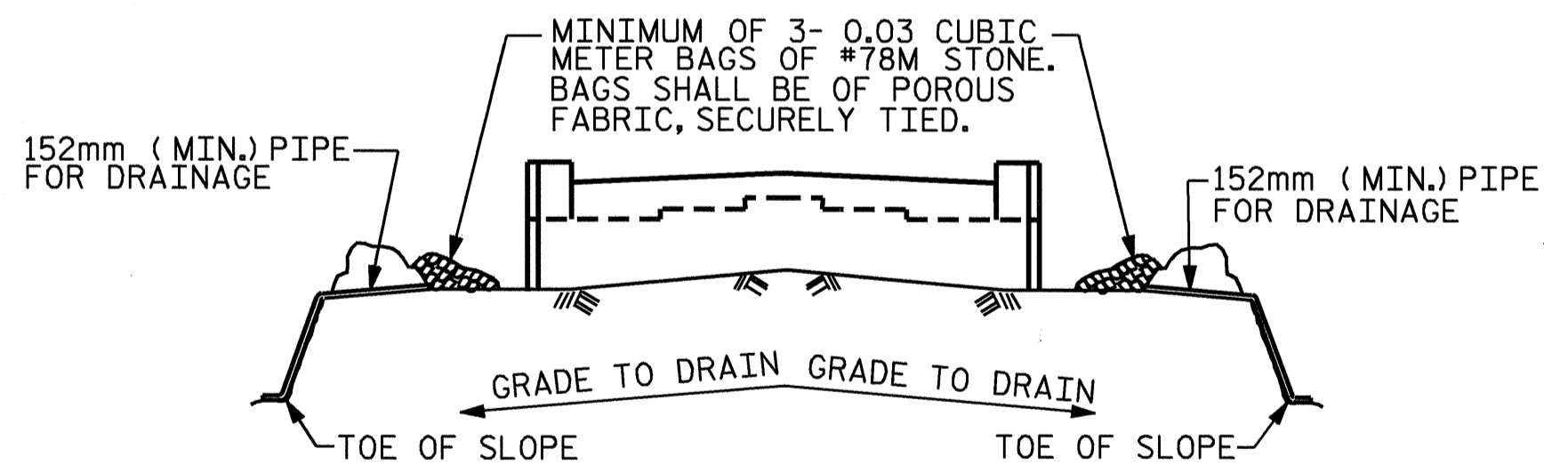
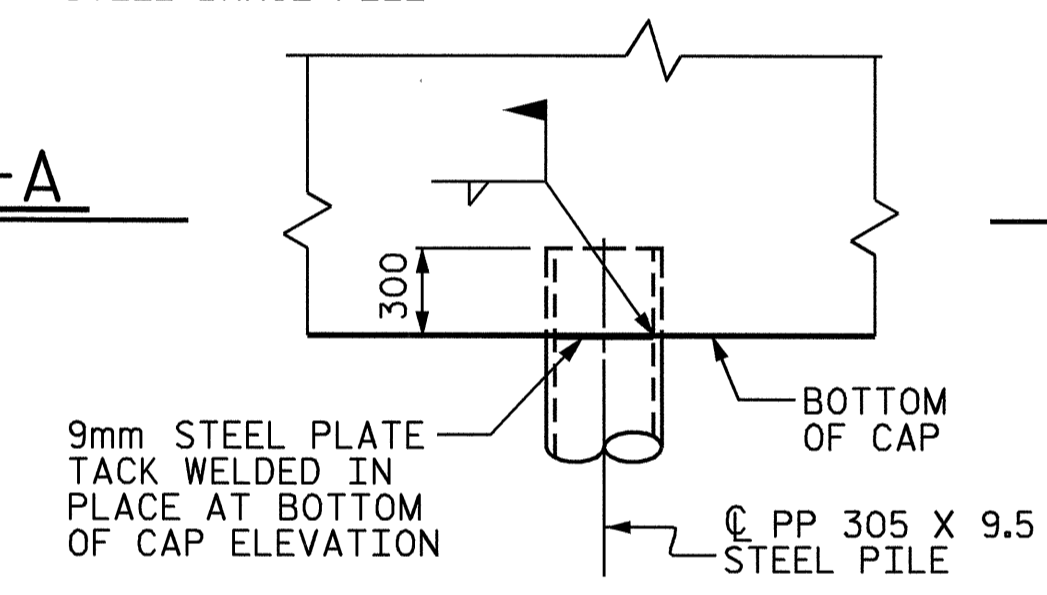


