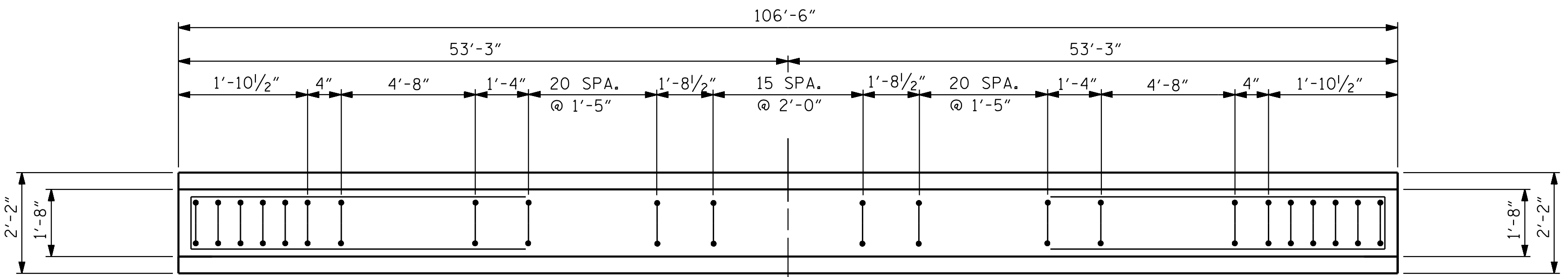


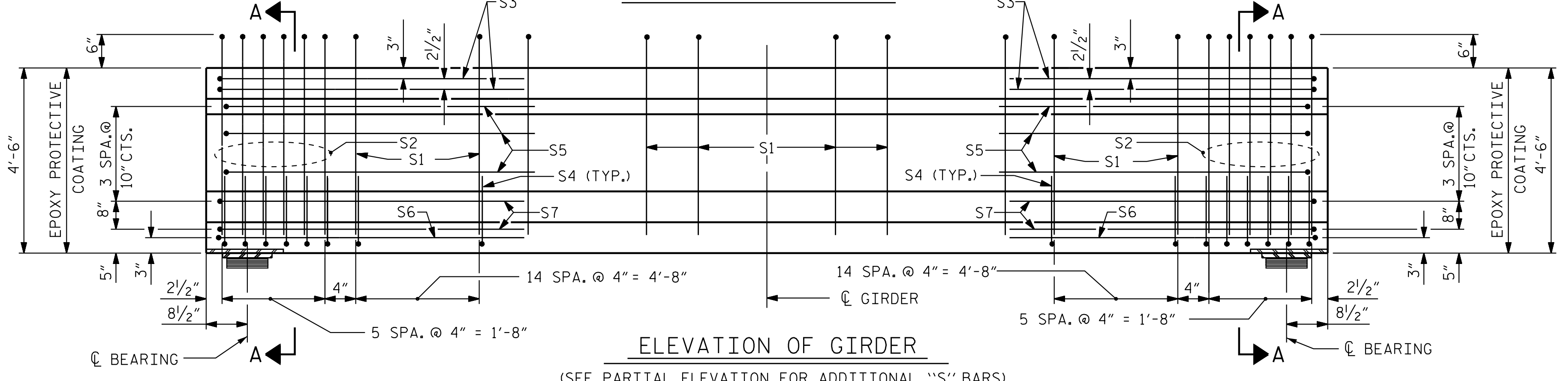
0.6" Ø LOW RELAXATION STRAND LAYOUT
48 STRANDS TOTAL

DEBONDING LEGEND

- △ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- STRANDS DEBONDED FOR 20'-0" FROM END OF GIRDER
- FULLY BONDED STRANDS



