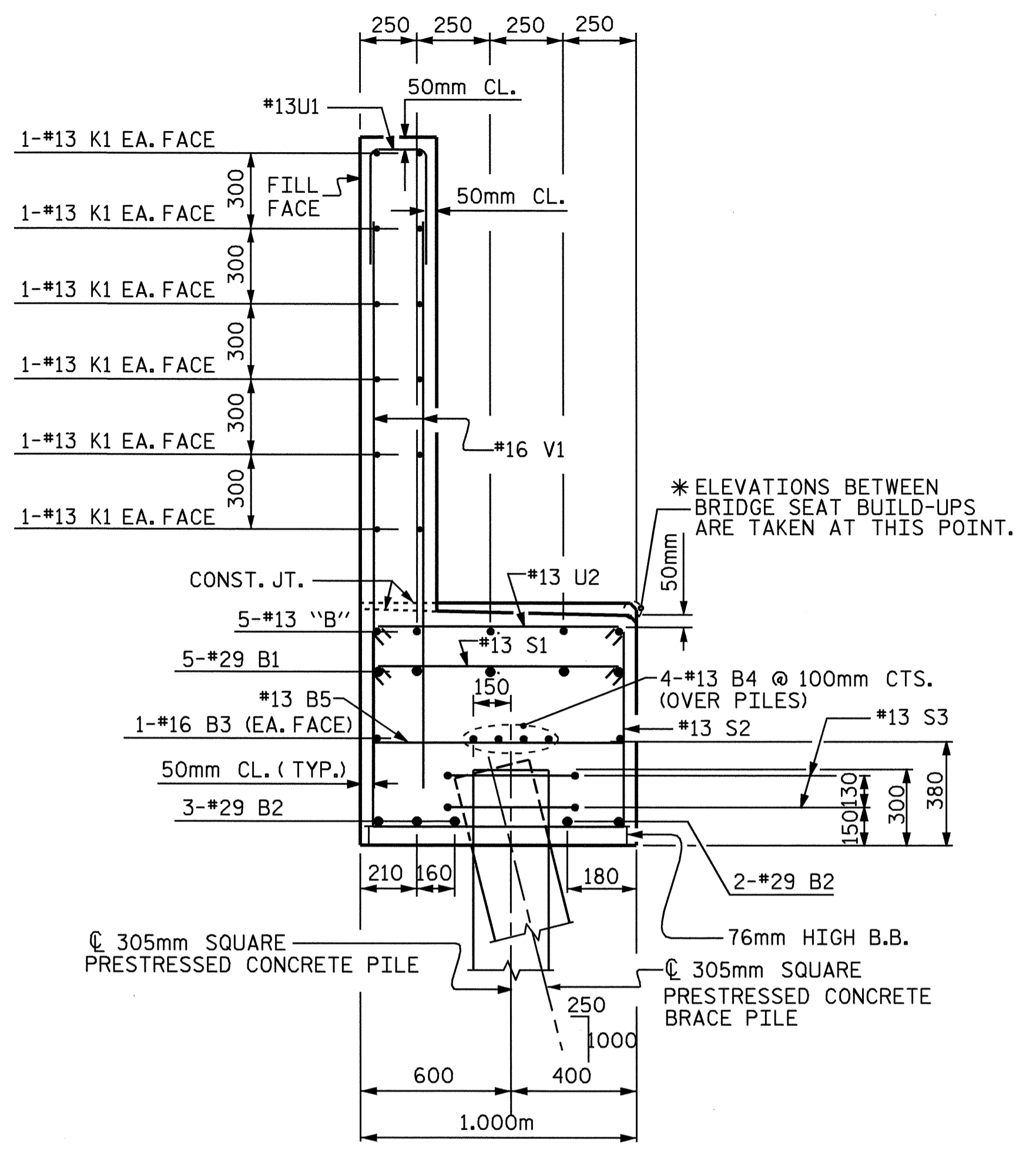
