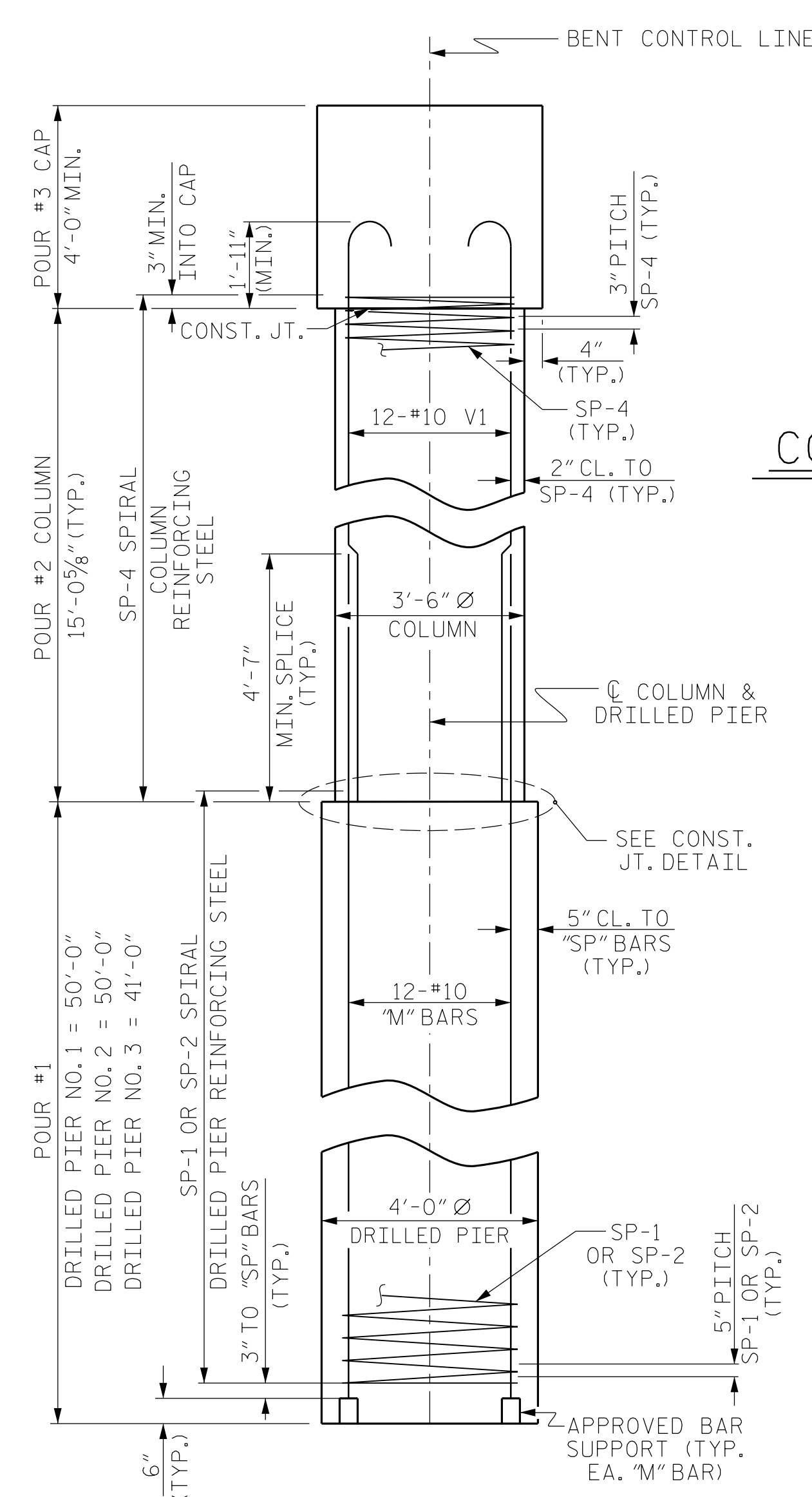
