

**Additional Subsurface Soil Exploration
Proposed ABC Store No. 197
Old Kings Road and Palm Coast Parkway
Palm Coast, Florida**



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Ardaman & Associates, Inc.

Geotechnical, Environmental and
Materials Consultants

October 8, 2008
File No. 08-6315

ABC Fine Wines & Spirits
9001 S. Orange Avenue
Orlando, Florida 32826

Attention: Ms. Phyllis Fitzpatrick

Subject: Additional Subsurface Soil Exploration
Proposed ABC Store No. 197
Old Kings Road and Palm Coast Parkway
Palm Coast, Florida

Dear Ms. Fitzpatrick:

As requested and authorized by you, we have completed a shallow subsurface soil exploration for the subject project. The purpose of performing this additional exploration was to re-evaluate the estimated normal seasonal high groundwater level at the site. This report documents our findings and presents our engineering recommendations.

Ardaman & Associates previously performed a subsurface soil exploration and geotechnical engineering evaluation for the proposed ABC development and presented the results in our February 4, 2008 report (A&A File No. 08-6315). We understand that SJRWMD subsequently evaluated the site and estimated the normal seasonal high groundwater table to be about 1 foot higher than our estimate presented in our February 4, 2008 report. Our current exploration as reported herein was performed at the opportune time since it is near the end of the rainy season and the above normal rainfall that has occurred over the last 2 months has helped restore the groundwater table elevations following the previous drought months.

SITE LOCATION AND SITE DESCRIPTION

The site for the proposed ABC Store # 197 is located on the northeast corner of the intersection of Old Kings Road and Palm Coast Parkway in Palm Coast, Flagler County, Florida (Section 18, Township 11 South, Range 31 East). The general site location is shown superimposed on the Beverly Beach, Florida U.S.G.S. quadrangle map presented on Figure 1.

The site is currently undeveloped and grass covered, with trees mostly on the north, northeast and northwest boundaries.

FIELD EXPLORATION PROGRAM

Hand Auger Borings

Ardaman engineer, Mr. Greg Stevens, performed the field exploration program on October 3, 2008. The field exploration program included performing 3 hand auger borings. The hand auger borings

were drilled using a 3.5-inch diameter bucket auger to depths between 6.5 and 7 feet below the ground surface. Representative soil samples were recovered from the hand auger borings and classified in the field. A summary of this field procedure is included in Appendix I.

The groundwater level at each of the boring locations was allowed to stabilize upon completion of drilling and was then measured. The borings were then backfilled with soil cuttings.

Test Locations

The approximate locations of the borings are schematically illustrated on a site plan shown on Figure 2. These locations were determined in the field by estimating distances from existing site features and should be considered accurate only to the degree implied by the method of measurement used.

LABORATORY PROGRAM

Representative soil samples obtained during our field sampling operation were packaged and transferred to our laboratory for further visual examination and classification. The soil samples were visually classified in general accordance with the Unified Soil Classification System (ASTM D-2488). The resulting soil descriptions are shown on the soil boring profiles presented on Figure 3.

GENERAL SUBSURFACE CONDITIONS

General Soil Profile

The results of the field exploration and laboratory programs are graphically summarized on the soil boring profiles presented on Figure 3. The stratification of the boring profiles represents our interpretation of the field boring logs and the results of laboratory examinations of the recovered samples. The stratification lines represent the approximate boundary between soil types. The actual transitions may be more gradual than implied.

The results of the borings indicate the following general soil profile of fine sand (SP) and fine sand with silt (SP-SM) to the boring termination depths.

The above soil profile is outlined in general terms only. Please refer to Figure 3 for soil profile details.

Groundwater Level

The groundwater level was measured in the boreholes on the day drilled after stabilization of the downhole water level. As shown on Figure 3, groundwater was encountered at depths that ranged from 6 to 6.5 feet below the existing ground surface on the dates indicated. Fluctuations in groundwater levels should be anticipated throughout the year primarily due to seasonal variations in rainfall and other factors that may vary from the time the borings were conducted.

NORMAL SEASONAL HIGH GROUNDWATER LEVEL

The normal seasonal high groundwater level each year is the level in the August-September period at the end of the rainy season during a year of normal (average) rainfall. The water table elevations associated with a higher than normal rainfall and in the extreme case, flood, would be higher to much higher than the normal seasonal high groundwater level. The normal high water levels would more approximate the normal seasonal high groundwater levels.

The seasonal high groundwater level is affected by a number of factors. The drainage characteristics of the soils, the land surface elevation, relief points such as drainage ditches, lakes, rivers, swamp areas, etc., and distance to relief points are some of the more important factors influencing the seasonal high groundwater level.

Based on our interpretation of the site conditions using our boring logs, we estimate the normal seasonal high groundwater level at the boring locations to be approximately 1 foot above the groundwater levels measured at the time of our field exploration.

Using the site topography plan provided by ABC Fine Wines & Spirits, we estimate the normal seasonal high groundwater level at our boring locations to be approximately +18.5 feet.

We note that a drainage ditch system exists in the area of this site. Historic staining of the soil is not considered to be a good indicator of current groundwater conditions.

CLOSURE

The analyses submitted herein are based on the data obtained from the soil borings presented on Figure 3. This report does not reflect any variations which may occur adjacent to or between the borings.

This study is based on a relatively shallow exploration and is not intended to be an evaluation for sinkhole potential. This study does not include an evaluation of the environmental (ecological or hazardous/toxic material related) condition of the site and subsurface.

This report has been prepared for the exclusive use of ABC Fine Wines & Spirits in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made.

We are pleased to be of assistance to you on this phase of the project. When we may be of further service to you or should you have any questions, please contact us.

Very truly yours,
ARDAMAN & ASSOCIATES, INC.



