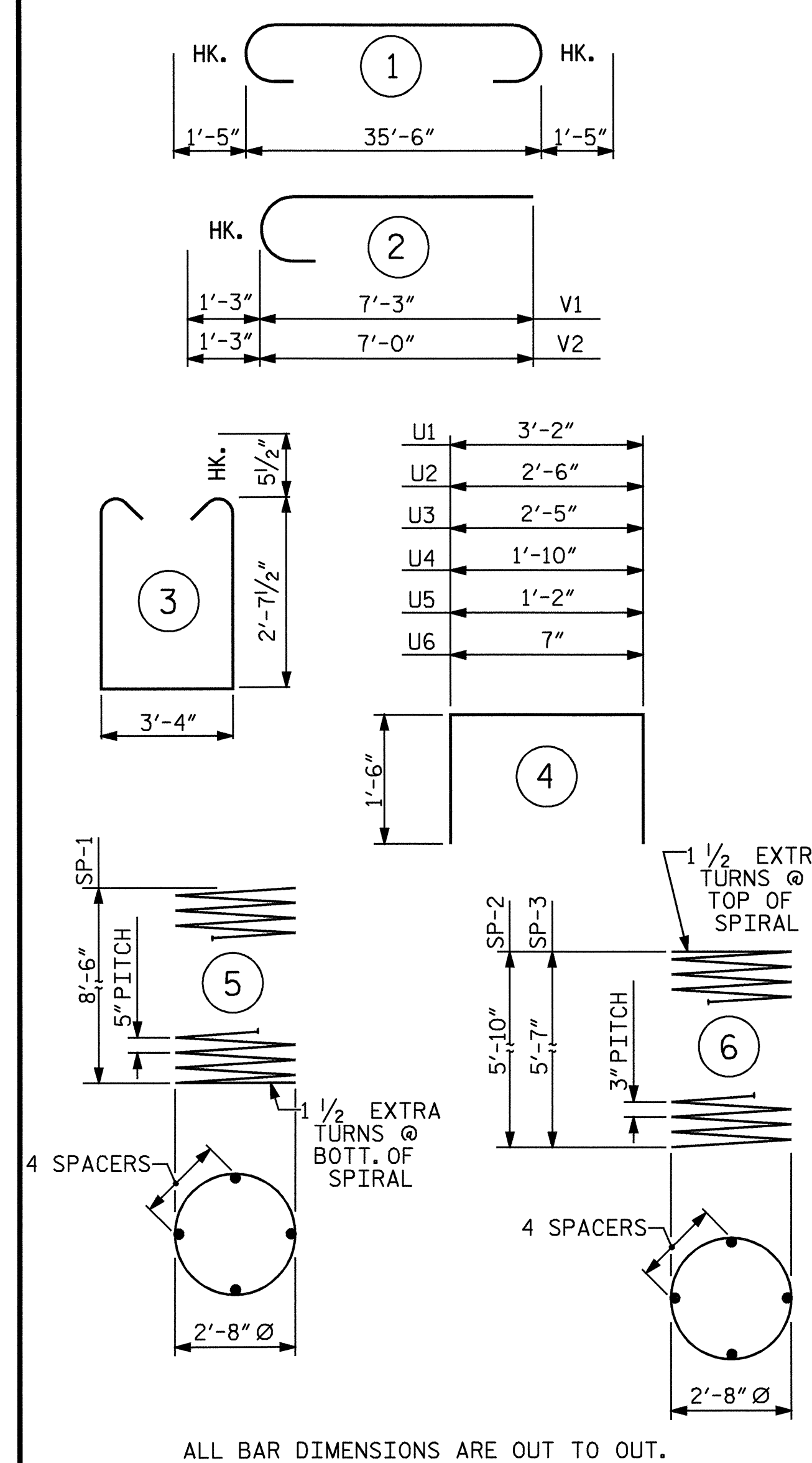


**PLAN OF DRILLED PIERS & COLUMNS**

REINFORCING STEEL, DIMENSIONS & DETAILS ARE TYPICAL FOR EACH COLUMN & DRILLED PIER.

