



Bureau of Public Roads Shoulder Test

SOIL ANALYSIS of TURF SHOULDERS

R. L. Patrick, L. D. Hicks, F. H. Brant
 North Carolina State Highway & Public Works Commission

Although no controlled tests were run, continued observation, during bad weather, of the sections of highway shoulders represented by the following analyses indicate that they have a satisfactory degree of stability as well as a satisfactory turf cover.

PENDER COUNTY

NEW HANOVER COUNTY

	<u>SAMPLE 1</u>	<u>SAMPLE 2</u>	<u>SAMPLE 3</u>	<u>SAMPLE 4</u>
Depth	0-4 in.	4-8 in.	0-4 in.	4-8 in.
Soil type	Hyde Loam	Hyde Sandy Loam	Norfolk Sand	Norfolk Sand
Subgrade class.	A-4	A-4	A-3	A-3
Coarse agg. (Ret. #10)	0	2	0	0
Coarse sand	2	12	29	27
Fine sand	43	43	66	67
Silt	39	34	2	3
Clay	16	11	3	3

	<u>PENDER COUNTY</u>		<u>NEW HANOVER COUNTY</u>	
	<u>SAMPLE 1</u>	<u>SAMPLE 2</u>	<u>SAMPLE 3</u>	<u>SAMPLE 4</u>
Pass No. 40	99	92	97	97
Pass No. 200	76	60	6	7
Pass No. 270	55	45	5	6
Liquid limit	16	16	15	23
Plasticity Index	N. P.	N. P.	N. P.	N. P.
Dry density in place	111.9	114.5	99.3	101.2
% of AASHO Max. Density	94.4	98.9	98.6	98.8
*Optimum moisture content	11.4%	12.4%	14.5%	16.3%
Turf	Bermuda grass and Alta Fescue		Bahia grass (heavy turf)	

*Existing moisture content was visually the optimum for the soil.