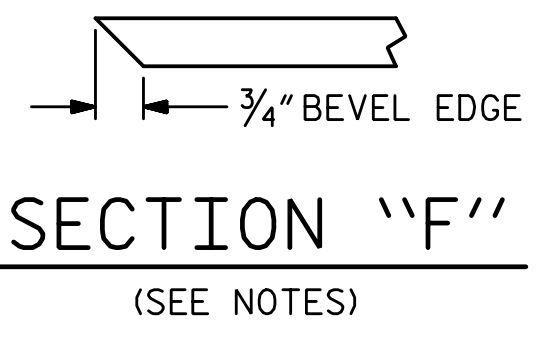


2/7/2023 11:19:29 AM P:\Raleigh\Projects\2018\Division 7 (SEA)\17BP7R142 Guilford 225 (Rehobeth Ch Rd over I-85 Bus)\Structures\Drawings\Final\17BP7R142_SMJ_G_400225.dgn



EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE IV GIRDER
(2 REQ'D PER GIRDER)



SECTION "F"
(SEE NOTES)

GIRDER DIMENSION TABLE			
STAGE 1			
GIRDER	DIM "A"	DIM "B"	DIM "C"
AG1	98'-5"	49'-2 1/2"	11 1/2"
AG2	98'-4 5/8"	49'-2 5/16"	11 5/16"
AG3	98'-4 1/4"	49'-2 1/8"	11 1/8"
AG4	98'-4"	49'-2"	11"
AG5	98'-3 3/8"	49'-1 13/16"	10 13/16"
BG1	98'-4 3/4"	49'-2 3/8"	11 3/8"
BG2	98'-4 1/2"	49'-2 1/4"	11 1/4"
BG3	98'-4 1/4"	49'-2 1/8"	11 1/8"
BG4	98'-4"	49'-2"	11"
BG5	98'-3 3/4"	49'-1 7/8"	10 7/8"
STAGE 2			
GIRDER	DIM "A"	DIM "B"	DIM "C"
AG6	98'-3 3/8"	49'-1 11/16"	10 11/16"
AG7	98'-3 1/8"	49'-1 9/16"	10 9/16"
AG8	98'-2 3/4"	49'-1 3/8"	10 3/8"
AG9	98'-2 3/8"	49'-1 3/16"	10 3/16"
AG10	98'-2 1/8"	49'-1 1/16"	10 1/16"
BG6	98'-3 5/8"	49'-1 13/16"	10 13/16"
BG7	98'-3 3/8"	49'-1 11/16"	10 11/16"
BG8	98'-3 1/8"	49'-1 9/16"	10 9/16"
BG9	98'-2 3/4"	49'-1 3/8"	10 3/8"
BG10	98'-2 1/2"	49'-1 1/4"	10 1/4"

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.

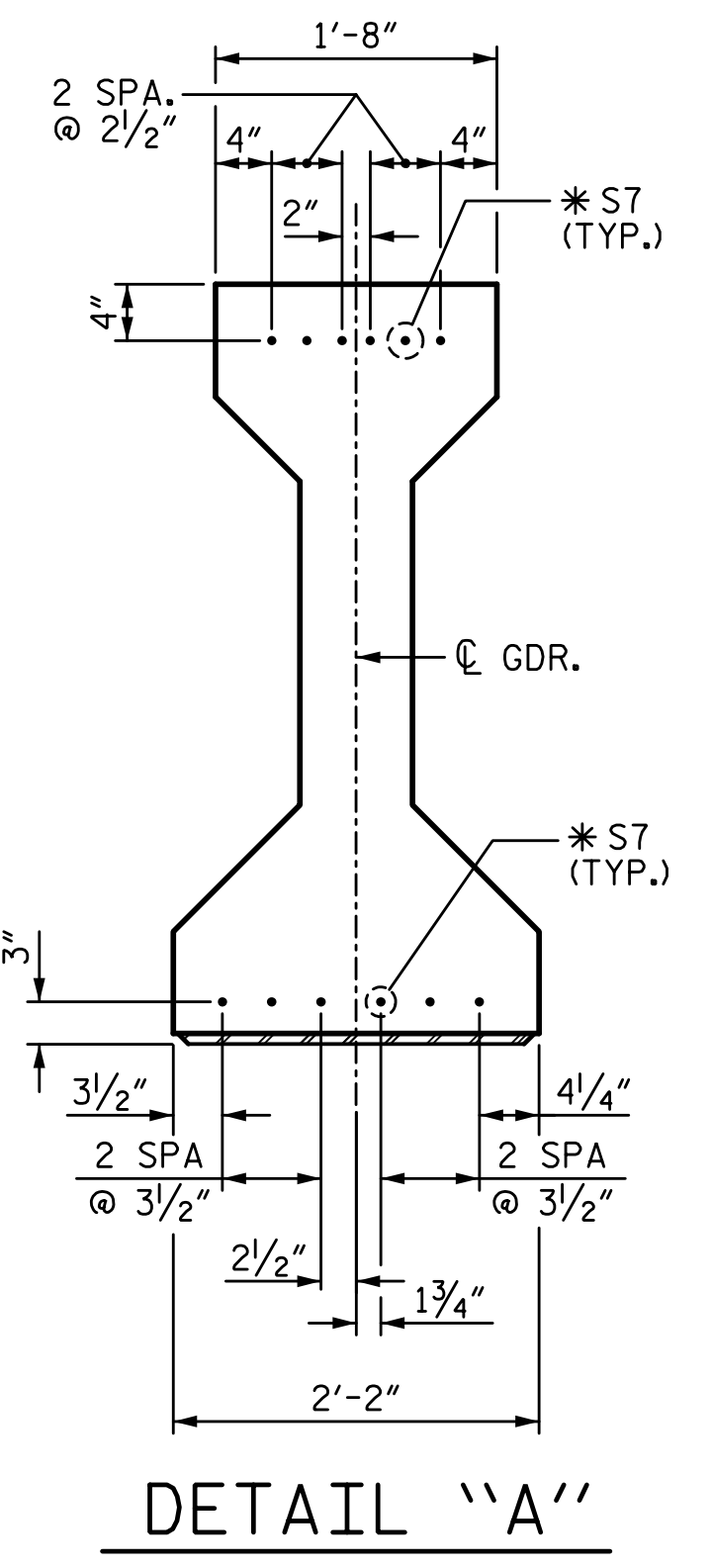
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