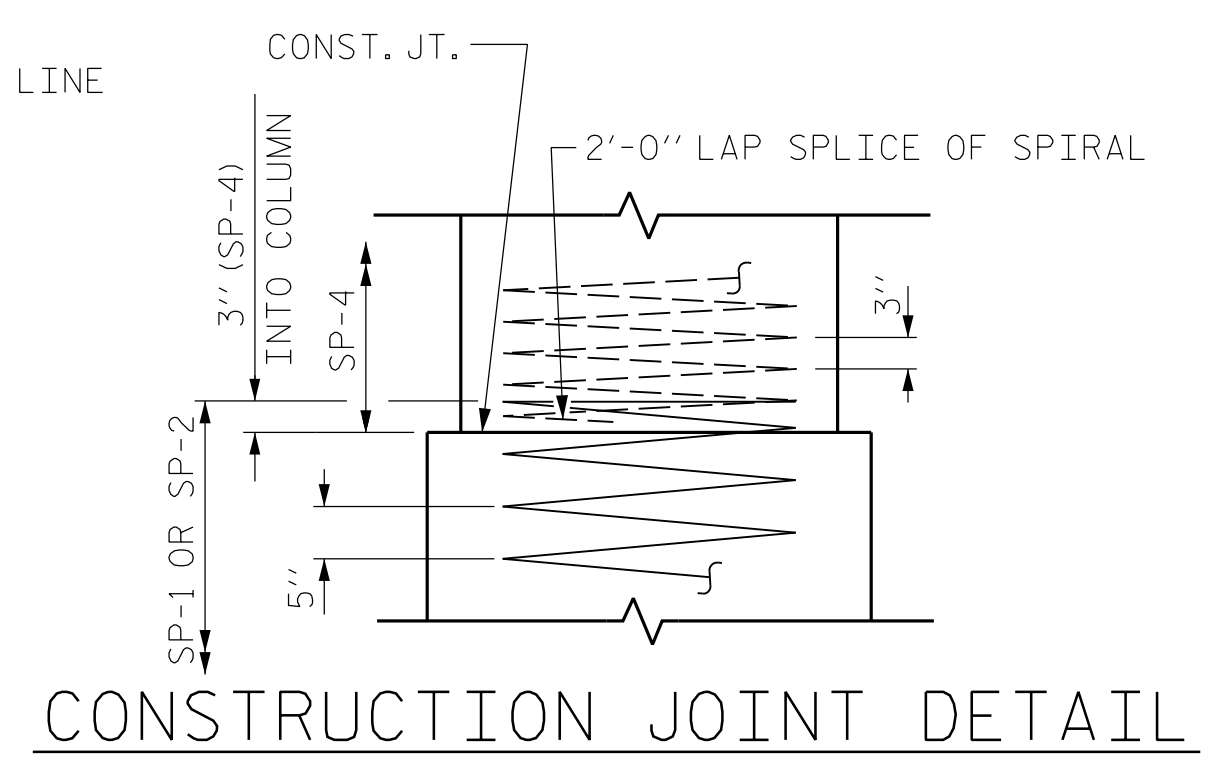


