GADSDEN COUNTY BUILDING & PLANNING & DEPARTMENT
1-B East Jefferson Street, Post Office Box 1799, Quincy, FL 32353-1799
Phone: (850) 875-8663 Fax: (850) 875-7280
E-mail: planning@gadsdencountyfl.gov Web site: www.gadsdencountyfl.gov

Class II, Type 11 Site Plan

_____ Conceptual/Preliminary x Conceptual _____ Preliminary

1. APPLICANT/OWNER
NAME (Print): Tallahassee Community College
CONTACT PERSON (If Corporation): Dr. Barbara Wills
ADDRESS: 444 Appleyard Drive
CITY: Tallahassee STATE: FL ZIP: 32303
TELEPHONE: (850) 201-8590 E-MAIL: willsba@tcc.edu

2. AUTHORIZED REPRESENTATIVE NAME: Mike Dilger (pending)
ADDRESS: 1967 Commonwealth Lane, Suite 200
CITY: Tallahassee STATE: FL ZIP: 32303
TELEPHONE: (850) 521-0344 E-MAIL: mdilger@gaceng.net

3. Parcel Identification Number 3-26-2N-3W-0000-00400-0000

4. Land Use Category: Public Existing Use: Public

5. Total Parcel Area: 833 Acres Total Development Area: 84 Acres
Number of Buildings: 0 Gross Floor Area: 0 Floor Area Ratio: 0
Number of Stories: 0 Height: 0 Area in Wetlands: 0
Area of Stormwater Facilities: 52,000 SF Impervious Surface Area: 19 Acres
Number of Seats for Restaurants or other places of Assembly: 0
Parking & Driveway Area Paved: 19 Acres Unpaved Parking Area: 0
Number of Parking Spaces: 30 Number of Handicapped Spaces: 2

8. NFIP# 12039C-0263C Flood Zone: X

9. The following plans and documents are required to complete this application for review (also see County Land Development Code (LDC) Chapter 5, Subsections 5207 and 5208 and Chapter 7, Subsection 7102 (Level I) or Subsection 7103 (Level II)):

a. X Two copies of this application with fee ($400) plus concurrency, if applicable.

b. X Six (6) Folded Preliminary Site Plan 24" x 36" prints, **2 signed and sealed** (copies must include the signature and seal), and **a .pdf copy (electronic copy).** Plans addressing the requirements of the LDC.

c. X An up-to-date survey and title opinion (or qualifying deed) with legal descriptions (See Sub. 7103.C of the LDC).

d. X Indication of FEMA Flood Zones/special flood hazard areas and environmental resources (wetlands, streams, creeks, etc.) to be protected on plans, as applicable.

e. X Authorization to Represent, if applicable.

f. X Two (2) copies of an Environmental Impact Assessment per County Land Development Code Section 5400, if applicable.

g. N/A Two (2) copies of a Certified Tree Survey as required per Subsection 5404.B.3 for protected trees, as applicable. Protected trees (greater than 20" diameter) must be shown on site plans. Also show Corridor Road setbacks and plantings (Subsection 5405), if applicable. *See project narrative*

h. N/A The completed Concurrency Review Application and traffic analysis, if applicable.

I hereby certify that the information contained in this application is correct and accurate and that I am either the sole property owner of the subject property, or am the authorized representative of the property owner(s) in all regards pertaining to this application pursuant to proof and/or attached authorization.

_____ I AM THE OWNER.

X I AM THE LEGAL REPRESENTATIVE OF THE OWNER (Attach Authorization to Represent) of the property described which is the subject matter of this application.

_____
Signature of Owner or Authorized Representative

SWORN TO AND SUBSCRIBED BEFORE ME THIS _____ DAY OF _____, 20_____

By _____ who is personally known to me or
Print (Owner or Authorized Representative)

produced I.D. and did take an oath.

SEAL:

_____
Notary Signature

_____
Notary Printed Name

Commission Number: _____

PENDING M.O.U

GADSDEN COUNTY BUILDING & PLANNING DEPARTMENT
1-B East Jefferson Street, Post Office Box 1799, Quincy, FL 32353-1799
PLANNING DIVISION
Phone (850) 875-8663 Fax (850) 875-7280
E-mail: planning@gadsdencountyfl.gov Web site: www.gadsdencountyfl.gov

APPLICATION FOR CONCURRENCY REVIEW

Parcel Identification Number: 3-26-2N-3W-0000-00400-0000

Location/Address: Blue Star Highway East, Havana 32333

Property Owner (Print): Tallahassee Community College (c/o Barbara Wills)

Address: 444 Appleyard Drive City: Tallahassee State: FL Zip: 32304

Phone: 850-201-8590 E-Mail: willsba@tcc.edu

Authorized Representative (Print): Mike Dilger

Address: 1967 Commonwealth Ln, Suite 200 City: Tallahassee State: FL Zip: 32303

Phone: 850-521-0344 E-Mail: mdilger@gaceng.net

Concurrency Requirements are outlined in Chapter 8 of the Gadsden County Land Development Code. Preliminary Development Orders may be issued without a concurrency evaluation. At the applicant's option, concurrency evaluation for water and wastewater services may be deferred until building permit or tap is requested, but no building permit will be issued until concurrency review for water and wastewater is complete.

Size of the project parcel: 833 Acres Land Use Classification: Public

Specific Uses or uses proposed to be expanded: Training course - FHP

Phase #: 0 Total Number of Phases: 0 Residential Units: 0

Gross Floor Area (GFA) or Square footage and number of units for each phase:

Existing GFA, # of units and square footage: 0

Proposed GFA, # of units and square footage: 0

Total GFA, # of units & density: 0

Traffic Impacts:

ITE Code and Existing Level of Service (Attach additional tables & data if necessary.)

Include Trips generated by the proposed project using the latest ITE Trip-Generation Handbook.

ITE Code	Land Use	# Units	Daily Trips	Peak Hour Trips
n/a	n/a	n/a	n/a	n/a
	Totals			

Include the following information for State & County roads impacted by the proposed development.

Road	Segment	Maximum Service Volume	LOS	Existing Peak Hour Volume	PM Peak Hour Trips Added	New Peak Hour Volume
n/a	n/a	n/a	n/a	n/a	n/a	n/a

LOS standards do not apply to local roads. Information required can be obtained from the FDOT District 3 Level of Service Tables at http://www.fdot.gov/planning/systems/programs/SM/los/districts/district3/2016/Gadsden.pdf.

Turn Lane Analysis will be required for major projects as required by FDOT.

Public School Capacity:

Planning will calculate impact to LOS based on # of Residential units proposed.

Parks:

Planning will calculate impact to LOS based on # of Residential units proposed.

I hereby certify that the information contained in this application is true and accurate and that I am either the owner or the subject property, or am the authorized representative of the property owner in regards to this matter.

____ I AM THE OWNER

X I AM THE LEGAL AUTHORIZED REPRESENTATIVE OF THE OWNER (Reference attached affidavit of ownership or Authorization to Represent submitted with development permit application to Gadsden County)

**

Signature of Owner or Authorized Representative

Date

Pending M.O.U

GADSDEN COUNTY
AUTHORIZATION TO REPRESENT

If the applicant is not the property owner an 'Authorization to Represent' is required.

This letter serves as notice that on this date: June 23, 2017

I/We, Tallahassee Community College (c/o Dr. Barbara Wills)
(Print name of property owner(s) and/or entity & authorized representative)

Hereby give authorization to,

George & Associates Consulting Engineers, Inc. (c/o: Robert George, Michael Dilger, Michael Freidin)
(Print name of authorized representative or entity. If the representative is an entity, print the name of all individuals representing the entity for the purposes of this statement)

1967 Commonwealth Lane, Suite 200 *Address* | Tallahassee, FL *City* | 32303 *Zip Code*

850-521-0344 *Telephone number* | mdilger@gaceng.net *E-mail Address*

To apply for an Pre-application, Citizens Bill of Rights, Site Plan application, concurrency application, etc. application and all necessary permits as part of the Gadsden County, Florida review process from the Gadsden County Planning & Community Development Department for the property described below:

3-26-2N-3W-0000-00400-0000 *(Parcel identification number)* | Blue Star Highway East Havana, FL 32333 *(E911 address)*

** *(Signature of property owner or entity & representative)* | *(Print name of property owner and/or entity)*

STATE OF FLORIDA, COUNTY OF _____

Sworn to and subscribed before me this __ day of _____, 20___, by

___Personally Known or Identification Produced _____

(Signature of Notary of Public – State of Florida) | *(Name of notary – typed, printed or stamped)*

Notary Seal

PENDING M.O.U (MEMORANDUM OF UNDERSTANDING) BETWEEN FHP & TCC/FPSI

(SEE NEXT PAGE)

MEMORANDUM OF AGREEMENT
BETWEEN
FLORIDA HIGHWAY PATROL
AND
TALLAHASSEE COMMUNITY COLLEGE,
FLORIDA PUBLIC SAFETY INSTITUTE

THIS MEMORANDUM OF AGREEMENT is entered into by and between THE FLORIDA HIGHWAY PATROL, A DIVISION OF THE FLORIDA DEPARTMENT OF HIGHWAY SAFETY AND MOTOR VEHICLES, whose address is 2900 Apalachee Parkway, Tallahassee, Florida 32399, hereinafter referred to as the "**FHP**,' and THE DISTRICT BOARD OF TRUSTEES OF TALLAHASSEE COMMUNITY COLLEGE, FLORIDA PUBLIC SAFETY INSTITUTE, whose address is 75 College Drive, Havana, Florida 32333-9735, hereinafter referred to as the "**Owner**."

WHEREAS, the parties to this Agreement have a common desire to have a high speed test track ("the "Project") constructed on the Owner's property; and

WHEREAS, Owner did not solicit bids from contractors for the construction of the Project within the confines outlined in **Exhibit A,** because FHP is constructing the Project at its own expense.

WHEREAS, the parties to this Agreement are willing participants in this project and are authorized to execute this agreement and carry out the responsibilities and duties of this Agreement;

WHEREAS, in mutual consideration of this Agreement, Owner agrees to provide FHP with a lease for use of the Project once complete. In return, FHP agrees to complete or to contract with third parties to complete construction of the Project. Both parties assent mutual consideration is found in this Agreement.

THEREFORE, in consideration of the mutual benefits anticipated by the parties, FHP and Owner agree as follows:

Article 1. THE CONTRACT DOCUMENTS

1.1 The "Contract for Services" constitutes the entire agreement between Owner and FHP and consists of: (1) this Agreement; (2) any and all exhibits and attachments hereto; (3) special conditions, if any; and (4) any amendments or addenda executed by the Owner and FHP hereafter.

1.2 Documents not included or expressly contemplated in this Article do not, and shall not, form any part of the Contract for Services.

1.3 At all times FHP is performing services, it shall comply with the terms of this Agreement, applicable federal, state and local laws, rules, and regulations.

Article 2. THE AGREEMENT

2.1 Pursuant to Fla. Stat. § 1013.46, Section 423 of the Florida Building Code, and State Requirements for Educational Facilities (SREF), Owner is required to prequalify contractors as eligible to bid on construction or capital improvement projects. Thus, FHP shall only hire a contractor and/or all subcontractor(s) (contractor and/or all subcontractors hereinafter collectively referred to as "Construction Parties") prequalified by Owner.

2.2 FHP shall, in consultation with the Owner, and the Construction Parties, endeavor to develop, implement and maintain a spirit of cooperation, collegiality, and open communication among the parties so that the goals and objectives of each are clearly understood, potential problems are resolved promptly, and, upon completion, the Project is deemed a success by all parties.

2.3 FHP shall supervise and direct the work at the Site. FHP shall, at a minimum, staff, or agree with the Construction Parties to staff the Project Site with personnel who shall:

(i) supervise and coordinate personnel and act as its primary liaison with the Owner;

(ii) coordinate trade contractors and suppliers, and supervise Site construction services;

(iii) be familiar with all trade divisions and trade contractor's scopes of Work, all applicable building codes, and any contracts for construction of the Project;

(iv) check, review and coordinate shop drawings and materials delivered to the Site, regularly review the Work to determine its compliance with the Contract for Services, periodically confer with the Owner and the Owner's designee to assure acceptable levels of quality;

(v) prepare and maintain Project records, including process documents and daily logs;

(vi) schedule and conduct weekly progress meetings with contractors to review such matters as jobsite safety, job procedures, construction progress, schedule, shop drawing status, and other information as necessary and provide prior notification of, and minutes from, such meetings to the Owner;

(vii) schedule and conduct weekly progress meetings with the Owner to review such matters as construction progress, schedule, shop drawing status, and other information as necessary;

(viii) make provision for Project security to protect the Project site and materials stored off-site against theft, vandalism, fire and accidents as required by the General Terms and Conditions; and

(ix) provide documentation necessary to the Owner for, and otherwise assist the Owner with, the preparation of the final "as-built" or record drawings.

2.4 FHP shall provide a monthly report summarizing the progress of the Project to the Owner, including information on the Construction Parties' Work, percentage of completion of the Work and Project accounting reports, including projected time to completion and estimated cost to complete the Work, digital progress photographs, project directory, logs for Requests for Information, submittals and shop drawings, Change Orders, cost change proposals, field directives, safety meetings, deficiencies, weather conditions, and meeting minutes.

2.5 Owner shall retain sign-off authority on the scope of work and any change orders outlined in this Agreement.

2.6 Owner shall retain permitting authority for any and all licenses, permits, or other access granted to the Project.

Article 3. TIME OF COMMENCEMENT AND COMPLETION

3.1 FHP shall commence the Work within ten (10) calendar days after _____, and shall be Finally Completed by _____.

3.2 Once the Project is completed, Owner and FHP agree to enter into a long-term lease commencing on _____ and running for _____ years.

Article 4. MISCELLANEOUS PROVISIONS

4.1 Owner and FHP, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors and assigns of such other party with respect to all covenants of this Agreement. FHP shall not assign this Agreement, whether by operation of law or otherwise, without the written consent of Owner.

4.2 This Agreement shall be governed by, and construed under, the laws of the State of Florida and venue shall lie in the courts in Leon County, Florida.

4.3 FHP represents and warrants that it has not employed or retained any company or person (other than a bona fide employee working solely for FHP) to solicit or secure this Agreement, and that it has not paid or agreed to pay any person, company, corporation individual or firm (other than a bona fide employee working solely for FHP) any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Agreement.

4.4 The Agreement may be unilaterally canceled by the Owner for refusal by FHP to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by FHP in conjunction herewith.

4.5 FHP warrants that it is not on the State of Florida's convicted vendor list for a public entity crime committed within the past thirty six (36) months. FHP further warrants

that it will neither utilize the services of, nor contract with, any Construction Parties, supplier, subcontractor, or consultant for an amount in excess of $15,000.00 in connection with this Project if the supplier, subcontractor or consultant has been placed on the State of Florida's convicted vendor list within the past thirty-six (36) months.

4.6 Owner is an equal opportunity institution and as such, encourages the use of small businesses including women and minority-owned small businesses in the provision of construction related services. Small businesses should have a fair and equal opportunity to compete for dollars spent by the Owner to procure construction-related services. Competition ensures that prices are competitive and a broad vendor base is available. FHP shall use good faith efforts to ensure opportunities are available to small businesses including women and minority-owned small businesses on the Project.

4.7 All exhibits referenced herein are attached hereto and incorporated herein by reference.

4.8 This Agreement represents the entire and integrated agreement between the Owner and FHP, and supersedes all prior negotiations, representations or agreements, either written or oral, for the Project. This Agreement may be amended only by written instruments signed by both the Owner and FHP.

4.9 FHP shall provide Owner and its representatives access to the Work in preparation and progress wherever located.

4.10 FHP shall not by any means:

(i) induce any person or entity employed in the construction of the Project to give up any part of the compensation to which that person or entity is entitled;

(ii) offer nor accept any bribes or kick-backs in connection with the Project from or to any individual or entity, including any of its trade contractors, subcontractors, consultants, suppliers or manufacturers of Project goods and materials; or

(iii) without the express written permission of the Owner in accordance with Owner's policies on the subject, in effect at the time FHP commences construction, call for or by exclusion require or recommend the use of any subcontractor, consultant, product, material, equipment, system, process or procedure in which FHP has a direct or indirect proprietary or other pecuniary interest.

4.11 Until this Agreement terminates, FHP shall ensure that all Construction Parties carry the insurance, proper licensing and payment and performance bonds described under Florida law and as described in the General Terms and Conditions.

4.12 Prior to construction beginning on the Project, FHP agrees to provide Owners with a Project Manual which shall include, but not be limited to, the following:

(i) Title page including a statement of compliance by the architect or engineer of record;
(ii) Signed and sealed table of contents;
(iii) Schedule of drawings;
(iv) Time to complete construction;
(v) Sample forms;
(vi) Bonding requirements;
(vii) Insurance requirements;
(viii) General conditions and supplementary conditions;
(ix) Soil testing results;
(x) Specifications, including requirements for materials, equipment, construction systems, standards, workmanship and performance of related services; and
(xi) addenda.

4.13 Owner and FHP shall comply with the SREF, 6A-2.0010, FAC, Florida Statutes and federal laws for all portions of this Agreement and the Project. Specifically, the parties agree:
(i) Owner will make sure all construction and site development for the Project is coordinated with the local comprehensive plan as required in Section 1013.33, Florida Statutes;
(ii) FHP will make sure the Project is constructed to meet a nationally recognized high-performance green building rating system as approved by the Department of Management Services;
(iii) All building materials comply with the minimum casualty safety and sanitation requirements.

Article 5. INDEMNITY

5.1 For good and valuable consideration, FHP shall to the fullest extent permitted by Florida law (specifically Section 768.28, Florida Statutes, as applicable), indemnify, hold harmless, protect and defend Owner and all of their agents and employees (the "Indemnitees") from and against all claims, damages, losses, liabilities and expenses (including but not limited to attorney's fees, other litigation expenses, and punitive damages if allowed by applicable law), arising out of or resulting from the performance of FHP's work or other activities or service of any kind undertaken by FHP, whether occurring on or off the Project's site, whether or not caused in part by the active or passive negligence or other fault of a party indemnified hereunder, provided that any such claim, damage, loss, liability or expense (a) is attributable to bodily injury, sickness, disease, or death of any persons (including employees of FHP and any third parties), or patent infringement or to injury to or destruction of tangible property including the loss of use resulting therefrom; (b) is caused in whole or in part by any negligent or wrongful act or omission of FHP or anyone directly or indirectly employed by it or anyone whose acts it may be liable, or is caused by or arises out of the use of any product, material or equipment furnished by FHP; and (c) is not attributable to the sole negligence of a party indemnified hereunder.

Article 6. INSURANCE AND LICENSURE

6.1 Owner shall verify that FHP and all other Construction Parties have a valid license, as required by Chapter 489, Florida Statutes.

6.2 FHP shall maintain, at a minimum, at all times during the course of the work at FHP's cost and expense the coverages, terms, riders and amendments, required of FHP and other Construction Parties by the insurance provisions of the provisions laid out in this section. Such insurance shall be maintained with insurance companies both acceptable to Owner and licensed to transact business and issue insurance in the State of Florida.

6.3 At all times during the term of this Contract, FHP and all Construction Parties shall keep in effect the following types of insurance: (i) commercial general liability insurance, including products liability, completed operations hazard, advertising injury liability, and personal injury liability insurance at a minimum limit of liability of _____ per occurrence; (ii) workers' compensation or qualified self-insurance, if required by Florida law; and (iii) any other insurance required by Florida law.

6.4 FHP shall ensure that it and all Construction Parties: (i) have commercial general liability insurance policies naming Owner and the Florida Public Safety Institute ("FPSI") as additional insureds (which may be by blanket endorsement), and is primary and non-contributing with any similar insurance maintained by Owner; (ii) all policies are written with insurers with a rating of A-VII or better in Best's insurance guide (or comparable rating in any successor guide), and each insurer is licensed to do business in the State of Florida; and (iii) all policies contain a waiver of the insurer's right of subrogation in respect of any claim against Owner, and contain no exclusion clause for the claims of one insured versus another insured or for the acts of one insured affecting another insured, but instead contain a separation of insureds clause whereby each insured shall be treated separately as respects any claim made or suit brought. FHP shall provide Owner with thirty (30) days prior written notice of termination, expiration, lapse, cancellation, or material change or amendment of FHP's commercial general liability insurance policy.

6.5 Upon Owner's request, FHP shall notify Owner of the effective date of each insurance policy and shall submit to Owner a certificate of insurance that provides evidence that the required coverage is in effect. FHP shall ensure that the certificate of insurance identifies Owner and FSPI as additional insureds on FHP's commercial general liability insurance policy.

6.6 In any action related to the Project in which Owner or its insurer is named as a party to a legal action, FHP shall make responsible efforts to allow Owner (and its insurer) to participate in discussions with FHP's insurance carrier regarding defense of the claim, and to allow Owner to participate in any material discussions with any plaintiff, including settlement.

6.7 In the event FHP fails or neglects to obtain or renew the required insurance and furnish evidence thereof to Owner with the executed Certificate of Insurance Form, Owner shall have: (a) the right, but not obligation, to procure such insurance charge FHP for the cost thereof; or (b) to deem such failure or neglect on the part of FHP as a material breach of this Agreement.

