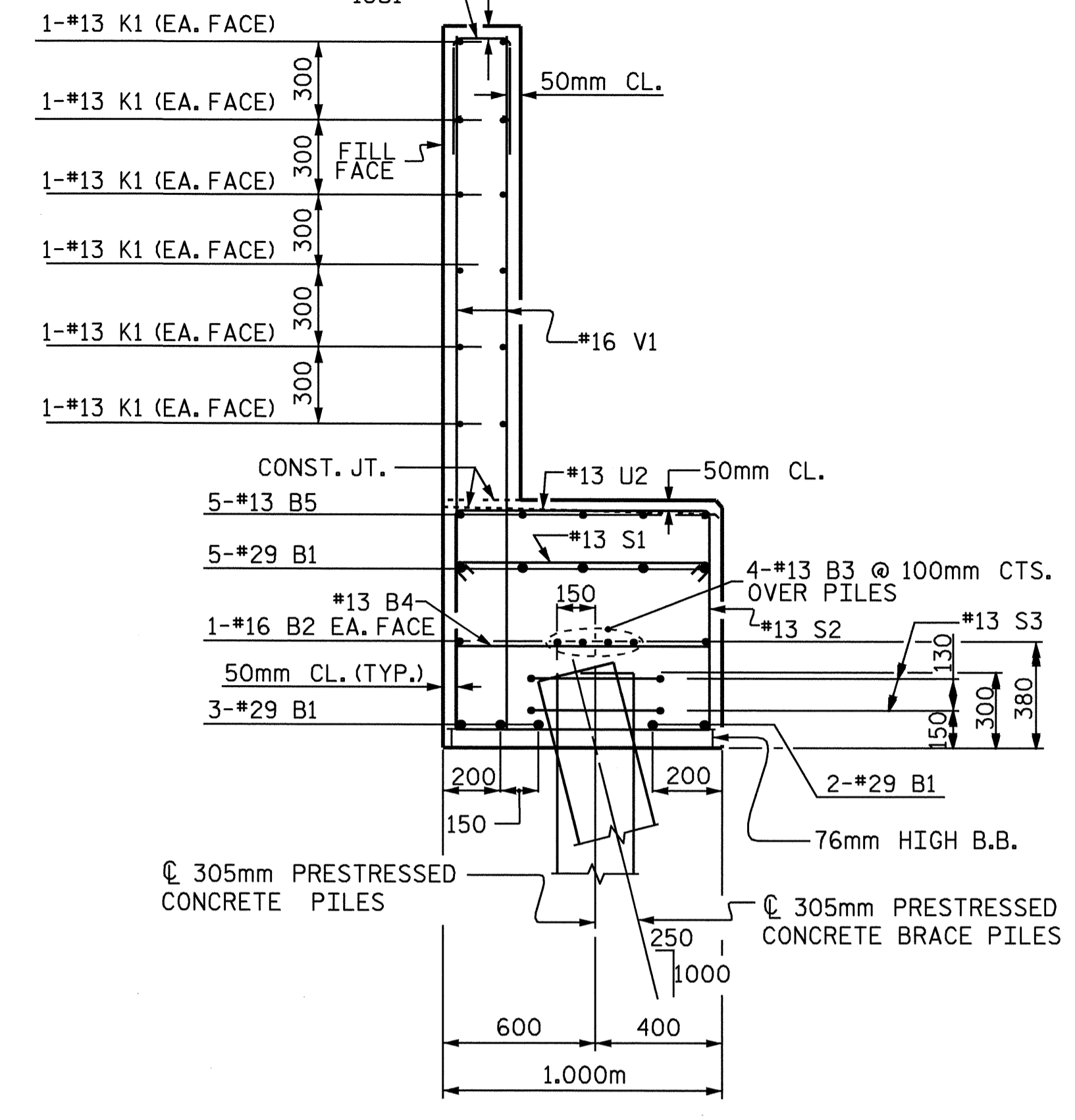