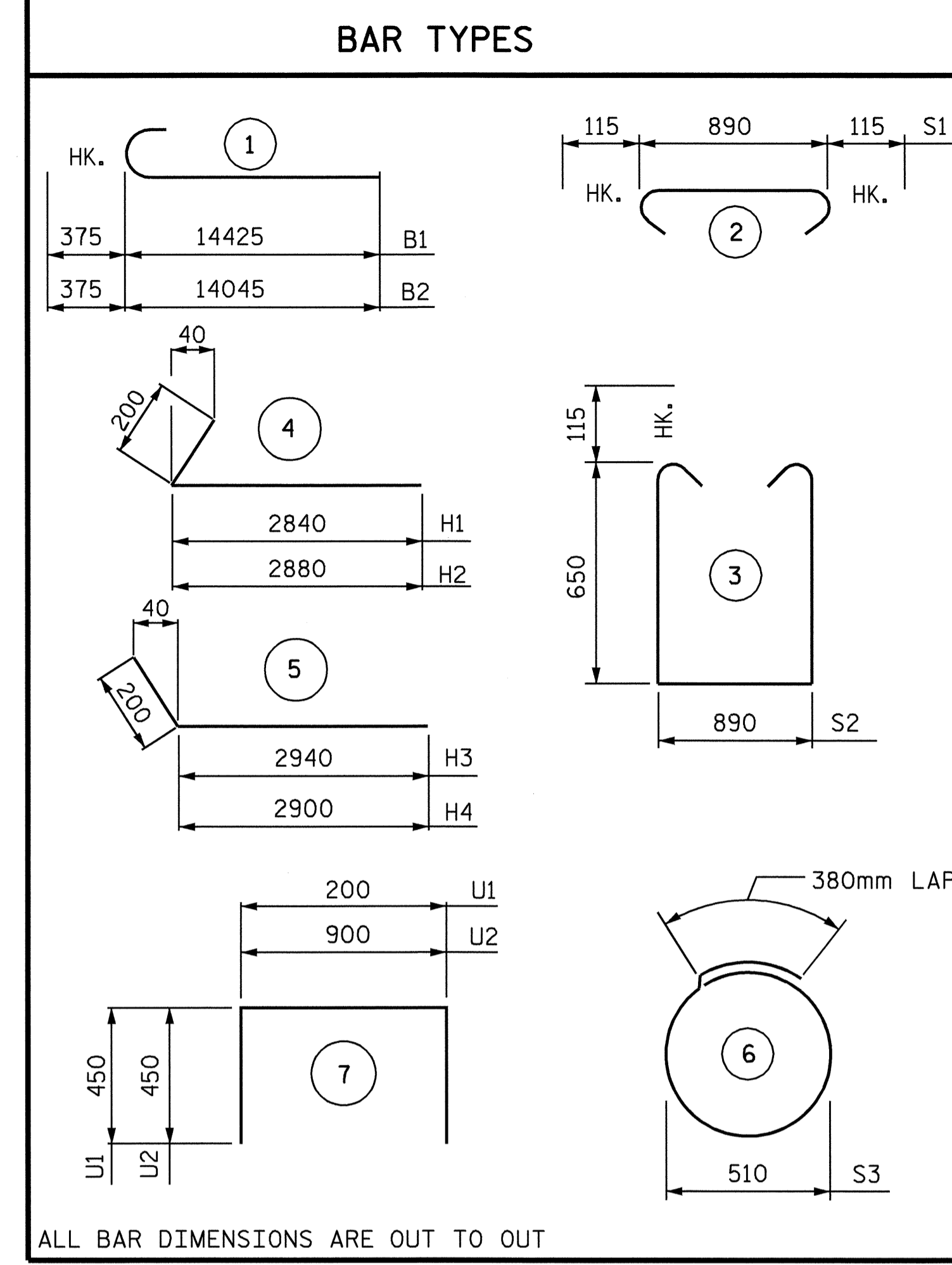


