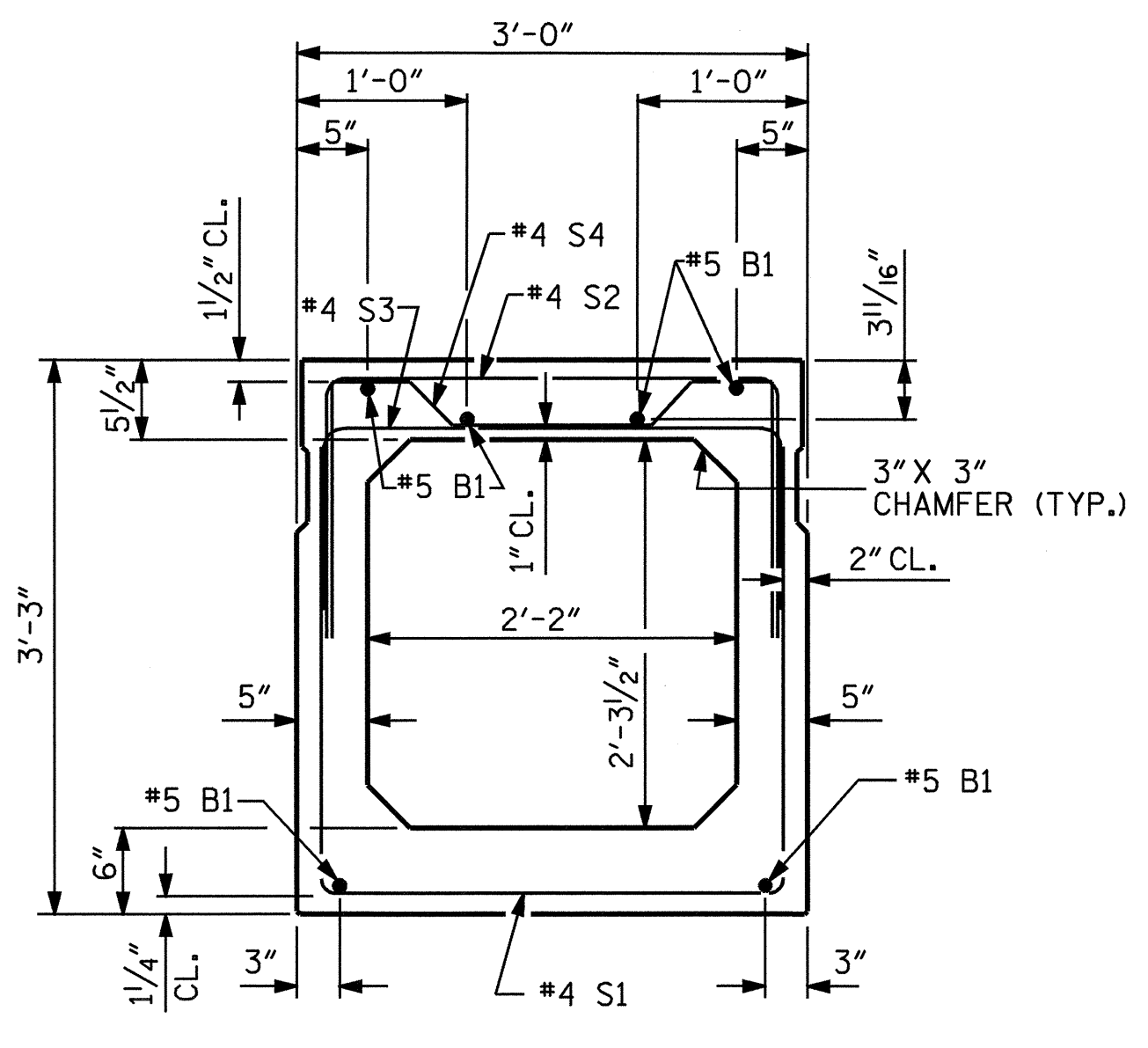