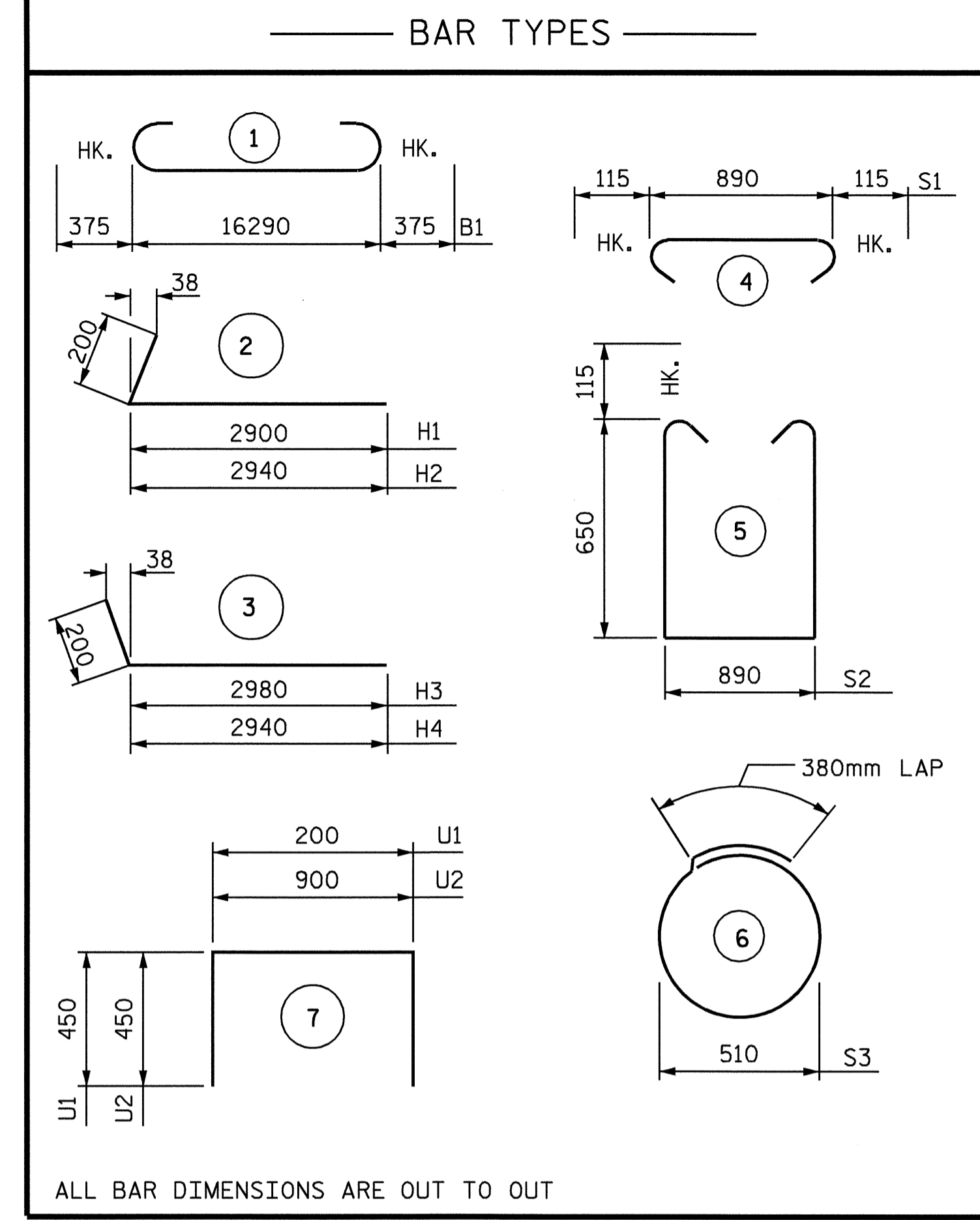


