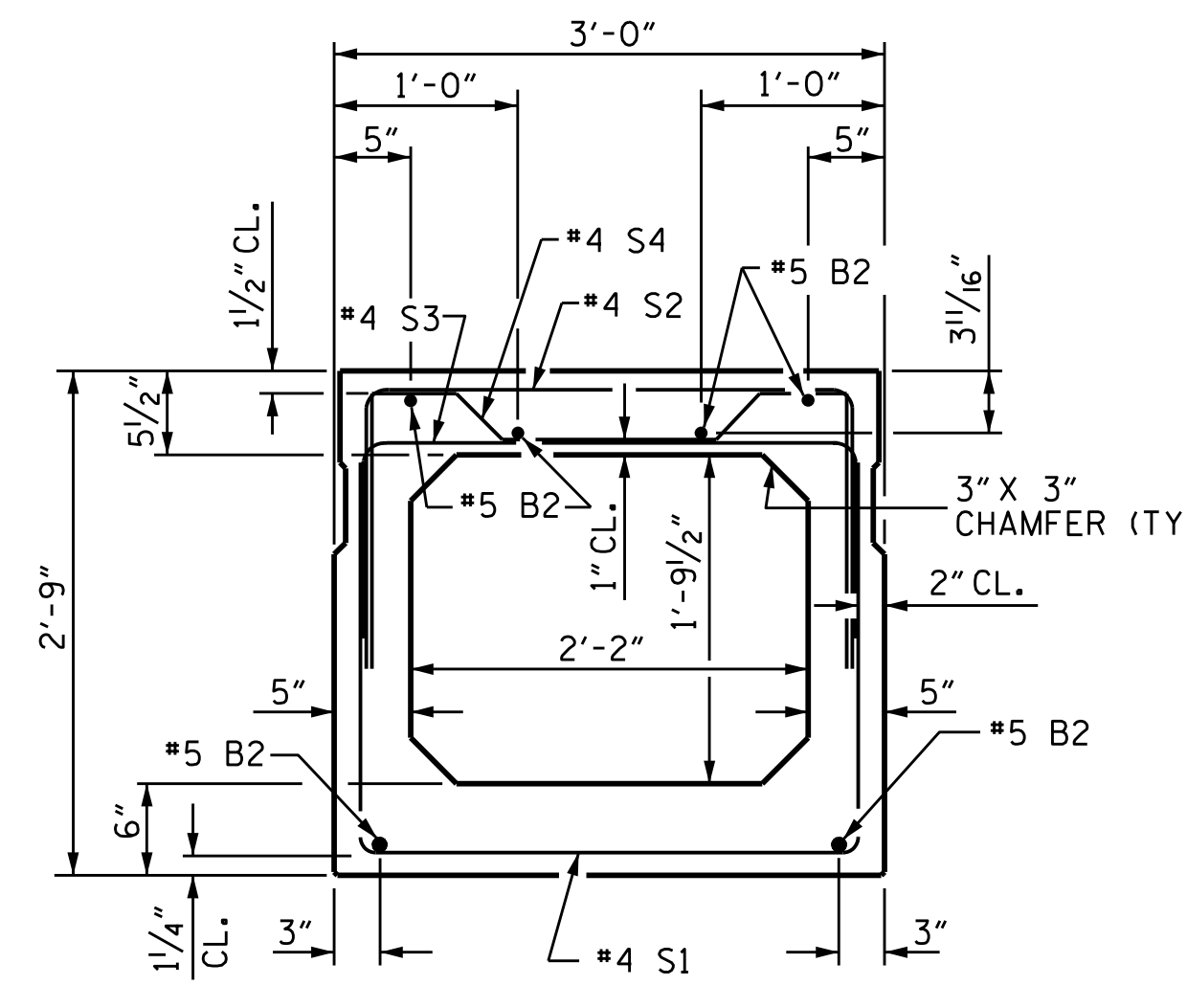
