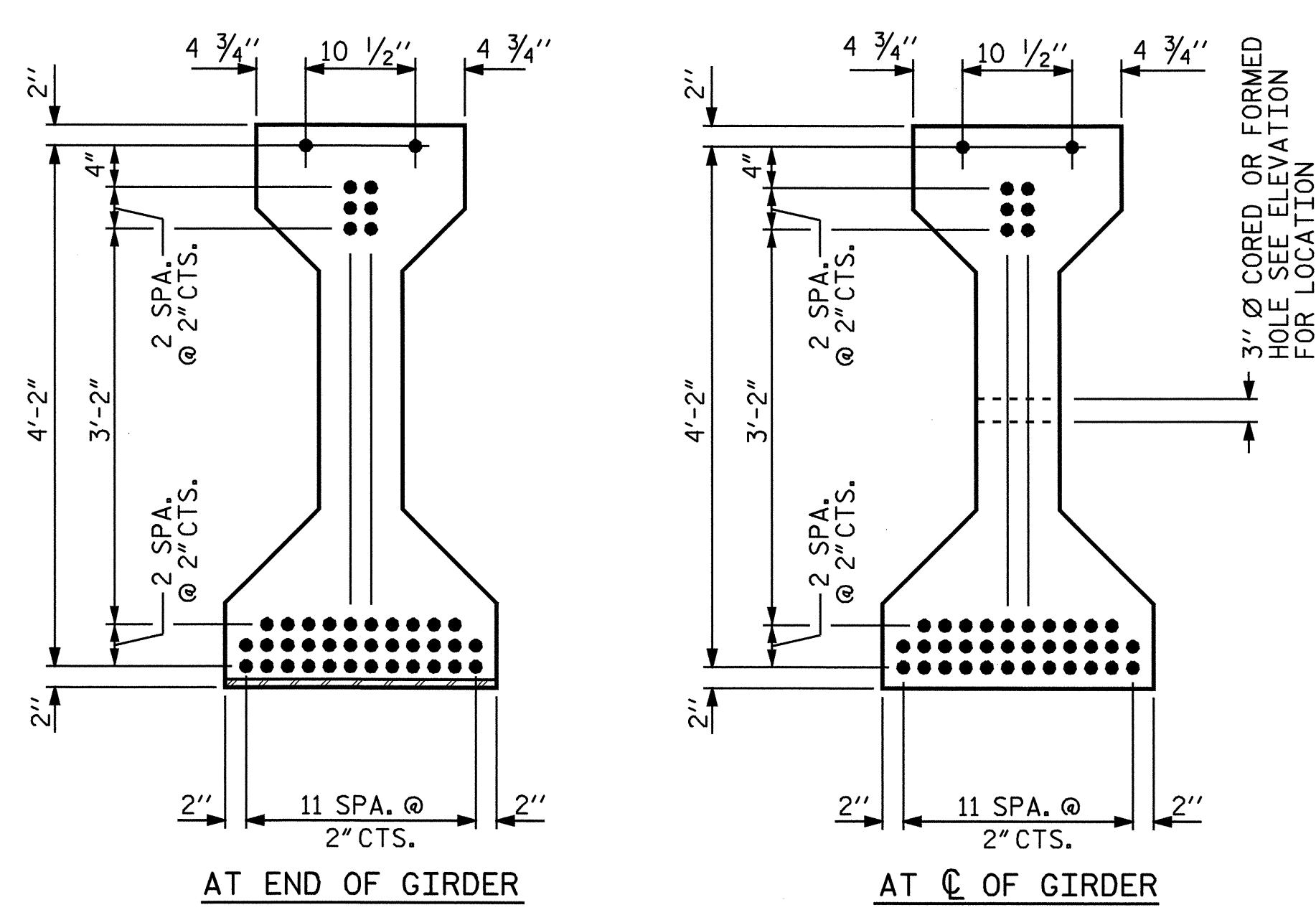
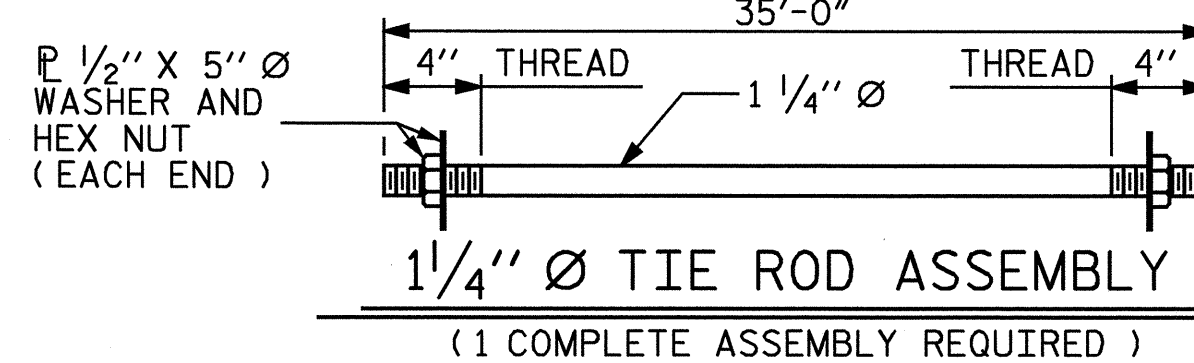


