

**ARCHAEOLOGICAL RECONNAISSANCE SURVEY AND HISTORIC
RESOURCES DESKTOP OF THE FPL GLADES POWER PARK SITE
GLADES COUNTY**

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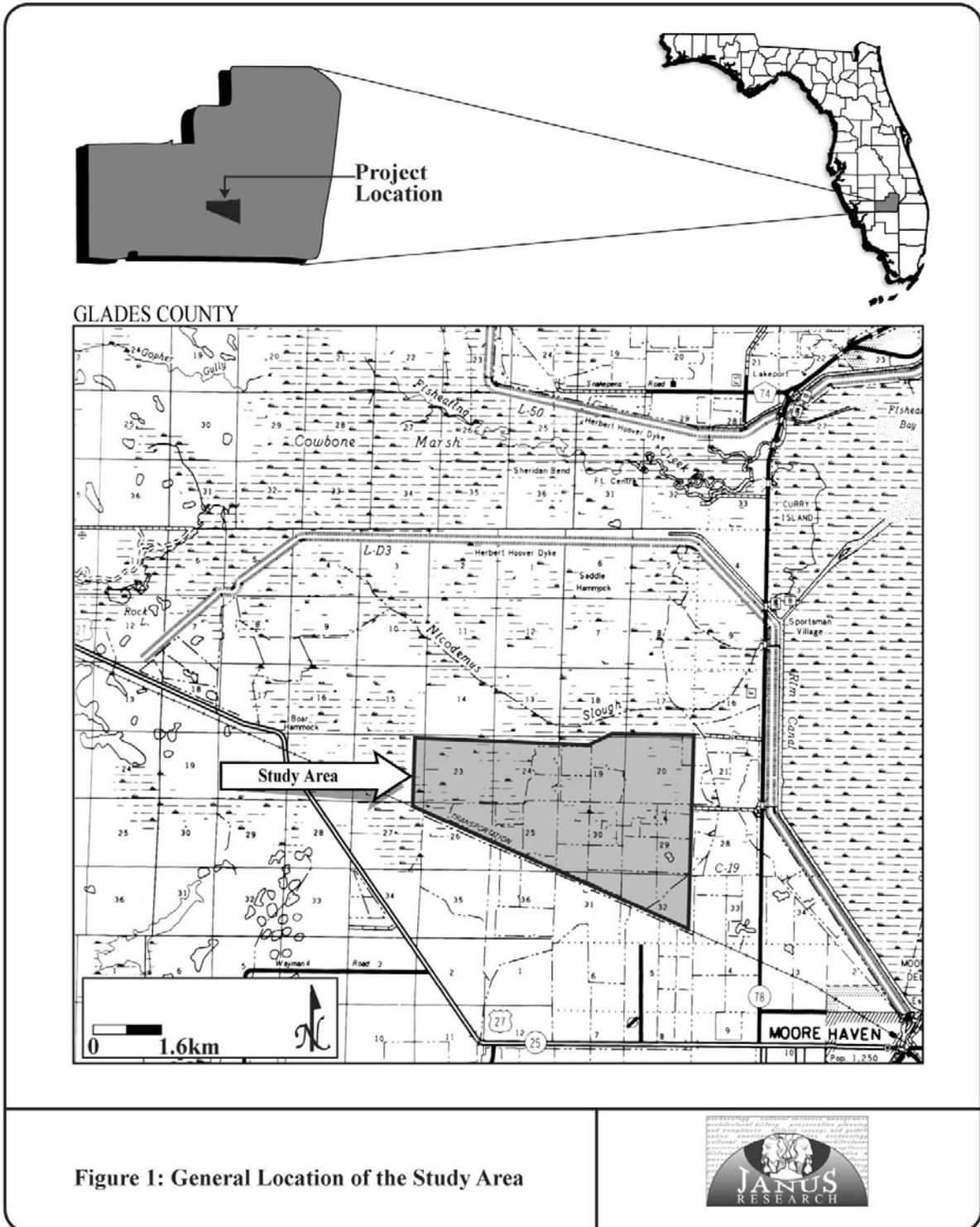
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INTRODUCTION

At the request of Golder Associates, on behalf of Florida Power & Light Company (FPL), Janus Research conducted a reconnaissance survey for the proposed FPL Glades Power Park Site in August, 2006. The FPL Glades Power Park site is located approximately two miles north of US 27 and one mile west of State Highway 78 and one and one-half miles west of Lake Okeechobee. The southern boundary of the project site is the South Central Florida Express Railway (SCFE). The project site lies in Sections 23-27 of Township 41 South, Range 31 East, and Sections 16-17, 19-21, and 29-33 of Township 41 South, Range 32 East, on the Lakeport (1970) and Lake Hicpochee (1971) USGS Quadrangles (Figure 1). The 4,900 ± acre project site consists mostly of cultivated sugar cane fields with numerous artificially bounded wetlands and an area of hardwood scrub hammocks and pasture in the northwest portion of this site. Photographs of the project site are provided in Appendix A.

Please note that the reconnaissance survey complied with the Reconnaissance Survey Guidelines of the Florida Division of Historic Resource (FDHR). This type of survey was intended to provide a basis for the “formulation of estimates of the necessity, type, and costs of further identification work and the setting of priorities for individual tasks involved”. As stated in the guidelines, “In some cases, a reconnaissance survey may show that historic properties are so unlikely to occur that there is no need for more intensive survey. In other cases, reconnaissance survey work may permit further survey work to be focused only on particular subareas or types of properties”.

Following the reconnaissance survey, a meeting was held with representatives of the Florida Department Historic Resources (FDHR) to review the results (September 2006), determine the scope of work needed to ensure compliance with Chapter 267, F.S., and to meet the requirements of the FDHR Complete and Sufficient review. At that time, the FDHR requested this reconnaissance report as well as additional testing at the recorded location of site 8GL60, a previously recorded archaeological site located in a sugar cane field within the project area. The FDHR also requested that a desktop analysis of the surrounding area be completed as a first step in addressing indirect effects on historic resources. It was recommended that the desktop analysis encompass a radius that included the town of Moore Haven and focus on identifying previously recorded *National Register of Historic Places (NRHP)*-listed or potentially eligible historic buildings and districts.



RECONNAISSANCE SURVEY

Background Research

Archival Research

Background research of the project site was performed to identify previously recorded archaeological sites and historic resources and areas of archaeological site potential. This analysis included an archaeological and historical literature and background information search pertinent to the project site. This included a search of the Florida Master Site File (FMSF), county and local site inventories, books and journal articles, and unpublished Cultural Resource Management (CRM) reports. Historic plat maps of the location as well as other historic maps and aerials were also examined.

