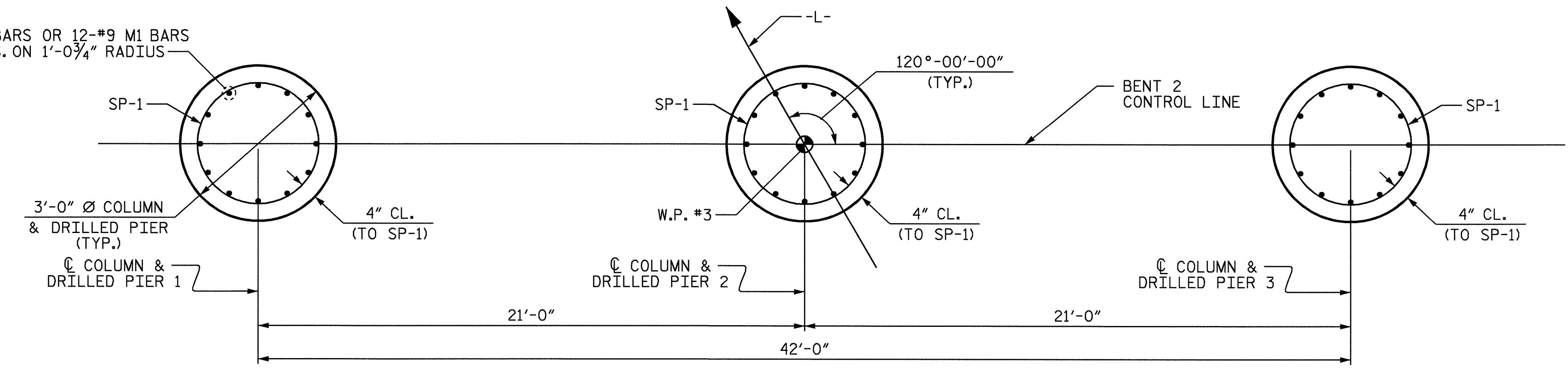
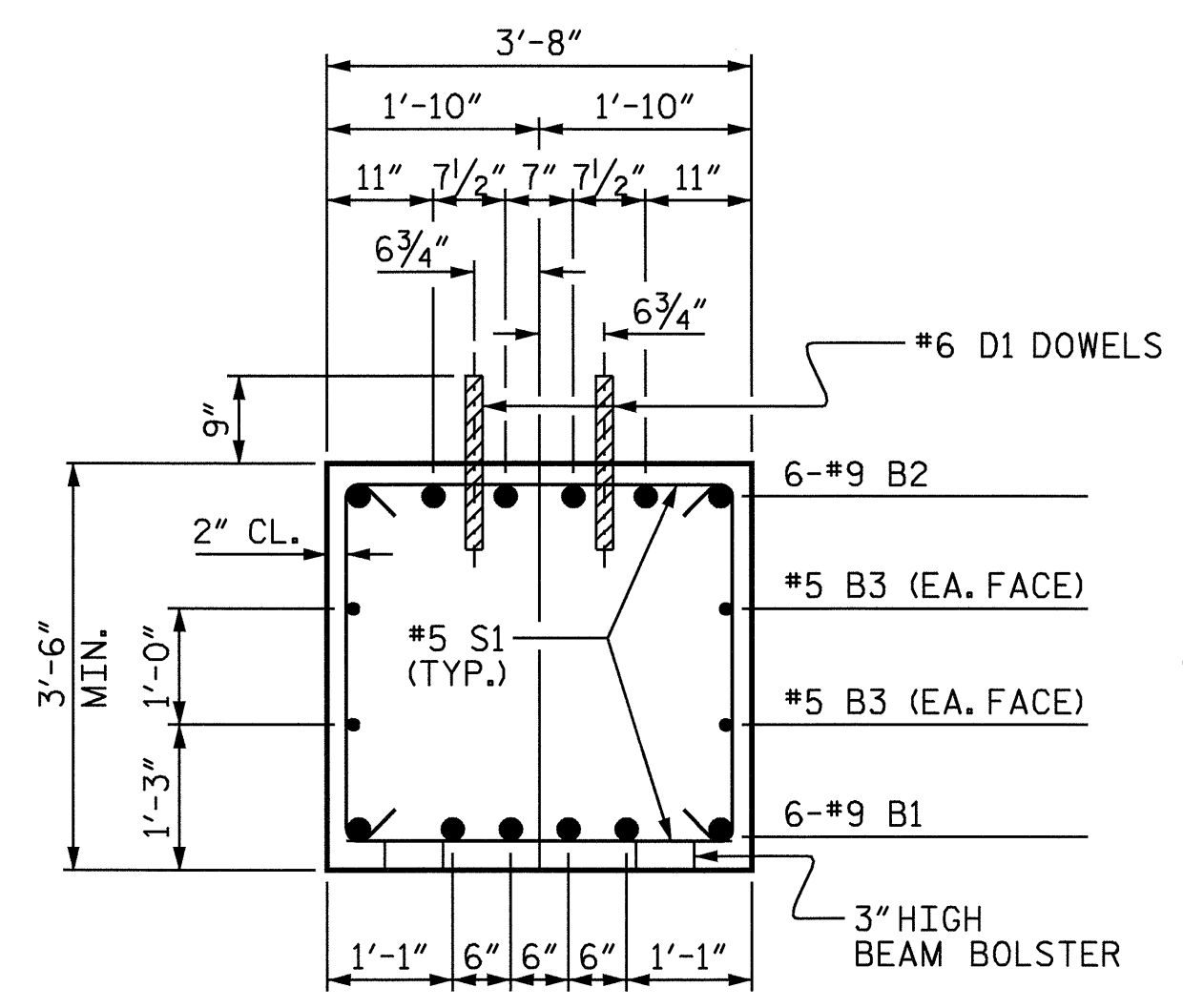


