

ATTACHMENT D

CULTURAL RESOURCE ASSESSMENT SURVEY

**CULTURAL RESOURCE ASSESSMENT SURVEY
GAINESVILLE RENEWABLE ENERGY CENTER
ALACHUA COUNTY, FLORIDA**

Prepared for:

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EXECUTIVE SUMMARY

Archaeological Consultants, Inc. (ACI) performed a cultural resource assessment survey (CRAS) for the proposed Gainesville Renewable Energy Center (GREC) in Alachua County. The purpose of the survey was to locate and identify any cultural resources located within the tract, and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). The Florida Division of Historical Resources (FDHR) reviewed this project under Chapters 267 and 403, *Florida Statutes (FS)* and required that a cultural resource assessment survey be conducted of the proposed development area (Kammerer 2009). All work was carried out in conformity with the specifications set forth in Chapter 1A-46, *Florida Administrative Code (FAC)* and the *Cultural Resource Management Standards and Operational Manual* (FDHR 2003). The survey described in this report was conducted in January 2010.

Archaeological background research, including a review of the Florida Master Site File (FMSF) and the NRHP indicated that no archaeological sites are recorded within the project area. However, the 1977 cultural resource assessment survey of the Deerhaven Generating Station (DGS) reported that a projectile point was recovered in the southwestern corner of the tract, a historic homestead was once located in the northern portion of the tract, and a sawmill was located southeast of the tract (Miller 1977). In addition, nine previously recorded archaeological sites are within 1.6 kilometers (km) [1 mile (mi)] of the tract, as well as several other cultural resources noted by Miller, but not recorded as sites. Based on the environmental setting, the project area has a moderate potential for the occurrence of aboriginal archaeological sites.

Background research, including a review of the FMSF and the NRHP, revealed no previously recorded historic structures within the tract. The Jacksonville, Gainesville, and Gulf Railroad, recorded as 8AL5393, runs along the southern boundary of the tract, but will not be impacted by the proposed facilities. The current survey revealed an absence of historic structures within the project area. However, it was determined that there was a moderate to high probability for the occurrence of historic archaeological deposits once associated with the homestead and/or sawmill.

The cultural resource assessment survey for the GREC consisted of surface reconnaissance combined with systematic and judgmental subsurface testing. As a result of this survey, no evidence of the features noted more than 30 years ago (Miller 1977) was found. This was not unexpected due to extensive agriculture and silviculture which no doubt removed the trash, glass, and bricks once noticed. Thus, no archaeological sites or historic structures, which are listed, determined eligible, or considered potentially eligible for listing in the NRHP, were identified within the proposed Gainesville Renewable Energy Center tract. As a result, no significant properties will be affected by this proposed development project, and no further work is recommended.

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1.0 INTRODUCTION

ACI performed a CRAS of the GREC in Alachua County (Figure 1.1). The GREC will be located on an approximately 131-acre tract within the boundaries of the approximately 1,146-acre previously certified site for the Gainesville Regional Utilities (GRU) existing DGS. The GREC parcel is not actively used by GRU and does not contain any facilities associated with the DGS.

The GREC project will involve the construction and operation of a nominal net 100-MW (nominal gross 116-MW) biomass-fired electrical power plant and associated facilities on the approximately 131-acre tract. The main electrical generating facilities for GREC will consist of a bubbling fluidized bed (BFB) boiler and conventional steam turbine generator. The BFB boiler will be capable of accommodating a wide range of clean, woody biomass fuels. Flue gas from the BFB boiler will pass through air emission control equipment and exhaust to the atmosphere through one 230-foot (ft) (70 meters [m]) tall stack. Other facilities in the main power block area will include an administration building; warehouse; water and wastewater treatment facilities; sand and fly and bottom ash handling and storage facilities; emergency diesel generator and firewater pump; a switchyard; and biomass fuel delivery, handling, and storage facilities.

The purpose of the survey was to locate and identify any cultural resources located within the tract, and to assess their significance in terms of eligibility for listing in the NRHP. The FDHR reviewed this project under Chapters 267 and 403, *FS* and required that a cultural resource assessment survey be conducted of the proposed development area (Kammerer 2009). All work was carried out in conformity with the specifications set forth in Chapter 1A-46, *FAC* and the *Cultural Resource Management Standards and Operational Manual* (FDHR 2003). The survey described in this report was conducted in January 2010.



Figure 1.1. Location of the Gainesville Renewable Energy Center, Section 27, Township 8 South, Range 19 East, Alachua County (Surveying and Mapping Office 2000).



2.0 ENVIRONMENTAL SETTING

2.1 Location and Environment

The GREC project area is located in Section 27 of Township 8 South, Range 19 East (United States Geological Survey [USGS] 1981) (Figure 2.1). The approximately 131-acre project area is located within the GRU DGS tract, between NW 128th Lane and US 441. The tract is presently undeveloped and has historically been used for agriculture and pine silviculture. Most of the tract is actively managed for timber production and has been altered by land preparation (furrowing) and periodic harvesting of timber. The tract is transected by numerous unpaved trails and is surrounded by manmade ditches.



Photo 2.1. General project setting.

2.2 Physiography and Geology

The project area is situated within the Northern Highlands of the Northern or Proximal physiographic zone. The Northern and Central Highlands are remnants of a once integrated highland that has been partitioned by erosion and solution. There are a number of ancient marine terraces within the Florida. The project area is located on the Wicomico terrace (Healy 1975). Elevation of the tract is between 55-56 m (180-185 ft) above mean sea level. The area is underlain by the Tertiary Coosawatchie formation with a surface lithology of clayey sand (Knapp 1978; Scott 2001; Scott et al. 2001).

2.3 Soils and Vegetation

The GREC project area is situated within the Pomona-Wauchula-Newnan soil association that is associated with the flatwoods, slight knolls, and transitional areas between the uplands and flatwoods (US Department of Agriculture [USDA] 1985).

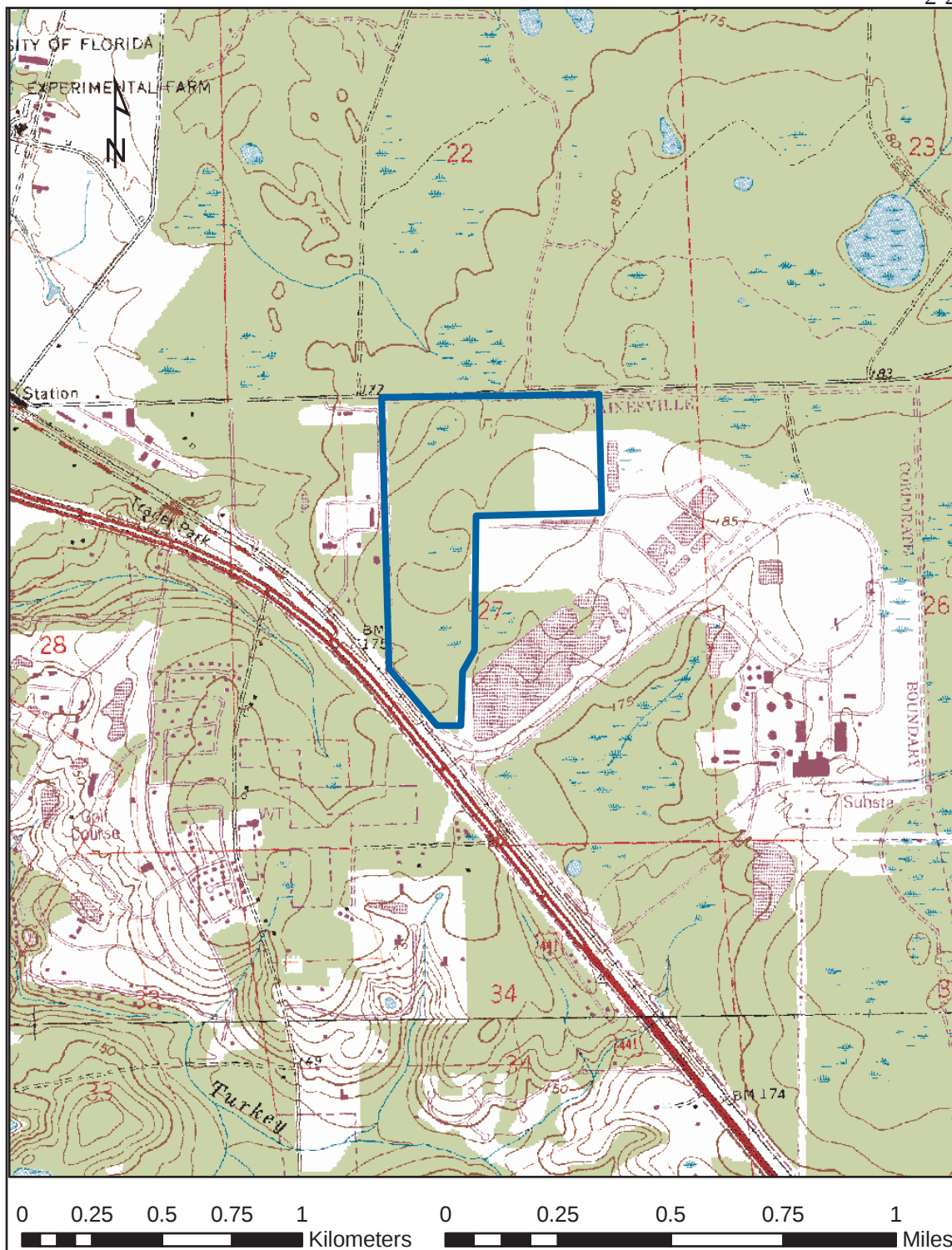


Figure 2.1. Environmental setting of the Gainesville Renewable Energy Center, Section 27, Township 8 South, Range 19 East (USGS Alachua 1981 and Gainesville West 1981).



