

**CULTURAL RESOURCE ASSESSMENT SURVEY
TECHNICAL MEMORANDUM
I-75 AT SR 951 ULTIMATE INTERCHANGE
COLLIER COUNTY, FLORIDA**

**Financial Project Number: 425843-2-22-01
Federal Aid Project Number: TBD**

Prepared for:

**Florida Department of Transportation
District One
P.O. Box 1249
Bartow, Florida 33831-1249**

February 2013

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1. Introduction

A cultural resource assessment survey (CRAS) of the proposed I-75 at SR 951 Ultimate Interchange was conducted by Archaeological Consultants, Inc. (ACI) in November 2012. The limits of the project will extend along I-75 from 3000 feet (ft) west and 1500 ft east of the current ramp terminals, 1500 ft north of the ramp terminals along SR 951, 1500 ft along SR 84 east and west of the intersection of SR 84 and SR 951, and 3000 ft along SR 951 south of the intersection of SR 84 and SR 951. Interchange improvements will require the development of an ultimate configuration that will incorporate the ultimate intersection at SR 84 and SR 951 (Kittelson and Associates 2012). The area of potential effects (APE) is defined as the area contained within the proposed interchange study area (**Figure 1**). Work included background research, ground surface reconnaissance, systematic archaeological testing, and a historic building survey.

The purpose of the survey was to locate and identify any prehistoric and historic period archaeological sites and/or historic structures located within the APE, and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). This survey was initiated in order to comply with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended, and the implementing regulations 36 CFR 800 (revised May 1999), as well as the provisions contained within the revised Chapter 267, *Florida Statutes (FS)*. All work was carried out in conformity with Part 2, Chapter 12 (“Archaeological and Historical Resources”) of the Florida Department of Transportation’s *Project Development and Environment (PD&E) Manual* (revised January 1999), and the standards contained in the *Cultural Resource Management Standards and Operational Manual* (Florida Division of Historical Resources [FDHR] 2003).

Background research indicated an absence of previously recorded historic resources, but one previously recorded archaeological site, 8CR840, a re-deposited lithic scatter once located within the APE and previously determined not eligible for listing in the NRHP (ACI 2002; Matthews 2002), is no longer extant.

As a result of field survey for this project, no archaeological sites or historic resources were identified within the APE. Thus, the proposed undertaking will have no effect on resources that are listed, determined eligible, or potentially eligible for listing in the NRHP.

