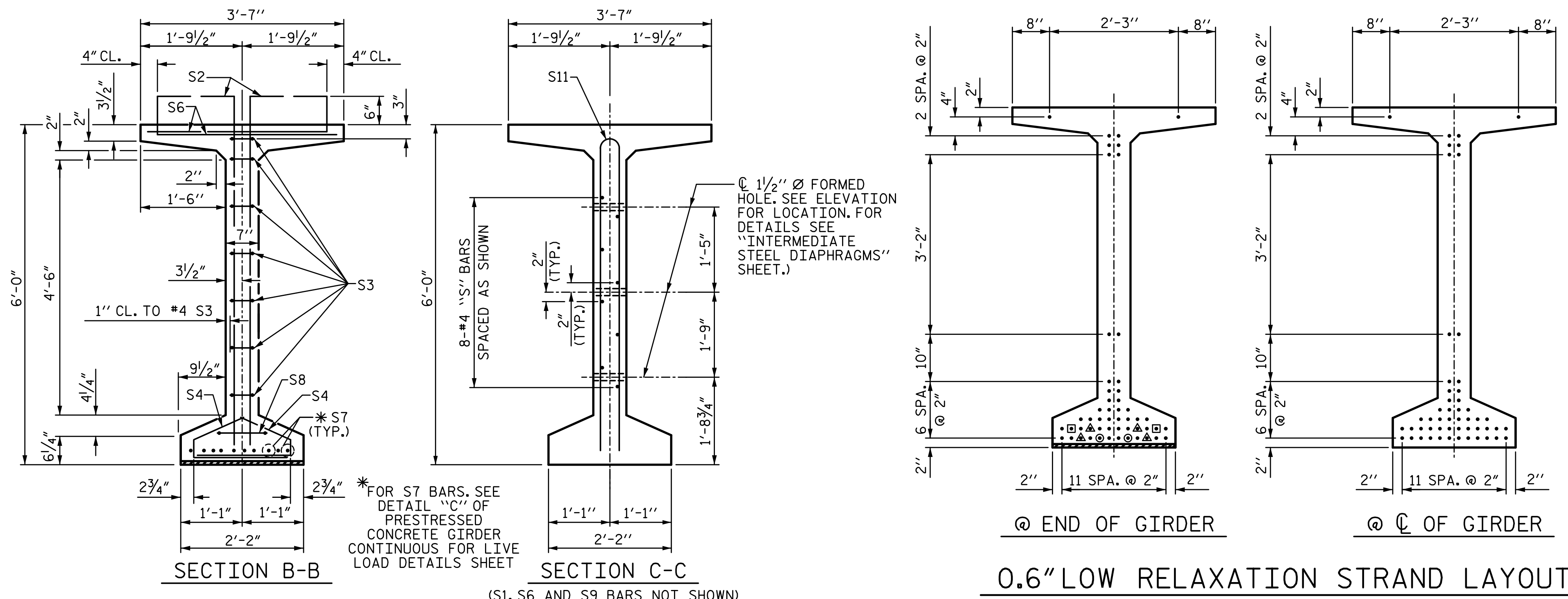


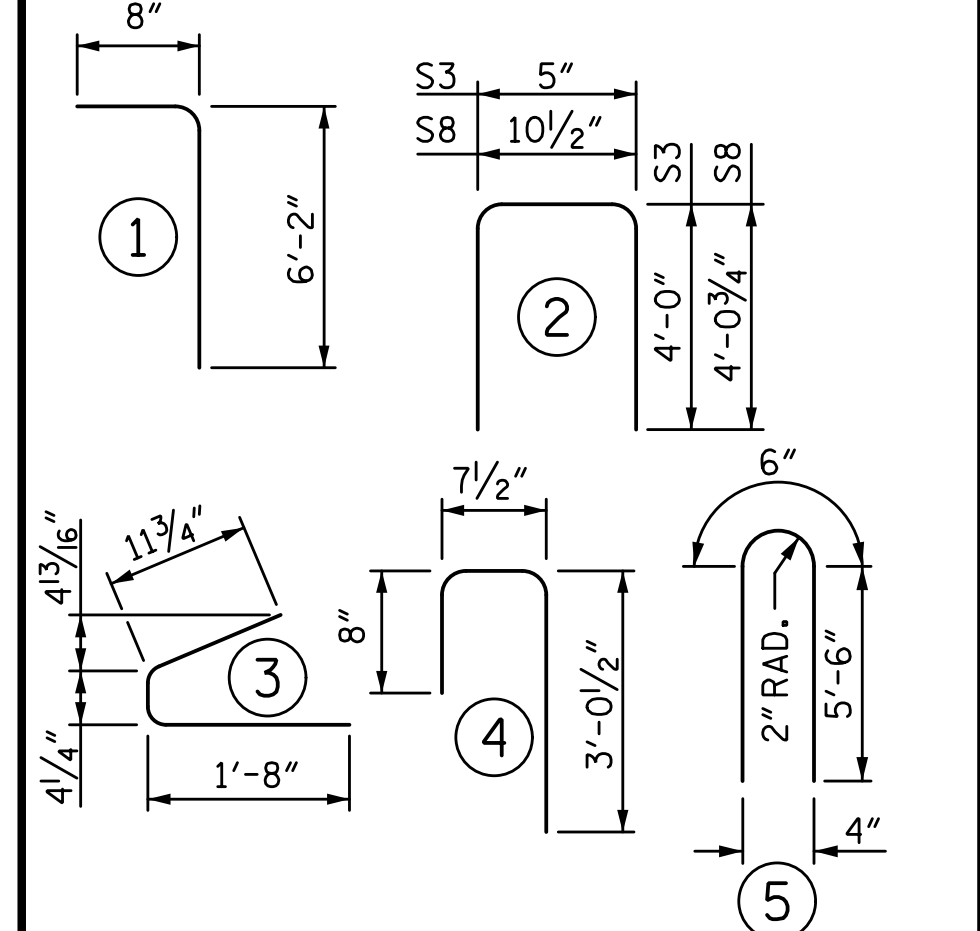
9/11/2015 10:16:44 AM G:\Projects\2014\U-3109A\Structures\Site 2\Site 2-Str 2 Bridge 436 (SBL)\Drawings\Final\402_U3109A_smu_pcg.dgn



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	NO.	SIZE	TYPE	LENGTH	WEIGHT
S1	194	4	1	6'-10"	886
S2	24	5	1	6'-10"	171
S3	14	4	2	8'-5"	79
S4	84	4	3	3'-0"	168
S6	218	5	4	4'-4"	985
* S7	20	5	STR	3'-8"	76
