FINAL REPORT
GEOPHYSICAL INVESTIGATION
EATON STREET SITE
EATONVILLE, FLORIDA

Prepared for DRB Homes
Winter Park, FL

Prepared by GeoView, Inc.
St. Petersburg, FL

December 5, 2006

Mr. Mike Johnson
DRB Homes
2715 West Fairbanks Avenue, Suite 203
Winter Park, FL 32789

Subject: Transmittal of Report for Geophysical Investigation
Eaton Street Site, Eatonville, Florida
GeoView Project Number 3500

Dear Mr. Johnson,

GeoView, Inc. (GeoView) is pleased to submit the report that summarizes and presents the results of the geophysical investigation conducted at the Eaton Street Site in Eatonville, Florida. The purpose of the investigation was to identify possible gravesites within the boundaries of the project site. GeoView appreciates the opportunity to have assisted you on this project. If you have any questions or comments about the report, please contact us.

GEOVIEW, INC.

Christopher Taylor, P.G.
Vice President

Michael J. Wightman, P.G.
President

Florida Professional Geologist Number 1423

1.0 Introduction

A geophysical investigation was conducted at the Eaton Street Site located at 510 Eaton Street in Eatonville, Florida. The investigation was conducted on two adjacent lots. The lots were each approximately 50 by 120 feet in size. The total survey area was approximately 100 by 120 feet. The purpose of the investigation was to help identify the existence, and if found, the location of any marked and unmarked gravesites within the areas of investigation. The investigation was conducted on November 29th, 2006.

At the time of the GeoView site investigation, the majority of the site was clear and accessible to the investigation. A small area within the southern portion of the site was inaccessible to the investigation due to the presence of wood debris and vegetation.

2.0 Description of Geophysical Investigation

The GPR survey was conducted within the accessible portions of the site along a series of parallel transects spaced 2 foot (ft) apart (Figure 1). The GPR data was collected with a Mala radar system using a 500-megahertz antenna with a time range setting of 50 to 70 nano-seconds. This time range setting provided information to an estimated depth of 6 to 8 ft below land surface (bls).

A total of 51GPR transects (radar grams) were initially collected at the site. The two-dimensional radar grams were then analyzed to create three-dimensional time (depth) slices of the site. Anomalies identified on the GPR depth slices were resurveyed with additional GPR transects to accurately determine the location of any suspect GPR anomalies. Hand augers were performed at each significant anomaly to determine if the origin of the GPR anomaly. A description of the GPR technique and the methods employed for archeological studies is provided in Appendix 2.1.

3.0 Identification of Possible Graves Using GPR

The features observed on GPR data that are most commonly associated with graves are:

- The occurrence of parabolic shaped GPR reflectors that are present within a laterally limited area. Depth of such GPR reflectors typically range from 3 to 6 ft bls. A parabolic-GPR signal response is typically associated with a buried object. In the case of graves, the parabolic-shaped reflectors are usually created when the GPR antenna is pulled perpendicular to the long axis of a grave.

- In the case where gravesite remains have been deteriorated, grave shafts can sometimes be determined by the presence of discontinuities in otherwise continuous soil horizons (represented by near-horizontal GPR reflectors). It is necessary to perform multiple closely-spaced GPR transects across the suspect areas when characterizing such anomalies. If an area with discontinuous soil horizons has a rectilinear shape then it is possible that a grave is present at that location.
- On the GPR depth slices, graves can be identified as an area of increased in the amplitude of the GPR signal response at the particular depth intervals of interest.

