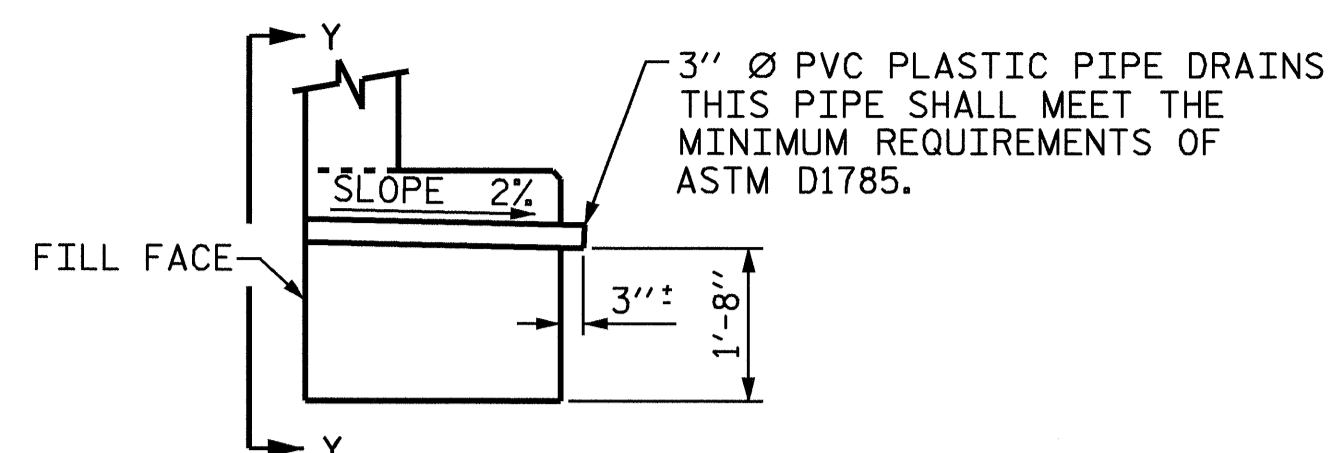


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

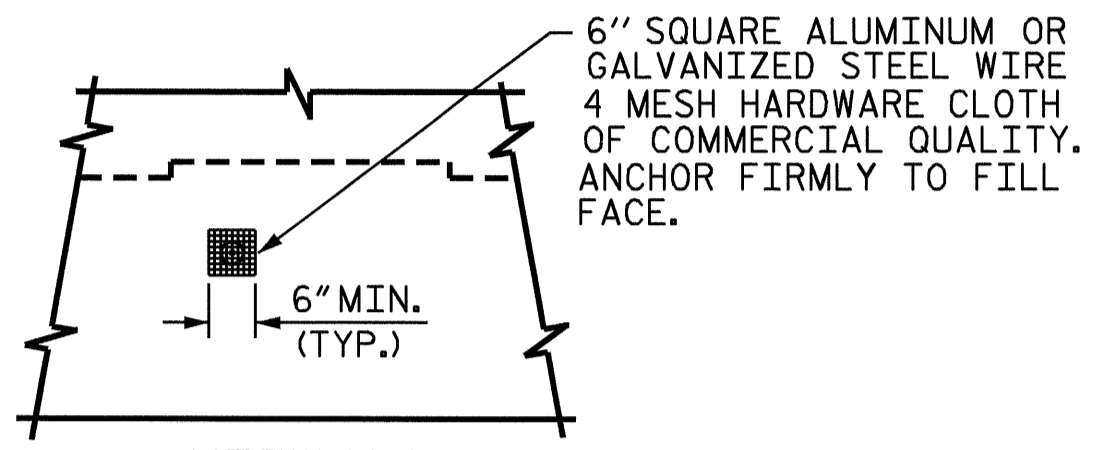
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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



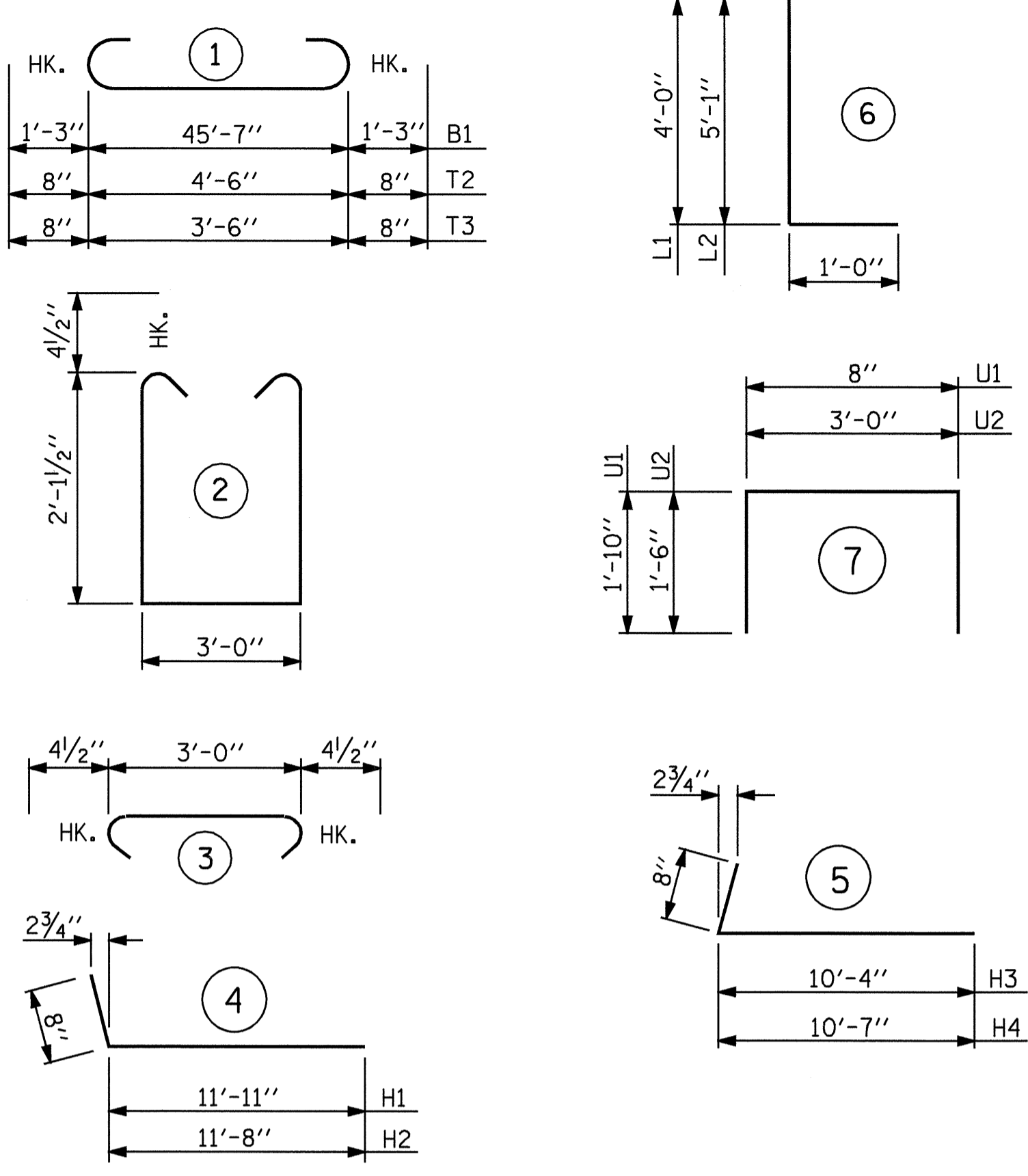
SECTION THRU CAP



VIEW Y-Y

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



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT #1

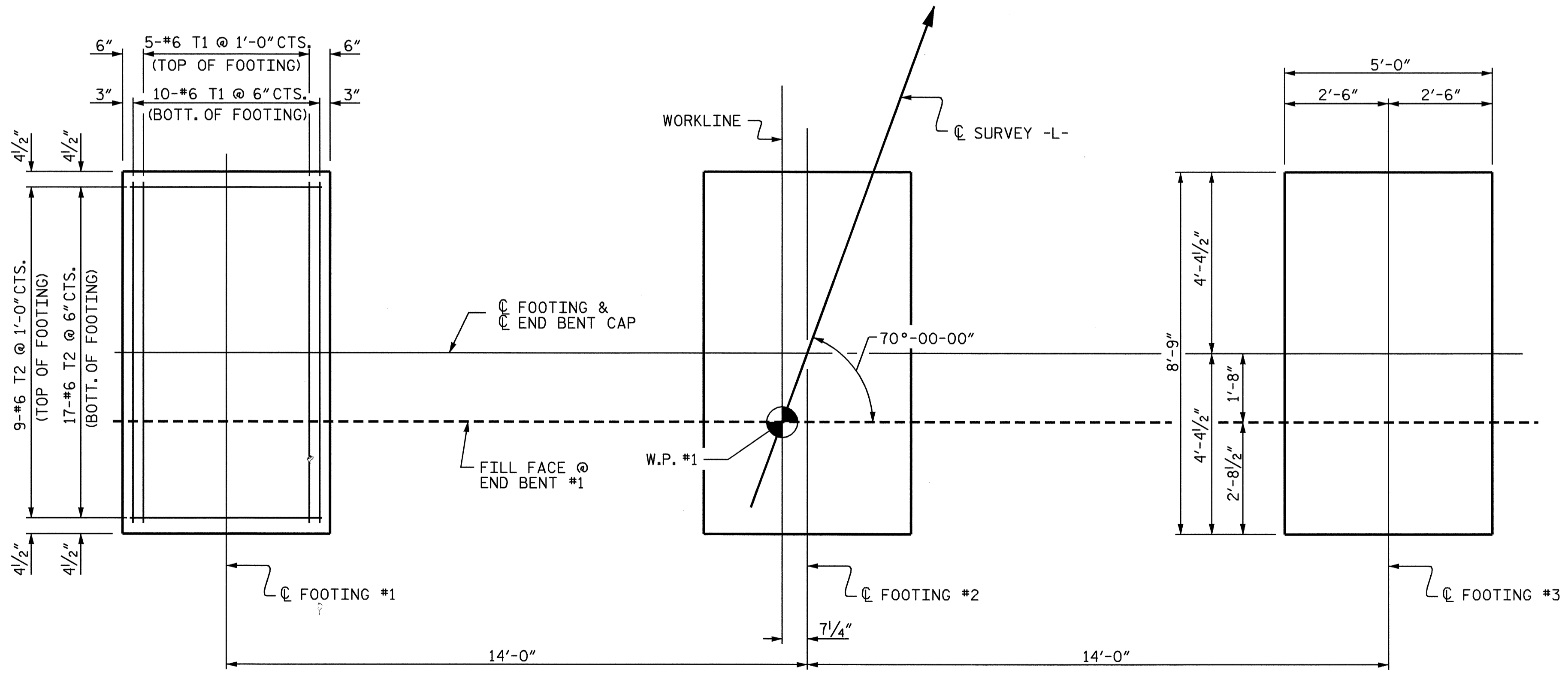
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#9	1	48'-1"	1635
B2	2	#5	STR	45'-9"	95
B3	10	#4	STR	2'-6"	17
H1	11	#5	4	12'-7"	144
H2	11	#5	4	12'-4"	142
H3	11	#5	5	11'-0"	126
H4	11	#5	5	11'-3"	129
K1	24	#4	STR	24'-1"	386
K2	8	#4	STR	2'-9"	15
L1	42	#8	6	5'-0"	561
L2	14	#6	6	6'-1"	128
S1	45	#4	3	3'-9"	113
S2	45	#4	2	8'-0"	240
T1	45	#6	STR	8'-3"	558
T2	78	#6	1	5'-10"	683
T3	28	#6	1	4'-10"	203
U1	40	#4	7	4'-4"	116
U2	6	#4	7	6'-0"	24
V1	80	#5	STR	7'-6"	626
V2	32	#5	STR	8'-10"	295
V3	30	#5	STR	8'-9"	274

REINFORCING STEEL = 6510 LBS

CLASS A CONCRETE BREAKDOWN

POUR #1: FOOTINGS	15.2 CU. YDS.
POUR #2: CAP & LOWER WINGS	17.0 CU. YDS.
POUR #3: BACKWALL & UPPER WINGS	14.8 CU. YDS.
TOTAL CLASS A CONCRETE	47.0 CU. YDS.

FOUNDATION EXCAVATION LUMP SUM



PLAN OF FOOTING

REINFORCING STEEL AND DIMENSIONS ARE TYPICAL FOR EACH FOOTING AT END BENT CAP. FOR FOOTING AT WING, SEE SHEET 2 OF 3.

PROJECT NO. B-4010
 ASHE COUNTY
 STATION: 20+93.60 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUBSTRUCTURE
 END BENT #1**



DRAWN BY: Q. NGUYEN/DAH DATE: 6/04
 CHECKED BY: M.G. CHEEK DATE: 7/04

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