CULTURAL RESOURCE ASSESSMENT SURVEY
TUPPERWARE HEIGHTS
ORANGE COUNTY, FLORIDA

Prepared for:

Tupperware Brands Corporation
14901 S. Orange Blossom Trail
Orlando, Florida 32837

Prepared by:

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EXECUTIVE SUMMARY

Archaeological Consultants, Inc. (ACI) conducted a cultural resource assessment survey (CRAS) of the Tupperware Heights property for Tupperware Brands Corporation. The project area is approximately 200 acres in size and is located between Orange Blossom Trail and the CSX Railroad right-of-way, north of Mary Louis Lane in southern Orange County. The development calls for two commercial tracts, and commercial/age restricted residential area, an upland preservation tract, and two wetland conservation areas. A Florida Department of Transportation pond in the southwest portion of the project area is an out-parcel.

The purpose of this investigation was to locate and identify any cultural resources within the project area and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). The archaeological and historical field surveys, conducted in November 2012, were conducted at the request of the Army Corps of Engineers (Carr 2012) (Appendix A). All work was carried out in conformity with the standards contained in the Cultural Resource Management Standards and Operational Manual (Florida Division of Historical Resources [FDHR] 2003). The resulting report meets specifications in Chapter 1A-46, Florida Administrative Code, and complies with Chapters 267 and 373, Florida Statutes (FS), as well as Florida’s Coastal Management Program and implementing state regulations regarding possible impact to significant historical properties, and Section 106 of the National Historic Preservation Act.

Background research and a review of the Florida Master Site File (FMSF) and the NRHP indicated that no previously recorded archaeological sites are within the project area. Given the known patterns of aboriginal settlement, the project area was considered to have a low probability for archaeological site occurrence. Although wetland resources are present, most of the lands are poorly or very poorly drained. As a result of field investigations no cultural resources were discovered.

A review of the FMSF and the NRHP indicated that no previously recorded historic structures are located within the project area. The review of the 2011 property appraiser data indicates that there are no historic structures (50 years of age or older) within the project area. This was confirmed by the field reconnaissance.

Given the results of background research and field survey, the development of the Tupperware Heights project area will have no effect on any archaeological sites or historic resources that are listed, determined eligible, or considered potentially eligible for listing in the NRHP. No further investigations are recommended.
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1.0 INTRODUCTION

1.1 Project Description

Archaeological Consultants, Inc. (ACI) conducted a cultural resource assessment survey (CRAS) of the Tupperware Heights property for Tupperware Brands Corporation. The project area is approximately 200 acres in size and is located between Orange Blossom Trail and the CSX Railroad right-of-way, north of Mary Louis Lane in southern Orange County (Figure 1.1). The development calls for two commercial tracts, and commercial/age restricted residential area, an upland preservation tract, and two wetland conservation areas (Figure 1.2). A Florida Department of Transportation pond in the southwest portion of the project area is an out-parcel.

These investigations, completed in November 2012, were conducted at the request of the Army Corps of Engineers (Carr 2012) (Appendix A) and in compliance with Section 106 of the National Historic Preservation Act. All work was carried out in conformity with the Florida Division of Historical Resources’ (FDHR) Cultural Resource Management Standards and Operational Manual (FDHR 2003). The resulting report meets specifications in Chapter 1A-46, Florida Administrative Code, and complies with Chapters 267 and 373, Florida Statutes (FS), as well as Florida’s Coastal Management Program and implementing state regulations regarding possible impact to significant historical properties.

1.2 Purpose

The purpose of this investigation was to locate and identify any pre-colonial and historic period archaeological sites and historic resources within the project area, and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). The field investigations were preceded by background research. Such work provided both an informed set of expectations concerning the kinds of cultural resources that might be anticipated to occur within the project area, as well as a basis for evaluating any new sites discovered.
Figure 1.1. Location of the Tupperware Heights project area, Orange County (ESRI 2011 - Streets).
Figure 1.2. Tupperware Heights Land Use Plan.
2.0 ENVIRONMENTAL SETTING

Environmental factors such as geology, topography, relative elevation, soils, vegetation, and water resources are important in determining where pre-colonial and historic period archaeological sites are likely to be located. These variables influenced what types of resources were available for utilization in a given area. This, in turn, influenced decisions regarding settlement location and land-use patterns. Because of the influence of the local environmental factors upon the pre-colonial period populations, a discussion of the effective environment is included.

2.1 Project Location

The Tupperware Heights project area is located in Sections 34 and 35 of Township 24 South, Range 29 East (United States Geological Survey [USGS] Kissimmee) (Figure 2.1). The approximately 200-acre parcel is located north of Mary Louis Lane between the Orange Blossom Trail and the CSX railroad right-of-way. Orange Avenue cuts through the eastern portion of the project area. Much of the project area is wetlands, with the developable lands located along Mary Louis Lane and Orange Avenue (Photos 2.1 and 2.2).

Photo 2.1. General project setting west of Orange Avenue.

2.2 Physiography and Geology

The project area is within the mid-peninsular geomorphic zone, which is characterized as having discontinuous highlands forming sub-parallel ridges separated by broad valleys that roughly parallel the coast (White 1970). More specifically, the project area is within the Osceola Plain (Scott 1978; White 1970). The area’s surface lithology consists of medium fine sands and silts (Scott 1978). Geologically, the area is underlain by undifferentiated sediments of the Pleistocene and Holocene (Scott 2001; Scott et al. 2001). Elevation of the project area is between 18 and 20 meters (m) (60-65 feet [ft]) above mean sea level.
Figure 2.1. Environmental setting of the Tupperware Heights project area, Sections 34 and 35 of Township 24 South, Range 29 East, USGS Kissimmee (National Geographic Society 2011 - USA Topo Maps).
2.3 Soils and Vegetation

The project area is located within the Smyrna-Basinger-St. Johns soil association, which is characterized by soils of the flatwoods, low ridges, and knolls. These are nearly level, poorly and very poorly drained sandy soils (U.S. Department of Agriculture [USDA] 1989). In general, the natural vegetation associated with the Smyrna and St. Johns soils consists of longleaf and slash pine with an understory of waxmyrtle, saw palmetto, pineland threeawn, bluestem, inkberry, and running oak. Basinger soils support mixed stands of pondcypress, sweetgum, scattered pond pine, and black tupelo. The understory includes blue maidencane, chalky bluestem, and other water-tolerant grasses and sedges. The local soils consists primarily of the very poorly drained Samsula-Hontoon-Basinger association, depressional (USDA 1989, 2010). The upland areas are underlain by the poorly drained St. Johns fine sand, Smyrna fine sand, and Immokalee fines sand. There is a small area of somewhat poorly drained Seffner fine sand in the southeast corner of the property and there are a few areas of very poorly drained Basinger fine sand, depressional.

2.4 Paleoenvironmental Considerations

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 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 savannas. 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 regional culture history is included to provide a framework within which to examine the local archaeological and historical record. Archaeological and historic sites are not individual entities, but were once part of a dynamic cultural system. As a result, individual sites cannot be adequately examined or interpreted without reference to other sites and resources in the area. The culture history of an area (i.e. the archaeological region) outlines the sequence of archaeological and historical cultures through time. These are defined largely in geographical terms, but also reflect shared environmental and cultural traits. The project area is in the East and Central archaeological region Milanich (1994) (Figure 3.1). The Paleo-Indian, Archaic, Formative, and Mississippian stages have been defined based on material culture traits such as stone tool forms 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 U.S. 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 period includes sub-periods defined by 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.

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 (BCE) (Milanich 1994). Archaeological evidence for Paleo-Indians consists primarily of scattered finds of diagnostic lanceolate-shaped projectile points. The Florida peninsula at this time was quite different than today. In general, the climate was cooler and drier with vegetation typified by xerophytic species with scrub oak, pine, open grassy prairies, and savannas (Milanich 1994:40). 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 stone tool forms (Austin 2001). Traditionally, it is believed that the Clovis Horizon (10,500-9000 BCE) represents the initial occupation of Florida and is defined by the presence of the fluted Clovis points. These are 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 BCE) is the best known of the three Paleo-Indian horizons. The lanceolate-shaped, unfluted Simpson and Suwannee projectile points are diagnostic of this time (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).
Figure 3.1. Florida Archaeological Regions. The project area (★) is within the East and Central Region.
Following the Suwannee Horizon is the Late Paleo-Indian Horizon (8500-8000 BCE). The smaller Tallahassee, Santa Fe, and Beaver Lake points have traditionally been attributed to this horizon (Milanich 1994). However, many of these points have been recovered stratigraphically from late Archaic and 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 and their temporal placement remains uncertain (Dunbar 2006a:410).