**BAR TYPES**



**BILL OF MATERIAL**

BENT No. 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	12	#10	1	38'-4"	1979
B2	4	#6	STR	35'-8"	214
B3	2	#4	STR	3'-10"	5
B4	2	#4	STR	3'-4"	4
M1	24	#9	STR	16'-3"	1326
S1	33	#5	3	9'-6"	327
U1	6	#4	4	6'-2"	25
U2	6	#4	4	5'-6"	22
U3	2	#4	4	5'-5"	7
U4	2	#4	4	4'-10"	6
U5	2	#4	4	4'-2"	6
U6	2	#4	4	3'-7"	5
V1	12	#9	2	8'-6"	347
V2	12	#9	2	8'-3"	337
REINFORCING STEEL				=	4610 LBS
SP-1	2	*	5	181'-0"	378
SP-2	1	**	6	206'-3"	138
SP-3	1	**	6	198'-0"	132
SPIRAL COLUMN REINFORCING STEEL				=	648 LBS

\* THE SP-1 SPIRAL COLUMN REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

\*\* THE SP-2 & SP-3 SPIRAL COLUMN REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED WIRE.

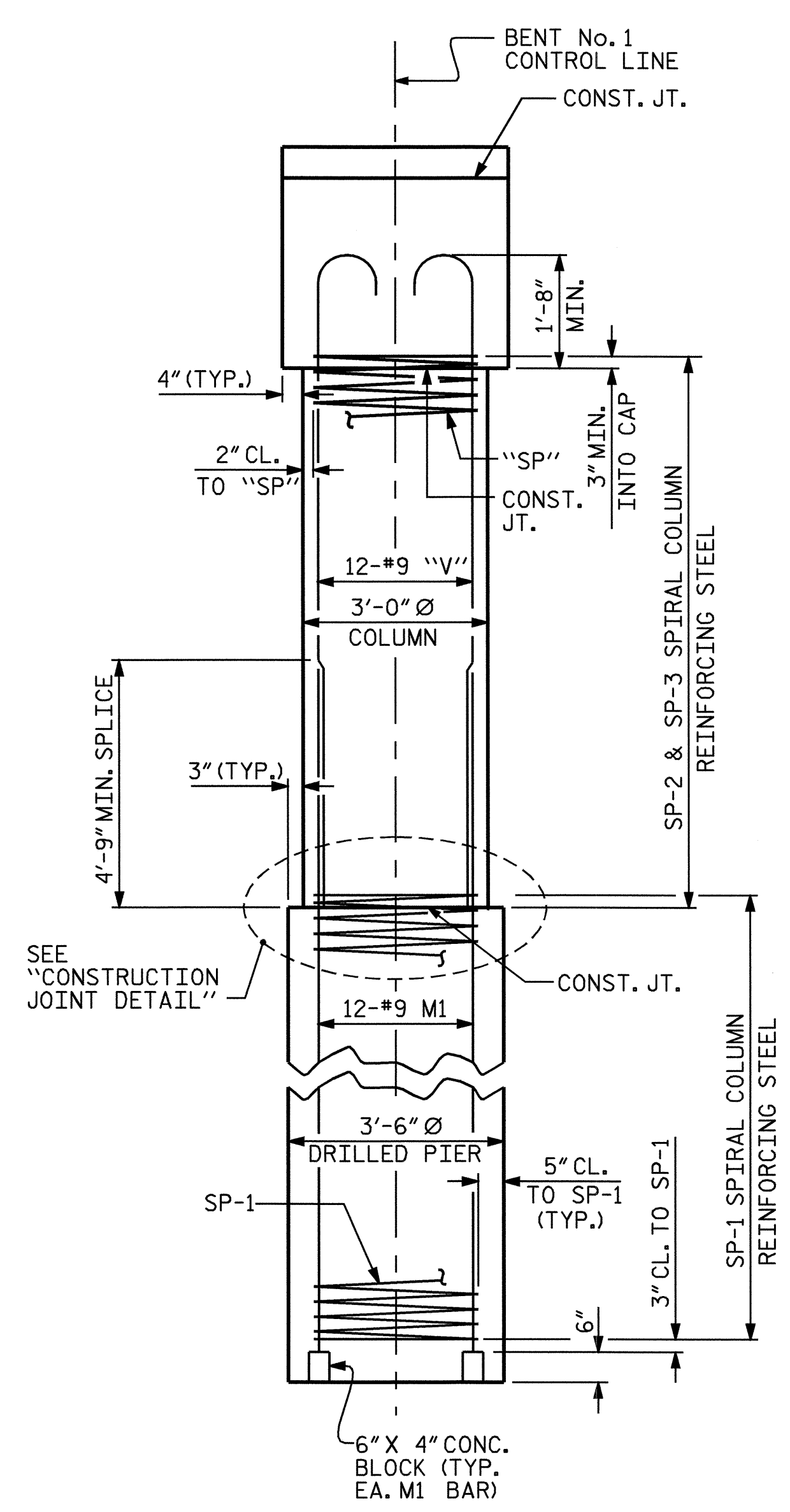
THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH THREE FEET OF EXTRA LENGTH.

CLASS A CONCRETE BREAKDOWN :

POUR #2 (COLUMNS)	2.8 C.Y.
POUR #3 (CAP)	14.8 C.Y.
POUR #4 (LATERAL GUIDES)	0.3 C.Y.
<b>TOTAL</b>	<b>17.9 C.Y.</b>

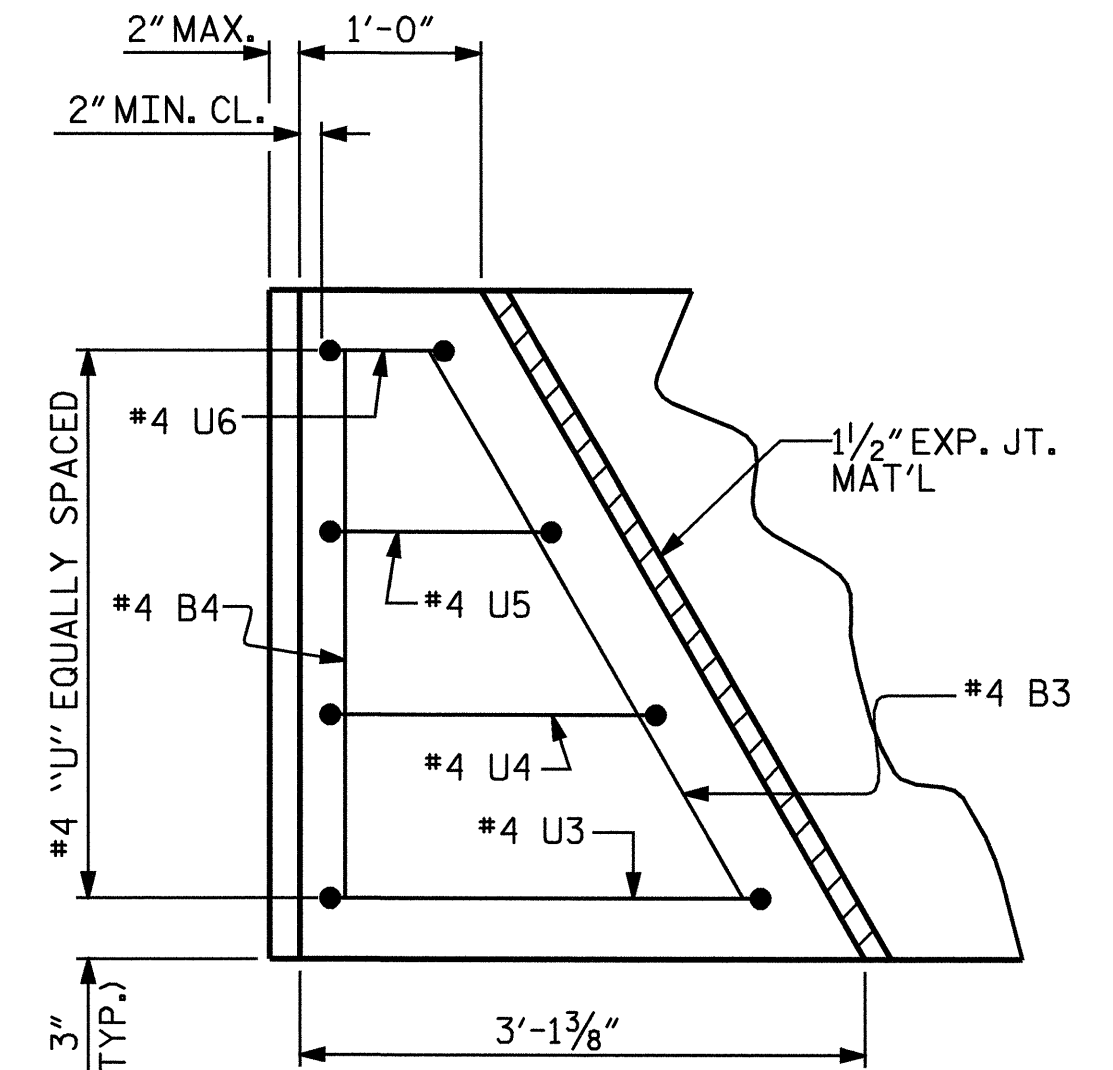
**3'-6" Ø DRILLED PIERS**

POUR #1 (DRILLED PIER CONCRETE)	6.4 C.Y.
3'-6" Ø DRILLED PIERS NOT IN SOIL	16.0 LIN. FT.
3'-6" Ø DRILLED PIERS IN SOIL	2.0 LIN. FT.
CROSSHOLE SONIC LOGGING	1 EACH
CSL TUBES	92.0 LIN. FT.