Article 7. NOTICES:

Whenever under the terms of this Agreement written notice is required or permitted to be given by any party to any other party, such notice shall be in writing and shall be deemed to have been sufficiently given if personally delivered, delivered by a national overnight courier service (such as Federal Express), transmitted by electronic facsimile or delivered (or delivery is refused) by United States Mail, in a properly stamped envelope, certified or registered mail, return receipt requested, addressed to the party to whom it is to be given, at the address hereinafter set forth. Any party hereto may change its address by written notice in accordance with this Section:

To FHP: The Florida Highway Patrol, a Division of The Florida Department of Highway Safety and Motor Vehicles
2900 Apalachee Parkway
Tallahassee, Florida 32399
Attn: _____

To Owner: The District Board of Trustees Of Tallahassee Community College, Florida Public Safety Institute
75 College Drive
Havana, Florida 32333-9735
Attn: Barbara K. Wills

IN WITNESS WHEREOF, the parties have affixed their signatures, effective on the date first written above.

The District Board of Trustees of Tallahassee Community College	The Florida Highway Patrol, a Division of The Florida Department of Highway Safety and Motor Vehicles
_____	_____
Barbara K. Wills, Vice President of Administrative Services & CBO	_____, _____
_____	_____
Date	Date

Approval as to form and legality:

College Attorney

Approval as to form and legality:

Department Attorney

Attachments included as part of this Agreement:
A - Project Location
A-1- FSPI Survey Map

EXHIBIT A: PROJECT LOCATION

Project Number: _____

Project Location: The Project is outlined in black on the FPSI Survey Map, attached as Exhibit A-1, and is located within the following coordinates in U.S. Survey Foot:

277 ACRES WITHIN PARCEL ID: 3-26-2N-3W-0000-00400-0000. FURTHER DESCRIPTION IS AS FOLLOWS:

BEGIN AT THE NWC OF SECT 36-2N-3W, RUN N88*37’49”E 2640.94 FT TO NEC OF NW1/4 OF SAID SECT 36; S00*40’14”E ALONG THE APPROXIMATE EQST LINE OF THE W1/2 OF SAID SECT 36 4902.05 FT TO THE NORTH RT/WY OF I-10; N58*42’35”W 54.07 FT; N54*39’41”W 701.80 FT; N58*43’34”W 2489.13FT; N00*00’00”W 1917.34 FT; N02*15’59”E 1213.91 FT TO POB.

GEORGE & ASSOCIATES
CONSULTING ENGINEERS
1967 COMMONWEALTH LANE, SUITE 200
TALLAHASSEE, FLORIDA 32303

August 14, 2017

Gadsden County Planning and Community Development Department
1-B East Jefferson Street
Quincy, FL 32353-1799
850-875-8663

Re: Gadsden County Building and Planning
Class II, Type 11 *Site Plan Conceptual Application*
***Florida Highway Patrol Test Track Facility* – FPID No.: 439931-1-52-01**

The Florida Highway Patrol Test Track Facility is a new construction project in Gadsden County to be located within the Florida Public Safety Institute Complex off U.S. 90 (Blue Star Highway East). The parcel is located in Gadsden County (District 7) in Section 26, Township 2N and Range 3W with a Future Land Use Designation of Public.

The proposed project consists of raw land preparation and new roadway construction for the test track facility that will be located on the southernmost portion of the 833-acre parcel within the Florida Public Safety Institute Complex. The proposed Test Track Facility location is adjacent to Interstate-10 and borders two other parcels of land with a Future Land Use Designation of Rural Residential and Agricultural 3. A minimum of twenty-five feet wide (25') Type B opaque buffer will be provided as shown in the plans.

There are no existing utilities currently within the project limits. Utilities and other underground infrastructure will not be included in this project as they are not required.

The minimum required parking spaces for the proposed Test Track Facility is shown in the plans provided. Due to the Class II land use category, a preliminary parking analysis was performed to determine the total amount of spaces that will be required to provide ample spaces. The classrooms sizes ultimately dictated the amount of spaces required. There will be no more than 30 student and instructor vehicles at the proposed Test Track Facility at more than one time. Therefore, the design has 30 spaces and 2 ADA accessible spaces currently designed.

The existing land features where the proposed track is located includes an open space where planted pines were clearcut/harvested sometime late 2013 to early 2014. An aerial plan sheet has been provided to show current conditions. The current plans indicate a natural wetland buffer of 50' to be maintained and not to be disturbed at all wetland locations. There are no other rivers, streams, creeks, or lakes within the project limits.

Project limitations/construction limits are shown on Sheet C-103 and C-301.

Hours of operations are those already established with FPSI. Generally, from 8:00 am to 5:00 pm. Some occasional night time driving/courses should be anticipated. Noise levels should not be of concern. There is a substantial buffer distance from the parcel to the north and is adjacent to I-10. Noise is not expected to exceed those of the surrounding area.

Should you have any questions or comments, please feel free to give me a call at the number listed below or by email at mdilger@gaceng.net.

Sincerely,

Michael Dilger, P.E.
Project Manager
George & Associates, Consulting Engineers, Inc.

SURVEYORS REPORT
Florida Highway Patrol Test Track Facility 439931-1-32-01
06/14/2017

1.0 PROJECT INFORMATION

1.1 Certified to:	Florida Department of Transportation District 3
1.2 Firm:	Diversified Design and Drafting, Inc. (3DS) L.B. 6844 2374 Capital Circle N.E Tallahassee, Florida 32308 (850-385-1133)
1.3 Surveyor in Responsible Charge	Jason D. Hill, P.S.M 6008 (jason@dddsinc.com)
1.4 Party Chiefs:	Tavares R Miles and Charles Harvey
1.5 Cad Technician	Sands Rudd
1.6 Project Description:	The Florida Highway Patrol Test Track Facility is a new construction project in Gadsden County. The purpose of the survey is to provide existing site conditions for design of new test track facility. The site is a 180 +\- acres of recently cleared planted pines.
1.7 Survey date:	Start: April 2017 End: May 2017
1.8 Field Book Numbers:	Intentionally blank page
1.9 CAiCE Database:	439931
1.10 Units of measure:	U.S Survey Feet

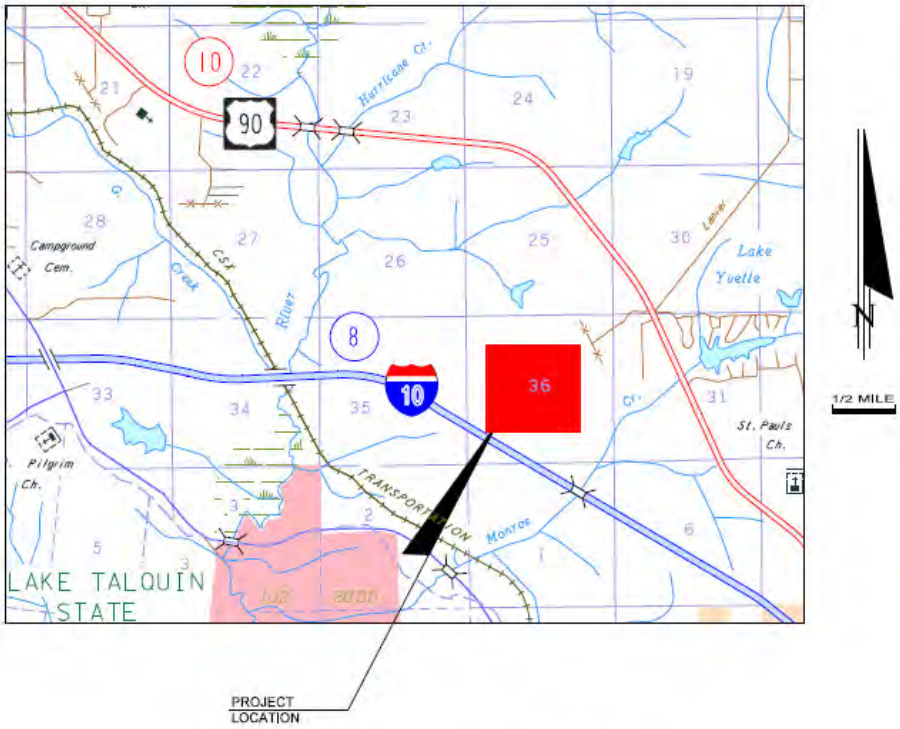
2.0 Type of Survey	New Construction

Gadsden County

Test Track

Florida Highway Patrol Test Track Facility located
at the Pat Thomas Law Enforcement Academy

FPID: 439931-32-01
Section No.: 50000000



PROJECT LOCATION MAP

3.0 Methodology

3.1	All topographic data was collected with conventional leveling by taking cross sections every 100' throughout project.
3.2	If Monumentation falls outside of project control, RTK will be used using Trimble R8_3 and located at least twice.
3.3	Data collected was manually input into and edited in CAiCE and delivered in Microstation SS4 MR3
3.4	GPS and level data will be processed using Trimble Business Center version 3.40.
3.5	This survey complies to all procedures and accuracy requirements as shown in Florida Department of Transportation Handbook dated October 10, 2016 and Survey Guidelines for District 3 dated July 2013
3.6	DTM Criteria Max. Triangle Distance 100 Feet Max. Break Line Length 50 Feet Max. Triangle Angle 179.9

4.1 Horizontal Datum	NAD(83)-(2011)-(Epoch 2010.0000)
4.2 Vertical Datum	NAVD88
4.3 Horizontal & Vertical Control Points	

DESIGNATION	B/L STATION	OFFSET	ELEVATION	DESCRIPTION	NORTHING (Y)	EASTING (X)	LATITUDE	LONGITUDE	ELLIP. HT. (METRIC UNITS)	SCALE FACTOR
105	105+00.0	0	196.508	SET IRON ROD 3DS CONTROL STAMPED BM105	555376.3103	1971703.5185	30°31'37.6197"	84°29'23.3719"	32.1980	0.99996808
110	110+00.0	0	198.262	SET IRON ROD 3DS CONTROL STAMPED BM110	555668.4597	1971297.7492	30°31'40.5117"	84°29'28.0111"	32.7330	0.99996817
115	115+00.0	0	195.517	SET IRON ROD 3DS CONTROL STAMPED BM115	555960.6091	1970891.9799	30°31'43.4037"	84°29'32.6504"	31.8960	0.99996826
120	120+00.0	0	190.862	SET IRON ROD 3DS CONTROL STAMPED BM120	556252.7585	1970486.2105	30°31'43.2957"	84°29'37.2897"	30.4770	0.99996835
125	125+00.0	0	183.737	SET IRON ROD 3DS CONTROL STAMPED BM125	556544.9079	1970080.4412	30°31'49.1876"	84°29'41.9291"	28.3060	0.99996843
130	130+00.0	0	178.600	SET IRON ROD 3DS CONTROL STAMPED BM130	556837.0573	1969674.6719	30°31'52.0795"	84°29'46.5686"	26.7410	0.99996852
140	140+00.0	0	166.923	SET IRON ROD 3DS CONTROL STAMPED BM140	557421.3600	1968863.1300	30°31'57.8632"	84°29'55.8478"	23.182	0.9999687
141	141+00.0	0	166.961	SET IRON ROD 3DS CONTROL STAMPED BM141	557479.7841	1968781.9819	30°31'58.4415"	84°29'56.7757"	23.193	0.99996872

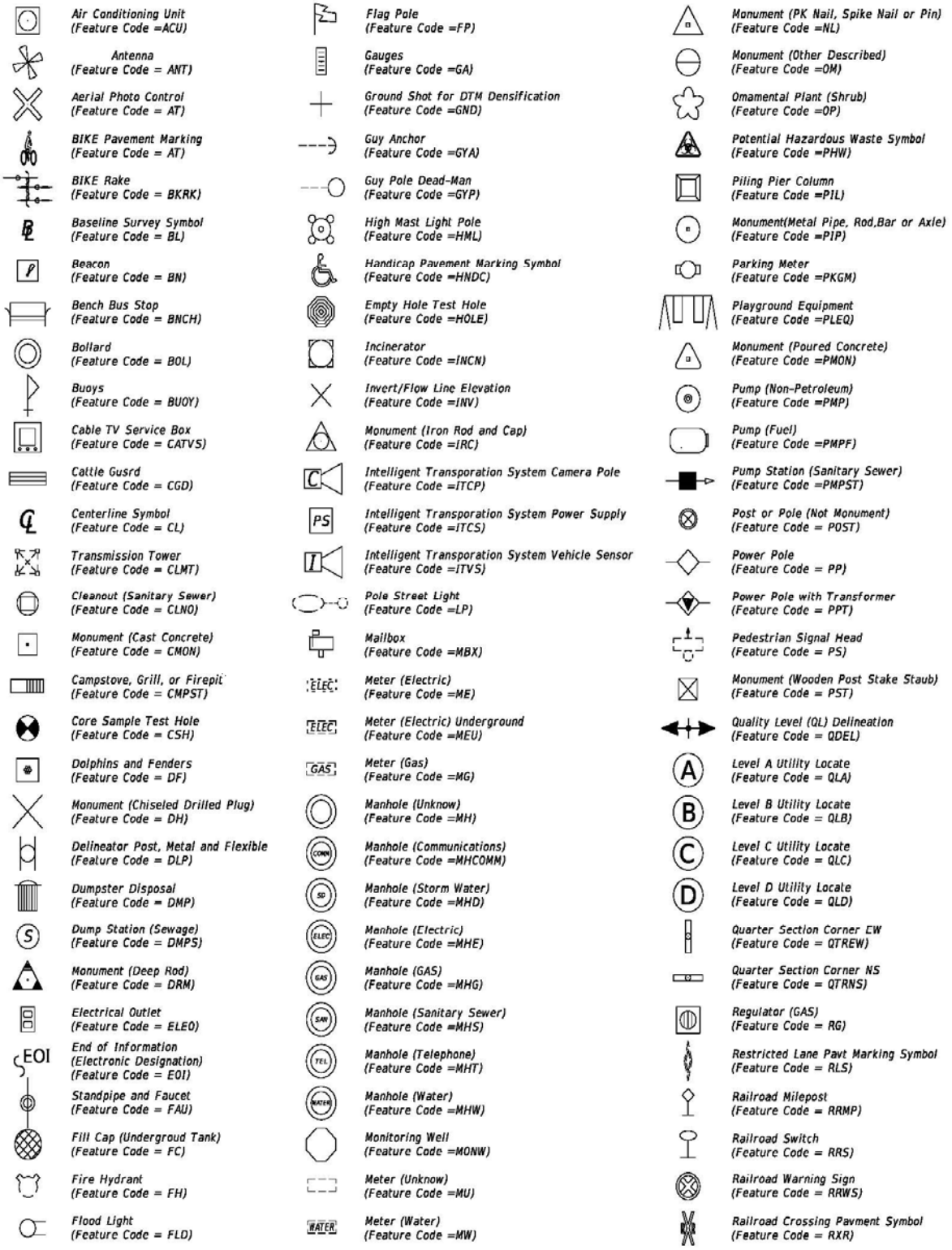
5.0 Sources

5.01	FDOT CAiCE Database 439931
5.02 Right of Way Maps	Intentionally blank page
5.03 Plats	Intentionally blank page
5.04 Official Records	Official Records Book 567 Page 1429
5.05 Certified Corner Records	Intentionally blank page
5.06 Aerials	GAD2016_643423.sid, GAD2016_643424.sid, GAD2016_643425.sid, GAD2016_643963.sid, GAD2016_643964.sid, GAD2016_643965.sid, GAD2016_644503.sid, GAD2016_644504.sid, GAD2016_645043.sid, GAD2016_645044.sid, GAD2016_645045.sid
5.07 Sunshine One Call Tickets	Intentionally blank page
5.08 Received Information	C 303 Site Plan , Wetland Locations (From EGS)
5.09	Intentionally blank page
5.10	Intentionally blank page
5.11	Intentionally blank page

6.00 General Notes

6.01 Bearing Basis	Bearing are based upon control points set using FPRN which were in the Florida state plane coordinate system, north zone, lambert projection, north American datum 83/11, US survey foot. Bearing are referenced to a grid bearing of N 54°14’48 W along the centerline of survey between stations 100+00.00 and 141+00.00.
6.02 Scale	The map of survey is intended to be displayed at a scale of 1/100 or smaller.
6.03 Underground Utilities	Intentionally blank page
6.04	Intentionally blank page
6.05	Intentionally blank page
6.07	Intentionally blank page
6.08	Intentionally blank page
6.09	Intentionally blank page

7.0 Legend and Abbreviations



Legend & Abbreviations


Monument (Slake & Tac)
(Feature Code =SAT)


Antenna Sattelite Dish
(Feature Code =SATD)


Section Corner
(Feature Code =SECT)


Cantilevered Sign Column (Large)
(Feature Code =SGNC)


Shared Pole
(Feature Code =SHP)


Shared Pole with Transformer
(Feature Code =SHPT)

Shrub
(Feature Code =SHR)


Shrub (Coniferous)
(Feature Code =SHRC)


Shrub (Deciduous)
(Feature Code =SHRD)


Seasonal High Water Mark
(Feature Code =SHWM)


Traffic Signal Head
(Feature Code =SIG)


Traffic Signal Controller
(Feature Code =SIGC)


Traffic Signal Head (Pedestal Mounted)
(Feature Code =SIGP)


SILO
(Feature Code =SILO)

Traffic Signal Pole and Mast Arm
(Feature Code =SMA)


Standpipe (Water)
(Feature Code =SP)


Sprinkler Head
(Feature Code =SPH)


Intellignet Transporation System
Fiber Splice Enclosure
(Feature Code =SPLE)


Intellignet Transporation System
Fiber Splice Vault (Buried)
(Feature Code =SPLV)

Spring or Water Source
(Feature Code =SPR)

Service Cabinet
(Electric or Telephone)
(Feature Code =SRVC)


Traffic Signal Wire Pole
(Feature Code =SSP)


Sign (Single Pole Support)
(Feature Code =SSS)


Tree Stump
(Feature Code =STM)


Monument (Stamped Disk)
(Feature Code =STMD)


Monument (Stamped Plate)
(Feature Code =STMD)

Storage Tank
(Feature Code =STTK)

Railroad Signal Gate
(Feature Code =SWG)


Telephone Booth
(Feature Code =TB)


Telephone Pole
(Feature Code =TELP)


Tide Gauge
(Feature Code =TG)

Test Hole (QLA Only)
(Feature Code =THA)


Telephone Pedestal
(Feature Code =TPD)


Tree (Unknow)
(Feature Code =TREE)


Tree (Coniferous)
(Feature Code =TREE)


Tree (Citrus)
(Feature Code =TREECI)


Tree (CYPRESS)
(Feature Code =TREECY)


Tree (Deciduous)
(Feature Code =TREED)


Tree (Oak)
(Feature Code =TREEOA)


Tree (Palm)
(Feature Code =TREEPA)

Tree (Palm Clump)
(Feature Code =TREEPC)

Tree (Pine)
(Feature Code =TREEPI)

Transformer
(Feature Code =TRNF)

Tower, Power Transmission
(Feature Code =TWRTRANS)

Underdrain Box
(Feature Code =UDBX)

Subsurface Utility Marker
(Feature Code =UMKR)

Unknow Point Cell
(Feature Code =UNK)

Valve Box (Unknow)
(Feature Code =VB)

Valve Box (Gas)
(Feature Code =VBG)

Valve Box (Non-Potable Water)
(Feature Code =VBNPW)

Valve Box (Sanitary Sewer)
(Feature Code =VBS)

Valve Box (Water)
(Feature Code =VBW)

Valve Cover (Unknow)
(Feature Code =VC)

Valve Cover (Effluent)
(Feature Code =VCEF)

Valve Cover (GAS)
(Feature Code =VCG)

Valve Cover (Non-Potable Water)
(Feature Code =VCNPW)

Valve Cover (Raw Water)
(Feature Code =VCRW)

Valve Cover (Sanitary Sewer)
(Feature Code =VCS)

Valve Cover (Water)
(Feature Code =VCW)

Valve Cover (Unknown)
(Feature Code =VLV)

Valve (Black Flow Preventer)
(Feature Code =VLVB)

Valve (GAS)
(Feature Code =VLVG)

Valve (Non Potable Water)
(Feature Code =VLVNPW)

Valve (Sanitary Sewer)
(Feature Code =VLVS)

Valve (Water)
(Feature Code =VLVW)

Vent (Unknow)
(Feature Code =VNT)

Vent (Gas)
(Feature Code =VNTG)

Vent (Sanitary Sewer)
(Feature Code =VNTS)

Well (Water)
(Feature Code =WELL)

Wind Mill
(Feature Code =WIM)

Wetland Point
(Feature Code =WLPT)

Wiring Pull Box (Lighting or Signal)
(Feature Code =WBP)

Cross Section Point
(Feature Code =XS)

Legend & Abbreviations

= AccessRamp (White)

= Agriculture Field (Green)

= Archaecological Site (Green)

= Area Obscured (Red)

= Attenuator (White)

= Embankment (Brown)

= Bridge (White)

= Bridge Element (White)

= Building (Blue)

= Building Overhang (Blue)

= Bus Stop (Purple)

= Cable Barrier (White)

= Canel (Cyan)

= Canopy (White)

= Cattle Guard (Cyan)

= Cemetery (White)

= Curb Gutter Back (Yellow)

= Curb Gutter (White)

= Curb Gutter Face (Yellow)

= Concrete Slab (White)

= Construction Line (Blue)

= Conveyor (White)

= Curb Ramp (Green)

= Curb Ramp Warning (Yellow)

= Deck (Cyan)

= Ditch (Cyan)

= Ditch Pavement (White)

= Docks (White)

= Driveway (Cyan)

= Drain Grate (Brown)

= Drain Juction Box (Brown)

= Drain Miscellaneous (Brown)

= Drain Pipes (Brown)