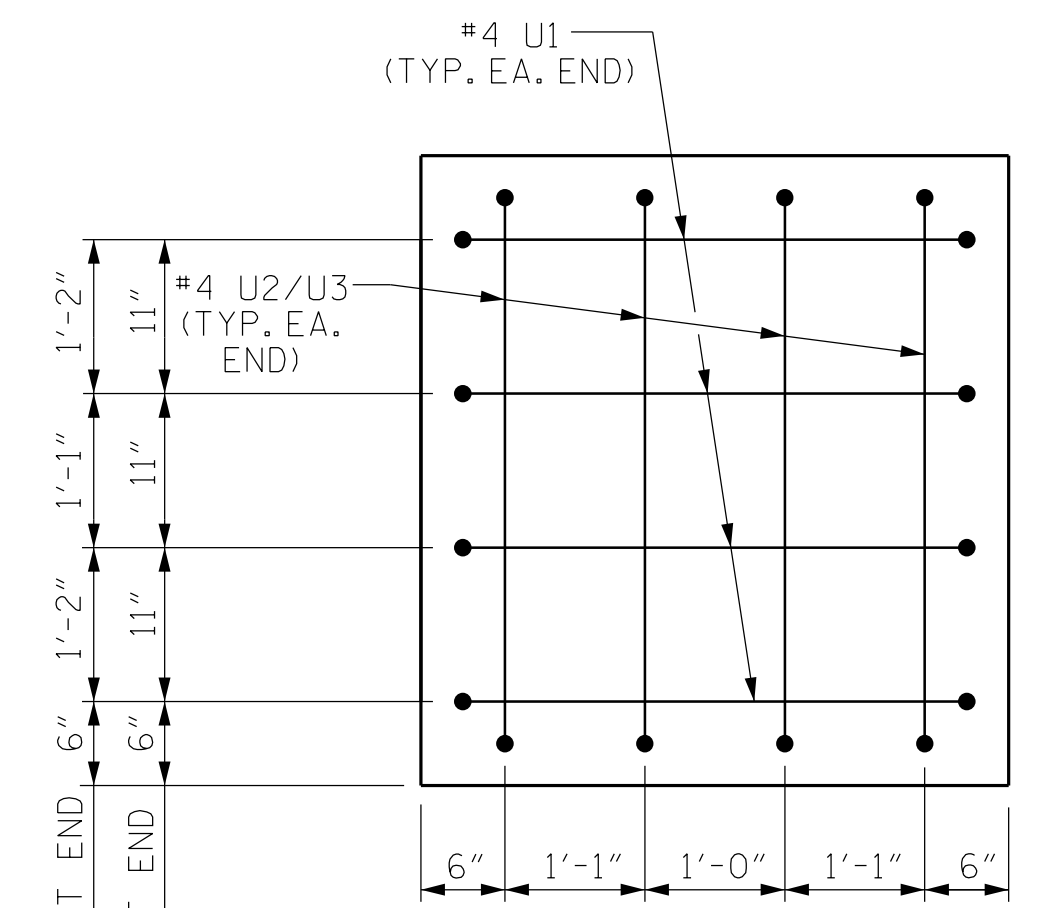
PLAN OF DRILLED PIERS & COLUMNS