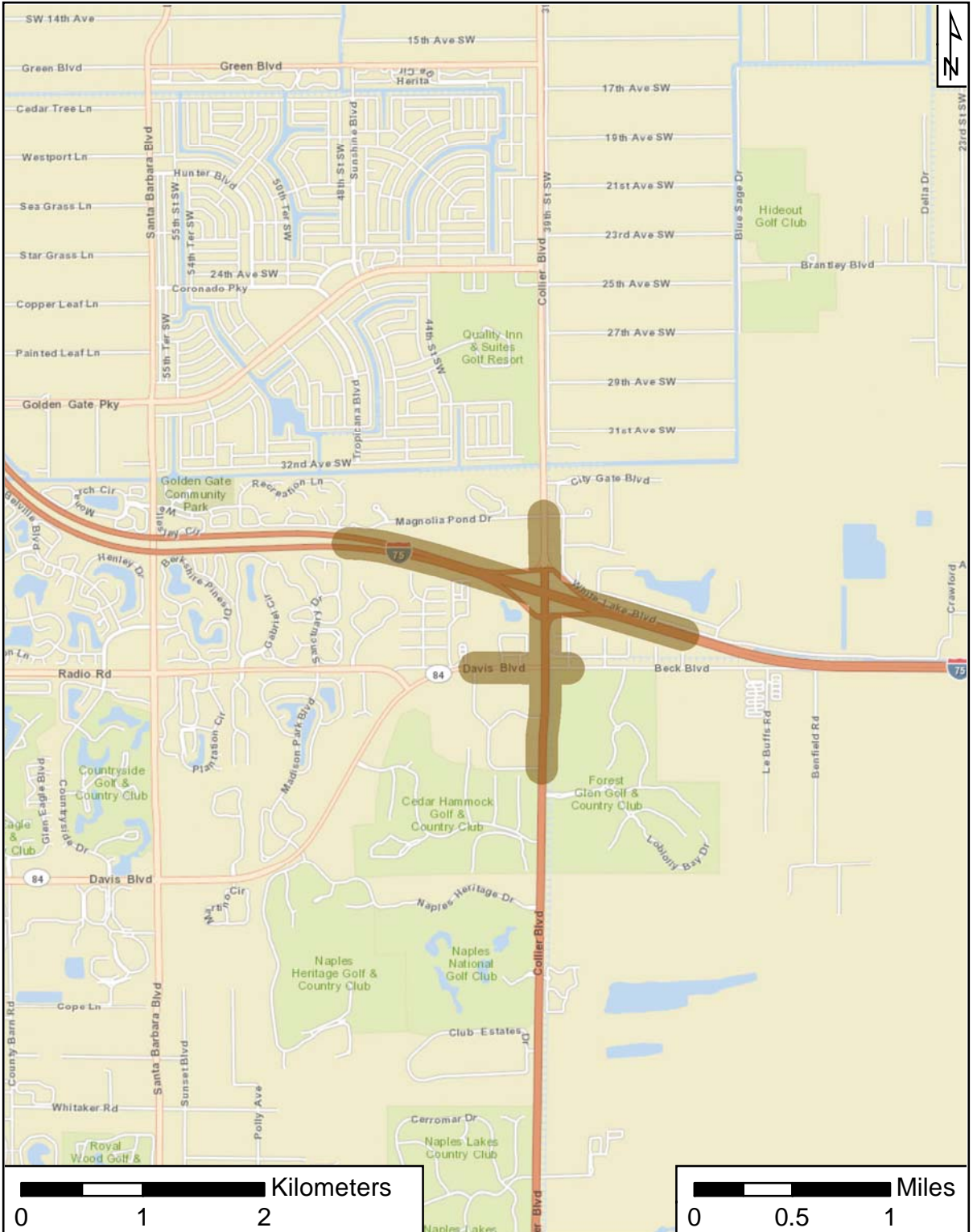


Figure 1. Location of the I-75 at SR 951 Ultimate Interchange, Collier County (ESRI 2012 - Streets)

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2. Project Description

The purpose of this project is to improve operational capacity and enhance overall traffic operations at I-75 and Collier Boulevard/CR 951 and on the surrounding roadway network. Collier Boulevard/CR 951 from Davis Boulevard/SR 84 to I-75 is funded for widening from 4 to 8 lanes. The project includes capacity improvements within one quarter-mile of Davis Boulevard/SR 84 and the I-75 interchange ramps. Similarly, Davis Boulevard/SR 84 from Radio Road to Collier Boulevard/CR 951 is funded for widening from 2 to 6 lanes. This project includes a bypass ramp for the eastbound to southbound movement at the Davis Boulevard/SR 84 and Collier Boulevard/CR 951 intersection. The interchange improvement will increase operational capacity to meet the local current and future traffic demand.

3. Physical Setting

The I-75 interchange at SR 951 is located at the eastern edge of the Naples metropolitan urban area in Collier County, Florida. This access point to I-75 connects the greater Naples area by two arterials, SR 951 also known as Collier Boulevard or County Road (CR) 951, and SR 84 also known as Davis Boulevard. Specifically, the interchange project is located in Township 49 South, Range 26 East, Sections 33 - 35 and Township 50 South, Range 26 East, Sections 2 and 3 (United States Geological Survey [USGS] 1958). An examination of this quadrangle map, the Collier County Soil Survey (United States Department of Agriculture [USDA] 1990), and a visual observation revealed that the natural landscape has been altered by extensive earthmoving, including ditching and filling associated with the construction of I-75 and the existing interchange, plus on-going development (**Photos 1 and 2**). These disturbances, coupled with the naturally low-lying terrain comprised of poorly to very poorly drained soils indicated a natural environment which would have offered few, if any, opportunities for prehistoric settlement, except on slightly elevated limestone outcrops about the surrounding swampy terrain (c.f. 8CR230 and 8CR231 noted below).



