



Florida Department of
TRANSPORTATION

SR 514 (Malabar Road) PD&E Study

Technical Memorandum:
Cultural Resource Assessment Survey of
Eight Proposed Ponds along State Road 514
From Babcock Road to US 1
Brevard County, Florida

FDOT D-5
Environmental Management Office

Author
SEARCH

Date of Publication
September 2014/Revised March 2015

**TECHNICAL MEMORANDUM:
CULTURAL RESOURCE ASSESSMENT SURVEY OF
EIGHT PROPOSED PONDS ALONG STATE ROAD 514
FROM BABCOCK ROAD TO US 1
BREVARD COUNTY, FLORIDA**

CONSULTANT: SEARCH
700 North 9th Avenue, Pensacola, Florida 32501

PRINCIPAL INVESTIGATOR: Marie E. Pokrant, MA, RPA

CLIENT: Atkins

DATE: September 2014/Revised March 2015

FM#: 430136-1

This technical memorandum details the results of a Cultural Resource Assessment Survey (CRAS) of eight pond locations associated with the proposed improvements to State Road (SR) 514 in Brevard County, Florida. The eight ponds currently under study are located along SR 514 between Babcock Road and US 1. The Florida Department of Transportation (FDOT), District 5, is evaluating the widening of the existing two-lane roadway to a four-lane roadway.

This technical memorandum serves as an addendum to the 2014 SEARCH report titled *Cultural Resource Assessment Survey for SR 514 (Malabar Road) from Babcock Road to US 1, Brevard County, Florida* (SEARCH 2014, Florida Master Site File [FMSF] No. TBD). The regional prehistory and history, environment, research design, background research, and field and laboratory methods for this study are discussed in the previous report and not repeated in this memorandum. In addition to the CRAS for the corridor, SEARCH conducted a desktop analysis for the proposed pond alternatives, which is included as **Attachment 1**. A FMSF survey log is included in **Attachment 2**.

The purpose of the survey is to locate, identify, and bound any archaeological resources, historic structures, and potential districts within the project area and to assess their potential for listing in the National Register of Historic Places (NRHP). This study was conducted to comply with Chapter 267 of the Florida Statutes and Rule Chapter 1A-46, Florida Administrative Code. All work was performed in accordance with Part 2, Chapter 12, of the FDOT Project Development and Environment (PD&E) Manual (revised January 1999) and the Cultural Resource Management Handbook (revised November 2004), as well as the Florida Division of Historical Resources (FDHR) recommendations for such projects as stipulated in the FDHR's *Cultural Resource Management Standards & Operations Manual, Module Three: Guidelines for Use by Historic Preservation Professionals*. The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation* (48 FR 44716). This study also complies with Section 106 of the National Historic Preservation

Act (as amended) and its implementing regulation 36 CFR Part 800 (Protection of Historic Properties).

The Area of Potential Effect (APE) defines the area within which visual, audible, and atmospheric effects will impact historic properties if pond construction ensues. The APE defined for this project consists of the proposed pond boundaries in addition to a 100-foot buffer (Figure 1).

