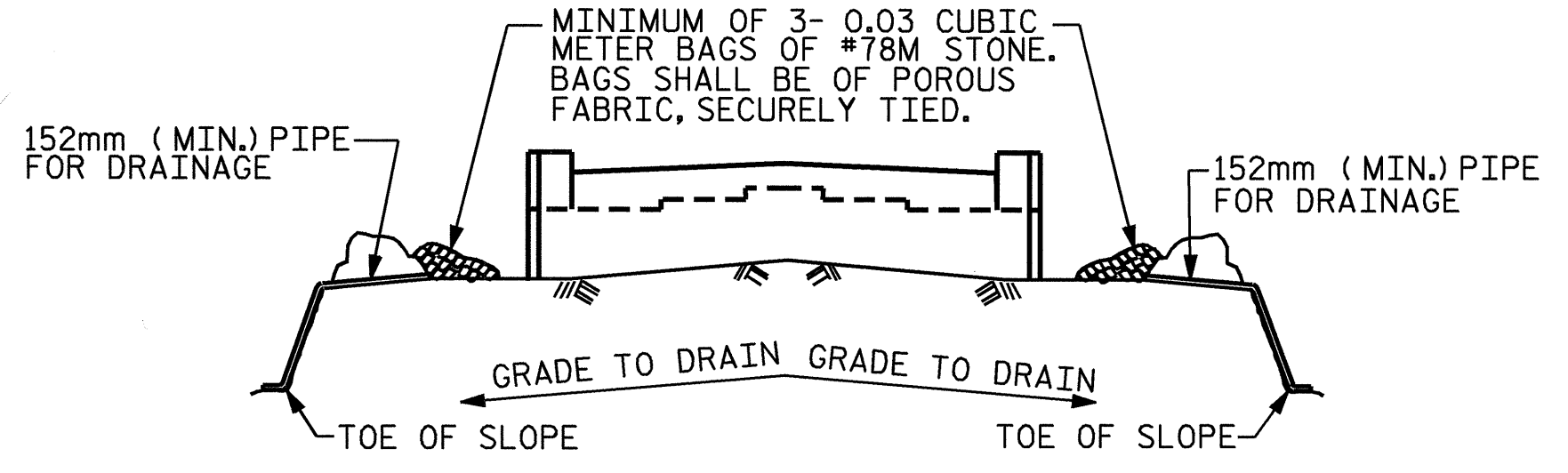


BILL OF MATERIAL						
END BENT 2						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	12	29	1	17200	1044	
B2	8	16	STR	16500	51	
B3	8	13	STR	8620	69	
B4	12	13	STR	3880	46	
B5	6	13	STR	4660	28	
B6	14	13	STR	1200	17	
H1	12	16	5	4340	81	
H2	12	16	5	4260	79	
H3	13	16	4	4360	88	
H4	13	16	4	4420	89	
J1	2	19	8	2700	12	
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	2560	389	
V2	36	16	STR	2940	164	
V3	38	16	STR	3160	186	
REINFORCING STEEL					kg	3251
CLASS A CONCRETE BREAKDOWN						
POUR 1 (CAP AND LOWER PORTION OF WINGS)						
					m <sup>3</sup>	21.7
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS)						
					m <sup>3</sup>	15.1
CLASS A CONCRETE TOTAL					m <sup>3</sup>	36.8
HP 310 X 79 STEEL PILES						
NO. 15 METERS						330.0