Archaeologists hypothesize that Paleo-Indians lived in migratory bands and subsisted by gathering and hunting, including the now-extinct Pleistocene megafauna. It is likely that these nomadic hunters traveled between permanent and semi-permanent sources of water, such as artesian springs, exploiting the available resources. These watering holes would have attracted the animals, thus providing food and drink. In addition to being tethered to water sources, most of the Paleo-Indian sites are close to good quality lithic resources. The settlement pattern consisted 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).

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 are 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 their associated game resources clustered around the few available water holes that were associated with sinkholes (Neill 1964). Whereas others believed that the Paleo-Indians 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). 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.

Some of the information about this period has been derived from the underwater excavations at two inland spring sites in Sarasota County: Little Salt Spring and Warm Mineral Springs (Clausen et al. 1979). Excavation at the Harney Flats Site in Hillsborough County 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 may not have been related as much to seasonal changes as generally postulated for the succeeding Archaic period, but instead movement was perhaps 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 the Paleo-Indian period and how the aboriginals adapted to their environmental setting (Webb 2006). Studies of the Pleistocene faunal remains from these sites clearly demonstrate the importance of these animals not for food alone, but as the raw material for their bone tool industry (Dunbar and Webb 1996).

### 3.2 Archaic

Climatic changes occurred, resulting in the disappearance of the Pleistocene megafauna and the demise of the Paleo-Indian culture. 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 the faunal and floral assemblages and the Bolen people represent the first culture adapted to the Holocene environment (Carter and Dunbar 2006). Theirs included a more specialized toolkit and the introduction of chipped-stone woodworking implements.

Due to a lack of controlled excavations and the poor preservation of organic materials in the upland sites, our knowledge of the Early Archaic artifact assemblage is limited (Carter and Dunbar 2006; Milanich 1994). Discoveries at several sites indicate that bone and wood tools were 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. Since water sources were more numerous and larger than previously, 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).

During the Middle Archaic, wetter conditions prevailed, sea levels began to rise, and pine forests and swamps began to emerge (Watts et al. 1996). The climate was changed to one of more pronounced seasonality with warmer summers and colder winters and by 4000 BCE the climate became essentially the same as that of today (Watts et al. 1996:29). Miller (1998:68) suggests that when sea levels reached their current positions, the St. Johns River changed its riverine characteristics to become similar to a lake in the upper reaches and estuarine in the lower reaches. This allowed for the development of a wide resource base. Settlement became focused within coastal and riverine locales (Milanich 1994:64). The Mount Taylor period has been identified for the period 5000-2000 BCE (Milanich 1994). Subsistence was based on hunting, fishing, shellfish collecting, and plant gathering. Sites are generally located along the Atlantic coast, the upper reaches of the St. Johns River, and the Ocklawaha and Wekiva Rivers (Ste. Claire 1990; Weisman 1993; Wheeler et al. 2000). The theory that Archaic populations practiced a seasonal migration pattern between the interior and the coast has been called into question as investigations have confirmed year-round occupation of some sites (Russo 1992, 1996b; Russo et al. 1993; Russo and Ste. Claire 1992; Ste. Claire 1990).

The archaeobotanical research at the Groves’ Orange Midden and the Lake Monroe Outlet Midden confirms an environment similar to today (ACI/Janus Research 2001; Newsom 1994; Purdy 1994b). Most of the botanical remains were from wetland species common along the lake margin, river swamp, and backwaters. Upland species were also utilized. Middens of mystery snail, apple snail, and mussel provide evidence of occupation and resource exploitation along the rivers of east and central Florida (Cumbaa 1976; Ellis et al. 1994; Fryman et al. 1978).

Mount Taylor sites include large base camps, smaller special-use campsites, burial areas, and extensive shell middens. The artifact inventory of the Mt. Taylor people includes stone projectile points, tools, and microliths, as well as tools and decorative items of shell, bone, and wood (ACI/Janus Research 2001; Purdy 1994a; Wheeler and McGee 1994a, 1994b). The large stemmed projectile points, especially the Newnan type, are diagnostic of this time. Other common point types include Hillsborough, Levy, Putnam, Alachua, and Marion (Bullen 1975). Silicified coral was more prevalent as a raw material (Milanich 1994) and thermal alteration of the stone became common (Ste. Claire 1987). Numerous shell and bone items indicate contact with coast.

One of the most interesting aspects of the Mount Taylor culture is evidence for mass burial interments in specially prepared areas within shell middens (Milanich and Fairbanks 1980). Such burials were found at Tick Island along the St. Johns River (Aten 1999; Bullen 1962; Jahn and Bullen 1978). Milanich (1994:81) suggests that Early and Middle Archaic peoples used aquatic environments for burial. The Early Archaic Windover Site contained primary and flexed burials within a peat pond.
These were held in place with wooden stakes and the interments included grave goods such as textiles and worked bone, shell, and wood (Doran 2002). The Gauthier cemetery, situated on a palm island within a slough between a pond and Lake Poinsett, contained primary and flexed burials (Carr and Jones 1981; Sigler-Eisenberg 1984b).

Interior sites (away from the major rivers and/or coast) include the smaller lithic and ceramic scatter campsites that were most likely used for hunting or served as special use extractive sites for such activities as gathering nuts or other botanical materials (Ste. Claire 1989, 1990). The Tomoka Site is a complex of nine mounds and a surrounding village midden located near the confluence of the Tomoka and Halifax River. Occupants utilized estuarine and coastal resources as evidenced by the midden of coquina and oysters. No ceramics have been recovered from this site complex (Douglass 1882; Piatek 1992, 1994). The burial mound at Tomoka (8VO51) is one of the earliest in Florida (Piatek 1994). Russo (1996a:284) suggests though that Florida’s Archaic burial mounds were not the precursors to the extensive burial mound use seen in the more recent past, rather, they were short-lived, dead-end traditions.

Evidence from the Groves’ Orange Midden indicates contact, either physically or through trade, with the Tampa Bay and possibly the Suwanee River valley areas (Purdy 1994a). The occupants of the Lake Monroe Outlet Midden obtained most of their chert from Ocala limestone (ACI/Janus Research 2001). More specifically, the materials were attributed to the Gainesville, Ocala, Lake Panasoffkee East, and West quarry clusters (Endonino 2007). Other evidence of trade can be seen in the use of soapstone, which was imported from north central Georgia, South Carolina, and Virginia (Yates 2000). Soapstone transportation most likely occurred via canoe, and evidence for canoe usage is well documented (Newsom and Purdy 1990; Purdy 1988; Wheeler et al. 2003).

By about 2000 BCE, fired clay pottery was introduced in Florida. The first ceramic types, tempered with fiber (Spanish moss or palmetto), are referred to as the Orange series. It was originally believed that the ceramics lacked decoration until about 1650 BCE when they were decorated with geometric designs and punctations. Recent research, however, has called the entire Orange chronology into question (Sassaman 2003). Based on a series of AMS dates on soot from Orange Incised sherds from the middle St. Johns Valley and from radiocarbon dates on oyster and charcoal in association with Orange ceramics near the mouth of the river, all the various Orange ceramic types occur within the time span of roughly 2150-1650 BCE. In addition, research by Cordell (2004) has documented the presence of sponge spicules in the Orange ceramic paste (the diagnostic trait of St. Johns wares) which suggest that the St. Johns ceramic tradition extends back to the beginning of ceramic use in the region (Sassaman 2003:11). The projectile point assemblage was the same, with the addition of the Clay, Culbreath, and Lafayette types (Bullen 1975).

There is little difference between Middle/Late Archaic and Orange populations except that there are more Orange sites and the density of sites is higher. Orange settlements were primarily located near wetland locales. The abundance of resources located in and near the wetlands permitted larger settlements. The adaptation to this environment allowed for a wider variety of resources to be exploited and greater variability in settlement patterns. Shellfish, fish, and other food sources were now available from coastal and freshwater wetlands resulting in an increase in population size.

Bridging the end of the Archaic and the beginning of the Formative stage is the Transitional period (1200 to 500 BCE), which was characterized by increased regionalism, population growth, and socio-cultural complexity (Bullen 1959, 1970). The diffusion of culture traits, resulting from the movements of small groups of people, led to the spread of several ceramic and tool traditions (Bullen 1959). The major changes in post-Transitional cultures cannot be attributed to environmental changes.
but rather the result of social, political, religious, and technological innovations introduced from elsewhere in the eastern U.S. (Miller 1998:76).