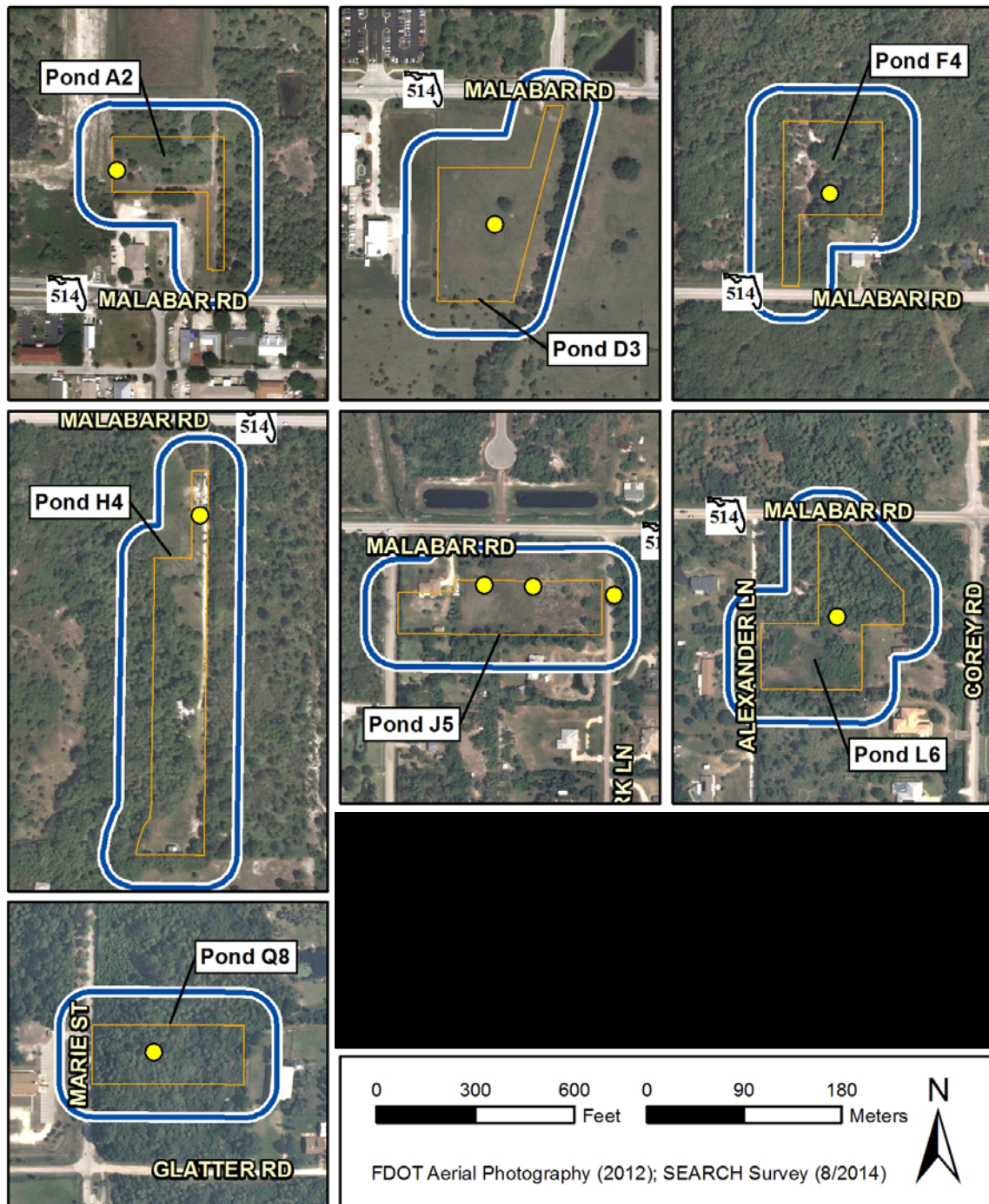


Figure 1. Shovel test locations within the SR 514 Pond APEs.

SURVEY RESULTS

Archaeology Results

During the CRAS for the SR 514 corridor, SEARCH determined that the majority of the project area had a low archaeological potential due to the artificially drained nature of the soils. The Principal Investigator spoke with Mr. Carl Beatty, Mayor of Malabar, and was informed that the land along SR 514 west of the railroad tracks was former cypress swamp that once was frequently flooded. The excavated canals in the area drain the land and make it habitable (SEARCH 2014:33). The soil drainage characteristics for this area consist primarily of poorly and very poorly drained soils (see **Attachment 1, Figure 1**).

A typical shovel test profile from the pond survey is documented as 20 centimeters (8 inches) of gray sand over brown sand mottled with black muck to a terminal depth of 70 centimeters (27 inches), as shown in **Figure 2**. SEARCH interpreted this soil profile as belonging to an artificially drained wetland.



Figure 2. Typical shovel test profile in the SR 514 Ponds APE.

Table 1. Summary of Archaeological Survey Results.

Pond Name	Archaeological Probability	Acres	Number of Shovel Tests	Cultural Resources Identified?
Pond A2	Low	1.57	1	None
Pond D3	Low	2.83	1	None
Pond F4	Low	2.19	1	None
Pond H4	Low	3.70	1	None
Pond J5	Moderate	2.18	3	None
Pond L6	Low	2.73	1	None
Pond Q8	Low	1.89	1	None
Pond U9	High	0.28	4	None

Thirteen shovel tests were excavated within the boundaries of the eight proposed ponds (see **Figure 1**). No archaeological sites or archaeological occurrences (AOs) were identified as a result of the archaeological survey.



Architecture Results

A review of the Brevard County Property Appraiser's database, in addition to a pedestrian survey of the eight pond locations, indicates that no historic resources are located within the SR 514 Ponds APEs.

