

NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC PLASTIC PIPE DRAINS, HARDWARE CLOTH AND FASTENERS. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

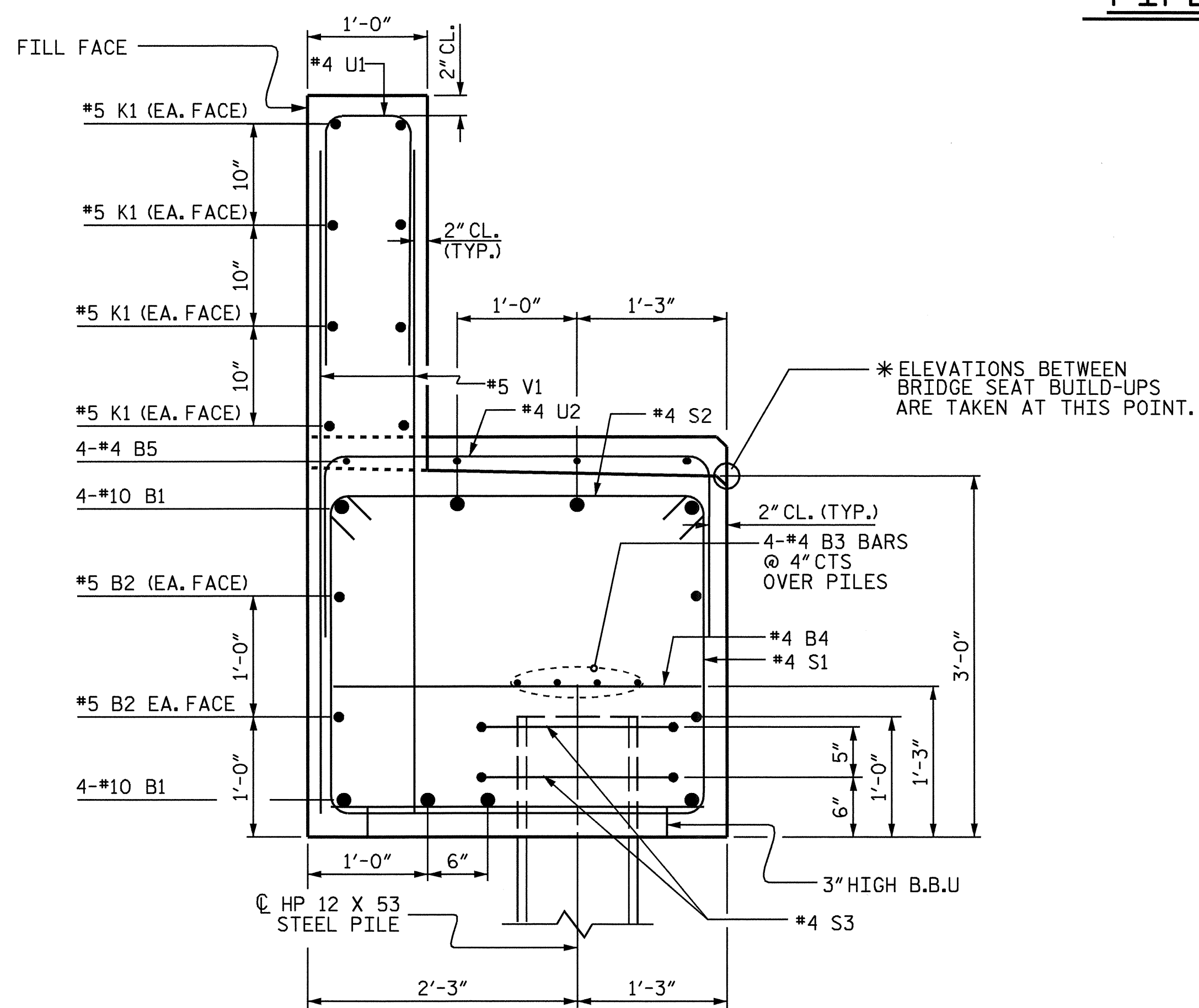
**PIPE DRAIN DETAILS**

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.

