

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203M EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TIE ROD ASSEMBLY SHALL BE AASHTO M270 GRADE 250 STRUCTURAL STEEL.

ALL REINFORCING STEEL SHALL BE GRADE 420.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN ELEVATION VIEW. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS. BEVEL EDGES OF PLATE "B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

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 50mm 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 27.6 MPa.

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 100mm, SHALL BE RAKED TO A DEPTH OF 6mm.

WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 150mm OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 13mm OF THE THEORETICAL LOCATION SHOWN.

FOR VERTICAL CRACKS IN PRESTRESSED CONCRETE GIRDERS PRIOR TO DETENSIONING, SEE SPECIAL PROVISIONS.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

DEAD LOAD DEFLECTION TABLE FOR SPAN A

TENTH POINTS	GIRDER A1 AND A6										GIRDER A2 AND A5										GIRDER A3 AND A4													
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9				
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.008	0.015	0.021	0.024	0.025	0.024	0.021	0.015	0.008	0.000	0.000	0.008	0.015	0.021	0.024	0.025	0.024	0.021	0.015	0.008	0.000	0.000	0.008	0.015	0.021	0.024	0.025	0.024	0.021	0.015	0.008	0.000
◆ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.004	0.008	0.011	0.013	0.014	0.013	0.011	0.008	0.004	0.000	0.000	0.004	0.008	0.012	0.014	0.015	0.014	0.012	0.008	0.004	0.000	0.000	0.004	0.009	0.012	0.014	0.015	0.014	0.012	0.009	0.004	0.000
FINAL CAMBER	↑	0	4	7	10	11	11	10	7	4	0	0	4	7	9	10	10	10	9	7	4	0	0	4	6	9	10	10	10	9	6	4	0	

◆ INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
ALL VALUES ARE SHOWN IN METERS, EXCEPT "FINAL CAMBER" WHICH IS SHOWN IN MILLIMETERS.

DEAD LOAD DEFLECTION TABLE FOR SPAN B

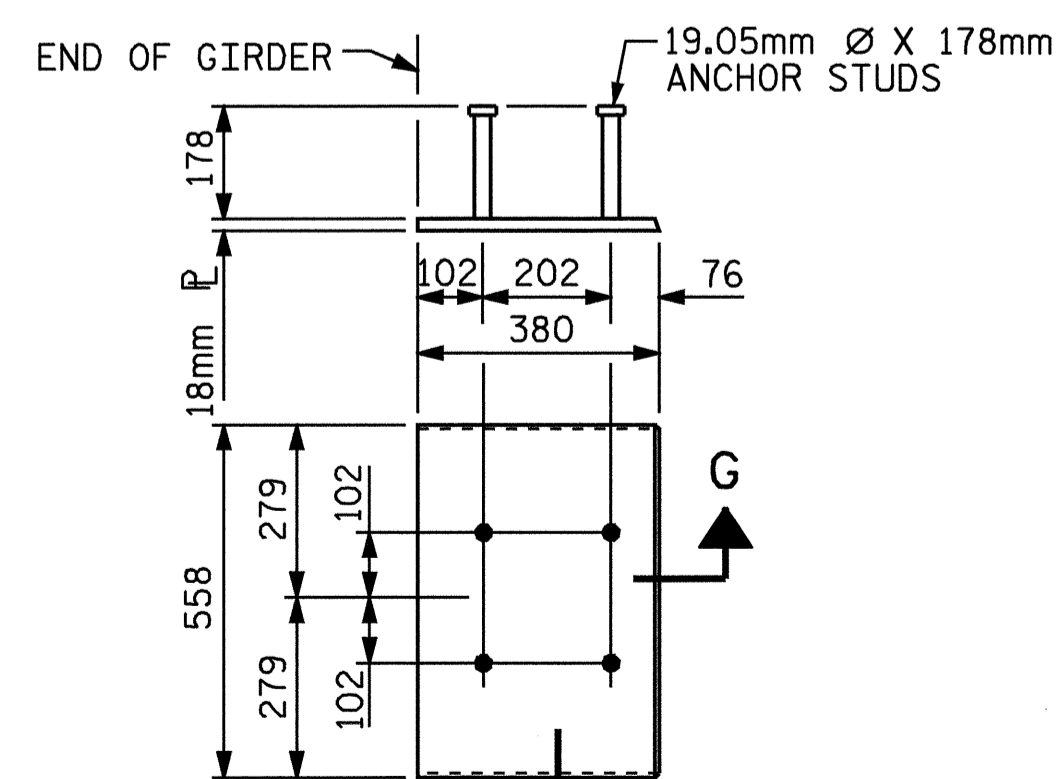
TENTH POINTS	GIRDER B1 AND B6										GIRDER B2 AND B5										GIRDER B3 AND B4													
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9				
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.008	0.015	0.021	0.024	0.026	0.024	0.021	0.015	0.008	0.000	0.000	0.008	0.015	0.021	0.024	0.026	0.024	0.021	0.015	0.008	0.000	0.000	0.008	0.015	0.021	0.024	0.026	0.024	0.021	0.015	0.008	0.000
◆ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.004	0.009	0.012	0.014	0.015	0.014	0.012	0.009	0.004	0.000	0.000	0.004	0.009	0.012	0.015	0.016	0.015	0.012	0.009	0.004	0.000	0.000	0.005	0.009	0.013	0.015	0.016	0.015	0.013	0.009	0.005	0.000
REQUIRED CAMBER	↑	0	4	6	9	10	11	10	9	6	4	0	0	4	6	9	9	10	9	9	6	4	0	0	3	6	8	9	10	9	8	6	3	0