12-#9 "V" BARS OR 12-#9 M1 BARS  
@ 6 5/8" CTS. ON 1'-0 3/4" RADIUS

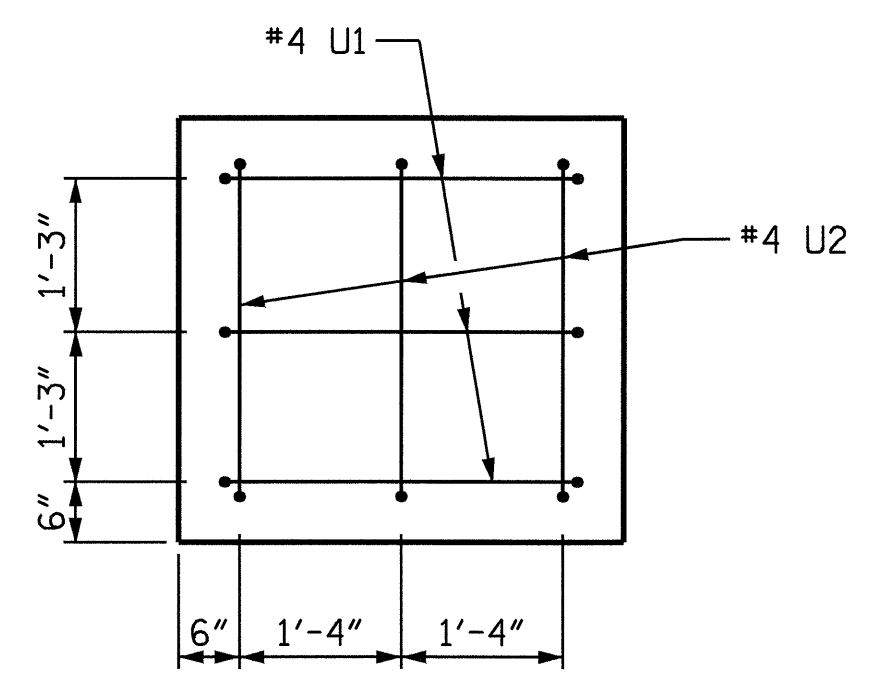


