1968 Year

Job No. 07578

Changes

County CLARK

010473

Project Identification CLA-571-1.18 SOIL PROFILE

File No. FEP-210 12-M-17

Proj. No.

Begin Sta. 58+00 End Sta. 93+00 Length 0.66 Miles

	RECON	AUGER	CORE	DRIVE ROD	RESISTIVITY
By	J.S.M.	W.S.B			
Dates	12-18-67	12-27-67			
No. of Holes or Soundings		9			
Footage		126.0'			
Samples Tested		29			

Drafting By K.J.B.

Completion Date 1-29-68

Drafting Hours 35

Topo Sheet 435-13NE

[✓] Samples Accounted For

Transmittal Date 2/2/68

No. of Tracings 2

Filed with year FET-229

Revisions

Remarks 5-L-151

Refer to

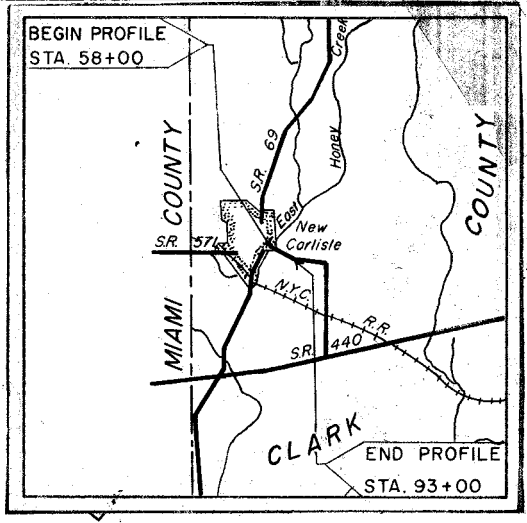
DO NOT WRITE IN THIS SPACE

Length	Auger Data			Core Data			Drive Rod Data		Resistivity
	No. of Holes	Footage	Samples	No. of Holes	Footage	Samples	No. of Soundings	Footage	No. of Locations
0.66	9	126.0	29	—	—	—	—	—	—

* See Reverse Side

TOTAL SAMPLES 29					
Samples VOIDED	Auger	Drive	Samples USED	Auger 29	Drive

TOTAL MILEAGE		
Alignment	Stations From——To	Mileage
SR 571	58+00 93+00	.66



PLACE

010473

Form AU 76

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

INTER-OFFICE COMMUNICATION

County of CLA Div. 7

S. H. 571 Sec. 1.18

Date February 8, 1968

To Oliver M. Liggitt, Division Engineer Attention: W. G. Knasel

From R. E. Catlin, Engineer of Location & Design By: H. E. Marshall

Subject CLA-571-1.18

Feb 20 3-1

Your attention is directed to the February 2, 1968 transmittal of soil profile information made for the subject project.

Subgrade and embankment foundation consist predominantly of sandy silt soils of the A-4a classification with some gravel and clay soils being encountered.

The following flexible pavement design is recommended for this project:

1"	404	Asphalt Concrete
1½"	402	Asphalt Concrete
6"	301	Bituminous Aggregate Base
4"	310	Subbase

Drainage of the subbase and shoulder materials by 605 Aggregate drains is considered satisfactory as shown on your typical section submission of December 15, 1967.

H. E. Marshall
H. E. Marshall
Engineer-Geologist

REC/HEM/vm

cc: Mr. Catlin
Mr. Forney
Mr. Hoffman
Mr. Shepard
Mr. Giffoney
Mr. Calvin
File - 2

RECEIVED
FEB 13 1968
STATE HIGHWAY
TESTING LABORATORY

Form AU 77

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

INTER-OFFICE COMMUNICATION

County of CLARK Div. 7

S. H. 571 Sec. 1.18

Date February 2, 1968

To R. E. Catlin, Engineer of Location & Design Attention: H. E. Marshall

From F. M. Williams Per: R. E. Calvin

Subject Report of Soil Profile Investigation
CLA-571-1.18

File: 203-1.1
Clark

Transmitted herewith is a copy of the soil profile for the subject project. General information regarding observations, the investigation, and findings, appears on drawing sheet number one.

The reproduced tracings of this report are being sent to Division 7 to be attached to the plans.

F. M. Williams
Engineer of Tests

Per: R E Calvin
R. E. Calvin
Assistant Engineer

RDR:RAW:nja
Encl.
cc: O. M. Liggitt (3)
W. G. Knasel (no encl.)
H. L. Krauser, Attn: C. H. Shepard
Ohio State Geological Survey, Attn: H. R. Collins
R. E. Calvin (4)

Form AU 77

STATE OF OHIO
DEPARTMENT OF HIGHWAYS

INTER-OFFICE COMMUNICATION

County of Clark Div. 7

S. H. 571 Sec. 1.18

Date December 8, 1967

To F. M. Williams, Engineer, Bureau of Tests Attention: R. E. Calvin

From O. M. Liggitt, Div. Dep. Dir., By W. G. Knasel, D/E Design & Planning

Subject Preliminary Prints for Soil Profile

Fub 203-1.1

For your use in developing a soil profile for the above identified project we are furnishing to you herewith two sets of prints including the following:

1) One title sheet for general orientation.

2) One typical section sheet for general background information.

3) Five sheets showing plan and profile from Sta. 54 to Sta. 101.

We have just submitted similar prints to Central Office Location & Design for their review. However, we do not expect that any revisions which might result from their review would have any affect on field work required for the soil profile, and would have no, or very little affect, on actual plotting of the soil profile.

Oliver M. Liggitt
Division Deputy Director

W. G. Knasel

W. G. Knasel
D/E Design & Planning

WGK:jb

Attach.

cc: File
Leistner (2)
Catlin, attn. Marshall
Hoffman

FOUNDATION EXPLORATION SECTION

SUBSURFACE INVESTIGATION RECONNAISSANCE REPORT

RECONNAISSANCE OF:

Roadway ✓

Bridge _____

Retaining Wall _____

Other _____; If other, specify _____

PROJECT: CLA 571-1.18

BRIDGE NO.: _____

RECONN. BY: J.S MAXEY

DATES: from 12-18 to 1967

NOTE: In preparing the reconnaissance report, the above entries shall be completed. In accordance with instructions to reconnaissance personnel the report shall include the following:

✓1. Description of Work.

✓2. Geology of Location or Site.

✓3. Topography

✓4. General Subsurface conditions.

✓5. Schedule of Borings.

6. Sketches of Water Points

7. Sketches of off-plan access

✓8. Listing of Special Equipment Required.

FE-10

Sheet No. 2 of 2

FOUNDATION EXPLORATION SECTION

SUBSURFACE INVESTIGATION RECONNAISSANCE REPORT

① Description of work

It is planned to relocate .66 mile of S.R. 571 at the east edge of New Carlisle. Beginning station is 58 and ending station is 93.

② Geology of Location or Site.

The area is glaciated Mississippi Valley Plain overlying carbonate rocks of the Ordovician series. Glacial drift is reported to be around 25 feet.

③ Topography.

Relief varies from 900 to 875 and is due to the valley of Honey Creek which is cut into the drift just east of New Carlisle.

④ General subsurface conditions

Subsurface material is the clay rich unsorted mixture of clay silt and sand with glacial boulders common to the wisconsin ground moraine.

⑤ Schedule of Borings.

Boring list is attached on a seprate sheet.

⑧ Listing of Special Equipment.

No special equipment is necessary. Flagmen will be needed along the roadway

OHIO DEPARTMENT OF HIGHWAYS
TESTING LABORATORY
FOUNDATION EXPLORATION SECTION

SCHEDULE OF TEST BORINGS

Reconn. By: J.S. Maxey Co., Rt., Sec.: CLA 571-1.18

Bridge No:

Date: Dec 18, 1967 Job No.: 07578

Sheet 1 of 1

Borings		RURAL	URBAN	Type			DEPTH	Check Clearance Req'd					
No.	Station and Offset			HA	TA	DC		A	W	S	G	E	T
1	60+80-23Rt.	✓			✓		10						
2	65+00-3 Rt.	✓			✓		30						
3	68+90-℄	✓			✓		15						
4	72+20-30Rt.	✓			✓		20						
5	77+00-12 Lt.	✓			✓		15						
6	82+00-10Rt.	✓			✓		15						
7	86+00-℄	✓			✓		15						
8	89+00-15Rt.	✓			✓		12						
10	93+00-12Rt.	✓			✓		10						

HA=Hand auger or other hand method
TA=Truck-mounted auger
DC=Drive Sample or rock core

A=Access to Private Property
W=Water lines
S=Sewer lines
G=Gas lines
E=Electrical Cables
T=Telephone Cables

SC-11

SOIL PROFILE PROJECT SUMMARY

COUNTY, RT. NO., & SEC. NO. Cla 571 1.18

FEDERAL NO. _____ LENGTH _____ MILES _____

BEGIN PROFILE STA. _____ END PROFILE STA. _____

PRESENT SURFACE _____ PROPOSED SURFACE _____

RECON. BY _____ FIELD WORK STARTED _____ FIELD WORK COMPLETED _____

EARTH AUGER: NO. OF HOLES _____ LIN.FT. BORING ____ BY _____ DAYS _____
CORE DRILL: NO. OF HOLES _____ LIN.FT. BORING ____ BY _____ DAYS _____

EARTH AUGER: SAMPLES INSP. _____ SAMPLES TESTED _____ TOTAL SAMPLES _____
CORE DRILL: SAMPLES INSP. _____ SAMPLES TESTED _____ TOTAL SAMPLES _____

