



Town of Lake Hamilton

Town Council Regular Meeting Agenda – March 5, 2024

001

Time: 6:00 P.M.
Location: Town Council Chambers
100 Smith Avenue

MAYOR MICHAEL KEHOE – VICE MAYOR CORA ROBERSON
COUNCIL MEMBERS, PATRICK SLAVENS, LARRY TOMLINSON, MARLENE WAGNER

1. **CALL TO ORDER**

2. **INVOCATION**

3. **PLEDGE OF ALLEGIANCE**

4. **ROLL CALL**

5. **PROCLAMATION**

A. *IRISH HERITAGE MONTH (pages 3-4)*

6. **CONSENT AGENDA**

Note: Members of the Council may remove items from the Consent Agendas if they wish to discuss them. Requests for removal need to be made known to the Mayor under the Approval of the Order of Business at the beginning of the meeting.

A. *February 6, 2024, Regular Meeting Minutes (pages 5-8)*

B. *February 14, 2024, Bid Opening for ITB BD 2024-01 Meeting Minutes (page 9)*

C. *February 27, 2024, Special Meeting Minutes (pages 10-12)*

D. *Appointment of Advisory Board Member (page 13)*

7. **PUBLIC COMMENT (Limited to 3 Minutes)** Your Town Council welcomes and invites citizens to comment on items (Non-Agenda Items) of community interest/concern or to bring forth areas of personal attention which may not have been fully addressed by Town Staff after prior contact to Town Hall, the Council may immediately act on any item or may request it be placed on a future agenda for further consideration.

8. **OLD BUSINESS**

A. *Public Hearing and Second Reading of Ordinance O-2024-1 Business Impact Statement (pages 14-18)*

B. *Public Hearing and Second Reading of Ordinance O-2024-2 Utilities Amendment (pages 19-30)*

C. *Public Hearing and Second Reading of Ordinance O-2024-3 Water Connection Amendment (pages 31-34)*

D. *Public Hearing and Second Reading of Ordinance O-2024-4 Detour School Annexation (pages 35-39)*

E. *Public Hearing and Second Reading of Ordinance O-2024-5 Water Tank Road Community Development District (pages 40-46)*

9. **NEW BUSINESS**

F. *First Reading of Ordinance O-2024-6 Petition to Extend the Boundaries of Hamilton Bluffs Community Development District (pages 47-57)*

G. *Public Hearing Resolution R-2024-2 Waste Water Facility Project Improvements (pages 58-198)*

H. *New Town Administrator Search (page 199)*

10. **STAFF REPORTS**

**TOWN ADMINISTRATORS REPORT
TOWN CLERK REPORT
TOWN ATTORNEY REPORT
TOWN COUNCIL COMMENTS**

002

ADJOURNMENT

Any opening invocation that is offered before the official start of the Town Council meeting shall be the voluntary offering of a private person, to and for the benefit of the Town Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the Town Council or the town staff, and the Town is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the Town Council meeting are invited to stand during the opening ceremony. However, such invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the Town Council Chambers or exit the Town Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

Any person desiring to appeal any decision made by the Town Council, with respect to any matter considered at such meeting or hearing, will need a record of the proceedings, and for such purposes, must ensure that a verbatim record and transcript of the proceeding is made in a form acceptable for official court proceedings, which record includes the testimony and evidence upon which the appeal is to be based. It shall be the responsibility of the person desiring to appeal any decision to prepare a verbatim record and transcript at his/her own expense, as the Town does not provide one. (F.S. 286.26.105)

ATTN: PERSONS WITH DISABILITIES. In accordance with the American with Disabilities Act and Section 286.26, Florida Statutes, persons needing special accommodations to participate in this proceeding, please contact the Town Clerks Office at 863-439-1910, at least forty-eight (48) hours prior to the meeting, provide a written request to the Office of the Town Clerk. If you are hearing or speech impaired, please contact the Florida Relay Service by dialing 7-1-1 or 1-800-955-8771 (TTY) / 1-800-955-8770 (Voice).



PROCLAMATION

WHEREAS, by 1776 nearly 300,000 Irish nationals had emigrated to the American colonies and played a crucial role in America's War for Independence; and

WHEREAS, five signers of the Declaration of Independence were of Irish descent and three signers were Irish born; and

WHEREAS, Irish Americans helped to fashion a system of government for our young Nation; and

WHEREAS, twenty-two Presidents have proudly proclaimed their Irish American heritage; and

WHEREAS, in 1792 Irish born James Hoban provided the architectural plans for the White House and served as one of the supervising architects for the construction of the Capital; and

WHEREAS, Irish born Commodore John Barry was recognized by the United States Congress in September of 2002 as the "First Flag Officer of the United States Navy"; and

WHEREAS, Commodore Jon Barry fought the last sea battle of the American Revolution off the coast of Florida; and

WHEREAS, in 1813, Captain Oliver Perry, an Irish American, achieved a major naval victory in the Battle of Lake Erie; and

WHEREAS, in 1942, the 5 Sullivan brothers made the ultimate sacrifice for democracy and freedom during the Naval Battle of Guadalcanal and later had the Destroyer USS Sullivan commissioned in their memory; and

WHEREAS, the Irish first came to Spanish "*La Florida*" in the 1500's- first as missionaries and mercenary soldiers and then as planters, traders, businessman, doctors, and administrators; and

WHEREAS, three of the Spanish Governors of "*La Florida*" were actually Irish military officers; and

WHEREAS, Fr. Richard Arthur, an Irish-born priest from Limerick who was appointed parish priest for St. Augustine in 1597 and ecclesiastical judge of "*La Florida*," established the first public school in America and opened it to both boys and girls of all races; and

WHEREAS, Andrew Jackson, whose family came from County Antrim, served as Florida's military governor following its acquisition by the United States; and

WHEREAS, Irish Americans, since America's inception, have provided and continue to provide leadership and service to this nation's political, business, and religious establishments; and

WHEREAS, it is fitting and proper to celebrate the rich cultural heritage and the many valuable contributions of Irish Americans.

NOW, THEREFORE, I Mayor Michael Kehoe, by virtue of the authority vested in me as Mayor of the Town of Lake Hamilton, in the State of Florida, do hereby declare the month of March 2024 as:

Irish American Heritage Month

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Official Seal of the Town of Lake Hamilton, Polk County, Florida, to be affixed this 5th day of March 2024.

Town of Lake Hamilton

Mayor Michael Kehoe

**TOWN OF LAKE HAMILTON
MINUTES
TOWN COUNCIL REGULAR MEETING
TUESDAY, February 6, 2024
6:00 PM**

The Town Council of Lake Hamilton held a Regular Meeting on Tuesday February 6, 2024, at 100 Smith Ave., Lake Hamilton, FL 33851.

CALL TO ORDER

Mayor Kehoe called the meeting to order at 6:00 p.m.

INVOCATION

Invocation was given by Vice Mayor Roberson

PLEDGE OF ALLEGIANCE

Pledge of Allegiance led by all

ROLL CALL

Vice Mayor Cora Roberson, Council Member Larry Tomlinson, Council Member Marlene Wagner, council Member Patrick Slavens, and Mayor Michael Kehoe were present.

Staff: Town Administrator Steven Hunnicutt, Attorney Heather Maxwell, Town Clerk Jacqueline Borja and Town Planner Chris Kirby were present.

APPROVAL OF CONSENT AGENDA

Motion made by Roberson and second by Slavens approved January 9, 2024, Regular Meeting Minutes and Asset Status Change. **Motion Passed 5-0**

RECOGNITION OF CITIZENS

Curtis 234 S Palm Dr.

Glenn Lawhorn 11000 Jim Eduards

Ryan Garrehson 79 N Haskins St.

NEW BUSINESS

Public Hearing and First Reading of Ordinance O-2024-1 Business Impact Statement

Attorney Maxwell read the title for the record.

ORDINANCE O-2024-: AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA AMENDING CHAPTER 1 OF THE LAKE HAMILTON CODE OF ORDINANCES, TO ADD SECTION 1-13, IMPLEMENTING THE STATE'S STATUTORY MANDATE TO PREPARE BUSINESS IMPACT ESTIMATES PRIOR TO THE ADOPTION OF PROPOSED ORDINANCES PURSUANT TO SECTION 166.041(4), FLORIDA STATUTES; PROVIDING FINDINGS; ADOPTING BUSINESS IMPACT ESTIMATE PROCEDURES, REQUIREMENTS AND EXEMPTIONS; PROVIDING FOR SEVERABILITY, CONFLICTS AND AN EFFECTIVE DATE.

Motion made by Roberson and a second by Slavens to approve first reading Ordinance O-2024-1 Business impact fees.

No public comments were received. A roll call was taken, Slavens aye, Tomlinson aye, Roberson aye and Kehoe aye. **Motion Passed 4-0.**

Public Hearing and First Reading of Ordinance O-2024-2 Utilities Amendment

Maxwell read the title for the record.

ORDINANCE O-2024-2 : An AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA, RELATING TO WATER AND SEWER UTILITIES; AMENDING SECTION 32-14 AND SECTION 32-15 OF THE CODE OF ORDINANCES OF THE TOWN OF LAKE HAMILTON, FLORIDA (THE “CODE”); TO UPDATE EMERGENCY RESPONSE RATES AND UTILITY AUDIT FEE; TO UPDATE UTILITY ACCOUNT PAYMENT METHODS; PROVIDING FOR CODIFICATION AND SCRIVENER’S ERRORS; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Motion made by Slavens and a second by Wagner to approve Ordinance O-2024-2 Utilities Amendment.

No public comments were received. A roll call vote was taken. Tomlinson aye, Roberson nay, Slavens aye, Wagner aye and Kehoe aye. **Motion Passed 4-1.**

Public Hearing and First Reading of Ordinance O-2024-3 Water Connection Amendment

Maxwell read the title for the record.

ORDINANCE O-2024-3: AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA; AMENDING TABLE 1 OF SECTION 32-8(e) OF THE CODE OF ORDINANCES OF THE TOWN OF LAKE HAMILTON TO CORRECT AN ERROR IN THE TABLE OF WATER CONNECTION FEES FOR RESIDENTIAL AND COMMERCIAL DEVELOPMENT WITH METERS UP TO 6.0 INCHES; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLITS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

Motion made by Roberson and a second by Wagner to approve Ordinance O-2024-3 Water Connection Amendment.

No public comments were received. A roll call vote was taken. Tomlinson aye, Roberson aye, Slavens aye, Wagner aye and Kehoe aye. **Motion Passed 5-0.**

Public Hearing and First Reading of Ordinance O-2024-4 Detour Annexation

Maxwell read the title for the record.

ORDINANCE O-2024-4:AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON EXTENDING THE CORPORATE LIMITS OF THE TOWN SO AS TO INCLUDE ADDITIONAL TERRITORY LYING ADJACENT TO THE PRESENT BOUNDARIES OF THE TOWN OF LAKE HAMILTON, FLORIDA; DESCRIBING SAID ADDITONAL TERRITORY; REPEALING ALL ORDINANCES IN CONFLICT HERewith AND PROVIDING FOR APPLICABILITY; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE. THE PROPERTY LOCATION IS 4,000 FEET EAST OF DETOUR ROAD ON THE SOUTHWEST CORNER ALFORD ROAD CONTAINING 58.70 ACRES.

Motion made by Roberson and a second by Wagner to approve Ordinance O-2024-4 Detour Annexation.

Glenn Lawhorn on 11000 Jim Eduards and Ryan Garrehson on 79 N Haskins St. commented.

A roll call vote was taken. Tomlinson aye, Roberson aye, Slavens aye, Wagner aye and Kehoe aye. **Motion Passed 5-0.**

Public Hearing and First Reading of Ordinance O-2024-5 Water Tank Road Community Development District

Maxwell read the title for the record.