**PLAN OF COLUMNS AND DRILLED PIERS**

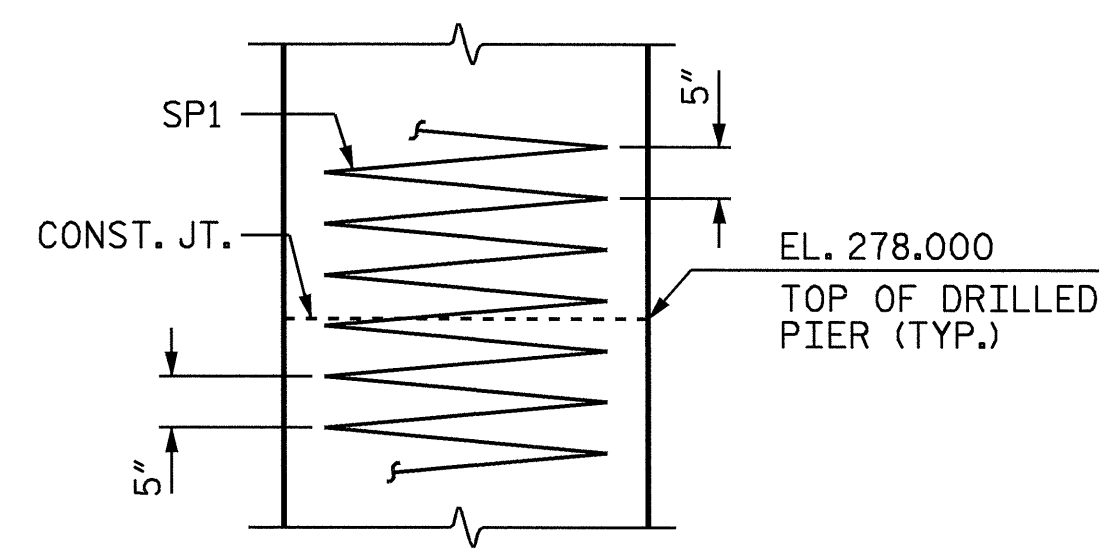
REINFORCING STEEL AND DIMENSIONS ARE