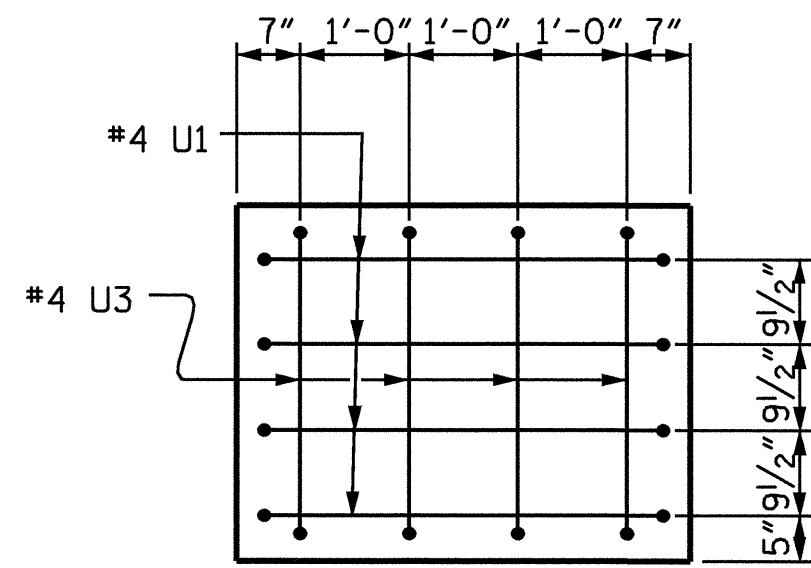
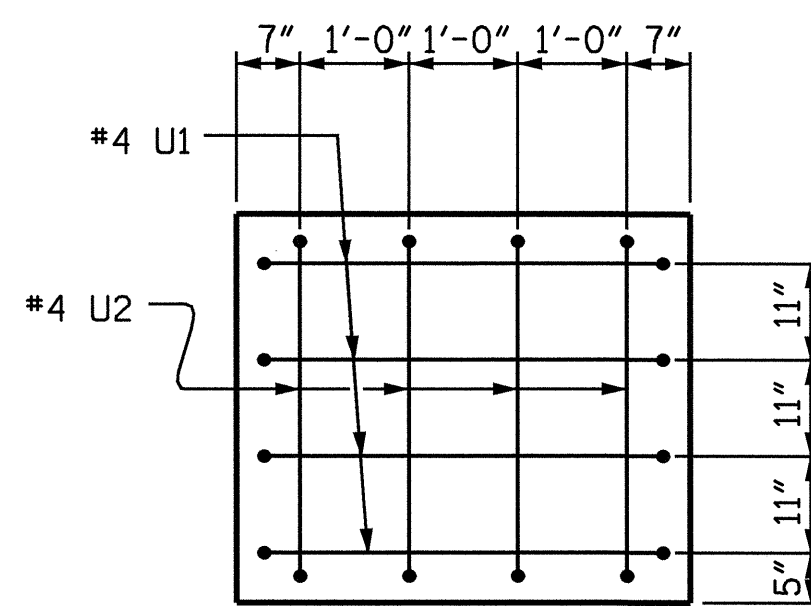