Specifically, the project area is underlain by the somewhat poorly drained Chipley sand and the poorly drained Pomona and Wauchula sands. The depressional areas on the tract are underlain by Montechoa loamy sand, which is very poorly drained. Pomona and Wauchula sand supports longleaf and slash pine with an understory of sawpalmetto, waxmyrtle, gallberry, brackenfern, pineland threeawn, blueberry, huckleberry, bluestem, and running oak. Vegetation associated with Montechoa loamy sand consists primarily of cypress, but some areas support swamp tupelo, pone pine, bay, and other water tolerant hardwoods. The better-drained Chipley sand supports slash and longleaf pine as well as water, laurel, and live oak. The understory consists of waxmyrtle, sumac, blackberry, gallberry, scattered sawpalmetto, carpetgrass, and pineland threeawn.

2.4 Paleo-Environment

The early environment of the region was different from that seen today. Sea levels were lower, the climate was arid, and fresh water was scarce. An understanding of human ecology during the earliest periods of human occupation in Florida cannot be based on observations of the modern environment because of changes in water availability, botanical communities, and faunal resources. Aboriginal inhabitants would have developed cultural adaptations in response to the environmental changes taking place, which were then reflected in settlement patterns, site types, artifact forms, and subsistence economies.

Due to the arid conditions between 16,500 and 12,500 years ago, the perched water aquifer and potable water supplies were absent (Dunbar 1981:95). Palynological studies conducted in Florida and Georgia suggest that between 13,000 and 5000 years ago, this area was covered with an upland vegetation community of scrub oak and prairie (Watts 1969, 1971, 1975). However, the environment was not static. Evidence recovered from the inundated Page-Ladson Site in north Florida has clearly demonstrated that there were two periods of low water tables and dry climatic conditions and two episodes of elevated water tables and wet conditions (Dunbar 2006c).

By 5000 years ago, a climatic event marking a brief return to Pleistocene climatic conditions induced a change toward more open vegetation. Southern pine forests replaced the oak savannahs. Extensive marshes and swamps developed along the coasts and subtropical hardwood forests became established along the southern tip of Florida (Delcourt and Delcourt 1981). Northern Florida saw an increase in oak species, grasses, and sedges (Carbone 1983). At Lake Annie, in south central Florida, pollen cores were dominated by wax myrtle and pine. The assemblage suggests that by this time, a forest dominated by longleaf pine along with cypress swamps and bayheads existed in the area (Watts 1971, 1975). About 5000 years ago, surface water was plentiful in karst terrains and the level of the Floridan aquifer rose to 1.5 m (5 ft) above present levels. With the establishment of warmer winters and cooler summers than in the preceding early Holocene, the fire-adapted pine communities prevailed. These depend on the high summer precipitation caused by the thunderstorms and the accompanying lightning strikes to spark the fires (Watts et al. 1996; Watts and Hansen 1994). The increased precipitation also resulted in the formation of the large swamp systems such as the Okefenokee and Everglades (Gleason and Stone 1994). After this time, modern floral, climatic, and environmental conditions began to be established.

3.0 CULTURAL CHRONOLOGY

A discussion of the culture history of a given area is included in cultural resource assessment reports to provide a framework within which the local archaeological and historical record can be examined. Archaeological and historical sites are not individual entities, but rather are part of once dynamic cultural systems. As a result, individual sites cannot be adequately examined or interpreted without reference to other sites and resources in the general area.

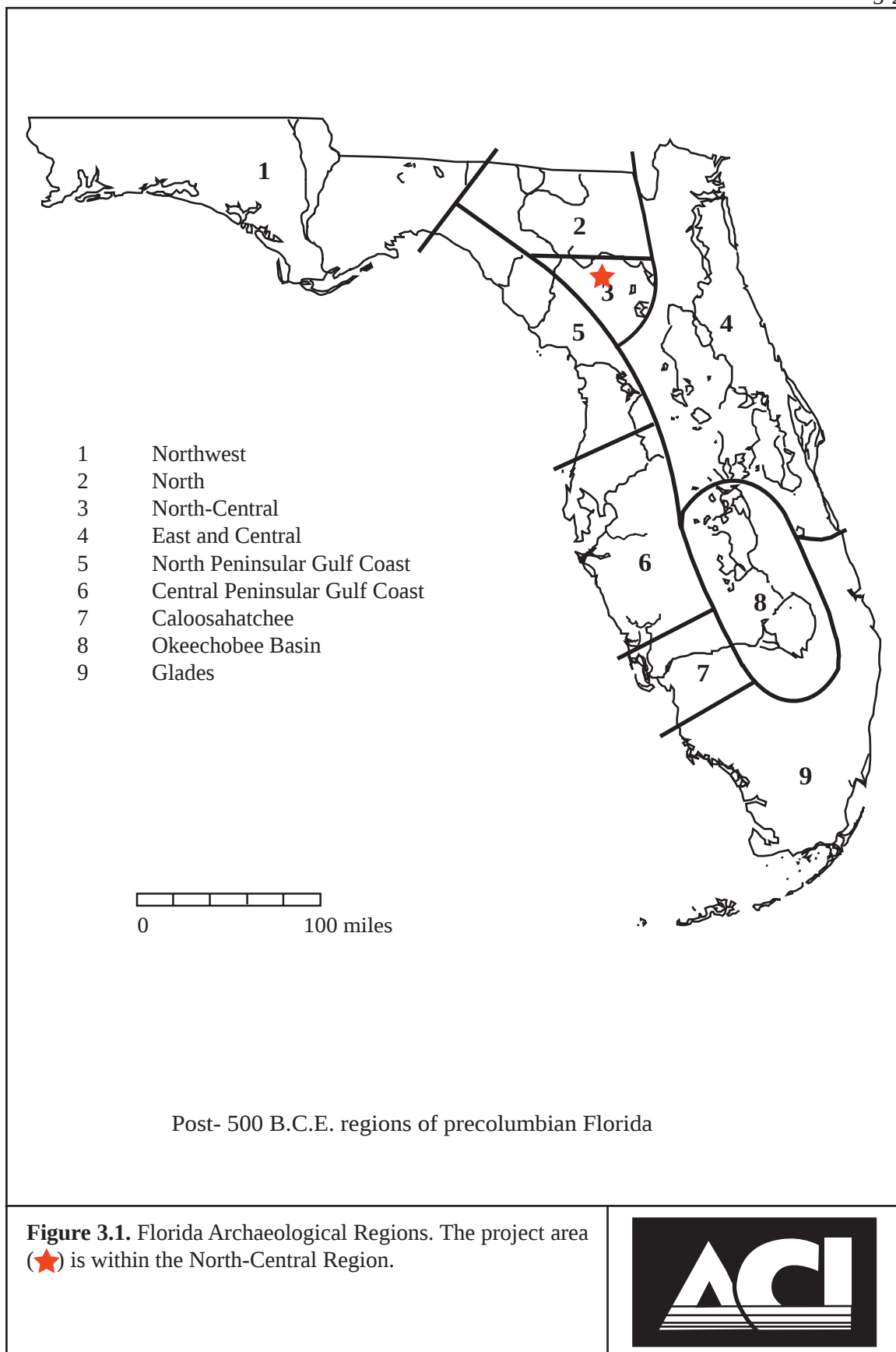
In general, archaeologists summarize the culture history of an area (i.e. an archaeological region) by outlining the sequence of archaeological cultures through time. These are defined largely in geographical terms, but also reflect shared environmental and cultural factors. The project area is located in the North-Central archeological region which extends from northern Lake County north to the Santa Fe River, between the St. Johns (East and Central Lakes) to the east and the coastal lowlands (North Peninsular Gulf Coast) to the west (Milanich and Fairbanks 1980) (Figure 3.1). The Paleo-Indian, Archaic (Early, Middle, and Late), Deptford, Cades Pond, and Alachua cultural periods have been defined based on unique sets of material cultural traits such as stone tools and ceramics, as well as subsistence, settlement, and burial patterns.

The local history of the region is divided into four broad periods based initially upon the major governmental powers. The first period, Colonialism, occurred during the exploration and control of Florida by the Spanish and British from around 1513 until 1821. At that time, Florida became a territory of the United States and 21 years later became a State (Territorial and Statehood). The Civil War and Aftermath (1861-1899) period deals with the Civil War, the period of Reconstruction following the war, and the late 1800s, when the transportation systems were dramatically increased and development throughout the state expanded. The Twentieth Century has subperiods based on important historic events such as the World Wars, the Boom of the 1920s, and the Depression. Each of these periods evidenced differential development and utilization of the region, thus effecting the historic site distribution across the land.

3.1 Paleo-Indian

The Paleo-Indian stage is the earliest known cultural manifestation in Florida, dating from roughly 12,000 to 7500 Before Common Era (B.C.E.) (Milanich 1994). When human populations were arriving in Florida, the sea levels were still as much as 40 to 60 m (130-200 ft) below present levels and coastal regions of Florida extended miles beyond present-day shorelines (Faught 2004). Thus, many of these sites have been inundated (cf., Faught and Donoghue 1997).

The Paleo-Indian period has been sub-divided into three horizons based upon characteristic tool forms (Austin 2001). Traditionally, it is believed that the Clovis Horizon (10,500-9000 B.C.E.) represents the initial occupation of Florida and is defined based upon the presence of the fluted Clovis points. These are somewhat more common in north Florida. However, recent work, may indicate that Suwannee and Simpson points are contemporary with or predate Clovis (Dunbar 2006a; Stanford 1991). The Suwannee Horizon (9000-8500 B.C.E.) is the most well known of the three Paleo-Indian horizons. The lanceolate-shaped, unfluted Simpson and Suwannee projectile points are diagnostic of this time period (Bullen 1975; Daniel and Wisenbaker 1987; Purdy 1981). The Suwannee tool kit includes a variety of scrapers, adzes, spokeshaves, unifacially retouched flakes, and blade-like flakes as well as bone and ivory foreshafts, pins, awls, daggers, anvils, and abraders (Austin 2001:23).



