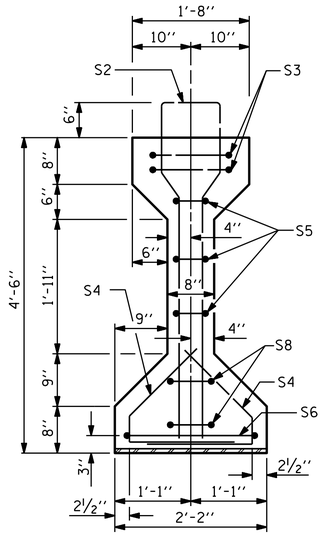
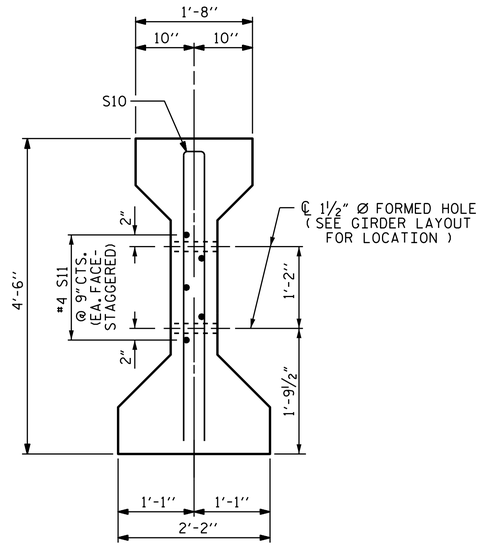
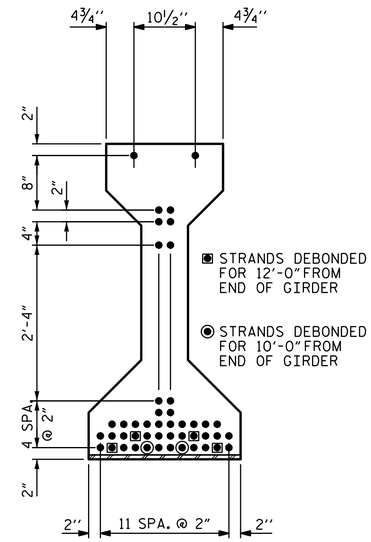


SECTION A-A



SECTION C-C

(S1 BARS NOT SHOWN)



0.6" Ø LOW RELAXATION STRAND LAYOUT

0.6" Ø L. R. GRADE 270 STRANDS

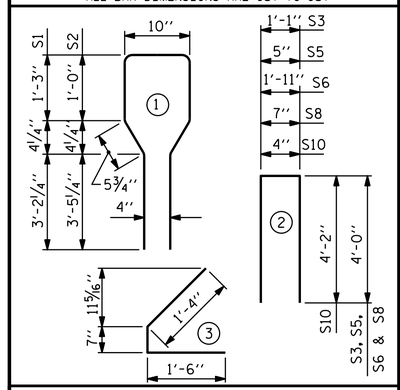
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
GIRDER 1	S1	193	#4	1	10'-8"	1375
GIRDER 5	S1	185	#4	1	10'-8"	1318
	S2	14	#6	1	10'-8"	224
	S3	4	#4	2	9'-1"	24
GIRDER 1	S4	232	#4	3	3'-5"	530
GIRDER 5	S4	220	#4	3	3'-5"	502
	S5	6	#4	2	8'-5"	34
	S6	2	#4	2	9'-11"	13
	S8	4	#4	2	8'-7"	23
	S10	2	#5	2	8'-8"	18
	S11	5	#4	STR	7'-0"	23

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

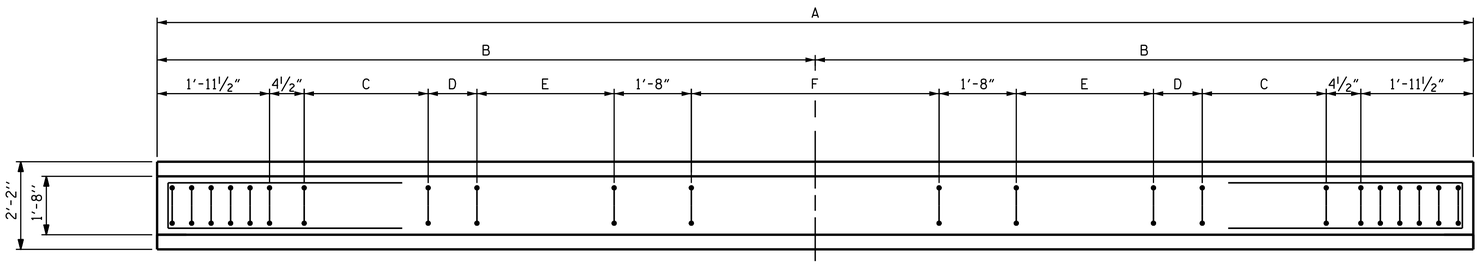
	REINFORCING STEEL LB.	8500 PSI CONCRETE C.Y.	0.6" Ø L. R. STRANDS No.
GIRDER 1	2264	20.7	46
GIRDER 5	2179	19.6	46