Gregory S. Stevens, E.I.
Assistant Project Engineer

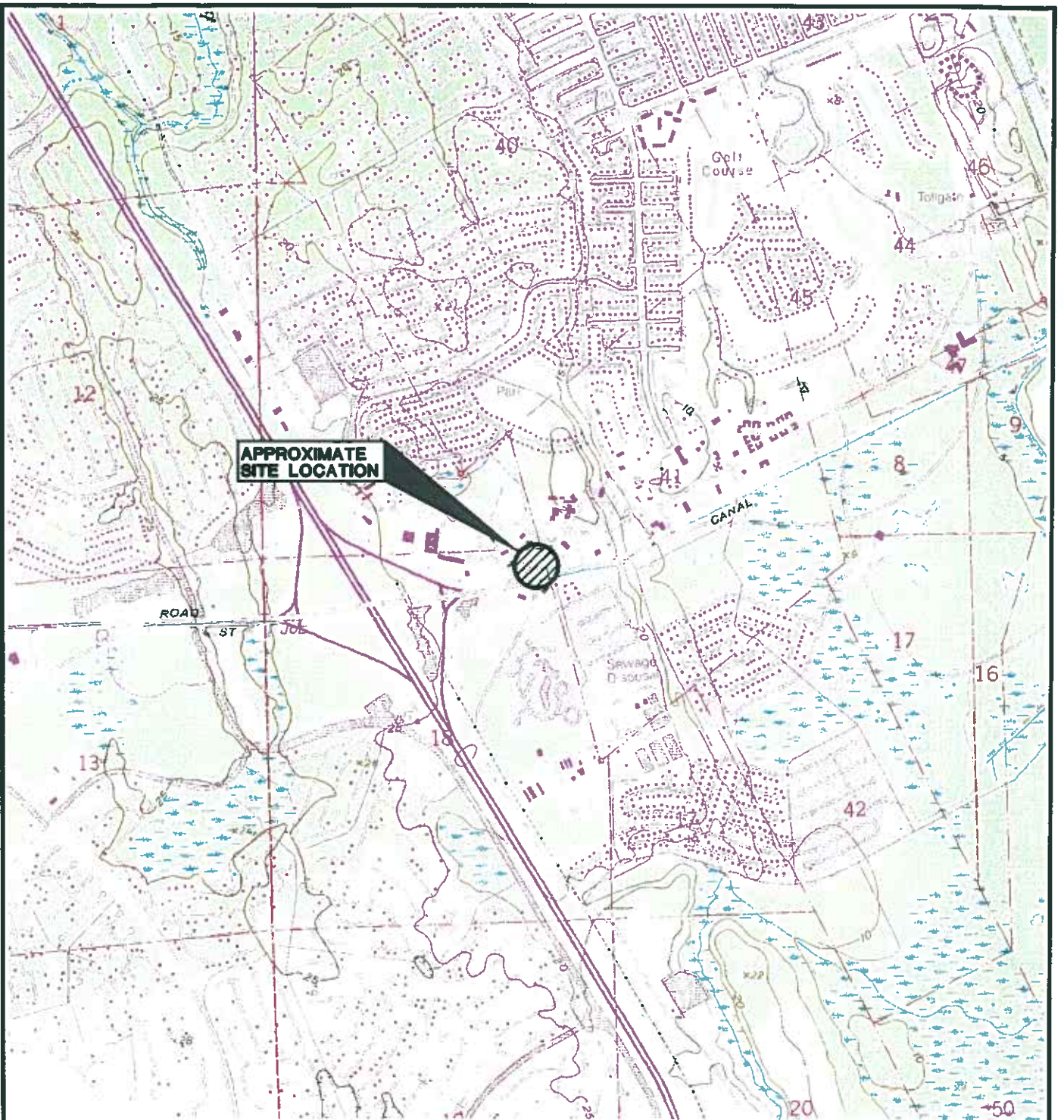


Charles H. Cunningham, P.E.
Division Manager
Florida License No. 38189

GSS/CHC/nfm/ksb
08-6315 ABC Store 197_Groundwater gss.wpd (2008 Geo)

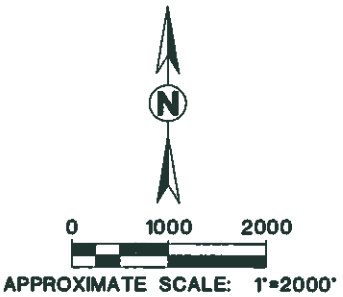
cc: Ms. Cindy Parker, P.E. - DRMP

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SECTION 18
TOWNSHIP 11 SOUTH
RANGE 31 EAST

