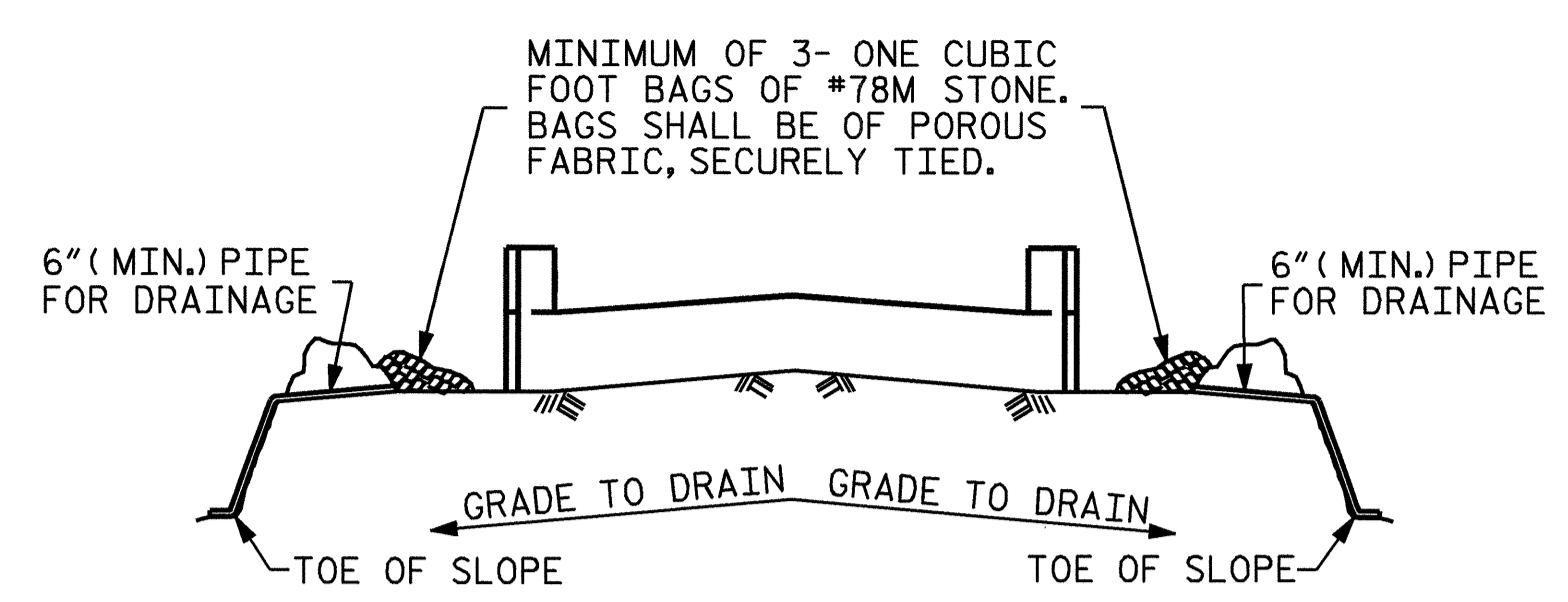


BAR TYPES

BILL OF MATERIAL

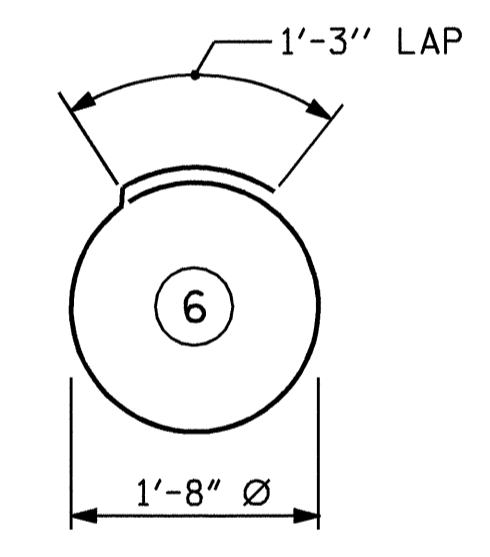
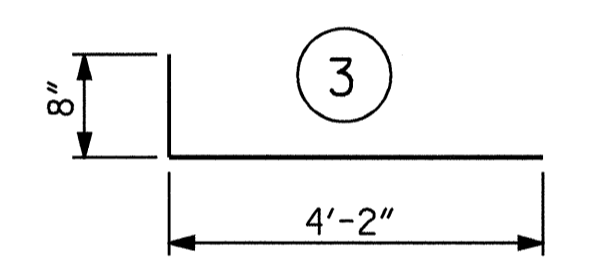
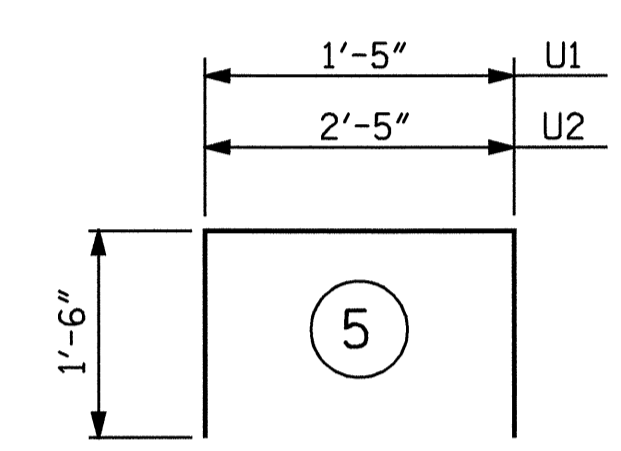
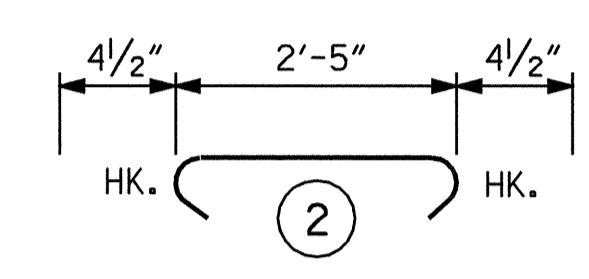
