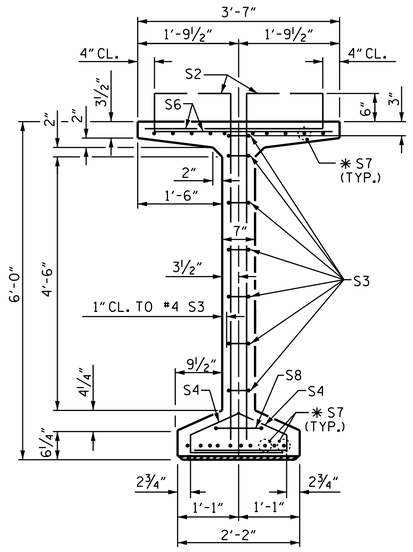
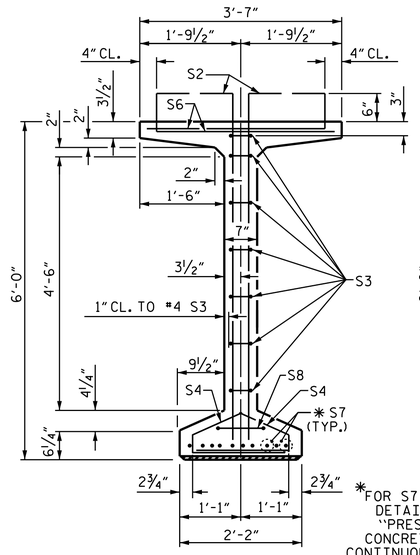
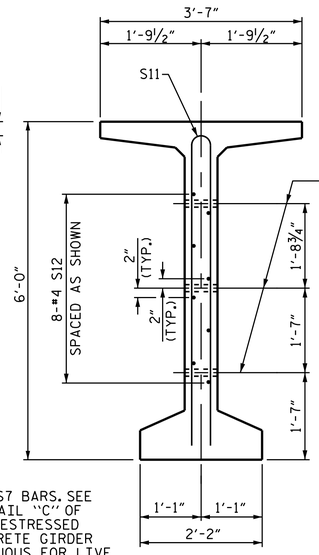


SECTION A-A



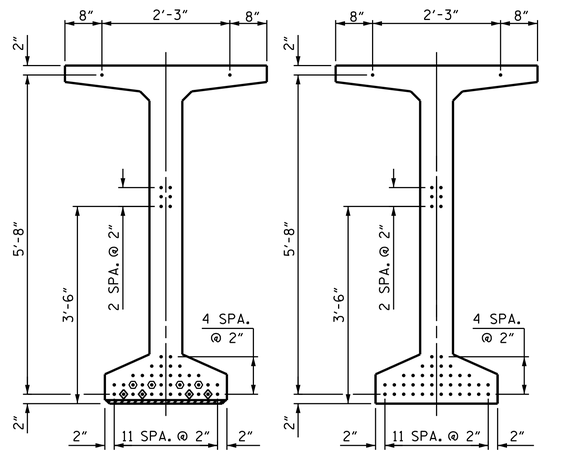
SECTION B-B



SECTION C-C

✱FOR S7 BARS, SEE DETAIL "C" OF "PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS" SHEET

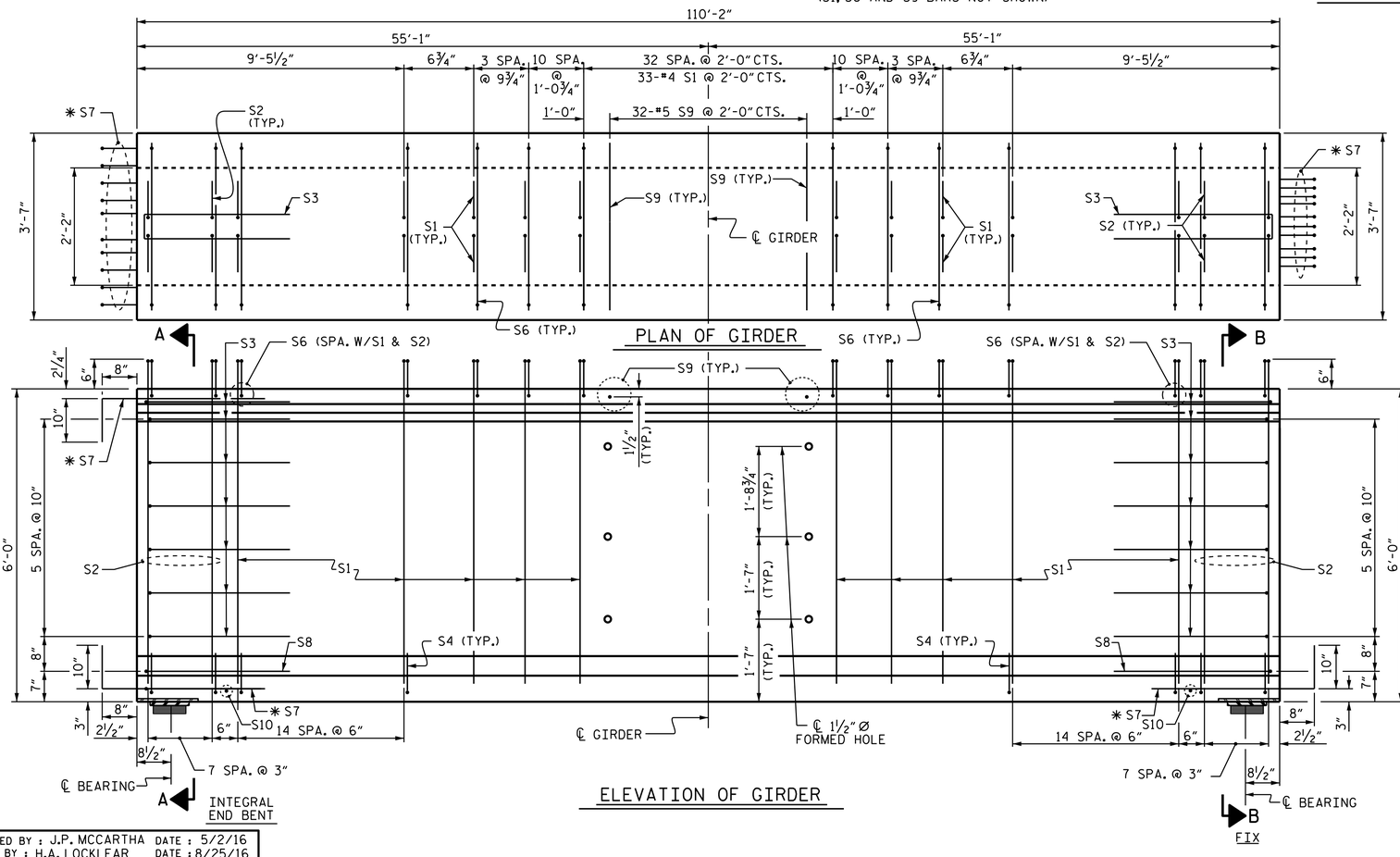
(S1, S6 AND S9 BARS NOT SHOWN)