Photo 1. Current conditions of the southeast interchange area.



Photo 2. Looking north at the CR 951/I-75 Interchange.

4. Cultural Overview

A detailed prehistoric and historic overview was included in the CRAS Report conducted for I-75 from SR 951 to South of Bonita Beach Road, Collier County, Florida (ACI 2001), and is not repeated in this Technical Memorandum. The CRAS report was approved by the SHPO in 2002 (Matthews 2002).

5. Archaeological and Historical Background and Research Considerations

Archaeological: Field survey was preceded by background research, including a check of the NRHP and the Florida Master Site File (FMSF), the Efficient Transportation Decision Making (ETDM) report number 13101, a review of the cultural resource survey reports conducted in the general vicinity (Jones 1982; Almy 1986; ACI 2000, 2001, 2002, 2007 and 2010; Janus Research 2005), as well as a review of county-wide inventories and assessments of prehistoric sites in Collier County (ACI 1992, 1999; AHC 1988, 1990, 1993).

This background research indicated that only one archaeological site had been previously recorded in the APE. This site, the Bottoms Up Site (8CR840) was a re-deposited lithic scatter site that was brought into the area as fill. It was located about one half mile southeast of the intersection of I-75 and SR 951 and just north of SR 84 (**Figure 2**). SHPO concurred that the site was not eligible for listing in the NRHP, and the site is no longer extant due to road and drainage improvements. Two other sites have been recorded within two miles of the undertaking. These include the Heineken Hammock Site (8CR231) and the Green Heron Hammock Site (8CR230) found near I-75 east of the proposed undertaking. Both sites are on slightly elevated limestone outcrops which support a tropical hammock, emphasizing the utilization/occupation of small rises in an otherwise low-lying swampy environment comprised of Pineda, limestone substratum typical of poorly defined drainage ways, or Boca find sand, a poorly drained, nearly level soil of the flatwoods (Lee et al.1993, 1998; USDA 1990).



Figure 2. Environmental setting and the location of the previously recorded archaeological sites within and in close proximity to the APE. Sections 33-35 of Township 49 South, Range 26 East and Sections 2-3 of Township 50 South, Range 26 East, USGS Belle Meade NW (National Geographic Society 2011 - *USA Topo Maps*).

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As the above noted studies, as well as more general studies, have shown, archaeological sites are, for the most part, located near a permanent or semi-permanent source of potable water, and are found, more often than not, on better drained soils or limestone outcrops near the better drained upland margins of wetland features such as swamps, sinkholes, lakes and ponds.

Given these known patterns of aboriginal settlement in the project area, and the fact that most of the interchange area had been subjected to extensive disturbances and five previous cultural resource assessment surveys (ACI 2000, 2001, 2002, 2007 and 2010), the area of interchange improvements was considered to have a very low potential for the discovery of prehistoric sites. The ETDM report gave the project a minimal degree of effect (ETDM 2011) due to the disturbances and negative findings of previous cultural resource surveys in the vicinity.

Historical: Background research indicated that no historic resources were recorded within the area of the undertaking or within two miles, and a review of historic aerials (Publication of Archival Library and Museum Materials [PALMM] 1963), USGS maps, and the historical/architectural survey of Collier County (Florida Preservation Services 1986) showed no potential for historic structures or buildings within the project APE.

6. Laboratory Procedures and Curation

No cultural materials were recovered, thus no laboratory methods were utilized. All project related information such as field notes, maps, and other project documentation are temporarily housed at ACI in Sarasota pending transfer to a FDOT-designated repository for permanent storage and curation. The original survey log and a copy of this report will be sent to the FDHR in Tallahassee.

