# REPORT OF GEOTECHNICAL EXPLORATION FOR PROPOSED HOTEL SITE DEVELOPMENT BRANDON, FLORIDA

Prepared for:

# LOVE INVESTMENT COMPANY Tampa, Florida

Prepared by:

MACTEC ENGINEERING AND CONSULTING, INC. Atlanta, Georgia

May 12, 2006

MACTEC Project 6513-06-0422





May 12, 2006

Mr. Peter M. Schiffer Love Investment Company 1050 Crown Pointe Parkway, Suite 960 Atlanta, GA 30338

Phone: (770) 551-5683 (770) 551-5685 Schiffer@gate.net

Subject:

Report of Geotechnical Exploration

**Proposed Hotel Site Development** 

Brandon, Florida

**MACTEC Project 6513-05-0422** 

Dear Mr. Schiffer:

MACTEC Engineering and Consulting, Inc. (formerly known as Law Engineering and Environmental Services), is pleased to submit this report of our geotechnical exploration for the proposed project. Our services were conducted in general accordance with our Proposal TG-06-022 dated April 11, 2006.

The results of our Geotechnical subsurface exploration, including our evaluation of the site and recommendations for site preparation and applicable foundation support systems are presented in this report. Additional geotechnical exploration should be performed when the location of individual structures is finalized.

We appreciate the opportunity to be of service to you on this project. Should you have any questions with regard to this report, or if we can be of any further assistance, please contact this office.

Sincerely,

Distribution:

MACTEC ENGINEERING AND CONSULTING, INC.

ica McRory, E.I. otechnical Professional

2 - Addressee (mail)

1 - Addressee (e-mail)

I - File

MACTEC Engineering and Consulting, Inc. 4919 West Laurel Street . Tampa, FL 33607 813-289-0750 • Fax: 813-289-5474

Curtis J. Roos, P.E.

Florida Registration 27570

Chief Engineer

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KEY TO CLASSIFICATIONS & SYMBOLS

# 1.0 EXECUTIVE SUMMARY

The project is located in Brandon, Florida in Hillsborough County. Specifically, the project is located on the southeast corner of the intersection of I-75 and State Road 60. The lot is a grass covered pasture with several vacant structures, fences and farming equipment. The pasture is currently being used for cattle grazing. The proposed project consists of the construction of a hotel. The design has not been finalized, but the anticipated construction includes a five to six story structure with associated parking and driveways. No structural information was supplied at this time, however, based on our experience, the maximum expected loads are 250 kips for a single column and 6 kips per linear foot (klf) for an exterior wall. In 2001, MACTEC performed a geotechnical exploration of the northern portion of the site, including five soil test borings, five auger borings and fifteen test pits. Another exploration consisting of six soil test borings was performed on the southern portion of the property in 2004. This exploration was conducted in the area of the proposed structure on the northern side of the property.

The ground surface has veneer of grass above an 8 foot layer of medium dense to very loose gray, and brown fine sand (SP) with some roots. SPT-1 encountered a highly compressible layer from 8 to 12 feet. SPT-2 encountered a highly compressible layer from 3 to 8 feet. SPT-2 then encountered medium dense to dense gray fine sand (SP) extending to a depth of 15 feet. Underlying these layers at an approximate depth of 15 feet was medium dense to loose clayey sand (SC). This layer extended to a depth of 20 feet in SPT-1 and to boring termination in SPT-2 at 30 feet. The final layer encountered in SPT-1 was stiff to soft highly plastic sandy clay (CH).

In our previous exploration, most of our borings and test pits encountered a highly compressible soil. This material consisted of black and dark brown highly organic material with root fibers. This material was approximately 3.5 to 6 feet thick and was encountered at varying depths in the range of 2 to 8.5 feet. The N-value was weight of hammer in this stratum.

The highly compressible soils will have to be removed prior to construction of the proposed hotel on shallow foundations. Preliminary site preparation and foundation recommendations are presented in the body of this report. After the final design plans and specifications are available, a final geotechnical investigation will be required prior to development of the site.

#### 2.0 INTRODUCTION

# 2.1 REPORT FORMAT

This report begins with a discussion of the field program, followed by a description of the general subsurface conditions. The site location map is presented on Figure 1, the approximate soil boring locations are presented on Figures 2 A-D, the USDA site vicinity sketch is presented on Figure 3 and the USGS site vicinity sketch is presented on Figure 4. A profile of the borings is shown in Figures 5 A-C and the individual soil boring logs are in the Appendix of this report. Included in the Appendix are the boring plans, boring logs and test pit records from our previous explorations at the site.

# 2.2 PROJECT CHARACTERISTICS

The proposed project consists of the construction of a hotel. The design has not been finalized, but the anticipated construction includes a five to six story structure with associated parking and driveways. No structural information was supplied at this time, however, based on our experience, the maximum expected loads are 250 kips for a single column and 6 kips per linear foot (klf) for an exterior wall. MACTEC has previously performed a geotechnical exploration in 2001 of the northern portion of the site, including five soil test borings, five auger borings and fifteen test pits. Another exploration consisting of six soil test borings was performed on the southern portion of the property in 2004. This exploration was conducted in the area of the proposed structure on the northern side of the property.

#### 2.3 SITE DESCRIPTION

The project is located in Brandon, Florida in Hillsborough County. Specifically, the project is located on the southeast corner of the intersection of I-75 and State Road 60. The lot is a grass covered pasture with several vacant structures, fences and farming equipment. The pasture is eurrently being used for cattle grazing.

#### 3.0 PURPOSE AND SCOPE

The purpose of this study was to obtain preliminary information on the general subsurface conditions at the proposed project site. The subsurface materials encountered were then evaluated with respect to the available project characteristics. In this regard, engineering assessments for the following items were formulated:

- General location and description of potentially deleterious materials encountered in the borings, which may interfere with construction progress or structural performance, including existing fills or surficial/subsurface organics.
- Identification of the existing ground water levels and estimated normal seasonal high ground water fluctuations.
- General preliminary site preparation recommendations including structural fill gradation and compaction requirements.
- Preliminary recommendation of applicable foundation support systems including deep and shallow foundation systems.

The following services were provided in order to achieve the preceding objectives:

- Reviewed readily available published geologic and topographic information. This included information from Quadrangle Maps published by the United States Geological Survey (USGS) and "Soil Survey of Hillsborough County, Florida" published by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS).
- Collected ground water level measurements and estimated normal wet seasonal high ground water levels.
- Requested utility location services and executed a program of subsurface exploration consisting of subsurface sampling and field testing. Our services consisted of conducting two soil test borings, to a depth of 30 feet. In each soil test boring, soil samples were collected and SPT resistances were measured at approximate intervals of two feet to a depth of ten feet and at approximate intervals of five feet thereafter.
- Visually classified and stratified representative soil samples in the laboratory using the Unified Soil Classification System. Conducted a limited laboratory-testing program. Identified soil conditions at each boring location and formed an opinion of the site soil stratigraphy
- The results of the field exploration were used in the engineering analysis and in the formulation of the recommendations. The results of the subsurface exploration, including the preliminary recommendations and the

Proposed Hotel Site Development Brandon, Florida MACTEC Project 6513-06-0422

data on which they are based, are presented in this formal written report prepared by an experienced Professional Engineer.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of hazardous or toxic materials in the soil, ground water, or surface water within or beyond the site studied. Any statements in the report regarding odors, staining of soils, or other unusual conditions observed are strictly for the information of our client.

#### 4.0 FIELD EXPLORATION

#### 4.1 GENERAL

Our field exploration included 2 soil borings in the northern portion of the property. The boring locations were determined in the field by measuring from existing ground surface features. If more precise locations are desired, we suggest that you contact a Registered Surveyor. The ground surface elevations at the boring locations were neither furnished nor determined. The approximate locations of the borings are illustrated on Figure 2, which has been included in the Appendix of this report.

The soil test borings were performed with the use of a CME Power Drill Rig using Bentonite "Mud" drilling procedures. The borings extended to depths of approximately 30 feet below the existing ground surface elevations. The soil sampling was performed in general accordance with ASTM Test Designation D-1686, entitled "Penetration Test and Split-Barrel Sampling of Soils." Samples were obtained at approximate intervals of two feet to a depth of ten feet, and at intervals of five feet thereafter. Representative portions of these soil samples were sealed in glass jars, labeled and transferred to our laboratory for classification by an engineer.

# 6.0 LABORATORY TESTING

# 6.1 GENERAL

The soil samples were transported to our laboratory and were classified by the Geotechnical Engineer using the USCS in general accordance with the ASTM Test Designation D-2488. It should be noted that all soil samples will be properly disposed of thirty days following the submittal of the MACTEC subsurface exploration report.

The following table summarizes the laboratory test results performed on samples from the site:

Boring No.	DEPTH (FT)	MOISTURE CONTENT (%)	PLASTIC LIMIT	Liquid Limit	PLASTIC: INDEX	, PERCENT FINER THAN No. 200 Sieve (By Weight):	ORGANIC CONTENT (%)
B-03	6.5 - 8	17.7					0.87
B-04	1.5 - 3	12.1				6.3	
B-04	6.5 - 8	40.4					6.2
B-05	4 - 5.5	21.3	#** *** ***		*****	5.2	~~
B-05	9 - 10.5	25.9			PAR NAME NAME	App. Not see	4.26
AB-04	4 - 10	212					37.6
B-1	14.0 - 15.0	59.6	27	182	155	*** ***	
B-2	4.0 – 5.5	50.1	***		Po 80 40	8.1	7.0
B-4	6.5 - 8.0	205.3		*******			59.8
B-5	6.5 – 8.0	87.0	****	an-house-	wo-au	424949	15.2
SPT-2	24.0 – 25.5	51.2			Andre ter	32.6	Prop. spar. Nam.

#### 6.0 GENERALIZED SUBSURFACE CONDITIONS

# 6.1 COUNTY SOIL SURVEY

The "Soil Survey of Hillsborough County, Florida," published by the USDA SCS, was reviewed for general near-surface soil information within the general project vicinity (see Figure 3 in the Appendix of this report). This information indicates that there are four primary mapping units, within the proposed project area. The soil map unit characteristics are presented below:

SOIL SERIES (MAP NUMBER)	SEASONAL HIGH GROUND WATER TABLE DEPTH BELOW NATURAL GRADE (FEET)
Basinger, Holopaw, Samsula (6)	+2.0 - 1.0
Malabar (27)	0-1.0
Myakka fine sand (29)	0-1.0
Zolfo (61)	2.0 - 3.6

# 6.2 USGS TOPOGRAPHY SURVEY

The topographic survey map published by the United States Geological Survey: "Brandon, Florida" dated 1974 (photorevised 1981) was reviewed for ground surface features at the proposed project location (see Figure 4 in the Appendix of this report.) Based on this review, the general ground surface elevation is approximately +30 feet National Geodetic Vertical Datum of 1929 (NGVD).

#### 6.3 GENERAL SUBSURFACE CONDITIONS

The subsurface conditions encountered at the hand auger and soil test boring locations are described on the Boring Records in the Appendix. These records represent our interpretation of the subsurface conditions based on the field logs, and visual examination of field samples by an engineer. The lines designating the interfaces between various strata on the Boring Records represent the approximate interface locations. In addition, the transitions between strata may be gradual. Water levels shown on the Boring Records represent the conditions only at the time of our exploration. It should be understood that soil and rock conditions may vary between boring locations.

The ground surface has veneer of grass above an 8 foot layer of medium dense to very loose gray, and brown fine sand (SP) with some roots. SPT-1 encountered a highly compressible layer from 8 to 12 feet. SPT-2 encountered a highly compressible layer from 3 to 8 feet. SPT-2 then encountered medium dense to dense gray fine sand (SP) extending to a depth of 15 feet, with N-values of 24 to 32 bpf.

Underlying these layers at an approximate depth of 15 feet was medium dense to loose clayey sand (SC). This layer extended to a depth of 20 feet in SPT-1 and to boring termination in SPT-2 at 30 feet and the N-values ranged from 4 to 13 bpf. The final layer encountered in SPT-1 was stiff to soft highly plastic sandy clay (CL) with recorded N-values of 4 to 11 bpf.

In our previous exploration, borings B-2, B-3, B-4 B-5, B-03, B-04, B-05, AB-02, AB-03 and AB-04 encountered a highly compressible soil peat. Test pits TP-4, TP TP-5, TP-6, TP-7, TP-8, TP-9, TP-11, TP-12, TP-13, TP-14, and TP-15 also encountered this material. This material consisted of black and dark brown highly organic material with root fibers. This material was approximately 3.5 to 6 feet thick and was encountered at varying depths in the range of 2 to 8.5 feet. The N-value was weight of hammer in this stratum. Based on the laboratory test results from boring B-4 and AB-04, this material has a moisture content of 205.3% and 212.0% and an organic content of 59.8% and 37.6%, respectively.

No "raveled" conditions indicative of "active" sinkhole type activity were encountered during this subsurface exploration program. The profiles of all borings have been included in the Appendix of this report. These profiles illustrate the visual characteristics of all soil strata encountered using the Unified Soil Classification System. Groundwater observations, sampling information and other pertinent field data and observations are also included. A sheet defining the terms and symbols used on the profiles is included in the Appendix of this report.

# 6.4 GROUND WATER CONDITIONS

Ground water was observed at a depth of approximately 4.7 to 6.5 feet below the existing grade. It should be noted that ground water levels tend to fluctuate during periods of prolonged drought and extended rainfall and may be affected by man-made influences. In addition, a seasonal effect may also occur during which higher ground water levels are normally recorded during rainy seasons.

We anticipate that the seasonal high ground water level will be approximately one foot below the average existing grade.

If the ground water level is critical to design or construction, ground water observation wells should be installed on site to monitor ground water fluctuations over a period of time and to permit more accurate determinations of wet season and dry season levels.

#### 7.0 GENERAL RECOMMENDATIONS

# 7.1 GENERAL

After the final design plans and specifications are available, a final geotechnical investigation at the exact building location will be required prior to development of the site. Our explorations at the site encountered highly compressible soils that will have to be removed prior to construction of the proposed development. Additional fill will also be needed to raise existing grades above the seasonal high ground water level.

Based upon the results of our previous subsurface exploration program, the highly compressible soils were encountered from 4 to 12 feet across the central and southern portion of the site. The highly compressible soils encountered underlying the subject project site are considered to be unsuitable foundation bearing material due to calculated settlements on the order of four inches as a result of the proposed construction at this site.

#### 7.2 FOUNDATION ALTERNATIVES

Our explorations revealed the presence of highly compressible soils located at the project site. These soils are considered unsuitable bearing material for shallow foundations due to excessive settlement potential. Settlements of the slab and structure could be in excess of 4 inches. In order to reduce the settlement to tolerable levels we recommend one of the following alternatives:

- Excavation and removal of the highly compressible soils, followed by replacement with compacted backfill. Surcharging of the site with temporary fill does not appear to be feasible due to the large variation in peat thickness.
- The use of piles to support the structure and floor slab. Additional deep borings would need to be performed to encounter a pile-bearing layer.

The remainder of this report addresses shallow foundation support after excavation.

#### 7.3 SHALLOW FOUNDATIONS

The highly compressible soils encountered within the proposed project site will need to be excavated, removed and backfilled with approved fill prior to the construction of shallow foundations. As a minimum, the bottom of the excavation should extend a distance 10 feet beyond the building exterior perimeter. Due to the variable depth and content of the deleterious materials, it is considered essential that a representative of the Geotechnical Engineer observe the excavation process. The excavation should initially extend to a depth of 10 feet. If highly compressible soils are found at the excavation bottom, they should be removed. The excavation should be performed with the use of dewatering techniques such as wellpoints and pumping from sumps. No more than 4-inches of water should be allowed in the bottom of the excavation. The sides of the excavation should be sloped or shored to protect workman as required by OSHA. During the excavation operations, any deleterious materials encountered should be hauled off site. No fill should be stockpiled adjacent to the excavation. During the replacement process a maximum of 2 feet of fill may be initially replaced without compaction. After which, fill should be compacted in lifts not exceeding 12 inches and should be compacted to 95 percent of the Modified Proctor (ASTM D-1557). Backfill material should be at or below the optimum moisture content for compaction and have no more than 10 percent material finer than a No. 200 sieve.

# 7.4 BEARING CAPACITY

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Based upon the satisfactory completion of the recommended site preparation, shallow foundations should be designed for a net maximum allowable bearing pressure of 2,500 pounds per square foot (psf). The foundation and floor slabs should bear on properly placed and compacted cohesionless (sand) fill.

All footings should be embedded so that the bottom of the foundation is a minimum of 16 inches below the adjacent compacted grades on all sides. Strip or wall footings should be a minimum of 18 inches wide and pad or column footings should be a minimum of 24 inches wide. These minimum footing sizes should be used regardless of whether or not the foundation loads and allowable bearing pressures dictate a smaller size. These minimum footing sizes tend to provide adequate load bearing area to develop overall bearing capacity and account for minor variations in the bearing materials. All footings should be constructed in a "dry" fashion, that is, it is

recommended that the building grades be selected so that normal seasonal high ground water levels remain at least one foot below the footing bottoms.

# 7.5 SETTLEMENT

The settlement of shallow foundations supported on sandy-type soils should occur rapidly. Thus, after removal of the highly compressible material, the majority of expected settlements should occur during construction as dead loads are imposed at the footing locations. Provided that the recommended subgrade preparation operations are properly performed, the total settlements of isolated columns and wall footings should not exceed one inch, with differential settlements on the order of 60 percent of the total settlements. Differential settlements of these magnitudes are usually considered tolerable for the anticipated construction. The tolerance of the proposed structures to the predicted total and differential settlements should, however, be confirmed by the Structural Engineer.

#### 8.0 BASIS FOR RECOMMENDATIONS

Our professional services have been performed, our findings obtained and our preliminary recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This company is not responsible for the conclusions, opinions or recommendations made by others based on the data presented in this report.

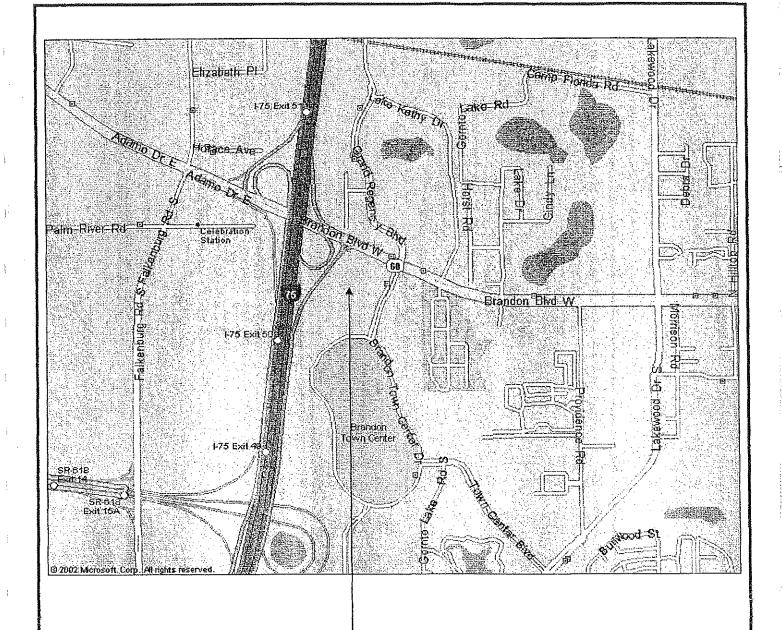
The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings performed at the locations indicated. Regardless of the thoroughness of a geotechnical exploration, there is always a possibility that conditions between borings will be different from those at specific boring locations and that conditions will not be as anticipated by the designers or contractors. In addition, the construction process itself may alter soil conditions.

If any subsoil variations become evident during the course of this project, a re-evaluation of the recommendations contained in this report will be necessary after we have had an opportunity to observe the characteristics of the conditions encountered. The applicability of the report should also be reviewed in the event significant changes occur in the design, nature or location of the proposed structure.

The preliminary recommendations provided in this report are based in part on project information provided to us and they only apply to the specific project and the site discussed in this report. If the project information is incorrect, or if additional information is available, the correct or additional information should be conveyed to us for review. Our recommendations may then be modified, if necessary. Experienced geotechnical personnel should observe and document the construction procedures used and the conditions encountered. Unanticipated conditions and inadequate procedures should be reported to the design team. We recommend that the owner retain MACTEC to provide these services based upon our familiarity with the project, the subsurface conditions and the intent of the recommendations and design.