AT END OF GIRDER

AT ℄ OF GIRDER

0.6"Ø LOW RELAXATION STRAND LAYOUT

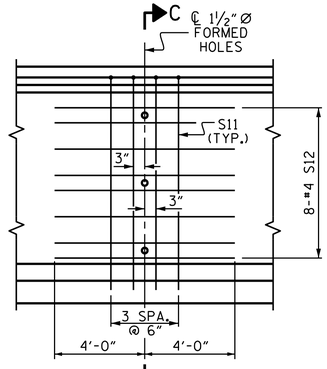


PLAN OF GIRDER

ELEVATION OF GIRDER

DEBONDING LEGEND

- ● FULLY BONDED STRANDS
- ◈ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
- ⬣ STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER



PARTIAL ELEVATION

SHOWING INTERMEDIATE STEEL DIAPHRAGM REINFORCING STEEL FOR SPAN A GIRDERS (2 LOCATIONS PER GIRDER)

0.6"Ø L. R. GRADE 270 STRANDS

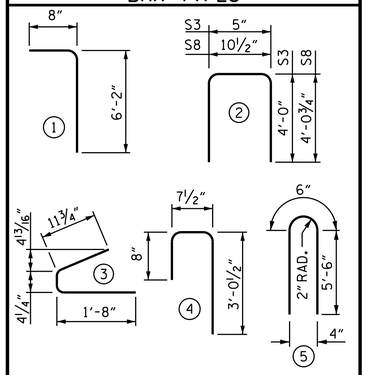
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GDR

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	178	#4	1	6'-10"	813
S2	32	#5	1	6'-10"	228
S3	14	#4	2	8'-5"	79
S4	92	#4	3	3'-0"	184
S6	210	#5	4	4'-4"	949
✱S7	30	#5	STR	3'-8"	115
S8	2	#5	2	9'-0"	19
S9	32	#5	STR	3'-3"	108
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

	REINFORCING STEEL	9,500 PSI CONCRETE	0.6"Ø L.R. STRANDS
	LBS.	C.Y.	No.
	2678	23.6	46

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
6	110'-2"	661'-0"

PROJECT NO. U-2579C

FORSYTH COUNTY

STATION: 29+24.97 -Y1-

SHEET 1 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD 72" PRESTRESSED CONCRETE MODIFIED BULB TEE CONTINUOUS FOR LIVE LOAD SPAN A

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL G. CHEEK, JR.
Marshall G. Cheek, Jr.
7/27/2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-12
1			3			TOTAL SHEETS
2			4			32

STR. #1

STD. NO. PCG8

ASSEMBLED BY : J.P. MCCARTHA	DATE : 5/2/16		
CHECKED BY : H.A. LOCKLEAR	DATE : 8/25/16		
DRAWN BY : EEM 2/6/97	REV. 10/1/11	MAA/GM	DESIGN ENGINEER OF RECORD: H.A. LOCKLEAR DATE : 6/2017
CHECKED BY : VAP 2/6/97	REV. 6/13	MAA/GM	
	REV. 1/15	MAA/TMG	

26-JUL-2017 15:04
R:\Structures\FINAL PLANS\401.023.U2579C.SMU.G1.012.330700.dgn
mcheek