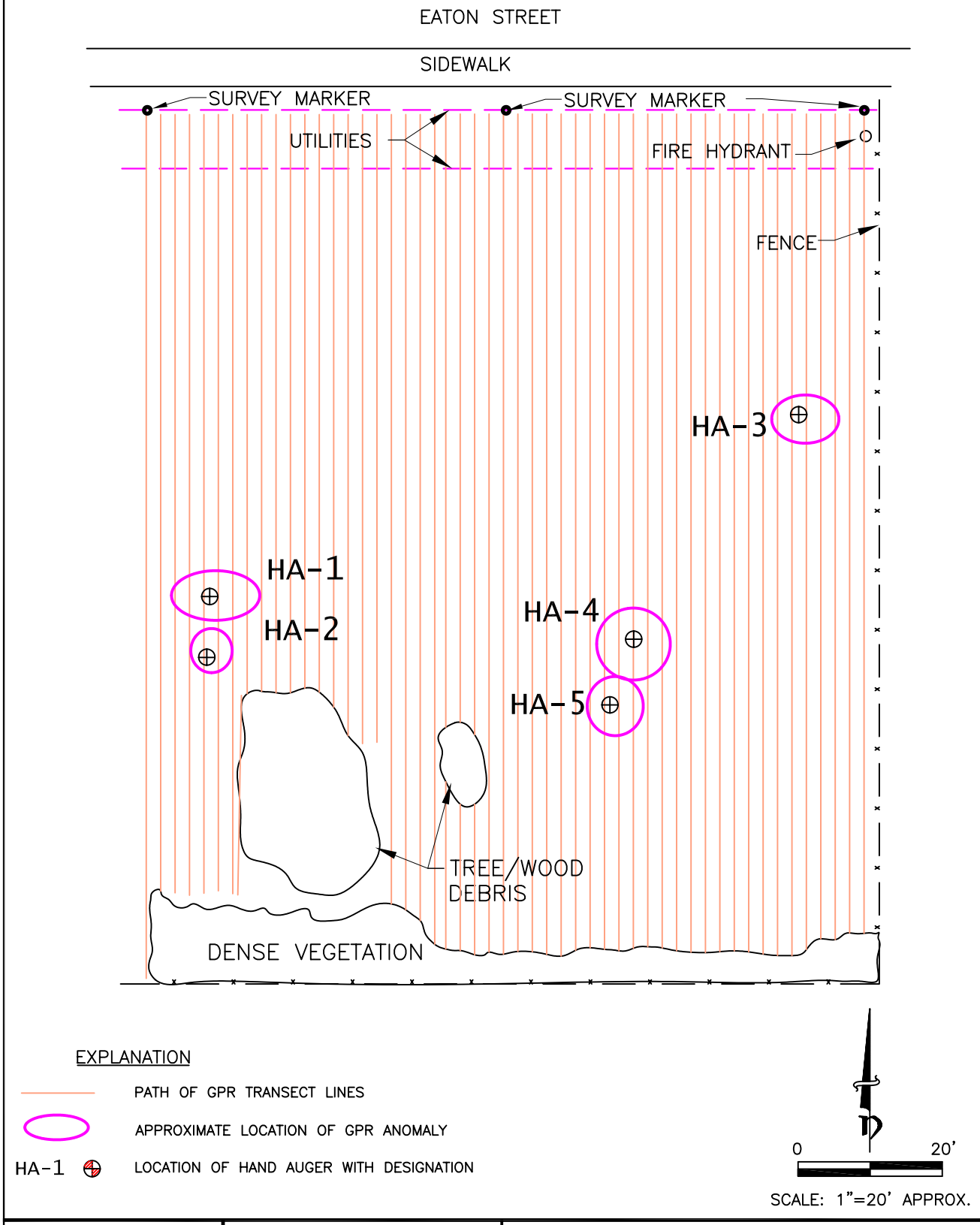
The probability that a GPR anomaly is associated with a grave is increased as the number of previously discussed attributes is observed on the radar grams. It is not possible based on the GPR data alone to determine if a GPR anomaly is associated with a grave.

4.0 Survey Results

No suspected gravesites were identified within the boundaries of the project site. Five GPR anomalies were identified during the GPR investigation. These anomalies were identified using both the two-dimensional radar grams and the three-dimensional time slices. The locations of these five GPR anomalies are shown on Figure 1 as GPR anomalies. Hand augers were performed within each of these anomalies. The results from the hand augers revealed that wood debris, roots, and other miscellaneous debris caused the GPR anomalies. The hand augers did not show the presence of any possible indications of gravesites. Four of the GPR depth slices are presented as Figures 2, 3, 4 and 5 and represent depth slices from approximately 1 to 2, 3 to 4, 5 to 6, and 7 to 8 ft bls, respectively. The locations of the GPR anomalies and Hand Augers are overlaid upon the depth slices to illustrate what was categorized as a GPR anomaly.

A discussion of the limitations of the GPR technique in geological characterization studies is provided in Appendix 2.