SECTION A-A

SECTION B-B

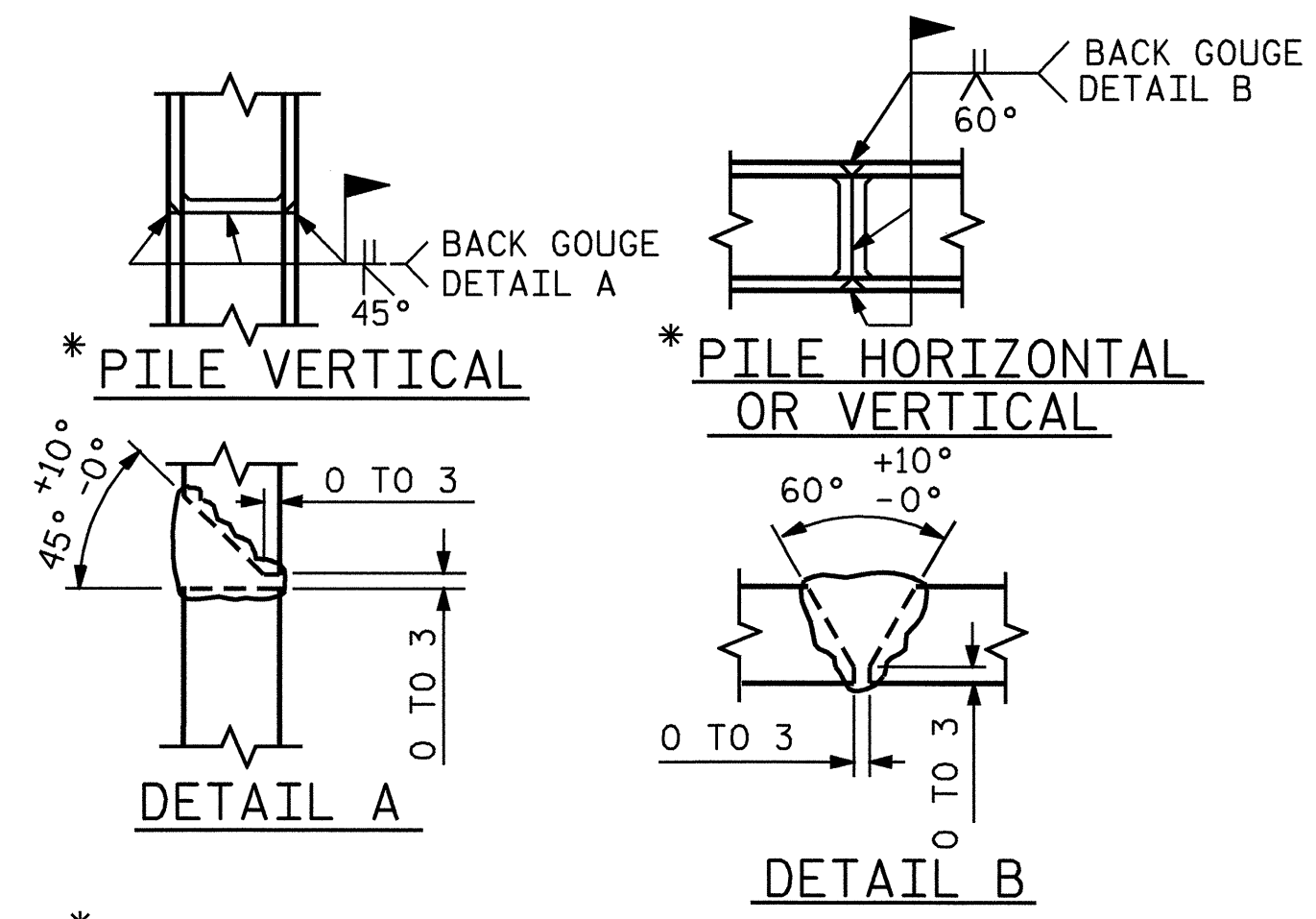


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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



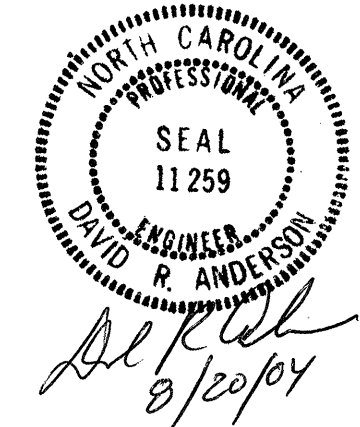
PILE SPLICE DETAILS

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 2 (RIGHT LANE)					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. 3-166  
 TOTAL SHEETS 172



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