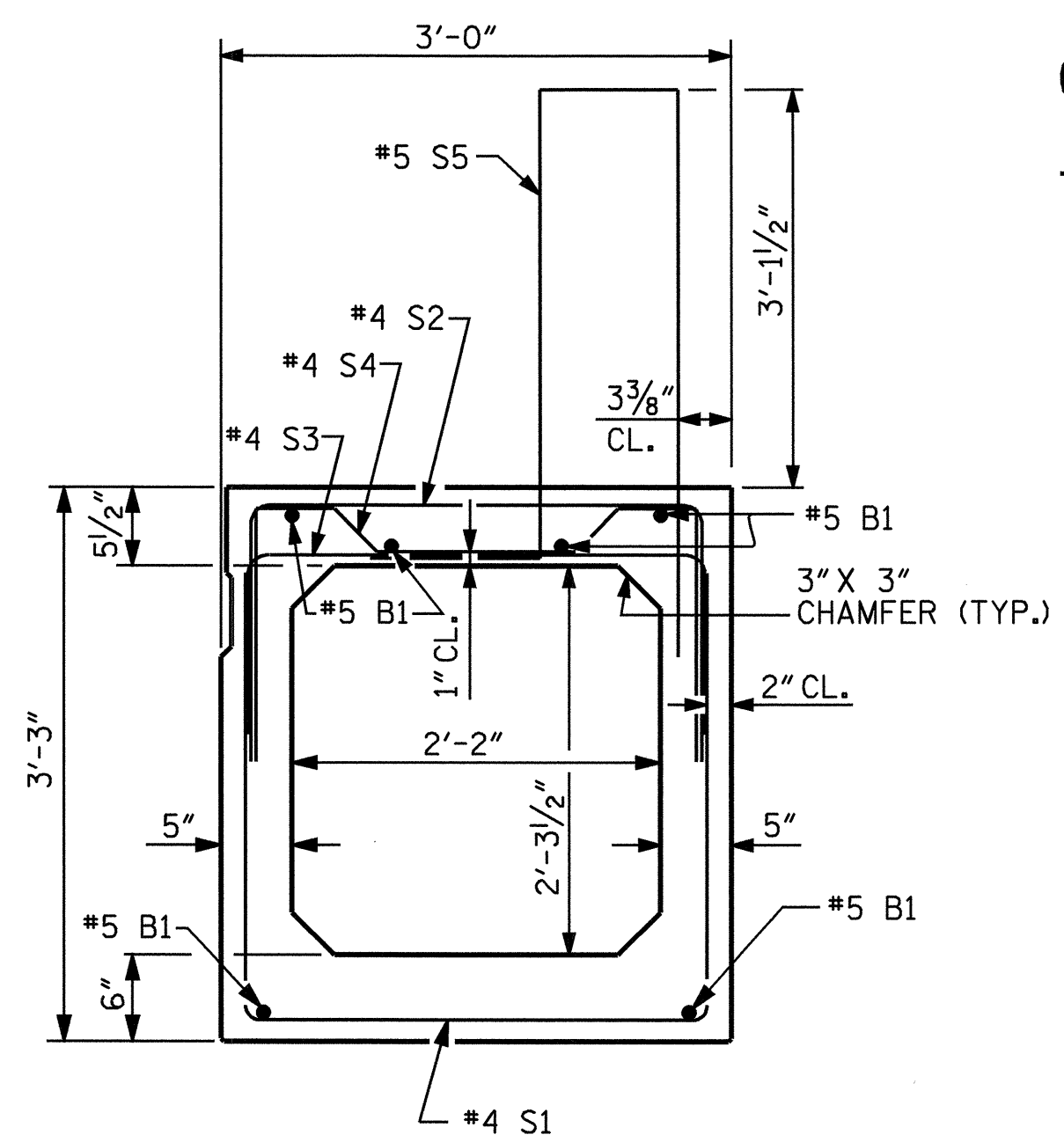