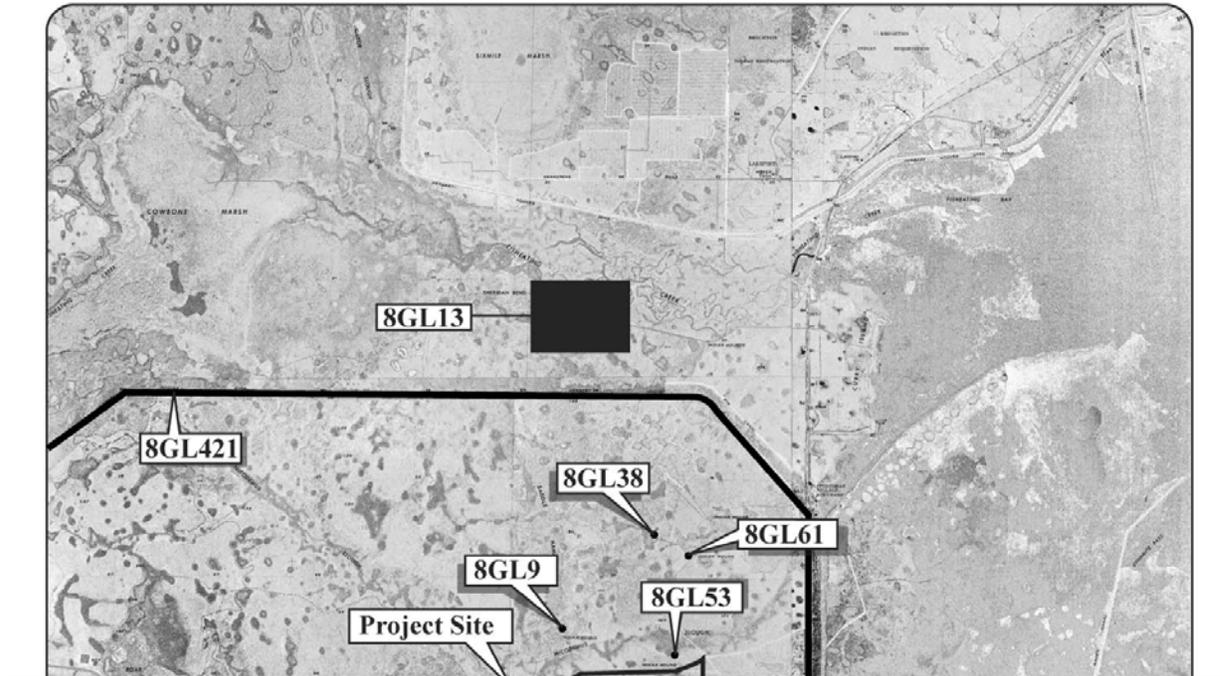
The FDHR search indicated that six cultural resource management surveys have been conducted within the general vicinity of the project site (Table 1). No previous surveys have been conducted within the boundaries of the project site. Carr's survey of Lake Okeechobee was mostly carried out through the use of aerial photographs which were then employed to locate earthwork and sand mound sites (1975:1).

Table 1. Previously Conducted Surveys in the Vicinity of the Project Site

| Survey | Survey # |
|--|----------|
| An Archaeological and Historical Survey of Lake Okeechobee [Glades, Palm Beach, Okeechobee and Martin Counties, Florida]. (Carr 1975) | 118 |
| A Report of Investigations on the West Okeechobee Basin Archaeological Survey. (Johnson 1990) | 2366 |
| Cultural Resource Assessment Surveys of Four Bridge Replacement Projects in Collier, Glades and Polk Counties. (McMurray 1991) | 2866 |
| Cultural Resources Assessment Survey Lake Okeechobee Scenic Trail (L.O.S.T.) from the Palm Beach/Hendry County Line North to the Okeechobee/Martin County Line, Okeechobee, Glades, and Hendry Counties, Florida. (Almy and Hinder 2002) | 7072 |
| Status of Fort Center Archaeological Site and Recommendations for Management and Protection of Sites. (Newman 2003) | 8827 |
| Cultural Resource Assessment Survey SR 78 from South of Nicodemus Slough to Bridge No. 050056 Glades County, Florida. (Pracht 2003) | 8903 |

The FDHR was contacted about the location of known archaeological sites and historic structures within or near the project site. A search of the FMSF records revealed five previously recorded archaeological sites (8GL9, 8GL38, 8GL53, 8GL60, 8GL61), one archaeological district (8GL13), and one historic district (8GL421) within the vicinity of the project site (Figure 2). All five sites are of the type that usually contains human remains.

One archaeological site (8GL60), recorded as a prehistoric mound, is located within the project site boundaries in the southeastern quarter of Section 20 in Township 41 South, Range 32 East. The site was not visited by Carr but was recorded as a Belle Glade mound based on its designation as an "Indian Mound" on a topographic map and other nearby sites.



The Lakeport USGS Quadrangle map (1970) shows this site indicated by the label “Indian Mound” (Figure 3). A review of the historic plat map of Township 41 South, Range 32 East (Florida Department of Environmental Protection [FDEP] 1871b, 1918, and 1926) and a 19th century map of the Atlantic and Gulf Coast Canal and Okeechobee Land Co. purchases (Kreamer n.d.) does not illustrate an Indian mound for this area. Due to lack of previous field investigation of the site, it has not been evaluated for its *NRHP*-eligibility (FMSF form, 8GL60, 1976).

Gator Mound (8GL53) lies just outside the project boundary near the northeastern corner of the FPL Glades Power Park site and just south of Nicodemus Slough. It is located in the southeastern quarter of Section 17 in Township 41 South, Range 32 East. This site is recorded as a prehistoric mound and earthworks of unknown cultural affiliation. This site was not visited by Carr (1975:38-39) but was located via its designation as an “Indian Mound” on the USGS Lakeport Quad and aerial photographs. It has not been evaluated for its *NRHP*-eligibility (FMSF form, 8GL53, 1975).

Site 8GL9, the Nicodemus Earthworks, is located approximately 2,500 ft. north of the project site and Nicodemus Slough. It lies within the southern half of Section 18 in Township 41 South, Range 32 East. It is recorded as a destroyed white sand burial mound and unlinear crescent earthworks with linear ridge and mound components (Carr 1975:28-33) that are associated with the Belle Glade Culture. The burial mound has been recorded as containing human remains. This site has not been evaluated for its *NRHP*-eligibility.

Site 8GL61, an unnamed site, is located approximately 6,500 ft. north of the project site. It lies within the southeastern quarter of Section 8 in Township 41 South, Range 32 East. It is recorded as a prehistoric mound associated with the Belle Glade culture. This site has not been evaluated for its *NRHP*-eligibility (FMSF form, 8GL61, 1976).

Site 8GL38, the Glades Circle Ditch, is located approximately 7,000 ft. north of the project site and Nicodemus Slough. It is located within the southeastern quarter of Section 8 in Township 41 South, Range 32 East, not far from 8GL61. This site is recorded as a prehistoric earthwork associated with the Glades culture. It has not been evaluated for its *NRHP*-eligibility.

