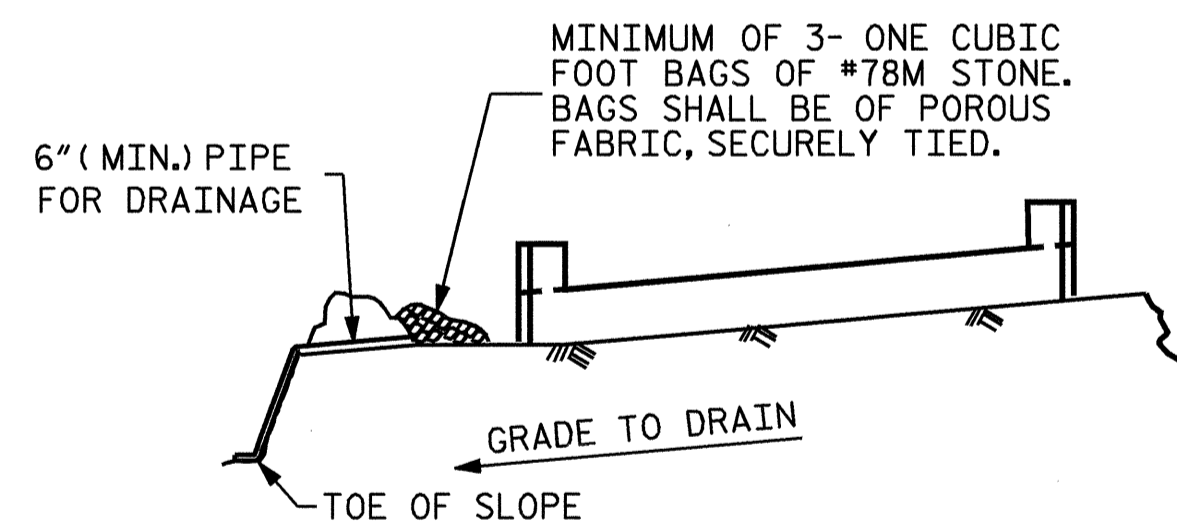


SECTION "A-A"