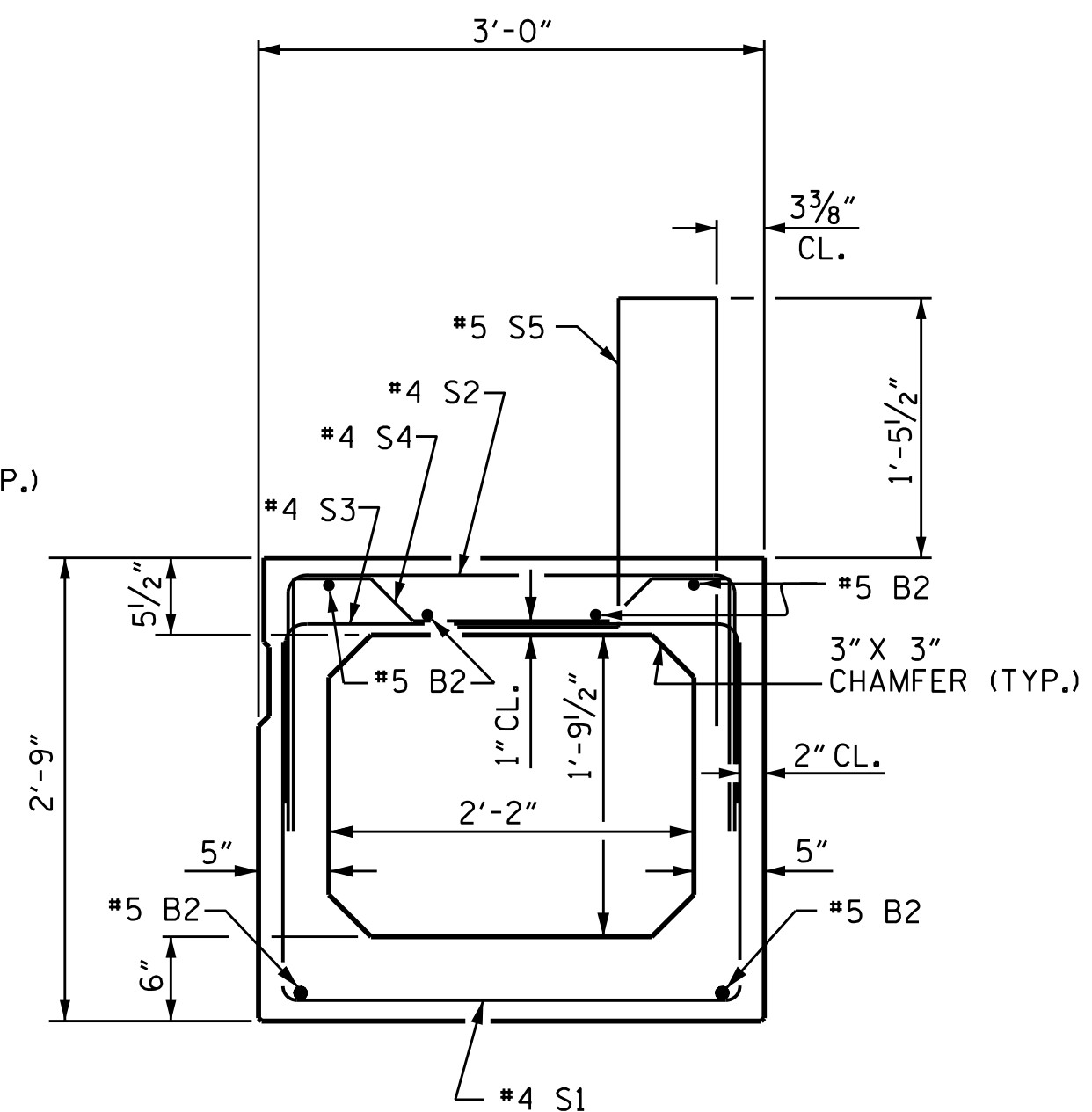