GIRDERS REQUIRED

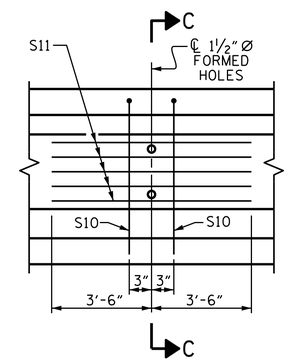
	NUMBER	LENGTH	TOTAL LENGTH
GIRDER 1	1	102'-0¼"	102'-0¼"
GIRDER 5	1	96'-6⅜"	96'-6⅜"

GIRDER DIMENSIONS

GIRDER	A	B	C	D	E	F
1	102'-0¼"	51'-0⅛"	50 SPA. @ 4½"	5⅛"	39 SPA. @ 6"	10 SPA. @ 1'-8"
5	96'-6⅜"	48'-3³⁄₁₆"	47 SPA. @ 4½"	5¹¹⁄₁₆"	39 SPA. @ 6"	8 SPA. @ 1'-8"

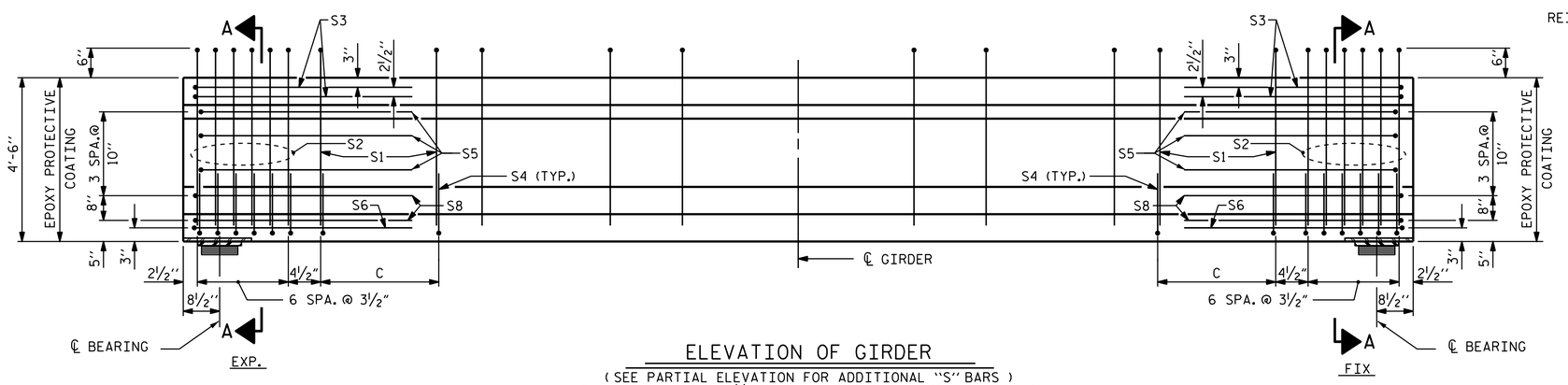


PLAN OF GIRDER



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM
REINFORCING STEEL FOR EXTERIOR GIRDERS



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)
(FOR LOCATION OF 1½" Ø FORMED HOLES, SEE SHEET 3 OF 4)

PROJECT NO. B-5119

GUILFORD COUNTY

STATION: 12+32.31 -RP-

SHEET 1 OF 4

NORTH CAROLINA PROFESSIONAL SEAL 29441 ENGINEER KRISTY W. ALFORD

DocuSigned by: F24583893 0BF40E...

11/25/2014

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER

(EXTERIOR GIRDERS)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-57
1			3			TOTAL SHEETS
2			4			77

ASSEMBLED BY : J.P. ADAMS DATE : 9/16/14
CHECKED BY : D.R. SHACKELFORD DATE : 10/2014

DRAWN BY : ELR 8/91
CHECKED BY : GRP 8/91

REV. 10/17/00R RWW/LES
REV. 5/1/06R TLA/GM
REV. 10/1/11 MAA/GM

25-NOV-2014 10:59
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jpadams

STD. NO. PCG6