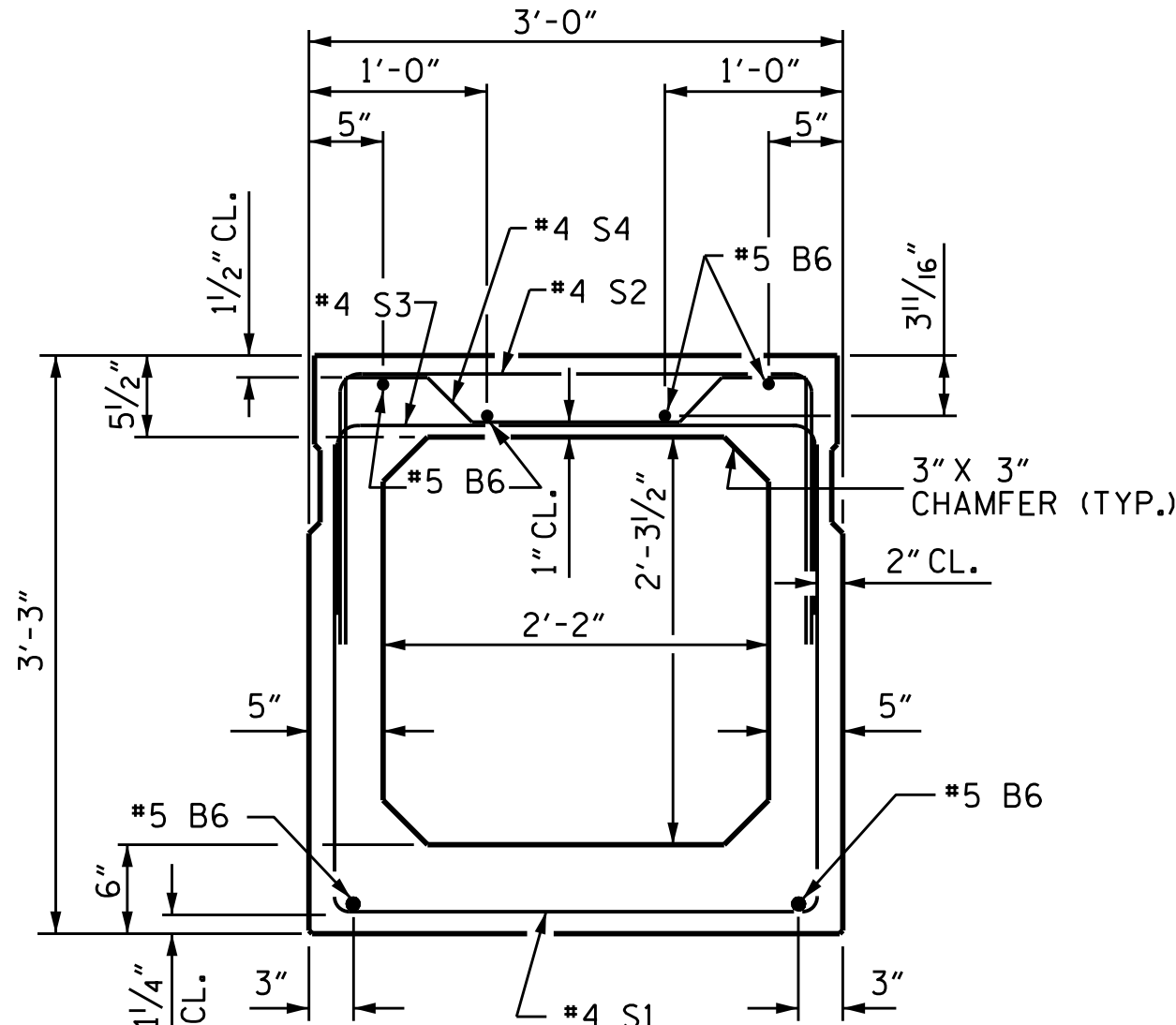


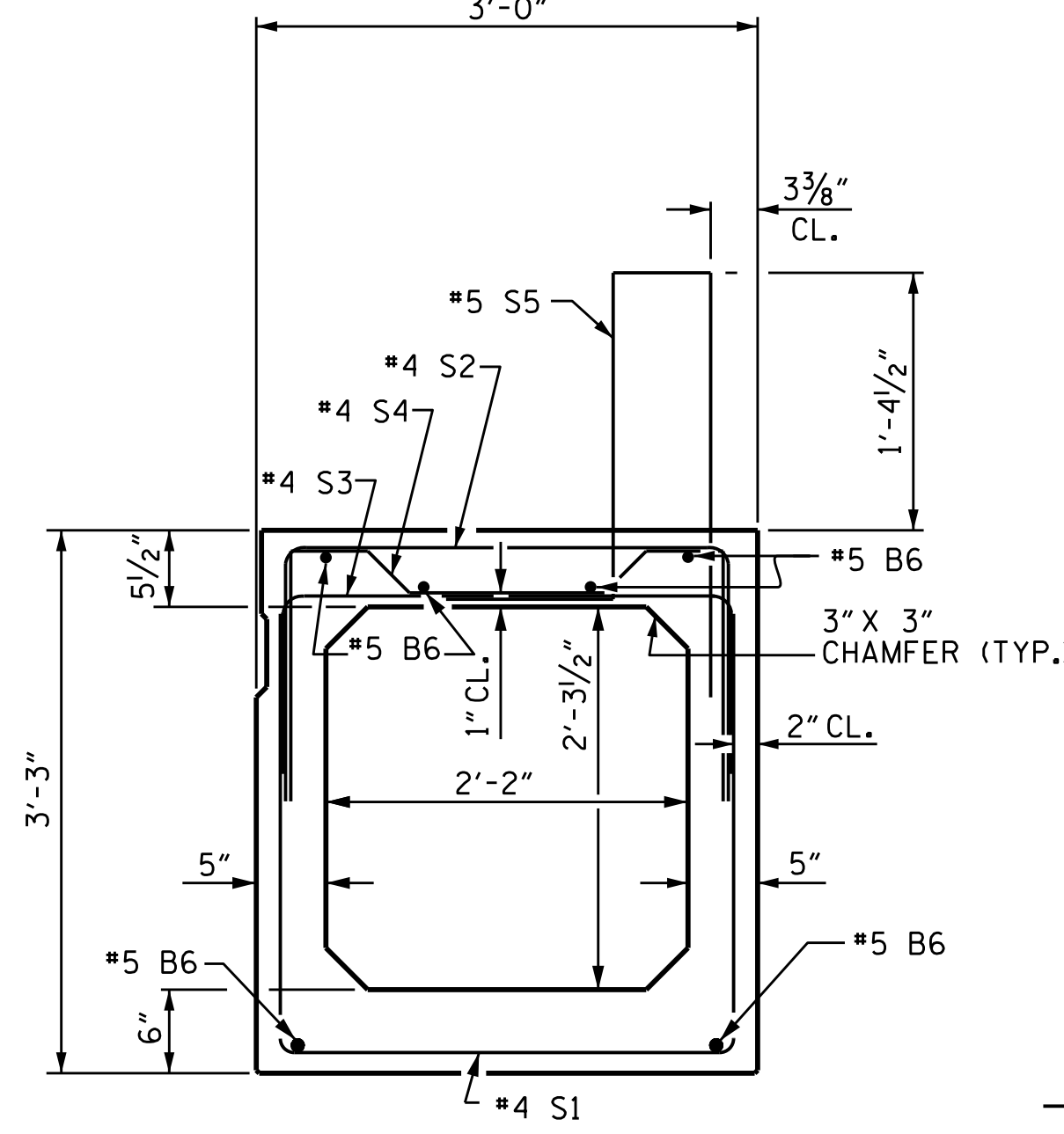
**END ELEVATION**

SHOWING PLACEMENT OF #5 & #4 "A" BARS AND LOCATION OF DOWEL HOLES. (INTERIOR BOX BEAM SECTION SHOWN-EXTERIOR SECTION SIMILAR EXCEPT SHEAR KEY LOCATION. STRAND LAYOUT NOT SHOWN.)