S8	2	5	2	9'-0"	19
S9	44	5	STR	3'-3"	149
S10	2	3	STR	1'-10"	1
S11	8	5	5	11'-6"	96
S12	16	4	STR	8'-0"	86

* NOTE: S7 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

SPAN	REINFORCING STEEL	9,000 PSI CONCRETE	0.6" Ø L. R. STRANDS
	LB.	C.Y.	No.
SPAN B	2716	27.6	52
SPAN C	2716	27.6	52

GIRDERS REQUIRED

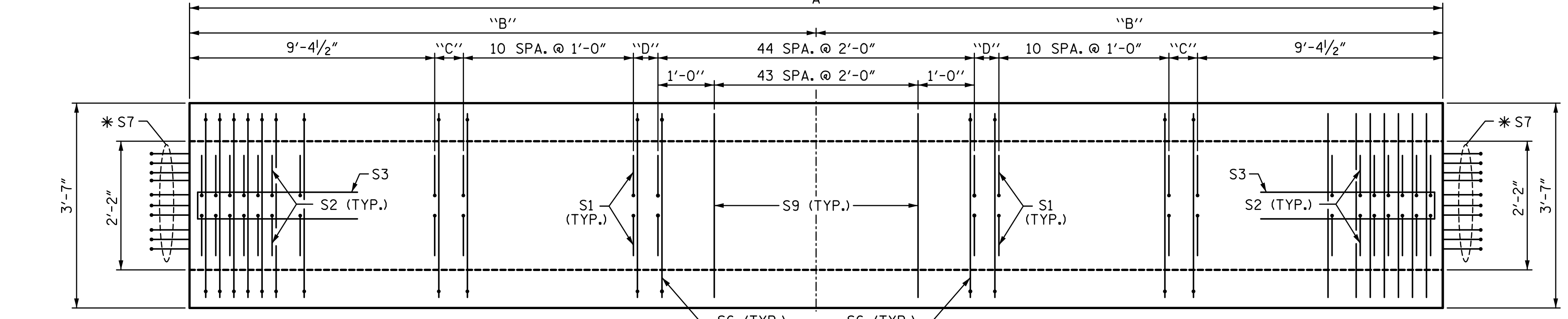
NUMBER	LENGTH	TOTAL LENGTH
4 (SPAN B)	"A"	515.17
4 (SPAN C)	"A"	515.79