7. Unexpected Discoveries

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

8. Survey Results

Archaeological: Archaeological field survey included both ground surface reconnaissance and the excavation of a total 42 shovel tests placed systematically and judgmentally (ACI 2000, 2001, 2007, 2010, 2012) within the project APE (**Figure 3**).

All test pits measured 20 inches (in) (50 centimeters [cm]) in diameter by at least 3.3 ft (1 meter [m]) in depth, unless impeded by limestone. All soil removed was screened through a .25



Figure 3. Location of the previously recorded archaeological site and shovel tests within the APE (Microsoft 2010 - *Bing Maps Hybrid*). Shovel tests not to scale; *arrow points to linear area within APE which could not be tested because of existing ponds.

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in (.63 cm) mesh hardware cloth to maximize the recovery of cultural materials. Each test pit was refilled after data recording, and the locations of all shovel tests were plotted on an aerial sheet.

As the result of archaeological survey, no prehistoric or historic archaeological sites were found.

Historical: Given the results of the background research, the historic field survey consisted of a reconnaissance only to verify the absence of historic resources within or adjacent to the APE. If found, photographs would be taken and an in-depth study of each identified historic resource would then be conducted.

9. Conclusions

As the result of background research and archaeological and historical field survey, no new cultural resources were identified within the pond sites for the I-75/SR 951 project APE. Thus, project development will have no effect on any cultural resources which are listed, determined eligible, or considered potentially eligible for listing in the NRHP. No further work is recommended.

10. References Cited

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- 1986 Archaeological Assessment Survey of the Citygate Commerce Park, Collier County, Florida. ACI, Sarasota.

Archaeological Consultants, Inc. (ACI)

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- 1999 Revised Mapping of Areas of Historical/Archaeological Probability in Collier County, Florida. ACI, Sarasota
- 1997 Cultural Resource Assessment Survey Report of U.S. 41 from North of SR 887 to San Carlos Boulevard, Collier and Lee Counties, Florida. ACI, Sarasota.
- 2000 Cultural Resource Assessment Survey SR 84 (Davis Boulevard) from Santa Barbara Boulevard to SR 951/SR 951, Collier County, Florida. ACI, Sarasota.
- 2001 Cultural Resource Assessment Survey I-75 from SR 951 to South of Bonita Beach Road, Collier County, Florida. ACI, Sarasota.
- 2002 Addendum Cultural Resource Assessment Survey I-75 from SR 951 to South of Bonita Beach Road, Collier/Lee County, Florida. ACI, Sarasota.
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Archaeological and Historical Conservancy (AHC)

- 1988 An Archaeological Survey of Collier County, Florida. ACI, Sarasota.
- 1990 An Archaeological Survey of Collier County: Phase I. ACI, Sarasota.
- 1993 An Archaeological Survey of Collier County: Phase I. AHC Technical Report #38. AHC, Miami.

ETDM

- 2011 ETDM Report 13101, I-75 at Collier Boulevard (SR 951), June 30.

Florida Department of Transportation (FDOT)

- 1999 *Project Development and Environmental Manual* Part 2, Chapter 12, "Archaeological and Historical Resources." FDOT, Tallahassee.

Florida Division of Historical Resources (DHR)

- 2003 *Cultural Resource Management Standards and Operational Manual*. FDHR, Tallahassee.

Florida Preservation Services

- 1986 Historical/Architectural Survey of Collier County, Florida. FDHR, Tallahassee.

Jones, Calvin

1982 Proposed New Borrow Pits, State Job 03175-3409, South Half of Section 35, Township 49 South, Range 26 east, Collier County, Florida. FDHR, Tallahassee.

Janus Research

2005 Cultural Resource Assessment Survey of the FPL Collier-Orange River #3 230 KV Transmission Line: Segment D, Collier County. Janus Research, Tampa.

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2012 Email Correspondence, Project Need, November 27.

Lee, Arthur R. and John G. Beriault

1993 A Small Site – Mulberry Midden, 8CR697 – Contributions to Knowledge of the Transitional Period. *The Florida Anthropologist* 46:43-52.

