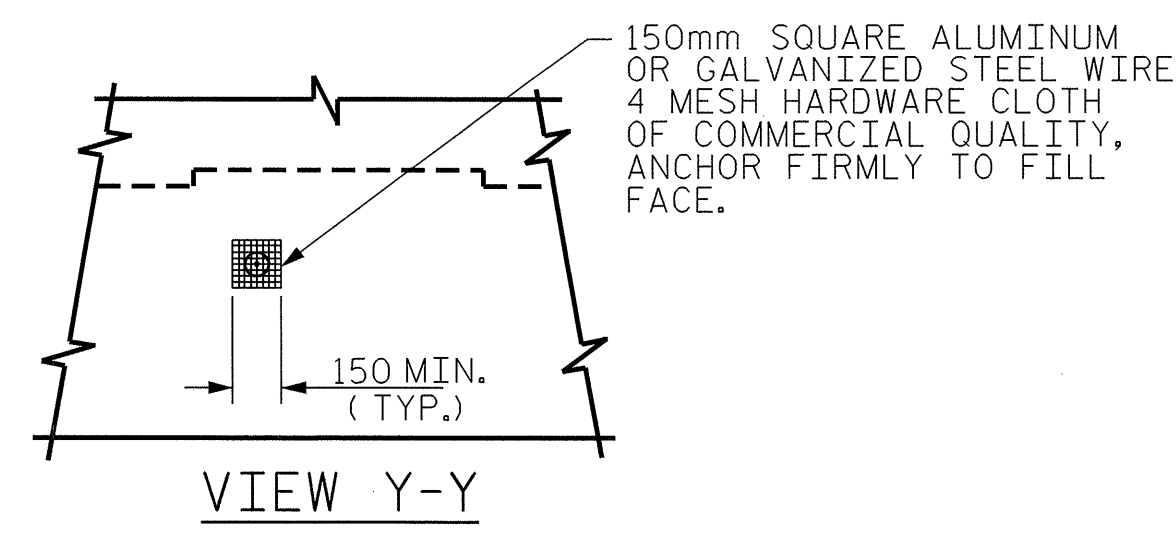
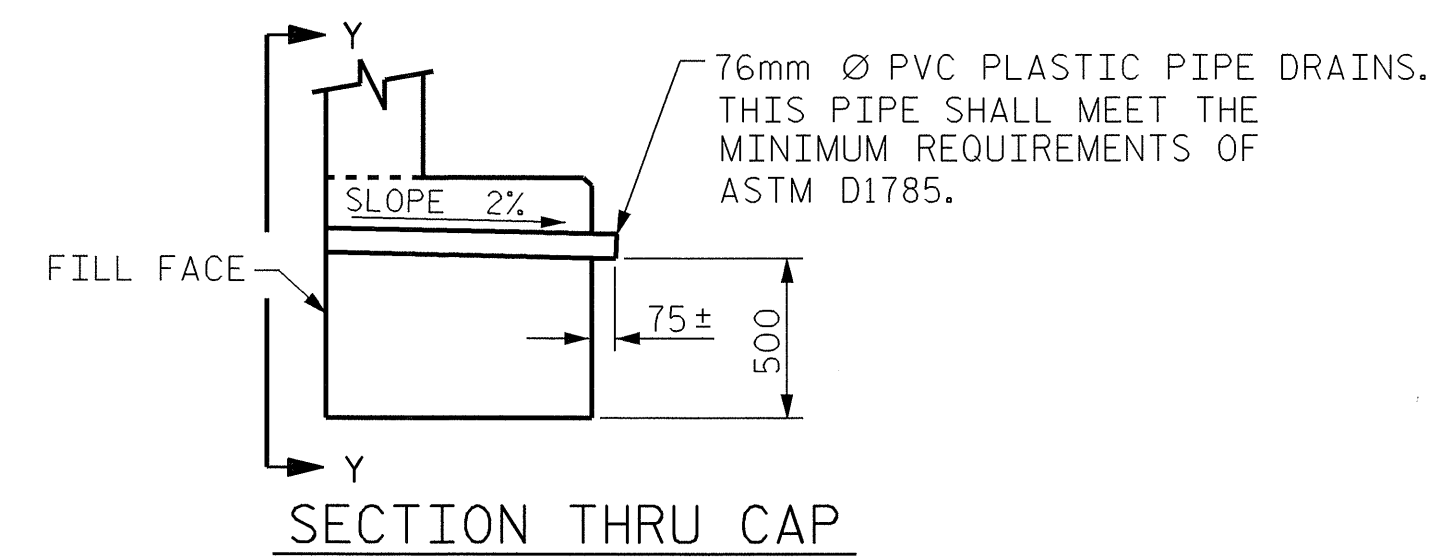


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

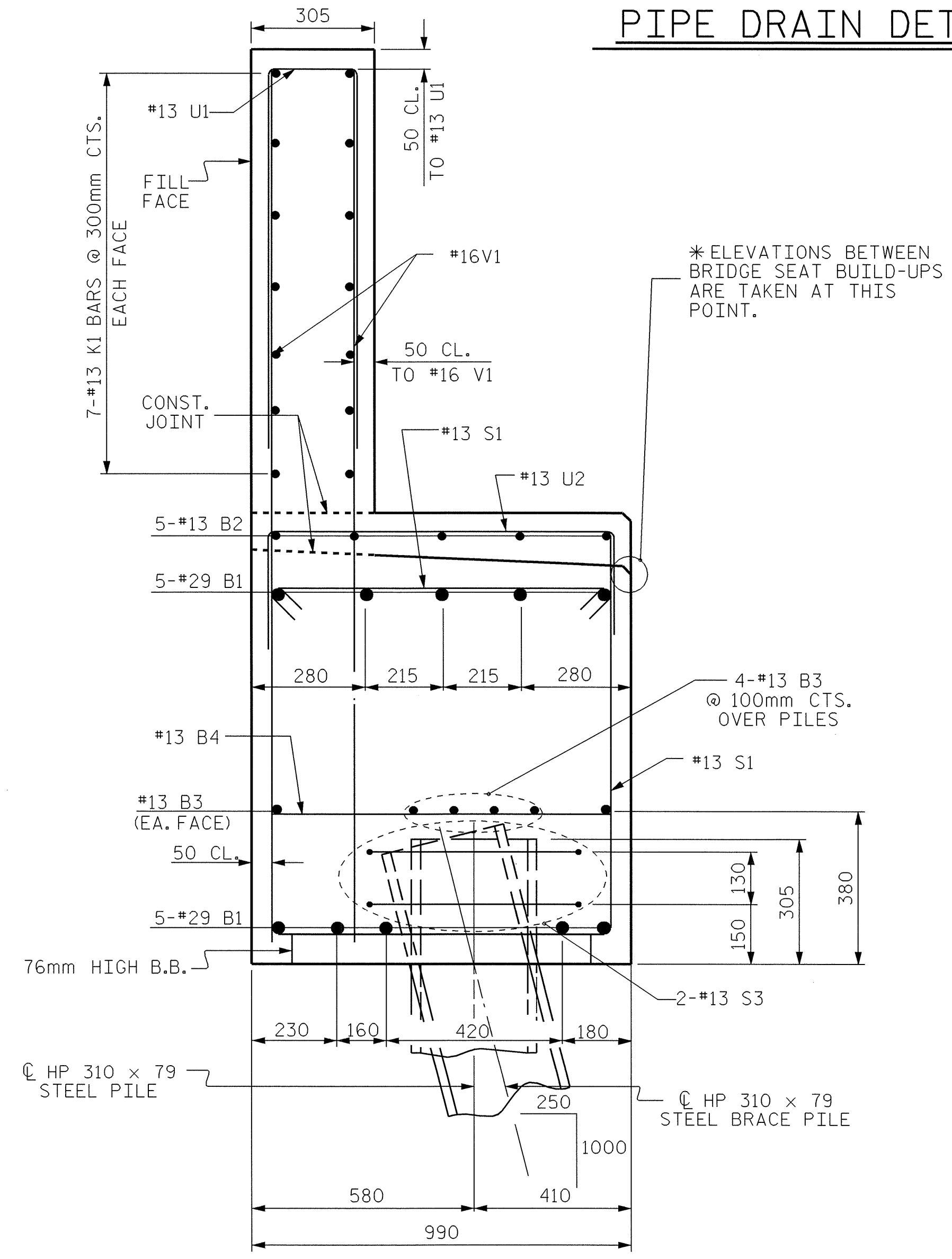
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

**TEMPORARY DRAINAGE AT END BENT**



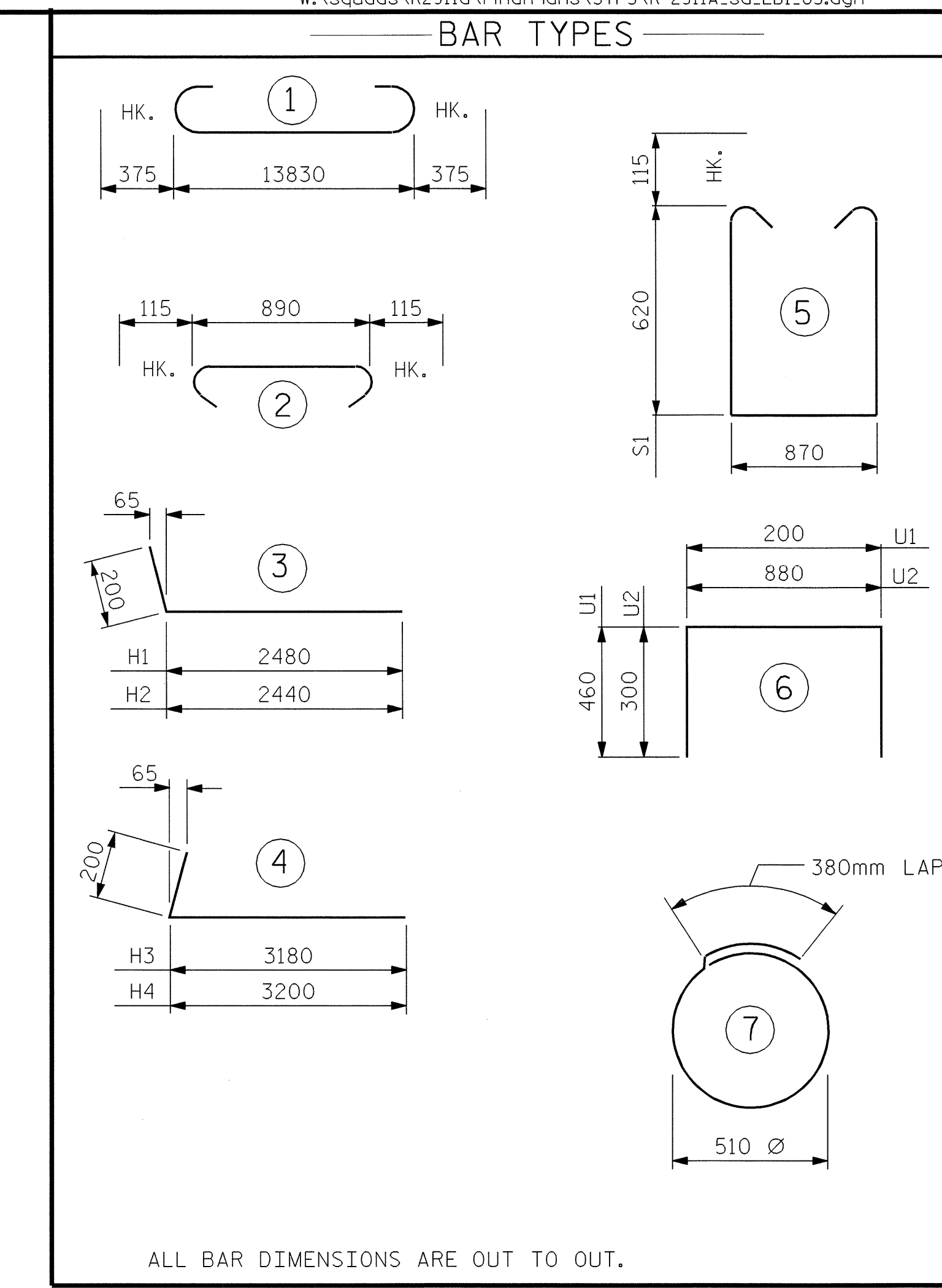
NOTE: NO SEPARATE PAYMENT WILL BE MADE FOR FURNISHING AND INSTALLING THE PVC PLASTIC PIPE DRAINS, HARDWARE CLOTH AND FASTENERS. THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

**PIPE DRAIN DETAILS**

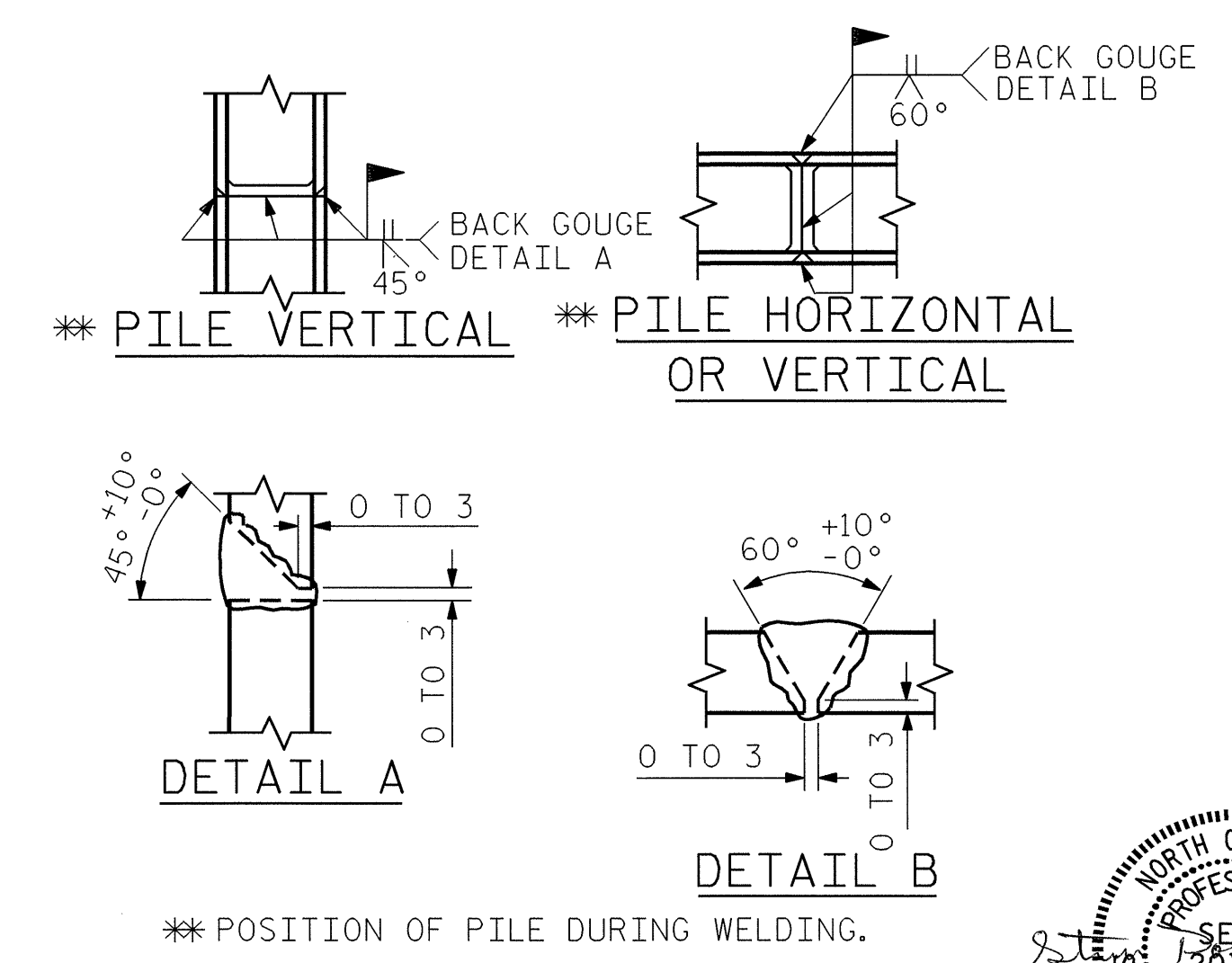


**SECTION A-A**

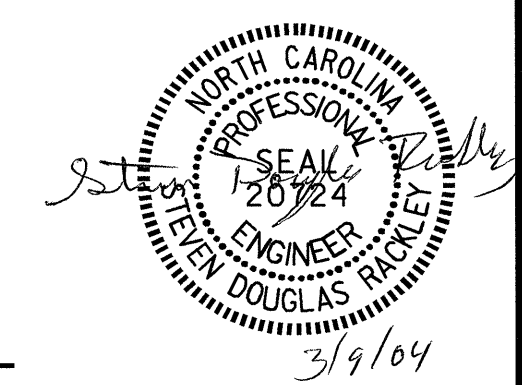
DRAWN BY : DAN PLATICA DATE : 01/09/04  
 CHECKED BY : M. K. BEARD DATE : 01/30/04



BILL OF MATERIAL					
END BENT #1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#29	1	14580	738
B2	5	#13	STR	5000	25
B3	12	#13	STR	7320	87
B4	12	#13	STR	880	10
H1	12	#13	3	2680	32
H2	12	#13	3	2640	31
H3	13	#13	4	3380	43
H4	13	#13	4	3400	44
K1	28	#13	STR	7300	203
K2	8	#13	STR	860	7
S1	38	#13	5	2340	88
S2	38	#13	3	1120	42
S3	20	#13	7	1980	39
U1	40	#13	6	1120	45
U2	11	#13	6	1480	16
V1	80	#16	STR	2600	323
V2	26	#13	STR	3000	78
V3	30	#13	STR	3180	95
REINFORCING STEEL					= 1946 kg
CLASS A CONCRETE BREAKDOWN:					
POUR #1: (CAP & BOTTOM OF WINGS)				CU. METERS	13.8
POUR #2: (TOP OF WINGS & BACKWALL)				CU. METERS	8.4
CLASS A CONCRETE TOTAL:				CU. METERS	22.2
HP 310 x 79 STEEL PILES					NO. = 10 METERS = 250



**PILE SPLICE DETAILS**



PROJECT NO. R-2911A  
IREDELL COUNTY  
 STATION: 41+59.472 -L-

SHEET 3 OF 3  
 STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUBSTRUCTURE  
 END BENT #1  
 (LEFT LANE)

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 106

STR. #3