PROJECT NO. U-3109A
ALAMANCE COUNTY
 STATION: 146+61.35 -L-

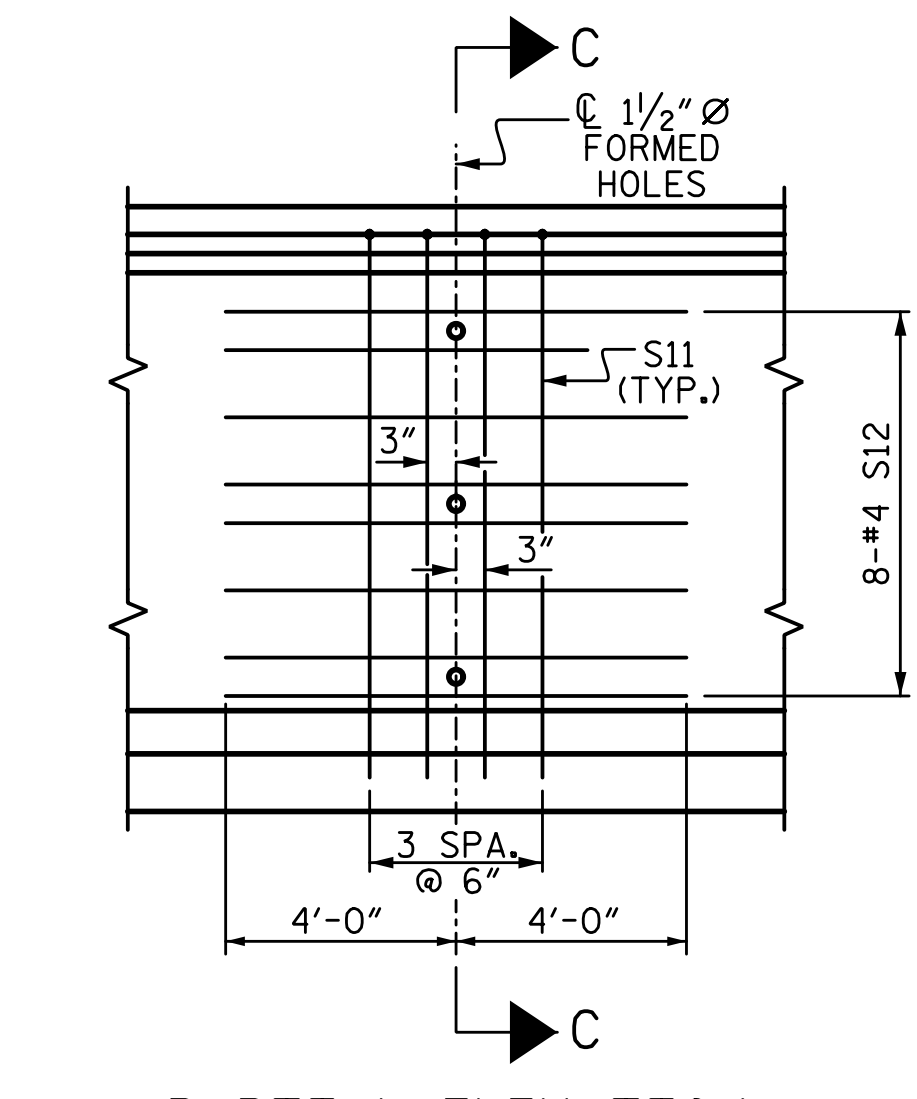
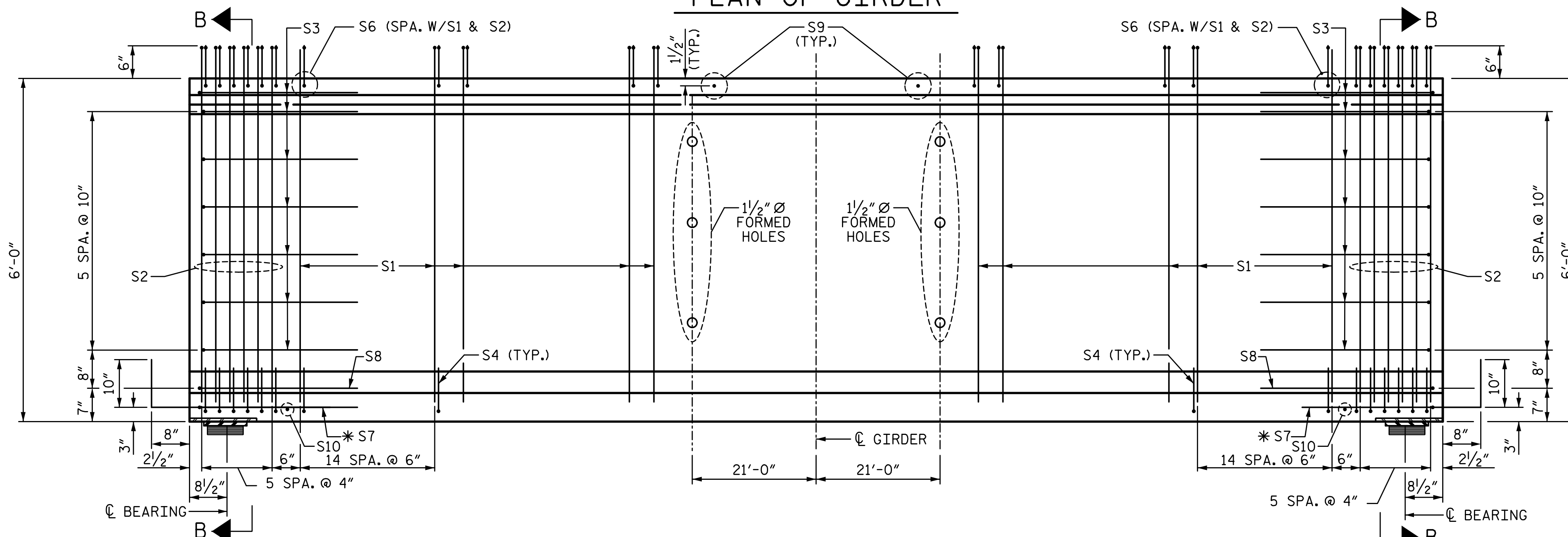
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 72" PRESTRESSED CONCRETE
 MODIFIED BULB TEE
 CONTINUOUS FOR LIVE LOAD
 SPAN B AND C
 (SBL)

