

MICROFILMED
APR 24 1964

LAKE COUNTY
LAK-306-6.15

LOG OF BORING
Date Started 3-5-79 Sampler Type SS Dia. 1.38" Water Elev. 652.77 @ 24 hrs.
Date Completed 3-6-79 Casing Length 10' Dia. 3.25"
Project Identification S.R. 306 Underpass Mentor, Lake Co., Ohio
Boring No. B-2 Station & Offset Sta. 20+15; 76' Rt. Surface Elev. 654.27

LOG OF BORING
Date Started 3-8-79 Sampler Type SS Dia. 1.38" Water Elev. 609.79
Date Completed 3-8-79 Casing Length 52' Dia. 3.25"
Project Identification S.R. 306 Underpass Mentor, Lake Co., Ohio
Boring No. B-3 Station & Offset Sta. 21+50; 45' Lt. Surface Elev. 655.79

LOG OF BORING
Date Started 3-6-79 Sampler Type SS Dia. 1.38" Water Elev. 645.05 @ 24 hrs.
Date Completed 3-7-79 Casing Length 34' Dia. 3.25"
Project Identification S.R. 306 Underpass Mentor, Lake Co., Ohio
Boring No. B-4 Station & Offset Sta. 22+70; 60' Lt. Surface Elev. 648.05

Elev	Depth	Sht. Pen. (ft)	Description	Field No.	Lab. Nos.	Physical Characteristics										SHTL Class		
						% Agg.	% S.S.	% F.S.	% Silt	% Clay	LL	PI	WC					
	0		Fill: Loose brown and gray Clayey SILT and SAND, trace Gravel, organic contamination															
649.8	2			1	1	2	11	33	34	20				24.2	A-4a			
646.8	6		Loose gray SAND and GRAVEL, little Silt, trace Clay	2	2	20	16	36	19	9				18.9	A-3a			
	10		Dense gray Clayey SILT, some Sand, little Gravel	3	3									12.0				
	12			4	4									12.0				
	14			5	5	11	11	14	34	30	23.44	9	11.6	A-4a				
622.3	16			6	6									12.6				
	20			7	7									13.5				
	22			8	8	12	11	14	33	30	22.44	11	12.6	A-4a				
	24			9	9									12.9				
	26			10	10									14.0				
	30			11	11									11.0				
	34		Hard gray Silty CLAY, some Sand, trace Gravel	12	12									11.1				
	38			13	13	8	10	15	33	34	20.34	7	10.3	A-4a				
606.0	40			14	14									11.6				
	44			15	15													
	46			16	16													
	48		Soft gray Shale	17	17													
595.7	50			18	18													
	52			19	19													
	54			20	20													
	56			21	21													
	58			22	22													
	60		Bottom of boring - 58.6' Water Level at 24 hours - 1.5' * 3" split spoon															

Elev	Depth	Sht. Pen. (ft)	Description	Field No.	Lab. Nos.	Physical Characteristics										SHTL Class	
						% Agg.	% S.S.	% F.S.	% Silt	% Clay	LL	PI	WC				
652.3	0		Fill: Railroad ballast - Silt, Sand, and Gravel														
648.8	6		Fill: Firm brown and black Silty SAND, little Clay, little Gravel	1	1	16	8	29	28	19				42.0	A-4a		
642.8	10		Very stiff brown Silty CLAY, some Sand, trace Gravel	2	2	6	9	13	36	36	29.37	3	17.8	A-4a			
	12			3	3									11.3			
	14		Medium to dense gray Clayey SILT, some Sand, trace to little gravel	4	4	7	12	14	35	32	22.85	0	10.7	A-4a			
	16			5	5									11.5			
	18			6	6									12.7			
	20			7	7	11	11	15	35	28	21.64	1	12.0	A-4a			
	22			8	8									12.2			
621.3	24			9	9									17.9			
	26			10	10									8.6			
	28			11	11									10.0			
	30			12	12	9	10	15	33	33	21.74	8	8.6	A-4a			
604.8	32			13	13									11.8			
603.1	34		Highly weathered Gray SHALE	14	14												
598.3	36		Soft Gray SHALE, highly fractured	15	15												
593.3	38		Soft Gray SHALE, slightly fractured	16	16												
	40			17	17												
	42			18	18												
	44			19	19												
	46			20	20												
	48			21	21												
	50			22	22												
	52			23	23												
	54			24	24												
	56			25	25												
	58			26	26												
	60		Bottom of boring - 62.5' Water level during drilling - 46.5' * 3" split spoon														

Elev	Depth	Sht. Pen. (ft)	Description	Field No.	Lab. Nos.	Physical Characteristics										SHTL Class
						% Agg.	% S.S.	% F.S.	% Silt	% Clay	LL	PI	WC			
644.1	0		Stiff brown mottled gray Silty CLAY, little Sand, trace Gravel	1	1	1	3	12	35	49	36.18	3	22.4	A-4a		
	2			2	2									16.5		
639.6	4		Medium to dense brown Clayey SILT, some Sand, trace Gravel	3	3	7	12	14	38	29	26.25	4	12.7	A-4a		
	6			4	4									12.1		
	8			5	5									11.4		
	10		Medium to dense gray Clayey SILT, some Sand, trace to little Gravel, with a firm Sand seam from 29.6' to 30.0'	6	6	10	11	14	33	32	22.04	1		A-4a		
	12			7	7									13.1		
	14			8	8											
	16			9	9									20.1		
618.1	18		Hard gray Silty CLAY, some Sand, trace Gravel	10	10	8	10	16	32	34	20.24	3		A-4a		
	20			11	11									11.3		
606.1	22			12	12											
604.2	24		Weathered gray SHALE	13	13											
	26			14	14											
	28		Soft gray SHALE, highly fractured to 45'	15	15											
	30			16	16											
	32			17	17											
	34			18	18											
	36			19	19											
	38			20	20											
	40			21	21											
	42			22	22											
	44			23	23											
	46			24	24											
	48			25	25											
	50			26	26											
	52			27	27											
	54			28	28											
	56			29	29											
	58			30	30											
	60		Bottom of boring - 53.0' Water level during drilling - 29.6' Water level at completion - 5' Water level at 24 hrs. - 3' Hollow stem auger refusal - 34'													

FRANKLIN CONSULTANTS INC. 5 / 5
Consulting Engineers
COLUMBUS, OHIO

STRUCTURE FOUNDATION INVESTIGATION BORING DATA
BRIDGE No. LAK-306-0635
LAK-306-0637
LAK-306-0638
S.R. 306 UNDER N&W AND CONRAIL R.R.

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED