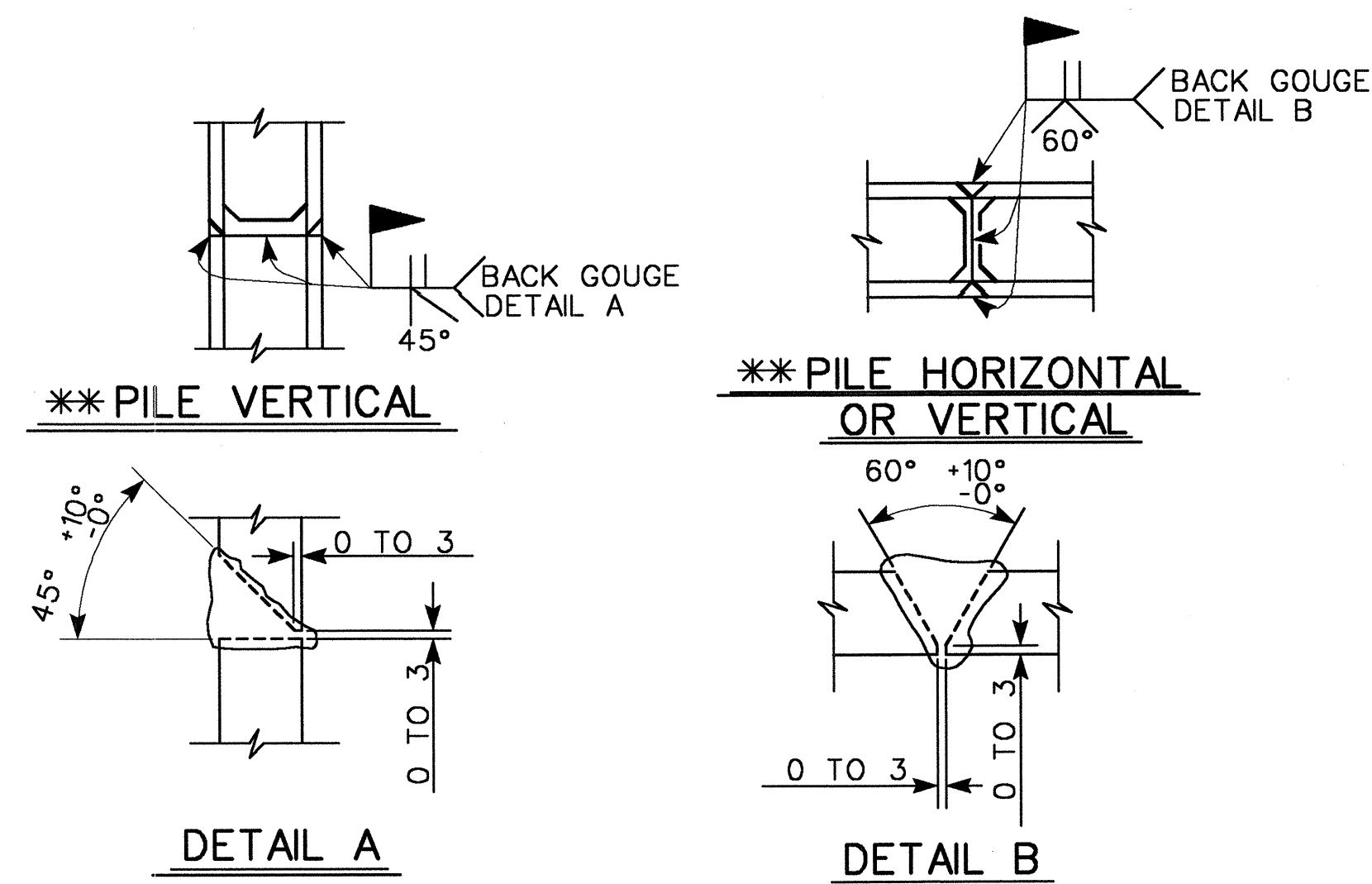


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

