

0.6" Ø LOW RELAXATION STRAND LAYOUT

(28 TOTAL STRANDS REQUIRED)

- FULLY BONDED STRANDS
- STRANDS DEBONDED FOR 14'-0" FROM END OF GIRDER
- ▲ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- OPTIONAL FULL LENGTH DEBONDED STRANDS. THESE STRANDS ARE NOT REQUIRED. IF THE FABRICATOR CHOOSES TO INCLUDE THESE STRANDS IN THE GIRDER, THE STRANDS SHALL BE DEBONDED FOR THE FULL LENGTH OF THE UNIT AT NO ADDITIONAL COST. SEE STANDARD SPECIFICATIONS, ARTICLE 1078-7.

\* FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET

(S1 BARS NOT SHOWN)

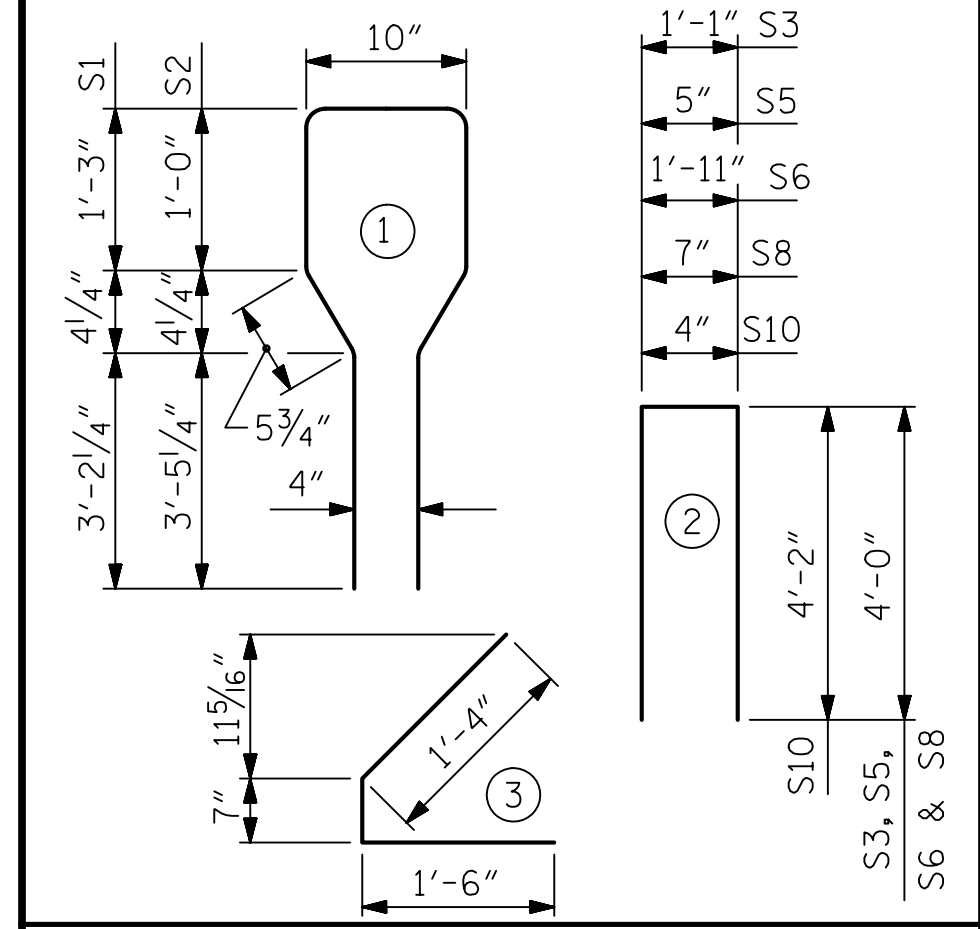
0.6" Ø L. R. GRADE 270 STRANDS		
AREA (SQ. INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	102	#4	1	10'-8"	727
S2	12	#6	1	10'-8"	192
S3	4	#4	2	9'-1"	24
S4	84	#4	3	3'-5"	192
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

