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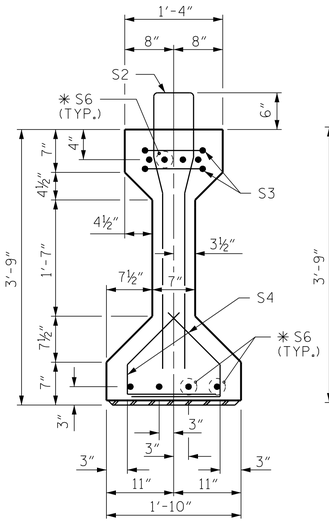
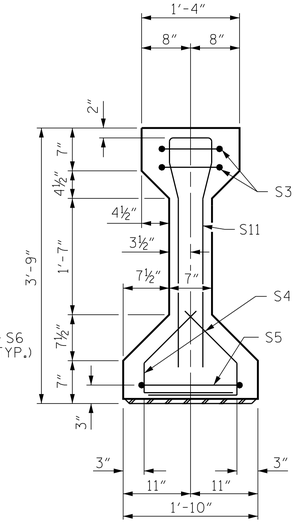
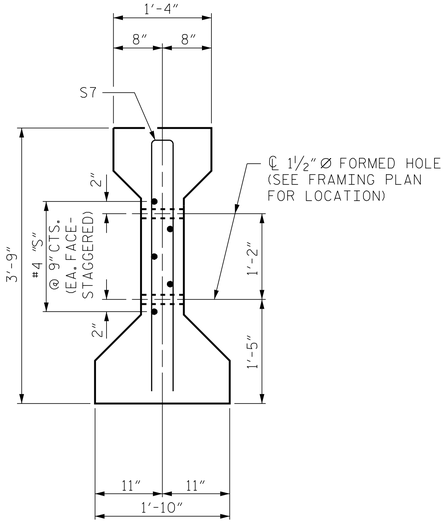


SECTION A-A

✱ FOR S6 BARS, SEE DETAIL "A" ON SHEET 5 OF 6.

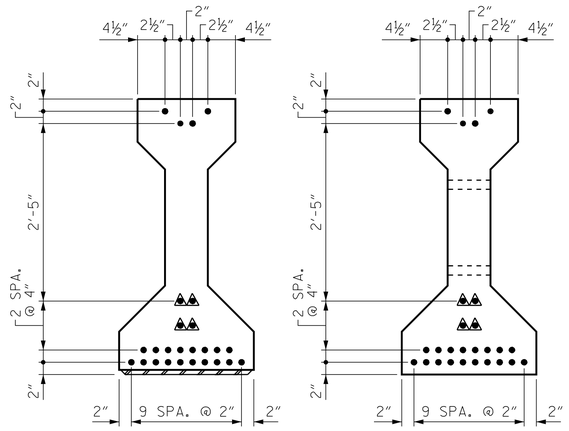


SECTION B-B



SECTION C-C

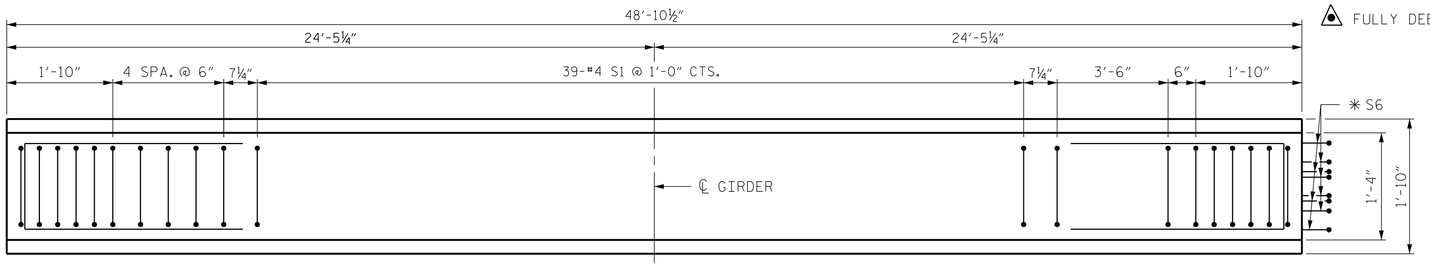
(S1 BARS NOT SHOWN)