END ELEVATION
 SHOWING PLACEMENT OF #5 & #4 "A" BARS AND LOCATION OF DOWEL HOLES. (INTERIOR BOX BEAM SECTION SHOWN-EXTERIOR SECTION SIMILAR EXCEPT SHEAR KEY LOCATION. STRAND LAYOUT NOT SHOWN.)

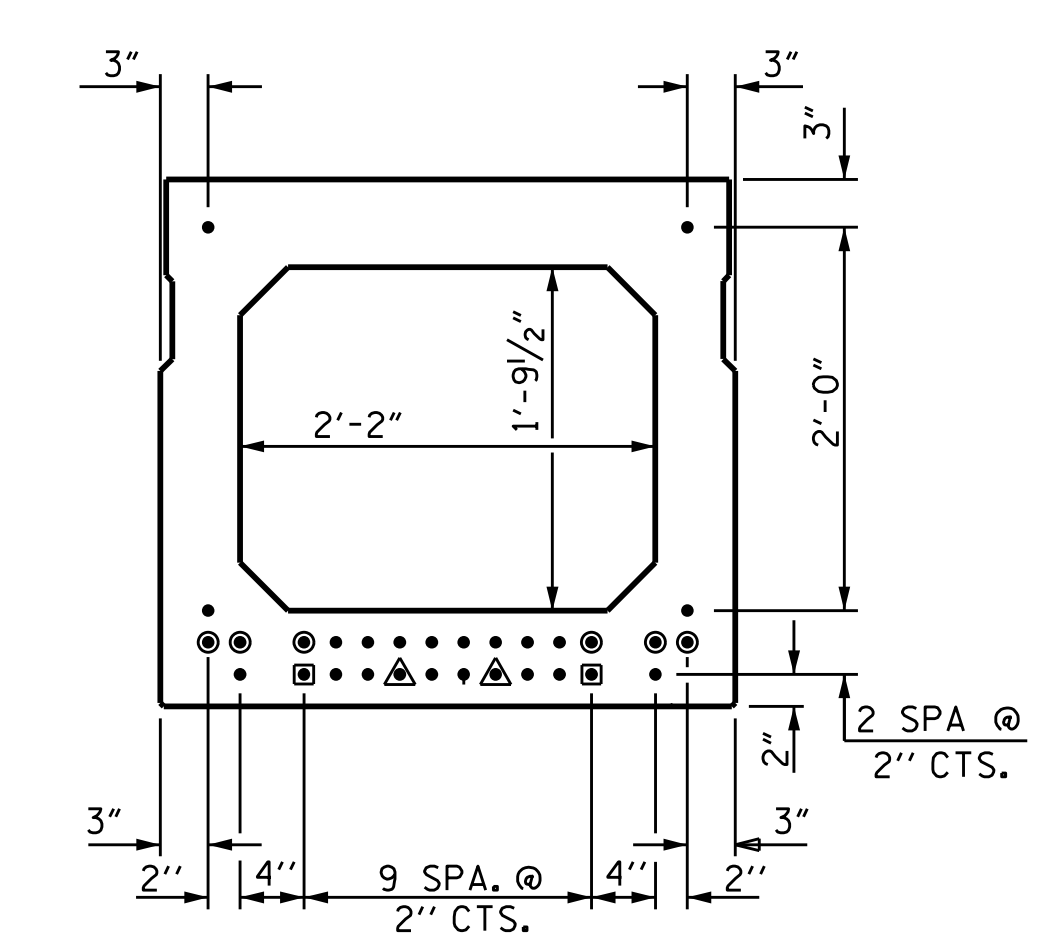


INTERIOR BOX BEAM SECTION
 (STRAND LAYOUT NOT SHOWN)



EXTERIOR BOX BEAM SECTION
 (STRAND LAYOUT NOT SHOWN)

0.6" Ø LOW RELAXATION STRAND LAYOUT

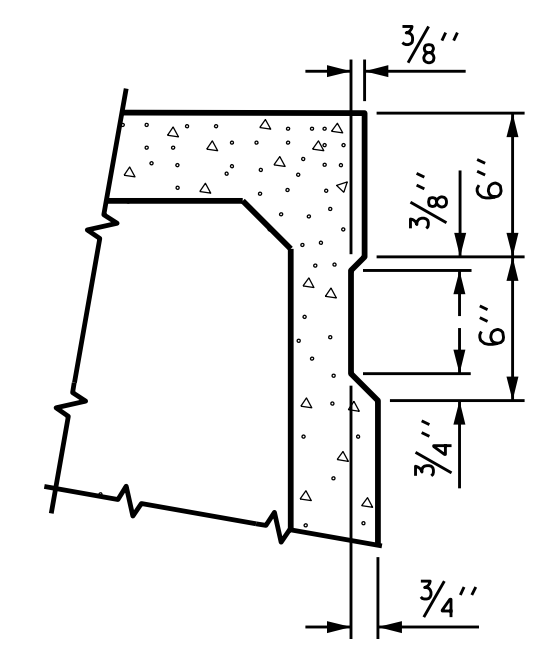


TYPICAL STRAND LOCATION
 (24 STRANDS REQUIRED)

DEBONDING LEGEND

- FULLY BONDED STRANDS
- ◻ STRANDS DEBONDED FOR 4'-0" FROM END OF UNIT
- ◄ STRANDS DEBONDED FOR 10'-0" FROM END OF UNIT
- ◉ OPTIONAL FULL LENGTH DEBONDED STRANDS. THESE STRANDS ARE NOT REQUIRED. IF THE FABRICATOR CHOOSES TO INCLUDE THESE STRANDS IN THE BOX BEAM UNIT, THE STRANDS SHALL BE DEBONDED FOR THE FULL LENGTH OF THE UNIT AT NO ADDITIONAL COST.