ORDINANCE O-2024-5:AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA ESTABLISHING THE WATER TANK ROAD COMMUNITY DEVELOPMENT DISTRICT PURSUANT TO CHAPTER 190, FLORIDA STATUTES (2023); PROVIDING A TITLE; PROVIDING FINDINGS; CREATING AND NAMING THE DISTRICT; DESCRIBING THE FUNCTIONS AND POWERS OF THE DISTRICT; DESIGNATING FIVE PERSONS TO SERVE AS THE INITIAL MEMBERS OF THE DISTRICTS BOARD OF SUPERVISORS; PROVIDING SEVERABILITY CLAUSE; PROVIDING AN EFFECTIVE DATE.

Motion made by Roberson and a second by Wagner to approve Ordinance O-2024-5 Water Tank Road Community Development District.

Glenn Lawhorn on 11000 Jim Eduards commented.

A roll call vote was taken. Tomlinson aye, Roberson aye, Slavens aye, Wagner aye and Kehoe aye. **Motion Passed 5-0.**

Code Enforcement Inter-local Agreement for Special Magistrate

The Town Attorney, Heather Maxwell read and prepared a Interlocal Agreement between Eagle Lake and Town of Lake Hamilton. The services will provide Special Magistrates hearings for Code Enforcement, and Red Light Camera violations for the Police Department. Staff is recommending the approval of Interlocal Agreement between City of Eagle Lake and Town of Lake Hamilton.

Motion made by Slavens and a second by Wagner to approve Code Enforcement Inter-local Agreement for Special Magistrate.

Glenn Lawhorn on 11000 Jim Eduards commented.

A roll call vote was taken. Tomlinson aye, Roberson aye, Slavens aye, Wagner aye and Kehoe aye. **Motion Passed 5-0.**

Planning Advisory Services Agreement

The Town needs to have it's (LDR) Land Development Code update, with current building codes, and laws. The Town is a Member of the (CFRPC) Central Florida Regional Planning Council, and has provided a scope of work, to completely overhaul, and go through the current (LDR) brining it current, that will address the current development standards with the residential development, and future commercial development standards. Staff is recommending the approval of the Planning Service Agreement in the amount of \$46,000.

Motion made by Slavens and a second by Tomlinson to approve Planning Advisory Services Agreement in the amount of \$46,000.

A roll call vote was taken. Tomlinson aye, Roberson aye, Slavens aye, Wagner aye and Kehoe aye. **Motion Passed 5-0.**

STAFF REPORTS:

Town Administrator- Town Administrator Hunnicutt commented that he has submitted his letter of resignation and would like for Friday, March 1st, 2024, be his last day. Council approved his request.

Town Clerk- Town Clerk Borja mentioned to Council the Ridge League Dinner would be held on Thursday February 8, 2024 at Lake Ashton in Lake Wales. The wastewater facility ribbon cutting would be on Friday February 16, 2024 at 2:00pm. The chamber luncheon would on Thursday, February 22, 2024, located at Tom Fellows in Davenport. The Woman's Club will be hosting a spaghetti dinner on Saturday, February 10, 2024. February will be the bid opening for the road and drainage improvement at the council chamber at 2:00 pm.

Police Department- Included in Packet.

Community development- Included in Packet

Public Works- Included in Packet.

TOWN ATTORNEY COMMENTS: No comments.

COUNCIL COMMENTS: Mayor Kehoe commented there will be a special meeting on February 27, 2024, at 6:00 pm for Town Administrator Hunnicutt to rescind his resignation.

ADJOURNMENT:

Motion made by Slavens and a second by Wagner to adjourn the meeting at 8:00 PM. **Motion Passed 4-0.**

ATTEST:

Michael Kehoe, Mayor

Jacqueline Borja, Town Clerk

Michael Teague, Town Administrator Interim

**TOWN OF LAKE HAMILTON
MINUTES
BID OPENING FOR ITB BD 2024-01
WEDNESDAY, FEBRUARY 14, 2024
2:00 PM**

The Bid Opening for ITB BD 2024-01 was conducted on Wednesday, February 14, 2024, at 2:00 PM, at 100 Smith Ave, Lake Hamilton, FL 33851.

CALL TO ORDER

Town Clerk Borja opened the meeting at 2:00 P.M.

ROLL CALL

The following members were present: Town Clerk Borja, Town Administrator Hunnicutt, Town Planner Kirby and Chastain Skillman.

ITB BD 2024-01 BID OPENING

Clerk Borja noted that there was 1 sealed bid received by the posted time. The bid was opened from Asphalt Paving Systems, inc. The bid will be review and consider.

ADJOURNMENT:

The meeting was adjourned at 2:02 P.M.

ATTEST:

Michael Kehoe, Mayor

Jacqueline Borja, Town Clerk

Steve Hunnicutt, Town Administrator

**TOWN OF LAKE HAMILTON
MINUTES
TOWN COUNCIL SPECIAL MEETING
TUESDAY, February 27, 2024
6:00 PM**

The Town Council of Lake Hamilton held a Special Meeting on Tuesday, February 27, 2024, at 100 Smith Ave., Lake Hamilton, FL 33851.

CALL TO ORDER

Mayor Kehoe called the meeting to order at 6:00 p.m.

INVOCATION

The invocation was given by Cora Roberson.

PLEDGE OF ALLEGIANCE

Pledge of Allegiance led by all.

ROLL CALL

Roberson, Slavens, Tomlinson, Wagner, and Kehoe were present.

Staff: Clerk Borja, Attorney Maxwell, and Finance Director Pettus were present.

SPECIAL MEETING BUSINESS

The Approval of Asphalt Paving Systems Bid for 2024-01 Road & Drainage Project.

The Town of Lake Hamilton received a grant from the FDRP, awarded back in 2022. It was decided that the grant would be used for the Road and Drainage Improvement and the bid was sent out. One bid was received on 2/14/24 from Asphalt Paving, Inc. The Town Administrator recommends the approval to give this award of Bid to Asphalt Paving, inc. to move forward to repair and replace the town roads.

Motion made by Wagner and a second by Slavens to approve the Bid 2024-01 Road & Drainage Project to Asphalt Paving Systems, inc.

A roll call vote was taken. Slavens aye, Wagner aye, Tomlinson aye, Roberson aye, Kehoe aye.

Motion passed 5-0.

The Approval of Public Works Director Pay Increase

The Town of Lake Hamilton has researched what other municipalities are paying for Utility Directors, and the current pay here is low compared to the other towns. Bringing our Utility Director into the range is essential for retention for the Town's growth. The financial impact is \$11,373.00 which the Town can absorb in the current water income, where \$326,000 was budgeted, transferring \$11,373.00 into the salaries portion will not impact the budget in a negative. The Town Administrator recommended the approval of this Budget.

Motion made by Wagner and a second by Slavens to approve Public Works Director pay increase in the amount of \$11,373.00.

A roll call vote was taken. Roberson aye, Slavens aye, Tomlinson aye, Wagner aye, Kehoe aye.

Motion passed 5-0.

The Approval of Police Department Pay Increase

The Town of Lake Hamilton is seeing growth and needs to continue to retain and invest in staff. The Police Department has seen a turnover, and it is mainly due to pay. Staff have researched surrounding agencies and noticed there have been board increases. Staff recommended increasing the hourly rate of the following positions: Officer, Corporal, Sergeant. For the Lieutenant position an increase of \$13,000 a year, which is \$6.25/hour. Cost estimate minimum of \$26,208 this fiscal year, and with the Lieutenant increase would be total for the Police Department of \$58,000 in salaries in wages. For the fiscal year current year of the budgeted \$797,053, the expenditure is currently \$244,544.50- 30% spent with 70% remaining, with the increase will put the budget at 40% through the fiscal year.

Motion made by Slavens and a second by Wagner to approve Police Department Pay Increase. A roll call vote was taken. Roberson aye, Slavens aye, Tomlinson aye, Wagner aye, Kehoe aye.
Motion passed 5-0.

Requesting Town Administrator to rescind resignation letter

Mayor Kehoe pulled out the agenda item due to the Town Administrator decision to proceed with his resignation letter.

Slavens mentioned he would like to have a discussion at the next meeting as to what led the the resignation of the Town Administrator and why it keeps happening it.

Roberson mentioned she would like to bring to discussion the next meeting the process to find a Town Administrator.

Consideration and Appointment of the Interim Town Administrator position

With the resignation of Town Administrator Steven M. Hunnicutt effective March 1,2024, the council needs to appoint an interim Town Administrator until position is permanently filled. Mayor Kehoe recommended that the council appoint Police Chief Michael Teague as Interim Town Administrator with an allowance of \$1,000 per pay period for acting out of capacity during the period of acting as Interim Town Administrator. Interim Town Administrator receive an allowance of \$1,000 per pay period of acting out of capacity during the period as acting Interim Town Administrator.

Motion made by Roberson and a second by Tomlinson to approve the appointment of the Interim Town Administrator position.

A roll call vote was taken. Roberson aye, Slavens aye, Tomlinson aye, Wagner aye, Kehoe aye.
Motion passed 5-0.

ADJOURNMENT:

Motion made by Slavens and a second by Roberson to adjourn the special meeting at 6:28 PM.
Motion passed 5-0.

ATTEST:

Michael Kehoe, Mayor

Jacqueline Borja, Town Clerk

Michael Teague, Interim Town Administrator



TOWN OF LAKE HAMILTON ADVISORY BOARD APPLICATION

Select One Advisory Board: ☒

- ☐ Planning and Zoning Board ☐ Charter Review Committee
☐ Zoning Adjustments & Appeals Board ☒ Parks & Recreation Advisory Board

ONLY Lake Hamilton Residents shall be appointed to Town Advisory Boards.

Name: DEANNA KYLE Email: DEANNAKYLE490@gmail.com
 Physical Address: 519 Smith Ave
 Mailing Address: PO BOX 718 LAKE HAMILTON, FL 33851
 Home Phone #: --- Cell #: 724 496 5662
 Employer: ---

Please answer the following Questions:

Are you a resident in the Town of Lake Hamilton? Yes ☒ No ☐
 Are you currently a Homeowner ☐ or Renter ☒ in the Town of Lake Hamilton?
 Are you a registered voter in the Town of Lake Hamilton? Yes ☒ No ☐
 How long have you lived in Lake Hamilton? Years/Months: 3 YRS
 Are you currently or have you ever served on any government Advisory Board? - No ☒
 If yes, which government agency? _____
 Are you currently employed by a government agency? Yes ☐ No ☒
 If yes, which government agency? _____
 Have you ever been convicted of a felony? Yes ☐ No ☒
 If yes, please provide documentation of restoration of rights from the state clemency board.

Please note: Per Florida Statutes 112.3145, any individual appointed to an advisory board within a municipality shall be required to submit a Disclosure of Financial Interest Statement, CE Form 1, annually to the Supervisor of Elections of Polk County on or before July 1st of each year.

Applicant's Signature: Deanna Kyle Date: 2-23-24

When completed and filed with the Town Clerk's Office, this document is a public record under Chapter 119, Florida Statutes, and therefore is open to public inspection.

Return form to: Town Clerk's Office
 Town Hall
 100 Smith Avenue - P.O. Box 126
 Lake Hamilton Florida, 33851

OFFICE USE ONLY

Mayor's recommendation for applicant to serve on selected advisory board? Yes ☒ No ☐

Advisory Board Appointment: PARK & REC ☒ Appointment ☐ Reappointment

Date of Appointment: MARCH 5, 2024 ☒ Primary ☐ Alternate

Mayor's Signature: Michael R. Rhee Date: 2-26-2024



Town of Lake Hamilton
Town Council
Agenda Summary Report

TO: Mayor, Town Council

FROM: Steven Hunnicutt Town Administrator

AGENDA ITEM: Ordinance 2024-01, implementing State Statutory Mandated, to prepare a mandatory business impact estimate that may have an impact on local business near a zoning change.