◆ INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
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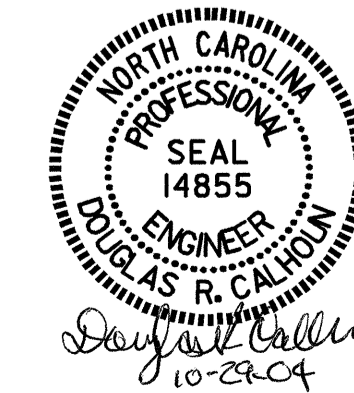
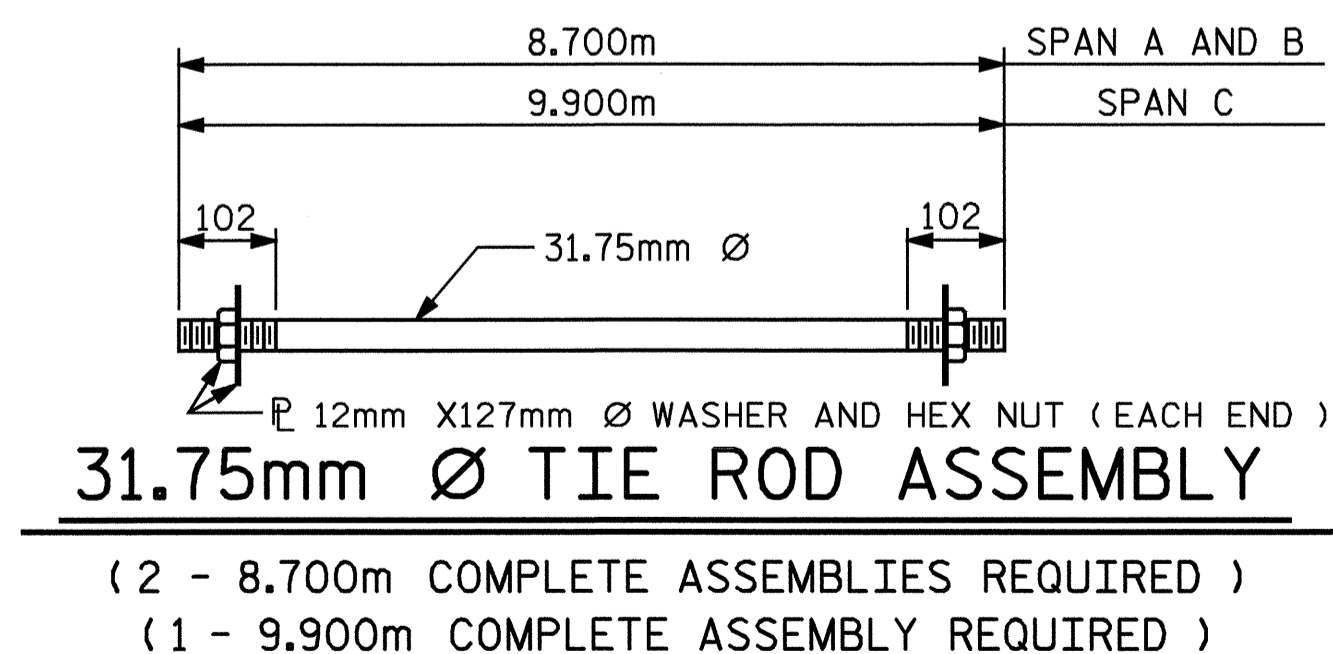
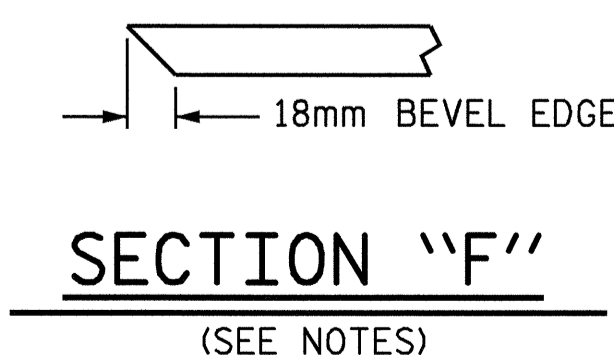
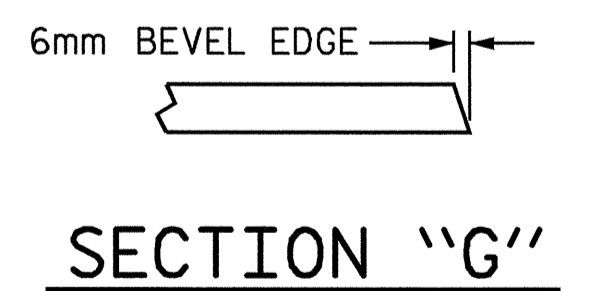
DEAD LOAD DEFLECTION TABLE FOR SPAN C