3.3 **Formative**

The period from about 500 BCE until 750 CE (Common Era) in this area is referred to as St. Johns I, which has been divided into three sub-periods: St. Johns I (500 BCE – 100 CE), St. Johns Ia (100 – 500 CE), and St. Johns Ib (500 – 750 CE) based on characteristic ceramic types (Milanich 1994:247). There are regional variants of this tradition: the St. Marys to the north and the Indian River to the south. The St. Marys Region is located at the mouth of the St. Johns and extends northward into Georgia (Russo 1992). Sites in this area contain a mixture of Georgia ceramics as well as St. Johns ceramics. At the southern end is the Indian River Region which was first defined by Rouse (1951). There is a higher prevalence of sand-tempered wares in this region. Malabar I is coeval with St. Johns I. Malabar II occurs at the same time as St. Johns.

Settlement patterns during this time were virtually the same as that seen for the earlier periods, i.e. along the coastal estuaries and larger rivers. The Twin Mounds Site faunal analysis suggests that there was a slight decrease in the dependence on freshwater shellfish during the St. Johns I periods as opposed to the preceding Orange period (Weisman 1993). Based on that analysis, there was an increase in the use of reptilian resources. There was also a tremendous increase in the number of archaeological sites during this time. An apparent trend from St. Johns I through Ib times was a population shift into the northern part of the St. Johns River valley, possibly due to the need for more arable land (Milanich and Fairbanks 1980:158).

Village wares were almost all St. Johns Plain throughout this period. St. Johns Incised is associated with the Early St. Johns I period. Deptford and Swift Creek pottery or copies are occasionally present in St. Johns I and Ia periods. St. Johns Cordmarked ceramics are associated with the St. Johns Ia period while Dunns Creek Red is associated with the St. Johns Ia and Ib periods. In her analysis of the ceramics from Edgewater Landing, Cordell (Russo et al. 1989:68) notes that through time, St. Johns Plain ceramics become sandier due to increased use of quartz sand as an aplastic agent.

Evidence of the continuous use of burial mounds begins at this time. Many of the burials were found in large central pits, probably the result of secondary interments. Some changes in the burial practices include the possible use of log tombs during the St. Johns Ia period as well as inclusion of Hopewellian-Yent complex exotic trade items (Milanich 1994:261). Much of the information on St. Johns I period burial practices have been obtained from the Ross Hammock site in Volusia County (Bullen et al. 1967). This site complex consists of two large burial mounds and an extensive village midden located on the west shore of Mosquito Lagoon (Bullen et al. 1967:16). The Benton Mound dates to the St. Johns Ia period (Miller 1994).

Year-round occupation of the coast and along the rivers occurred with special use-activity sites located in other locales and short-term campsites on the coast as well. Excavations at the Sligh Site and the Lake Jessup South suggest that these sites served as villages or long-term encampments (Dickinson and Wayne 1996; Wayne and Dickinson 1993). A wide variety of tools and an abundance of ceramics suggested a relatively sedentary group. Hunting, food preparation, and tool making were common site activities. The site pattern consists of small, probably individual household midden deposits with structural evidence limited to arcs of shallow post holes, often shell-filled, and fire pits (Dickinson and Wayne 1996:108). The Hontoon Island site has provided a wealth of data due to the preservation of many classes of artifacts within the inundated midden deposits. Evidence of an
extensive wood-working tradition is noted by the numerous carved items recovered from the river as well as the debitage remaining from the carving activities (Bullen 1955; Purdy 1987). The plant and animal remains analyses suggested that the site was occupied year round and most of the resources were collected within 5-10 km (3-6 mi) of the site (Newsom 1987; Wing and McKean 1987).

The survey of the Edgewater Landing tract recorded several shell midden deposits that date to this period (Johnson and Ste. Claire 1988). Excavations conducted at two of the sites indicated occupation during the St. Johns Ia and St. Johns Ib periods. Both sites were characterized as short-term camps established to harvest oysters and hardshell clams. The sites were occupied irregularly throughout the year, but contained evidence indicating that the sites were utilized during all seasons of the year (Russo et al. 1989). The Seminole Rest site is a large quahog clam-processing center located along Mosquito Lagoon (Horvath 1995). The faunal analysis indicated that the site was used throughout the year, but did not appear to be occupied on a year-round basis (Quitmyer 1995). Although located along the lagoon’s shore, fish made up only a small portion of the diet, less than 15%, and mammals even less (Kozuch 1995).

3.4 Mississippian

The St. Johns II period has been divided into three sub-periods: St. Johns IIa (750 – 1050 CE), St. Johns IIb (1050 – 1513 CE), and St. Johns IIc (1513 – 1565 CE). These periods are marked by the presence of St. Johns Check Stamped pottery. St. Johns II carries on the tradition and is marked only by the introduction of check-stamped pottery (Goggin 1952:70). Occupation of riverine and coastal shell middens continued, although Miller (1998:80) notes that there is a relative increase in the number of non-riverine and non-coastal sites, perhaps as the result of locating sites in more agriculturally suited locales. Such sites are quite numerous, suggesting an increase in population.

Hunting and gathering remained important but the dependence upon cultivated crops such as maize, squash, and gourds increased in some areas. The use of gourds as domesticates is still being studied as there is no evidence for cultivation even though gourds and squashes have been around for thousands of years prior to this period (Newsom et al. 1993). In the upper St. Johns basin, the practice of horticulture was not adopted because the wetland ecology and subsistence strategies were different (Russo 1984; Sigler-Eisenberg 1984a; Sigler-Eisenberg et al. 1985). At the Gauthier Site, fish and aquatic turtles were the primary subsistence items, with relatively little reliance upon terrestrial game or freshwater shellfish (Sigler-Eisenberg 1984b).

There was an increase in the number and size of villages during the St. Johns IIa period suggesting population expansion. A ranked society may have evolved as evidenced by the differential burial customs. No longer were all people interred in burial mounds. Deagan (1978:109) notes that around 1000 CE a population shift from the more southern and southwestern areas into the northern areas is evidenced by changes in relative frequencies of burial mounds in the areas over time. Excavations of several burial mounds revealed a new pattern in that the burials were placed on their backs with their heads or feet pointing toward the mound center (Jennings et al. 1957; Willey 1954).

The St. Johns IIb period (ca. 900-1250/1300 CE) is characterized by the adoption of some Mississippian traits into the ceremonial system as well as the presence of St. Johns Simple Stamped ceramics. The Mississippian lifestyle, however, never became dominant, possibly because the soils were not suitable for full agricultural pursuits. A more complex socio-political organization is suggested by the presence of platform mounds at the ceremonial centers: Mill Cove Complex near the mouth of the St. Johns River and Mt. Royal just north of Lake George (Ashley 2012). Copper beads and ornaments, as well as greenstone celts, have been recovered from several sites, indicating contact
with the Mississippian world. Mt. Royal has been considered a center of dispersal in the marine shell trade due to the tremendous quality of unmodified whelk shells recovered from the mound (Ashley 2005). By around 1300 CE, influence from the Mississippian world waned, probably due to the fall and abandonment of the Macon Plateau to the north and the disruption of the existing interaction networks. At this time, the major sites were apparently abandoned and the St. Johns II people moved further south, up the St. Johns River. However, within two centuries, the introduction of corn farming and the shift from long-distance trading to territorial raiding created the volatile landscape that was encountered by the Europeans when they first arrived (Ashley 2012:125).

The St. Johns IIc period is marked by the introduction of European artifacts in some of the mounds. Three Native American ethnic groups were known to inhabit east central Florida at the time of Spanish contact: the Ais, the Mayaca, and the Jororo. The Ais lived along the Atlantic Coast and were closely involved with the Spanish. They inhabited the coastal strand and Indian River areas at this time. They apparently mixed indigenous hunting/gathering/fishing economy with the salvaging of Spanish shipwrecks (Milanich 1995:64-65). The Timucuans shared a common language but cannot be considered as a specific cultural group because the range of the Timucuan speakers was crossect by dialect, techno-environmental, ceremonial, political and geographical differences (Deagan 1978:89). The Mayaca occupied eastern Lake, western Volusia, and Seminole counties. The Jororo occupied the area of Orange and Seminole Counties, extending southward into Polk and Highlands Counties (Milanich 1995:63). They pursued a hunting-gathering-fishing economy (Newsom 1987). Although these Indians apparently continued the St. Johns tradition, they did not share the same Timucuan language as the St. Johns people further north (Milanich 1995).