DATE: February 1, 2024

SUMMARY: The Town Attorney has prepared Ordinance 2024-01, to make sure the Town is in compliance with the State Mandate, on the business impact statement requirements.

ATTORNEY REVIEW: YES: ☒ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☒ There is no Financial Impact.

RECOMMENDATION: Staff is recommending the approval of Ordinance 2024-01.

ATTACHEMENTS: Copy of Ordinance 2024-01

ORDINANCE 2024-01

AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA AMENDING CHAPTER 1 OF THE LAKE HAMILTON CODE OF ORDINANCES, TO ADD SECTION 1-13, IMPLEMENTING THE STATE'S STATUTORY MANDATE TO PREPARE BUSINESS IMPACT ESTIMATES PRIOR TO THE ADOPTION OF PROPOSED ORDINANCES PURSUANT TO SECTION 166.041(4), FLORIDA STATUTES; PROVIDING FINDINGS; ADOPTING BUSINESS IMPACT ESTIMATE PROCEDURES, REQUIREMENTS AND EXEMPTIONS; PROVIDING FOR SEVERABILITY, CONFLICTS AND AN EFFECTIVE DATE.

NOW THEREFORE, BE IT ENACTED BY THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA, AS FOLLOWS:

Section 1. Findings. In adopting this Ordinance, the Town Council of the Town of Lake Hamilton, Florida (the "Town") hereby makes and expresses the following findings, purposes, and intent:

(1) The Town has been conferred broad legislative powers to enact ordinances to perform governmental functions and exercise power to promote the health, welfare, safety and quality of life of a local government's residents by both the Florida Constitution and the Florida Legislature.

(2) The procedures for adopting municipal ordinances are set forth in Section 166.041, Florida Statutes.

(3) The Florida Constitution grants municipalities broad authority to take actions furthering citizens' health, welfare, safety, and quality of life called "home rule," and this authority includes legislative powers to enact local laws.

(4) Florida municipalities have those governmental, corporate, and proprietary powers that enable them to conduct municipal government, perform municipal functions and provide municipal services, and exercise any power for municipal purposes, except as otherwise provided by law.

(5) These home rule powers have been liberally construed when reviewed by courts.

(6) This broad home rule authority is limited by two guideposts: preemption, where a higher level of government such as the State has already legislated on a topic, and standards of reasonableness.

(7) A municipal ordinance can be declared invalid on the grounds that it is inconsistent with the Florida Constitution or Florida Statutes, and inconsistency may be found where a municipal ordinance is either preempted by or in conflict with the Florida Constitution or Florida Statutes.

(8) A municipal ordinance can also be declared invalid on the grounds that it is arbitrary or unreasonable, meaning that it has no legitimate governmental interest, and municipal ordinances are presumed valid by courts reviewing them, and the burden falls on the challenger to establish the ordinance's arbitrary or unreasonable nature.

(9) Beginning October 1, 2023, municipal ordinances adopted in Florida may be subject to local challenge based upon failure to produce a "business impact estimate."

(10) If a court invalidates an ordinance, this ruling may result in imposition of attorneys' fees against a municipality if an ordinance is later determined to be arbitrary or unreasonable.

(11) The Florida Legislature also adopted a statutory mandate that municipalities produce a "business impact estimate" prior to passing an ordinance, subject to certain exemptions and exceptions.

(12) The statute (Chapter 203-309, Laws of Florida, codified as Section 166.041(4), Florida Statutes) mandates that the estimate must be published on the municipality's website and include certain information, such as the proposed ordinance's purpose, estimated economic impact on businesses, and compliance costs.

(13) This unfunded state mandate also imposes certain conditions on lawsuits brought by any party to challenge the legal validity of local ordinances as preempted by state law, arbitrary, or unreasonable.

(14) The state has created a number of exemptions for certain specified ordinances, including

- Ordinances required to comply with federal or state laws or regulations
- Ordinances relating to the issuance or refinancing of debt
- Ordinances relating to the adoption of budgets or budget amendments, including revenue sources necessary to fund the budget
- Ordinances required to implement a contract or agreement, including grants or financial assistance
- Emergency ordinances
- Ordinances related to procurement
- Ordinances enacted to implement: Part II, Ch. 163, including land development regulations, zoning, development orders, development agreements, and development permits; Sections 190.046(CDDs); the Florida Building Code; the Florida Fire Prevention Code.

(15) The Town Council has provided all necessary public notice and held the requisite public hearings and accepted testimony and other competent, substantial evidence from the public for purposes of making these findings and determining to adopt this ordinance.

Section 2. AMENDING CHAPTER 1 OF THE CODE OF ORDINANCES OF THE TOWN OF LAKE HAMILTON, TO ADD SEC. 1-13, TO BE TITLED “IMPLEMENTATION OF STATUTORY MANDATE TO PERFORM BUSINESS IMPACT ESTIMATES.” That Chapter 1 of the Code of Ordinances of the Town of Lake Hamilton, Florida (hereinafter “the Code”) is hereby amended to add Section 1-13, which shall be read as follows (underline language added):

Sec. 1-13. – Implementation of Statutory mandate to perform business impact estimates.

The Town Council hereby adopts the implement the Florida statutory mandate contained in section 166.041(4), Florida Statutes, to perform business impact estimates prior to the adoption of certain ordinances as specified in the statute. The Town Council shall perform a business impact statement in accordance with the requirements or the statute for all ordinances not exempted by section 166.041(4)(c) or 166.0411, Florida Statutes, and may in its sole discretion determine to perform a business impact statement for any ordinance that is exempt under the statute. Nothing contained herein is intended to create additional mandates for performing the business impact estimates of exempt ordinances or to waive any exemption. The Town hereby authorizes and adopts a pass through charge applicable to any person, firm, entity, or business which requests or sponsors the adoption of an ordinance solely to assess, cover and collect the fees, deposits, costs and expenses relating to pertaining to the preparation of the business impact estimate. The Town may in its sole discretion waive this pass through charge.

Section 3. SEVERABILITY. If any provision or portion of this Ordinance is declared by any court of competent jurisdiction to be void, unconstitutional, or unenforceable, then all remaining provisions and portions of this Ordinance shall remain in full effect.

Section 4. CONFLICTS. Should any provision contained in this Ordinance conflict with any prior provision of the Code or any Town ordinance, then the provisions of this ordinance shall control.

Section 5. EFFECTIVE DATE. This Ordinance shall take effect immediately upon its adoption.

INTRODUCED on first reading this ____ day of _____, 2024.

PASSED on second reading this ____ day of _____, 2024.

TOWN OF LAKE HAMILTON, FLORIDA

MICHAEL KEHOE, MAYOR

ATTEST:

JACQUELINE BORJA, TOWN CLERK

Approved as to form:

HEATHER R. MAXWELL, TOWN ATTORNEY

Record of Vote	Yes	No
Roberson	_____	_____
Tomlinson	_____	_____
Slavens	_____	_____
Wagner	_____	_____
Kehoe	_____	_____



Town of Lake Hamilton
Town Council
Agenda Summary Report

TO: Mayor, Town Council

FROM: Steven Hunnicutt Town Administrator

AGENDA ITEM: Amending Code of Ordinance Section 32-14 and Section 32-15

DATE: February 1, 2024

SUMMARY: The Town staff has reviewed Ordinances pertaining to Emergency Response Rates and Utility Audit Fees, along with Account Payment Methods, that need to be updated, having some scrivener's errors. The Town Attorney has also review the language that needed to be changed, and has updated the Ordinances, to reflect proper language, with current operations of the Town.

ATTORNEY REVIEW: YES: ☒ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☒ There is no Financial Impact.

RECOMMENDATION: Staff is recommending the approval of Ordinance 0-24-02 with the new language, and has been updated currently by the Town Attorney.

ATTACHEMENTS: Copy of Ordinance 0-24-02

ORDINANCE O-2024-02

AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA, RELATING TO WATER AND SEWER UTILITIES; AMENDING SECTION 32-14 AND SECTION 32-15 OF THE CODE OF ORDINANCES OF THE TOWN OF LAKE HAMILTON, FLORIDA (THE “CODE”); TO UPDATE EMERGENCY RESPONSE RATES AND UTILITY AUDIT FEE; TO UPDATE UTILITY ACCOUNT PAYMENT METHODS; PROVIDING FOR CODIFICATION AND SCRIVENER’S ERRORS; PROVIDING FOR CONFLICTS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE.

NOW THEREFORE, BE IT ENACTED BY THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA, AS FOLLOWS:

SECTION 1. TITLE; FINDINGS.

(a) Findings. In adopting this Ordinance and modifying the Town Code, the Town Council of Lake Hamilton, Florida, hereby makes the following findings:

(1) The Town is authorized, pursuant to general and special law and its home rule powers contained in statutes and the Florida Constitution, to own, manage, operate, provide and extend central water, wastewater, and reclaimed water services both within and without the Town of Lake Hamilton, Florida.

(2) In furtherance thereof, the Town declared beginning in 2013 and continuously thereafter an exclusive water and wastewater service area both within and without the Town limits.

(3) The Town is authorized by its Charter, Section 166.201, Florida Statutes, and Sections 180.13 and 180.191, Florida Statutes, to establish and fix rates, fees, and charges for customers within and without the boundaries of the Town.

(5) The rates, fees, and charges established herein provide funding for water and wastewater utility services which promote the health, safety, and general welfare of the Town’s customers as therefore beneficial to the rate payers of the Town’s water and wastewater utility system.

(6) The Town has provided the required public notice and held the necessary public hearing(s) in order to adopt these rules.

SECTION 2. REVISIONS TO SECTION 32-14, LAKE HAMILTON CODE.

Section 32-14 of the Code of Ordinances of the Town of Lake Hamilton, Florida, (the “Lake Hamilton Code”) is hereby amended to read as follows (~~strike through~~ language deleted, underline language added):

“Sec. 32-14. - User charges, billing, delinquent accounts.

All customers of the town's water and sewer systems shall pay all applicable monthly user charges, connection fees, lines extension charges and all related charges at rates established by the town council. Billing for water and sewer service shall be rendered monthly, or as otherwise determined by the Town council. Requests for re-connection after service has been terminated shall be accompanied by payment of a re-connection service fee established by resolution of the town council. Payment of the entire amount of the delinquent bill and additional payment to offset any deficiencies in the required deposit account shall be required. Re-institution of service shall be accomplished only by the department of public works. Any unauthorized connection shall subject the violator to the full penalties of the law.

(1) Adoption of Water System Rates. The Town hereby establishes and adopts the following water rates:

(a) Users of potable water for residences located inside the Corporate Limits of the Town of Lake Hamilton shall pay a minimum monthly sum, which shall be known as the "Service Fee", plus the per thousand gallon consumption charges as adopted by Ordinance No. O-2014-07 of the Town of Lake Hamilton, and as may be amended by Ordinance from time to time.

(b) Users of potable water for residences located outside the Corporate Limits of the Town of Lake Hamilton and all non-residential uses whether located inside or outside the Corporate Limits shall pay a minimum monthly sum, which shall be known as the "Service Fee", plus the per thousand gallon consumption charges as adopted by Ordinance No. O-2014-07 of the Town of Lake Hamilton, and as may be amended by Ordinance from time to time.