TYPICAL FOR ALL COLUMNS AND DRILLED PIERS



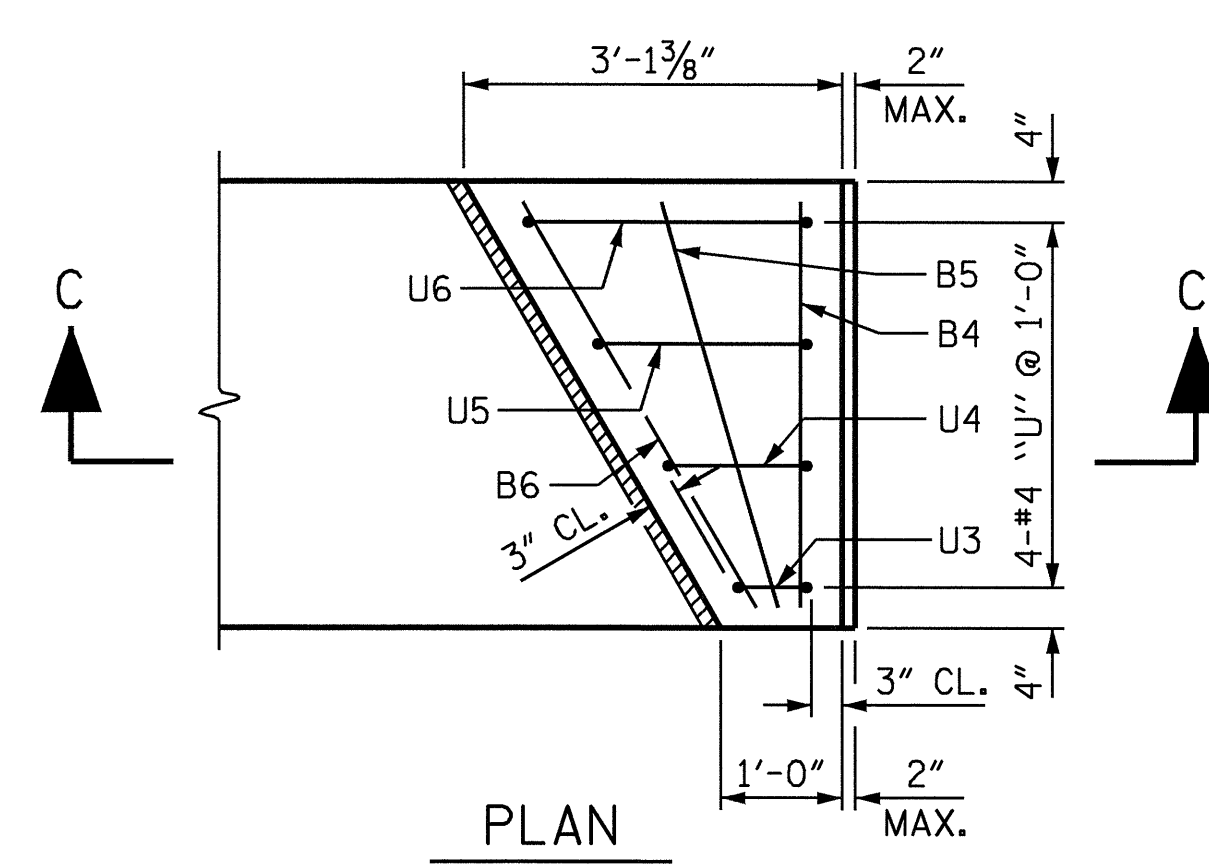
**SECTION A-A**



