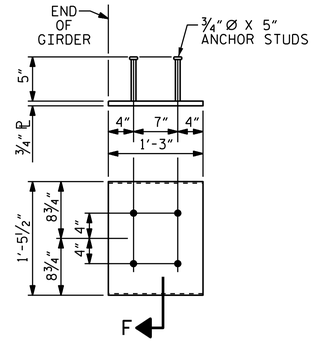
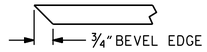



## EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE II GIRDER

(2 REQ'D PER GIRDER)




## SECTION "F"

(SEE NOTES)

## 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 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 6100 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, EXCLUDING THE OUTSIDE 4" AND LINK SLAB AREA, SHALL BE RAKED TO A DEPTH OF ¼".

## DEAD LOAD DEFLECTION TABLE FOR GIRDERS

| SPANS A & 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 | 0.018 | 0.035 | 0.051 | 0.067 | 0.079 | 0.092 | 0.099 | 0.107 | 0.110 | 0.113 | 0.110 | 0.107 | 0.099 | 0.092 | 0.079 | 0.067 | 0.051 | 0.035 | 0.018 | 0 |
| ✱ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓ | 0 | 0.010 | 0.020 | 0.029 | 0.038 | 0.045 | 0.052 | 0.057 | 0.061 | 0.063 | 0.064 | 0.063 | 0.061 | 0.057 | 0.052 | 0.045 | 0.038 | 0.029 | 0.020 | 0.010 | 0 |
| FINAL CAMBER ↑ | 0 | 1/16" | 3/16" | 1/4" | 3/8" | 7/16" | 1/2" | 1/2" | 9/16" | 9/16" | 9/16" | 9/16" | 9/16" | 1/2" | 1/2" | 7/16" | 3/8" | 1/4" | 3/16" | 1/16" | 0 |
| SPANS A & B | | | | | | | | | | | | | | | | | | | | | | |
| 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 | 0.018 | 0.035 | 0.051 | 0.066 | 0.079 | 0.091 | 0.099 | 0.107 | 0.109 | 0.112 | 0.109 | 0.107 | 0.099 | 0.091 | 0.079 | 0.066 | 0.051 | 0.035 | 0.018 | 0 |
| ✱ DEFLECTION DUE TO SUPERIMPOSED D.L. ↓ | 0 | 0.012 | 0.024 | 0.034 | 0.045 | 0.053 | 0.062 | 0.067 | 0.072 | 0.074 | 0.076 | 0.074 | 0.072 | 0.067 | 0.062 | 0.053 | 0.045 | 0.034 | 0.024 | 0.012 | 0 |
| FINAL CAMBER ↑ | 0 | 1/16" | 1/8" | 3/16" | 1/4" | 5/16" | 3/8" | 3/8" | 7/16" | 7/16" | 7/16" | 7/16" | 7/16" | 3/8" | 3/8" | 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 SHOWN IN INCHES (FRACTION FORM).

PROJECT NO. B-5662

HALIFAX COUNTY

STATION: 15+61.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 030024 ENGINEER ASTER G. ABRAHA

Aster Abraha
DocuSigned by: DDA094AED5104FD...
5/22/2020

DESIGN ENGINEER OF RECORD: M.M. AHMED DATE : 03/20

ASSEMBLED BY : M.M. AHMED/A.Y.G. DATE : 05/20
CHECKED BY : S. WANCE DATE : 05/2020

DRAWN BY : ELR 11/91
CHECKED BY : GRP 11/91

REV. 1/15 MAA/TMG
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-13 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 30 |

22-MAY-2020 18:43
R:\Structures\Plans\B5662_SMU. G*_410093.dgn
aabraha

STD. NO. PCG9 (Sht. 1)