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

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT

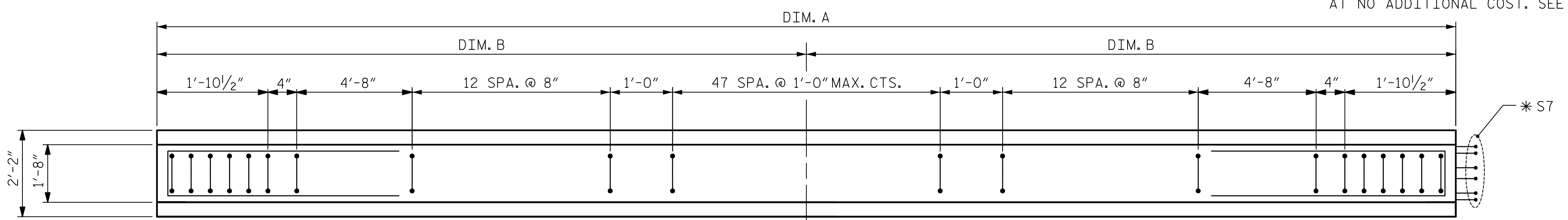


QUANTITIES FOR ONE GIRDER

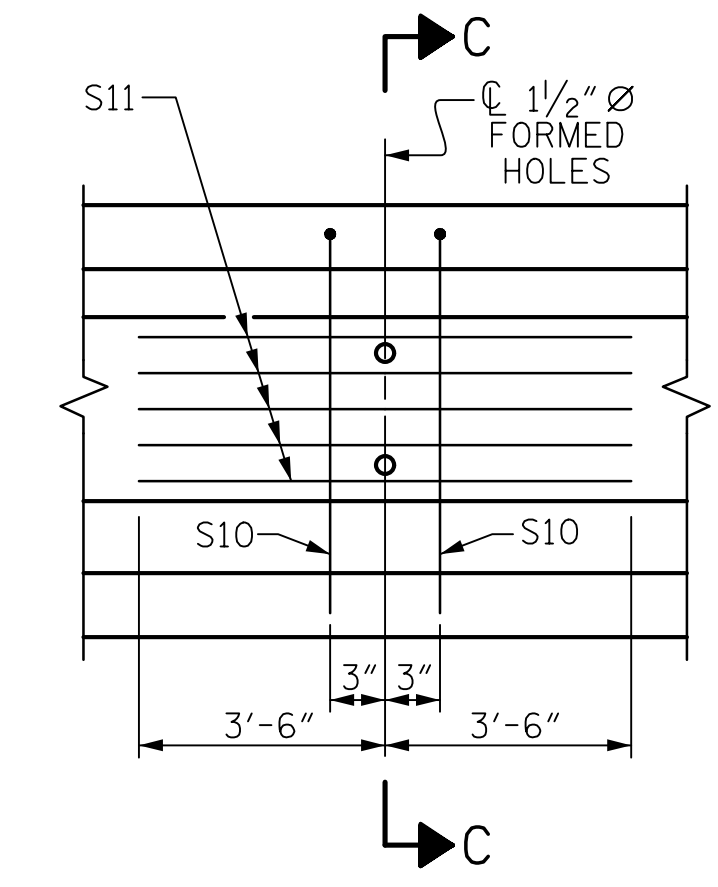
GIRDER QUANTITY	REINFORCING STEEL LB.	5000 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
	1,264	16.0 (AVG.)	28

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
7	SEE TABLE	550'-6 <sup>3</sup> / <sub>16</sub> "