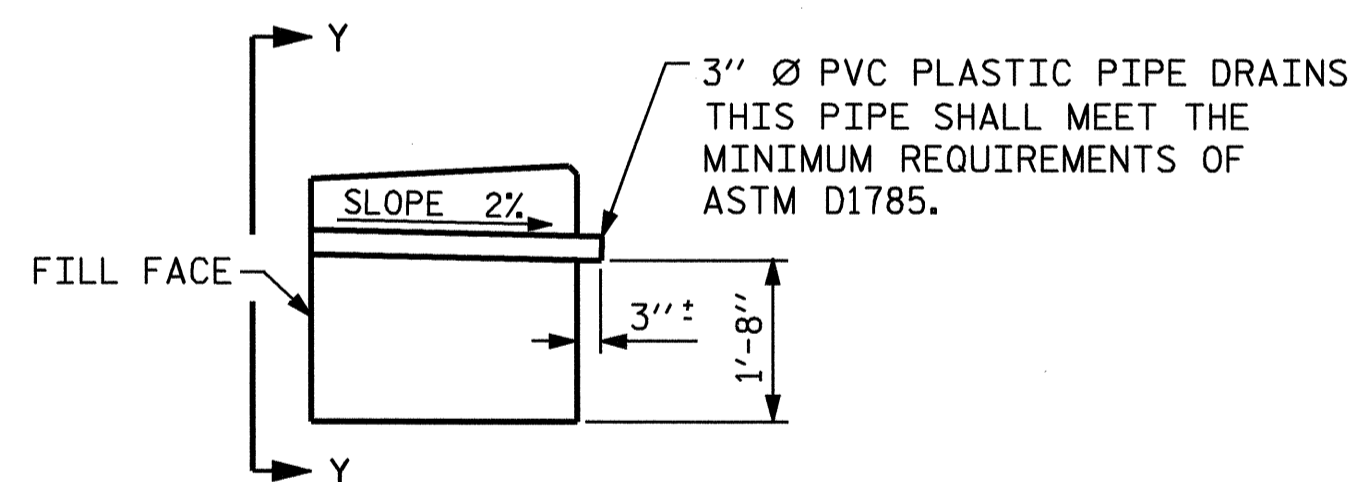


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

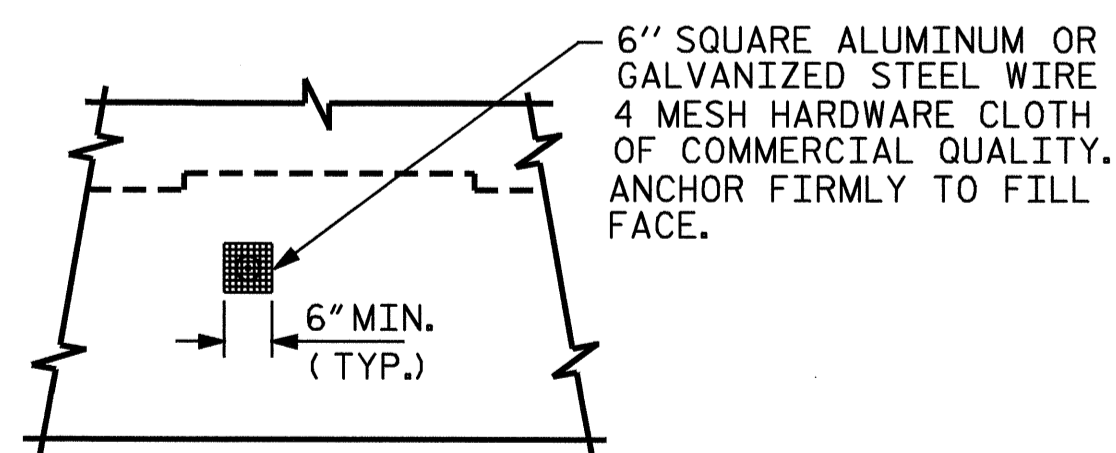
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