Lee, Arthur R., John G. Beriault, Jean Belknap, Walter M. Buschelman, John W. Thompson and Carl B. Johnson

1998 Heineken Hammock, 8CR231: A Late Archaic Corridor Site in Collier County, Florida. *The Florida Anthropologist* 51:233-239.

Matthews, Janet Snyder

2002 SHPO Review Letter for I-75 from SR 951 to South of Bonita Beach Road, Collier County, to James E. St. John, Federal Highway Administration, March 1. DHR Project Number 2002-01236.

National Geographic

2011 USA Topo Maps.

Publication of Archival Library & Museum Materials (PALMM)

1963 Flight FIPS 12021, Flight Number 300, Tile Number 251.

United States Department of Agriculture (USDA)

1990 Soil Survey of Collier County. United States Government Printing Office. Washington, D.C.

United States Geological Survey (USGS)

1958 Belle Meade NW, Florida. Photorevised 1987.

n.d. mrg1814.tif Belle Meade, Florida.

APPENDIX A: 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) I-75 at SR 951 Ultimate Interchange, Phase I

Report Title (exactly as on title page) Cultural Resource Assessment Survey Technical Memorandum, I-75 at SR 951 Ultimate Interchange, Collier County, Florida; FPID No.: 425843-2-22-01

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

Publication Date (year) 2012 Total Number of Pages in Report (count text, figures, tables, not site forms) 34

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
P11022, ACI, Sarasota

Supervisors of Fieldwork (even if same as author) Names Almy, Marion M.

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. _____ 3. _____ 5. _____ 7. _____
2. _____ 4. _____ 6. _____ 8. _____

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)
Name Kittelton and Associates, Inc. Organization _____
Address/Phone/E-mail 225 E. Robinson Street, Suite 450 Orlando, FL 32801

Recorder of Log Sheet Lee Hutchinson Date Log Sheet Completed 12-12-2012

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; attach additional sheet if necessary)
1. Collier 3. _____ 5. _____
2. _____ 4. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)
1. Name BELLE MEADE NW Year 1958 4. Name _____ Year _____
2. Name _____ Year _____ 5. Name _____ Year _____
3. Name _____ Year _____ 6. Name _____ Year _____

Description of Survey Area

Dates for Fieldwork: Start 12-5-2012 End 12-6-2012 Total Area Surveyed (fill in one) _____ hectares _____ 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
damage assessment monitoring report other(describe): _____

Scope/Intensity/Procedures background research, systematic subsurface testing, 1 m deep, 50 cm diameter, 6.4 mm mesh screen; 41 ST @ 50 & 100 m intervals; all sterile

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

Florida Archives (Gray Building) library research- local public local property or tax records other historic maps
Florida Photo Archives (Gray Building) library-special collection - nonlocal 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 shovel test-other screen size block excavation (at least 2x2 m)
surface collection, uncontrolled water screen soil resistivity
shovel test-1/4" screen posthole tests magnetometer
shovel test-1/8" screen auger tests side scan sonar
shovel test 1/16" screen coring pedestrian survey
shovel test-unscreened test excavation (at least 1x2 m) unknown
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): _____

Survey Results (cultural resources recorded)