The Fort Center Archaeological District (8GL13) is composed of numerous middens and earthworks associated to the Belle Glade I and II culture. The earthworks include mounds, linear embankments, burial mound, borrow areas and circular ditches. This complex includes archaeological sites 8GL11- 8GL13, 8GL15-8GL25, 8GL375 and 8GL376. The site is named for a nineteenth century Seminole War fort (8GL23) built on the prehistoric site (Sears 1982:ix). The complex is situated in both hammock and savannah adjacent to the south bank of Fisheating Creek. Some erosion has occurred to the site components from bank cutting. Mounds A and B (8GL12) were excavated by Sears between 1967 and 1971. He indicates that this is a multi-component site with varying depths of cultural deposits (Sears 1971, 1982). Mounds and middens with additional earthworks in the form of circular borrows were

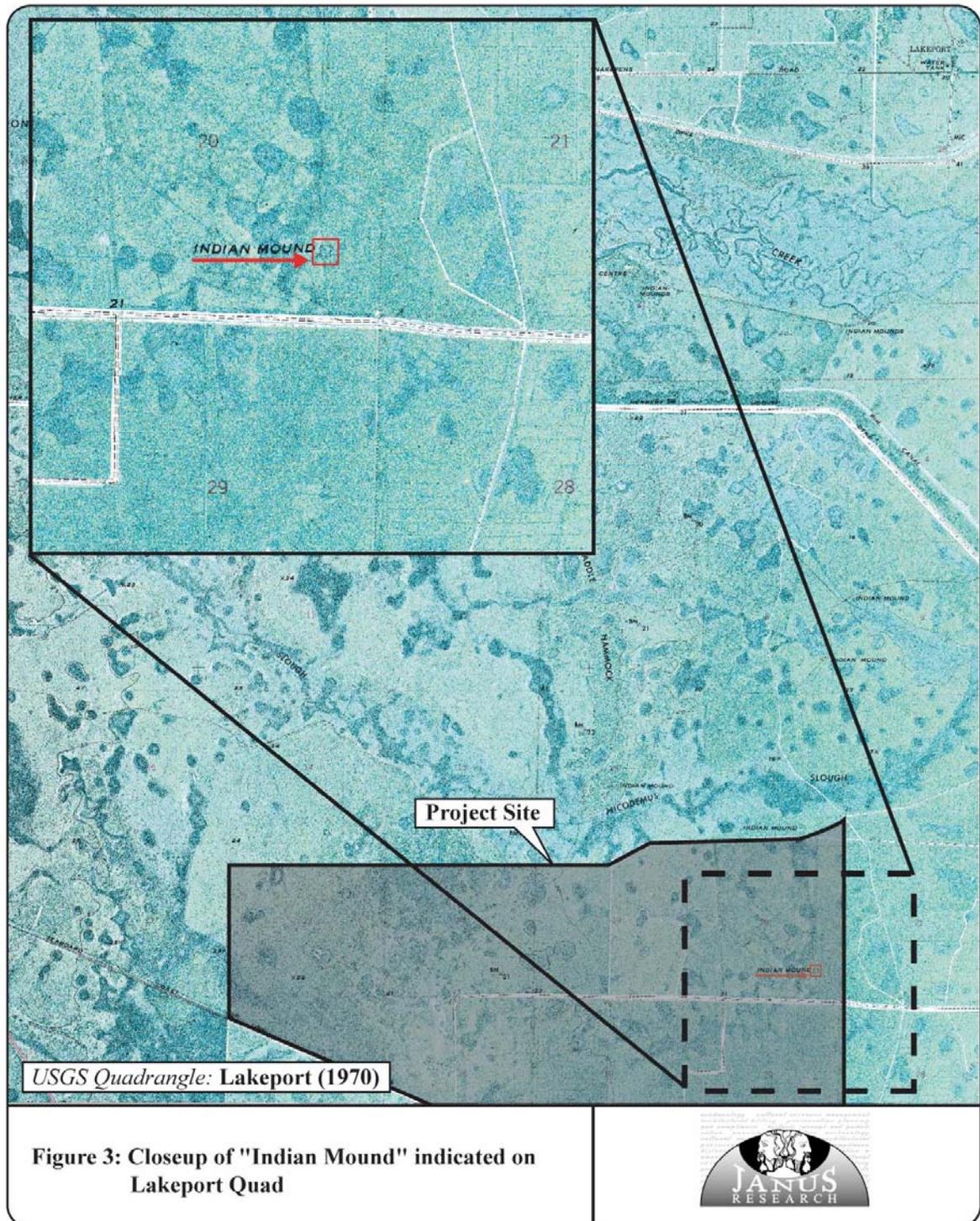


Figure 3: Closeup of "Indian Mound" indicated on Lakeport Quad



identified through aerial photographs (Carr 1975; Johnson 1991). The sand mounds have eroded and earthworks are damaged from cattle grazing. The Fort Center Archaeological District is an important prehistoric site group with the potential to be a state park, but it has not been evaluated for its *NRHP*-eligibility.

The Herbert Hoover Dike (8GL421) that surrounds Lake Okeechobee is listed in the FMSF as a district or resource group. This site consists of 5 historic structures in 5 different counties; 8GL421A is the historic structure site number for the segment located in Glades County. Construction of the dike began in the early 1930s by the U.S. Army Corps of Engineers and was completed in 1938. The 34 ft. high dike is composed of shell, rock and gravel covered with grass, trees, and a service drive on top of the levee. It is considered to be the largest civil engineering work in South Florida and continues to control the waters around Lake Okeechobee. It lies approximately one and one-half mile east of the project site. This historic resource has been previously determined by the State Historic Preservation Officer (SHPO) to be *NRHP*-eligible (FMSF form, 8GL421, 2002).

A review of the historic plat map of Township 41 South, Range 31 East (FDEP 1871a) and Township 41 South, Range 32 East (FDEP 1871b, 1918, and 1926) did not reveal any military forts, encampments or roads, battle sites, homesteads, farmsteads, trails, or Native American villages located within 3 miles of the project site.

Environmental Research and Land Use History

A review of a 19th century map (Kreamer n.d.) and the historic plat map of Township 41 South, Range 31 East (FDEP 1871a) and Township 41 South, Range 32 East (FDEP 1871b, 1918, and 1926) indicate the project site previously consisted of poorly drained low flats of scrubby or hardwood trees, palmetto hammocks, and saw grass marsh related to the drainage of Lake Okeechobee. Surveyor’s field notes were not available for this area. A review of the tract book records indicate this area was first developed in 1883 and 1884 when the Atlantic and Gulf Coast Canal and Okeechobee Land Co. and Florida Land and Improvement Co. began purchasing large portions of land in the area. Table 2 shows the historic land ownership of the project site.

Table 2. Land Apportionment in the Project Site as Recorded in the Tract Book Records

| Township 41 South, Range 31 East | | | |
|---|----------------------|---|-----------------------------|
| Section | Portion Owned | Owner | Date of Deed or Sale |
| 23 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| 24 | All | Florida Land and Improvement Co. | December 15, 1883 |
| 25 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| 26 | All | Florida Land and Improvement Co. | December 15, 1883 |
| 27 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| Township 41 South, Range 32 East | | | |
| Section | Portion Owned | Owner | Date of Deed or Sale |
| 16 | All unsurveyed | James M. Kreamer | May 5, 1892 |
| 17 | Unsurveyed part | Heirs of J.A. Henderson | December 28, 1904 |
| | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| 19 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| 20 | All | Florida Land and Improvement Co. | December 15, 1883 |
| 21 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| | All unsurveyed | Heirs of J.A. Henderson | December 28, 1904 |
| | See copy of deed | David G. Click | March 1, 1945 |
| 29 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| 30 | All | Florida Land and Improvement Co. | December 15, 1883 |
| 31 | All | The Atlantic and Gulf Coast Canal and Okeechobee Land Co. | December 15, 1884 |
| | Unsurveyed part | Heirs of J.A. Henderson | December 28, 1904 |
| 32 | Unsurveyed part | Heirs of J.A. Henderson | December 28, 1904 |
| | All | Florida Land and Improvement Co. | December 15, 1883 |
| 33 | All unsurveyed | Heirs of J.A. Henderson | December 28, 1904 |

