

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 SUB-SECTION 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. FOR SPAN A AND 7600 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" AND THE PORTION WITHIN THE LINK SLAB AREA, SHALL BE RAKED TO A DEPTH OF 1/4".

THE TOP OF GIRDER IN THE REGION OF THE LINK SLAB SHALL BE SMOOTH (NOT RAKED) AND FREE OF STIRRUPS/STUDS, ANCHOR STUDS, DECK FORMWORK ATTACHMENTS, AND OVERHANG FALSEWORK/FORMWORK ATTACHMENTS.

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

SPANS A, C & D

0.6" Ø LOW RELAXATION		EXTERIOR GIRDERS 1 & 4																				
TWENTIETH POINTS		0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	0
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.014	0.028	0.040	0.052	0.062	0.071	0.077	0.084	0.086	0.088	0.086	0.084	0.077	0.071	0.062	0.052	0.040	0.028	0.014	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.009	0.018	0.027	0.035	0.041	0.048	0.052	0.056	0.057	0.059	0.057	0.056	0.052	0.048	0.041	0.035	0.027	0.018	0.009	0
FINAL CAMBER	↑	0	1/16"	1/8"	3/16"	3/16"	1/4"	5/16"	5/16"	5/16"	5/16"	3/8"	5/16"	5/16"	5/16"	1/4"	3/16"	3/16"	1/8"	1/16"	1/16"	0

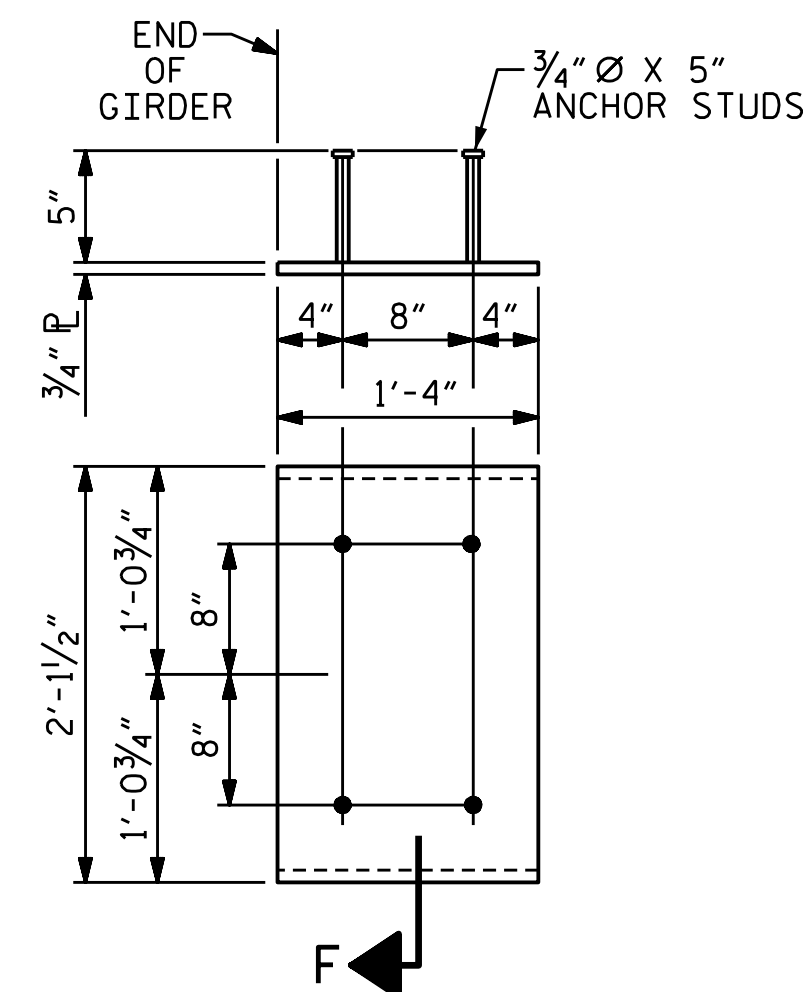
0.6" Ø LOW RELAXATION		INTERIOR GIRDERS 2 & 3																				
TWENTIETH POINTS		0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	0
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.014	0.027	0.040	0.052	0.062	0.071	0.077	0.083	0.085	0.087	0.085	0.083	0.077	0.071	0.062	0.052	0.040	0.027	0.014	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.011	0.021	0.030	0.039	0.047	0.054	0.058	0.063	0.065	0.066	0.065	0.063	0.058	0.054	0.047	0.039	0.030	0.021	0.011	0
FINAL CAMBER	↑	0	1/16"	1/16"	1/8"	1/8"	3/16"	3/16"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/16"	3/16"	1/8"	1/8"	1/16"	1/16"	0

SPAN B

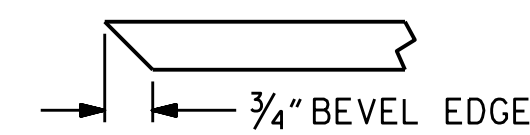
0.6" Ø LOW RELAXATION		EXTERIOR GIRDERS 1 & 4																				
TWENTIETH POINTS		0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	0
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.038	0.074	0.107	0.140	0.166	0.192	0.209	0.225	0.231	0.236	0.231	0.225	0.209	0.192	0.166	0.140	0.107	0.074	0.038	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.029	0.056	0.081	0.106	0.126	0.146	0.158	0.170	0.175	0.179	0.175	0.170	0.158	0.146	0.126	0.106	0.081	0.056	0.029	0
FINAL CAMBER	↑	0	1/8"	3/16"	5/16"	7/16"	1/2"	9/16"	5/8"	5/8"	11/16"	11/16"	11/16"	5/8"	5/8"	9/16"	1/2"	7/16"	5/16"	3/16"	1/8"	0

