

EMBEDDED PLATE "B-1" DETAILS FOR 54", 72", & 78" CFRP F.I.B.

(2 REQ'D PER GIRDER)

NOTES

FOR CARBON FIBER REINFORCED POLYMER (CFRP) STRAND, SEE SPECIAL PROVISIONS.

FOR GLASS FIBER REINFORCED POLYMER (GFRP) BAR, SEE SPECIAL PROVISIONS.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN ELEVATION VIEW.

EMBEDDED PLATE "B-1" SHALL BE STAINLESS STEEL CONFORMING TO ASTM A240 ALLOY 316L

ANCHOR STUDS SHALL BE STAINLESS STEEL CONFORMING TO ASTM F593 ALLOY 316L OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.6/D1.6M BRIDGE WELDING CODE.

AT ENDS OF GIRDERS PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER

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 54" CFRP F.I.B. PRESTRESSED CONCRETE GIRDERS, 6500 PSI FOR 72" CFRP F.I.B. PRESTRESSED CONCRETE GIRDERS AND 6500 PSI FOR 78"CFRP F.I.B. PRESTRESSED CONCRETE GIRDERS EXCEPT GIRDERS IN SPANS G & I WHERE IT SHALL BE 5000 PSI.

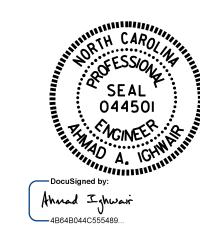
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

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

THE CONTRACTOR HAS THE OPTION TO PROVIDE, AT NO ADDITIONAL COST TO THE DEPARTMENT, 2 ADDITIONAL STRANDS AT THE TOP OF THE GIRDER TO FACILITATE TYING OF THE REINFORCMENT. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4500 lbs.

FOR 54"CFRP F.I.B., 72"CFRP F.I.B. AND 78"CFRP F.I.B. PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

> PROJECT NO. B-4863 CARTERET ___ COUNTY STATION: 34+75.00 -L-



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPERSTRUCTURE

PRESTRESSED CONCRETE GIRDER

3/9/2020 REVISIONS S1-095 DATE: DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

A.A.IGHWAIR T. H. CARROLL _ DATE : <u>01-20</u> DESIGN ENGINEER OF RECORD: <u>A.A.IGHWAIR</u> DATE: <u>01-20</u>