= Drain Special (Brown)

= Drain Spillway (Brown)

= Dummy Chains (White)

= Easement Line (Blue)

= Easement Perpetual Line (Blue)

OE OE = Electric Areial (Red)

BE(B) BE(B) = Electric Buried Level B Locate (Red)

BE(C) BE(C) = Electric Buried Level C Locate (Red)

BE(D) BE(D) = Electric Buried Level D Locate (Red)

= End Treatment (Brown)

= Fence (Brown)

OFOC OFOC = Fiber Optic Cable Aerial (Brown)

BFOC(B) BFOC(B) = Fiber Optic Cable Buried Level B Locate (Brown)

BFOC(C) BFOC(C) = Fiber Optic Cable Buried Level C Locate (Brown)

BFOC(D) BFOC(D) = Fiber Optic Cable Buried Level D Locate(Brown)

OFOE OFOE = Fiber Optic Elctrical Aerial (Red)

BFOE(B) BFOE(B) = Fiber Optic Elctrical Buried Level B Locate (Red)

BFOE(C) BFOE(C) = Fiber Optic Elctrical Buried Level C Locate (Red)

BFOE(D) BFOE(D) = Fiber Optic Elctrical Buried Level D Locate (Red)

OFOT OFOT = Fiber Optic Telephone Aerial (Brown)

BFOT(B) BFOT(B) = Fiber Optic Telephone Buried Level B Locate (Brown)

BFOT(C) BFOT(C) = Fiber Optic Telephone Buried Level C Locate (Brown)

BFOT(D) BFOT(D) = Fiber Optic Telephone Buried Level D Locate (Brown)

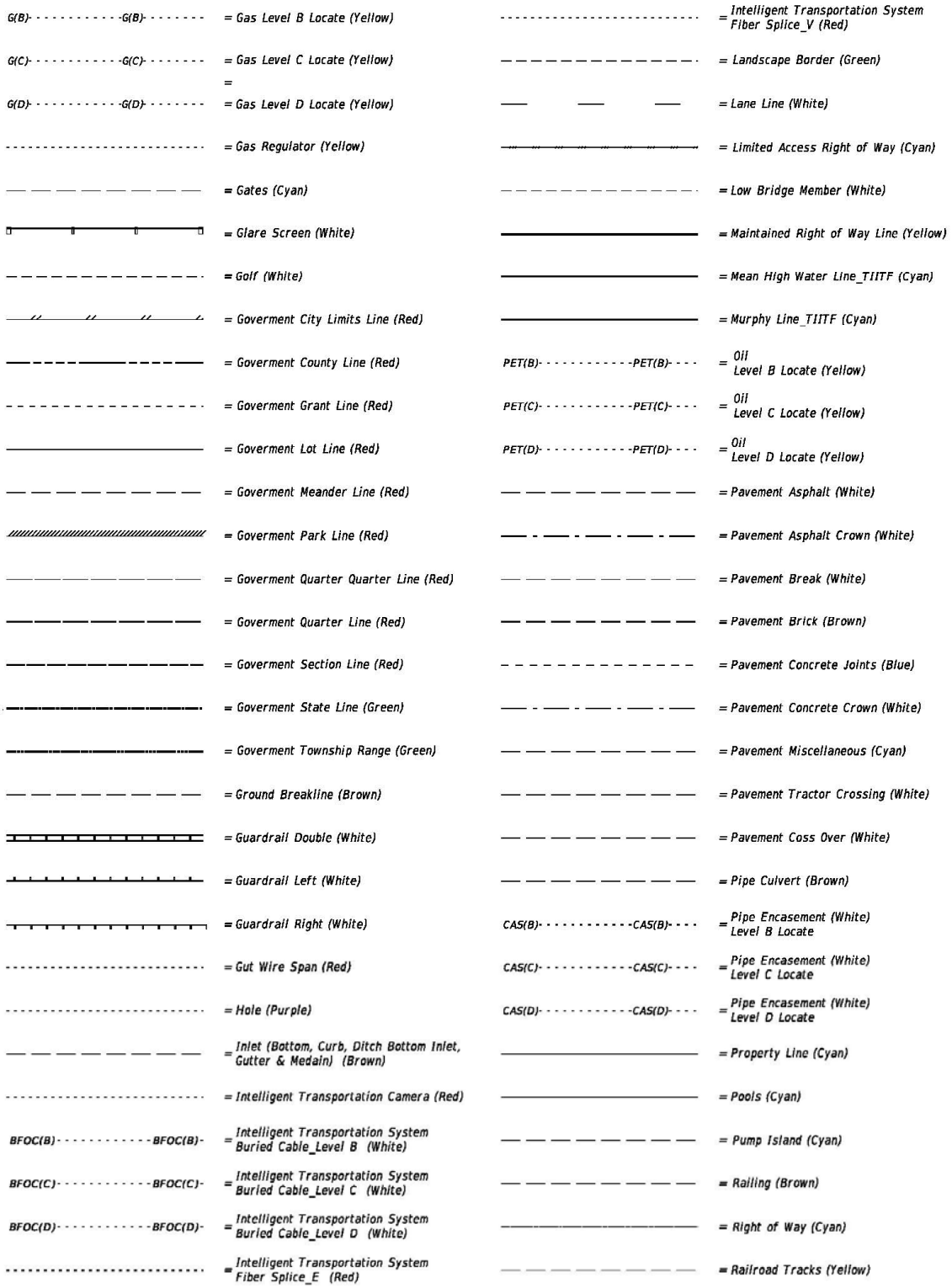
BFOC(B) BFOC(B) = Fiber Optic Television Buried Level B Locate (Brown)

BFOC(C) BFOC(C) = Fiber Optic Television Buried Level C Locate (Brown)

BFOC(D) BFOC(D) = Fiber Optic Television Buried Level D Locate (Brown)

= Furance (Purple)

Legend & Abbreviations



Legend & Abbreviations

= Rip Rap (Yellow)

= Railroad Baseline (White)

S(B) S(B) = Sanitary Force Main (Green) Level B Locate

S(C) S(C) = Sanitary Force Main (Green) Level C Locate

S(D) S(D) = Sanitary Force Main (Green) Level D Locate

S(B) S(B) = Sanitary Sewer (Green) Level B Locate

S(C) S(C) = Sanitary Sewer (Green) Level C Locate

S(D) S(D) = Sanitary Sewer (Green) Level D Locate

= Sanitary Sewer Pump Station (Green)

= Sea Wall (White)

= Shoulder Paved (Blue)

= Shoulder UnPaved (White)

= Shrub Hedge (Green)

= Sidewalk Back (Green)

= Sidewalk Front (Blue)

= Signal Loop (Cyan)

= Sign Truss Overhead (White)

= Slopes (Brown)

= Slopes Levee (Brown)

= Span Wire (Red)

= Stairs (White)

= Stock Pile (Brown)

Storm Sewer (Light Brown)

= Stream Crossing (Blue)

= Stream Edge (Blue)

STM(B) STM(B) = Steam (Yellow) Level B Locate

STM(C) STM(C) = Steam (Yellow) Level C Locate

STM(D) STM(D) = Steam (Yellow) Level D Locate

= Subdivision line (Magenta)

= SUEL TIITF LIne (Green)

BT(B) BT(B) = Telephone Buried (Brown) (Line, Duct & Toll) Level B Locate

BT(C) BT(C) = Telephone Buried (Brown) (Line, Duct & Toll) Level C Locate

BT(D) BT(D) = Telephone Buried (Brown) (Line, Duct & Toll) Level D Locate

= Traffic Separator (Brown)

= Trail (Brown)

= Trash (Brown)

= Treadle (Cyan)

= Tree Dipline (Green)

= Tree Line Grove (Green)

= Tree Line Scatter (Green)

= Tree Line Woods (Green)

= Tributary (Blue)

= Underdrain (Brown)

= Underdrain Box (Brown)

= Vaults Above / Below Ground (Red)

= Wall (Brown)

= Wall Barrier(Brown)

= Wall Retain Earth (Brown)

= Sea Wall (White)

W(B) W(B) = Water (Blue) Level B Locate

W(C) W(C) = Water (Blue) Level C Locate

W(D) W(D) = Water (Blue) Level D Locate

= Water Edge (Cyan)

= Water Line (Cyan)

NPW(B) NPW(B) = Water Line Non- Potable (Purple) Level B Locate

NPW(C) NPW(C) = Water Line Non- Potable (Purple) Level C Locate

NPW(D) NPW(D) = Water Line Non- Potable (Purple) Level D Locate

= Wetland (Blue)

= Wetland Corps of Engineers (Green)

= Wetland Florida Deparment of Environmental Protection (Blue)

= Wetland Emergent Wetland (Green)

= Wetland Marsh (Green)

Legend & Abbreviations

AC.	=	ACRE
AHD	=	AHEAD
ALUM.	=	ALUMINUM
ASSOC.	=	ASSOCIATES
AZ.		
BK	=	BACK
℄	=	BASELINE
B.O.S.	=	BEGINNING OF SURVEY
℄	=	CENTERLINE
(C)	=	COMPUTED
C1	=	CURVE NUMBER
CH ; C.B.	=	CHORD BEARING
C.R.	=	COUNTY ROAD
CONC.	=	CONCRETE
COR., CORN.	=	CORNER
CORP.	=	CORPORATION
CONST.	=	CONSTRUCTION
d	=	PENNYWEIGHT
Δ	=	DELTA ANGLE
D	=	DEGREE OF CURVE
(D)	=	DEED MEASUREMENT
E	=	EAST
E.F.B.	=	ELECTRONIC FIELD BOOK
E.O.S.	=	END OF SURVEY
EXIST.	=	EXISTING
(F)	=	FIELD MEASUREMENT
F.A.P.	=	FEDERAL AID PROJECT
F.D.O.T.	=	FLORIDA DEPARTMENT OF TRANSPORTATION
FL.	=	FLORIDA
FND.	=	FOUND
F.P.; FP	=	FINANCIAL PROJECT
FT.	=	FEET, FORT
GALV.	=	GALVANIZED
G.L.O	=	GENERAL LAND OFFICE
GOV'T.	=	GOVERNMENT
HWY.	=	HIGHWAY
ID.	=	IDENTIFICATION
INC.	=	INCORPORATED
I.B.	=	IRON BAR
I.P.	=	IRON PIPE
I.R.	=	IRON ROD
IR & C	=	IRON ROD & CAP
L	=	LENGTH OF CURVE
L1	=	LINE LABEL
LB	=	LICENSED BUSINESS
L.O.C.	=	LIMITS OF CONSTRUCTION
LS	=	LICENSED SURVEYOR
LT.	=	LEFT
MAINT.	=	MAINTAINED
MHWL	=	MEAN HIGH WATER LINE
MK.	=	MARK
MON.	=	MONUMENT
N	=	NORTH
NA, N/A	=	NOT APPLICABLE
NAVD	=	NORTH AMERICAN VERTICAL DATUM
NE	=	NORTHEAST
O.R.	=	OFFICIAL RECORD
NL	=	NAIL
No. ; #	=	NUMBER
N.T.S.	=	NOT TO SCALE
NW	=	NORTHWEST
(P)	=	PLAT
P.B.	=	PLAT BOOK
P.C.	=	POINT OF CURVATURE
P.C.P.	=	PERMANENT CONTROL POINT
P.O.C.	=	POINT ON CURVE
PG.	=	PAGE
P.I.	=	POINT OF INTERSECTION
P.K., PK	=	PARKER KALON
P.L.S.	=	PROFESSIONAL LAND SURVEYOR
P.O.T.	=	POINT ON TANGENT
POLY	=	POLYENGINEERING, INC.
P.R.C.	=	POINT OF REVERSE CURVE
PRELIM.	=	PRELIMINARY
P.R.M., PRM	=	PERMANENT REFERENCE MONUMENT
(P)	=	PLAT
P.B.	=	PLAT BOOK
P.C.	=	POINT OF CURVATURE
P.C.P.	=	PERMANENT CONTROL POINT
P.O.C.	=	POINT ON CURVE
PG.	=	PAGE
P.I.	=	POINT OF INTERSECTION
P.K., PK	=	PARKER KALON
P.L.S.	=	PROFESSIONAL LAND SURVEYOR
P.O.T.	=	POINT ON TANGENT
POLY	=	POLYENGINEERING, INC.
P.R.C.	=	POINT OF REVERSE CURVE
PRELIM.	=	PRELIMINARY
P.R.M., PRM	=	PERMANENT REFERENCE MONUMENT
PROP	=	PROPERTY, PROPOSED
P.S.M.	=	PROFESSIONAL SURVEYOR AND MAPPER
P.T.	=	POINT OF TANGENCY
PUB.	=	PUBLISHED
R	=	RADIUS OR RANGE
RD.	=	ROAD
REF.	=	REFERENCE
REQ.	=	REQUIRED
REG.	=	REGISTERED
R.L.S., RLS	=	REGISTERED LAND SURVEYOR
R- -E	=	RANGE EAST
R- -W	=	RANGE WEST
RT.	=	RIGHT
R/W	=	RIGHT OF WAY
S	=	SOUTH
SE	=	SOUTHEAST
SQ.	=	SQUARE
S.R.	=	STATE ROAD
S.R.D., SRD	=	STATE ROAD DEPARTMENT
SEC.	=	SECTION
SEC.	=	SECTION
S.F.	=	SQUARE FEET
STA.	=	STATION
ST.	=	STREET, SAINT
SUR.	=	SURVEY, SURVEYOR
SURV.	=	SURVEY, SURVEYOR
SW	=	SOUTHWEST
T	=	TANGENT OR TOWNSHIP
T- -N	=	TOWNSHIP NORTH
T- -S	=	TOWNSHIP SOUTH
T.B.	=	TANGENT BEARING
T.C.	=	TANGENT TO CURVE
T.S.	=	TITLE SEARCH
T.I.I.T.F	=	TRUSTEES INTERNAL IMPROVEMENT TRUST FUND
U.S.	=	UNITED STATES
USC&GS	=	UNITED STATES COASTAL AND GEODETIC SURVEY
USDA	=	UNITED STATES DEPARTMENT OF AGRICULTURE
W	=	WEST
W/	=	WITH
WIT.	=	WITNESS
W.P.I.	=	WORK PROGRAM ITEM
'	=	MINUTES, FEET
°	=	DEGREES
"	=	SECONDS, INCHES
&	=	AND
X	=	EASTING
Y	=	NORTHING
+/-	=	MORE OR LESS

8.0 Compilation of Surveys

Task	Completed By:
Horizontal Control	3DS
Vertical Control	3DS
Alignment	3DS
Right of Way	Intentionally blank page
Topographic	3DS
Control Survey (Field)	Intentionally blank page
Control Survey (Map)	Intentionally blank page
Right of Way Map	Intentionally blank page

9.0 File List

See Appendix "A"

10.0 Alignment Report

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11.0 Certification

I hereby certify that this survey and all the files herein are a true and accurate representation of a field survey made under my responsible charge, and that to the best of my knowledge meets the Standards of Practice as set forth by the Board of Professional Surveyors and Mappers in Rule Chapter 5J-17 of the Florida Administrative Code.

Signed _____ Date _____

Jason D. Hill, P.S.M
Florida License No. LS - 6008

This report is not full or complete without the signed and sealed compact disk (CD) containing the survey database (listed in 9.0) dated_____

Name	Size KB	Date modified
C:\CAiCE\439931		
A\		06.08.2003
Microsta Files\		01.06.2017
439931.CFT	0.00	26.05.2017
439931.cr$	1.98	26.05.2017
439931.dt4	11.00	14.06.2017
439931.dv$	11.50	14.06.2017
439931.g$$	0.96	14.06.2017
439931.gbl	0.01	14.06.2017
439931.go4	11.00	14.06.2017
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439931.mdo	368.00	16.03.1998
439931.or$	0.12	26.05.2017
439931.pc4	11.00	14.06.2017
439931.ps4	11.00	14.06.2017
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439931.pt4	351.00	14.06.2017
439931.rpt	1.84	14.06.2017
439931.sel	71.00	14.06.2017
439931.sr$	177.92	30.05.2017
439931.tpr	0.89	14.06.2017
439931.txt	1.44	14.06.2017
439931.zip	3612.74	14.06.2017
439931_undo.kcm	296.00	06.08.2003
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Align.rep	0.72	14.06.2017
CONTOURS.dgn	603.00	14.06.2017
control.txt	0.89	14.06.2017
CTLSRD01.DGN	84.00	14.06.2017
CTLSRD02.DGN	64.50	14.06.2017
drainage.cdg	0.65	01.06.2017
DREXRD01.dgn	25.00	01.06.2017
DTM.cdg	145.27	01.06.2017
EXIST.BN#	1.18	26.05.2017
EXIST.CL!	7.73	26.05.2017
EXIST.D##	0.01	26.05.2017
EXIST.DP!	7.55	26.05.2017
EXIST.DTM	0.10	26.05.2017
EXIST.HD#	0.01	26.05.2017
EXIST.ini	0.16	26.05.2017
EXIST.LN#	2.32	26.05.2017
EXIST.LT!	188.25	26.05.2017
EXIST.PU!	15.74	26.05.2017
EXIST.tg#	5.58	26.05.2017
EXIST.TR!	172.30	26.05.2017
EXIST.XY#	72.81	26.05.2017
FeatList.lis	0.40	31.05.2017
GDTMRD01.dat	525.00	01.06.2017
GDTMRD01.dgn	220.00	01.06.2017
GDTMRD01_Tin.dgn	100.50	01.06.2017
segment.ls$	0.06	26.05.2017
topo.cdg	853.06	01.06.2017
TOPORD01.dgn	284.50	14.06.2017
wetland.cdg	190.39	01.06.2017
WETLRD01.dgn	83.50	14.06.2017
C:\CAiCE\439931\A		
C:\CAiCE\439931\Microsta Files		
CONTOURS.dgn	603.00	14.06.2017
CTLSRD01.DGN	84.00	14.06.2017
CTLSRD02.DGN	64.50	14.06.2017
drainage.cdg	0.65	01.06.2017

DREXRD01.dgn	25.00	01.06.2017
DTM.cdg	145.27	01.06.2017
GDTMRD01.dat	525.00	01.06.2017
GDTMRD01.dgn	220.00	01.06.2017
GDTMRD01_Tin.dgn	100.50	01.06.2017
topo.cdg	853.06	01.06.2017
TOPORD01.dgn	284.50	14.06.2017
wetland.cdg	190.39	01.06.2017
WETLRD01.dgn	83.50	14.06.2017

SPECIES SURVEY FOR THE PRESENCE OF GOPHER TORTOISES

FLORIDA HIGHWAY PATROL
TEST TRACK FACILITY
MIDWAY, FLORIDA
FPID: 439931-1-32-01

Prepared For Submittal To:

FLORIDA HIGHWAY PATROL
and
GEORGE & ASSOCIATES, INC.
1967 COMMONWEALTH LANE, SUITE 200
TALLAHASSEE, FLORIDA 32303

Prepared By:

ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC.
104 NORTH MAGNOLIA DRIVE
TALLAHASSEE, FLORIDA 32301
(850) 386-1253

JULY 2017
044-025-16-02

July 14, 2017

George & Associates, Inc
1967 Commonwealth Lane, SUITE 200
Tallahassee, FL 32303

ATTN: Robert George, P.E.
Project Manager

SUBJECT: Report of Species Survey for the Presence of Gopher Tortoises
Florida Highway Patrol Test Track
Gadsden County, Florida

Dear George:

Enclosed is the Species Survey for the Presence of Gopher Tortoises prepared for the above referenced project. Presented in this Report is a summary of the field investigation, and the potential impact to the habitat of the gopher tortoise.

Environmental and Geotechnical Specialists, Inc. (**EGS**) appreciates the opportunity to be of service on this project.

Sincerely,

Audra Hayden, P.E.
FL P.E. No. 74756
Environmental and Geotechnical Specialists, Inc.
Florida Certificate of Engineering Authorization Number 6222

Enclosure

Table of Contents

NARRATIVE

TABLE

FIGURES

APPENDICES

NARRATIVE

1.0 INTRODUCTION

Environmental and Geotechnical Specialists, Inc. (**EGS**) has completed the Species Survey for the Presence of Gopher Tortoises *(Gopherus Polyphemus)* at the location of the proposed Florida Highway Patrol (FHP) Test Track Facility at the Pat Thomas Law Enforcement Academy in Gadsden County, Florida. This assessment included a review of the proposed construction as it relates to potential impact on the habitat of the Gopher Tortoise. This report documents findings of the assessment and presents our conclusions.

2.0 PROJECT DESCRIPTION

The FHP is proposing to construct a driver training facility for use by the Academy to train enrollees in a safe and controlled environment that will mimic both interstate and rural driving conditions. The project will be designed to allow for future development in the center of the proposed track for additional training conditions to be added at a later date.

The proposed project location consists of approximately 189-acres in Gadsden County, Florida, near the city of Quincy. The site is located in Sections 25, 26, 35 and 36, Township 2 North, Range 3 West of the USGS coordinate system. Specifically, the project site is south of US 90 and north of I-10, approximately 6-miles southeast of Quincy, FL. A site location map has been included as **Figure 1** and an aerial photograph of the project location has been included as **Figure 2**.

3.0 HABITATS OF PROTECTED OR ENDANGERED SPECIES

A review of the database records for the Florida Natural Areas Inventory (FNAI) was conducted to determine the potential presence of habitat within or adjacent to the project limits suitable for the occurrence of the gopher tortoise *(Gopherus Polyphemus)*. The US Fish and Wildlife Service (USFWS) and the Florida Fish & Wildlife Conservation Commission (FACE) database records were also consulted. The FNAI Report has been included as **Appendix A**.