The smaller Tallahassee, Santa Fe, and Beaver Lake projectile points have traditionally been attributed to Late Paleo-Indian Horizon (8500-8000 B.C.E.) (Milanich 1994). However, many of these points have been recovered stratigraphically from Late Archaic or Early Woodland period components and thus, may not date to this time period at all (Austin 2001; Farr 2006). Florida notched or pseudo-notched points, including the Union, Greenbriar, and Hardaway-like points may represent Late Paleo-Indian types, but these types have not been recovered from datable contexts; their temporal placement remains uncertain (Dunbar 2006a:410).

Although the Paleo-Indian period is generally considered to have been cooler and drier, there were major variations in the inland water tables resulting from large-scale environmental fluctuations. There have been two major theories as to why most Paleo-Indian materials have been recovered from inundated sites. The “Oasis” theory posits that due to low water tables and scarcity of potable water, the Paleo-Indians and associated game resources clustered around the few available sinkholes containing water (Neill 1964). Ben Waller postulated that they gathered around “river-crossings” to ambush the large Pleistocene animals as they crossed the rivers (Waller 1970). This implies periods of elevated water levels. Based on the research along the Aucilla and Wacissa Rivers, it appears that both theories are correct, depending upon what the local environmental conditions were at that time (Dunbar 2006b). As such, during the wetter periods, populations became more dispersed because the water resources were abundant and the animals they relied on could roam over a wider range. In addition to being “tethered” to water sources, most of the Paleo-Indian sites are close to sources of good quality lithic resources. The settlement pattern consist of the establishment of semi-permanent habitation areas and the movement of the resources from their sources of procurement to the residential locale by specialized task groups (Austin 2001:25).

Some of the information about this period has been derived from the underwater excavations at Little Salt Spring and Warm Mineral Springs (Clausen et al. 1979). The Harney Flats Site has provided a rich body of data concerning Paleo-Indian life ways. Analysis indicates that this site was used as a quarry-related base camp with special use activity areas (Daniel and Wisenbaker 1987). It has been suggested that Paleo-Indian settlement was probably related to the scheduling of “tool-kit replacement, social needs, and the availability of water,” among other factors (Daniel and Wisenbaker 1987:175). Investigations along the Aucilla and Wacissa Rivers, as well as other sites within the north Florida rivers have provided important information on how the Paleo-Indians adapted to their environment (Webb 2006). Studies of the Pleistocene faunal remains clearly demonstrate the importance of these animals not just for food, but as the raw material for their bone tool industry (Dunbar and Webb 1996).

3.2 Archaic

As the Paleo-Indian period ended, climatic changes occurred and the Pleistocene megafauna disappeared. The disappearance of the mammoths and mastodons resulted in a reduction of open grazing lands, and thus, the subsequent disappearance of grazers such as horse, bison, and camels. With the reduction of open habitat, the herd animals were replaced by the more solitary, woodland browser: the white-tailed deer (Dunbar 2006a:426). The intertwined data of megafauna extinction and cultural change suggests a rapid and significant disruption in both faunal and floral assemblages and the Bolen people represent the first culture adapted to the Holocene environment (Carter and Dunbar 2006). This included a more specialized toolkit and the introduction of chipped-stone woodworking implements.

However, because of a lack of excavated collections and the poor preservation of bone and other organic materials in the upland sites, our knowledge of the full range of the Early Archaic tool assemblages is uncertain (Carter and Dunbar 2006; Milanich 1994). Discoveries at the Page-Ladson, Little Salt Spring, and Windover sites indicate that bone and wood tools were also used (Clausen et al. 1979; Doran 2002; Webb 2006). The archaeological record suggests a diffuse, yet well-scheduled, pattern of exploiting both coastal and interior resources. Because water sources were much more numerous and larger than in earlier times, the Early Archaic peoples could sustain larger populations, occupy sites for longer periods, and perform activities that required longer occupation at a specific locale (Milanich 1994:67).

By approximately 6500 years ago marked environmental changes, which had profound influence upon human settlement and subsistence practices, occurred. Humans adapted to this changing environment and regional and local differences are reflected in the archaeological record (Russo 1994a, 1994b; Sassaman 2008). Among the landscape alterations were rises in sea and water table levels that resulted in the creation of more available surface water. In addition to changed hydrological conditions, this period is characterized by the spread of mesic forests and the beginnings of modern vegetation communities including pine forests and cypress swamps.

The archaeological record for the Middle Archaic is better understood than the Early Archaic. The stemmed, broad blade projectile points, including Newnan, Levy, Marion, and Putnam types, are diagnostic of this period (Bullen 1975). Population growth, as evidenced by the increased number of sites and accompanied by increased socio-cultural complexity, is also assumed for this time (Milanich and Fairbanks 1980). Site types include large base camps, smaller special-use campsites, quarries, and burial areas. The most common sites are the smaller campsites, which were most likely used for hunting or served as special-use extractive sites for such activities as gathering nuts or other botanical materials. Base camps are defined by larger artifact assemblages and a wider variety of tool forms.

During the Late Archaic period, population increased and became more sedentary. The abundant wetland resources allowed larger settlements to be maintained. It is likely that the change in settlement patterns is related to environmental changes. By the end of the Middle Archaic, the climate closely resembled that of today; vegetation changed from those species which preferred moist conditions to pines and mixed forests (Watts and Hansen 1988). The adaptation to this environment allowed for a wider variety of resources to be exploited and a wider variation in settlement patterns. Shellfish, fish, and other food sources were now available from coastal and freshwater wetlands resulting in an increase population size. The projectile point styles of the Middle Archaic continued with the addition of Culbreath, Lafayette, Clay, and Westo types (Bullen 1975). The first fired clay pottery was made in Florida about 4000 years ago and was tempered with fibers (Spanish moss or palmetto). Recent research has revealed that the plain and decorated Orange period ceramics were contemporaneous (Sassaman 2003).

3.3 Deptford

The Deptford period (500 B.C.E.-200 Common Era [C.E.]) has been well documented as a coastal culture along the Gulf and Atlantic shorelines. The sites tend to be located in live oak-magnolia hammocks immediately adjacent to saltwater marshes. Sea level rise since the Deptford period had inundated some sites and formed islands out of others. Smaller inland sites, probably for hunting, are also known, but less well understood. Deptford subsistence strategies were based on hunting and gathering with an emphasis on the coastal resources. Coastal sites, often located in saltwater marshes, are easily identified by the presence of shell middens. Archaeologists believe

the Deptford people spent most of the year along the lagoons and salt marshes. Seasonally, small groups may have moved inland and up the rivers to exploit the riverine and hammock resources (Milanich and Fairbanks 1980:72). By about 100 C.E., the Deptford settlement pattern began to change; villages were now being established in the interior as opposed to only the special-use campsites (Milanich 1994:114).

Deptford pottery is easily identified and is characterized by linear patterns of small rectangles or squares on the outside of pots. Simple stamp, linear check stamp, and check stamp patterns were applied by pressing a carved wooden paddle into the moist clay prior to firing. Other pottery was decorated by wrapping the wooden paddle with a cord and pressing it into the moist clay. Spanish moss was replaced by better tempering agents such as sand and grit. Lithic, worked shell, and worked bone artifacts tend to be scarce at Deptford sites, suggesting that wood was primarily used as the raw material for their tools (Milanich 1994:126).

Evidence of culture changes is seen beginning around 100 B.C.E. by the increased interaction, construction of burial and other ceremonial mounds, and the movement of peoples into the interior on a permanent basis. The Yent ceremonial complex has been described by Sears (1962) for the panhandle and north peninsula gulf coast area based upon the excavations at the Crystal River, Yent, and Pierce Mounds. Not all late Deptford sites appear to be associated with that complex as cremations and midden burials have been reported from non-mound sites.

3.4 Weeden Island

The Weeden Island related cultures (100-750 C.E.) evolved out of the preceding Deptford period. There are several variants of the Weeden Island culture. The project area is situated within the Cades Pond area. All of the known Cades Pond sites are located south of the Santa Fe River and north of Orange Lake in eastern Alachua and western Clay and Putnam Counties. No Cades Pond sites are located in western Alachua County (Milanich 1994:229). Ceremonialism and its expressions, such as the construction of complex burial mounds containing exotic and elaborate grave offerings, reached their greatest development during this time. Similarly, the subsistence economy, divided between maritime and terrestrial animals and perhaps horticultural products, represents the maximum effective adjustment to the environment.

Milanich (1994:168) believes there are six basic types of Weeden Island sites. These include (1) villages, (2) village(s) with burial mounds, (3) villages without mounds but within three miles of a village with one or more mounds, (4) mound-village complexes, consisting of a village with two or more mounds, (5) isolated burial mounds, and (6) task-specific (special-use) sites such as lithic quarries, hunting camps, and other resource extractive camps. Villages were nuclear settlements with the associated midden deposit often being horseshoe shaped. All villages within this region were located next to extensive wetlands, large lakes, or both. It has been noted that villages were also proximate to other aquatic habitats, sand hills, pine scrub, and flatwoods (Milanich et al. 1984; Sigler-Lavelle 1980). Settlement along the wetlands would have provided the optimal setting for collecting the resources required by the site occupants. Although upland resources such as deer, nuts, and other animals were utilized, most of the protein was obtained from the wetlands (Cumbaa 1972). When the early mounds and villages were abandoned, new villages and mound were established nearby. As the villages grew, new communities budded off and moved nearby (Milanich 1994:236).