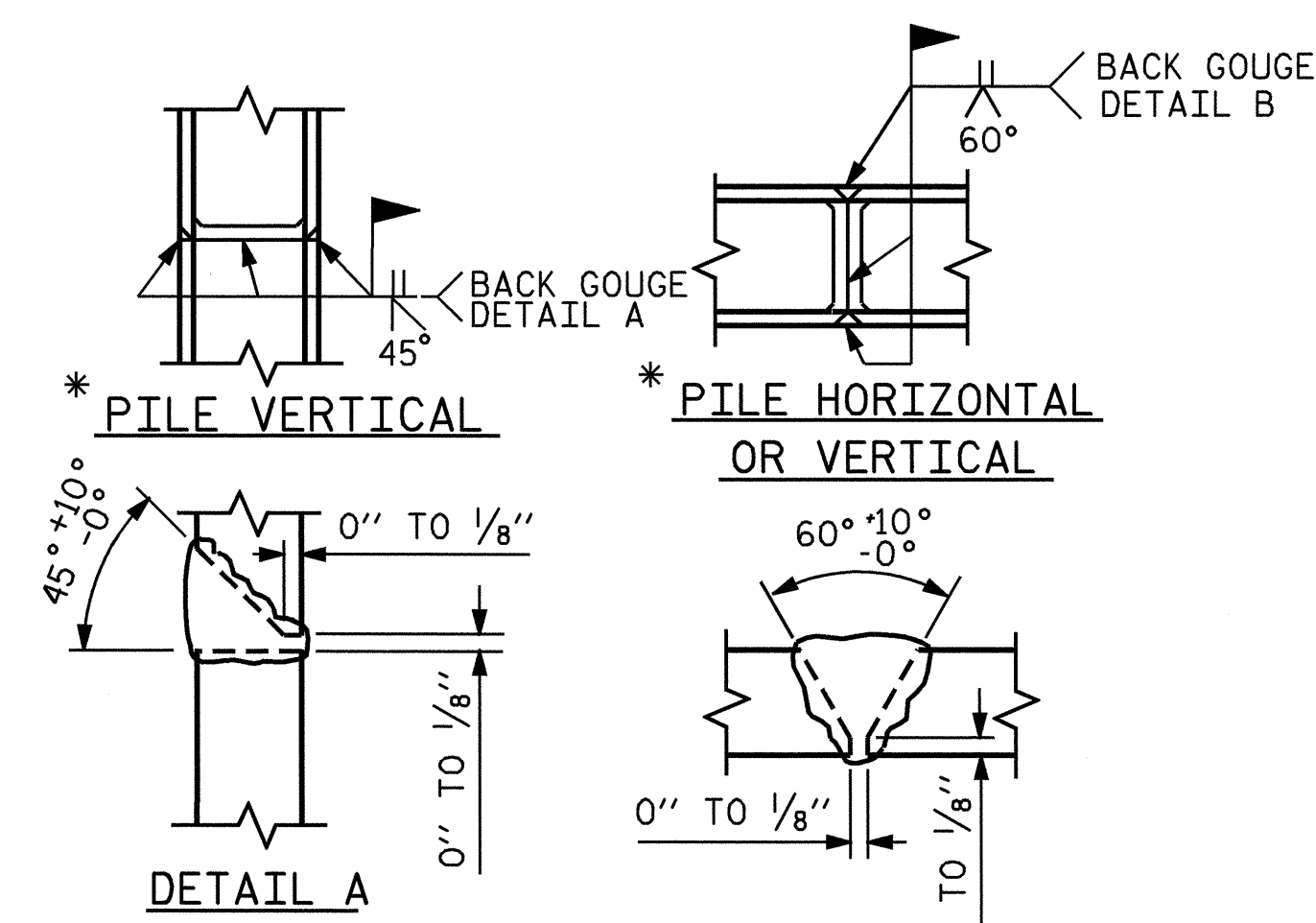
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

