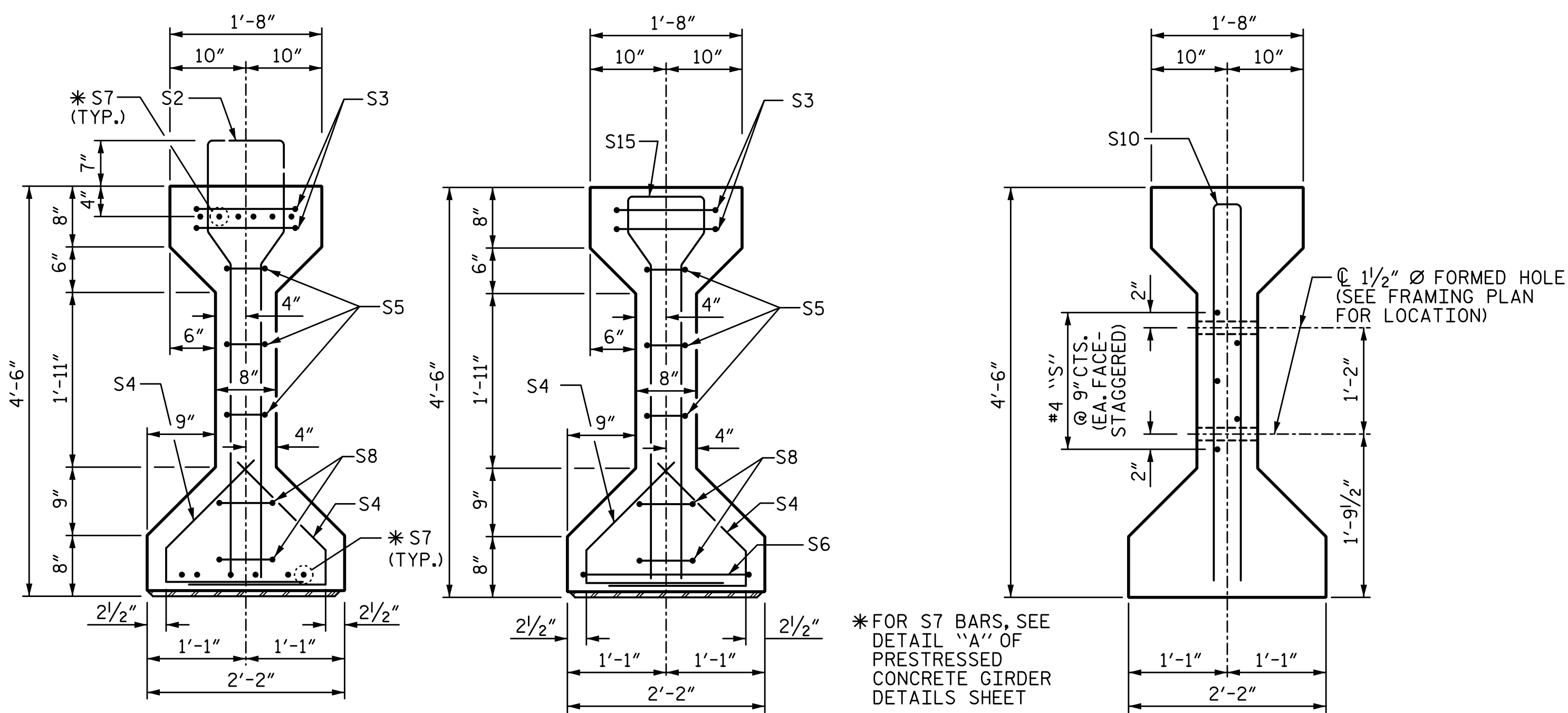


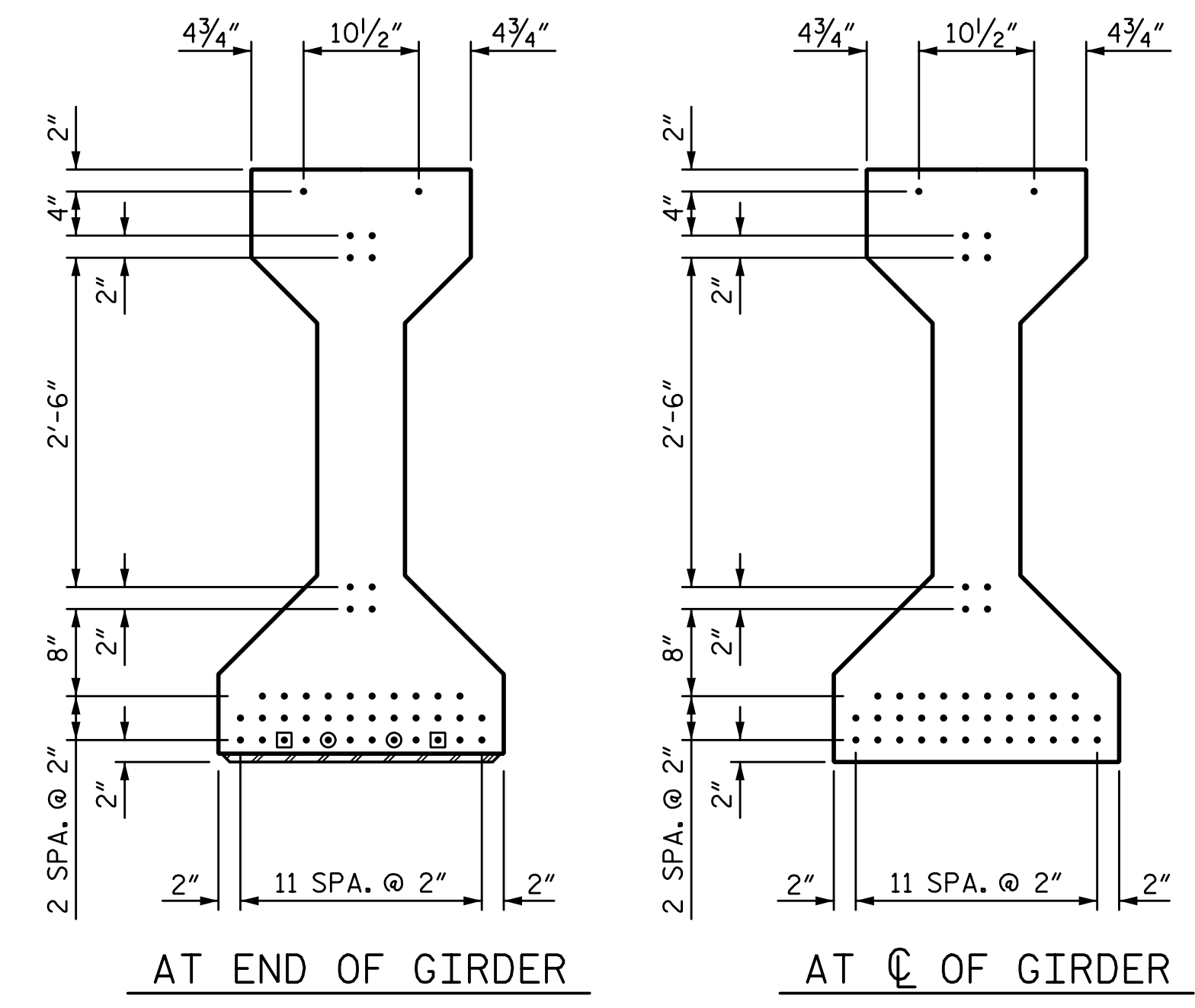
2/7/2023 11:19:28 AM P:\Raleigh\Projects\2018\Division 7 (SEA)\17BP7R142 Guilford 225 (Rehobeth Ch Rd over I-85 Bus)\Structures\Drawings\Final\17BP7R142_SML_G_400225.dgn