OBTAINED FROM U.S.G.S. QUAD MAP: BEVERLY BEACH, FLORIDA 1992



QUADRANGLE LOCATION

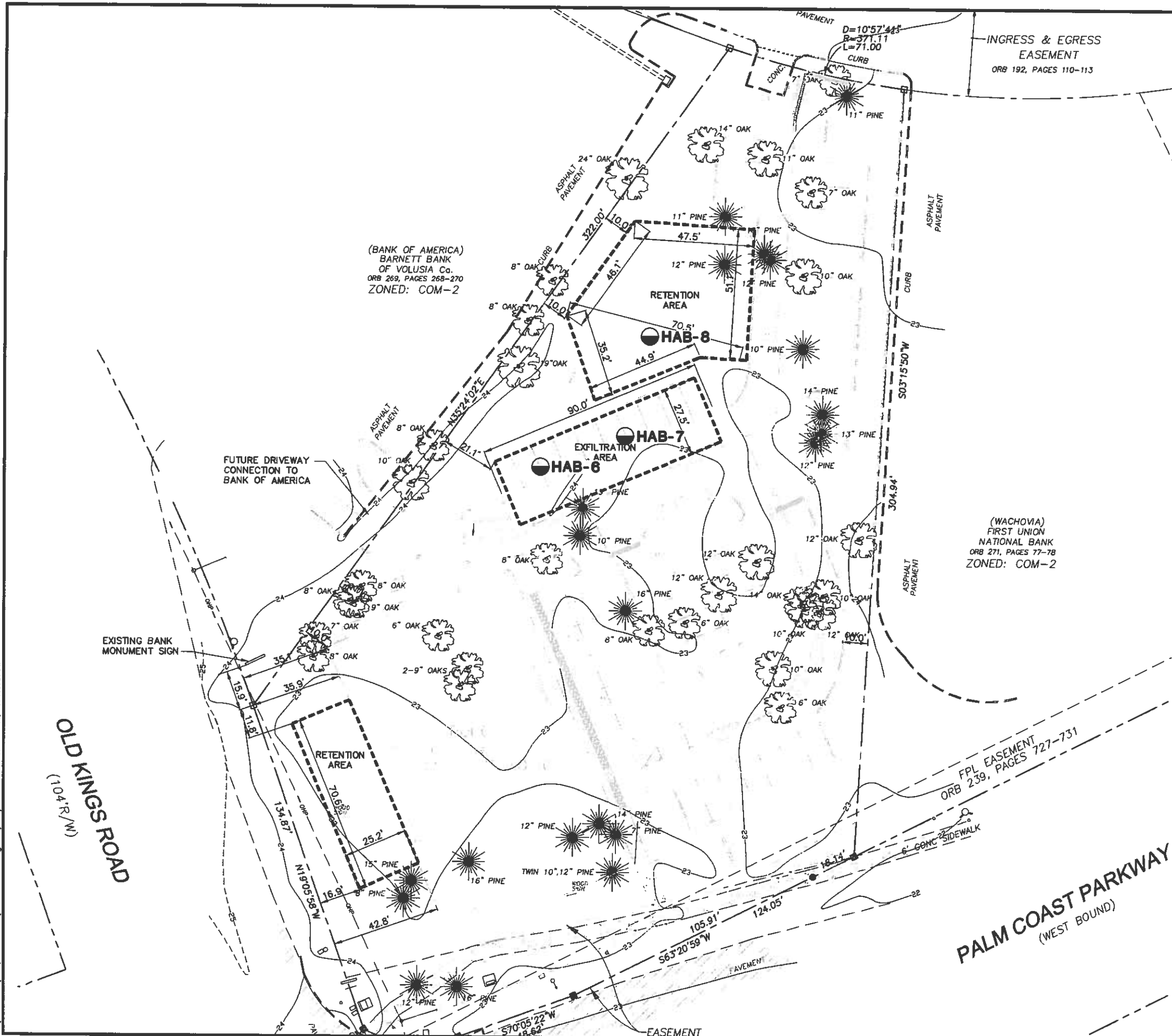
SITE LOCATION MAP

 **Ardaman & Associates, Inc.**
Geotechnical, Environmental and
Materials Consultants

**SUBSURFACE SOIL EXPLORATION
PROPOSED ABC STORE #197
OLD KINGS ROAD AND PALM COAST PARKWAY
PALM COAST, FLAGLER COUNTY, FLORIDA**

DRAWN BY: CD	CHECKED BY:	DATE: 10/07/08
FILE NO. 08-8315	APPROVED BY:	FIGURE: 1


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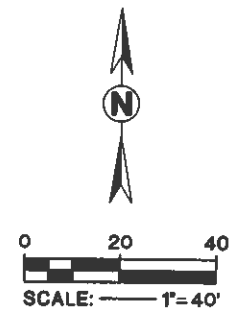


(BANK OF AMERICA)
BARNETT BANK
OF VOLUSIA Co.
ORB 269, PAGES 268-270
ZONED: COM-2

(WACHOVIA)
FIRST UNION
NATIONAL BANK
ORB 271, PAGES 77-78
ZONED: COM-2


LEGEND

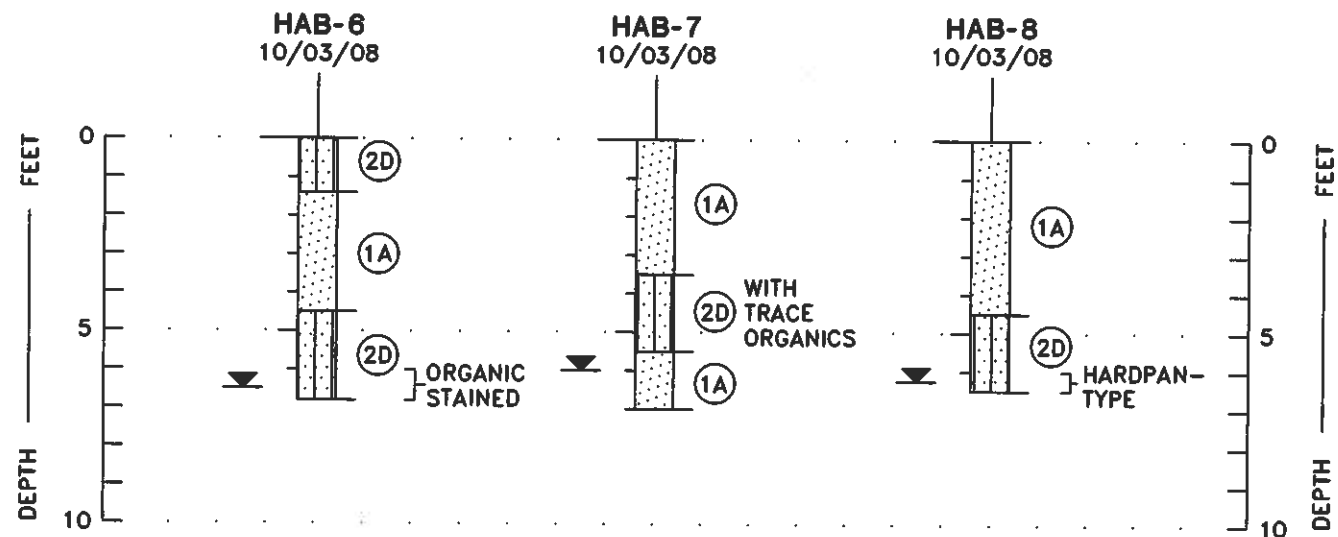
-  **HAB** HAND AUGER BORING LOCATION
- NOTE: THE BASE MAP FOR THE BORING LOCATION PLAN IS A SITE PLAN BY DRMP, DATED SEPTEMBER 2008.



