

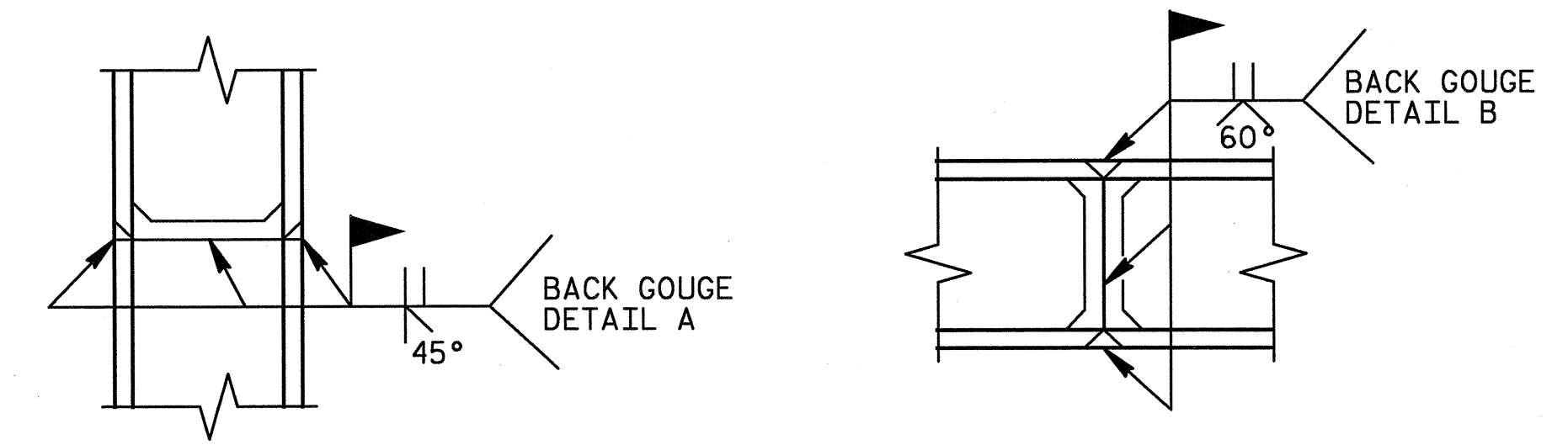
TEMPORARY DRAINAGE AT END BENT

DRAINAGE NOTES:

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.

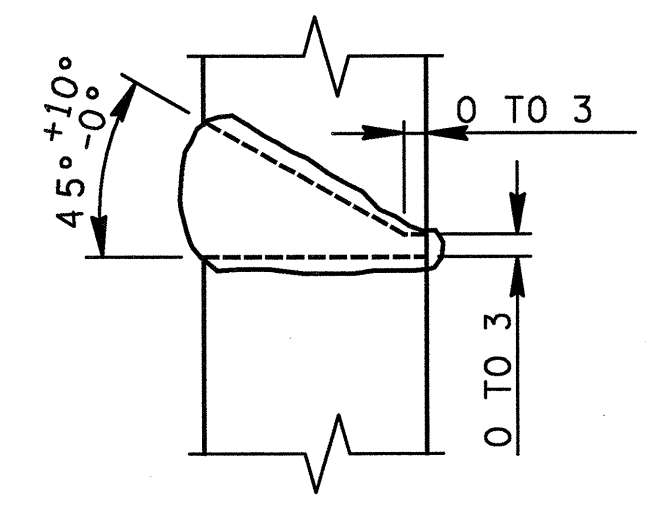
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR 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.

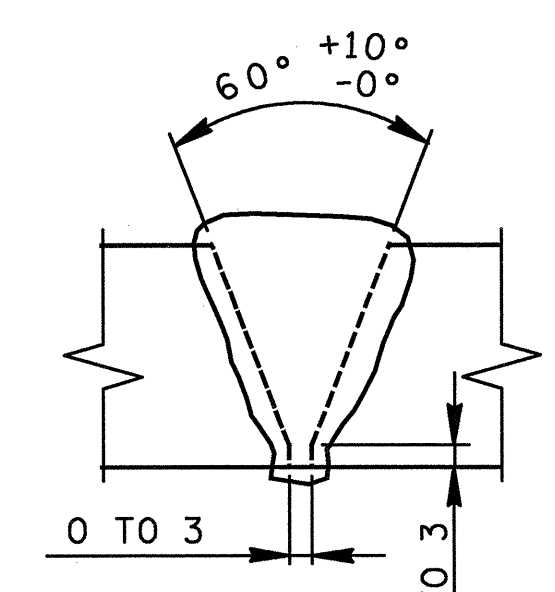


▲ PILE VERTICAL

▲ PILE HORIZONTAL OR VERTICAL



DETAIL A

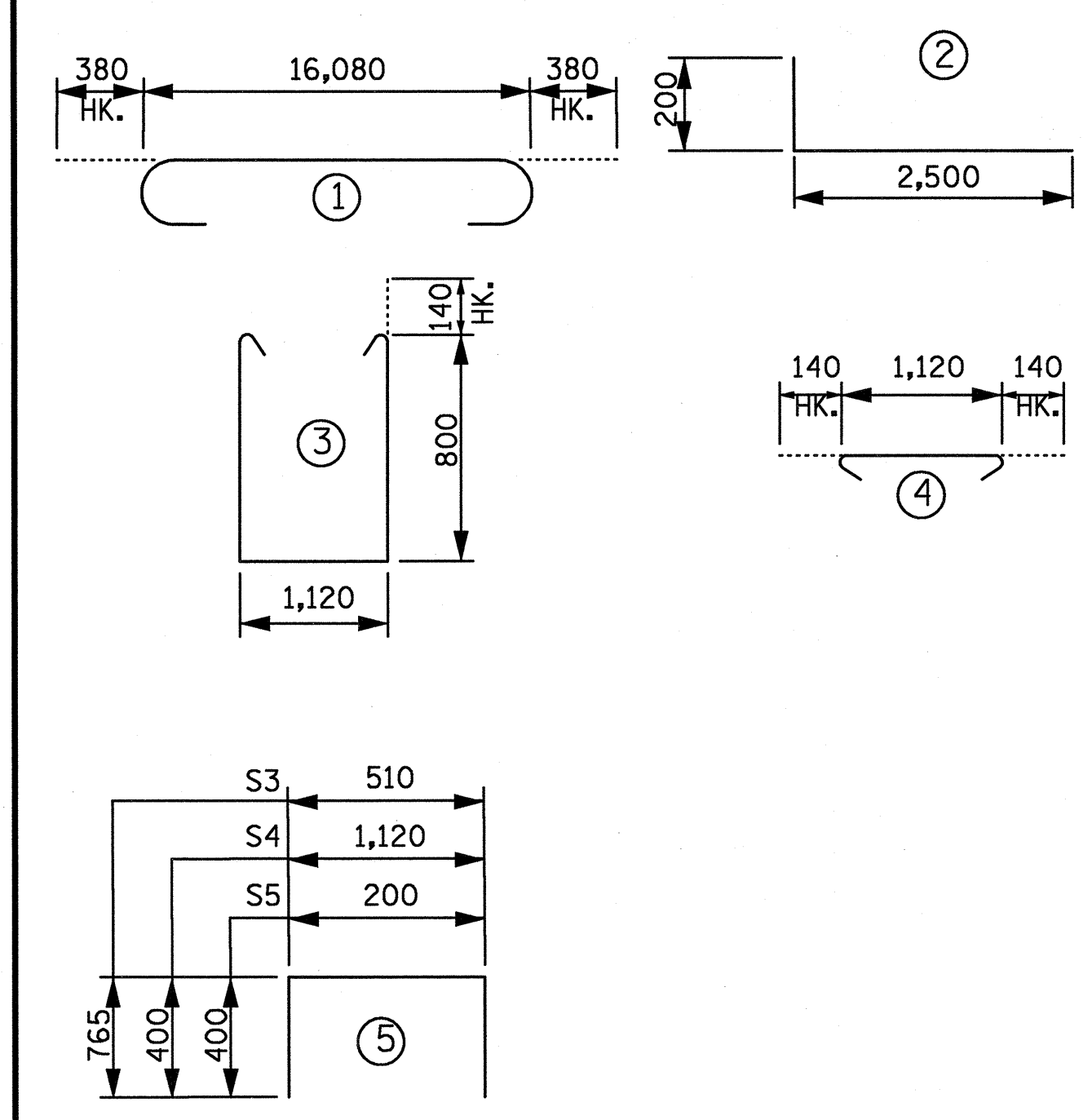


DETAIL B

▲ POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF REINFORCING

MARK	NO.	SIZE	TYPE	LENGTH (mm)	MASS (kg)
B1	10	#29	①	16,840	852
B2	4	#16	STR.	16,080	100
B3	16	#13	STR.	8,420	134
B4	14	#13	STR.	1,120	16
B5	30	#16	STR.	900	42
H1	48	#16	②	2,700	201
K1	12	#16	STR.	16,080	299
K2	8	#16	STR.	860	11
S1	79	#16	③	3,000	368
S2	79	#16	④	1,400	172
S3	36	#13	⑤	2,040	73
S4	25	#16	⑤	1,920	74
S5	48	#13	⑤	1,000	48
V1	96	#16	STR.	2,340	349
V2	24	#16	STR.	2,680	100
V3	24	#16	STR.	2,860	107
TOTAL REINFORCING STEEL = 2,946 kg					

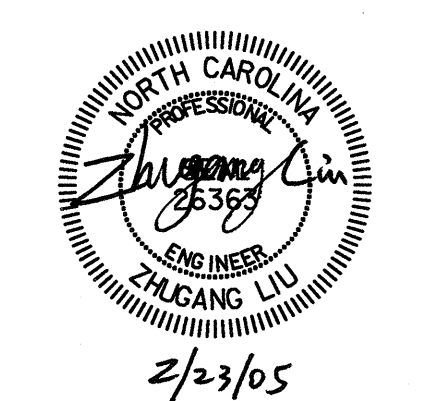
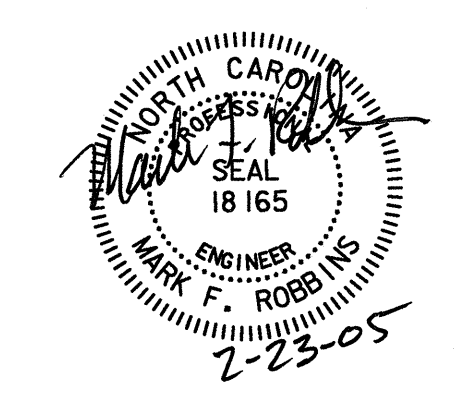
QUANTITIES - END BENT 1

REINFORCING STEEL		2,946 kg
CLASS A CONCRETE	POUR 1	19.7 CU. METERS
	POUR 2	10.6 CU. METERS
	TOTAL	30.3 CU. METERS
HP 310 X 79 STEEL PILES		NO. 12
		260.9 METERS

PROJECT No. R-2552C
 JOHNSTON COUNTY
 STATION: POS 16+52.599 -Y4- =
 POC 9+28.021 -FLYOVER-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 END BENT 1



R RALPH WHITEHEAD ASSOCIATES, INC.
 CONSULTING ENGINEERS
 P.O. BOX 35624 CHARLOTTE, N.C. 28235
 DRAWN BY LGH DATE 10-04 DWG. NO.
 CHECKED BY TVR DATE 12-04 D-1748.25

REVISIONS	NO.	DATE	BY
	1		
	2		
	3		
	4		

SHEET NO. 5-420
 TOTAL SHEETS 431

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