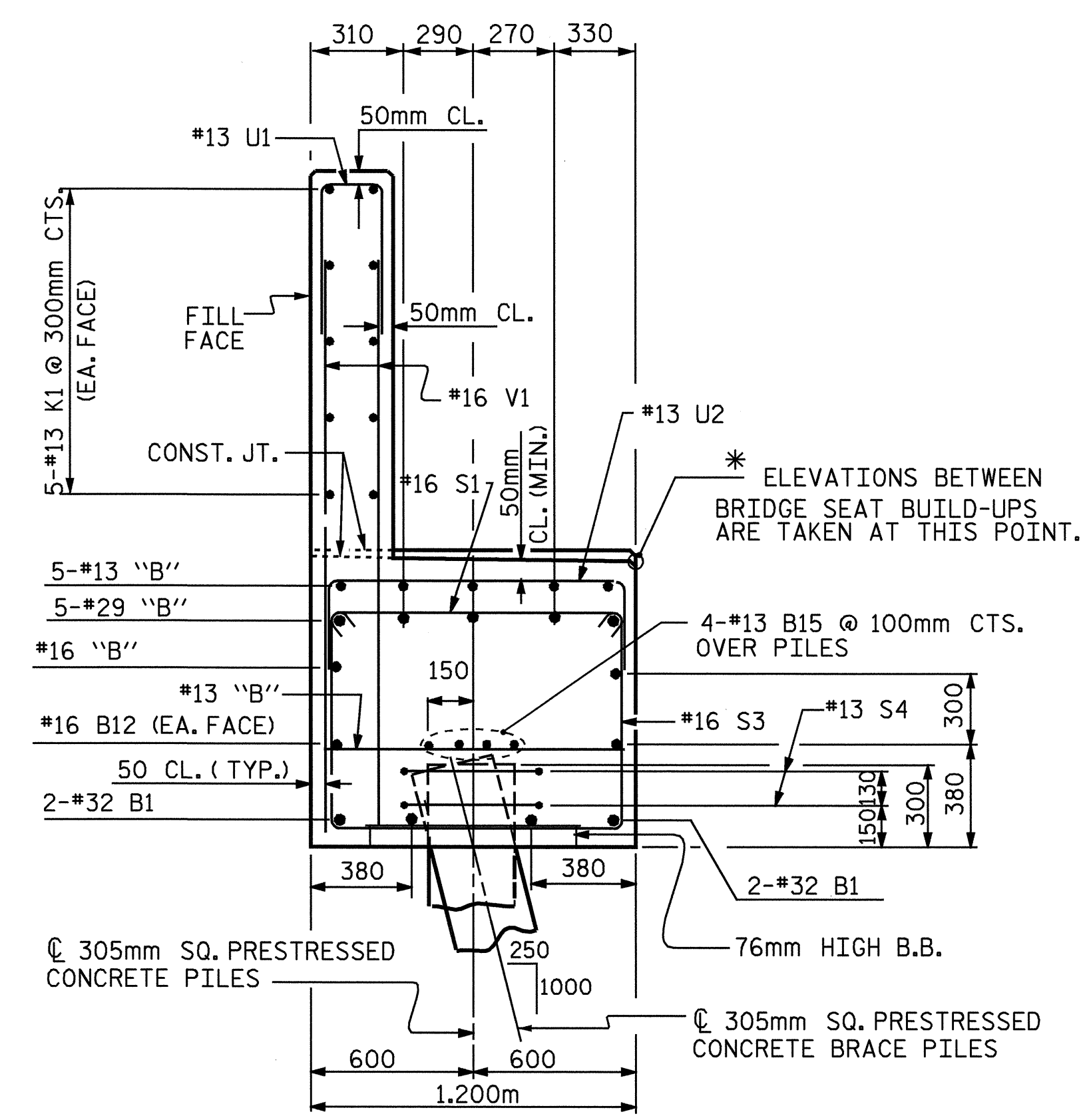
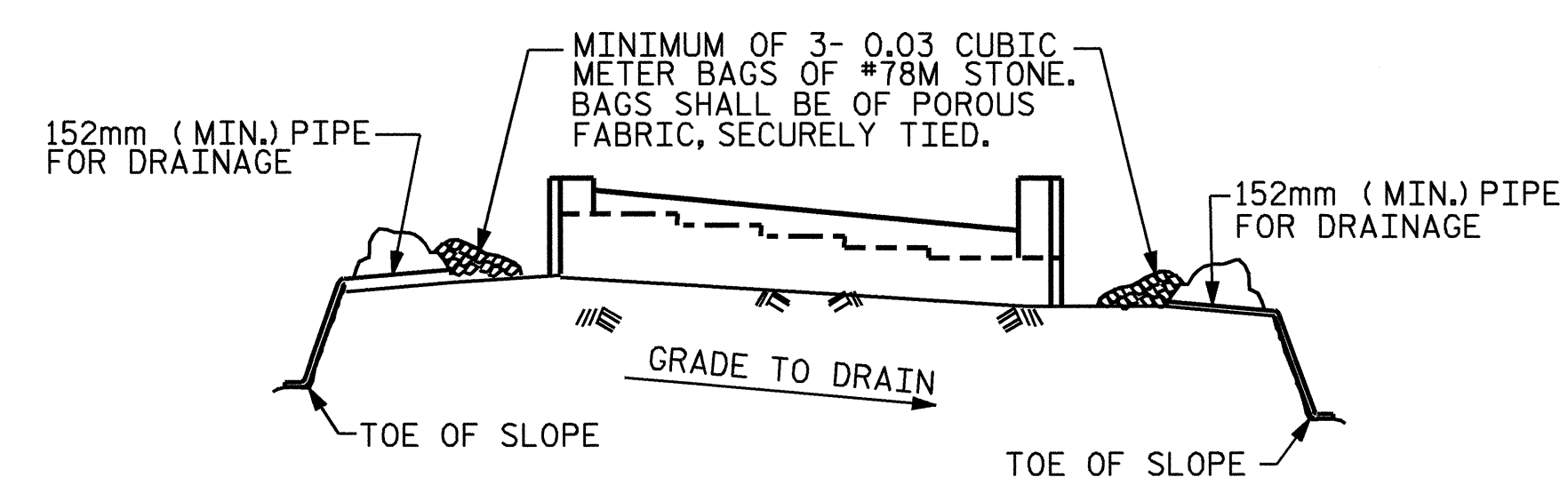


