

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 STANDARD SPECIFICATIONS.

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 7500 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 EMBEDDED CLIPS FOR PRESTRESSED CONCRETE GIRDERS, SEE SPECIAL PROVISIONS.

0.6" Ø L. R. GRADE 270 STRANDS

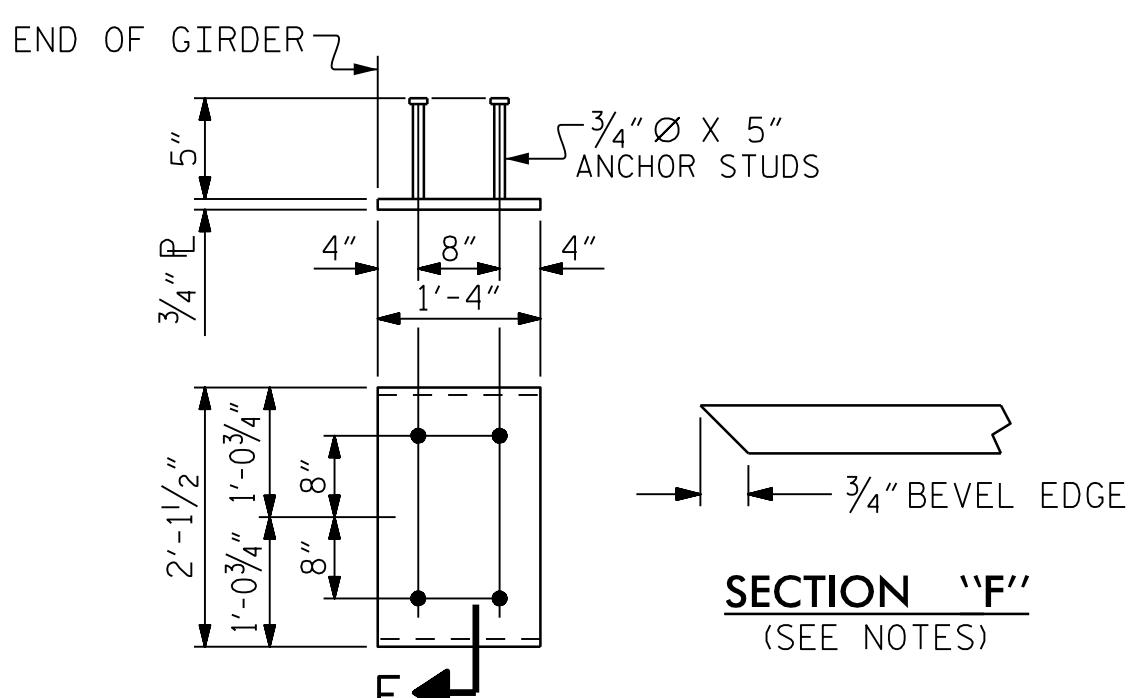
AREA (SQ. INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950

REINFORCING STEEL FOR ONE GIRDER

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
GDR. B1	S1	#6	1	10'-8"	734
GDRS. B2 & B3	S1	#5	1	10'-8"	723
GDRS. B4 & B5	S1	#4	1	10'-8"	712
GDR. B6	S1	#5	1	10'-8"	701
	S2	#6	1	11'-0"	133
	S3	#4	2	9'-1"	24
	S4	#4	3	3'-5"	164
	S5	#4	2	8'-5"	34
	S6	#4	2	9'-11"	13
	S7	#4	2	8'-7"	23
GDRS. B1 & B6	S8	#5	2	8'-8"	18
GDRS. B2 - B5	S8	#5	2	8'-8"	36
GDRS. B1 & B6	S9	#5	STR.	7'-0"	73
GDRS. B2 - B5	S10	#5	STR.	15'-2"	159
	S11	#6	STR.	3'-9"	90