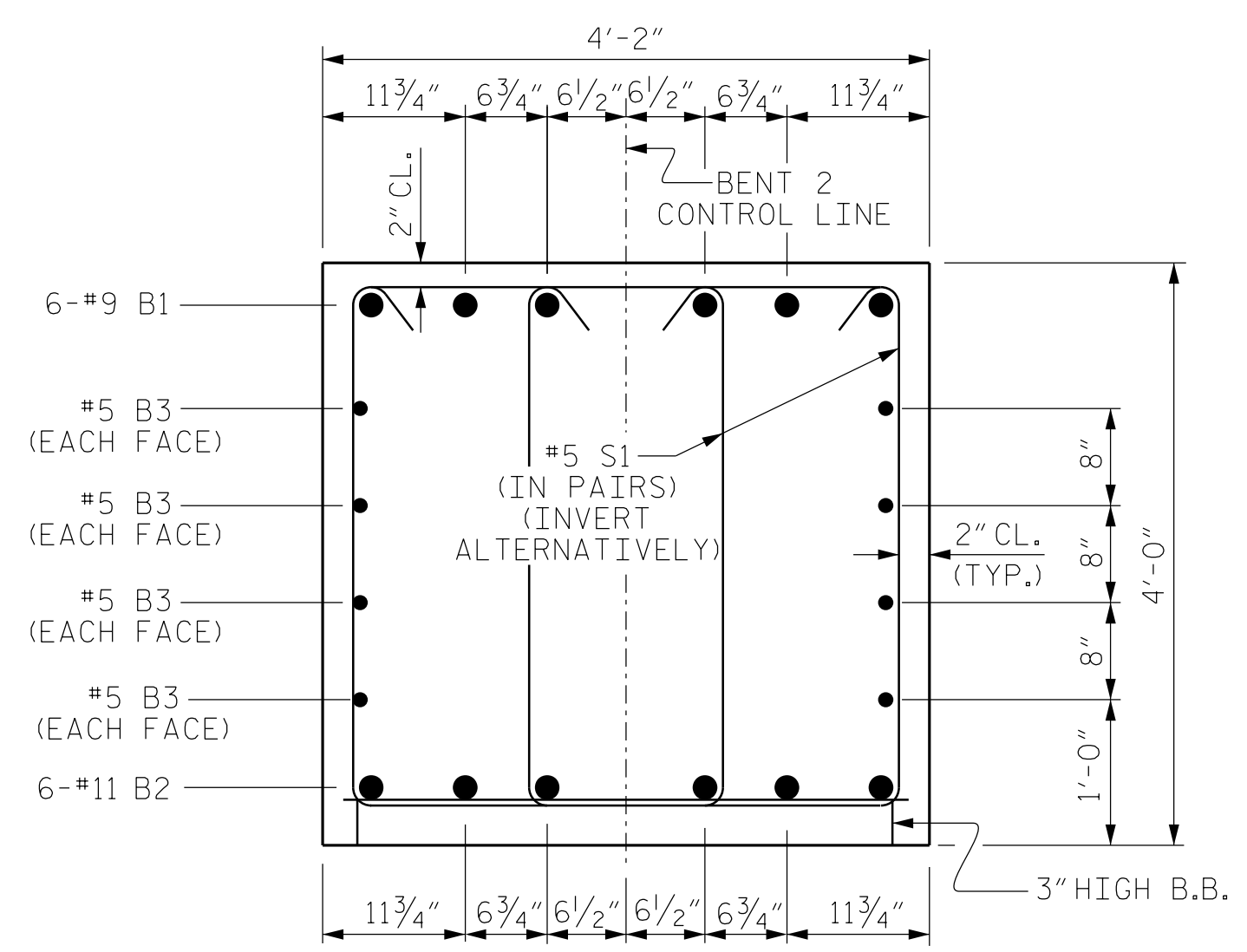
END ELEVATION



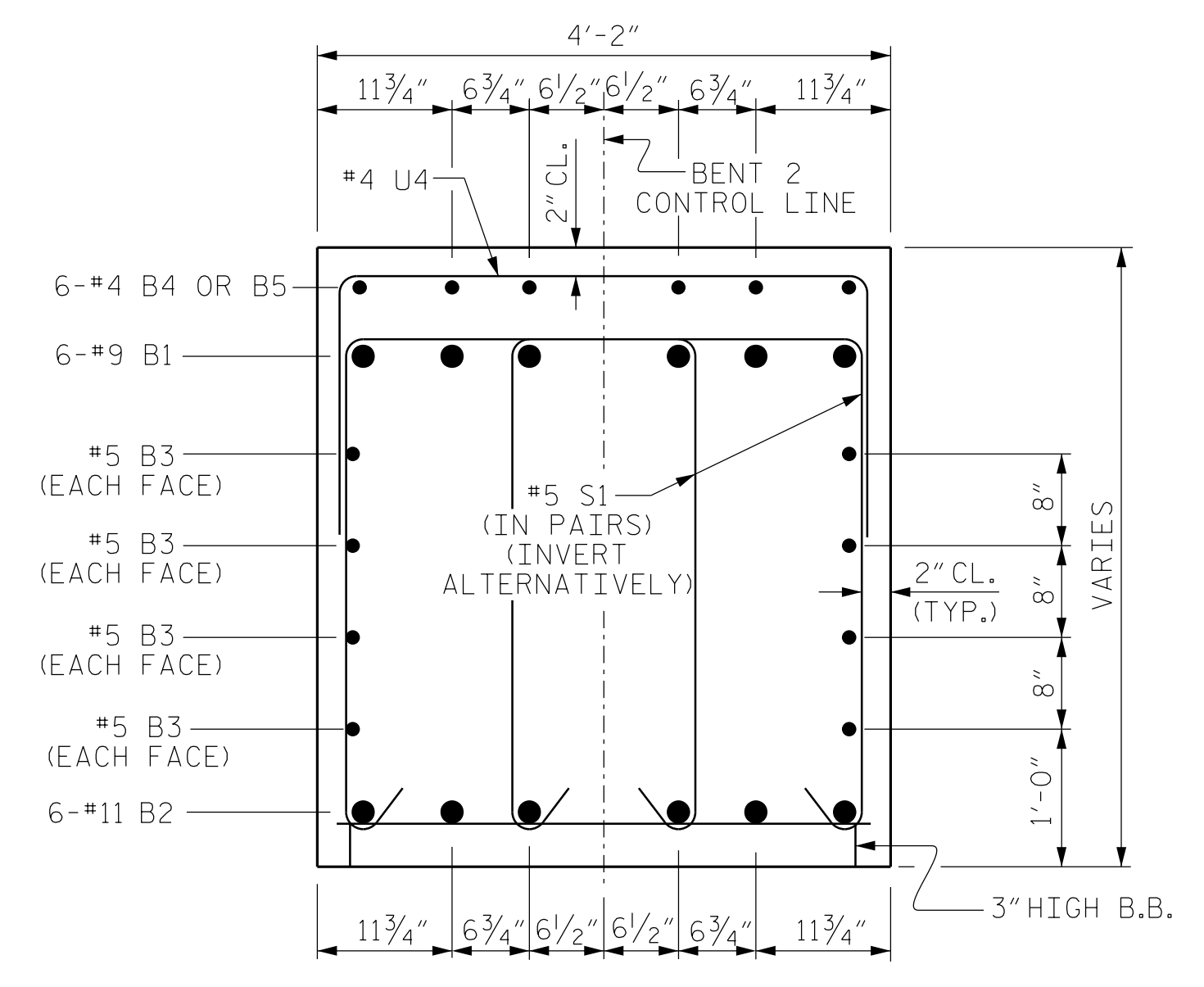
CONSTRUCTION JOINT DETAIL



