EXTERIOR GIRDERS

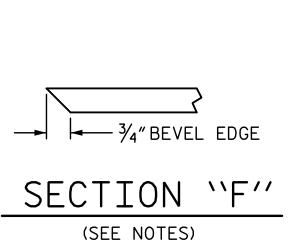
``D'' ``F'' ``G'' ← END OF GIRDER (TYP.) DIRECTION OF INCREASING STATIONS

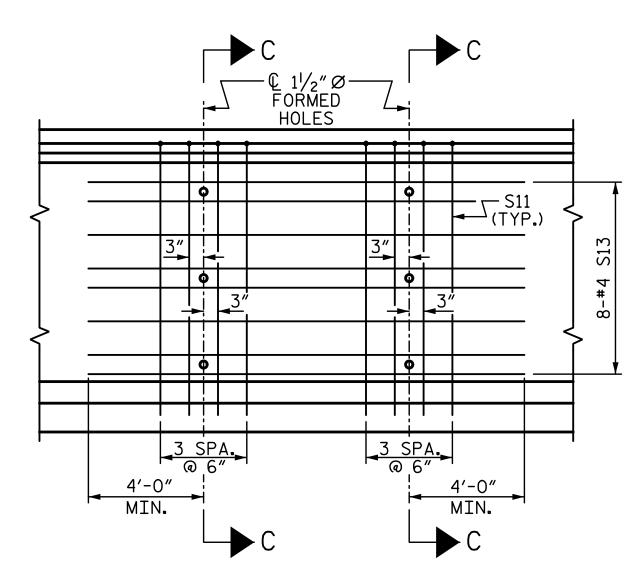
INTERIOR GIRDERS

LOCATION OF $1\frac{1}{2}$ " Ø HOLES

| GIRDER FORMED HOLE LOCATIONS - SPAN A | | | | | | | | | |
|---------------------------------------|-------------------------|-----------|------------------------|-------------------------------------|--|--|--|--|--|
| | ``D'' | ``E'' | ``F'' | ``G'' | | | | | |
| GDR. 1 | 41'-71/2" | 41′-73⁄8″ | - | - | | | | | |
| GDRS. 2 THRU 5 38'-25/6" | | 41′-73⁄8″ | 3′-5³⁄ ₁₆ " | 3′-5 ³ / ₁₆ ″ | | | | | |
| GDR. 6 | 38′-25⁄ ₁₆ ″ | 45′-0%6″ | - | - | | | | | |

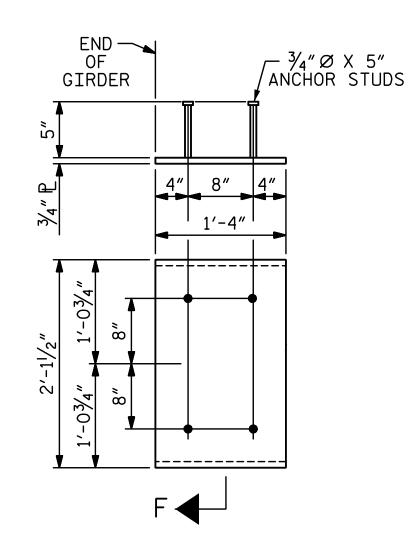
| GIRDER FORMED HOLE LOCATIONS - SPAN B | | | | | | | | | |
|---------------------------------------|--------------------------------------|-----------|---------|-------------------------------------|--|--|--|--|--|
| | ``D'' | ``E'' | ``F'' | ``G'' | | | | | |
| GDR. 1 | 37′-71/2″ | 37′-73⁄8″ | - | - | | | | | |
| GDRS.2 THRU 5 | 34′-25/16″ | 37′-73⁄8″ | 3′-5¾6″ | 3′-5 ³ / ₁₆ ″ | | | | | |
| GDR. 6 | 34'-2 ⁵ / ₁₆ " | 41′-0%6″ | - | - | | | | | |





