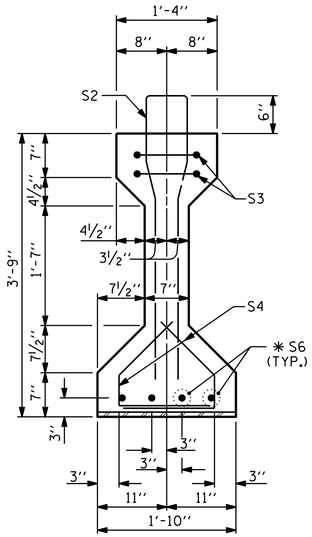
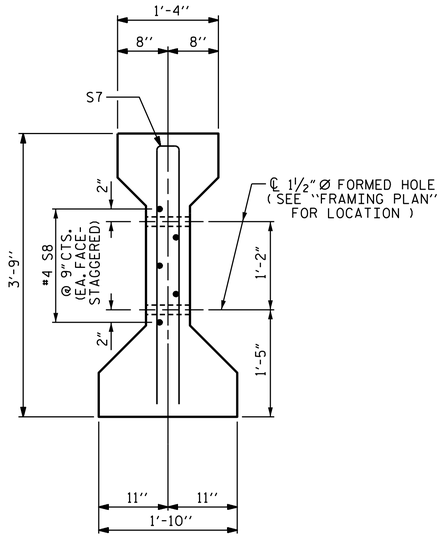
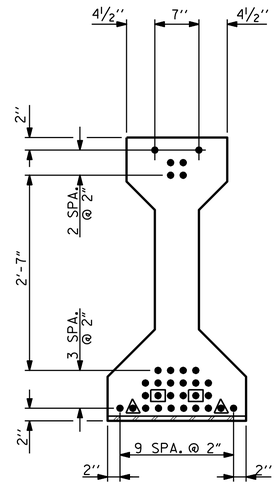



SECTION B-B

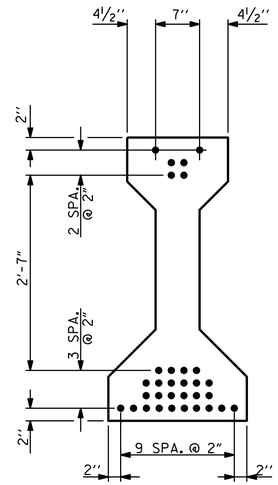



SECTION C-C

(S1 BARS NOT SHOWN)




AT END OF GIRDER

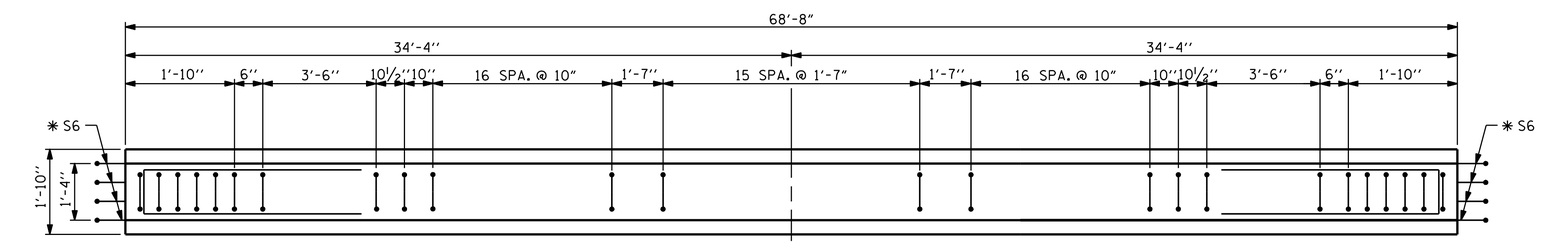



AT ℄ OF GIRDER

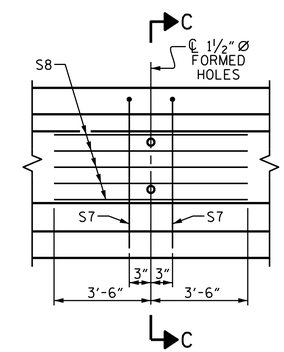
## 0.6" Ø LOW RELAXATION STRAND LAYOUT

### DEBONDING LEGEND

- ● FULLY BONDED STRANDS
- ◉ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- ◉ STRANDS DEBONDED FOR 6'-0" FROM END OF GIRDER