DRAFTING BY _____ DRAFTING COMPLETED _____ LETTER OR PROFILE SENT _____

REMARKS _____

HRB GROUP DESIGNATION	OHIO GROUP DESIGNATION	AGGREGATE %	COARSE SAND %	FINE SAND %	SILT %	CLAY %	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	NO. SAMPLES TESTED	DENSITY DATA: NO. DENSITY SAMPLES	DENSITY DATA: OPTIMUM MOISTURE	DENSITY DATA: MAX. DRY WT. LBS/CU.FT
A-1-a(0)	A-1-a	65	17	6	10		NP		7	1			
A-1-b(0)	A-1-b	47	23	13	11	6	NP		7	4			
A-3 (0)	A-3												
-	A-3a	20	27	27	17	9	NP		16	1			
A-2-4(0)	A-2-4	38	15	17	20	10	20	1	10	4			
A-2-5(0)	A-2-5												
A-2-6( )	A-2-6												
A-2-7( )	A-2-7												
A-4 (3)	A-4a	20	11	17	30	22	22	6	13	16			
A-4 ( )	A-4b												
A-5 ( )	A-5												
A-6 (8)	A-6a	15	6	13	37	29	37	14	21	1			
A-6 ( )	A-6b												
A-7-5	A-7-5												
A-7-6(13)	A-7-6	32	3	8	23	34	53	27	28	2			

LAB. NOS. SAMPLES TESTED 60524-60542

LAB. NOS. MOISTURE DENSITY SAMPLES _____

_____ COUNTY _____

SUMMARY OF TESTS ON SOIL PROFILE SAMPLES

County, Rt. No., & Section Cla-571-1.18

Lab. No. So.-	Sample No.	Station	~~Depth in Feet~~ Sample	Mechanical Analysis Agg. %	C Sand %	F Sand %	Silt %	Clay %	Physical Charact. L.L.	P.I.	Water Cont. %	Density Opt.	Max. Dry Wt.	SHTL Class	Remarks
		A-1-a	Total & Avg.	65	19	6	-	10 -	N	P	7			D	
		A-1-b	Total	191	91	51	43	24	N	P	29			4	
			Avg.	47	23	13	11	6	N	P	7				
		A-3a	Total & Avg.	20	27	27	17	9	N	P	16			1	
		E-2-4	Total	152	61	68	79	40	20	5	42			2	
			Avg.	38	15	17	20	10	20	1	10				
		A-4a	Total	325	168	269	475	363	355	97	204			18	
			Avg.	20	11	17	30	22	22	6	13				
		A-6a	Total & Avg.	15	6	13	37	29	37	14	21			1	
		A-7-6	Total	64	7	16	46	67	107	54	58			2	
			Average	32	3	8	23	34	53	27	28				

SO-8

SUMMARY OF TESTS ON SOIL PROFILE SAMPLES

County, Rt. No., & Section CLA-571-1.18

1/3

Lab. No. So.-	Sample No.	Station	Depth in Feet	Mechanical Analysis: Agg. %	C Sand %	F Sand %	Silt %	Clay %	Physical Charact.: L.L.	P.I.	Density: Water Cont. %	Opt.	Max. Dry Wt.	SHTL Class	Remarks
60534	1	82+00 10RT	0-5	55	3	5	13	24	57	31	29			A-7-6*	BR-MC ST Fcg +
5	2	"	5-10	17	10	16	32	25	22	7	12			A-4a	BR-MC ST Fcg +
6	3	"	10-15	19	10	15	30	26	17	4	14			A-4a	BR-MC ST Fcg =
7	4	86+00 20'Lt	0-5	48	26	15	-11-		NP		7			A-1-b*	BR-GS WET
8	5	"	5-10	48	20	11	14	7	NP		10			A-1-b*	BR-GS+Soil WET
9	6	"	10-15	42	19	13	16	10	20	5	12			A-2-4	BR-GS+Soil WET
60540	7	89+00 15RT	0-5	9	4	11	33	43	50	23	29			A-7-6*	BR-MC ST Fcg =
1	8	"	5-9	6	9	15	39	31	22	7	13			A-4a	BR-SMC =
2	9	"	9-12	10	9	22	33	26	18	3	10			A-4a	BR-SMC ST Fcg =
3	10	93+00 12RT	0-5	49	17	11	17	6	NP		8			A-1-b*	BR-G+Soil K
4	1	"	5-10	22	11	19	28	20	19	5	11			A-4a	BR-SMC W/G +
5	2	77+00 12LT	0-5	23	9	13	30	25	25	8	13			A-4a*	BR-SMC ST Fcg =
6	3	"	5-10	25	11	17	24	23	20	5	9			A-4a	BR-SMC ST Fcg -

SD-8

SUMMARY OF TESTS ON SOIL PROFILE SAMPLES

County, Rt. No., & Section CLA-571-1.18

2
3

Lab. No. So.-	Sample No.	Station	Depth in Feet	Mechanical Analysis Agg. %	C Sand %	F Sand %	Silt %	Clay %	Physical Charact. L.L.	P.I.	Density Water Cont. %	Opt.	Max. Dry Wt.	SHTL Class	Remarks
60547	14	77+00 12LT	10-13	26	12	20	24	18	18	4	10			A-4a	BR-GSt+SOIL K
8	5	72+20 30RT	0-5	9	12	17	42	20	26	6	18			A-4a	BR-MC w/G =
9	6	"	5-10	21	12	16	29	22	22	6	12			A-4a	BR-SMC w/G =
60550	7	"	10-13	20	8	15	29	28	24	7	11			A-4a	BR-SMC w/G =
1	8	"	13-17	22	16	32	19	11	N	P	13			A-2-4	BR-GSt+SOIL wet
2	9	"	17-20	20	27	27	17	9	N	P	16			A-3a	BR-GSt+SOIL wet
3	20	68+90 ℄	0-3	15	6	13	37	29	37	14	21			A-6a	BR-MC ST Frg -
4	1	"	3-7	43	15	12	21	9	N	P	10			A-2-4	BR-GSt+SOIL K
5	2	"	7-10	45	11	11	23	10	N	P	7			A-2-4	BR-GSt+SOIL K
6	3	65+00 3RT	0-5	30	16	14	22	18	25	7	10			A-4a	BR-SMC w/G =
7	4	"	5-10	15	12	22	32	19	29	4	26			A-4a	BR-SMC ST Frg =
8	5	"	10-14	17	11	18	31	23	21	8	12			A-4a	BR-SMC ST Frg =
9	6	"	14-18	19	9	19	30	23	21	7	8			A-4a	BR-SMC w/G +

SO-8

SUMMARY OF TESTS ON SOIL PROFILE SAMPLES

3
3

County, Rt. No., & Section CLA-571-1.18

Lab. No. So.-	Sample No.	Station	Depth in Feet	Mechanical Analysis Agg. %	C Sand %	F Sand %	Silt %	Clay %	Physical Charact. L.L.	P.I.	Density Water Cont. %	Opt.	Max. Dry Wt.	SHTL Class	Remarks
60560	27	65+00 3RT	18-21	46	7	11	20	16	26	9	15			A-4a	BR MC ST Frg +
1	8	60+80 23RT	0-5	65	19	6	-10-		NP		7			A-1-b	BR. S+G WET
2	9	11	5-10	46	28	14	-12-		NP		4			A-1-b	BR-S+G WET

SO-8

GENERAL INFORMATION

INTRODUCTION

THE PROJECT CONSISTS OF THE WIDENING AND RESURFACING WITH MINOR ALIGNMENT AND GRADE IMPROVEMENT OF 0.66 MILE OF SR 571, BEGINNING AT THE SR 571-SR 69 INTERSECTION, EXTENDING EASTWARD AND TERMINATING 0.5 MILE EAST OF HONEY CREEK.

PROPOSED GRADE INDICATES MAXIMUM PROPOSED 3-FOOT CUTS AND 5-FOOT FILL EMBANKMENTS.

GEOLOGY OF THE PROJECT

THE ALIGNMENT TRAVERSES THE FLOODPLAIN OF HONEY CREEK, IN AN AREA WHERE RELATIVELY THIN GLACIAL DRIFT OVERLIES LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

EXPLORATORY BORINGS WERE MADE BY MEANS OF TRUCK-MOUNTED MECHANICAL SOIL AUGER, ON DECEMBER 27, 1967.

INVESTIGATIONAL FINDINGS

MATERIALS ENCOUNTERED ON THE PROJECT WERE PREDOMINANTLY COMPRISED OF SANDY SILTS (A-4a), WITH SOME SANDY GRAVELS (A-1-b AND A-2-4), GENERALLY HAVING LOW MOISTURE CONTENTS AND MOISTURE CONTENTS BELOW THE PLASTIC RANGE.

WET MATERIAL WAS ENCOUNTERED AT STATION 65+00.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS— 29 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	65	19	6	-	10 -	NP	NP	7	1
GRAVEL WITH SAND	A-1-b(0)	A-1-b	47	23	13	11	6	NP	NP	7	4
COARSE AND FINE SAND	-----	A-3a	20	27	27	17	9	NP	NP	16	1
GRAVEL WITH SAND AND SILT	A-2-4(0)	A-2-4	38	15	17	20	10	20	1	10	4
SANDY SILT	A-4(3)	A-4a	20	11	17	30	22	22	6	13	16
SILT AND CLAY	A-6(8)	A-6a	15	6	13	37	29	37	14	21	1
CLAY	A-7-6(13)	A-7-6	32	3	8	23	34	53	27	28	2

AUGER BORING-PLAN VIEW.