During the late 19th century, full scale attempts were made to drain the land and make it suitable for agriculture and for transit systems such as the Atlantic Coast Line Railway. In 1881, Philadelphia millionaire Hamilton Disston negotiated with Florida Governor Bloxham and the Internal Improvement Fund to drain all of the lands overflowed by Lake Okeechobee and the Kissimmee River in exchange for one-half of the reclaimed land. Disston's companies, the Okeechobee Land Company and the Atlantic and Gulf Coast Canal Company, undertook the first attempt to drain the Everglades and put their chief engineer, J.A. Kreamer, in charge of surveying the purchased lands around the lake. During 1881 and 1882, channels were dug between the lake systems to the north and the Kissimmee River (Tebeau 1971:288). The Atlantic and Gulf Coast Canal and Okeechobee Land Company were responsible for opening up Lake Okeechobee to the Gulf of Mexico by dredging a channel to the Caloosahatchee River. Drainage operations began and the Florida Land and Improvement Company and Kissimmee Land Company were formed to help fulfill the drainage contract (Hetherington 1980:6).

Disston changed Florida from a wilderness of swamps, heat, and mosquitoes into an area ripe for investment. This enabled Henry B. Plant to move forward with his plans to open the west coast of Florida with a railroad-steamship operation called the Jacksonville, Tampa & Key West Railway. Through the Plant Investment Company, he bought up defunct rail lines such as the Silver Springs, South Florida Railroad, and Florida Southern Railroad to establish his operation (Mann 1983:68; Harner 1973:18–23). In 1902, Henry Plant sold all of his Florida holdings to the Atlantic Coast Line, which would become the backbone railroad of the southeast (Mann 1983:68).

Historic aerials from the late 1940s (1948 and 1949) show the eastern portion of the project site as open fields with dirt roads and a few drainage canals most likely for the drying of the land for cattle grazing. The 1957 aerials show a few small patches of land where there is patterned ditch construction. By 1968 (1962 and 1968 aerials) the ditching for sugar cane fields are evident but still only within small patches of land in the eastern property area. Aerials depicting the western portion of the project site (1949, 1957 and 1962) show hardwood hammocks with cleared patches interspersed with small ponds.

An interview with Jon Tallent from Lykes Brothers (personal communication, November 2006) indicated that Lykes Brothers has owned the project site and area for about 69 years. The property was purchased primarily between 1937 and 1938 with smaller outparcels purchased in the early 1940s. When the land was purchased, some improvements were made, such as tree removal, plowing, and discing. This disturbance was minor due to the technology of the time. Portions of the project site were later turned into improved pasture for cattle about 40 years ago. Other areas remained relatively open grassland with cabbage palm hammocks and oak hammocks similar to the Nicodemus Slough area to the north of the project site. The northwest portion of the project site remains this way.

Sugarcane has been on the project site for almost 30 years in the southeast portion of the project site and 20 years in other areas. Cane field preparation includes bulldozing and burning existing trees. The area is then disced and ditched. The ditches are dug to between

2.5 and 5 ft. deep. The initial field preparation involves heavy duty discing between 18 and 24 in deep. Laser leveling is undertaken to eliminate rises and slight depressions. This is a minor undertaking and lasering is only undertaken to between six inches and one foot deep. Every three years the land is allowed to go fallow. The land is then disced and laser leveled again. This maintenance discing typically goes 12 in deep.

In the 1970s, the area appears very similar to what is depicted on the historic aerials. The 1970 Lakeport and 1971 Lake Hicpochee quadrangle show the western portion of the project site as hammocks while the eastern portion is clear with the parcels of ditch patterning. In his 1975 survey, Robert Carr noted that the area around 8GL60 (located in the east portion of the project site) was being used for cattle pasture. Today, the project site is mainly sugar cane fields interspersed with artificially confined wetlands. The northwestern portion of the project site is still scrubby or hardwood trees interspersed with cleared areas and small ponds that are being used for cattle grazing.

Two general soil associations have been identified within the project site. The Immokalee-Myakka soils are associated with flatwoods and the Basinger-Valkaria soils are associated with sloughs and hammocks (United States Department of Agriculture [USDA] 2000). Table 3 shows the soil types found within the project study site and their drainage characteristics.

Table 3. Drainage Characteristics of Soil Types within the Project Site

| Drainage Characteristics | Soil Types | Environmental Association |
|---------------------------------|-----------------------------------|---|
| Poorly drained | Hallandale fine sand | low, broad flats and cabbage palm hammocks |
| | Valkaria fine sand | low flatwoods, in sloughs, and poorly defined drainage ways |
| | Malabar fine sand | narrow to broad sloughs and in poorly defined drainage ways in areas of the flatwoods |
| | Pople fine sand | on low flats and on cabbage palm hammocks |
| | Felda fine sand | broad, low flats and in large drainage ways in areas of flatwoods |
| | Boca fine sand | cabbage palm flatwoods adjacent to sloughs, depressions, and drainage ways |
| | Basinger fine sand | low flats and in sloughs and poorly defined drainage ways |
| | Pineda fine sand | broad, low flats and in large drainage ways in areas of flatwoods |
| | Oldsmar sand | flatwoods adjacent to sloughs and streams |
| | Immokalee sand | broad areas of flatwoods |
| | Ft. Drum fine sand | flats next to sloughs, depressions, and drainage ways |
| | Malabar fine sand, high | slightly higher areas in flatwoods |
| Very poorly drained | Gator muck, depressional | marshes, swamps, and wet depressions |
| | Floridana fine sand, depressional | wet depressions |
| | Okeelanta muck, depressional | depressions, marshes, and swampy areas |
| | Astor fine sand, depressional | depressions and along the edges of swamps and marshes |

Site Probabilities and Expected Results

Additionally, the environmental conditions and the cultural context of the project site were reviewed as they relate to the prediction of the location of precontact and historic archaeological sites. The designation of zones based on their potential for containing archaeological sites, or site potential zones, was based on previous research conducted within the various archaeological regions of Florida. Four environmental factors were employed in predicting site locations: soil type (soil drainage), distance to fresh (potable) water, distance to hardwood hammocks, and relative topography. The relative importance of each of these variables depends upon the composite environmental setting. In a sand hills environment, for example, a majority of the known sites are located near a water source on a ridge slope. If a water source is not located in the vicinity, the probability of site occurrence decreases dramatically. Water will not be a determining factor, however, if another resource with more limited distribution, such as stone for tool manufacture, is available. In areas of relatively low relief and abundant wetlands, areas of higher elevation relative to the surrounding terrain would be considered more likely to contain sites.

According to Robert S. Carr (1975:9) the types of sites typical for this area include middens, sand mounds, and earthworks. Habitation sites most commonly occur on the edges of hammocks and creek and river levees. Mounds are found in the hammocks as well as in the savannahs. Due to the wet conditions of the area, sometimes artificial sand mounds were constructed for temple and habitation foundations, for burial preparation or interment, or to create dry fields for maize agriculture.