CONCLUSIONS

This technical memorandum details the results of a CRAS of eight proposed ponds along SR 514 in Brevard County, Florida. FDOT, District 5, is evaluating widening SR 514 from Babcock Road to US 1 from the existing two-lane roadway to a four-lane roadway.

The archaeological survey included the excavation of 13 shovel tests within the proposed pond footprints. No artifacts were recovered by any of the 13 shovel tests, and no archaeological sites or occurrences were identified within the SR 514 Ponds APEs. No historic structures were identified within any of the eight pond APEs. No NRHP-eligible or listed resources were identified within the SR 514 Ponds APEs, and no further work is recommended for these locations.

REFERENCES CITED

SEARCH

- 2014 *Cultural Resource Assessment Survey for SR 514 (Malabar Road) from Babcock Road to US 1, Brevard County, Florida*. FMSF Survey No. TBA. On file, SEARCH, Inc., Newberry, Florida.

ATTACHMENT 1:
DESKTOP ANALYSIS

**DESKTOP ANALYSIS OF
PROPOSED POND ALTERNATIVES FOR THE
MALABAR ROAD (SR 514) PD&E STUDY
FROM BABCOCK STREET (SR 507) TO US 1
BREVARD COUNTY, FLORIDA**

CONSULTANT: SEARCH
700 North 9th Avenue, Pensacola, Florida 32501
PRINCIPAL INVESTIGATOR: Marie Pokrant, MA, RPA
CLIENT: FDOT, District 5 and
Atkins North America Inc.
DATE: July 2014
FINANCIAL MANAGEMENT NO.: 430136-1-22-01

The present memorandum represents a desktop analysis of proposed pond alternatives in support of the State Road (SR) 514 Project Development and Environment (PD&E) Study from Babcock Street to US 1 in Brevard County, Florida. The desktop analysis was conducted with the purpose of identifying cultural resource potential and previously recorded historic properties that are listed, or may be eligible for listing, in the National Register of Historic Places (NRHP). In May 2014, SEARCH updated a previous (November 2013) desktop analysis based on field observations during the archaeological survey of the project corridor. This desktop serves as an addendum to the previous pond location analyses.

The Florida Master Site File (FMSF) database was reviewed for any previous surveys or previously recorded resources. Archaeological site probability was based on soil drainage (**Figures 1 and 2**), distance to water, and prior disturbance. In addition, the Brevard County Property Appraiser database (**Figure 3**), historic maps, and aerial photographs were reviewed to determine if structures constructed prior to 1970 are located in the vicinity of the proposed ponds. For the purposes of this desktop analysis, the study area for each pond was defined as the proposed pond footprint. Atkins North America Inc. provided the pond nomenclature.

The FMSF indicates that one of the proposed ponds (Pond K6, located west of Corey Road) was included in a cultural resource assessment survey (CRAS) in support of the proposed Stillwater Residential Development (Thomas Penders & Associates, Inc. 2004; FMSF Survey No. 10833). No cultural resources were identified within this ponds site and no further survey would be recommended for Pond K6.

No previously recorded resources have been identified in the remaining 20 pond locations, none of which have been subject to cultural resource survey. The Brevard County Property Appraiser's database indicates that six of the 21 pond locations are located on parcels containing buildings 50 years old or older. The cultural resources desktop analysis for the 21 pond locations is summarized in **Table 1**.

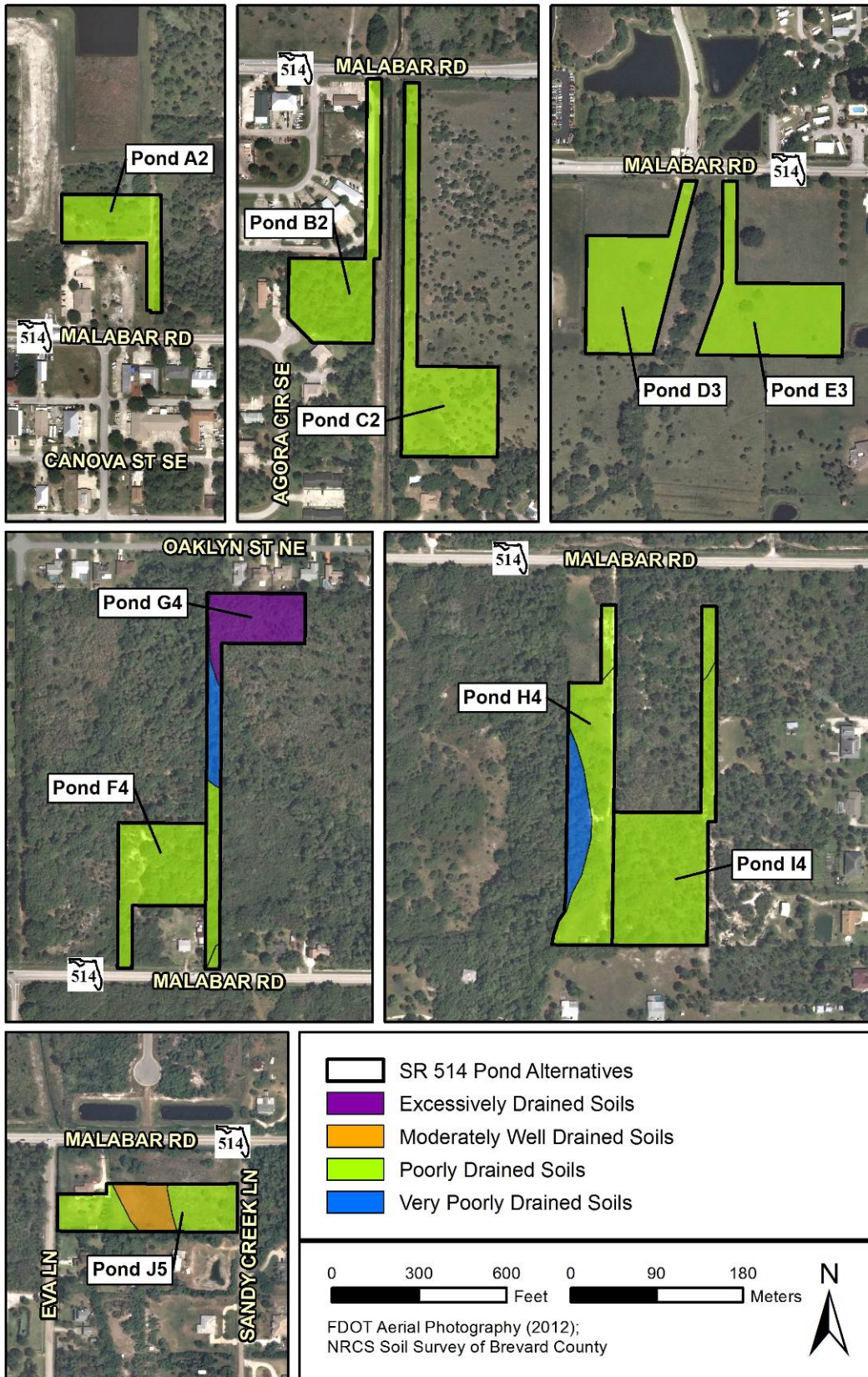


Figure 1. Soil drainage within the SR 514 Pond Alternatives. Map 1 of 2.

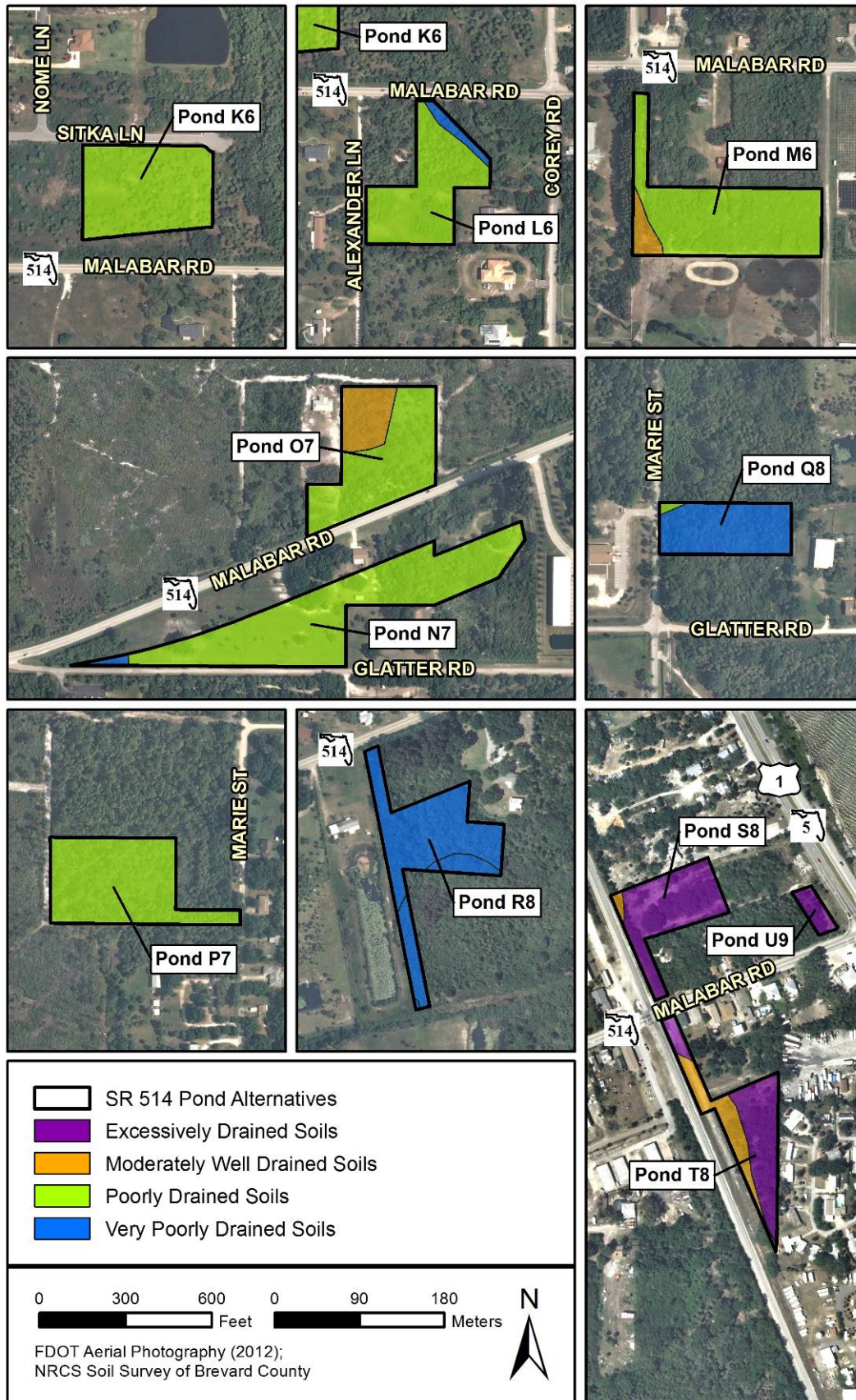


Figure 2. Soil drainage within the SR 514 Pond Alternatives. Map 2 of 2.