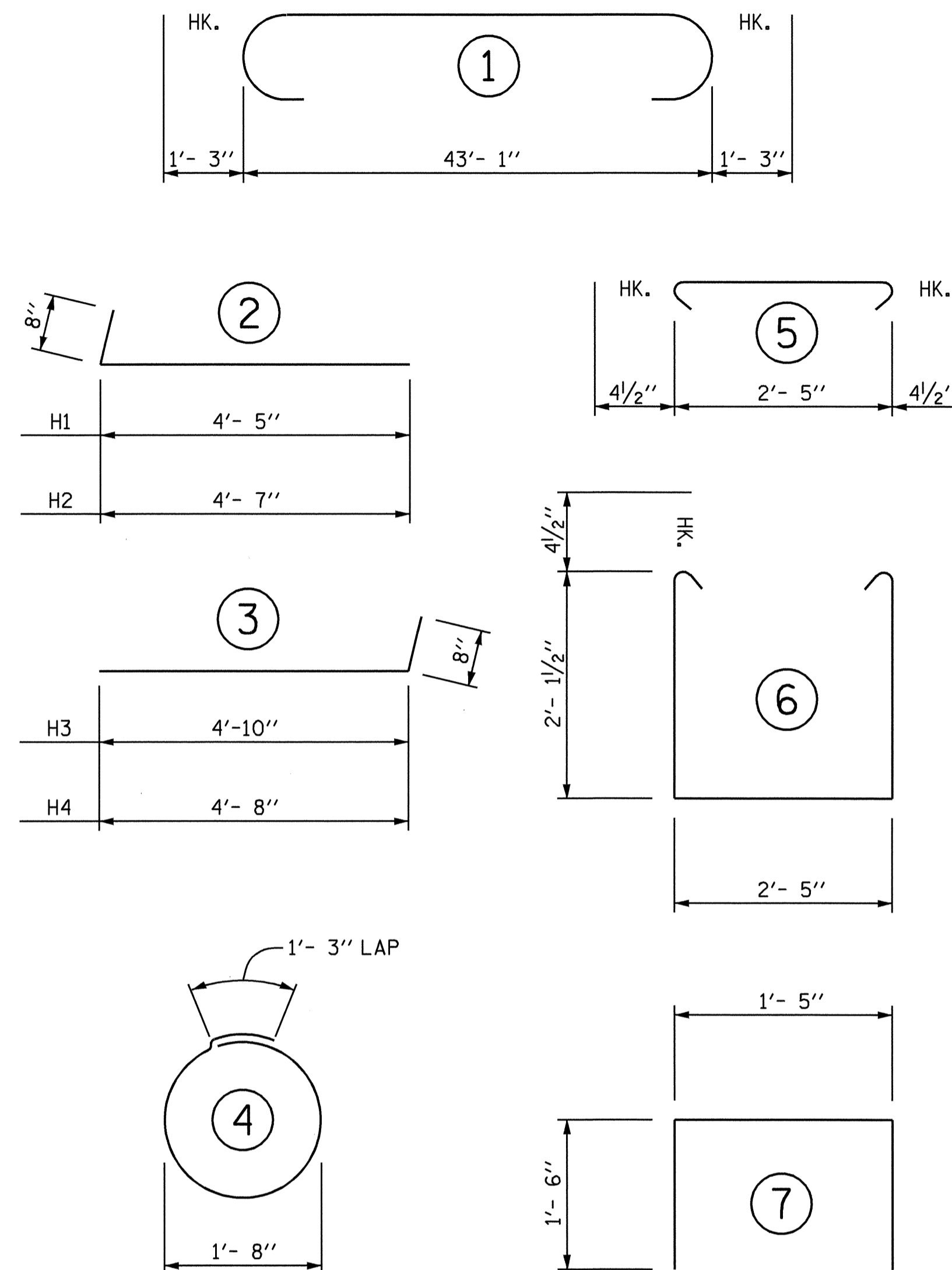


VIEW Y-Y

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**

**BAR TYPES**



ALL BAR DIMENSIONS ARE OUT TO OUT.

**BILL OF MATERIAL**

**END BENT #1**

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	#9	1	45'- 7"	1240
B2	#6	STR	43'- 3"	130
B3	#4	STR	22'-10"	122
B4	#4	STR	2'- 5"	18
D1	#6	STR	1'- 6"	54
H1	#4	2	5'- 1"	20
H2	#4	2	5'- 3"	21
H3	#4	3	5'- 6"	18
H4	#4	3	5'- 4"	18
S1	#4	5	3'- 2"	89
S2	#4	6	7'- 5"	208
S3	#4	4	6'- 6"	52
S4	#4	STR	2'- 8"	18
S5	#4	7	4'- 5"	12
V1	#4	STR	4'- 1"	44
V2	#4	STR	3'- 9"	45

REINFORCING STEEL = 2109 LBS

**CLASS A CONCRETE BREAKDOWN**

POUR #1 (CAP & BOTT. OF WINGS)	12.0 C.Y.
POUR #2 (TOP OF WINGS)	0.9 C.Y.
POUR #3 (LATERAL GUIDES)	0.1 C.Y.
<b>CLASS A CONCRETE TOTAL</b>	<b>13.0 C.Y.</b>