SECTION A-A

SECTION B-B

PIPE PILE IN END BENT CAP DETAIL

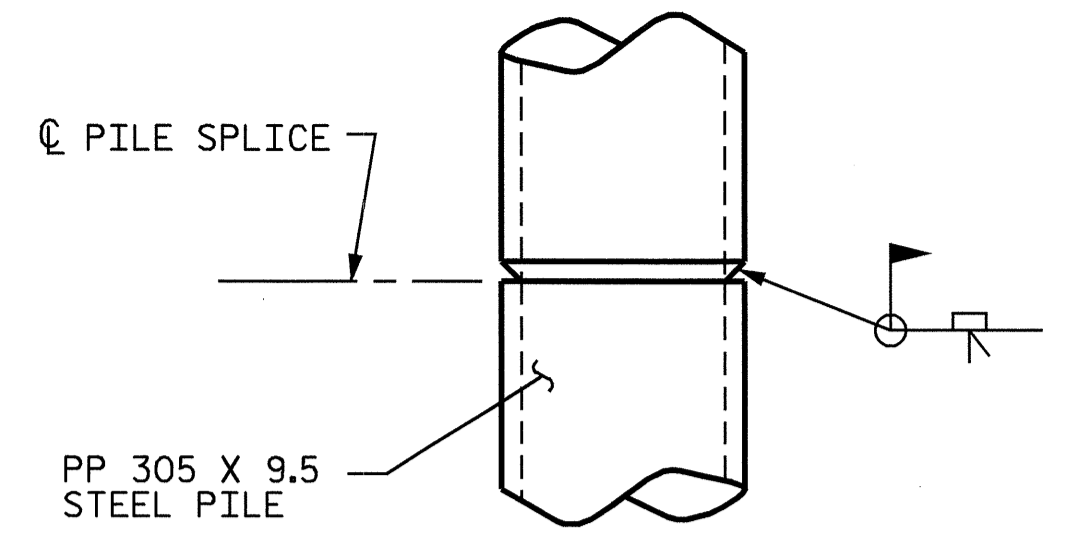


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

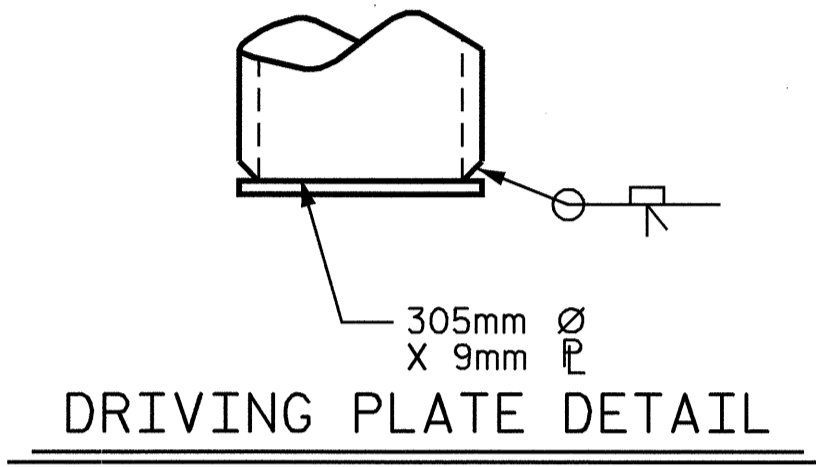
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

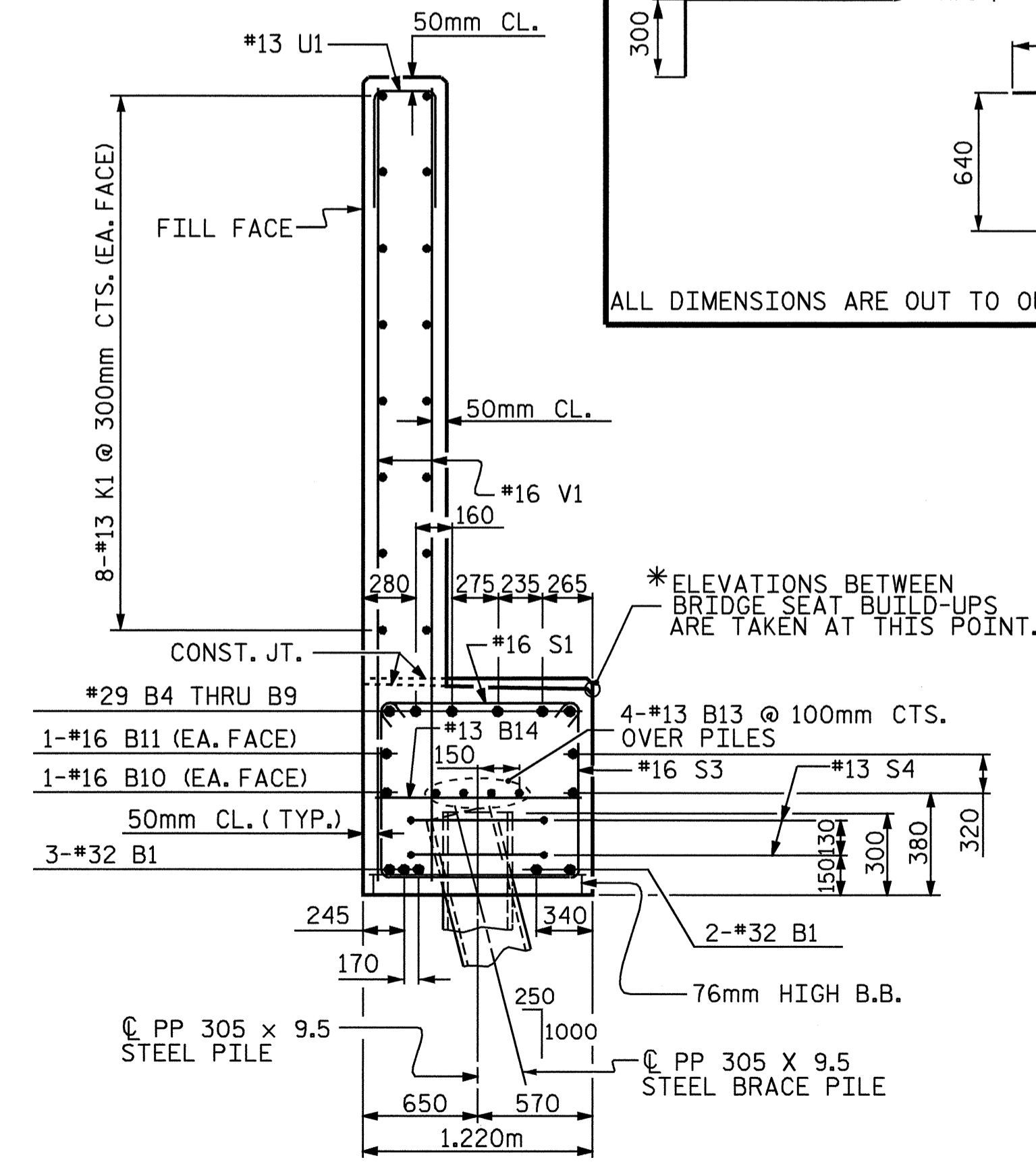
TEMPORARY DRAINAGE AT END BENT



PIPE PILE SPLICE DETAILS



DRIVING PLATE DETAIL



SECTION C-C

BAR TYPES

Diagram showing various bar types (1-9) with their dimensions and shapes. Types 1-4 are L-shaped bars with dimensions like 13335, 10905, 7425, 7605, 7845, 8105, 8265, 8485. Types 5-9 are other shapes with dimensions like 3980, 4180, 5180, 4980, 1120, 640, 200, 580, 300.

BILL OF MATERIAL					
END BENT 2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	32	1	13760	881
B2	6	29	1	11280	342
B3	6	29	STR	11280	342
B4	1	29	1	7800	39
B5	1	29	1	7980	40
B6	1	29	1	8220	42
B7	1	29	1	8480	43
B8	1	29	1	8640	44
B9	1	29	1	8860	45
B10	4	16	STR	12580	78
B11	2	16	STR	6780	21
B12	12	13	STR	5380	64
B13	12	13	STR	8580	102
B14	23	13	STR	1120	26
H1	13	16	4	4180	84
H2	13	16	4	4380	88
H3	14	16	5	5380	117
H4	14	16	5	5180	113
J1	2	19	8	2700	12
J2	6	19	9	1140	15
K1	48	13	STR	8560	409
K2	8	13	STR	1410	9
S1	68	16	2	1400	148
S2	46	16	3	2720	194
S3	22	16	3	3180	109
S4	36	13	7	1980	71
U1	73	13	6	1120	81
U2	22	13	6	2040	45
V1	146	16	STR	3000	680
V2	36	16	STR	3400	190
V3	42	16	STR	3660	239
REINFORCING STEEL					kg 4713

CLASS A CONCRETE BREAKDOWN		
POUR 1 (CAP AND LOWER PORTION OF WINGS)	m ³	30.3
POUR 2 (BACKWALL AND UPPER PORTION OF WINGS)	m ³	25.1
CLASS A CONCRETE TOTAL	m ³	55.4
PP 305 x 9.5 STEEL PILE		
NO. 20 METERS		360.0

PROJECT NO. R-513BA
ROBESON COUNTY
STATION: 113+73.429 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT 2
(LEFT LANE)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	9-88
1			3			TOTAL SHEETS
2			4			172

DRAWN BY: S. M. RASHIDI DATE: 1/6/03
CHECKED BY: M. A. ALLEN DATE: 03-04