Mound sites contain a number of Weeden Island ceramic types. These are among some of the finest ceramics in the southeast; they are often thin, well-fired, burnished, and decorated with

incising, punctation, complicated stamping, and animal effigies (Milanich 1994:211). These ceramics can be divided into three general categories - mortuary pottery, prestige/elite pottery, and utilitarian wares. It should be noted though that undecorated ceramics are most common in the village areas whereas the decorated types are most often associated with the burial mounds. The village wares consist almost entirely of sand tempered plain while the ceremonial wares included St. Johns Plain and Dunns Creek Red. Milanich and his colleagues note that greater time and effort was spent on the manufacture of the certain decorated wares as opposed to the undecorated wares and the elite pottery was usually better made (Milanich et al. 1984).

Hunting implements would have included the Columbia, Jackson, and Bradford points used on spears or as hafted knives, and possibly Pinellas points, which would have tipped arrows. These people had a unique cultural adaptation to the wetlands and forest of north-central Florida. However, around 600 C.E., the Cades Pond people were displaced by the Alachua, and new cultural practices, focusing on agricultural pursuits, are evident.

3.5 Alachua

The Alachua had a sufficiently different culture from the preceding Cades Pond that they were believed to have moved into the area from northern or coastal Georgia, although an inland Georgia group (Ocmulgee) is more likely than a coastal one (Milanich et al. 1976). The Alachua culture was initially defined as a sedentary agricultural complex with extensive villages situated in areas with good soil. Their pottery was decorated with cord- and cob-marking. In addition, burial mounds were constructed, but were less common than previously (Goggin 1949:39).

Alachua sites tend to be large middens with little or no freshwater shell located in areas of good agricultural soils. Although Alachua sites are found around the same wetlands and lakes as Cades Pond sites, the Alachua sites are located in areas of higher elevation and loamier soils. The use of agriculture also resulted in fewer animal species being utilized (Milanich 1994:335). Fish were still primarily caught with nets, and the lack of larger fish in the faunal assemblages suggests that gigs, spears, and arrow were not often used. Deer was probably the most important meat source (Milanich 1994:339). Other materials recovered from the villages include abundant pottery, bone tools, and lithic artifacts. The lithic material included Pinellas points, drills, gravers, spokeshaves, ovoid knives, and a variety of grinding equipment. Fewer bone tools are associated with the Alachua culture as compared to the Cades Pond.

The ceramics used during the Alachua period have been divided into two subperiods: Hickory Pond (600-1250 C.E.) and Alachua (1250-1539 C.E.). The end date of 1539 was when the de Soto *entrada* came through the area. Hickory Pond sites are identified by the presence of cord marking while the Alachua period sites are identified by the use of cob marking. It is not until the Alachua period that evidence for maize horticulture is obtained.

Based on the excavations of the Richardson Site on the west side of Orange Lake, Alachua villages were roughly 200 m (656 ft) square. The houses, which were roughly eight meters (26 ft) in diameter, were spaced 20 m (66 ft) apart. Drying racks and storage cribs were located between the structured. Hearths, storage pits, and smudge pits were located within the houses (Milanich 1972). Testing at the Law School Mound, Woodward Mound, and Henderson Mound all indicated utilization during the earlier Hickory Pond period (Bullen 1949; Fradkin and Milanich 1977; Loucks 1976). Thus, it is possible that by the Alachua period, burial mounds ceased to be utilized.

3.6 Colonialism

The cultural traditions of the native Floridians ended with the advent of European expeditions to the New World. The initial events, authorized by the Spanish crown in the 1500s, ushered in devastating European contact. The colonial period begins with the arrival of the Pánfilo de Narvaéz expedition in 1528 and Hernando de Soto in 1539. Hernando de Soto passed through the Potano territory on his way to Apalachee province in 1539. In the wake of this *entrada* through the southeast, thousands of natives were decimated from the battles as well as the introduction of European diseases such as small pox, measles, and typhoid fever to which the natives had no immunity (Gannon 1996).

The Western Timucuan Indians, known as the Potano, were present throughout the area when the Europeans first arrived. These are the historic counterparts of the Alachua. The de Soto expedition headed north from Tampa Bay and passed through several towns on its way to Apalachee during the summer of 1539. One of his possible routes followed the Alachua Trail, which led along the west side of Orange Lake (Milanich and Hudson 1993:146, Figure 132). Five villages were reported by the de Soto expedition and include Itaraholata, Potano, Utinasmocharra, Malapaz, and Chloupaha. These ran in a north/south line from the Sumter/Marion county line into northwest Alachua County near the Santa Fe River. The influence of the Europeans greatly affected the occupants of the region.

In the early 1570s, Phillip II of Spain issued the Ordinances of Pacification, Patronage, and Laying Out of Towns (Bushnell 1996) which brought about the beginning of the mission chain across north Florida. During the Mission Period, (1567-1705) attempts were made to missionize the aboriginal population at about 80 mission centers throughout Florida (Hann 1996b:78). The Franciscan friars arrived in the Potano territory in 1606, with the establishment of San Francisco de Potano. Shortly thereafter, missions were established at San Miguel, Santa Ana, and San Buenaventura (Hann 1996a:165). Hann (1996a:231) notes that during the 1650s, there was massive depopulation in the western Timucuan area due to European diseases, harsh labor practices, forced relocation by the Spaniards, and the failed 1656 revolt. Before that, however, Worth (1998:69) reports that between the first missionization of this region in 1608 and the early part of 1617, almost 12,000 Timucuan had been baptized, only half of which remained alive in 1617. The Florida Mission System was dealt a fatal blow in 1702 by the English and Creek raids, which destroyed the remaining missions in north and northwest Florida.

Mission period archaeological sites in central north Florida are characterized by a ceramic assemblage containing Jefferson and Goggin wares as well as European manufactured items like majolica, olive jar, iron, and glass beads. Jefferson ceramics are defined as being grog-tempered with complicated stamped, check stamped, and incised designs as well as being cob marked, punctated, or roughened. Goggin wares are shell tempered and either plain, incised, or cord marked (Worth 1992:201-204).

The area that now constitutes the State of Florida was ceded to England in 1763 after two centuries of Spanish possession. England governed Florida until 1783, when the Treaty of Paris returned Florida to Spain. The influence of the Spaniards during this second tenure was limited. In the 1700s, members of the Creek Nation and remnants of other southeastern Indian groups moved into Florida, becoming known as the Seminoles. Their early history can be divided into two basic periods: *colonization* (1716-1767) when the initial movement of Creek towns into Florida occurred and *enterprise* (1767-1821) which was an era of prosperity under the British and Spanish rule prior to the American presence (Mahon and Weisman 1996). Weisman (1989:4)

reports that the sites tend to be shallow and have a single component. The Seminoles focused on hunting, raising cattle, and horticultural pursuits. They also crossed back and forth into Georgia and Alabama conducting raids and welcoming escaped slaves that resulted in General Andrew Jackson's invasion of Spanish Florida in 1818, which became known as the First Seminole War.

3.7 Territorial and Statehood

The First Seminole War and the 1819 Adams-Onís Treaty resulted in Florida being established as a territory of the United States in 1821. The state was subsequently divided into two counties: Escambia and St. Johns, which were divided by the Suwannee River. The establishment of Florida as a territory of the United States resulted in an increase in population movement into the state. Alachua County was carved from St. Johns County in 1824. Unfortunately, for these earlier settlers, the Seminoles, who had arrived a century earlier, were not willing to leave. In an attempt to ease the tensions, the Federal government and the Seminole Indians signed the Treaty of Moultrie Creek in 1823. The Indians were to relinquish all their lands for a roughly four million acre reservation in the center of the peninsula (Mahon 1985). Besides decreasing the size of the Seminole land holdings, the Treaty left them with land poorly suited to cultivation. Since neither side lived up to the agreements, conflicts continued.

The U.S. government concluded that the only way to solve the “Indian problem” was to remove the Seminoles from Florida entirely. The Treaty of Paynes Landing (1832) and the Treaty of Fort Gibson (1833) were drawn up with Indian deportation as the primary goal. These treaties infuriated the Indians and the subsequent increase in hostility and violence culminated in the beginning of the Second Seminole War (1835-1842). Much of the action during this war took place in and around Alachua County. The area around Orange Lake was used by Seminoles “for green-corn dances and councils, from which small war-parties emerged, cutting off travelers and express-riders” (Sprague 1964:252). As such, a series of fortifications were established to help protect the supply routes. Settlers were concentrated at the larger forts and towns, and often were from government rations (Weismantel 1996). At the end of the war, the remaining Seminoles settled in the Everglades and Big Cypress Swamp.

The general project area was first surveyed in 1831 by Joshua A. Coffee and then 19 years later by A. M. Randolph. Neither depicted any historic features within Section 27 on the Plats nor were any features discussed within their field notes (State of Florida 1831, 1834, 1850a, 1850b). The project area was described as 1st, 2nd, and 3rd rate land with pine, oak, ash, laurel, dogwood, and white oak timber. William L. Campbell purchased about half of Section 27 in 1859 (State of Florida n.d.:98).

In 1845, the State of Florida was admitted to the Union, with Tallahassee as the state capitol. In 1850, the US Congress passed an Act to enable states to reclaim the “swamp lands” within their limits. These lands were given to the States by the Federal Government and in Florida were put into the Internal Improvement Fund. In 1855, the Florida Railroad was constructed from Fernandina to Gainesville, and by 1861, it was completed to Cedar Keys. In 1855, the Third Seminole War, or Billy Bowlegs War, began because of pressure placed on Native Americans remaining in Florida to move to the west (Covington 1982). The war started in Collier County, in southwest Florida, and sporadically continued until 1858 when the U.S. Government resorted to monetary incentives to induce the remaining Seminoles to move west.

