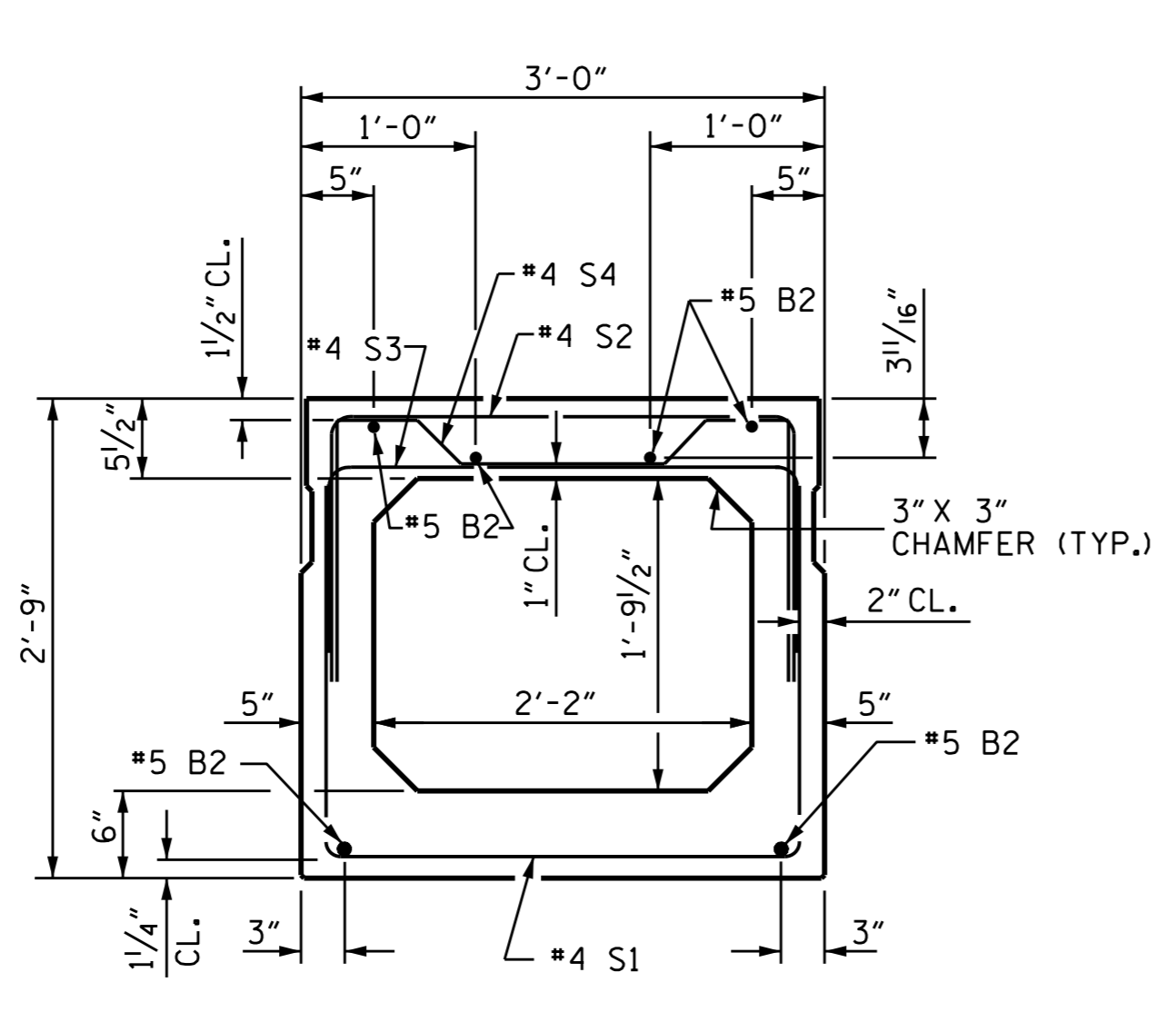


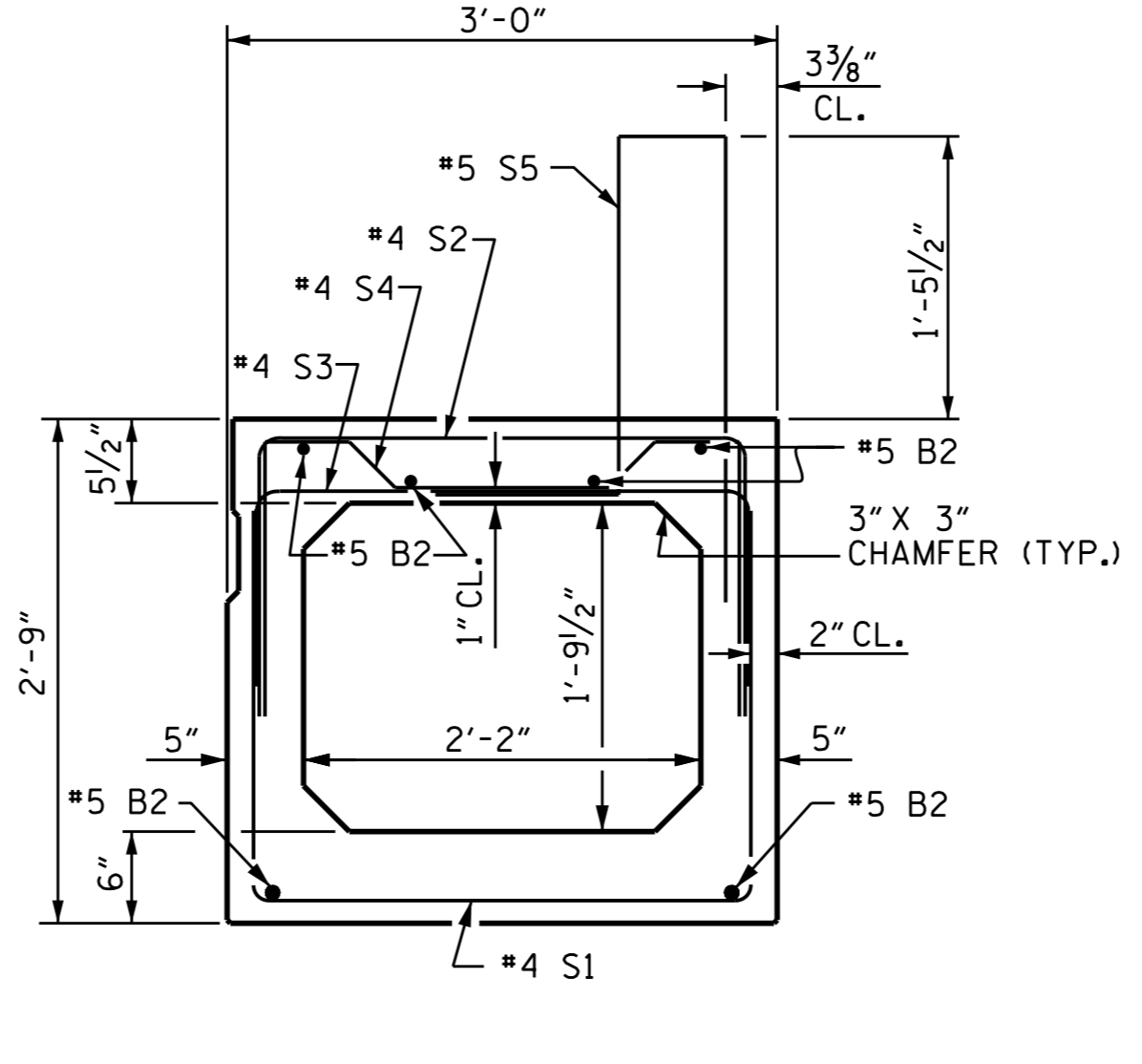
**END ELEVATION**

SHOWING PLACEMENT OF #5 A1 & #4 A2 AND LOCATION OF DOWEL HOLES. (INTERIOR BOX BEAM SECTION SHOWN-EXTERIOR SECTION SIMILAR EXCEPT SHEAR KEY LOCATION. STRAND LAYOUT NOT SHOWN.)



