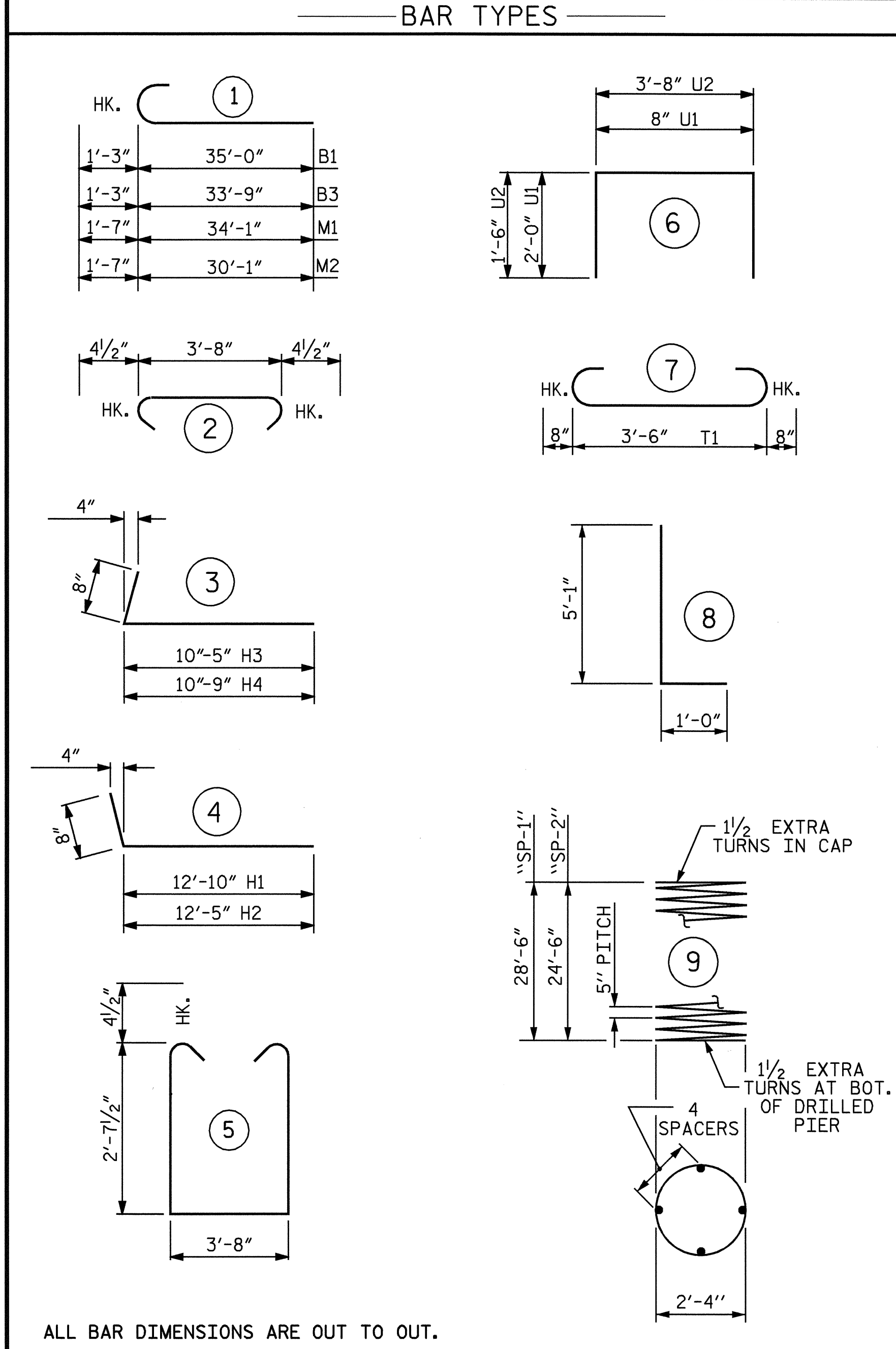


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



BILL OF MATERIAL

END BENT #2

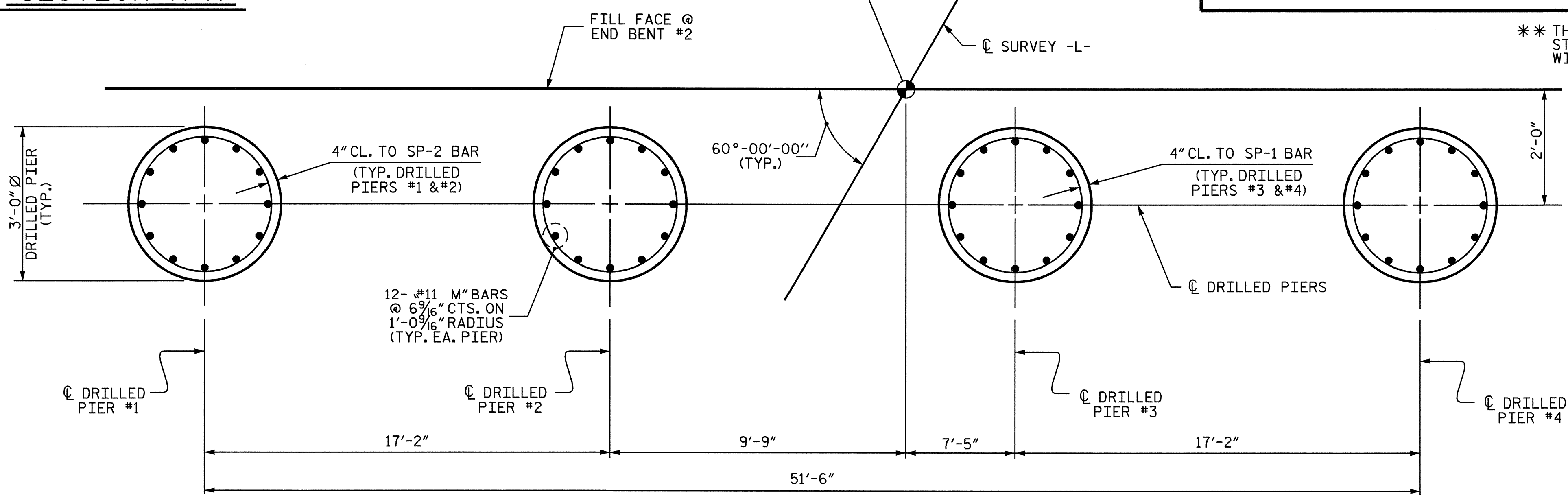
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#9		36'-3"	1233
B2	4	#5	STR	32'-2"	134
B3	10	#9		35'-0"	1190
B4	10	#4	STR	3'-6"	23
B5	5	#4	STR	12'-4"	41
K1	30	#4	STR	22'-1"	443
K2	8	#4	STR	3'-0"	16
H1	11	#5		13'-6"	155
H2	11	#5		13'-1"	150
H3	11	#5		11'-1"	127
H4	11	#5		11'-5"	131
L1	14	#6		6'-1"	128
M1	24	#11		35'-8"	4548
M2	24	#11		31'-8"	4038
S1	77	#5		9'-8"	776
S2	77	#5		4'-5"	355
T1	28	#6		4'-10"	203
U1	55	#5		4'-8"	268
U2	17	#4		6'-8"	76
V1	110	#5	STR	7'-11"	908
V2	32	#5	STR	9'-3"	309
V3	28	#5	STR	9'-4"	273
SP-1	2	**		593'-11"	1240
SP-2	2	**		515'-0"	1074

SP-1 REINFORCING STEEL = 2,314 LBS

SP-2 REINFORCING STEEL = 15,525 LBS

CLASS "A" CONCRETE BREAKDOWN

POUR #1 WING FOOTING	CU. YDS. 1.2
POUR #2 CAP & LOWER WINGS	CU. YDS. 31.7
POUR #3 BACKWALL & UPPER WINGS	CU. YDS. 18.5
TOTAL CLASS A CONCRETE	CU. YDS. 50.2
3'-0" Ø DRILLED PIERS	
DRILLED PIER CONCRETE POUR #1	CU. YDS. 28.3
3'-0" Ø DRILLED PIER IN SOIL	LF 48.00
3'-0" Ø DRILLED PIER NOT IN SOIL	LF 60.00
SID INSPECTION	EA. 2
CROSSHOLE SONIC LOGGING	EA. 2
CSL TUBES	LF 472



** THE SP-1 AND SP-2 SPIRAL REINFORCING STEEL SHALL BE W-31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BARS.

DRAWN BY: CR YARBROUGH DATE: 10/04
 CHECKED BY: M.G. CHEEK DATE: 11/04



PROJECT NO. B-3300
 ASHE COUNTY
 STATION: 17+36.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUBSTRUCTURE
 END BENT #2**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS 23
2			4			