

0.6" Ø LOW RELAXATION STRAND LAYOUT

- STRANDS DEBONDED 2'-0" FROM END OF GIRDER.
- ▲ STRANDS DEBONDED 8'-0" FROM END OF GIRDER.
- STRANDS DEBONDED 24'-0" FROM END OF 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.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS.

BEVEL EDGES OF PLATE "B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

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 6000 PSI.

THE TOP SURFACE OF THE GIRDER SHALL BE RAKED TO A DEPTH OF 1/4" EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER.

ALL REINFORCING STEEL SHALL BE GRADE 60.

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

0.6" Ø L. R. GRADE 270 STRANDS

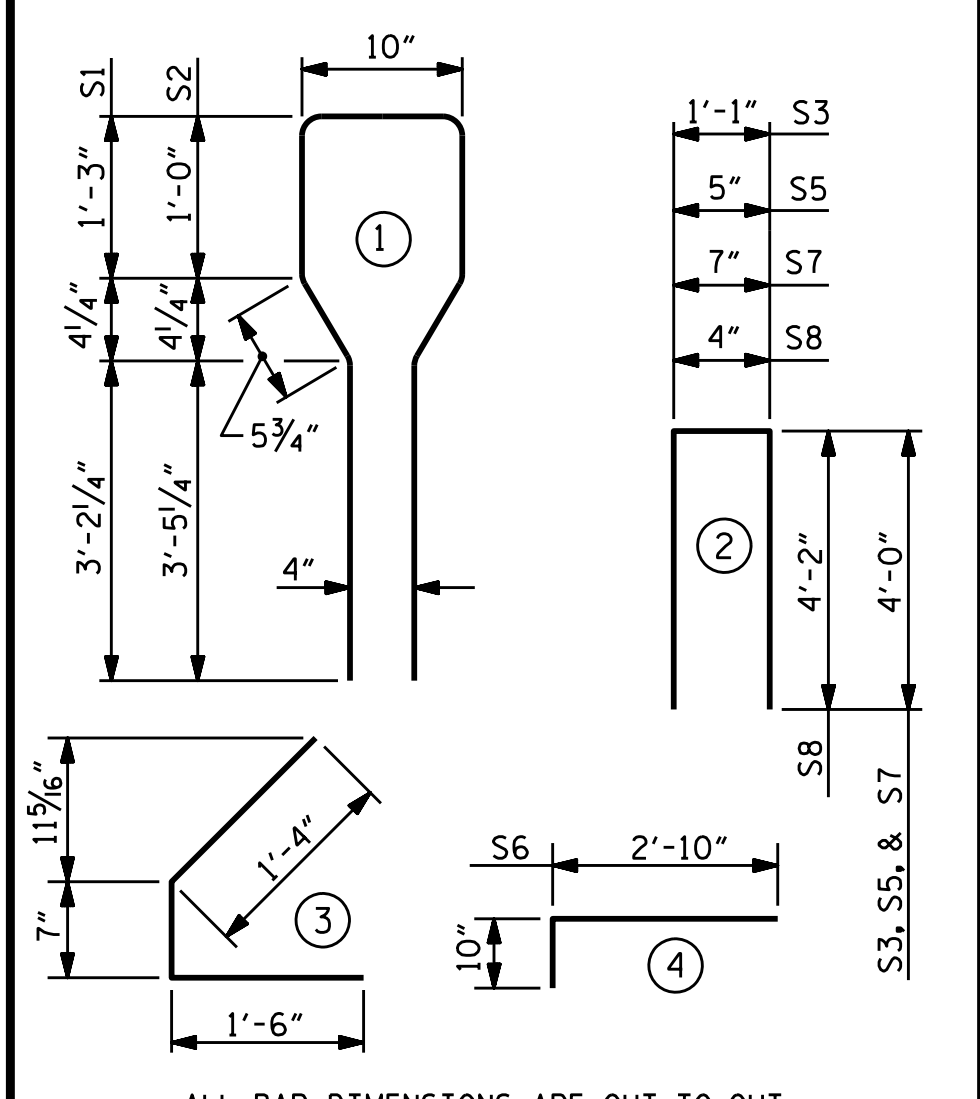
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	#6	1	10'-8"	477
S2	#6	1	10'-8"	192
S3	#4	2	9'-1"	24
S4	#4	3	3'-5"	146
S5	#4	2	8'-5"	34
*S6	#5	4	3'-8"	76
S7	#4	2	8'-7"	23
S8	#5	2	8'-8"	18
S9	#4	STR	7'-0"	23
S10	#3	STR	1'-10"	1
S11	#3	STR	1'-4"	1