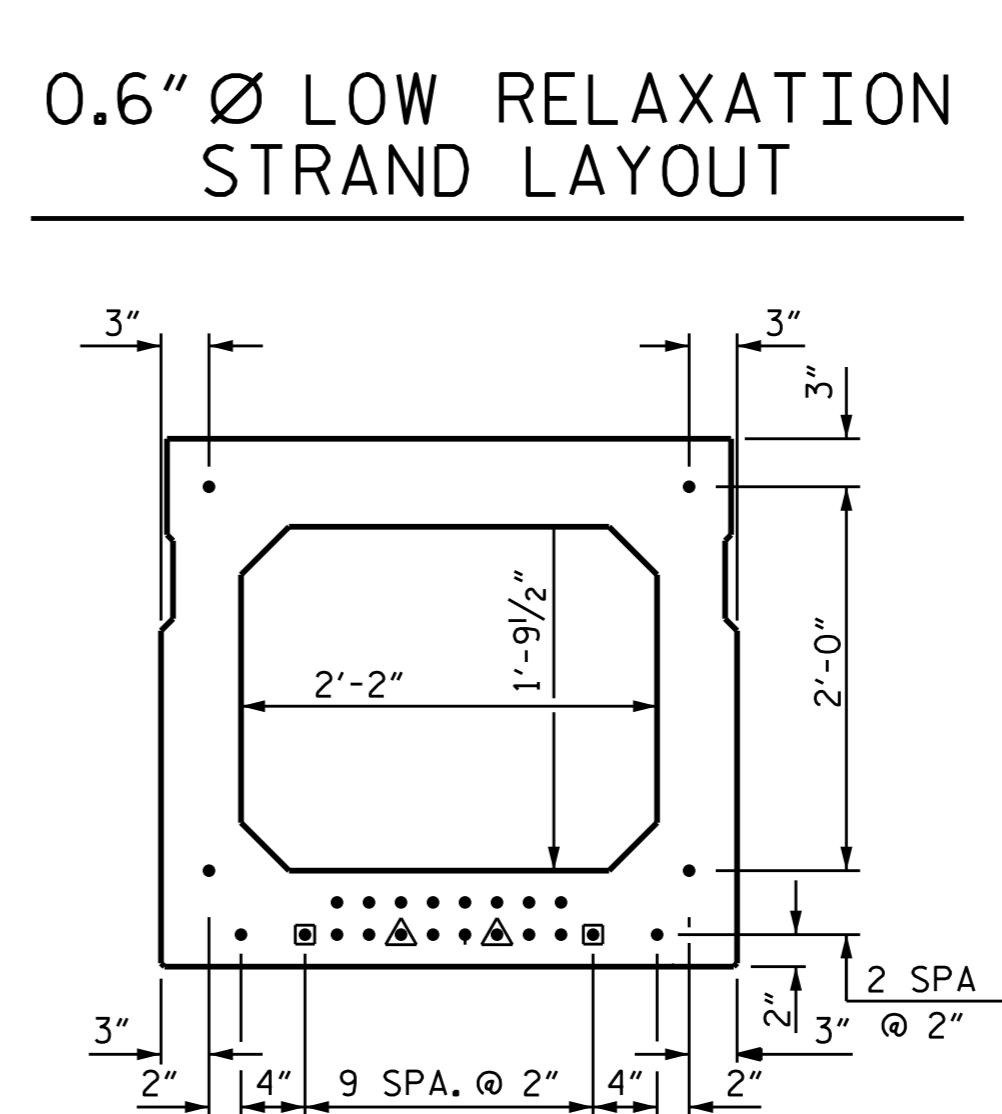
**INTERIOR BOX BEAM SECTION**

(STRAND LAYOUT NOT SHOWN)



**EXTERIOR BOX BEAM SECTION**

(STRAND LAYOUT NOT SHOWN)