SECTION A-A



SECTION B-B

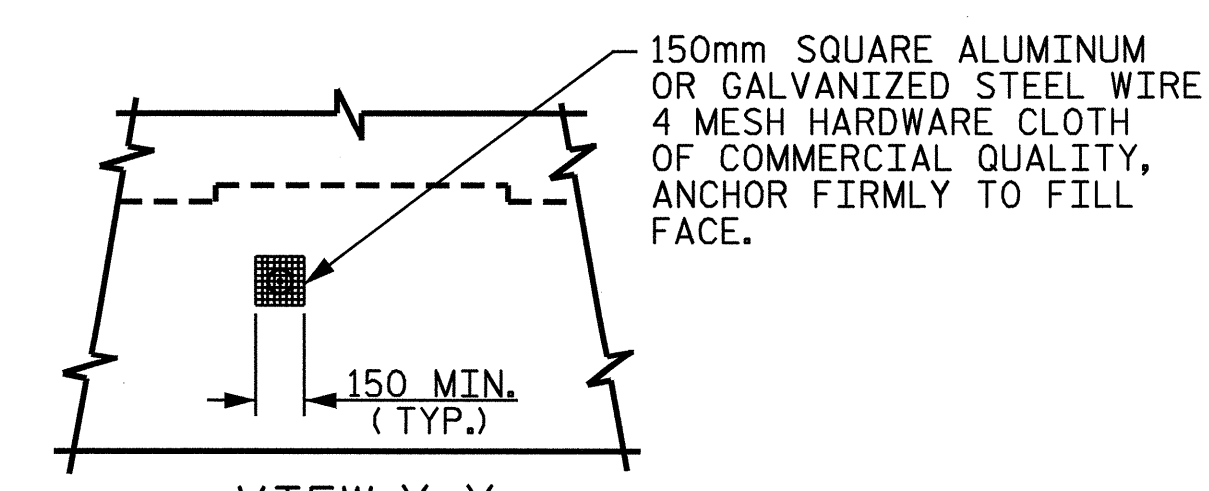


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

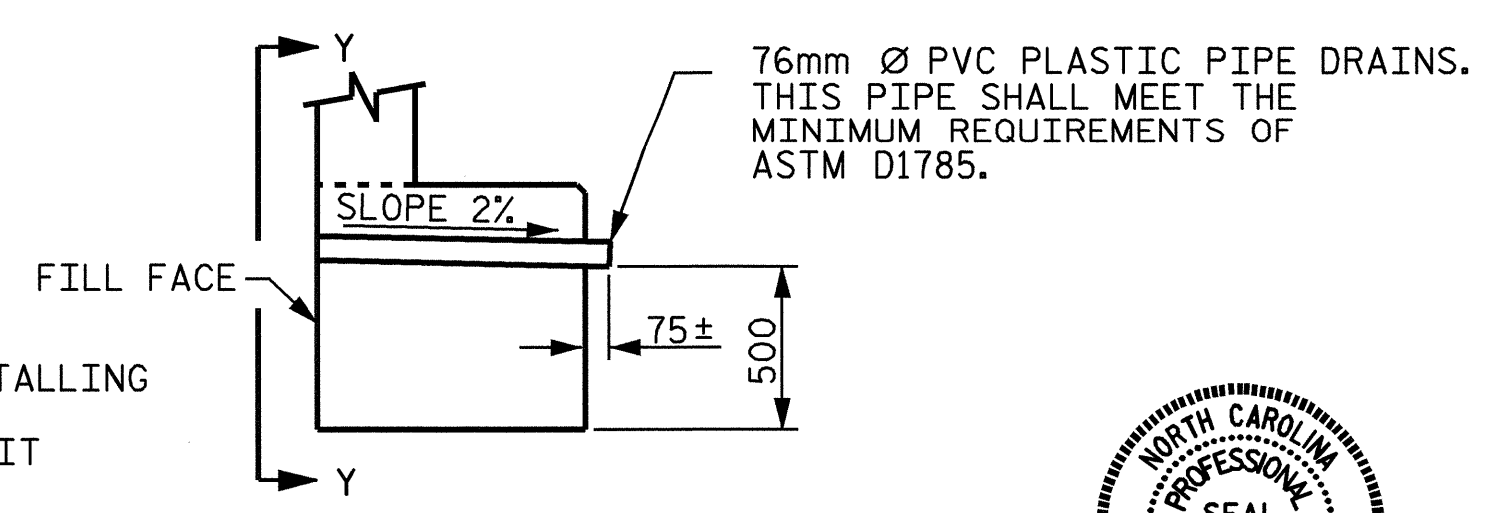
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



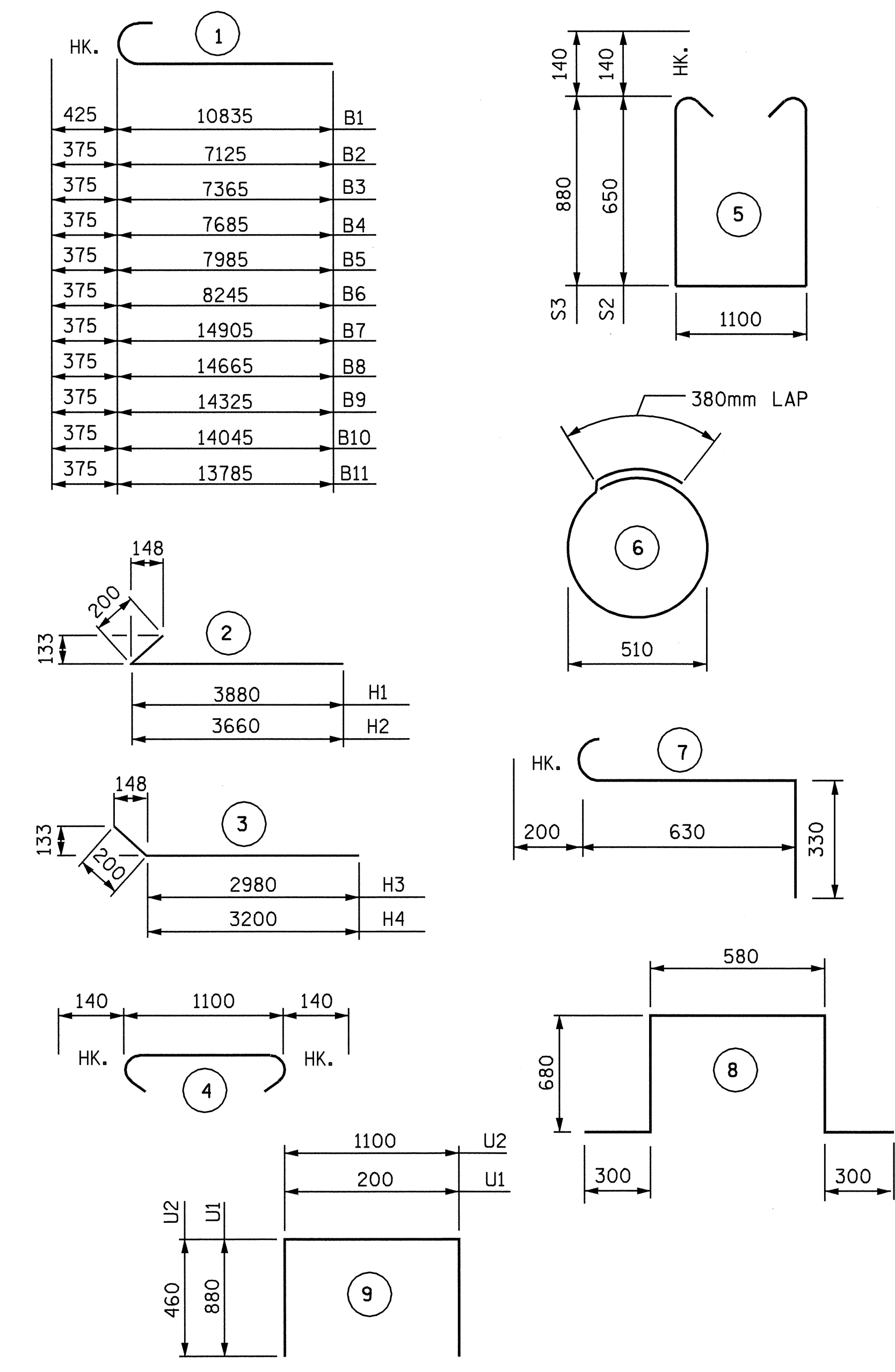
NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC PIPE DRAINS, HARDWARE CLOTH AND FASTENERS. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