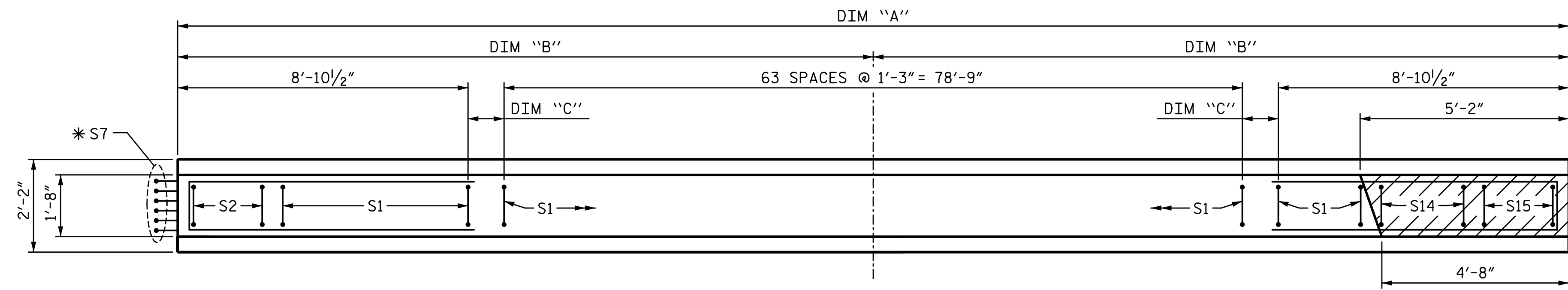
SECTION A-A

SECTION B-B

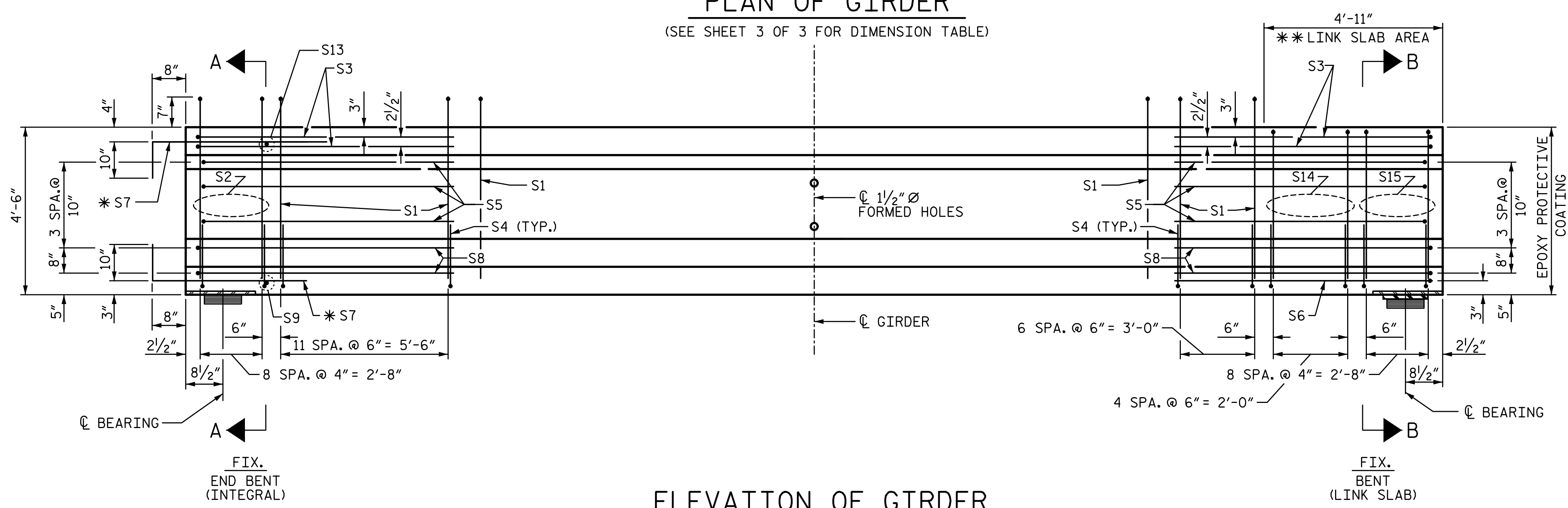
SECTION C-C
(S1 BARS NOT SHOWN)