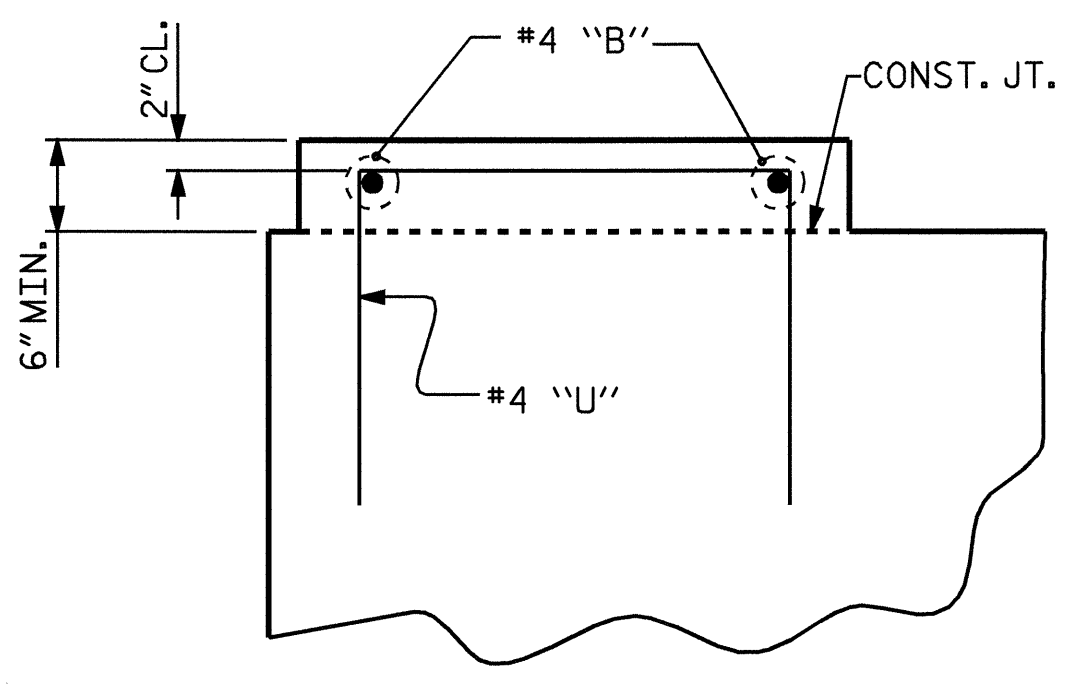


**END ELEVATION**

REINFORCING STEEL, DIMENSIONS & DETAILS ARE TYPICAL FOR EACH COLUMN & DRILLED PIER UNLESS OTHERWISE NOTED.



