

EMBEDDED PLATE "B-1" DETAILS FOR 63" MODIFIED BULB TEES (2 REQ'D PER GIRDER)

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 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 8000 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", SHALL BE RAKED TO A DEPTH OF 1/4".

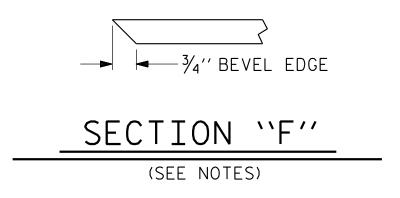
A 2" \times 2"CHAMFER IS ALLOWED AT THE INTERSECTION OF THE WEB AND THE BOTTOM FLANGE OF THE 63" AND 72" MODIFIED BULB TEES ONLY.

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.

| DEAD LOAD DEFLECTION TABLE FOR GIRDERS - SPANS A & B | | | | | | | | | | | | | | | | | | | | |
|--|------------------------|--|--|---|---|--|---|---|---|---|---|---|--|--|---|-------------------|--|--|--|--|
| GIRDERS 1 & 4 | | | | | | | | | | | | | | | | | | | | |
| 0 | .05 | .1 | .15 | .2 | . 25 | .3 | . 35 | .4 | . 45 | . 5 | . 55 | .6 | .65 | .7 | .75 | .8 | .85 | . 9 | .95 | 1.0 |
| 0.0 | 0.037 | 0.073 | 0.107 | 0.138 | 0.166 | 0.189 | 0.208 | 0.221 | 0.230 | 0.233 | 0.230 | 0.221 | 0.208 | 0.189 | 0.166 | 0.138 | 0.107 | 0.073 | 0.037 | 0.0 |
| 0.0 | 0.021 | 0.042 | 0.062 | 0.082 | 0.098 | 0.113 | 0.123 | 0.133 | 0.137 | 0.140 | 0.137 | 0.133 | 0.123 | 0.113 | 0.098 | 0.082 | 0.062 | 0.042 | 0.021 | 0.0 |
| 0.0 | 3/16" | 3/8" | 1/2" | ¹¹ /16" | 13/16" | 15/ ₁₆ " | 1" | 1½ ₆ ″ | 11/16" | 11/8" | 11/16" | 1½ ₆ ″ | 1" | 15/16" | 13/16" | 11/16" | 1/2" | 3/8" | 3/16" | 0.0 |
| GIRDERS 2 - 3 | | | | | | | | | | | | | | | | | | | | |
| 0 | .05 | .1 | .15 | .2 | .25 | .3 | . 35 | .4 | .45 | . 5 | . 55 | .6 | .65 | .7 | .75 | .8 | .85 | .9 | .95 | 1.0 |
| 0.0 | 0.037 | 0.073 | 0.107 | 0.138 | 0.166 | 0.189 | 0.208 | 0.221 | 0.230 | 0.233 | 0.230 | 0.221 | 0.208 | 0.189 | 0.166 | 0.138 | 0.107 | 0.073 | 0.037 | 0.0 |
| 0.0 | 0.022 | 0.045 | 0.066 | 0.088 | 0.104 | 0.121 | 0.132 | 0.143 | 0.146 | 0.150 | 0.146 | 0.143 | 0.132 | 0.121 | 0.104 | 0.088 | 0.066 | 0.045 | 0.022 | 0.0 |
| 0.0 | 3/16" | 5/16" | 1/2" | 5/8″ | 11/16" | 13/16" | 7/8" | 15/ ₁₆ " | 15/16" | 1" | 15/ ₁₆ " | 15/16" | 7/8" | 13/16" | 11/16" | 5/8" | 1/2" | 5/16" | 3/16" | 0.0 |
| | 0 0.0 0.0 0.0 | 0 .05 0.0 0.037 0.0 0.021 0.0 3/16" 0 .05 0.0 0.037 0.0 0.022 | 0 .05 .1 0.0 0.037 0.073 0.0 0.021 0.042 0.0 3/6" 3/8" 0 .05 .1 0.0 0.037 0.073 0.0 0.022 0.045 | 0 .05 .1 .15 0.0 0.037 0.073 0.107 0.0 0.021 0.042 0.062 0.0 3/16" 3/8" 1/2" 0 .05 .1 .15 0.0 0.037 0.073 0.107 0.0 0.022 0.045 0.066 | 0 .05 .1 .15 .2 0.0 0.037 0.073 0.107 0.138 0.0 0.021 0.042 0.062 0.082 0.0 3/16" 3/8" 1/2" 11/16" 0 0.05 .1 .15 .2 0.0 0.037 0.073 0.107 0.138 0.0 0.022 0.045 0.066 0.088 | 0 .05 .1 .15 .2 .25 0.0 0.037 0.073 0.107 0.138 0.166 0.0 0.021 0.042 0.062 0.082 0.098 0.0 3/16" 3/8" 1/2" 11/16" 13/16" 0 0.05 .1 .15 .2 .25 0.0 0.037 0.073 0.107 0.138 0.166 0.0 0.022 0.045 0.066 0.088 0.104 | 0 .05 .1 .15 .2 .25 .3 0.0 0.037 0.073 0.107 0.138 0.166 0.189 0.0 0.021 0.042 0.062 0.082 0.098 0.113 0.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 0 0.05 .1 .15 .2 .25 .3 0.0 0.037 0.073 0.107 0.138 0.166 0.189 0.0 0.022 0.045 0.066 0.088 0.104 0.121 | 0 .05 .1 .15 .2 .25 .3 .35 0.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 0 .05 .1 .15 .2 .25 .3 .35 0.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.0 0.022 0.045 0.066 0.088 0.104 0.121 0.132 | 0 .05 .1 .15 .2 .25 .3 .35 .4 0.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.0 3/6" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 0 .05 .1 .15 .2 .25 .3 .35 .4 0.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.0 0.022 0.045 0.066 0.088 0.104 0.121 0.132 0.143 | GIR O .05 .1 .15 .2 .25 .3 .35 .4 .45 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/16" GIR O .05 .1 .15 .2 .25 .3 .35 .4 .45 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 O.0 0.022 0.045 0.066 0.088 0.104 0.121 0.132 0.143 0.146 | GIRDERS 1 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/16" 11/8" GIRDERS 2 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 O.0 0.022 0.045 0.066 0.088 0.104 0.121 0.132 0.143 0.146 0.150 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/16" 11/16" 11/16" GIRDERS 2 - 3 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 O.0 0.022 0.045 0.066 0.088 0.104 0.121 0.132 0.143 0.146 0.150 0.146 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/16" 11/16" 11/16" 11/16" GIRDERS 2 - 3 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 O.0 0.022 0.045 0.066 0.088 0.104 0.121 0.132 0.143 0.146 0.150 0.146 0.143 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 .65 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 0.208 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 0.123 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 1 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 .65 .7 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 0.208 0.189 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 0.123 0.113 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/16" 11/18" 11/16" | CIRDERS 1 & 4 O | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 .65 .7 .75 .8 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 0.208 0.189 0.166 0.138 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 0.123 0.113 0.098 0.082 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/1 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 .65 .7 .75 .8 .85 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 0.208 0.189 0.166 0.138 0.107 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 0.123 0.113 0.098 0.082 0.062 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 .6 .65 .7 .75 .8 .85 .9 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 0.208 0.189 0.166 0.138 0.107 0.073 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 0.123 0.113 0.098 0.082 0.062 0.042 O.0 3/16" 3/8" 1/2" 11/16" 13/16" 15/16" 1" 11/16" 11/16" 11/18" 11/16 | GIRDERS 1 & 4 O .05 .1 .15 .2 .25 .3 .35 .4 .45 .5 .55 .6 .65 .7 .75 .8 .85 .9 .95 O.0 0.037 0.073 0.107 0.138 0.166 0.189 0.208 0.221 0.230 0.233 0.230 0.221 0.208 0.189 0.166 0.138 0.107 0.073 0.037 O.0 0.021 0.042 0.062 0.082 0.098 0.113 0.123 0.133 0.137 0.140 0.137 0.133 0.123 0.113 0.098 0.082 0.062 0.042 0.021 O.0 3/6" 3/8" 1/2" 11/16" 13/6" 15/6" 1" 11/16" 11 |

