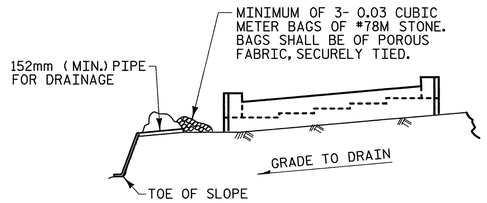
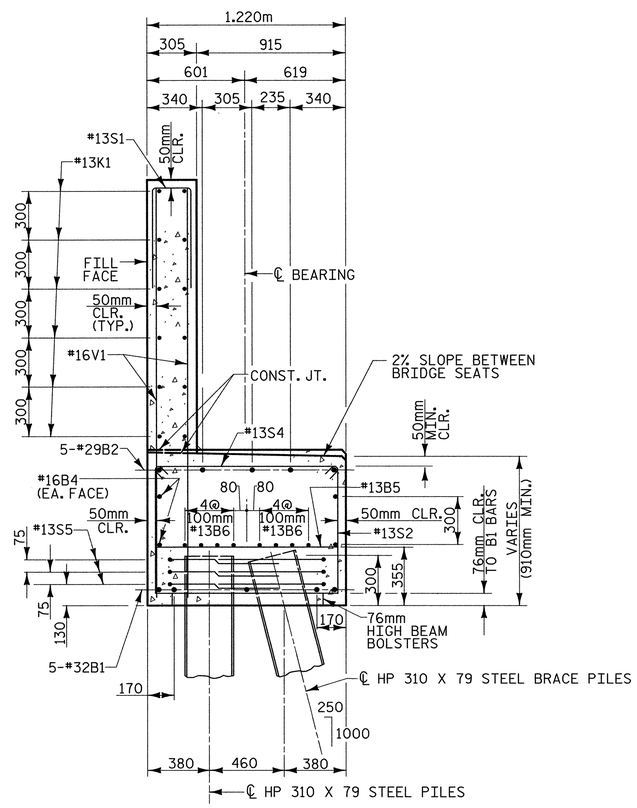


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

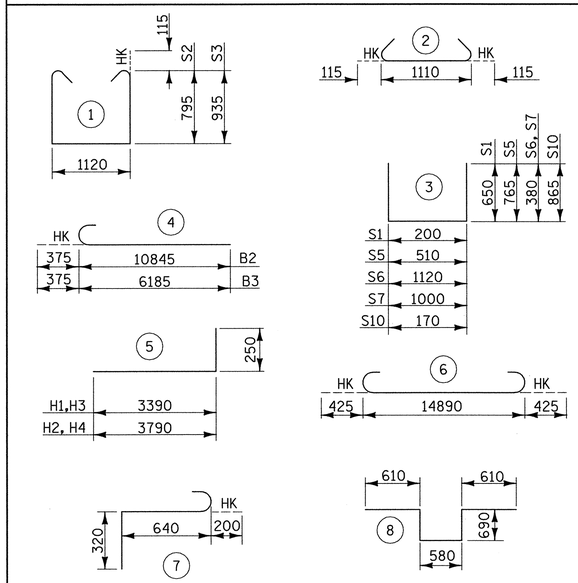
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



SECTION A-A

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR END BENT 1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	#32	6	15740	504
B2	5	#29	4	11220	223
B3	5	#29	4	6560	130
B4	4	#16	STR	14880	92
B5	13	#13	STR	1120	14
B6	16	#13	STR	7820	124
H1	20	#13	5	3640	72
H2	20	#13	5	4040	80
H3	4	#16	5	3640	23
H4	4	#16	5	4040	25
K1	24	#13	STR	7820	187
S1	44	#13	3	1500	66
S2	26	#13	1	2940	76
S3	18	#13	1	3220	58
S4	44	#13	2	1340	59
S5	30	#13	3	2040	61
S6	8	#13	3	1880	15
S7	10	#13	3	1760	17
S8	2	#19	8	3180	14
S9	6	#19	7	1160	16
S10	4	#13	3	1900	8
V1	88	#16	STR	2440	333
V2	14	#16	STR	2840	62
V3	21	#13	STR	2840	59
V4	20	#16	STR	3100	96
V5	22	#13	STR	3100	68

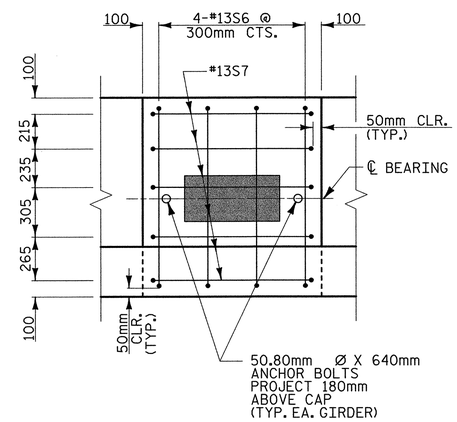
TOTAL REINFORCING STEEL = 2482 kg

CLASS "A" CONCRETE - CU. METERS

POUR 1	20.7 cu. m
POUR 2	12.5 cu. m
TOTAL	33.2 cu. m

HP 310 X 79 STEEL PILES

12 PILES REQUIRED - 174 LIN. METERS



SEAT DETAIL

(TYP. SEATS 2 & 4)

METRIC

PROJECT NO. R-2552AA

WAKE - JOHNSTON COUNTY

STATION: 14+38.000 -LREV- POT

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE END BENT 1 (LEFT LANE)

PLANS PREPARED BY:
MULKEY ENGINEERS & CONSULTANTS
PO Box 33127
Raleigh, N.C. 27636
(919) 851-1912
(919) 851-1918 (FAX)
WWW.MULKEYINC.COM

NORTH CAROLINA PROFESSIONAL SEAL 14174 ENGINEER ROBERT C. LARSON
2/11/05

REFERENCE NO. BL-25

REVISIONS							SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:		S-164
1			3				TOTAL SHEETS
2			4				429

DRAWN BY : J. P. SHERMAN DATE : 9/04
CHECKED BY : R. C. LARSON DATE : 12/04

02/04/2005 02:54:07 PM G:\project\200\R-2552\Structures\Site 4\Left Lane\R2552AA_SD_EL_03.dgn