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

BAR TYPES



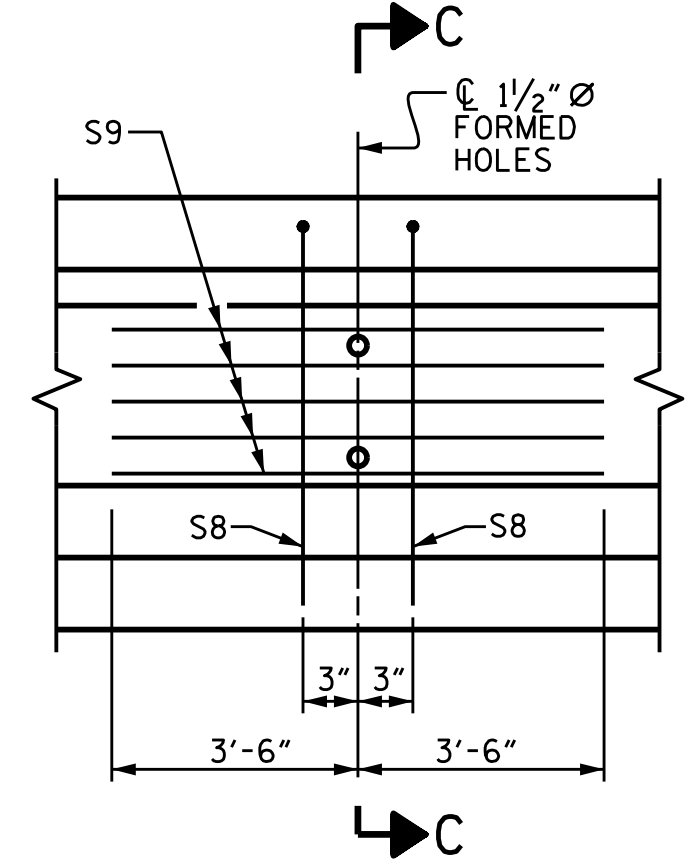
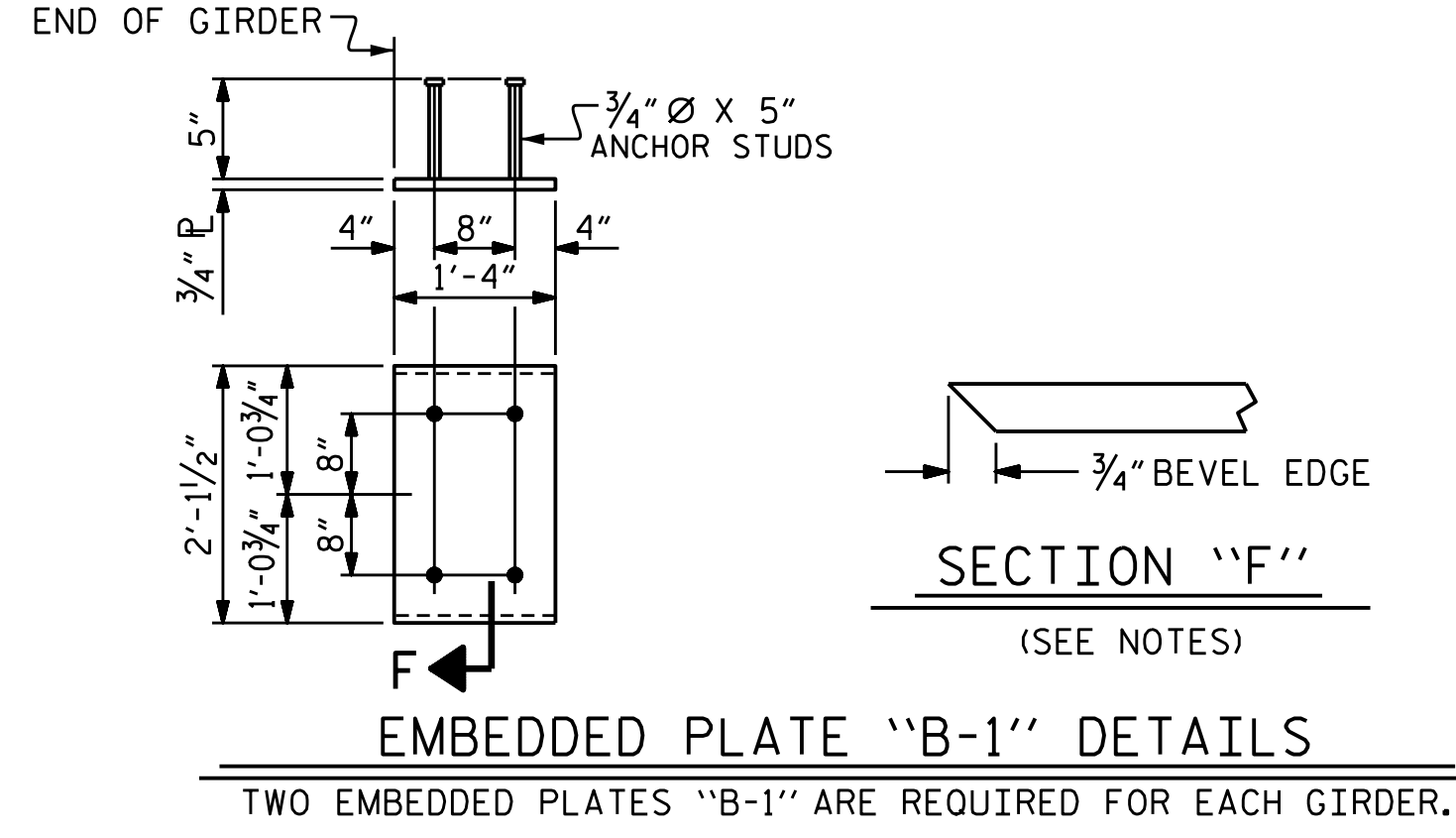
ALL BAR DIMENSIONS ARE OUT-TO-OUT.

QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL LB.	8000 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
EXTERIOR GIRDER	1015	17.2	42
INTERIOR GIRDER	1015	17.2	42

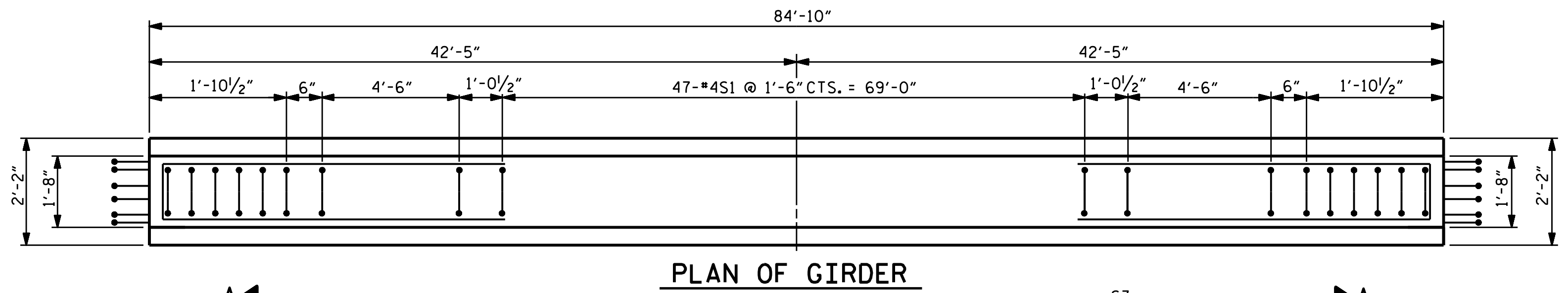
GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
4	84'-10"	339'-4"