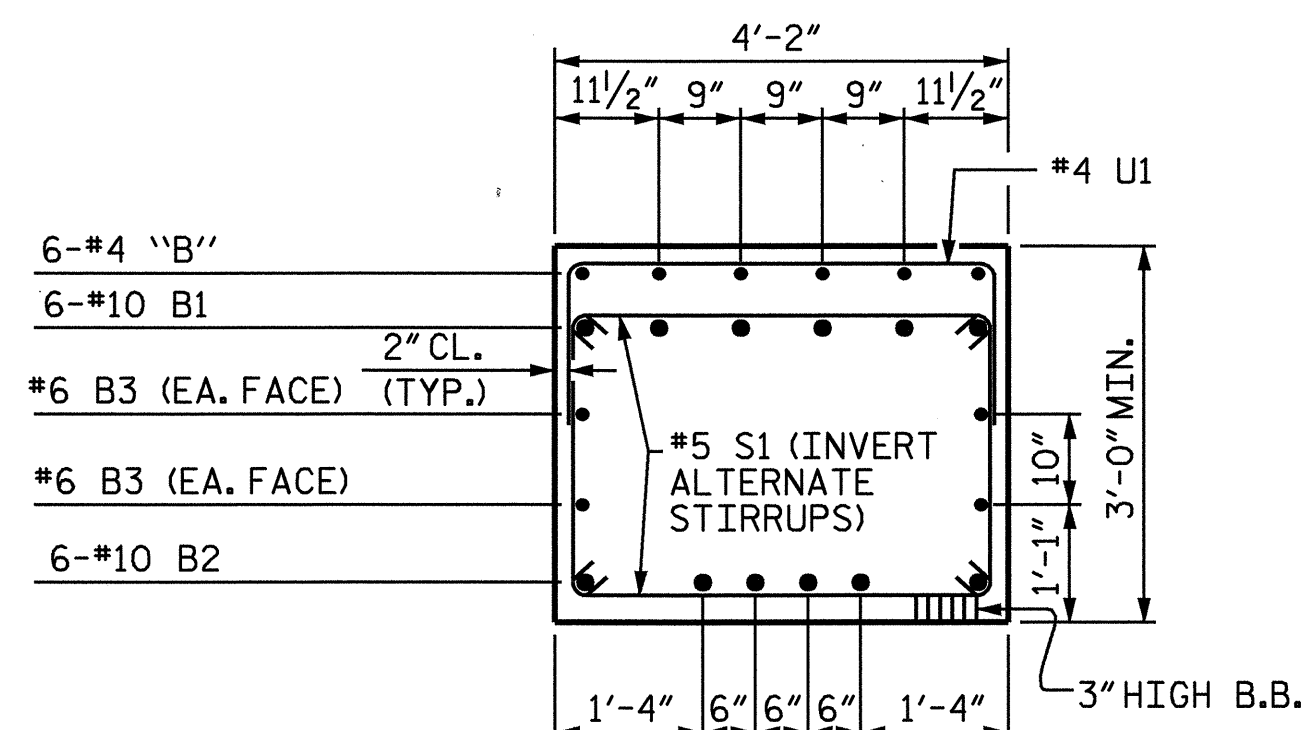
**CONSTRUCTION JOINT DETAIL**  
SHOWING MECHANICAL COUPLER