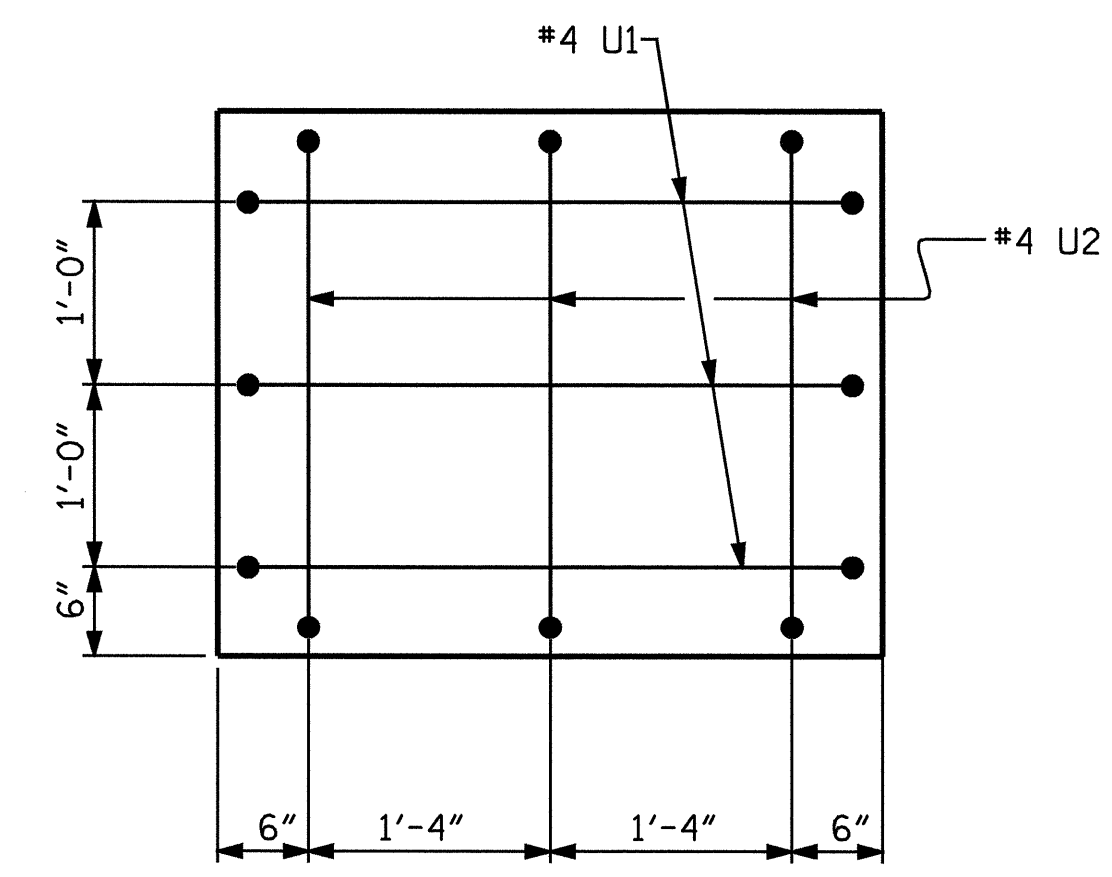
**PLAN**



**ELEVATION**

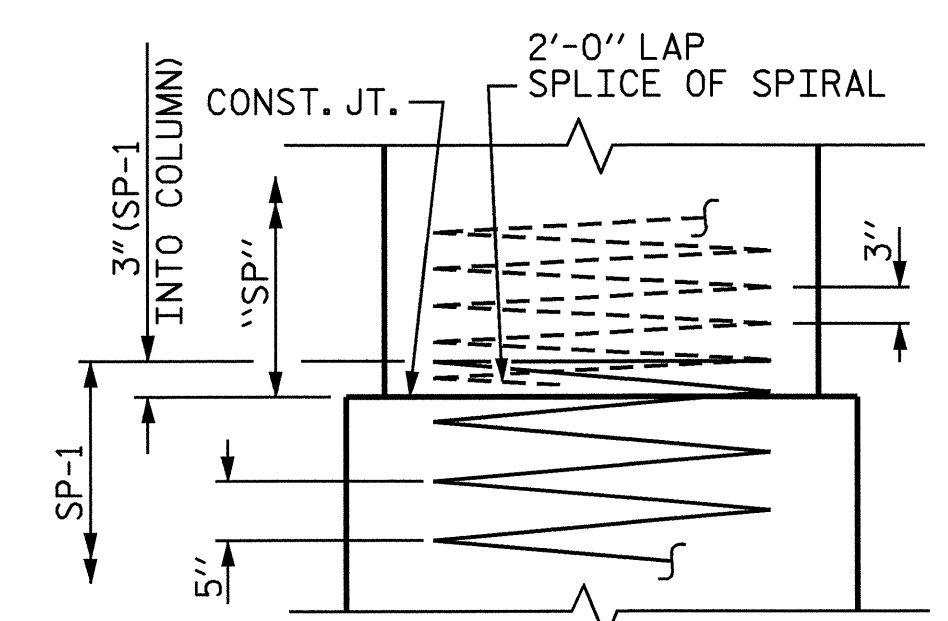
**LATERAL GUIDE DETAIL**

(LEFT LATERAL GUIDE SHOWN ; RIGHT LATERAL GUIDE SIMILAR)



**END OF CAP VIEW**

(TYPICAL EACH END)



**CONSTRUCTION JOINT DETAIL**



PROJECT NO. B-3709  
WATAUGA COUNTY  
 STATION: 16+99.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE**  
**BENT No. 1**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-13
1			3			TOTAL SHEETS
2			4			23

DRAWN BY : A.R.CHESSON DATE : 1-05  
 CHECKED BY : B.N. GRADY DATE : 2-05