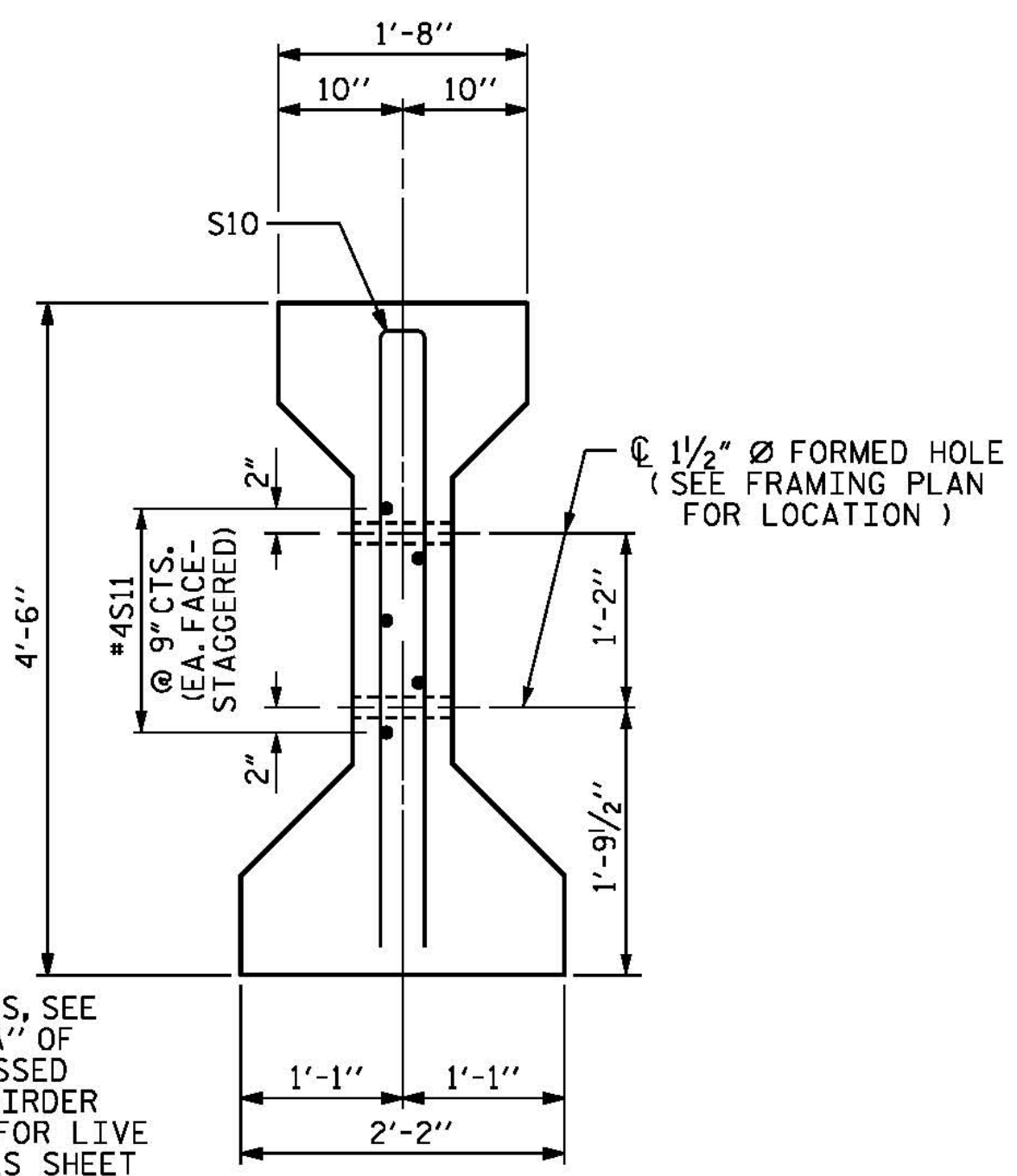