0.6" Ø LOW RELAXATION STRAND LAYOUT



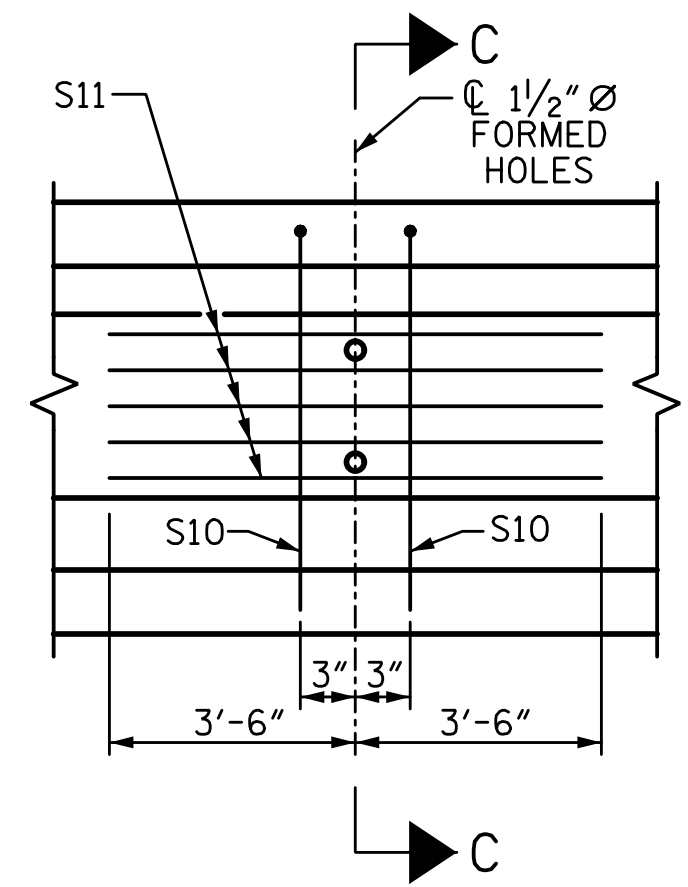
PLAN OF GIRDER
(SEE SHEET 3 OF 3 FOR DIMENSION TABLE)



ELEVATION OF GIRDER
(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

** DO NOT ROUGHEN TOP OF GIRDER IN THIS AREA

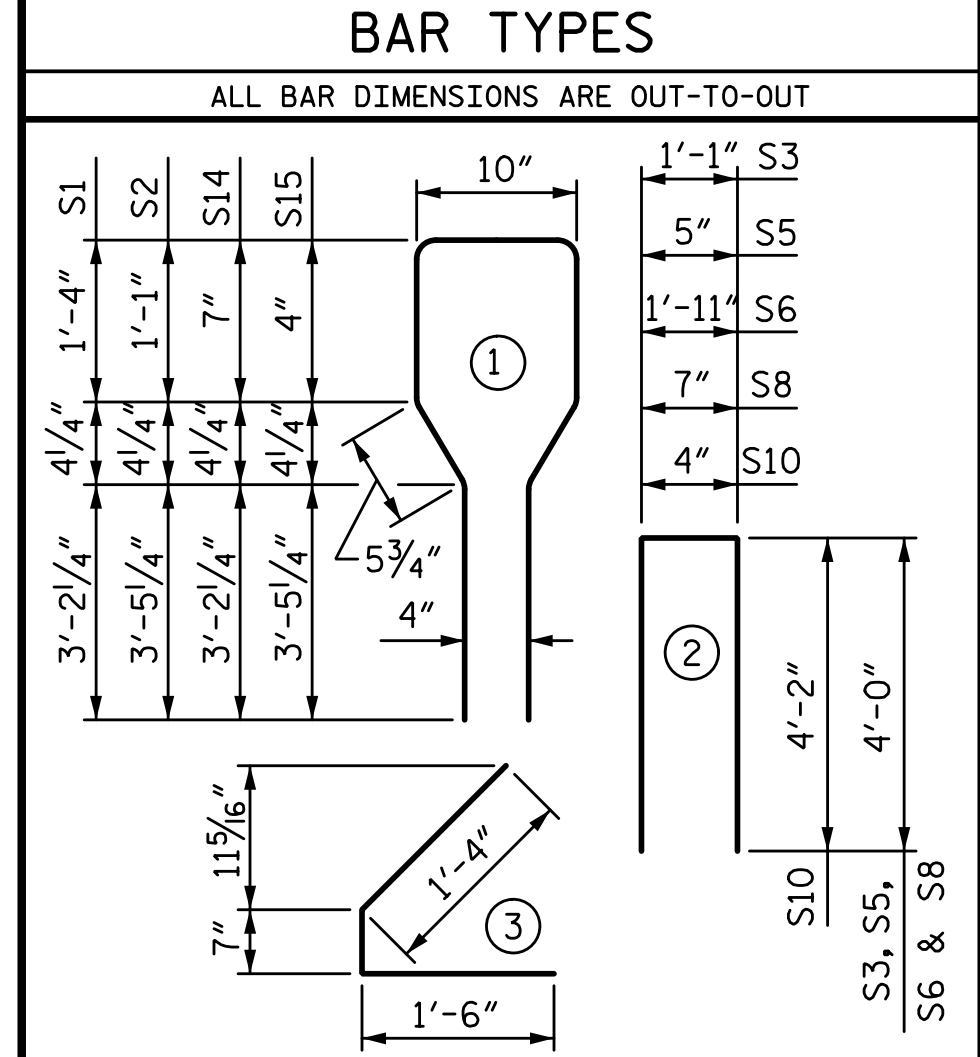
- DEBONDING LEGEND
- FULLY BONDED STRAND
 - STRAND DEBONDED FOR 18'-0" FROM END OF GIRDER
 - STRAND DEBONDED FOR 8'-0" FROM END OF GIRDER