3.8 Civil War and Aftermath

In 1861, Florida followed South Carolina's lead and seceded from the Union in a prelude to the Civil War. Florida had much at stake in this war as evidenced in a report released from Tallahassee in June 1861. It listed the value of land in Florida as \$35,127,721 and the value of slaves in the state at \$29,024,513 (Dunn 1989:59). Even though the Florida coast experienced a naval blockade during the war, the interior of the state saw very little military action. However, the railroad tracks were damaged around Gainesville during some of the fighting. The State did help supply beef to the Confederacy. The only major battle fought in north Florida was the Battle of Olustee, which took place some ten miles east of Lake City in 1864. Though the Confederate Army won the battle, most of the State remained under Union control until the end of the war.

Immediately following the war, the South underwent a period of "Reconstruction" to prepare the Confederate States for readmission to the Union. The program was administered by the U.S. Congress, and on July 25, 1868, Florida officially returned to the Union (Tebeau 1980:251). The end of the Civil War stimulated growth in the area. Southerners sought new homes to escape the unrest in the neighboring ex-Confederate states, and the war brought prosperity to a large number of Northerners who sought vacation homes in warmer climates. The Homestead Act of 1866 opened public land in Florida to homesteaders. However, ex-confederates were ineligible and only freed slaves and loyal white settlers were eligible for the 80-acre farms. This was a period of economic hardship for the previous plantation owners due to the emancipation of the slaves. After the war, most of the plantations in the area converted from cultivating sugar cane and cotton to growing citrus.

During the Reconstruction period, Florida's financial crisis, born of pre-war railroad bonded indebtedness, led Governor William Bloxham to search for a buyer for an immense amount of state lands. Bloxham's task was to raise adequate capital in one sale to free from litigation the remainder of state lands for desperately needed revenue. In 1881, Hamilton Disston purchased four million acres from the State. This "Disston Purchase" enabled the distribution of large land subsidies to railroad companies, inducing them to begin extensive construction programs for new lines throughout the state. Henry Plant and Henry Flagler assisted with this venture by developing the east and west coast via their railroads (Harner 1973). The Plant Investment System bought the other half of Section 27 in 1885 (State of Florida n.d.:98). The railroad, with its ability to rapidly transport produce and people, had an immediate impact on the entire region. More settlers gained access to the state, land for citrus groves grew more accessible, and adequate and economical transportation for citrus crops and naval stores became a reality.

The Great Freeze of 1894-95 severely affected the citrus industry in the region. In 1894, growers in the state had shipped more than one billion oranges to markets in the nation; only three percent of that amount was shipped the following year. The freeze not only destroyed the fruit, but also killed the trees. The region entered a period of depression with many residents leaving Florida, thereby causing the dissolution of many small towns. Henry Flagler came to the rescue by lending money for seeds and expenses and they would transport the produce on his rail lines (Weismantel 1996). This began the diversification into cattle and truck crops including watermelons, cantaloupes, cabbage, and cucumbers. Sea Island cotton continued to be an important crop. The 1915 boll weevil epidemic ended the prosperous Sea Island cotton industry.

3.9 20th Century

The turn of the century prompted optimism and an excitement over growth and development. With increased financial resources and machinery, extensive reaches of land were now available for development. An improving road system, increasing services, and a growing population were additional significant features of the era. The first twenty years of the new century witnessed the advent of progressivism in which governments expanded their services beyond the traditional limits of the previous century.

Many small communities developed largely as lumber and turpentine towns along the route of the railroads. From the 1870s until World War I, turpentine and lumber played a major role in the economy of the region. Lumber, mill, crate, and turpentine companies thrived and mill towns were built. Harvesting of the pine resin brought turpentine camps that included a turpentine still, living quarters, buildings for producing barrels and pots, maintenance sheds for wagons, along with mule barns, and a commissary (Federal Writers' Project [FWP] 1939:61). By 1910, Florida ranked first in the production of naval stores (FWP 1939:378).

In 1914, prosperity ended with the outbreak of war between Germany and England. Both countries were large consumers of turpentine and resin. Although the U.S. was a neutral nation at first, trade with Germany and England was precarious. Later, the German submarine warfare destroyed the naval stores traffic. Because of the war, the livelihood of many area residents dwindled and turpentine workers moved to larger cities to find work. Sawmills often purchased the remaining timber, while developers purchased the land to later subdivide and sell.

By 1926-27, the Florida real estate market collapsed. The 1926 real estate economy in Florida was based upon such wild land speculations that banks could not keep track of loans or property values. Confidence in the Florida real estate market quickly diminished, investors could not sell lots, and depression hit Florida earlier than the rest of the nation. At the same time, the agricultural industry suffered a devastating infestation by the Mediterranean fruit fly, which endangered the future of the entire citrus industry (Mormino and Pizzo 1983:167). To make the situation even worse two hurricanes hit south Florida in 1926 and 1928. The hurricanes destroyed confidence in Florida as a tropical paradise and created a flood of refugees fleeing northward. Soon after, the October 1929 stock market crash and the onset of the Great Depression left the area in a state of stagnation.

By the mid-1930s, the New Deal programs implemented by the Franklin D. Roosevelt administration started employing large numbers of workers, helping to revive the economy of the state. The programs, aimed at pulling the nation out of the Depression, were instrumental in the construction of roads, bridges, parks, and public buildings.

By 1940, recovery from the Great Depression was imminent. The incoming service personnel and their families renewed the area economy. Federal roads, channel building, and airfield construction for the wartime defense effort brought numerous Americans into Florida. As World War II ended, Florida experienced a population boom during which the state's population increased from 1,897,414 to 2,771,305 from 1940 to 1950 (US Census Bureau [USCB] 1995). After the war, car ownership increased making the American public more mobile and vacations inexpensive. As veterans returned, the trend in new housing focused on the development of small tract homes in new subdivisions bordering larger cities. The construction of the Florida Turnpike and Interstate 75 in the 1960s and 1970s drew large-scale development away from the communities along the more rural highways and as such most of the region remains rural in

nature. Alachua County had 217,955 residents in 2000, over half of which lived in the Gainesville area (USCB 2009).

A review of the aerial photographs available from the Publication of Archival Library & Museum Materials (PALMM) revealed no major development of the tract. The 1937, 1949, and 1955 aerials depict a structure along an east/west trending road in the northwest portion of the tract, with the road being widened and straightened by 1949 (PALMM 1937, 1949, 1955). The northern 40 acres of the tract had been cleared, but the remainder of the area looks to have been pine flatwoods. By 1961, the structure is no longer evident and by 1968, a small north/south trending dirt road runs along the eastern boundary of the project area (PALMM 1961, 1968).

4.0 RESEARCH CONSIDERATIONS AND METHODOLOGIES

4.1 Background Research and Literature Review

A review of archaeological and historical literature, records, and other documents and data pertaining to the project area was conducted. The focus of this research was to ascertain the types of cultural resources known in the project vicinity, their temporal/cultural affiliations, site location information, and other relevant data. This included a review of sites listed in the NRHP, the FMSF, cultural resource survey reports, published books and articles, unpublished manuscripts, maps, and interviews. The FMSF data in this report were obtained in January 2010 though it may not reflect all recorded resources as according to FMSF staff, input may be one month or more behind receipt of reports and site files. No persons were available for interviews, thus no informant interviews were conducted.

4.1.1 Archaeological Considerations

For archaeological survey projects of this kind, specific research designs are formulated prior to initiating fieldwork in order to delineate project goals and strategies. Of primary importance is an attempt to understand, based on previous investigations, the spatial distribution of known resources. Such knowledge serves not only to generate an informed set of expectations concerning the kinds of sites which might be anticipated to occur within the project area, but also provides a valuable regional perspective, and thus, a basis for evaluating any sites discovered.

Archaeological background research, including a review of FMSF and the NRHP indicated that no archaeological sites are recorded within the project area; however, nine archaeological sites have been recorded within 1.6 km (1 m) of the tract (Table 4.1; Figure 4.1). The first four sites (8AL369-381) were recorded as part of the University of Florida Site Survey in 1962. The 1977 cultural resource assessment survey of the Deerhaven Generating Station collected additional data on 8AL369 and 8AL370; the former was considered potentially eligible for listing in the NRHP. As such, Honerkamp conducted archaeological excavations at the Deerhaven 2 Site, recovering lithic and ceramic data indicative of occupation during the Early Archaic through Hickory Pond periods. The site had been subject to extensive disturbance through natural processes and the site retained poor stratigraphic integrity, and, as such, he believed the data recovered was sufficient to mitigate any adverse effects to the site and no additional investigations were recommended (Honerkamp 1977). No evidence of 8AL370 was discovered by Miller, who noted that the area had been bulldozed (Miller 1977).

Table 4.1. Previously recorded archaeological sites proximate to the GREC.