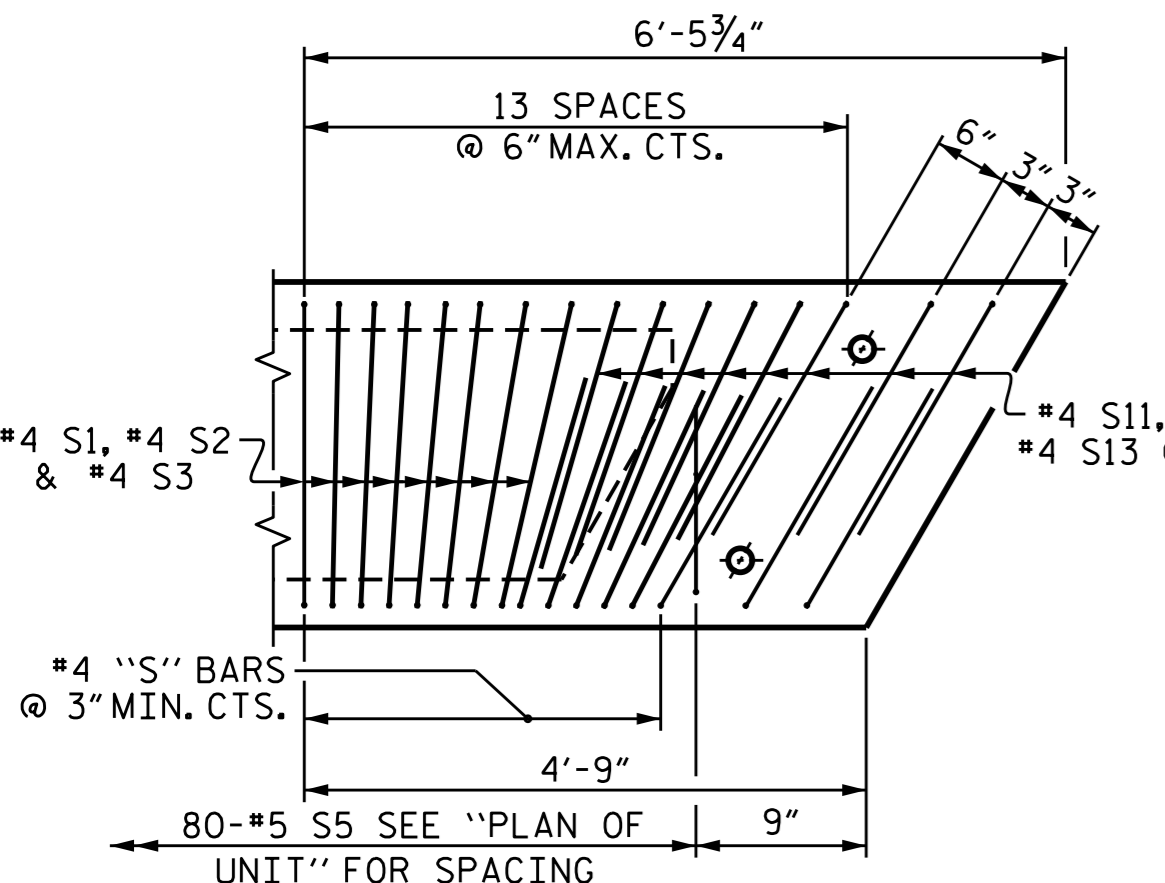
**TYPICAL STRAND LOCATION**

(24 STRANDS REQUIRED)