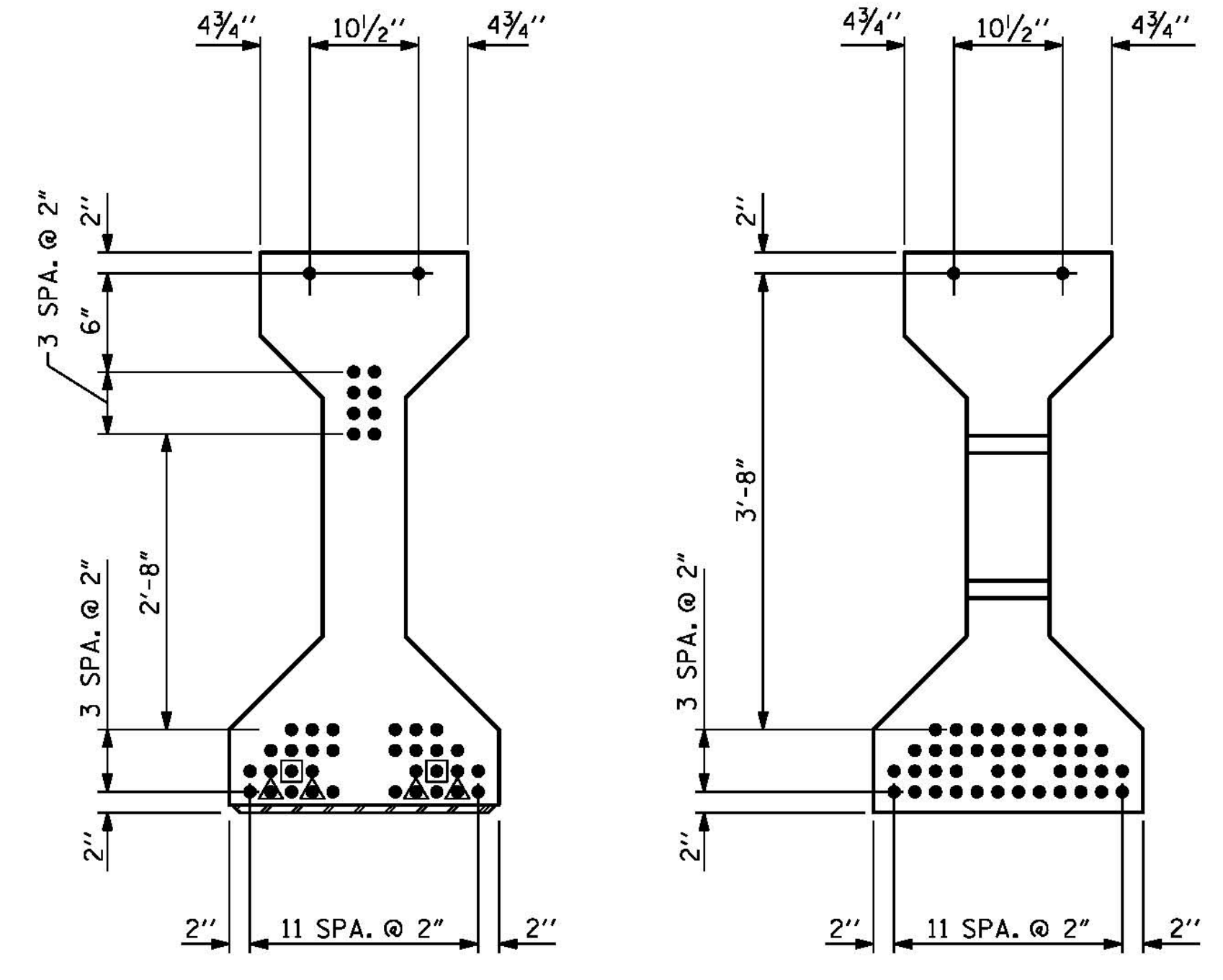