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 6000 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 IN THE LINK SLAB AREA.



DETAIL "A"

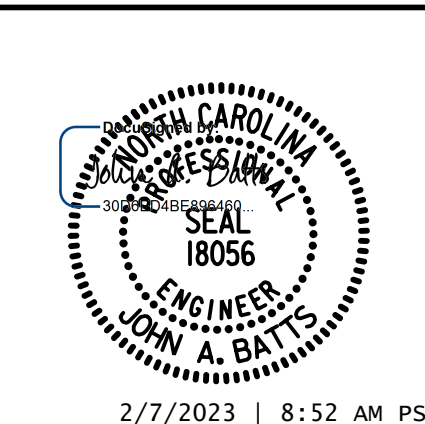
PROJECT NO. BP7.R006.3
GUILFORD COUNTY
STATION: 18+82.09 -L-

SHEET 3 OF 3

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN A & SPAN B																						
0.6" Ø LOW RELAXATION																						
GIRDER 1																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.033	0.066	0.097	0.125	0.150	0.172	0.189	0.201	0.209	0.211	0.209	0.201	0.189	0.172	0.150	0.125	0.097	0.066	0.033	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.021	0.044	0.066	0.087	0.105	0.120	0.133	0.142	0.147	0.149	0.147	0.142	0.133	0.120	0.105	0.087	0.066	0.044	0.021	0
FINAL CAMBER	↑	0	1/8"	1/4"	3/8"	7/16"	9/16"	5/8"	11/16"	11/16"	3/4"	3/4"	3/4"	11/16"	11/16"	5/8"	9/16"	7/16"	3/8"	1/4"	1/8"	0
SPAN A & SPAN B																						
0.6" Ø LOW RELAXATION																						
GIRDER 2 THRU 9																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.033	0.066	0.097	0.125	0.150	0.172	0.189	0.201	0.209	0.211	0.209	0.201	0.189	0.172	0.150	0.125	0.097	0.066	0.033	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.024	0.051	0.076	0.100	0.121	0.139	0.153	0.163	0.170	0.172	0.170	0.163	0.153	0.139	0.121	0.100	0.077	0.051	0.024	0
FINAL CAMBER	↑	0	1/8"	3/16"	1/4"	5/16"	3/8"	3/8"	7/16"	7/16"	7/16"	1/2"	7/16"	7/16"	3/8"	3/8"	5/16"	1/4"	3/16"	1/8"	0	0
SPAN A & SPAN B																						
0.6" Ø LOW RELAXATION																						
GIRDER 10																						
TWENTIETH POINTS	0	.05	.10	.15	.20	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70	.75	.80	.85	.90	.95	1.0	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.033	0.066	0.097	0.125	0.150	0.172	0.189	0.201	0.209	0.211	0.209	0.201	0.189	0.172	0.150	0.125	0.097	0.066	0.033	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.022	0.047	0.070	0.092	0.111	0.128	0.141	0.151	0.156	0.158	0.156	0.151	0.141	0.128	0.112	0.092	0.071	0.047	0.022	0
FINAL CAMBER	↑	0	1/8"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"	5/8"	5/8"	5/8"	5/8"	9/16"	1/2"	7/16"	3/8"	5/16"	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).

DRAWN BY: T. BANKOVICH DATE: 2-22
CHECKED BY: J.A. BATTS DATE: 2-22
DESIGN ENGINEER OF RECORD: J.A. BATTS DATE: 2-22



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
PRESTRESSED CONCRETE GIRDER DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-29
1			3			TOTAL SHEETS
2			4			58

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED