

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.

TIE ROD ASSEMBLY SHALL BE AASHTO M270 GRADE 36 STRUCTURAL STEEL.

ALL REINFORCING STEEL SHALL BE GRADE 60.

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 STANDARD 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 2" BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

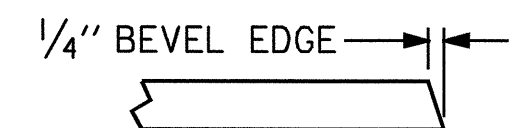
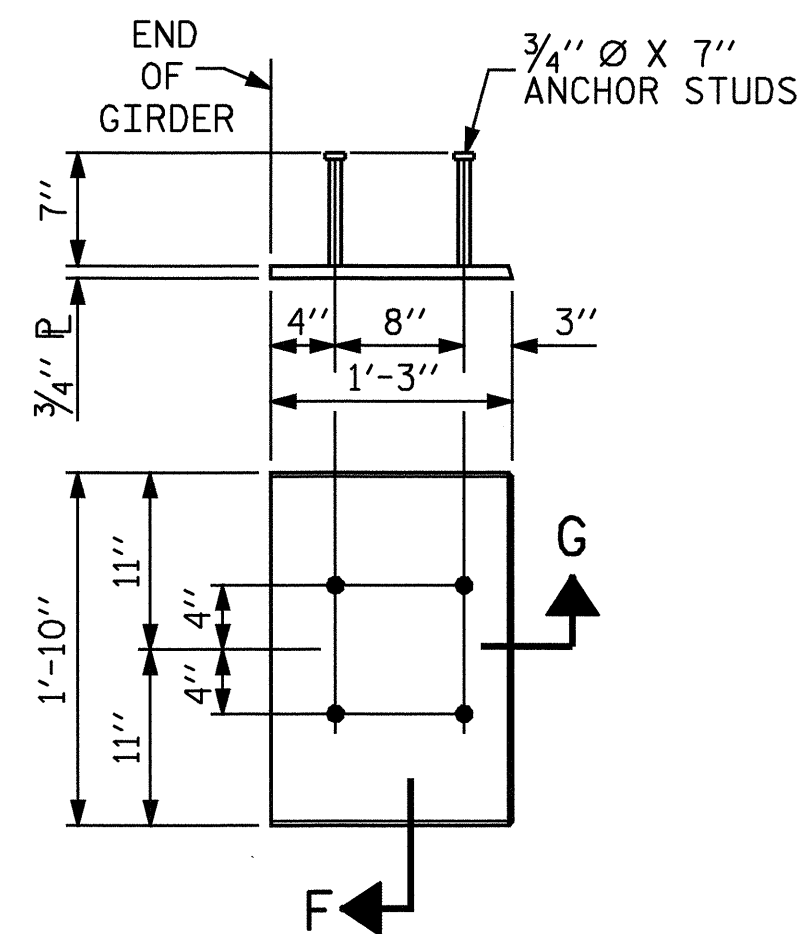
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI FOR SPANS A & C AND 4400 PSI FOR SPAN B.

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

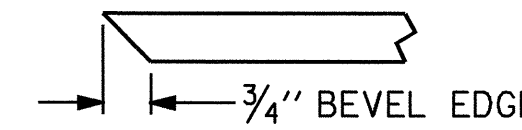
THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE RAKED TO A DEPTH OF 1/4".

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

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

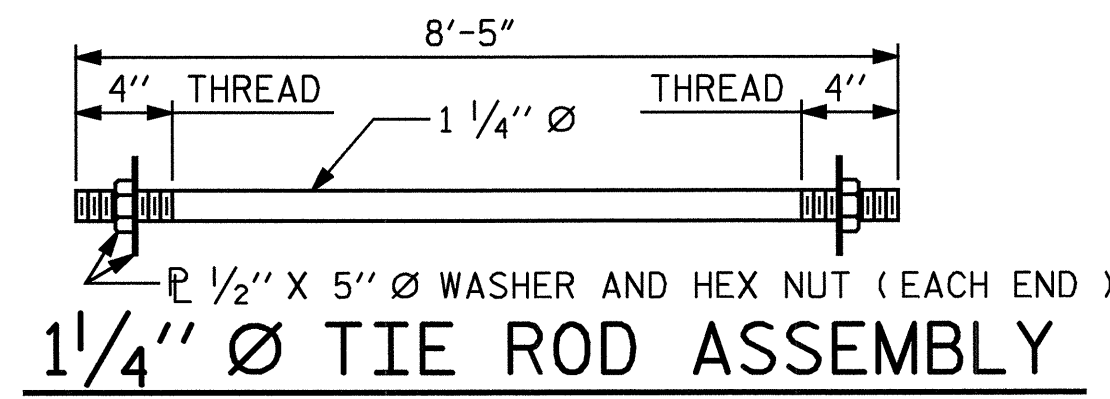


SECTION "G"



SECTION "F"

(SEE NOTES)



1 1/4" Ø TIE ROD ASSEMBLY

(10 COMPLETE ASSEMBLIES REQUIRED)

EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE III GIRDER

(2 REQ'D PER GIRDER)

DEAD LOAD DEFLECTION TABLE FOR SPAN A

| 1/2" Ø LOW RELAXATION | GIRDER A1 | | | | | | | | | | | | GIRDER A2, A3, A4, & A5 | | | | | | | | | | | | GIRDER A6 | | | | | | | | | | | |
|---------------------------------------|-----------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|-------|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-----|--|--|
| | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | | | | | |
| TENTH POINTS | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | | | |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0.0 | 0.028 | 0.054 | 0.073 | 0.086 | 0.090 | 0.086 | 0.073 | 0.054 | 0.028 | 0.0 | 0.0 | 0.028 | 0.054 | 0.073 | 0.086 | 0.090 | 0.086 | 0.073 | 0.054 | 0.028 | 0.0 | 0.0 | 0.028 | 0.054 | 0.073 | 0.086 | 0.090 | 0.086 | 0.073 | 0.054 | 0.028 | 0.0 | | |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0.0 | 0.012 | 0.023 | 0.032 | 0.037 | 0.039 | 0.037 | 0.032 | 0.023 | 0.012 | 0.0 | 0.0 | 0.013 | 0.025 | 0.034 | 0.040 | 0.042 | 0.040 | 0.034 | 0.025 | 0.013 | 0.0 | 0.0 | 0.012 | 0.022 | 0.031 | 0.036 | 0.038 | 0.036 | 0.031 | 0.022 | 0.012 | 0.0 | | |
| FINAL CAMBER | ↑ | 0.0 | 3/16" | 3/8" | 1/2" | 5/16" | 5/8" | 9/16" | 1/2" | 3/8" | 3/16" | 0.0 | 0.0 | 3/16" | 3/8" | 7/16" | 9/16" | 5/8" | 1/2" | 3/8" | 3/16" | 0.0 | 0.0 | 3/16" | 3/8" | 1/2" | 5/8" | 5/8" | 1/2" | 3/8" | 3/16" | 0.0 | | | | |

DEAD LOAD DEFLECTION TABLE FOR SPAN B

| 1/2" Ø LOW RELAXATION | GIRDER B1 | | | | | | | | | | GIRDER B2, B3, B4, & B5 | | | | | | | | | | GIRDER B6 | | | | | | | | | | | | | |
|---------------------------------------|-----------|-----|-------|-------|--------|--------|-------|--------|--------|-------|-------------------------|-----|-------|-------|-------|--------|-------|--------|-------|--------|-----------|-------|-------|-------|-------|-------|--------|--------|-------|--------|--------|-------|-------|-----|
| | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | | |
| TENTH POINTS | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0.0 | 0.040 | 0.075 | 0.103 | 0.120 | 0.120 | 0.103 | 0.075 | 0.040 | 0.0 | 0.0 | 0.040 | 0.075 | 0.103 | 0.120 | 0.120 | 0.103 | 0.075 | 0.040 | 0.0 | 0.0 | 0.040 | 0.075 | 0.103 | 0.120 | 0.120 | 0.103 | 0.075 | 0.040 | 0.0 | | | |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0.0 | 0.017 | 0.032 | 0.044 | 0.052 | 0.055 | 0.052 | 0.044 | 0.032 | 0.017 | 0.0 | 0.0 | 0.018 | 0.035 | 0.048 | 0.056 | 0.059 | 0.056 | 0.048 | 0.035 | 0.018 | 0.0 | 0.0 | 0.017 | 0.032 | 0.044 | 0.052 | 0.055 | 0.052 | 0.044 | 0.032 | 0.017 | 0.0 |
| FINAL CAMBER | ↑ | 0.0 | 1/4" | 1/2" | 11/16" | 13/16" | 7/8" | 13/16" | 11/16" | 1/2" | 1/4" | 0.0 | 0.0 | 1/4" | 1/2" | 11/16" | 3/4" | 13/16" | 3/4" | 11/16" | 1/2" | 1/4" | 0.0 | 0.0 | 1/4" | 1/2" | 11/16" | 13/16" | 7/8" | 13/16" | 11/16" | 1/2" | 1/4" | 0.0 |