**INTERIOR BOX BEAM SECTION**

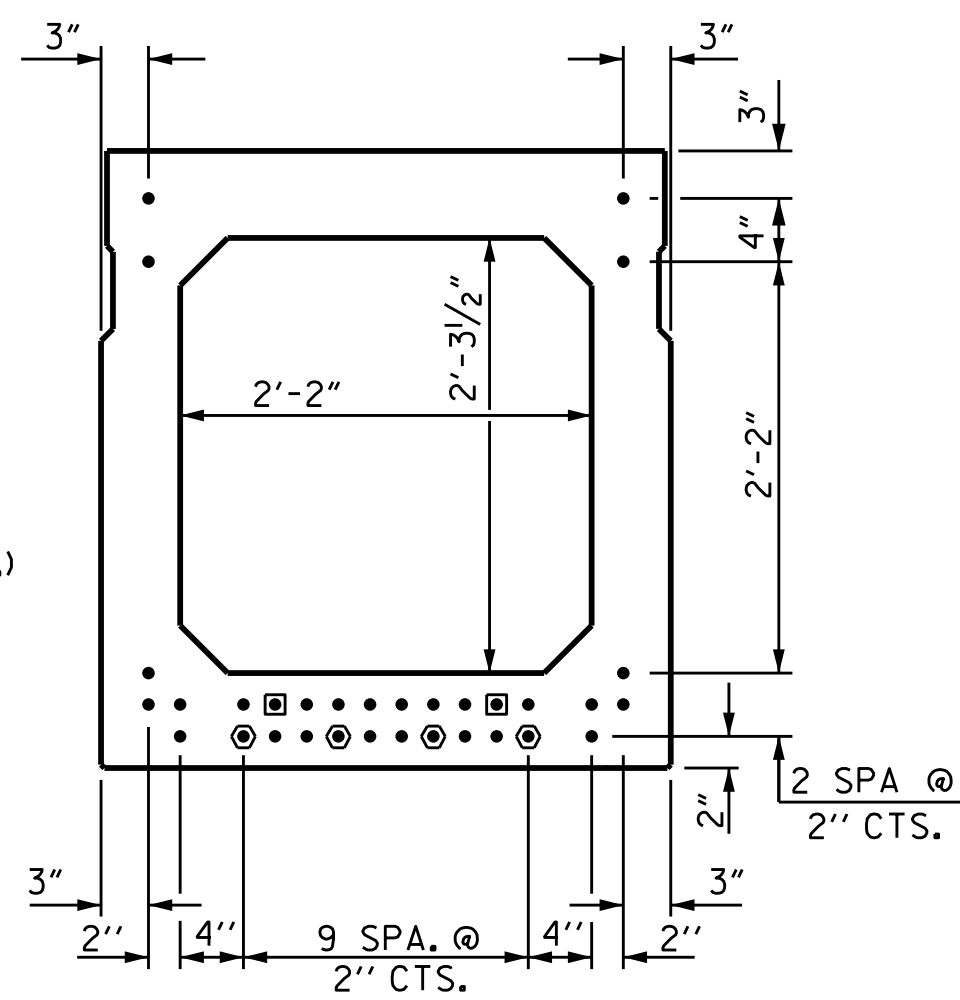
(STRAND LAYOUT NOT SHOWN)



**EXTERIOR BOX BEAM SECTION**

(STRAND LAYOUT NOT SHOWN)

**0.6" Ø LOW RELAXATION STRAND LAYOUT**



**TYPICAL STRAND LOCATION**

(32 STRANDS REQUIRED)

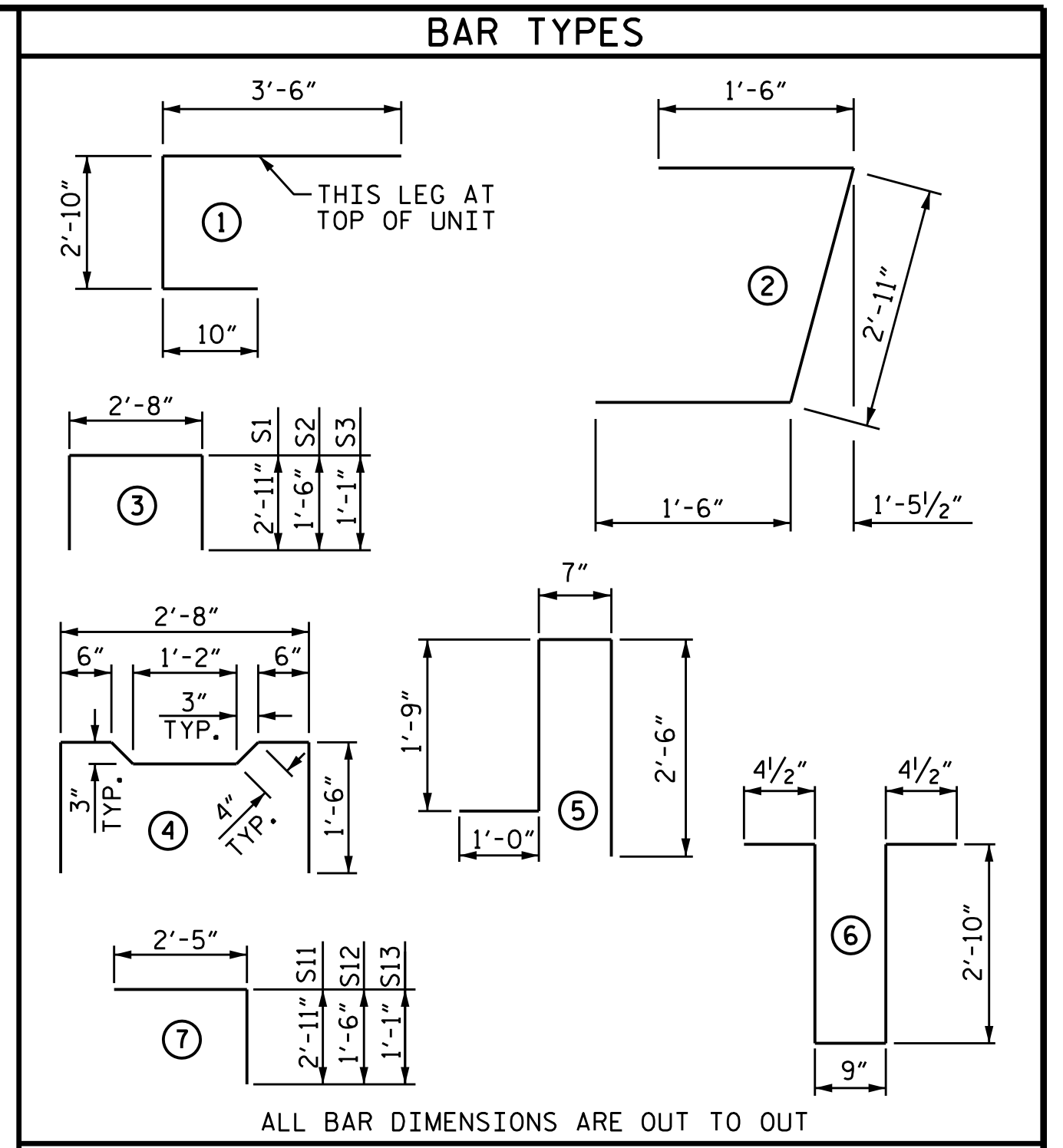
**DEBONDING LEGEND**

- FULLY BONDED STRANDS
- ◐ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- ◑ STRANDS DEBONDED FOR 12'-0" FROM END OF GIRDER

BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE STANDARD SPECIFICATIONS ARTICLE 1078-7.

**GRADE 270 STRANDS**

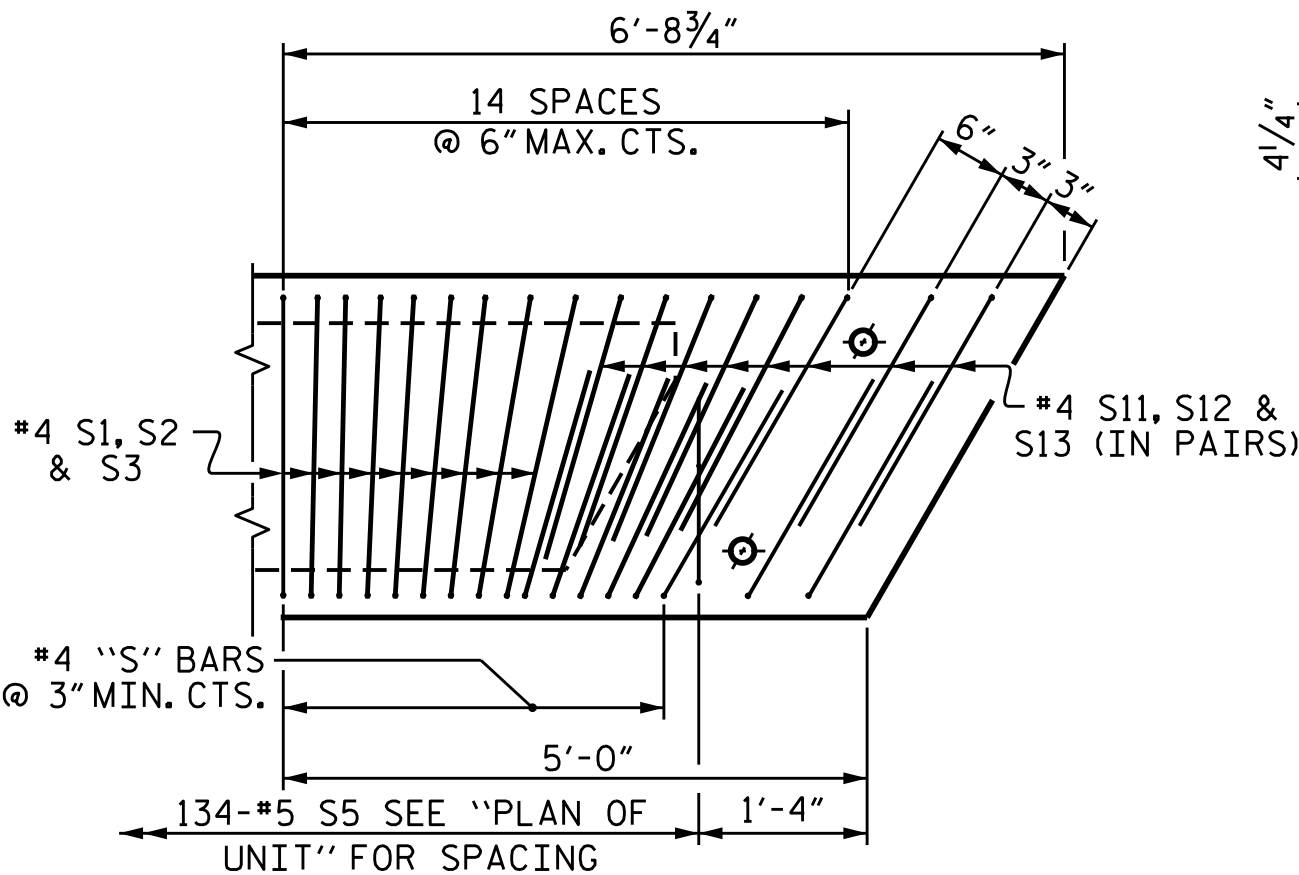
0.6" Ø L.R.	
AREA (SQUARE INCHES)	0.217
ULTIMATE STRENGTH (LBS. PER STRAND)	58,600
APPLIED PRESTRESS (LBS. PER STRAND)	43,950