SECTION A-A

SECTION B-B



SECTION C-C  
(S12 BARS NOT SHOWN)



AT END OF GIRDER  
AT C OF GIRDER  
0.6" Ø LOW RELAXATION STRAND LAYOUT  
(42 STRANDS REQUIRED)

- DEBONDING LEGEND
- FULLY BONDED STRANDS
  - ◻ STRANDS DEBONDED FOR 2'-0" FROM END OF GIRDER
  - ◻ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER

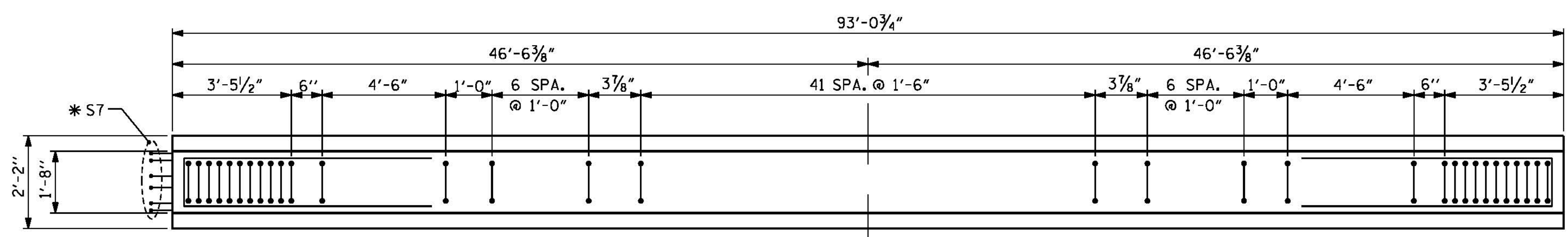
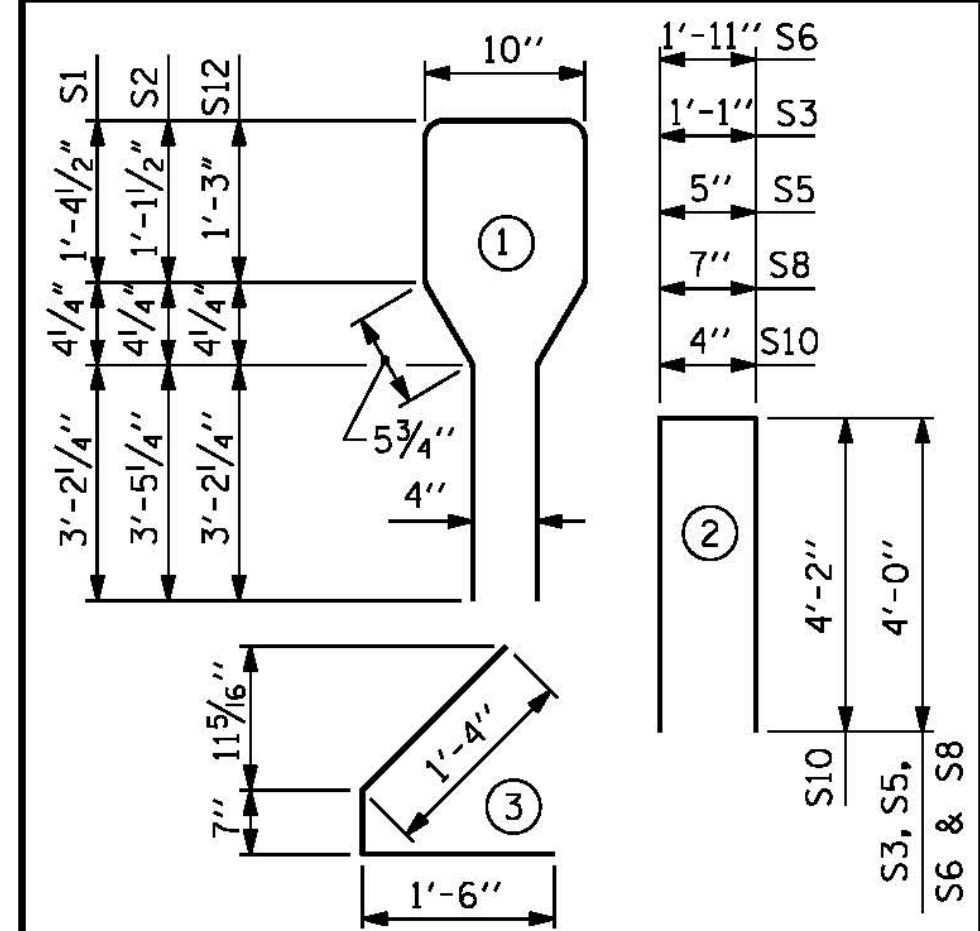
| 0.6" Ø L. R. GRADE 270 STRANDS |  |  |
|--------------------------------|--|--|
| AREA<br>(SQUARE INCHES)        | ULTIMATE STRENGTH<br>(LBS. PER STRAND) | APPLIED PRESTRESS<br>(LBS. PER STRAND) |
| 0.217                          | 58,600                                 | 43,950                   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