The Lakeport USGS Quadrangle map (1970) shows many of the previously recorded sites within the vicinity of the project site (see Figure 2). All of these sites are located near wetlands, and most are situated in current or historic areas of scrubby and/or hardwood trees. The presence of numerous sites in the area, several of which indicate permanent habitation, suggest there are similar, unrecorded sites located within or next to the FPL Glades Power Park site. In addition to areas of current or former hardwood scrub hammocks and the numerous circular wetlands, the flowing water of Nicodemus Slough would also have attracted prehistoric settlers. Based on all of these variables, there are numerous areas of moderate to high potential for unrecorded archaeological sites within the project site (Figure 4).¹ The Fort Center Archaeological District, a group of Bell Glade middens, mounds, burial mounds, and earthworks as well as a Seminole fort, located over 3 miles to the north of the project area was reviewed on historic and modern aerial photographs. This review assisted in refining what a mound complex would look like on aerials maps (i.e. “targets”) and was used comparatively to identify any similar “targets” in the project site.

¹ The Seaboard Coast Railway, originally owned by the Atlantic Coast Line Railway, is located in proximity to the project site but outside of the project site. The C19 canal and the L306 Levee are both adjacent to the eastern portion of the project site but outside of the project site. They were not recorded as part of the reconnaissance survey. Should the project site boundaries change to include these resources, it is recommended that these resources be recorded and evaluated.

Methods

The archaeological reconnaissance survey included a pedestrian survey supplemented by subsurface shovel tests to field-check the archaeological site potential zones developed during the background research. A total of 64 judgmentally-placed shovel tests were excavated within the project site (Appendix B) with a particular focus on the location of the previously recorded archaeological site, 8GL60, and any areas that contained current or former hammocks.

Janus Research's work for the South Florida Water Management District (SFWMD) Acceler8 projects has confirmed the destructive nature of sugar cane cultivation. It is clear that unless the sites were protected prior to land preparation activities, the leveling of the field to the muck removed almost all of the natural soil or cultural deposits that may have originally existed above the muck. Therefore, it is unlikely that any intact and significant archaeological material would be found in a field that has been used for continual sugar cane cultivation and subject to repeat plowing. Based on this, our pedestrian survey and judgmental testing in sugar cane fields focused on the following areas:

- 1) locations of previously recorded sites;
- 2) locations within the cane fields that have not been disturbed by the cultivation, which typically border wetlands;
- 3) other undisturbed areas bordering wetlands;
- 4) areas that contained existing or relic hammocks, as indicated on historic aerials or county soil surveys.

Pedestrian survey and judgmental testing occurred in the northwest section of the property site where there has been no sugar cane cultivation. This area has been left for cattle and existing hardwood hammock. A pedestrian survey was conducted for portions of this area that were easily accessible and provided clear ground visibility. Judgmental testing focused on those areas within the high potential zones that would be more likely to yield sites, such as the center or edge of the historic hammocks (Carr 1975), as determined from historic aerials.

Standard archaeological methods for recording field data were followed throughout the project. The identification number, location, stratigraphic profile, and soil descriptions were recorded for each shovel test. Shovel tests were circular and roughly 50 cm (20 in.) in diameter. They were dug to a minimum depth of 1 m (3.3 ft.), unless excavation was inhibited by pit slumping due to the influx of water or by subsurface obstructions such as limestone bedrock or concreted clay. All excavated soil was dry screened through 6.4-mm (¼-in.) hardware cloth suspended from portable wooden frames. The location of each shovel test was plotted on 1"=200 m field aerials (Appendix B).

Results

All of the shovel tests were negative and yielded no any archaeological material. The pedestrian survey did not indicate the presence of any above-ground archaeological sites.

Systematic testing within the recorded location of 8GL60 was not feasible as the site is located within an active sugar cane field. Two tests were placed in the vicinity of 8GL60; both of which were negative. Additional testing of the recorded location of 8GL60 will take place once the sugar cane is harvested. This testing will include the location of the site as recorded on the USGS map as well as a 100-ft. buffer extending in the four cardinal directions of its recorded location.

HISTORIC RESOURCES DESKTOP ANALYSIS

At the request of the FDHR, a desktop analysis was performed to identify previously recorded *NRHP*-listed or potentially eligible historic buildings and districts within a 5 mile radius of the project site, to include the city of Moore Haven. This analysis included an archaeological and historical literature and background information search pertinent to this area.

The FMSF search indicated that eight cultural resource management surveys have been conducted within 5 miles of the project site (Table 4).

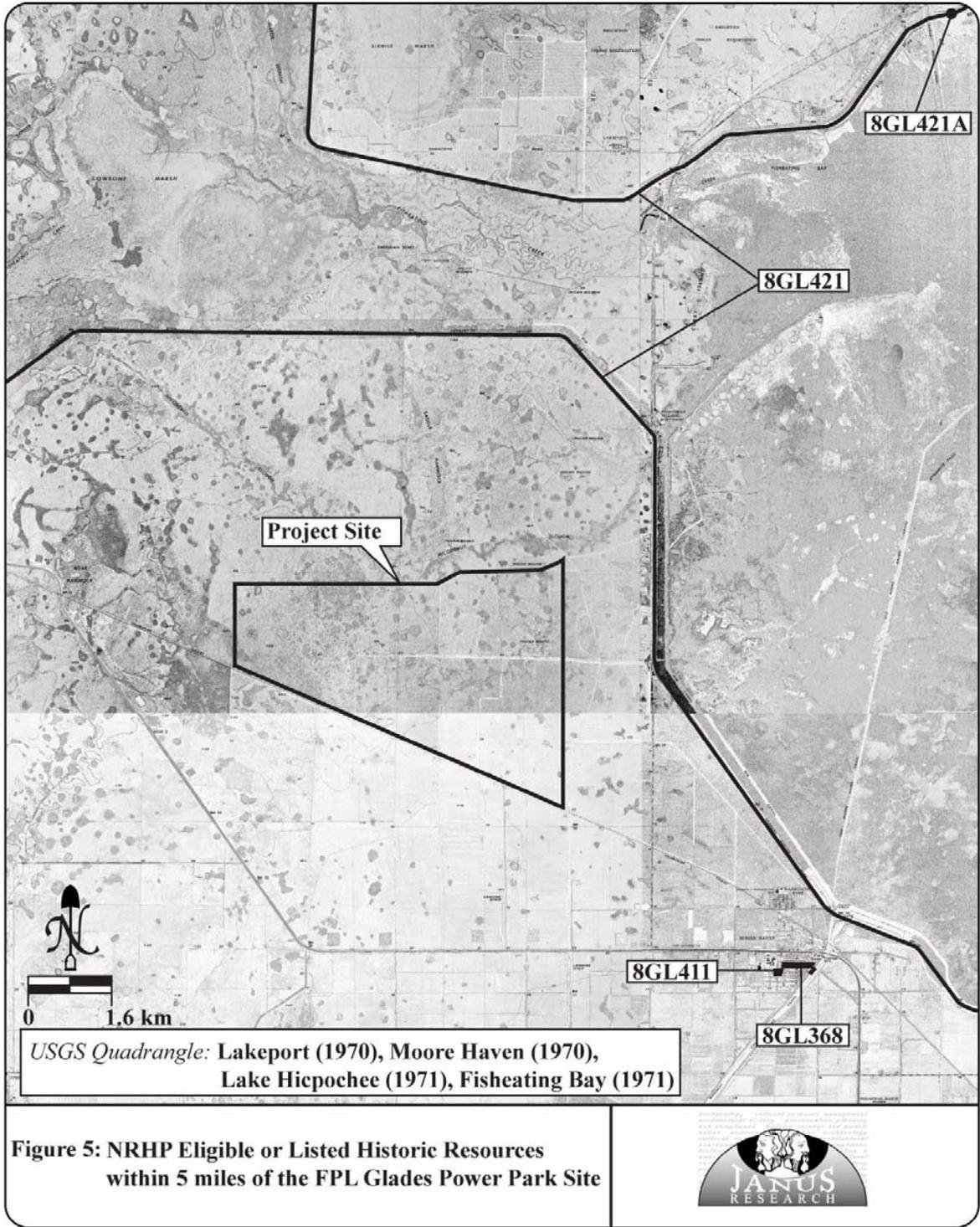
Table 4. Previously Conducted Surveys within 5 miles of the Project Site