SECTION A-A



1/2" Ø LOW RELAXATION STRAND LAYOUT



1/4" Ø TIE ROD ASSEMBLY

(1 COMPLETE ASSEMBLY REQUIRED)

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.
 TIE ROD ASSEMBLY SHALL BE AASHTO M270 GRADE 36 STRUCTURAL STEEL.
 APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES.
 FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.
 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 5000 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.
 FOR VERTICAL CRACKS IN PRESTRESSED CONCRETE GIRDERS PRIOR TO DETENSIONING, SEE SPECIAL PROVISIONS.
 FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

1/2" Ø L. R. GRADE 270 STRANDS

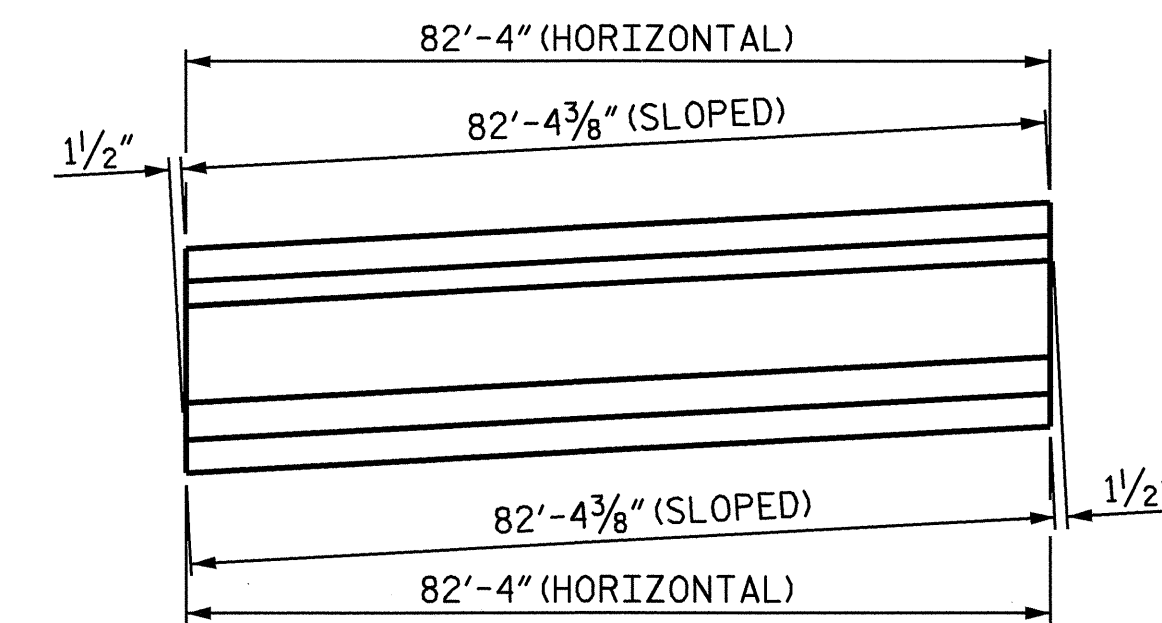
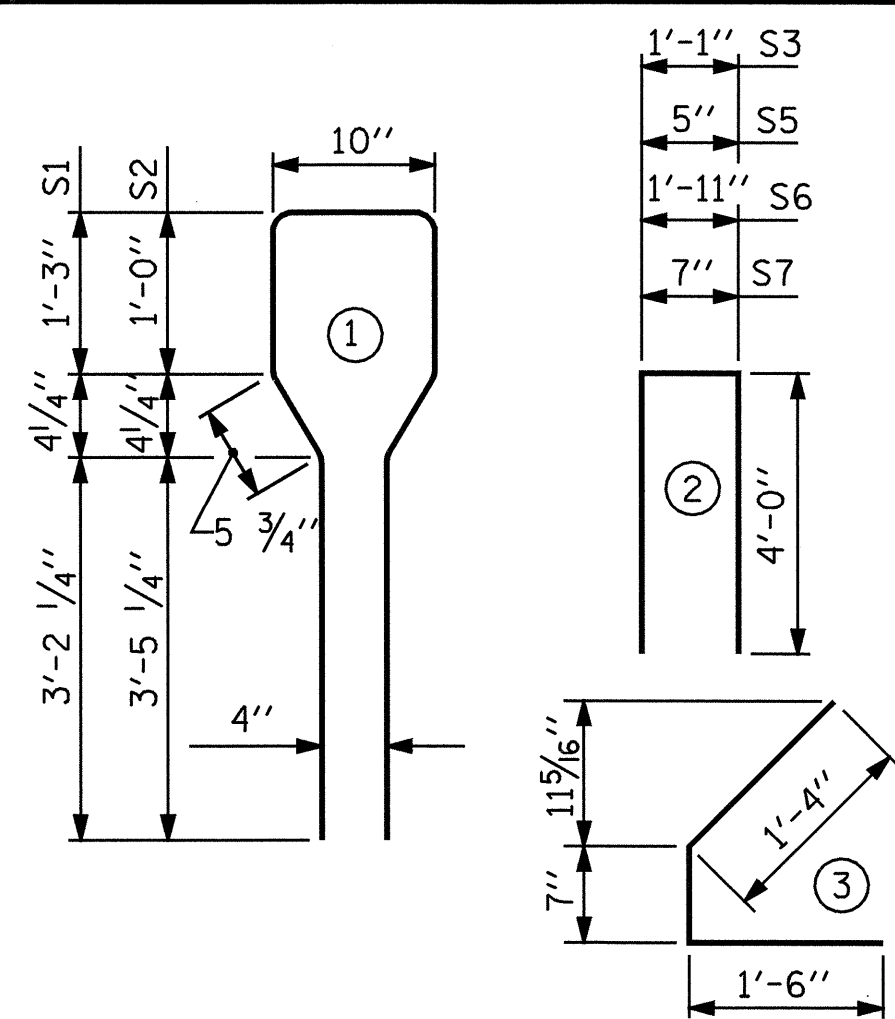
AREA (SQ. INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.153	41,300	30,980

REINFORCING STEEL FOR ONE GIRDER

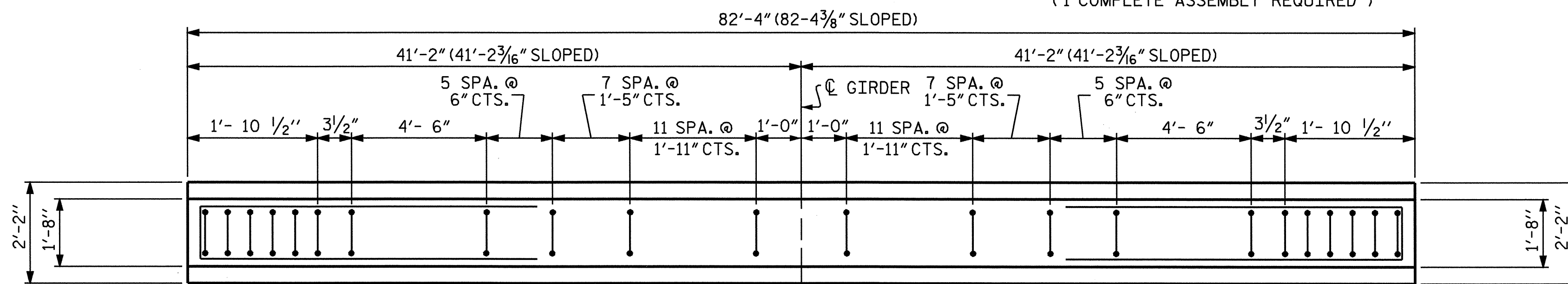
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
S1	66	#4	1	10'-8"	470
S2	12	#6	1	10'-8"	192
S3	4	#4	2	9'-1"	24
S4	64	#4	3	3'-5"	146
S5	6	#4	2	8'-5"	34
S6	2	#4	2	9'-11"	13
S7	4	#4	2	8'-7"	23