(2) Adoption of Wastewater System Rates. The Town Council of the Town of Lake Hamilton hereby establishes a Retail Wastewater Service Base Rate of \$48.51 and a Usage Rate in the amount of \$13.61 per thousand gallons of wastewater, as measured by retail water meter reading. A current schedule of the Wholesale Wastewater Service Rate shall be on file in the office of the Town Clerk.

(3) Annual Indexing Adjustment of Rates. That each October 1 from and after October 1, 2021, the latest water and wastewater charges shall be adjusted by the greater of (1) 3%, or (2) the amount of the annual increase in the index numbers of based upon the change in that year's Consumer Price Index for all Urban Consumers: water, sewer, and trash collection services in U.S. City Average.

(4) Miscellaneous Rates. The Town adopts the following miscellaneous rates:
Utility Service Fees and Charges for Residents and Business

Service Charge Description Note: Water turn/off are conducted the next business day unless same day service is requested and paid by 4:00 PM		Amount
New Account Admin Charge (to open an account)		\$30
Closing Account Admin Charge added to the account prior to return of Deposit		\$30
New Account Water Deposit – required to open a new account		\$200
Non-Sufficient Fund Fee		\$30
Delinquent Account increased deposit		\$400
Delinquent Account meter turn off Fee		\$30
Account holder request for temporary meter turn on/off service.		\$30
Optional Same day meter turn on service fee in addition to all other fees applicable. Not available for accounts with payment plan.		\$30
After Hours Emergency Meter Service Response Fee. Normal Hours are - - Outside of Normal Hours: Monday through Friday from 8:00AM to 5:00PM		\$60
<u>Emergency Service Response Visit Fee –</u> <u>During Business Hours: Monday through Friday from 8:00AM to 5:00PM</u>		<u>\$30</u>
<u>Labor – Emergency Response:</u> <u>During Business Hours: Mon-Fri (8:00AM to 5:00PM) – Technician</u> <u>During Business Hours: Mon-Fri (8:00AM to 5:00PM) – Supervisor</u> <u>Outside Business Hours: Mon-Fri (8:00AM to 5:00PM) – Technician</u> <u>Outside Business Hours: Mon-Fri (8:00AM to 5:00PM) - Supervisor</u>		<u>\$45/hr</u> <u>\$65/hr</u> <u>\$67.50/hr</u> <u>\$97.50/hr</u>
<u>Materials/Supplies – Emergency Response/Repair</u>		<u>Materials Cost</u> <u>Only</u>
In person or over the phone service fee in addition to credit card fees		\$5
Late Fee is 10% of unpaid water use balance assessed after the 20 th COB		10%
Water audit and/or disputed meter reading if results of audit determine meter is working accurately. This Fee is Waived if Meter is not Registering within AWWA Standards		\$60 <u>\$25</u>
Accounts with OnSyte Performance System – Monthly fee		\$37.52
New meter and connection set fee ¾" (new meters installed 4 business days minimum after application is submitted).		\$200 labor + cost of parts
New meter and connection set fee 1" (new meters installed 4 business days minimum after application is submitted). Maximum Residential size.		\$200 labor + cost of parts
New meter and connection set fee 2" (new meters installed 4 business days minimum after application is submitted).		\$300 labor + cost of parts
New Meter and connection above 2" will need to be included in building permit and approved by the town. The installation and cost will be the responsibility of the account holder and must be done by a licensed professional.		
Relocating Existing meter.	Based on New Meter Set Fee costs Breakdown minus the cost of the meter	
Construction Meter – Admin new account and closing fee (\$60) + Set up and take down fee (\$60) + monthly Base charge and water usage Billed monthly. + equipment deposit (\$1500.00) + Water Deposit (\$200). Any Construction Meter Account not paid on time monthly will be discontinued, unpaid charges will be deducted from the deposit and meter will be reclaimed. A new account will need to be opened at that time.		
Damage to Meter Box, Damage to Meter, Damage to any appurtenances to the water system.		Labor and replacement cost
Penalty for Meter Tampering/Theft of Service 1 st infraction		Statutory

Penalty for Meter Tampering/Theft of Service 2 nd infraction	Statutory
Penalty for Meter Tampering/Theft of Service 3 rd infraction	Statutory
Penalty for Obscured Meter	Statutory
Penalty for Cross Connection	Statutory
Penalty for Connection to Other Systems	Statutory

SECTION 3. REVISIONS TO SECTION 32-15, LAKE HAMILTON CODE.

Section 32-15 of the Code of Ordinances of the Town of Lake Hamilton, Florida, (the “Lake Hamilton Code”) is hereby amended to read as follows (~~striketrough~~ language deleted, underline language added):

Sec. 32-15. - Utility service policies.

The town council hereby adopts user service rules, regulations, policies and fees as set forth below. The administrator/clerk may for convenience publish these utility service policies in a document containing the utility service application with instructions for completing it, referencing pertinent state laws affecting water customers, and specifying the current fees for deposits, impact fees and setting meters, and other information that the administrator or clerk may determine is needed from time to time.

(1) Establishment of Water Service. Every residential dwelling unit and every non-residential land use, be it a business, an industrial operation, a non-profit or a church, shall apply to the Town for water service. Upon payment of deposits and fees by the applicant, the Town will establish the water service connection, which shall be the only potable water connection for the customer. Water service will be immediate and continuous as long the account remains current.

(a) A water meter set fee, based on the size of the meter that has been chosen by the customer, shall be charged by the Town for tapping the water main and furnishing and installing a water meter. The fee is the same whether the property and the customer are located within or outside the town.

(b) The Town will construct, extend and provide water service from the water main adjacent to the property requesting water service; shall set the water meter and check valve, and shall connect the water meter to the water service.

(c) If the property is on the opposite side of the road from the water main, the applicant shall hire a licensed plumber or underground utilities contractor to tap the main and bore a water service line under the road. The plumber or contractor is responsible for applying for and receiving an approved permit from the Town, or in the case of crossing a Polk County or Florida State road or highway, a permit from the appropriate agency. Materials and methods employed shall be specified by the permitting agency.

(2) Water Application and Fees.

(a) The applicant must apply for water service from the town as a new applicant. They shall complete a Water Service application provided by the town, provide required documentation, and pay to the Utility Billing Office a deposit in the amount established by the Town Council as amended from time to time, which is currently \$200.00. An administrative fee of \$30 is also due at time of application.

(b) As a part of the application, the applicant shall provide a picture ID; and documents' showing the applicant is authorized to reside or conduct business at the address shown on the application.

(c) The town will have water turned on at said address the next business day of completed application being accepted by the Utility Billing office. Applicants may pay an additional service fee to have service established sooner. Applications made on a Friday may not be turned on until the next Monday.

(d) Water may be turned on for inspection purposes with an application and a \$60 fee. Service will remain on for 48 hours.

(3) Other Services Provided. Upon the opening of a utility account, the account holder agrees to be charged for other municipal services provided by the Town. For residential properties located in the town limits, the services and charges include: Water, sewer, and associated taxes and service, Garbage and Recycle, Trash, and Stormwater. For commercial customers, charges include: Water and associated taxes and Stormwater. For accounts located outside the town limits, charges include: Water, sewer and associated taxes and service.

(4) Rates. Water Rates are set forth in sec. 32-14 of the Town Code. Other utility charges are determined by adoption the annual budget.

(5) Payment for Services. Water meters are read on/or near the 20th of every month. Users are billed monthly on the last business day of each month. Payments are due on the 20th of every month.

(a) ~~Payments can be made in person at town hall on any Monday, Wednesday, or Friday not a state or federal holiday by cash, check, money order or credit card (service fees apply). Payments can be dropped in the after hours payment box located outside of town hall. Credit card payments by phone can only be done on Fridays and the 20th of the month. A credit card company convenience fee will be charged for all credit/debit card payments. A town service charge~~ An administrative service processing charge is collected for all in-person or over the phone credit/debit card payments. Payments can also be dropped in the after-hours payment box located outside of Town Hall.

(b) User and service charges not paid on or before the 20th of the month will

have a late charge ~~added to the bill~~ assessed to the account and said fee shall be payable by the ~~next month on the 20th~~ 20th day of the next month. If the 20th falls on a weekend or a holiday, the late charge will be applied to the unpaid bill on the ~~working day~~ next business day following the due date.

(6) Delinquent Accounts/Disconnect Water. Accounts will be considered delinquent if any account balance is ~~sixty (60)~~ thirty (30) days past due and will be subject to water service being discontinued with no further notice. A \$30 disconnect fee will be applied to the account. Monthly water base fee and all other service charges will continue to be billed.

~~(a) At any time that the User's Account is delinquent for more than sixty (60) days and is over \$200, the amount on deposit for the customer will be withdrawn from the deposit account and applied toward payment of the delinquent bill. Such amount will then be invoiced to the User's Account. In the case of an account that has become so delinquent that the original deposit has been depleted, the deposit to re-establish water service will be double the current deposit of \$200, which would be \$400.~~

~~(b a)~~ a Hardship Status – The town understands that some customers may not be able to pay the full balance due to a hardship. If that is the case, the account holder must ~~set up an approved~~ request a payment plan with the ~~Clerk's~~ Finance office. If a payment plan ~~has been~~ is approved, ~~future~~ late fees during the plan period will be waived if the payment plan is being adhered to. If the account holder ~~does not abide by defaults on the terms of the payment plan, the account service will be turned off disconnected and item (6) and (6)(a) above will prevail.~~ Payment plans cannot extend past ~~three months~~ ninety (90) days.

(7) Restore Water – Upon receipt of payment of the full past due amount and disconnect fee from the customer, or in case of a hardship, an approved payment plan with specified payment being received and recorded, the Utilities Department shall have the water service restored to the customer the next business day. ~~Payments to restore water made on Friday may not be turned on until Monday. Re-connection payments made on a Friday may result in restoration of services on the following Monday.~~

(8) Non-sufficient Funds. Should a payment made by check not be accepted by the bank, ~~water service will be discontinued, and~~ all future payments must be paid by cash, money order, ~~certified~~ Cashier's check or credit card. A \$30 non-sufficient fund fee, ~~a \$30 disconnect fee,~~ plus the amount of the unpaid bill will be charged to the account holder.

(a) Should a payment be made by credit card and the account holder initiates a credit card chargeback with their financial institution without first attempting to resolve a payment issue with the Town (referred to as "merchant") a \$30 credit card chargeback fee, plus the amount of the unpaid bill, will be charged to the account holder. Thereafter, the customer will not be eligible to make future credit card payments.

(9) Destruction and Tampering. By opening an account for services, you agree not to maliciously, willfully or negligently break, damage, destroy, uncover, deface or tamper

with any structure, appurtenance or equipment which is a part of the water system of the town.

(a) If you or any person using your property willfully tampers with, damages, or illegally connects to, diverts or extends the system without first applying for and receiving service from the town, you are in violation of Sections 812.14(2)-(5), Florida Statutes and can be charged with a misdemeanor of the first degree, which is punishable by a fine of \$1,000.

(b) If a meter has been locked by staff because of a delinquent account or no application for service on file to the property and it is determined that the lock was removed without staff authorization, the meter will be removed, the account will be considered delinquent and all past balances must be paid to reestablish a new account and all fees must be paid to reinstall the meter.

(10) Putting Account on Vacation Mode/Transfer Account. You may submit an application to modify your account for any time you will be away from your residence for more than six months. This will take off the charges for garbage and trash. The bill will still show the Water Base Rate and Stormwater charges. If you relocate to another property which is served by the Town of Lake Hamilton, you must file an application to establish services at the new property. You do not need to pay another deposit, but your account must be current in order to transfer.

(11) Reporting a Possible Leak/Dispute a High Bill/Zero Consumption. If a water customer desires the town to check their meter for a leak or possible defective meter or service line, they should report it to the utility billing specialist and a work order will be completed and given to the Water Department. If there is no issue with the meter or town service line, the customer will be billed \$60. The water customer should follow up with the Utilities Department to determine the outcome.