APPENDIX 1
FIGURES



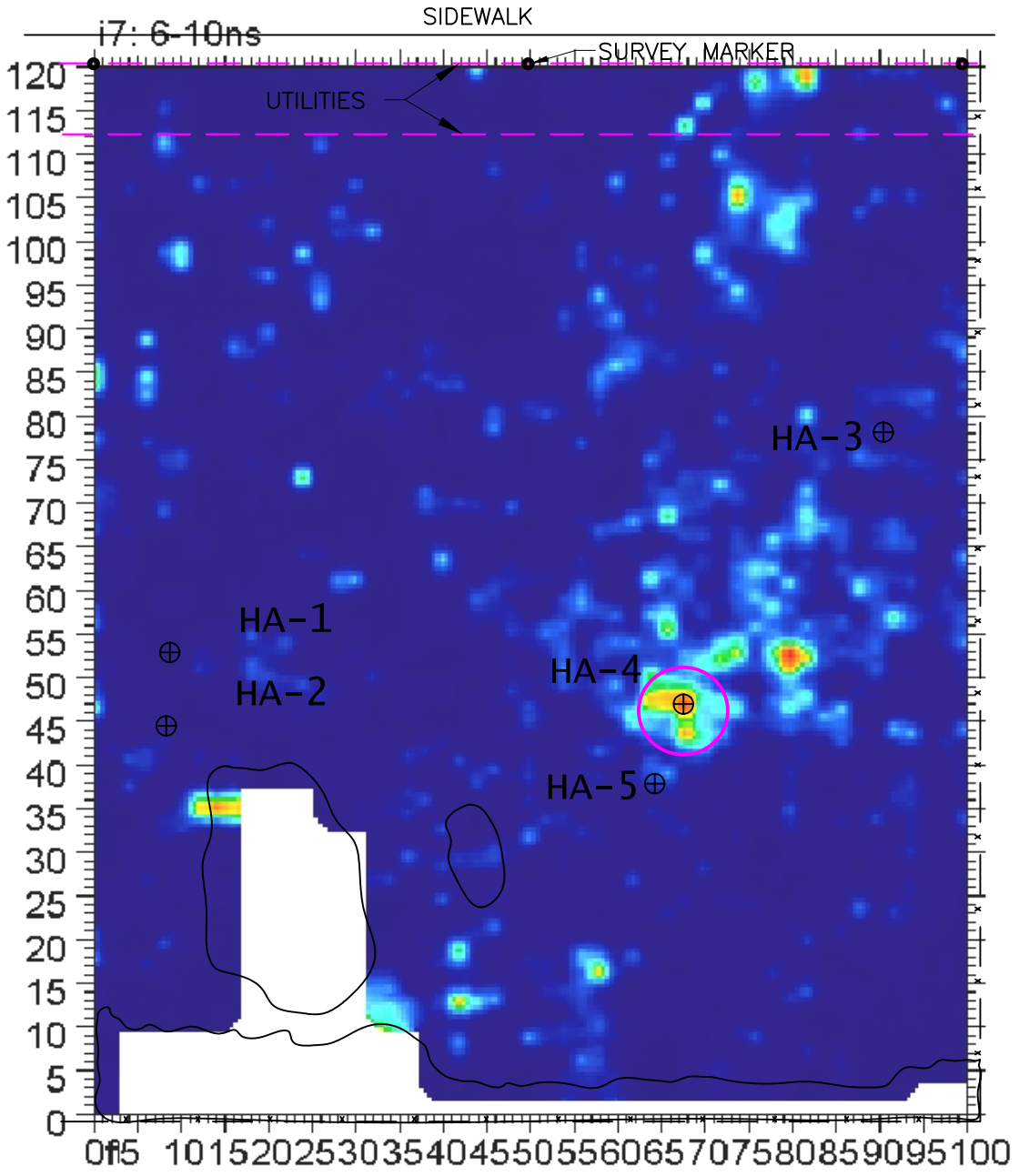
Geo View

FIGURE 1
SITE MAP
SHOWING RESULTS
OF GEOPHYSICAL
INVESTIGATION

EATON STREET SITE SITE
EATONVILLE, FLORIDA

DRB HOMES
WINTER PARK, FLORIDA

PROJECT: 3500
DATE: 12/05/2006



EXPLANATION

APPROXIMATE LOCATION OF GPR ANOMALY

HA-1 LOCATION OF HAND AUGER WITH DESIGNATION

0 20'

SCALE: 1"=20' APPROX.