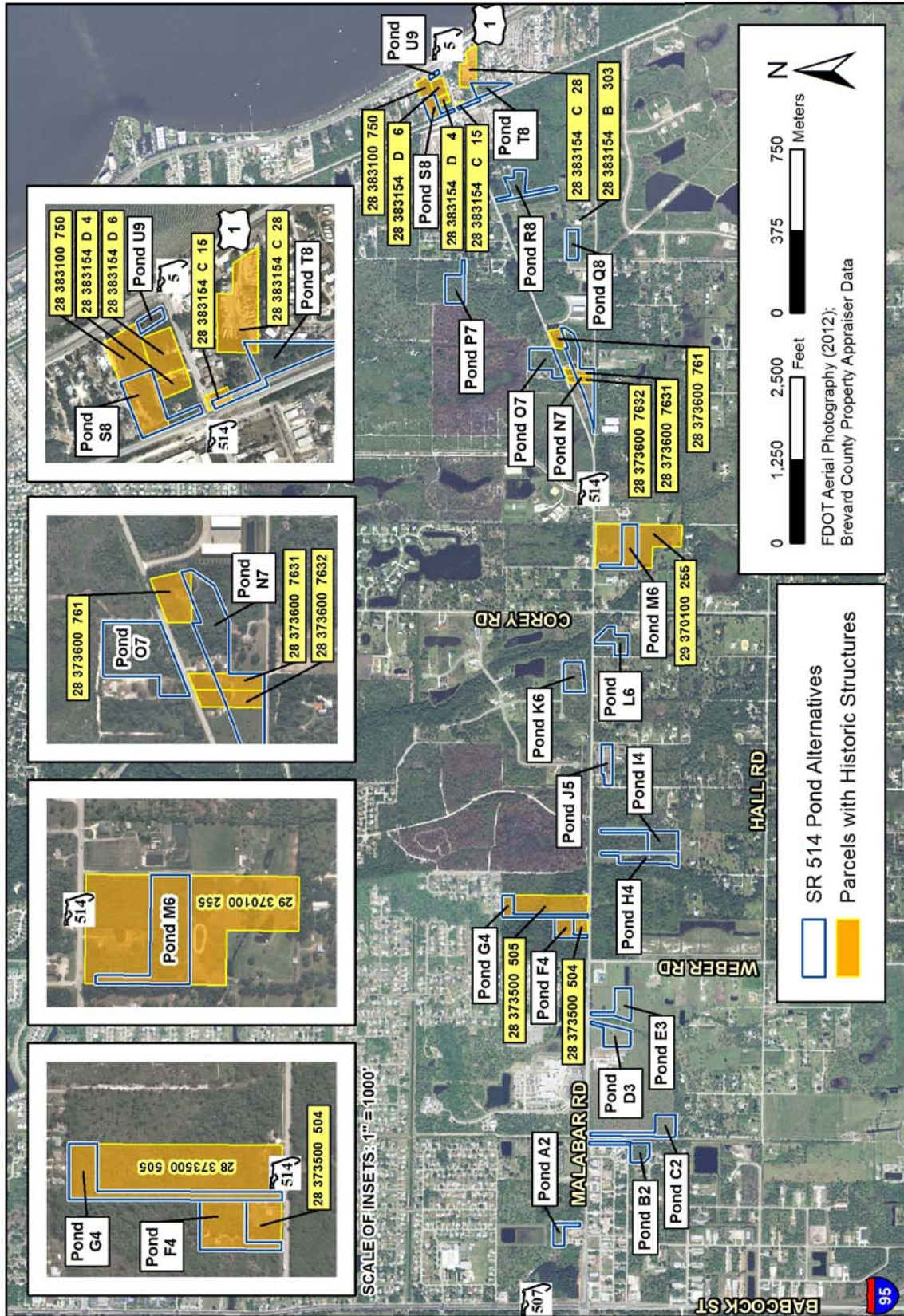


Figure 3. Parcels containing pre-1970 buildings.

Table 1. SR 514 Pond Alternatives Cultural Resources Matrix.

Pond	Previously Surveyed?	Archaeological Probability	Extant Unrecorded Historic Resources?
A2	No	Low (prehistoric and historic)	None
B2	No	Low (prehistoric and historic)	None
C2	No	Low (prehistoric and historic)	None
D3	No	Low (prehistoric and historic)	None
E3	No	Low (prehistoric and historic)	None
F4	No	Low (prehistoric and historic)	28 373500 504 (8BR03118, located outside)
G4	No	Moderate (prehistoric and historic)	28 373500 505 (8BR03117, located outside)
H4	No	Low (prehistoric and historic)	None
I4	No	Low (prehistoric and historic)	None
J5	No	Moderate (prehistoric and historic)	None
K6	Yes (FMSF Survey No.10833)	Low (prehistoric and historic)	None
L6	No	Low (prehistoric and historic)	None
M6	No	Low (prehistoric and historic)	29 370100 255 (8BR03110, located outside)
N7	No	Low (prehistoric and historic)	28 373600 761 (8BR03104); 280373600 7631 (8BR03105); 28373600 7632 (8BR03106)
O7	No	Moderate (prehistoric and historic)	None
P7	No	Low (prehistoric and historic)	None
Q8	No	Low (prehistoric and historic)	None
R8	No	Low (prehistoric and historic)	None
S8	No	High (prehistoric and historic)	28 383100 750 (ca.1930); 28 383154 D 4 (8BR03081- 8BR03083, located outside); 28 383154 D 6 (8BR03079, located outside)
T8	No	High (prehistoric and historic)	280383154 C 28 (2 buildings ca. 1964); 28 383154 C 15 (8BR03086)
U9	No	High (prehistoric and historic)	None

In addition to the cultural resources probability outlined in **Table 1**, the estimated number of shovel tests per proposed pond location is provided in **Table 2**. This estimate is based on the acreage of the pond and the low, moderate or high archaeological potential of the pond location. The majority of the proposed pond locations were considered to have low archaeological potential due to the very poorly or poorly drained nature of the soils (see **Figures 1 and 2**).



Table 2. Estimated Number of Shovel Tests per Pond Location.

Pond Name	Acres
Pond A2	1.57
Pond B2	2.58
Pond C2	3.49
Pond D3	2.83
Pond E3	3.01
Pond F4	2.19
Pond G4	2.60
Pond H4	3.70
Pond I4	4.25
Pond J5	2.18
Pond K6	3.17
Pond L6	2.73
Pond M6	3.97
Pond N7	5.24
Pond O7	3.53
Pond P7	3.26
Pond Q8	1.89
Pond R8	3.04
Pond S8	1.84
Pond T8	2.10
Pond U9	0.28

REFERENCES CITED

Thomas Penders & Associates, Inc.

2004 *A Cultural Resources Assessment Survey of the Proposed Stillwater Preserve Residential Development, Brevard County, Florida*. FMSF Survey No. 10833. On file at the Florida Division of Historical Resources.

SEARCH

2014 *SR 514 (Malabar Road) PD&E Study, Cultural Resource Assessment Survey for SR 514 (Malabar Road) from Babcock Road to US 1, Brevard County, Florida*. FMSF Survey No. 20798. On file, Division of Historical Resources, Tallahassee, Florida.

ATTACHMENT 2:
SURVEY LOG SHEET

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) Phase I CRAS for SR 514/Malabar Road Ponds

Report Title (exactly as on title page) TECHNICAL MEMORANDUM: CULTURAL RESOURCE ASSESSMENT SURVEY OF EIGHT PROPOSED PONDS ALONG STATE ROAD 514 FROM BABCOCK ROAD TO US 1, BREVARD COUNTY, FLORIDA

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

Publication Date (year) 2014 Total Number of Pages in Report (count text, figures, tables, not site forms) 5

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
on file, SEARCH, Newberry. SEARCH project no. 2972. FDOT FM # 430136-1

Supervisors of Fieldwork (even if same as author) Names Pokrant, Marie

Affiliation of Fieldworkers: Organization Southeastern Archaeological Research City Pensacola/Newberry

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)

1. Malabar Road 3. _____ 5. _____ 7. _____
2. Ponds 4. _____ 6. _____ 8. _____

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)

Name _____ Organization ATKINS Global

Address/Phone/E-mail _____

Recorder of Log Sheet Marie Pokrant, MA, RPA Date Log Sheet Completed 9-11-2014

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. Brevard 3. _____ 5. _____
2. _____ 4. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

1. Name GRANT Year 1970 4. Name _____ Year _____
2. Name MELBOURNE EAST Year 1980 5. Name _____ Year _____
3. Name _____ Year _____ 6. Name _____ Year _____

Description of Survey Area

Dates for Fieldwork: Start 8-21-2014 End 8-22-2014 Total Area Surveyed (fill in one) _____ hectares 17.37 acres

Number of Distinct Tracts or Areas Surveyed 8

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 STPs placed judgmentally throughout Pond APEs. Visual inspection for structures built before 1969 within proposed ponds.

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)