SITE LOCATION



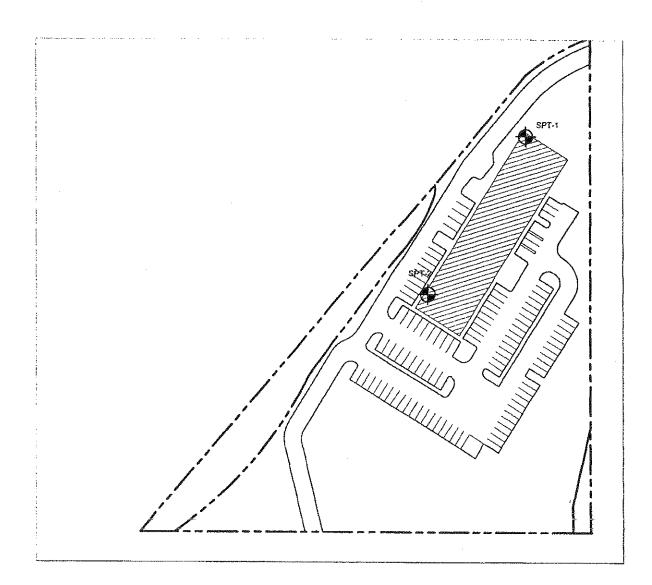
Source: Microsoft Streets & Trips 2004

Brandon Hotel Site Development Brandon, Florida



SITE LOCATION MAP

Project 6513-06-0422 Figure 1



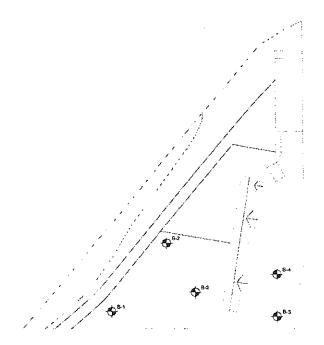
Brandon Hotel Site Development Brandon, Florida



FIELD EXPLORATION PLAN Project 6513-06-0422

Figure 2.A

Prepared By	JAM
Checked By	or



# **LEGEND**

Approximate Soil Test Boring Location

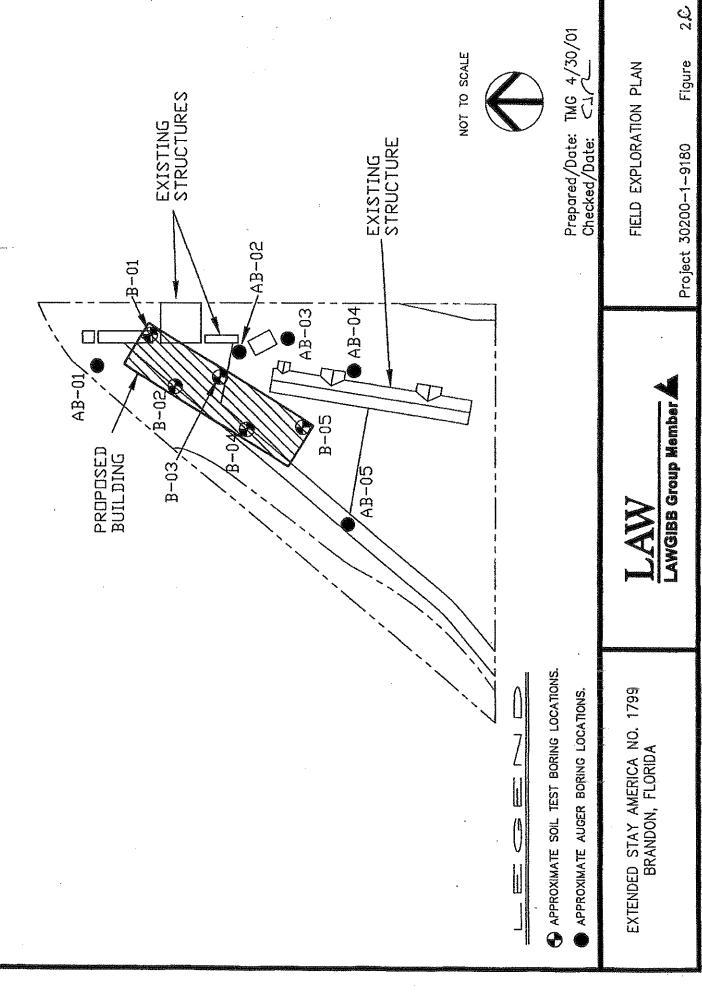
Brandon Hotel Site Development Brandon, Florida

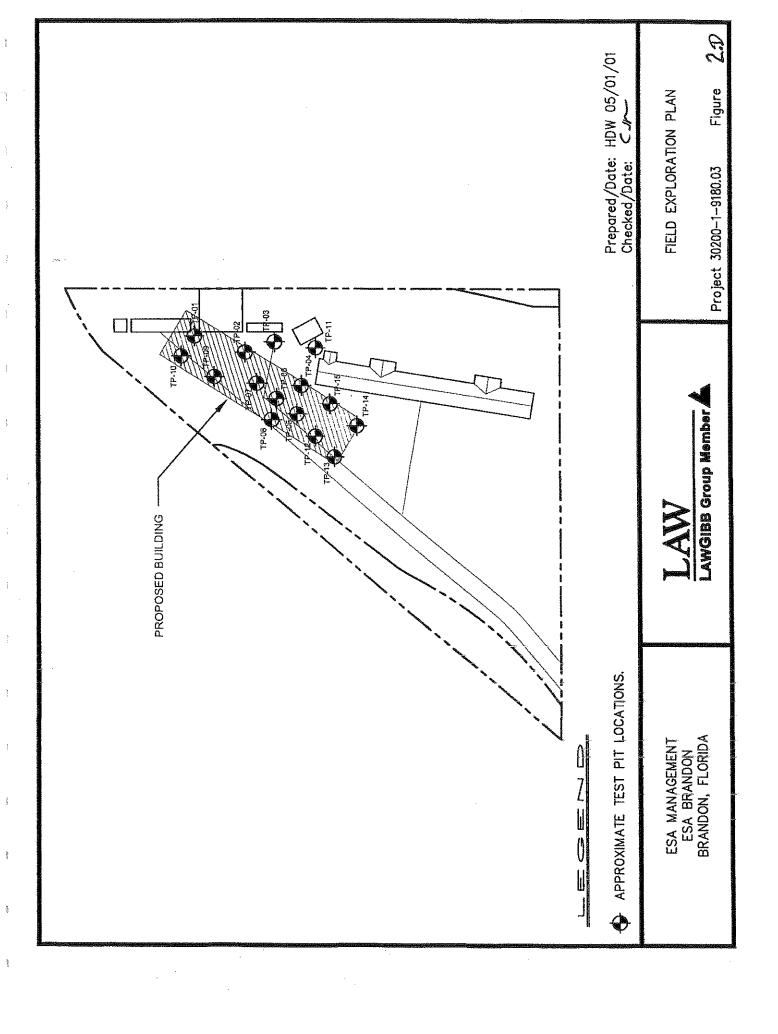


FIELD EXPLORATION PLAN

Project 6513-04-0349 Figure 2, 3

Prepared By	JAM	
Checked Ry	سن ع	







SITE LOCATION



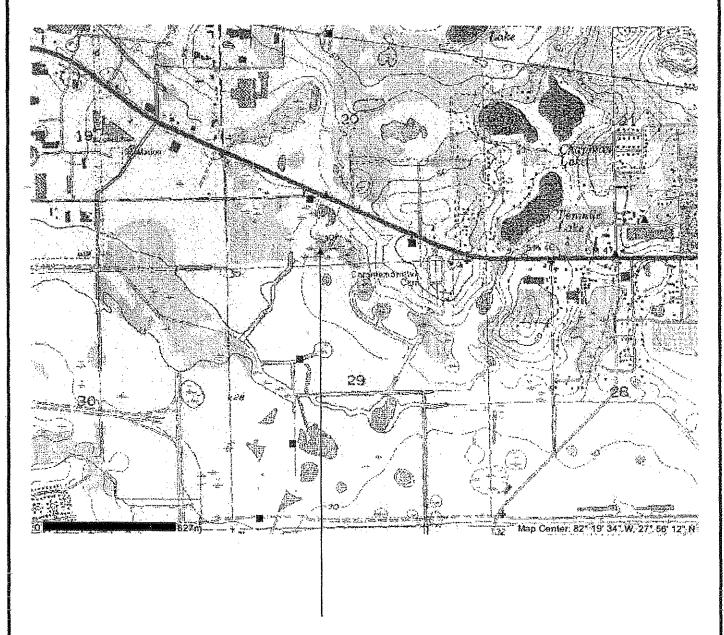
Source: USDA "Soil Survey of Hillsborough County, Florida"

Brandon Hotel Site Development Brandon, Florida



USDA VICINITY MAP

Project 6513-06-0422 Figure 3



SITE LOCATION



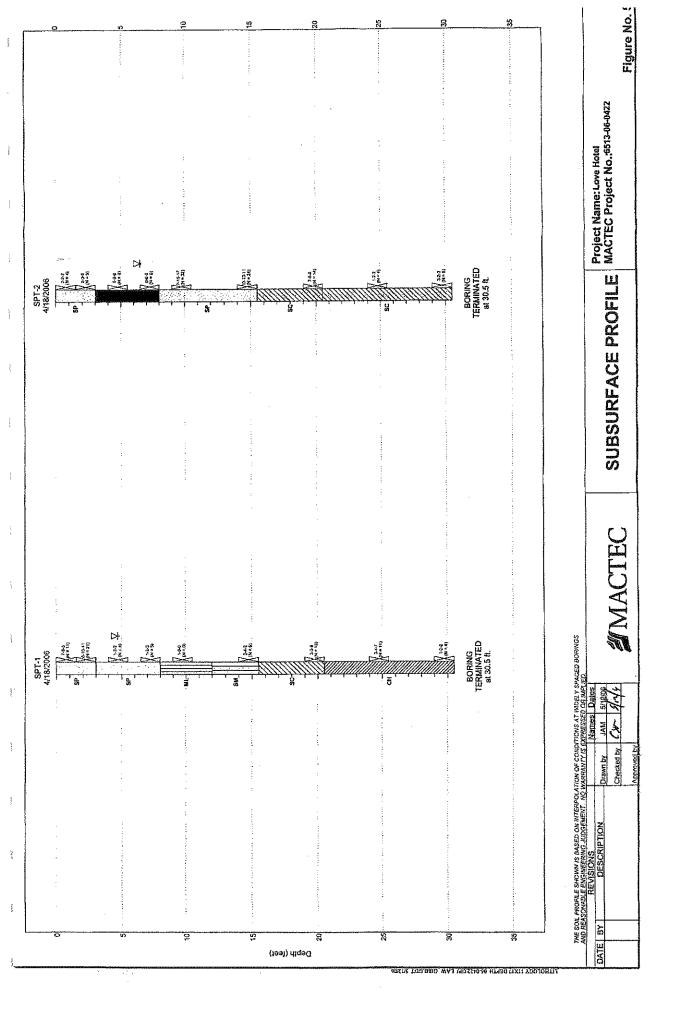
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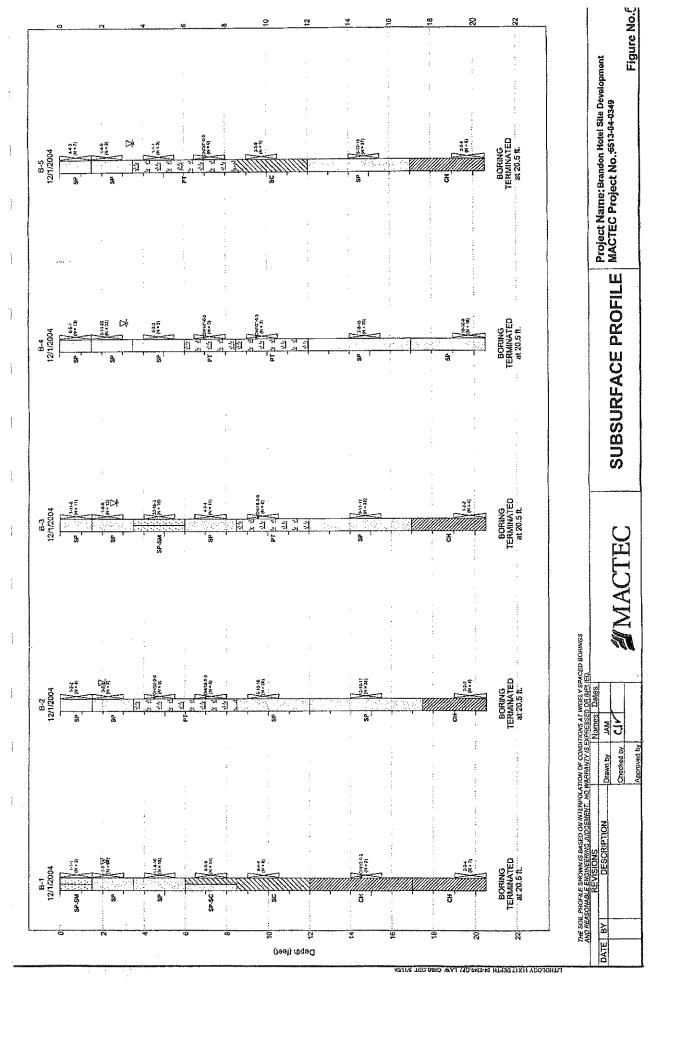
Source: USGS Quadrangle Map, Brandon, Florida 1981