**DEBONDING LEGEND**

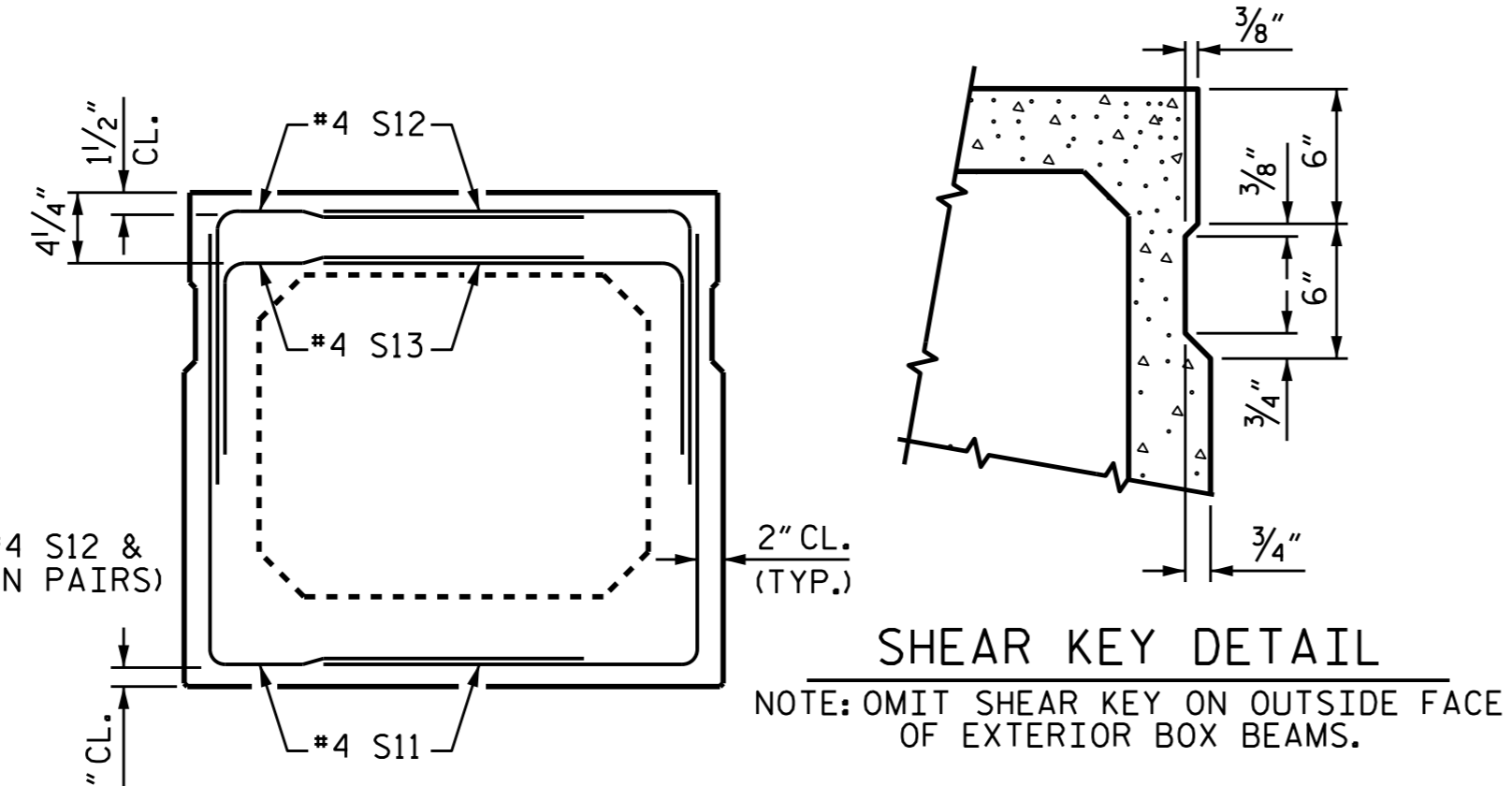
- FULLY BONDED STRANDS
- ◻ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- ◻ STRANDS DEBONDED FOR 10'-0" FROM END OF GIRDER

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.