END ELEVATION

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.)

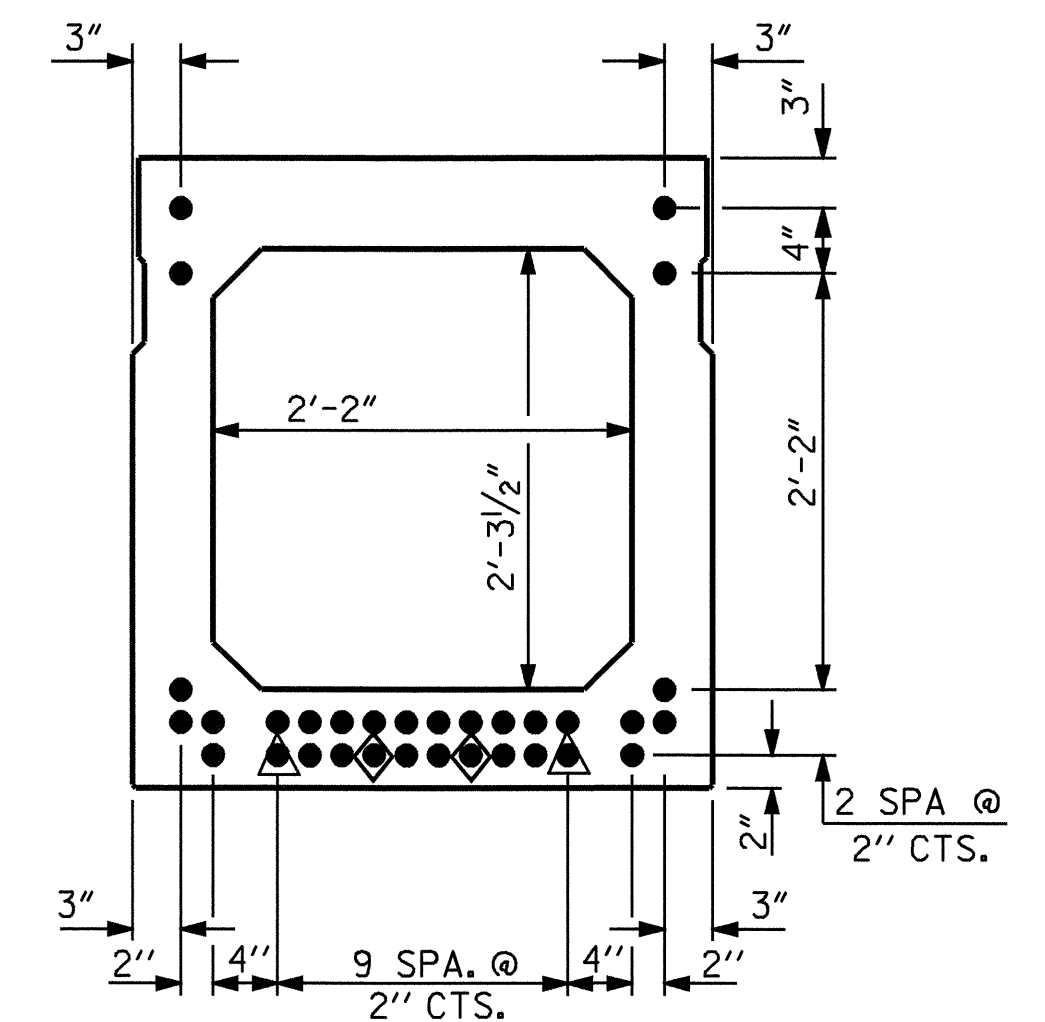


INTERIOR BOX BEAM SECTION
(STRAND LAYOUT NOT SHOWN)



EXTERIOR BOX BEAM SECTION
(STRAND LAYOUT NOT SHOWN)