AUGER BORING PLOTTED TO VERTICAL SCALE ONLY.

WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT.

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. E.G. 15

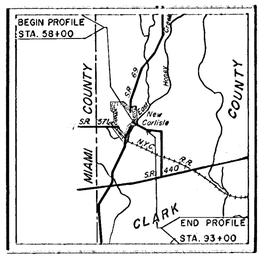
SOIL PROFILE

CLARK COUNTY
CLA-571-1.18

1/2

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 CONSTRUED AS A PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT.



LOCATION MAP

Recon — J.S.M. — 12-18-67
Drilling-Auger-W.S.B.—12-27-67
Drafting— K.J.S. — 2-2-68

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	DEPTH TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
60+80 23'Rt	0.0	-5.0	65	19	6	-	10 -	NP	NP	7	A-1-a*
	5.0	-10.0	46	28	14	-	12 -	NP	NP	4	A-1-b
65+00 13'Rt	0.0	-5.0	30	16	14	22	18	25	7	10	A-4a
	5.0	-10.0	15	12	22	32	19	29	4	26	A-4a
	10.0	-14.0	17	11	18	31	23	21	3	12	A-4a
	14.0	-18.0	19	9	19	30	23	21	7	8	A-4a
	18.0	-21.0	46	7	11	20	16	26	9	15	A-4a
68+90 CL	0.0	-3.0	15	6	13	37	29	37	14	21	A-6a
	3.0	-7.0	43	15	12	21	9	NP	NP	10	A-2-4
	7.0	-10.0	45	11	11	23	10	NP	NP	7	A-2-4
72+20 30'Rt	0.0	-5.0	9	12	17	42	20	26	6	18	A-4a
	5.0	-10.0	21	12	16	29	22	22	6	12	A-4a
	10.0	-13.0	20	8	15	29	28	24	7	11	A-4a
	13.0	-17.0	22	16	32	19	11	NP	NP	13	A-2-4
	17.0	-20.0	20	27	27	17	9	NP	NP	16	A-3a
77+00 12'Lt	0.0	-5.0	23	9	13	30	25	25	8	13	A-4a*
	5.0	-10.0	25	11	17	24	23	20	5	9	A-4a
	10.0	-13.0	26	12	20	24	18	18	4	10	A-4a
82+00 10'Rt	0.0	-5.0	55	3	5	13	24	57	31	29	A-7-6*
	5.0	-10.0	17	10	16	32	25	22	7	12	A-4a
	10.0	-15.0	19	10	15	30	26	17	4	14	A-4a
86+00 20'Lt	0.0	-5.0	48	26	15	-	11 -	NP	NP	7	A-1-b*
	5.0	-10.0	48	20	11	14	7	NP	NP	10	A-1-b*
	10.0	-15.0	42	19	13	16	10	20	5	12	A-2-4
89+00 15'Rt	0.0	-5.0	9	4	11	33	43	50	23	29	A-7-6*
	5.0	-9.0	6	9	15	39	31	22	7	13	A-4a
	9.0	-12.0	10	9	22	33	26	18	3	10	A-4a
93+00 12'Rt	0.0	-5.0	49	17	11	17	6	NP	NP	8	A-1-b*
	5.0	-10.0	22	11	19	28	20	19	5	11	A-4a

GENERAL INFORMATION

INTRODUCTION

THE PROJECT CONSISTS OF THE WIDENING AND RESURFACING WITH MINOR ALIGNMENT AND GRADE IMPROVEMENT OF 0.66 MILE OF SR 571, BEGINNING AT THE SR 571-SR 69 INTERSECTION, EXTENDING EASTWARD AND TERMINATING 0.5 MILE EAST OF HONEY CREEK.

PROPOSED GRADE INDICATES MAXIMUM PROPOSED 3-FOOT CUTS AND 5-FOOT FILL EMBANKMENTS.

GEOLOGY OF THE PROJECT

THE ALIGNMENT TRAVERSES THE FLOODPLAIN OF HONEY CREEK, IN AN AREA WHERE RELATIVELY THIN GLACIAL DRIFT OVERLIES LIMESTONE AND SHALE BEDROCK, OF ORDOVICIAN AGE.

EXPLORATION

EXPLORATORY BORINGS WERE MADE BY MEANS OF TRUCK-MOUNTED MECHANICAL SOIL AUGER, ON DECEMBER 27, 1967.

INVESTIGATIONAL FINDINGS

MATERIALS ENCOUNTERED ON THE PROJECT WERE PREDOMINANTLY COMPRISED OF SANDY SILTS (A-4a), WITH SOME SANDY GRAVELS (A-1-b AND A-2-4), GENERALLY HAVING LOW MOISTURE CONTENTS AND MOISTURE CONTENTS BELOW THE PLASTIC RANGE.

WET MATERIAL WAS ENCOUNTERED AT STATION 65+00.

LEGEND FOR PROJECT AVERAGE RESULTS OF TESTS— 29 SAMPLES TESTED

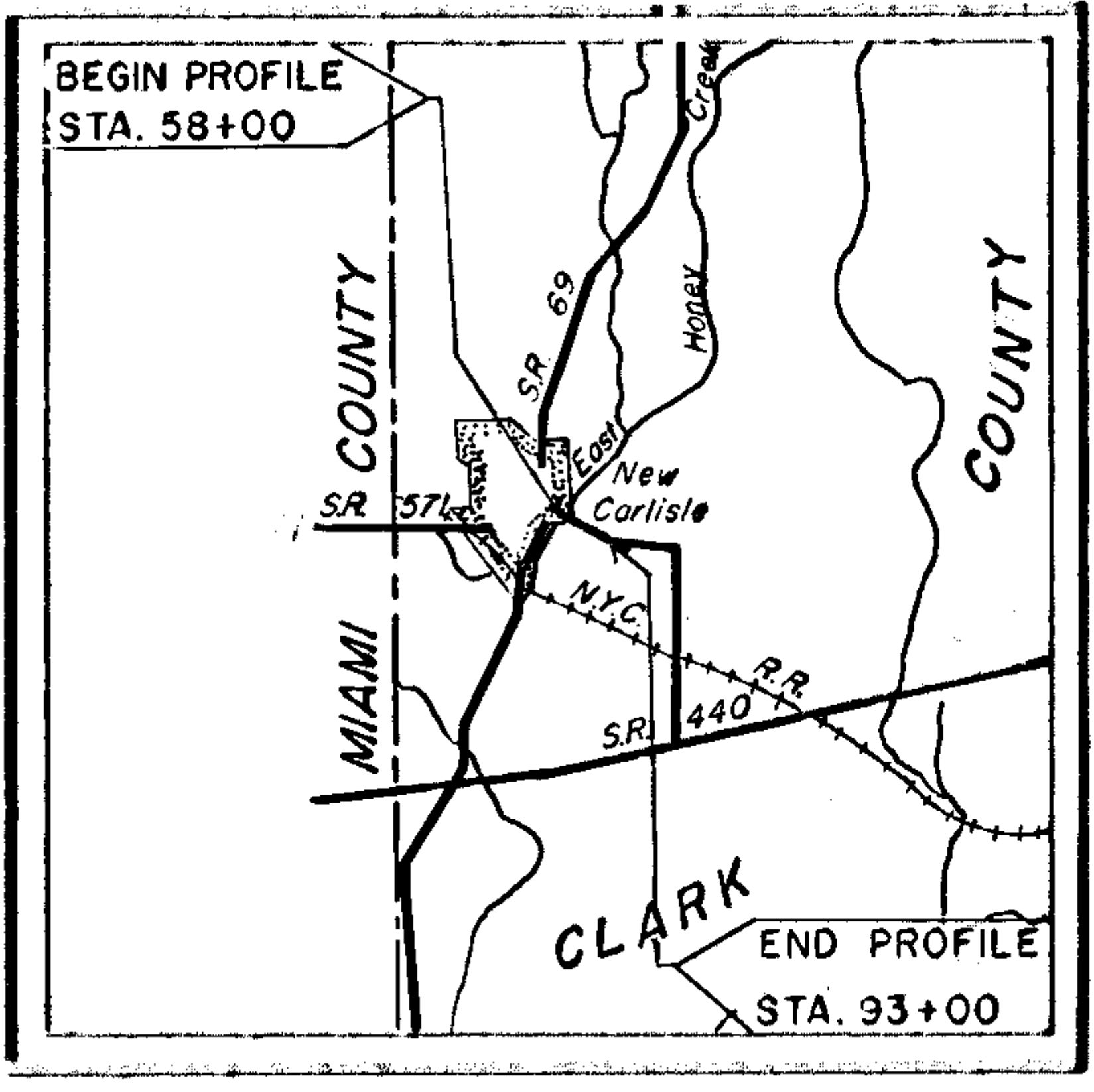
DESCRIPTION	H.R.B. CLASS	OHIO CLASS	% AGG.	% C. SAND	% F. SAND	% SILT	% CLAY	LIQUID LIMIT	PLASTICITY INDEX	WATER CONTENT	SAMPLES TESTED
GRAVEL	A-1-a(0)	A-1-a	65	19	6	-	10 -	NP	NP	7	1
GRAVEL WITH SAND	A-1-b(0)	A-1-b	47	23	13	11	6	NP	NP	7	4
COARSE AND FINE SAND	-----	A-3a	20	27	27	17	9	NP	NP	16	1
GRAVEL WITH SAND AND SILT	A-2-4(0)	A-2-4	38	15	17	20	10	20	1	10	4
SANDY SILT	A-4(3)	A-4a	20	11	17	30	22	22	6	13	16
SILT AND CLAY	A-6(8)	A-6a	15	6	13	37	29	37	14	21	1
CLAY	A-7-6(13)	A-7-6	32	3	8	23	34	53	27	28	2

AUGER BORING-PLAN VIEW.

AUGER BORING PLOTTED TO VERTICAL SCALE ONLY.

WATER CONTENT NEARLY EQUAL TO OR GREATER THAN LIQUID LIMIT.

NOTE: FIGURES BESIDE BORINGS INDICATE WATER CONTENT IN PERCENT. E.G. 15


BEGIN PROFILE
STA. 58+00
MIAMI COUNTY
S.R. 69
Honey Creek
East
New Carlisle
S.R. 571
N.Y.C. R.R.
S.R. 440
CLARK COUNTY
END PROFILE
STA. 93+00

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.

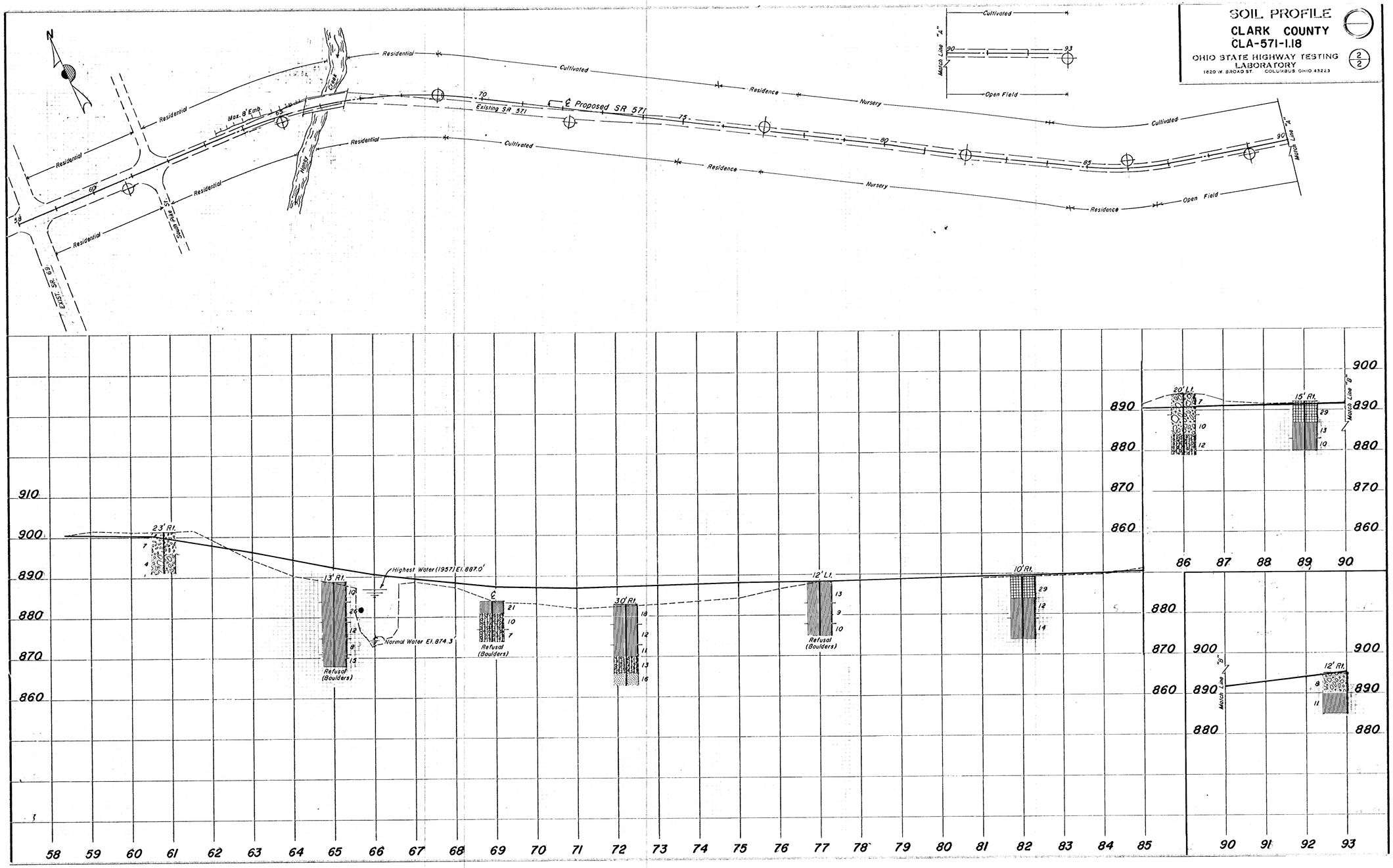
STATION & OFFSET		DEPTH FROM	DEPTH TO	% AGG.	% C.S.	% F.S.	% SILT	% CLAY	L.L.	P.I.	% W.C.	SHTL CLASS.
60+80	23'Rt	0.0	5.0	65	19	6	- 10 -		NP	NP	7	A-1-a*
		5.0	10.0	46	28	14	- 12 -		NP	NP	4	A-1-b
65+00	13'Rt	0.0	5.0	30	16	14	22	18	25	7	10	A-4a
		5.0	10.0	15	12	22	32	19	29	4	26	A-4a
		10.0	14.0	17	11	18	31	23	21	8	12	A-4a
		14.0	18.0	19	9	19	30	23	21	7	8	A-4a
		18.0	21.0	46	7	11	20	16	26	9	15	A-4a
68+90	CL	0.0	3.0	15	6	13	37	29	37	14	21	A-6a
		3.0	7.0	43	15	12	21	9	NP	NP	10	A-2-4
		7.0	10.0	45	11	11	23	10	NP	NP	7	A-2-4
72+20	30'Rt	0.0	5.0	9	12	17	42	20	26	6	18	A-4a
		5.0	10.0	21	12	16	29	22	22	6	12	A-4a
		10.0	13.0	20	8	15	29	28	24	7	11	A-4a
		13.0	17.0	22	16	32	19	11	NP	NP	13	A-2-4
		17.0	20.0	20	27	27	17	9	NP	NP	16	A-3a
77+00	12'Lt	0.0	5.0	23	9	13	30	25	25	8	13	A-4a*
		5.0	10.0	25	11	17	24	23	20	5	9	A-4a
		10.0	13.0	26	12	20	24	18	18	4	10	A-4a
82+00	10'Rt	0.0	5.0	55	3	5	13	24	57	31	29	A-7-6*
		5.0	10.0	17	10	16	32	25	22	7	12	A-4a
		10.0	15.0	19	10	15	30	26	17	4	14	A-4a
86+00	20'Lt	0.0	5.0	48	26	15	- 11 -		NP	NP	7	A-1-b*
		5.0	10.0	48	20	11	14	7	NP	NP	10	A-1-b*
		10.0	15.0	42	19	13	16	10	20	5	12	A-2-4
89+00	15'Rt	0.0	5.0	9	4	11	33	43	50	23	29	A-7-6*
		5.0	9.0	6	9	15	39	31	22	7	13	A-4a
		9.0	12.0	10	9	22	33	26	18	3	10	A-4a
93+00	12'Rt	0.0	5.0	49	17	11	17	6	NP	NP	8	A-1-b*
		5.0	10.0	22	11	19	28	20	19	5	11	A-4a

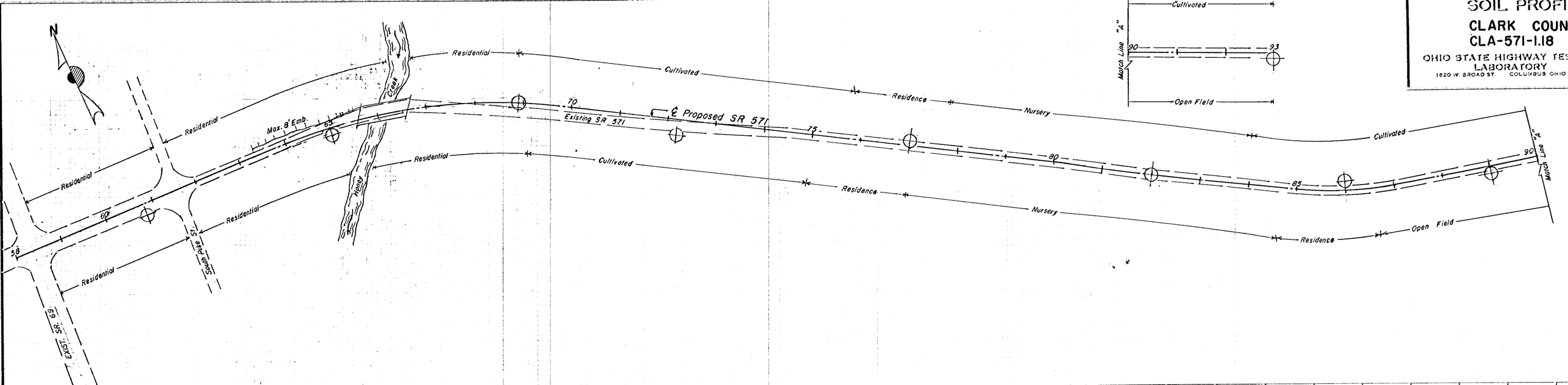
TE - 127
1800-1-18

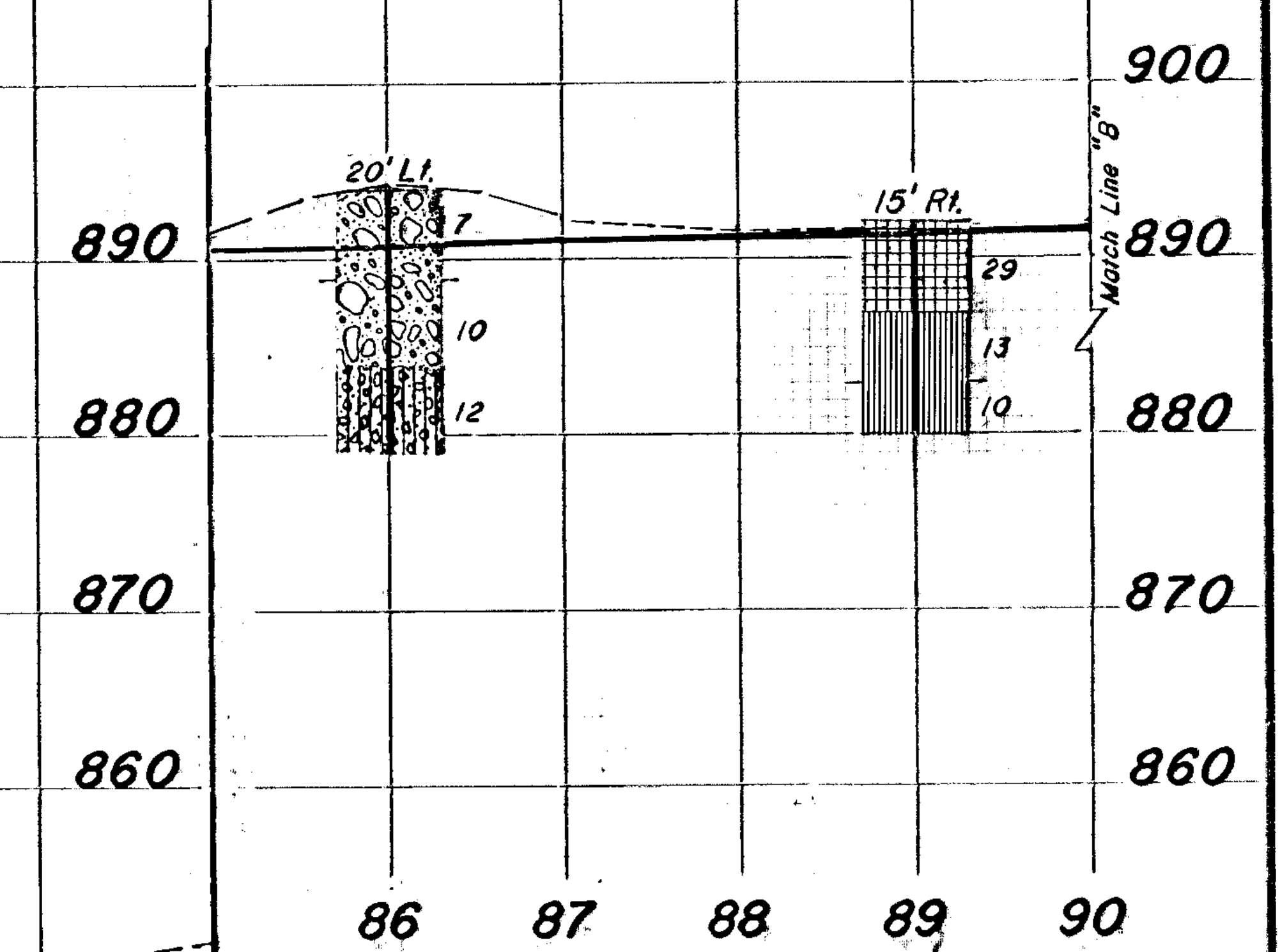
SOIL PROFILE
CLARK COUNTY
CLA-571-1.18

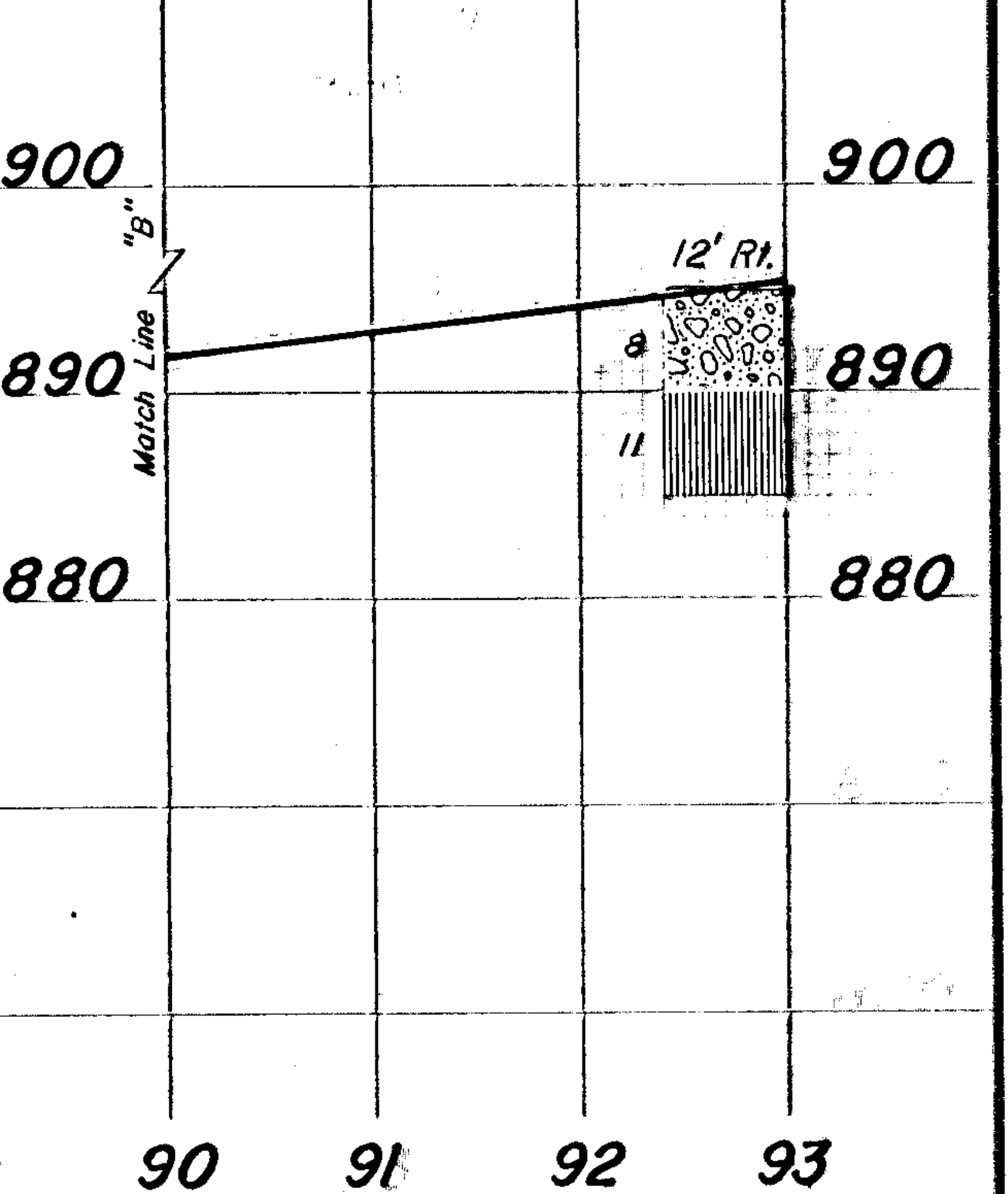
OHIO STATE HIGHWAY TESTING LABORATORY
1820 W. BROAD ST. COLUMBUS, OHIO 43223

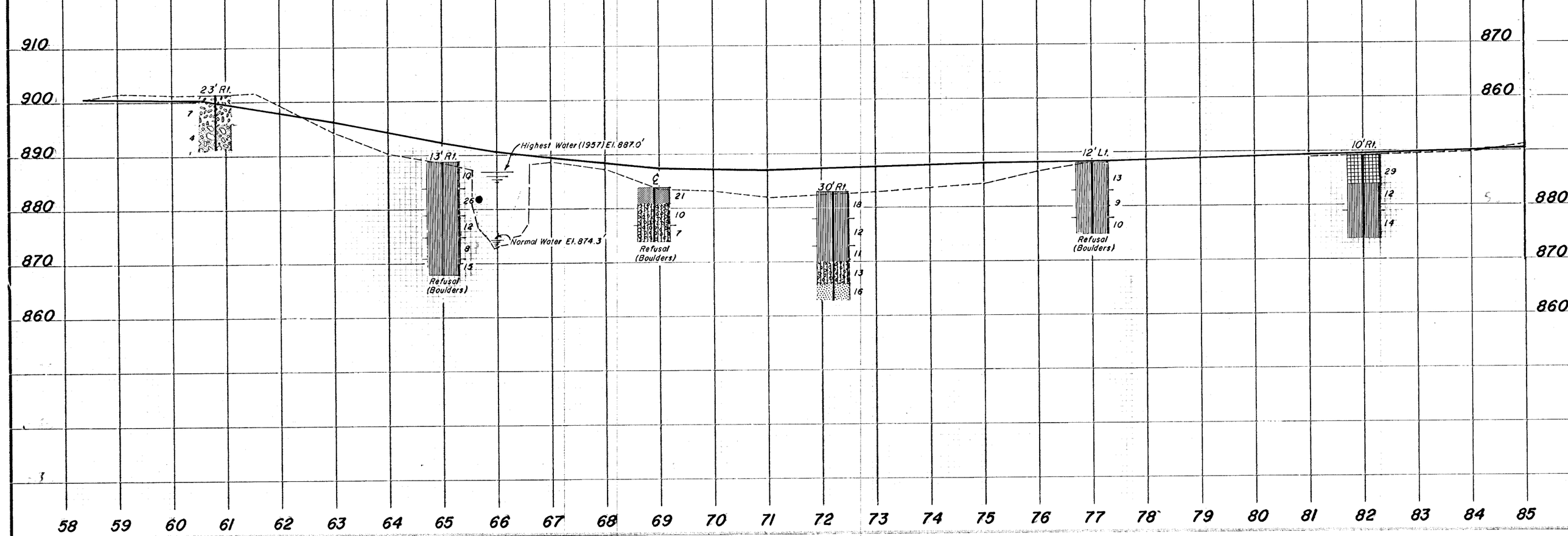
2/2




N
Residential
Residential
Residential
Residential
Residential
Residential
Max. 8' Emb.
Creek
Creek
South Pike St.
EXIST. SR 619
Cultivated
Residence
Nursery
Cultivated
Residence
Nursery
Residence
Open Field
Cultivated
Open Field
Existing SR 571
℄ Proposed SR 571
58
60
65
70
75
80
85
90
93
Match Line "A"
Match Line "A"
SOIL PROF
CLARK COUN
CLA-571-1.18
OHIO STATE HIGHWAY TES
LABORATORY
1620 W. BROAD ST. COLUMBUS OHIO


900
890
880
870
860
20' Lt.
7
10
12
15' Rt.
29
13
10
Match Line "B"
86
87
88
89
90


900
900
"B"
12' Rt.
Match Line
890
890
8
11
880
880
90
91
92
93


910
900
890
880
870
860
870
860
880
870
860
23' Rt.
7
4
1
13' Rt.
10
26
12
9
14
Refusal
(Boulders)
Highest Water (1957) El. 887.0'
Normal Water El. 874.3'
℄
21
10
7
Refusal
(Boulders)
30' Rt.
18
12
11
13
16
12' Lt.
13
9
10
Refusal
(Boulders)
10' Rt.
29
12
14
58
59
60
61
62
63
64
65
66
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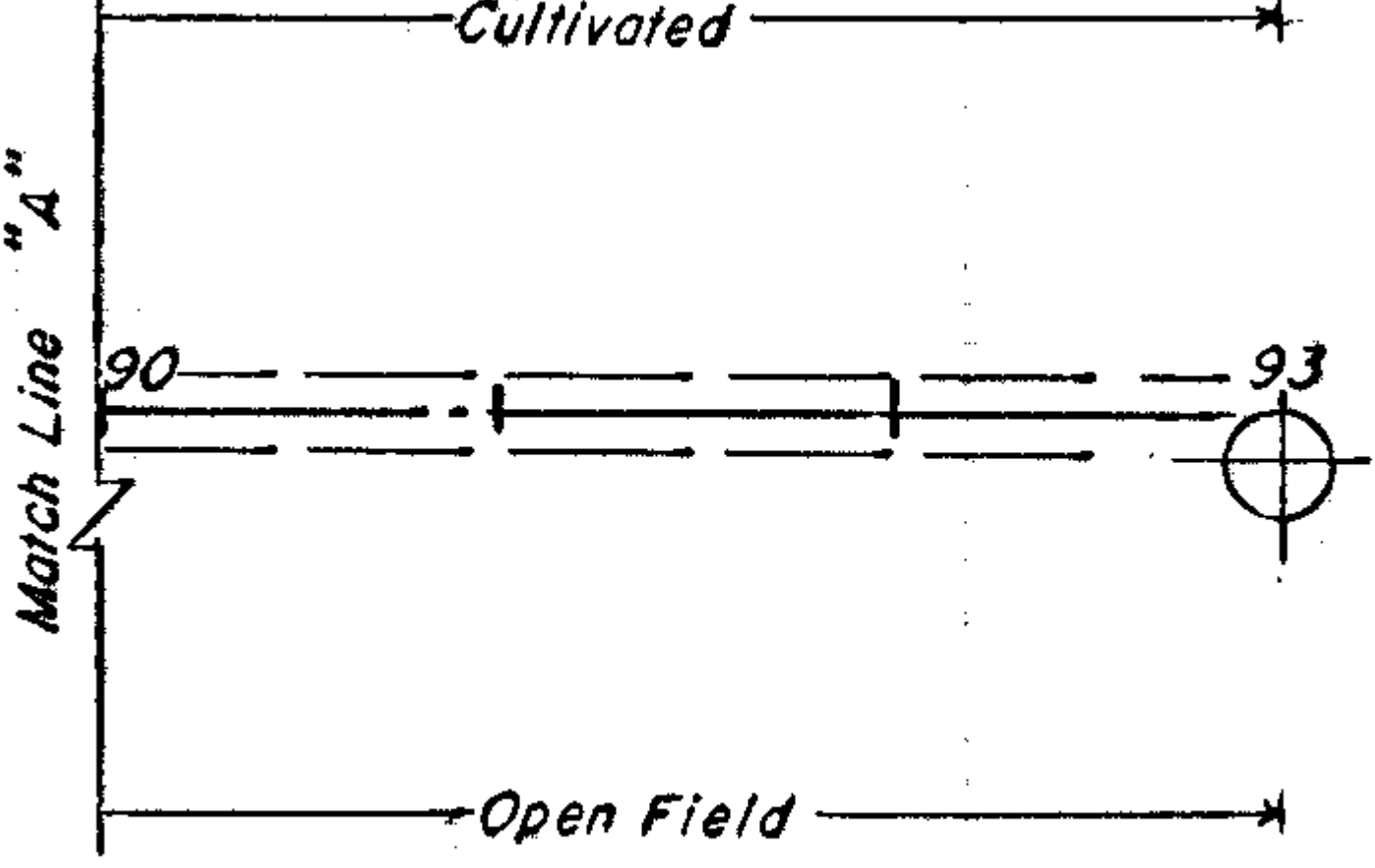
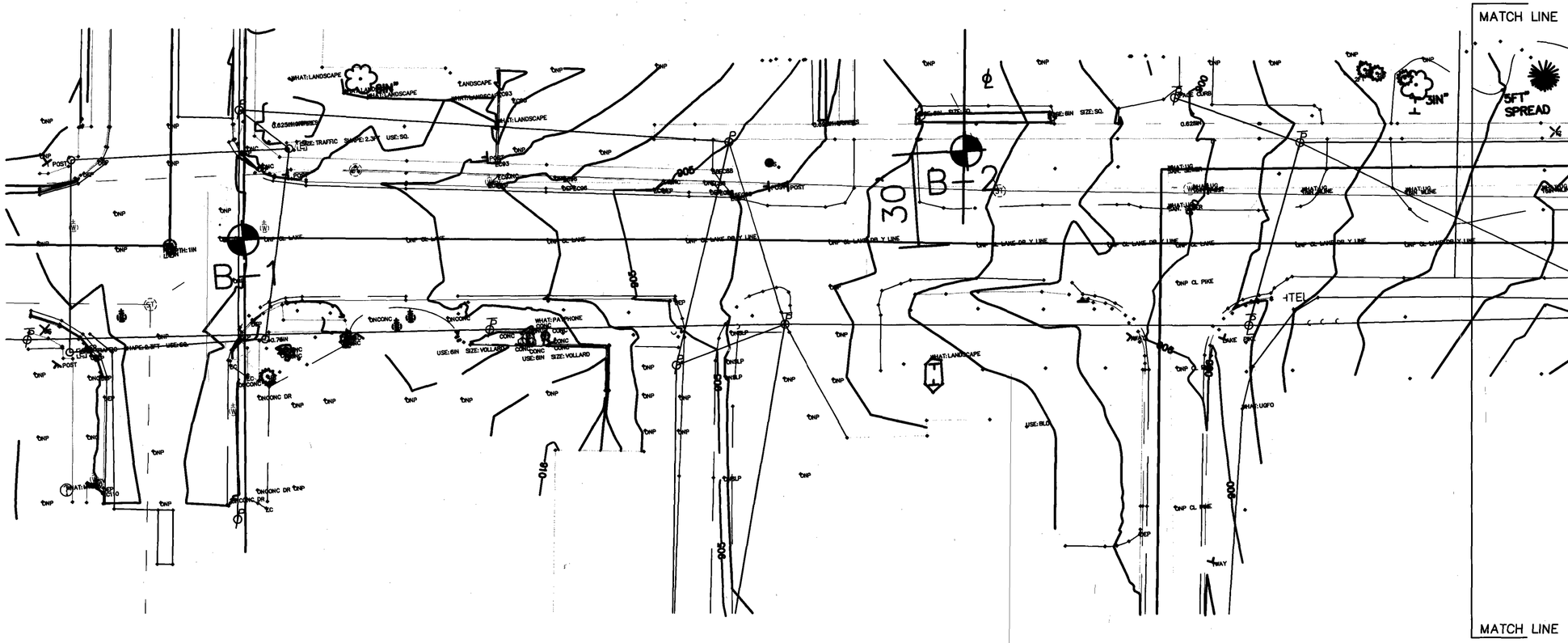
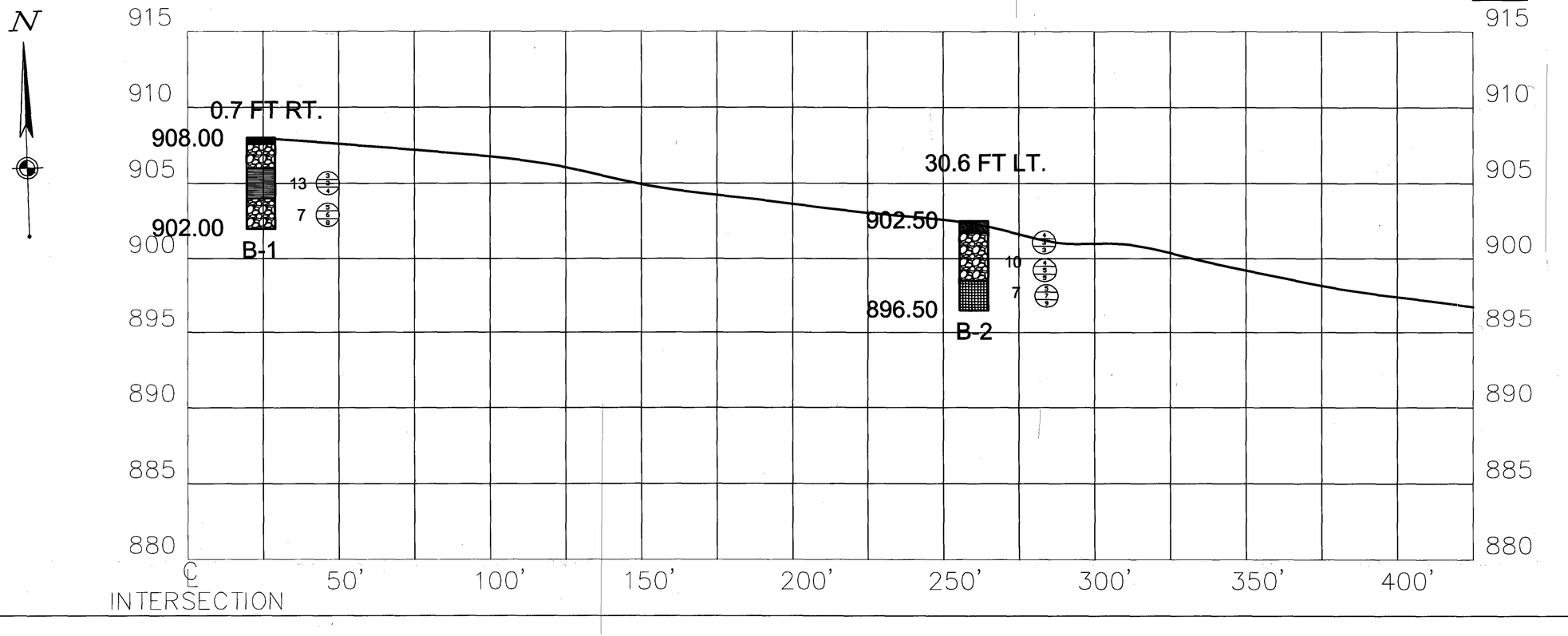
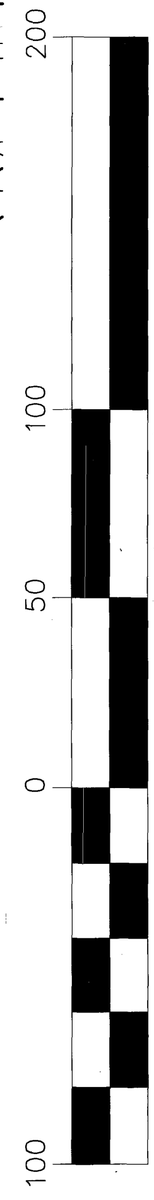
82
83
84
85


Cultivated
Match Line "A"
90
93
Open Field







VERTICAL SCALE:
1" = 10'

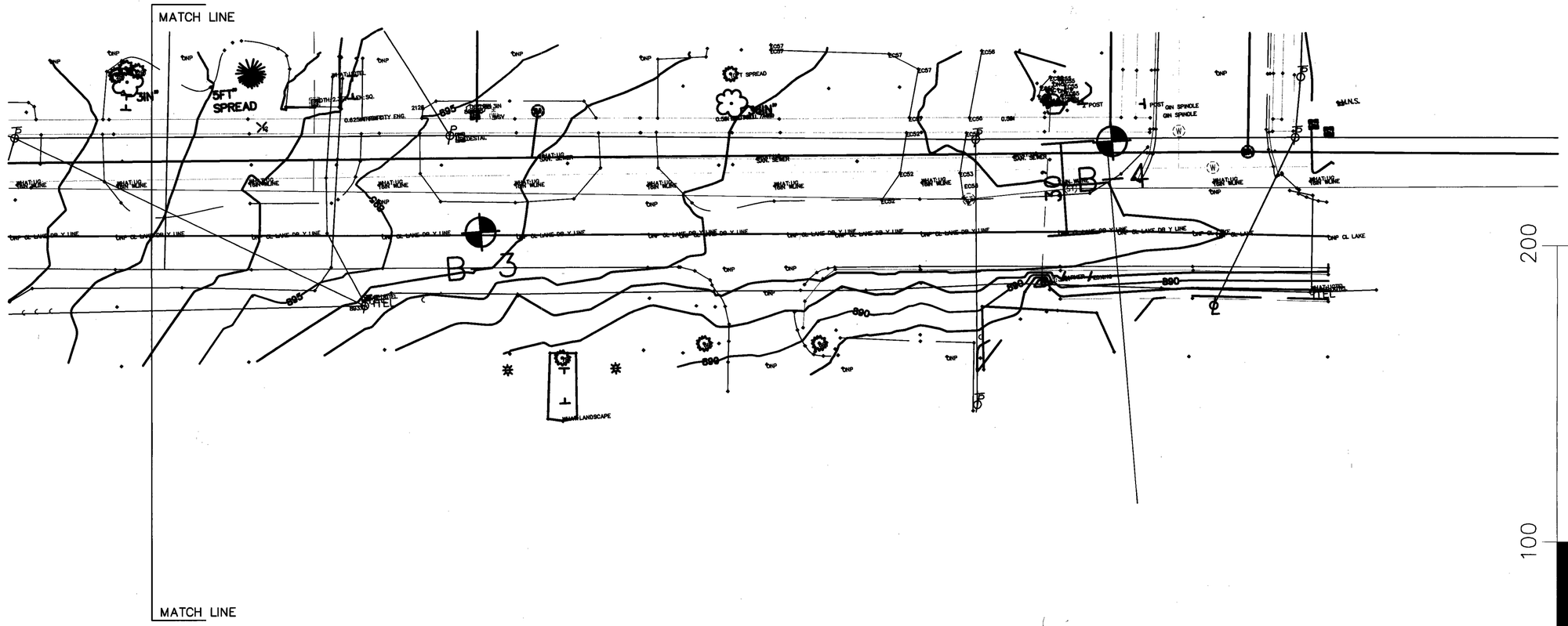
1700 LYONS ROAD
DAYTON, OHIO 45207-1884
OFFICE (937) 435-3200
FAX (937) 291-6549
email: hq@dustechinc.com
www.dustechinc.com
DUS TECH

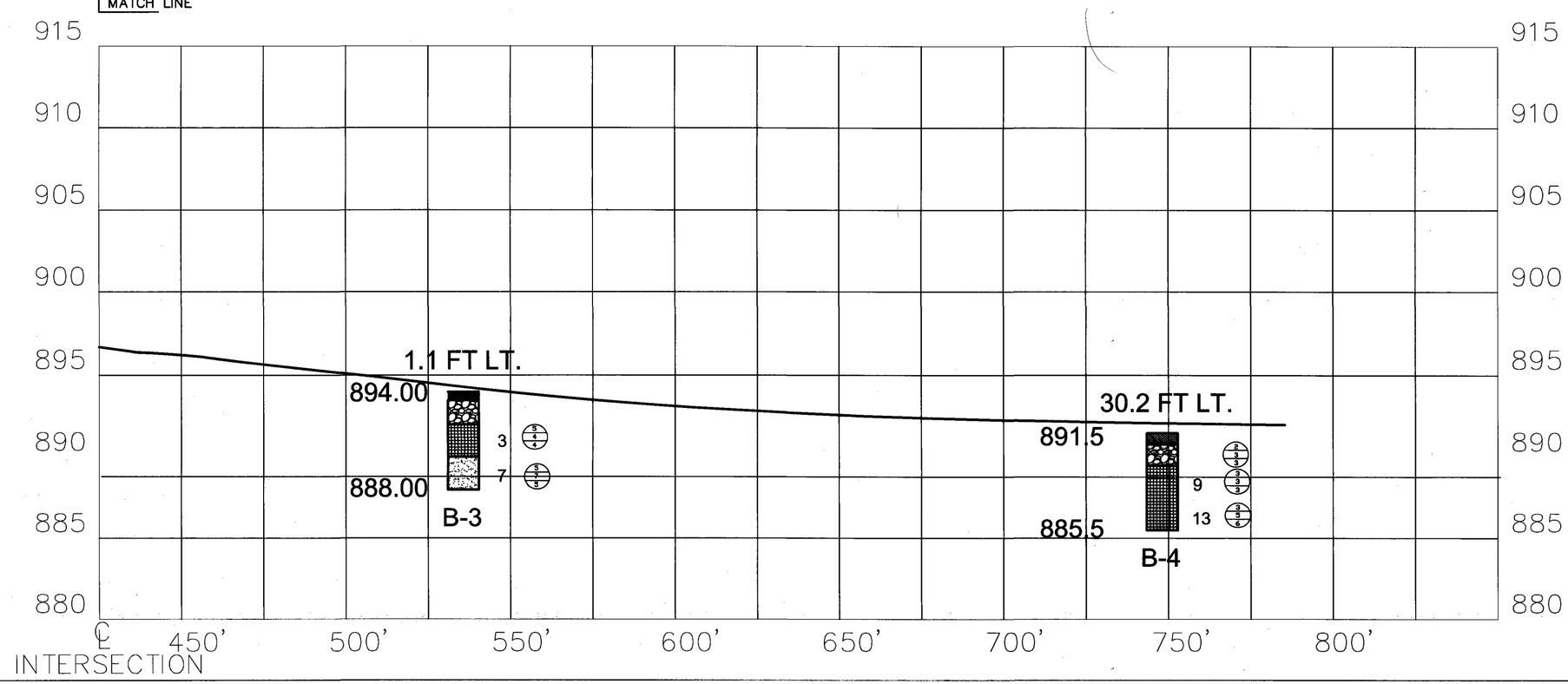
HORIZONTAL SCALE (IN FEET)
SOIL PLAN AND PROFILE

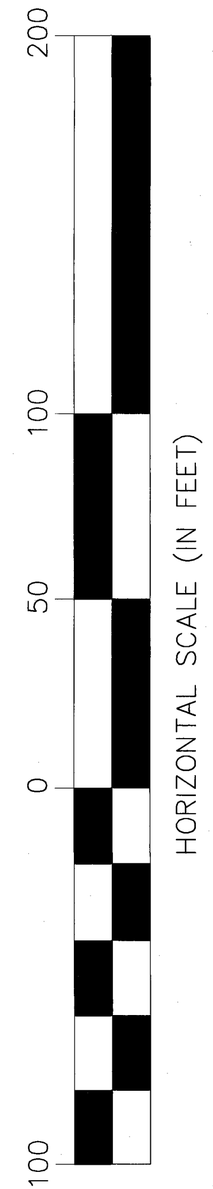
CLA EAST
LAKE AVENUE

DRAWN:	SMH
DESIGNED:	PKO
REVIEWED:	LJK
DATE:	5-25-05

1/2







VERTICAL SCALE:
1" = 10'

TESTECH
1700 LYONS ROAD
DAYTON, OHIO 45458-1864
OFFICE (937) 435-3200
FAX (937) 293-4549
email: info@testechinc.com
www.testechinc.com

SOIL PLAN AND PROFILE

CLA EAST
LAKE AVENUE

DRAWN:	SMH
DESIGNED:	PKO
REVIEWED:	LJK
DATE:	5-25-05

2/2

LOG OF BORING

Date Started: 5/27/2005 | Sampler's Type: SS | Dia.: 2.25 in. | Water Elev.: None
Date Completed: 5/27/2005
Boring No.: B-1 | Station and Offset: 00 + 00.00, 0.7 CL | Surface Elev.: 908.00 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
908.00	0.0				Asphalt & Base Material (24 inches)										
907.00	1.0														
906.00	2.0														
		3-3-4			Brown sandy silty clay(fill)	1	8	4	58	30				13	A-6b
905.00	3.0														
904.00	4.0														
903.00	5.0	5-6-8			Brown Sandy Gravel (Fill)	2	47	12	25	16				6.9	A-1-b
902.00	6.0														
					End of Boring										

LOG OF BORING

Date Started: 5/27/2005 | Sampler's Type: SS | Dia.: 2.25 in. | Water Elev.: None
Date Completed: 5/27/2005
Boring No.: B-2 | Station and Offset: 02 +35.00, 30.6 Lt. CL | Surface Elev.: 902.50 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
902.50	0.0				Topsoil (8 inches)										
901.50	1.0														
900.50	2.0				Brown Sand and Gravel fill)	1	35	14	37	15				10	A-1-b
		4-5-5													
899.50	3.0														
898.50	4.0				Brown Sand and Gravel fill)	2	35	14	37	15				10	A-1-b
897.50	5.0	5-7-9			Brown Sandy Silty Clay (Fill)	3	15	4	24	29	28	46	28	6.6	A-7-6
896.50	6.0														
					End of Boring										

LOG OF BORING

Date Started: 5/27/2005 | Sampler's Type: SS | Dia.: 2.25 in. | Water Elev.: None
Date Completed: 5/27/2005
Boring No.: B-3 | Station and Offset: 02 + 67.00, 1.1 CL | Surface Elev.: 894.00 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
894.00	0.0				Asphalt/Base (24 inches)										
893.00	1.0														
892.00	2.0														
		5-4-4			Brown sandy silty clay (fill)	1	15	4	24	29	28	46	28	3.2	A-7-6
891.00	3.0														
890.00	4.0														
889.00	5.0	5-7-5			Brown silty sand (fill)	2	3	15	69	13				6.6	A-3a
888.00	6.0														
					End of Boring										

LOG OF BORING

Date Started: 5/27/2005 | Sampler's Type: SS | Dia.: 2.25 in. | Water Elev.: None
Date Completed: 5/27/2005
Boring No.: B-4 | Station and Offset: 02 + 15.00, 30.2 Lt. CL | Surface Elev.: 891.50 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
950.00	0.0				Topsoil (8 inches)										
949.00	1.0														
		2-3-3			Brown clayey sand and gravel (fill)	1	38	15	31	16				8.7	A-1-b
948.00	2.0														
947.00	3.0	3-3-3			Brown sandy silty clay (fill)	2	13	4	23	27	33	46	28	13	A-7-6
946.00	4.0														
945.00	5.0	3-5-6			Brown sandy silty clay (fill)	3	13	4	23	27	33	46	28	13	A-7-6
944.00	6.0														

VERTICAL SCALE: N.T.S.

1700 LYONS ROAD
DAYTON, OHIO 45458-1864
OFFICE (937) 435-3200
FAX (937) 435-3201
email: tlab@testtechinc.com
www.testtechinc.com
TEST TECH

BORING LOGS

CLA EAST LAKE AVENUE

DRAWN:	SMH
DESIGNED:	PKO
REVIEWED:	LJK
DATE:	5-25-05

1/1

LOG OF BORING

Date Started	5/27/2005	Sampler's Type	SS	Dia.	2.25 in.	Water Elev.	None
Date Completed	5/27/2005						
Boring No.	B-1	Station and Offset	00 + 00.00, 0.7 CL			Surface Elev.	908.00 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics								
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
908.00	0.0														
					Asphalt & Base Material (24 inches)										
907.00	1.0														
906.00	2.0														
		3-3-4			Brown sandy silty clay(fill)	1	8	4	58	30				13	A-6b
905.00	3.0														
904.00	4.0														
903.00	5.0	5-6-8			Brown Sandy Gravel (Fill)	2	47	12	25	16				6.9	A-1-b
902.00	6.0														
					End of Boring										

LOG OF BORING

Date Started	5/27/2005	Sampler's Type	SS	Dia.	2.25 in.	Water Elev.	None
Date Completed	5/27/2005						
Boring No.	B-2	Station and Offset	02 +35.00, 30.6 Lt. CL			Surface Elev.	902.50 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics								
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
902.50	0.0														
					Topsoil (8 inches)										
901.50	1.0														
900.50	2.0				Brown Sand and Gravel fill)	1	35	14	37	15				10	A-1-b
		4-5-5													
899.50	3.0														
898.50	4.0				Brown Sand and Gravel fill)	2	35	14	37	15				10	A-1-b
897.50	5.0	5-7-9			Brown Sandy Silty Clay (Fill)	3	15	4	24	29	28	46	28	6.6	A-7-6
896.50	6.0														
					End of Boring										

LOG OF BORING

Date Started	5/27/2005	Sampler's Type	SS	Dia.	2.25 in.	Water Elev.	None
Date Completed	5/27/2005						
Boring No.	B-3	Station and Offset	02 + 67.00, 1.1 CL			Surface Elev.	894.00 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics								
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C.	ODOT Class
894.00	0.0														
					Asphalt/Base (24 inches)										
893.00	1.0														
892.00	2.0														
		5-4-4			Brown sandy silty clay (fill)	1	15	4	24	29	28	46	28	3.2	A-7-6
891.00	3.0														
890.00	4.0														
889.00	5.0	5-7-5			Brown silty sand (fill)	2	3	15	69	13				6.6	A-3a
888.00	6.0														
					End of Boring										

LOG OF BORING

Date Started	5/27/2005	Sampler's Type	SS	Dia.	2.25 in.	Water Elev.	None
Date Completed	5/27/2005						
Boring No.	B-4	Station and Offset	02 + 15.00, 30.2 Lt. CL			Surface Elev.	891.50 ft

Elevation (ft)	Depth (ft)	Std. Pen / RQD	Rec (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics								
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L	P.I.	W.C.	ODOT Class
950.00	0.0														
					Topsoil (8 inches)										
949.00	1.0														
		2-3-3			Brown clayey sand and gravel (fill)	1	38	15	31	16				8.7	A-1-b
948.00	2.0														
947.00	3.0	3-3-3			Brown sandy silty clay (fill)	2	13	4	23	27	33	46	28	13	A-7-6
946.00	4.0														
945.00	5.0	3-5-6			Brown sandy silty clay (fill)	3	13	4	23	27	33	46	28	13	A-7-6
944.00	6.0														

Year	PID No.	78291	County	Clark
2005				
	oge number	19467		CLA East Lake Avenue
			Identification	
File No.	DRS			

CONSULTANT PROJECT

Begin Sta. _____ End Sta. _____

Name of Consultant Tes Tech

Name of Drilling Contractor

Contents of File Geotechnical Sheets