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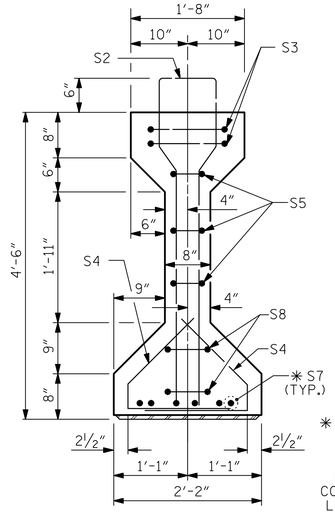
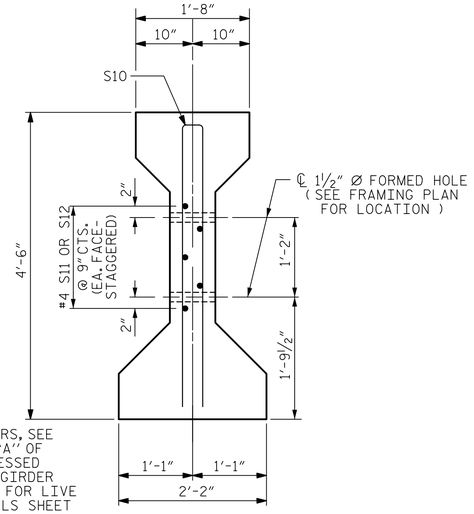


SECTION B-B

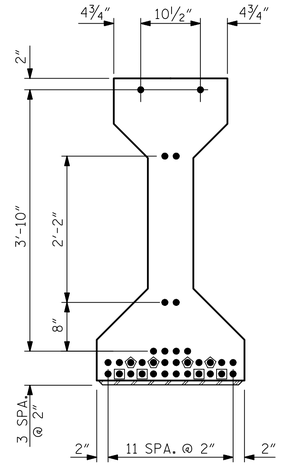


✳ FOR S7 BARS, SEE DETAIL "A" OF PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS SHEET

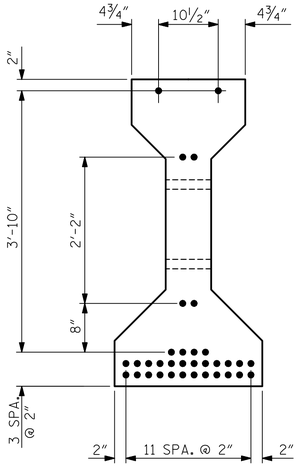
SECTION C-C

(S1 BARS NOT SHOWN)

GDR.	"A"	"B"
B1	91'-8¼"	45'-10⅛"
B2	91'-6½"	45'-9¼"
B3	91'-5"	45'-8½"
B4	91'-3½"	45'-7¾"
B5	91'-2"	45'-7"
B6	91'-0½"	45'-6¼"
B7	90'-11¼"	45'-5⅜"
B8	90'-9¾"	45'-4⅞"



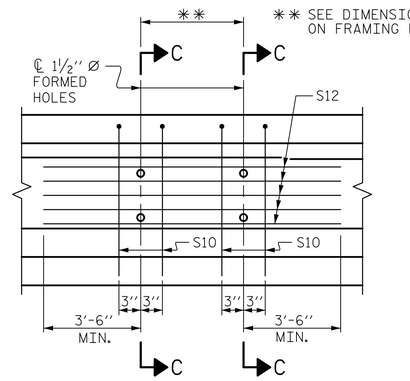
AT END OF GIRDER



AT ℄ OF GIRDER

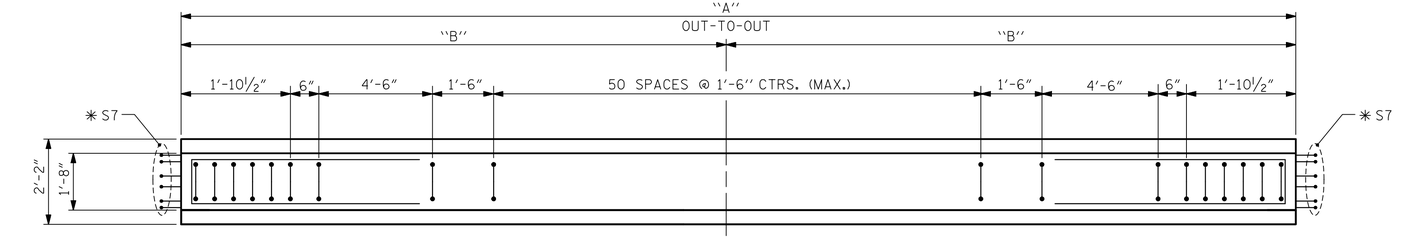
0.6"Ø LOW RELAXATION STRAND LAYOUT

- ● FULLY BONDED STRANDS
- ◙ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
- ◉ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER

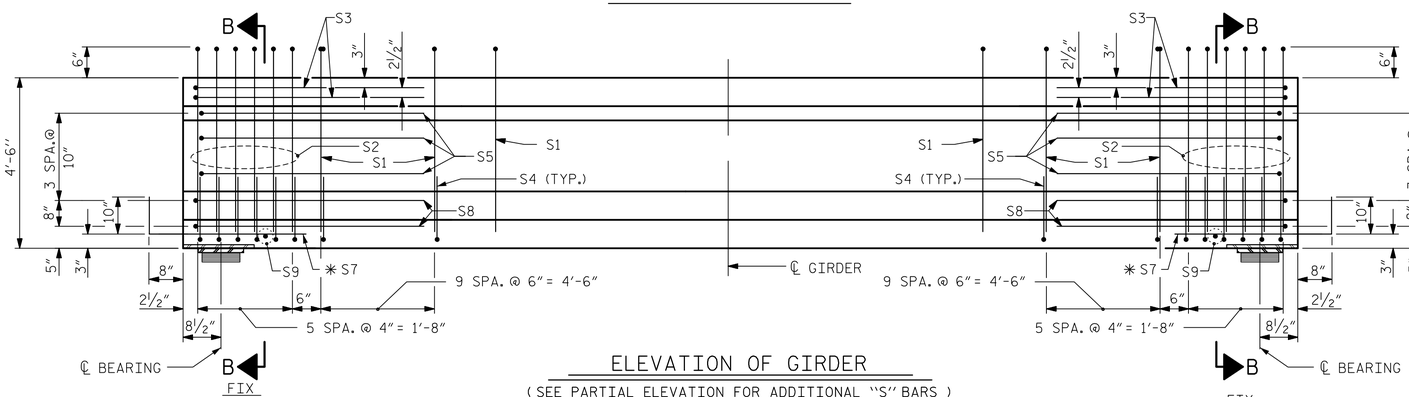


PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. B2-B7

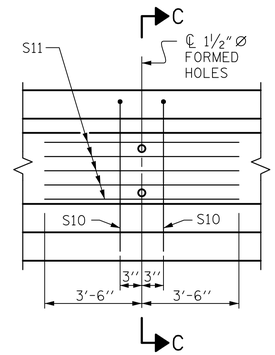


PLAN OF GIRDER



ELEVATION OF GIRDER

(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)



PARTIAL ELEVATION

SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER Nos. B1 & B8

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

FOR NOTES, SEE SHEET 4 OF 5.

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

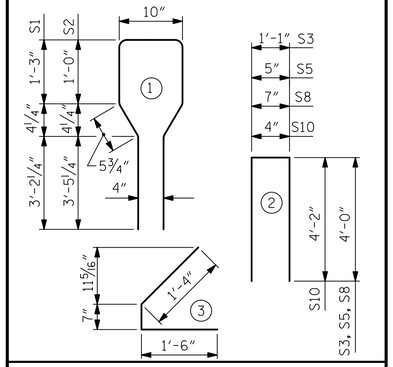
REINFORCING STEEL FOR ONE GIRDER

	BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
	S1	71	#4	1	10'-8"	506
	S2	12	#6	1	10'-8"	192
	S3	4	#4	2	9'-1"	24
	S4	64	#4	3	3'-5"	146
	S5	6	#4	2	8'-5"	34
	✳ S7	12	#5	STR	3'-8"	46
	S8	4	#4	2	8'-7"	23
	S9	2	#3	STR	1'-10"	1
EXTERIOR GDR.	S10	2	#5	2	8'-8"	18
INTERIOR GDR.	S10	4	#5	2	8'-8"	36
EXTERIOR GDR.	S11	5	#4	STR	7'-0"	23
INTERIOR GDR.	S12	5	#4	STR	12'-0"	40

✳ 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 LB.	7000 PSI CONCRETE C.Y.	0.6" Ø L.R. STRANDS No.
EXTERIOR GIRDER	1013	18.5 (AVG.)	34
INTERIOR GIRDER	1048	18.5 (AVG.)	34

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
8	SEE TABLE	729'-10¾"

PROJECT NO. U-2707

FORSYTH COUNTY

STATION: 17+34.88 -Y-

SHEET 2 OF 5 BRIDGE NO. 109

AECOM
AECOM TECHNICAL SERVICES, INC.
701 CORPORATE CENTER DRIVE, SUITE 475
RALEIGH, NC 27607
(919) 854-6200 www.aecom.com
AECOM License No. F-0342

NORTH CAROLINA PROFESSIONAL SEAL 20474 ENGINEER JOHN C. MORRISON
DocuSigned by: John C. Morrison
1/12/2016

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

AASHTO TYPE IV PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD SPAN B

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-55
1			3			TOTAL SHEETS
2			4			86

STD. NO. PCG6

ASSEMBLED BY : KHC	DATE : 11/2015	
CHECKED BY : JCM	DATE : 11/2015	
DRAWN BY : ELR 8/91	REV. 5/1/06R	TLA/GM
CHECKED BY : GRP 8/91	REV. 10/1/11	MAA/GM
	REV. 1/15	MAA/TMG

USER: kyle.compton
DGN: RLBridge 109\Cad\402_025_U2707_SMU_555_PCG02.dgn

DATE: 1/12/2016
TIME: 8:50:03 AM