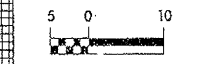


BY 13 818 NW 1/4 IN 6' OAK LOCATED  
 SOUTH OF BL. ST. BEHASS  
 E.M. 1000

**TAYLOR WISEMAN & TAYLOR**  
 ENGINEERS & SURVEYORS & PLANNERS  
 P.L.L.C. - SUBSURFACE UTILITY ENGINEERING  
 6111 HAYERS FORK DRIVE SUITE 131 RALEIGH, N.C. 27606  
 TELEPHONE NO. 919.958.8282 FAX NO. 919.969.6334



PROJECT REFERENCE NO.	R2514-A	SHEET NO.	53
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	



CONST. REV.  
 R/W REV.

**RAIN HYDROLOGIC DATA**  
 DRAINAGE STRUCTURE NO. 3

DRAINAGE AREA	1.072	SQ. KM.
DESIGN FREQUENCY	1.00	YRS.
DESIGN DISCHARGE	1.37	CMS
DESIGN RW ELEVATION	1.958	M.
10 YEAR DISCHARGE	1.47	CMS
100 YEAR RW ELEVATION	1.973	M.
OVERTOPPING FREQUENCY	1.00	YRS.
OVERTOPPING DISCHARGE	1.60	CMS
OVERTOPPING ELEVATION	1.970	M.



