

0.6" Ø LOW RELAXATION STRAND LAYOUT

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.

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 ---- PSI.

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

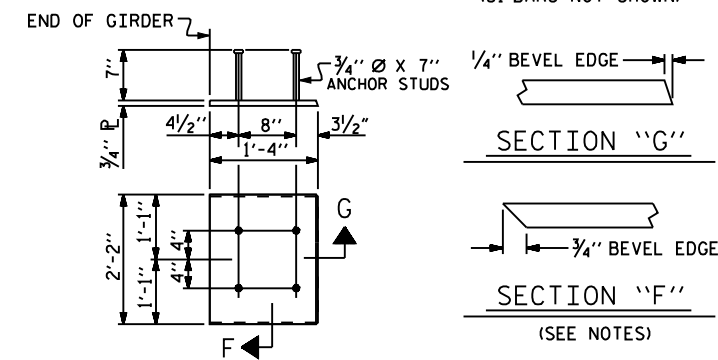
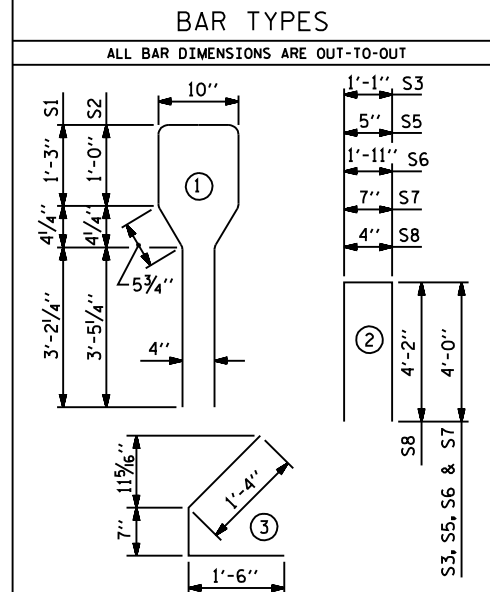
THE TOP SURFACE OF THE GIRDER SHALL BE RAKED TO A DEPTH OF 1/4" EXCEPT IN THE AREA BETWEEN THE STIRRUP AND THE EDGE OF THE GIRDER.

WHEN DRAPED STRANDS ARE DETAILED, THE LONGITUDINAL LOCATION OF THE HOLD DOWN DEVICES SHALL BE WITHIN 6" OF THE LOCATION SHOWN AND THE CENTER OF GRAVITY OF THE GROUP OF DRAPED STRANDS SHALL BE LOCATED WITHIN 1/2" OF THE THEORETICAL LOCATION SHOWN.

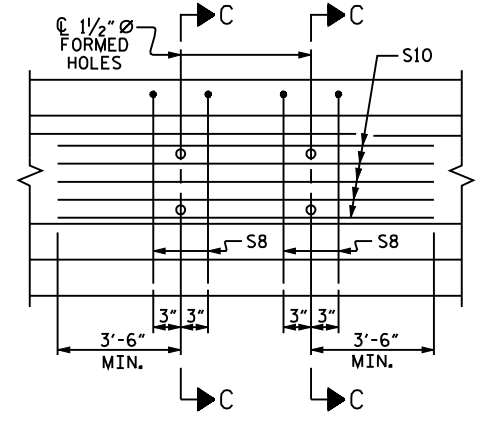
FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