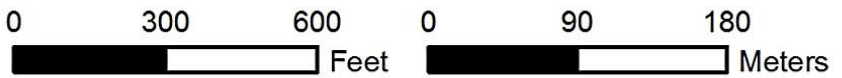
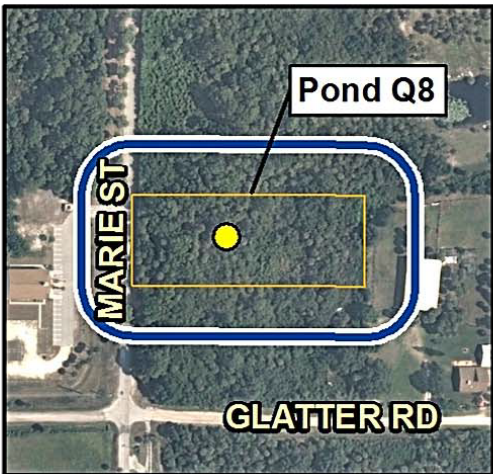
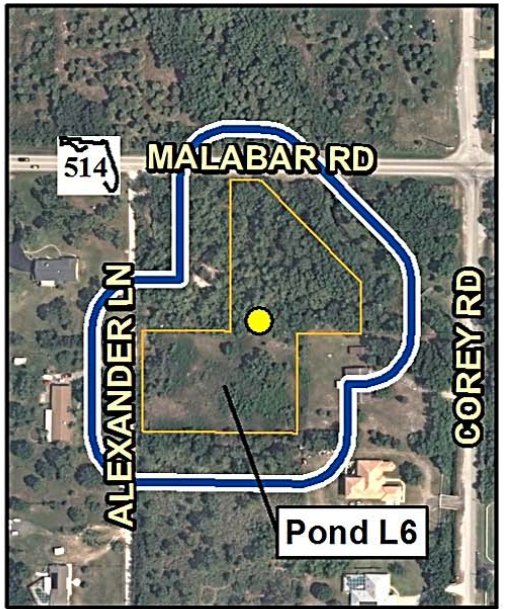
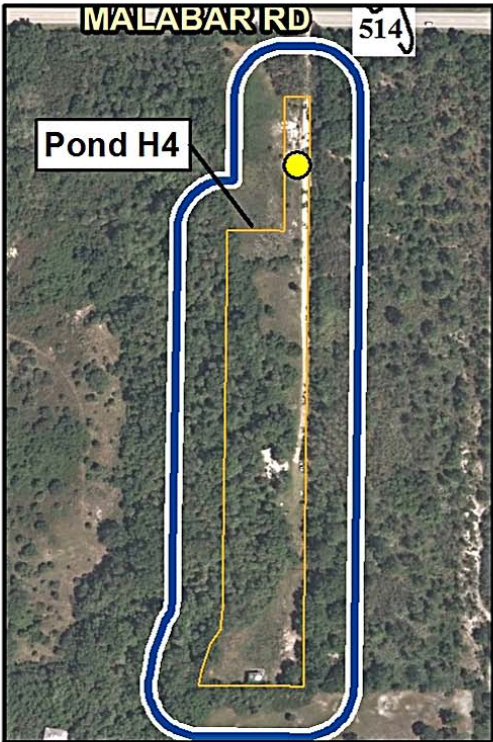
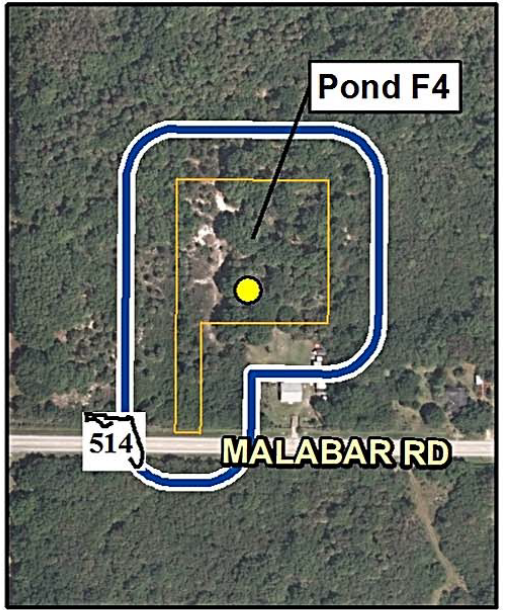
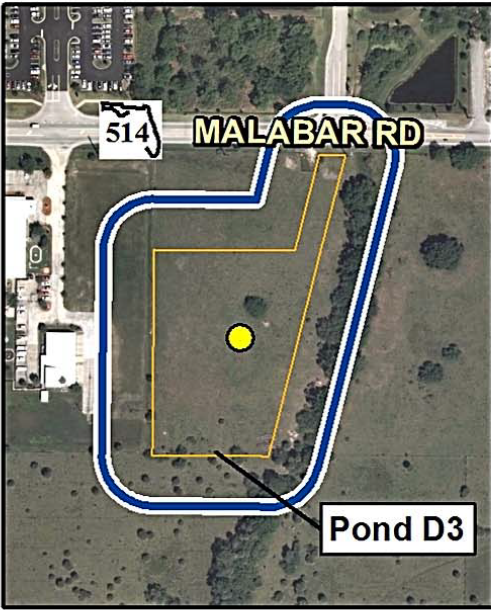
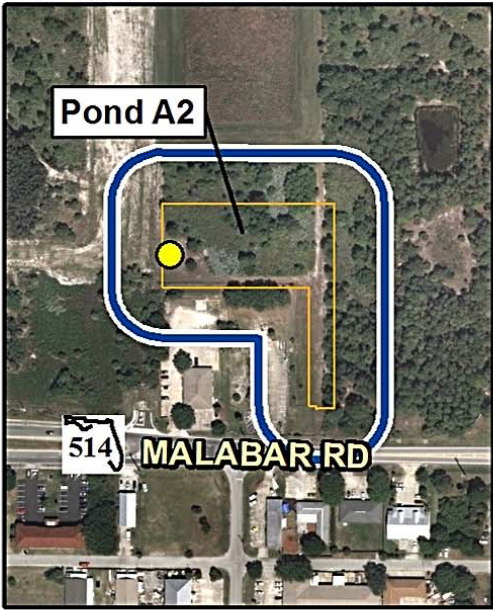
Site Significance Evaluated? Yes No
Count of Previously Recorded Sites 1 Count of Newly Recorded Sites 0
Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) BR00053

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: _____



FDOT Aerial Photography (2012); SEARCH Survey (8/2014)