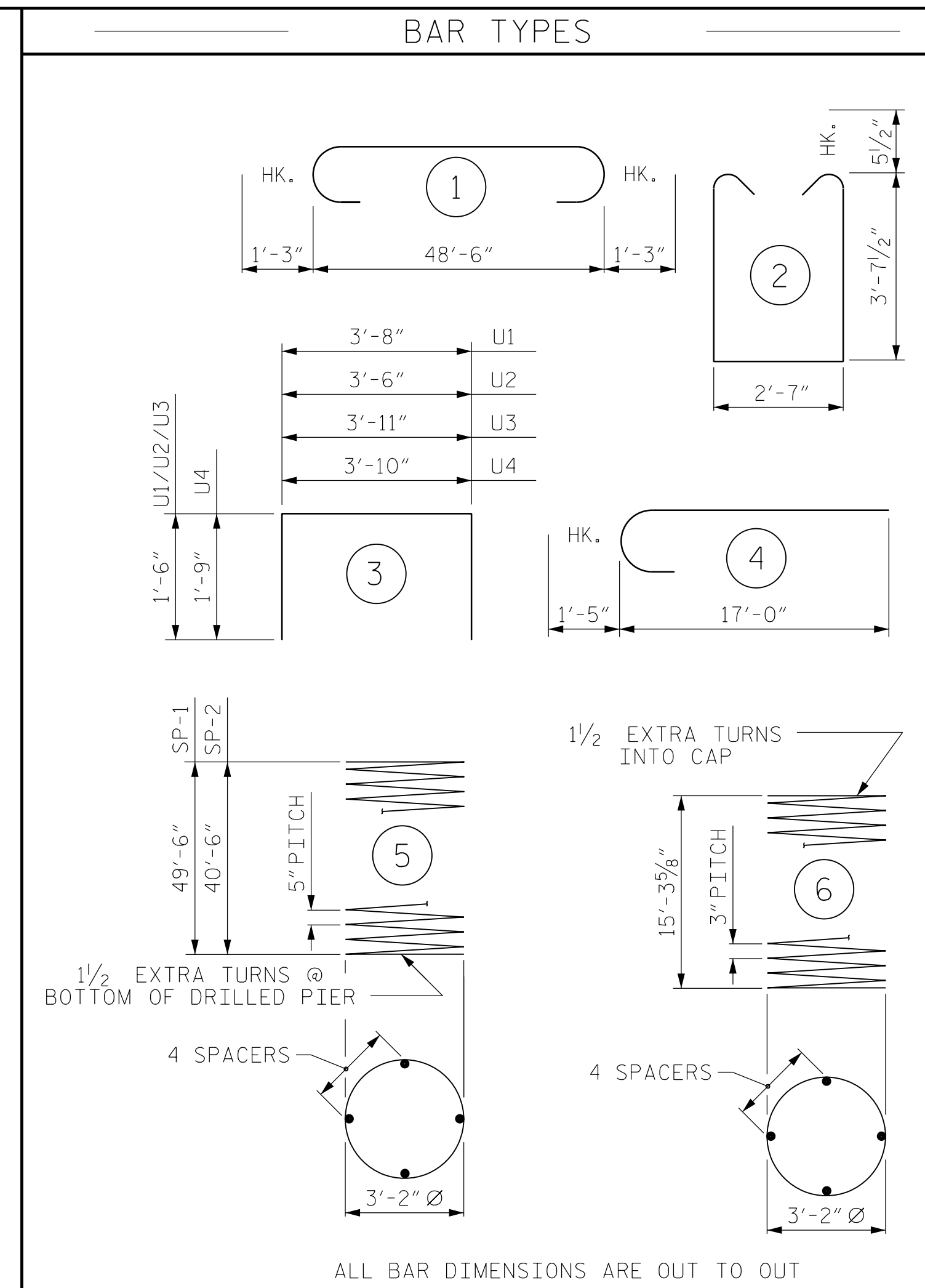
END OF CAP VIEW  
(TYPICAL BOTH ENDS)