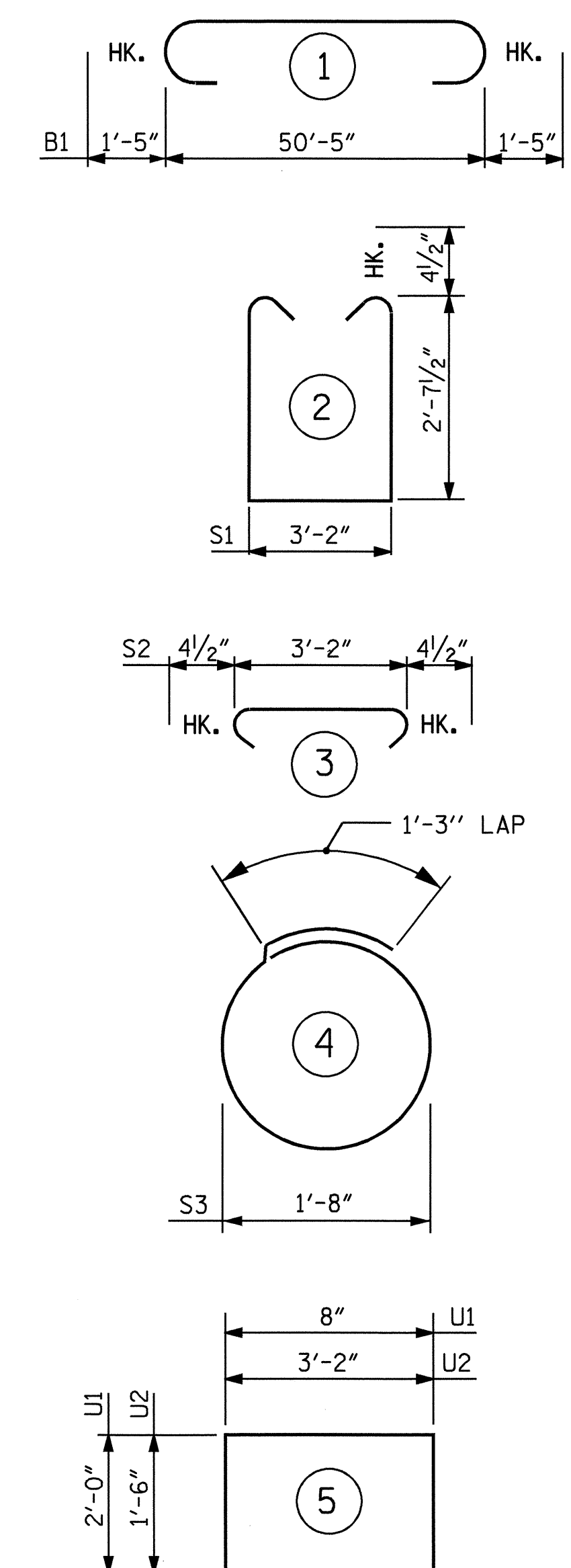


**SECTION A-A**



**PILE SPLICE DETAILS**

**BAR TYPES**



**BILL OF MATERIAL**

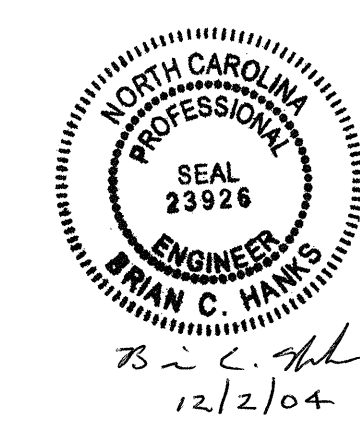
END BENT #1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#10	1	53'-3"	1833
B2	4	#5	STR	50'-5"	210
B3	8	#4	STR	26'-5"	141
B4	13	#4	STR	3'-2"	27
B5	8	#4	STR	2'-0"	11
H1	8	#5	STR	7'-3"	60
H2	8	#5	STR	6'-8"	56
H3	2	#5	STR	6'-4"	13
H4	2	#5	STR	5'-9"	12
H5	2	#5	STR	2'-9"	6
H6	2	#5	STR	2'-2"	5
K1	8	#5	STR	59'-9"	499
S1	51	#4	2	9'-2"	312
S2	51	#4	3	3'-11"	133
S3	16	#4	4	6'-6"	69
U1	45	#4	5	4'-8"	140
U2	6	#4	5	6'-2"	25
V1	90	#5	STR	5'-6"	516
V2	4	#4	STR	6'-7"	18
V3	4	#4	STR	6'-11"	18
V4	2	#4	STR	7'-4"	10
V5	6	#4	STR	7'-5"	30
V6	9	#4	STR	7'-1"	43
V7	2	#4	STR	6'-3"	8
V8	3	#4	STR	6'-9"	14
REINFORCING STEEL					LBS. 4209
CLASS A CONCRETE POUR 1 (CAP & LOWER PART OF EARWALLS)					21.1 CU. YD.
POUR 2 (UPPER PART OF EARWALLS & BACKWALL)					7.7 CU. YD.
TOTAL					28.8 CU. YD.
HP 12 X 53 STEEL PILES NUMBER = 8					LIN. FT. = 240
STEEL PILE POINTS					EACH 8
PILE EXCAVATION IN SOIL					LIN. FT. = 55
PILE EXCAVATION NOT IN SOIL					LIN. FT. = 25

ALL BAR DIMENSIONS ARE OUT TO OUT.

PROJECT NO. B-3659  
HAYWOOD COUNTY  
 STATION: 14+42.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 END BENT 1



DRAWN BY: K. K. PUROHIT DATE: 01/12/04  
 CHECKED BY: A. B. NAIK DATE: 02/05/04

REVISIONS						TOTAL SHEETS
NO.	BY:	DATE:	NO.	BY:	DATE:	23
1			3			
2			4			