OLD KINGS ROAD
(104'R/W)

PALM COAST PARKWAY
(WEST BOUND)

BORING LOCATION PLAN		
 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants		
SUBSURFACE SOIL EXPLORATION PROPOSED ABC STORE #197 OLD KINGS ROAD AND PALM COAST PARKWAY PALM COAST, FLAGLER COUNTY, FLORIDA		
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LEGEND

SOIL DESCRIPTIONS

- ① FINE SAND (SP)
- ② FINE SAND WITH SILT (SP-SM)
- ③ SILTY FINE SAND (SM)
- ④ CLAYEY FINE SAND (SC)
- ⑤ ORGANIC TOPSOIL
- ⑥ ORGANIC MUCK (OH)

COLORS

- Ⓐ LIGHT GRAY TO GRAY
- Ⓑ LIGHT BROWN TO BROWN
- Ⓒ GRAY TO GREENISH GRAY
- Ⓓ VERY DARK GRAY OR VERY DARK BROWN

HAB HAND AUGER BORING

▼ GROUNDWATER LEVEL MEASURED ON DATE DRILLED

SP, SP-SM
SM, SC, CH
UNIFIED SOIL CLASSIFICATION SYSTEM

NOTE: UPON COMPLETION OF EACH BORING, THE BOREHOLE WAS BACKFILLED WITH SOIL CUTTINGS.

WHILE THE BORINGS ARE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT THEIR RESPECTIVE LOCATIONS AND FOR THEIR RESPECTIVE VERTICAL REACHES, LOCAL VARIATIONS CHARACTERISTIC OF THE SUBSURFACE MATERIALS OF THE REGION ARE ANTICIPATED AND MAY BE ENCOUNTERED. THE BORING LOGS AND RELATED INFORMATION ARE BASED ON THE DRILLER'S LOGS AND VISUAL EXAMINATION OF SELECTED SAMPLES IN THE LABORATORY. THE DELINEATION BETWEEN SOIL TYPES SHOWN ON THE LOGS IS APPROXIMATE AND THE DESCRIPTION REPRESENTS OUR INTERPRETATION OF SUBSURFACE CONDITIONS AT THE DESIGNATED BORING LOCATIONS ON THE PARTICULAR DATE DRILLED.

GROUNDWATER ELEVATIONS SHOWN ON THE BORING LOGS REPRESENT GROUNDWATER SURFACES ENCOUNTERED ON THE DATES SHOWN. FLUCTUATIONS IN WATER TABLE LEVELS SHOULD BE ANTICIPATED THROUGHOUT THE YEAR.

SOIL BORING PROFILES

Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

SUBSURFACE SOIL EXPLORATION
PROPOSED ABC STORE #197
OLD KINGS ROAD AND PALM COAST PARKWAY
PALM COAST, FLAGLER COUNTY, FLORIDA

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APPENDIX

Hand Auger Boring Procedure

HAND AUGER BORINGS

Auger borings are used when a relatively large, continuous sampling of soil strata close to ground surface is desired. A 3-inch diameter, hand-held bucket auger with a cutting head at its end is screwed into the ground in 1-foot sections. The sample is recovered by withdrawing the auger out of the ground without rotating it. The soil sample so obtained, is classified and representative samples put in bags or jars and brought back to the laboratory for classification testing.