0.6" Ø LOW RELAXATION STRAND LAYOUT



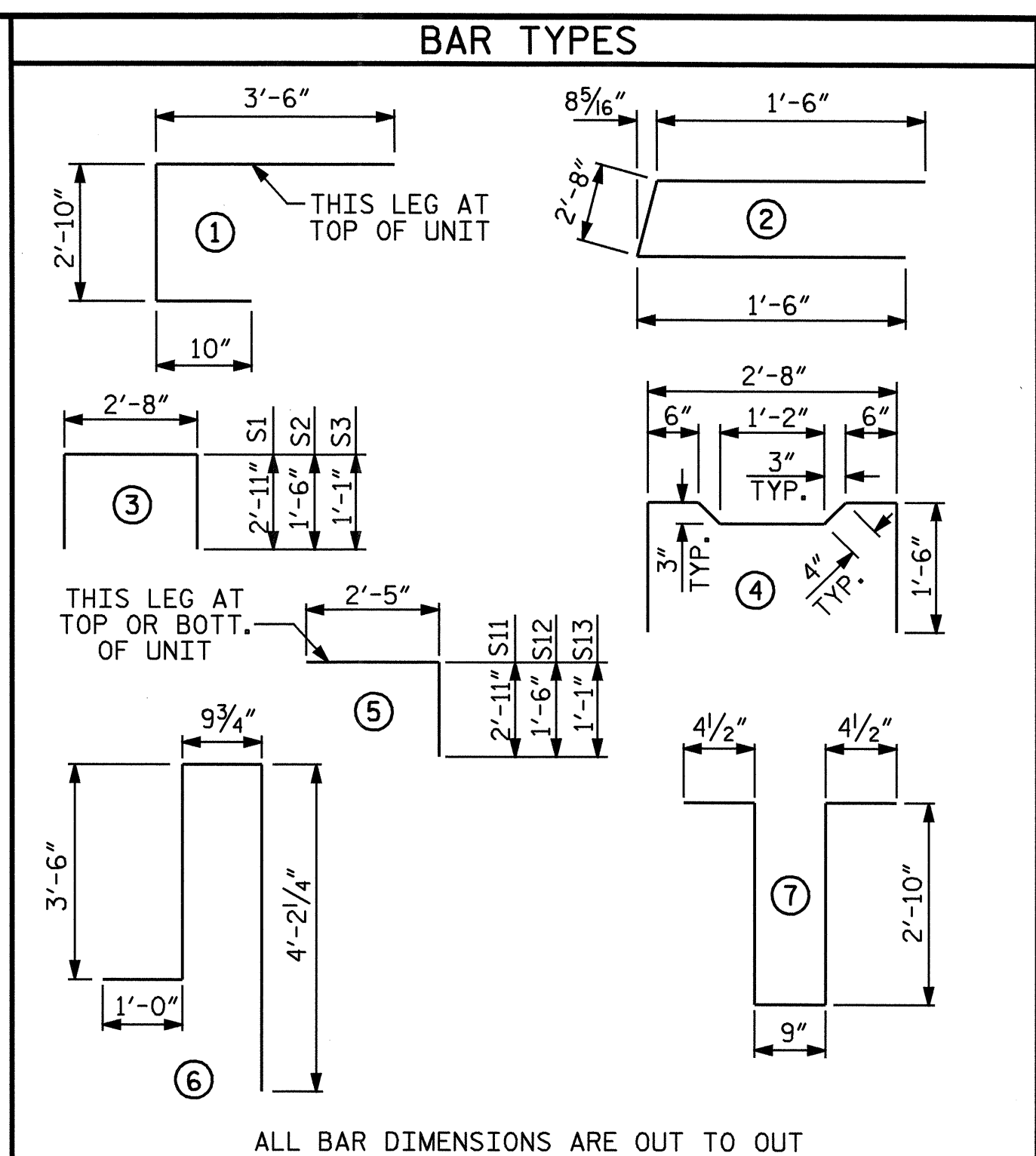
TYPICAL STRAND LOCATION
(32 STRANDS REQUIRED)

(INTERIOR BOX BEAM SECTION SHOWN; EXTERIOR SECTION SIMILAR EXCEPT SHEAR KEY LOCATION)

DEBONDING LEGEND

- FULLY BONDED STRANDS
- ◐ STRANDS DEBONDED FOR 4'-0" FROM END OF GIRDER
- ◑ STRANDS DEBONDED FOR 8'-0" FROM END OF GIRDER

