| | | – DE | AD L | .OAD | DE | FLEC | TIO | N TA | BLE | F0 | R GI | CRDE | RS- | | | | | | | | |
|---|----------------------------|-------|-------|-------|--------------------------------|-------|-------------------|-------------------|--------------------|--------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|-------|--------------------------------|-------|-------|---|
| $0.6\% \times 1.0\% \text{ DELAYATION}$ | 0.6" Ø LOW RELAXATION | | | | | | | | | | | | | | | | | | | | |
| 0.0 Ø LOW RELAXATION | EXTERIOR GIRDERS 1 & 5 | | | | | | | | | | | | | | | | | | | | |
| TWENTIETH POINTS | 0 | 0.05 | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 | 0.75 | 0.80 | 0.85 | 0.90 | 0.95 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | 0 | 0.012 | 0.024 | 0.034 | 0.044 | 0.053 | 0.061 | 0.067 | 0.071 | 0.074 | 0.075 | 0.074 | 0.071 | 0.067 | 0.061 | 0.053 | 0.044 | 0.034 | 0.024 | 0.012 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D. L. | 0 | 0.007 | 0.014 | 0.020 | 0.026 | 0.031 | 0.035 | 0.039 | 0.042 | 0.043 | 0.044 | 0.043 | 0.042 | 0.039 | 0.035 | 0.031 | 0.026 | 0.0220 | 0.014 | 0.007 | 0 |
| FINAL CAMBER | 0 | ½16" | 1⁄8" | 3/16" | 1⁄4" | 1/4" | ⁵ ⁄16" | ⁵ ⁄16" | 3/ ₈ 11 | 3/8" | 3/8" | 3/ ₈ " | 3/8" | ⁵ ⁄16" | ⁵ ⁄16" | 1/4" | 1/4" | ³ ⁄ ₁₆ " | 1/8" | ½16" | 0 |
| 0.6" ∅ LOW RELAXATION | SPANS A & C | | | | | | | | | | | | | | | | | | | | |
| 0.0 Ø LOW KELAXATION | INTERIOR GIRDERS 2, 3, & 4 | | | | | | | | | | | | | | | | | | | | |
| TWENTIETH POINTS | 0 | 0.05 | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 | 0.75 | 0.80 | 0.85 | 0.90 | 0.95 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | 0 | 0.012 | 0.024 | 0.034 | 0.044 | 0.053 | 0.061 | 0.067 | 0.071 | 0.074 | 0.075 | 0.074 | 0.071 | 0.067 | 0.061 | 0.053 | 0.044 | 0.034 | 0.024 | 0.012 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D. L. | 0 | 0.008 | 0.016 | 0.023 | 0.030 | 0.036 | 0.041 | 0.045 | 0.048 | 0.049 | 0.050 | 0.049 | 0.048 | 0.045 | 0.041 | 0.036 | 0.030 | 0.023 | 0.016 | 0.008 | 0 |
| FINAL CAMBER | 0 | ½16" | 1/8" | 1/8" | ³ / ₁₆ " | 3/16" | 1/4" | 1/4" | ⁵ ⁄16" | ⁵ ⁄ ₁₆ " | ⁵ ⁄16" | ⁵ ⁄16" | ⁵ ⁄16" | 1/4" | 1/4" | 3/16" | 3/16" | 1/8" | 1/8" | ½16" | 0 |

^{*} INCLUDES FUTURE WEARING SURFACE ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM)