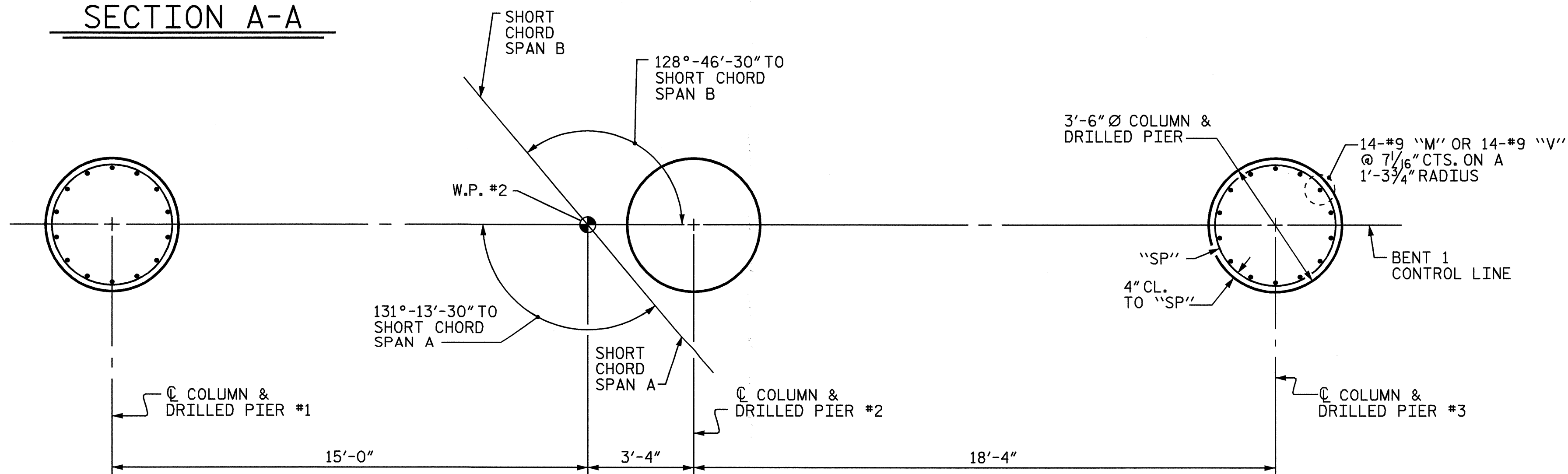
**VIEW X-X**



**VIEW Y-Y**



**SECTION A-A**



**PLAN OF COLUMNS AND DRILLED PIERS**

**NOTES :**

STIRRUPS IN CAP MAY BE SHIFTED AS NECESSARY TO CLEAR ANCHOR BOLTS.

HOOKS ON "V" BARS MAY BE TURNED AS NECESSARY FOR PLACING REINFORCING STEEL.

ALL STEEL IN THE DRILLED PIERS IS INCLUDED IN THE PAY ITEMS FOR "REINFORCING STEEL" AND "SPIRAL COLUMN REINFORCING STEEL".

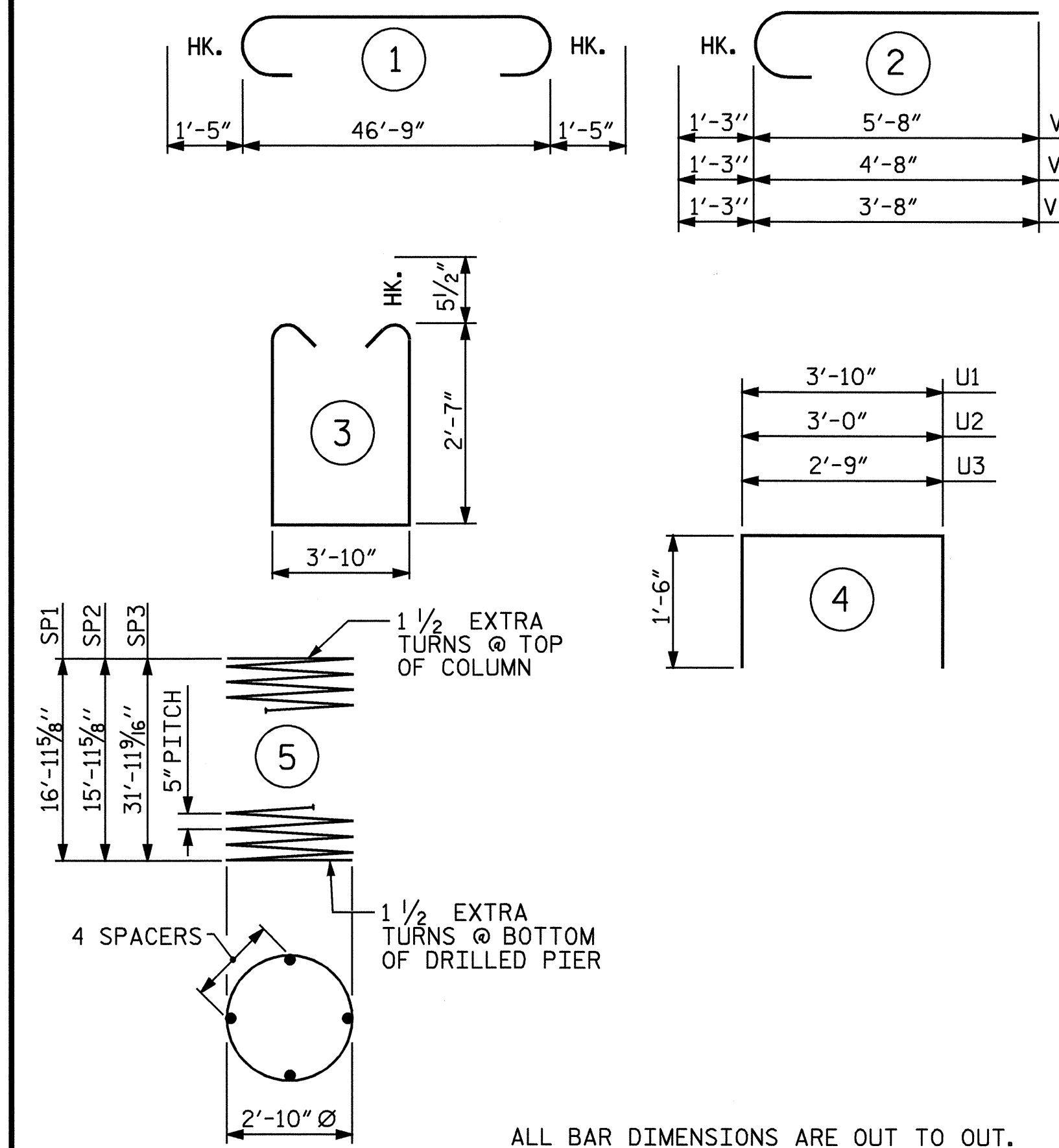
THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH 3 FEET OF EXTRA LENGTH.

MECHANICAL COUPLERS SHALL BE USED TO JOIN THE LONGITUDINAL DRILLED PIER REINFORCING STEEL TO THE COLUMN REINFORCING STEEL. THE HEIGHT OF THE COUPLERS SHALL BE STAGGERED ON ALTERNATING BARS BY 1'-6" FOOT AND THE DRILLED PIER AND COLUMN STEEL SHALL BE CUT ACCORDINGLY. SEE SPECIAL PROVISIONS FOR MECHANICAL BUTT SPLICING FOR REINFORCING STEEL.

THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND LINE ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FOOT BELOW THE GROUND LINE.

SPLICING OF THE LONGITUDINAL BARS IN THE DRILLED PIER WILL NOT BE PERMITTED.

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

\* THE SP1, SP2 & SP3 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

**BILL OF MATERIAL**

BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	6	#10		49'-7"	1280
B2	6	#10	STR	46'-10"	1209
B3	4	#6	STR	46'-10"	281
B4	6	#4	STR	6'-0"	24
B5	18	#4	STR	5'-8"	68
B6	6	#4	STR	4'-7"	18
M1	28	#9	STR	17'-0"	1618
M2	14	#9	STR	34'-0"	1618
S1	44	#5	3	9'-11"	455
U1	52	#4	4	6'-10"	237
U2	4	#4	4	6'-0"	16
U3	4	#4	4	5'-9"	15
V1	14	#9	2	6'-11"	329
V2	14	#9	2	5'-11"	282
V3	14	#9	2	4'-11"	234
REINFORCING STEEL					= 7684 LBS
SP1	1	*	5	395'-0"	412
SP2	1	*	5	373'-8"	390
SP3	1	*	5	715'-8"	746
SPIRAL COLUMN REINFORCING STEEL ("SP")					= 1548 LBS
CLASS A CONCRETE					
POUR 2 (COLUMNS)----- 4.9 C.Y.					
POUR 3 (CAP)----- 24.1 C.Y.					
TOTAL----- 29.0 C.Y.					

**DRILLED PIER QUANTITIES**

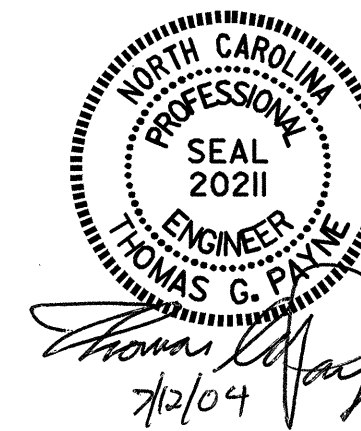
DRILLED PIER CONCRETE	
POUR 1 (DRILLED PIER)----- 18.9 C.Y.	
3'-6" Ø DRILLED PIER NOT IN SOIL-----	34.00 LIN. FT.
3'-6" Ø DRILLED PIER IN SOIL-----	19.00 LIN. FT.
PERMANENT STEEL CASING FOR 3'-6" Ø DRILLED PIER-----	24.00 LIN. FT.
CROSS HOLE SONIC LOGGING---	1 EA.
CSL TUBES-----	242.00 LIN. FT.

PROJECT NO. B-3310  
BUNCOMBE COUNTY  
 STATION: 19+18.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SUBSTRUCTURE  
 BENT 1



REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

S-20  
 TOTAL SHEETS  
 32

DRAWN BY : A.R.CHESSON/JPA DATE : 1-04  
 CHECKED BY : J.H. LANDRUM DATE : 3-04