The “Environmental Assessment” conducted for the Pat Thomas Law Enforcement Academy by Cardo Entry on March 2012, was also reviewed. Sections of the Assessment have been included as **Appendix B**. The Cardno Entrix assessment identified gopher tortoise habitat, as well as burrows, within the upland communities of the site. The locations of their burrow from the 2012 report have been included in the information provided in **Appendix B**.

In addition, three state listed plant species were observed during the Cardno Entrix study. The listed plant species included heartleaf wild ginger (*Hexastylis arifolium*), crane-fly orchid (*Tipularia discolor*), and the rain lily (*Zephyranthes atamasco*). It should be noted that the Cardno Entrix Environmental Assessment included approximately 910-acres at the Training Facility. The proposed Test Track will encumber 189-acres located in the southeast corner of the previous assessment area.

A summary of each species identified during the field review conducted by Cardno Entrix is as follows:

- Gopher Tortoise (*Gopherus Polyphemus*)
  Federal Status: Candidate
  State Status: Threatened

Gopher Tortoise

The gopher tortoise is a medium-sized reptile (up to 10 inches) that feeds primarily on grasses and other herbaceous plants. The gopher tortoise is typically found in dry upland areas such as sandhills, scrub, dry pine flatwoods, and xeric oak hammocks with well-drained sandy soils for burrowing. It is commonly associated with a pine overstory and an open understory with a grassed non-woody groundcover and sunny areas for nesting. Gopher tortoises can sometimes be found in more marginal habitats such as roadside cleared zones, ditch banks, utility and pipeline right-of-way, and pastures.

Gopher tortoises spend most of their time in or near their burrows. The width of a burrow is known to correlate strongly with the carapace length of the resident gopher tortoise. Therefore, the configuration, condition, shape and dimensions of any burrows are assessed to determine if they are gopher tortoise burrows or the burrows of another animal.

- Heartleaf Wild Ginger (*Hexastylis arifolium*)
  Federal Status: Not Listed
  State Status: Threatened

Heartleaf Wild Ginger

Heartleaf wild ginger is characterized by arrow-head shaped, anise-scented leaves that are shiny dark green, highlighted with silver veining. In early spring the plant typically stands 8-inches tall and is adorned with dark purple flowers at the leaf base. Wild ginger occurs in fire protected areas and slopes within moist hardwood forests.

Cardno Entrix identified the flower within steep slopes adjacent to wetlands associated with ravines. Because the construction of the test track is located outside of the ravine area, it is unlikely this plant will be impacted.

- Crane-Fly Orchid (*Tipularia discolor*)
  Federal Status: Not Listed
  State Status: Threatened

Crane-Fly Orchid

The crane-fly orchid is a perennial terrestrial woodland orchid. It is a member of the Orchidaceae family. It is predominantly found within the southeast. It emerges in the autumn as a single oval shaped leaf in the autumn. The flowering stem is 15 to 20 inches tall with plain colored inflorescence foliage.

While EGS did not identify any crane-fly orchid, Cardno did identify two lone plants during their evaluation in 2012. Just like the wild ginger, crane-fly orchids live on steep slopes adjacent to wetlands. Based on their habitat, it is unlikely the construction of the FHP Test Track will impact the species. The FHP Test Track is located outside of the area where this orchid was observed.

- Rain Lily (*Zephyranthes atamasco*)
  Federal Status: Candidate
  State Status: Threatened

Rain Lily

The rain lily is a small, colony forming perennial, 8 to 15 inches tall with a thick grass-like leaf. The plant grows in swampy forests or coastal plains in the southeastern United States. It blooms within the spring and summer months and grows in soils rich in organics that remain mostly moist.

Because the construction of the test track is located outside of the area where the rain lily was identified, it is unlikely this plant will be impacted.

4.0 GOPHER TORTOISE SURVEY

A species survey was conducted by EGS personnel on May 3, 8, and 9, 2017 for the purpose of locating any listed species within or adjacent to the proposed construction limits. The survey focused primarily on the gopher tortoise, as well as the listed plant species that were previously identified within the 2012 Environmental Assessment conducted by Cardno Entrix.

The survey was conducted using both pedestrian and vehicular transects. The pedestrian surveys involved a visual inspection of the property with two personnel walking the project area with the use of a handheld GPS to ensure that the property limits were thoroughly covered. The width of the pedestrian transects were approximately 35-feet.

The proposed test track area, previously clear-cut, was densely vegetated during the time of the survey. The ground cover was primarily covered by vines and woody shrubs, making it unsuitable habitat for gopher tortoises. The only areas of potential suitable habitat for the gopher tortoise were the cleared, sandy areas associated with the existing access ways. Photographs taken during the field investigation have been included as **Figures 3A-3B**.

5.0 SUMMARY

During the field survey 25 burrows were identified. Of the 25 burrows, 6 were identified as being currently active. The remaining burrows were identified as follows: 6 burrows with previous activity but no recent activity, 6 abandoned burrows, and 7 burrows occupied by other species. The approximate locations of each burrow observed has been overlaid on the aerial photograph included as **Figure 2**. A table providing the GPS coordinates and a description of each burrow has been included as **Table 1**. No other listed species were observed during the field review.

It should be noted that state regulations protect both the gopher tortoise and its burrow by not allowing any land disturbance within 25 feet of an active gopher tortoise burrow. FWC guidelines require that a survey of potentially impacted gopher tortoise habitat be conducted no more than 90 days prior to any commencement of construction or clearing. All active tortoise burrows located within the limits of construction, as well as all active tortoise burrows located within 25 feet from the limits of construction, will require an approved permit from FWC to relocate the tortoises prior to construction. If the limits of construction maintain 25-feet clearance from tortoise burrows, then no FWC permit is required.

6.0 CLOSURE

The data, results, and conclusions presented in this Report are intended for the use of **George & Associates Consulting Engineers, Inc.** and the **Florida Highway Patrol**, for use in the design and construction of the proposed high speed test track at the Pat Thomas Law Enforcement Academy in Gadsden County, Florida. This Report has been prepared in accordance with the procedures generally accepted by environmental and consulting professionals. This Report shall not be reproduced, except in full, without the written approval of Environmental and Geotechnical Specialists, Inc. Should additional documents and information become available, Environmental and Geotechnical Specialists, Inc. reserves the right to evaluate and modify, if necessary, the conclusions and recommendations presented in this Report. The client recognizes that the scope of the work rendered under this agreement is limited to those identified in this Report.

7.0 SIGNATURE

ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC.
Florida Certification of Engineering Authorization Number: 6222

Audra H. Hayden, P.E.
FL P.E. No. 74756

TABLE

TABLE 1
APPROXIMATE TORTOISE BURROW LOCATIONS*
FLORIDA HIGHWAY PATROL TEST TRACK FACILITY
GADSDEN COUNTY, FLORIDA

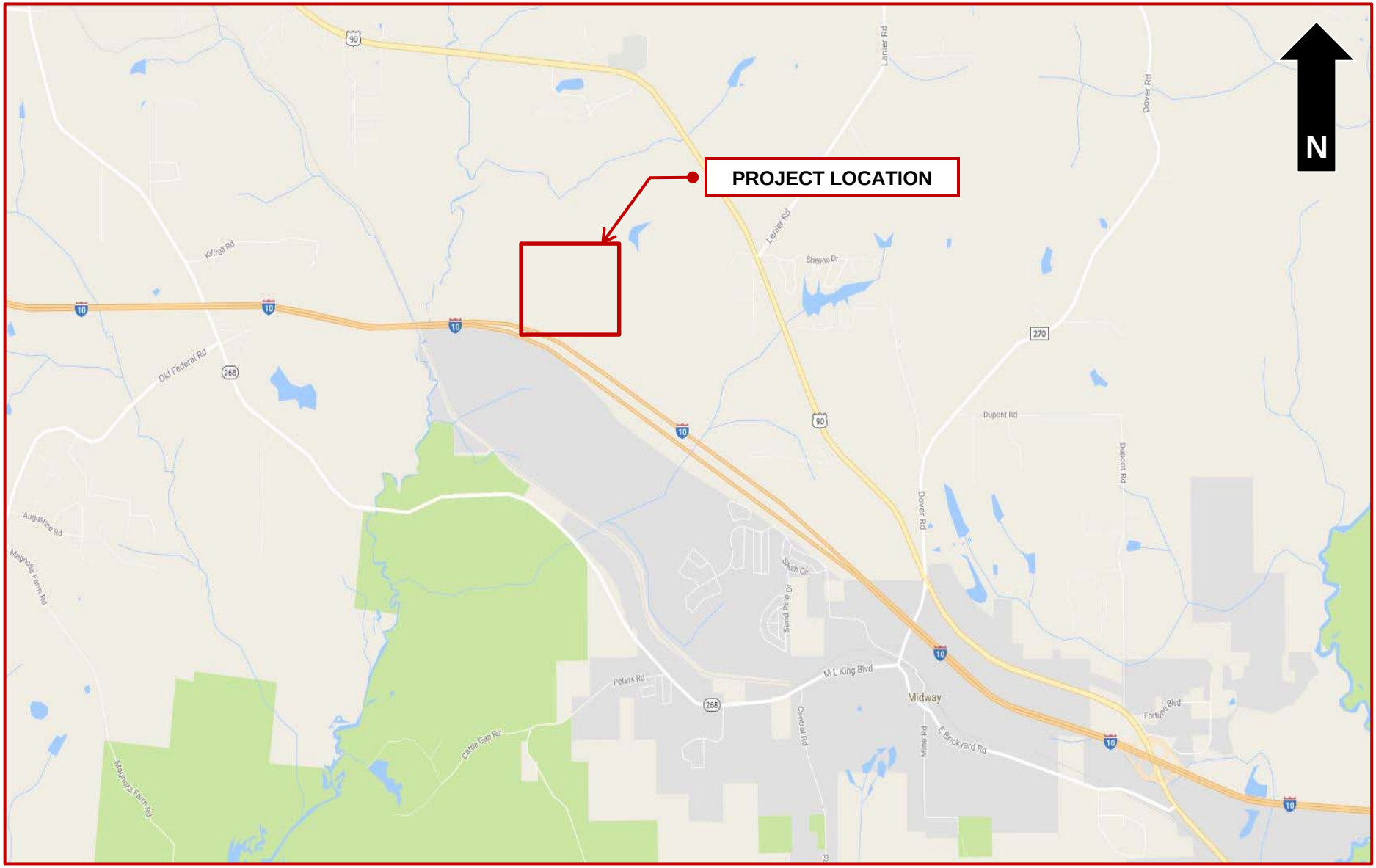
BURROW NUMBER	LATITUDE	LONGITUDE	COMMENTS
T-1	30° 31.824' N	84° 29.975' W	Active Burrow
T-2	30° 31.847' N	84° 29.961' W	No Recent Activity
T-3	30° 31.777' N	84° 29.995' W	No Recent Activity
T-4	30° 31.792' N	84° 29.909' W	Likely Armadillo Burrow**
T-5	30° 31.838' N	84° 29.873' W	Active Burrow
T-6	30° 31.951' N	84° 29.755' W	Active Burrow
T-7	30° 31.974' N	84° 29.733' W	Active Burrow
T-8	30° 31.993' N	84° 29.697' W	Abandoned Burrow
T-9	30° 31.974' N	84° 29.713' W	Active Burrow
T-10	30° 31.966' N	84° 29.720' W	Likely Armadillo Burrow**
T-11	30° 31.930' N	84° 29.741' W	Likely Armadillo Burrow**
T-12	30° 31.895' N	84° 29.798' W	Abandoned Burrow
T-13	30° 31.860' N	84° 29.785' W	No Recent Activity
T-14	30° 31.840' N	84° 29.788' W	Abandoned Burrow
T-15	30° 31.877' N	84° 29.722' W	Abandoned Burrow
T-16	30° 31.924' N	84° 29.678' W	No Recent Activity
T-17	30° 31.933' N	84° 29.668' W	Abandoned Burrow
T-18	30° 31.933' N	84° 29.683' W	No Recent Activity
T-19	30° 31.938' N	84° 29.685' W	No Recent Activity
T-20	30° 31.950' N	84° 29.681' W	Likely Armadillo Burrow - Abandoned**
T-21	30° 31.965' N	84° 29.683' W	Active Burrow
T-22	30° 31.978' N	84° 29.643' W	Abandoned Burrow
T-23	30° 31.985' N	84° 29.620' W	Likely Armadillo Burrow**
T-24	30° 31.965' N	84° 29.613' W	Likely Armadillo Burrow - Abandoned**
T-25	30° 31.944' N	84° 29.498' W	Likely Armadillo Burrow - Abandoned**

Note:

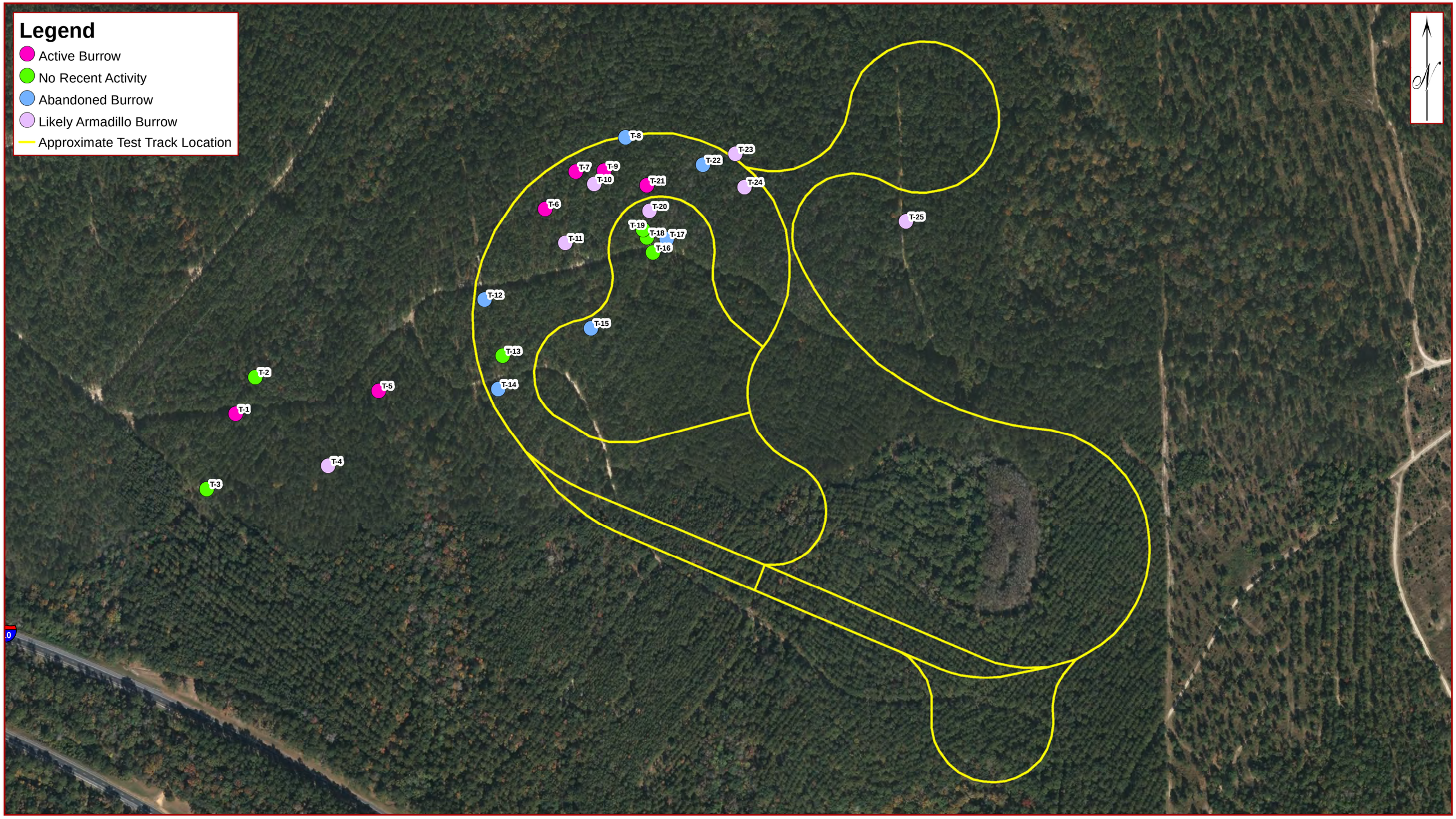
* Coordinates Obtained from Handheld GPS Unit (+/- 3')

**Likely Armadillo Burrow Identified by Shape of Burrow Opening and Tracking Observed

FIGURES



DRAWN: A. CHAMBERLAIN	CHECKED: J. HAYDEN, P.E.	ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC. 104 N MAGNOLIA DRIVE TALLAHASSEE, FL 32301 OFFICE #: (850) 386-1253 FAX #: (850) 385-8050	TITLE: PROJECT LOCATION MAP FLORIDA HIGHWAY PATROL (FHP) TEST TRACK FACILITY GADSDEN COUNTY, FLORIDA FPID: 439931-1-32-01
ENGINEER: A. HAYDEN, P.E.			
CLIENT: GEORGE & ASSOCIATES			
PROJ. NO.: 44-25-17-02	SCALE:		DATE: JUNE 2017 / FIGURE NO.: 1



DRAWN: A. CHAMBERLAIN	CHECKED: A. HAYDEN, P.E.	**ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC.**	TITLE: AERIAL PHOTOGRAPH OF APPROXIMATE BURROW LOCATIONS FLORIDA HIGHWAY PATROL (FHP) TEST TRACK FACILITY GADSDEN COUNTY, FLORIDA FPID: 439931-1-32-01
ENGINEER: J. HAYDEN, P.E.		**104 North Magnolia Drive,Tallahassee, Florida 32301** **Office #: (850) 386-1253 Fax #: (850) 385-8050**	
CLIENT: GEORGE & ASSOCIATES			
PROJ. NO.: 44-25-17-02	SCALE:		DATE: JULY 2017 / FIGURE NO.: 2

TYPICAL PHOTO OF GOPHER TORTOISE BURROW

PHOTOGRAPH OF TYPICAL GOPHER TORITISE HABITAT TAKEN AT LOCATION OF ONE BURROW.

DRAWN:	FIGURE:		TITLE:
M. KOENIG, E.I.	3A	ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC.	FIELD PHOTOGRAPHS FHP TEST TRACK

PHOTOGRAPH OF WETLAND LOCATION AT NORTH EAST CORNER OF PARCEL.

PHOTOGRAPH OF CRESCENT SHAPPED WETLAND LOCATED AT CENTER OF PROPERTY.

DRAWN:	FIGURE:		TITLE:
M. KOENIG, E.I.	3B	ENVIRONMENTAL AND GEOTECHNICAL SPECIALISTS, INC.	FIELD PHOTOGRAPHS FHP TEST TRACK

APPENDICES

APPENDIX A

FNAI REPORT

MARCH 20, 2017

FLORIDA
Natural Areas
INVENTORY

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

March 20, 2017

Judy Hayden
Environmental & Geotechnical Specialists, Inc.
104 North Magnolia Drive
Tallahassee, FL 32301

Dear Ms. Hayden,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: Florida Highway Patrol Test Track Facility

Date Received: 3/14/2017

Location: Gadsden County

Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences, some of which are historic, mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. An invoice will be mailed separately. If I can be of further assistance, please contact me at (850) 224-8207 or at npasco@fnai.fsu.edu.

Sincerely,

Nathan Pasco

Nathan Pasco
GIS / Data Services

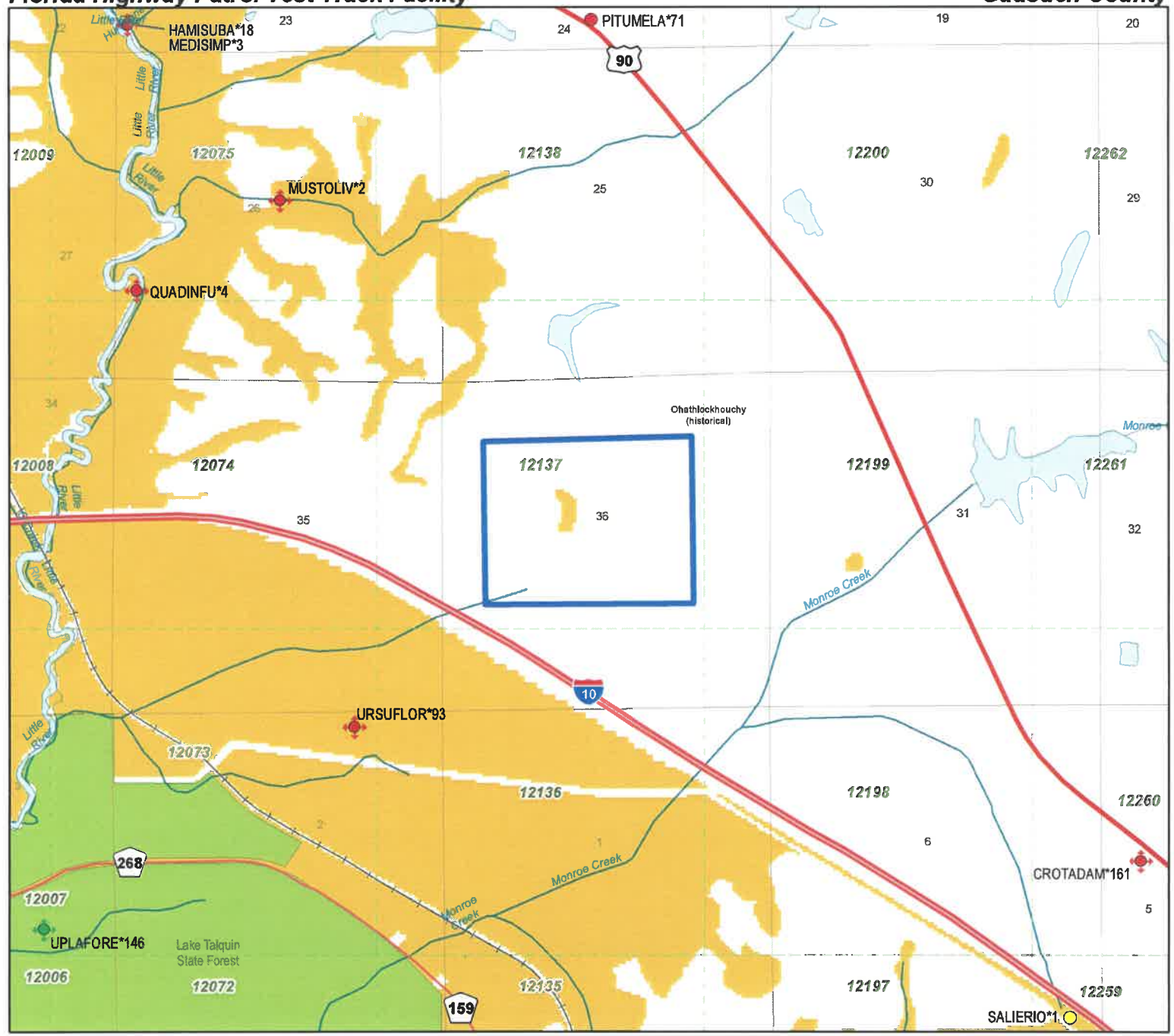
Encl

Florida Highway Patrol Test Track Facility

Gadsden County

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
(850) 681-9364 Fax
www.fnai.org

FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive
- Point Indicates General Vicinity of Element
- U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

N

Land Acquisition Projects

- Florida Forever Board of Trustees Projects
- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units
- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Site boundaries are approximate.

Map produced by NDP 3/20/2017

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FLORIDA Natural Areas INVENTORY

FNAI ELEMENT OCCURRENCE REPORT on or near

Florida Highway Patrol Test Track Facility

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
CROTADAM*161	*Crotalus adamanteus*	Eastern Diamondback Rattlesnake	G4	S3	N	N	1995	No general description given	1980-1995: 8 sightings, 3-5 ft. (U95CAI01).
HAMISUBA*18	*Hamiota subangulata*	Shiny-rayed Pocketbook	G2	S1S2	E	FE	1954-10-09	1954-10-09: Blackwater stream (PNDBRI06FLUS).	1954-10-09: Clench and Turner collected 2 individuals (A56CLE01FLUS, PNDBRI06FLUS).
MEDISIMP*3	*Medionidus simpsonianus*	Ochlockonee Moccasinshell	G1	S1	E	FE	1956-PRE	No general description given	1956-pre: collection probably from US-90 crossing, possibly made in 1954 by Clench and Turner. No additonal collection data but collection is probably at MCZ (A56CLE01FLUS).
MUSTOLIV*2	*Mustela frenata olivacea*	Southeastern Weasel	G5T4	S3?	N	N	1957-02-01	No general description given	MUSEUM SPECIMEN: COLLECTED BY W.L. JENNINGS, 1957-02-01, #01753 FSM.
PITUMELA*71	*Pituophis melanoleucus*	Pine Snake	G4	S3	N	SSC	1973-07-08	No general description given	DOR COLL. 8 JULY 1973 BY S. SCUDDER AND L.R. FRANZ.
QUADINFU*4	*Quadrula infucata*	Sculptured Pigtoe	G3	S2S3	N	N	2014-Pre	Little River (Ochlockonee River drainage) upstream of Lake Talquin. Most of the land bordering this stretch of river is undeveloped, much of it forested.	This occurrence is documented by multiple records extending from XX - YY. Williams et al. (2014) depict at least 3 sites from which this occurrence has been documented. For specific data, references, and sites, see individual source features and Additi
SELOFERR*1	*Selonodon ferrugineus*	Rusty Cebrionid Beetle	G2	S1S2	N	N	1961-07-10	1961-07-10: No description given (B99GAL01FLUS).	1961-07-10: This species was collected using a black light trap. It was collected on three other dates, all in June or July, going back to 1948 (B99GAL01FLUS).
SPHORUFI*18	*Sphodros rufipes*	Red-legged Purse-web Spider	G4	S3	N	N	1938	1938: Webs are found at bases of trees in mesic forest (A80GER01FLUS).	1938:Gertsch and Platnick (1980) recorded species as present here, based on several collections from 1934-1938. More precise and updated record is needed (A80GER01FLUS).
URSUFLOR*93	*Ursus americanus floridanus*	Florida Black Bear	G5T2	S2	N	N	2012	Area dominated by Apalachicola National Forest, a large area consisting of mesic and wet flatwoods, sandhill, and bay swamps (U05SIM01FLUS). The Chipola, Apalachicola, Ochlockonee, St. Marks, Aucilla, Econfina River, and a short stretch of the Steinhatch	2012: Estimated population of 438-695 individuals (U05SIM01FLUS); This EO represents the Primary and Secondary Bear Ranges for the Apalachicola Population. Primary is the FWC-designated core area that represents breeding range and contains documented ev

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Suite 200-C
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(850) 224-8207
(850) 681-9364 Fax

FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

Biodiversity Matrix Report

Matrix Unit ID: 12137

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Likely					
Hamiota subangulata	Shiny-rayed Pocketbook	G2	S1S2	E	FE
Medionidus simpsonianus	Ochlockonee Moccasinshell	G1	S1	E	FE
Mycteria americana	Wood Stork	G4	S2	LT	FT
Upland hardwood forest		G5	S3	N	N
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	N
Potential					
Agrimonia incisa	Incised Groove-bur	G3	S2	N	T
Amphiuma pholeter	One-toed Amphiuma	G3	S3	N	N
Andropogon arctatus	Pine-woods Bluestem	G3	S3	N	T
Asclepias viridula	Southern Milkweed	G2	S2	N	T
Asplenium heteroresiliens	Wagner's Spleenwort	G2	S1	N	N
Baptisia megacarpa	Apalachicola Wild Indigo	G2	S1	N	E
Brickellia cordifolia	Flyr's Brickell-bush	G3	S2	N	E
Conradina glabra	Apalachicola Rosemary	G1	S1	LE	E
Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	G3G4	S2	N	N
Croomia pauciflora	Croomia	G3	S2	N	E
Croton elliottii	Elliott's Croton	G3	SH	N	N
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	T	FT
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lythrum curtissii	Curtiss' Loosestrife	G1	S1	N	E
Magnolia ashei	Ashe's Magnolia	G2	S2	N	E
Matelea alabamensis	Alabama Spiny-pod	G2	S2	N	E
Matelea floridana	Florida Spiny-pod	G2	S2	N	E
Mustela frenata olivacea	Southeastern Weasel	G5T4	S3?	N	N
Myotis austroriparius	Southeastern Bat	G4	S3	N	N
Peucaea aestivalis	Bachman's Sparrow	G3	S3	N	N
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	FE
Pinguicula primuliflora	Primrose-flowered Butterwort	G3G4	S3	N	E
Pityopsis flexuosa	Zigzag Silkgrass	G3	S3	N	E
Platanthera integra	Yellow Fringeless Orchid	G3G4	S3	N	E
Rhexia parviflora	Small-flowered Meadowbeauty	G2	S2	N	E
Rhododendron austrinum	Florida Flame Azalea	G3	S3	N	E
Rhododendron chapmanii	Chapman's Rhododendron	G1	S1	LE	E
Ruellia noctiflora	Nightflowering Wild Petunia	G3?	S2	N	E
Schisandra glabra	Bay Star-vine	G3	S2	N	E
Torreya taxifolia	Florida Torreya	G1	S1	LE	E
Trillium lancifolium	Narrow-leaved Trillium	G3	S2	N	E
Xyris longisepala	Karst Pond Xyris	G2G3	S2S3	N	E
Xyris scabrifolia	Harper's Yellow-eyed Grass	G3	S3	N	T

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
GNR = Element not yet ranked (temporary).
GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).
S5 = Demonstrably secure in Florida.
SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
SX = Believed to be extirpated throughout Florida.
SU = Unrankable; due to a lack of information no rank or range can be assigned.
SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
SNR = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
E = Endangered: species in danger of extinction throughout all or a significant portion of its range.
E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
E, PDL = Species currently listed endangered but has been proposed for delisting.
E, PT = Species currently listed endangered but has been proposed for listing as threatened.
E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
PE = Species proposed for listing as endangered
PS = Partial status: some but not all of the species' infraspecific taxa have federal
PT = Species proposed for listing as threatened
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: http://www.doacs.state.fl.us/pi/.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

APPENDIX B

ENVIRONMENTAL ASSESSMENT

PREPARED BY CARDNO ENTRIX

MARCH 01, 2012

FLORIDA PUBLIC SAFETY INSTITUTE
ENVIRONMENTAL ASSESSMENT
GADSDEN COUNTY, FLORIDA

March 1, 2012

Prepared for:

Florida Public Safety Institute
75 College Drive, Suite 203
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Cardno ENTRIX
Shaping the Future

Caitlin E. Elam
Staff Scientist

M. Andrew Barth, PWS
Senior Consultant/Principal

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1.0 INTRODUCTION

Cardno ENTRIX has completed an environmental assessment of approximately 910.65 acres within the Florida Public Safety Institute (FPSI) Training Facility for a Comprehensive Land Use Plan Amendment. The subject property is comprised of two tracts located approximately 2 miles east of the City of Quincy, Florida (Quincy), south of U. S. Highway 90 (US90) and north of Interstate 10 (I-10) in Gadsden County, Florida. The assessment is being conducted to provide preliminary and site-specific information that aid in identifying environmentally sensitive features for the purpose of evaluating the proposed land use designation changes. This assessment includes maps and descriptions of the ecological communities, including surface water features, as well as a preliminary survey for state and federal listed plant and wildlife species.

Based on our site review, observed environmentally sensitive features included approximately 210.75 acres of state and federal jurisdictional wetlands, three state listed plant species, and one state listed animal species. Observed listed plants included wild ginger (*Asarum arifolium*) and crane-fly orchid (*Tipularia discolor*) within the beech-magnolia slope forest community and rainlily (*Zephyranthes atamasco*) within the stream swamp along the Little River floodplain. Gopher tortoise burrows were observed within the upland plant communities. No federal-listed species were observed.

Tallahassee Community College (TCC) is submitting a land use plan amendment for two parcels comprising FPSI. These parcels are shown on the **Figure 1** and are currently designated as *Agriculture III*. A land use change is needed to align the designated use of these two parcels with the mission of FPSI and the intended use of the land. The activities of FPSI primarily consist of academic and training activities by government agencies. The land use category that best matches the future use of the land is *Public*. The two parcels are not used for any agricultural activities, they have not been used for agriculture in the past five years, and no agricultural use is intended for the future. Thinning of the previously planted loblolly pine (*Pinus taeda*) to restore native longleaf pine (*P. palustris*) habitat in the uplands and the reintroduction of fire to manage these systems is included in the FPSI Natural Resource Plan, May 2010.

The future development impacts to on-site natural resources resulting from the proposed land use change and consistency with specific policies in the Gadsden County Comprehensive Plan are discussed in **Section 5.0**. Potential impacts will be predominately limited to the upland habitats and the listed species contained therein, *e. g.*, gopher tortoise, include the construction of structures associated with the training facility and pine harvesting. These impacts will be minimized by following Best Management Practices (BMP) and gopher tortoise protection/relocation protocols. The impacts to wetlands will be minimized by the 50-foot wetland setbacks, and BMP utilization. No federally listed species were identified at the site. Any additional wetland impacts resulting from development associated with the land use change, such as road crossings, will be compensated through appropriate mitigation during state and federal permitting .

2.0 STUDY AREA

The property consists of two tracts of land totaling approximately 910.65 acres in Gasden County near Quincy, Florida (**Figure 1**). The site is located in, or in portions of, Sections 25, 26, 35 and 36, Township 2 North, Range 4 East. Specifically, the project is located south of US90 and north of I-10 approximately 2 miles east of downtown Quincy. The site can be accessed from Academy drive and US90.

Previous owners of the site converted the uplands within the FPSI study area to loblolly pine plantation. These plant communities were historically sandhill on deep sandy ridges and upland pine on soils with a higher clay content. In the historical setting these plant communities would have been dominated by longleaf pine. Much of the converted uplands continue to support plant species that are indicative of sandhill.

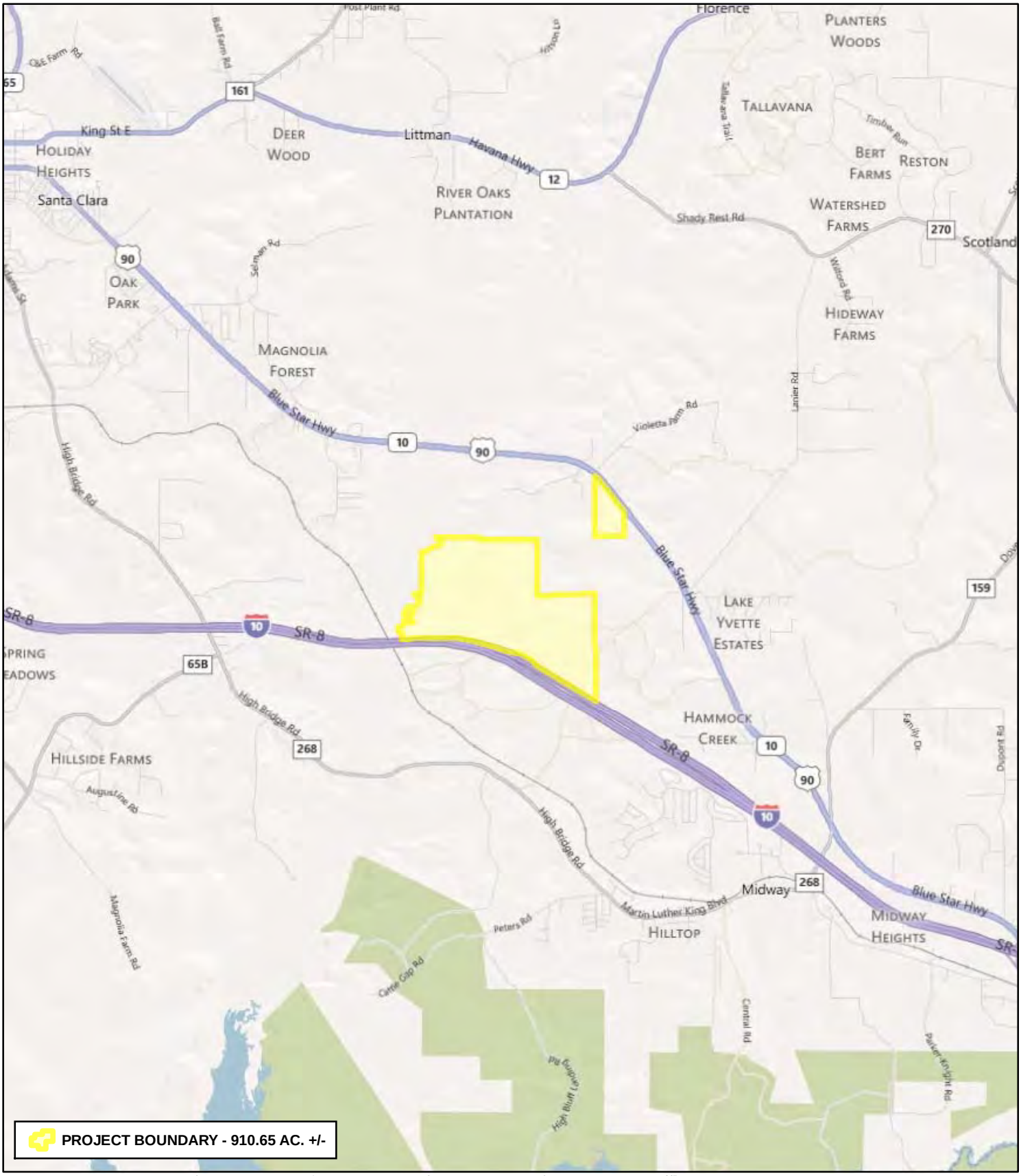

Figure 1 - Location Map

Florida Public Safety Institute
Gadsden County, Florida

Image: BING ROADS

Sec 24, 25, 26, 27, 34, 35, 36
Twp 02 N
Rng 03 W

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Coordinate System: NAD 1983 SPFNF

Date:02/08/2012 Rev. Date: xx/xx/xx PM: MAB GIS Analyst: JPB Map Document: FIGURE1_LOCATION.mxd Project Number: 4942-053-1000 PDF Document: FIGURE1_LOCATION.pdf Plot Size: 8.5 x 11

The forested communities on the slopes and floodplains have retained the historical dominant plant species. Wildlife observations were limited due to the conversion of the native habitats to silviculture with a dense canopy cover, which is known to reduce faunal species richness and listed species habitat.

Typically, intensive silvicultural practices in conjunction with fire suppression lead to a reduction of within-stand forest structural diversity and plant species richness. As a result, habitat characteristics important to wildlife are minimized resulting in decreased wildlife use. Site conversion, clearcutting, site preparation, as well as the lack of burning and thinning usually leads to low species diversity and richness. The diversity and density of some species, especially reptiles and amphibians, are greatly diminished following planted pine conversion.

3.0 METHODOLOGIES

3.1 EXISTING DATA COLLECTION

The subject tracts were evaluated for the potential occurrence of species listed by the U. S. Fish and Wildlife Service (FWS), Florida Fish and Wildlife Conservation Commission (FFWCC), and Florida Department of Agriculture and Consumer Services (FDACS). Prior to initiating surveys for wildlife and rare species, Cardno ENTRIX reviewed the Florida Natural Areas Institute (FNAI) database to determine known listed or rare species occurrences within the project vicinity and species that had the potential to be found on site. Additionally, Cardno ENTRIX reviewed the FFWCC Bald Eagle Nest Identification database for the locations of known eagle nests and the Federal Emergency Management Agency (FEMA) database was utilized to determine the presence of 100-yr floodplain within the subject property.

As a result of the background research, protected plants and wildlife species previously observed as occurring within the general vicinity of the study area and those having the potential to occur in the study area were compiled and are listed in **Table 1**. Their likelihood of occurrence is also listed in this table with a *high* probability indicating that the respective species was observed within the study area.

Table 1. Listed Species Known to Occur/Potentially Occur On Site.

Scientific Name	Common Name	Status	Likelihood of On-Site Occurrence
Amphibians			
Lithobates capito	gopher frog	SSC	Low
Birds			
Falco sparverius	Southern American Kestrel	FLT	Low
Grus canadensis pratensis	Florida sandhill crane	FLT	Low
Haliaeetus leucocephalus	bald eagle	GE/BA PA	Low
Mycteria americana	wood stork	FE	Low
Picoides borealis	red-cockaded woodpecker	FE	Low
Mammals			
Sciurus niger shermani	Sherman's fox squirrel	SSC	Low
Reptiles			
Drymarchon couperi	eastern indigo snake	FLT	Low
Gopherus polyphemus	gopher tortoise	FLT	High
Macrochelys temminckii	alligator snapping turtle	SSC	Moderate
Pituophis melanoleucus mugitus	Florida pine snake	SSC	Low
Mollusks			
Lampsilis subangulata	Shinyrayed pocketbook	FE	Moderate
Medionidus simpsonianus	Ochlockonee moccasinshell	FE	Moderate
Plants			
Asarum arifolium	wild ginger	FLT	High
Calycanthus floridus	Eastern sweetshrub	FLT	Moderate
Erythronium umbilicatum	Troutlily	FLE	Moderate

Scientific Name	Common Name	Status	Likelihood of On-Site Occurrence
Kalmia latifolia	Mountain laurel	FLT	Moderate
Lilium michauxii	Carolina lily	FLE	Moderate
Lilium superbum	Turkscap lily	FLE	Moderate
Magnolia ashei	Ashe's magnolia	FLT	Moderate
Magnolia pyramidata	pyramid magnolia	FLT	Moderate
Pityopsis flexuosa	Florida golden aster	FLE	Moderate
Stewartia malacodendron	Stewartia	FLE	Moderate
Tipularia discolor	crane-fly orchid	FLT	High
Trillium lanceifolium	lanceleaf wakerobin	FLE	High
Xanthorhiza simplicissima	Yellowroot	FLE	Moderate
Zephyranthes atamasca	rainlily	FLT	High

FE-Listed by Florida as Federally designated Endangered; FT-Federally designated Threatened; FLT-Florida-designated Threatened; FLE-Florida-designated Endangered; SSC-Florida Species of Special Concern; GE/BA PA-*Golden Eagle/Bald Eagle Protection Act*

3.2 HABITAT MAPPING

Ecological communities observed on site were field mapped and aerially delineated using GIS to create an electronic file of the study area land covers. The *Florida Land Use, Cover and Forms Classification System* (FLUCCS) was utilized to classify on-site habitats and land features. This method was developed by the Florida Department of Transportation (FDOT) as a way to develop a unified land use classification system for all land cover and plant communities found throughout Florida. Land cover types were mapped using high-resolution infrared photography, soils maps, and ground-truthing techniques. Descriptions of plant species composition and structure for each FLUCCS unit were created based on field observations throughout each habitat. Perennial streams were also verified and digitized based on thorough field surveys and LiDAR analysis.

3.3 WILDLIFE AND VEGETATION SURVEYS

Site-specific surveys were initiated to determine the presence of listed species regulated by local, state and federal government agencies. Surveys focused on those species previously identified as having a likelihood of occurring on site. Listed plant species are regulated by the *Preservation of Native Flora of Florida Act*, Section 581, *Florida Statutes* (FS) and Chapter 5B-40, *Florida Administrative Code* (FAC). Wildlife species are listed under the *Endangered Species Act of 1973*, and Chapter 39.27, F.AC. Survey transects were established such that 30% of all the habitats were canvassed. Survey events were conducted in January and February 2012. Surveys were conducted using both pedestrian and vehicular transects. Pedestrian surveys included meandering transects, line transects and spot surveys at wetland features and areas with unique aerial signatures. Most upland pedestrian transects were conducted by ecologists walking parallel to each other through various habitats. The width of these transects varied from approximately 30 to 300 feet ensuring that the surveyors had an overlapping field of view for species-specific surveys.

The survey width was highly dependent on the type of habitat, vegetation density, and the species of wildlife or plant for which the survey was conducted. The narrower survey widths were used in habitats that may be occupied by species such as the gopher tortoise, their burrows, and other ground dwelling species. The wider transect widths were used in areas of arboreal species (those found in trees), where each tree could easily be scanned with the aid of binoculars. Specifically, the surveys targeted potential gopher tortoise habitat and burrows, nest trees for Sherman's fox squirrels (*Sciurus niger shermani*) and potential red-cockaded woodpecker (*Picoides borealis*; RCW) cavity trees. Areas that were extremely disturbed or surrounded by unsuitable habitats were briefly reviewed.

Bird surveys were conducted within each distinctive habitat type by way of pedestrian transects frequently stopping to listen for songs or calls. Visual surveys for rookeries, potential nest trees, or tree cavities were also conducted in areas of suitable habitat. Plant surveys were generally conducted in concert with the wildlife surveys; however, specific spot surveys in habitats that had potential to harbor listed plants species were also conducted. Survey transects for listed reptiles and amphibians were also conducted using pedestrian transects along wetland edges looking under logs, stumps, and debris piles. Additionally, window surveys were conducted along all navigable roads, firebreaks, and paths where possible. These open and often sandy corridors afford an opportunity to observe animal tracks and plants that are dependent on an open canopy.

The location of observed protected wildlife or plant species was mapped in the field and their coordinates recorded using Garmin GPS unit. Survey methodologies specific to individual species are further detailed. All observed exotic/invasive species observations were also recorded in the plant species list (**Appendix A)**

4.0 RESULTS

4.1 HABITAT/ECOLOGICAL COMMUNITIES

The site is located within the Northern Highlands and Tifton Uplands physiographic provinces of the Gulf Coastal Plain. The Cody Scarp lies to the south. This area is underlain by undifferentiated Miocene clastic sediments and is characterized by rolling hills created by the erosional effects of streams and rivers that dissect the landscape and create steep-sided upland inter-fluves. The site sits on top of the Miccosukee and Torreya geologic formations. The property is bounded on the western edge by the Little River which drains directly into Lake Talquin. The property is within the Ochlocknee River watershed.

The local topography ranges from 68 to 208 feet above sea level and consists of steep-sloped, densely wooded inter-fluvial hills and low, broad forested floodplains that are dissected by perennial and intermittent streams. A small natural levee is present along the river. Soils range from well and moderately drained, on the upland inter-fluves, to very poorly drained soils within the floodplains. They are primarily deep sands. A quadrangle map illustrating site topography is provided as **Figure 2**.

The Natural Resources Conservation Service (NRCS) soils manual was utilized to determine the approximate extent of the different soil mapping units known to exist within the project boundaries. Fifteen soil mapping units were determined to occur within the project limits. Further, *The Hydric Soils of Florida Handbook*[1] (NRCS 2007) was reviewed to obtain a preliminary assessment of hydric soils on site. The soils on the property range from well drained to very poorly drained drainage classes and consist of organic mucks (Histosols), deep sands (Entisols), and older clayey soils (Kaolinitic Ultisols). Slopes range from 0 to 60 percent. A summary of NRCS soil mapping units, soil code, acreage and hydric determination is provided in **Table 2**. A soils map is provided as **Figure 3**. Septic and construction limitations on individual soil mapping units are included as **Appendix B**.

Table 2. Summary of On-Site Soils.

Map Unit	Description	Acreage	Hydric
003	Albany-Ousley-Pelham Complex, 0-5% Slopes, Occasionally Flooded	0.96	No
006	Blanton Sand, 5-8% Slopes	0.82	No
009	Bonifay-Alpin Complex, 0-5% Slopes	426	No
014	Cowarts-Dothan-Fuquay Complex, 5-8% Slopes	44.78	No
021	Dothan-Fuquay-Cowarts Complex, 8-15% Slopes	218.02	No
040	Cowarts-Dothan-Fuquay Complex, 15-60% Slopes	10.42	No

[1] Hydric Soils of Florida Handbook, Third Edition. Carlisle, Victor W., Professor Emeritus, University of Florida, Soil and Water Science Department. March 2000.

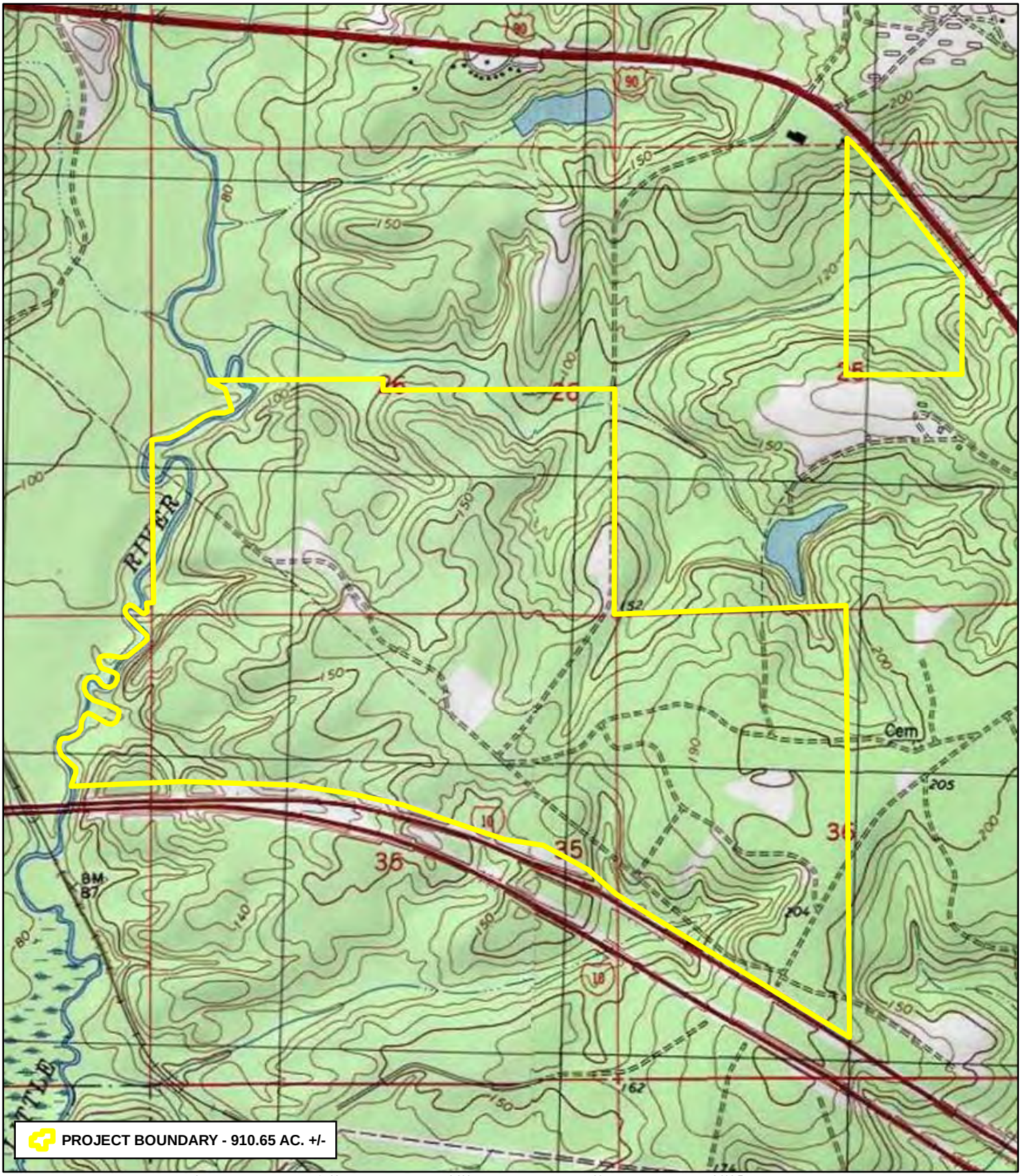

Figure 2 - USGS Quadrangle Map

Florida Public Safety Institute
Gadsden County, Florida

Image: ESRI QUAD
Sec 24, 25, 26, 27, 34, 35, 36
Twp 02 N
Rng 03 W

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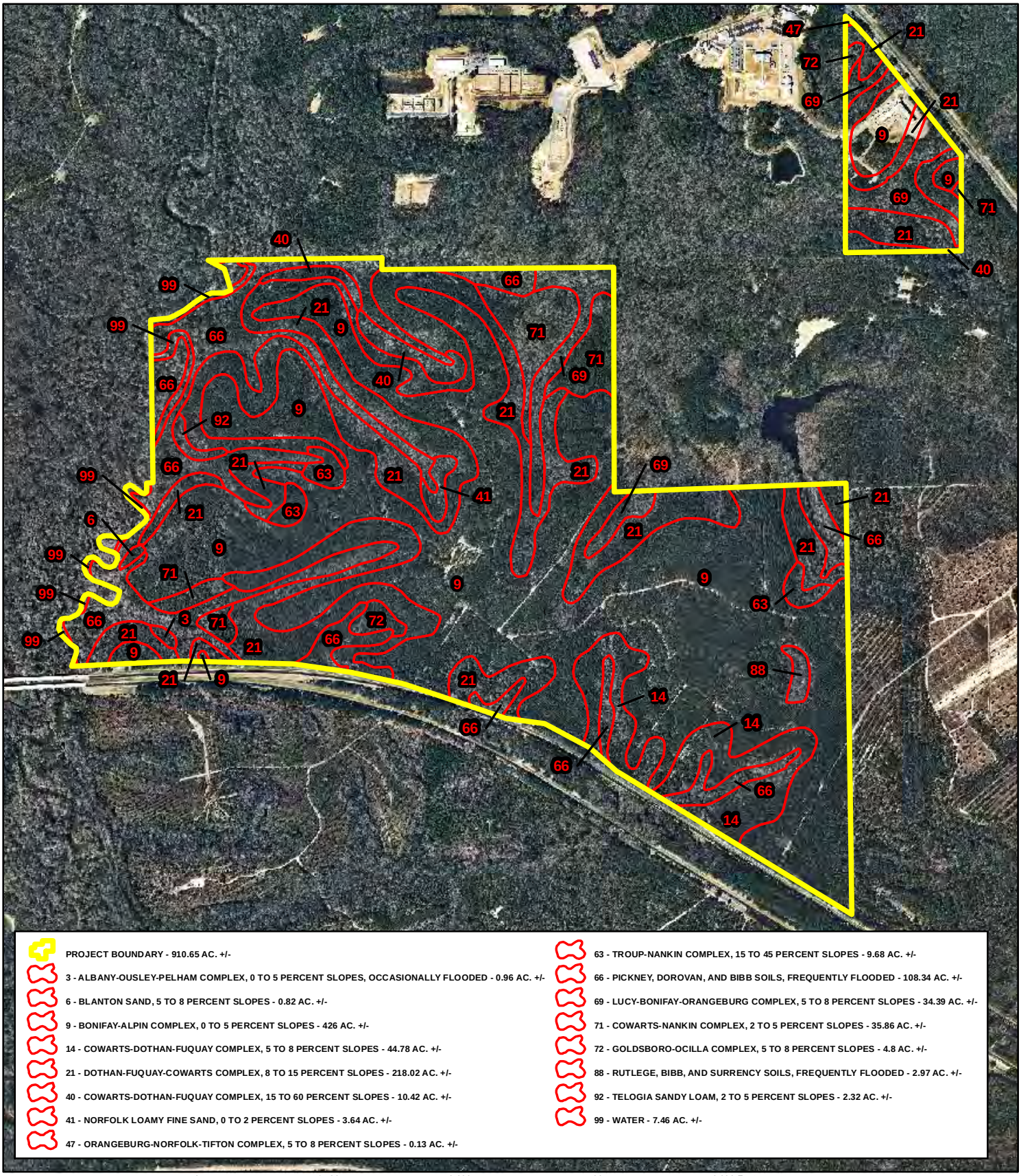
Coordinate System: NAD 1983 SPFNF

Date:02/08/2012 Rev. Date: xx/xx/xx PM: MAB GIS Analyst: JPB Map Document: FIGURE2_QUAD.mxd Project Number: 4942-053-1000 PDF Document: FIGURE2_QUAD.pdf Plot Size: 8.5 x 11



PROJECT BOUNDARY - 910.65 AC. +/-

3 - ALBANY-OUSLEY-PELHAM COMPLEX, 0 TO 5 PERCENT SLOPES, OCCASIONALLY FLOODED - 0.96 AC. +/-

6 - BLANTON SAND, 5 TO 8 PERCENT SLOPES - 0.82 AC. +/-

9 - BONIFAY-ALPIN COMPLEX, 0 TO 5 PERCENT SLOPES - 426 AC. +/-

14 - COWARTS-DOTHAN-FUQUAY COMPLEX, 5 TO 8 PERCENT SLOPES - 44.78 AC. +/-

21 - DOTHAN-FUQUAY-COWARTS COMPLEX, 8 TO 15 PERCENT SLOPES - 218.02 AC. +/-

40 - COWARTS-DOTHAN-FUQUAY COMPLEX, 15 TO 60 PERCENT SLOPES - 10.42 AC. +/-

41 - NORFOLK LOAMY FINE SAND, 0 TO 2 PERCENT SLOPES - 3.64 AC. +/-

47 - ORANGEBURG-NORFOLK-TIFTON COMPLEX, 5 TO 8 PERCENT SLOPES - 0.13 AC. +/-

63 - TROUP-NANKIN COMPLEX, 15 TO 45 PERCENT SLOPES - 9.68 AC. +/-

66 - PICKNEY, DOROVAN, AND BIBB SOILS, FREQUENTLY FLOODED - 108.34 AC. +/-

69 - LUCY-BONIFAY-ORANGEBURG COMPLEX, 5 TO 8 PERCENT SLOPES - 34.39 AC. +/-

71 - COWARTS-NANKIN COMPLEX, 2 TO 5 PERCENT SLOPES - 35.86 AC. +/-

72 - GOLDSBORO-OCILLA COMPLEX, 5 TO 8 PERCENT SLOPES - 4.8 AC. +/-

88 - RUTLEGE, BIBB, AND SURRENCY SOILS, FREQUENTLY FLOODED - 2.97 AC. +/-

92 - TELOGIA SANDY LOAM, 2 TO 5 PERCENT SLOPES - 2.32 AC. +/-

99 - WATER - 7.46 AC. +/-

0 1,500 3,000 4,500 6,000 Feet

0 450 900 1,350 1,800 Meters

Figure 3 - NRCS Soils Map

Florida Public Safety Institute
Gadsden County, Florida

Image: ESRI QUAD
Sec 24, 25, 26, 27, 34, 35, 36
Twp 02 N
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Coordinate System: NAD 1983 SPFNF

Date:02/08/2012 Rev. Date: xx/xx/xx PM: MAB GIS Analyst: JPB Map Document: FIGURE3_SOIL.mxd Project Number: 4942-053-1000 PDF Document: FIGURE3_SOIL.pdf Plot Size: 8.5 x 11

Table 2, continued. Summary of On-Site Soils

Map Unit	Description	Acreage	Hydric
041	Norfolk Loamy Fine Sand, 0-2% Slopes	3.64	No
047	Orangeburg-Norfolk-Tifton Complex, 5-8% Slopes	0.13	No
063	Troup-Nankin Complex, 15-45% Slopes	9.68	No
066	Pickney, Dorovan, And Bibb Soils, Frequently Flooded	108.34	Yes
069	Lucy-Bonifay-Orangeburg Complex, 5-8% Slopes	34.39	No
071	Cowarts-Nankin Complex, 2-5% Slopes	35.86	No
072	Goldsboro-Ocilla Complex, 5-8% Slopes	4.8	No
088	Rutlege, Bibb, And Surrency Soils, Frequently Flooded	2.97	Yes
092	Telogia Sandy Loam, 2-5% Slopes	2.32	No
099	Water	7.46	Yes

Cardno ENTRIX identified six land cover types on the property. Two of these land cover designations, Stream Swamp FLUCCS 615 and Gum Swamp FLUCCS 613, are wetland communities and the remaining designations are classified as upland communities. The majority of on-site uplands have been altered by past silvicultural operations andthe dominant land cover designation on the property is planted pine (FLUCCS 441). Wetland community types included stream swamp (FLUCCS 615), the second most prevalent land use designation on the site, and gum swamp (FLUCCS 613). A system of intermittent and perennial streams flow through deeply cut channels from the highest portions of the site to the Little River. Upland communities on site included planted pine (FLUCCS 441) and beech-magnolia (FLUCCS 431). A summary of the FLUCCS designations observed on-site and the associated acreages are outlined in **Table 3**.

Table 3. FLUCCS Codes, Designations, Acreages and Category

FLUCCS Code	Community	Acreage
Upland		
166	Stormwater Pond	0.79
175	Governmental	9.19
431	Beech-Magnolia	115.54
441	Planted Pine	574.38
Wetland		
613	Gum Swamp	5.68
615	Stream Swamp	205.07
	Total Upland Acreage	**699.90**
	Total Wetland Acreage	**210.75**

Small hydric inclusions were occasionally observed within the uplands as well as small upland islands within areas delineated as wetlands. These areas typically measured less than 1/8 acre and were found primarily in the community transitional zones and floodplains. Due to the small size of these features, they were not mapped. Dirt roads and trails were also omitted from the map. An infrared DOQQ map with the FLUCCS delineations for each land cover type is provided as **Figure 4**. A detailed description of each FLUCCS land cover type is provided in **Section 4.1.1**. A comprehensive list of observed plant species is provided as **Appendix A**.

4.1.1 Uplands

Stormwater Pond (FLUCCS 166), 0.79 Acres

This land use type includes a small stormwater pond south of the dormitories. The dominant vegetation in the pond is woolgrass (*Scirpus cyperinus*), soft rush (*Juncus effusus*), and broomsedge bluestem (*Andropogon virginicus*). Other obligate and facultative wetland species are present within the pond. The periphery of the pond is dominated by bermudagrass (*Cynodon dactylon*) and common ruderal species.

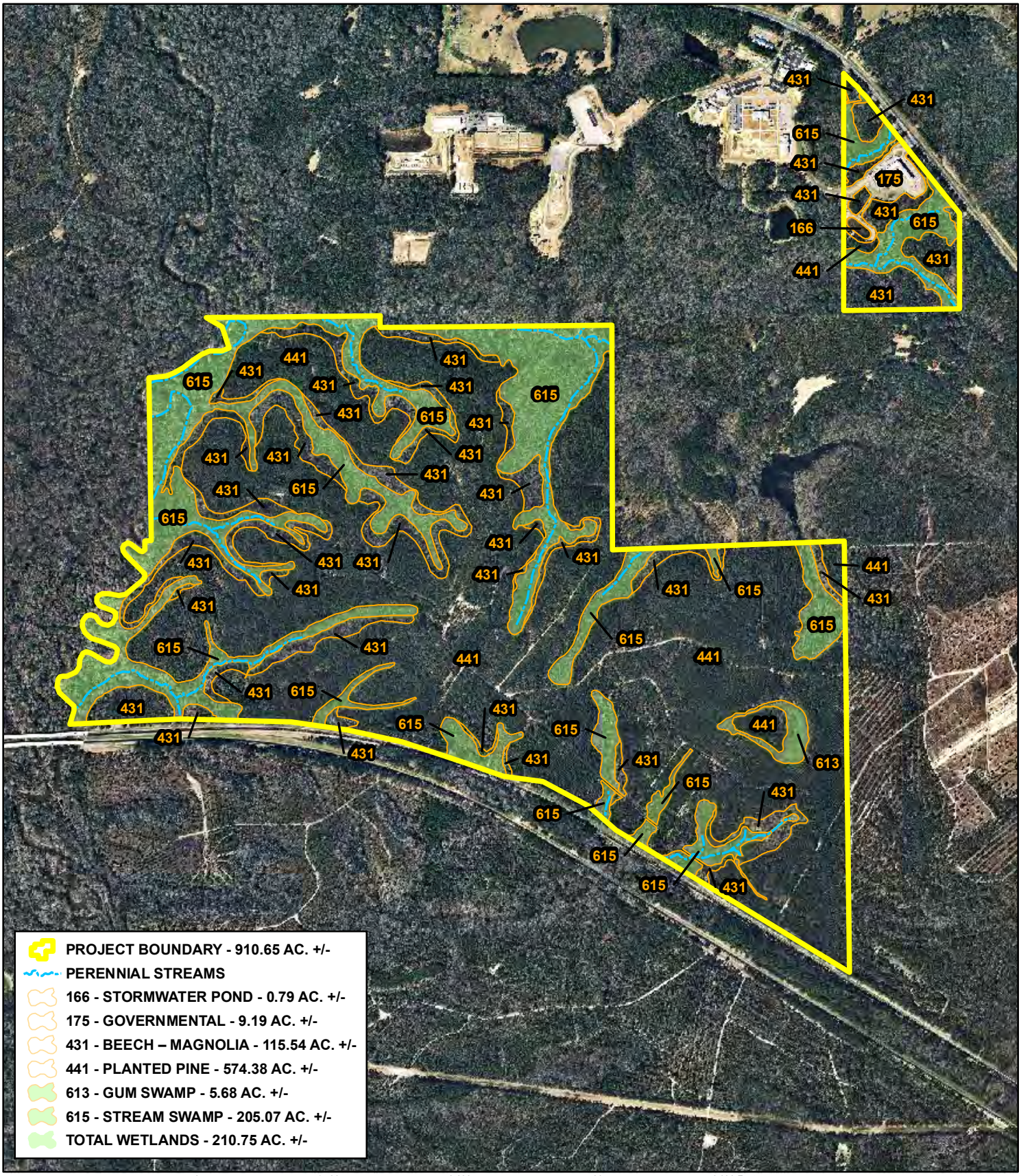

Figure 4 - FLUCCS Map

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Governmental (FLUCCS 175), 9.19 Acres
This designation includes buildings, parking lots, and maintained lands associated with FPSI.