| Survey | Survey # |
|--|----------|
| An Archaeological and Historical Survey of Lake Okeechobee [Glades, Palm Beach, Okeechobee and Martin Counties, Florida]. (Carr 1975) | 118 |
| A Report of Investigations on the West Okeechobee Basin Archaeological Survey. (Johnson 1990) | 2366 |
| Cultural Resource Assessment Surveys of Four Bridge Replacement Projects in Collier, Glades and Polk Counties. (McMurray 1991) | 2866 |
| Cultural Resource Assessment, Survey US 27 (Moore Haven Bridge) from North of CR 720 to West of First Street, Glades County, Florida. (Janus Research 1992) | 3411 |
| Historic Properties Survey of Moore Haven. (Hartig 1995) | 4074 |
| Cultural Resources Assessment Survey Lake Okeechobee Scenic Trail (L.O.S.T.) from the Palm Beach/Hendry County Line North to the Okeechobee/Martin County Line, Okeechobee, Glades, and Hendry Counties, Florida. (Almy and Hinder 2002) | 7072 |
| Status of Fort Center Archaeological Site and Recommendations for Management and Protection of Sites. (Newman 2003) | 8827 |
| Cultural Resource Assessment Survey SR 78 from South of Nicodemus Slough to Bridge No. 050056 Glades County, Florida. (Pracht 2003) | 8903 |

The FMSF revealed 33 individual historic buildings, two historic districts, and one historic dike within a five mile radius of the FPL Glades Power Park Project site (Table 5). The majority of the previously recorded resources are located within the city of Moore Haven. The two historic districts, Moore Haven Downtown Historic District (8GL368) and Moore Haven Residential District (8GL411) are listed in the *NRHP* (Figure 5). The Herbert Hoover Dike (8GL421 and 8GL421A) has been determined eligible for listing in the *NRHP* on an individual basis. The remaining 33 historic buildings have not been evaluated by the SHPO.

Table 5. Previously Recorded Historic Resources within 5 Miles of the Glades Power Park

| FMSF # | Site Name/ Address | Style | Date | NRHP Status |
|------------------------|---|--------------------------|-------------|--------------------|
| 8GL368 | Moore Haven Downtown Historic District | various | various | NRHP-Listed |
| 8GL411 | Moore Haven Residential District | various | various | NRHP-Listed |
| 8GL421 & 8GL421A | Herbert Hoover Dike | N/A | c. 1930 | NRHP-Eligible |
| 8GL84 | 50 US 27 | Frame Vernacular | 1929 | Not Evaluated |
| 8GL85 | 62 US 27 | Masonry vernacular | 1945 | Not Evaluated |
| 88GL86 | 156 US 27 | Frame Vernacular | 1925 | Not Evaluated |
| 88GL258 | 315 Avenue K | Frame Vernacular | c. 1923 | Not Evaluated |
| 88GL259 | 301 Avenue K | Frame Vernacular | c. 1923 | Not Evaluated |
| 8GL273 | 299 Avenue K | Frame Vernacular | c. 1928 | Not Evaluated |
| 8GL282 | 499 Avenue K | Frame Vernacular | c. 1940 | Not Evaluated |
| 8GL283 | 470 Avenue J | Frame Vernacular | c. 1940 | Not Evaluated |
| 8GL284 | Tatum House/ 429 J Avenue | Frame Vernacular | c. 1940 | Not Evaluated |
| 8GL285 | 471 Avenue J | Frame Vernacular | c. 1925 | Not Evaluated |
| 8GL286 | First Baptist Church Parsonage/ 285 J Avenue | Frame Vernacular | 1919 | Not Evaluated |
| 8GL288 | Lundy, Ed Building/ 198 J Avenue | Masonry vernacular | 1947 | Not Evaluated |
| 8GL292 | 62 Avenue J | Frame Vernacular | c. 1925 | Not Evaluated |
| 8GL297 | Glades County Courthouse/ J Avenue | Neo-Classical Revival | 1926 | Not Evaluated |
| 8GL298 | 242 Avenue N | Frame Vernacular | 1930 | Not Evaluated |
| 8GL299 | Bussell House/ 270 N Avenue | Frame Vernacular | 1930 | Not Evaluated |
| 8GL300 | 298 Avenue N | Frame Vernacular | c. 1925 | Not Evaluated |
| 8GL301 | 300 Avenue N | Frame Vernacular | c. 1927 | Not Evaluated |
| 8GL302 | Sheriffs House/ 314 N Avenue | Frame Vernacular | c. 1927 | Not Evaluated |
| 8GL316 | Altamonte Hotel/ 143 L Avenue | Frame Vernacular | c. 1917 | Not Evaluated |
| 8GL322 | 315 Avenue L | Frame Vernacular | c. 1925 | Not Evaluated |
| 8GL323 | 384 Avenue L | Frame Vernacular | c. 1945 | Not Evaluated |
| 8GL324 | 442 Avenue L | Frame Vernacular | c. 1925 | Not Evaluated |
| 8GL325 | 360 Avenue R | Frame Vernacular | c. 1930 | Not Evaluated |
| 8GL326 | 399 Avenue R | Frame Vernacular | c. 1945 | Not Evaluated |
| 8GL328 | Horwitz, Marion House/ 400 Riverside Drive | Frame Vernacular | c. 1917 | Not Evaluated |
| 8GL329 | 500 Riverside Drive | Frame Vernacular | c. 1929 | Not Evaluated |
| 8GL330 | Moore Haven Ice Company/ Florida Avenue | Frame Vernacular | 1926 | Not Evaluated |
| 8GL331 | Cannery-Warehouse/ Florida Avenue | Frame Vernacular | c. 1926 | Not Evaluated |
| 8GL332 | 401 4th Street | Frame Vernacular | c. 1927 | Not Evaluated |
| 8GL333 | 428 Railroad Avenue | Frame Vernacular | c. 1945 | Not Evaluated |
| 8GL334 | Moore Haven Hotel/ 300 Riverside Drive | Frame Vernacular | 1916 | Not Evaluated |
| 8GL335 | 400 5th Street | Frame Vernacular | 1920 | Not Evaluated |



The construction of the Herbert Hoover Dike (8GL421) that surrounds Lake Okeechobee began in the early 1930s by the U.S. Army Corps of Engineers and was completed in 1938. The 34 ft. high dike is composed of shell, rock and gravel covered with grass, trees, and a service drive on top of the levee. It is considered to be the largest civil engineering work in South Florida and continues to control the waters around Lake Okeechobee. The Herbert Hoover Dike segment (8GL421A), which is also part of the Herbert Hoover Dike Resource Group (8GL421) which spans five counties is located approximately one and one-quarter mile east of the project site. The segment (8GL421A) and the resource group (8GL421) were determined eligible for listing in the *NRHP* by SHPO in 2002.