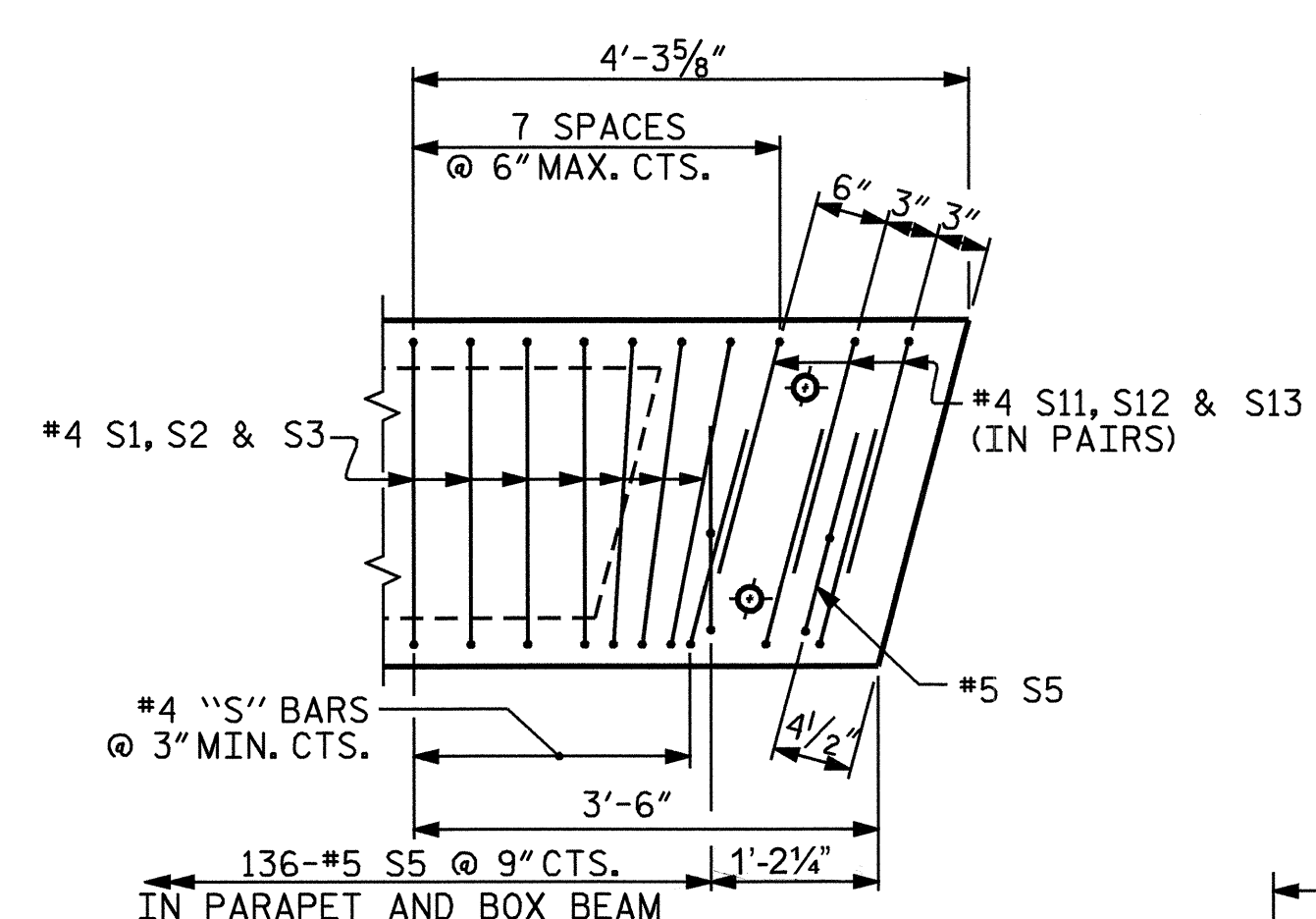
GRADE 270 STRANDS		0.6" Ø L.R.	
AREA (SQUARE INCHES)		0.217	
ULTIMATE STRENGTH (LBS. PER STRAND)		58,600	
APPLIED PRESTRESS (LBS. PER STRAND)		43,950	



