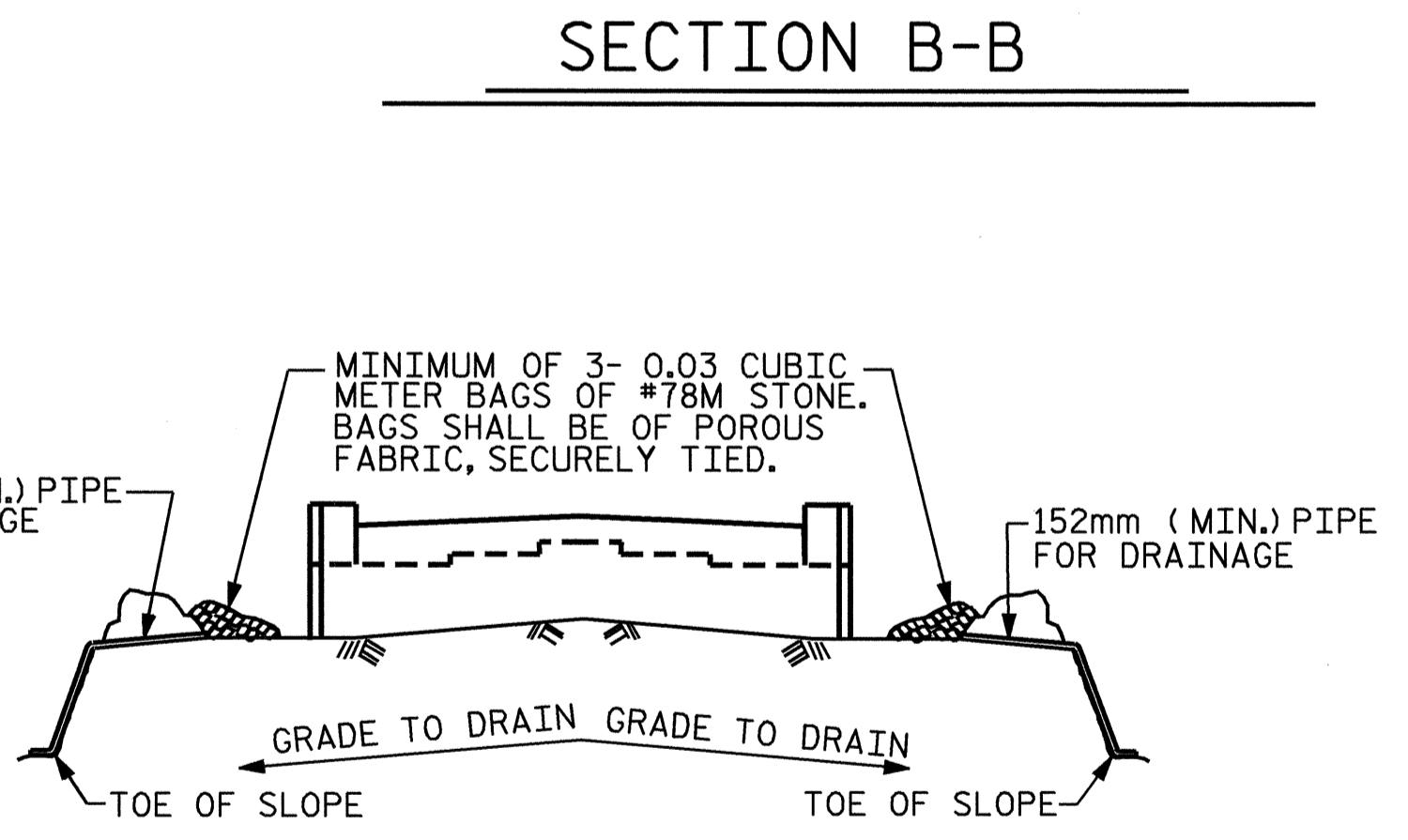


BILL OF MATERIAL					
END BENT 1					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	12	29	1	17200	1044
B2	2	16	STR	16500	51
B3	8	13	STR	8620	69
B4	12	13	STR	3880	46
B5	6	13	STR	4660	28
B6	14	13	STR	1200	17
H1	12	16	4	4280	80
H2	12	16	4	4200	78
H3	13	16	5	4300	87
H4	13	16	5	4360	88
J1	2	19	8	2700	12
J2	6	19	9	1140	15
K1	28	13	STR	8620	240
K2	8	13	STR	920	7
S1	74	16	2	2780	319
S2	74	16	3	1480	170
S3	26	13	7	1980	51
U1	49	13	6	1120	55
U2	24	13	6	2120	51
V1	98	16	STR	2580	392
V2	36	16	STR	2900	162
V3	36	16	STR	3140	175
REINFORCING STEEL				kg	3237
CLASS A CONCRETE BREAKDOWN					
POUR 1 (CAP AND LOWER PORTION OF WINGS) m ³ 21.6					
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS) m ³ 15.3					
CLASS A CONCRETE TOTAL m ³ 36.9					
HP 310 X 79 STEEL PILES					
NO. 15 METERS					435.0