BAR TYPES

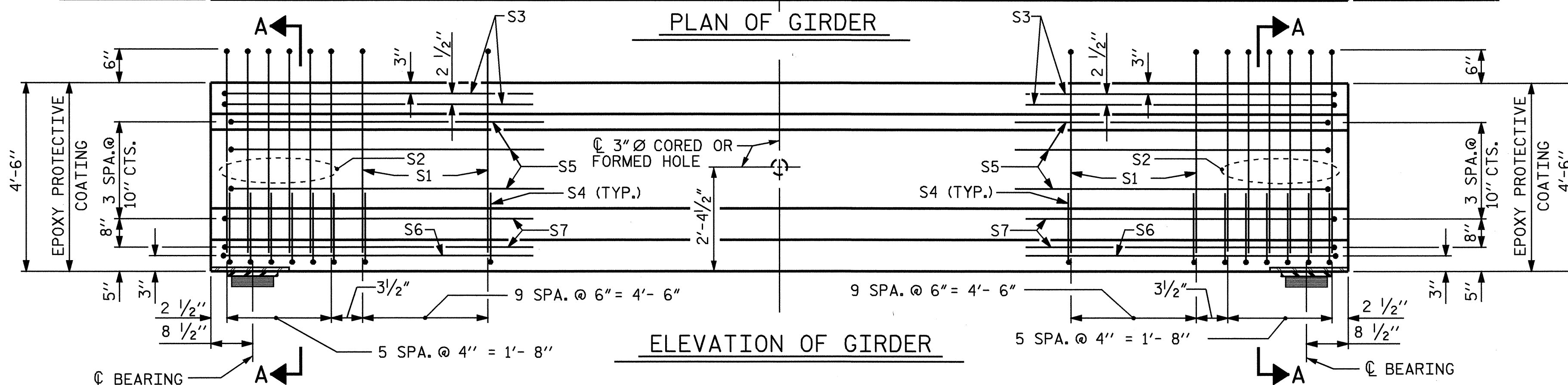
ALL BAR DIMENSIONS ARE OUT-TO-OUT



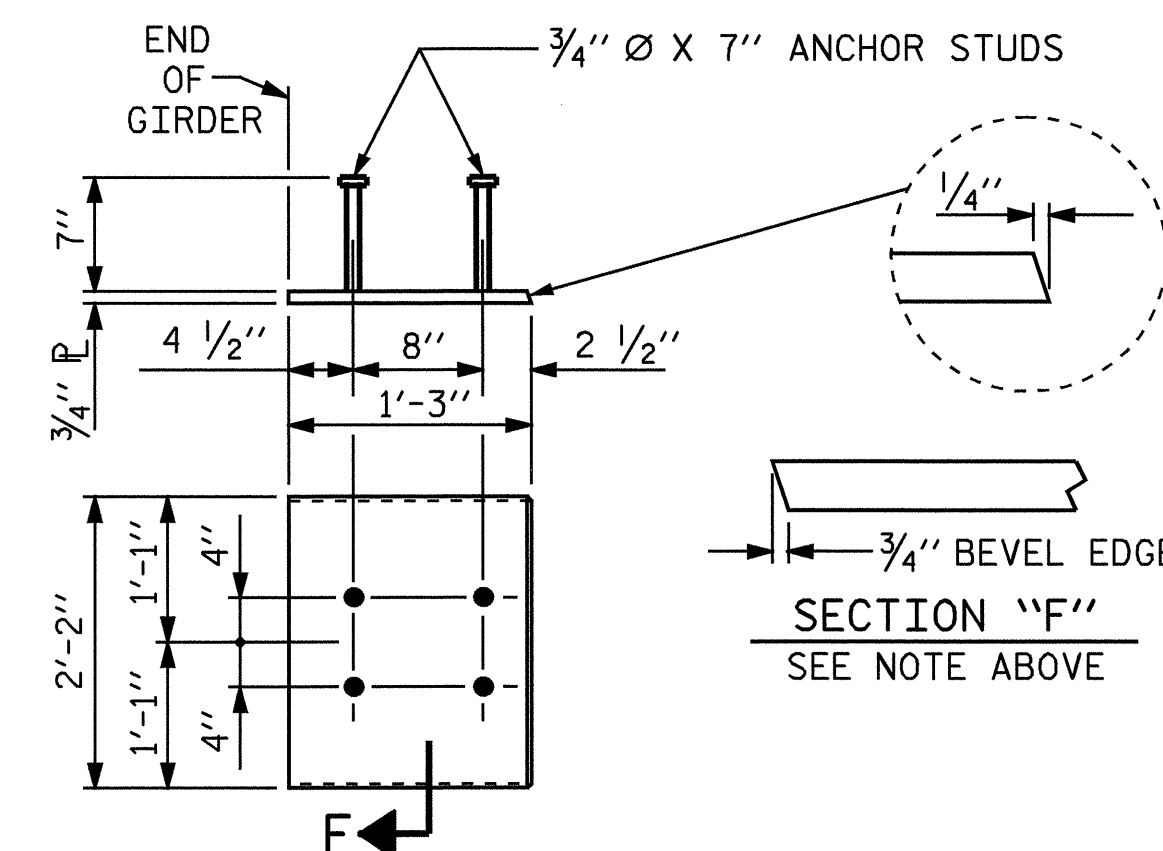
ELEVATION OF GIRDER SHOWING BEVEL



PLAN OF GIRDER



ELEVATION OF GIRDER



EMBEDDED PLATE "B-1" DETAILS

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

QUANTITIES FOR ONE GIRDER

	REINFORCING STEEL LB.	6,500 PSI CONCRETE C.Y.	1/2" Ø L.R. STRANDS No.
	902	16.7	42

GIRDERS REQUIRED

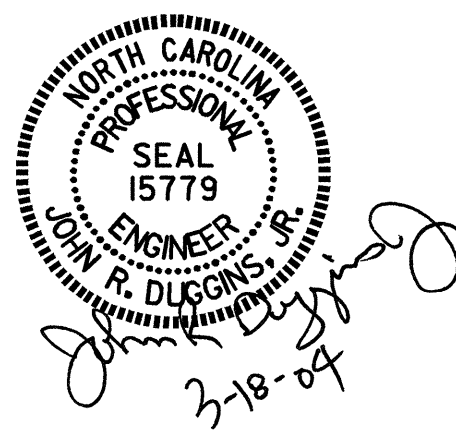
NUMBER	LENGTH	TOTAL LENGTH
5	82'-4"	411'-8"

PROJECT NO. B-3607
 ASHE COUNTY
 STATION: 10+87.50 -L-

DEAD LOAD DEFLECTION TABLE FOR GIRDERS

1/2" Ø LOW RELAXATION TENTH POINTS	SPAN A																						
	GIRDERS 1 THRU 4										GIRDER 5												
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0		
