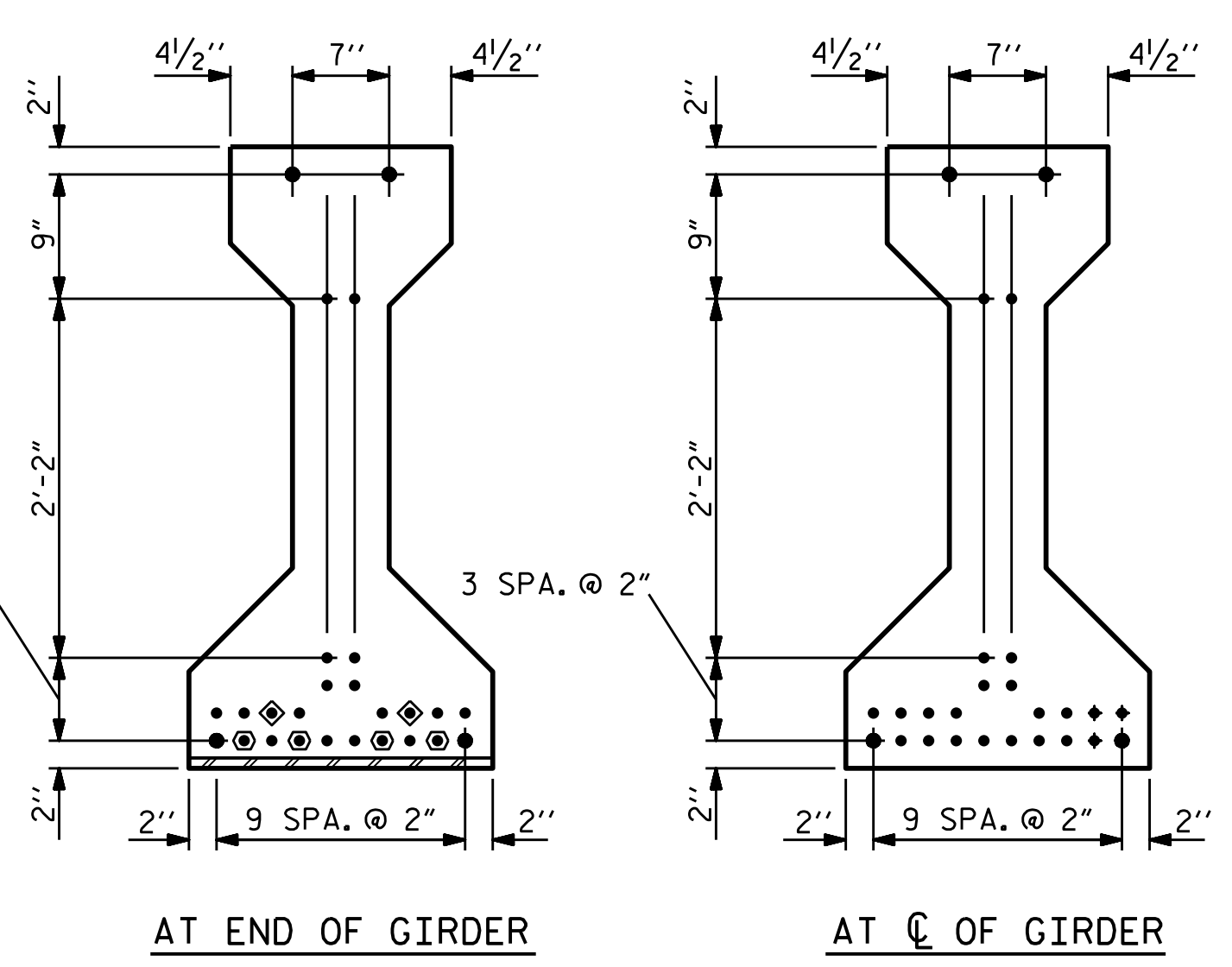


EMBEDDED PLATE "B-1" DETAILS

TWO EMBEDDED PLATES "B-1" ARE REQUIRED FOR EACH GIRDER.



0.6" Ø LOW RELAXATION STRAND LAYOUT

- DEBONDING LEGEND**
- FULLY BONDED STRANDS
 - ◆ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER
 - STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER

DEAD LOAD DEFLECTION TABLE FOR GIRDERS												
0.6" Ø LOW RELAXATION	SPAN C										BRG.	
	GIRDERS #1 THROUGH #12											
TENTH POINTS	BRG.	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	BRG.	
CAMBER (GIRDER ALONE IN PLACE)	↑	0	0.036	0.068	0.093	0.108	0.114	0.108	0.093	0.068	0.036	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0	0.020	0.037	0.051	0.059	0.062	0.059	0.051	0.037	0.020	0
FINAL CAMBER	↑	0	3/16"	3/8"	1/2"	9/16"	5/8"	9/16"	1/2"	3/8"	3/16"	0

* INCLUDES FUTURE WEARING SURFACE
ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM), EXCEPT "FINAL CAMBER" WHICH IS GIVEN IN INCHES (FRACTION FORM).

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS. BEVEL EDGES OF PLATE "B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

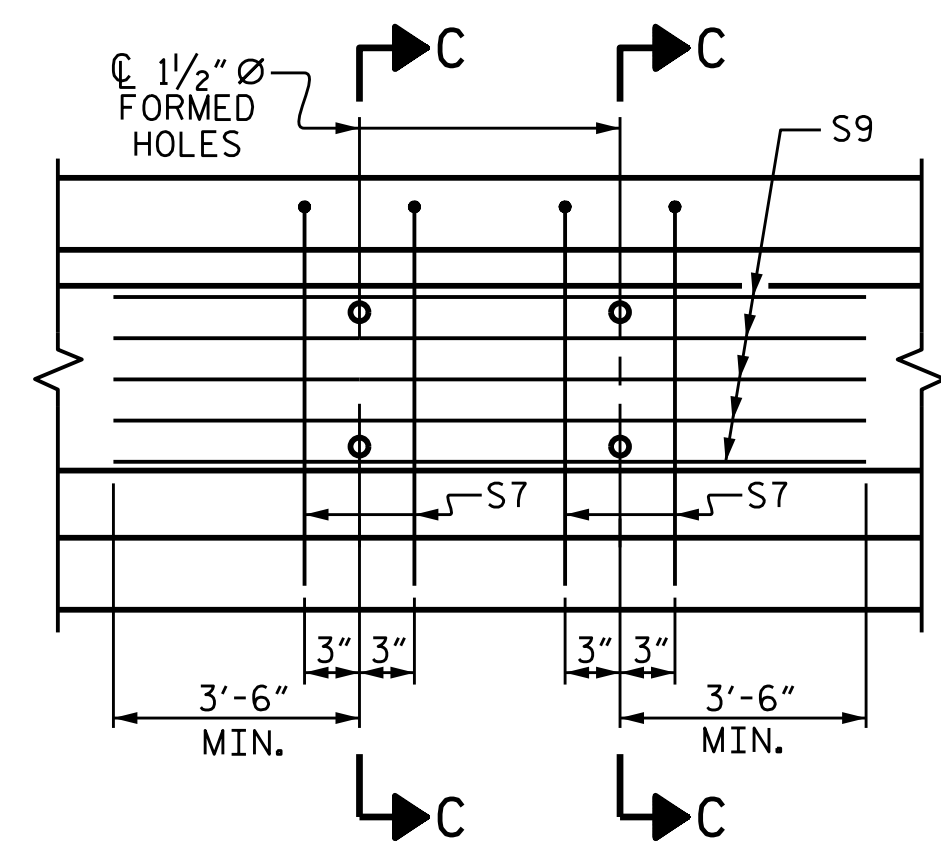
ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

ALL PRESTRESSED STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 5,600 PSI.