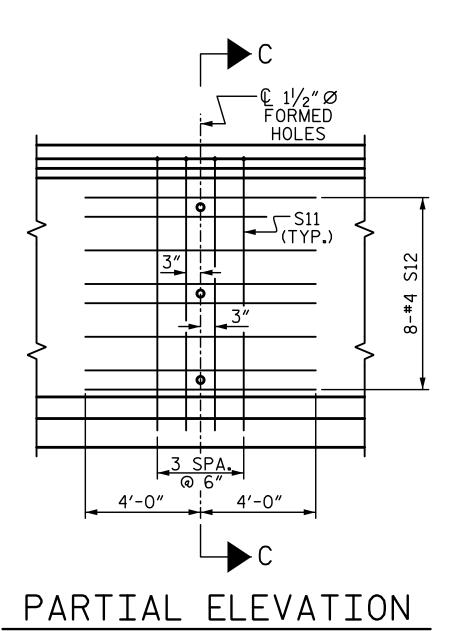
PARTIAL ELEVATION

SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR INTERIOR GIRDERS SEE SHEET 1 OF 3 OR 2 OF 3 FOR SECTION C-C.



EMBEDDED PLATE "B-1" DETAILS FOR 63" MODIFIED BULB TEES

(2 REQ'D PER GIRDER)



SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR EXTERIOR GIRDERS SEE SHEET 1 OF 3 OR 2 OF 3 FOR SECTION C-C.

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.

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 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.

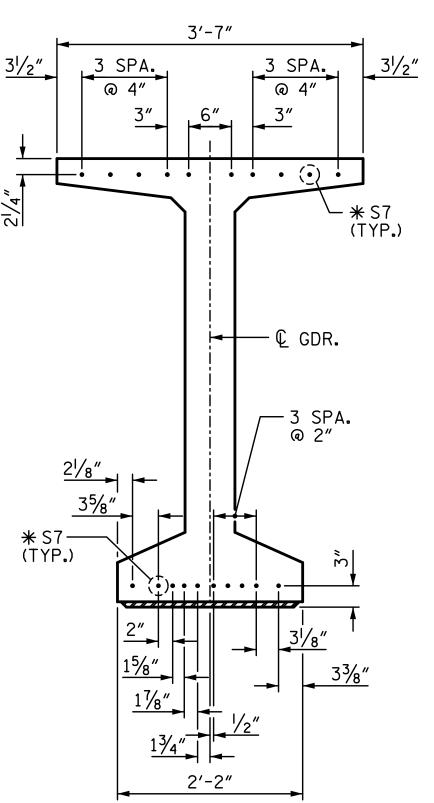
THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 7800 PSI FOR SPAN A GIRDERS AND 7200 PSI FOR SPAN B GIRDERS.

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".

A 2"x 2"CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 63" AND 72" MODIFIED BULB TEES ONLY.

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 REINFORCING STEEL. THESE STRANDS SHALL BE PULLED TO A LOAD OF 4500 lbs.



PROJECT NO. U-2525C GUILFORD

COUNTY

<u>25+52.71 -Y7-</u> STATION:_

STATE OF NORTH CAROLINA

DETAIL "C" SHEET 3 OF 3

PLANS PREPARED BY: SIMPSON NGINEERS ASSOCIATES 5640 Dillard Drive Suite 200 Cary, NC 27518 (919) 852-0468 (919) 852-0598 (Fax) www.simpsonengr.com LICENSURE NO. C-2521

OKESSION A OKESSION A -DOCUSIGNEES AL TWO 243201 - ALL SWOTINGES

DEPARTMENT OF TRANSPORTATION SUPERSTRUCTURE PRESSTRESSED CONCRETE GIRDER DETAILS

| | SHEET NO. | | | | |
|-----|-----------|-----|-----|-------|-----------------|
| BY: | DATE: | NO. | BY: | DATE: | S10-12 |
| | | 3 | | | TOTAL SHEETS |
| | | 4 | | | 36 |

S.D. COOPER DATE: 3-17
DATE: 3-17
DATE: 3-17 T.J. BEACH T.J. BEACH DESIGN ENGINEER OF RECORD: .

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED