County Line Farms, LLC 200 Lake Morton Drive, Suite 200 Lakeland, Florida 33801

February 25, 2011

Attention:

Mr. Thomas W. Moore, Jr. - Manager

**RE:** Report of the Preliminary Subsurface Soil Investigation

County Line Farms Property Hillsborough County, Florida

Our File: DES 116682

Dear Mr. Moore:

Pursuant to your authorization, **DRIGGERS ENGINEERING SERVICES**, **INC.** has completed the requested program of test borings at the subject site. Presented herein are the results of our field and laboratory tests with a general discussion of our findings. You will note that this investigation is considered preliminary with regards to actual structure foundation requirements pending more detailed studies on a structure by structure basis.

#### **INVESTIGATION PROGRAM**

You will note that an original investigation was conducted on the subject property for Genesis Group with a report date of April 29, 2004. However, due to these areas being heavily wooded, deeper Standard Penetration Test (SPT) borings were not conducted within two central pond areas along the western property boundary at that time. Instead, shallow classification or hand auger borings were performed to provide shallow subsurface information. Through the review process, SWFWMD determined that deep SPT borings would be necessary within those pond areas as well. Accordingly, we recently gained access to that area to conduct the borings. The following presents an overall discussion of the results of all our findings on the subject site including the three (3) most recently performed SPT borings.

**SOIL BORINGS** - Plate I of the report attachments identifies the respective positioning of a series of Standard Penetration Test (SPT) borings that were performed on the project for the original investigation in 2004. The locations of the three (3) more recent SPT borings (P-1, P-2 and P-3) are provided on Plate II. The test borings were performed generally at the locations that were staked in the field by the project survey crews.

You will note that the Standard Penetration Test borings were conducted in areas that were accessible to our exploration equipment. Certain locations were in wetlands with standing water and were not accessible to standard exploration equipment. At these locations, the existing water depth was recorded.

Logs of the test borings are presented in the attachments reflecting estimated Unified and AASHTO Soil Classification. Groundwater information is also presented on the attached logs.

**LABORATORY INVESTIGATION** - A limited program of laboratory testing was also undertaken to aid in characterizing the engineering properties of the subsurface soils. Our laboratory tests principally included grainsize analyses and Atterberg limits determinations together with organic content tests on selected specimens. The results of our laboratory tests are included in the report attachments.

#### GENERALIZED SUBSURFACE CONDITIONS

<u>SOIL CONDITIONS</u> - In general, the program of test borings identified the presence of a variable thickness surficial veneer of topsoil with differing organic content and concentration of roots. Typically, this upper organic enriched zone was less than 12 inches thick.

Below the upper organic topsoil, the near-surface native sediments appeared to consist of predominantly fine sands with variable silt, clay and organic fines that typically comprised the Unified Soil Classification of SP to SP-SM and SM and the AASHTO Soil groupings of A-3 to A-2-4. The thickness of this upper sandy unit varied over the site. Typically, these upper predominately sandy soils extended to depths on the order of 10 to 15 feet and locally deeper. However, in localized areas, lenticular clayey sand seams appeared to be interbedded with the fine sands and silty to slightly clayey sands within the upper 10 feet.

Typically, below the upper sand unit, the test borings generally graded to clayey sands interbedded with sandy clays that commonly overlay the deeper limestone which appeared to be dolomitic. It is also significant to note that in some cases lenses or seams of limestone or dolomitic silt occurred within the clayey sand and sandy clay units within the upper 20 to 30 feet. It should also be mentioned that some of the clayey sands and sandy clays that were encountered above the limestone formation locally appeared to be phosphatic.

The surface of limestone occurred at varying depths ranging from as little as 18 to as deep as 38 feet below existing grade. Many of the borings, of course, were terminated at relatively shallow depths in accordance with your request and did not encounter the limestone formation.

GROUNDWATER CONDITIONS - Groundwater was recorded at relatively shallow depths during the course of our original geotechnical investigation in April of 2004. With the exception of low lying areas and wetlands, groundwater was commonly encountered at depths of about 2.5 to 4.5 feet at the time of our investigation which was principally during a period of minimal rainfall. However, it is important to note that two (2) of the more recent requested SPT borings (P-2 and P-3) identified groundwater about 4 to 5 feet deeper than was recorded in the borings within the vicinity during the original investigation in that area (B-2 and B-3) even though both investigations were conducted within what would be considered the "dry" season. The reason for this difference is presently unknown. Boring P-1 from the current study identified groundwater only about 1 foot below the water level recorded at B-1 from the previous study.

Nevertheless, in general across the site, we would anticipate that normal wet season groundwater levels in the upland portions of the site could probably be expected within a depth of 12 inches below existing grade. This agrees favorably with the USDA Natural Resources Conservation Service (NRCS) which suggests soils on site are predominantly represented by the Myakka, Malabar and Smyrna fine sands. Soils in these mapping units are characterized as possessing seasonal high groundwater levels within 12 inches of existing grade during the wet season months.

However, careful consideration should be given to the groundwater conditions noted at P-2 and P-3 which was somewhat deeper than expected during this most recent investigation. Where wet ponds are desired and/or the seasonal high groundwater level is critical to the design of this particular pond for other reasons such as littoral shelves or outflow considerations, additional studies would be warranted. We would expect these studies would include installation of shallow

piezometers to document groundwater levels throughout the year as well as some research as to the possible cause of the lowered groundwater levels in order to assess whether this lowered groundwater condition would be expected to be sustained. Spot checking other groundwater levels and monitoring during the wet season would also be prudent to better refine normal seasonal high groundwater levels within the upland areas.

#### GENERALIZED DISCUSSION OF GEOTECHNICAL TEST RESULTS

In advance of obtaining detailed information relative to structure concepts for this project, included herein is a brief discussion of our preliminary findings as it would relate to a typical low-rise residential or commercial development.

GENERALIZED FOUNDATION CONDITIONS - Our geotechnical investigation has generally identified the presence of subsurface soils that are generally suited for low-rise construction utilizing relatively routine subgrade preparation and conventional shallow foundations. Subgrade preparation, of course, must include careful stripping of any surface highly organic soils followed by proof-rolling of the subgrade and necessary fill soils needed to develop design grades.

Foundation design recommendations, of course, must be developed based upon a careful review of anticipated design grades and structural loads as well as more detailed geotechnical information in specific structure areas. Therefore, at the appropriate time, we would be happy to review such information and develop a proposal for generating site specific information for foundation design recommendations.

BORROW SOIL CHARACTERISTICS - Our test borings have identified the presence of an upper unit of sands with variable silt, clay and organic finds generally comprising the AASHTO A-3 to A-2-4 Soil Classification. These soil types are generally considered as suitable for use as fill in both structure and paved areas with appropriate earthwork management, placement and compaction control. Typically, these upper more granular soils with minimal plasticity extended to depths on the order of 10 to 15 feet and locally more.

Of significance is the fact that soils comprising the AASHTO A-2-4 or Unified Soil Classification SM contain appreciable silt and probable trace amounts of clay fines. These soil types are naturally more weather sensitive and will require appropriate moisture control for proper placement and compaction. In general, it will be necessary to control the moisture contents with

these soil types to within  $\pm 2\%$  of optimum moisture as established by the Modified Proctor moisture density relationship of AASHTO T-180.

Due to the fact that these soils will doubtless be excavated below the groundwater table, they will require appropriate spreading and aeration in order to reduce moisture contents to levels suitable for proper compaction. As a result of this moisture sensitivity, the contractor must exercise added care in earthwork management in order to maintain the fill surfaces appropriately shaped to promote positive drainage during rainfall events. Mechanical aeration must be planned as a routine operation in order to control moisture contents during earthwork operations.

It is also important for the contractor to recognize that soils containing appreciable fines may necessitate special compaction procedures such as the utilization of vibratory sheepsfoot or vibratory tamping foot type compaction equipment in addition to the utilization of conventional smooth steel wheel vibratory rollers. The kneading action of the sheepsfoot or vibratory tamping foot rollers is commonly more efficient in compacting soils containing appreciable silt or clay fines.

Improvement in efficiency in placement and compaction can also be gained by excavating and blending soils with increased fines content with overlying or underlying zones with minimal silt or clay fines in order to reduce the overall effective fines content. Therefore, consideration needs to be given by the earthwork contractor with respect to ways and means for excavating retention areas for the production of borrow so as to effect maximum blending of constituents.

The deeper clayey sands and clays comprising the A-2-6 to A-7-6 AASHTO Soil Classification generally exhibit moderate to high plasticity and would generally not be suitable for use as fill in structure or paved areas. Further, it visually appeared that some of these clayey soils may be phosphatic. In some cases, phosphatic soils are associated with formations that exhibit increased potential for the production of Radon gas. Thus, if there is a probability that these deeper soils may be excavated and placed on the ground surface throughout the site, it would be prudent to consider testing these soils for potential Radon production. Further, if there is an anticipated need for excavating in proximity to these deeper clayey soils, it may also be advisable to perform some Radon screening tests on the potential borrow soils immediately overlying these phosphatic units.

No. 58013

**DRIGGERS ENGINEERING SERVICES, INC.**, appreciates this opportunity to be of continued service on this project. Should you have any questions, please do not hesitate to contact the undersigned at your convenience.

Respectfully submitted,

DRIGGERS ENGINEERING SERVICES

Wayne S. Dinggers, P.E. Senior Geotechnical Engineer

FL Registration No. 58013

Jaine Driggers, P.E.

President

FL Registration No. 16989

WSD-REP\116682

Copies submitted: (2) County Line Farms, LLC; Attn: Mr. Thomas Moore, Jr.

(3) Genesis Group: Attn: Mr. Kyle L. Thornton, P.E.

#### **APPENDIX**

## PLATE I - BORING LOCATION PLAN (APRIL 2004 STUDY)

## PLATE II - BORING LOCATION PLAN (CURRENT STUDY)

# STANDARD PENETRATION TEST BORING LOGS AND HAND AUGER BORING LOGS (APRIL 2004 STUDY)

# STANDARD PENETRATION TEST BORING LOGS (CURRENT STUDY)

SUMMARY OF LABORATORY TEST RESULTS (BOTH STUDIES)

**GRAINSIZE ANALYSES** 

METHOD OF TESTING

PLATE I - BORING LOCATION PLAN (APRIL 2004 STUDY)

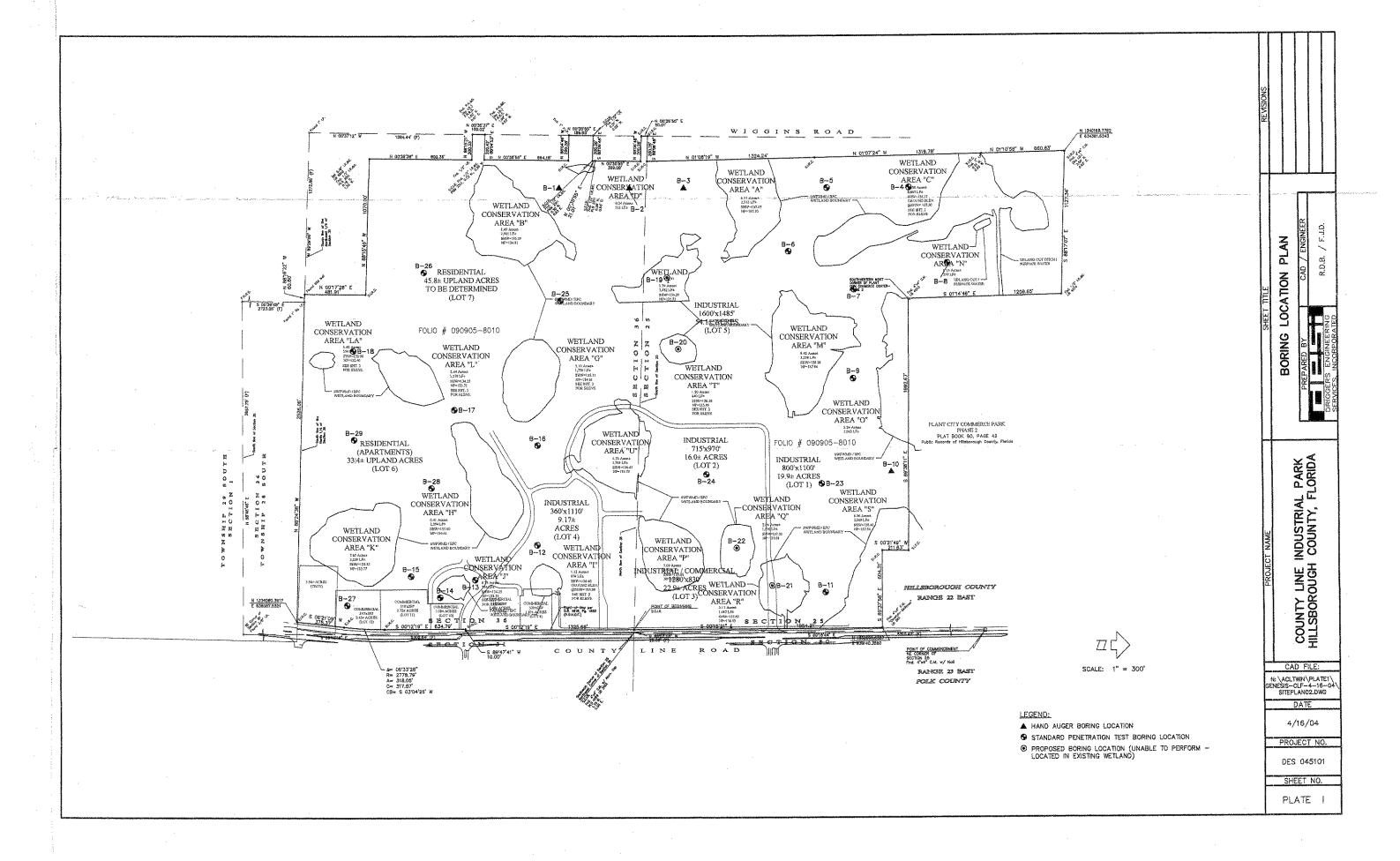
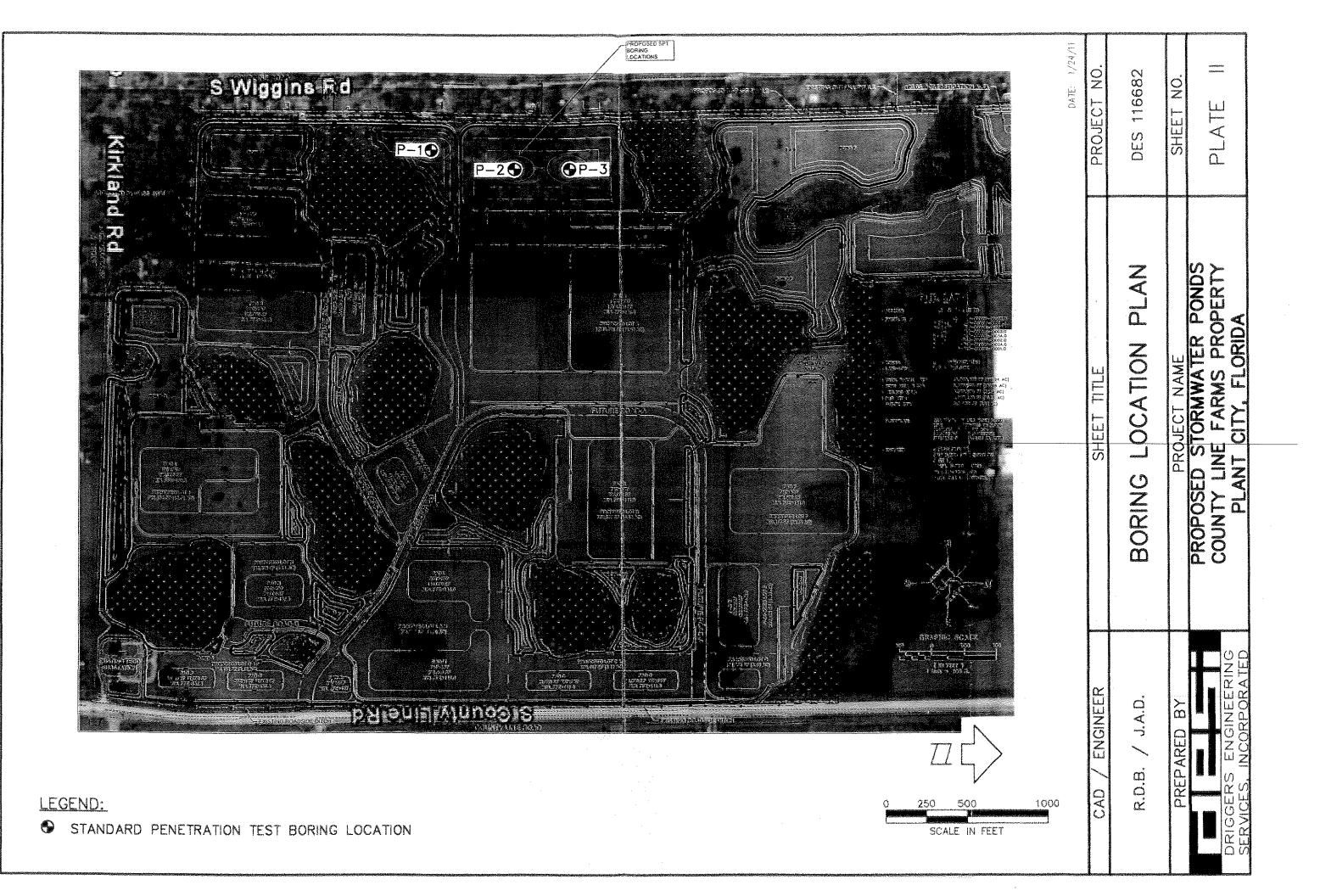


PLATE II - BORING LOCATION PLAN (CURRENT STUDY)



# STANDARD PENETRATION TEST BORING LOGS AND HAND AUGER BORING LOGS (APRIL 2004 STUDY)



DDO JECT	HAND AUG				
PROJECT:	County Line Industrial Park	CLIEN'		Ge	nesis Group
	Hillsborough County, Florida Project No.: DES 045101		R TABLE:	3.6'	DATE: 3/2/04
rechnician:	T.A.	DATE:	3/2/04	ļ	COMPLETION DEPTH: 6.0'
_OCATION:	See Plate I	TEST	NUMBER:		B-1
			O.L.		
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMARKS
,	Dark gray highly organic Fine SAND with roots (Pt) (A-8)	0		Surf	face Elevation: Unknown  (B-1 is located
	Dark brown Fine SAND			in	heavily wooded area.)
	with finely divided organic material (SP) (A-3)	- 1			
A DESCRIPTION OF THE PROPERTY	Brown slightly silty Fine SAND (SP-SM) (A-3)				
		- 2			×
odes de calebrate de la calebr		3			
	Brown silty Fine SAND (SM) (A-2-4)				
		4			
		- 5			
		· :			
		6	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		
		7 -			



	HAND AUGE	R BORIN	G LOC	G
PROJEC	T: County Line Industrial Park	CLIENT	Γ:	Genesis Group
	Hillsborough County, Florida Project No.: DES 045101	WATER	TABLE	
TECHNIC	CIAN: T.A.	DATE:	3/2	COMPLETION DEPTH: 6.0'
LOCATIO		TEST	IUMBER	
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL	REMARKS
	Dark gray Fine SAND with surficial roots (SP) (A-3)	0	/2//3	Surface Elevation: Unknown (B-2 is located
	Very dark brown silty Fine SAND with finely divided organic material (SM) (A-2-4) Dark reddish-brown	1 .		in heavily wooded area.)
	slightly silty Fine SAND (SP-SM) (A-3) Orangish-brown slightly silty Fine SAND			
• • •	(SP-SM) (A-3)	- 2		
	Light brown slightly silty Fine SAND (SP-SM) (A-3)			
		- 3		
		- 4		عد المستوع الم
	Light grayish-brown silty Fine SAND (SM) (A-2-4)			
		5		
		may ray and a ray and a ray a ra		
		6		
			· serven-rapesarveserep-	
		<del></del>	**************************************	
		F 7	1	



	HAND AUGE	ER BORIN	G LOG	}		
PROJEC	T: County Line Industrial Park Hillsborough County, Florida	CLIENT		Genesi	is Group	
	Project No.: DES 045101	WATER	R TABLE:	4.2'	DATE: 3/2	/04
TECHNIC		DATE:	3/2	/04	COMPLETION DEPTH:	
LOCATIO		TEST	IUMBER:		3-3	
			] 			
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMARKS	
	Dark brown organic, silty Fine SAND (SM/Pt) (A-8)	0			e Elevation: Unknow (B-3 is located avily wooded area.)	/n
	Dark brown slightly silty Fine SAND with finely divided organic material (SP-SM) (A-3)	- 1		iii ne	avily wooded alea.	
	Light brown slightly silty Fine SAND (SP-SM) (A-3)	}				
		- 2				
		3				
	Light grayish-brown silty Fine SAND (SM) (A-2-4)	4 -				
		- 5				
		6				
		- 7 -				

•		_	ES 045101 BORING NO. <b>B-4</b>		
			y Line Industrial Park, Hillsborough County, Florida	<b>y</b>	
	tion <u>s</u> pletior		Plate I Depth To	Forema	an <u>W.M.</u>
De	pietioi pth _	1	1.5' Date 3/15/04 Water 3.8'	Time	Date 3/15/04
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +138.2+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP
0	Z;;;x;	Í	Brown Fine SAND with trace of roots (SP) (A-3)		
5	11.00 H		Light brown to tan Fine SAND (SP) (A-3)  Light brown Fine SAND (SP) (A-3)  Dark brown to brown slightly silty Fine SAND with finely divided organic material (SP-SM) (A-3)  Very loose to medium dense grayish-brown to dark brown silty Fine SAND (SM) (A-2-4)	1/1/2 2/2/3 3/5/6	
15			- light grayish-brown with trace of cemented sand at depth 12.0' - brown at depth 15.0'	3/7/9	
- 20			Medium dense very light gray Fine SAND (SP) (A-3)  Medium dense grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)	8/11/12	
- 25			Medium dense grayish-brown clayey Fine SAND (SC) (A-2-6)	6/8/7	•
- 30 -			Medium dense to loose grayish-green phosphatic, silty, clayey Fine SAND (SC) (A-2-7)	6/5/6	
Rer	narks				
				Cas	ing Length

			ES 045101		BORING N									
			y Line Industrial	Park, Hillsbo	rough County	, Florida	Forema			W.M				
	tion <u>s</u> oletion		Plate I		Denth To		Foreina	· · · · · · · · · · · · · · · · · · ·	······	IVI. VV	•			
De	pth _		1.5' Date _	3/15/04	Depth To Water	3.8'	Time		_ Dat	e	3/1	15/0	)4	
DEPTH, FT	SYMBOL	SAMPLES	S SURF. EL: +138	OIL DESC	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BL( S H/	STA ENETRA OWS/F SAMPL AMMER	ATIO T. OI ER-1	N T N 2" 40 L " DI	O.i .B.	D. P	80
35			Medium dense t			sphatic,		/		ļ		_	4	$\downarrow$
- 40			silty, clayey Fine Firm gray phosp (CH) (A-7-6)				3/4/3		Aut			~		
							3/3/4	•		<u> </u>		$\bot$	$\  \cdot \ $	+
50 - 60 - 65 - 65														
Rer	narke	Щ.,					<u> </u>	<u>.                                    </u>		L	II			
1,50	nai Nõ						Cas	ing Len	gth _					

1 -		_	ES 045101		BORING N								
			ty Line Industrial P	ark, Hillsbo	rough County	, Florida	Earama		W.N	4			_
1	pletion		Plate I	······································	Depth To	***************************************	Forema		VV.1V	1.			
De	pth _		40.4' Date	3/12/04	Water _	4.9'	Time		Date	3/1	2/0	4	_
ОЕРТН, FT		SAMPLES	SURF. EL: +138.6	5+/-'	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO' SA	STANDA IETRATIO WS/FT. O IMPLER-1 IMER, 30	ON T N 2" 140 L )" DF	O.D .B.	). •	30
0			Dark brown Fine S		finely divided				Ì				Γ
5			organic material ( Light brown Fine S Grayish-brown Fir of cemented sand Gray silty Fine SA	SAND (SP) ne SAND w (SP) (A-3	ith trace 3) ace								
			of cemented sand Very loose to loos slightly silty Fine S	e brown to	light brown		2/3/3						
10	# 1230970 1-69-9-9- 1 1 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						3/2/4						F
	rijadi rijadi lijadi rijadi rijadi						2/2/3						-
15			Stiff green phosph (CH) (A-7-6)	atic, sandy	CLAY		5/5/9						
- 20			Stiff tan dolomitic	SILT (ML)	(A-6)		4/5/8						
25			Medium dense grewith seams of wear (SC) (A-2-7)			ine SAND	4/5/10						
30			Loose brown and clayey Fine SAND (SC) (A-2-7)			s	6/3/4						
			Hard brown and d	ark tan pho	sphatic, (1)								L
Re	marks	В	rehole Grouted				<u> </u>						_
		<u>(1</u>	) sandy CLAY (Cl	H) (A-7-6)			Cas	ing Leng	th				

-		***	DES 045101 BORING NO. B-5								
			nty Line Industrial Park, Hillsborough County, Florida	Forema	an	V	V.M.				
Com <sub>l</sub> De	oletion pth	1	Depth To 40.4' Date <u>3/12/04</u> Water 4.9' ]	Time		_ Date		3/1	2/0	)4_	
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +138.6+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO S/	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.E SAMPLER-140 LB. HAMMER, 30" DROP					80
35	//	Ц	Hard brown and dark tan phosphatic, sandy CLAY		10	20		Ĩ	Ţ	Ĭ	Ĭ
	//		(CH) (A-7-6)	13/14/18					+	$\parallel$	+
									7		
			Tan LIMESTONE					1	1	Ŋ	$\mathbb{H}$
40				50*	* 0.4' Pe	netratio	n	_	+	H	$\prod$
									1		
									+	$\frac{1}{1}$	$\frac{1}{1}$
	-								+	$\dagger$	$\parallel$
45				:				1	1		$\parallel$
	1								-	$\dashv$	+
									+	$\prod$	+
50											
									$\perp$	$\coprod$	+
								-	+	+	H
55	-							_	1	$\prod$	$\coprod$
								-	+	H	$\frac{\parallel}{\parallel}$
											$\parallel$
	1			:					$\bot$	$\coprod$	$\coprod$
60								_	+	╁	+
				,				$\dashv$	1	$\dagger \dagger$	$\dagger \dagger$
	1								1	$\prod$	$\prod$
									$\bot$	$\dashv$	$\prod$
65			İ				_	$\top$	+	H	H
									1	$\prod$	$\prod$
								$\perp$	$\perp$	$\coprod$	
Rei	marks	Bo	orehole Grouted	~	inalass						
				cas	ing Leng	յւո					

		_	DES 045101 BORING NO. <u>B-6</u>							
			ty Line Industrial Park, Hillsborough County, Florida Plate I	Forema		W.M				
	oletio		Depth To	roreina	all	V V . IV				
De	pth _		41.5' Date <u>3/12/04</u> Water <u>4.5'</u>	Time		Date	3/1	2/04	<u> </u>	
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +138.6+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO\ SA HAN	STANDA ETRATIC WS/FT. O MPLER-1 IMER, 30	N TE N 2"  40 L  " DR	O.D B. OP	١.	
0	海路交	<b> </b>	Dark gray Fine SAND with roots (SP) (A-3)	<u></u>	10	20	40		080	ſ
- 5			Dark brown silty Fine SAND with finely divided organic material and trace of roots (SM) (A-2-4) Brown Fine SAND (SP) (A-3) Gray and orangish-brown silty Fine SAND (SM) (A-2-4) Grayish-brown silty Fine SAND (SM) (A-2-4) Loose to medium dense brown slightly silty Fine SAND (SP-SM) (A-3)	2/2/4						
	1 ( 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			7/9/12		<del>-</del>		+	+	
- 10 -			- trace of cemented sand at depth 10.0'	7/8/11 8/12/13						-
15			Loose very light grayish-brown Fine SAND (SP) (A-3) Loose light gray silty,	5/5/5						
- 20 -			slightly clayey Fine SAND (SM) (A-2-4)  Very stiff brown and green sandy CLAY (CH) (A-7-6)	7/6/9						1 1 1
25			Tan LIMESTONE	18/50*	* 0.5' Pen	etration				1 7
30				50*	* 0.2' Pen	etration				
										£ 1
Ker	narks	 BC	rehole Grouted	Cas	ing Lengt	h	····			

1			DES 045101 BORING NO. B-6								
			ty Line Industrial Park, Hillsborough County, Florida Plate I	Forema	····		W.M				
Comp	_	า		roreina	151		VV.IVI				
De	pth _		Depth To 41.5' Date 3/12/04 Water 4.5'	Time		Dat	е	3/	12	04	
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +138.6+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BL H	STA ENETRA OWS/F SAMPLI AMMER	ATIO T. OI ER-1	N 7 N 2' 40 '' D	ES O LB RC	.D. P	
35 -		Ц	Tan LIMESTONE	50*	  * 0.5' F	l Penetrati	l ion—			$\bot$	$\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!\!$
40 -			Hard grayish-brown dolomitic SILT (ML) (A-6)	11/16/24	0.0 ,						
- 50 -											
- 65 -									1		
Ren	Remarks Borehole Grouted  Casing Length										

1 -			BORING NO. <u>B-7</u>	7						
			ty Line Industrial Park, Hillsborough County, Florida Plate I	Foreman		W.M			<del></del>	
	oletio	3	Depth To		***************************************	* 7 . 1 7 1		<del></del>		_
De	pth _		35.2' Date 3/15/04 Water 2.8'	Time		Date _	3/1	5/04	1	_
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +138.9+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLOV SA	STANDA ETRATIO VS/FT. OI MPLER-1 IMER, 30	N TE N 2" ( 40 Li	O.D B.	).	:0
0		ľ	Gray to dark gray slightly organic Fine SAND					$\prod$	T	Ň
5	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		(SP) (A-3) Dark brown Fine SAND with finely divided organic material (SP) (A-3) Brown slightly silty Fine SAND (SP-SM) (A-3) Grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4) Gray clayey Fine SAND (SC) (A-2-6)							
	1 (1) (1)	7	Medium dense grayish-brown slightly silty	4/5/9		•		44	_ _	
- 10			Fine SAND (SP-SM) (A-3)	6/7/7						
			Dance and Jak harry allk.			-		44	$\bot$	
- 15			Dense grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)	18/15/20						
- 20			Very stiff green phosphatic, sandy CLAY (CH) (A-7-6)  Very stiff orange and green CLAY (CH) (A-7-6)	7/9/8						
- 25			Tan LIMESTONE	5/7/11						
30				15/20/12			•			
Re	marks	Bo	prehole Grouted	Casin	g Lengt	h				_ _ 



•			DES 045			BORING N									
					Park, Hillsbo	rough County	, Florida	F			10111				—
Comp			e Plate I			Denth To		Forema	an		W.M	<u> </u>	—		
De	pth _		35.2'	Date _	3/15/04	Depth To Water	2.8'	Time		Dat	е	3/1	<u>5/0</u>	4	
ОЕРТН, FT	SYMBOL	SAMPLES	SURF.	S EL: +13	SOIL DESC	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO	STA ENETR/ OWS/F SAMPLI AMMER	ATIO T. ON ER-1	N TE 1 2" 40 L " DR	0.I B.	). •	20
25		lſ		MESTON									Т		Й
35		M	1011 551	VILOTOI.	( <u> </u>	, , , , , , , , , , , , , , , , , , ,		50*	* 0.5' P	enetrati	on I		T	П	1
													T		
													I		
- 40 -													_		Щ
													_		$\coprod$
													╀		4
													+	$\vdash$	$\frac{1}{1}$
													╁	H	$\mathbb{H}$
45												<u> </u>	+	H	H
	·												+		H
														$\vdash$	H
														$\vdash$	
- 50															
50															
···															
- 55 -													$\sqcup$	4	$\coprod$
												_	$\downarrow \downarrow$	-	
										··· ·			+	+	$\vdash$
													+	-	$\mathbb{H}$
													+	+	H
- 60											_		+	_	H
													$\dagger \dagger$		$  \cdot  $
						\$							$\Box$		
- 65														1	
00															
													$\sqcup$	_ _	Щ
Ren	narks	Bo	rehole (	Grouted					<u>* </u>	·	1		<del></del> L	!_	卄
								Cas	sing Len	gth					_

		-	DES 045101 BORING NO. B-8						
		***************************************	ty Line Industrial Park, Hillsborough County, Florida Plate I	Foreman		W.M			
Comp	_		Depth To	roreman		101.00	·		
De	pth _	<u></u>	26.5' Date 3/15/04 Water 4.1' 7	Γime		Date	3/15	5/04	
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +138.8+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PEN BLOV SA	STANDA ETRATIO VS/FT. ON MPLER-1 IMER, 30	N TE 1 2" ( 40 LE " DR	D.D. 3.	
0	1612		Dark gray slightly organic Fine SAND with roots				1	ΤÏ	ΤŬ
- 10 - 15 - 20 - 25			(SP) (A-3) Light grayish-brown Fine SAND (SP) (A-3) Dark brown Fine SAND with finely divided organic material (SP) (A-3)  Brown slightly silty Fine SAND (SP-SM) (A-3) Loose brown silty Fine SAND with trace of cemented sand (SM) (A-2-4) Medium dense grayish-brown clayey Fine SAND (SC) (A-2-6) Medium dense brown to grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)  Very stiff green CLAY (CH) (A-7-6)  Stiff gray phosphatic, sandy CLAY (CH) (A-7-6)  Tan LIMESTONE	4/5/6 6/8/7 5/5/7 4/7/8 5/6/7					
				-				- -	H
- 30 -				_					H
				_					
Rer	narks	Bo	rehole Grouted	Casin	g Lengt	h			<u> </u>

£ ~			BORING NO. B-9								
• -			ty Line Industrial Park, Hillsborough County, Florida Plate I	Forema	an W.M.						
Com	oletion	1	Depth To	<del></del>		_					
De	pth		40.3' Date <u>3/15/04</u> Water <u>3.1'</u>	Time	Date 3/15/04						
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +138.8+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP	នក					
0	<b>建筑</b>	ľ	Dark gray slightly organic Fine SAND with roots		10 20 40 000						
5	ESE Estate Estate		(SP) (A-3) Dark brown to brown Fine SAND with finely divided organic material (SP) (A-3) Brown Fine SAND (SP) (A-3) Brown slightly silty Fine SAND (SP-SM) (A-3)								
			Loose brown silty Fine SAND (SM) (A-2-4)	3/3/4							
			Medium dense light grayish-brown Fine SAND (SP) (A-3)	8/10/14	•						
10			Medium dense to dense grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)	12/13/14		Ŧ					
				18/21/20		1					
- 15			Dense grayish-brown clayey Fine SAND (SC) (A-2-6)	14/18/17							
20			Medium dense to loose green to light gray and green phosphatic, clayey Fine SAND (SC) (A-2-7)	8/9/8							
25				5/5/4							
30		7	Tan dolomitic LIMESTONE	3/11/50*	* 0.5' Penetration						
			Very stiff tan dolomitic SILT (ML) (A-6)	†		$\forall$					
Rei	Remarks Borehole Grouted  Casing Length										



			DES 045				BORING	NO. <u>B-9</u>				·			(40					
Proje	ct C	our	ity Line I	ndustria	l Park, Hill	sbor	rough Count	y, Florida												
			e Plate I	****				· · · · · · · · · · · · · · · · · · ·	Forem	an	·····		N.M							
De	pletio pth _	n	40.3'	Date	3/15/0	)4	Depth To Water	3.1'	Time			Date	·	3/	/15/	/04				
ОЕРТН, FT	SYMBOL	SAMPLES	SURF.			SCI	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O. SAMPLER-140 LB. HAMMER, 30" DROP						N TEST I 2" O.D. 40 LB.				
35			Very sti	ff tan do	lomitic SIL	.T (I	ML) (A-6)							Ż	$oxed{\Box}$	Ĭ	Ť			
40			Tan LIM	1ESTON	VE.	*****		· · · · · · · · · · · · · · · · · · ·	15/10/15											
40									50*	* 0.3	Pene	tratio	n			1				
50 -																				
60 -			*																	
65																				
Ren	narks	Bo	rehole G	routed					Cas	ing Le	ngth									



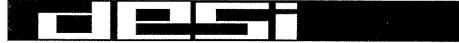
	HAND AUGI			G					
PROJEC	County Line Industrial Park	CLIEN.		Genes	is Group				
	Hillsborough County, Florida Project No.: DES 045101	WATE	RTABL	***		DATE: 2/24/04			
TECHNIC		DATE:	2/	24/04	COMPLET	TION DEPTH: 6.0'			
LOCATIO	ON: See Plate I	TEST	UMBER	₹:	-10				
	35011001		T Z	15-10					
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL		REMAR	KS			
	Light grayish-brown Fine SAND	0		Surface	e Elevatio	n: Unknown			
Ŷ.	(SP) (A-3)			(Note:	B-10 is lo	cated on top			
`						nately 12' high.)			
	Brown slightly silty Fine SAND								
	(SP-SM) (A-3)	<b>+ 1</b> ·		<u> </u>					
			linei.						
	D								
	Brown and gray Fine SAND (SP) (A-3)	- 2							
				•					
		<u> </u>							
		3 -							
	4.								
		ļ		Property of the second					
				The state of the s					
		4 -							
		5 -							
	٧,								
		<del> </del> 6	****	** Ground	duator no	t encountered			
				Ground	hin depth				
Ī					•				
- 1		<b>├</b> 7 <b>-</b>							



		-	DES 045101 BORING NO. B-	11	
			ity Line Industrial Park, Hillsborough County, Florida	Foreman	W.M.
Com	pletio	n	Depth To		V V , IVI.
De	pth		40.5' Date <u>3/12/04</u> Water <u>3.6'</u>	Time	Date 3/12/04
ОЕРТН, FT		SAMPLES	SOIL DESCRIPTION SURF. EL: +138.4+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP
0	***		Gray Fine SAND with roots and trace of finely		
- 5			divided organic material (SP) (A-3) Light brownish-gray Fine SAND (SP) (A-3) Dark brown Fine SAND with finely divided organic material (SP) (A-3) Light brown Fine SAND (SP) (A-3) Light brown silty, slightly clayey Fine SAND (SM) (A-2-4)	4/9/10	
		Н	Medium dense gray clayey Fine SAND (SC) (A-2-6)	1 4/9/10	
10			(SO) (A-2-0)	9/12/13	
			Medium dense grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)	6/11/10	
15			Medium dense grayish-brown to very light gray Fine SAND (SP) (A-3)	8/9/12	
- 20 -				7/10/12	
- 25 -			Very stiff green phosphatic, sandy CLAY (CH) (A-7-6)	7/9/11	
30 -			Hard light gray sandy CLAY with seams of LIMESTONE (CH) (A-7-6)	18/23/13	
			Hard tan dolomitic SILT (ML) (A-6)		
Ren	narks	Во	rehole Grouted	Casin	g Length



Project No. DES 045101 BORING NO. B-11 Project County Line Industrial Park, Hillsborough County, Florida Location See Plate I Foreman W.M. Depth To Completion 3/12/04 Depth 40.5' Date Water 3.6 Time 3/12/04 Date BLOWS ON SAMPLER PER 6" OR PEN. STR. STANDARD 닙 SYMBOL **PENETRATION TEST** SOIL DESCRIPTION DEPTH, BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP SURF. EL: +138.4+/-' 40 60 80 Hard tan dolomitic SILT (ML) (A-6) 35 35/47/50\* \* 0.2' Penetration Tan LIMESTONE 40 50\* \* 0.5' Penetration 45 50 55 60 65 Remarks Borehole Grouted Casing Length



1		DES 045101 BORING NO. B-12			
-	~~~	ounty Line Industrial Park, Hillsborough County, Florida See Plate I	Foreman	W.M	·
Com	_ oletion	Depth To	<del></del>		
De	pth _	41.5' Date 3/16/04 Water 1.2'	Time	Date	3/16/04
DEPTH, FT	SYMBOL	SOIL DESCRIPTION  SURF. EL: +135.9+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDA PENETRATIO BLOWS/FT. ON SAMPLER-1 HAMMER, 30	N TEST N 2" O.D. 40 LB.
0		Dark gray slightly organic Fine SAND		10 20	40 80 80
5	1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1	(SP) (A-3) Brown Fine SAND (SP) (A-3) Light brown Fine SAND (SP) (A-3) Very light brown slightly silty Fine SAND (SP-SM) (A-3)			
	1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Loose grayish-brown slightly silty Fine SAND (SP-SM) (A-3)	3/4/4	•	
- 10 -		Medium dense brown silty Fine SAND (SM) (A-2-4)	5/7/13		
		Medium dense light grayish-brown Fine SAND	7/9/9		
4 5		(SP) (A-3) Dense to medium dense grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)	12/18/14		
- 15 -			10/11/17	/	
20 -		Medium dense gray clayey Fine SAND (SC) (A-2-6)			
			4/8/9		
- 25			12/11/12		
- 30 -		Very stiff green phosphatic, sandy CLAY with seams of Coarse SAND (CH/SP) (A-7-6)	3/7/9		
		Tan LIMESTONE	1		
Ren	narks	Borehole Grouted	Casing	g Length	



			BORING NO. <u>B-12</u>	2					-		
			ty Line Industrial Park, Hillsborough County, Florida	Temboo							
			Plate I	Forema	an		W.M				
De	oletio	n	Depth To 41.5' Date 3/16/04 Water 1.2'	Time		Date	е	3/	16/	04	
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +135.9+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP						
- 35 -			Tan LIMESTONE	50*						I	Ň
- 40 - 45 - 50 - 60			Very stiff tan dolomitic SILT (ML) (A-6)	9/14/12	* 0.5' F	enetrati	on				
								$\dashv$	+	$\dagger \dagger$	++
									1		$\prod$
Ren	narks	Во	rehole Grouted	<u> </u>	ine I	out b	1			<u> </u>	<u>Т</u>
l				Cas	ing Len	gtn					



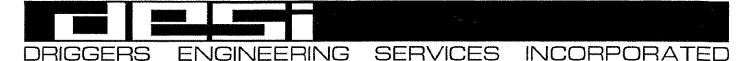
		****	DES 045101 BORING NO. B-13	3								
-	~~~~		ty Line Industrial Park, Hillsborough County, Florida Plate I	Foremar	<u> </u>	W.N	1					
Comp	letio	า	Depth To									
De	pth _		21.5' Date <u>3/17/04</u> Water 2.6'	Time		Date _	3/1	7/04	1			
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +135.0+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENE BLOW SAM	RD I TEST 2" O.D. 0 LB. DROP 40 60 80						
0	# \$P\$	ľ	Gray Fine SAND with roots (SP) (A-3)	:	Ť	20	TŤ	ΤŤ				
- 5 -			Dark brown Fine SAND with finely divided organic material (SP) (A-3) Light brown Fine SAND (SP) (A-3) Gray and orange silty, slightly clayey Fine SAND (SM) (A-2-4) Very light brown silty Fine SAND (SM) (A-2-4) Very light brown silty, clayey Fine SAND (SM-SC) (A-2-4) Loose grayish-brown clayey Fine SAND (SC) (A-2-6) Medium dense brown slightly silty Fine SAND (SP-SM) (A-3) Medium dense to dense gray silty, slightly clayey Fine SAND (SM) (A-2-4)	1/4/5 4/5/7 9/12/15								
15 -			Medium dense gray clayey Fine SAND (SC) (A-2-6)	9/10/12		1						
- 20 -			Loose gray and dark green silty, slightly clayey Fine SAND (SM) (A-2-4)	3/4/5	•							
- 30 -												
Ren	RemarksCasing Length											



_			DES 045101 BORING NO.	***************************************	_					
			ty Line Industrial Park, Hillsborough County, Flore Plate I	rida	Foreman	W.M.				
Com	pletio	3	Depth To	ı تات						
De	pth _	<u> </u>	21.5' <b>Date</b> 3/17/04 <b>Water</b> 5.	4 1	ime	Date 2/23/04				
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +134.7+/-'	SCRIPTION  SCRIPTION  SCRIPTION  SCRIPTION  SCRIPTION  SCRIPTION  SCRIPTION  SCRIPTION  BLOWS/FT. ON 2"  SAMPLER-140 II HAMMER, 30" DI HAMMER, 30" DI 10 20 44						
0	26.00	1	Gray to dark gray Fine SAND with roots			10 20 40 60 80				
- 5			(SP) (A-3)  Dark brown Fine SAND with finely divided organic material (SP) (A-3)  Light brown Fine SAND (SP) (A-3)  Very light brown silty, slightly clayey  Fine SAND (SM) (A-2-4)		-					
			Loose brown slightly silty Fine SAND		3/4/5					
	-1,'(') ',' ','  -1,'1,'1,'1,'  -2,'1,'1,'1,'		(SP-SM) (A-3)		0/4/0					
			Medium dense grayish-brown Fine SAND (SP) (A-3)		5/11/14					
10			Dense gray silty Fine SAND (SM) (A-2-4)		8/16/17					
	X		Medium dense grayish-brown silty, slightly clayey Fine SAND (SM) (A-2-4)		9/11/14					
15		<b>,</b>	Very stiff green and brown sandy CLAY (CH) (A-7-6)		5/7/12					
- 20			Medium dense gray and dark gray silty, slightly clayey Fine SAND (SM) (A-2-4)		5/7/8					
0.5										
25										
					-					
- 30										
	<u> </u>	Щ								
Rei	marks			······································	Casir	ng Length				



			DES 045101 BORING NO. B-1	5					
			ty Line Industrial Park, Hillsborough County, Florida Plate I	Foreman	<del></del>	W.M			
Com	oletion	<u> </u>	Depth To	····					
De	pth _		41.5' Date <u>3/17/04</u> Water 4.6'	Time	D:	ate _	2/23	3/04	<u> </u>
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +134.6+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENET BLOWS/ SAMP	RATIO FT. OI LER-1	ANDARD KATION TEST FT. ON 2" O.I LER-140 LB. R, 30" DROF 20 40 6		,
0	\$\\\\_{\text{5}}\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ľ	Gray Fine SAND with roots and trace of finely				TŤ	$\check{\sqcap}$	Ή
- 5	Francisco de la constanta de l		divided organic material (SP) (A-3) Dark brown Fine SAND with finely divided organic material (SP) (A-3) Light brown Fine SAND (SP) (A-3) Orange slightly silty Fine SAND (SP-SM) (A-3) Very loose very light brown to very light grayish-brown slightly silty Fine SAND (SP-SM) (A-3)	2/2/2	•				
- 10 -			Medium dense brown silty Fine SAND (SM) (A-2-4)	9/7/10		1			
10			Medium dense light gray Fine SAND (SP) (A-3)	4/10/10				H	$\prod$
	1		Dense grayish-brown slightly silty Fine SAND (SP-SM) (A-3)	11/21/22			•		
- 15 -			Dense gray silty, slightly clayey Fine SAND (SM) (A-2-4)	9/17/16			•		
- 20 -			Very stiff light gray sandy CLAY (CH) (A-7-6)	6/8/7					
- 25 -			Loose light gray and dark gray phosphatic, clayey Fine SAND (SC) (A-2-7)	4/5/4				- Indiana	
- 30 -	And the second s		Stiff grayish-tan dolomitic SILT (ML) (A-6)	5/6/7					
			Tan LIMESTONE				$\vdash$	H	+
Rer	narks	Bc	orehole Grouted	Casin	g Length _		<u> </u>	<u></u>	<del></del>



**BORING NO. B-15** Project No. DES 045101 Project County Line Industrial Park, Hillsborough County, Florida Location See Plate I W.M. Foreman Depth To Water Completion 41.5' Date 3/17/04 4.6' Date 2/23/04 Depth Time BLOWS ON SAMPLER PER 6" OR PEN. STR. **STANDARD** ᇤ SYMBOL **PENETRATION TEST** SOIL DESCRIPTION DEPTH, BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP SURF. EL: +134.6+/-1 20 40 60 80 Tan LIMESTONE 35 10/18/35 Medium dense tan calcareous, clayey Fine SAND (SC) (A-2-6) 40 2/6/8 45 50 55 60 65 Remarks Borehole Grouted **Casing Length** 



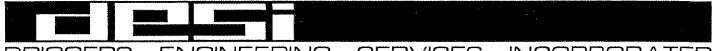
Project No. DES 045101 BORING NO. B-16  Project County Line Industrial Park, Hillsborough County, Florida												
-			e Plate I	Foreman		W.M	·					
Comp De	oletion pth_	1	Depth To 40.8' Date <u>3/16/04</u> Water <u>0.6'</u>	Time		Date	3/16	/04				
рертн, гт	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +135.9+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENE BLOW SAN	1 2" C 40 LB " DRC	RD N TEST I 2" O.D. 40 LB. ' DROP 40 60 8					
0	1313	ſ	Dark gray slightly organic Fine SAND			20		ΙŤ	ĬΪ			
- 5			(SP) (A-3) Grayish-brown Fine SAND (SP) (A-3) Dark brown silty Fine SAND with finely divided organic material (SM) (A-2-4) Brown Fine SAND (SP) (A-3) Grayish-brown silty Fine SAND (SM) (A-2-4)									
			Medium dense light grayish-brown silty Fine SAND (SM) (A-2-4)	5/10/11		•						
40			Medium dense gray silty, slightly clayey Fine SAND (SM) (A-2-4)	9/8/12								
- 10 -			Medium dense grayish-brown to brown silty Fine SAND (SM) (A-2-4)	8/11/14								
				7/11/14		•						
- 15 -			Medium dense to dense light gray to grayish-brown Fine SAND (SP) (A-3)	9/15/21								
- 20 -			Medium dense dark grayish-brown to gray silty Fine SAND (SM) (A-2-4)	10/11/10								
- 25 -				10/9/11								
- 30 -			Hard green and brown sandy CLAY (CH) (A-7-6)	7/15/28								
		_	Hard tan dolomitic SILT (ML) (A-6)									
Rer	narks	LL Bo							Щ			
	Remarks Borehole Grouted Casing Length											



Project No. DES 045101 BORING NO. B-16 Project County Line Industrial Park, Hillsborough County, Florida															
			ity Line Indust e Plate I	trial P	ark, Hillsbo	rough County	, Florida	Forema	n		W.M				
Com	oletio	า			0/40/04	Depth To Water	0.01						4010		_
ne	pth _		40.8' Date	<del></del>	3/16/04	water	0.6'	Time		Date		3/	16/0	)4	
ОЕРТН, FT	SYMBOL	SAMPLES	SURF. EL: +			RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BL S H/	STAI ENETRA OWS/F SAMPLI AMMER 0 2	ATIO T. OI ≣R-1	N T V 2" 40 L " DI	' O.I _B.	D. P	80
35			Hard tan dol	omitic	SILT (ML	) (A-6)							$\prod$	$\blacksquare$	$\prod$
- 40			Tan LIMEST	ONE			***************************************	7/12/34	* 0.3' P	enetrati	on				
- 50 - 60 - 65 -															
													_	$\prod$	
Remarks Borehole Grouted															
Remarks Borehole Grouted  Casing Length															