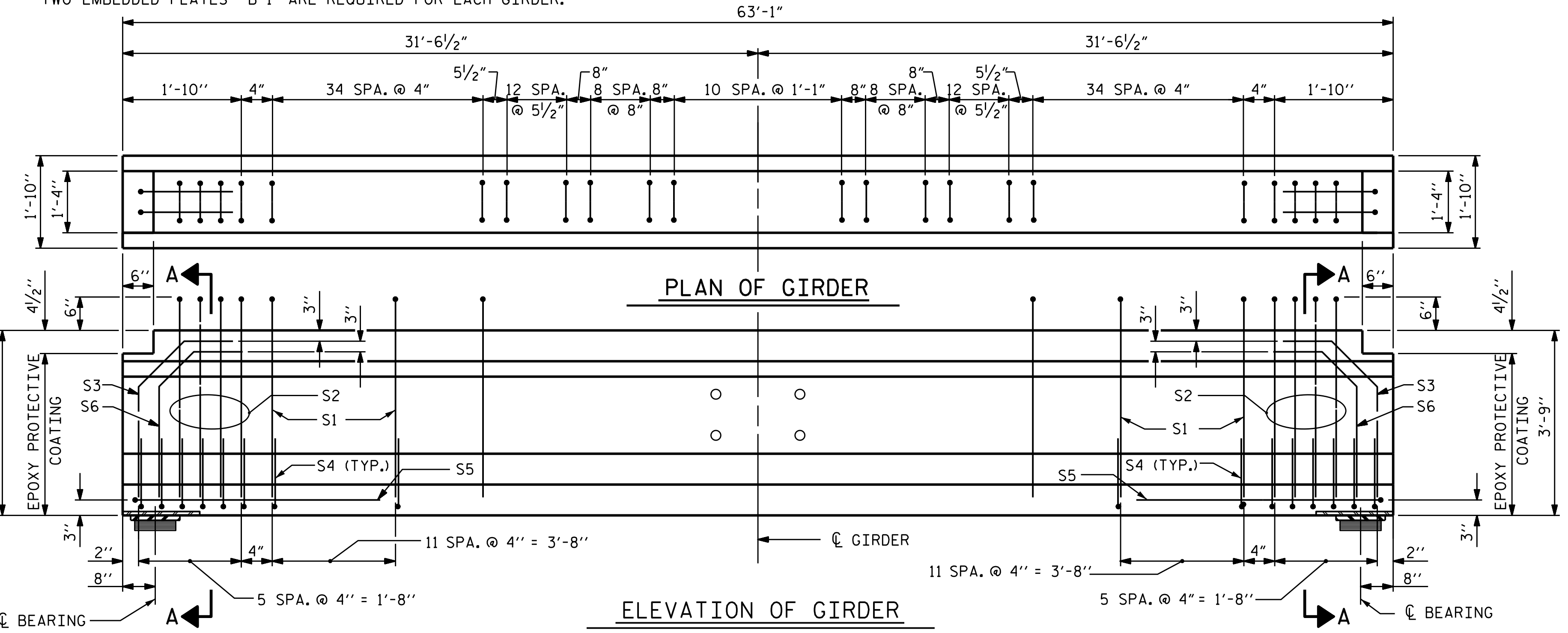
DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TOP SURFACE OF THE GIRDER SHALL BE RAKED TO A DEPTH OF 1/4" EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER.