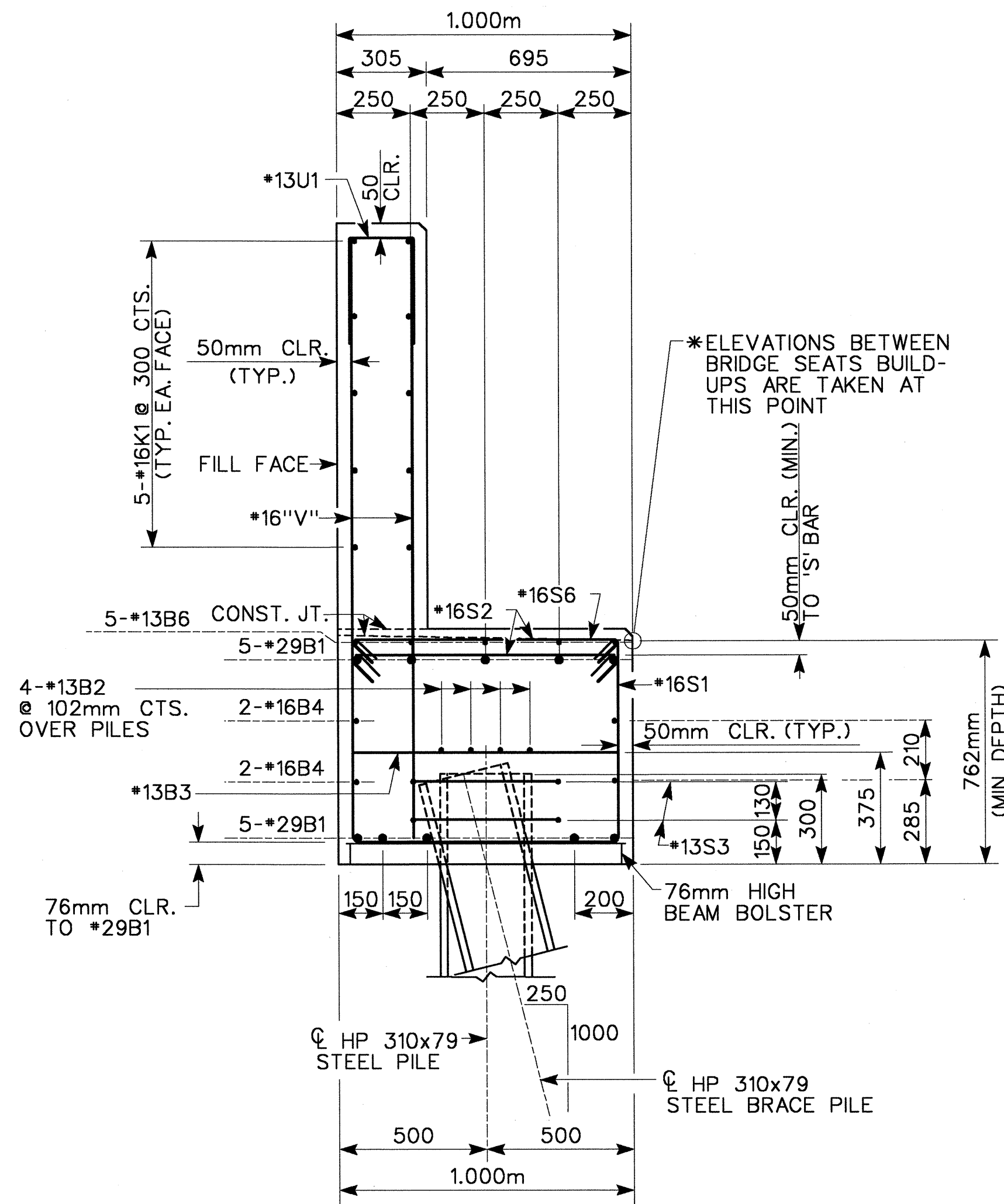
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE FOR THE SEVERAL PAY ITEMS.