1 -	Project No. DES 045101 BORING NO. B-17 Project County Line Industrial Park, Hillsborough County, Florida									
			e Plate I	Forema	an	W.M.				
Com <sub>l</sub> De	pletion pth	1	Depth To 40.8' Date <u>3/16/04</u> Water <u>0.3'</u>	Time	Date	3/1	6/04	4		
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +134.1+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STAN PENETRA BLOWS/F1 SAMPLE HAMMER 10 2	. ON 2" R-140 L , 30" DR	O.D B.	),		
0	£3.55	Í	Dark gray slightly organic Fine SAND with roots		10 2.					
		$\mathbf{F}$	\(SP) (A-3) \Light brown and gray Fine SAND (SP) (A-3)							
			Light grayish-brown Fine SAND (SP) (A-3)				+	+		
			Light gray silty Fine SAND (SM) (A-2-4)				+			
- 5 -			Light gray Fine SAND (SP) (A-3)							
	X X X X X X X X X X X X X X X X X X X		Medium dense gray silty, slightly clayey Fine SAND (SM) (A-2-4)	8/11/9						
4.0			Medium dense brownish-gray silty Fine SAND (SM) (A-2-4)	9/14/9						
- 10 -	X X X X X X X X X X X X X X X X X X X		Medium dense brownish-gray silty, slightly clayey Fine SAND (SM) (A-2-4)	11/13/16			+			
				10/13/14						
15	(		Very dense to dense dark grayish-brown silty Fine SAND (SM) (A-2-4)	17/26/28			•			
- 20 -			Very stiff green CLAY (CH) (A-7-6)	11/12/20						
- 25 -				8/12/14						
- 30 -			Medium dense green and gray phosphatic, clayey Fine SAND (SC) (A-2-7)	7/11/12						
			Very stiff green phosphatic, sandy CLAY (1)							
Rer	Remarks Borehole Grouted (1) (CH) (A-7.6) Casing Length									
(1) (CH) (A-7-6) Casing Length										



		~	DES 045	·····		BORING I									
			<u>ity Line I</u> e Plate I	ndustria	al Park, Hillsb	orough County	/, Florida	Forema	man W.M.						
Comp	oletio	<u> </u>		<del></del>		Depth To				······					<del></del>
De	pth _		40.8'	Date	3/16/04	Water	0.3'	Time	· · · · · · · · · · · · · · · · · · ·	Date	<u> </u>	3/	16/	04	
DEPTH, FT	SYMBOL	SAMPLES	SURF.		SOIL DESC	CRIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BL ;	STA ENETRA OWS/F SAMPLI AMMER	ATIO T. OI ER-1	N T V 2" 40 I " D	' O. LB.	D. P	80
- 35 -					phosphatic,	sandy CLAY					<b> </b>		<del>   </del>	_	
			(CH) (/		NE			8/10/10							
40		7						35/50*	* 0.3' F	enetrati	on				
- 45 - - 50 - - 55 - - 60 -															
Rar	narke	LL R	orehole (	Frouted							I			L	Щ
	Remarks Borehole Grouted Casing Length														



Project No. DES 045101 BORING NO. B-18									
			ty Line Industrial Park, Hillsborough County, Florida			10131			
	non <u>s</u> oletion		Plate I  Depth To	Forema	n	W.M			
De	pth _	•	41.5' Date <u>3/16/04</u> Water <u>0.3'</u>	Time		Date	3/16	/04	
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +133.8+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PEN BLOV SA	STANDA ETRATIC VS/FT. OI MPLER-1 IMER, 30	N TE: N 2" C 140 LE D" DR(	D.D. 3. OP	. 80
0	=====		Dark gray organic Fine SAND (SP-SM/Pt) (A-8)			20	10	$\sqcap$	Щ
- 5			Yellowish-tan Fine SAND (SP) (A-3) Orangish-brown slightly silty Fine SAND with trace of cemented sand (SP-SM) (A-3) Tan Fine SAND (SP) (A-3)  Very loose to medium dense gray						
			to grayish-brown silty Fine SAND (SM) (A-2-4)	3/1/2 6/7/12					
- 10 -			Dense dark grayish-brown to grayish-brown	12/15/22			•		
			silty, slightly clayey Fine SAND (SM) (A-2-4)	11/15/18			<b>/</b>		
- 15 -			Medium dense grayish-brown phosphatic, clayey Fine SAND (SC) (A-2-7)	8/10/16				100	
- 20 -			Tan dolomitic LIMESTONE	11/7/34					
- 25 -			Very stiff tan sandy CLAY (CH) (A-7-6)	9/10/13		/			
30 -			Very stiff to hard tan dolomitic SILT (ML) (A-6)	8/12/7					
Remarks Borehole Grouted  Casing Length									



Project No. DES 045101 BORING NO. B-18									
		unty Line Industrial Park, Hillsborough County, Florida							
		ee Plate I	Foreman	<u> </u>	V.M.				
De	pletion pth	Depth To 41.5' Date 3/16/04 Water 0.3'	Time	Date	3/16/04				
DEPTH, FT	SYMBOL	SOIL DESCRIPTION  SURF. EL: +133.8+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENETRA BLOWS/FT SAMPLE	DARD TION TEST . ON 2" O.D. R-140 LB. 30" DROP 40 60 80				
- 35 -		Very stiff to hard tan dolomitic SILT							
- 40		(ML) (A-6)	7/15/44						
			7/13/44						
- 45 -									
		·							
- 50 -									
- 55 -									
- 60 -									
65									
Ren	Remarks Borehole Grouted Casing Length								



חם יייי	· T.	IIAIII	AUGER					
PROJEC	County Line Industri	al Park		CLIENT: Genesis Group				
	Hillsborough County,	Florida		WATER	TABLE:	+1.0'	DATE	3/2/04
TECHNI	Project No.: DES 0	<del>4</del> 3101		DATE:			COMPLETION DE	PTH:
LOCATI	ON:			TEST NI	3/2/04 JMBER:		0.0	
	See Plate I				<del> </del>	В	-19	
ELEV. (FT)	DESCRIP	TION		DEPTH (FT)	SYMBOL		REMARKS	•
		-	٠.	0		Surface	Elevation: Un	known
						(Not	te: B-19 is local existing wetland	ed
							ornoung manarra	·/
				- 1 -				
							•	
					- Livering			
				- 2 -	***************************************			
					Avenue and		S	÷
		•		- 3 -				
د								
-								
				- 4 -				
					To the second se			
				- 5 -				
							•	
			÷	- 6 -				
·								
				,,				
				- 7 -	2			



	HAND AUGER BORING LOG									
PROJEC	:T:	County Line Industrial Park		CLIENT	:	Canaci	s Group			
		Hillsborough County, Florida Project No.: DES 045101	*		TABLE:	+1.2'	DATE: 3/2	2/04		
TECHNIC	CIAN:	T.A.		DATE:	3/2		COMPLETION DEPTH 0.0'	:		
LOCATIO	ON:	See Plate I		TEST.N	UMBER:		20			
ELEV. (FT)		DESCRIPTION		DEPTH (FT)	SYMBOL		REMARKS			
				- 1 - 2 -		(Not	Elevation: Unknoe: B-20 is located existing wetland.)	wn		
				- 4 -						
				- 6 -						



	HAND AUGER BORING LOG									
PROJEC'	County Line Industrial Park	CLIENT		Genesis Group						
	Hillsborough County, Florida Project No.: DES 045101	WATER	TABLE	.E: DATE:						
TECHNIC	CIAN: T.A.	DATE:	3/2	COMPLETION DEPTH:   0.0'						
LOCATIO	DN: See Plate I	TEST N	UMBER	R: B-21						
ELEV. (FT)	DESCRIPTION	DEPTH (FT)	SYMBOL.	REMARKS						
		0		Surface Elevation: Unknown  (Note: B-21 is located in existing wetland.)						
		- 1 -								
		2 -								
		- 3 -								
		- 4 -								
		- 6 -								



1.			HAND AUGER		*	G ·			,
PROJEC	PT:	County Line Industrial Park		CLIENT	:	Genes	is Group		
		Hillsborough County, Florida Project No.: DES 045101	;	WATER	TABLE	: +1,3'		DATE:	/2/04
TECHNIC	CIAN:	T.A.		DATE:	3/2	2/04	COMPLE	TION DEPT 0.0'	H:
LOCATIO	ON:	See Plate I		TEST N	UMBER		-22		
ELEV. (FT)		DESCRIPTION		DEPTH (FT)	SYMBOL		REMAR	RKS	-
	-	,		0		Surface	e Elevatio	on: Unkn	own
	·				A STATE OF THE STA	(No in	te: B-22 existing v	is located wetland.)	
				- 1 -					
				2 -	-				
				3 -					
				- 4 -					
		•		- 6 -					
			·	- 7 -					



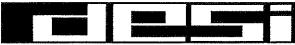
	Project No. DES 045101 BORING NO. B-23									
			ty Line Industrial Park, Hillsborough County, Florida	Foreman	W.M.					
Com	_ pletion	1	Depth To	<del></del>						
De	pth _		21.5' Date <u>3/12/04</u> Water <u>3.3'</u>	Time	Date 3/12/04					
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +139.4+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP 10 20 40 60 80					
0	7-5		Gray to dark gray Fine SAND with roots and							
- 10			trace of finely divided organic material (SP) (A-3)  Dark grayish-brown Fine SAND with finely divided organic material and roots (SP) (A-3)  Dark reddish-brown weakly cemented Fine SAND with finely divided organic material (SP) (A-3)  Light brown Fine SAND (SP) (A-3)  Very light brown slightly silty Fine SAND (SP-SM) (A-3)  Brown slightly silty Fine SAND (SP-SM) (A-3)  Loose to medium dense dark brown silty Fine SAND with finely divided organic material (SM) (A-2-4)  Medium dense brown silty Fine SAND	2/3/4 3/4/10 10/10/14						
- 15 -	KXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		Medium dense brown slity Fine SAND (SM) (A-2-4) Medium dense very light gray Fine SAND (SP) (A-3) Medium dense gray silty,	13/14/12						
- 20	N.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X.X		slightly clayey Fine SAND (SM) (A-2-4)  Medium dense dark gray silty Fine SAND (SM) (A-2-4)	13/13/11						
- 25 -										
- 30 -	**************************************									
	LI									
Rer	Remarks Casing Length									



Project No. DES 045101 BORING NO. B-24												
	***************************************		ty Line Industrial Park, Hillsborough County, Florida Plate I	Forema	an	W.N						
Com	pletio	1	Depth To	<del></del>					·			
De	pth _		21.5' Date <u>3/15/04</u> Water <u>3.8'</u>	Time		Date _	3/1	5/0	4			
рертн, ғт	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +138.1+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO\	STANDA ETRATIONS/FT. COMPLER- MPLER, 3	ON TI ON 2" 140 L 0" DF	O.D .B. ROP	).			
0			Dark gray to gray Fine SAND with roots and									
	355		trace of finely divided organic material (SP) (A-3)					$\perp$				
			Dark reddish-brown weakly cemented Fine SAND				++	-	++			
			with finely divided organic material (SP) (A-3)					$\dashv$				
- 5			Light brown Fine SAND (SP) (A-3)									
			Loose gray silty, slightly clayey Fine SAND	2/4/6								
			(SM) (A-2-4)		\\			_	$\bot \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$			
			Medium dense grayish-brown silty Fine SAND (SM) (A-2-4)	3/5/6	•				+			
10			Medium dense to dense light brown			$\rightarrow +$	+	$\dashv \dashv$	+			
	reigh. Teach		slightly silty Fine SAND (SP-SM) (A-3)	5/9/11								
				8/12/19								
		$H_{\perp}$										
15			Dense grayish-brown clayey Fine SAND (SC) (A-2-6)				111	$\dashv$				
			(00) (1/2 0)	13/16/19			<del> </del>					
							H	+	+++			
			Medium dense light gray and green phosphatic,									
- 20			clayey Fine SAND (SC) (A-2-7)			/						
20				7/8/10								
	7.2.2.2	$\parallel$	**************************************	<del></del>			-	- -				
							-	-				
								++				
25								11				
			4.1				11	4	444			
							++	$\dashv$				
- 30								++	+			
	-							+				
Rei	Remarks											
		Casing Length										



Project No. DES 045101 BORING NO. B-25 Project County Line Industrial Park, Hillsborough County, Florida										
			Plate I	Foreman	W.M.					
Comp De	oletion pth_	1	Depth To 21.5' Date <u>3/17/04</u> Water <u>1.1'</u>	Time	Date3/17/04					
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +135.8+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP					
0			Dark gray organic, silty Fine SAND with roots							
- 5 -	11111111 414444 4141411111111111111111		\(\((\sum_{Pt}\)\) (A-8) Dark brown silty Fine SAND with finely divided organic material (SM) (A-2-4) Grayish-brown silty Fine SAND (SM) (A-2-4)							
	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (		Medium dense light brown slightly silty Fine SAND (SP-SM) (A-3)	5/7/9						
		7	Medium dense gray to gray and brown silty, slightly clayey Fine SAND (SM) (A-2-4)	10/10/7						
10 -			Signly dayby File of the Colly (FEE F)	11/13/11						
	N KIKI		Dense light grayish-brown Fine SAND (SP) (A-3)	15/16/17	•					
- 15 -			Medium dense dark grayish-brown silty Fine SAND (SM) (A-2-4)	12/13/13						
- 20 -				7/11/13	•					
				***************************************						
- 25 -										
- 30 -										
Dav	narks	Ш								
rer	Remarks Casing Length									



Proje	ct No.		BORING NO. <u>B-26</u>							
			ty Line Industrial Park, Hillsborough County, Florida							_
	_		Plate I	Foremar	ו	<u>W.</u>	M			
De	oletio: pth	)	Depth To 21.5' Date 3/17/04 Water 0.5'	Time		Date	3/1	17/0	4	
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: Unknown **	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO SA	STAND NETRATI WS/FT. ( AMPLER MMER, 3	ON T ON 2" -140 L 30" DI	O.I .B.	), •	
0	VA TIE		2" Root Mat		10	20	71	$\top$		Ť
- 5 - 10 - 15 - 20 - 25 - 30 -			Dark grayish-brown slightly silty Fine SAND with finely divided organic material (SP-SM) (A-3) Grayish-brown slightly silty Fine SAND (SP-SM) (A-3) Orangish-brown slightly silty Fine SAND with trace of cemented sand (SP-SM) (A-3) Grayish-brown silty Fine SAND (SM) (A-2-4) Medium dense brown silty Fine SAND with roots (SM) (A-2-4) Medium dense light grayish-brown slightly silty Fine SAND (SP-SM) (A-3) Dense dark brown Fine SAND with finely divided organic material (SP) (A-3) Dense very light gray Fine SAND (SP) (A-3) Dense grayish-brown silty Fine SAND (SM) (A-2-4) Dense gray silty, slightly clayey Fine SAND (SM) (A-2-4) Very stiff green phosphatic, sandy CLAY with limestone fragments (CH) (A-7-6)	3/6/6 3/7/8 10/14/19 14/21/22 14/15/17						
Rer	marks	Bc	rehole Grouted  No topographical information available in this area	Casi	ng Leng	th				
l			TTO TOPOGRAPHICAL INICIHATION AVAILABLE III IIIIS ALEA		ng reng					-



### ENGINEERING SERVICES INCORPORATED DRIGGERS

1		_	BORING NO. B-27								
			ty Line Industrial Park, Hillsborough County, Florida Plate I	Foreman		,	W.M				·
Com	pletion pth _	1	Depth To	Time		Date	····	•	17/	04	
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +134.1+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLC S	STAI NETRA DWS/FI AMPLE MMER	ATIO F. OI ER-1	N T N 2" 40 I " D	O. LB. RO	D.	80
0	N : 7	ľ	Gray Fine SAND with trace of roots and trace			<u>,                                    </u>			Ť	Ĭ	Ť
- 5			of finely divided organic material (SP) (A-3) Brown Fine SAND (SP) (A-3) Light brown Fine SAND (SP) (A-3) Orange and gray silty Fine SAND (SM) (A-2-4) Light brown slightly silty Fine SAND (SP-SM) (A-3) Medium dense grayish-brown silty,	7/7/6							
			slightly clayey Fine SAND (SM) (A-2-4)  Medium dense light gray Fine SAND (SP) (A-3)	5/6/10							
- 10				4/9/10							
NUT-			Medium dense grayish-brown silty Fine SAND (SM) (A-2-4)	6/8/10							
15				7/11/11							
- 20			Dense grayish-green clayey Fine SAND (SC) (A-2-6)				-				
				9/17/16							
25											
WI ATTERNATURE AND A STATE OF THE STATE OF T											
30											
Rei	marks				t-						
	TOTAL CHILL			Casing	Leng	gth					



		_	DES 045101		BORING N		28						-	***************************************
1			ty Line Industrial F Plate I	ark, Hillsbo	rough County	, Florida	Forema	an		W.M				
Comp	oletio	า		T	Depth To								***************************************	
De	pth _		21.5' Date	3/17/04	Water _	2.2'	Time		Date	e	3/1	7/0	14	
DEPTH, FT	SYMBOL	SAMPLES	SC SURF. EL: +135.	OIL DESC	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BL H	STA ENETRA OWS/F SAMPLI AMMER	ATIO T. OI ER-1	N TI N 2" 40 L )" DF	O.I .B.	D. P	80
0	7:13:		Dark gray Fine Sa	AND with tra	ace of roots							T	П	П
- 5			(SP) (A-3) Dark brown Fine organic material Light brown Fine Grayish-brown sil (SM) (A-2-4) Light grayish-brown (SP-SM) (A-3)	(SP) (A-3) SAND (SP) ty Fine SAN	(A-3) ID with cemer		4/6/10							
- 10 -			Medium dense lig Fine SAND (SP-5 Medium dense gr Medium dense ve	SM) (A-3) ay silty Fine	SAND (SM)	(A-2-4)	8/10/11			1				
			(SP) (A-3)  Dense gray silty F				11/15/24				•			
15			Dense gray claye	y Fine SAN	D (SC) (A-2-	6)	12/17/14							
- 20 -			Medium dense gr clayey Fine SANE				6/5/7		•					
- 25														
				to a			1000 A. C.							
30 -														
Rer	narks						Cas	ing Ler	igth _					<u>#</u> - =



Project No. DES 045101 BORING NO. B-29 Project County Line Industrial Park, Hillsborough County, Florida Location See Plate I Foreman W.M. Completion Depth To Depth 21.5' Date 3/17/04 Water 2.4 Time Date 3/17/04 BLOWS ON SAMPLER PER 6" OR PEN. STR. **STANDARD** F SYMBOL PENETRATION TEST SOIL DESCRIPTION DEPTH, BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP SURF. EL: +136.0+/-1 20 40 60 80 Dark gray Fine SAND (SP) (A-3) Dark brown slightly silty Fine SAND with finely divided organic material (SP-SM) (A-3) Grayish-brown Fine SAND (SP) (A-3) Dark grayish-brown silty Fine SAND (SM) (A-2-4) Dark brown silty Fine SAND with finely divided organic material (SM) (A-2-4) 2/3/3 Loose dark brown slightly silty Fine SAND with finely divided organic material 3/4/10 (SP-SM) (A-3) Medium dense dark brown silty Fine SAND 10 with finely divided organic material 6/12/18 (SM) (A-2-4) Dense dark brown slightly silty Fine SAND 9/15/26 (SP-SM) (A-3) Medium dense grayish-brown silty, 15 slightly clayey Fine SAND (SM) (A-2-4) 10/14/12 Stiff green sandy CLAY (CH) (A-7-6) 20 5/6/8 25 30 Remarks Casing Length

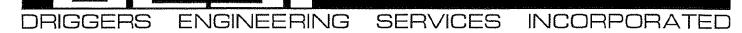
STANDARD PENETRATION TEST BORING LOGS (CURRENT STUDY)

		-	DES 116682 BORING NO. P-1	<del></del>						_
		_	osed Stormwater Ponds, County Line Farms Property, Plate II	Plant City, FL Foreman	<u> </u>	M.J				
	oletior	)	Depth To							~
De	pth _		41.5' Date 1/12/11 Water 4.9'	Time		Date _	1/1:	2/11	1	_
рертн, ғт	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +135.6+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENI BLOV SAI	STANDA ETRATIC VS/FT. OF WPLER-1 MER, 30	N TE N 2"   40 LI '" DR	O.D B. OP	),	<u> </u>
0			Grayish-brown Fine SAND (SP) (A-3)							Ì
			Brown Fine SAND (SP) (A-3)  Medium dense light brown Fine SAND (SP) (A-3)	4/5/7	•					
5			Loose light brown slightly silty Fine SAND (SP-SM) (A-3)	5/4/3	•					
			Loose to medium dense light brown to grayish-brown Fine SAND (SP) (A-3)	2/2/6		7				
40			- light grayish-brown at depth 8.0'	5/5/7	•					
10				5/6/10						
			Medium dense brown silty Fine SAND with seam of light brown clayey Fine SAND (SM/SC) (A-2-4/A-2-6)	10/12/12						
15	X X X X X X X X X X X X X X X X X X X		Medium dense brown silty, slightly clayey Fine SAND (SM) (A-2-4)	9/11/14						
- 20			Medium dense light green clayey Fine SAND (SC) (A-2-6)	4/5/6	•					
25			Soft yellowish-orange to yellowish-orange and brown silty CLAY (CH) (A-7-6)  Medium dense yellow silty Fine SAND (SM) (A-2-4)	3/1/6	•					
- 30 -			Very stiff to hard yellowish-brown to brown and yellowish-brown sandy CLAY (CH) to (CL) (A-7-6)	9/9/12						
								N		ĺ
Ren	narks	Bo	rehole Grouted	Casir	ng Length	1				



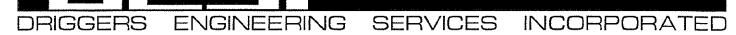
-			DES 116682 BORING NO. P-7 Desed Stormwater Ponds, County Line Farms Property					-		Patent de la Company
			e Plate II	r, Flant City, FL	······	M.J				—
Comp De	oletion pth	1	Depth To 41.5' Date 1/12/11 Water 4.9'	Time		Date	1/1	2/1	11	
ОЕРТН, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION SURF. EL: +135.6+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	BLO S/	STANDA NETRATIO WS/FT. O AMPLER-1 MMER, 30	N 7E N 2" 40 L )" DR	O.I B.	D. P	80
- 35 -	///	ľ	Very stiff to hard yellowish-brown					ľ	Ĭ	Ĭ
			to brown and yellowish-brown sandy CLAY (CH) to (CL) (A-7-6)	13/50*	* 0.4' Pe	netration				
- 40 -			Hard light green silty CLAY (CL) (A-7-6)	15/15/41				4		
45					-			<del> </del>		
				FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF						
- 50 -										
- 55 -										
- 60 -										
- 65 -										
Ren	narks	Bo	orehole Grouted	Cas	ing Leng	th		_		

-		_	BORING NO. P-2		
			osed Stormwater Ponds, County Line Farms Property, In Plate II		n M.J.
Com De	pletion pth	า 	Depth To 41.5' Date 1/12/11 Water 9.3'	Time	Date 1/12/11
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +137.8+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP
0	266E	1	Dark gray Fine SAND with roots and finely		10 20 40 60 80
	1.63 (c) 1.63 (c)		divided organic material (SP) (A-3)  Reddish-brown Fine SAND with trace of finely divided organic material (SP) (A-3)  Light brown Fine SAND (SP) (A-3)	5/6/7	•
- 5	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		Medium dense to very loose light orangish-brown to light brown slightly silty Fine SAND (SP-SM) (A-3)	3/2/2	
			Very loose light brown silty Fine SAND (SM) (A-2-4)	2/2/2	
10	109891 1111111- 1111111- 1111111- 111111-		Very loose light brown slightly silty Fine SAND (SP-SM) (A-3)  Medium dense light grayish-brown Fine SAND	2/1/2	
	7/7/		(SP) (A-3)  Medium dense grayish-brown clayey Fine SAND	4/7/7	
			(SC) (A-2-6) Stiff grayish-brown sandy CLAY (CH) (A-7-6)	6/8/7	
15			our grayion brown barray out to (orr) (ver o)	4/4/7	
- 20			Stiff light brown CLAY (CH) (A-7-6)	5/4/5	
- 25			Stiff green and yellowish-brown sandy CLAY with seams of brown Fine SAND (CH/SP) (A-7-6/A-3)	5/4/5	
			Hard tan dolomitic SILT (ML) (A-4)	· -	
- 30	2000 2000 2000 2000 2000 2000 2000 200			13/17/17	
			Hard brown silty CLAY (CL) (A-7-6)		
Rei	marks	<u>Bc</u>	rehole Grouted	Caei	ing Length
l					



			DES 116682		BORING N						·	***************************************	•	
			osed Stormwate Plate II	r Ponds, Cour	ity Line Farms	Property,	Plant City, FL Forema	n		M.J.				
	pletion pth _				Depth To Water		<del></del>			······································				
De	pth _		41.5' Date	1/12/11	Water	9.3'	Time	,	Dat	e	1/	12/	11	
ОЕРТН, FT	SYMBOL	SAMPLES	SURF. EL: +13	SOIL DESC	RIPTION		BLOWS ON SAMPLER PER 6" OR PEN. STR.	BL S H/	STA ENETRA OWS/F SAMPLI AMMER 0 2	ATIO T. OI ER-1	N T N 2" 40 I " DI	O. B.	D. P	80
- 35		╽	Hard brown silt	y CLAY (CL)	(A-7-6)							Ī	Ţ	Щ
- 40 -			Hard green sar	ndy CLAY (CL	) (A-7-6)		12/14/17							
- 45 - 50 - 55 - 60							12/19/31							
					·							_		
Rer	narks	Вс	rehole Grouted				Cas	ing Len	gth					

Project No. DES 116682 **BORING NO. P-3** Project Proposed Stormwater Ponds, County Line Farms Property, Plant City, FL M.J. Location See Plate II Foreman Depth To Water Completion 41.5' 1/12/11 7.8' Depth Date Time 1/12/11 Date BLOWS ON SAMPLER PER 6" OR PEN. STR. **STANDARD** ᇤ SAMPLES SYMBOL PENETRATION TEST SOIL DESCRIPTION DEPTH, BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP SURF. EL: +138.7+/-1 40 60 80 Dark gray Fine SAND with roots and finely divided organic material (SP) (A-3) Tannish-brown Fine SAND (SP) (A-3) 3/3/4 Loose to very loose light brown slightly silty Fine SAND (SP-SM) (A-3) 3/2/2 5 2/1/1 Very loose light grayish-brown silty, 1/2/2 clayey Fine SAND (SM-SC) (A-2-4/A-2-6) 10 Medium dense light grayish-brown 3/5/7 clayey Fine SAND (SC) (A-2-6) 5/7/6 Medium dense light grayish-brown silty Fine SAND (SM) (A-2-4) 15 7/8/9 Very stiff green sandy CLAY with trace of phosphate (CH) (A-7-6) 20 6/10/14 Medium dense light gravish-brown phosphatic. silty, clayey Fine SAND (SM-SC) (A-2-4/A-2-6) Firm green sandy CLAY 25 with thin seams of dark brown Fine SAND 3/3/4 (CH/SP) (A-7-6/A-3) Very stiff tan dolomitic SILT (ML) (A-4) 30 3/8/15 Hard brown CLAY (CL) (A-7-6) Remarks Borehole Grouted Casing Length



1 -		_	DES 116682 BORING NO. P-3						
			osed Stormwater Ponds, County Line Farms Property, Plate II	, Plant City, FL Forema	n	M.J.	•		
Com	oletion pth	ŋ	Depth To 41.5' Date 1/12/11 Water 7.8'	Time		ate	1/12	//11	<u> </u>
DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION  SURF. EL: +138.7+/-'	BLOWS ON SAMPLER PER 6" OR PEN. STR.	PENET BLOWS	/FT. OI PLER-1	N TE: N 2" C 40 LE " DR(	).D. 3. OP	
- 35	//	ľ	Hard brown CLAY (CL) (A-7-6)	_	10	20			) 90 
		7		11/15/23			-	$\vdash \vdash$	$\perp \parallel \parallel$
								$\vdash \downarrow$	+
									+++
- 40 -			Hard brown CLAY with yellowish-orange cemented clay fragments (CL) (A-7-6)					П	
	//		Cemented Clay Hagments (CL) (A-7-0)	11/14/17					+
									$\dagger \dagger$
									$\prod$
- 45 -	ĺ							$\vdash$	+
								$\vdash$	+
								$\vdash$	+ + +
- 50 -				<u> </u>					++
									++
									+++
- 55 -									
									$\coprod$
									+
- 60 -				-					
- 60									
								+	++
				and the state of t	TO THE STATE OF TH				
65									
								+	+ +
				-				+	+++
Don	narke	L P	rehole Grouted						<u>††</u>
rten	ııai KS	<u> </u>	neriole Giodled	Casi	ng Length				

SUMMARY OF LABORATORY TEST RESULTS (BOTH STUDIES)

# SUMMARY OF LABORATORY TEST RESULTS

RES.	(Овт-ст)																					
\$0°4	(mdd)																					
	(mdd)																			ial Park,	Hillsborough County, Florida	
Hd																			dno	ıe İndustı	gh Count	=
ORG	(%)	10.2	5.4							2.0					-				Genesis Group	County Line Industrial Park,	Hillsborough DES 045101	ED 040 E
G.S.			*	*	<b>**</b> 41.5	** 21.6	***	36.7	** 24.4		*	*	** 20.4	** 30,2	*	** 25.2			Ů		I C	2
CON																		ļ	CLIENI:	PROJECT:	Ď.	1
U.C.																		}		PR(	KH E.	पें स
P.P.	(£3)																	er)				
ERG S	SI																	dromet				0 Sieve
ATTERBERG LIMITS	P.L.				21	91	15	. 11	È				13	. 17		16	est	sis (Hy	<del></del>		,	No. 20
*	H				67	717	23	04	£				21	22		36	lation T	e Analy	Conten Noride	lfate	istivity	Passing
ů																	Consolidation Test	Grainsize Analysis (Hydrometer)	Organic Content Total Chloride	Total Sulfate	Lab Resistivity	see 1 est Curves Percent Passing No. 200 Sieve
, A	(pcf)																	O	- 0	Ε.	J 0	ე <u>ი</u> .
% M					23.7	13.9	16.2	13.5	13.5				13.2	13.0		12.4	II	Ħ	11 11			Hi li
z		D with roots	Q			Fine SAND	Fine SAND		Fine SAND		a	Q	æ	Œ			Con.	G.S. (+1)	ORG. (%) CI. (ppm)	SO <sub>4</sub> (ppm)	RES. (ohm-cm) *	* • *
DESCRIPTION		Dark gray highly organic Fine SAND with roots	Dark brown organic, silty Fine SAND	Dark brown silty Fine SAND	Green phosphatic, sandy CLAY	Grayish-brown silty, slightly clayey Fine SAND	Grayish-brown silty, slightly clayey Fine SAND	Gray clayey Fine SAND	Grayish-brown silty, slightly clayey Fine SAND	Dark brown Fine SAND with finely divided organic material	Light grayish-brown silty Fine SAND	Dark grayish-brown silty Fine SAND	Gray silty, slightly clayey Fine SAND	Gray silty, slightly clayey Fine SAND	Light gray slightly silty Fine SAND	Gray clayey Fine SAND	Water Content	Dry Density	Specific Gravity Liquid Limit	Plastic Limit	Shrinkage Limit	rocket Fenetrometer Unconfined Compression
DEPTH	æ	7.0-0.0	9.0-0.0	8.0-9.5	15.0-16.5	15.0-16.5	10.0-11.5	6.0-7.5	12.0-13.5	1.0-2.6	6.0-7.5	15.0-16.5	15.0-16.5	8.0-9.5	6.0-7.5	15.0-16.5	Water	Dry L	Speci Liquid	Plastic	Shrin	Uncor
BORING	ON	B-1	B-3	P.4	B-5	B-7	B-8	B-11	B-12	B-14	B-16	B-17	B-23	B-25	B-28	B-28	= %M	$y_d(pcf) =$	C. LL			F.F. (IST) = U.C. =

# SUMMARY OF LABORATORY TEST RESULTS

RES.	(Овин-сш)	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s									TOTAL PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY							
SO 4	(bbm)															<b>~</b>		
ָ֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖֖	(mdd)														County Line Industrial Park,	Hillsborough County, Florida		
Hď														roup	ine Indus	ugh Cour	101	
ORG	(%)													Genesis Group	County L	Hillsboro	DES 045101	
G.S.		** 91.7																
CON														CLIENT:	PROJECT:		Ā	
U.C.														CE	PR		FILE:	
P.P.	(tsf)												cr)					
SRG S	SF						:			1			'dromet				į	O Sieve
ATTERBERG LIMITS	F	8										Fest	Grainsize Analysis (Hydrometer)	ŧ			ŞŞ	Percent Passing No. 200 Sieve
	13	126										Consolidation Test	ze Anal	Organic Content Total Chloride	ulfate	Lab Resistivity	See Test Curves	t Passın <sub>(</sub>
G,												Consol	Grainsi	Organi Total C	Total Sulfate	Lab Re	See Te	Percen
, d	(bet)																	
% M		45.8										H	11	11 13	I	}	11	I§
7			inidandana arang managan arang managan arang managan arang managan arang managan arang managan arang managan a									Con.	G.S. (+1)	ORG. (%) Cl. (ppm)	SO <sub>4</sub> (ppm)	RES. (ohm-cm)	*	*
DESCRIPTION		Green sandy CLAY					Constitution of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of	Andreas and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second				Water Content	Dry Density	Specific Gravity Liquid Limit	Plastic Limit	Shrinkage Limit	Pocket Penetrometer	Unconfined Compression
DEPTH	(g)	20.0-21.5			A COLUMN TO THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF THE TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TAXABLE PROPERTY OF TA	Acres - Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrell Market Barrel			**************************************			Wate	Dry 1	Speci Ligui	Plast	Shrin		
BORING	ÓN	B-29										= %M	$Y_d(pcf) =$	s II	pľ.	= TS	P.P. (tsf) =	U.C.

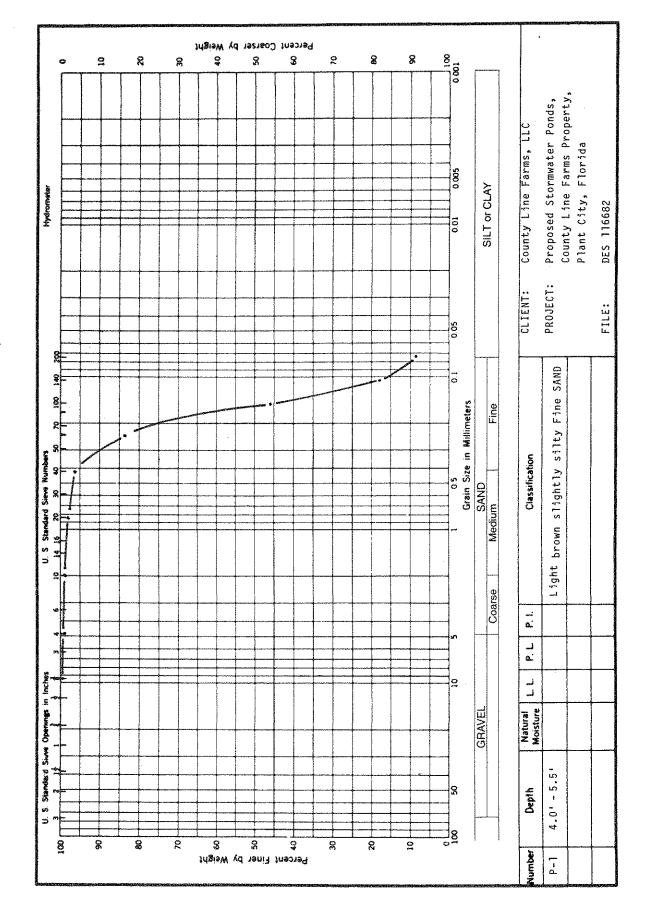
* 1					
ŧ					
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\					
\   					
** 1 1			·		
· !					
· } ;					
)       					
}					
)					
. :	E.				

# SUMMARY OF LABORATORY TEST RESULTS

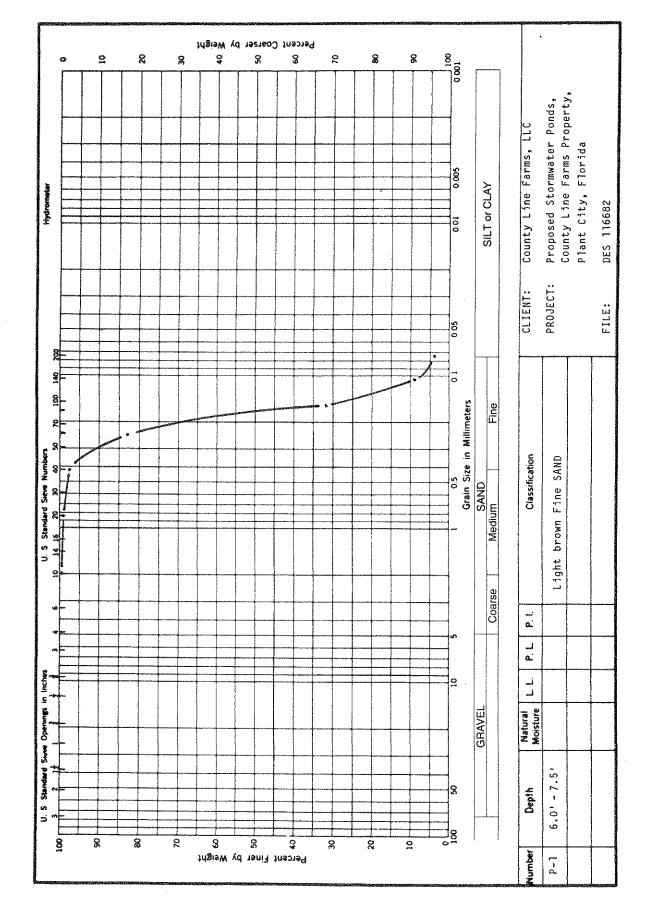
RES.	(Орш-сш)				dillibration of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of	1411 ENDINGE - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177 - 177	TTT-III II	Walter to the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the stat	A-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	A TO THE REAL PROPERTY OF THE PARTY OF THE P	 TTTP: 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s				orida	
SO <sub>4</sub>	(mqq)																	County Line Farms Property, Plant City, Florida	
ť	(mdd)															CLC	r Ponds,	roperty, I	
Hd																Farms, l	ormwate	Farms F	. 7
ORG.	(%)									W						County Line Farms, LLC	Proposed Stormwater Ponds,	unty Line	DES 116682
G.S.		*	*	*	*	*	**	**	**	*						ပိ	Pro	රී	D
CON.																NT:	PROJECT:		_••
U.C.																CLIENT:	PRO,		FILE:
P.P.	(tsf)														_				
s s	SL														Graínsize Analysis (Hydrometer)				Sieve
ATTERBERG LIMITS	P.						1.1	-11	19					est	sis (Hyd				See Test Curves Percent Passing No. 200 Sieve
	LL						22	33	28					Consolidation Test	e Analy	Organic Content Total Chloride	lfate	istivity	See Test Curves Percent Passing
G														Consolie	Grainsiz	Organic Conter Total Chloride	Total Sulfate	Lab Resistivity	See Test Percent
Y &	(bct)														-		·	•	
% %							19.3	17.6	17.4						11	11 11	II	î	II H
					The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		SAND	Д	Q			The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		Con.	G.S. (+1)	ORG. (%) Cl. (ppm)	SO <sub>4</sub> (ppm)	RES. (ohm-cm)	* *
DESCRIPTION		Light brown slightly silty Fine SAND	Light brown Fine SAND	Light brown slightly silty Fine SAND	Light brown slightly silty Fine SAND	Light brown slightly silty Fine SAND	Light grayish-brown silty, clayey Fine SAND	Light grayish-brown clayey Fine SAND	Light grayish-brown clayey Fine SAND	Light grayish-brown silty Fine SAND				Water Content	ensity	Specific Gravity Liquid Limit	Limit	Shrinkage Limit	Pocket Penetrometer Unconfined Compression
DEPTH	<b>(£)</b>	4,0-5.5	6.0-7.5	4.0-5.5	2.0-3.5	6.0-7.5	8.0-9,5	10.0-11.5	12.0-13.5	15.0-16.5		The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s	Water	Dry Density	Specific Grav Liquid Limit	Plastic Limit	Shrink	Pocket Uncont
BORING	o N	ė.	-d	P-2	్లో.	P-3	p-3	p-3	p-3	P-3				[	$Y_d(pcf) =$	G <sub>S</sub> ==		SL ==	P.P. (tsf) = U.C. =

**GRAINSIZE ANALYSES** 

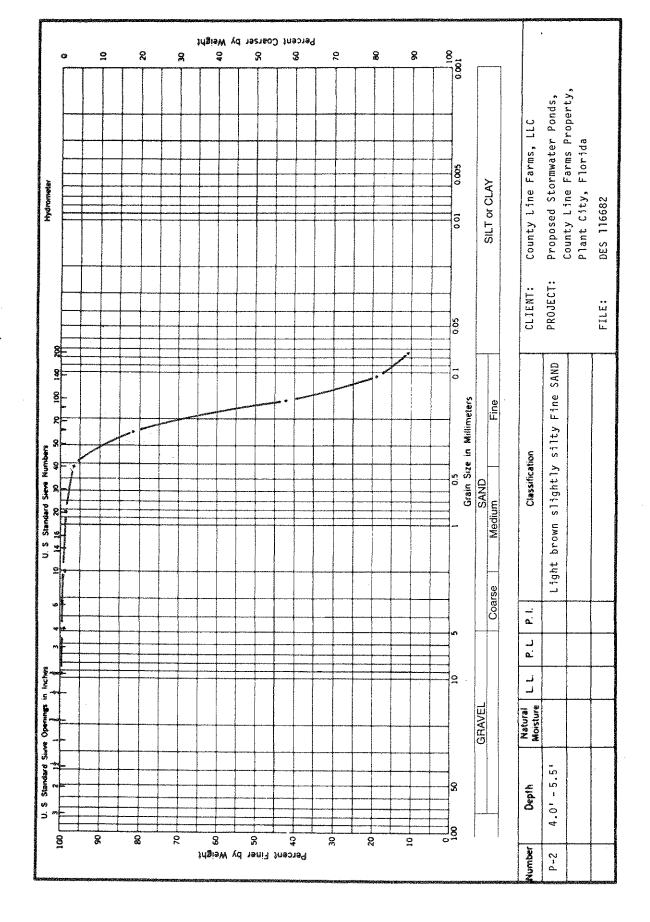
DRIGGERS ENGINEERING SERVICES, INC.



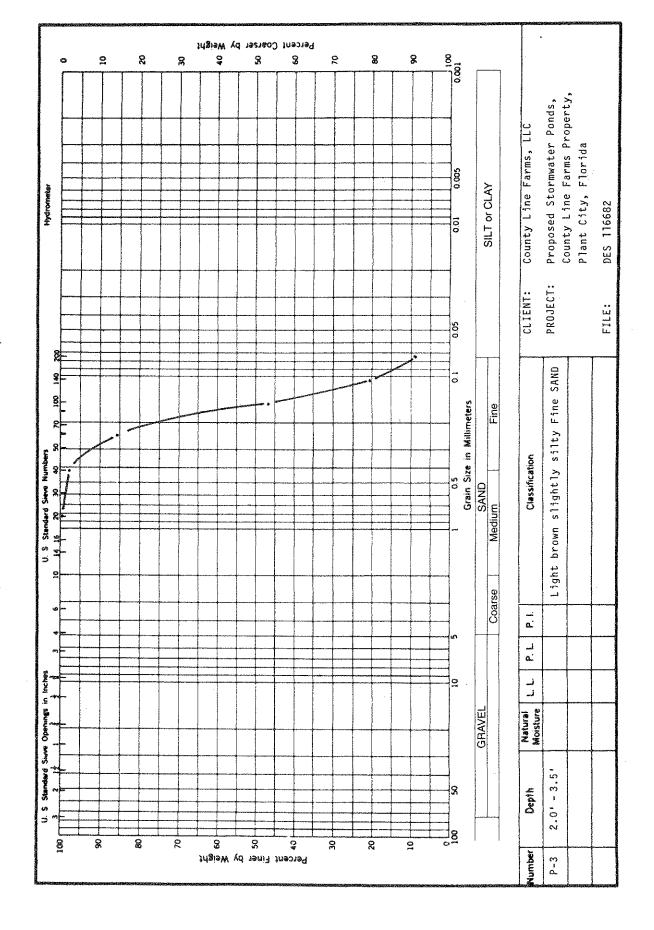
DRIGGERS ENGINEERING SERVICES, INC.



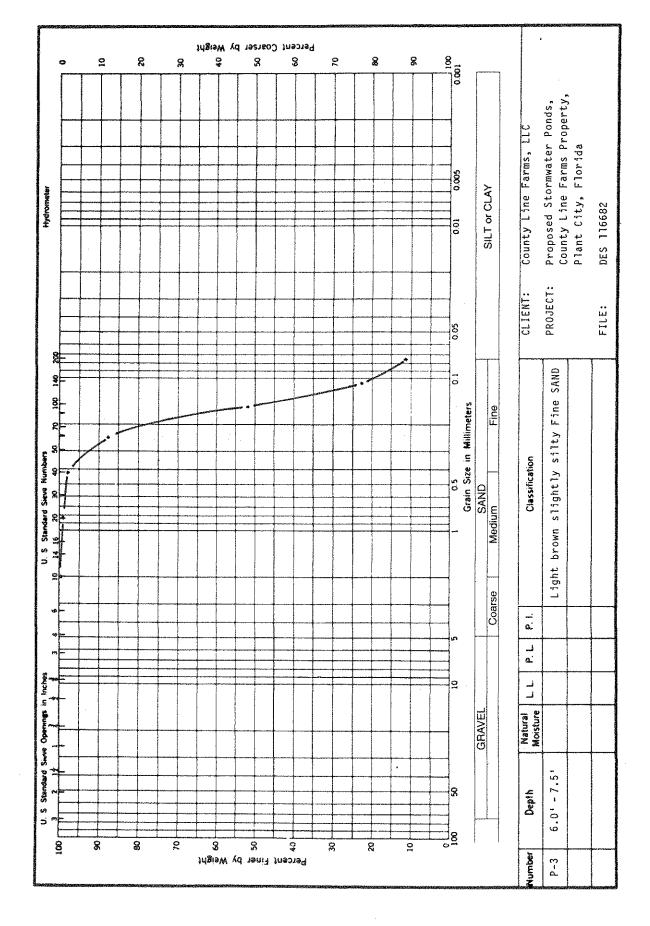
DRIGGERS ENGINEERING SERVICES, INC.



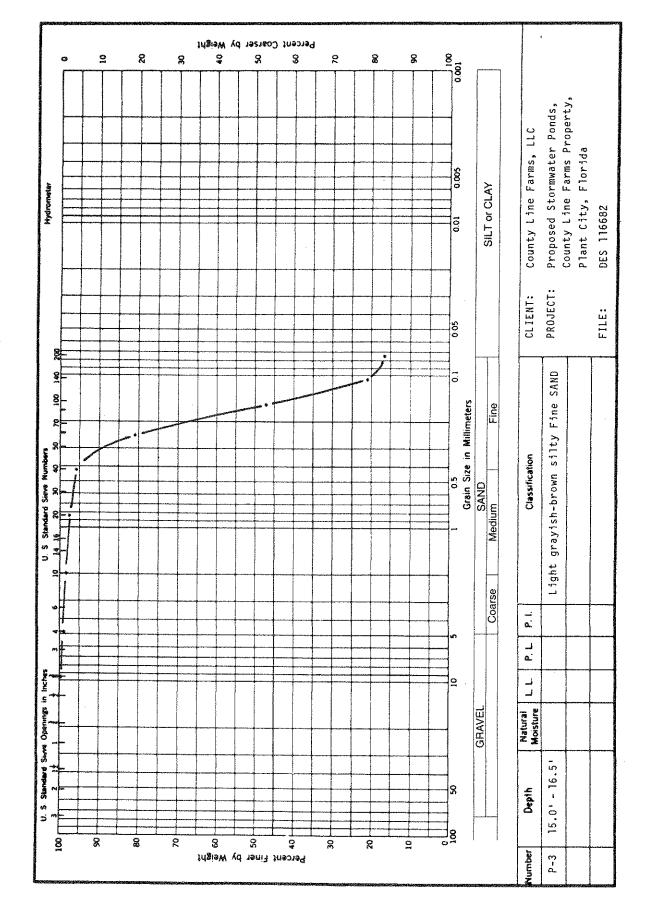
DRIGGERS ENGINEERING SERVICES, INC.



DRIGGERS ENGINEERING SERVICES, INC.

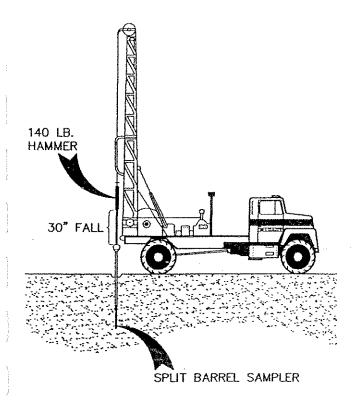


DRIGGERS ENGINEERING SERVICES, INC.



METHOD OF TESTING

## STANDARD PENETRATION TEST WITH AUTOMATIC HAMMER AND SOIL CLASSIFICATION



## WATER TABLE FINE SAND "N" VALUE OR BLOW COUNT MUCK SILTY FINE SAND CLAYEY FINE SAND SHELBY TUBE -SANDY CLAY STRATUM CHANGE CLAY 50/0.3 LIMESTONE DENOTES CORE RUN 50 BLOWS FOR 0.3' PENETRATION

### STANDARD PENETRATION TEST (ASTM D-1586)

In the Standard Penetration Test borings, a rotary drilling rig is used to advance the borehole to the desired test depth. A viscous drilling fluid is circulated through the drill rods and bit to stabilize the borehole and to assist in removal of soil and rock cuttings up and out of the borehole.

Upon reaching the desired test depth, the 2 inch O.D. split-barrel sampler or "split-spoon", as it is sometimes called, is attached to an N-size drill rod and lowered to the bottom of the borehole. A 140 pound automatic hammer, attached to the drill string at the ground surface, is then used to drive the sampler into the formation. The hammer is successively raised and dropped for a distance of 30 inches using an automated lifting mechanism. The number of blows is recorded for each 6 inch interval of penetration or until virtual refusal is achieved. In the above manner, the samples are ideally advanced a total of 18 inches. The sum of the blows required to effect the final 12 inches of penetration is called the blowcount, penetration resistance or "N" value of the particular material at the sample depth.

After penetration, the rods and sampler are retracted to the ground surface where the core sample is removed, sealed in a glass jar and transported to the laboratory for verification of field classification and storage.

### SOIL SYMBOLS AND CLASSIFICATION

Soil and rock samples secured in the field sampling operation were visually classified as to texture, color and consistency. Soil classifications are presented descriptively and symbolically for ease of interpretation. The stratum identification lines represent the approximate boundary between soil types. In many cases, this transition may be gradual.

Consistency of the soil as to relative density or undrained shear strength, unless otherwise noted, is based upon Standard Penetration resistance values of "N" values and industry-accepted standards. "N" values, or blowcounts, are presented in both tabular and graphical form on each respective boring log at each sample interval. The graphical plot of blowcount versus depth is for illustration purposes only and does not warrant continuity in soil consistency or linear variation between sample intervals.

The borings represent subsurface conditions at respective boring locations and sample intervals only. Variations in subsurface conditions may occur between boring locations. Groundwater depths shown represent water depths at the dates and time shown only. The absence of water table information does not necessarily imply that groundwater was not encountered.