ALL BAR DIMENSIONS ARE OUT TO OUT

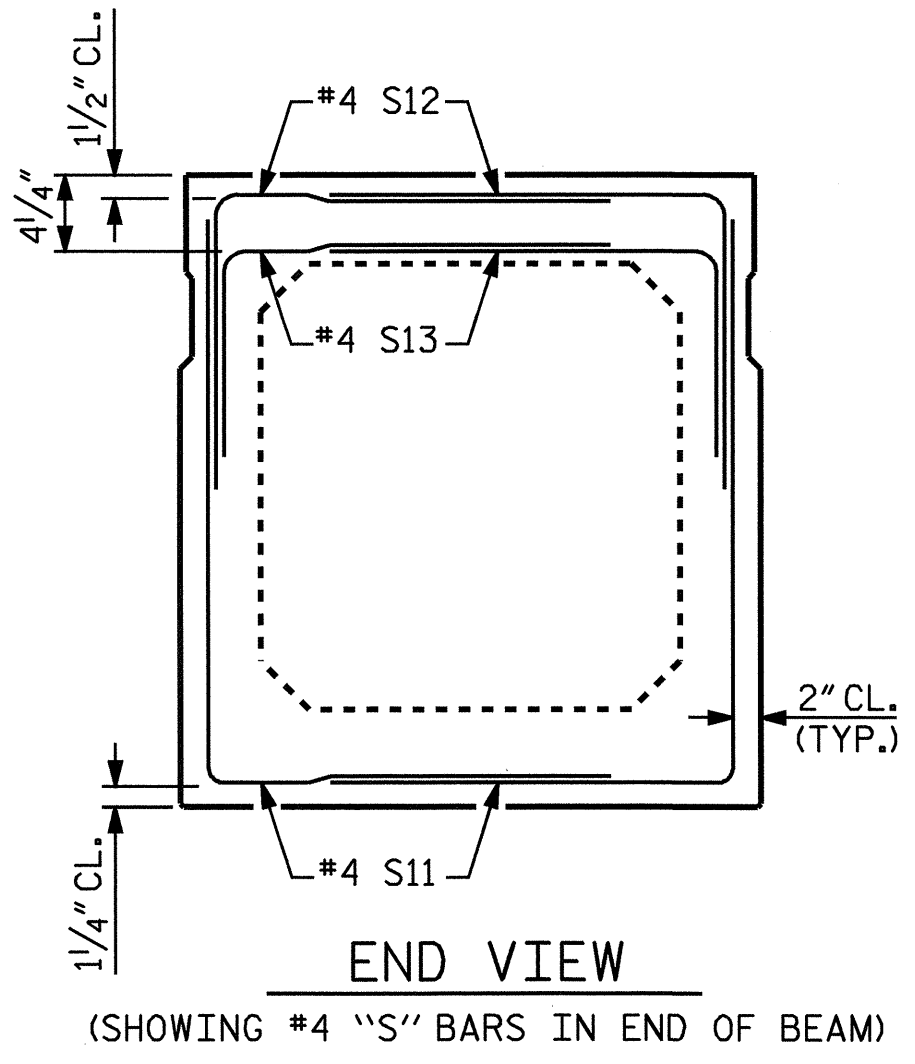
BILL OF MATERIAL FOR ONE BOX BEAM SECTION

BAR NUMBER	SIZE	TYPE	EXTERIOR UNIT LENGTH	EXTERIOR UNIT WEIGHT	INTERIOR UNIT LENGTH	INTERIOR UNIT WEIGHT
A1	10	#5	7'-2"	75	7'-2"	75
A2	44	#4	5'-8"	167	5'-8"	167
B1	12	#5	STR 53'-3"	666	53'-3"	666
K1	15	#4	7'-2"	72	7'-2"	72
K2	10	#4	STR 2'-7"	17	2'-7"	17
S1	78	#4	3	8'-6"	443	8'-6"
S2	78	#4	3	5'-8"	295	5'-8"
S3	141	#4	3	4'-10"	455	4'-10"
S4	63	#4	4	5'-10"	246	5'-10"
S11	12	#4	5	5'-4"	43	5'-4"
S12	12	#4	5	3'-11"	31	3'-11"
S13	12	#4	5	3'-6"	28	3'-6"
* S5	138	#5	6	9'-6"	1367	--
REINFORCING STEEL				2537 LBS.		2537 LBS.
* EPOXY COATED REINF. STEEL				1367 LBS.		1367 LBS.
7500 P.S.I. CONCRETE				23.9 CU. YDS.		23.9 CU. YDS.
0.6" Ø L.R. STRANDS				No. 32		No. 32



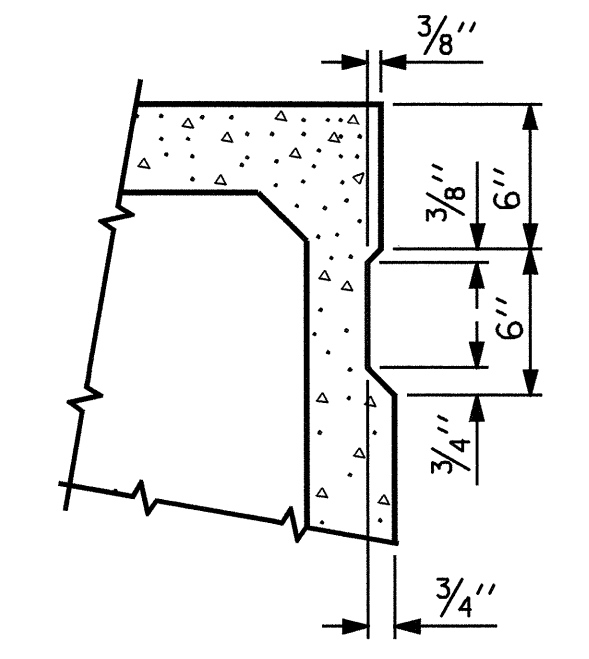
DETAIL "B"