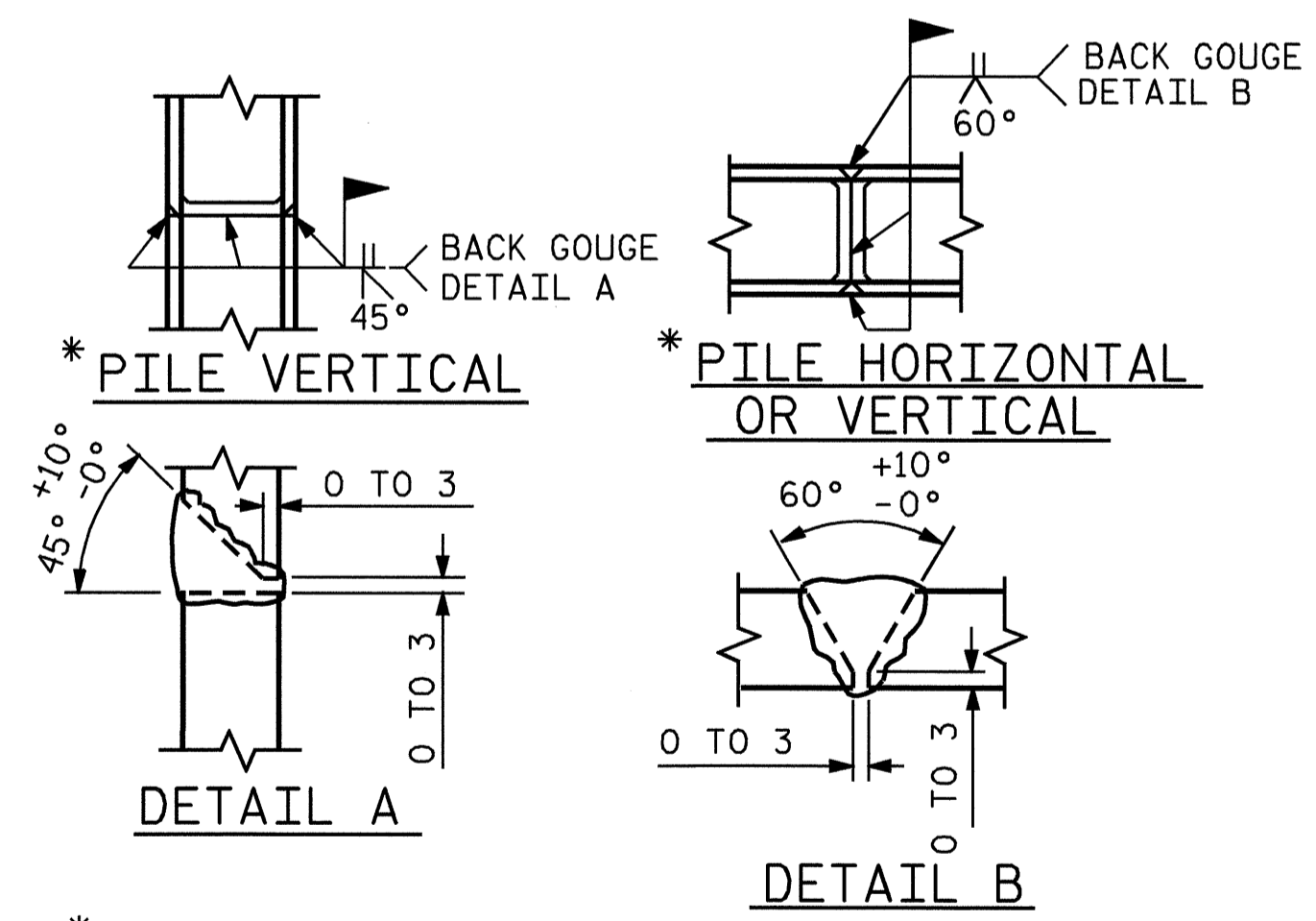


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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



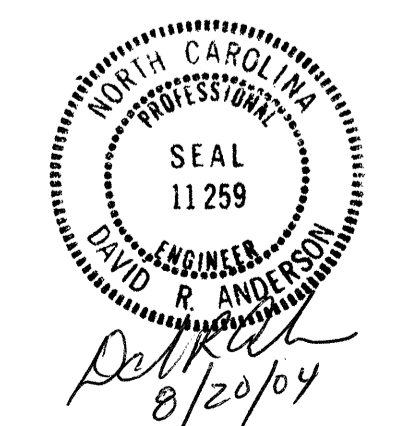
PILE SPLICE DETAILS

PROJECT NO. R-513BA
ROBESON COUNTY
 STATION: 138+30.800 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 END BENT 1
 (LEFT LANE)



DRAWN BY : S. M. RASHIDI DATE : 10/7/03
 CHECKED BY : M. A. ALLEN DATE : 04-04

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:		
1			3			5-137	
2			4			TOTAL SHEETS 172	