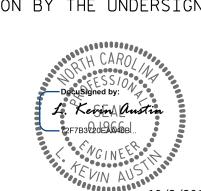
* INCLUDES FUTURE WEARING SURFACE.

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



PLANS PREPARED BY: **+MULKEY** PO Box 33127 RALEIBH, N.G. 27636 (919) 851-1912 (919) 851-1918 (FAX) WWW.MULKEYING.COM

THIS STANDARD DRAWING REVIEWED & ADOPTED FOR USE AT THE REFERENCED LOCATION BY THE UNDERSIGNED:



SHEET 3 OF 4 STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STATION: 24+06.36 -L- POT

PROJECT NO. ____

COLUMBUS

STANDARD

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS

| | SHEET NO. | | | | | | |
|-----|-----------|-----|-----|-------|-----------------|--|--|
| BY: | DATE: | NO. | BY: | DATE: | S-12 | | |
| | | (R) | | | TOTAL SHEETS | | |
| | | ক্ট | | | 33 | | |

STD. NO. PCG9

W-5518

COUNTY

+

ASSEMBLED BY: W.B.ALLEN

DATE: 3/15 CHECKED BY : Z. H. BROWN DATE : 3/15 DRAWN BY: ELR 11/91 CHECKED BY: GRP 11/91

MAA/TMG MAA/TMG