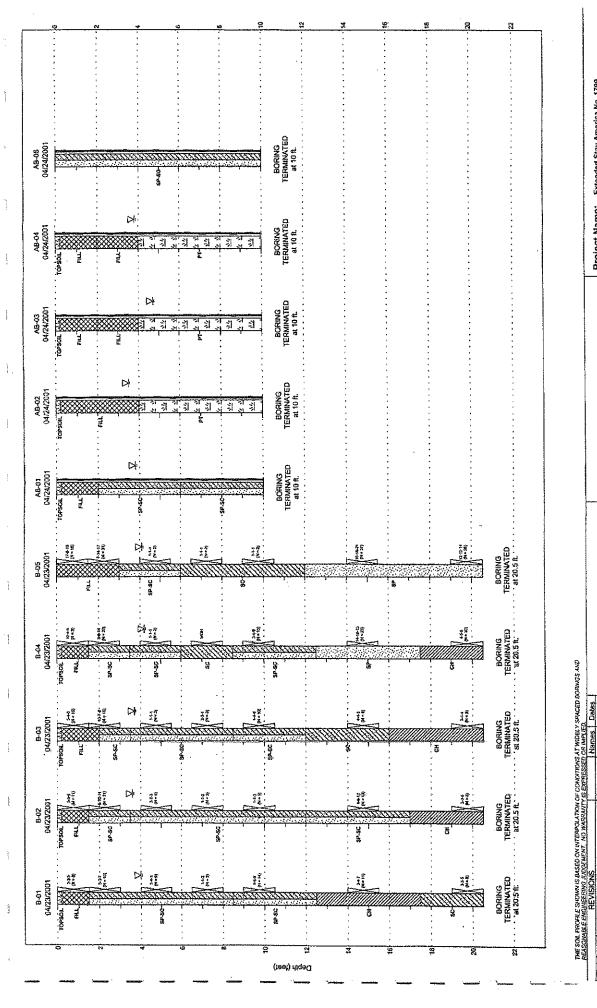
Brandon Hotel Site Development Brandon, Florida



USGS VICINITY MAP
Project 6513-06-0422
Figure 4







SUBSURFACE PROFILE

LAW
LAWGIBB Group Member

£DG

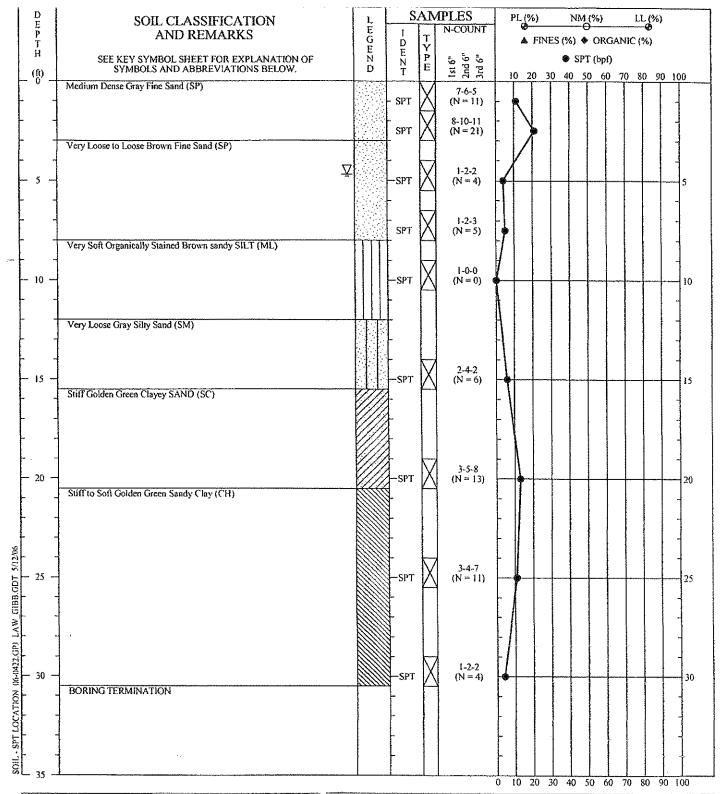
DATE BY

Approved by Checked by Drawn by

Project Name: Extended Stay America No. 1799 LAW Project No.: 30206-1-9180.03

Figure No. 5,(

SOIL BORING RECORDS



DRILLER: K. Jakacky

EQUIPMENT: CME Power Drill Rig METHOD:

Rotary Wash with Bentonite "Mud". ASTM D-1586 HOLE DIA .:

2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

#### SOIL TEST BORING RECORD

PROJECT: Love Hotel LOCATION: Brandon, FL

DRILLED:

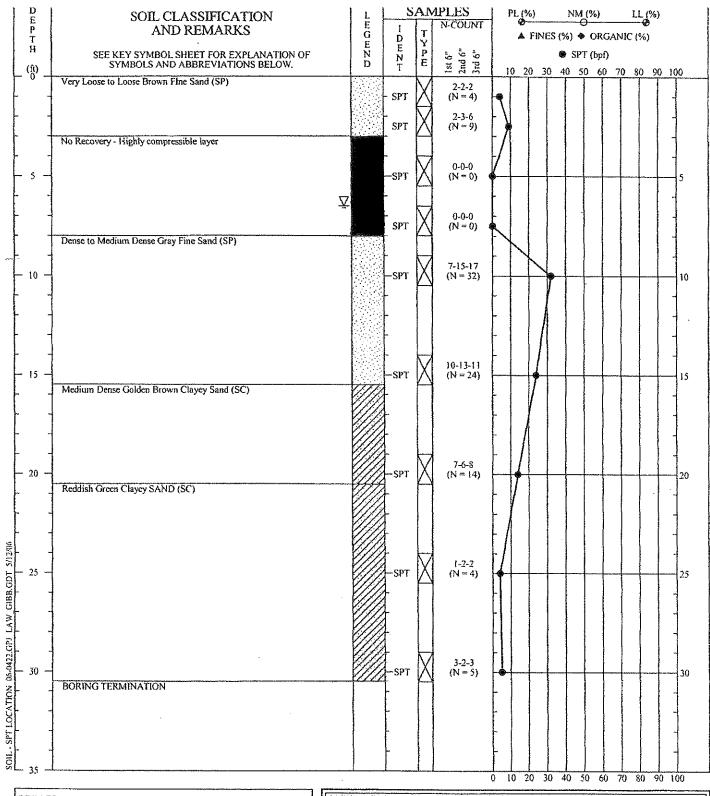
April 18, 2006

PROJ. NO.: 6513-06-0422 **BORING NO.: SPT-1** 

PAGE 1 OF 1

CHECKED BY: Ch





DRILLER: K. Jakacky

EQUIPMENT: CME Power Drill Rig

METHOD: Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

# SOIL TEST BORING RECORD

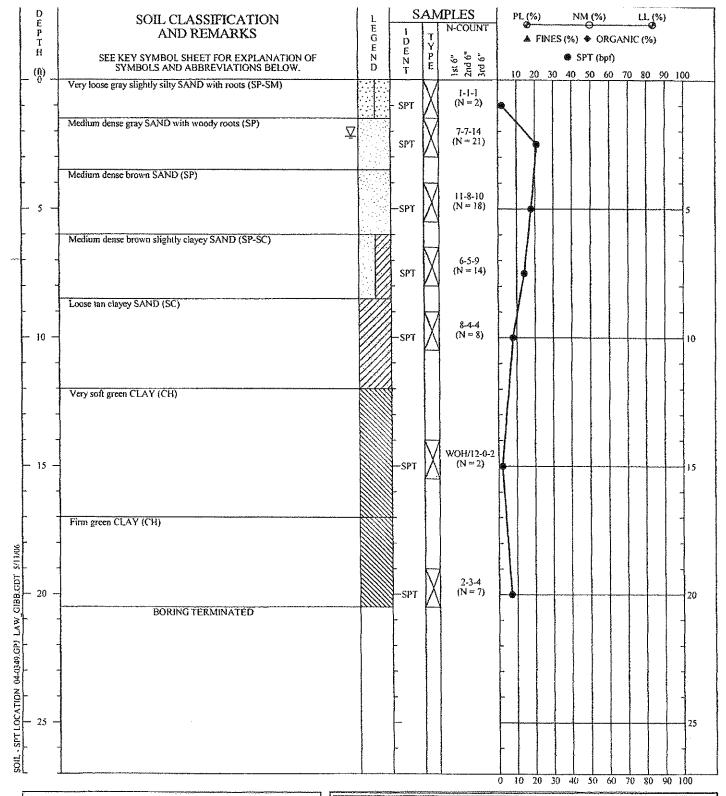
PROJECT: Love Hotel LOCATION: Brandon, FL

DRILLED: April 18, 2006

PROJ. NO.: 6513-06-0422

BORING NO.: SPT-2 PAGE 1 OF 1





DRILLER:

D. Teslicko EQUIPMENT: CME Power Drill Rig METHOD:

Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA .: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

#### SOIL TEST BORING RECORD

PROJECT: Brandon Hotel Site Development

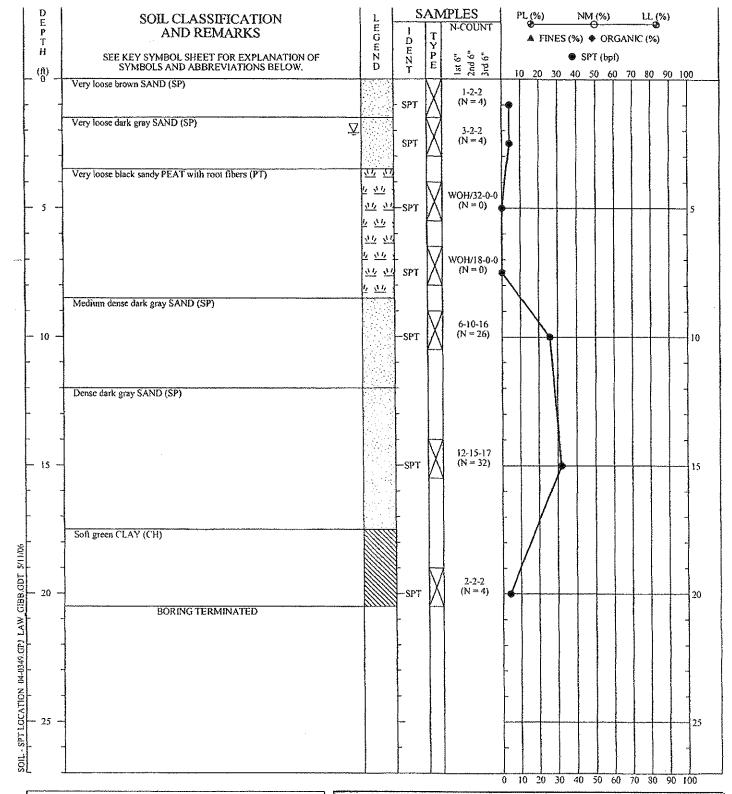
LOCATION: Brandon, FL

DRILLED: December 1, 2004

**BORING NO.: B-1** PAGE 1 OF 1

CHECKED BY: OF PROJ. NO.: 6513-04-0349





DRILLER:

EQUIPMENT: CME Power Drill Rig METHOD:

Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER.
INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

# SOIL TEST BORING RECORD

PROJECT: Brandon Hotel Site Development

LOCATION: Brandon, FL

DRILLED: PROJ. NO .:

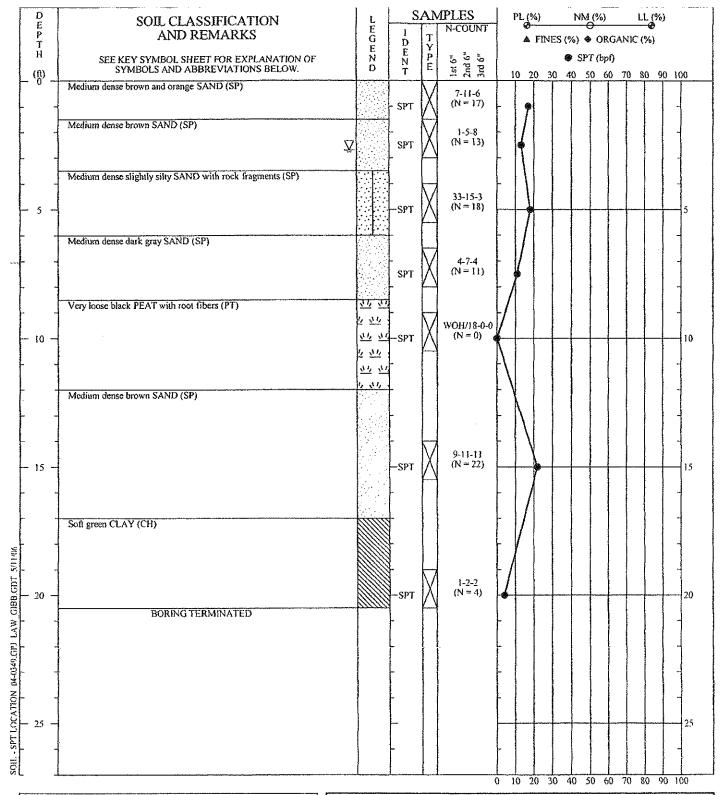
December 1, 2004

6513-04-0349

**BORING NO.: B-2** PAGE 1 OF 1

CHECKED BY: CF





DRILLER: D. Testicko

EQUIPMENT: CME Power Drill Rig
METHOD: Rotary Wash with Bentonite "Mud". ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

#### SOIL TEST BORING RECORD

PROJECT: Brandon Hotel Site Development

LOCATION: Brandon, FL

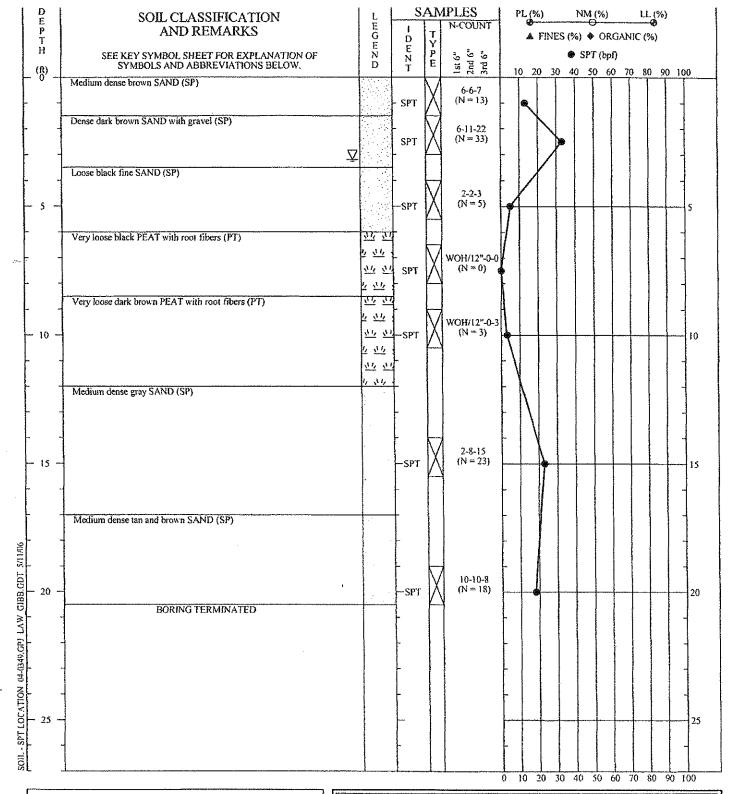
BORING NO.: B-3

**DRILLED:** December 1, 2004 **PROJ. NO.:** 6513-04-0349

CHECKED BY: CF

PAGE 1 OF 1





DRILLER:

D. Teslicko

EQUIPMENT: CME Power Drill Rig METHOD:

Rotary Wash with Bentonite "Mud". ASTM D-1586

HOLE DIA .: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION, SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

# SOIL TEST BORING RECORD

PROJECT: Brandon Hotel Site Development

LOCATION: Brandon, FL

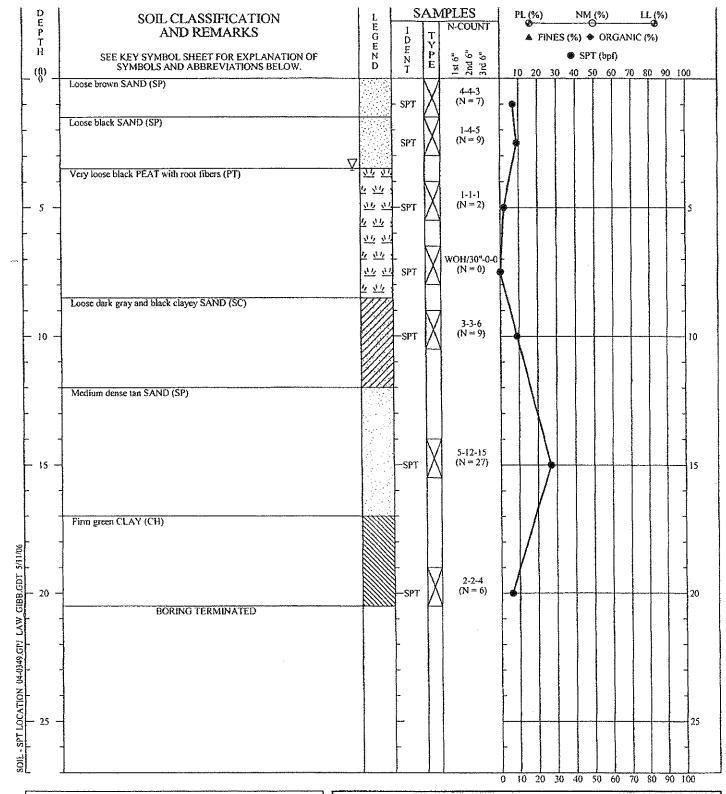
DRILLED: December 1, 2004

PROJ. NO.: 6513-04-0349

PAGE 1 OF 1 CHECKED BY: CJ

BORING NO.: B-4





DRILLER:

D. Teslicko

EQUIPMENT: CME Power Drill Rig

METHOD:

Rotary Wash with Bentonite "Mud". ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

# SOIL TEST BORING RECORD

**PROJECT:** Brandon Hotel Site Development

LOCATION: Brandon, FL

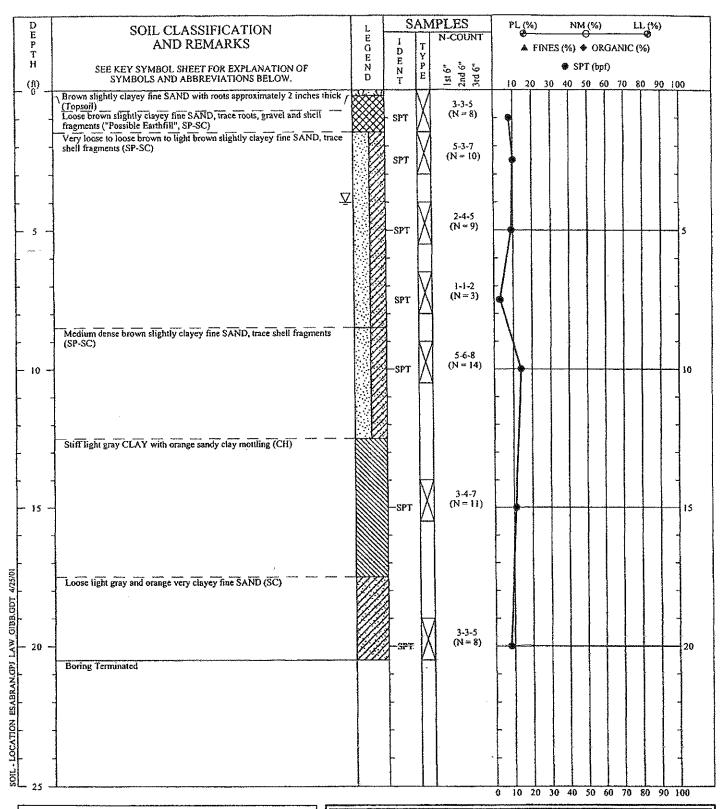
DRILLED: December 1, 2004

PROJ. NO.: 6513-04-0349

BORING NO.: B-5

PAGE 1 OF 1 CHECKED BY:





DRILLER: D. Teslicko
EQUIPMENT: CME Power Drill Rig
METHOD: Rotary Wash with Bentonite "Mud", ASTM D-1586
HOLE DIA.: 2 15/16 inches
REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