Geo View

FIGURE 2
GPR TIMES SLICE OF
APPROXIMATELY
1 TO 2 FEET BLS

EATON STREET SITE
EATONVILLE, FLORIDA

DRB HOMES
WINTER PARK, FLORIDA

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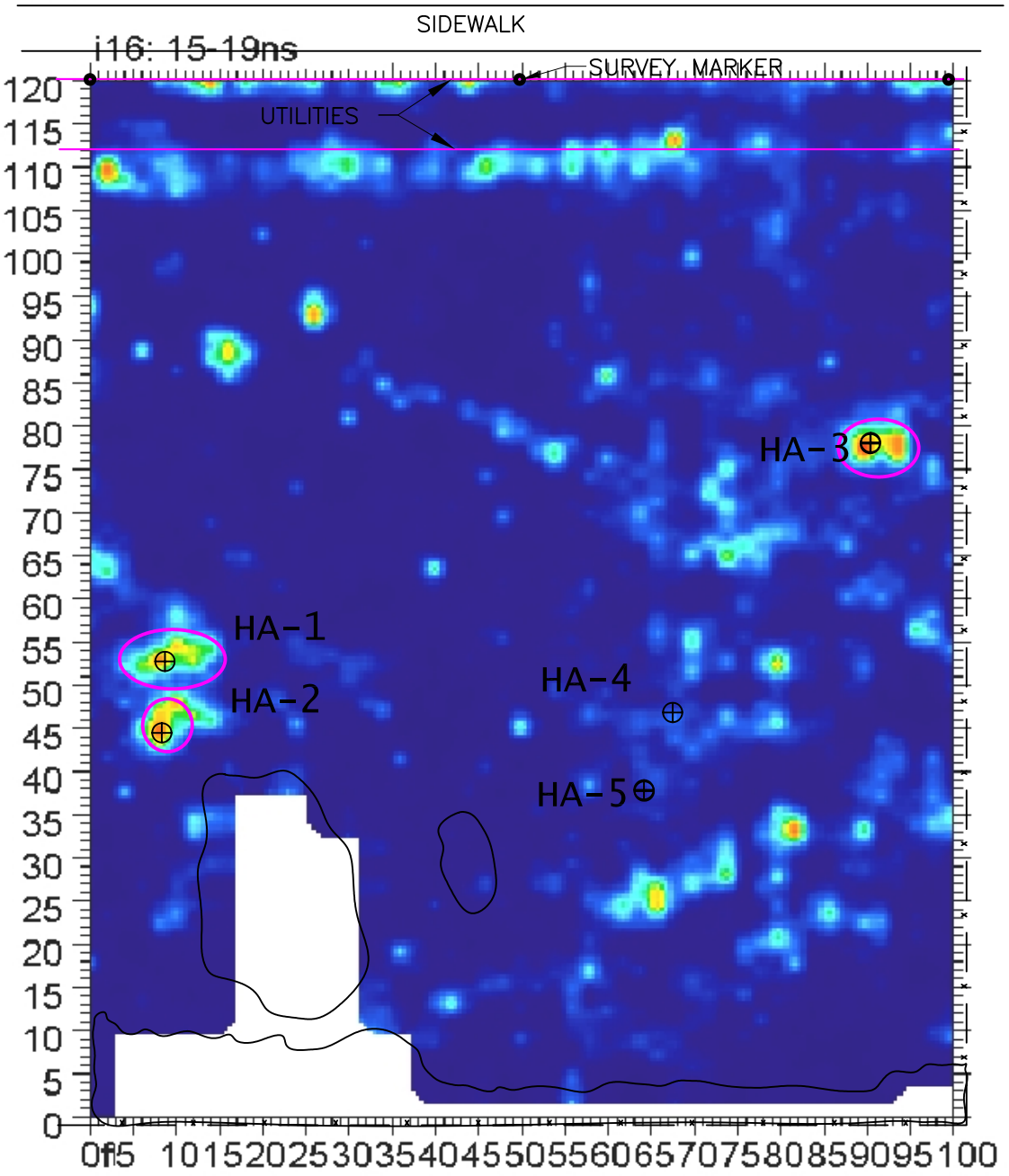
DATE: 12/05/2006



EXPLANATION

APPROXIMATE LOCATION OF GPR ANOMALY

HA-1 LOCATION OF HAND AUGER WITH DESIGNATION

0 20'

SCALE: 1"=20' APPROX.