PLAN OF GIRDER

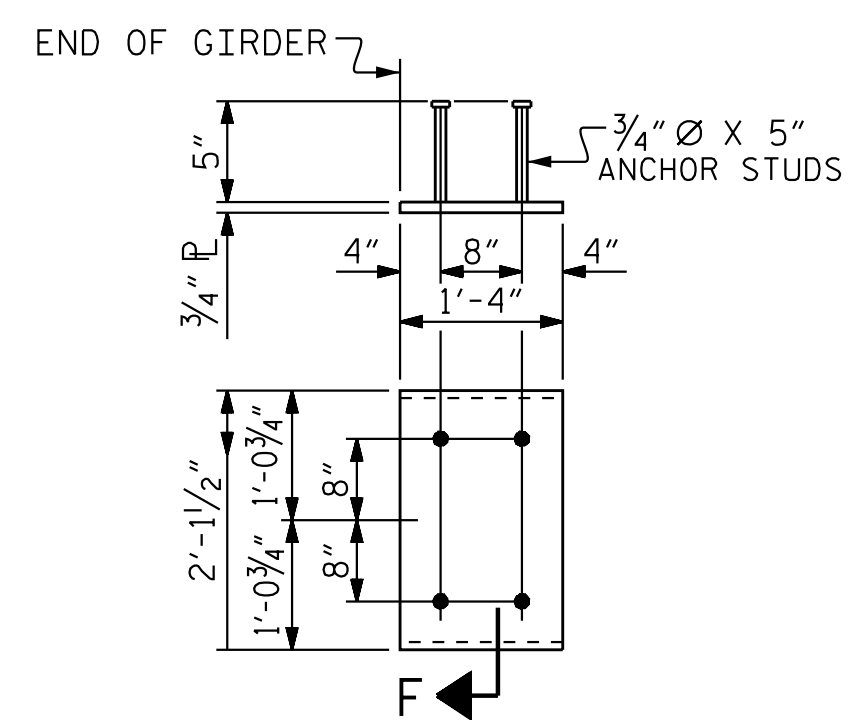


ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

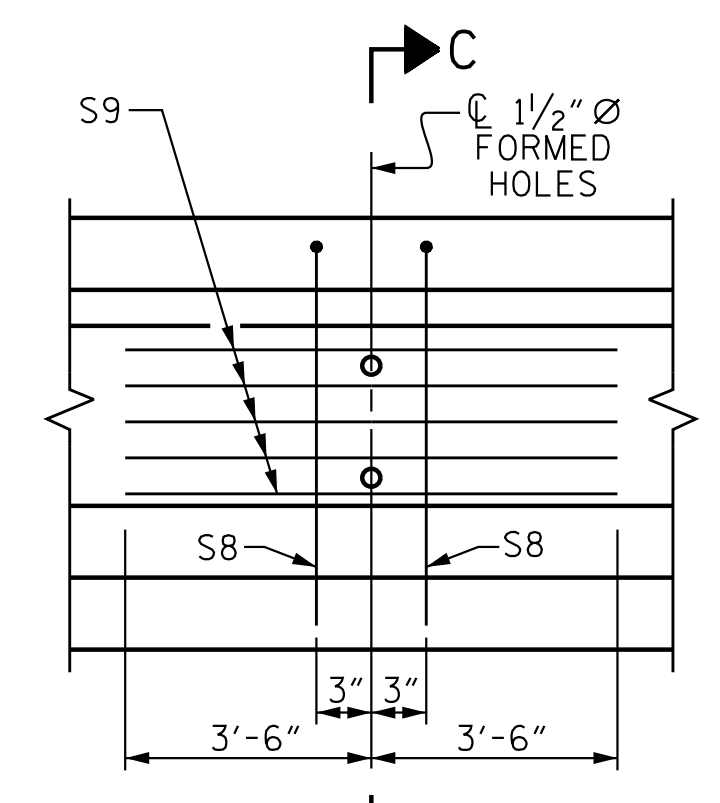
NOTES

- 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.
- APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES.
- 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 EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.
- ALL PRESTRESSED 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 7,000 PSI.
- 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 SHALL BE RAKED TO A DEPTH OF 1/4" EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER.
- WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 6" OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 1/2" OF THE THEORETICAL LOCATION SHOWN.



EMBEDDED PLATE "B-1" DETAILS

TWO EMBEDDED PLATES "B-1" ARE REQUIRED FOR EACH GIRDER.