PARTIAL ELEVATION
SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR ALL GIRDERS.

| 0.6" Ø L. R. GRADE 270 STRANDS | | |
|--------------------------------|-------------------------------------|-------------------------------------|
| AREA (SQ. INCHES) | ULTIMATE STRENGTH (LBS. PER STRAND) | APPLIED PRESTRESS (LBS. PER STRAND) |
| 0.217 | 58,600 | 43,950 |

| REINFORCING STEEL FOR ONE GIRDER | | | | | |
|----------------------------------|-----|------|------|---------|--------|
| BAR | NO. | SIZE | TYPE | LENGTH | WEIGHT |
| S1 | 83 | #4 | 1 | 10'-10" | 601 |
| S2 | 9 | #5 | 1 | 10'-10" | 102 |
| S3 | 4 | #4 | 2 | 9'-1" | 24 |
| S4 | 84 | #4 | 3 | 3'-5" | 192 |
| S5 | 6 | #4 | 2 | 8'-5" | 34 |
| S6 | 1 | #4 | 2 | 9'-11" | 7 |
| * S7 | 12 | #5 | STR | 3'-8" | 46 |
| S8 | 4 | #4 | 2 | 8'-7" | 23 |
| S9 | 1 | #3 | STR | 1'-10" | 1 |
| S10 | 2 | #5 | 2 | 8'-8" | 18 |
| S11 | 5 | #4 | STR | 7'-0" | 23 |
| S13 | 1 | #3 | STR | 1'-4" | 1 |
| S14 | 5 | #4 | 1 | 9'-4" | 31 |
| S15 | 9 | #5 | 1 | 9'-4" | 88 |



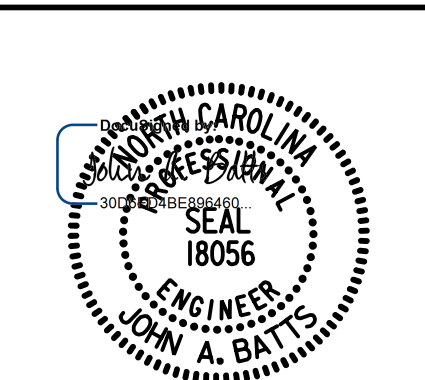
| QUANTITIES FOR ONE GIRDER | | | |
|---------------------------|----------------------|-----------------------|--------------------------|
| | REINFORCING STEEL LB | 8,000 PSI CONCRETE CY | 0.6" Ø L. R. STRANDS No. |
| GIRDER | 1191 | 19.9 | 44 |

| GIRDERS REQUIRED | | |
|------------------|--------|--------------|
| NUMBER | LENGTH | TOTAL LENGTH |
| 10 | VARIES | 982.43' |

PROJECT NO. BP7.R006.3
GUILFORD COUNTY
 STATION: 18+82.09 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 AASHTO TYPE IV
 PRESTRESSED CONCRETE
 GIRDERS 6-10
 SPANS A & B (STAGE 2)



| | |
|---------------------------------------|------------|
| DRAWN BY: S.D. COOPER | DATE: 2-22 |
| CHECKED BY: J.A. BATTS | DATE: 2-22 |
| DESIGN ENGINEER OF RECORD: J.A. BATTS | DATE: 2-22 |

| REVISIONS | | | | SHEET NO. | |
|-----------|-----|-------|-----|-----------|-------|
| NO. | BY: | DATE: | NO. | BY: | DATE: |
| 1 | | | 3 | | |
| 2 | | | 4 | | |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED