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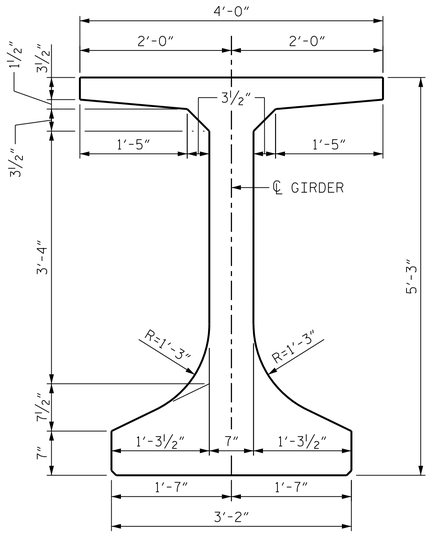
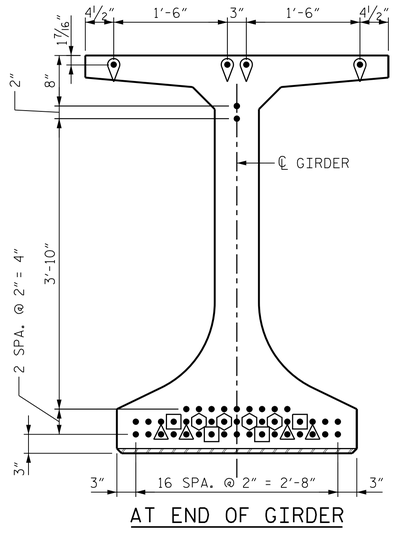


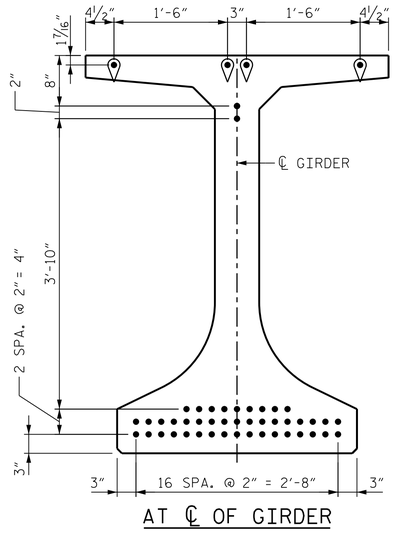
GIRDER OUTSIDE DIMENSIONS



AT END OF GIRDER

DEBONDING LEGEND

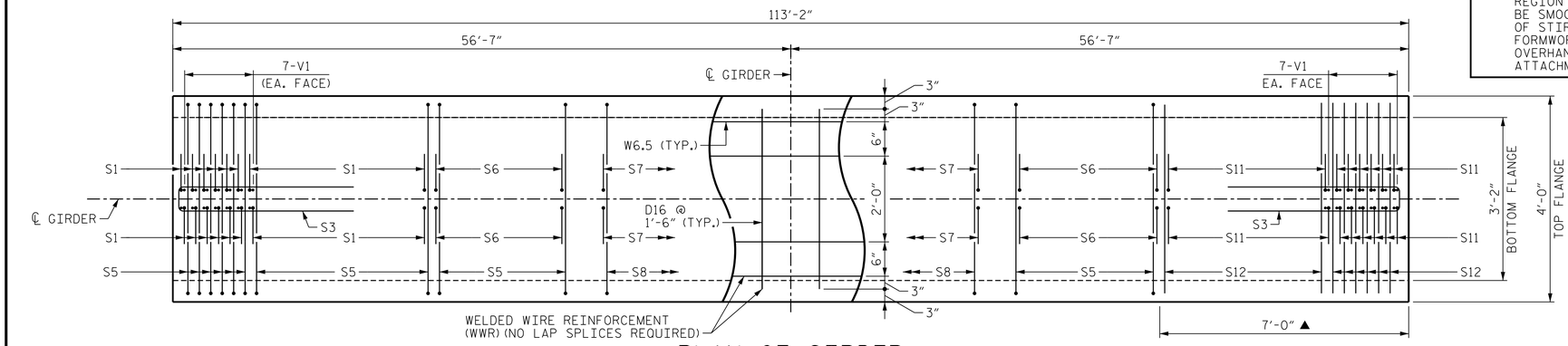
- ● FULLY BONDED STRANDS
- ▲ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- ▣ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER
- ⬢ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
- 0.6" Ø "SLACK" STRANDS TO BE TENSIONED TO 10,000 LBS. (MAX.)