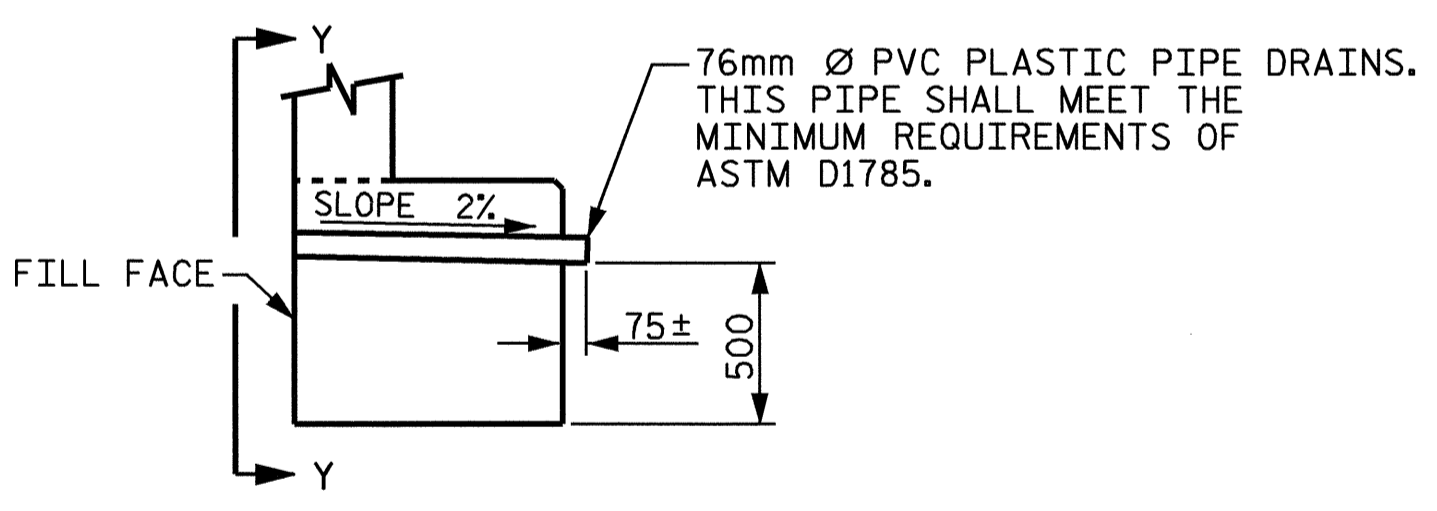
SECTION A-A



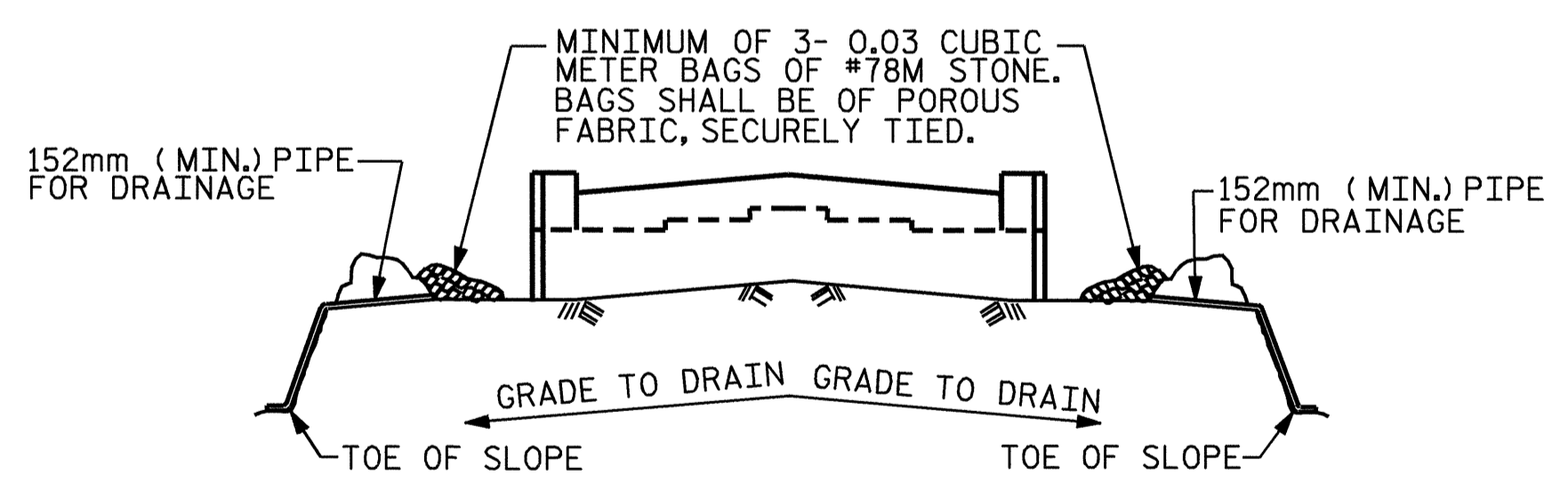
SECTION B-B



BILL OF MATERIAL					
END BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	29	1	14800	749
B2	10	29	1	14420	730
B3	4	16	STR	13560	84
B4	16	13	STR	7120	113
B5	21	13	STR	900	19
B6	10	13	STR	3060	30
B7	5	13	STR	4060	20
H1	11	16	4	3040	52
H2	11	16	4	3080	53
H3	11	16	5	3140	54
H4	11	16	5	3100	53
K1	48	13	STR	7140	341
K2	8	13	STR	900	7
S1	77	13	2	1120	86
S2	77	13	3	2420	185
S3	32	13	6	2000	64
U1	85	13	7	1100	93
U2	26	13	7	1800	47
V1	170	16	STR	2520	665
V2	56	16	STR	2920	254
REINFORCING STEEL				kg.	3699
CLASS A CONCRETE BREAKDOWN					