| REINFORCING STEEL FOR ONE GIRDER |        |      |      |         |        |
|----------------------------------|--------|------|------|---------|--------|
| BAR                              | NUMBER | SIZE | TYPE | LENGTH  | WEIGHT |
| S1                               | 20     | #4   | 1    | 10'-11" | 146    |
| S2                               | 28     | #6   | 1    | 10'-11" | 459    |
| S3                               | 4      | #4   | 2    | 9'-1"   | 24     |
| S4                               | 96     | #4   | 3    | 3'-5"   | 219    |
| S5                               | 6      | #4   | 2    | 8'-5"   | 34     |
| S6                               | 1      | #4   | 2    | 9'-11"  | 7      |
| * S7                             | 6      | #5   | STR  | 3'-8"   | 23     |
| 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     |
| S12                              | 56     | #4   | 1    | 10'-8"  | 399    |

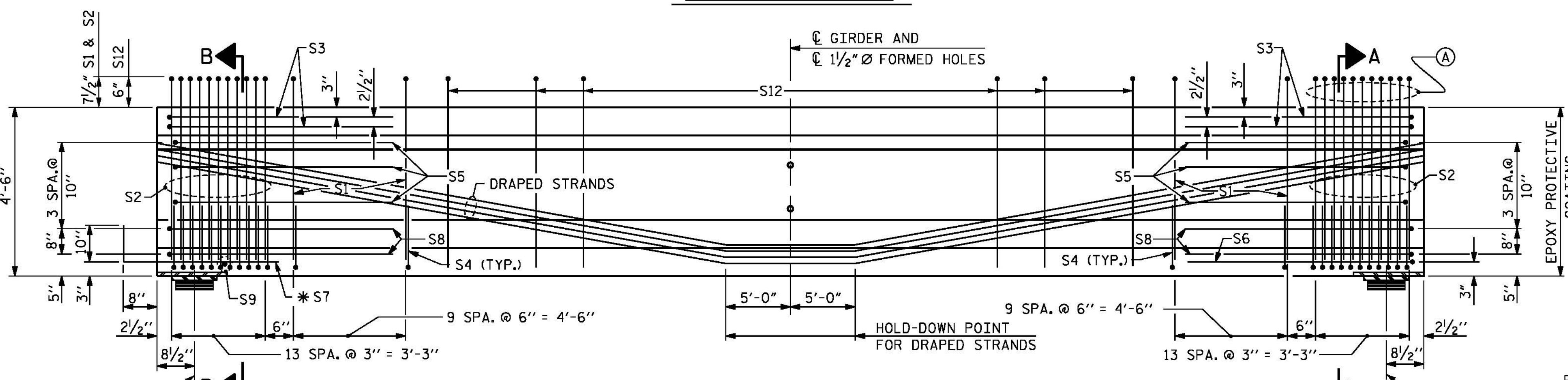
\* NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