ALL BAR DIMENSIONS ARE OUT TO OUT

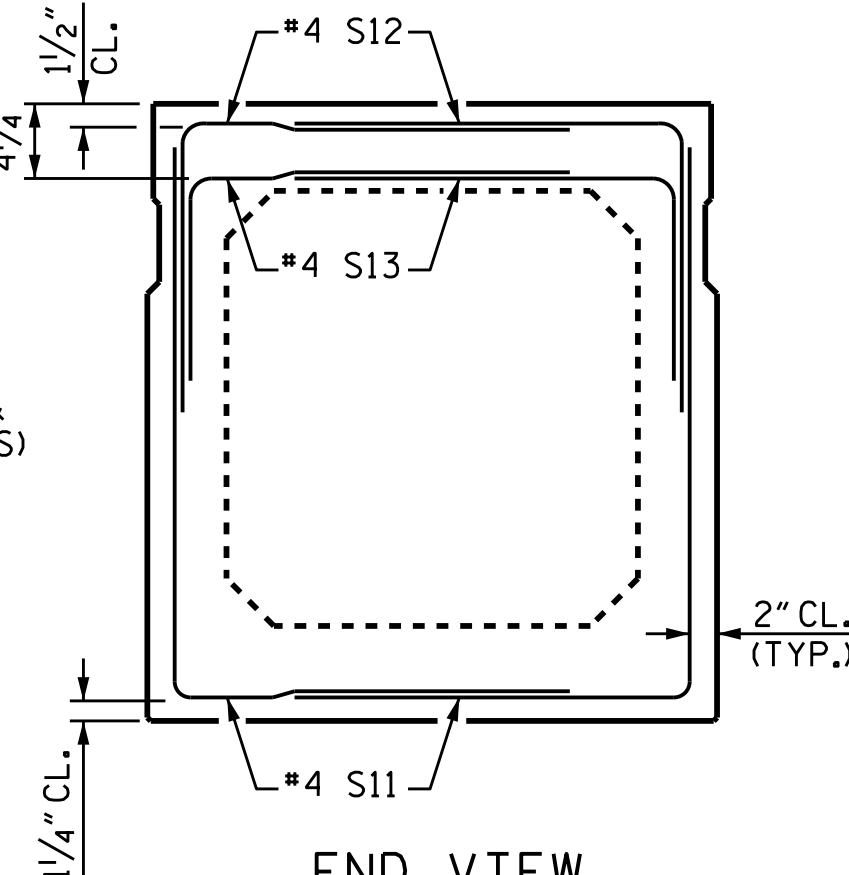
**BILL OF MATERIAL FOR ONE BOX BEAM SECTION**

BAR	NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
				LENGTH	WEIGHT	LENGTH	WEIGHT
A1	10	#5	1	7'-2"	75	7'-2"	75
A2	44	#4	2	5'-11"	174	5'-11"	174
B6	12	#5	STR	50'-11"	637	50'-11"	637
K1	15	#4	6	7'-2"	72	7'-2"	72
K2	10	#4	STR	2'-10"	19	2'-10"	19
S1	77	#4	3	8'-6"	437	8'-6"	437
S2	77	#4	3	5'-8"	291	5'-8"	291
S3	135	#4	3	4'-10"	436	4'-10"	436
S4	58	#4	4	5'-10"	226	5'-10"	226
S11	32	#4	7	5'-4"	114	5'-4"	114
S12	32	#4	7	3'-11"	84	3'-11"	84
S13	32	#4	7	3'-6"	75	3'-6"	75
*S5	134	#5	5	5'-10"	815	--	--
REINFORCING STEEL				2640	LBS.	2640	LBS.
*EPOXY COATED REINF. STEEL				815	LBS.		
7500 P.S.I. CONCRETE				19.7	CU. YDS.	19.6	CU. YDS.
0.6" Ø L.R. STRANDS				No.	32	No.	32



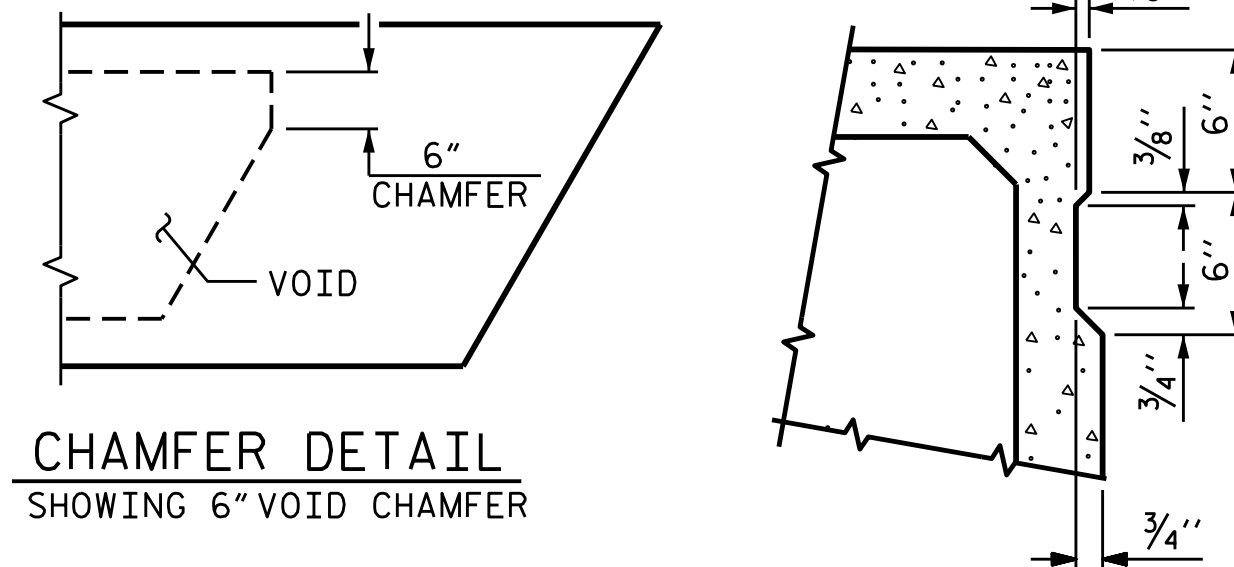
**DETAIL "B"**

EXTERIOR UNIT SHOWN, INTERIOR UNIT SIMILAR EXCEPT OMIT #5 S5 BARS. "B" BARS AND "A" BARS NOT SHOWN.



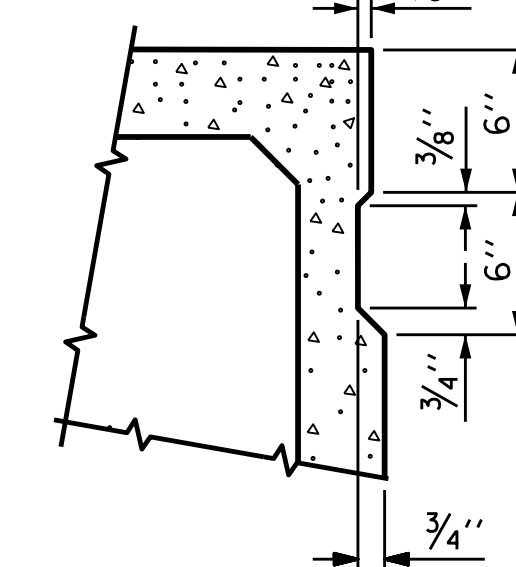
**END VIEW**

(SHOWING #4 "S" BARS IN END OF BEAM)



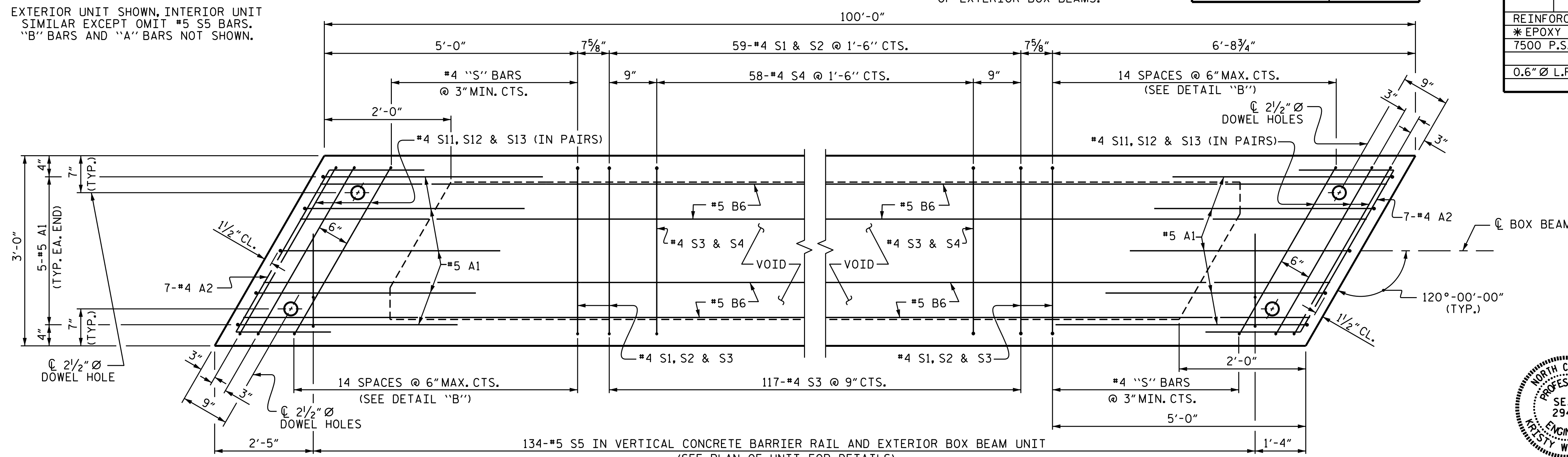
**CHAMFER DETAIL**

SHOWING 6" VOID CHAMFER



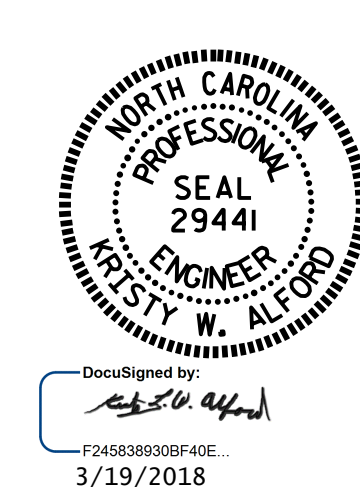
**SHEAR KEY DETAIL**

NOTE: OMIT SHEAR KEY ON OUTSIDE FACE OF EXTERIOR BOX BEAMS.



**PLAN OF BOX BEAM**

EXTERIOR UNIT SHOWN, INTERIOR UNIT SIMILAR EXCEPT OMIT #5 S5 BARS. FOR LOCATION OF DIAPHRAGMS, SEE "PLAN OF UNIT". FOR THREADED INSERTS, SEE "THREADED INSERT DETAIL". FOR REINFORCING STEEL IN DIAPHRAGMS, SEE "DOUBLE DIAPHRAGM DETAILS".



PROJECT NO. B-5320  
GRANVILLE COUNTY  
 STATION: 15+98.00 -L-  
 SHEET 6 OF 9

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 STANDARD  
 SPAN B  
 3'-0" X 3'-3"  
 PRESTRESSED CONCRETE  
 BOX BEAM UNIT

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY : M. A. LESHURE DATE : 1/4/18  
 CHECKED BY : R. L. CHESSON DATE : 1/18  
 DRAWN BY : DGE II/II REV. 9/14 MAA/TMG  
 CHECKED BY : TMG II/II