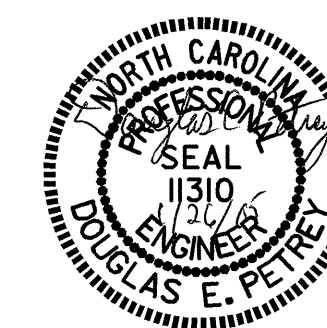
DEAD LOAD DEFLECTION TABLE FOR SPAN C

| 1/2" Ø LOW RELAXATION | GIRDER C1 | | | | | | | | | | GIRDER C2, C3, C4, & C5 | | | | | | | | | | GIRDER C6 | | | | | | | | | | | | | |
|---------------------------------------|-----------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------|-----|-----|-------|-------|-------|-------|-------|-------|-------|-----------|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | | |
| TENTH POINTS | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | 0 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 0 | |
| CAMBER (GIRDER ALONE IN PLACE) | ↑ | 0.0 | 0.003 | 0.007 | 0.009 | 0.010 | 0.011 | 0.010 | 0.009 | 0.007 | 0.003 | 0.0 | 0.0 | 0.003 | 0.007 | 0.009 | 0.010 | 0.011 | 0.010 | 0.009 | 0.007 | 0.003 | 0.0 | 0.0 | 0.003 | 0.007 | 0.009 | 0.010 | 0.011 | 0.010 | 0.009 | 0.007 | 0.003 | 0.0 |
| * DEFLECTION DUE TO SUPERIMPOSED D.L. | ↓ | 0.0 | 0.002 | 0.004 | 0.005 | 0.006 | 0.007 | 0.006 | 0.005 | 0.004 | 0.002 | 0.0 | 0.0 | 0.002 | 0.004 | 0.006 | 0.007 | 0.007 | 0.006 | 0.004 | 0.002 | 0.0 | 0.0 | 0.002 | 0.004 | 0.005 | 0.006 | 0.006 | 0.006 | 0.005 | 0.004 | 0.002 | 0.0 | |
| FINAL CAMBER | ↑ | 0.0 | 0" | 1/16" | 1/16" | 1/16" | 1/16" | 1/16" | 1/16" | 0" | 0.0 | 0.0 | 0" | 0" | 1/16" | 1/16" | 1/16" | 1/16" | 1/16" | 0" | 0" | 0.0 | 0.0 | 0" | 1/16" | 1/16" | 1/16" | 1/16" | 1/16" | 1/16" | 1/16" | 0" | 0.0 | |

* INCLUDES FUTURE WEARING SURFACE.

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

PROJECT NO. B-3694
ROCKINGHAM COUNTY
 STATION: 17+27.50 -L-



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 PRESTRESSED CONCRETE GIRDER
 CONTINUOUS FOR LIVE LOAD
 DETAILS &
 DEAD LOAD DEFLECTIONS
 NOVEMBER 1991

| REVISIONS | | | | | | SHEET NO. | |
|-----------|-----|-------|-----|-----|-------|-----------------|--|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S-14 | |
| 1 | | | 3 | | | TOTAL SHEETS 36 | |
| 2 | | | 4 | | | | |

| | |
|----------------------------|-----------------------|
| ASSEMBLED BY : A.R.CHESSON | DATE : 5-04 |
| CHECKED BY : B.N.GRADY | DATE : 8-04 |
| 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 |