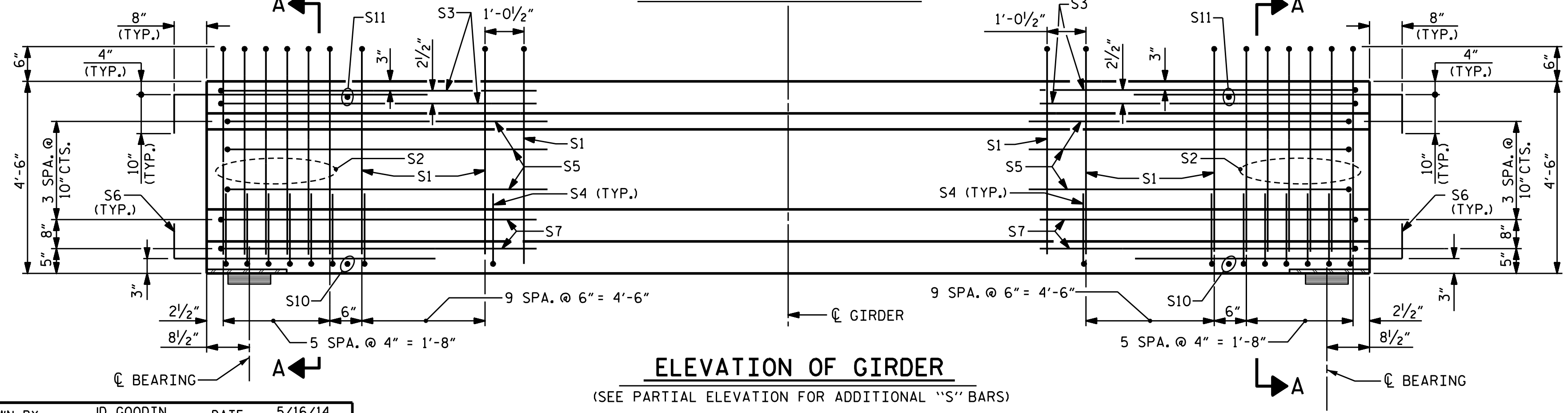


PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER NOS. 1 THROUGH 4.



PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

DRAWN BY : JD GOODIN	DATE : 5/16/14
CHECKED BY : MEG / JWT	DATE : 6/23/14
QC / QA BY : TG ZEBLO	DATE : 7/7/14

DRAWN BY : JMB 12/87	REV. 8/16/99RR RWW/LES
CHECKED BY : ARB 12/87	REV. 5/1/06R TLA/GM
	REV. 10/1/11 MAA/GM

PLAN PREPARED BY:

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 A&O PROJECT NO. 2013.044

DocuSigned by:
 Mark Gustafson
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 3/23/2015

PROJECT NO. R-2514D
JONES COUNTY
 STATION: 561+15.20 -L-
=17+04.80 -Y7-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**STANDARD
 AASHTO TYPE IV
 PRESTRESSED
 CONCRETE GIRDER
 RIGHT LANE**

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

SHEET NO. **S14-9**
 TOTAL SHEETS 21

STRUCTURE NO. 14 STD. NO. PCG3