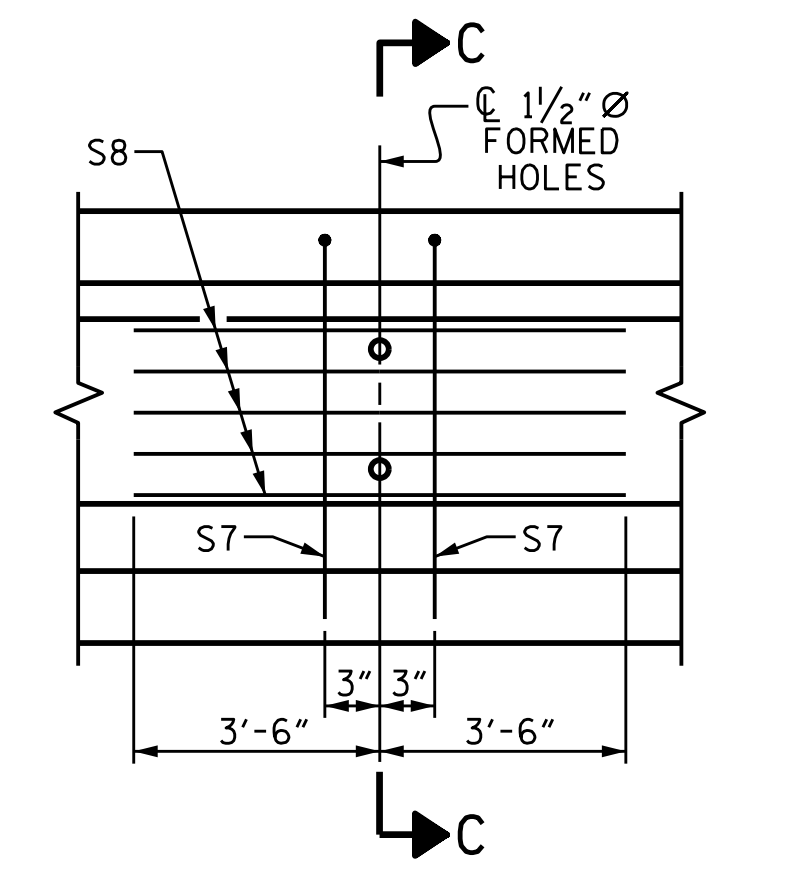


PARTIAL ELEVATION

* SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDERS 2, 3, 6, 9, 10, AND 11.



(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)