**HP 12x53 STEEL PILES**

NO. 6 LIN. FT. 90

STEEL PILE POINTS NO. 6

PROJECT NO. B-3504  
RANDOLPH COUNTY  
 STATION: 18+70.50 -L-

SHEET 3 OF 3

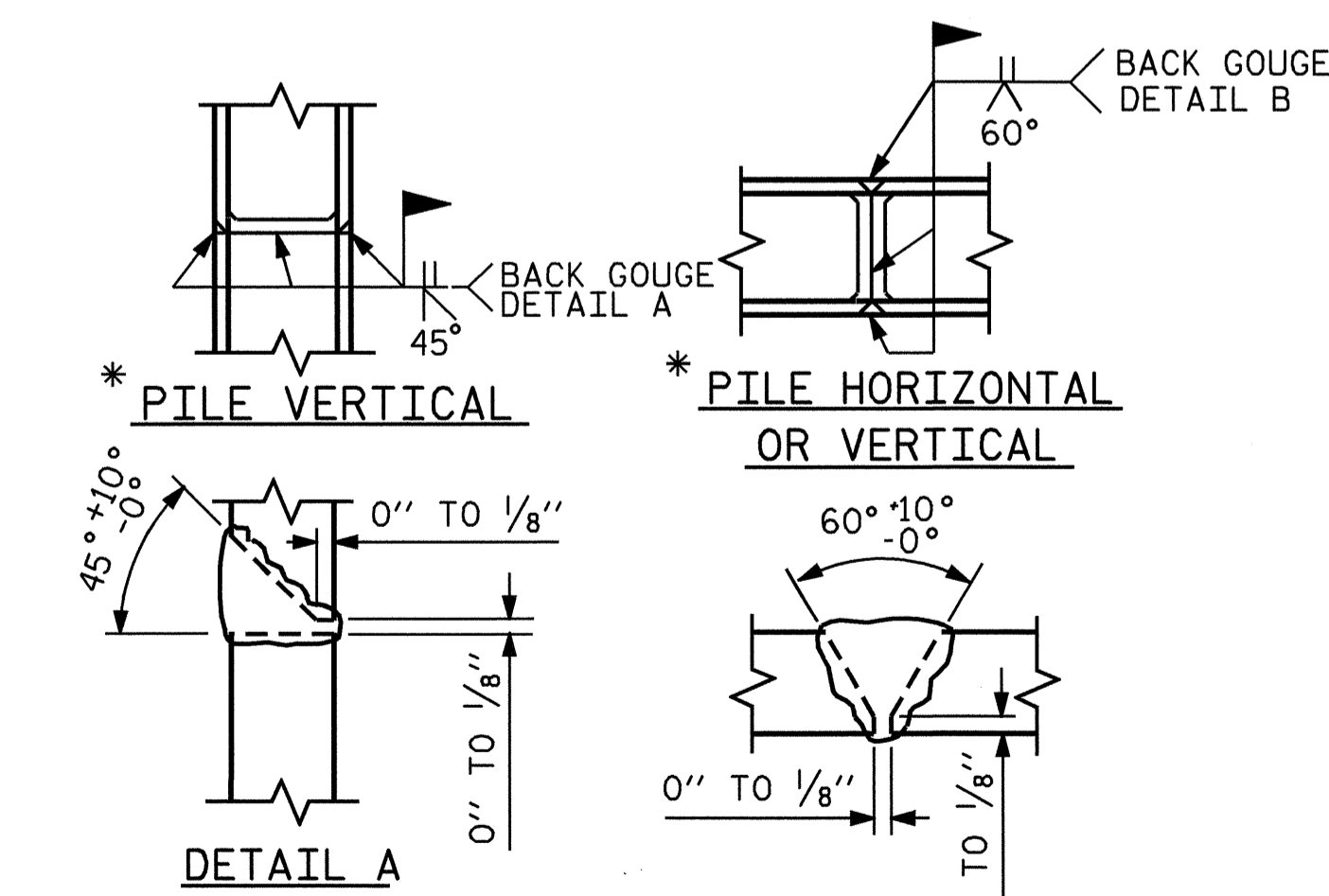
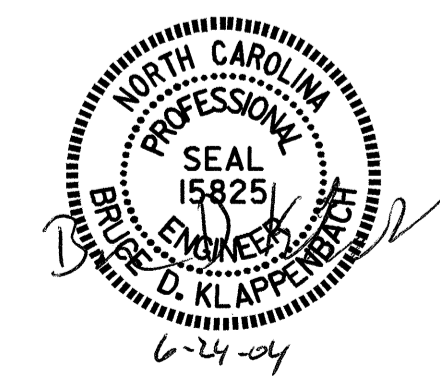
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**SUBSTRUCTURE  
 END BENT #1**

**REVISIONS**

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

SHEET NO. S-14  
 TOTAL SHEETS 27



\* POSITION OF PILE DURING WELDING. **PILE SPLICE DETAILS**

DRAWN BY: D. A. GLADDEN DATE: 5-13-04  
 CHECKED BY: M. G. SHAIKH DATE: 6-14-04