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



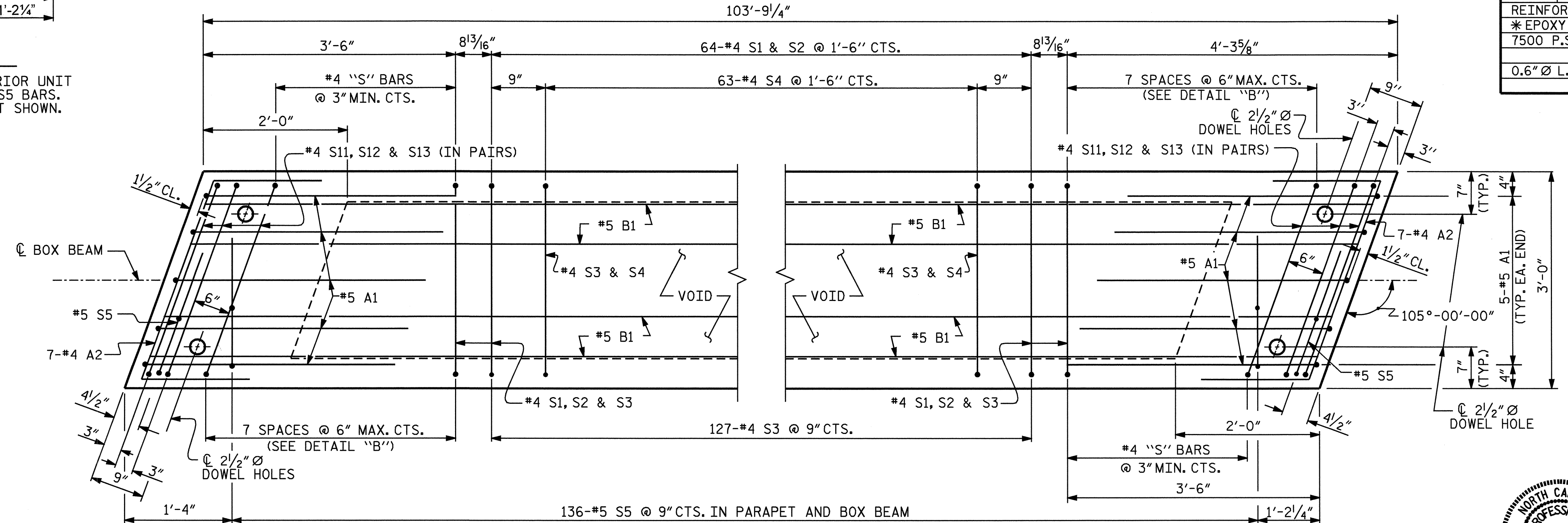
END VIEW

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



SHEAR KEY DETAIL

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



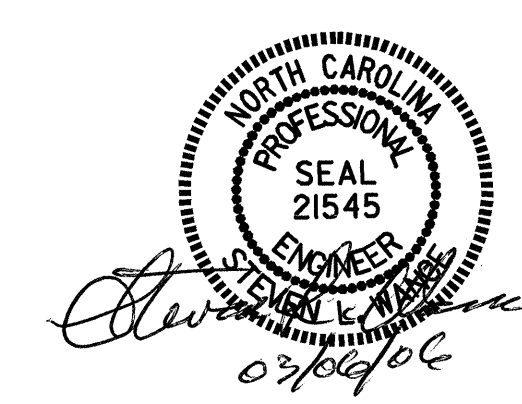
PLAN OF BOX BEAM

EXTERIOR UNIT SHOWN, INTERIOR UNIT SIMILAR EXCEPT OMIT #5 S5 BARS. FOR LOCATION OF DIAPHRAGMS, SEE PLAN OF SPANS. FOR REINFORCING STEEL IN DIAPHRAGMS, SEE DIAPHRAGM DETAILS.

PROJECT NO. B-4110
DURHAM COUNTY
 STATION: 17+41.66 -L-

SHEET 4 OF 13

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



ASSEMBLED BY : SWANCOPE	DATE : 08/05
CHECKED BY : M.A. ALLEN	DATE : 11/05
DRAWN BY : TLA 5/05	ADDED 7/11/05
CHECKED BY : GM 6/05	