POUR 1 (CAP AND LOWER PORTION OF WINGS)					m ³ 23.8
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS)					m ³ 19.2
TOTAL					m ³ 43.0
305mm P/S SQUARE PRESTRESSED CONCRETE PILES					
NO. 16 METERS					224.0



SECTION THRU CAP

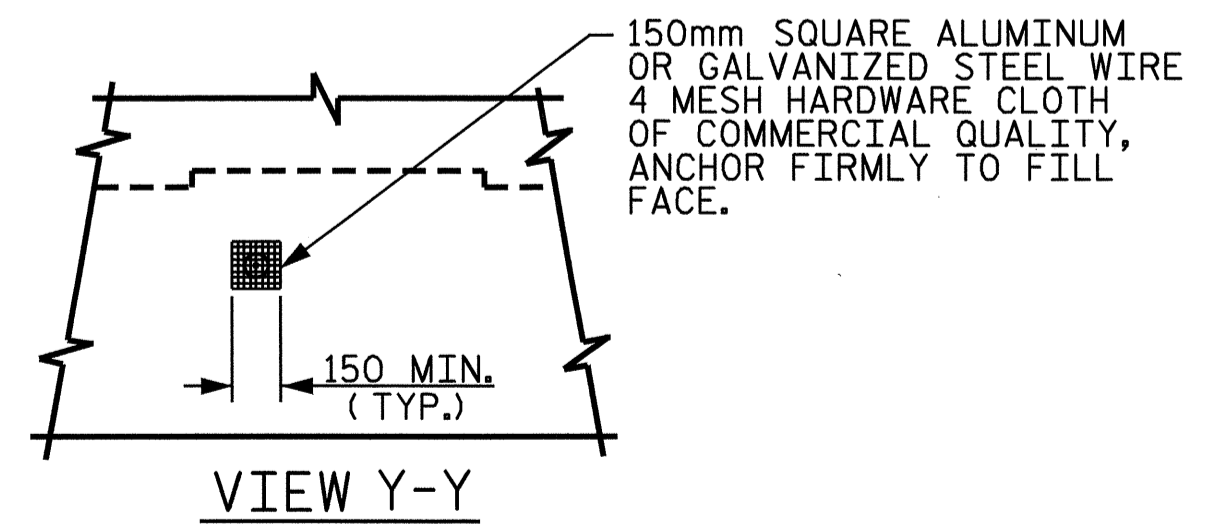


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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



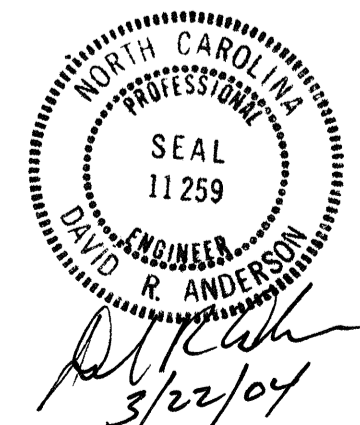
VIEW Y-Y

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: 298+57.237 -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:	
1			3			TOTAL SHEETS 312
2			4			

DRAWN BY: S. M. RASHIDI DATE: 8/01/02
 CHECKED BY: K. P. SEDAI DATE: 8/7/02