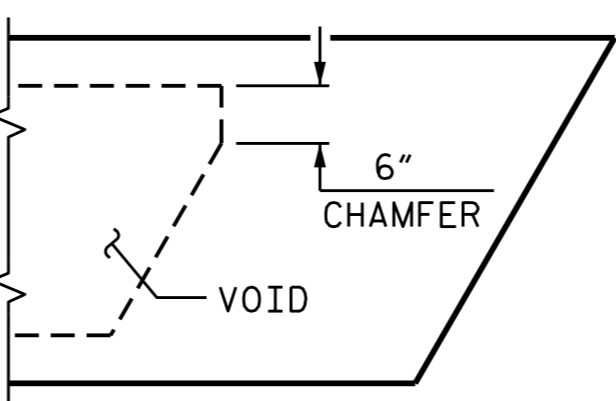
**DETAIL "B"**

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



**SHEAR KEY DETAIL**

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



**CHAMFER DETAIL**

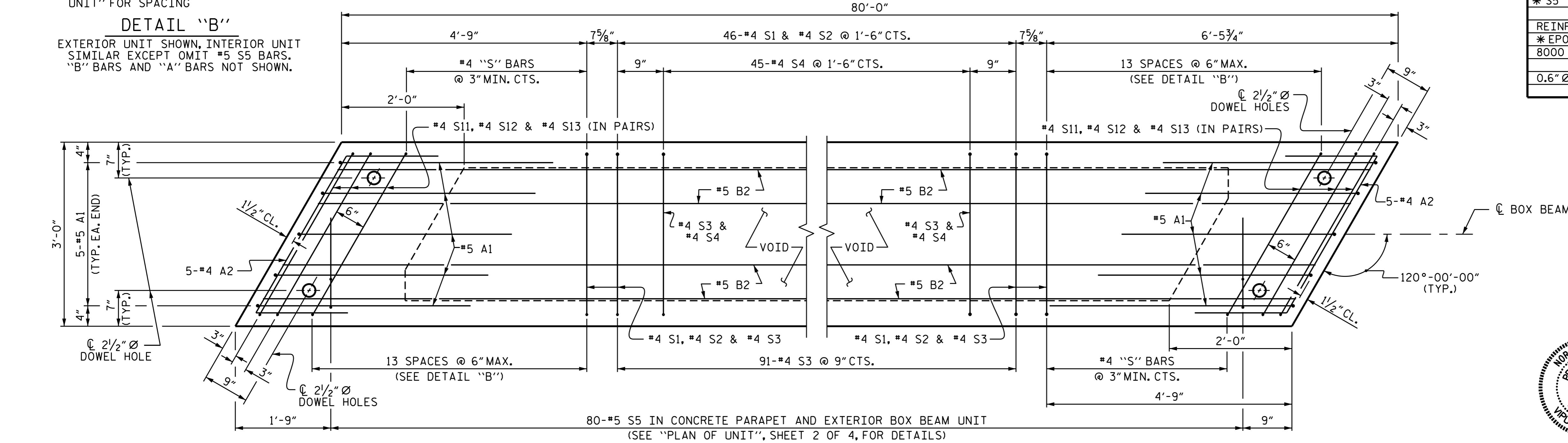
SHOWING 6" VOID CHAMFER

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



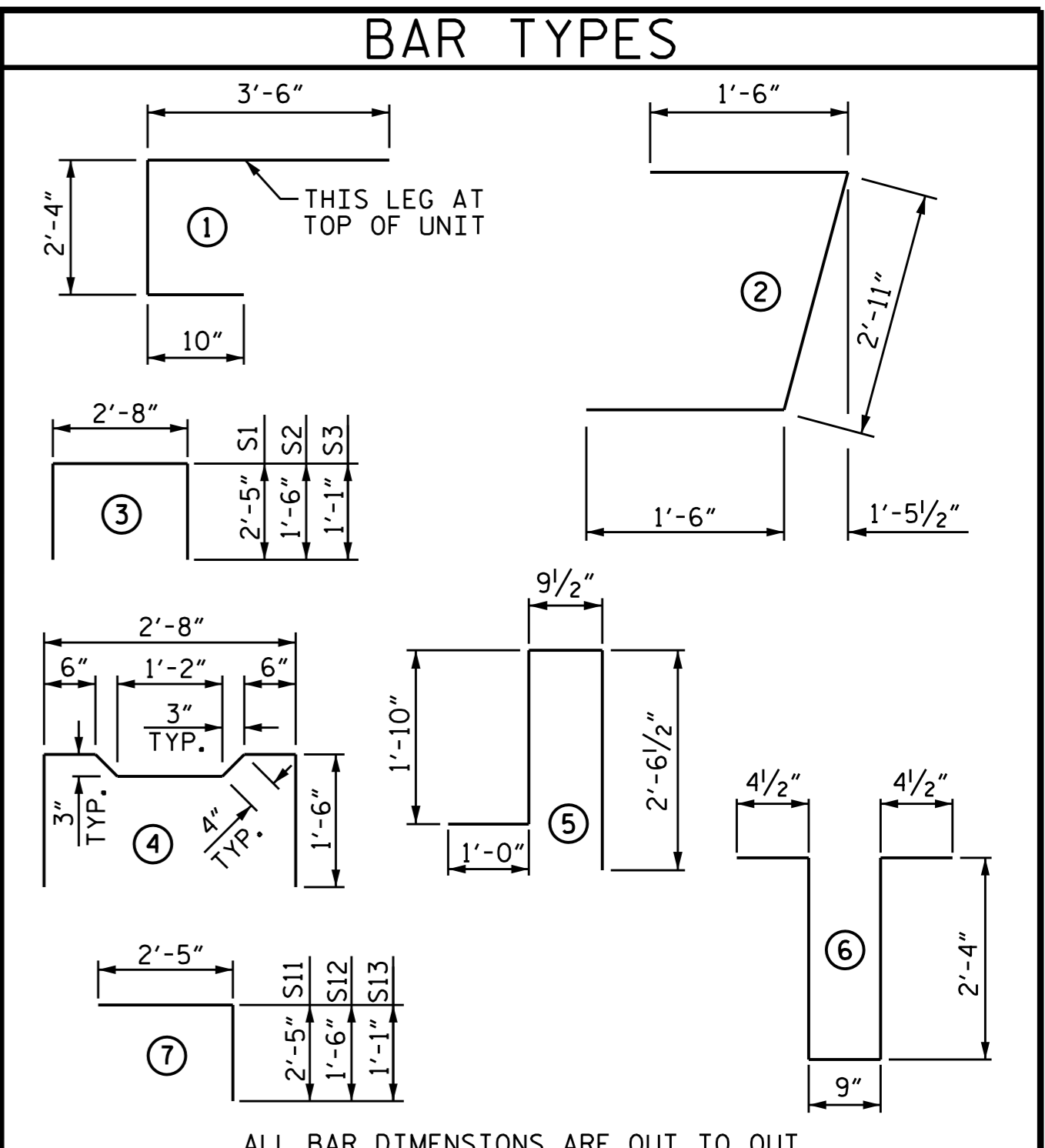
**END VIEW**

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



**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".



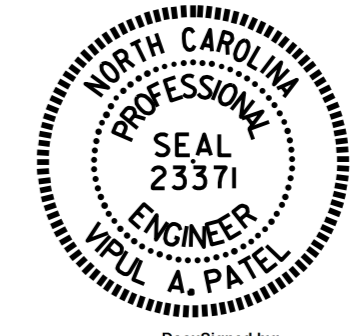
ALL BAR DIMENSIONS ARE OUT TO OUT

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

BAR NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
			LENGTH	WEIGHT	LENGTH	WEIGHT
A1	10	#5	6'-8"	70	6'-8"	70
A2	34	#4	5'-11"	134	5'-11"	134
B2	12	#5 STR	40'-11"	512	40'-11"	512
K1	12	#4	6'-2"	49	6'-2"	49
K2	8	#4 STR	2'-10"	15	2'-10"	15
S1	62	#4	7'-6"	311	7'-6"	311