### TO ASOIL DEST BORING RECORD

PROJECT: Extended Stay America No. 1799

LOCATION: Brandon, Florida

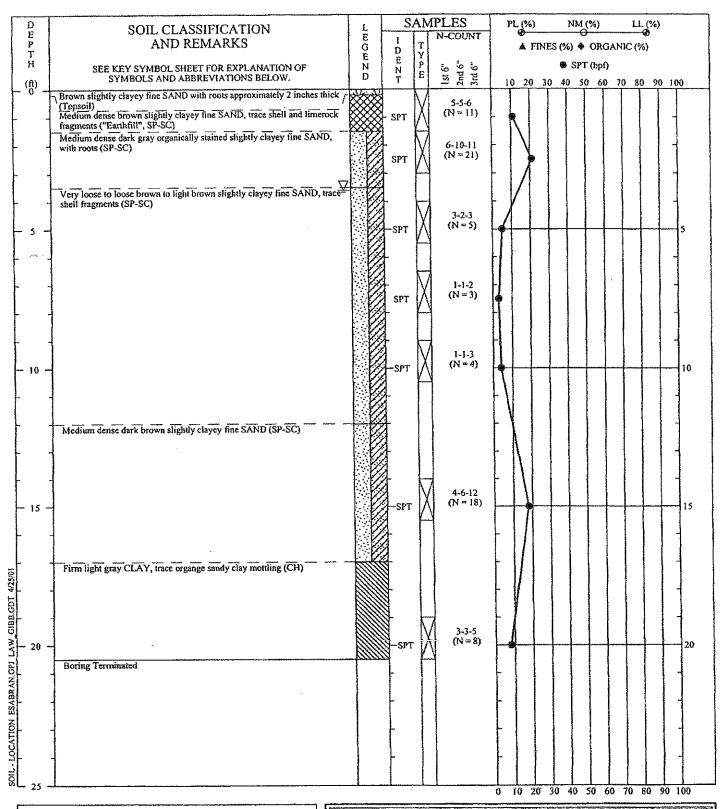
**DRILLED:** April 23, 2001 **PROJ. NO.:** 30200-1-9180.03

PAGE 1 OF 1
CHECKED BY:

BORING NO.: B-01







DRILLER: D. Teslicko

EQUIPMENT: CME Power Drill Rig

METHOD: Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

#### SOU TEST BORING RECORD

PROJECT: Extended Stay America No. 1799

LOCATION: Brandon, Florida

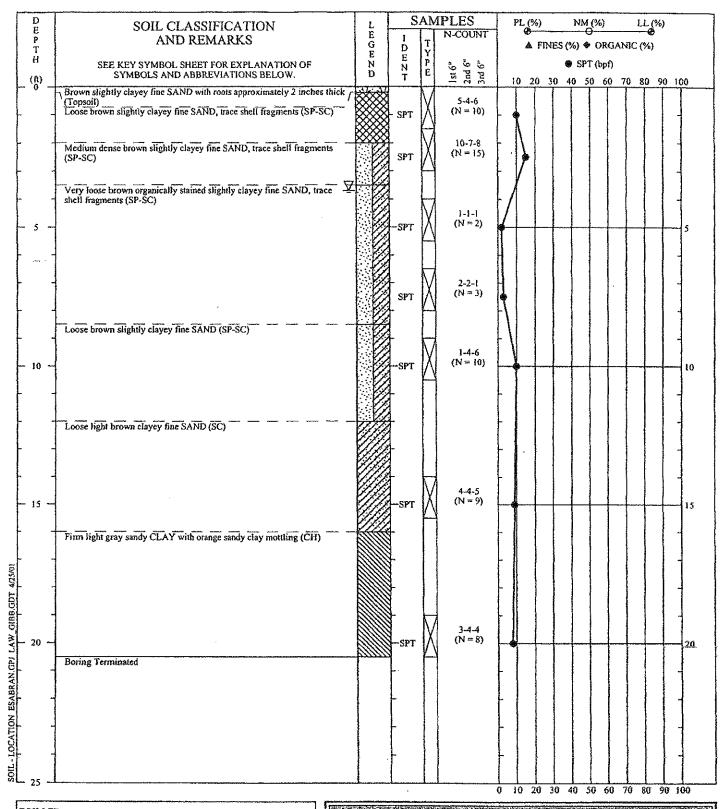
**BORING NO.: B-02** PAGE 1 OF 1

April 23, 2001 PROJ. NO.: 30200-1-9180.03

DRILLED:

CHECKED BY: C





DRILLER: EQUIPMENT: CME Power Drill Rig

D. Teslicko

METHOD:

Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

#### SON TESTBORING RECORD

PROJECT: Extended Stay America No. 1799

LOCATION: Brandon, Florida

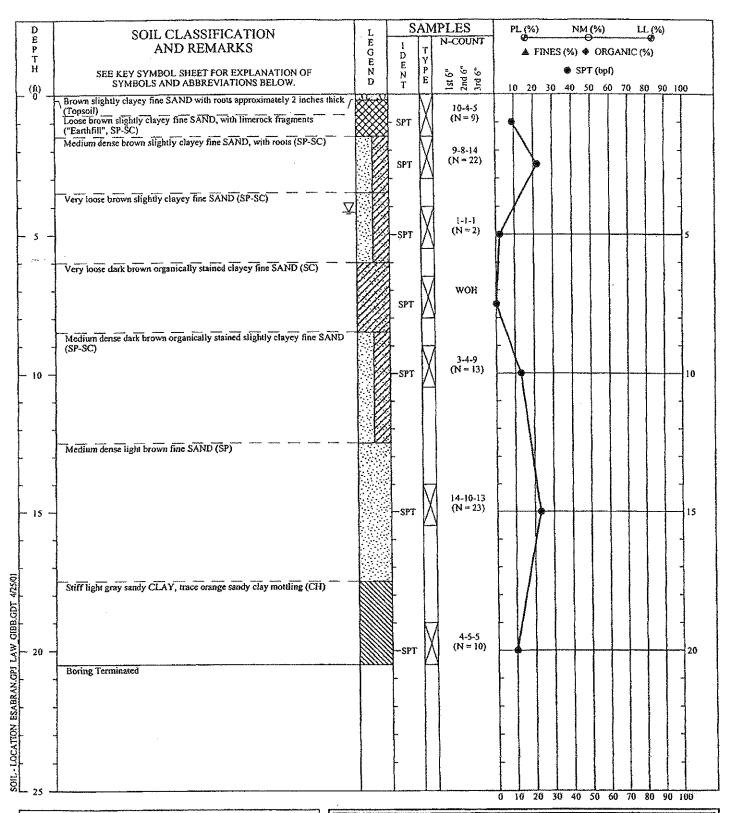
**BORING NO.: B-03** 

DRILLED: April 23, 2001

PROJ. NO.: 30200-1-9180.03

PAGE I OF 1 CHECKED BY: (>





DRILLER:

D, Teslicko

EQUIPMENT: CME Power Drill Rig

METHOD:

Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA .: 2 15/16 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS RETWEEN STRATA MAY BE GRADUAL.

### SOIL IEST BORING RECORD

PROJECT:

Extended Stay America No. 1799

LOCATION:

Brandon, Florida

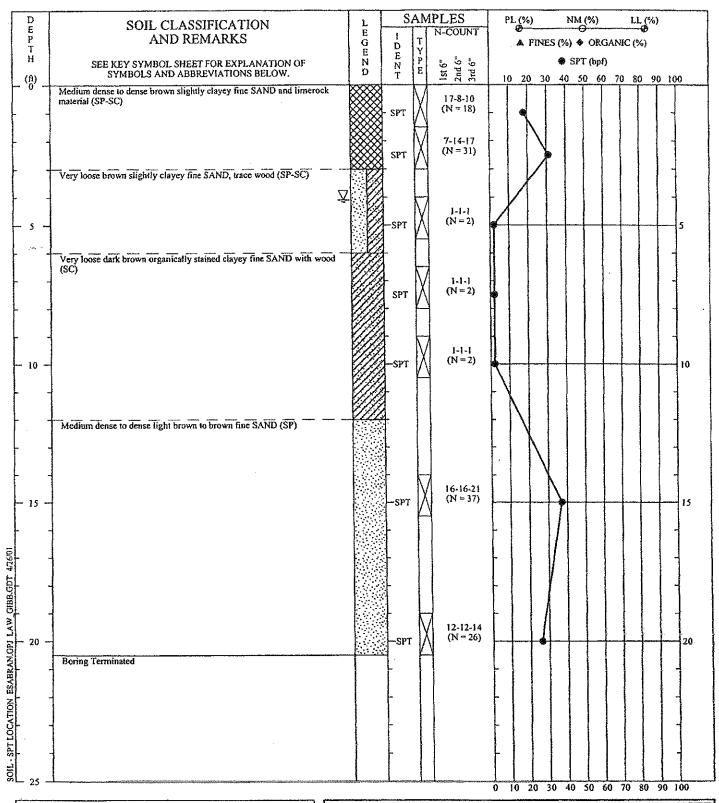
BORING NO.: B-04

DRILLED: PROJ. NO.:

April 23, 2001 30200-1-9180.03 PAGE 1 OF 1 CHECKED BY:

<u>LAW</u>





DRILLER:

D. Teslicko

METHOD:

EQUIPMENT: CME Power Drill Rig Rotary Wash with Bentonite "Mud", ASTM D-1586

HOLE DIA.: 2 15/16 inches

REMARKS:

3.

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

#### SOIL TEST BORING RECORD

PROJECT:

Extended Stay America No. 1799

LOCATION:

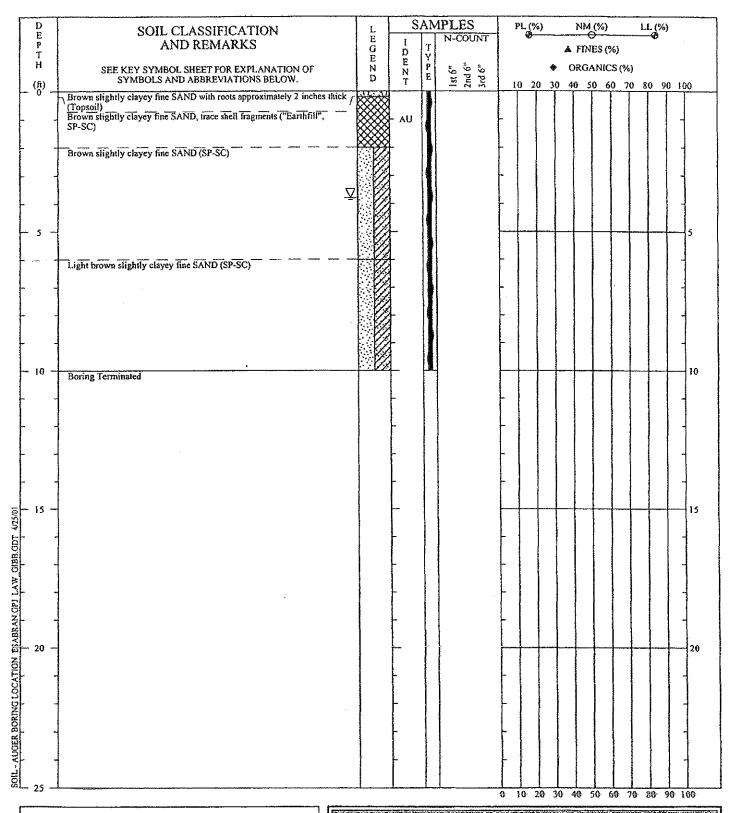
Brandon, Florida

**BORING NO.: B-05** PAGE 1 OF 1

DRILLED: PROJ. NO.: April 23, 2001 30200-1-9180.03

CHECKED BY: C





DRILLER: D. Teslicko

EQUIPMENT: 3-inch Diameter Bucket Auger

METHOD: Solid Stem Auger Boring, ASTM D-1452

HOLE DIA .: 3 inches

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

# AUGER-BORINGRE CORD

PROJECT: Extended Stay America No. 1799

LOCATION: Brandon, Florida

DRILLED: April 24, 2001

BORING NO.: AB-01 PAGE 1 OF 1

PROJ. NO.: 30200-1-9180.03

CHECKED BY: C

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DRILLER: D. Teslicko

EQUIPMENT: 3-inch Diameter Bucket Auger

METHOD: Solid Stem Auger Boring, ASTM D-1452

HOLE DIA.: 3 inche

REMARKS:

34

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

TATOGERBORING RECORD

PROJECT: Extended Stay America No. 1799

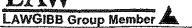
LOCATION: Brandon, Florida

DRILLED: April 24, 2001 PAGE 1 OF L

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 April 24, 2001
 PAGE 1 OF 1

 PROJ. NO.:
 30200-1-9180.03
 CHECKED BY:

LAW



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DRILLER: D. Teslicko

EQUIPMENT: 3-inch Diameter Bucket Auger

METHOD: Solid Stem Auger Boring, ASTM D-1452 HOLE DIA.:

REMARKS:

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# AUGERBORING RECORD

PROJECT: Extended Stay America No. 1799

LOCATION: Brandon, Florida

DRILLED: April 24, 2001 **BORING NO.: AB-03** PAGE 1 OF 1

PROJ. NO.: 30200-1-9180.03 CHECKED BY: Cr





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DRILLER: D. Teslicko

EQUIPMENT: 3-inch Diameter Bucket Auger

METHOD: Solid Stem Auger Boring, ASTM D-1452

HOLE DIA,: 3 inches

REMARKS:

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### AUGER BORING RECORD

PROJECT: Extended Stay America No. 1799

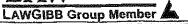
LOCATION: Brandon, Florida

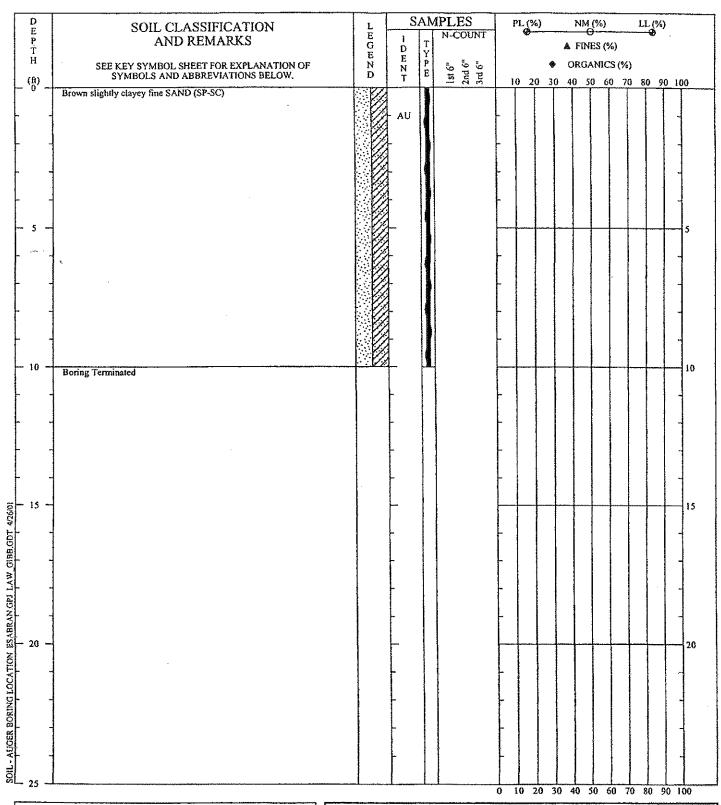
BORING NO.: AB-04

PAGE 1 OF 1 CHECKED BY:

**DRILLED:** April 24, 2001 **PROJ. NO.:** 30200-1-9180.03

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DRILLER: D. Teslicko

EQUIPMENT: 3-inch Diameter Bucket Auger

METHOD: Solid Stem Auger Boring, ASTM D-1452

HOLE DIA.: 3 inches

REMARKS:

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### \*\*\* AUGERBORING RECORD

PROJECT: Extended Stay America No. 1799

LOCATION: Brandon, Florida

**DRILLED:** April 24, 2001 **PROJ. NO.:** 30200-1-9180.03

PAGE 1 OF 1 CHECKED BY:

**BORING NO.: AB-05** 

LAW



	SOIL CLASSIFICATION	L	E	SAMPLES			
D E P	AND REMARKS	L E G E	L E V	D E N T	Dry Density (pcf)	Moisture Content %	
T H	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	D D	(ft) - 0,0 -	Ñ T	E CO	Cont	
- (ft)	2 inches of Topsoil Brown slightly silry fine SAND with small and large roots, trace debris ("Earthfill", SP-SM)	<b>****</b>	_ 0,0 _				
	Brown slightly silty fine SAND (SP-SM)	****					
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DRILLER: Complete Development
EQUIPMENT: Trackhoe
HOLE DIM.:
REMARKS:

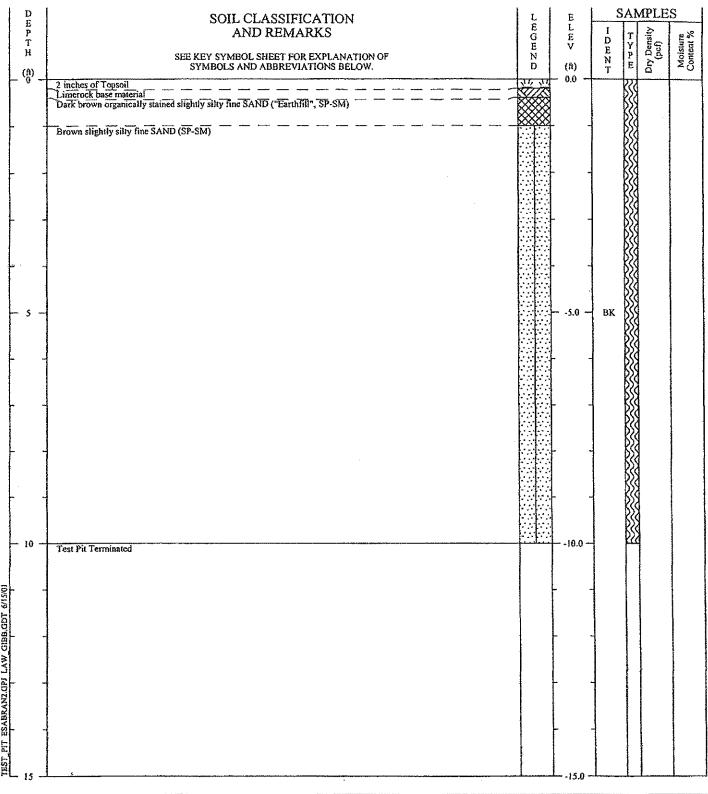
THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-01

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180



DRILLER: Complete Development EQUIPMENT: Trackhoe

HOLE DIM.:

REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-02

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

PAGE 1 OF 1

200-1-9180 PAGE 1

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		Gray to brown slightly silty fine SAND ("Earthfill", SP-SM)						e di esta de la constanta de l	
S 5		Dark brown organically stained slightly silty fine SAND with large roots, some debris and seams of dark brown peat (SP-SM)			-5.0 -	вк			
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DRILLER: Complete Development EQUIPMENT: Trackhoe HOLE DIM.: REMARKS:

THIS RECORD IS A REASONABLE INTERPRETATION OF SUBSURFACE CONDITIONS AT THE EXPLORATION LOCATION. SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND AT OTHER TIMES MAY DIFFER. INTERFACES BEWEEN STRATA ARE APPROXIMATE. TRANSITIONS BETWEEN STRATA MAY BE GRADUAL.

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

TEST PIT NO.: TP-03

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P T	AND REMARKS	L E G E	E L E V	I D E N	ਜ਼ ਚ ≺ ਜ Dry Density	(pct) Moisture Content %	
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- `o` -	2 inches of Topsoil Limerock base material	77 T	- 0.0		<u>}</u>		1
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DRILLER: Complete Development EQUIPMENT: Trackhoe

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REMARKS:

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-04

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

D E	SOIL CLASSIFICATION	L E	E L		AMPLE	
P	AND REMARKS	GE	Ë	D I	Sonsity L	sut %
H (ft) _	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	N D	(A) - 0.0 -	D E N T	Dry Density (pcf)	Moisture Content %
1-0-	2 inches of Topsoil Limerock base material 4 inches thick	ŸX	0.0		<b>}</b>	
1	Gray to brown slightly silty fine SAND (SP-SM)				}}}	
-						
					<b>}</b>	
ļ					889	
					833	
					<b>}</b>	
	Dark brown PEAT with small and large roots at 3 feet (PT)	F 77 77 77			<b>888</b>	
		W W			<b>B</b> \$\$	
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		7 77			833	
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		4 34	]		<b>\$</b> \$3	
-	Brown fine SAND (SP)	1300	+	-		
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DRILLER: Complete Development EQUIPMENT: Trackhoe

HOLE DIM.:

REMARKS:

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-05

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

)-1-9180 PAGE 1 OF 1

DEP	SOIL CLASSIFICATION	L E	E		AMPLE	
T	AND REMARKS	G E	E	DENT	Dry Density (pcf)	Moisture Content %
(ft) —	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	N D	(ft) - 0.0 -	1		& Q.
8	3 inches of Topsoil  Dark brown to brown fine SAND (SP-SM)		-			
	Dark brown PEAT with large roots (PT)	7 77 7 77 7 78 7 78				
_ 5 -	Dark brown slightly silty fine SAND, trace peat (SP-SM)		5,0	вк		
			-			
	Brown fine SAND (SP)					
TEST PIT ESABRANZOPI LAW GIBBGDT 6/15/01	Test Pit Terminated .		-10.0 -	and the second s		
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DRILLER: Complete Development EQUIPMENT: Trackhoe

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REMARKS:

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PROJECT: ESA - Brandon Brandon, Florida

TEST PIT NO.: TP-06

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

D	SOIL CLASSIFICATION	L	E			PLES	
E P T	AND REMARKS	LEGEZ	E L E V	D E	T Y P E	Orry Defisity (pcf)	Moisture Content %
(B)	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	D D	(ft) - 0.0 -	D E N T	E		ON
- (g) -	Grass with limerock material 3 inches thick Gray to brown slightly silty fine SAND, with debris ("Earthfill", SP-SM)	*****	- 0.0				
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	Dark brown PEAT (PT)	4 44					
-	Dark brown organically stained slightly silty line SAND, with small roots (SP-SM)						
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- 5 -	Dark brown to brown slighlty silty fine SAND (SP-SM)		5.0	ВK			
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DRILLER: Complete Development EQUIPMENT: Trackhoe

HOLE DIM.:

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-07

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

D E	SOIL CLASSIFICATION	L	E	S		IPLE	
P T H	AND REMARKS	L E G E N	L E V	D E N T	T Y P E	Dry Density (pcf)	Moisture Content %
- (ft) -	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	D	(fi) - 0.0 -			Dry.	Com
	2 inches of Topsoil Brown slightly silty fine SAND with debris ("Earthfill", SP-SM)		0.0				
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-	Dark brown PEAT with small roots (PT)	<u>₩</u> ₩					
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- 5 -	Dark brown organically stained slightly silty fine SAND (SP-SM)		5.0	BK			
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	Light brown fine SAND (SP)		··· -				
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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-08

**EXCAVATED:** May 18, 2001 **PROJ. NO.:** 30200-1-9180

30200-1-9180 PAGE 1 OF 1

I D	SOIL CLASSIFICATION	L	E }			(FLE	
P	AND REMARKS	E G E	E L E V	I D E N T	T Y	Dry Density (pcf)	Maisture Content %
(8)	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	N D	(ft)	N T	P	Dry D	Cong
- (R) -	2 inches of Topsoil Limerock material with shell fragments	<b>*</b>	- 0.0 -		<b>***</b>		
	Dark brown to gray slightly silty fine SAND with debris ("Earthfill", SP-SM)						
<b>-</b> •							
	Dark brown PEAT with small roots (PT)	7 77 27 27					1
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	Dark brown organically stained slightly silty fine SAND (SP-SM)					I	
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	Light brown fine SAND (SP)		-				
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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

TEST PIT NO.: TP-09

DE	SOIL CLASSIFICATION	L E	E		AMPLE	7
P T H	AND REMARKS  SEE KEY SYMBOL SHEET FOR EXPLANATION OF	G B N D	E L E V	I D E N T	Dry Density (pcf)	Moisture Content %
(ft)	SYMBOLS AND ABBREVIATIONS BELOW.	Ď	(ft) - 0.0 -	T	E Ç	ΣÖ
	4 inches of limerock base material  Brown to gray slightly silty fine SAND (SP-SM)	N/W				
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<u> </u>	 		5.0	BK		
-	Brown to light brown fine SAND (SP)				<b>}</b> }}	
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REMARKS:

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-10

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

D	SOIL CLASSIFICATION	L	E	S.	AM	PLE	S
E P T H	AND REMARKS  SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	L EGEND	E L E V (ft)	D E N T	T Y P E	Dry Density (pcf)	Moisture Content %
- (fi) -	8 inches of limerock base material		— 0.0 —		<b>?</b>		
The state of the s	Brown to gray slightly silty fine SAND with debris ("Earthfill", SP-SM)		-				
			-				
	Dark brown PEAT with small and large roots (PT)	京 京 京 京 :					
and the second s	Dark brown organically stained slightly silty fine SAND (SP-SM)		— -5.0 <b>—</b>	ВK			
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_	Light brown fine SAND (SP)						
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TEST PIT ESABRANZ GPJ LAW GIBB.GDT 6/15/01			-				
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DRILLER: Complete Development EQUIPMENT: Trackhoe

HOLE DIM.: REMARKS:

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PROJECT: ESA - Brandon LOCATION:

Brandon, Florida

EXCAVATED: May 18, 2001 PROJ. NO.:

30200-1-9180

TEST PIT NO.: TP-11

D	SOIL CLASSIFICATION	L	E		~~~~	1PLE	1
E P T H	AND REMARKS	E G E	E E V	D E N	T Y P E	Dry Density (pcf)	Moisture Content %
(ft) _	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	D D	(ft) - 0.0 -	N T	É	Dry.	Con
	2 inches of Topsoil Gray to brown slightly silty fine SAND ("Earthfill", SP-SM)						
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} -	Dark brown PEAT with roots (PT)	577. 京京					
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	Dark brown organically stained slightly silty fine SAND (SP-SM)	2 22 -4-4					
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- 10 -	Brown fine SAND (SP)		10.0 -		<b>}</b>		
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DRILLER: Complete Development EQUIPMENT: Trackhoe

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FIRST PUTRECORD

PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-12

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180 PROJ. NO.:

D	SOIL CLASSIFICATION		E	S		IPLE	
E P T	AND REMARKS	E G E	Ē	D D	Ţ	ensity :f)	n tre
H (ft)	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	N D	(ft) 0.0	D E N T	Y P E	Dry Density (pcf)	Moisture Content %
2 inches of Topsoil Brown slightly silty fine	SAND ("Earthfill", SP-5M)						
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Dark brown PEAT with s	imall and large roots (PT)						
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Dark brown PEAT and o	rganically stained sandy SILT (PT/SM)		7		<b>8</b>		<u> </u>
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DRILLER: Complete Development

EQUIPMENT: Trackhoe

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REMARKS:

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INTERFACES BEWEEN STRATA ARE APPROXIMATE.

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PROJECT:

ESA - Brandon

LOCATION:

Brandon, Florida

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

TEST PIT NO.: TP-13

D E	SOIL CLASSIFICATION	L	E	SAMPLE				
P	AND REMARKS	E G E N	E L E V	I D E N T	T	ensity	Moisture	
H (ft)	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	N D	(ft)	N T	T Y P E	Dry Density (pcf)	Σζ	
0 -	2 inches of Topsoil Brown slightly silty fine SAND with limerock base material ("Earthfill", SP-SM)		- 0.0 -		<b>}</b>			
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-	Dark brown PEAT with roots (PT)	2 22						
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	Dark brown organically stained silty fine SAND (SM)							
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- 15 -	Light brown fine SAND (SP)							
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SUBSURFACE CONDITIONS AT OTHER
AND AT OTHER TIMES MAY DIFFER.
BEWEEN STRATA ARE APPROXIMATE.
BETWEEN STRATA MAY BE GRADUAL.

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PROJECT: ESA - Brandon LOCATION: Brandon, Florida

TEST PIT NO.: TP-14

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

D	SOIL CLASSIFICATION	L	E	S	AMPLES			
D E P T H	AND REMARKS	L E G E N	E L E V	I D E N	TYPE	(pcf)	Moisture Content %	
(fi) -	SEE KEY SYMBOL SHEET FOR EXPLANATION OF SYMBOLS AND ABBREVIATIONS BELOW.	D NEST	(ft) - 0.0 -	T	E È	ŝ		
	2 inches of Topsoil Gray to brown slightly silty fine SAND ("Earthfill", SP-SM)		-					
-	Brown to dark brown slightly sitty fine SAND (SP-SM)		_					
. 40 <sub>6</sub>								
- 5 -	Dark brown PEAT with root fibers and wood log (PT)	<u> </u>	-5.0 -	вк				
		77. 77		BK				
Annual annual annual annual annual annual annual annual annual annual annual annual annual annual annual annua	Dark brown organically stained slightly silty fine SAND (SP-SM)			i de la companya de l				
- 10 -	Gray fine SAND (SP)		-10.0 -			-		
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DRILLER:

Complete Development

EQUIPMENT: Trackhoe

HOLE DIM.: REMARKS:

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### TESTPIL RECORD

PROJECT:

ESA - Brandon

LOCATION: Brandon, Florida

EXCAVATED: May 18, 2001 PROJ. NO.: 30200-1-9180

TEST PIT NO.: TP-15

KEY TO CLASSIFICATIONS & SYMBOLS

Undisturbed Sample Auger Cuttings	Split Spoon Sample	Rock Core	∇ Water Table at time of drilling ▼ Water Table after 24 hours					CORRELATION OF PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY	SAND & GRAVEL SILT & CL	Slows   Relative Density   No. of Blows	6 - 4 Very Loose 0 - 2 Very Soft	30 Medium Dense 5.8	Dense 9-15	Over 50 Very Dense 16 - 30 Very Stiff Over 30 Hard		IIMESTONE	ws Cor	10- 20 Soft 21- 50 Medium	51 - 50/3" Hard Greater than 50/3" Very Hard			KEY TO SYNBOLS AND	DESCRIPTIONS	Allegation of the second second	W NACIEC	
TYPICAL NAMES	Weil graded gravels, gravel - sand mixtures, little or no fines.	Poxyly graded gravels or grave - sand mixtures. little or no fines.	Sity gravels, gravel - sand - silt mixtures.	Clayey gravels, gravel - sand - clay mixhures.	Well graded sands, gravelly sands, little or no fines.	Poorly graded sands or gravelly sands, little or no fines.	Silty sands, sand - silt mixtures	Clayey rands, sand - clay mixtures.	Impanic sile and very fire sends mek flour, sily of	clayey the saids of clayey kills and with sagni prasticity.	Inorganie lays of low to medium phasticity, gravelly clave, sandy clays, silty clays, kan clays,	Oceanie after and decommend office of the	Organic sus and organic sury cays or low plasticity.	inorganic silts, micaccous or diatomaccous fine sandy or silty soils, elastic silts.	Inorganic clays of High plasticity, fat clays	Organic clays of medium to high plasticity,	organic silts.	Peat and other highly organic soils.	Limestone	Weathgred Limestone	Soils possessing characteristics of two groups are designated by	GRAVEL	Fine Coarse Cobbles Boulders	5,4 3/4" 3" 12" SIZE	Engineers, U.S. Army Technical	1960)
GROUP SYMBOLS	MD CM	SOS GP	GW GW	<u>2</u> 33	MS	(Little or no fines)	H SW	SC	M M		<u>ال</u>			M	ij	12	150	2 % PT	SI H	WLS WES	ssing characte		Modium Coarso	No.40 No.10 No.4	em, Corps of	Kevised April,
MAJOR DIVISIONS  CLEAN CRAVIETS		٠	LARGER than the NTH FINES No. 4 sieve size)	~~	CLEAN	SMALLER than the SANDS WITH No. 4 Sieve Size)	(Appreciable anrount of fines)		SILTS AND CLAYS (Liquid limit LESS than 50)			SILTS AND CLAYS (Liquid limit GREATER than 50)				HIGHLY ORGANIC SOILS	LIMESTONE FORMATIONS		BOUNDARY CLASSIFICATIONS: Soils posse	TINES	SILT OR CLAY Fine	No.200 No.40 TIN STANI	Reference: The Unified Soil Classification System, Corps of	. 3-357, Vol. I, March, 1955 (1		
MA			COARSE	GRAINED	(More than 50% of material is LARGER							CELVE	SOILS	(More than, 50% of national is	SMALLER than No. 200 sieve sizo)			HIGHE			BOUNDARY CL.		SILTC		Reference: The L	Memorandum No

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