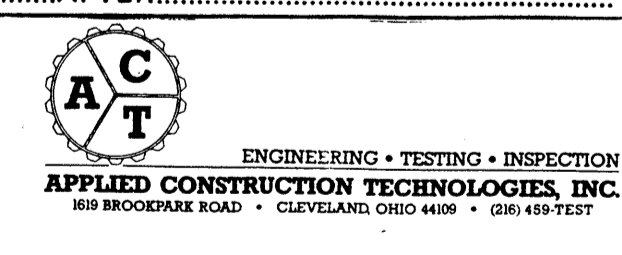


FILE NO: 8809.37
BORING LOG **BORING NO:** B-4
PROJECT: WIDENING OF SR. 306 BRIDGE OVER SR. 2, LAKE COUNTY, OHIO LAK-306-6.91
FOR: CT CONSULTANTS, INC.
DRILLED: NOVEMBER 15, 1988
BORING METHOD: HOLLOW STEM FLIGHT AUGERS
SAMPLER TYPE AND SIZE: SS-SPLIT SPOON 2" O.D. ST-SHELBY TUBE
A-AUGER FLIGHT: DIAMOND ROCK CORE BARREL
OTHER:
HAMMER: 140 LBS. DROP 30"

ELEV. (FT.)	LOG	SAMPLE			Slow Count On Split Spoon per 6 in.	DESCRIPTION
		Depth (Ft.)	No.	Type		
636 ±		0				0-4" Asphaltic Concrete
		1	SS	3-4-9		4 1/2"-1.8" Brown Sand and Gravel Base. Moist.
		5				
		2	SS	6-10-11		Brown and Gray Silty Clay. Some Sand. Trace Gravel. Fill. Stiff. Moist. (CL) ODOT Soil Group A-6b.
		5				Black Organic Silty Clay. Trace Sand and Root Fibers. Fill. Stiff. Moist. (CL) ODOT Soil Group A-6b.
		10	SS	17-15-20		Mottled Brown and Gray Silty Clay. Some Sand. Trace Gravel. Very Stiff to Hard. Moist. (CL) ODOT Soil Group A-6b.
		15				
		4	SS	12-15-17		Fill Consisting of Asphaltic Concrete Fragments, Cinders and Slag. Moist.
		20	SS	11-14-18		Dark Gray Organic Silty Clay. Trace Sand. Fill. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		25				
		6	SS	15-20-30		Mottled Brown and Gray Silty Clay. Trace Sand. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		30				
		7	SS	30-43		Gray Silty Clay. Some Sand. Trace Gravel. Hard. Moist. (CL) ODOT Soil Group A-6b.
		35				
		8	SS	30-54		Mottled Brown and Gray Silty Clay. Trace Sand. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		40				
		9	SS	26-38-48		Gray Silty Clay. Some Sand. Trace Gravel. Layers of Silty Fine Sand in Formation. Hard. Moist. (CL) ODOT Soil Group A-6b.
		45				
		10	SS	50 Per 3"		Gray Clayey Silt. Some Shale Fragments. Hard. Moist. (ML) ODOT Soil Group A-4b.
		45				Gray Shale. Wet.
		45				End of Boring @ 44.3'

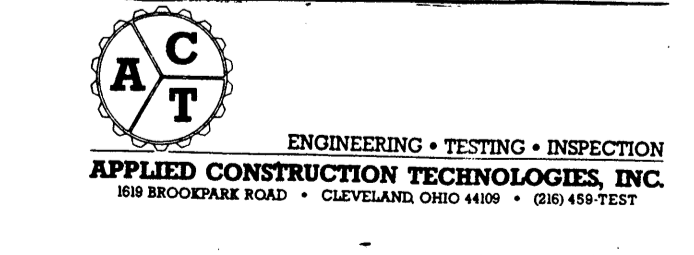
GROUND WATER: ENCOUNTER: 27.5'
 AT COMPLETION: AFTER



FILE NO: 8809.37
BORING LOG **BORING NO:** B-5
PROJECT: WIDENING OF SR. 306 BRIDGE OVER SR. 2, LAKE COUNTY, OHIO LAK-306-6.91
FOR: CT CONSULTANTS, INC.
DRILLED: NOVEMBER 7, 1988
BORING METHOD: HOLLOW STEM FLIGHT AUGERS
SAMPLER TYPE AND SIZE: SS-SPLIT SPOON 2" O.D. ST-SHELBY TUBE
A-AUGER FLIGHT: DIAMOND ROCK CORE BARREL
OTHER:
HAMMER: 140 LBS. DROP 30"

ELEV. (FT.)	LOG	SAMPLE			Slow Count On Split Spoon per 6 in.	DESCRIPTION
		Depth (Ft.)	No.	Type		
658 ±		0				0-4" Asphaltic Concrete
		1	SS	6-5-9		4 1/2"-1.8" Brown Sand and Gravel Base. Moist.
		5				
		2	SS	9-9-9		Brown and Gray Silty Clay. Some Sand. Trace Gravel. Fill. Stiff to Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		10				
		3	SS	4-5-8		Dark Gray Organic Silty Clay. Trace Sand. Fill. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		15				
		4	SS	7-8-11		Mottled Brown and Gray Silty Clay. Trace Sand. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		20				
		5	SS	7-11-16		Fill Consisting of Asphaltic Concrete Fragments, Cinders and Slag. Moist.
		25				
		6	SS	37-11-10		Dark Gray Organic Silty Clay. Trace Sand. Fill. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		30				
		7	SS	8-13-17		Mottled Brown and Gray Silty Clay. Trace Sand. Very Stiff. Moist. (CL) ODOT Soil Group A-6b.
		35				
		8	SS	18-28-31		Gray Silty Clay. Some Sand. Trace Gravel. Hard. Moist. (CL) ODOT Soil Group A-6b.
		40				
		9	SS	11-16-19		Gray Silty Clay. Some Sand. Trace Gravel. Hard. Moist. (CL) ODOT Soil Group A-6b.
		45				
		10	SS	15-21-30		Gray Silty Clay With Layers of Silt. Hard. Moist. (CL) ODOT Soil Group A-6b.
		50				
		11	SS	13-18-19		Gray Silty Clay. Some Sand. Trace Gravel. Layers of Silty Fine Sand in Formation. Hard. Moist. (CL) ODOT Soil Group A-6b.
		55				
		12	SS	39-36-41		Gray Clayey Silt. Some Shale Fragments. Hard. Moist. (ML) ODOT Soil Group A-4b.
		60				
		13	SS	31-39-56		Gray Shale. Moist.
		65				End of Boring @ 64.2'

GROUND WATER: ENCOUNTER: 51.5'
 AT COMPLETION: 34.0' AFTER



CLASSIFICATION TEST RESULTS

Sampled:	BORING B-1 @ 8.5'-10.0'	BORING B-1 @ 20.0'-21.5'	BORING B-1 @ 29.0'-30.5'	BORING B-1 @ 59.0'-60.5'
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(1) Grainsize Analysis:

Percent Finer Than:

U.S. Std. Sieve No.	99.7	98.3	95.9	95.0
U.S. Std. Sieve No. 10	97.4	95.4	92.5	90.3
U.S. Std. Sieve No. 40	91.6	87.6	83.3	81.1
U.S. Std. Sieve No. 200	80.1	76.3	70.8	68.5
0.005 mm	42.9	40.3	34.3	38.1

(2) Atterberg Limits:

Property	34	33	29	26
Liquid Limit	34	33	29	26
Plasticity Index	14	13	9	9
As-Received Moisture %	18.6	16.3	14.3	11.3

(3) Subgrade Classification:

Property	A-5a	A-5a	A-4a	A-4a
ODOT Soil Group	A-5a	A-5a	A-4a	A-4a
Group Index	10	10	7	7

CLASSIFICATION TEST RESULTS

Sampled:	BORING B-2 @ 2.0'-3.5'	BORING B-2 @ 29.5'-31.0'	BORING B-3 @ 14.0'-15.5'	BORING B-3 @ 39.0'-40.5'
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(1) Grainsize Analysis:

Percent Finer Than:

U.S. Std. Sieve No.	95.3	97.4	96.5	97.0
U.S. Std. Sieve No. 10	90.3	93.3	91.3	95.2
U.S. Std. Sieve No. 40	80.1	84.2	80.7	90.7
U.S. Std. Sieve No. 200	66.8	69.0	66.8	77.5
0.005 mm	31.5	30.1	29.9	36.9

(2) Atterberg Limits:

Property	25	22	24	23
Liquid Limit	25	22	24	23
Plasticity Index	7	6	7	7
As-Received Moisture %	11.8	9.0	10.6	10.1

(3) Subgrade Classification:

Property	A-4a	A-4a	A-4a	A-4a
ODOT Soil Group	A-4a	A-4a	A-4a	A-4a
Group Index	6	7	6	9

CLASSIFICATION TEST RESULTS

Sampled:	BORING B-4 @ 14.0'-15.5'	BORING B-4 @ 34.0'-35.0'	BORING B-5 @ 14.0'-15.5'	BORING B-5 @ 44.0'-45.5'
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(1) Grainsize Analysis:

Percent Finer Than:

U.S. Std. Sieve No.	95.6	98.3	97.9	92.9
U.S. Std. Sieve No. 10	89.4	92.1	95.0	87.8
U.S. Std. Sieve No. 40	79.6	78.3	89.2	79.0
U.S. Std. Sieve No. 200	66.8	59.1	79.0	66.6
0.005 mm	30.4	28.1	42.7	32.2

(2) Atterberg Limits:

Property	25	21	34	24
Liquid Limit	25	21	34	24
Plasticity Index	7	6	14	7
As-Received Moisture %	11.5	8.8	16.8	10.4

(3) Subgrade Classification:

Property	A-4a	A-4a	A-5a	A-4a
ODOT Soil Group	A-4a	A-4a	A-5a	A-4a
Group Index	6	5	10	6

APPLIED CONSTRUCTION TECHNOLOGIES, INC.
 1619 BROOKPARK ROAD, CLEVELAND, OHIO

STRUCTURE FOUNDATION INVESTIGATION

BRIDGE LAK-306-6.91
 OHIO STATE ROUTE 306
 MENTOR, OHIO
 LAKE COUNTY

CLIENT: C.T. CONSULTANTS, INC.

DATE 4-28-89 SCALE DRAWN BY 19

PROJECT NO. 8809.37 DRAWING NO.

209 502
 1985
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 1985