SECTION A-A

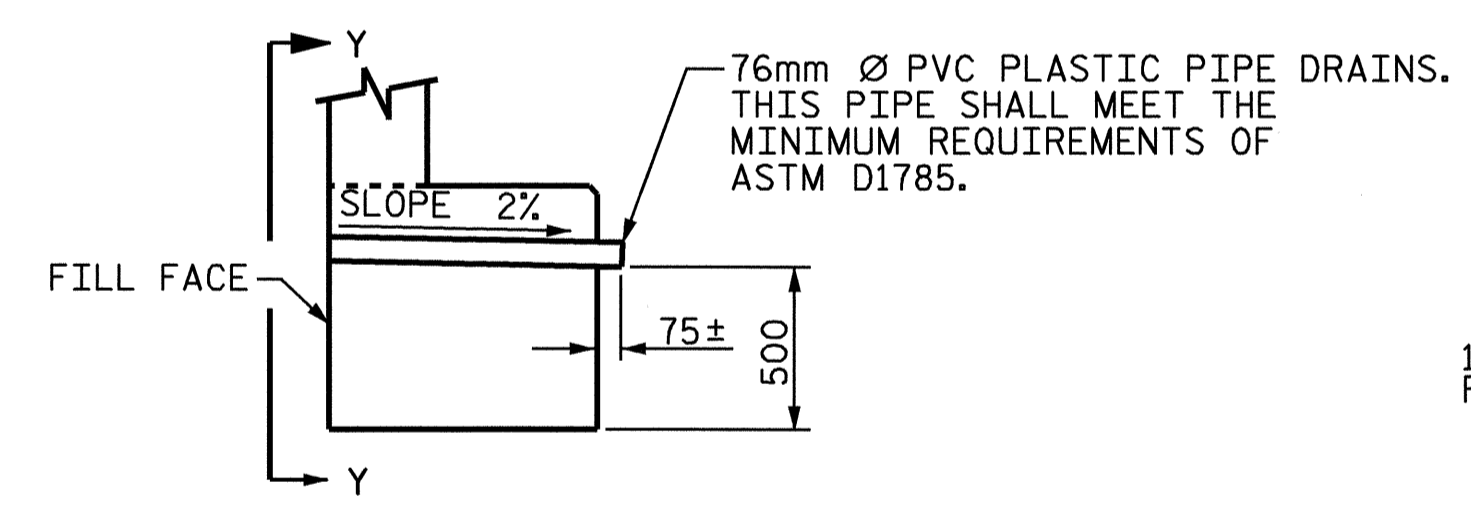


SECTION B-B

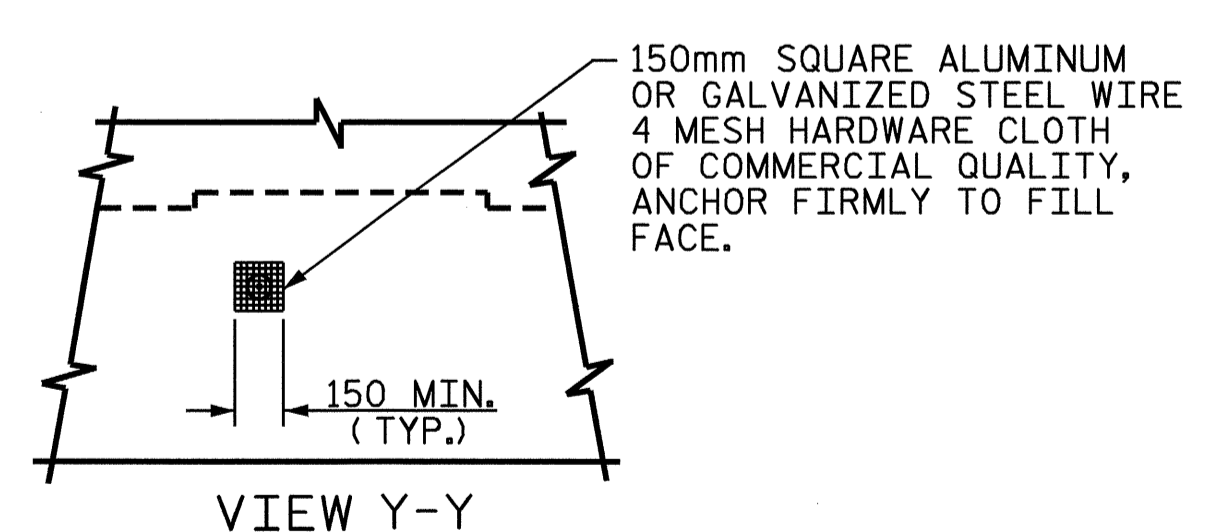


ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL					
END BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	29	1	17040	862
B2	2	16	STR	16340	51
B3	8	13	STR	8540	68
B4	13	13	STR	900	12
B5	15	13	STR	900	13
H1	11	16	2	3100	53
H2	11	16	2	3140	54
H3	11	16	3	3180	54
H4	11	16	3	3140	54
K1	24	13	STR	8540	204
K2	8	13	STR	900	7
S1	45	13	4	1120	50
S2	45	13	5	2420	108
S3	20	13	6	2000	40
U1	48	13	7	1100	52
U2	9	13	7	1800	16
V1	96	16	STR	2500	372
V2	28	16	STR	2920	127
V3	28	16	STR	2860	124
REINFORCING STEEL				kg.	2321
CLASS A CONCRETE BREAKDOWN					
POUR 1 (CAP AND LOWER PORTION OF WINGS)					3 m ³ 14.5
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS)					3 m ³ 13.3
TOTAL					3 m ³ 27.8
305mm P/S CONCRETE PILES					
NO. 10				METERS	80.0



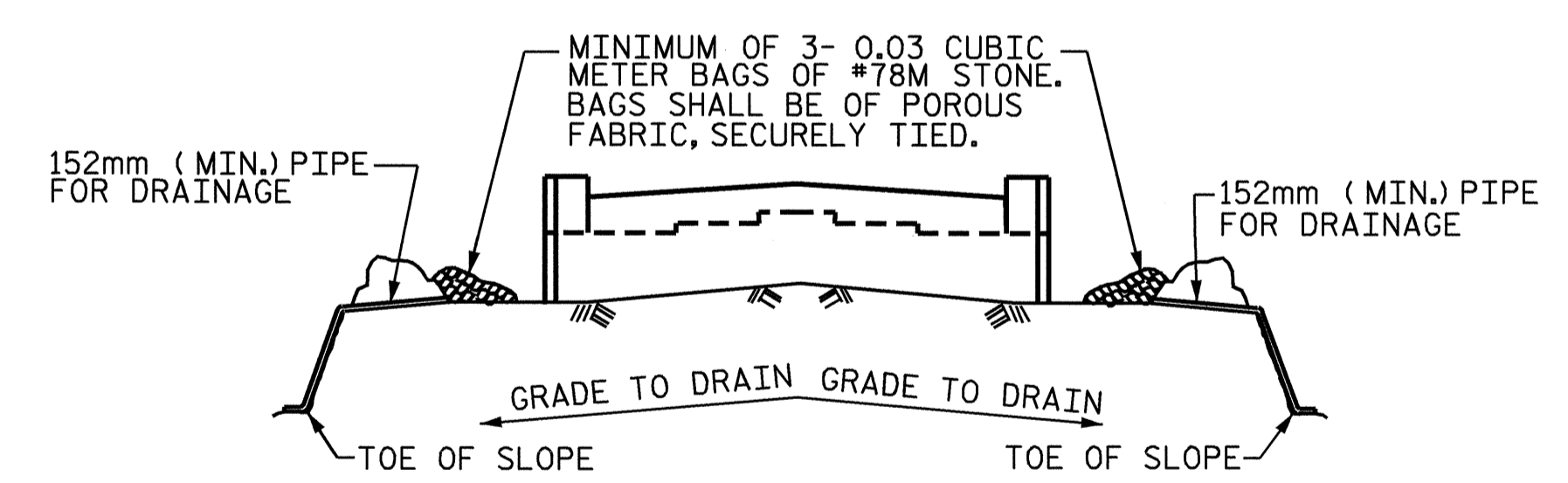
SECTION THRU CAP



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



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.

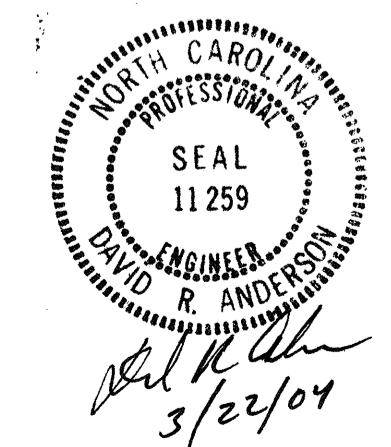
TEMPORARY DRAINAGE AT END BENT

PROJECT NO. R-513C
ROBESON COUNTY
 STATION: 17+37.086 -Y3-

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:	TOTAL SHEETS
1			3			312
2			4			312

DRAWN BY: S. M. RASHIDI DATE: 9/6/02
 CHECKED BY: K. P. SEDAI DATE: 9/17/02