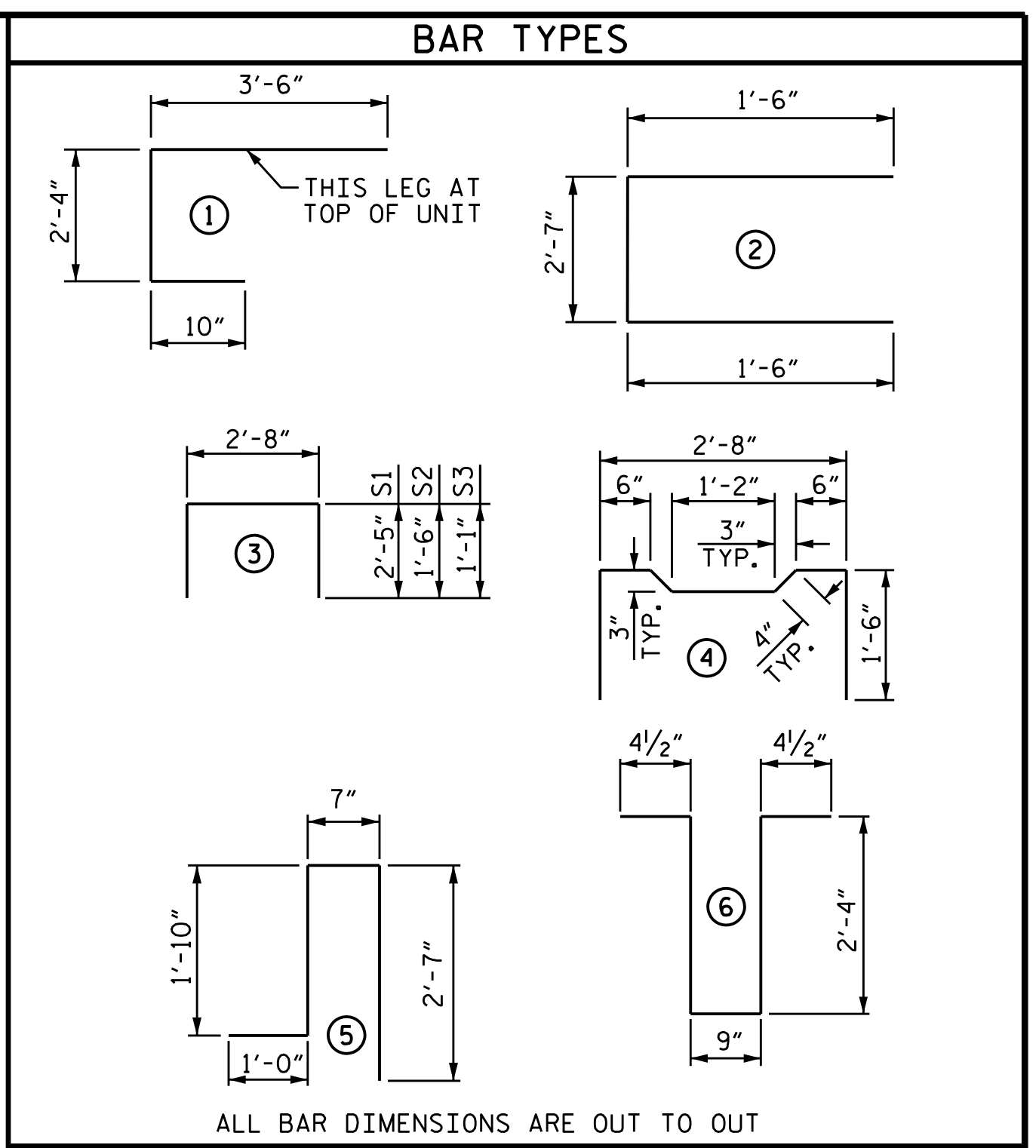
BOND SHALL BE BROKEN ON STRANDS AS SHOWN FOR THE SPECIFIED LENGTH FROM EACH END OF THE BOX BEAM. SEE STANDARD SPECIFICATIONS ARTICLE 1078-7.