TENTH POINTS	GIRDER C1 AND C6										GIRDER C2 AND C5										GIRDER C3 AND C4													
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9				
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.015	0.028	0.039	0.045	0.048	0.045	0.039	0.028	0.015	0.000	0.000	0.015	0.028	0.039	0.045	0.048	0.045	0.039	0.028	0.015	0.000	0.000	0.015	0.028	0.039	0.045	0.047	0.045	0.039	0.028	0.015	0.000
◆ DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.005	0.009	0.013	0.015	0.016	0.015	0.013	0.009	0.005	0.000	0.000	0.005	0.010	0.013	0.016	0.016	0.016	0.013	0.010	0.005	0.000	0.000	0.005	0.010	0.013	0.016	0.017	0.016	0.013	0.010	0.005	0.000
REQUIRED CAMBER	↑	0	10	19	26	30	32	30	26	19	10	0	0	10	18	26	29	32	29	26	18	10	0	0	10	18	26	29	30	29	26	18	10	0

◆ INCLUDES SLAB, BUILDUPS & STAY-IN-PLACE FORMS.
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EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE III GIRDER
(2 REQ'D PER GIRDER)



PROJECT NO. B-2583
MADISON COUNTY
STATION: 11+03.000 -Y1-

SHEET 4 OF 4

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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-84
1			3			TOTAL SHEETS 112
2			4			

ASSEMBLED BY : T.A. HARRIS	DATE : 11/22/02
CHECKED BY : W.S. ARAFAT	DATE : 5/16/04
DRAWN BY : ELR 11/91	REV. 8/16/99 MAB/LES
CHECKED BY : GRP 11/91	REV. 10/17/00 RWW/LES
	REV. 7/10/01 LES/RDR