S2	62	#4	5'-8"	235	5'-8"	235
S3	107	#4	4'-10"	345	4'-10"	345
S4	45	#4	5'-10"	175	5'-10"	175
S11	32	#4	4'-10"	103	4'-10"	103
S12	32	#4	3'-11"	84	3'-11"	84
S13	32	#4	3'-6"	75	3'-6"	75
*S5	80	#5	6'-2"	515	--	--
REINFORCING STEEL			LBS.	2,108	LBS.	2,108
*EPOXY COATED REINF. STEEL			LBS.	515		
8000 P.S.I. CONCRETE			CU. YDS.	14.3	CU. YDS.	14.2
0.6" Ø L.R. STRANDS			No.	24	No.	24

PROJECT NO. B-4751  
GASTON COUNTY  
 STATION: 15+53.00 -L-

SHEET 3 OF 4



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 STANDARD  
 3'-0" X 2'-9"  
 PRESTRESSED CONCRETE  
 BOX BEAM UNIT

REVISIONS						SHEET NO. S-7
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 19
2			4			

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

ASSEMBLED BY: <u>N.D. AIUTO</u>	DATE: <u>3/8/15</u>
CHECKED BY: <u>I.H. CARROLL</u>	DATE: <u>3/9/15</u>
DRAWN BY: <u>DGE II/II</u>	REV. <u>4/15</u> MAA/TMG
CHECKED BY: <u>TMG II/II</u>	