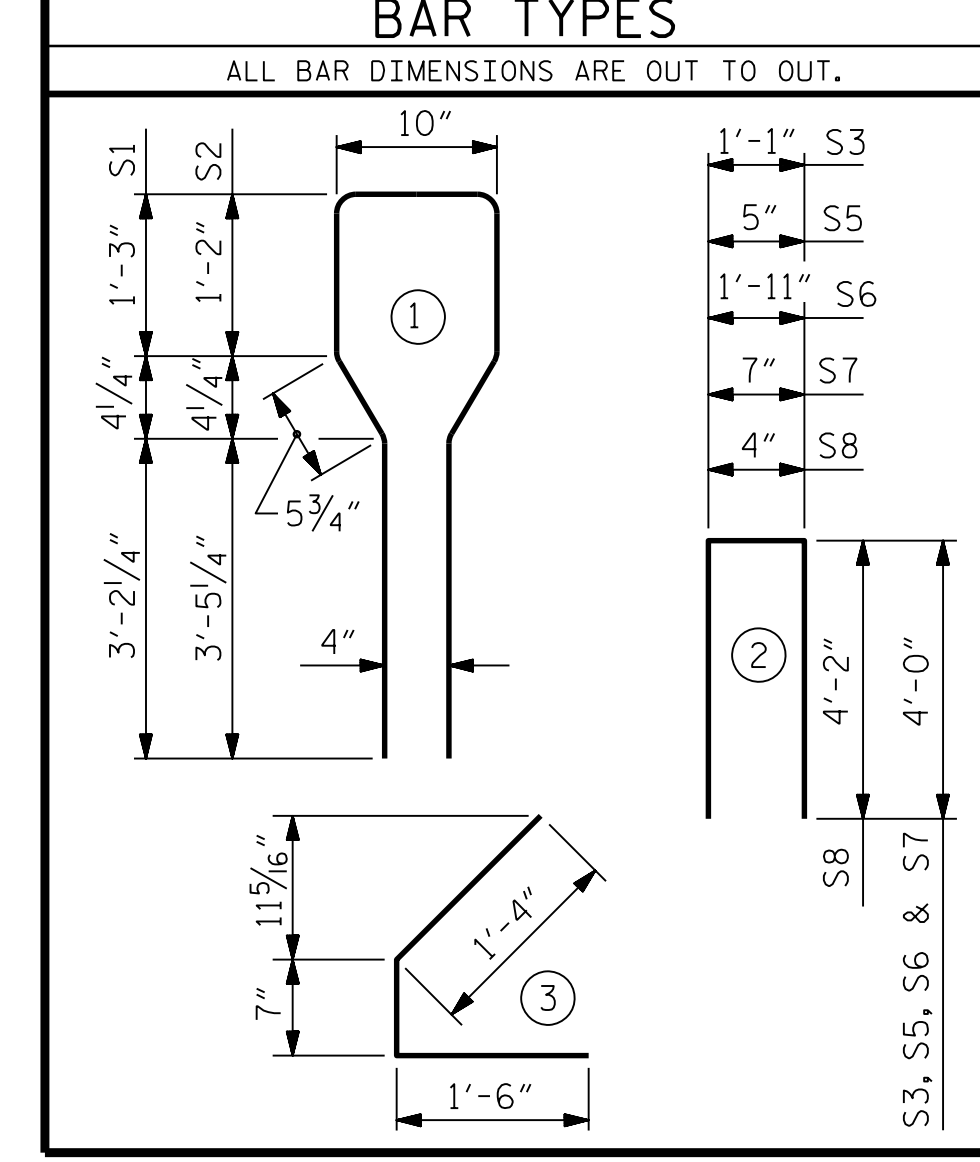
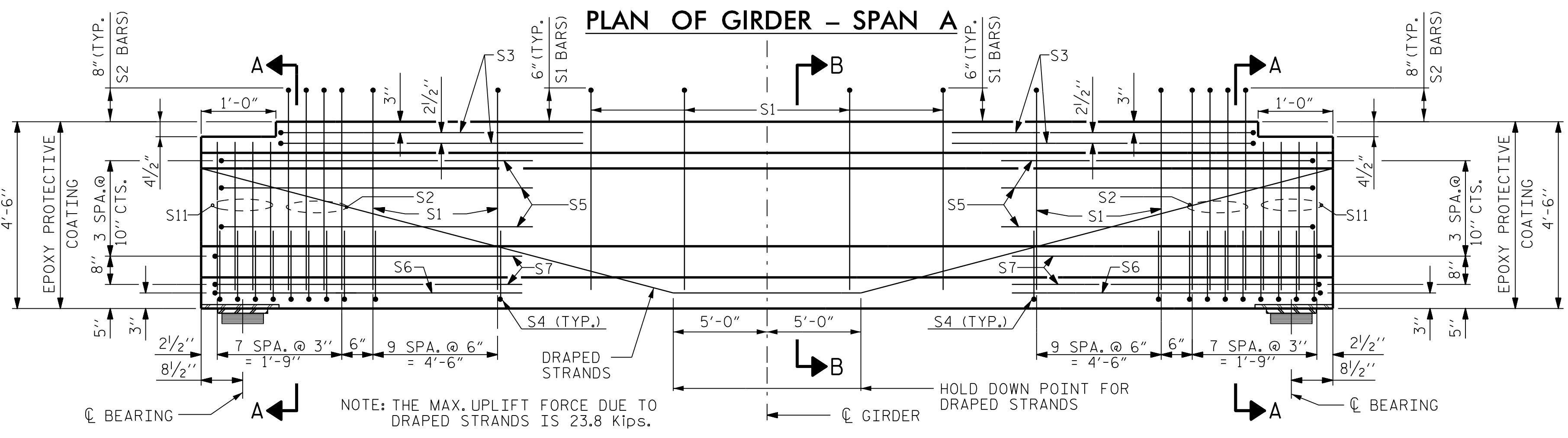
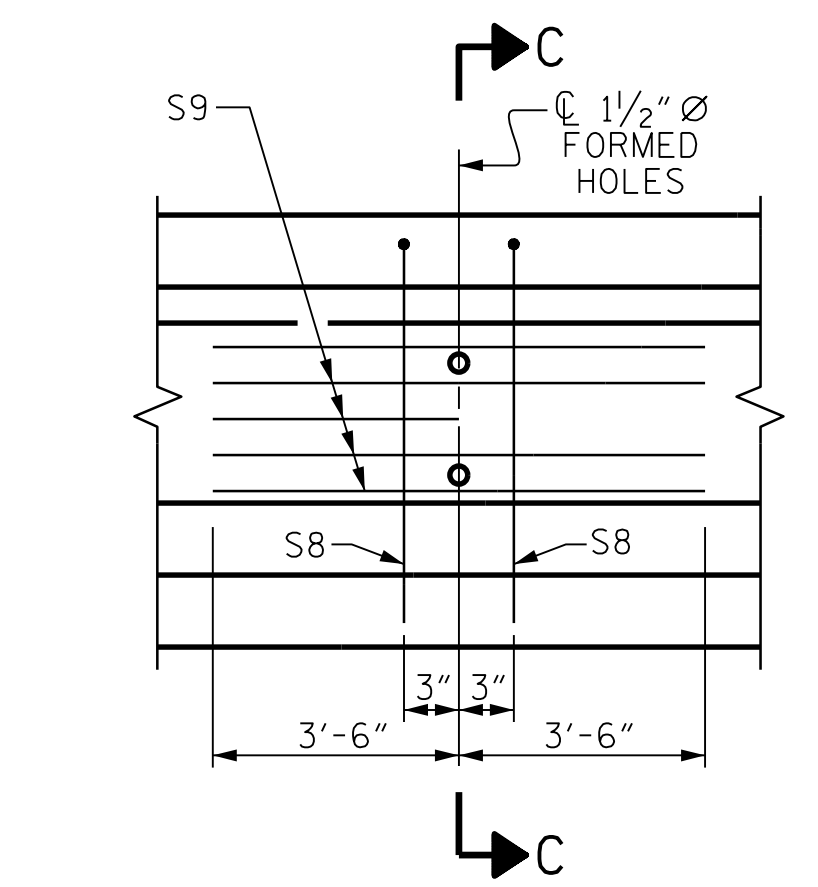
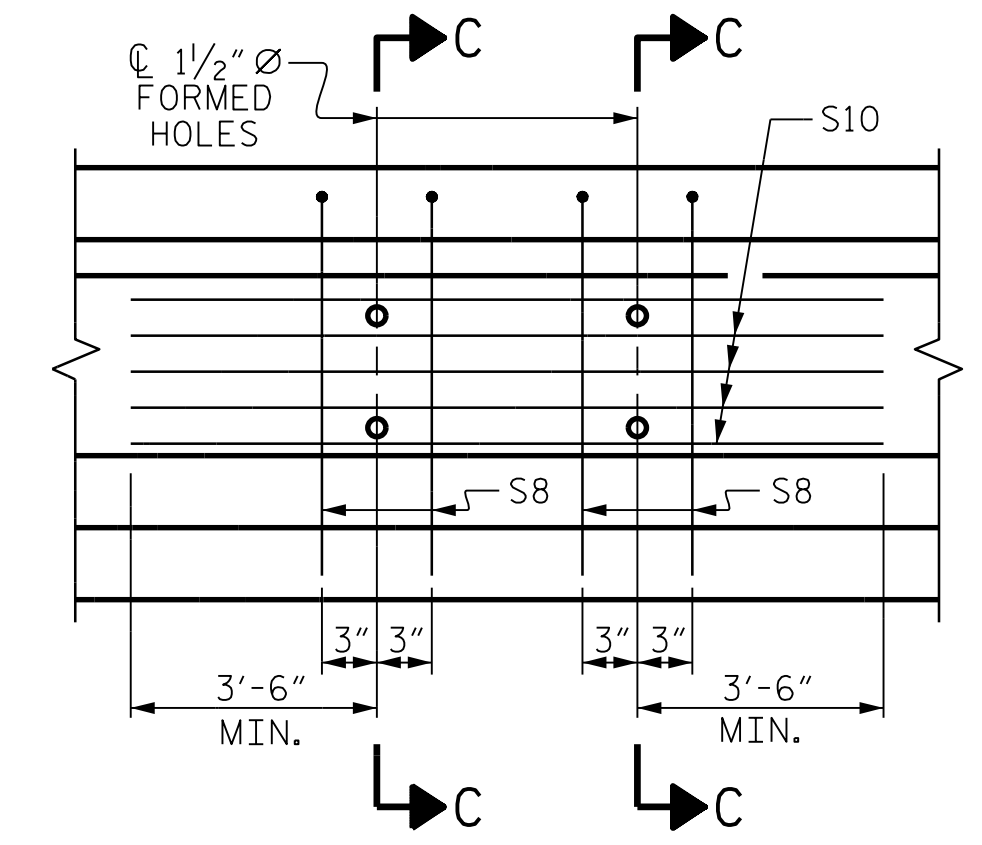
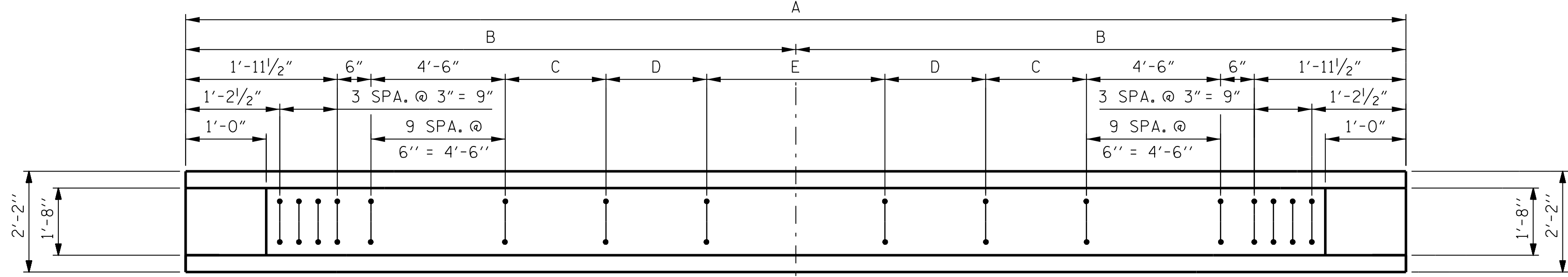
36 - 0.6" Ø LOW RELAXATION STRAND LAYOUT