(a) The town is not responsible for service lines beyond the meter.

(b) If there is an issue with the meter and components, the town will repair the meter and components at no cost to the customer.

(12) Water Meter Maintenance. Water Meters are maintained on a set schedule. As a result of these maintenance activities, the meter or the register(s) may be changed. The new meter reading shall be brought to the attention of Utility Billing. If a change in register numerical sequencing causes an error in the consumptive calculations, the customer's account may not be charged correctly. Once discovered, the customer will be notified of the error and if any adjustments are due they will be posted. Accounts shall be adjusted as described below:

(a) The period in question may not be any greater than the previous six (6) months.

(b) If the payment(s) was less than the average, the customer shall be sent a corrected bill.

(c) The customer will be allowed to pay this amount over the same number of months as the months in question, up to a maximum of six (6) months.

(d) If the payment(s) was greater than the average, the customer's account shall be credited the difference.

(13) Payment for Water Service in the Event of a Leak. Plumbing problems beyond the meter outlet are the responsibility of the customer. There are instances when the customer's plumbing system may develop a leak. As a courtesy by the Town, this policy is intended to offer the customer some billing relief in the form of a credit while the Town recovers a portion of the cost to treat and deliver the water. In the event an inordinate increase in water usage by any customer is discovered in the billing process, it is the duty of the customer to immediately determine if there is a leak within the building or buildings on his property or in the service line from the meter to the building(s) and make immediate repairs.

The customer may recognize the leak and initiate repairs, or Utility Billing may issue a work order if "HIGH CONSUMPTION" is detected through the billing system. If Utility Billing issues a work order the water meter will be read a second time. If the reading is correct, a door tag will be left notifying the customer that a leak may exist on their system. A water audit will be recommended and scheduled upon the customer's request and ~~\$60~~ \$25 billed to the account. Once the customer has been notified, they will have until the next billing cycle to correct the leak for any monetary adjustment to be considered. Any high consumption that occurs beyond that time will not be considered for adjustment / credit because the customer should be proactive with making repairs once they are alerted to a problem, either by a high consumption invoice or a notification from staff. Hence, from the time of the first high consumption invoice until repaired should be no more than three (3) months. The three (3) month period will be the only period considered for the leak credit review. Once the customer repairs the leak and provides a written request explaining the problem, which should include proof of repairs (with proper dates), they can request an adjustment to offer some financial relief in the form of a courtesy credit. The customer shall pay all current charges and NOT delay payment during the leak credit review process. If a credit is authorized, it will appear on a future bill. Only one (1) credit per a twelve (12) month period shall be considered per property. This policy is NOT intended to address repetitive plumbing problems.

(a) The base service charge shall not be included in determining the credit.

(b) The Utility Maintenance Division shall determine the average water consumption for a six (6) month period prior to the leak to establish a "base-line".

(c) Utility Billing Division shall determine which invoices constitute the high usage to use in the calculations associated with the adjustment.

three
current

(d) Utility Billing Division is authorized to provide the customer a credit for months of high usage amount over the amount as calculated in (b) above at water rates, based upon the following criteria:

- cycle
- (1) The customer has properly completed the repair and submitted documentations for the credit request form and,
 - (2) The cause of the high consumption was found during the billing or water audit, and/or
 - (3) The customer recognized the leak, and
 - (4) The cause was such that a reasonable and prudent customer could not recognize the problem in a timely manner.

(e) Only these leaks may be considered:

- (1) Underground domestic pipe leaks
- (2) Under the structure domestic pipe leaks
- (3) Underground irrigation pipe leaks
- (4) Leaks in the fitting connecting to the water meter

(f) Leaks that will NOT be considered:

- heads,
- (1) Toilet, faucet or other fixture leaks
 - (2) Swimming pool problems, (piping, pumps, filters, etc.)
 - (3) Sprinkler equipment problems, (timers/controllers, sprinkler etc.)
 - (4) Customer negligence
 - (5) Water theft
 - (6) Unknown or unexplained water consumption

(14) Payment for Zero Consumption – Water consumption is measured through mechanical water meters. These meters are owned by the Town and maintained on a specified schedule. The maintenance schedule has been established to promote accurate readings and protect the interest of the customer and the investment of the Town. Being a mechanical device, there are instances when a meter may "slow down" or may fail completely and stop totalizing water flow. The Utility Billing System normally detects these problems and provides a "Zero Consumption - Low Meter Use

Report". This report checks the latest meter reading and lists those active accounts with zero consumption. Utility Maintenance staff reviews this report and generates a work order to have field personnel investigate. The meter is then checked, replaced and/or repaired, and the results given Utility Billing via the completed work order form. Based on that information, the customer will be "BACK BILLED" for all water consumed but not registered as follows:

(a) The period in question may not be any greater than the previous twelve (12) months.

(b) The average water consumption per month will be determined.

(c) The average water consumption per month, totaled for the number of months in question will be the amount the customer will be back billed.

(d) It shall be determined if the monthly base charge was paid or should be back billed.

(e) The customer will be allowed to pay the total amount due over the same number of months as the months in question, up to a maximum of twelve (12) months.

(15) Closing an Account. The Town must receive a signed application or electronic communication from the account holders verified email to modify or close an account. When the application is received a final meter reading will take place and the applicant's deposit will be used to pay the final bill, disconnect fee and any delinquent charges. If the deposit is not enough to pay the outstanding balance an invoice will be mailed to the applicant and payment must be received within 15 days of date the invoice was mailed.

SECTION 4. CODIFICATION AND SCRIVENER'S ERRORS.

The Town Council intends that this Ordinance be made part of the Town of Lake Hamilton Code of Ordinances, and that sections of this Ordinance can be renumbered or re-lettered and the word "Ordinance" may be changed to "Section", "Article" or some other appropriate word or phrase to accomplish codification, and regardless of whether this Ordinance is ever codified, the Ordinance may be renumbered or re-lettered and scrivener's or typographical errors and clarification of ambiguous wording that do not affect the intent may be corrected with the authorization of the Town Administrator without the need for a public hearing.

SECTION 5. CONFLICTS.

If the event of a conflict with any other Town ordinances or part of ordinances, the provisions of this Ordinance shall control.

SECTION 6. SEVERABILITY.

If any section, subsection, sentence, clause, phrase, word, or other part of this Chapter is for any reason declared unconstitutional or invalid by any court of competent jurisdiction, such part shall be deemed separate, distinct and independent and the remainder of this Chapter shall continue in full force and effect.

SECTION 7. EFFECTIVE DATE.

This ordinance shall take effect immediately upon its passage.

INTRODUCED and PASSED on first reading this 6th day of February 2024.

PASSED and ADOPTED on second reading this 5th day of March 2024.

FLORIDA

TOWN OF LAKE HAMILTON,

MICHAEL KEHOE, MAYOR

ATTEST:

JACQUELINE BORJA, TOWN CLERK

Approved as to form:

HEATHER R. MAXWELL, TOWN ATTORNEY

Record of Vote	Yes	No
Slavins		
Roberson		
Tomlinson		
Wagner		
Kehoe		



Town of Lake Hamilton
Town Council
Agenda Summary Report

TO: Mayor, Town Council

FROM: Steven Hunnicutt Town Administrator

AGENDA ITEM: Correction of error in water connection fees, amending table 1, section 32-8 of the code of ordinances.

DATE: February 1, 2024

SUMMARY: The Town staff has reviewed Water Connection fees, and advised the Town Attorney of the error in the inside town limits versus outside the town limits, to change the underlined connection fee about, as follows: current \$18,554.32 for inside the town, to \$14,495.56, and \$14,495.56 for outside town limits to \$18,119.45.

ATTORNEY REVIEW: YES: ☒ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☒ There is no Financial Impact.

RECOMMENDATION: Staff is recommending the approval of Ordinance 0-24-03, with the change of the Water Connection fees, as underlined in the attached Ordinance.

ATTACHEMENTS: Copy of Ordinance 0-24-03

ORDINANCE O-2024-03

AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA; AMENDING TABLE 1 OF SECTION 32-8(e) OF THE CODE OF ORDINANCES OF THE TOWN OF LAKE HAMILTON TO CORRECT AN ERROR IN THE TABLE OF WATER CONNECTION FEES FOR RESIDENTIAL AND COMMERCIAL DEVELOPMENT WITH METERS UP TO 6.0 INCHES; PROVIDING FOR CODIFICATION; PROVIDING FOR CONFLITS; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE

NOW THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA, AS FOLLOWS:

SECTION 1. AMENDMENT TO TABLE 1, SECTION 32-8. CODE OF ORDINANCES.

Table 1, located in Section 32-8(e) of the Code of Ordinances of the Town of Lake Hamilton, Florida, is hereby corrected and shall read as follows (~~striketrough~~ language deleted, underline language added):

Table 1: Water Connection Fees for Residential and Commercial development with meters up to 6.0 inches			
Meter Size (in inches)	Ratio to meter size	Water Connection Fee for Service Inside Town Limits	Water Connection Fee for Service Outside Town Limits
1.0 & less	1.0	\$2,319.29	\$2,899.11
1.5	2.0	4,638.58	5,798.23
2.0	5.0	18,554.32 <u>14,495.56</u>	14,495.56 <u>18,119.45</u>
3.0	8.0	37,108.64	46,385.80
4.0	16.0	57,982.28	72,477.79
6.0	25.0	115,964.56	144,955.70

SECTION 2. CODIFICATION AND SCRIVENER'S ERRORS.

The Town Council intends that this Ordinance be made part of the Town of Lake Hamilton Code of Ordinances, and that sections of this Ordinance can be renumbered or re-lettered and the word "Ordinance" may be changed to "Section", "Article" or some other appropriate word or phrase to accomplish codification, and regardless of whether this

Ordinance is ever codified, the Ordinance may be renumbered or re-lettered and scrivener's or typographical errors and clarification of ambiguous wording that do not affect the intent may be corrected with the authorization of the Town Administrator without the need for a public hearing.

SECTION 3 CONFLICTS.

If the event of a conflict with any other Town ordinances or part of ordinances, the provisions of this Ordinance shall control.

SECTION 4. SEVERABILITY.

If any section, subsection, sentence, clause, phrase, word, or other part of this Ordinance is for any reason declared unconstitutional or invalid by any court of competent jurisdiction, such part shall be deemed separate, distinct and independent and the remainder of this Ordinance shall continue in full force and effect.

SECTION 5. EFFECTIVE DATE.

This ordinance shall take effect immediately upon its passage.

INTRODUCED and PASSED on first reading this ____ day of _____, 2024.

PASSED and ADOPTED on second reading this ____ day of _____, 2024.

FLORIDA

TOWN OF LAKE HAMILTON,

MICHAEL KEHOE, MAYOR

ATTEST:

JACQUELINE BORJA, TOWN CLERK

Approved as to form:

HEATHER R. MAXWELL, TOWN ATTORNEY

Record of Vote	Yes	No
Slavens		
Roberson		
Tomlinson		
Wagner		
Kehoe		



Town of Lake Hamilton
Town Council
Agenda Summary Report

TO: Mayor, Town Council, Town Attorney

FROM: Chris Kirby, Town Planner

AGENDA ITEM: Ordinance O-24-04 Detour School Annexation

DATE: February 6, 2024

SUMMARY: Multiple parcels totaling 58 acres adjacent to Lake Hamilton property on Lake Hatchineha Road, petitioned by the property owner for annexation.