0.6" Ø LOW RELAXATION		INTERIOR GIRDERS 2 & 3																				
TWENTIETH POINTS		0	.05	.1	.15	.2	.25	.3	.35	.4	.45	.5	.55	.6	.65	.7	.75	.8	.85	.9	.95	0
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.038	0.074	0.107	0.140	0.166	0.192	0.208	0.224	0.230	0.236	0.230	0.224	0.208	0.192	0.166	0.140	0.107	0.074	0.038	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.032	0.063	0.092	0.120	0.142	0.164	0.178	0.192	0.197	0.202	0.197	0.192	0.178	0.164	0.142	0.120	0.092	0.063	0.032	0
FINAL CAMBER	↑	0	1/16"	1/8"	3/16"	1/4"	5/16"	5/16"	3/8"	3/8"	3/8"	7/16"	3/8"	3/8"	3/8"	5/16"	5/16"	1/4"	3/16"	1/8"	1/16"	0

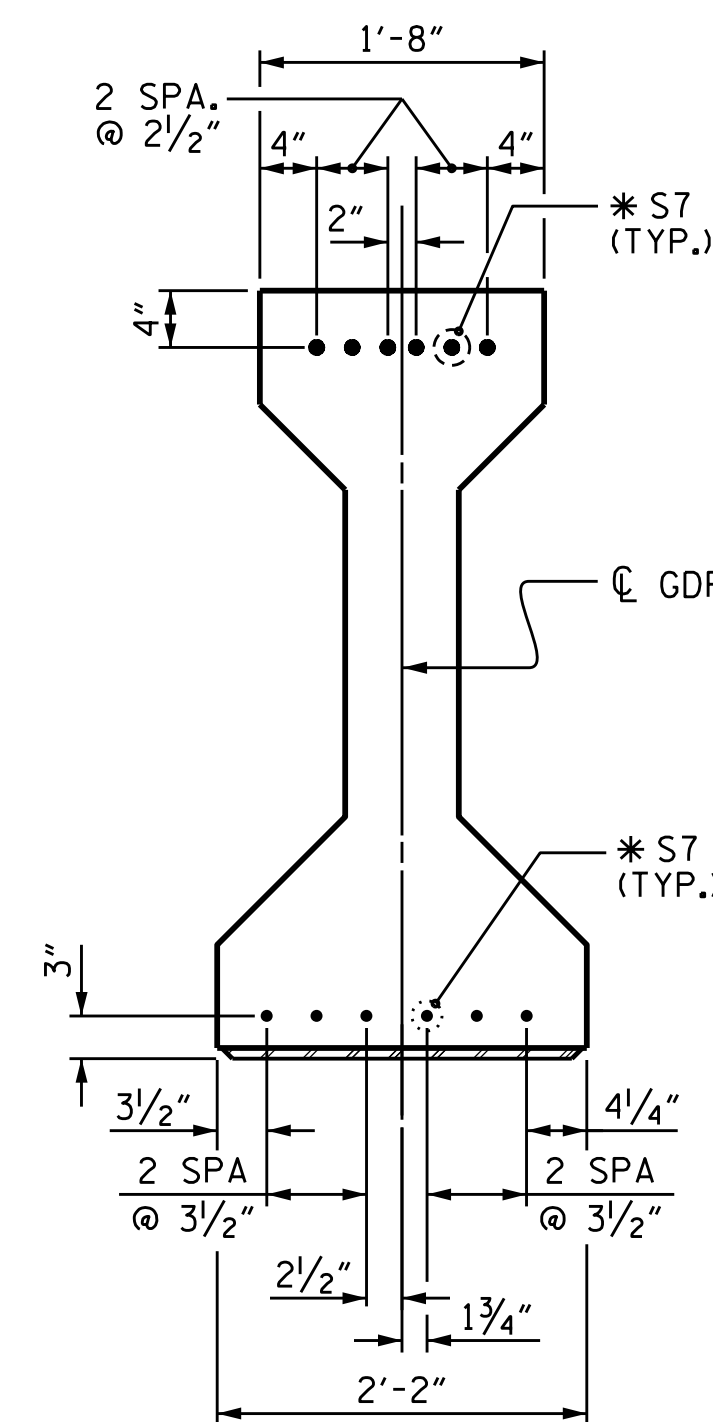
* INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM).



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



SECTION "F"
(SEE NOTES)



AT END INTEGRAL END BENT END

DETAIL "A"

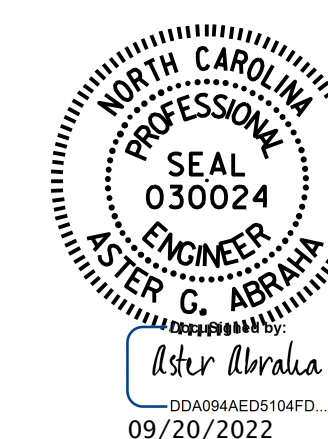
(FOR AASHTO TYPE IV GIRDERS)

PROJECT NO. B-5670
NASH COUNTY
STATION: 16+98.00 -L-

SHEET 5 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
DETAILS



ASSEMBLED BY : M.M. AHMED	DATE : 06/22
CHECKED BY : S. WANCE	DATE : 06/22
DESIGN ENGINEER OF RECORD: M.M. AHMED	DATE : 07/22
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

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19
1			3			TOTAL SHEETS
2			4			40