

GENERAL INFORMATION

INTRODUCTION

The project consists of a slight realignment, widening and resurfacing of SR 306, located east of Willoughby, west of Mentor, between SR 84 and USR 20.

The proposed grade indicates cut, maximum 2 feet in depth.

GEOLOGY OF THE PROJECT

The project is located on the glaciated flat Lake Plain Region, where moderately thick glacial drift overlies shale bedrock, of Devonian age.

EXPLORATION

Exploratory borings were made by means of truck-mounted mechanical earth auger on August 1, 1962.

INVESTIGATIONAL DISCLOSURES

Borings disclose that materials occurring immediately below proposed grade consist of gravels, sands, sandy silts, silts and silt clays, in the A-1-b, A-3a, A-4 and A-6a classifications, having low moisture contents or moisture contents in the lower portion of the plastic range.

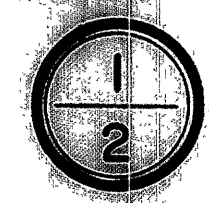
Frost susceptible silts were found to occur within three feet of proposed grade at stations 301+50 and 310+00.

LEGEND FOR PROJECT-AVERAGE RESULTS OF TESTS- 28 SAMPLES TESTED

DESCRIPTION	H. R. B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
Gravel	A-1-a(0)	A-1-a	73	7	16	1	3	HP	HP	8	1
Gravel with sand	A-1-b(0)	A-1-b	41	30	17	4	8	20	2	12	6
Fine sand	A-3(0)	A-3	15	7	60	-	9	HP	HP	19	1
Coarse and fine sand	----	A-3a	13	25	44	6	12	HP	HP	15	7
Gravel with sand and silt	A-2-4(0)	A-2-4	51	23	11	6	9	24	3	14	1
Sandy silt	A-4(3)	A-4a	14	12	25	22	27	26	5	20	6
Silt	A-4(7)	A-4b	9	2	17	53	19	HP	HP	25	1
Silt and clay	A-6(0)	A-6a	6	7	9	31	47	28	11	21	5

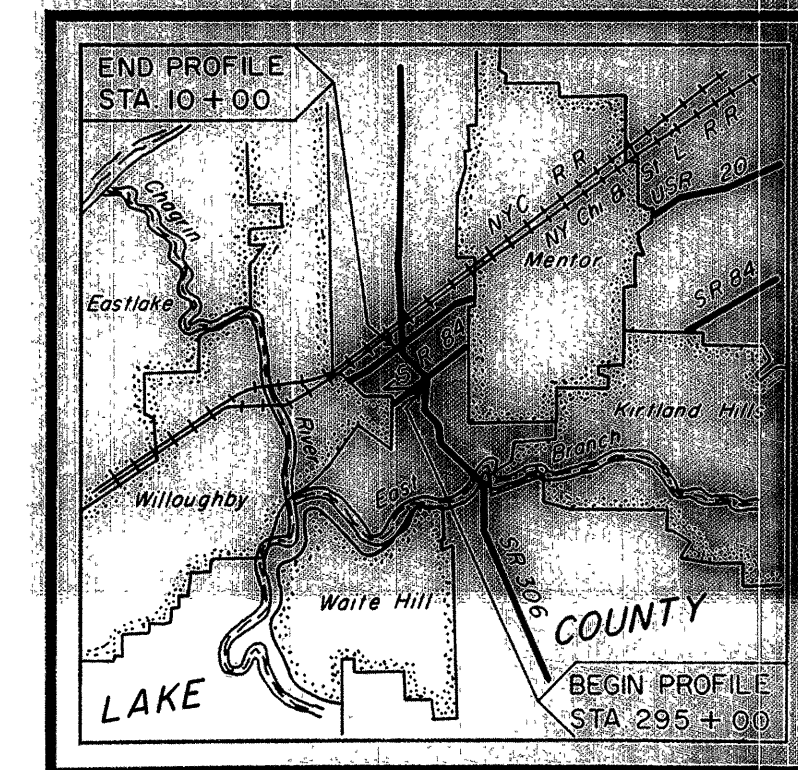
Auger boring - plan view.  
 Auger boring plotted to vertical scale only.  
 Indicates a non-plastic material with high water content.  
 Free water.  
 Water content nearly equal to or greater than liquid limit.  
 NOTE: Figures beside borings indicate water content in percent. e.g. 15

SOIL PROFILE  
LAKE COUNTY  
LAK - 306 - 5.56



OHIO STATE HIGHWAY  
TESTING LABORATORY  
1620 W. BROAD ST. COLUMBUS 23, OHIO

NOTE: INFORMATION SHOWN BY THIS SUBGRADE PROFILE WAS OBTAINED SOLELY FOR USE IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE STATE OF OHIO DOES NOT GUARANTEE THE ACCURACY OF THIS DATA AND IT IS NOT TO BE CONSIDERED AS A PART OF THE MEANS GOVERNING CONSTRUCTION OF THE PROJECT.



LOCATION MAP

Recon - C. J. K. - 7/20/62  
Drilling - Auger - L. M. D. - 8/1/62  
Drafting - D. A. - 8/16/62

SUMMARY OF SOIL TEST DATA

NOTE: NP shown in Liquid Limit and Plasticity Index columns indicates that the material is non-plastic. \*Denotes sample taken at or near grade.

STATION & OFFSET	DEPTH FROM-TO	% AGG.				% SILT		% CLAY		L.L.	P.I.	W.C.	CLASS.
		C.S.	F.S.	SILT	CLAY	SILT	CLAY						
296+45 20' Rt	0.0-6.0	11	25	40	4	17	HP	HP	9		16	A-3a *	
	6.0-10.0	26	17	44	7	6	HP	HP				A-3a	
301+50 12' Lt	0.0-3.0	0	5	10	37	40	30	12	26		26	A-6a *	
	3.0-6.0	9	2	17	53	19	HP	HP	25		25	A-4b *	
	6.0-9.0	5	5	43	27	15	HP	HP	23		23	A-4a	
	9.0-11.0	0	2	4	43	51	25	11	19		19	A-6a	
306+00 12' Lt	0.0-3.0	16	7	15	24	32	26	11	19		19	A-6a *	
	3.0-5.0	20	13	12	11	6	20	5	16		16	A-1-b *	
	5.0-9.0	30	32	16	6	2	HP	HP	17		17	A-1-b	
	9.0-11.0	15	33	26	-	16	HP	HP	16		16	A-3a	
310+00 12' Lt	0.0-5.0	26	0	0	20	40	31	12	18		18	A-4a *	
	5.0-9.0	51	23	11	6	0	24	3	14		14	A-2-4	
	9.0-12.0	13	0	0	0	0	HP	HP	22		22	A-3a	
314+00 11' Lt	0.0-3.0	9	15	21	11	27	25	7	20		20	A-4a *	
	3.0-5.0	36	22	25	2	14	HP	HP	13		13	A-1-b *	
	5.0-6.0	16	7	10	39	19	HP	HP	23		23	A-4a	
	6.0-9.0	10	24	20	11	10	HP	HP	16		16	A-1-b	
	9.0-12.0	15	7	0	-	0	HP	HP	19		19	A-3	
318+50 10' Lt	0.0-3.0	15	16	25	12	32	27	8	16		16	A-4a *	
	3.0-6.0	7	46	26	8	13	HP	HP	18		18	A-3a *	
	6.0-9.0	11	12	19	21	16	HP	HP	11		11	A-6a	
	9.0-13.0	0	5	72	-	23	HP	HP	20		20	A-3a	
322+00 15' Lt	0.0-5.0	13	18	27	11	12	HP	HP	7		7	A-3a *	
	5.0-6.5	11	10	10	20	31	20	20	12		12	A-4a	
	6.5-11.0	73	1	10	1	0	HP	HP	9		9	A-1-a	
9+00 12' Lt	0.0-6.0	16	20	17	1	6	HP	HP	5		5	A-1-b *	
	6.0-10.0	59	25	3	1	21	6	8	8		8	A-1-b	
	10.0-12.0	0	0	31	53	30	11	22				A-6a	