

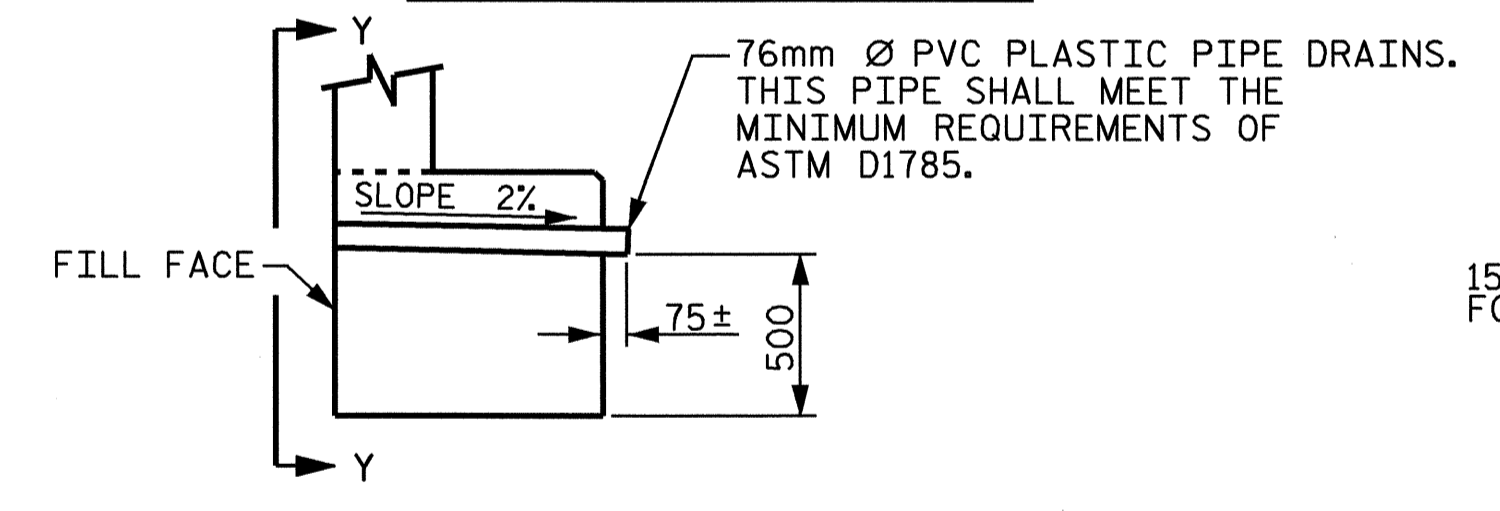
BILL OF MATERIAL					
END BENT 2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	32	1	15160	485
B2	6	29	1	15060	457
B3	4	19	STR	14380	129
B4	16	13	STR	7580	121
B5	13	13	STR	1280	17
B6	12	13	STR	840	10
J1	1	19	7	2840	6
J2	3	19	8	1200	8
H1	11	16	4	3340	57
H2	11	16	4	3460	59
H3	11	16	5	3520	60
H4	11	16	5	3420	58
K1	28	13	STR	7580	211
K2	4	13	STR	1020	4
S1	58	13	2	3100	179
S2	58	13	3	1500	86
U1	40	13	6	1100	44
U2	6	13	6	2180	13
U3	30	13	6	2340	70
V1	80	16	STR	2680	333
V2	30	16	STR	3080	143
V3	30	16	STR	3020	141
REINFORCING STEEL					kg 2691
CLASS A CONCRETE BREAKDOWN					
POUR 1 (CAP AND LOWER PORTION OF WINGS)				m <sup>3</sup>	20.9
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS)				m <sup>3</sup>	13.6
CLASS A CONCRETE TOTAL				m <sup>3</sup>	34.5
305mm SQUARE P/S PILES					
NO. 11	METERS				176.0

Ø 305mm P/S CONCRETE PILE  
Ø 305mm P/S CONCRETE BRACE PILE

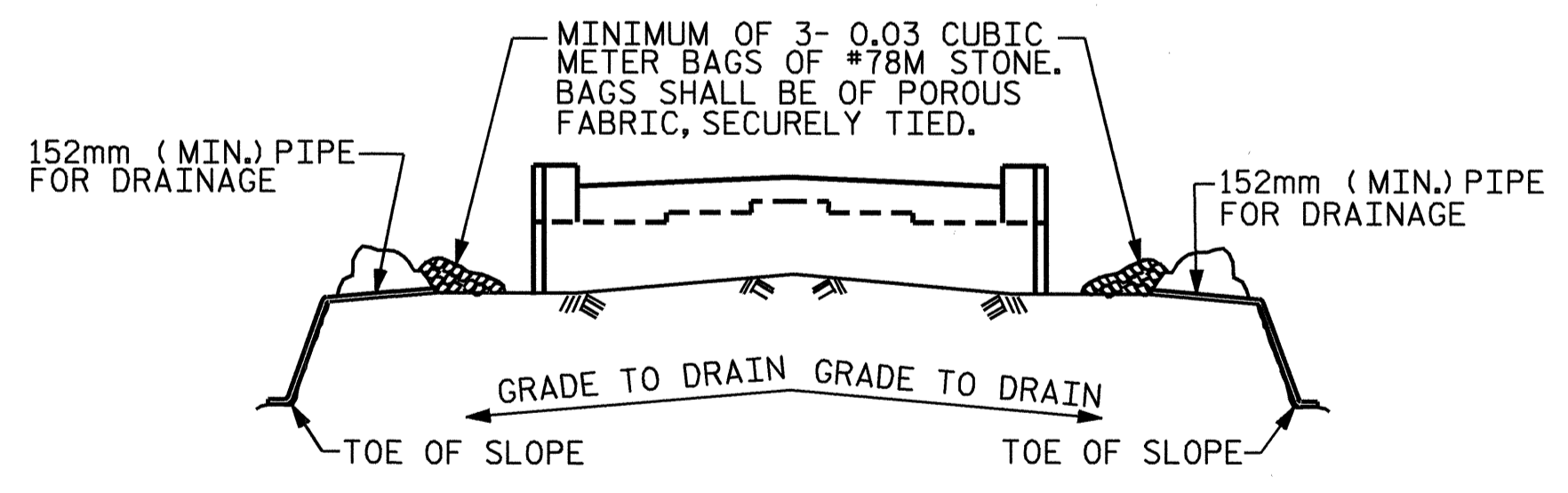
Ø 305mm P/S CONCRETE PILE  
Ø 305mm P/S CONCRETE BRACE PILE

SECTION A-A

SECTION B-B



SECTION THRU CAP

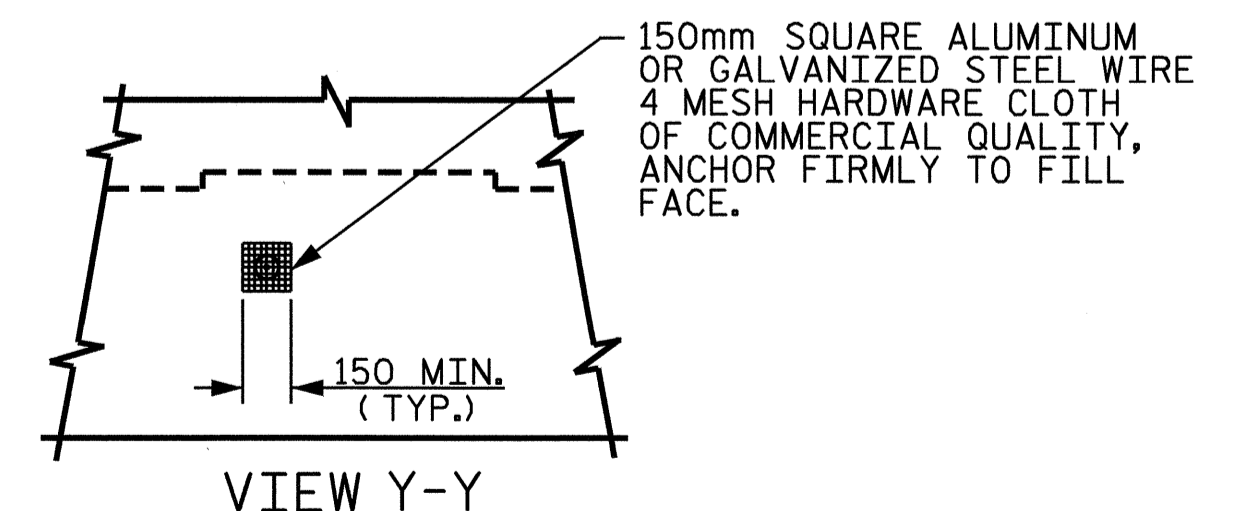


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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



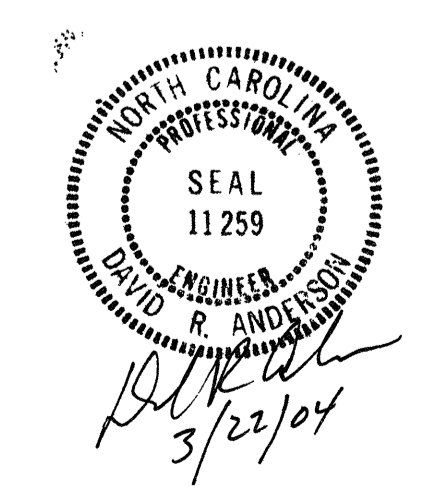
VIEW Y-Y

NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC 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

PROJECT NO. R-513C  
ROBESON COUNTY  
STATION: 271+08.001-L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUBSTRUCTURE END BENT 2					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. 5-122  
TOTAL SHEETS 312

DRAWN BY: S. M. RASHIDI DATE: 5/14/02  
CHECKED BY: K. P. SEDA DATE: 8/28/02