ATTORNEY REVIEW: YES: ☒ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☒ If Yes, Please Explain:

RECOMMENDATION: Staff recommends approving Ordinance O-24-04 Detour School Annexation

ATTACHEMENTS: a) Public Notice
b) Ordinance

ORDINANCE O-2024-04

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON EXTENDING THE CORPORATE LIMITS OF THE TOWN SO AS TO INCLUDE ADDITIONAL TERRITORY LYING ADJACENT TO THE PRESENT BOUNDARIES OF THE TOWN OF LAKE HAMILTON, FLORIDA; DESCRIBING SAID ADDITIONAL TERRITORY; REPEALING ALL ORDINANCES IN CONFLICT HERewith AND PROVIDING FOR APPLICABILITY; PROVIDING FOR SEVERABILITY; AND PROVIDING AN EFFECTIVE DATE. THE PROPERTY LOCATION IS 4,000 FEET EAST OF DETOUR ROAD ON THE SOUTHWEST CORNER ALFORD ROAD CONTAINING 58.70 ACRES.

WHEREAS, a petition integrate territory into the Town of Lake Hamilton has been filed requesting the Town to extend its corporate limits to include certain property herein described; and

WHEREAS, the Town of Lake Hamilton deems it expedient and practical to incorporate said territory as the same is in conformity with overall plans for extending boundaries of the Town; and welfare, and

WHEREAS, the property herein described is contiguous and adjacent to the corporate limits of the Town of Lake Hamilton, and the property will become a part of the unified corporate area with respect municipal services and benefits.

NOW THEREFORE BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA, AS FOLLOWS:

1. That the Town Council of the Town of Lake Hamilton does hereby annex into the corporate limits of the Town of Lake Hamilton, Florida, 4 parcels owned by the Cassidy Land Development, LLC and consisting of a total of 58.70 acres, described as follows:

Parcel Number: 272822-000000-011030, 272822-000000-011020, 272822-000000-011010, 272822-000000-013040

Section 22, Township 28 South, Range 15 East, Polk County, Florida.

2. The town boundaries of the Town of Lake Hamilton are hereby redefined to include the parcels of land described above and in accordance with Exhibit “A” hereto attached

Ordinance O-24-04
Page 2

and made a part of the Ordinance.

3. All ordinances in conflict herewith are hereby repealed.
4. If any provision or portion of this ordinance is declared by any court of competent jurisdiction to be void, unconstitutional or unenforceable, then all remaining provision and portions of this ordinance shall remain in full force and effect.
5. This ordinance shall take effect upon adoption.

INTRODUCED on first reading this ____ day of _____, 2024.

PASSED on second reading this ____ day of _____, 2024.

TOWN OF LAKE HAMILTON, FLORIDA

MICHAEL KEHOE, MAYOR

ATTEST:

JACQUELINE BORJA, TOWN CLERK

Approved as to form:

HEATHER MAXWELL, TOWN ATTORNEY

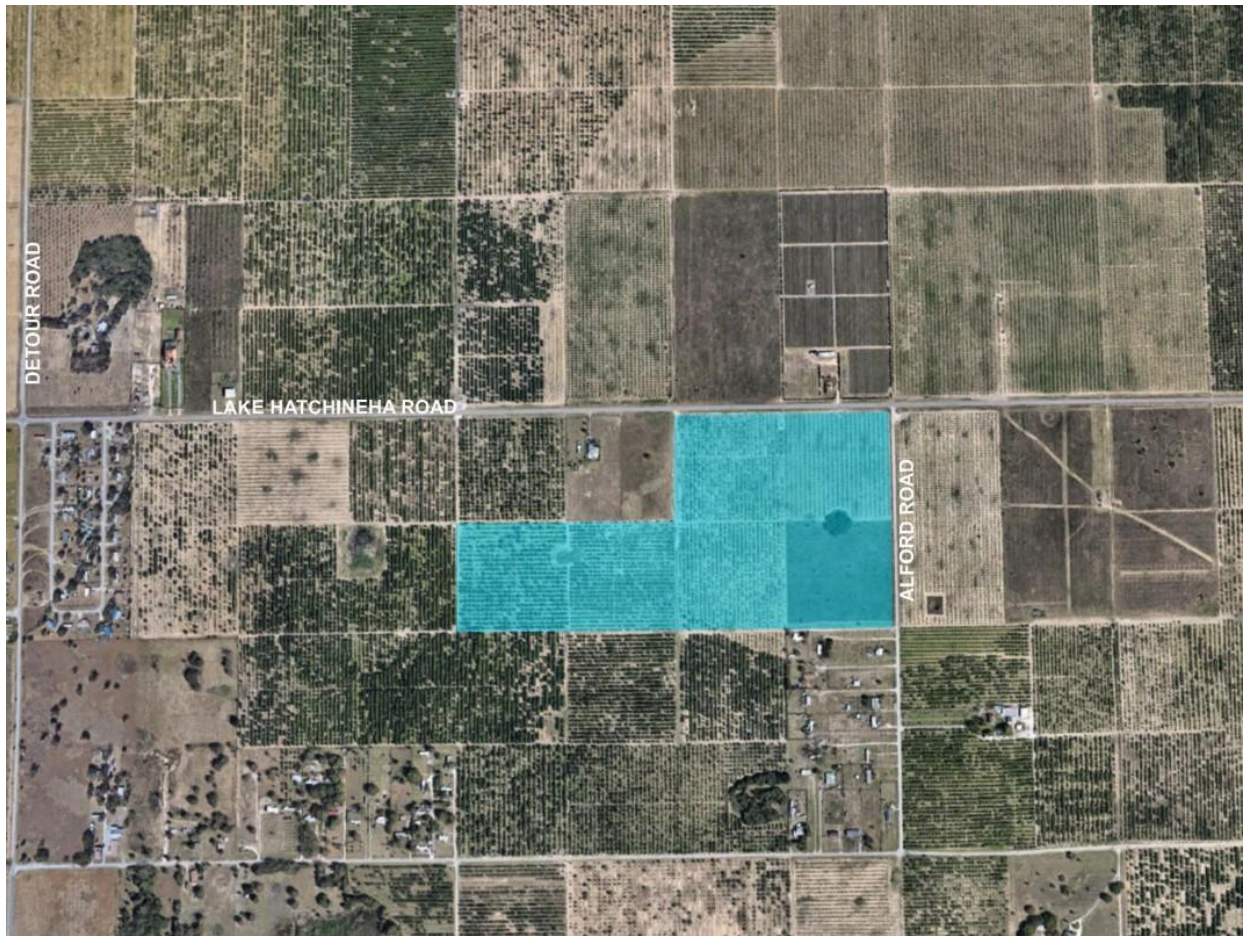
Ordinance O-24-04
Page 3

Record of Vote	Yes	No
Wagner	_____	_____
Roberson	_____	_____
Tomlinson	_____	_____
Slavin	_____	_____
Kehoe	_____	_____

Ordinance O-24-04
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EXHIBIT A

Group 9 Annexation and Legal Description





Town of Lake Hamilton
Town Council
Agenda Summary Report

TO: Mayor, Town Council, Town Attorney

FROM: Chris Kirby, Town Planner

AGENDA ITEM: Ordinance O-24-05 Water Tank CDD

DATE: February 6, 2024

SUMMARY: An Ordinance to create the Water Tank Community Development District.

ATTORNEY REVIEW: YES: ☒ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☒ If Yes, Please Explain:

RECOMMENDATION: Staff recommends approving Ordinance O-24-05 Water Tank Community Development District

ATTACHEMENTS: a) Public Notice

b) Ordinance

ORDINANCE NO. O-24-05

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA ESTABLISHING THE WATER TANK ROAD COMMUNITY DEVELOPMENT DISTRICT PURSUANT TO CHAPTER 190, FLORIDA STATUTES (2023); PROVIDING A TITLE; PROVIDING FINDINGS; CREATING AND NAMING THE DISTRICT; DESCRIBING THE FUNCTIONS AND POWERS OF THE DISTRICT; DESIGNATING FIVE PERSONS TO SERVE AS THE INITIAL MEMBERS OF THE DISTRICTS BOARD OF SUPERVISORS; PROVIDING SEVERABILITY CLAUSE; PROVIDING AN EFFECTIVE DATE.

WHEREAS, Cassidy Land Development, LLC, a Florida limited liability company ("Petitioner"), has filed a Petition to Establish the Water Tank Road Community Development District (the "Petition") with the Town Council of the Town of Lake Hamilton (the "Town Council") pursuant to Section 190.005(2)(a), *Florida Statutes*, to adopt an ordinance establishing the Water Tank Road Community Development District (the "District") pursuant to Chapter 190, *Florida Statutes*; and

WHEREAS, Petitioner is a Florida limited liability company authorized to conduct business in the State of Florida, whose address is 346 East Central Ave, Winter Haven, Florida 33880; and

WHEREAS, the owners of one hundred percent (100%) of the real property to be included in the District have consented to the establishment of the District; and

WHEREAS, all interested persons and affected units of general-purpose local government were afforded an opportunity to present oral and written comments on the Petition at a duly noticed public hearing conducted by the Town Council on __Feb 6th____, 2024, pursuant to Section 190.005(2)(b), *Florida Statutes*; and

WHEREAS, upon consideration of the record established at that duly noticed hearing, the Town Council has considered the record of the public hearing and the statutory factors set forth in section 190.005(2)(c), *Florida Statutes*, in making its determination to grant or deny the Petition; and

WHEREAS, the Town Council, pursuant to the information contained within the Petition and based on an investigation conducted by staff and otherwise being fully advised as to the facts and circumstances contained within the request of the District, finds as follows:

- (1) The statements within the Petition are true and correct; and
- (2) The Petition is complete in that it meets the requirements of Section 190.005(2)(a), *Florida Statutes*; and
- (3) The appropriate Town of Lake Hamilton staff have reviewed the Petition for establishment of the District on the proposed land and have advised the Town Council that said Petition is complete and sufficient; and
- (4) Establishment of the District by this Ordinance is subject to and not inconsistent with any applicable element or portion of the state comprehensive plan or the Town Comprehensive Plan; and

- (5) The area of land within the District is of sufficient size, is sufficiently compact, and is sufficiently contiguous to be developed as one functional, interrelated community; and
- (6) The District is the best alternative available for delivering community development services and facilities to the area that will be served by the District; and
- (7) The community development services and facilities of the District will not be incompatible with the capacity and uses of existing local and regional community development services and facilities; and
- (8) The area that will be served by the District is amenable to separate special-district government; and

WHEREAS, pursuant to the information stated above, the Town Council has decided to grant the Petition to establish the Water Tank Road Community Development District; and

WHEREAS, establishment of the District will constitute a timely, efficient, effective, responsive and economic way to deliver community development services in the area described in the Petition; and

WHEREAS, the establishment of the District shall not act to amend any land development approvals governing the land area to be included within the District; and

WHEREAS, upon the effective date of this establishing Ordinance, the Water Tank Road Community Development District, as created by general law, will be duly and legally authorized to exist on the proposed property and to exercise all of its general and special powers as limited by law.

NOW THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA:

SECTION 1. TITLE. This Ordinance shall be known and may be cited as the "Water Tank Road Community Development District Establishment Ordinance."

SECTION 2. BOARD FINDINGS. The Board findings set forth in the recitals to this Ordinance are hereby incorporated in this Ordinance.

SECTION 3. AUTHORITY. This Ordinance is adopted in compliance with and pursuant to the Uniform Community Development District Act of 1980, Chapter 190, *Florida Statutes*.

SECTION 4. CREATION OF DISTRICT; DISTRICT NAME. The Petition filed to create the Water Tank Road Community Development District is hereby granted and there is hereby created a community development district, which is situated within the Town of Lake Hamilton, Florida, which District shall be known as the "Water Tank Road Community Development District."