3.5 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. After Ponce de Leon’s landing near St. Augustine in 1513, Spanish explorations were confined along the west coast of Florida and European contact along the east coast was left to a few shipwrecked sailors from treasure ships that sailed through the Straits of Florida on their way to Spain. Cape Canaveral was a landmark for these explorers and sailors. The French established Fort Caroline, near today’s Jacksonville, to promote their interests in the New World. The need to protect the treasure galleons led Spain to remove the French from the region. Pedro Menéndez de Avilés led the Spanish fleet in its conquest of Fort Caroline and the destruction of the French.

During Spain’s first period of occupancy (1565-1763), it failed to establish permanent settlements in the project area. Located on the fringe of Spanish activity centered in St. Augustine, Orange County was too far removed for Spain to exert political control (Milanich and Fairbanks 1980). Missionization of the Jororo and Mayaca began in the late 1600s, and in 1728 Joseph de Bullones wrote to the king that the Jororo were “gone” (Hann 2003:132). Evidence of European contact with the Jororo is seen at the Philip and Goodnow mounds where glass beads and iron scissors have been recovered (Milanich 1995). Due to the attempts of the Spanish military and missionaries to alter the traditional lifeways, by the end of the seventeenth century these aboriginal populations were virtually extinct.

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; however, Spanish influence was nominal during this second period of ownership. Prior to the American colonial settlement of Florida, remnants of the Creek Nation and other Indian groups from Alabama, Georgia, and South Carolina moved into Florida and began to
repopulate the vacuum created by the decimation of the aboriginal inhabitants. The Seminoles, as these migrating groups of Indians became known, formed at various times, loose confederacies for mutual protection against the new American Nation to the north (Tebeau 1980:72).

3.6 Territorial and Statehood

The bloody conflict between the Americans and the Seminoles over Florida first came to a head in 1818, and was subsequently known as the First Seminole War. In 1821, Florida became a U.S. Territory as a result of the war and the Adams-Onis Treaty. Andrew Jackson, named provisional governor, divided the territory into St. Johns and Escambia Counties. St. Johns County included the lands lying east of the Suwannee River. In the first territorial census (1825), 5077 people were reported within St. Johns County, and by 1830, that number had risen to 8956 (Tebeau 1980:134).

Even though the First Seminole War was fought in north Florida, the Treaty of Moultrie Creek in 1823, at the end of the war, was to affect the settlement of all of Florida. The Seminoles relinquished their claim to the whole peninsula in return for an approximately four million acre reservation south of Ocala and north of Charlotte Harbor (Mahon 1985). The reservation was found to be nearly barren, with poor soils, few good hammocks, and frequently covered with water during the rainy season (Knetsch 2008:8). The treaty never satisfied the Indians or the Anglo-Americans. The inadequacy of the reservation and desperate situation of the Seminoles living there, plus the mounting demand of the Anglo-Americans for their removal, soon produced another conflict.

By 1835, the Second Seminole War was underway. Mosquito County, created in 1824, encompassed present-day Osceola, Lake, Orange, Seminole, Brevard, and Volusia Counties as well as parts of several other counties. Mosquito County was sparsely occupied with mostly sugar plantations along the rivers near the coast. In 1835, the Territory’s legislative council established the county seat at John Bunch’s plantation in New Smyrna. However, before the first session could be held, the threat of Indian attacks forced the county government to move to St. Augustine, the seat of St. Johns County, for safety. During the war, court was held concurrently with that for St. Johns County (Robison and Andrews 1995).

During the Second Seminole War, Fort Mellon, located near present-day Sanford, was the principal military installation in east central Florida. The area around Lake “Ahapopka” (now Apopka) became a refuge for the Indian groups headed by Chief Osuchee (ACI 1994; Tebeau 1980). Military and civilian suppliers passed through the region traveling to reach Seminole villages and an increasing number of military fortifications (ACI 1990:11). The lands around Lake Tohopekaliga were a Seminole stronghold during the war. Here, the Seminoles kept their cattle and retreated into the cypress swamp west of the lake at the approach of soldiers (Mahon 1985; Sprague 1964). In January 1837, General Jesup’s men encountered the Seminoles near the “Great Cypress Swamp” and drove them into dense swamp. On January 28, the army moved forward and occupied a strong position on Tohope-ka-liga Lake where several hundred head of cattle were confiscated by Jesup (Sprague 1964:258).

The Second Seminole War lasted until 1842 when the federal government decided to end the conflict by withdrawing troops from Florida. Some of the battle-weary Seminoles were persuaded to emigrate west where the federal government had set aside land for a reservation. However, those who were adamant about remaining were allowed to do so but were pushed further south into the Everglades and Big Cypress Swamp, which became the last Seminole stronghold (Tebeau 1980).
The war had a deleterious effect on new settlement in Florida. To encourage settlement in the middle portion of the territory after the war, the Armed Occupation Act of 1842 offered settlers 160 acres of land at no cost, provided they built a house, cleared five acres, planted crops, and resided on the land for five years. Any head of a family or single man over 18 years of age and able to bear arms, was eligible to receive a homestead (Covington 1961). This act, plus the end of the war, created a small wave of immigration by Anglo-American pioneers to central Florida. Although the act was supposed to bring in new settler to Florida, only a third of those who were issued permits arrived after the Act went into effect (Knetsch 2008:241). Most of these immigrants were Anglo-American farmers and cattle ranchers, or “crackers,” from the southeastern United States (Gaby 1993). In 1845, B.F. Whitner surveyed the exterior and section lines of Township 24 South, Range 29 East; no roads, trails, fort, or homesteads were depicted proximate to the project area, although a few trails are depicted a few miles north and west of the project area (State of Florida 1845). He described the general project area as third rate pine and palmetto with areas of thick swamp (State of Florida 1843:244, 396-397).

At the end of the Second Seminole War, the Florida Legislature relocated the county seat from its safe haven in St. Augustine to Enterprise, now in Volusia County. In 1845, the Union admitted the State of Florida with Tallahassee as the state capital. In the same year, due to the thriving citrus industry, Mosquito County was renamed Orange County with a population in the 1850 census numbering 466 residents. At the same time, the Legislature moved the county seat to Mellonville, but in 1856 relocated it to the community which became Orlando (Hebel 1955:2). Much of the early development occurred along the coast or inland waterways. Cities such as Enterprise, Sanford, and New Smyrna developed along waterways such as the St. Johns, Halifax, and Indian Rivers. The rivers were heavily used transporting residents, goods, and crops from the 1850s until the advent of the railroad (Hebel 1955). Prior to the Civil War, the cotton, cattle, and sugar industries thrived while the developing citrus, turpentine, and logging industries were in their infancy.

Throughout the intervening years between the Second and Third Seminole Wars, tensions erupted periodically between settlers and Seminoles. The desire to remove all Seminoles from Florida and to recapture all former slaves became national policy. As a result, 10 military forts were established in Orange County by 1846. These included: Fort Butler near the south end of Lake George; Fort Kingsbury at the northeast end of Lake George; Fort Mellon on the south bank of Lake Monroe; Fort Lane on the west side of Lake Harney; Fort Maitland, Fort Gatlin, Fort Christmas, and Fort Taylor to the west of Lake Winder; Fort McNeal west of Lake Poinsett; and Fort Ann on the Halifax River (Blackman 1927:19).

In December 1855, the Third Seminole War started as a result of pressure placed on the Indians remaining in Florida to move to the West (Covington 1982). The war originated in present-day Collier County when Seminole Chief Billy Bowlegs and 30 warriors launched a retaliatory attack upon an army camp, killing four soldiers and wounding four others. This hostile action renewed state and federal interest in the final removal of the Seminoles from Florida. As a result, several regional military posts were established (Tebeau 1966).

Military action was not decisive during the war; therefore, in 1858 the U.S. Government resorted to monetary persuasion to induce the remaining Seminoles to move west. Chief Billy Bowlegs accepted $5000 for himself and $2500 for his lost cattle; each warrior received $500, and $100 was given to each woman and child. On May 4, 1858, the ship Grey Cloud set sail from Fort Myers with 123 Seminoles; 41 captives and a Seminole woman guide were added to the group at Egmont Key. On May 8, 1858, the Third Seminole War was declared officially over (Covington 1982:78-80). Between the end of the Third Seminole War and the beginning of the Civil War, settlers continued to arrive in the area, attracted by its rich soil, mild climate, and homesteading opportunities.
3.7 Civil War and Aftermath

In 1861, Florida followed South Carolina’s lead and seceded from the Union as a prelude to the Civil War. Florida had much at stake in this war as evidenced in a report released from Tallahassee in June of 1861. It listed the value of land in Florida as $35,127,721 and the value of slaves at $29,024,513 (Dunn 1989:59). Even though the coast of Florida experienced a naval blockade during the war, the interior of the state saw very little military action. One of the major contributions of the state to the war effort was in the supplying of beef to the Confederate Government. The blockade along the coast made it very difficult to ship cattle from Florida to Cuba. Therefore, the ranchers from Florida herded their cattle to Charleston, South Carolina and sold them to the Confederate Government. The Confederate Government estimated that three-fourths of the cattle which Florida supplied to the Confederacy originated from Brevard and Manatee Counties (Shofner 1995:72). The war lasted until 1865.

At the close of the Civil War, the first commercial citrus grove was planted near present-day Orlando by W.H. Holden. His produce was hauled via the St. Johns River to present day Sanford and continued by boat to Charleston (Federal Writers’ Project [FWP] 1939:224). In 1871, General Henry R. Sanford purchased 12,000 acres near Mellonville. He brought in hundreds of workers to clear the land and plant citrus. Sanford’s goal was to establish a city as large as Jacksonville and bring prosperity to the upper St. Johns region. Sanford sent an agent to Sweden to recruit workers who were guaranteed passage and expenses in exchange for one year of work. Because of this arrangement, Sanford was accused of operating a form of slavery and many of the workers ran away. Other Swedes, however, fulfilled their contracts and were given a five-acre grove (FWP 1939:360).

Immediately following the war, the South underwent as 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 returned to the Union (Tebeau 1980:251). By 1870, the county population had risen from 987 in 1860 to 2195 (Kendrick 1976:150). The war stimulated growth in Florida in two ways: many 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 Acts of 1866 and 1876 provided additional incentive for settlers to come to the area. The Act of 1866 gave Union-loyal African-Americans and southerners the opportunity to receive 80-acre tracts in Florida and the other four public land states. Former Confederates, however, were ineligible to receive homesteads until the Act of 1876 (Tebeau 1980:266, 294). Beginning about 1870, many settlers began to buy the land on which they had homesteaded for so many years in anticipation of the coming railroad (Hetherington 1980:86).

By 1881, the State of Florida faced a financial crisis involving a title to public lands. On the eve of the Civil War, land had been pledged by the Internal Improvement Fund to underwrite railroad bonds. After the War, when the railroads failed, the land reverted to the State. Almost $1 million was needed by the state to pay off the principal and accumulated interest on the debt, thereby giving clear title. Hamilton Disston contracted with the State of Florida in two large land deals: the Disston Drainage Contract and the Disston Land Purchase. The drainage contract stipulated that Disston and his associates would drain and reclaim all overflow lands south of present-day Orlando and east of the Peace River in exchange for one-half the acreage that could be reclaimed and made fit for cultivation. They agreed to purchase Internal Improvement Fund Lands at $0.25 an acre to satisfy the indebtedness of the fund. A contract was signed on June 1, 1881 for the sale of four million acres for the sum of $1 million, the estimated debt owed by the Improvement Fund.

During 1881 and 1882, channels were dug between numerous lake systems and the Kissimmee River (Tebeau 1980:279). The Atlantic and Gulf Coast Canal and Okeechobee Land
Company was responsible for connecting Lake Okeechobee with the Gulf of Mexico by dredging a channel to the Caloosahatchee River. Disston and his associates received 1,652,711 acres of land under the contract, although they probably never permanently drained more than 50,000 acres (Tebeau 1980:280). 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. Disston obtained title to all of Section 35, while all of Section 34 was purchased by the South Florida Railroad (State of Florida n.d.:179). Henry B. Plant moved 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, Ocala & Gulf Railroad, Florida Transit and Peninsular Railroad, South Florida Railroad, and Florida Southern Railroad to establish his operation (Harner 1973:18-23; Mann 1983:68). In 1902, Henry Plant sold all of his Florida holdings to the Atlantic Coast Line, which would become the backbone of the southeast (Mann 1983:68). In the early 1880s, railroads made the previously isolated area of central Florida accessible to tourists and prospective settlers. Citrus production was the main industry in the region until the winter of 1894-1895, when the “Great Freeze” devastated many citrus crops causing many settlers to return to the north. Those that chose to stay and replant their groves slowly regained their prosperity (Robison and Andrews 1995:183).

3.8 Twentieth Century

At the turn-of-the-century, Florida’s history was marked by the outbreak of the Spanish-American War in 1898. As Florida is the closest state to Cuba, American troops were stationed and deployed from the state’s coastal cities. Harbors in Tampa, Pensacola, and Key West were improved as more ships were launched with troops and supplies. “The Splendid Little War” was short in duration, but evidence of the conflict remained in the form of improved harbors, expanded railroads, and military installations (George 1990).

In 1904, Governor Broward initiated significant reforms in Florida’s politics. Several of his major issues included the Everglades drainage project, railroad regulation, and the construction of roads. During this time, railroads were constructed throughout the state and automobile use became more prevalent. Improved transportation in the state opened the lines to export Florida’s agricultural and industrial products (George 1990). As various products such as fruits and vegetables were leaving the state, people were arriving in Florida. Some entered as new residents and others as tourists. Between 1900 and 1910, the state population increased from 528,542 residents to 752,619.

Rapid and widespread growth was the theme of this period in Florida history. Thousands of miles of railroad tracks were laid by the Florida East Coast (FEC), Seaboard Air Line (SAL), and Atlantic Coast Line (ACL) railways. While agriculture, especially the citrus industry, had become the backbone of Florida’s economy, manufacturing and industry began growing during the beginning of the century. Fertilizer production, boat building, and lumber and timber products were strong secondary industries (Weaver et al. 1996:3).

Wartime activity associated with World War I in 1917 required the development of several training facilities in the state, and protecting the coastlines was a priority at this time. Although the conflict only lasted until November 1918, the economy was boosted greatly by the war. For example, the war brought industrialization to port cities such as Tampa and Jacksonville, where shipbuilding accelerated. These cities also functioned as supply depots and embarkation points. An indirect
economic benefit of the war was an increase in agricultural production for central Florida since beef, vegetables, and cotton were in great demand (George 1990).

While Florida industrialization and agriculture flourished, immigration and housing development slowed during the war. Tourism increased as a result of the war in Europe, which forced Americans to vacation domestically. Tycoons such as Henry Flagler and Henry Plant were building the hotels and railroads for people desiring winter vacations in sunny Florida. These magnates took an interest in the improvements and promotion of Florida in an effort to bring in more tourist dollars, however small rural communities felt little effect from the increase in tourism.

After World War I, Florida experienced unprecedented growth. Many people relocated to Florida during the war; some came to work in wartime industries while other were stationed in the state as soldiers. Bank deposits increased, real estate companies opened in many cities, and state and county road systems expanded quickly. Earlier land reclamation projects created thousands of new acres of land to be developed. Real estate activity increased steadily after the war’s end and drove up property values. Prices on lots were inflated to appear more enticing to out-of-state buyers. Every city and town in Florida had new subdivisions platted and lots were selling and reselling for quick profits. Southeast Florida, including cities such as Miami and Palm Beach, experienced the most activity, although the boom affected most communities in central and southern Florida (Weaver et al. 1996:3).

Road building became a statewide concern as it shifted from a local to a state function. A state highway association, established in Orlando in 1917, sponsored the development of an improved highway system. These roads made even remote areas of the state accessible and allowed the boom to spread. The Dixie Highway, constructed between 1915 and the early 1930s by Carl Fisher, encouraged travelers to come south to Florida (Harner 1973:63) and it became a significant route for travelers through the state (Blackman 1927:28; Shofner 1982:155). Florida’s legislative prohibition on income and inheritance taxes also encouraged more people to move into the state.

The Boom Period began to decline in the mid 1920s, when the Florida East Coast Railway placed an embargo on freight shipments to South Florida. Ports and rail terminals were overflowing with unused building materials. In addition, northern newspapers published reports of fraudulent land deals in Florida. In 1926 and 1928, two hurricanes hit southeastern Florida, killing hundreds of people and destroying thousands of buildings. The collapse of the real estate market and the subsequent hurricane damage effectively ended the boom. The 1929 Mediterranean fruit fly infestation that devastated citrus groves throughout the state only worsened the recession (Weaver et al. 1996:4).

By the time the stock market collapsed in 1929, Floridians were already accustomed to economic depression. Construction activity had halted and industry dramatically declined. Subdivisions platted several years earlier remained empty and buildings stood on lots partially-finished and vacant (Weaver et al. 1996). However, the relatively small amount of real estate activity in rural citrus and vegetable-growing towns in the central part of the state somewhat mitigated the effects of the real estate market collapse (Shofner 1982; Tebeau 1980).

The Depression affected most areas of the state’s economy. Between 1929 and 1933, 148 state and national banks collapsed, more than half of the state’s teachers were owed back pay, and a quarter of the residents were receiving public relief (George 1990). New building and development in the Boom Period’s subdivisions for the most part ceased. Beef and citrus production declined, manufacturing slowed, and development projects were stopped. Even the railroad industry felt the pressures of the 1930s, and had to reduce service and let go some personnel. In addition, the increasing use of the automobile lessened the demand for travel by rail.
As a result of hard economic times, President Franklin D. Roosevelt initiated several national relief programs including the Works Progress Administration (WPA) and the Civilian Conservation Corps (CCC). The WPA provided jobs for professional workers and laborers, who constructed or improved many roads, public buildings, parks, and airports in Florida. The CCC improved and preserved forests, parks, and agricultural lands (Shofner 1987). A cross-Florida sea-level canal was proposed to create federal jobs in the area, but was rejected by many farmers in the area who feared salt water would seep into their fields and kill crops (Historic Property Associates [HPA] 1995).

From the end of the Great Depression until after the close of the post-war era, Florida’s history was inextricably bound with World War II and its aftermath. It became one of the nation’s major training grounds for the various military branches including the Army, Navy, and Air Force. Prior to this time, tourism had been the state’s major industry. However, it was brought to a halt as tourist and civilian facilities, such as hotels and private homes, were placed into wartime service. The influx of service personnel and their families increased industrial and agricultural production in Florida, and introduced the residents to the warm weather and tropical beauty of Florida.

The U.S. Navy established an aviation-training base east of Sanford that helped save the bankrupt community in 1943. This increased demand for agricultural products as well as the railway use. Railroads once again profited, since service personnel, military goods, and materials needed to be transported. However, airplanes were now becoming the new form of transportation, and Florida became a major airline destination. The highway system was also being expanded at this time. The State Road Department constructed 1,560 miles of highway during the war era (George 1990).

At the conclusion of World War II, Florida’s economy was almost fully recovered. Former military personnel found the local climate amenable and remained in Florida permanently after the war. These new residents greatly increased the population in the 1940s (George 1990). Tourism quickly rebounded and once again became a major source of the state’s economy. In 1949, Gatorland, which is located just north of the project area, was founded by Owen Godwin. Initially, the 110-acre park was called the Florida Wildlife Institute, and was renamed to the Snake Village and Alligator Farm shortly thereafter. It received its current name in 1954. The park is still owned by the family.

The 1956 Highway Act initiated a plan for 41,500 miles of interstate highway throughout the country. Interstate 4 (I-4), which was constructed in the late-1950s and early-1960s, was part of the plan. Completed in 1965, it passed through downtown Orlando, connecting Tampa to Daytona. I-4 quickly served as the beltway across central Florida, providing access to both coasts and many tourist attractions. After Walt Disney World opened in 1971, growth and development along I-4 in Orange County exploded. Cities in this area have experienced large growth in recent years due to their proximity to the metropolitan Orlando area.

3.9 Project Area Specifics

The aerial photographs of the project area from 1944, 1951, and 1969, available from the Publication of Archival Library & Museum Materials (PALMM), revealed that the project area had not been developed historically. Orange Blossom Trail, Orange Avenue, and the railroad are all present in 1944, but no structures were present within the project area (PALMM 1944, 1951, 1969).
4.0 RESEARCH CONSIDERATIONS AND METHODS

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 area and 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 information in this report was obtained October 2012, which is the most recent edition. However, according to FMSF staff, input may be a month or more behind receipt of reports and site files.

4.1.1 Archaeological Considerations

Background research revealed that there is only one archaeological site within two miles of the project area (Figure 4.1). 8OR2171, the Flamingo Road Site, consists of an isolated piece of lithic debitage that was recorded during the survey of the magnetic levitation transportation demonstration corridor (Estabrook 1992).

There have been numerous surveys conducted within a mile of the project area for transportation projects (ACI 1998, 2005; Browning and Jackson 1990; Chambliss 2010a, 2010b; Estabrook and Fuhrmeister 1992; Fuhrmeister and Austin 1991; Janus Research 2003a, 2003b; Johnson and DeBenedetto 1994), electric and natural gas facilities (Athens 1992; Athens et al. 1993; Estabrook 2000; Janus Research 1994, 2002; Panamerican Consultants 1999; Willis 1977), cell towers (Parker 2004, 2007), and developments (Matson and Wayne 2003; Stewart and Weiss 1983). However, none of these surveys recorded any archaeological sites proximate to the project area.

Based on these data, combined with more regional archaeological syntheses (Austin and Layman 1989; Ellis et al. 1994; Johnson and Basinet 1995), the project area and surrounding lands have been the scene of human activity for more than 8000 years. As archaeologists have long realized, aboriginal populations did not select their habitation sites and special use activity areas in a random fashion. Rather, many environmental factors had a direct influence upon site location selection. Among these variables are soil drainage, distance to freshwater, relative topography, and proximity to food and other resources including stone and clay. In general, comparative site location data indicate a pattern of site distribution favoring the relatively better-drained and more elevated land relative to the surrounding terrain and near a permanent or semi-permanent source of potable water including rivers, creeks, and freshwater marshes. Upland sites well removed from potable water are rare. In the pine flatwoods and hardwood forests, sites tend to be situated on ridges and knolls near a freshwater source. It should be noted that the settlement patterns noted above cannot be applied to sites of the Paleo-Indian and Early Archaic periods, which precede the onset of modern environmental conditions.

Given these known patterns of aboriginal settlement, the project area was considered to have a low probability for archaeological site occurrence due to poorly drained nature of the property. Research suggests that the most likely type of aboriginal site would be a small lithic and/or artifact scatter. Background research suggested a low potential for the discovery of historic (50 years of age or older) archaeological sites or structures within the project area.
Figure 4.1. Location of the previously recorded cultural resources proximate to the Tupperware Heights project area, Sections 34 and 35 of Township 24 South, Range 29 East, USGS Kissimmee (National Geographic Society 2011 - USA Topo Maps).
4.1.2 Historical Considerations

A review of the FMSF and the NRHP indicated that no previously recorded historic structures are located within the project area. However, there is a historic feature, the South Florida Railroad (now CSX), which is located to the east of the project area. The Osceola County segment has been recorded as 8OS2540; and, the Orange County portion has not been recorded. The proposed Tupperware Heights development will have no affect on this feature. Gatorland (8OR6233) is located north of the project area, but again, it will not be affected by the development of this property. The review of the property appraiser data indicates that there are no historic structures (50 years of age or older) within the project area (Donegan 2012). In addition, the aerials of the project area since 1944 indicate that the tract had not been developed, and no structures were evident in the project area (PALMM 1944, 1951, 1969).

4.2 Field Methodology

Archaeological field survey methods consisted of surface reconnaissance combined with systematic subsurface testing. Shovel tests were placed at 50 m (164 ft) intervals along the cypress swamp and judgmentally throughout the rest of the project area. Shovel tests were circular and measured approximately 50 cm (20 in) in diameter by at least 1 m (3.3 ft) in depth unless precluded by natural impediments. All soil removed from the shovel tests was screened through a 0.64 cm (0.25 in) mesh hardware cloth to maximize the recovery of artifacts. The locations of all shovel tests were plotted on the aerial map, and following the recording of relevant data such as stratigraphic profile and artifact finds, all shovel tests were refilled.

The historic resources survey used standard field methods to identify and record historic resources. Any resource with features indicative of 1962 or earlier construction materials, building methods, or architectural styles would have been noted and information collected to complete the FMSF form.

4.3 Unexpected Discoveries

If human burial sites such as Indian mounds, lost historic and pre-colonial cemeteries, or other unmarked burials or associated artifacts were found, then the provisions and guidelines set forth in Chapter 872.05, FS (Offenses Concerning Dead Bodies and Graves) 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, thus no laboratory methods were utilized.