Site Significance Evaluated? Yes No

Count of Previously Recorded Sites 0 Count of Newly Recorded Sites 0

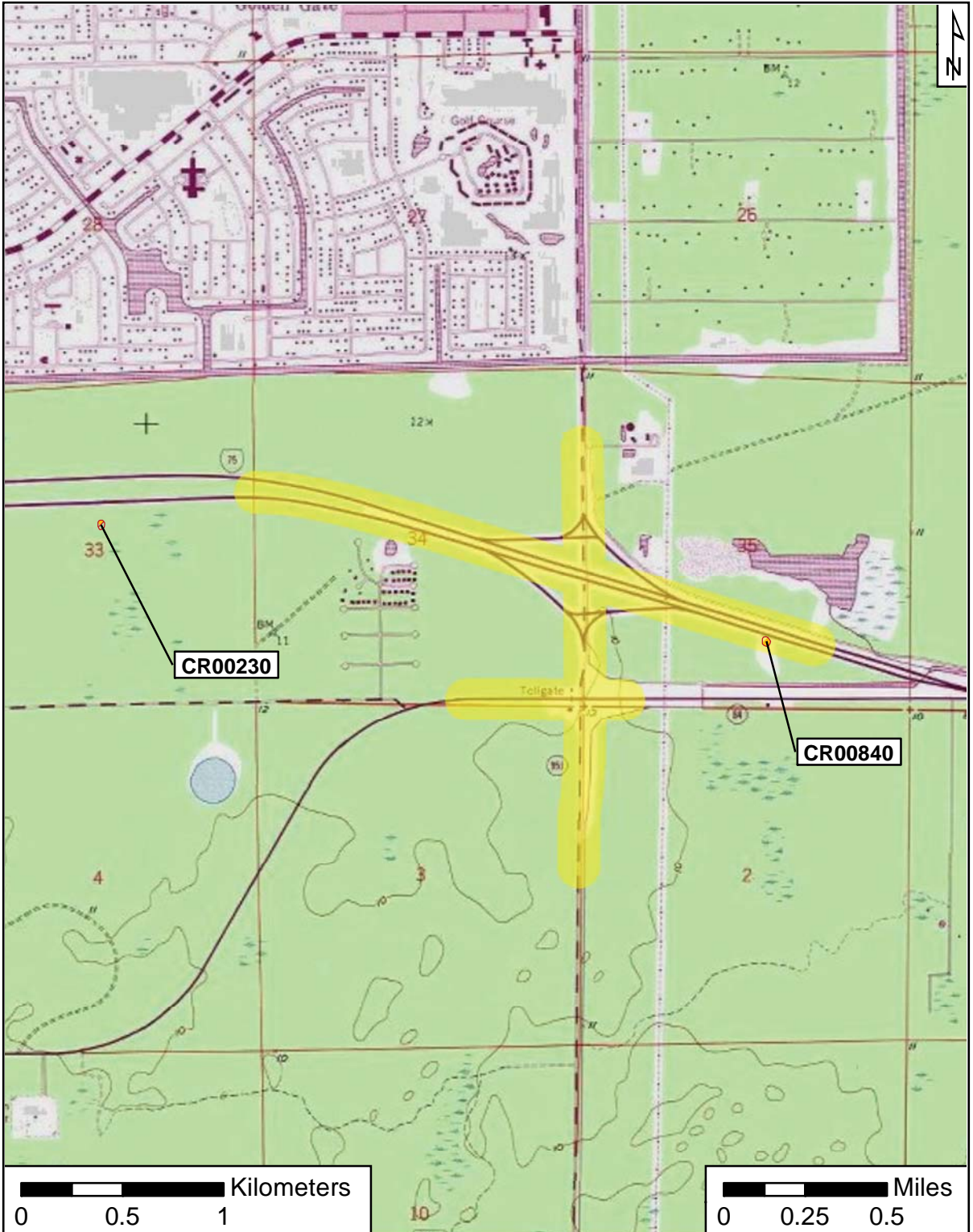
Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) _____

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". 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)

SHPO USE ONLY SHPO USE ONLY SHPO USE ONLY
Origin of Report: 872 CARL UW 1A32 # _____ Academic Contract Avocational
Grant Project # _____ Compliance Review: CRAT # _____
Type of Document: Archaeological Survey Historical/Architectural Survey Marine Survey Cell Tower CRAS Monitoring Report
Overview Excavation Report Multi-Site Excavation Report Structure Detailed Report Library, Hist. or Archival Doc
MPS MRA TG Other: _____
Document Destination: _____ Plotability: _____



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 Sections 33-35 of Township 49 South, Range 26 East and Sections
 2-3 of Township 50 South, Range 26 East
 USGS Belle Meade NW, Collier County
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