Beech-Magnolia (FLUCCS 431), 115.54 Acres
This forested community is located on slopes and inter-fluvial ridge tops throughout the property. On the upper slopes and ridges the dominant canopy species were loblolly pine, southern magnolia (*Magnolia grandiflora*), Spanish oak (*Quercus falcate*), water oak (*Q. nigra*), white oak (*Q. alba*), laurel oak (*Q. laurifolia*), tulip poplar (*Liriodendron tulipifera*), pignut hickory (*Carya glabra*), and black cherry (*Prunus serotina*). On the lower portions of the slope, approaching the stream floodplains, spruce pine (*Pinus glabra*) replaced loblolly pine and swamp chestnut oak (*Q. michauxii*) became prominent. The sub-canopy was characterized by the presence of American beech (*Fagus grandifolia*). Other sub-canopy species included American hornbeam (*Carpinus caroliniana*), hophornbeam (*Ostrya virginiana*), southern sugar maple (*Acer saccharum* ssp. *floridanum*), American holly (*Ilex opaca*), devilwood (*Osmanthus americanus*), flowering dogwood (*Cornus florida*), common persimmon (*Diospyros virginiana*), and common sweetleaf (*Symplocos tinctoria*). The shrub stratum was sparse to moderate and the dominant species were dwarf palmetto (*Sabal minor*) on the lower slope, sparkleberry (*Vaccinium arboreum*) on the higher slopes or ridges, and needle palm (*Rhapidopyllum hystrix*) in the bottomlands. Other commonly encountered shrub species were hearts-a-bustin' (*Euonymus americanus*), American witchhazel (*Hamamelis virginiana*), dahoon (*I. cassine*), parsley hawthorn (*Crataegus marshallii*). The sparse herb stratum consisted of slender woodoats (*Chasmanthium laxum*), ebony spleenwort (*Asplenium platyneuron*), partridgeberry (*Mitchella repens*), scattered longbract wakerobin (*Trillium underwoodii*) on the slopes, and occasional Adam's needle (*Yucca filamentosa*) on the highest portions of the ridges.

Planted Pine (FLUCCS 441), 574.38 Acres
This land use type is found on the upper ridges and ranges from xeric to slightly mesic. The highest and driest portions of the property are being utilized for silvicultural activities. The forested canopy consisted of loblolly pine planted in rows. The sub-canopy was dominated by water oak, laurel oak, and sweetgum (*Liquidambar styraciflua*) in mesic areas. The sparse shrub layer was dominated by sparkleberry (*Vaccinium arboretum*), southern live oak (*Q. virginiana*), sand live oak (*Q. geminata*), and wax myrtle (*Myrica cerifera*) in mesic areas. The herbaceous stratum was sparse and consisted of upland species such as broomsedge bluestem, summer farewell (*Dalea pinnata*), dogfennel (*Eupatorium capillifolium*), dogtongue wild buckwheat (*Eriogonum tomentosum*), capillary hairsedge (*Bulbostylis ciliatifolia*), roundleaf bluet (*Houstonia procumbens*), and lichen (*Cladonia* sp.).

4.1.2 Wetlands

Gum swamp (FLUCCS 613), 5.68 Acres
This forested wetland community is located in a single kidney shaped, possible karstic feature in the southeastern portion of the property. This wetland was dry at the time of the survey; however, the high water line and presence of adventitious rooting indicate consistent ponding up to six feet deep of significant duration. The dominant canopy species in the deepest portion is Ogeechee tupelo (*Nyssa ogeche*) with no significant sub-canopy, shrub, or herbaceous layer. The periphery consists of eastern cottonwood (*Populus deltoids*), swamp tupelo (*N. biflora*), and red maple (*Acer rubrum*) in the canopy with a moderate tall shrub layer of eastern cottonwood (*P. heterophylla*), common buttonbush (*Cephalanthus occidentalis*), titi (*Cyrilla racemiflora*), and Carolina willow (*Salix caroliniana*). The herbaceous stratum closer to the periphery of the feature is moderate to dense. The dominant herbaceous species were queen-of-the-meadow (*E. fistulosum*), dogfennel, sugarcane plumgrass (*Saccharum giganteum*), floating marshpennywort (*Hydrocotyle ranunculoides*), and primrose-willow (*Ludwigia* sp.).

Stream Swamp (FLUCCS 615), 205.07 Acres

This forested wetland community is located in the floodplains of the streams between upland ridges and includes both stream floodplains and the floodplain of the Little River. Included within this community designation are both intermittent and perennial stream channels of varying sizes. The closed canopy consisted of swamp chestnut oak, spruce pine, tulip poplar, sweetgum, red maple, sweetbay (*Magnolia virginiana*), and swamp bay (*Persea palustris*). In the river floodplain bald-cypress (*Taxodium distichum*), river birch (*Betula nigra*), and slippery elm (*Ulmus rubra*) were common. The sub-canopy is moderate and consisted of American hornbeam, American beech, and young canopy species. The shrub stratum ranged from moderate to dense and included swarf palmetto, needle palm, wax myrtle, Elliott's blueberry (*Vaccinium elliottii*), dahoon, coastal doghobble (*Leucothoe axillaris*), large gallberry (*Ilex coriacea*), Virginia sweetspire (*Itea virginica*), and titi along the river floodplain. The herb stratum ranged from moderate to dense. Giant cane (*Arundinaria gigantea*) and slender woodoats (*Chasmanthium laxum*) were the dominant herbaceous species. Ferns were also dominant and common species included Christmas fern (*Polystichum acrostichoides*), downy maiden fern (*Thelypteris dentata*), and Japanese false spleenwort (*Deparia petersenii*). Other common herbaceous species were golend ragwort (*Packera aurea*), butterweed (*P. glabella*), millet beaksedge (*Rhynchospora milliacea*), and leathery rush (*J. coriaceus*). In the river floodplain Atamasco lily (*Zephyranthes atamasca*) and Indian woodoats (*C. latifolium*) were common.

4.2 FLOODPLAIN

FEMA determined 83.15 acres of the 100-year flood plain to occur within the limits of the subject property. All of the FEMA-mapped floodplain is limited to the large southernmost tract of land. The limits of the flood plain are shown on **Figure 5**.

4.3 LISTED SPECIES

Wildlife observations were limited due to the conversion of the native habitat to silvicultural land use. All plant species observed on the property are listed in **Appendix A**. Inferred wildlife presence was based on observations of scat, tracks, vocalizations or other signs.

The plant species observed within the project site contain species that are both annual and perennial. It is likely that some plant species, including early-spring ephemerals as well as other seasonal annual species, are present within the study area but were not present at the time of field investigation. Furthermore, it is certain that additional wildlife species would use the parcel during varying species-specific migratory, breeding, and foraging seasons.

The results of the FNAI database search identified three listed species occurrences previously observed within a one-mile radius of the project site (**Figure 6**). These species included the FNAI-listed Florida pine snake (*Pituophis melanoleucus mugitus*), Ochlockonee Moccasinshell (*Medionidus simpsonianus*), and the Shinyrayed Pocketbook (*Lampsilis subangulata*). These species were not observed during our site assessment.

No Federal-listed plant or wildlife species were observed. Three state-listed plant species and one state-listed animal species were observed on-site. Wild ginger (*Asarum arifolium*) and crane-fly orchid (*Tipularia discolor*) were observed within the beech-magnolia slope forest community and rainlily (*Zephyranthes atamasco*) was observed in the Stream Swamp (FLUCCS 615) along the Little River floodplain. Gopher tortoise burrows were observed within the upland plant communities.

Figure 5 - FEMA 100-year Floodplain

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Figure 6 - FNAI Map

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A brief review of these species as well as those species thought to have potential of occurring within the survey area, but not observed, is herein provided. As previously indicated, listed wildlife species observations can be limited due to their seasonal distribution Additionally, listed plant observations can be limited due to their flowering phenology at the time of the survey. A map detailing the location of observed state listed species is provided as **Figure 7**.

Those species in bold type were located during field surveys.

4.3.1 Wildlife

Gopher Tortoise (*Gopherus polyphemus*), Florida Threatened

The gopher tortoise is a relatively large (carapace length often 15-28 cm, but up to 38 cm) terrestrial turtle with a domed carapace, short elephantine hindlimbs, shovellike forelimbs, a gular projection from the anterior plastron, and a short tail. Preferred habitat includes sandhill (pine-turkey oak), sand pine scrub, xeric hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, and mixed hardwood-pine communities. Gopher tortoise burrows provide a habitat that many other wildlife species share with their host. Many of these commensal species are listed as protected due to specific habitat requirements. The suitability of gopher tortoise habitats for development, along with the desire to collect them for food, has traditionally led to their decline.

Historically the majority of uplands throughout the project site were potential gopher tortoise habitat. Conversion of historically open canopied sandhills to densely planted pines reduced the preferred habitat to a few small areas receiving sufficient sunlight to support herbaceous plant growth and nest incubation. Twenty gopher tortoise burrows were observed within the on-site uplands. Burrows were concentrated within open sunny areas including small clearings, roadsides, and openings within the planted pines. All burrows were identified as inactive. This assignment is based on the activity assessment of the burrow apron. The current inactive activity status of all burrows may be a direct result of the cooler winter temperatures and associated lower tortoise activity levels.

Population estimates were determined using methods described within the FFWCC *Gopher Tortoise Permitting Guidelines* (April 2008, Revised November 2011). Site-specific gopher tortoise survey coverage was extrapolated to 100% of the available tortoise habitat and used in the below equation.

$N=(A+I)0.5$ Where:

N=Number of gopher tortoises
A=Number of active tortoise burrows
I=Number of inactive tortoise burrows
0.5=The recommended conversion factor

An estimated total of 40 burrows or 20 gopher tortoises potentially occupy the project site.

Gopher frog (*Lithobates capito*), Florida Species of Special Concern

Gopher frogs are typically a gopher tortoise burrow commensal species. This frog species also utilizes herbaceous, seasonally flooded depressions for breeding in October through April. They often rest at the opening of gopher tortoise burrow during the daytime. The mouths of all observed gopher tortoise burrows were carefully inspected for the presence of gopher frogs.

No gopher frogs were observed during our surveys. Due to the lack of breeding habitat and lack of visual observation it is likely that this species does not utilize this site.

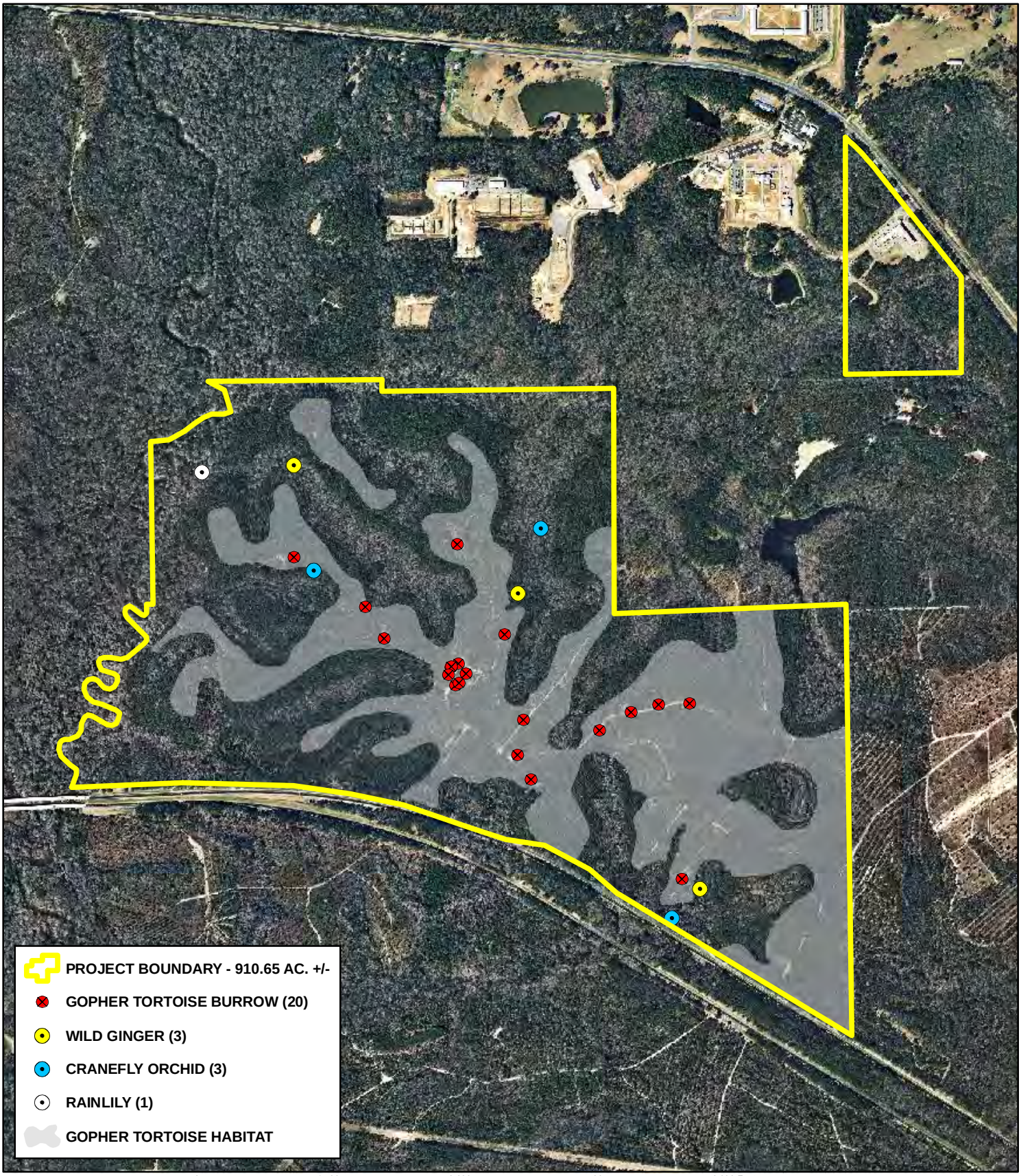

Figure 7 - Listed Species Observed

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Bald eagle (*Haliaeetus leucocephalus*), Golden Eagle/Bald Eagle Protection Act
This large accipiter is distinguished by the white head and tail, and bright yellow bill. The bald eagle is generally found near large water bodies, nesting in primarily tall, live pine trees. This species build huge nests in the tops of large trees near rivers, lakes, marshes, or other wetland areas. In general they need an environment of quiet isolation; tall, mature trees; and clean waters.

This species was not observed during site visits. Likelihood of occurrence of this species on site is low due to lack of preferred habitat.

Wood stork (*Mycteria americana*), Federally Endangered
The wood stork is a very tall (40") and heavy wading bird of southern wetlands. Adults have white primary feathers and black secondary feathers and tail feathers. The head is naked of feathers and the neck is thick and black. The wood storks' bill is long, massive at the base, and tapering and down-curved toward the tip. Its long legs are dark gray with pinkish feet. Wood storks inhabit wet meadows, swamps, ponds, mudflats, freshwater marshes, and coastal shallows. The wood stork catches fish by feeling with its bill in shallow, often murky water. The wood stork is the only stork in North America. It frequents mangroves, swamps, marshes, and streams. In the United States, the wood stork remains all year in isolated coastal areas of the southeast. After the breeding season, some individuals travel north beyond the normal range in a post-breeding dispersal.

This species was not observed during site visits. Likelihood of occurrence of this species on site is low due to lack of preferred habitat.

Red Cockaded Woodpecker (*Picoides borealis*), Federally Endangered
These are small woodpeckers, 22 cm (8.5 in) from beak tip to tail tip and have back and wings with a black and white ladder pattern, black cap and white patch on the cheek, back bill, white belly and breast white, with black spots on the outer breast. Males have a small red tuft behind the eye that is difficult to see. Favored habitat is open, mature pine forest. The nest is built in the breeding male's roost cavity, typically excavated 10-13 m (30-40 ft) above ground in pines that are very old (usually more than 80 years). Cavity trees of this species always have a cavity entrance in which the edges of the hole are thickly coated with pine sap or resin. The woodpeckers peck holes around the cavity entrance to release the sticky resin, which helps deter predators such as rat snakes from invading the nest. Populations and suitable habitat are fragmented throughout southern Georgia and the rest of the southeastern United States.

This species was not observed during site visits. Suitable habitat is very specific for these birds. They inhabit old pine forests with open understory maintained by frequent, natural lightening fires. Due to the lack of preferred habitat is unlikely that this species exists on site.

Florida Sandhill Crane (*Grus canadensis pratensis*), Florida Threatened
A tall, long-necked, long-legged bird with a clump of feathers that droops over the rump; flies with neck and legs fully extended; adults are gray overall (may have brownish-red staining resulting from preening with muddy bill), with a whitish chin, cheek, and upper throat, and dull red skin on the crown and lores (lacking in immatures); immatures have a pale to tawny, feathered head and neck, and a gray body with brownish-red mottling; and average length around 104 cm with a wingspan 185 cm. Preferred habitat includes wet prairies, marshy lake regions, low lying pastures (including "improved" ones), shallow flooded open areas; vicinity of ponds in areas dominated by saw palmettos and scattered wooded hammocks that support cabbage palms, pines, oaks, and wetland trees such as magnolia and cypress; along sloughs and in open pinewood flats; avoids forests and deep marshes. Nesting normally occurs in

shallow ponds, marshes, and lakes with thick emergent vegetation. This species has been documented to tolerate limited human disturbance.

This species was not observed during site visits. Likelihood of occurrence of this species on site is low due to lack of preferred feeding and breeding habitat.

Southern American Kestrel (*Falco sparverius paulus*), Florida Threatened
The southeastern American kestrel is the smallest North American falcon. It is a species that prefers open pine forest where dead trees exist. It can also be found along open edges near river bottoms, coastal regions and suburban areas. The kestrel prefers to nest in old woodpecker or squirrel cavities located 15-40 feet above the ground in pine trees; however, it will also nest in artificial nest boxes and other available cavities. The primary diet of the kestrel consists of large insects and occasional rodents and reptiles. It is very similar to the more common migrating kestrel (*Falco sparverius*) and is typically differentiated from the southeastern American kestrel during late spring and summer when only the resident species remain. The decline of this raptor in Florida appears to be caused by the loss of preferred nesting areas. One kestrel species was observed flying overhead during wildlife transect. Due to fact the observation occurred in October and the limited examination time, the falcon species could not be determined. Although several snag trees were located within the study area, no kestrel nests were observed.

This species was not observed during site visits. Likelihood of occurrence of this species on site is low due to lack of preferred habitat.

Sherman's fox squirrel (*Sciurus niger shermani*), Florida Species of Special Concern
Typically Sherman's fox squirrels prefer turkey oak and longleaf pine communities; however, due to loss of habitat they are frequently found in open areas with pine and oak canopies and typically require a larger home range to compensate for loss of optimal food sources. Fox squirrels forage on longleaf pine cones; the cones will be on the ground with some to most scales removed starting from the base of the cone, and chew/bite marks on the stripped stem. They forage on a wide variety of nuts, acorns, berries, fungi, insects, and particularly pine nuts. Fox squirrels build bulky nests consisting of twigs in pine and oak trees. No fox squirrel nests were found during site visits.

This species was not observed during site visits. This species may utilize the wooded habitat within the floodplain of the Little River.

Alligator Snapping Turtle (*Macrochelys temminckii*), Florida Species of Special Concern
A very large turtle with a huge head, strongly hooked jaws, an extra row of scutes along each side of the shell (between the costals and marginals), three keels along the carapace, and a long tail; adult carapace length usually 38-66 cm (to 80 cm), mass 16-68 kg (to 143 kg); young are brown, with a very rough shell and long tail, 3-4.4 cm at hatching. Preferred habitat includes slow moving, deep water of rivers, sloughs, oxbows, and canals or lakes associated with rivers (e.g., impoundments); also swamps, bayous, and ponds near rivers, and shallow creeks that are tributary to occupied rivers. Sometimes enters brackish waters near river mouths. Usually occurs in water with mud bottom and some aquatic vegetation but may use sand-bottomed creeks. Range of this species in Georgia is limited to Gulf Coast drainages in the southwestern corner of the state.