SITE #	SITE NAME	SITE TYPE	CULTURE
AL00369	Deerhaven 2	Artifact scatter	Archaic; Deptford; Weeden Island; Alachua
AL00370	Mineral Springs	Lithic scatter/quarry	Aboriginal
AL00380	NN	Lithic scatter/quarry	Aboriginal
AL00381	NN	Artifact scatter	Aboriginal with pottery
AL02581	Brooke Point #1	Lithic scatter	Aboriginal lacking pottery
AL02582	Brooke Point #2	Lithic scatter	Aboriginal lacking pottery
AL02583	Brooke Point #3	Lithic scatter	Aboriginal lacking pottery
AL02584	Brooke Point #4	Lithic scatter	Aboriginal lacking pottery
AL02585	Brooke Point #5	Lithic scatter	Aboriginal lacking pottery

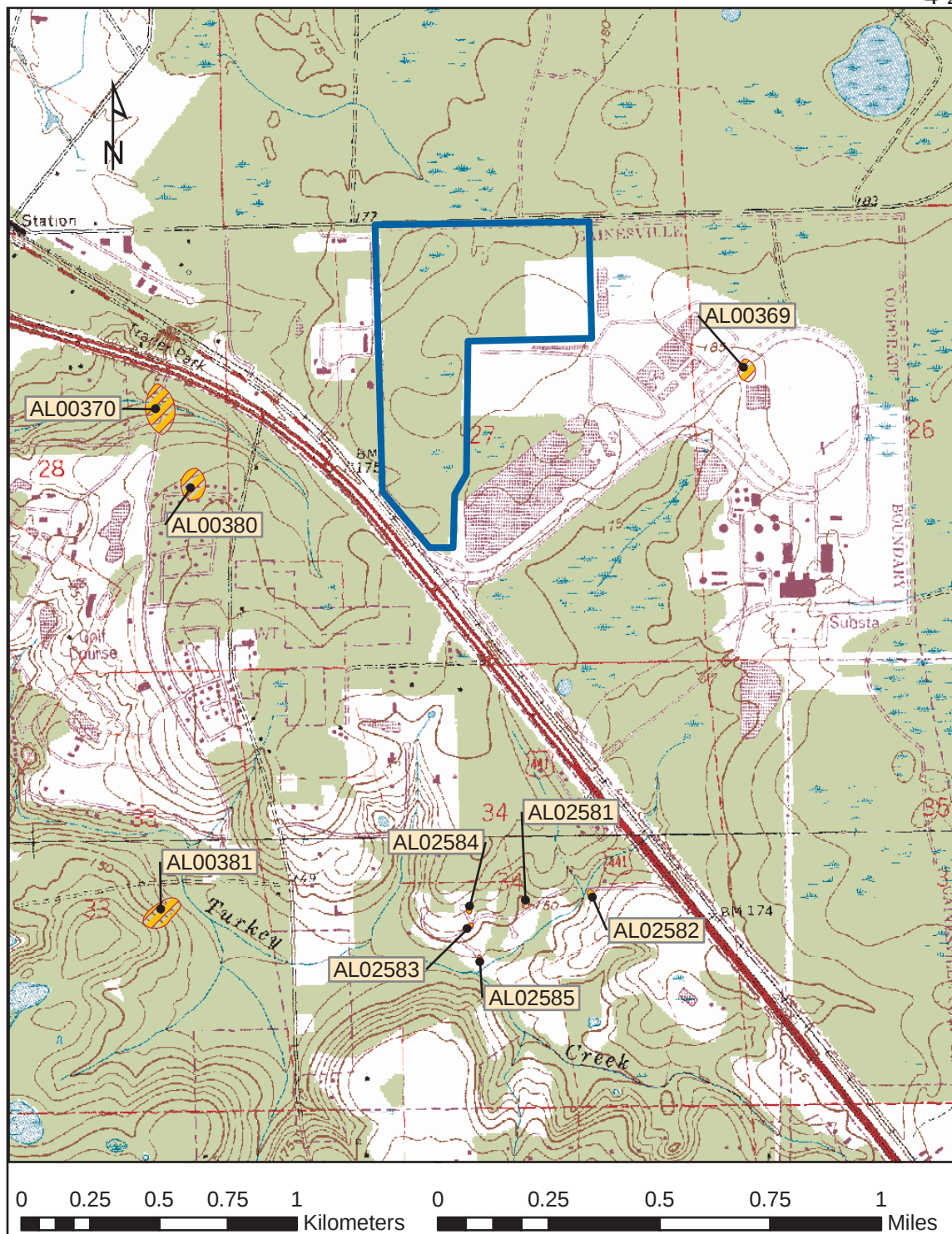


Figure 4.1. Location of the previously recorded archaeological sites proximate to the GREC (USGS Alachua 1981 and Gainesville West 1982).



8AL2581-2585 were recorded as low-density lithic scatters during the surveys associated with Ken Johnson's search of Aguacaleyquen and Cali (Johnson 1987; Ruhl 2009). However, none of the sites was discussed in the report.

In addition to the two sites reported above, Miller reported a number of other cultural resources within and near the DGS tract but did not record them as archaeological sites. These included a projectile point that was recovered in the southwestern corner of the tract near a springhead, a historic homestead located in the northern portion of the tract, and a sawmill located southeast of the project area (Figure 4.2) (Miller 1977). The homestead reportedly belonged to Marshall Green during the early part of the 20th century, and later on, the 40-acre tract had been cultivated by Ralph Cellon. When Miller visited the location of the homestead, he noted only a thicket of plum trees and a few piles of trash and rubble. Early and Emmet Baird operated the sawmill from around 1885 until 1905. It was located in a mature hardwood hammock along US 441 and was evidenced by glass and brick as well as some ornamental plants when Miller visited the area more than 30 years ago.

SEARCH conducted extensive background research on the archaeological sites contained within the unincorporated areas of the County. No evidence of 8AL369 was discovered during that survey, though the site area was reported disturbed by a railroad spur, berms, and a retention pond. The focus of the county-wide investigations was to determine whether the previously recorded sites were extant, and based upon the locations of those sites, develop an archaeological site location predictive model (Austin et al. 2001). The following year, the model was tested and refined based upon ground truthing within lands owned by the County. This resulted in the recording of eight new sites, seven of which were located within zones of high archaeological potential and the other was within a zone of moderate archaeological potential. The environmental factors of significance are:

- o The presence of better-drained (i.e., somewhat poorly or better), in the uplands, particularly those that are loamy or have a loamy subsoil;
- o Ridge and hill crests or slopes, particularly in poorly drained areas;
- o Access to water or wetland resources (i.e., within 400 m);
- o Access to chert resources in the limestone plain; and
- o Access to multiple resource zones from the Northern Highlands Transitional Zone (SEARCH 2001:63).

The project area has a moderate probability for aboriginal archaeological site occurrence due the somewhat poorly drained soils and the presence of a number of wetland features on the tract. Review of the aerial photographs and previous report on the project area revealed the presence of a farmstead in the northern portion of the property. Thus, there is a high probability for the occurrence of historic resources as well.

4.1.2 Historical Considerations

Examination of the FMSF indicated that no historic structures are currently recorded within the project area. In addition to pre-Columbian archaeological sites, the potential for yet unrecorded historic period archaeological sites was assessed. Historical documents and literature, including the nineteenth century federal surveyor's plat and field notes, were reviewed. Given the results of the historic research, evidence of a homestead and possibly the sawmill complex was considered possible.

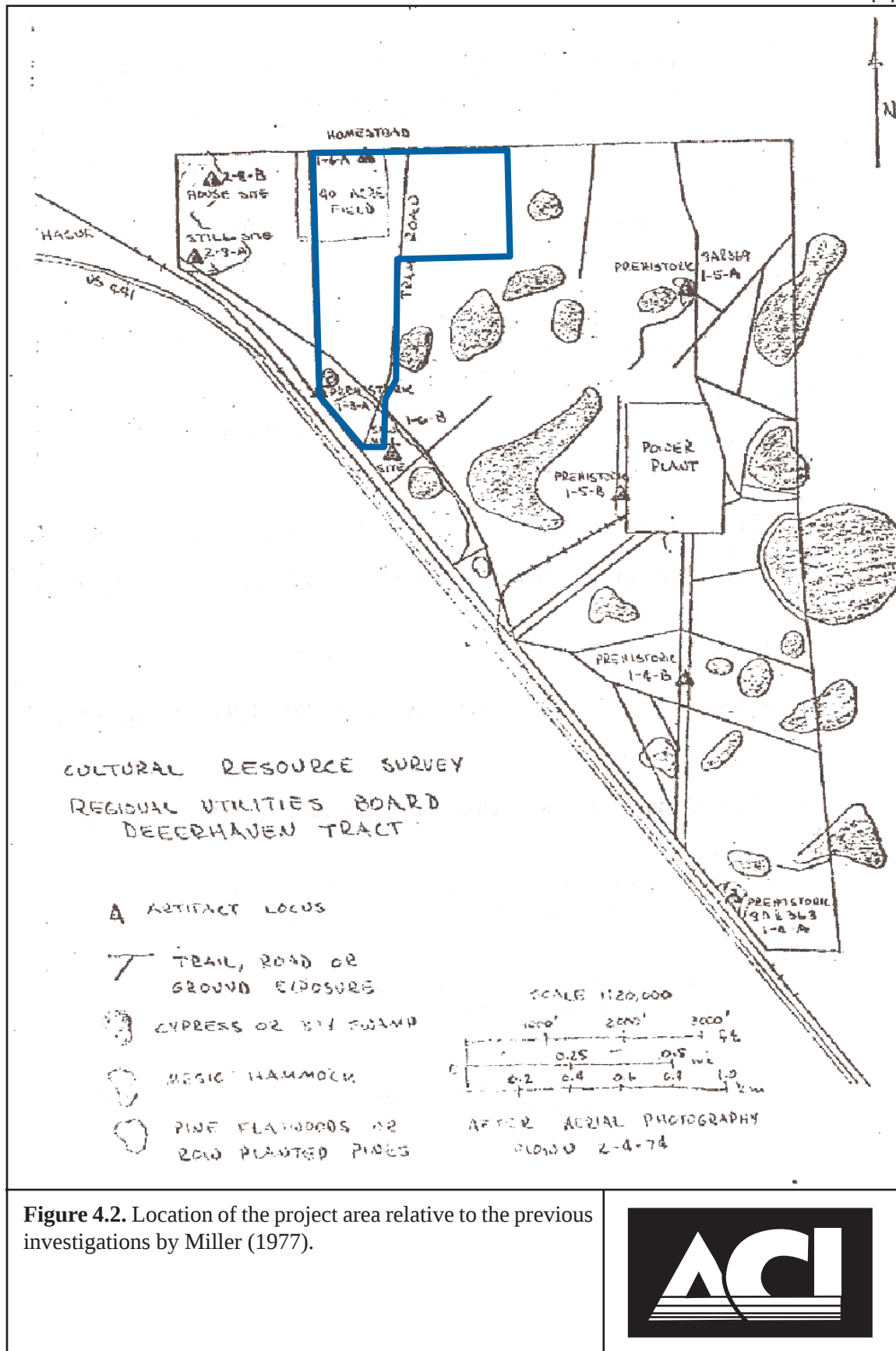


Figure 4.2. Location of the project area relative to the previous investigations by Miller (1977).