CAMBER (GIRDER ALONE IN PLACE)	↑	0.000	0.056	0.106	0.146	0.171	0.179	0.171	0.146	0.106	0.056	0.000	0.000	0.056	0.106	0.146	0.171	0.179	0.171	0.146	0.106	0.056	0.000
* DEFLECTION DUE TO SUPERIMPOSED D.L.	↓	0.000	0.029	0.054	0.075	0.087	0.092	0.087	0.075	0.054	0.029	0.000	0.000	0.028	0.053	0.072	0.085	0.092	0.085	0.072	0.053	0.028	0.000
FINAL CAMBER	↑	0	5/16"	5/8"	7/8"	1"	1 1/16"	1"	7/8"	5/8"	5/16"	0	0	5/16"	5/8"	7/8"	1 1/16"	1 1/16"	1 1/16"	7/8"	5/8"	5/16"	0

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



ASSEMBLED BY : D. HODGE DATE : 10/03
 CHECKED BY : J. LAMBERT DATE : 11/03
 DRAWN BY : JMB 12/87 REV. 2/6/97 EEM/RGW
 CHECKED BY : ARB 12/87 REV. 7/17/98 RWW/LES
 REV. 8/16/99 RWW/LES

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD
 AASHTO TYPE IV
 PRESTRESSED CONCRETE GIRDER

FEB. 1988

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

TOTAL SHEETS 32