This species was not observed during site visits. This species may utilize the river channel of the Little River.

Eastern Indigo Snake (*Drymarchon couperi*), Florida Threatened
The longest of North American snakes; heavy-bodied and shiny blue-black overall; chin, throat, and sides of head variably suffused with cream, orange, or red; scales unkeeled (males may have partial keel on scales of the middorsal 3-5 scale rows); anal undivided; 17 scale rows at mid-body; 1 preocular; third from last upper labial distinctly narrowed at the top; adult total length usually 152-213 cm (to 263 cm), about 43-61 cm at hatching. Habitat includes sandhill regions dominated by mature longleaf pines, turkey oaks, and wiregrass; flatwoods; most types of hammocks; coastal scrub; dry glades; palmetto flats; prairie; brushy riparian and canal corridors; and wet fields. Occupied sites are often near wetlands and frequently are in association with gopher tortoise burrows. Pineland habitat is maintained by periodic fires. Viable populations of this species require relatively large tracts of suitable habitat. Refuges include tortoise burrows, stump holes, land crab burrows, armadillo burrows, or similar sites. Eggs may be laid in gopher burrows.

This species was not observed during site visits. Likelihood of occurrence of this species on site is extremely low due to lack of preferred habitat.

Florida pine snake (*Pituophis melanoleucus mugitus*), Florida Species of Special Concern
Adults can measure up to 2.2 m. (7ft.). There can be a lot of variation in the color, but is typically tan with indistinct blotches of dark tan and rusty brown that are most distinct on the tail end of the body. Scales are keeled. It prefers sandy areas covered by stands of long leaf pine or oak and may also be found in open fields or anywhere frequented by the pocket gopher. Spends much time in underground burrows (may be the burrow of another animal or may dig the burrow itself). The Florida pine snake ranges from southern South Carolina to Alabama and to all but the southern tip of Florida.

This species was not observed during site visits. Likelihood of occurrence of this species on site is low due to lack of preferred habitat.

Ochlockonee Moccasinshell (*Medionidus simpsonianus*), Federally Endangered
This is a small freshwater mussel with a slightly elongated shell that usually measures less than 2.2 inches (55 mm) in length. The Ochlockonee Moccasinshell has a broadly curved ventral margin and a posterior ridge that is heavily marked with irregular ridges. The outer shell surface (periostracum) is light brown to yellow green in color and sculptured with dark green rays. The nacre (inner shell surface) is bluish white in appearance. Like many freshwater mussels, the Ochlockonee Moccasinshell is highly sensitive to changes within its habitat. Due primarily to sedimentation, pollution, introduction of the Asiatic clam (*Corbicula* sp.) and habitat degradation through the construction of impoundments, this small mussel is one of the rarest species in the eastern Gulf region.

This species was not observed during site visits. Likelihood of occurrence of this species within on-site portions of the Little River is moderate due to the small presence of preferred habitat and the close proximity of the vouchered upstream FNAI occurrence.

Shinyrayed Pocketbook (*Lampsilis subangulata*), Federally Endangered
The shiny-rayed pocketbook is a medium-sized freshwater mussel that usually reaches 3.3 inches (85 mm) in length. Its shell is nearly elliptical in shape, with a rounded posterior ridge. The smooth, light yellowish-brown outer surface is shiny and decorated with bright emerald green rays. Its nacre (inner shell surface) is white in appearance. Historically, *Lampsilis subangulata* was found throughout the Apalachicola-Chattahoochee-Flint (ACF) and Ochlockonee Rivers of Georgia, Alabama and Florida. However, today it is greatly reduced throughout its historical range.

This species was not observed during site visits. Likelihood of occurrence of this species within on-site portions of the Little River is moderate due to the small presence of preferred habitat and the close proximity of the vouchered upstream FNAI occurrence.

4.3.2 Plants

Wild Ginger (*Asarum arifolium*; Aristolochiaceae), Florida Threatened
Wild ginger is a terrestrial early-spring flowering plant that occurs in moist hardwood forests on slopes and in other fire protected areas. This species typically blooms February through May. Wild ginger is distinguished by 4-6 inch long heart-shaped leaves that smell of ginger when crushed or rubbed. The 1-2 inch long maroon urn-shaped flowers emerge at the base of the stem and are often hidden by leaf litter. The basal location of the flowers aids in pollination by beetles, ants, and other flightless insects.

Individuals were located along the slopes of ravines in Beech-Magnolia (FLUCCS 431) forest. Due to the position of the plants on steep slopes adjacent to wetlands, most of the plants should be protected from silvicultural or other land use activities.

Crane-fly Orchid (*Tipularia discolor*; Orchidaceae), Florida Threatened
The crane-fly orchid is a terrestrial plant found in woodlands, typically on mesic wooded slopes overlooking streams, rivers, and lakes. This orchid has hibernal leaf, a semi-glossy green on top and varyingly purple on bottom, appearing in the late fall (typically November in Florida) and persists through early spring (early March). The leaf measures up to 3 inches (7.5 cm) long on mature plants. The inflorescence appears in mid-summer, usually mid-late July. The flowers are approximately 0.5 inch across (1.3 cm) and resemble a large mosquito or a small crane-fly. The flowers of this orchid are asymmetrical (with the lip skewed one direction and the petals and dorsal sepal skewed the other).

Two solitary individuals were observed along the slopes of ravines in Beech-Magnolia (FLUCCS 431) forest. Due to the position of the plants on steep slopes adjacent to wetlands, most of the plants should be protected from silvicultural or other land use activities.

Rainlily (*Zephyranthes atamasco*; Amaryllidaceae), Florida Threatened
Rainlily is a Florida Department of Environmental Protection (FDEP) and U. S. Army Corps of Engineers (COE) Facultative Wetland species that is found in moist rich woods throughout the Panhandle and North Florida. This species flowers in the spring and summer. Rainlily is a perennial herb to 30 cm tall with narrowly linear lily-like leaves that emerge from a bulb. Flowers are white, fading to pink with age, and solitary, terminating the flowering scape.

This species was found in a single moderately dense colony along floodplain of the Little River within the Stream Swamp (FLUCCS 615) community designation. Due to the location of the plants within the floodplain, plants are protected from potential silvicultural activities and other potential anthropogenic disturbances.

Lanceleaf wakerobin (*Trillium lancifolium*; Trilliaceae), Florida Endangered
This species is limited to three counties in north Florida including Gadsden. It is found growing alone or colonies on moist slopes above creek floodplains. The flowers appear in late winter/early spring. Three lanceolate whorled leaves mottled with dark and light green subtend the inflorescence. The flowers are maroon, and the corolla consists of three petals. Aside from the variable lance-shaped leaves, the conclusive characters that distinguish this species from other species in this genus are that the anthers sub-equal the filaments and the lanceolate sepals are reflexed below the leaves.

Although no lanceleaf wakerobin were located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities. As a side note, *Trillium* sp. were common in the Beech-magnolia forest but none were flowering as they normally would be at the time of survey so conclusive verification of this species' presence/absence was difficult. It is possible that this species is present on the property.

Pyramid magnolia (*Magnolia pyramidata*; Magnoliaceae), Florida Endangered
Pyramid magnolia is found on moist sites in southern Georgia, southern Alabama, and the Florida Panhandle. The leaves of this tree species are simple, alternate, deciduous, smooth, and usually widest near the middle like a kite, about 5 inches long, with an ear-like base, and arranged in an umbrella-like pattern at the ends of branches. Twigs are smooth and purple-brown and the leaf buds are glabrous. Bark is smooth and brown becoming scaly on larger trees. Flowers are yellow-white and fragrant. Fruit is a cone-like aggregate of fleshy red follicles.

Although no pyramid magnolia was located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Ashe's magnolia (*Magnolia ashei*; Magnoliaceae), Florida Endangered
Ashe magnolia is found on moist sites in southern Georgia, southern Alabama, and the Florida Panhandle. The leaves of this tree species are simple, alternate, deciduous, smooth, and usually widest near the middle like a kite, about 5 inches long, with an ear-like base, and arranged in an umbrella-like pattern at the ends of branches. Twigs are smooth and purple-brown. Bark is smooth and brown becoming scaly on larger trees. Flowers are cream-colored with a purple blotch at the base of the petal. Fruit is a cone-like aggregate of fleshy red follicles.

Although no Ashe's magnolia was located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Florida golden aster (*Pityopsis flexuosa*; Asteraceae), Florida Endangered
This species is endemic to the eastern Florida Panhandle. It is found in xeric sandy oak and pine woodlands. This perennial herb is distinguished by a zigzag stem and a dense white pubescence on the stems and leaves. The cauline and basal leaves are approximately the same size and shape. Several yellow sunflower-like flowers emerge in the late summer and fall from each stem.

Although no Florida golden aster was located on site, this species is known to occur locally and it is possible that it may occur within the on-site planted pine (FLUCCS 441) community.

Troutlily (*Erythronium umbilicatum*; Liliaceae), Florida Endangered
This species is common north Florida, but within the state it is restricted two counties (Gadsden and Leon). It is found growing in large colonies on moist slopes above creek floodplains. The flowers and leaves appear in late winter/early spring. The leaves are lanceolate, lily-like and mottled with lighter green spots. The solitary flowers terminating the scape yellow to yellow-orange with distinctive dark brown anthers.

Although no troutlilies were located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Carolina lily (*Lilium michauxii*; Liliaceae), Florida Endangered
This species is restricted to the Florida Panhandle. It is found in moist oak hammocks on mesic soils. Carolina lily is a perennial herb emerging from a bulb or rhizome. Leaves present along the mid-stem are

in distinct whorls of 5-7 while the upper and lower cauline leaves may be alternate. Leaves are oblanceolate to obovate or, in other words, widest above the middle. The solitary, terminal flower is orange-red with purple spots and appears in summer.

Although no Carolina lilies were located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Turkscap lily (*Lilium superbum*; Liliaceae), Florida Endangered
This species is restricted to the Florida Panhandle. It is found in moist oak hammocks on mesic soils. Turkscap lily is a perennial herb emerging from a bulb or rhizome. Leaves present along the mid-stem are in distinct whorls of 5-7 while the upper and lower cauline leaves may be alternate. Leaves are lanceolate to elliptic or, in other words, widest at the middle and tapering to both ends. The solitary, terminal flower is orange or orange-red with purple spots and appears in summer.

Although no Turkscap lilies were located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Stewartia (*Stewartia malacodendron*; Theaceae), Florida Endangered
This small shrub species is found in ten counties in the Florida Panhandle. It is distinguished vegetatively by elliptic deciduous leaves that are slightly lighter green on the underside. The leaves are minutely serrate along the upper 3/4 of the margin. The lower surface and leaf margins are covered with sparse soft white hairs. The buds are protected by two scales that are covered with the same soft white pubescence. The twigs are a light to dark reddish brown and new growth is covered with hairs. The flowers are solitary, arising from the leaf axils, with 5 white petals subtending numerous stamens with purple anthers and a pubescent ovary in the center. The fruits are a 1-2 cm wide woody capsule containing 2-4 purplish to reddish brown seeds. The flowers appear from April to June and fruits can be seen July through October. Most commonly this species is associated with rich slope forests.

Although no stewartia was located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Mountain laurel (*Kalmia latifolia*; Ericaceae), Florida Threatened
This shrub species is found on rich mesic slopes in 11 counties in the Florida Panhandle with a disjunct population in Suwannee County. It is distinguished by its elliptic waxy dark green evergreen leaves. The mid-vein on the upper surface is slightly raised. They are alternate and range from 5 to 13 centimeters in length. From April through June showy clusters of flowers are prominent. These have fused corollas, making them cup shaped, and are white infused with pink. The fruits appear July through August and are round, brown dehiscent capsules, 1/4 inch long, splitting into 5 valves when dry and release numerous small seeds.

Although no mountain laurel was located on site, this species is known to occur locally within the beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Eastern sweetshrub (*Calycanthus floridus*; Calycanthaceae), Florida Threatened
While this shrub species is restricted, in Florida, to the Panhandle, it is common in other southeastern states. This species is found on slopes above stream floodplains and in bottomland forests. Plants are generally over 5 feet tall and grow in small colonies. The leaves are opposite, semi-deciduous, and medium green above and lighter green beneath. The leaves are fragrant when crushed. The small dark

maroon flowers are also very fragrant and are surrounded by numerous lanceolate dark maroon tepals. The achenes are contained within a fleshy receptacle. Flowers appear in the spring.

Although no eastern sweetshrub was located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

Yellowroot (*Xanthorhiza simplicissima*; Ranunculaceae), Florida Endangered
This herb species is common in the southeast, but it is restricted to four counties in the Florida Panhandle. Yellowroot is a facultative wetland species that grows in bottomland forests and river banks. The pinnately compound serrate leaves are clustered in fascicles along the stem. The root, from which the plant gets its name, is yellow on the inside. The inflorescences are a terminal spike of very small maroon flowers appearing in the spring.

Although no yellowroot was located on site, this species is known to occur locally within beech-magnolia (FLUCCS 431) or stream swamp (FLUCCS 615) communities.

4.4 EXOTIC AND NUISANCE PLANT SPECIES

Throughout the project limits Cardno ENTRIX observed infrequent non-native and exotic plant species. Commonly observed Florida Exotic Pest Plant Council (FLEPPC) Category I and II invasive/exotic plant species included Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), Japanese climbing fern (*Lygodium japonicum*), and Chinese tallow tree (*Sapium sebiferum*). Bahiagrass (*Paspalum notatum*) and centipede grass (*Eremochloa ophiuroides*) were the most common non-native species and were observed invading the altered edges of some of the natural plant communities.

5.0 ENVIRONMENTAL IMPACT ASSESSMENT

The proposed land use change from *Agriculture* to *Public III* is anticipated to have minimal impact on the site's natural resources. Environmentally sensitive areas can be avoided during construction and BMP will be implemented for any land alterations. The owner proposes to restore the upland pine plantation to longleaf pine as the logging progresses. Any future silvicultural activities will follow BMP for silviculture. Activities related to land development associated with the land use change in jurisdictional wetlands will follow the guidelines in the Gadsden County Comprehensive Plan (GCCP), Objective 5.2. Impacts to listed species will be avoided when possible and any impacts to the native and listed flora/fauna will be conducted in accordance with the policies listed under Objective 5.4 in GCCP.

Potential impacts to already degraded upland Planted Pine (FLUCCS 441) habitats and the listed species contained therein, *e. g.*, gopher tortoise, include the construction of structures, such as the prison facility currently under construction, and pine harvesting. Development/construction, including the installation of septic tanks and drain fields, if required, will maintain a 50-foot (construction) or 100-foot (septic installation) natural buffer adjacent to jurisdictional wetlands (Policy 5.2.11). The clearing of land for building may impact gopher tortoise burrows, cause potential for erosion and sediment deposition in adjacent wetlands, and reduce wildlife habitat by clearing vegetation. These activities can be offset by the relocation of gopher tortoises according to FFWCC protocol (Policy 5.4.2), the utilization of BMP for silviculture (Policy 5.2.5 and 5.2.12) including the installation of silt fencing, and the planned restoration of the dense surrounding loblolly pine plantation to native longleaf pine forest as outlined in the FPSI Natural Resource Management Plan, May 2010. The restoration of these forests to a natural fire regime and the reintroduction of longleaf pine will offset impacts from land clearing or silviculture. No listed plant species were found in the Planted Pine habitats. The Beech-Magnolia forest (FLUCCS 431)

community contains the majority of the listed plant species found on site and none of these were federally protected. The extremely steep slopes and difficulty of silviculture in this area makes it unlikely that the native vegetation in the Beech-Magnolia forest or the listed species contained therein will be significantly compromised by this land use change.

Any actions taken in state or federal jurisdictional wetlands will follow the guidelines in the GCCP, Objective 5.2. The wetlands are designated by the county as environmentally sensitive lands (ESL) and will be afforded maximum planning controls (Policy 5.2.20). Wetland and floodplain impacts will be naturally minimized by the inherent unsuitability of these areas for construction, *i. e.*, steep slopes, muck/organic soils, and the land use change will not violate Policy 5.2.10 as no development is slated for the FEMA 100 year floodplain. The impacts to wetlands, such as sedimentation and threats to native flora and fauna, will be minimized by the natural Beech-Magnolia forest buffer, 50-foot wetland setbacks (Policy 5.2.4), and the utilization of BMP (Policy 5.2.5) when development occurs in the vicinity of these sensitive natural features . No federally listed species were identified in the jurisdictional wetlands or adjacent plant communities. The persisting native vegetation in the wetlands and on the slopes requires no significant management. Any future wetland impacts to the jurisdictional wetlands and streams on the property resulting from the land use change will be compensated for through mitigation. The natural functions of the soils will be maintained as no draining of the wetlands is planned and the majority of the uplands on site will remain in their natural state and pervious to groundwater recharge inputs (Policy 5.3.2).

Appendix C depicts the assessed environmental features, including wetland setbacks, as they relate to development.

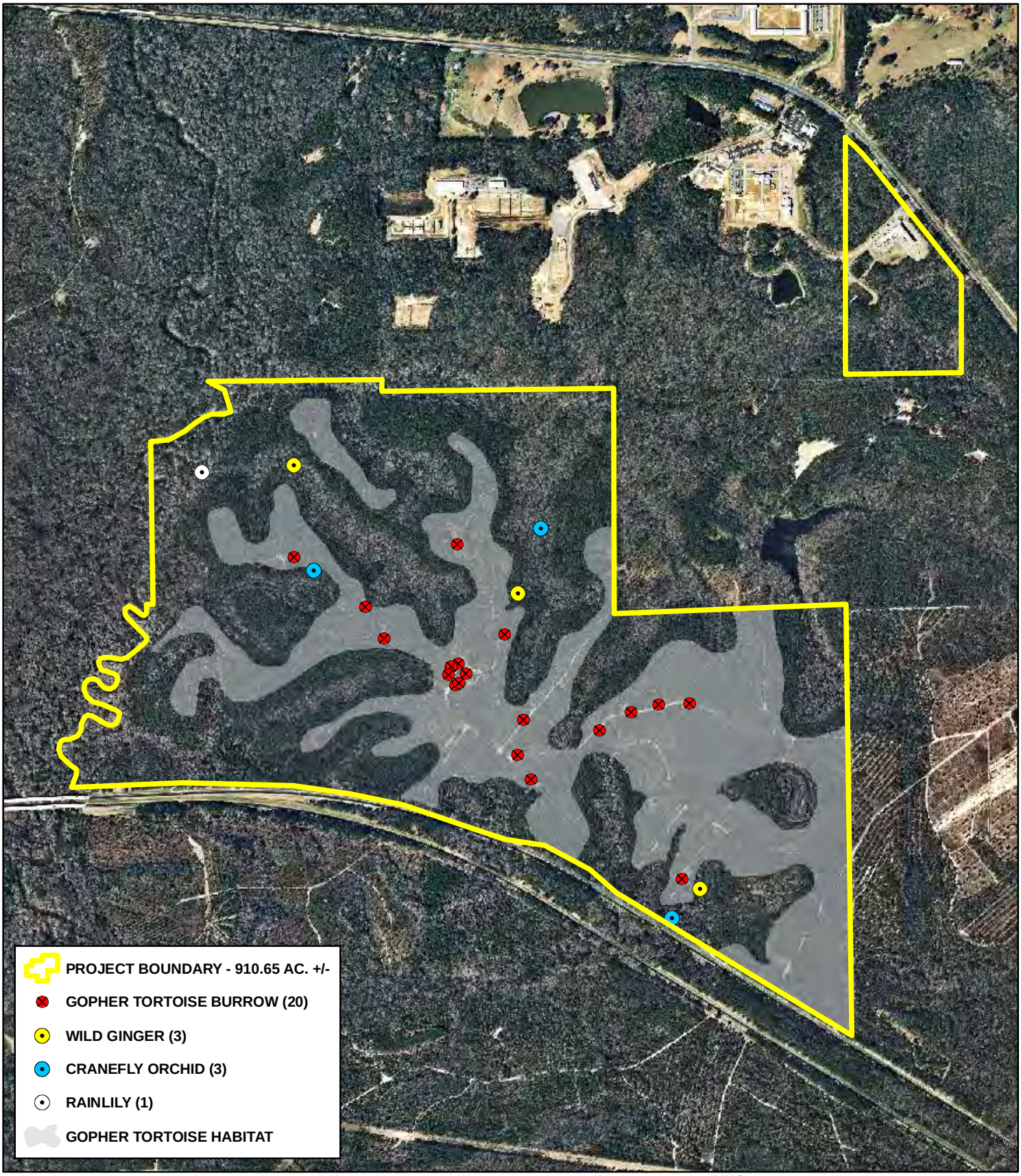

Figure 4 - Listed Species Observed

Florida Public Safety Institute

Gadsden County, Florida

Image: ESRI QUAD

Sec 24, 25, 26, 27, 34, 35, 36
Twp 02 N
Rng 03 W

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Coordinate System: NAD 1983 SPFNF

Date:02/08/2012 Rev. Date: xx/xx/xx PM: MAB GIS Analyst: JPB Map Document: FIGURE7_LISTED_SPECIES_OBSERVED.mxd Project Number: 4942-053-1000 PDF Document: FIGURE7_LISTED_SPECIES_OBSERVED.pdf Plot Size: 8.5 x 11