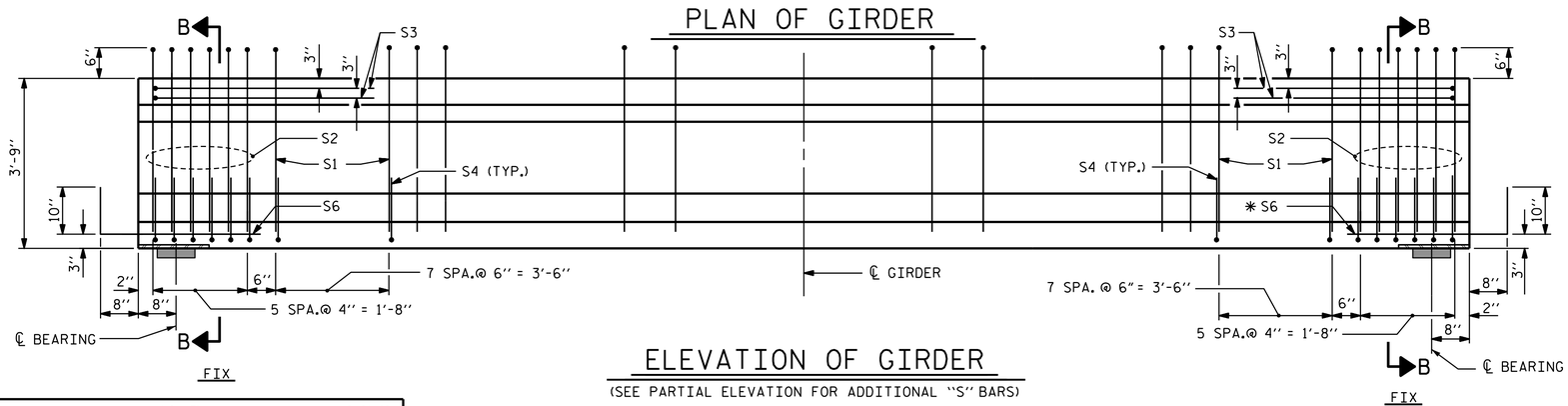



## PLAN OF GIRDER




## PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL




## ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

## 0.6" Ø L. R. GRADE 270 STRANDS

| AREA (SQUARE INCHES) | ULTIMATE STRENGTH (LBS. PER STRAND) | APPLIED PRESTRESS (LBS. PER STRAND) |
|---|---|---|
| 0.217 | 58,600 | 43,950 |

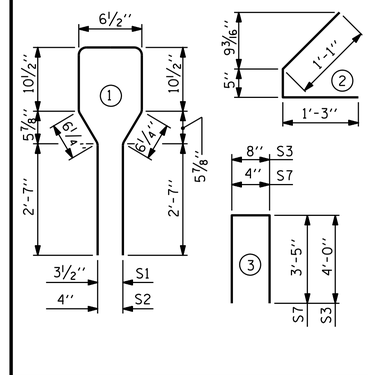
## REINFORCING STEEL FOR ONE GIRDER

| BAR | NUMBER | SIZE | TYPE | LENGTH | WEIGHT |
|---|---|---|---|---|---|
| S1 | 68 | #4 | 1 | 8'-6" | 386 |
| S2 | 12 | #6 | 1 | 8'-6" | 153 |
| S3 | 4 | #4 | 3 | 8'-8" | 23 |
| S4 | 56 | #4 | 2 | 2'-9" | 103 |
| ✱ S6 | 8 | #5 | STR | 3'-8" | 31 |
| S7 | 2 | #5 | 3 | 7'-2" | 15 |
| S8 | 5 | #4 | STR | 7'-0" | 23 |

✱ NOTE: S6 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.

## BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT




## QUANTITIES FOR ONE GIRDER

| | REINFORCING STEEL | 8400 PSI CONCRETE | 0.6" Ø L. R. STRANDS |
|---|---|---|---|
| | LB. | C.Y. | No. |
| | 734 | 9.9 | 32 |

## GIRDERS REQUIRED

| NUMBER | LENGTH | TOTAL LENGTH |
|---|---|---|
| 5 | 68'-8" | 343'-4" |

PROJECT NO. B-4983

BURKE COUNTY

STATION: 13+52.95 -L-

SHEET 2 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

AASHTO TYPE III
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD
SPAN B

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL C. CHEEK, JR.

DocuSigned by: Marshall C. Cheek, Jr.
6549D6EBAA38405...
4/25/2014

| REVISIONS | | | | | | | | SHEET NO. |
|---|---|---|---|---|---|---|---|---|
| NO. | BY: | DATE: | NO. | BY: | DATE: | | | S-11 |
| 1 | | | 3 | | | | | TOTAL SHEETS |
| 2 | | | 4 | | | | | 36 |

STD. NO. PCG5

| | | | |
|---|---|---|---|
| ASSEMBLED BY : | V.X. NGUYEN | DATE : | 6/21/12 |
| CHECKED BY : | H.T. BARBOUR | DATE : | 4/13 |
| DESIGN ENGINEER OF RECORD: | W.J. HARRIS | DATE : | 4/14 |

| | |
|---|---|
| DRAWN BY : ELR 8/91 | REV. 10/17/00R RWW/LES |
| CHECKED BY : GRP 8/91 | REV. 5/1/06R TLA/GM |
| | REV. 10/1/11 MAA/GM |

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