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER #1-7

0.6" Ø L. R. GRADE 270 STRANDS

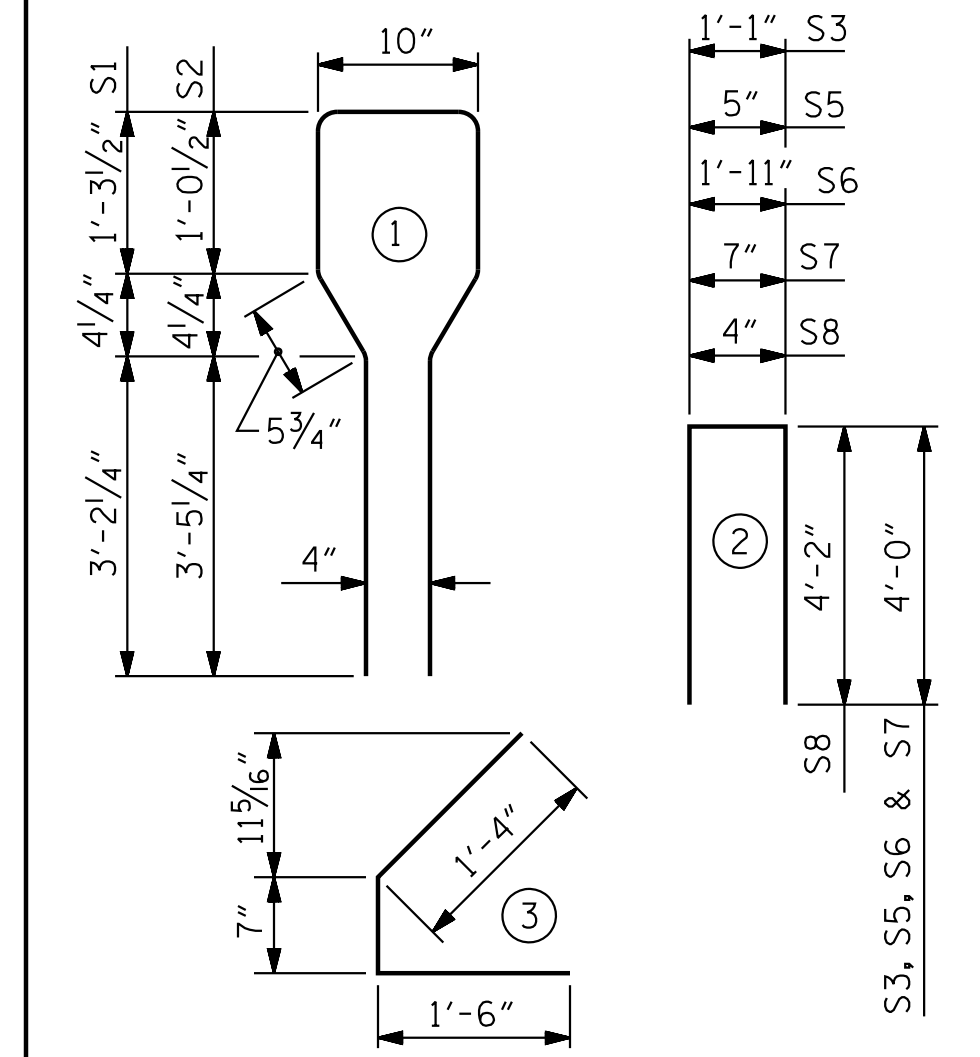
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	88	#4	1	10'-9"	632
S2	12	#6	1	10'-9"	194
S3	4	#4	2	9'-1"	24
S4	64	#4	3	3'-5"	146
S5	6	#4	2	8'-5"	34
S6	2	#4	2	9'-11"	13
S7	4	#4	2	8'-7"	23
S8	4	#5	2	8'-8"	36
S9	10	#4	STR	7'-0"	47

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

REINFORCING STEEL LB.	9,000 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
1,149	21.6	48

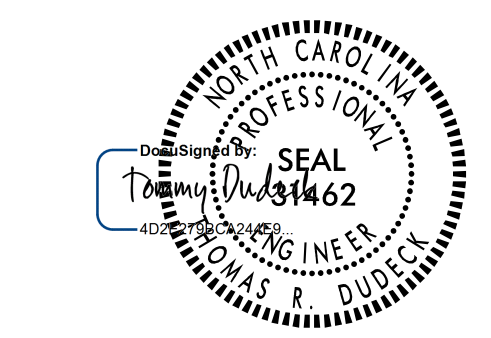
GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
7	106'-6"	745'-6"

PROJECT NO. U-2525C
GUILFORD COUNTY
STATION: 329+95.42 -L-

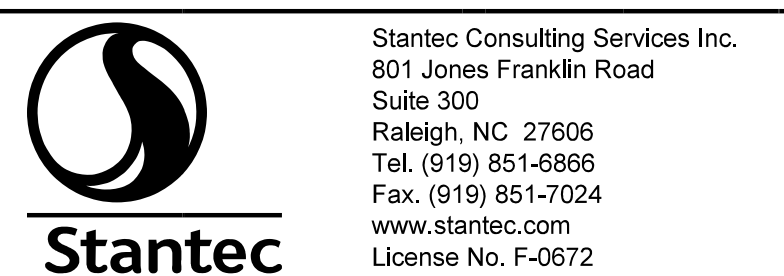
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
STANDARD
AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
(LL)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-11
1			3			TOTAL SHEETS 29
2			4			



1/12/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



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DRAWN BY: N.D'AIUTO DATE: 09/28/16
CHECKED BY: M. B. ISENHOUR DATE: 11/7/16
DESIGN ENGINEER OF RECORD: T. R. DUDECK DATE: 01/12/18

1/9/2018 10:45:53 AM jgelle

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