4.2 Field Methodology

The field methodology consisted of surface reconnaissance combined with systematic subsurface testing at 25 m (82 ft) intervals in those areas expected to contain cultural resources, i.e. where Miller (1977) reported cultural resource. In addition, shovel testing was conducted at 50 m (164 ft) intervals around the wetland features and judgmentally throughout the remainder of the tract. Shovel tests were circular, and measured approximately 50 cm (20 in) in diameter by a meter (3.3 ft) in depth. The soil removed from the shovel tests was screened through 6.4 mm (0.25 in) mesh hardware cloth to assure the recovery of any artifacts. The locations of all shovel tests were plotted on the aerial map, and, following the recording of relevant data such as environmental setting, stratigraphic profile, and artifact finds, all shovel tests were backfilled.

4.3 Unexpected Discoveries

If human burial sites such as Indian mounds, lost historic and prehistoric cemeteries, or other unmarked burials or associated artifacts were found, then the provisions and guidelines set forth in Chapter 872.05, *FS* (Florida's Unmarked Burial Law) were to be followed. However, it was not anticipated that such sites would be found during this survey.

4.4 Laboratory Methods and Curation

No artifacts were recovered, and thus no laboratory methods were utilized. The field notes, maps, and other project documentation will be stored at ACI in Sarasota unless the client wishes otherwise.

5.0 SURVEY RESULTS AND CONCLUSIONS

5.1 Results

The cultural resource assessment survey conducted for the Gainesville Renewable Energy Center consisted of surface reconnaissance combined with systematic and judgmental subsurface testing (Figure 5.1). A total of 80 shovel tests was excavated. Forty of the 80 shovel tests were excavated at 25 m (82 ft) intervals: 16 were excavated in the vicinity of the once extant homestead, 11 were excavated in the vicinity of the reported sawmill, and 13 were excavated in the vicinity of where Miller found a projectile point in 1977. In addition, 25 shovel tests were placed at 50 m (164 ft) intervals around the wetland features and 15 were judgmentally placed throughout the remainder of the tract. All shovel tests were sterile and no cultural materials were noted on the surface. The visual reconnaissance revealed an absence of historic structures on the parcel. The security guard was questioned concerning any cultural resources on the property, but he had no information to contribute.

The testing in the homestead area, in the northwest corner of the project area, revealed a stratigraphy of 0-30 cm (0-12 in) dark brown sand underlain by light brown sand. The saw mill area, located in the southeast corner of the project area, had a stratigraphy of 0-50 cm (0-20 in) dark gray sand underlain by dark brown sand. The southwest corner of the project area, where the projectile point has previously been recovered, evidenced a stratigraphy of 0-30 cm (0-12 in) dark gray sand underlain by light brown sand. The judgmental tests and tests around the southern wetland revealed a stratigraphy of 0-50 cm (0-20 in) dark gray sand, 50-70 cm (20-28 in) dark brown hardpan, and 70-100 cm (28-39 in) light gray sandy clay. The northern wetland area had a stratigraphy of 0-50 cm (0-20 in) dark brown sand underlain by light brown sand, and the central wetland area had a stratigraphy of 0-50 cm (0-12 in) dark gray sand underlain by gray sand.

5.2 Conclusions

The cultural resource assessment survey for the GREC consisted of surface reconnaissance combined with systematic and judgmental subsurface testing. As a result of this survey, no previously noted features (trash, thicket of trees, and broken glass) observed by Miller (1977) were found. This was not unexpected due to 30 years of agriculture and silviculture. Thus, no archaeological sites or historic structures, which are listed, determined eligible, or considered potentially eligible for listing in the NRHP, were identified within the proposed Gainesville Renewable Energy Center tract. Therefore, no significant properties will be affected by this proposed development project, and no further work is recommended.

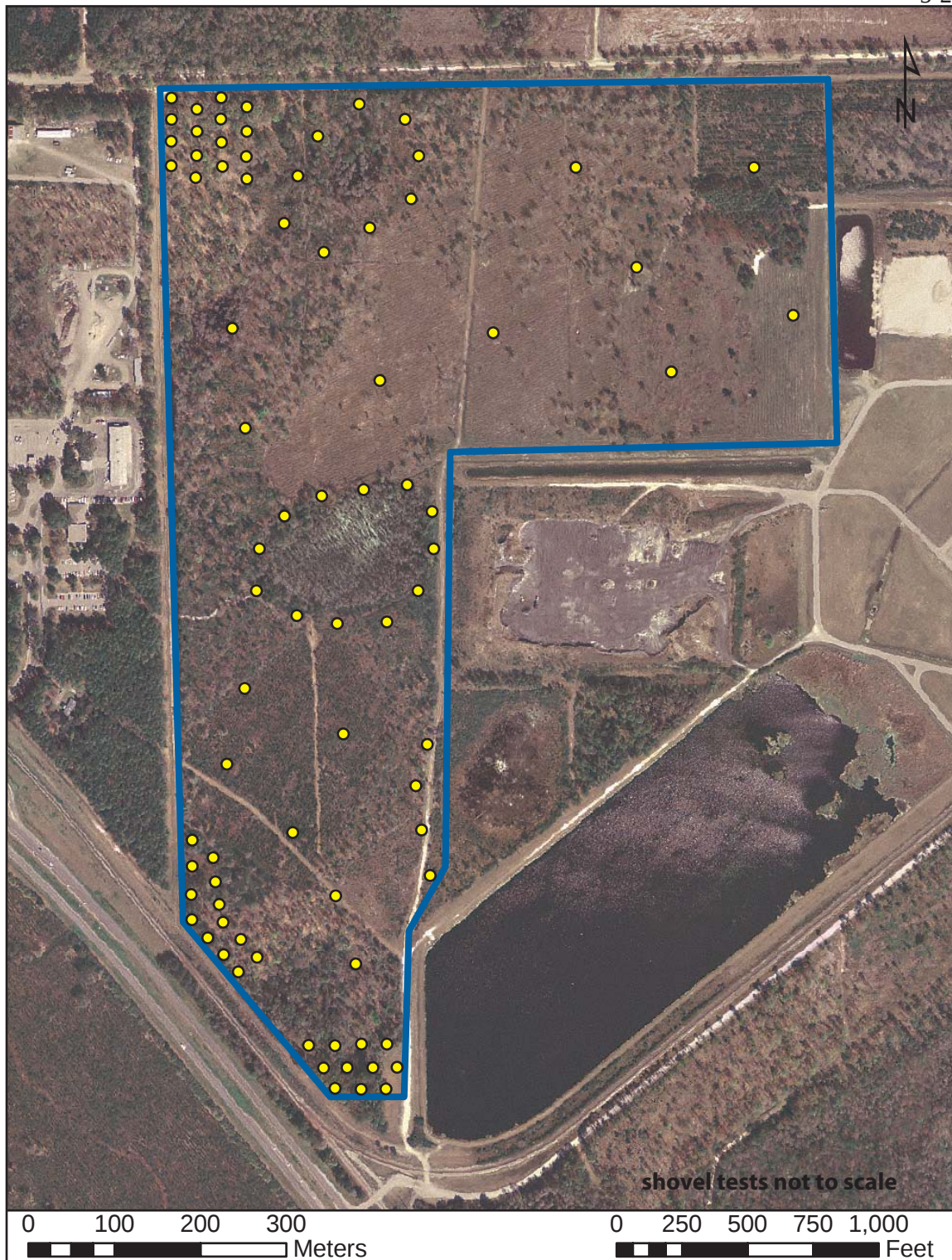


Figure 5.1. Approximate location of the shovel tests within the GREC project area, Section 27, Township 8 South, Range 19 East (USGS Alachua 2004).



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APPENDIX A: SHPO correspondence



FLORIDA DEPARTMENT OF STATE
Kurt S. Browning
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Mr. James S. Gordon
Gainesville Renewable Energy Center
75 Arlington Street, 5th Floor
Boston, Massachusetts 20009

December 22, 2009

Re: DHR Project File No.: 2009-6973 / Received by DHR: December 1, 2009
Gainesville Renewable Energy Center
Site Certification Application
Alachua County

Dear Mr. Gordon:

Our office has reviewed the referenced project in accordance with Chapters 267 and 403, *Florida Statutes*, regarding possible impact to historic properties listed, or eligible for listing, in the National Register of Historic Places, or otherwise of historical, architectural or archaeological value.

We note that while Section 5.9 of this application references a prior cultural resources assessment, it does not address the specifics of that assessment. A search of our records indicates that what was then called the Deerhaven Generating Plant Expansion was subjected to a cultural resources assessment in 1977. Several cultural resources were identified but for various reasons were not recorded in the Florida Master Site File (FMSF). Consequently, any recent searches of the FMSF would not reveal the presence of resources that may in fact still be located within the project area. Furthermore, the significance of historic resources on the property may have increased in the 32 years since the survey was conducted. Because of this, it is the request of this agency that a professional archaeologist perform a cultural resource survey of the property, including subsurface testing, in order to relocate cultural resources identified in the 1977 survey and to assess the probability that additional archaeological sites and/or historic properties might be present.

If this application is referencing a more recent cultural resources assessment, a new survey may not be necessary. Regardless, detailed references to specific cultural resource assessment(s) and associated findings should be incorporated into your application.