SECTION 5. EXTERNAL BOUNDARIES OF THE DISTRICT. The external boundaries of the District are described in **Exhibit A** attached hereto and incorporated by reference, the overall boundaries encompassing 289 acres, more or less. There are no parcels within the external boundaries of the District that are to be excluded from the District.

SECTION 6. FUNCTIONS AND POWERS. The District is limited to the performance of those powers and functions as described in Chapter 190, *Florida Statutes*. The District is also authorized to exercise additional powers to finance, fund, plan, establish, acquire, construct,

reconstruct, enlarge or extend, equip, operate and maintain systems and facilities for: parks and facilities for indoor and outdoor recreational, cultural, and educational uses as authorized and described in Section 190.012(2)(a), *Florida Statutes*; and security powers, including but not limited to guardhouses, fences and gates, and electronic intrusion detection, as authorized and described in Section 190.012(2)(d), *Florida Statutes*. In the exercise of its powers, the District shall comply with all applicable governmental laws, rules, regulations and policies including, but not limited to, all Town of Lake Hamilton ordinances and policies governing land planning and permitting of the development to be served by the District. The District shall not have any zoning or permitting powers governing land development or the use of land. No debt or obligation of the District shall constitute a burden on any local general-purpose government.

SECTION 7. BOARD OF SUPERVISORS. The five persons designated to serve as initial members of the District's Board of Supervisors are as follows: Warren K. Heath, Daniel Arnette, Lindsey Roden, Jessica Petrucci, and Lauren O. Schwenk. All of the above-listed persons are residents of the state of Florida and citizens of the United States of America.

SECTION 8. SEVERABILITY. If any provision of this Ordinance, or the application thereof, is finally determined by a court of competent jurisdiction to be illegal, invalid, or unenforceable, such provision shall be deemed severable and the remaining provisions shall continue remain in full force and effect provided that the invalid, illegal or unenforceable provision is not material to the logical and intended interpretation of this Ordinance.

SECTION 9. EFFECTIVE DATE. This Ordinance shall be effective immediately upon adoption.

INTRODUCED AND PASSED on first reading at the regular meeting of the Town Council of Lake Hamilton, Florida, held this ____ day of _____ 2024.

PASSED AND ADOPTED on second reading at the regular meeting of the Town Council of Lake Hamilton, Florida, held this ____ day of _____ 2024.

TOWN OF LAKE HAMILTON, FLORIDA

ATTEST

JACQUELINE BORJA, TOWN CLERK

APPROVED AS TO FORM:

HEATHER R. MAXWELL, ESQ., TOWN ATTORNEY

Record of Vote	Yes	No
Roberson		
Tomlinson	.	
Kehoe		
Wagner		
Slavin		

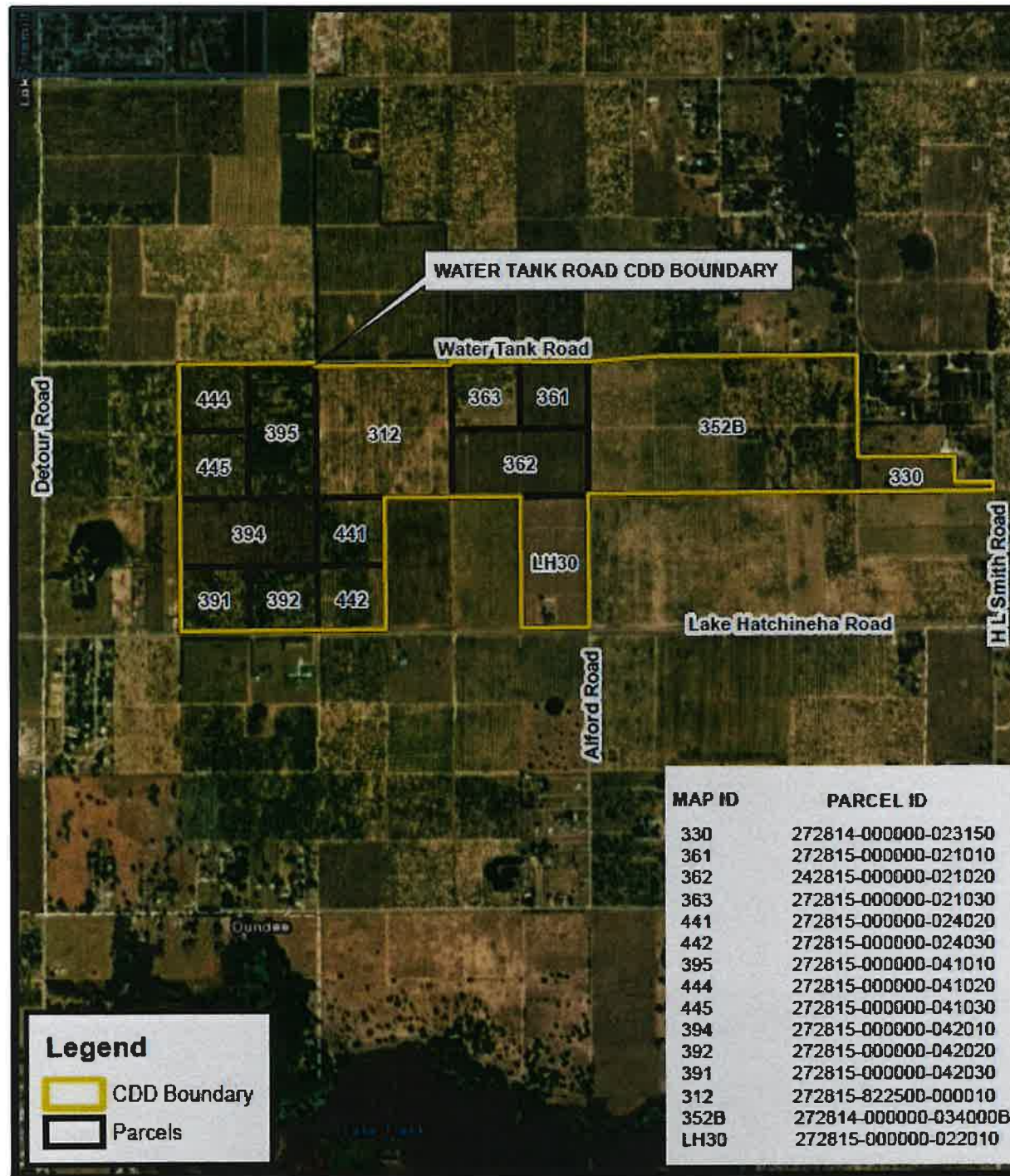
EXHIBIT A
LEGAL DESCRIPTION

A PORTION OF SECTIONS 14 AND 15, TOWNSHIP 28 SOUTH, RANGE 27 EAST, POLK COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE WEST 1/4 CORNER OF SAID SECTION 15; THENCE N89°00'52"E, ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF SECTION 15, A DISTANCE OF 1323.79 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N89°00'52"E, A DISTANCE OF 1323.79 FEET TO A POINT ON THE WEST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 15; THENCE S00°35'17"E, ALONG SAID WEST LINE, A DISTANCE OF 48.70 FEET; THENCE DEPARTING SAID WEST LINE, RUN N88°52'48"E, A DISTANCE OF 1323.96 FEET TO A POINT ON THE EAST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 15; THENCE N00°36'19"E, ALONG SAID EAST LINE, A DISTANCE OF 45.50 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHEAST 1/4 OF SAID SECTION 15; THENCE N89°01'05"E, ALONG SAID SOUTH LINE, A DISTANCE OF 1323.44 FEET TO THE WEST 1/4 CORNER OF SAID SECTION 14; THENCE N89°28'09"E, ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF SAID SECTION 14, A DISTANCE OF 2624.54 FEET TO A POINT WEST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 14; THENCE S00°26'38"E, ALONG SAID WEST LINE, A DISTANCE OF 999.03 FEET; THENCE DEPARTING SAID WEST LINE, RUN N89°25'40"E, A DISTANCE OF 936.05 FEET; THENCE S00°21'04"E, A DISTANCE OF 250.00 FEET; THENCE N89°25'40"E, A DISTANCE OF 375.97 FEET TO A POINT ON THE EAST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 14; THENCE S00°19'07"W, ALONG SAID EAST LINE, A DISTANCE OF 82.56 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 SECTION 14; THENCE S89°24'42"W, ALONG SAID SOUTH LINE, A DISTANCE OF 1310.42 FEET TO THE SOUTHEAST CORNER OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF SECTION 14; THENCE S89°24'43"W, ALONG SAID SOUTH LINE, A DISTANCE OF 2620.49 FEET TO A POINT ON THE WEST LINE OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 14; THENCE S00°37'20"E, ALONG SAID WEST LINE, A DISTANCE OF 1334.57 FEET TO A POINT ON THE SOUTH LINE OF SECTION 15; THENCE S89°18'33"W, ALONG SAID SOUTH LINE OF SECTION 15, A DISTANCE OF 662.35 FEET TO A POINT ON THE EAST LINE OF THE WEST 1/2 OF THE SOUTHEAST OF THE SOUTHEAST 1/4 OF SECTION 15; THENCE N00°36'50"W, ALONG SAID EAST LINE, A DISTANCE OF 1332.89 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF SECTION 15; THENCE S89°09'50"W, ALONG SAID SOUTH LINE, A DISTANCE OF 1324.30 FEET TO A POINT ON THE EAST LINE OF THE EAST 1/2 OF THE SOUTHEAST OF THE SOUTHWEST 1/4 OF SECTION 15; THENCE S00°35'48"E, ALONG SAID EAST LINE, A DISTANCE OF 1329.53 FEET TO A POINT ON THE SOUTH LINE OF SECTION 15; THENCE ALONG THE SOUTH LINE OF SECTION 15 THE FOLLOWING TWO (2) COURSES AND DISTANCES; S89°18'33"W, A DISTANCE OF 662.35 FEET; THENCE S89°22'01"W, A DISTANCE OF 1324.10 FEET TO A POINT ON THE WEST LINE OF THE WEST 1/2 OF THE SOUTH W 1/4 OF SECTION 15; THENCE N00°34'51"W, ALONG SAID WEST LINE, A DISTANCE OF 2647.57 FEET TO THE POINT OF BEGINNING.

CONTAINING 289 ACRES MORE OR LESS

GENERAL LOCATION MAP OF THE PROPOSED WATER TANK ROAD COMMUNITY DEVELOPMENT DISTRICT





Town of Lake Hamilton
Town Council
Agenda Summary Report

TO: Mayor, Town Council, Town Attorney

FROM: Chris Kirby, Town Planner

AGENDA ITEM: Ordinance O-24-06 Hamilton Bluffs CDD Amended Boundary

DATE: March 1, 2024

SUMMARY: An ordinance to amend the current boundary for Hamilton Bluffs CDD.