PIPE DRAIN DETAILS



SECTION THRU CAP

BAR TYPES
ALL DIMENSIONS ARE OUT TO OUT



BILL OF MATERIAL
END BENT NO. 1

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	32	1	11260	577
B2	1	29	1	7500	38
B3	1	29	1	7740	39
B4	1	29	1	8060	41
B5	1	29	1	8360	42
B6	1	29	1	8620	44
B7	1	29	1	15280	77
B8	1	29	1	15040	76
B9	1	29	1	14700	74
B10	1	29	1	14420	73
B11	1	29	1	14160	72
B12	4	16	STR	10100	63
B13	1	16	STR	6580	10
B14	1	16	STR	5440	8
B15	12	13	STR	6920	83
B16	5	13	STR	4440	22
B17	1	13	STR	2660	3
B18	1	13	STR	2900	3
B19	1	13	STR	3220	3
B20	1	13	STR	3520	3
B21	1	13	STR	3780	4
B22	18	13	STR	1100	20
H1	11	16	2	4080	70
H2	11	16	2	3860	66
H3	10	16	3	3180	49
H4	10	16	3	3400	53
H5	8	13	STR	1300	10
K1	30	13	STR	6920	206
S1	67	16	4	1380	143
S2	38	16	5	2680	158
S3	29	16	5	3140	141
S4	22	13	6	1980	43
S5	3	19	7	1160	8
S6	1	19	8	2540	6
U1	56	13	9	1960	109
U2	17	13	9	2020	34
V1	112	16	STR	2200	382
V2	32	16	STR	2960	147
V3	28	16	STR	2560	111
REINFORCING STEEL					kg. 3111
CLASS A CONCRETE BREAKDOWN					
POUR 1: (CAP AND LOWER PORTION OF WINGS AND WING PILE BLOCK) CU. METERS					23.3
POUR 2: (BACKWALL AND UPPER PORTION OF WINGS) CU. METERS					13.6
TOTAL CU. METERS					36.9
305mm SQ. PRESTRESSED CONCRETE PILES.					
NO. 12	METERS				228

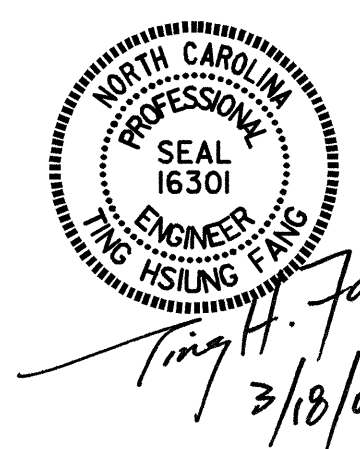
NOTE: CONCRETE DISPLACED BY CONCRETE PILES HAS BEEN DEDUCTED FROM CONCRETE QUANTITY.

PROJECT NO. R-513BB
ROBESON COUNTY
STATION: 209+17.263 -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:	S-52
1			3			TOTAL SHEETS
2			4			312