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

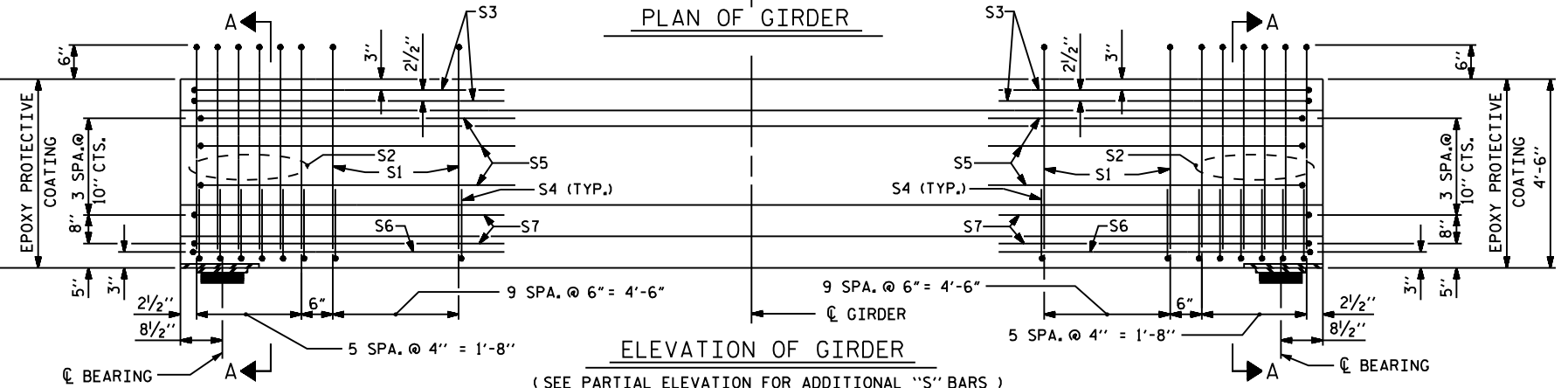
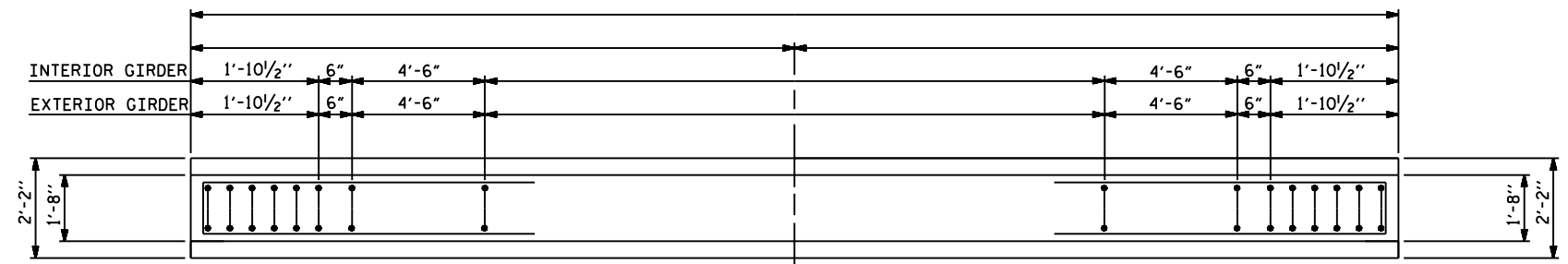
REINFORCING STEEL FOR ONE GIRDER					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
EXTERIOR GDR.	S1	#4	1	10'-8"	
INTERIOR GDR.	S1	#4	1	10'-8"	
	S2	#6	1	10'-8"	192
	S3	#4	2	9'-1"	24
	S4	#4	3	3'-5"	146
	S5	#4	2	8'-5"	34
	S6	#4	2	9'-11"	13
	S7	#4	2	8'-7"	23
EXTERIOR GDR.	S8	#5	2	8'-8"	
INTERIOR GDR.	S8	#5	2	8'-8"	
EXTERIOR GDR.	S9	#4	STR	7'-0"	
INTERIOR GDR.	S	#4	STR		



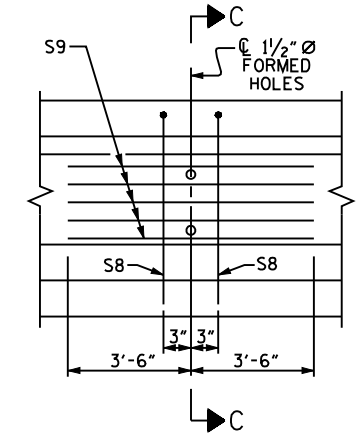
EMBEDDED PLATE "B-1" DETAILS
TWO EMBEDDED PLATES "B-1" ARE REQUIRED FOR EACH GIRDER.



PARTIAL ELEVATION
SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER NOS. ----
(FOR INTERIOR GDRS. WITH SKEW < 70° OR SKEW > 110°)



(SEE PARTIAL ELEVATION FOR ADDITIONAL "S" BARS)



PARTIAL ELEVATION
SHOWING INTERMEDIATE DIAPHRAGM REINFORCING STEEL FOR GIRDER NOS. ----
(FOR ALL EXTERIOR GIRDERS AND INTERIOR GIRDERS WITH 70° ≤ SKEW ≤ 110°)

QUANTITIES FOR ONE GIRDER			
	REINFORCING STEEL	PSI CONCRETE	0.6" Ø L. R. STRANDS
	L.B.	C.Y.	No.
EXTERIOR GIRDER			
INTERIOR GIRDER			

GIRDERS REQUIRED		
NUMBER	LENGTH	TOTAL LENGTH

PROJECT NO. _____
COUNTY _____
STATION: _____

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
STANDARD
AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER

REVISIONS					
NO.	BYs	DATEs	NO.	BYs	DATEs
1			3		
2			4		

ASSEMBLED BY :	DATE :
CHECKED BY :	DATE :
DRAWN BY : JMB 12/87	REV. 7/17/98 RWW/LES
CHECKED BY : ARB 12/87	REV. 8/16/99RR RWW/LES
	REV. 5/1/06R TLA/GM