The project-related records will be maintained at the ACI office in Sarasota unless the client requests otherwise.
5.0 RESULTS AND CONCLUSIONS

5.1 Archaeological

The archaeological investigations conducted within the Tupperware Heights project area consisted of surface reconnaissance combined with systematic subsurface testing. There was total of 55 shovel tests excavated, of which 34 were excavated at 50 m (164 ft) intervals and 21 were judgmentally placed (Figure 5.1). The general stratigraphy consists of 0-20 cm (0-8 in) gray sand, 20-60 cm (8-24 in) light gray sand, 60-70 cm (24-28 in) dark brown hardpan, and 70-100 cm (28-40 in) brown muck. No cultural materials were recovered from the shovel tests or discovered on the surface. No archaeological sites were discovered.

5.2 Historical

A review of the FMSF and the NRHP indicated that no previously recorded historic structures are located within the project area. The review of the property appraiser data indicates that there are no historic structures (50 years of age or older) within the project area. This was confirmed by the field reconnaissance.

5.3 Conclusions

Given the results of background research and field survey, the development of the Tupperware Heights property will have no effect on any archaeological sites or historic resources that are listed, determined eligible, or considered potentially eligible for listing in the NRHP. No further investigations are recommended.
Figure 5.1. Approximate location of the shovel tests within the Tupperware Heights property. Shovel tests not to scale (Microsoft 2010 -Bing Maps Hybrid).
6.0 REFERENCES CITED

ACI
1990 Cultural Resource Assessment Survey of the Birchwood Project Tract (Phase I), Osceola County, Florida. ACI, Sarasota.
1994 Cultural Resource Assessment Survey SR 535 from Apopka-Vineland Road to Chase Road Orange County, Florida. ACI, Sarasota.
1998 A Cultural Resource Assessment Survey Orange Avenue (SR 527) from the Osceola/Orange County Line to Taft-Vineland Road Orange County, Florida. ACI, Sarasota.

ACI/Janus Research
2001 Phase III Mitigative Excavation at the Lake Monroe Outlet Midden (8VO53), Volusia County, Florida. ACI, Sarasota and Janus Research, Tampa.

Ashley, Keith H.

Aten, Lawrence E.

Athens, William P.

Austin, Robert J.
2001 Paleoindian and Archaic Archaeology in the Middle Hillsborough River Basin: A Synthetic Overview. SEARCH, Jonesville.

Austin, Robert J. and Sylvia Layman

Blackman, William F.
Browning, William D. and Roy Adlai Jackson
1990 Archaeological/Historical Resource Assessment Survey of the Proposed Dart Boulevard Interchange with Florida's Turnpike, Osceola County, Florida. FDOT, Tallahassee.

Bullen, Ripley P.

Bullen, Ripley P., Adelaide K. Bullen, and William J. Bryant

Carbone, Victor

Carr, James L.

Carr, Robert S. and B. Calvin Jones

Carter, Brinnen C. and James S. Dunbar

Chambless, Elizabeth J.
2010a Cultural Resource Assessment Survey, State Road 500 PD&E Study, Osceola County, Florida. SEARCH, Jonesville.
2010b Technical Memorandum Cultural Resource Assessment Survey of Five Ponds along State Road 500 in Osceola County, Florida. SEARCH, Jonesville.

Clausen, Carl J., A. D. Cohen, Cesare Emiliani, J. A. Holman, and J. J. Stipp

Cordell, Ann S.
Covington, James W.

Cumbaa, Stephen L.

Daniel, I. Randolph and Michael Wisenbaker

Deagan, Kathleen A.

Delcourt, Paul A. and Hazel R. Delcourt

Dickinson, Martin F. and Lucy B. Wayne

Donegan, Bill
2012 Records Search. Orange County Property Appraiser, Orlando.

Doran, Glen H., Ed.

Douglass, Andrew E.

Dunbar, James S.
Dunbar, James S. and S. David Webb  

Dunn, Hampton  

Ellis, Gary D., Russell A. Dorsey, and Robin Denson  
1994 Cultural Resources Study of Seminole County, Florida: Archaeology. Gulf Archaeological Research Institute, Lecanto.

Endonino, Jon C.  

ESRI  
2012 *Streets*.

Estabrook, Richard W.  

Estabrook, Richard W. and Charles Fuhrmeister  

Farr, Grayal Earle  
2006 *A Reevaluation of Bullen's Typology for Preceramic Projectile Points*. MA thesis, Department of Anthropology, Florida State University, Tallahassee.

Faught, Michael K.  

Faught, Michael K. and Joseph F. Donoghue  

FDHR  

Fryman, Mildred, John W. Griffin, and James Miller  
Fuhrmeister, Charles and Robert J. Austin

FWP

Gaby, Donald C.
1993 *The Miami River and Its Tributaries.* Historical Association of Southern Florida, Miami.

George, Paul

Gleason, Patrick J. and P. Stone

Goggin, John M.

Hann, John H.

Harner, Charles E.

Hebel, Ianthe Bond

Hetherington, Alma

Horvath, Elizabeth A.

HPA

Jahn, Otto L. and Ripley P. Bullen
Janus Research
2002  Cultural Resources Follow-up Surveys for Lines 500 and 600 (Supplemental Report 5). Janus Research, Tampa.

Jennings, Jesse D., Gordon R. Willey, and Marshall T. Newman

Johnson, Robert E. and B. Alan Basinet

Johnson, Robert E. and Michael J. DeBenedetto
1994  A Cultural Resources Survey of Highway US 441 (17/92) from Osceola Parkway in Osceola to Taft-Vineland Road in Orange County, Florida. Florida Archaeological Services, Jacksonville.

Johnson, Robert E. and Dana Ste. Claire

Kendrick, Baynard H.

Knetsch, Joe

Kozuch, Laura

Mahon, John K.

Mann, Robert W.

Matson, Lindsay and Lucy B. Wayne
Microsoft
2010  *Bing Maps Hybrid.*

Milanich, Jerald T.

Milanich, Jerald T. and Charles H. Fairbanks

Miller, James J.

National Geographic Society
2011  *USA Topo Maps.*

Neill, Wilfred T.

Newsom, Lee A.

Newsom, Lee A. and Barbara A. Purdy

Newsom, Lee A., S. David Webb, and James S. Dunbar

PALMM
1944  *Aerial Photograph - 2-26-44, DCU-6C-140.* PALMM.
1951  *Aerial Photograph - 4-5-51, DCU-4H-141.* PALMM.
1969  *Aerial Photograph - 12-18-69, DEV-ILL-93.* PALMM.

Panamerican Consultants, Inc.

Parker, Brian T.
Parker, Brian T.

Piatek, Bruce J.

Purdy, Barbara A.
1988 *Wet Site Archaeology*. Telford Press, Caldwell, NJ.

Quitmyer, Irvy R.

Robison, Jim and Mark Andrews

Rouse, Irving

Russo, Michael

Russo, Michael, Ann S. Cordell, Lee A. Newsom, and Robert J. Austin
Russo, Michael, Ann S. Cordell, and Donna L. Ruhl  

Russo, Michael and Dana Ste. Claire  

Sassaman, Kenneth E.  

Scott, Thomas M.  


Shofner, Jerrell H.  


Sigler-Eisenberg, Brenda  


Sigler-Eisenberg, Brenda, Ann S. Cordell, Richard W. Estabrook, Elizabeth A. Horvath, Lee A. Newsom, and Michael Russo  

Sprague, John T.  

Stanford, Dennis  
State of Florida, Department of Environmental Protection
1845 Plat. Township 24 South, Range 29 East. B. F. Whitner.

Ste. Claire, Dana
1989 Archaeological Investigations at the McDonald Farm Site, Volusia County, Florida. On file, FDHR, Tallahassee.

Stewart, Marilyn C. and Phillip J. Weiss

Tebeau, Charlton W.

USDA
1989 Soil Survey of Orange County, Florida. USDA, Soil Conservation Services

Waller, Ben I.

Watts, William A.
1975 A Late Quaternary Record of Vegetation from Lake Annie, South-Central Florida. Geology 3(6): 344-346.

Watts, William A., Eric C. Grimm, and T. C. Hussey

Watts, William A. and Barbara C. S. Hansen
Wayne, Lucy B. and Martin F. Dickinson

Weaver, Paul L., III, Historic Property Associates, and Pappas Associates Inc.

Webb, S. David, Ed.

Weisman, Brent R.

Wheeler, Ryan J. and Ray M. McGee

Wheeler, Ryan J., James J. Miller, Ray M. McGee, Donna L. Ruhl, Brenda Swann, and Melissa Memory

Wheeler, Ryan J., Christine Newman, and Ray M. McGee

White, William A.

Willey, Gordon R.