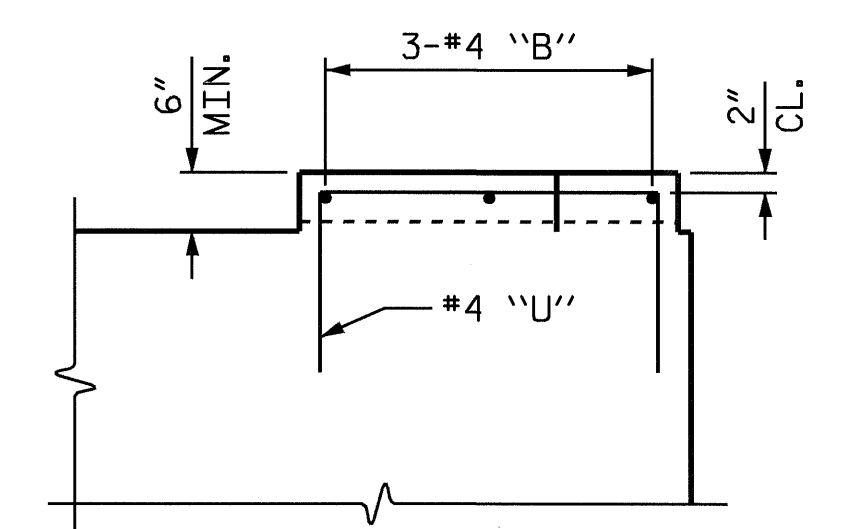
**VIEW X-X**



**CONSTRUCTION JOINT DETAIL**

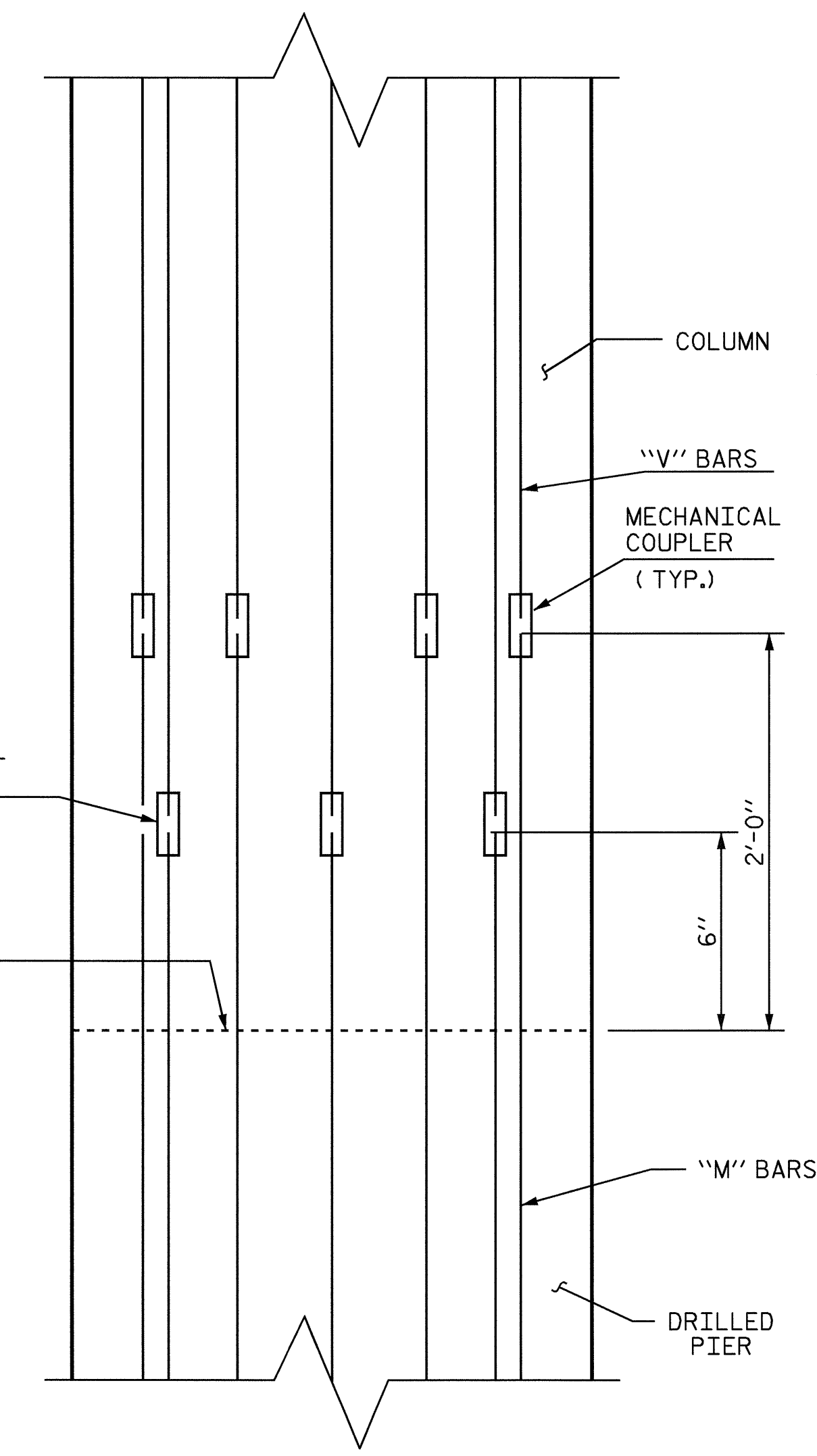


