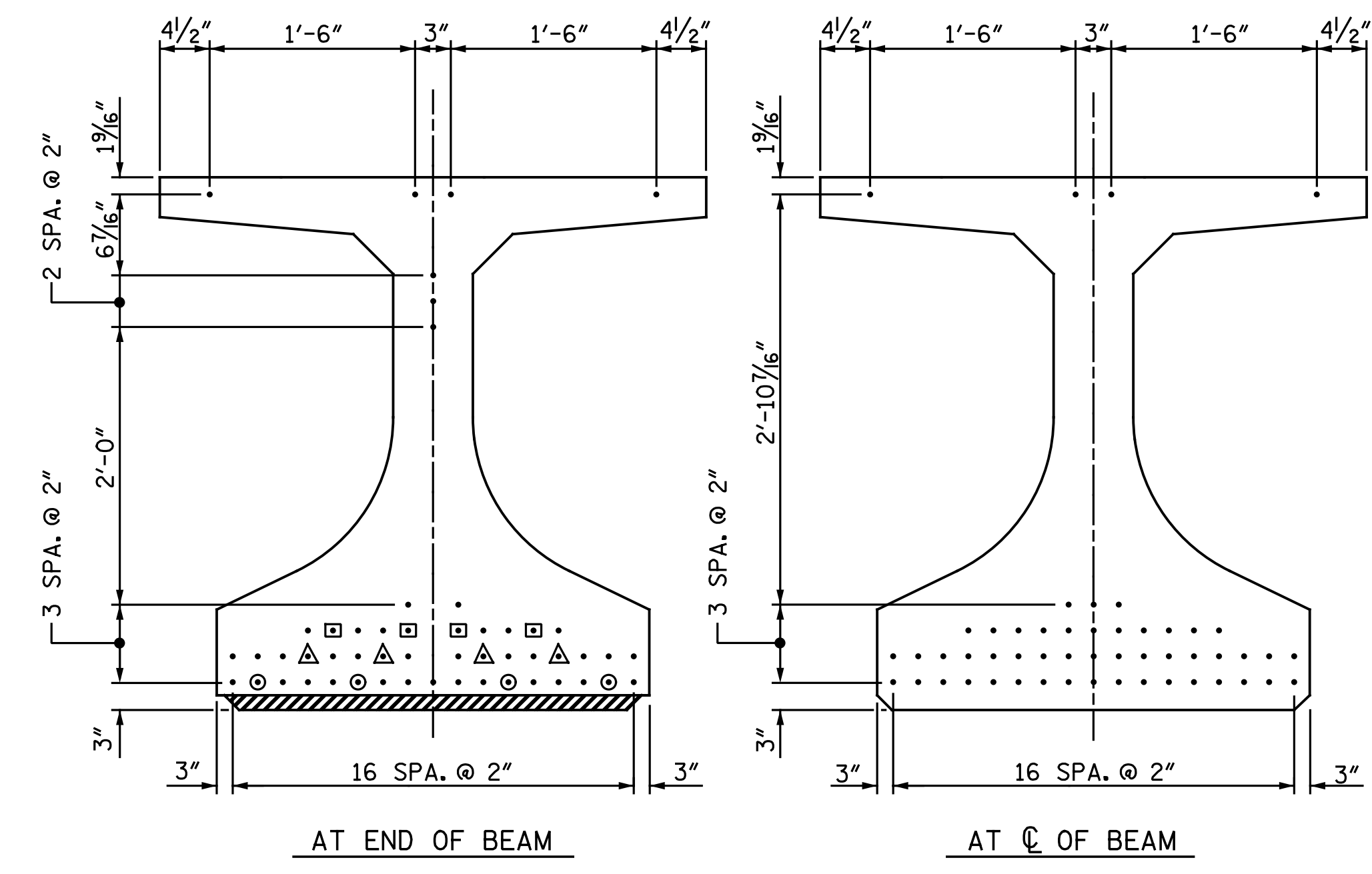


1/2" Ø FORMED HOLE. SEE "BEAM LAYOUT" SHEET FOR LOCATION. FOR DIM. "A" & "B" SEE "INTERMEDIATE STEEL DIAPHRAGMS FOR 45" FLORIDA I-BEAMS" SHEET.

- DEBONDING LEGEND**
- FULLY BONDED STRANDS
 - STRANDS DEBONDED FOR 8'-0" FROM END OF BEAM
 - STRANDS DEBONDED FOR 10'-0" FROM END OF BEAM
 - STRANDS DEBONDED FOR 12'-0" FROM END OF BEAM

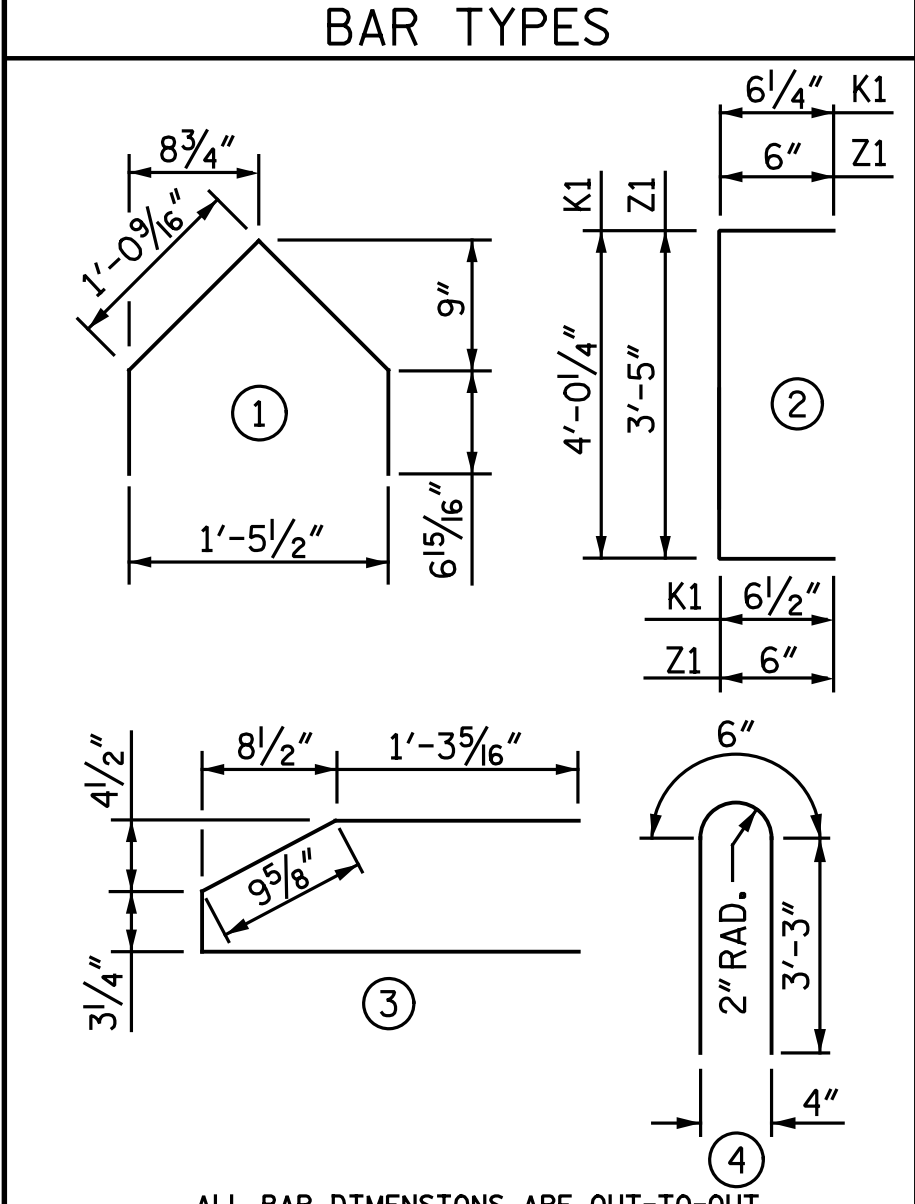


0.6" Ø LOW RELAXATION STRAND LAYOUT

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 *

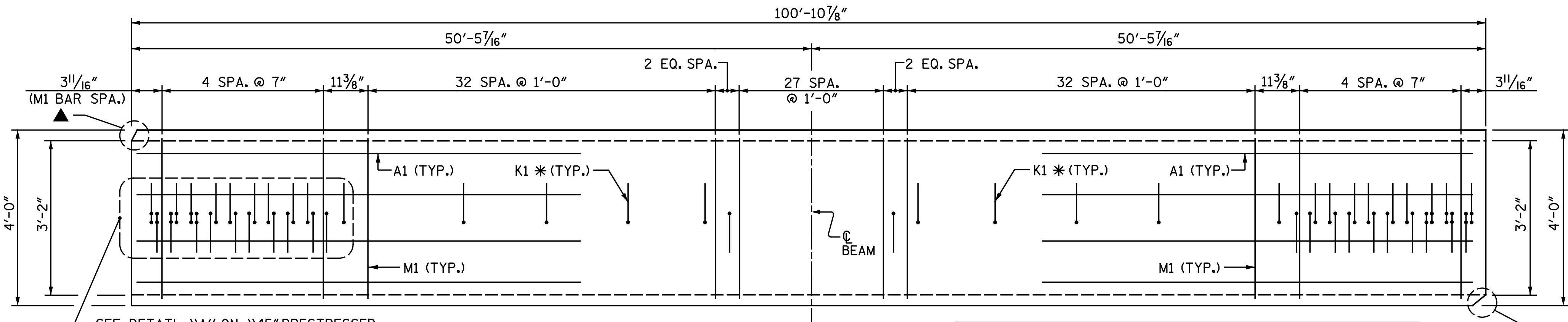
REINFORCING STEEL FOR ONE BEAM					
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
A1	8	#5	STR.	19'-0"	159
C1	34	#3	1	3'-3"	42
D1	210	#3	3	4'-4"	342
K1	153	#5	2	5'-1"	811
M1	106	#4	STR.	3'-8"	260
S11	4	#5	4	7'-0"	29
S12	5	#4	STR.	8'-0"	27
Y1	12	#5	STR.	3'-3"	41
Z1	18	#5	2	4'-5"	83

* NOTE: THE (4) STRANDS ALONG THE TOP FLANGE TO BE STRESSED TO 10,000 LBS. EACH.

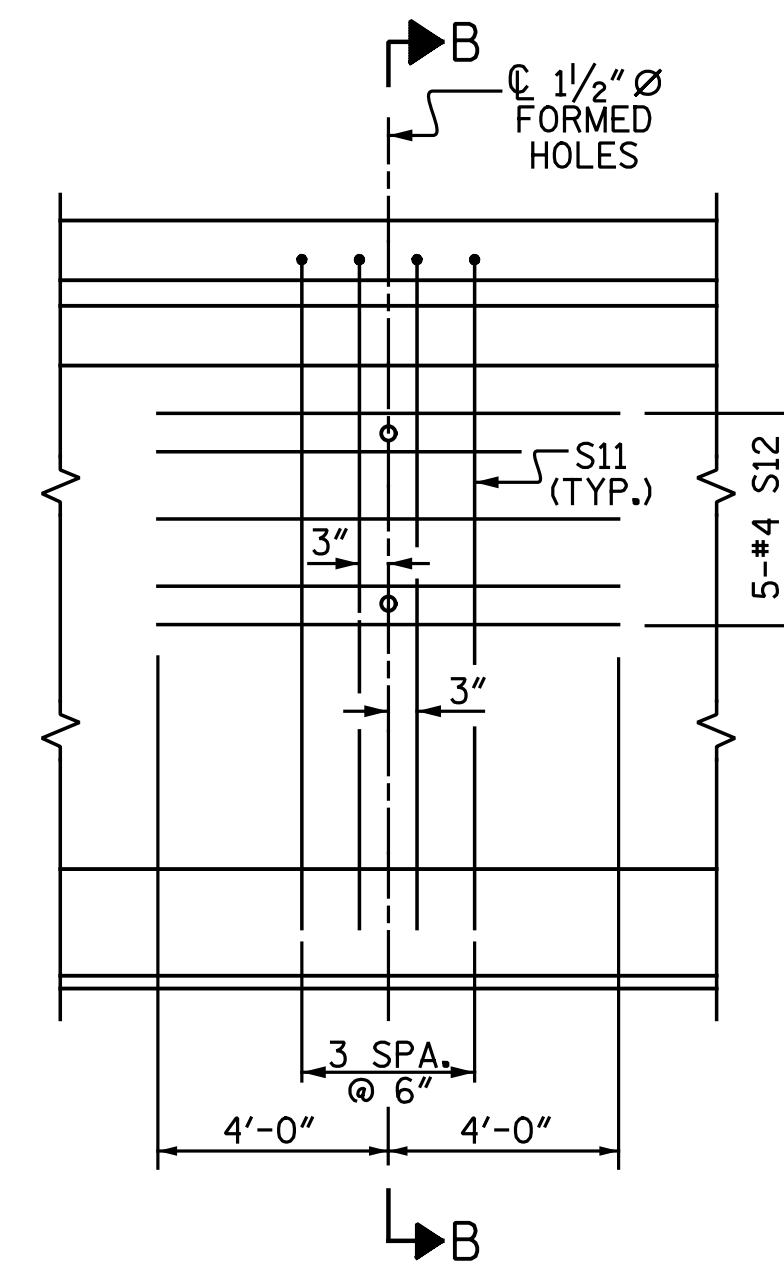


QUANTITIES FOR ONE BEAM			
	REINFORCING STEEL	7,500 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	No.
EXT. & INT. BEAM	1,794	22.6	52

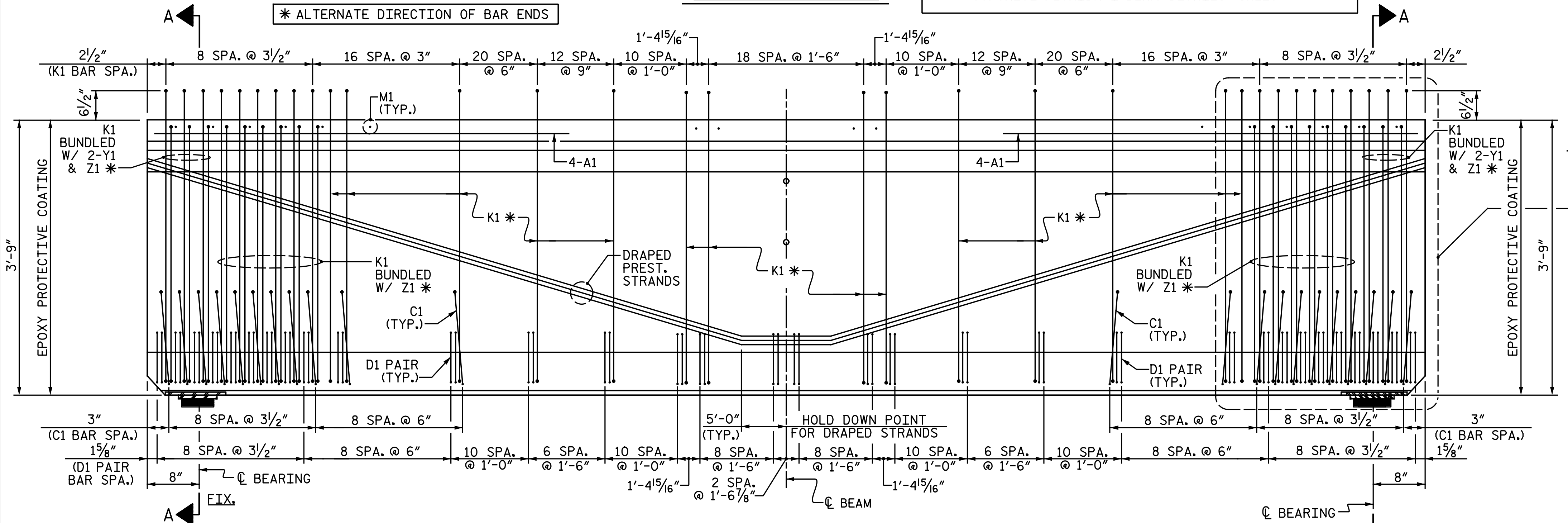
BEAMS REQUIRED		
NUMBER	LENGTH	TOTAL LENGTH
16	100.91'	1,614.50'



PLAN OF BEAM



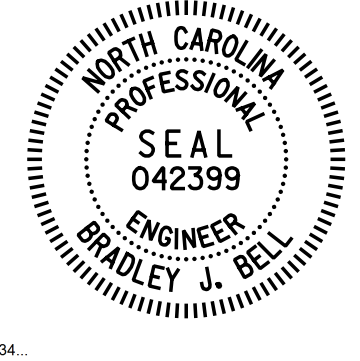
PARTIAL ELEVATION



ELEVATION OF BEAM

SEE DETAIL "B" ON "45" PRESTRESSED CONCRETE FLORIDA I-BEAM DETAILS" SHEET

PROJECT NO. I-5878
HARNETT COUNTY
STATION: 1002+79.68 -LREV-



Designed by: [Signature]
4/22/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Michael Baker International
Michael Baker Engineering
8000 Regency Parkway, Suite 600
Cary, North Carolina 27518
NC License No.: F-1084

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
45" PRESTRESSED CONCRETE FLORIDA I-BEAM

REVISIONS						SHEET NO. S2-II
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 34
2			4			

DRAWN BY: N. B. SPEAKS DATE: 4-22-19
CHECKED BY: B. J. BELL DATE: 9-18-19