SHEAR KEY DETAIL

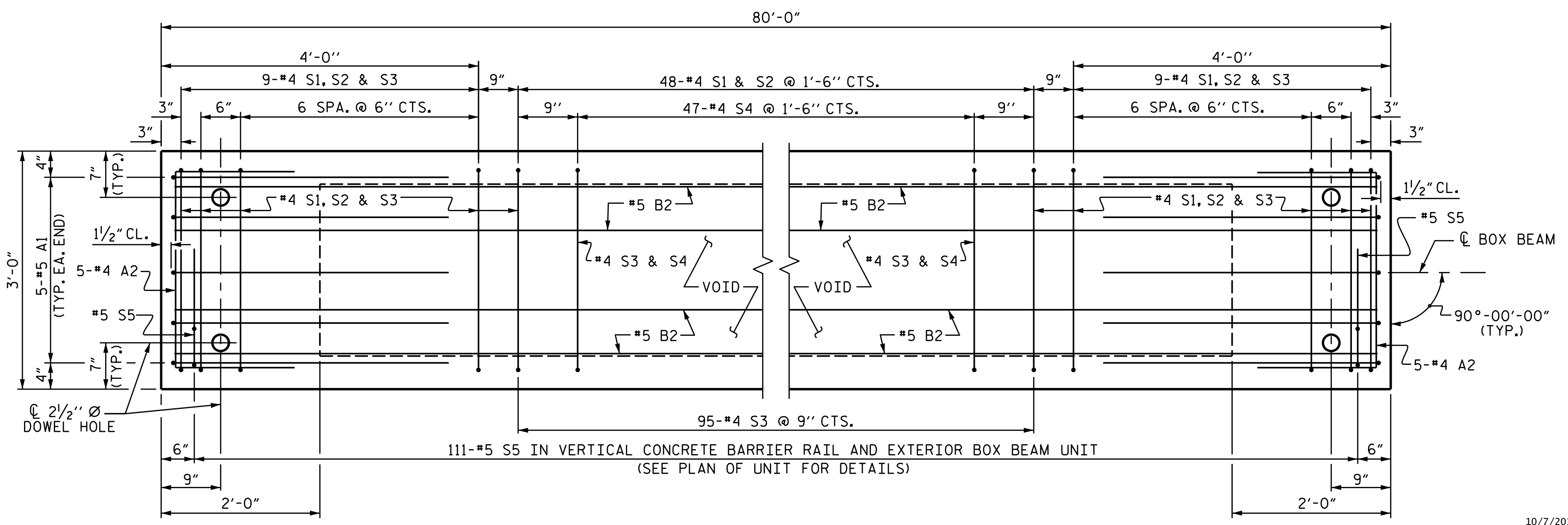
NOTE: OMIT SHEAR KEY ON OUTSIDE FACE OF EXTERIOR BOX BEAMS.

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



BILL OF MATERIAL FOR ONE BOX BEAM SECTION

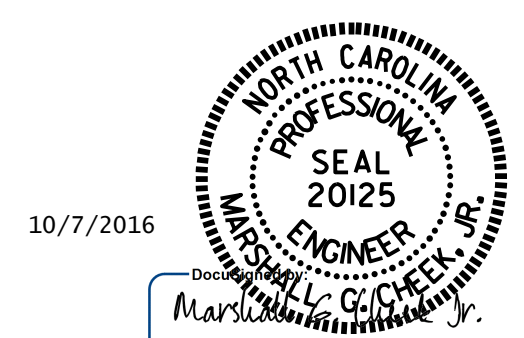
BAR NUMBER	SIZE	TYPE	EXTERIOR UNIT		INTERIOR UNIT	
			LENGTH	WEIGHT	LENGTH	WEIGHT
A1	#5	1	6'-8"	70	6'-8"	70
A2	#4	2	5'-7"	127	5'-7"	127
B2	#5	STR	40'-11"	512	40'-11"	512
K1	#4	6	6'-2"	49	6'-2"	49
K2	#4	STR	2'-7"	14	2'-7"	14
S1	#4	3	7'-6"	331	7'-6"	331
S2	#4	3	5'-8"	250	5'-8"	250
S3	#4	3	4'-10"	365	4'-10"	365
S4	#4	4	5'-10"	183	5'-10"	183
*S5	#5	5	6'-0"	695	--	--
REINFORCING STEEL			1901	LBS.	1901	LBS.
* EPOXY COATED REINF. STEEL			695	LBS.		
8000 P.S.I. CONCRETE			14.2	CU. YDS.	14.1	CU. YDS.
0.6" Ø L.R. STRANDS			No. 24		No. 24	



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".

ASSEMBLED BY : R. CAREATHERS/MP DATE : 6/3/15
 CHECKED BY : M. PISO DATE : 6/17/15
 DRAWN BY : DGE 10/11 REV. 9/14 MAA/TMG
 CHECKED BY : TMG 11/11



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. B-4814
SAMPSON COUNTY
 STATION: 17+71.00 -L-

SHEET 3 OF 5
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 3'-0" X 2'-9"
 PRESTRESSED CONCRETE
 BOX BEAM UNIT

REVISIONS						SHEET NO. S2-7
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 46
2			4			