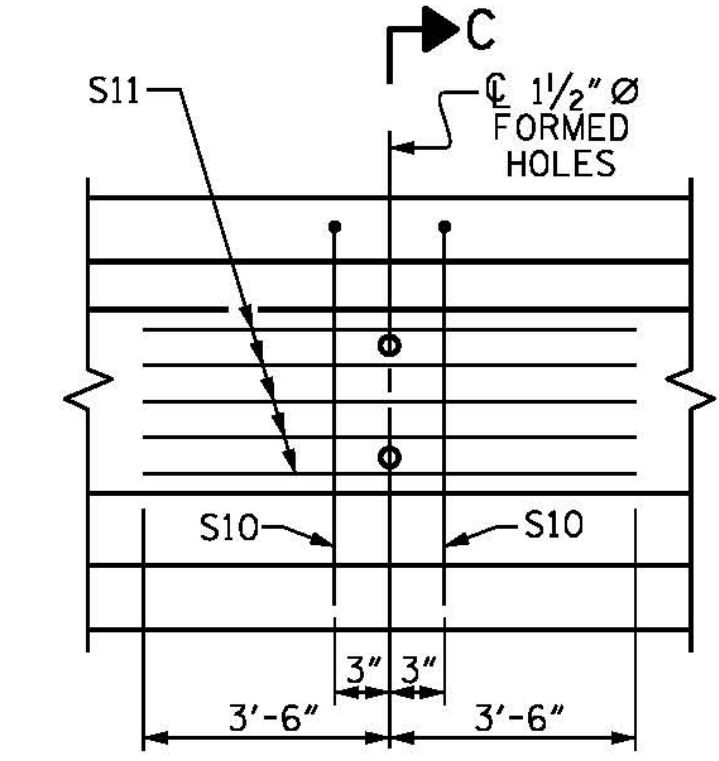
PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)  
THE UPLIFT FORCE DUE TO DRAPED STRANDS IS 27.0 KIPS  
SEE END BEVEL DETAIL ON PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET.

(A) WHEN END BEVEL IS REQUIRED, ROTATE END S2 BAR SUCH THAT THEY ARE PLACED PARALLEL TO THE END BEVEL WHILE MAINTAINING 2" OF CONCRETE COVER. TAPER SPACING OF ADJACENT S2 BARS SUCH THAT THE CLEAR DISTANCE BETWEEN THE BARS EXCEEDS 1/2".



PARTIAL ELEVATION  
SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. AC1 TO AC7

QUANTITIES FOR ONE GIRDER

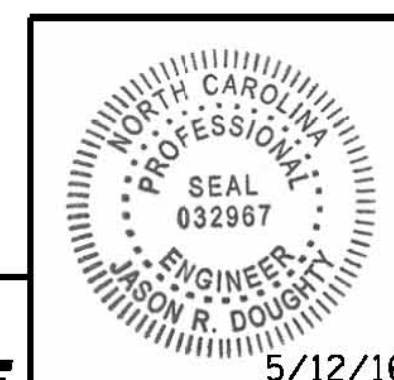
| REINFORCING STEEL | 9000 PSI CONCRETE | 0.6" Ø L. R. STRANDS |
|-------------------|-------------------|----------------------|
| LB.               | C.Y.              | No.                  |
| 1376              | 18.89             | 42                   |

GIRDERS REQUIRED

| NUMBER | LENGTH | TOTAL LENGTH |
|--------|--------|--------------|
| 7      | 93.06' | 651.44'      |

PROJECT NO. B-4929  
PENDER COUNTY  
STATION: 38+13.81 -L2-

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
STANDARD  
AASHTO TYPE IV  
PRESTRESSED CONCRETE GIRDER  
CONTINUOUS FOR LIVE LOAD  
SPAN AC



**PARSONS BRINCKERHOFF**  
434 FAYETTEVILLE STREET  
SUITE 1500  
RALEIGH, NC 27601  
LICENSE NO. F-0165

DocuSigned by:  
Jason R. Doughty  
00F1C86448274F7...

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

SHEET NO.  
**S-97**  
TOTAL SHEETS  
**278**

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

5/11/2016 4:00:19 PM B4929\_SMU\_G6.dgn

|                                       |                     |
|---------------------------------------|---------------------|
| DESIGNED BY: J. BORUTA                | DATE: OCT 2015      |
| DRAWN BY: M. HOBBS                    | DATE: OCT 2015      |
| CHECKED BY: M. WAGNER                 | DATE: JAN 2016      |
| DESIGN ENGINEER OF RECORD: J. DOUGHTY | DATE: MAY 2016      |
| DRAWN BY: ELR 8/91                    | REV. 5/1/06R TLA/GM |
| CHECKED BY: GRP 8/91                  | REV. 10/1/11 MAA/GM |
|                                       | REV. 1/15 MAA/TMG   |