**PLAN**



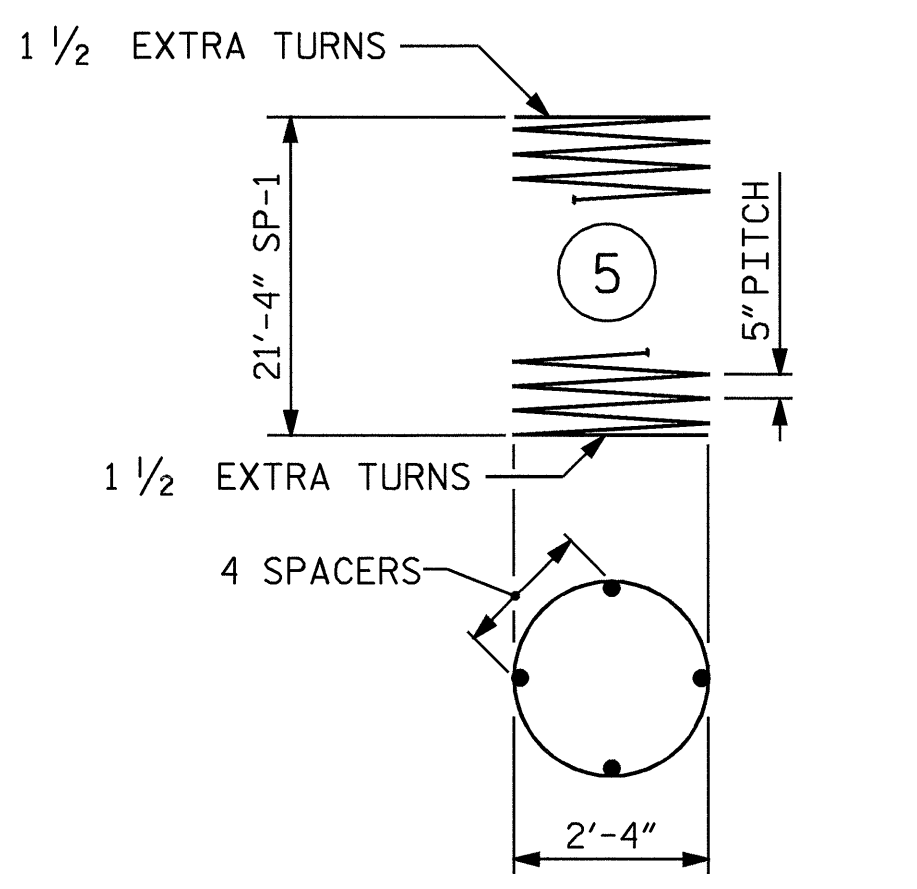
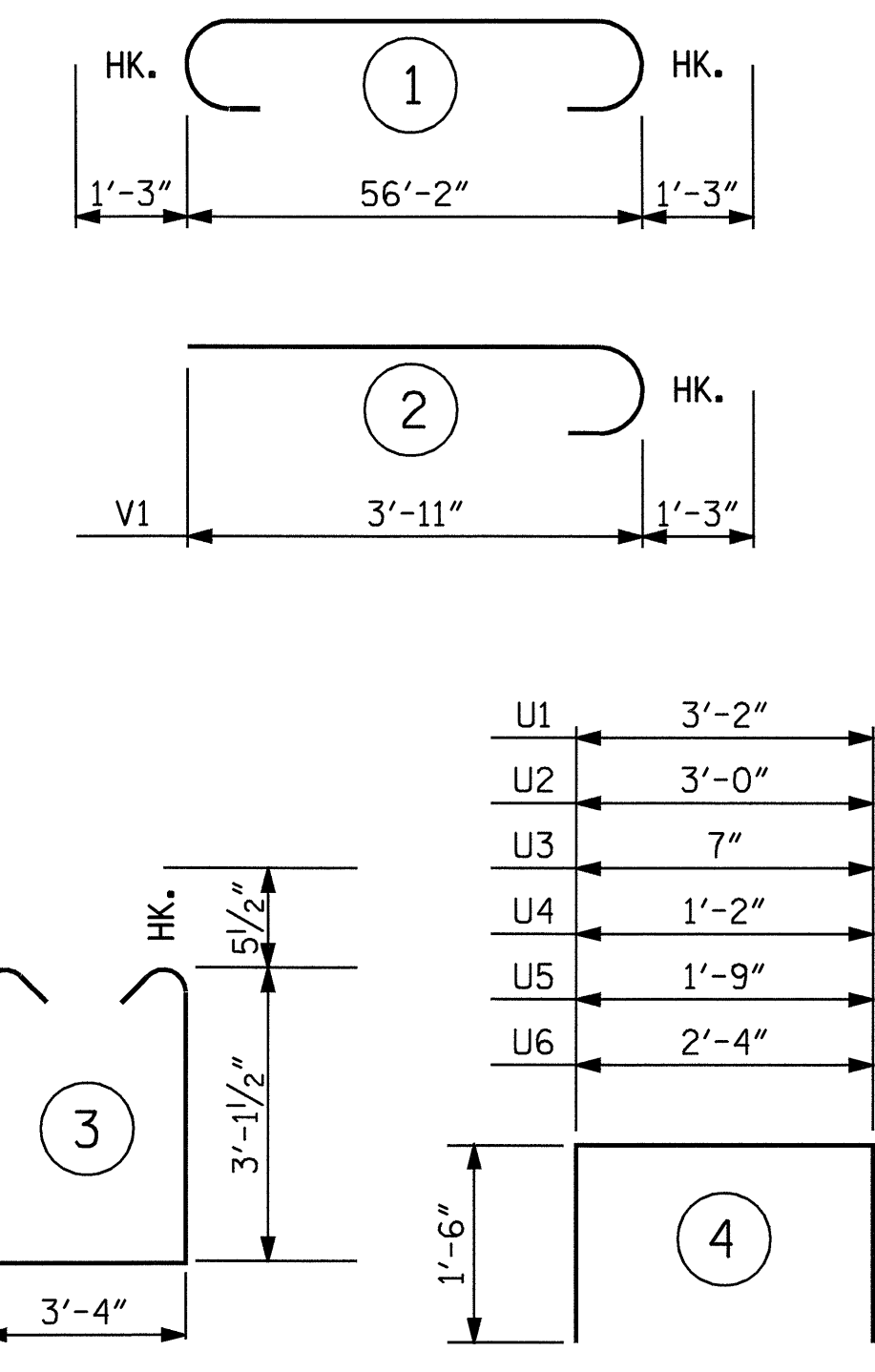
**ELEVATION**