| | | – DE | AD L | .OAD | DEI | FLEC | TIO | N TA | BLE | F0 | R G | CRDE | RS- | | | | | | | | |
|--|----------------------------|-------|-------|-------|--------------------------------|--------------------------------|-------|-------|-------------------|-------------------|-------------------|--------------------------------|-------------------|-------|-------|-------------------|--------------------------------|-------|-------|-------|---|
| 0.6" ∅ LOW RELAXATION | | | | | | | | | | S | SPAN | В | | | | | | | | | |
| 0.0 Ø LOW KELAXATION | EXTERIOR GIRDERS 1 & 5 | | | | | | | | | | | | | | | | | | | | |
| TWENTIETH POINTS | 0 | 0.05 | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 | 0.75 | 0.80 | 0.85 | 0.90 | 0.95 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | 0 | 0.018 | 0.036 | 0.052 | 0.068 | 0.081 | 0.093 | 0.102 | 0.108 | 0.113 | 0.114 | 0.113 | 0.108 | 0.102 | 0.093 | 0.081 | 0.068 | 0.052 | 0.036 | 0.018 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D. L. | 0 | 0.014 | 0.028 | 0.041 | 0.053 | 0.064 | 0.073 | 0.080 | 0.086 | 0.089 | 0.090 | 0.089 | 0.086 | 0.080 | 0.073 | 0.064 | 0.053 | 0.041 | 0.028 | 0.014 | 0 |
| FINAL CAMBER | 0 | 1/16" | 1/16" | 1/8" | ³ ⁄16" | ³ ⁄16" | 1⁄4" | 1/4" | ⁵ ⁄16" | ⁵ ⁄16" | ⁵ ⁄16" | ⁵ ⁄16" | ⁵ ⁄16" | 1/4" | 1/4" | ³ ⁄16" | ³ / ₁₆ " | 1/8" | ½16" | 1/16" | 0 |
| 0.6" ∅ LOW RELAXATION | SPAN B | | | | | | | | | | | | | | | | | | | | |
| 0.0 Ø LUW RELAXATION | INTERIOR GIRDERS 2, 3, & 4 | | | | | | | | | | | | | | | | | | | | |
| TWENTIETH POINTS | 0 | 0.05 | 0.10 | 0.15 | 0.20 | 0.25 | 0.30 | 0.35 | 0.40 | 0.45 | 0.50 | 0.55 | 0.60 | 0.65 | 0.70 | 0.75 | 0.80 | 0.85 | 0.90 | 0.95 | 0 |
| CAMBER (GIRDER ALONE IN PLACE) | 0 | 0.018 | 0.036 | 0.052 | 0.068 | 0.081 | 0.093 | 0.102 | 0.108 | 0.113 | 0.114 | 0.113 | 0.108 | 0.102 | 0.093 | 0.081 | 0.068 | 0.052 | 0.036 | 0.018 | 0 |
| * DEFLECTION DUE TO SUPERIMPOSED D. L. | 0 | 0.016 | 0.032 | 0.047 | 0.061 | 0.073 | 0.084 | 0.092 | 0.098 | 0.102 | 0.103 | 0.102 | 0.098 | 0.092 | 0.084 | 0.073 | 0.061 | 0.047 | 0.032 | 0.016 | 0 |
| FINAL CAMBER | 0 | 1/16" | 1/8" | 1/8" | ³ ⁄ ₁₆ " | ³ / ₁₆ " | 1⁄4" | 1/4" | ⁵ ⁄16" | ⁵ ⁄16" | ⁵ ⁄16" | ⁵ ⁄ ₁₆ " | ⁵ ⁄16" | 1/4" | 1/4" | 3/16" | ³ ⁄ ₁₆ " | 1/8" | 1/8" | ½16" | 0 |

P. D. BRYANT

REV. 1/15

REV. 2/15

REV. 12/17

DESIGN ENGINEER OF RECORD:

ASSEMBLED BY: P. K. NEWTON

CHECKED BY: P. D. BRYANT

CHECKED BY: GRP 11/91

DRAWN BY: ELR 11/91

* INCLUDES FUTURE WEARING SURFACE ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER", WHICH IS GIVEN IN INCHES (FRACTION FORM)

DATE: 8/28/23

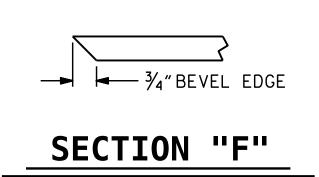
MAA / TMG

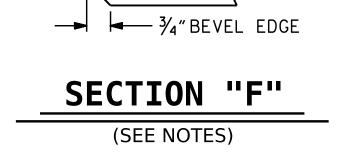
MAA / TMG

MAA / THC

DATE: 2/7/23

DATE: 8/28/23







END OF GIRDER ——

(2 REQ'D. PER GIRDER)

 $r = \frac{3}{4}$ " $\emptyset \times 5$ "

ANCHOR STUDS

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 EOUAL, 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 4,600 PSI FOR SPANS A & C AND NOT LESS THAN 6,400 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" AND THE LINK SLAB REGION, SHALL BE RAKED TO A DEPTH OF 1/4".

> BR-0046 PROJECT NO. _ **SAMPSON** STATION: 24+30.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD

P. Korey Newton

SEAL 7 26445

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS

| 4FFE39D1431B407 | | | | | | | | | | | |
|-------------------------|-----|-----------|-------|-----|-----|-------|-----------------|--|--|--|--|
| 10/09/2023 | | REVISIONS | | | | | | | | | |
| DOCUMENT NOT CONSIDERED | NO. | BY: | DATE: | NO. | BY: | DATE: | S-14 | | | | |
| FINAL UNLESS ALL | 1 | | | 3 | | | TOTAL SHEETS | | | | |
| SIGNATURES COMPLETED | 2 | | | 4 | | | 31 | | | | |

10/9/2023 R:\Structures\Plans\401_029_BR-0046_SMU_Girder DL_S-14_810022.dgn