SECTION A-A



SECTION B-B



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR ONE BENT

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	6	#9		51'-0"	1,040
B2	6	#11	STR	48'-8"	1,551
B3	8	#5	STR	48'-8"	406
B4	6	#4	STR	12'-0"	48
B5	6	#4	STR	28'-8"	115
M1	24	#10	STR	57'-1"	5,895
M2	12	#10	STR	48'-1"	2,483
S1	196	#5		10'-9"	2,198
U1	8	#4		6'-8"	36
U2	4	#4		6'-6"	17
U3	4	#4		6'-11"	18
U4	62	#4		7'-1"	293
V1	36	#10		18'-5"	2,853

REINFORCING STEEL (FOR ONE BENT) 16,953 LBS.

SP-1	2	*	5	1,176'-3"	2,454
SP-2	1	*	5	965'-1"	1,007
SP-4	3	**	6	614'-9"	1,232

SPIRAL COLUMN REINFORCING STEEL (FOR ONE BENT) 4,693 LBS.

\* THE SP-1 & SP-2 SPIRAL REINFORC. STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR  
 \*\* THE SP-4 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR

CLASS A CONCRETE BREAKDOWN (FOR ONE BENT)

POUR #2 (COLUMNS)	16.1 C.Y.
POUR #3 (CAP)	33.0 C.Y.

TOTAL CLASS A CONCRETE 49.1 C.Y.

DRILLED PIERS: (FOR ONE BENT)

DRILLED PIER CONCRETE	
POUR #1 (DRILLED PIERS)	65.7 C.Y.
4'-0" Ø DRILLED PIER NOT IN SOIL	56.5 LIN. FT.
4'-0" Ø DRILLED PIER IN SOIL	84.5 LIN. FT.
PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	9.0 LIN. FT.
CSL TESTING	3 EA.
CSL TUBES	582 LIN. FT.
PIT TESTING	1 EA.

PROJECT NO. BR-0069

CASWELL COUNTY

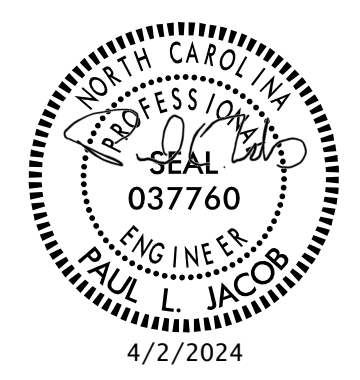
STATION: 20+18.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

SUBSTRUCTURE

BENT 2 DETAILS



DRAWN BY: J. WEIGER DATE: 6-2023  
 CHECKED BY: J. LOFTUS DATE: 8-2023  
 DESIGN ENGINEER OF RECORD: J. LOFTUS DATE: 3-2024

moffatt & nichol  
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 (919) 781-4626 VOICE (919) 781-4869 FAX  
 NC License No.: F-0105

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-31
1			3			TOTAL SHEETS
2			4			38

3/20/2024 03:19:10 PM BR-0069 Structures\01-CADD\02-Final Drawings\01\_061\_BR0069\_SML\_B202.031.160001.dgn jloftus