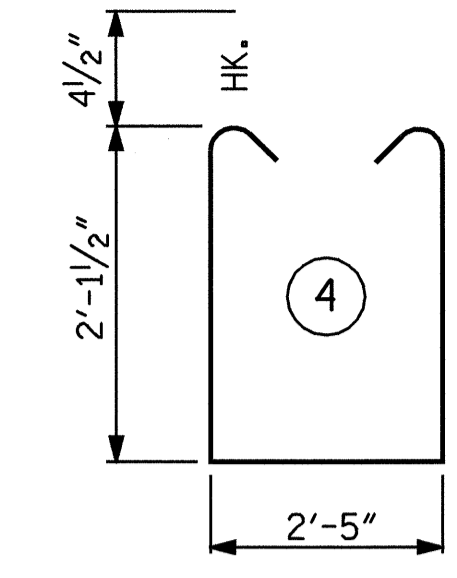
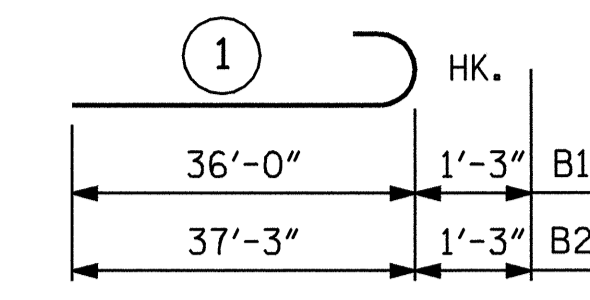


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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 FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