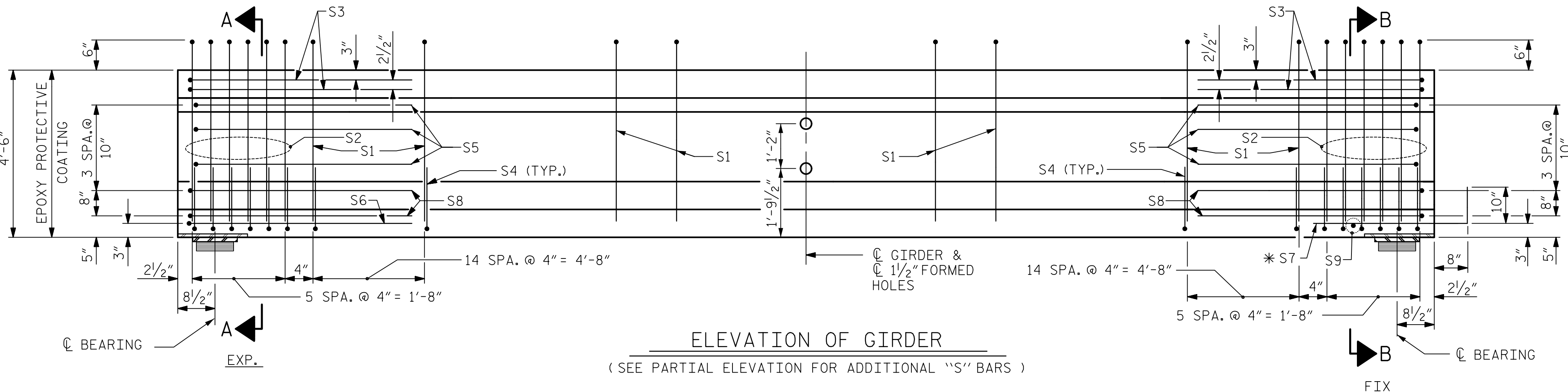


PLAN OF GIRDER



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR ALL GIRDERS



ELEVATION OF GIRDER

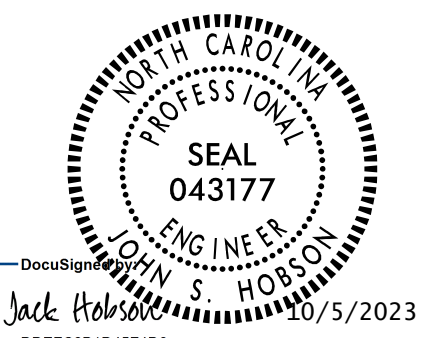
(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)

GDR.	DIM. A	DIM. B
A1	78'-7 <sup>11</sup> / <sub>16</sub> "	39'-3 <sup>7</sup> / <sub>8</sub> "
A2	78'-7 <sup>3</sup> / <sub>4</sub> "	39'-3 <sup>7</sup> / <sub>8</sub> "
A3	78'-7 <sup>13</sup> / <sub>16</sub> "	39'-3 <sup>7</sup> / <sub>8</sub> "
A4	78'-7 <sup>13</sup> / <sub>16</sub> "	39'-3 <sup>15</sup> / <sub>16</sub> "
A5	78'-7 <sup>7</sup> / <sub>8</sub> "	39'-3 <sup>15</sup> / <sub>16</sub> "
A6	78'-7 <sup>15</sup> / <sub>16</sub> "	39'-3 <sup>15</sup> / <sub>16</sub> "
A7	78'-7 <sup>15</sup> / <sub>16</sub> "	39'-4"

ASSEMBLED BY : J.S. HOBSON DATE : 05/17/23  
 CHECKED BY : C.C. CAMPBELL DATE : 06/19/23  
 DESIGN E.O.R. : J.S. HOBSON DATE : 08/30/23

DRAWN BY : ELR 8/9/11 REV. 10/1/11 MAA/GM  
 CHECKED BY : GRP 8/9/11 REV. 1/15 MAA/TMG  
 REV. 12/17 MAA/THC

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PROJECT NO. U-5808  
 UNION COUNTY  
 STATION: 55+00.96 -L2-

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

REVISIONS						SHEET NO. S-16
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 56
2			4			