Because this letter and its contents are a matter of public record, cultural resource consultants who have knowledge of our survey request may contact an applicant or the project agent. This should in no way be interpreted as an endorsement by this agency. The Division of Historical Resources does not maintain a list of professional consultants who are qualified to work in the State of Florida and/or who meet *The Secretary of the Interior's Historic Preservation Professional Standards* [Volume 62, Number 119, page 33707 (June 20, 1997)], ("Professional Qualifications"), or as amended in the future. However, the American Cultural Resources Association (ACRA) maintains a listing of

500 S. Bronough Street • Tallahassee, FL 32399-0250 • <http://www.flheritage.com>

☐ Director's Office
(850) 245-6300 • FAX: 245-6436

☐ Archaeological Research
(850) 245-6444 • FAX: 245-6452

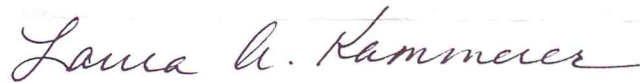
☒ Historic Preservation
(850) 245-6333 • FAX: 245-6437

Mr. Gordon
December 22, 2009
Page 2

professional consultants (www.acra-crm.org/southeast.html). In addition, the Register of Professional Archaeologists (RPA) maintains a membership directory for locating professional archaeologists as well as other professional preservation consultants (www.rpanet.org/about.htm). Many qualified historic preservation professionals are not members of these organizations, and omission from the directories does not imply that someone does not meet the Secretary's Standards or that the resultant work would not be acceptable. Conversely, inclusion on the lists is no guarantee that a product will automatically be acceptable.

If you have any questions concerning our comments, please contact Samantha Earnest, Historic Preservationist, by electronic mail at swearnest@dos.state.fl.us, or by telephone at 850-245-6333 or 800-847-7278.

Sincerely,

A handwritten signature in dark ink, reading "Laura A. Kammerer". The signature is fluid and cursive, with the first name "Laura" and last name "Kammerer" clearly legible.

Laura A. Kammerer
Historic Preservationist Supervisor
Compliance Review Section
Bureau of Historic Preservation

PC: Mr. Mike Halpin, DEP 3700

APPENDIX B: Survey Log

Ent D (FMSF only) ____ / ____ / ____



Survey Log Sheet

Florida Master Site File
Version 4.1 1/07

Survey # (FMSF only) _____

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

Identification and Bibliographic Information

Survey Project (name and project phase) CRAS Gainesville Renewable Energy Center, Phase I

Report Title (exactly as on title page) Cultural Resource Assessment Survey Gainesville Renewable Energy Center Alachua County, Florida

Report Author(s) (as on title page— individual or corporate; last names first) Archaeological Consultants, Inc. (ACI)

Publication Date (year) 2010 **Total Number of Pages in Report** (count text, figures, tables, not site forms) 34

Publication Information (Give series and no. in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
ACI (2010) Cultural Resource Assessment Survey Gainesville Renewable Energy Center Alachua County, Florida.
Conducted for Environmental Consulting & Technology Inc., Gainesville by ACI, Sarasota.

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

Affiliation of Fieldworkers (organization, city) ACI, Sarasota

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

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

Name Environmental Consulting and Technology, Inc.

Address/Phone 3701 NW 98th Street, Gainesville, FL 32606

Recorder of Log Sheet Horvath, Elizabeth A.

Date Log Sheet Completed 01 /25 /10

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) Alachua

USGS 1:24,000 Map(s) : Map Name/Date of Latest Revision (use supplement sheet if necessary): Alachua 1981

Description of Survey Area

Dates for Fieldwork: Start 01 /18/ 10 End 01/21/ 10

Total Area Surveyed (fill in one) _____ hectares 132 acres

Number of Distinct Tracts or Areas Surveyed 1

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.)

- | | | | |
|---|--|---|---|
| ☐ Florida Archives (Gray Building) | ☒ library research- <i>local public</i> | ☒ local property or tax records | ☒ other historic maps |
| ☐ Florida Photo Archives (Gray Building) | ☒ library-special collection - <i>nonlocal</i> | ☐ newspaper files | ☒ soils maps or data |
| ☒ Site File property search | ☒ Public Lands Survey (maps at DEP) | ☒ literature search | ☒ windshield survey |
| ☒ Site File survey search | ☐ local informant(s) | ☐ Sanborn Insurance maps | ☒ aerial photography |
| ☐ other (describe) _____ | | | |

Archaeological Methods (✓ Check as many as apply to the project as a whole.)

☐ Check here if **NO** archaeological methods were used.

- | | | |
|---|---|--|
| ☐ surface collection, controlled | ☐ other screen shovel test (size: _____) | ☐ block excavation (at least 2x2 M) |
| ☐ surface collection, <u>un</u> controlled | ☐ 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 (✓ Check as many as apply to the project as a whole.)

☐ 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 background research, surface reconnaissance, systematic subsurface testing @ 25 & 50 m intervals as well as judgmentally, 50 cm diameter, 1 m deep, 6.4 mm mesh screen; 80 ST, all sterile

Survey Results (cultural resources recorded)

Site Significance Evaluated? ☐ Yes ☒ No If Yes, circle NR-eligible/significant site numbers below.Site Counts: Previously Recorded Sites 0 Newly Recorded Sites 0

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, i.e., researched Site File records. List site #'s without "8." Attach supplementary pages if necessary.) _____

Site Form Used: ☒ Site File Paper Form ☐ SmartForm II Electronic Recording Form**REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPIES OF USGS 1:24,000 MAP(S)**

DO NOT USE

SITE FILE USE ONLY

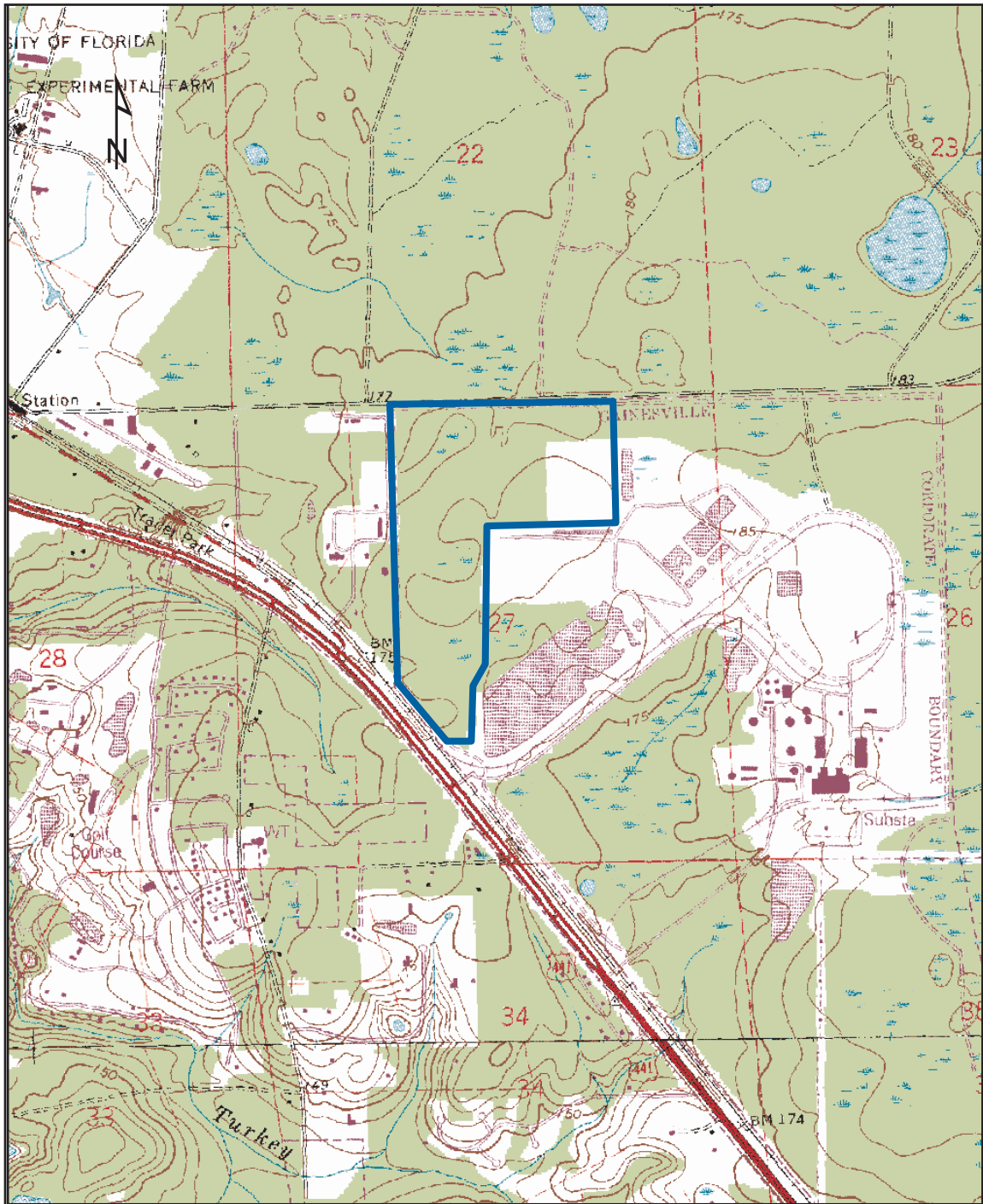
DO NOT USE

BAR Related

- | | |
|-------------------------------|---------------------------------------|
| ☐ 872 | ☐ 1A32 # _____ |
| ☐ CARL | ☐ UW |

BHP Related

- | |
|--|
| ☐ State Historic Preservation Grant |
| ☐ Compliance Review: CRAT # _____ |



0 0.25 0.5 0.75 1 Kilometers

0 0.25 0.5 0.75 1 Miles

Gainesville Renewable Energy Center
 Section 27, Township 8 South, Range 19 East
 USGS Alachua 1981
 Alachua County