CONCLUSIONS AND RECOMMENDATIONS

No archaeological sites were identified during the reconnaissance survey. The background research identified one previously recorded archaeological site (8GL60) within the project site boundaries. This site is located in an active sugar cane field, which precluded systematic testing of the recorded location of this site. Additional testing will be conducted once the sugar cane has been harvested. It is also recommended that the hammock located in the northwestern part of the project site be subjected to a systematic survey should any ground disturbing activities of any nature take place within the hammock area. FPL's development plans currently exclude this hammock area.

The desktop analysis revealed 33 individual historic buildings, two historic districts, and one historic dike within a five mile radius of the Glades Power Park Project site. The majority of the previously recorded resources are located within the city of Moore Haven and their *NRHP* eligibility has not been determined. The two historic districts, Moore Haven Downtown Historic District (8GL368) and Moore Haven Residential District (8GL411) are listed in the *NRHP*. The Herbert Hoover Dike (8GL421 & 8GL421A) was determined *NRHP*-eligible by the SHPO in 2002. Coordination with the FDHR is recommended to discuss specific project plans, such as height and lighting issues, for these off-site resources.

Unanticipated Finds

In the event that human remains are found during construction or maintenance activities, the provisions of Chapter 872.05 of the *Florida Statutes* will apply. Chapter 872.05 states that, when human remains are encountered, all activity that might disturb the remains shall cease and may not resume until authorized by the District Medical Examiner or the State Archaeologist. The District Medical Examiner has jurisdiction if the remains are less than 75 years old or if the remains are involved in a criminal investigation. The State Archaeologist has jurisdiction if the remains are more than 75 years of age.

Curation

Survey Log Sheet (Appendix C) is curated at the Florida Master Site File in Tallahassee, along with a copy of this report. Field notes and other pertinent project records are temporarily stored at Janus Research until the property owner or client requests them.

REFERENCES CITED

Almy, Marion and Kim Hinder

2002 Cultural Resources Assessment Survey Lake Okeechobee Scenic Trail (L.O.S.T.) from the Palm Beach/Hendry County Line North to the Okeechobee/Martin County Line, Okeechobee, Glades, and Hendry Counties, Florida. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

Carr, Robert S.

1975 An Archaeological and Historical Survey of Lake Okeechobee [Glades, Palm Beach, Okeechobee and Martin Counties, Florida]. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

Florida Department of Environmental Protection (FDEP)

1871a Plat Map for Township 41 South, Range 31 East

1871b Plat Map for Township 41 South, Range 32 East

1818 Plat Map for Township 41 South, Range 32 East

1926 Plat Map for Township 41 South, Range 32 East

Harner, Charles E.

1973 *Florida's Promoters: The Men Who Made It Big*. Trend House, Tampa.

Hartig, Victoria

1995 Historic Properties Survey of Moore Haven. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

Hetherington, Alma

1980 *The River of the Long Water*. The Mickler House Publishers, Chuluota, Florida.

Janus Research

1992 Cultural Resource Assessment, Survey US 27 (Moore Haven Bridge) from North of CR 720 to West of First Street, Glades County, Florida. Copies available from the Florida Department of State Division of Historical Resources, Tallahassee.

Johnson, William Gray

1990 A Report of Investigations on the West Okeechobee Basin Archaeological Survey. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

1991 Remote Sensing and Soil Science Applications to Understanding Belle Glade Cultural Adaptations in the Okeechobee Basin. Unpublished Ph.D. dissertation on file, Department of Anthropology, University of Florida, Gainesville.

Kreamer, J.M.

- n.d. Atlantic and Gulf Coast Canal and Okeechobee Land Co. showing drainage territory compiled from recent surveys. Published by F. Bourquin and Co. Archives and Special Collections, Rollins College. Accessed on September 28, 2006 from Central Florida Memory (<http://www.cfmemory.org/index.php>).

Mann, R. W.

- 1983 *Rails 'Neath the Palms*. Darwin Publications, Burbank, California.

Marquardt, William H.

- 1992 The Calusa Domain: An Introduction. In *Culture and Environment in the Domain of the Calusa*, edited by W. H. Marquardt, pp. 1–7. Institute of Archaeology and Paleoenvironmental Studies, Monograph 1. Florida Museum of Natural History, University of Florida, Gainesville.

McMurray, Carl

- 1991 Cultural Resource Assessment Surveys of Four Bridge Replacement Projects in Collier, Glades and Polk Counties. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

Newman, Christine

- 2003 Status of Fort Center Archaeological Site and Recommendations for Management and Protection of Sites. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

Pracht, Jodi B.

- 2003 Cultural Resource Assessment Survey SR 78 from South of Nicodemus Slough to Bridge No. 050056 Glades County, Florida. Manuscript on file, Florida Department of State, Division of Historical Resources, Tallahassee.

Sears, William H.

- 1971 Food Production and Village Life in Prehistoric Southeastern United States. *Archaeology* 24 (4): 322-329.
- 1982 *Fort Center: An Archaeological Site in the Lake Okeechobee Basin*. Ripley P. Bullen *Monographs in Anthropology and History* No. 4. University Presses of Florida, Gainesville.

Tebeau, Charlton W.

- 1971 *A History of Florida*. University of Miami Press, Miami.

United States Department of Agriculture (USDA)

- 2000 *Soil Survey of Glades County, Florida*. USDA/Soil Conservation Service.

APPENDIX A:
PHOTOGRAPHS OF PROJECT SITE



Property entrance, view facing west



North boundary, west side, view facing west



Photograph of wetland irrigation ditch running southwest, view facing south



Shovel Test #34 within wetland, view facing west.

APPENDIX B:
FIELD AERIAL MAPS WITH SHOVEL TEST LOCATIONS

Glades Power Park Site Northwest Quadrant



Glades Power Park Site Northeast Quadrant



Glades Power Park Site Closeup of Northeast Quadrant



APPENDIX C:
SURVEY LOG SHEETS

Ent D (FMSF only) ___/___/___



Survey Log Sheet

Florida Master Site File
Version 2.0 9/97

Survey # (FMSF only) _____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (Name and project phase)

Report Title (exactly as on title page)

Report Author(s) (as on title page— individual or corporate; last names first)

Publication Date (year) _____ Total Number of Pages in Report (Count text, figures, tables, not site forms) _____

Publication Information (If relevant, series and no. in series, publisher, and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*; see *Guide to the Survey Log Sheet*.)

Supervisor(s) of Fieldwork (whether or not the same as author[s]; last name first) _____

Affiliation of Fieldworkers (organization, city) _____

Key Words/Phrases (Don't use the county, or common words like *archaeology, structure, survey, architecture*. Put the most important first. Limit each word or phrase to 25 characters.)