REVISIONS						SHEET NO. S02-21
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS S02-51
2			4			

STR. #2

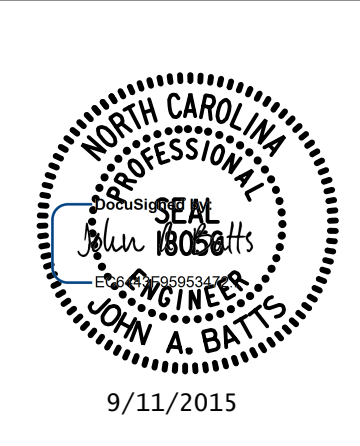


- FULLY DEBONDED STRAND
- ◻ STRAND DEBONDED FOR 16'-0" FROM END OF GIRDER
- ▲ STRAND DEBONDED FOR 20'-0" FROM END OF GIRDER
- ⊙ STRAND DEBONDED FOR 28'-0" FROM END OF GIRDER



PARTIAL ELEVATION
 (SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR ALL GIRDERS)

PLANS PREPARED BY:
SIMPSON ENGINEERS & ASSOCIATES
 5640 Dillard Drive
 Suite 200
 Cary, NC 27518
 (919) 852-0468
 (919) 852-0598 (Fax)
 www.simpsonengr.com
 LICENSURE NO. C-2521



DRAWN BY: T. BANKOVICH DATE: 9-15
 CHECKED BY: J.A. BATTS DATE: 9-15
 DESIGN ENGINEER OF RECORD: J.A. BATTS DATE: 9-15

SEE GIRDER DIMENSION TABLE ON "PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS" SHEET FOR DIMENSIONS "A", "B", "C" AND "D"