Geo View

FIGURE 3
GPR TIMES SLICE OF
APPROXIMATELY
3 TO 4 FEET BLS

EATON STREET SITE
EATONVILLE, FLORIDA

DRB HOMES
WINTER PARK, FLORIDA

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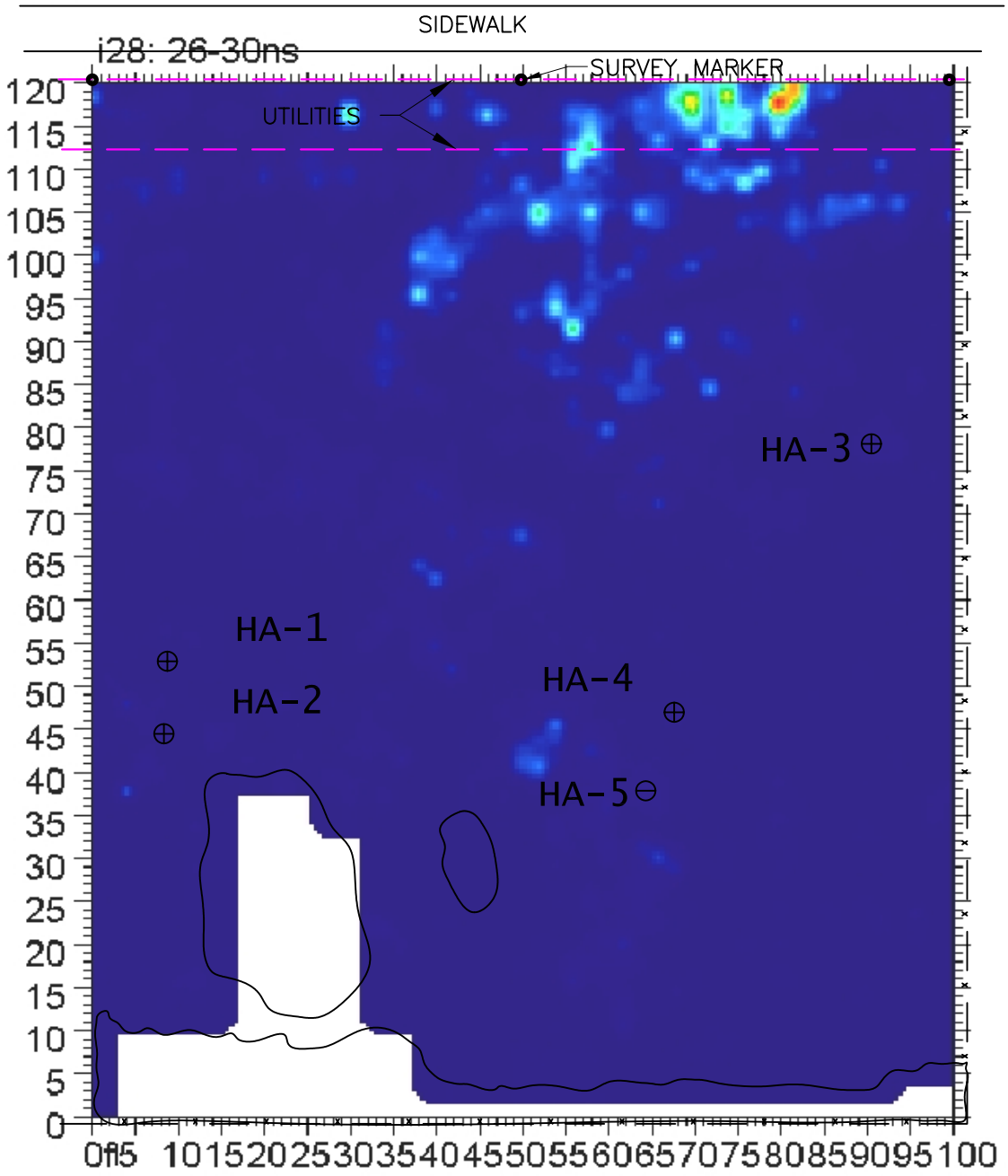
DATE: 12/05/2006



EXPLANATION

APPROXIMATE LOCATION OF GPR ANOMALY

HA-1 LOCATION OF HAND AUGER WITH DESIGNATION

0 20'

SCALE: 1"=20' APPROX.