**LATERAL GUIDE DETAIL**



**MECHANICAL COUPLER STAGGER DETAIL**

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

\* THE "SP" SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

**BILL OF MATERIAL**

BENT 2					
BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
B1	6	9	STR	56-3	1148
B2	6	9	1	58-8	1197
B3	4	5	STR	56-3	235
B4	2	4	STR	3-4	4
B5	2	4	STR	3-5	5
B6	2	4	STR	3-10	5
D1	60	6	STR	1-6	135
M1	36	9	STR	23-9	2907
S1	48	5	3	10-6	526
U1	6	4	4	6-2	25
U2	6	4	4	6-0	24
U3	2	4	4	3-7	5
U4	2	4	4	4-2	6
U5	2	4	4	4-9	6
U6	2	4	4	5-4	7
V1	36	9	2	5-2	632
SP-1	3	**	5	389-6	1219
REINFORCING STEEL				LBS.	6867
SPIRAL REINFORCING STEEL				LBS.	1219
CLASS A CONCRETE BREAKDOWN					
POUR #2 (COLUMNS)				C.Y.	2.2
POUR #3 (CAP)				C.Y.	27.2
POUR #4 (LATERAL GUIDE)				C.Y.	0.3
TOTAL CLASS A CONCRETE				C.Y.	29.7

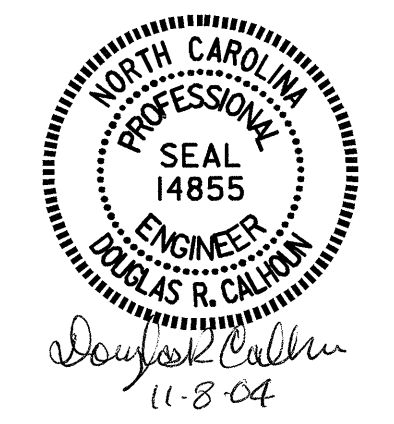
**3'-0" DRILLED PIERS**

DRILLED PIER CONCRETE			
POUR #1 (DRILLED PIERS)	C.Y.	14.9	
3'-0" DRILLED PIERS IN SOIL: 35.20 LIN. FT.			
3'-0" DRILLED PIERS NOT IN SOIL: 21.80 LIN. FT.			
PERMANENT STEEL CASING FOR 3'-0" DRILLED PIERS: 34.50 LIN. FT.			
CSL TUBES: 258.00 LIN. FT.			
CROSSHOLE SONIC LOGGING EA. 1			

PROJECT NO. B-3451  
DURHAM COUNTY  
STATION: 14+99.30 -L-  
SHEET 2 OF 2

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

**SUBSTRUCTURE BENT 2**



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-21
1			3			TOTAL SHEETS
2			4			27