Willis, Raymond F.

Wing, Elizabeth S. and Laurie McKean

Yates, William Brian
2000 Implications to Late Archaic Exchange Networks in the Southeast as Indicated by the Archaeological Evidence of Prehistoric Soapstone Vessels Throughout Florida. MS thesis, Department of Anthropology, Florida State University, Tallahassee.
APPENDIX A: ACOE correspondence (see item 4)
June 21 2012

Regulatory Division
Cocoa Section
SAJ-2012-01430 (NPR-JLC)

Abdul Alkadry
Harris Civil Engineers LLC (Mr.)
1200 Hillcrest Street, Suite 200
Orlando, Florida 32803

Dear Mr. Alkadry:

This is in reference to your permit application received on May 15 2012, requesting Department of the Army (DA) authorization to impact waters of the United States. The project has been assigned permit application number SAJ-2012-014302, which should be referenced on all future correspondence.

The project is located at the north side of Mary Louis Lane between South Orange Blossom Trail and Florida’s Turnpike in Sections 34 and 35, Township 24 South Range 29 East, Orange County, Florida.

While this application originated through the Joint Permit Process with the State of Florida, insufficient information was received by the U.S. Army Corps of Engineers (Corps). Your application is considered incomplete. No further action will be taken until the information requested on the enclosed checklist is received.

Please be advised that all drawings, sketches, or plans must be on 8.5-inch by 11-inch, paper. For clarity please review and answer the questions in the order in which they are asked.

1. Please field flag the landward extent of the wetlands in accordance 1987 Corps of Engineers Wetland Delineation Manual, Atlantic and Gulf Coastal Plain Regional Supplement and contact this office (Jim Carr) to field review and verify the wetland line.

2. It appears, based on your application drawing, that the stormwater pond (Pond 400) proposed for the western portion of the project site will impact existing surface waters/ditches. These ditches are within the core foraging area of the wood stork (Mycteria Americana) and are
considered suitable foraging habitat (SFH) for the species. Please provide a total acreage figure of ditches proposed for impact by the project. Typically projects that impact less than 0.5 acres of SFH will not have a measurable effect on wood storks but mitigation may be required for these losses when appropriate.

3. Provide the names of federally listed endangered or threatened species that may be affected by the proposed work or utilize designated critical habitat that may be affected by the proposed work. Please include any work performed (i.e., transect type and coverage, survey date[s] and time[s]) to identify occurrence, or potential occurrence, of potentially affected species or critical habitat. Furthermore, any maps that depict this information can also be included.

4. State any historic properties listed in or eligible for listing in, the National Register of Historic Places and state which historic property may be affected by the proposed work. If necessary, please provide a vicinity map that indicates the location of the historic property in relation to the project site.

5. After review and verification of the wetland line it is determined that your total project impact to wetlands and surface water is less than 0.5 acres your project may qualify for Nationwide Permit 39. However, mitigation may be required.

6. Provide a signed application by the person who desires to undertake the proposed activity (i.e. applicant) or a duly authorized agent. If you have any questions, an ERP Joint Application form can be found at the following link: http://www.saj.usace.army.mil/Divisions/Regulatory/forms.htm

7. If your project will ultimately impact more than 0.5 acres of wetlands and surface waters you will need to provide a list of adjacent property owners, including names and mailing addresses, for distribution of the Public Notice. If there are over five adjacent property owners, please provide the list on self-stick mailing labels.

8. Provide a listing of all other government authorizations obtained or requested for the work, including required certifications relative to water quality, coastal zone management, or marine sanctuaries.
9. A written statement explaining how avoidance and minimization of losses of waters of the United States were achieved on the project site.

10. Inclusion of your compensatory mitigation proposal that offsets unavoidable losses of waters of the United States or justification explaining why compensatory mitigation should not be required.

Any revisions or modifications you may propose during the evaluation process must be coordinated with both the State of Florida and the Corps of Engineers.

As the application is considered incomplete, no action will be taken on it until the above-requested information and drawings have been received. We request that you provide this information within 45 days. If no response is received, we will assume you have no further interest in obtaining a Department of the Army permit and the application will be deactivated. Such action will constitute final action by the Department of the Army.

You are cautioned that work performed below the mean high waterline or ordinary high waterline in waters of the United States, or the discharge of dredged or fill material into adjacent wetlands, without a Department of Army permit could subject you to enforcement action. Receipt of a permit from the Florida Department of Environmental Protection, the St Johns River Water Management District or local authorizations does not obviate the requirement for obtaining a Department of Army permit for the work described above prior to commencing work.

All responses should be directed to James Carr at 400 High Point Drive, Suite 600, Cocoa, Florida, 32926 or by telephone at 321-504-3771 extension 16, (fax # 321-504-3803) or by e-mail: James.L.Carr@usace.army.mil

Sincerely,

James L. Carr
Project Manager
APPENDIX B: Survey log
### Identification and Bibliographic Information

**Survey Project (name and project phase)**
CRAS Tupperware Heights, Orange Co.

**Report Title (exactly as on title page)**
Cultural Resource Assessment Survey Tupperware Heights Orange County, Florida

**Report Authors (as on title page, last names first)**
1. ACI
2. 
3. 
4. 

**Publication Date (year)** 2012

**Total Number of Pages in Report** (count text, figures, tables, not site forms) 41

**Publication Information** (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of American Antiquity.)
Conducted for Tupperware Brands Corporation, Orlando, by ACI, Sarasota

**Supervisors of Fieldwork**
**Names** Almy, Marion

**Affiliation of Fieldworkers**
Organization Archaeological Consultants Inc
City Sarasota

**Key Words/Phrases** (Don’t use county name, or common words like archaeology, structure, survey, architecture, etc.)
1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 

**Survey Sponsors** (corporation, government unit, organization or person directly funding fieldwork)
Name Tupperware Brands Corporation
Organization 
Address/Phone/E-mail 14901 S. Orange Blossom Trail, Orlando, FL 32837

**Recorder of Log Sheet** Horvath, Elizabeth A.

**Date Log Sheet Completed** 

**Is this survey or project a continuation of a previous project?** Yes

### Mapping

**Counties** (List each one in which field survey was done; attach additional sheet if necessary)
1. Orange
2. 
3. 
4. 
5. 

**USGS 1:24,000 Map Names/Year of Latest Revision** (attach additional sheet if necessary)
1. Name KISSIMMIE Year 
2. Name 
Year 
3. Name 
Year 
4. Name 
Year 

### Description of Survey Area

**Dates for Fieldwork**
Start 11-19-2012
End 11-20-2012

**Total Area Surveyed (fill in one) hectares 200**

**Number of Distinct Tracts or Areas Surveyed** 1

**If Corridor (fill in one for each)**
Width: meters feet
Length: kilometers miles
**Survey Log Sheet**

### Research and Field Methods

**Types of Survey** (check all that apply):
- [ ] archaeological
- [x] architectural
- [x] historical/archival
- [ ] underwater
- [ ] damage assessment
- [ ] monitoring report
- [ ] other (describe):

**Scope/Intensity/Procedures**
- background research, systematic & judgmental subsurface testing, 1 m deep, 50 cm diameter, 6.4 mm mesh screen; 34 @ 50 m, 21 judgemental - all sterile

### Preliminary Methods (check as many as apply to the project as a whole)

- [ ] Florida Archives (Gray Building)
- [ ] Florida Photo Archives (Gray Building)
- [x] Site File property search
- [ ] Site File survey search
- [ ] other (describe):

### Archaeological Methods (check as many as apply to the project as a whole)

- [ ] surface collection, controlled
- [ ] surface collection, uncontrolled
- [ ] shovel test 1/4" screen
- [ ] shovel test 1/8" screen
- [ ] shovel test 1/16" screen
- [ ] shovel test unscreened
- [ ] other (describe):

### Historical/Architectural Methods (check as many as apply to the project as a whole)

- [ ] building permits
- [ ] commercial permits
- [ ] interior documentation
- [ ] other (describe):

### Survey Results (cultural resources recorded)

**Site Significance Evaluated?**
- [ ] Yes
- [x] No

**Count of Previously Recorded Sites** 0

**Count of Newly Recorded Sites** 0

Previously Recorded Site #’s with Site File Update Forms (List site #’s without “0”. Attach additional pages if necessary.)

Newly Recorded Site #’s (Are all originals and not updates? List site #’s without “0”. Attach additional pages if necessary.)

Site Forms Used:
- [ ] Site File Paper Form
- [ ] Site File Electronic Recording Form

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

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