### TEMPORARY DRAINAGE AT END BENT



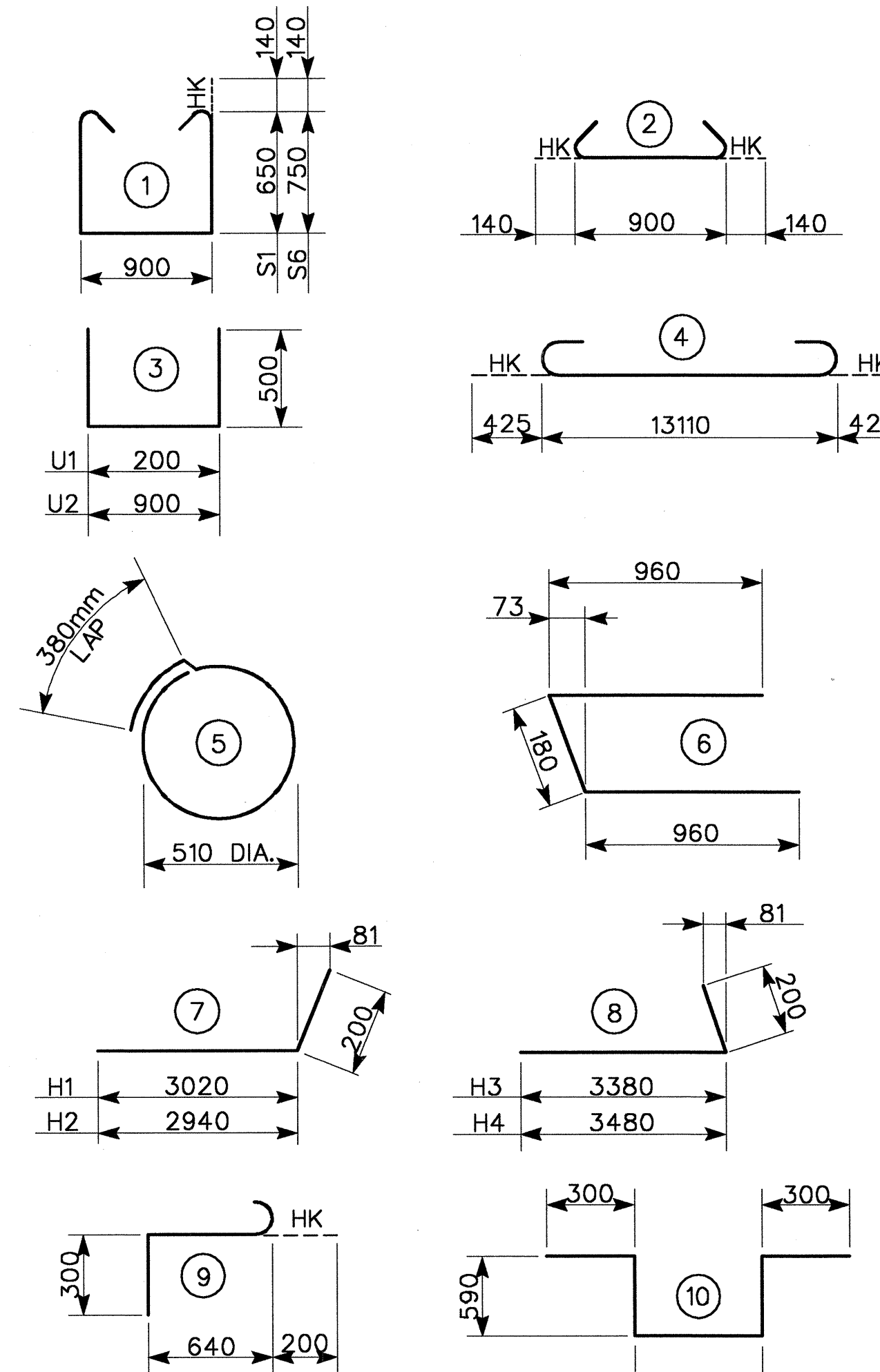
### PILE SPLICE DETAILS

\*\* POSITION OF PILE DURING WELDING



### SECTION A-A

### BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

### BILL OF MATERIAL

#### FOR END BENT #1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	29	4	13960	706
B2	8	13	STR	6980	56
B3	11	13	STR	900	10
B4	4	16	STR	13200	82
B5	16	13	STR	900	14
B6	5	13	STR	5800	29
H1	10	13	7	3220	32
H2	10	13	7	3140	31
H3	11	13	8	3580	39
H4	11	13	8	3680	40
K1	10	16	STR	13200	205
S1	26	16	1	2480	100
S2	47	16	2	1180	86
S3	16	13	5	1980	31
S4	3	19	9	1140	8
S5	1	19	10	2360	5
S6	21	16	1	2680	87
U1	37	13	3	1200	44
U2	24	13	3	1900	45
U3	4	13	6	2100	8
V1	74	16	STR	1960	225
V2	28	16	STR	2420	105
V3	32	16	STR	2600	129

REINFORCING STEEL - kq 2117

#### CLASS A CONCRETE BREAKDOWN

POUR 1 - (CAP & BOT. OF WINGS)	m <sup>3</sup>	12.6
POUR 2 - (TOP OF WINGS & BACKWALL)	m <sup>3</sup>	9.3

CLASS A CONCRETE TOTAL m<sup>3</sup> 21.9

#### HP 310x79 STEEL PILES

NO. 9 METERS	72.0
STEEL PILE POINTS	EA. 9

PROJECT NO. R-2552B

JOHNSTON COUNTY

STATION: 65+51.880 -L-  
14+25.318 -Y7-

SHEET 3 of 3

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

### END BENT #1 SUBSTRUCTURE

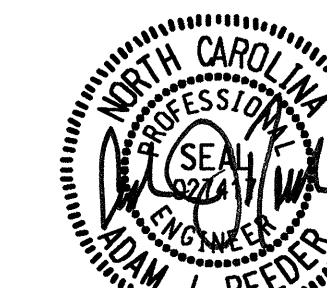
#### REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			5-19
2			4			TOTAL SHEETS 431

**PBS&**

1616 E. MILLBROOK RD., SUITE 310  
RALEIGH, NORTH CAROLINA 27609  
PHONE (919) 876-6888  
FAX (919) 876-6848

DRAWN BY : SD DATE : 7/03  
CHECKED BY : JL DATE : 8/03



1-13-04