Geo View

FIGURE 4
GPR TIMES SLICE OF
APPROXIMATELY
5 TO 6 FEET BLS

EATON STREET SITE
EATONVILLE, FLORIDA

DRB HOMES
WINTER PARK, FLORIDA

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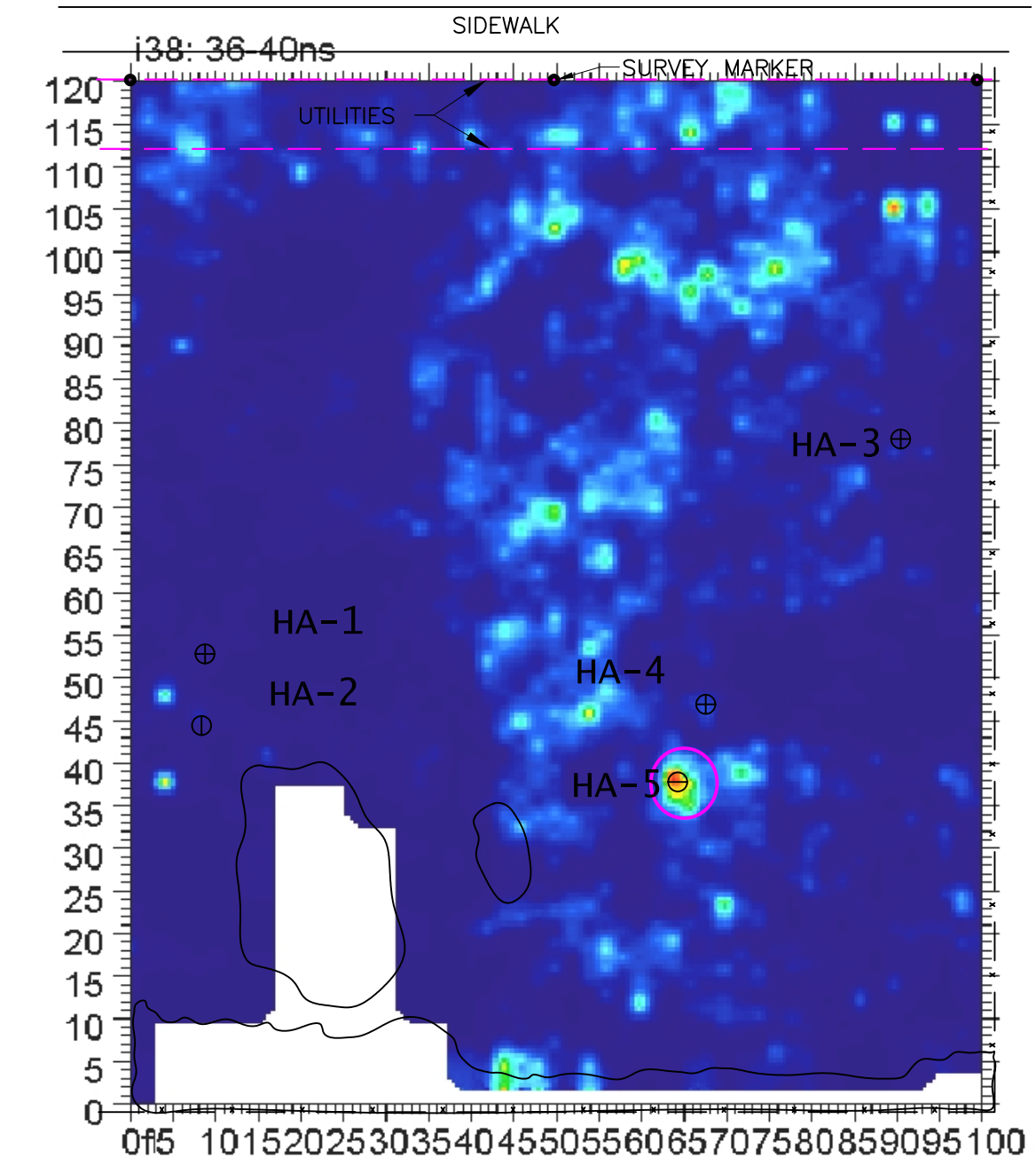
3500
DATE:
12/05/2006



EXPLANATION

APPROXIMATE LOCATION OF GPR ANOMALY

HA-1 LOCATION OF HAND AUGER WITH DESIGNATION

0 20'

SCALE: 1"=20' APPROX.