Survey Sponsors (corporation, government unit, or person who is directly paying for fieldwork)

Name _____

Address/Phone _____

Recorder of *Log Sheet* _____ Date *Log Sheet* Completed _____

Is this survey or project a continuation of a previous project? No Yes: Previous survey #(s) [FMSF only]

Mapping

Counties (List each one in which field survey was done - do not abbreviate; use supplement sheet if necessary)

USGS 1:24,000 Map(s) : Map Name/Date of Latest Revision (use supplement sheet if necessary):

Description of Survey Area

Dates for Fieldwork: Start _____ End _____ Total Area Surveyed (fill in one) _____ hectares _____ acres

Number of Distinct Tracts or Areas Surveyed _____

If Corridor (fill in one for each): Width _____ meters _____ feet Length _____ kilometers _____ miles

Research and Field Methods

Types of Survey (check all that apply): archaeological architectural historical/archival underwater other: _____

Preliminary Methods (✓Check as many as apply to the project as a whole. If needed write others at bottom).

- Florida Archives (Gray Building) library research- local public local property or tax records windshield
 Florida Photo Archives (Gray Building) library-special collection - nonlocal newspaper files aerial photography
 FMSF site property search Public Lands Survey (maps at DEP) literature search
 FMSF survey search local informant(s) Sanborn Insurance maps
 other (describe) _____

Archaeological Methods (Describe the proportion of properties at which method was used by writing in the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%), S(-ome: 20-50%); M(-ost: 50-90%); or A(-ll, Nearly all: 90-100%). If needed write others at bottom.

Check here if NO archaeological methods were used.

- ___ surface collection, controlled ___ other screen shovel test (size: ___) ___ block excavation (at least 2x2 M)
___ surface collection, uncontrolled ___ water screen (finest size: ___) ___ soil resistivity
___ shovel test-1/4"screen ___ posthole tests ___ magnetometer
___ shovel test-1/8" screen ___ auger (size:___) ___ side scan sonar
___ shovel test 1/16"screen ___ coring ___ unknown
___ shovel test-unscreened ___ test excavation (at least 1x2 M)
___ other (describe): _____

Historical/Architectural Methods (Describe the proportion of properties at which method was used by writing in the corresponding letter. Blanks are interpreted as "None.")

F(-ew: 0-20%), S(-ome: 20-50%); M(-ost: 50-90%); or A(-ll, Nearly all: 90-100%). If needed write others at bottom.

Check here if NO historical/architectural methods were used.

- ___ building permits ___ demolition permits ___ neighbor interview ___ subdivision maps
___ commercial permits ___ exposed ground inspected ___ occupant interview ___ tax records
___ interior documentation ___ local property records ___ occupation permits ___ unknown
___ other (describe): _____

Scope/Intensity/Procedures

Survey Results (cultural resources recorded)

Site Significance Evaluated? Yes No If Yes, circle NR-eligible/significant site numbers below.

Site Counts: Previously Recorded Sites _____ Newly Recorded Sites _____

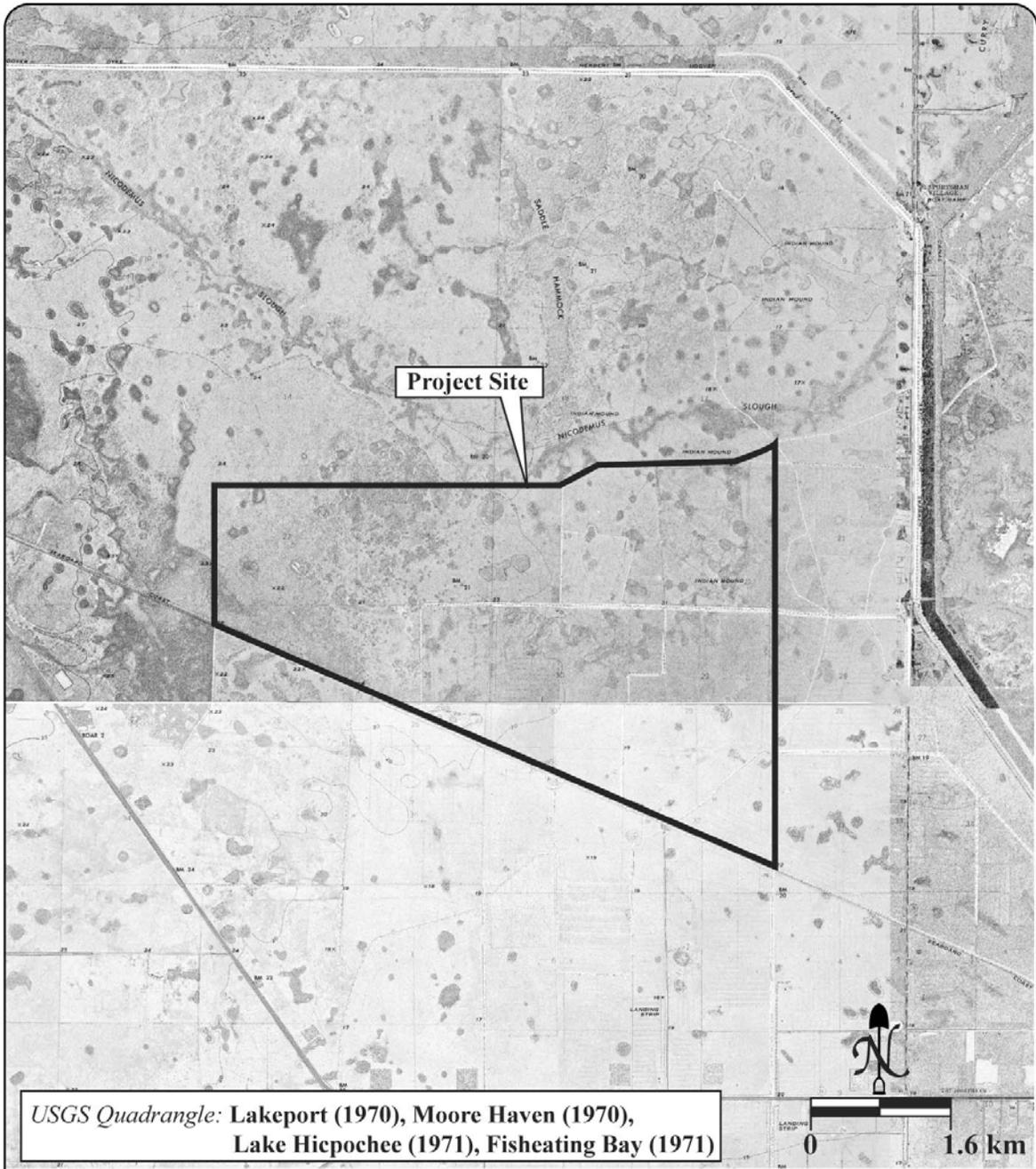
Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8." Attach supplementary pages if necessary)

Newly Recorded Site #'s (Are you sure all are originals and not updates? Identify methods used to check for updates, ie, researched the FMSF records. List site #'s without "8." Attach supplementary pages if necessary.)

Site Form Used: SmartForm FMSF Paper Form Approved Custom Form: Attach copies of written approval from FMSF Supervisor.

DO NOT USE SITE FILE USE ONLY DO NOT USE
Table with 2 columns: BAR Related (872, 1A32, CARL, UW) and BHP Related (State Historic Preservation Grant, Compliance Review: CRAT #)

ATTACH PLOT OF SURVEY AREA ON PHOTOCOPIES OF USGS 1:24,000 MAP(S)



General Location of the FPL Glades Power Park Site