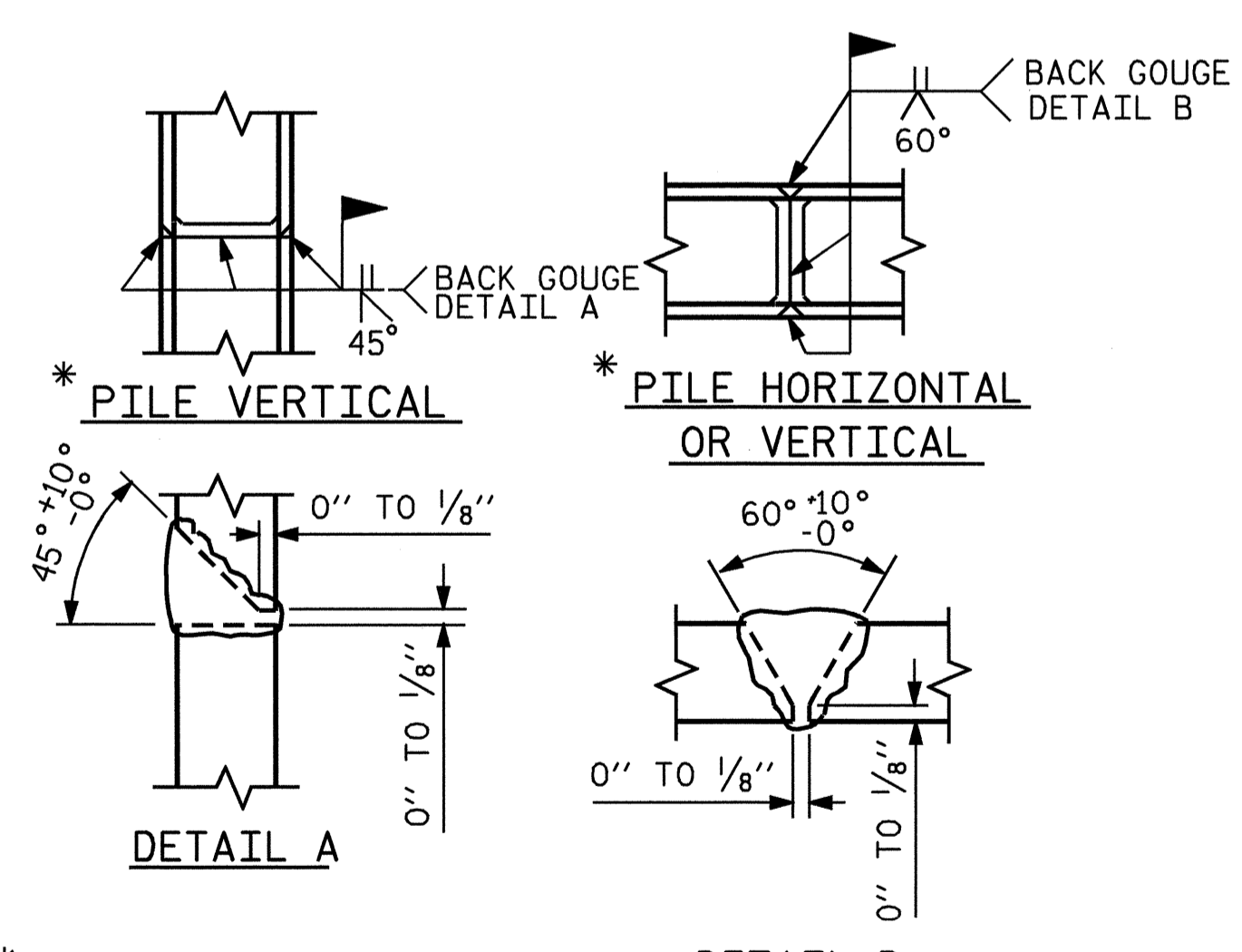


ALL BAR DIMENSIONS ARE OUT TO OUT.