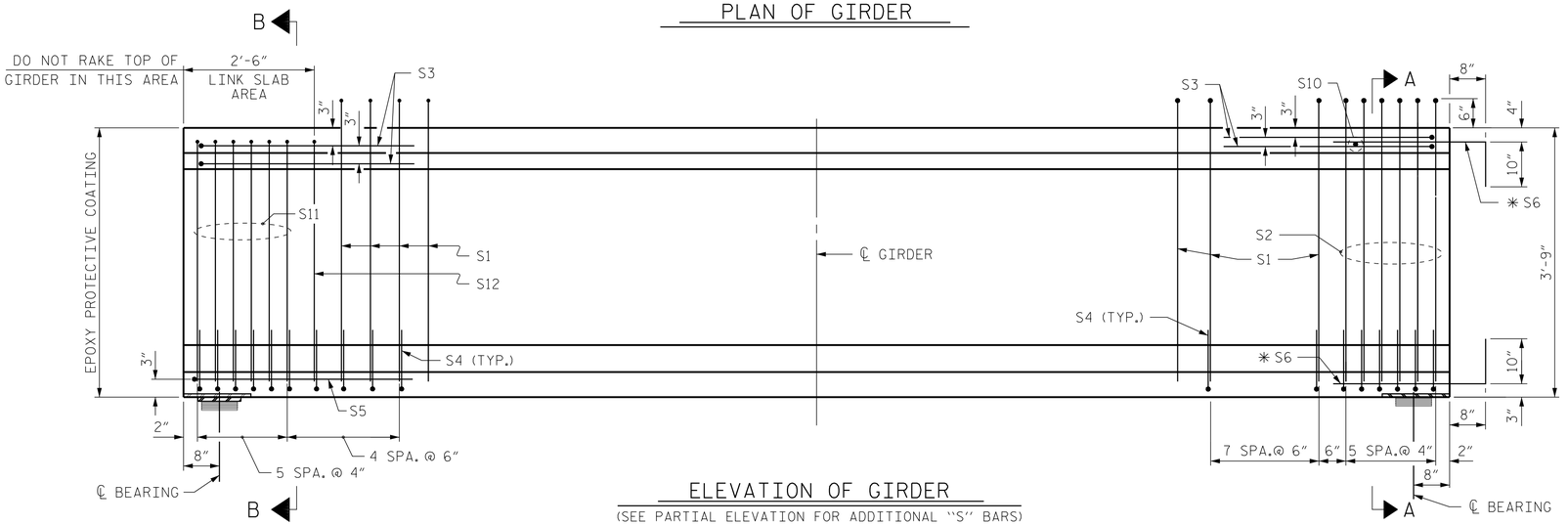
0.6"Ø LOW RELAXATION STRAND LAYOUT

DEBONDING LEGEND

- ● FULLY BONDED STRANDS
- ▲ FULLY DEBONDED STRANDS

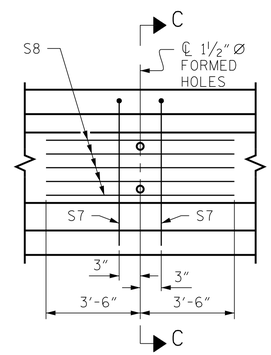


PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR ALL GIRDERS

0.6" Ø L.R. GRADE 270 STRANDS

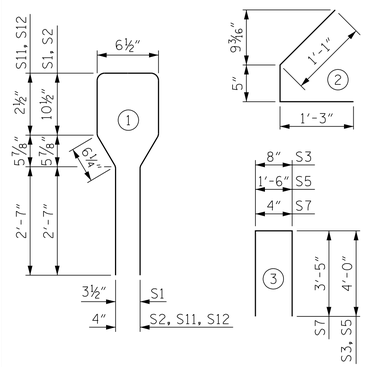
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	50	#4	1	8'-6"	284
S2	6	#6	1	8'-6"	77
S3	4	#4	3	8'-8"	23
S4	48	#4	2	2'-9"	88
S5	1	#4	3	9'-6"	6
✱S6	8	#5	STR	3'-8"	31
S7	2	#5	3	7'-2"	15
S8	5	#4	STR	7'-0"	23
S10	1	#3	STR	1'-0"	1
S11	6	#6	1	7'-2"	65
S12	1	#4	1	7'-2"	5

✱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	6,000 PSI CONCRETE	0.6"Ø L.R. STRANDS
	LB.	C.Y.	No.
GDR. DG1-DG4	618	7.0	26

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
4	48'-10½"	195'-6"

PROJECT NO. B-5156

PENDER COUNTY

STATION: 22+90.50 -L-

SHEET 4 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

AASHTO TYPE III
PRESTRESSED CONCRETE GIRDER
CONTINUOUS FOR LIVE LOAD

SPAN D

NORTH CAROLINA PROFESSIONAL SEAL 047653 ENGINEER CLAY T. POOLE

DocuSigned by: Clay T Poole 1/10/2024
5AE35A6E0302425...

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REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19
1			3			TOTAL SHEETS
2			4			45

ASSEMBLED BY : D. D. LOWERY	DATE : 03/2023		
CHECKED BY : C.T. POOLE	DATE : 03/2023		
DRAWN BY : ELR 8/91	REV. 1/15	MAA/TMG	
CHECKED BY : GRP 8/91	REV. 12/17	MAA/THC	
	REV. 11/21	BNB/AAI	

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STD. NO. PCG5

1/10/2024 K:\ROT_Structures_Bridge\NC\011036491 - B-5156\Cad\Dgn\B5156_SMU_G4_700028.dgn