PARTIAL ELEVATION

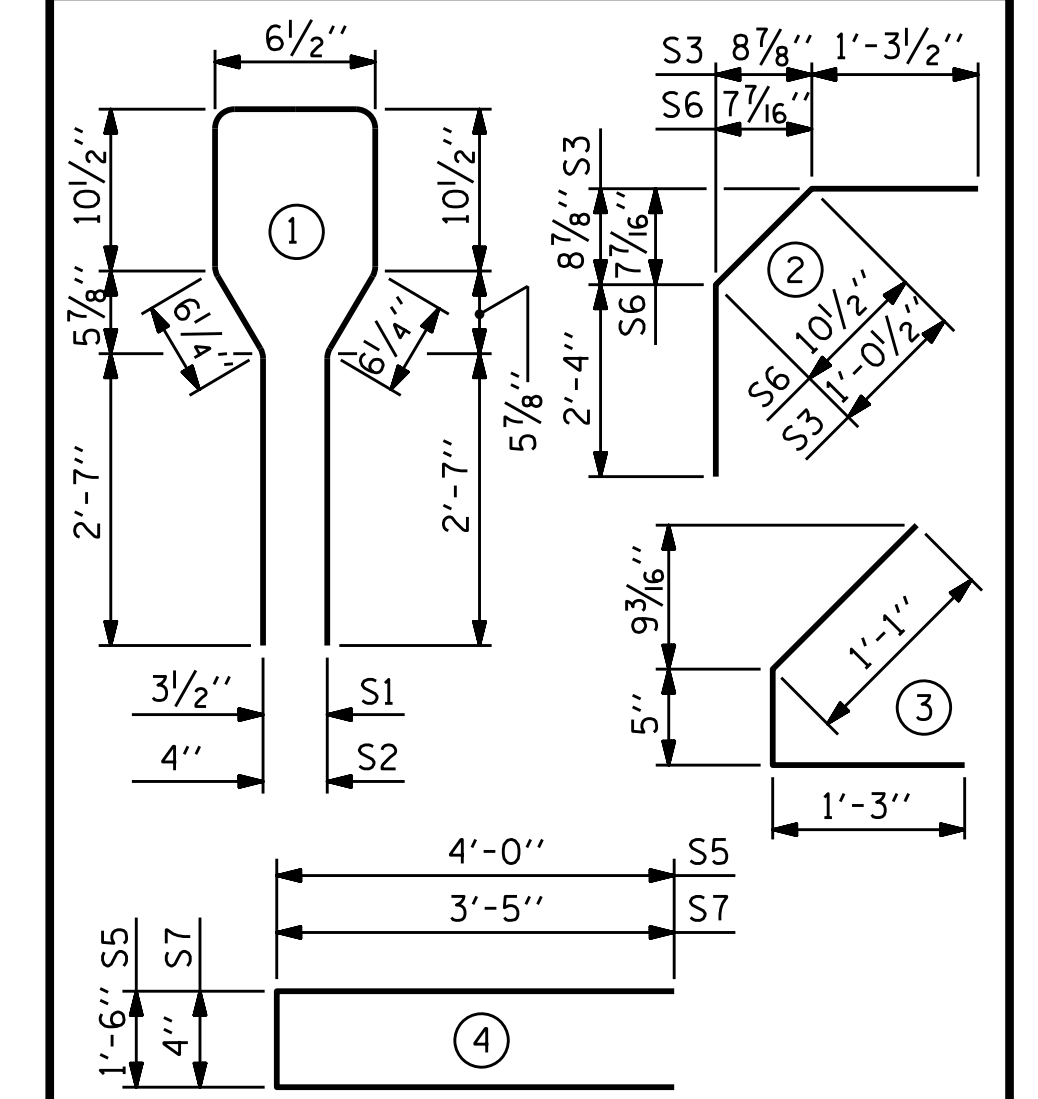
* SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDERS 1, 4, 5, 7, 8, AND 12.

0.6" Ø L. R. GRADE 270 STRANDS		
AREA (SQ. 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	125	#4	1	8'-6"	710
S2	8	#6	1	8'-6"	102
S3	4	#6	2	4'-8"	28
S4	72	#4	3	2'-9"	132
S5	2	#4	4	9'-6"	13
S6	4	#6	2	4'-6"	27
* S7	2	#5	4	7'-2"	15
* S7	4	#5	4	7'-2"	30
* S8	5	#4	STR	7'-0"	23
* S9	5	#4	STR	13'-2"	44

BAR TYPES

ALL BAR DIMENSIONS ARE OUT-TO-OUT



QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL	7,500 PSI CONCRETE	0.6" Ø L. R. STRANDS
	LB.	C.Y.	No.
* GDR. 1, 4, 5, 7, 8, 12	1,050	9.1	26
* GDR. 2, 3, 6, 9, 10, 11	1,086	9.1	26

GIRDERS REQUIRED

NUMBER	LENGTH	TOTAL LENGTH
12	63'-1"	757'-0"

PROJECT NO. B-5136
CABARRUS COUNTY
 STATION: 21+74.92 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD
 AASHTO TYPE III
 PRESTRESSED CONCRETE GIRDER

SPAN C

REVISIONS				SHEET NO.
NO.	BY:	DATE:	NO.	DATE:
1			3	
2			4	

TOTAL SHEETS 75

ASSEMBLED BY : J.D. HAWK	DATE : 7/15/14	DESIGN ENGINEER OF RECORD:
CHECKED BY : H.A. LOCKLEAR	DATE : 10/15/14	V.A. PATEL
DRAWN BY : JMB 12/87	REV. 8/16/99RR RWW/LES	DATE : 1/05/15
CHECKED BY : ARB 12/87	REV. 5/1/06R TLA/GM	
	REV. 10/1/11 MAA/GM	