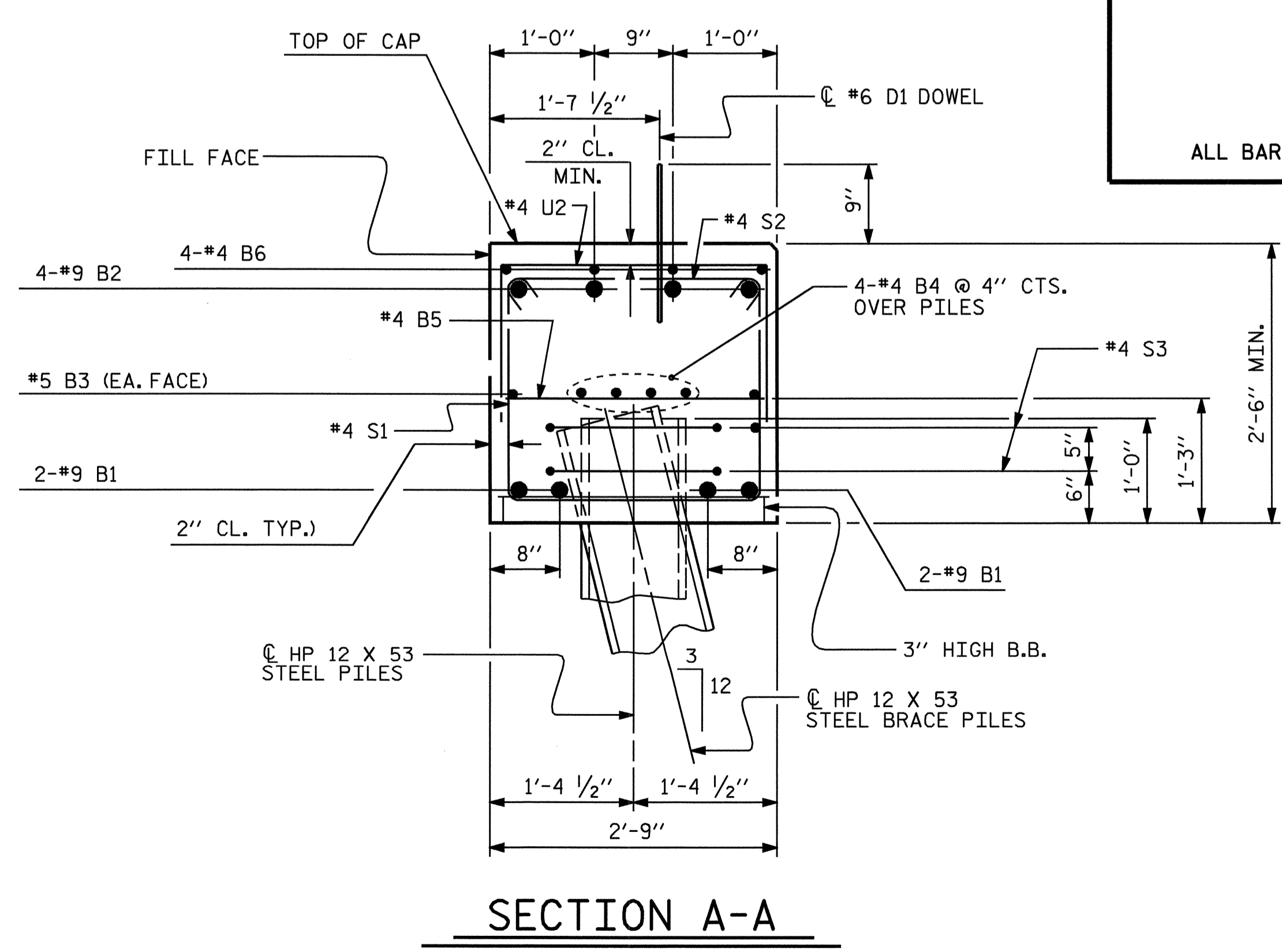
END BENT 1					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	8	9	1	37-3	1013
B2	8	9	1	38-6	1047
B3	4	5	STR	34-4	143
B4	12	4	STR	23-6	188
B5	17	4	STR	2-5	27
B6	4	4	STR	28-4	76
D1	40	6	STR	1-6	90
H1	28	4	3	4-10	90
K1	16	4	STR	3-11	42
S1	59	4	4	7-5	292
S2	59	4	2	3-2	125
S3	24	4	6	6-6	104
U1	4	4	5	4-5	12
U2	19	4	5	5-5	69
V1	40	4	STR	5-8	151
REINFORCING STEEL					3469 LBS.

CLASS A CONCRETE		
POUR 1	CAP & LOWER PART OF WINGS	19.7 C.Y.
POUR 2	UPPER PART OF WINGS	2.0 C.Y.
POUR 3	LATERAL GUIDE	0.1 C.Y.
TOTAL		21.8 C.Y.

HP 12 x 53 STEEL PILES		
NO.	12	LIN. FT. 300



PILE SPLICE DETAILS

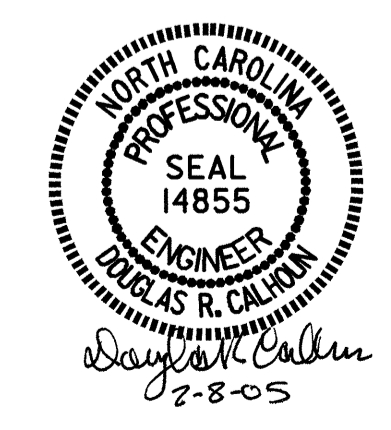


SECTION A-A

PROJECT NO. B-3450
 DURHAM COUNTY
 STATION: 14+31.00 -L-
 SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUBSTRUCTURE
 END BENT 1**



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-17
1			3			TOTAL SHEETS
2			4			53

DRAWN BY: A.L.MEADOWS DATE: 7/10/02
 CHECKED BY: T.A.HARRIS DATE: 9/27/02