GIRDER	A	B	C	D	E	REINFORCING STEEL (LBS.)	7500 PSI CONCRETE (C.Y.)
B1	102'-4 3/16"	51'-2 1/4"	2 SPA. @ 1'-0"	1'-2 3/4"	41 SPA. @ 2'-0"	1324	20.7
B2	101'-2 1/16"	50'-7 1/16"	2 SPA. @ 1'-0"	1'-7 9/16"	40 SPA. @ 2'-0"	1435	20.5
B3	100'-0 5/8"	50'-0 3/8"	2 SPA. @ 1'-0"	1'-0 3/4"	40 SPA. @ 2'-0"	1435	20.3
B4	99'-0 1/8"	49'-6"	2 SPA. @ 1'-0"	1'-6 9/16"	39 SPA. @ 2'-0"	1424	20.0
B5	98'-0 3/8"	49'-0 1/4"	2 SPA. @ 1'-0"	1'-0 3/4"	39 SPA. @ 2'-0"	1424	19.9
B6	97'-1 1/16"	48'-6 3/4"	2 SPA. @ 1'-0"	1'-7 1/4"	38 SPA. @ 2'-0"	1291	19.7
TOTAL	= 597'-9 1/4"					TOTAL = 8,333	TOTAL = 121.1



EMBEDDED PLATE "B-1" DETAILS

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



PROJECT NO. **I-4729A**
POLK COUNTY
STATION: **21+44.22 -RP F-**

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

**AASHTO TYPE IV
PRESTRESSED CONCRETE GIRDER
SPAN B**

REVISIONS						SHEET No.
No.	BY:	DATE:	No.	BY:	DATE:	S2-13
1			3			TOTAL SHEETS
2			4			31

DRAWN BY: T. DETMERS DATE: 7-17
CHECKED BY: D. DELK DATE: 7-17
DESIGN ENGINEER: S. PHAN DATE: 7-17

PLANS PREPARED BY:
PARSONS
5540 CenterView Drive, Suite 217
Raleigh, NC 27606-3386
NC LICENSE No. F-0246

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED