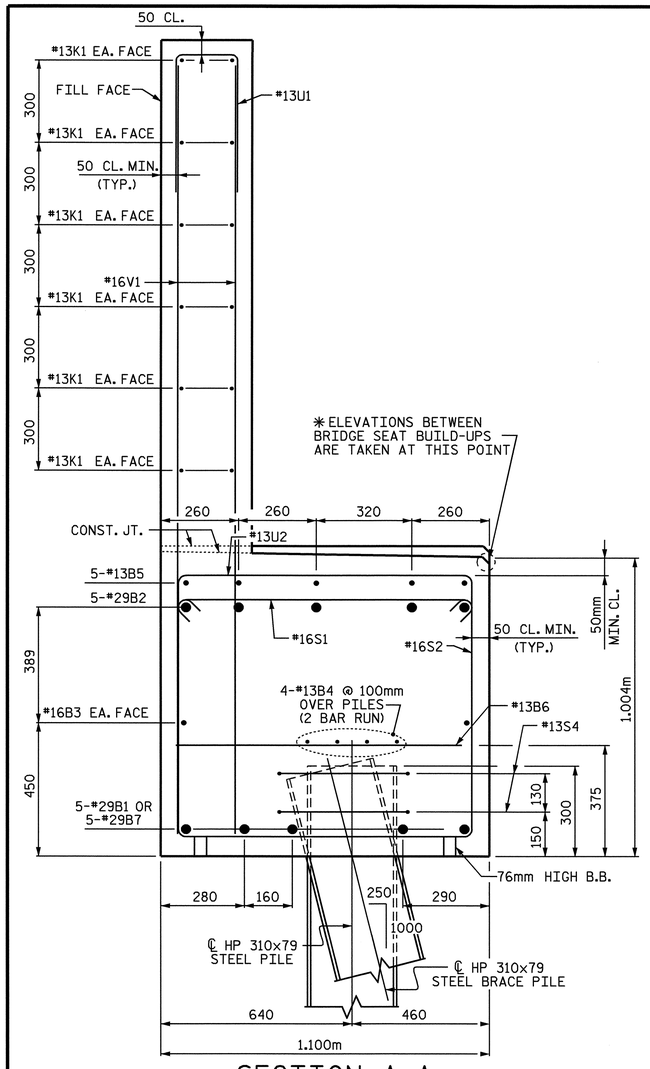
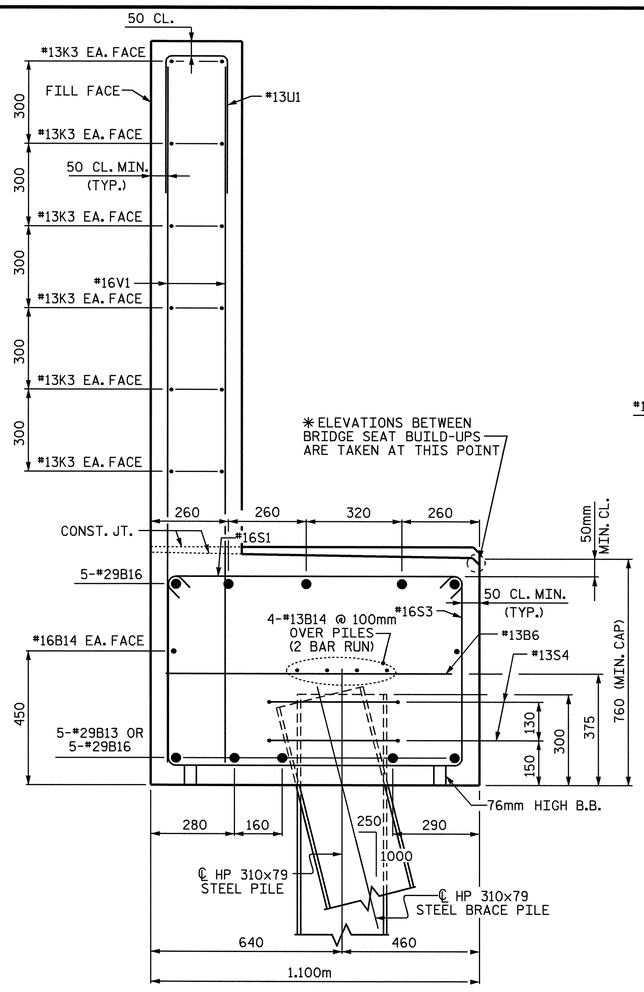
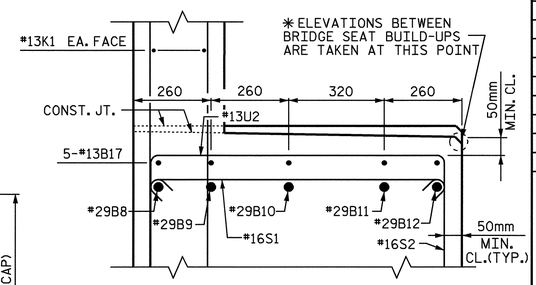


SECTION A-A



SECTION B-B



SECTION C-C

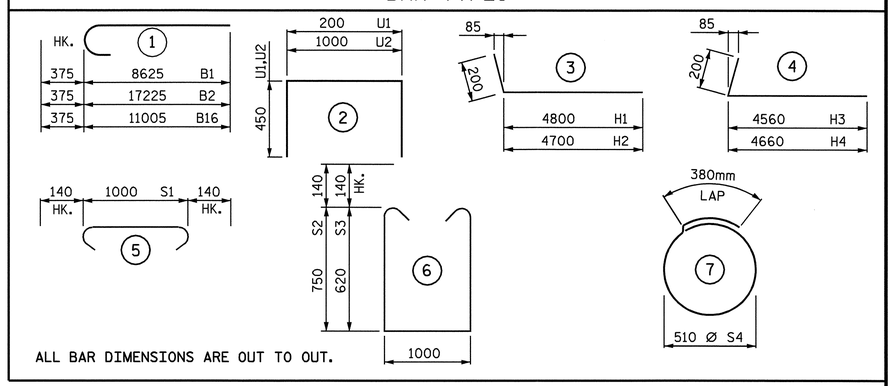
BILL OF MATERIAL END BENT NO. 1 (STAGE I)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	29	1	9000	228
B2	5	29	1	17600	445
B3	2	16	STR	17200	53
B4	8	13	STR	8900	71
B5	5	13	STR	8520	42
B6	14	13	STR	1000	14
B7	5	29	STR	11480	290
H3	12	16	4	4760	89
H4	12	16	4	4860	91
K1	24	13	STR	8900	212
K2	6	13	STR	1400	8
S1	64	16	5	1280	127
S2	64	16	6	2780	276
S4	20	13	7	1980	39
U1	48	13	2	1100	52
U2	17	13	2	1900	32
V1	96	16	STR	2480	370
V2	42	16	STR	3200	209

REINFORCING STEEL Kg 2648
CLASS A CONCRETE
POUR #1 18.9 m3
POUR #2 12.2 m3
TOTAL 31.1 m3
HP 310x79 STEEL PILES
No. 11 154.0 m

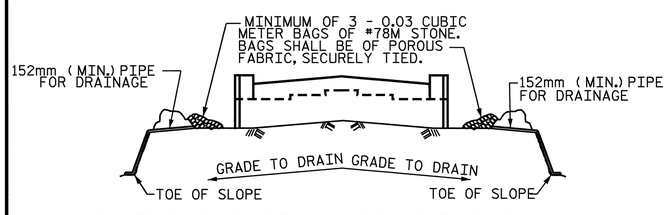
BILL OF MATERIAL END BENT NO. 1 (STAGE II)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B6	16	13	STR	1000	16
B8	1	29	STR	9220	47
B9	1	29	STR	9300	47
B10	1	29	STR	9440	48
B11	1	29	STR	9560	48
B12	1	29	STR	9640	49
B13	5	29	STR	10600	268
B14	4	16	STR	9960	60
B15	12	13	STR	6760	81
B16	10	29	1	11380	576
B17	5	13	STR	4300	21
H1	12	16	3	5000	93
H2	12	16	3	4900	91
K3	36	13	STR	6660	238
K4	6	13	STR	1400	8
S1	88	16	5	1280	175
S2	54	16	6	2780	233
S3	34	16	6	2520	133
S4	24	13	7	1980	47
U1	58	13	2	1100	63
U2	10	13	2	1900	19
V1	116	16	STR	2480	446
V3	42	16	STR	3060	199

REINFORCING STEEL Kg 3006
CLASS A CONCRETE
POUR #1 19.6 m3
POUR #2 14.3 m3
TOTAL 33.9 m3
HP 310x79 STEEL PILES
No. 13 182.0 m

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

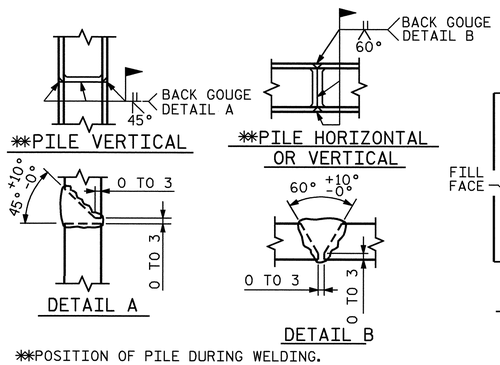


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

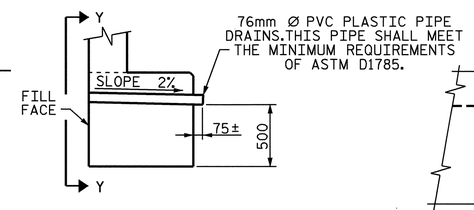
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

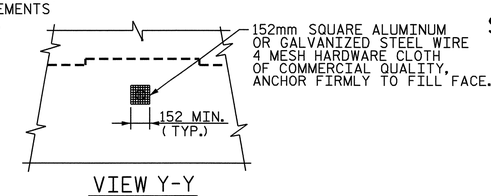


✱✱POSITION OF PILE DURING WELDING.

PILE SPLICE DETAILS



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

PROJECT NO. U-2717
GUILFORD COUNTY
STATION 40+56.584-L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT #1
DETAILS
(STAGES I & II)

NORTH CAROLINA PROFESSIONAL SEAL 15825 ENGINEER BRUCE D. KLAPPENBACH

REVISIONS								SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:			S-34
1			3					TOTAL SHEETS
2			4					47

STR. #1

DRAWN BY:	H.T. BARBOUR	DATE: 8-17-04
CHECKED BY:	S. P. LAM	DATE: 8-26-04

03-SEP-2004 08:58
H:\squad\U2717\hbarbour\Microstation\U-2717_sd_E*_01.dgn
H.T. BARBOUR