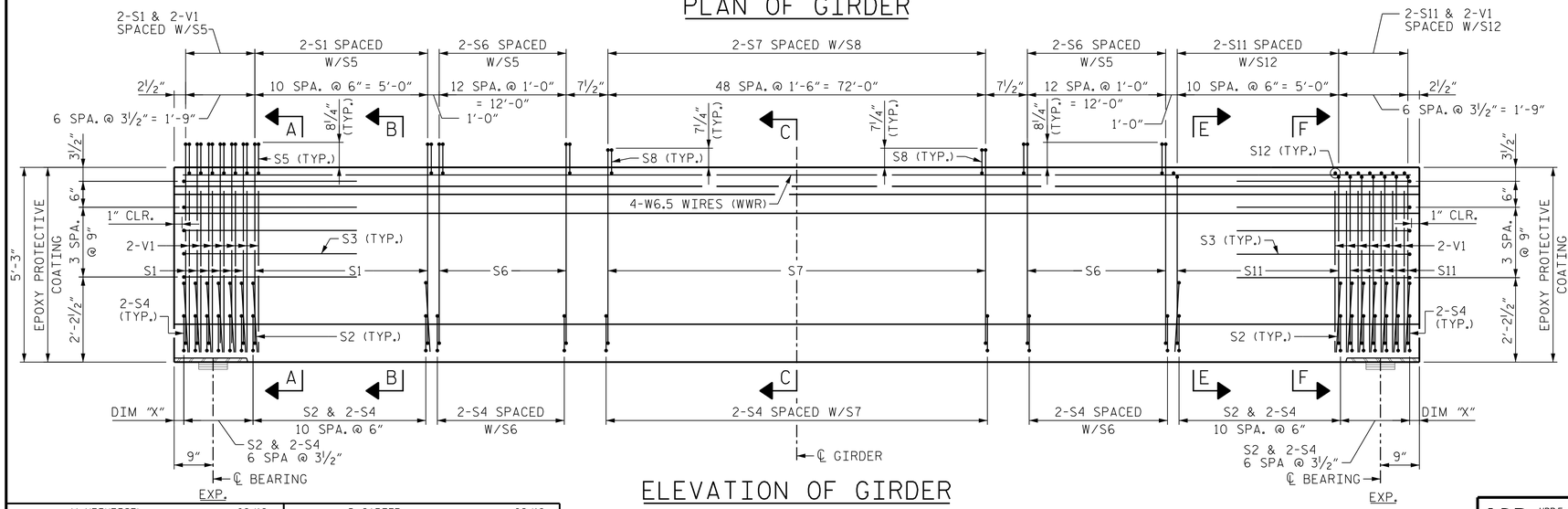
AT ℄ OF GIRDER

0.6" Ø LOW RELAXATION STRAND LAYOUT

▲ = THE TOP OF THE GIRDER IN THE REGION OF THE LINK SLAB SHALL BE SMOOTH (NOT RAKED) AND FREE OF STIRRUPS, ANCHOR STUDS, DECK FORMWORK ATTACHMENTS, OR OVERHANG FALSEWORK/FORMWORK ATTACHMENTS.



PLAN OF GIRDER



ELEVATION OF GIRDER

FOR LOCATION OF 1½" Ø FORMED HOLES, SEE "SUPERSTRUCTURE PRESTRESSED CONCRETE GIRDER FOR LINK SLAB DETAILS" SEE SHEET 4 OF 4.

DIM. "X":
1 13/16" CLR. TO S2 BARS
1 7/16" MIN. CLR. TO S4 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 GDR.

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	34	#5	1	6'-10"	242
S2	34	#3	2	3'-3"	42
S3	10	#3	3	8'-4"	31
S4	218	#3	4	4'-4"	355
S5	43	#4	5	6'-0"	173
S6	52	#4	1	6'-10"	238
S7	98	#4	1	6'-9"	442
S8	49	#4	5	5'-10"	191
S9	8	#5	3	9'-10"	82
S10	10	#4	STR	8'-0"	53
S11	34	#5	1	6'-0"	213
S12	17	#4	STR	3'-6"	40
V1	28	#5	STR	4'-9"	139
WWR	-	-	-	-	245

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT

QUANTITIES FOR ONE GIRDER

WWR	REINF. STEEL	8,000 PSI CONCRETE	0.6" Ø L.R. STRANDS
LB.	LB.	C.Y.	No.
245	2,241	29.0	49

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
19	113'-2"	2,150'-2"

PROJECT NO. U-2579AB

FORSYTH COUNTY

STATION: 47+28.33 -Y15REV-

SHEET 1 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUPERSTRUCTURE
63" PRESTRESSED CONCRETE FLORIDA I-BEAM (FIB) FOR LINK SLAB SPAN A

NORTH CAROLINA PROFESSIONAL SEAL 29589 ENGINEER DOMENIC A. COLETTI

Domenic A. Coletti 10/18/2021

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S03-23
1	--	--	3	--	--	TOTAL SHEETS
2	--	--	4	--	--	61

DES BY: M. NEIHEISEL	DATE: 02/19	DWG BY: D. CARTER	DATE: 02/19
DES CHK: S. NIFONG	DATE: 02/19	CHK BY: A. MILLER	DATE: 04/19

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555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

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