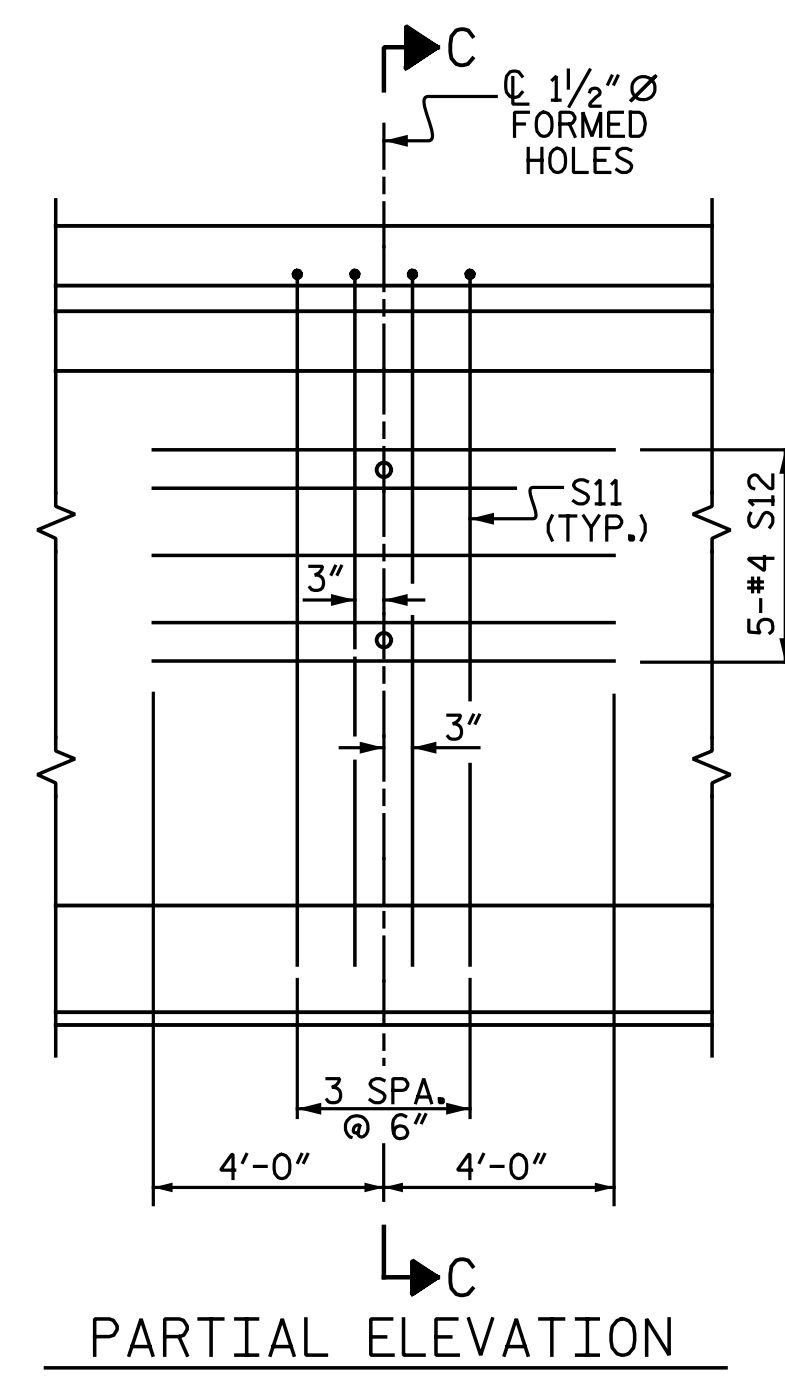


- DEBONDING LEGEND
- FULLY BONDED STRANDS
  - STRANDS DEBONDED FOR 8'-0" FROM END OF BEAM
  - ◇ STRANDS DEBONDED FOR 10'-0" FROM END OF BEAM
  - ◐ STRANDS DEBONDED FOR 12'-0" FROM END OF BEAM

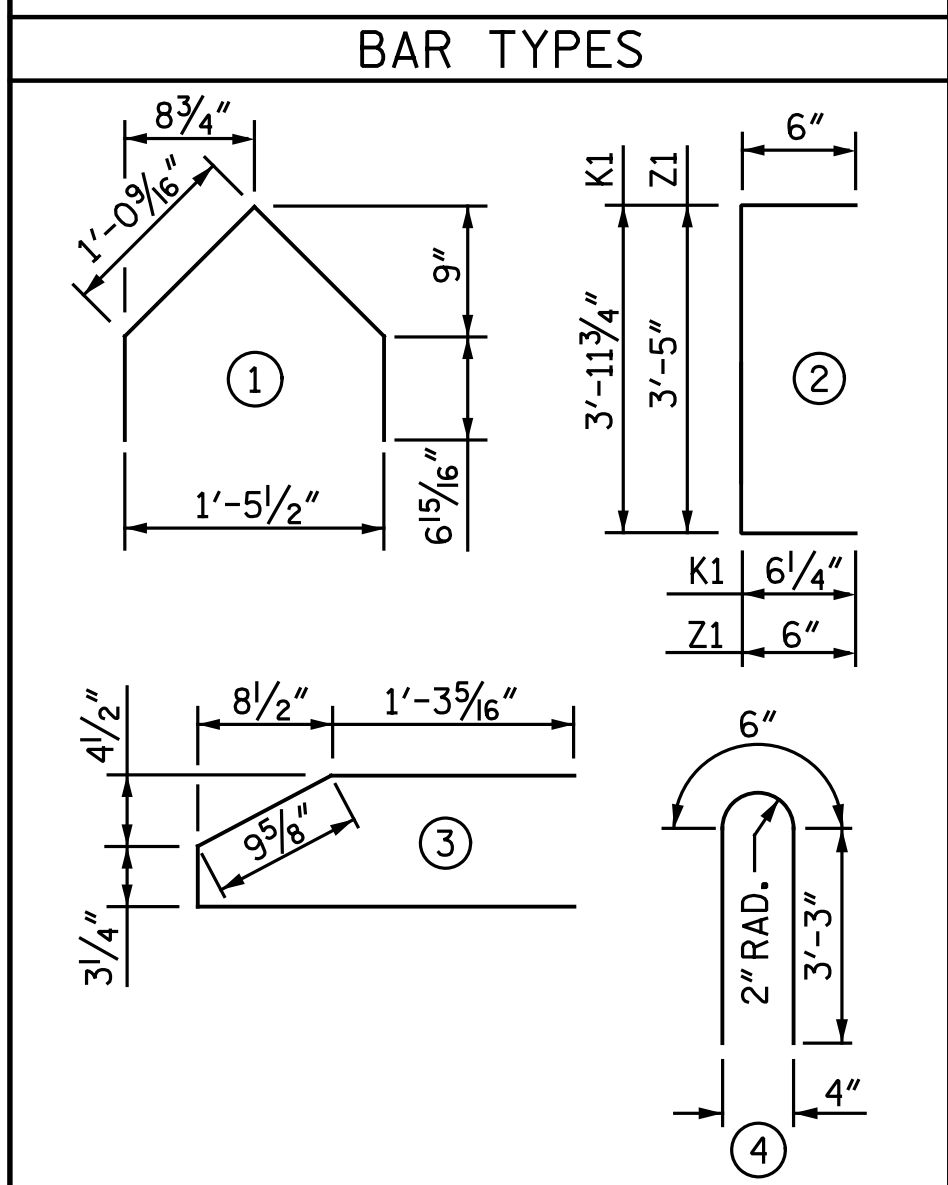


0.6" Ø L. R. GRADE 270 STRANDS		
AREA (SQUARE INCHES)	ULTIMATE STRENGTH (LBS. PER STRAND)	APPLIED PRESTRESS (LBS. PER STRAND)
0.217	58,600	43,950 *

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'-0"	798
M1	113	#4	STR.	3'-8"	277
** S7	20	#5	STR.	3'-8"	76
S10	2	#3	STR.	2'-10"	2
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.

\*\* NOTE: S7 BARS SHALL BE BENT BEFORE SHIPMENT. HEAT BENDING SHALL NOT BE ALLOWED.



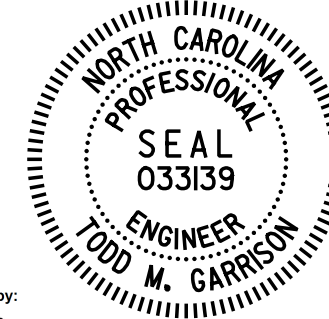
ALL BAR DIMENSIONS ARE OUT-TO-OUT

QUANTITIES FOR ONE BEAM			
	REINFORCING STEEL	7,500 PSI CONCRETE	0.6" Ø L.R. STRANDS
	LB.	C.Y.	No.
EXT. & INT. BEAM	1,876	22.6	52

BEAMS REQUIRED		
NUMBER	LENGTH	TOTAL LENGTH
16	100'-11"	1614.67'

PROJECT NO. I-5986B  
JOHNSTON COUNTY  
STATION: 1260+34.00 -L-

SHEET 4 OF 4



DocuSigned by:  
Todd M. Garrison  
4/21/2020

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

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

REVISIONS						SHEET NO. SI-26
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			57

DRAWN BY: N. B. SPEAKS DATE: 6-10-19  
CHECKED BY: J. M. GARRISON DATE: 6-17-19