Geo View

FIGURE 5
GPR TIMES SLICE OF
APPROXIMATELY
7 TO 8 FEET BLS

EATON STREET SITE
EATONVILLE, FLORIDA

DRB HOMES
WINTER PARK, FLORIDA

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DATE: 12/05/2006

APPENDIX 2
DESCRIPTION OF GEOPHYSICAL METHODS, SURVEY METHODOLOGIES AND LIMITATIONS

2.1 Ground Penetrating Radar

Ground Penetrating Radar (GPR) consists of a set of integrated electronic components that transmits high frequency (200 to 1500 megahertz [MHz]) electromagnetic waves into the ground and records the energy reflected back to the ground surface. The GPR system consists of an antenna, which serves as both a transmitter and receiver, and a profiling recorder that both processes the incoming signal and provides a graphic display of the data. The GPR data can be reviewed as both printed hard copy output or recorded on the profiling recorder's hard drive for later review. GeoView uses a Mala GPR system. Archeological studies are typically conducted using a 500 MHz antenna.

A GPR survey provides a graphic cross-sectional view of subsurface conditions. This cross-sectional view is created from the reflections of repetitive short-duration electromagnetic (EM) waves that are generated as the antenna is pulled across the ground surface. The reflections occur at the subsurface contacts between materials with differing electrical properties. The electrical property contrast that causes the reflections is the dielectric permittivity that is directly related to conductivity of a material. The GPR method is commonly used to identify such targets as underground utilities, graves, underground storage tanks or drums, buried debris, voids or geological features.

The greater the electrical contrast between the surrounding earth materials and target of interest, the greater the amplitude of the reflected return signal. Unless the buried object is metal, only part of the signal energy will be reflected back to the antenna with the remaining portion of the signal continuing to propagate downward to be reflected by deeper features. If there is little or no electrical contrast between the target interest and surrounding earth materials it will be very difficult if not impossible to identify the object using GPR.

The depth of penetration of the GPR signal is very site specific and is controlled by two primary factors: subsurface soil conditions and selected antenna frequency. The GPR signal is attenuated (absorbed) as is passes through earth materials. As the energy of the GPR signal is diminished due to attenuation, the energy of the reflected waves is reduced, eventually to the level that the reflections can no longer be detected. The more conductive the earth materials, the greater the GPR signal attenuation, hence a reduction in signal penetration depth. In Florida,

the typical soil conditions that severely limit GPR signal penetration are near-surface clays and/or organic materials.

The depth of penetration of the GPR signal is also reduced as the antenna frequency is increased. However, as antenna frequency is increased the resolution of the GPR data is improved. Therefore, when designing a GPR survey a tradeoff is made between the required depth of penetration and desired resolution of the data. As a rule, the highest frequency antenna that will still provide the desired maximum depth of penetration should be used. For most gravesite studies, a mid-frequency (500 MHz) antenna is used.

A GPR survey is conducted along survey lines (transects) that are measured paths along which the GPR antenna is moved. Electronic marks are placed in the data by the operator at designated points along the GPR transects. These marks allow for a correlation between the GPR data and the position of the GPR antenna on the ground.

Depth estimates to the top of features are determined by dividing the time of travel of the GPR signal from the ground surface to the top of the feature by the velocity of the GPR signal. The velocity of the GPR signal is usually obtained from published tables of velocities for the type and condition (saturated vs. unsaturated) of soils underlying the site. The accuracy of GPR-derived depths typically ranges from 20 to 40 percent of the total depth.

Interpretation and Limitations of GPR data

The analysis and collection of GPR data is both a technical and interpretative skill. The technical aspects of the work are learned from both training and experience. Interpretative skills for archeological characterization studies are developed by having the opportunity to compare GPR data collected in numerous settings to the results from confirmatory excavations performed at the same locations.

The ability of GPR to collect interpretable information at a project site is limited by the attenuation (absorption) of the GPR signal by underlying soils. Once the GPR signal has been attenuated at a particular depth, information regarding deeper geological conditions will not be obtained. GPR data can only resolve subsurface features that have a sufficient electrical contrast between the features in question and surrounding earth materials. If an insufficient contrast is present, the subsurface feature will not be identified. GeoView can make no warranties or representations of geological conditions that may be present beyond the depth of investigation or resolving capability of the GPR equipment or in areas that were not accessible to the geophysical investigation.