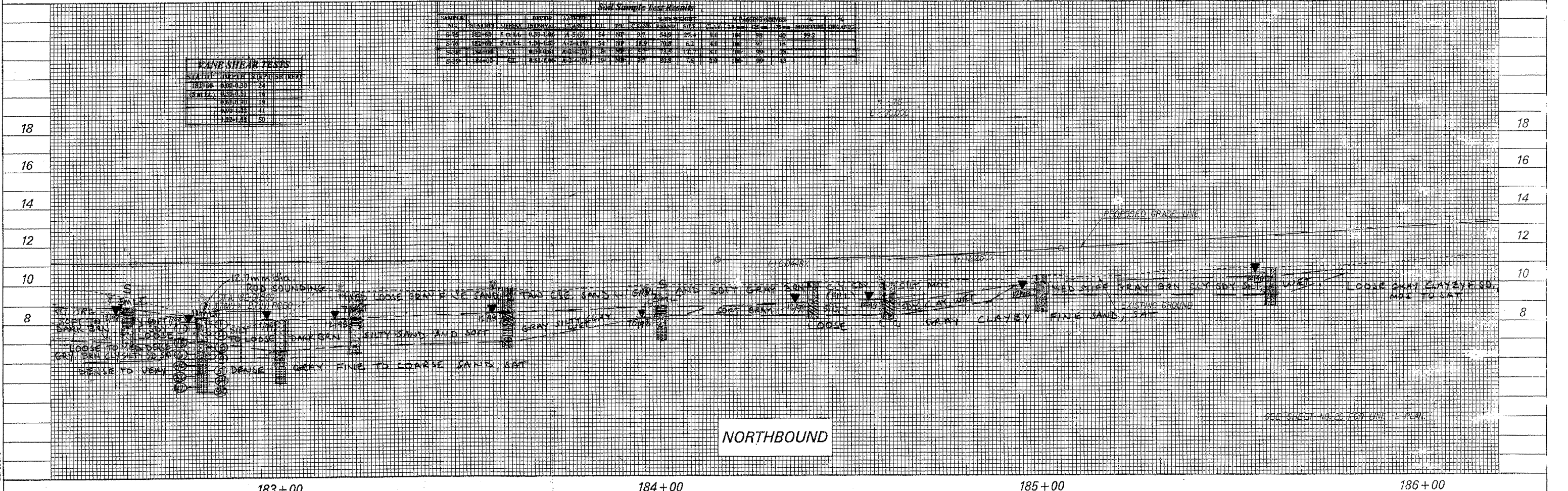
**SOUTHBOUND**

**Soil Sample Test Results**

NO.	STATION	DEPTH	TEST	RESULT	UNIT	REMARKS
1	183+00	0.00-0.30	W	19.5	%	WET
2	183+00	0.30-0.60	W	19.5	%	WET
3	183+00	0.60-0.90	W	19.5	%	WET
4	183+00	0.90-1.20	W	19.5	%	WET
5	183+00	1.20-1.50	W	19.5	%	WET
6	183+00	1.50-1.80	W	19.5	%	WET
7	183+00	1.80-2.10	W	19.5	%	WET
8	183+00	2.10-2.40	W	19.5	%	WET
9	183+00	2.40-2.70	W	19.5	%	WET
10	183+00	2.70-3.00	W	19.5	%	WET
11	183+00	3.00-3.30	W	19.5	%	WET
12	183+00	3.30-3.60	W	19.5	%	WET
13	183+00	3.60-3.90	W	19.5	%	WET
14	183+00	3.90-4.20	W	19.5	%	WET
15	183+00	4.20-4.50	W	19.5	%	WET
16	183+00	4.50-4.80	W	19.5	%	WET
17	183+00	4.80-5.10	W	19.5	%	WET
18	183+00	5.10-5.40	W	19.5	%	WET
19	183+00	5.40-5.70	W	19.5	%	WET
20	183+00	5.70-6.00	W	19.5	%	WET
21	183+00	6.00-6.30	W	19.5	%	WET
22	183+00	6.30-6.60	W	19.5	%	WET
23	183+00	6.60-6.90	W	19.5	%	WET
24	183+00	6.90-7.20	W	19.5	%	WET
25	183+00	7.20-7.50	W	19.5	%	WET
26	183+00	7.50-7.80	W	19.5	%	WET
27	183+00	7.80-8.10	W	19.5	%	WET
28	183+00	8.10-8.40	W	19.5	%	WET
29	183+00	8.40-8.70	W	19.5	%	WET
30	183+00	8.70-9.00	W	19.5	%	WET
31	183+00	9.00-9.30	W	19.5	%	WET
32	183+00	9.30-9.60	W	19.5	%	WET
33	183+00	9.60-9.90	W	19.5	%	WET
34	183+00	9.90-10.20	W	19.5	%	WET
35	183+00	10.20-10.50	W	19.5	%	WET
36	183+00	10.50-10.80	W	19.5	%	WET
37	183+00	10.80-11.10	W	19.5	%	WET
38	183+00	11.10-11.40	W	19.5	%	WET
39	183+00	11.40-11.70	W	19.5	%	WET
40	183+00	11.70-12.00	W	19.5	%	WET
41	183+00	12.00-12.30	W	19.5	%	WET
42	183+00	12.30-12.60	W	19.5	%	WET
43	183+00	12.60-12.90	W	19.5	%	WET
44	183+00	12.90-13.20	W	19.5	%	WET
45	183+00	13.20-13.50	W	19.5	%	WET
46	183+00	13.50-13.80	W	19.5	%	WET
47	183+00	13.80-14.10	W	19.5	%	WET
48	183+00	14.10-14.40	W	19.5	%	WET
49	183+00	14.40-14.70	W	19.5	%	WET
50	183+00	14.70-15.00	W	19.5	%	WET

**RAVE SHEAR TESTS**

STATION	DEPTH	RAVE	UNIT
183+00	0.00-0.30	24	PSF
183+00	0.30-0.60	19	PSF
183+00	0.60-0.90	19	PSF
183+00	0.90-1.20	19	PSF
183+00	1.20-1.50	19	PSF
183+00	1.50-1.80	19	PSF
183+00	1.80-2.10	19	PSF
183+00	2.10-2.40	19	PSF
183+00	2.40-2.70	19	PSF
183+00	2.70-3.00	19	PSF
183+00	3.00-3.30	19	PSF
183+00	3.30-3.60	19	PSF
183+00	3.60-3.90	19	PSF
183+00	3.90-4.20	19	PSF
183+00	4.20-4.50	19	PSF
183+00	4.50-4.80	19	PSF
183+00	4.80-5.10	19	PSF
183+00	5.10-5.40	19	PSF
183+00	5.40-5.70	19	PSF
183+00	5.70-6.00	19	PSF
183+00	6.00-6.30	19	PSF
183+00	6.30-6.60	19	PSF
183+00	6.60-6.90	19	PSF
183+00	6.90-7.20	19	PSF
183+00	7.20-7.50	19	PSF
183+00	7.50-7.80	19	PSF
183+00	7.80-8.10	19	PSF
183+00	8.10-8.40	19	PSF
183+00	8.40-8.70	19	PSF
183+00	8.70-9.00	19	PSF
183+00	9.00-9.30	19	PSF
183+00	9.30-9.60	19	PSF
183+00	9.60-9.90	19	PSF
183+00	9.90-10.20	19	PSF
183+00	10.20-10.50	19	PSF
183+00	10.50-10.80	19	PSF
183+00	10.80-11.10	19	PSF
183+00	11.10-11.40	19	PSF
183+00	11.40-11.70	19	PSF
183+00	11.70-12.00	19	PSF
183+00	12.00-12.30	19	PSF
183+00	12.30-12.60	19	PSF
183+00	12.60-12.90	19	PSF
183+00	12.90-13.20	19	PSF
183+00	13.20-13.50	19	PSF
183+00	13.50-13.80	19	PSF
183+00	13.80-14.10	19	PSF
183+00	14.10-14.40	19	PSF
183+00	14.40-14.70	19	PSF
183+00	14.70-15.00	19	PSF



**NORTHBOUND**

15-MAR-2008 10:08:10 AM 10801.dgn