ATTORNEY REVIEW: YES: ☒ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☒ If Yes, Please Explain:

RECOMMENDATION: Staff recommends approving Ordinance O-24-06 Hamilton Bluffs CDD Amended Boundary

ATTACHEMENTS: a) Public Notice
b) Ordinance

ORDINANCE NO. O-2024-06

AN ORDINANCE OF THE TOWN OF LAKE HAMILTON, FLORIDA AMENDING SECTION 5 OF ORDINANCE O-22-06 THAT ESTABLISHED THE HAMILTON BLUFF COMMUNITY DEVELOPMENT DISTRICT BY ADDING APPROXIMATELY 444 ACRES OF LAND THERETO PURSUANT TO SECTION 190.046, FLORIDA STATUTES; PROVIDING FOR THE AMENDMENT OF EXHIBIT A TO ORDINANCE O-22-06, TO PROVIDE FOR A NEW METES AND BOUNDS LEGAL DESCRIPTION OF THE EXTERNAL BOUNDARIES OF THE DISTRICT; PROVIDING FOR ALL OTHER TERMS AND CONDITIONS TO REMAIN UNCHANGED; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on March 1, 2022, the Town Council of Lake Hamilton, Florida (the “**Town Council**”) pursuant to Section 190.005(2)(a), *Florida Statutes*, adopted Ordinance O-22-06, which established the Hamilton Bluff Community Development District (“**District**”); and

WHEREAS, the Town has received from the District a “*Petition to Amend the Boundary of the Hamilton Bluff Community Development District*,” dated December 5, 2022, as amended through December 7, 2023, (the “**Petition**”), which Petition is in compliance with the provisions of Section 190.046, *Florida Statutes*; and

WHEREAS, all interested persons and affected units of general-purpose local government were afforded an opportunity to present oral and written comments on the Petition at a duly noticed public hearing conducted by the Town Council on April 2, 2024, pursuant to Section 190.046(1)(b), *Florida Statutes*; and

WHEREAS, upon consideration of the record established at that duly noticed hearing, the Town Council has considered the record of the public hearing and the statutory factors set forth in Section 190.046(1)(b), *Florida Statutes*, in making its

determination to grant or deny the Petition; and

WHEREAS, the Town Council, pursuant to the information contained within the Petition and based on an investigation conducted by the Town of Lake Hamilton (the “**Town**”) staff and

otherwise being fully advised as to the facts and circumstances contained within the request of the District, finds as follows:

- (1) The statements within the Petition are true and correct; and
- (2) The Petition is complete in that it meets the requirements of Section 190.046(1)(a), *Florida Statutes* (2023); and
- (3) The appropriate Town staff have reviewed the Petition of the District on the proposed lands to be included within the District and have advised the Town Council that said Petition is complete and sufficient; and
- (4) Amendment of the District boundaries and all land uses and services planned within the District, as amended are not inconsistent with applicable elements or portions of the adopted State Comprehensive Plan or the applicable and effective local comprehensive plans; and
- (5) The area of land to be included within the District is of sufficient size, is sufficiently compact, and is sufficiently contiguous to be developed as one functional, interrelated community; and
- (6) The District, as amended, is the best alternative available for delivering community development services and facilities to the area that will be served by the District; and
- (7) The community development services and facilities of the District, as amended, will not be incompatible with the capacity and uses of existing local and regional community development services and facilities; and
- (8) The area that will be served by the District, as amended, is amenable to separate special-district government.

WHEREAS, pursuant to the information stated above, the Town Council has decided to grant the District's Petition to Amend the Boundary of the Hamilton Bluff Community Development District; and

WHEREAS, the District, as amended, will constitute a timely, efficient, effective, responsive and economic way to deliver community development services in the area described in the Petition; and

WHEREAS, the District, as amended shall not act to amend any land development approvals governing the land area to be included within the District; and

WHEREAS, upon the effective date of this Ordinance, the Hamilton Bluff Community Development District, as created by general law, will be duly and legally authorized to exist on the proposed property and to exercise all of its general and special powers as limited by law.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF COMMISSIONERS OF THE TOWN OF LAKE HAMILTON, FLORIDA:

SECTION 1. TITLE. This Ordinance shall be known and may be cited as the “Hamilton Bluff Community Development District Boundary Amendment Ordinance No. 1.”

SECTION 2. BOARD FINDINGS. The Board findings set forth in the recitals to this Ordinance are hereby incorporated in this Ordinance.

SECTION 3. AUTHORITY. This Ordinance is adopted in compliance with and pursuant to the Uniform Community Development District Act of 1980, Chapter 190, *Florida Statutes*.

SECTION 4. EXTERNAL BOUNDARIES OF THE DISTRICT. The Petition is hereby approved and Section 5, External Boundaries of the District of Ordinance O-22-06, is hereby amended and shall encompass approximately 710 acres, more or less.

SECTION 5. LEGAL DESCRIPTION OF THE DISTRICT. Exhibit “A” of Ordinance O-22-06, is hereby replaced in its entirety with a new Exhibit “A”, which is attached hereto and incorporated herein, and which accurately depicts the external boundaries of the District, as amended,

SECTION 6. ALL OTHER CONDITIONS TO REMAIN UNCHANGED. All other terms and conditions of Ordinance O-22-06 shall remain unchanged and enforceable in accordance with the terms expressed herein.

SECTION 7. SEVERABILITY. If any provision of this Ordinance, or the application thereof, is determined by a court of competent jurisdiction to be illegal, invalid, or unenforceable,

such provision shall be deemed severable and the remaining provisions shall continue remain in full force and effect provided that the invalid, illegal or unenforceable provision is not material to the logical and intended interpretation of this Ordinance.

SECTION 8. EFFECTIVE DATE. This Ordinance shall be effective immediately upon adoption.

INTRODUCED AND PASSED ON FIRST READING by the Town Council of the Town of Lake Hamilton, Florida, meeting in Regular Session this 5th day of March 2024.

INTRODUCED, PASSED AND DULY ADOPTED ON SECOND READING by the Town Council of the Town of Lake Hamilton, Florida, meeting in Regular Session this 2nd day of April 2024.

TOWN COUNCIL OF LAKE HAMILTON
FLORIDA

BY: _____
Michael W. Kehoe, Mayor

ATTEST:

By: _____
Jacqueline Borja, Town Clerk

APPROVED AS TO FORM:

By: _____
Heather R. Maxwell, Esq., Town Attorney

<u>Record of Vote</u>	<u>Yes</u>	<u>No</u>
Roberson	_____	_____
Tomlinson	_____	_____
Kehoe	_____	_____
Wagner	_____	_____
Slavens	_____	_____

Exhibit "A"**Legal Description of the District**

A PORTION OF SECTIONS 15, 16 AND 21, TOWNSHIP 28 SOUTH, RANGE 27 EAST, POLK COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID SECTION 15; THENCE N89°12'47"E, ALONG THE NORTH LINE OF SAID SECTION 15, A DISTANCE OF 1653.53 FEET; THENCE DEPARTING SAID NORTH LINE, RUN S00°34'24"E, A DISTANCE OF 669.81 FEET TO A POINT ON THE NORTH LINE OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 15 ; THENCE N89°09'48"E, ALONG SAID NORTH LINE, A DISTANCE OF 330.77 FEET TO A POINT ON THE WEST LINE OF THE OF THE W 1/2 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 15; THENCE N00°34'42"W, ALONG SAID WEST LINE, A DISTANCE OF 669.52 FEET TO A POINT ON THE WEST LINE OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 10; THENCE N00°29'23"W, ALONG SAID WEST LINE, A DISTANCE OF 659.91 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 10; THENCE S89°12'59"W, ALONG SAID SOUTH LINE, A DISTANCE OF 661.63 FEET TO A POINT ON THE WEST LINE OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 10; THENCE N00°30'31"W, ALONG SAID WEST LINE, A DISTANCE OF 659.95 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 10; THENCE N89°13'10"E, ALONG SAID NORTH LINE, A DISTANCE OF 1323.69 FEET TO A POINT ON THE EAST LINE OF THE EAST 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 10; THENCE S00°28'16"E, ALONG SAID EAST LINE, A DISTANCE OF 838.42 FEET; THENCE DEPARTING SAID EAST LINE, RUN S89°16'42"W, A DISTANCE OF 65.66 FEET; THENCE S00°17'13"E, A DISTANCE OF 257.33 FEET; THENCE N89°12'33"E, A DISTANCE OF 66.49 FEET TO A EAST LINE OF THE E 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 10; THENCE S00°28'16"E, ALONG SAID EAST LINE, A DISTANCE OF 224.09 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 10; THENCE N89°12'40"E, ALONG SAID SOUTH LINE, A DISTANCE OF 330.69 FEET; THENCE DEPARTING SAID SOUTH LINE RUN, N00°27'05"W, A DISTANCE OF 1320.18 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 10; THENCE N89°08'16"E, ALONG SAID NORTH LINE, A DISTANCE OF 993.42 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 10; THENCE S00°23'34"E, ALONG SAID WEST LINE, A DISTANCE OF 1321.46 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 10; THENCE N89°12'40"E, ALONG THE SOUTH LINE, A DISTANCE OF 1322.74 FEET TO THE NORTHWEST CORNER OF SAID SECTION 14; THENCE N89°35'29"E, ALONG THE NORTH LINE OF SAID SECTION 14, A DISTANCE OF 495.00 FEET; THENCE DEPARTING SAID NORTH LINE, RUN S00°38'17"E, A DISTANCE OF 1332.89 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 14; THENCE N89°31'38"E, ALONG SAID NORTH LINE, A DISTANCE OF 819.20 FEET TO A POINT ON THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 14; THENCE S00°32'38"E, ALONG SAID EAST LINE, A DISTANCE OF 1332.24 FEET TO A POINT ON THE NORTH LINE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 14; THENCE S89°28'31"W, ALONG SAID NORTH LINE, A DISTANCE OF 1312.00 FEET TO A POINT ON THE WEST 1/4 CORNER OF SECTION 14; THENCE S89°01'06"W, ALONG THE SOUTH LINE OF THE NORTHWEST 1/4 OF

SAID SECTION 15, A DISTANCE OF 2647.85 FEET TO THE EAST 1/4 CORNER OF SECTION 15; THENCE S89°00'52"W, ALONG THE SOUTH LINE OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF SECTION 15, A DISTANCE OF 1323.79 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHWEST 1/4 OF SECTION 15; THENCE S89°00'52"W, ALONG SAID SOUTH LINE, A DISTANCE OF 661.90 FEET TO A POINT ON THE EAST LINE OF THE WEST 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 15 ; THENCE S00°34'37"E, ALONG SAID EAST LINE, A DISTANCE OF 1321.75 FEET TO A SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 15; THENCE S89°11'27"W, ALONG SAID SOUTH LINE, A DISTANCE OF 661.97 FEET TO A POINT ON THE EAST LINE OF THE EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 16; THENCE S00°34'24"E, ALONG SAID EAST LINE, A DISTANCE OF 1319.71 FEET TO A POINT ON THE SOUTH LINE OF SECTION 16; THENCE N89°58'17"W, ALONG SAID SOUTH LINE, A DISTANCE OF 657.88 FEET TO A POINT ON THE EAST LINE OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 21 ; THENCE S00°16'55"E, ALONG SAID EAST LINE, A DISTANCE OF 666.11 FEET TO A POINT ON THE SOUTH LINE NORTH 1/2 OF THE NORTHEAST 1/4 OF SECTION 21; THENCE S89°56'49"W, ALONG SAID SOUTH LINE, A DISTANCE OF 1317.23 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 21; THENCE N00°09'21"W, ALONG SAID WEST LINE, A DISTANCE OF 667.98 FEET TO A POINT ON THE NORTH LINE OF SECTION 21; THENCE S89°58'17"E, ALONG THE NORTH LINE, A DISTANCE OF 1315.77 FEET TO A POINT ON THE WEST LINE OF EAST 1/2 OF THE SOUTHWEST 1/4 OF SECTION 16 ; THENCE N00°37'16"W, ALONG SAID WEST LINE, A DISTANCE OF 1322.13 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 16; THENCE N89°45'44"W, ALONG SAID SOUTH LINE, A DISTANCE OF 659.02 FEET TO A POINT ON THE WEST LINE OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 16 ; THENCE N00°40'08"W, ALONG SAID WEST LINE, A DISTANCE OF 1324.55 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 16; THENCE N89°33'14"W, ALONG SAID SOUTH LINE, A DISTANCE OF 1157.70 FEET TO A POINT ON THE EAST LINE OF SCENIC HIGHWAY NORTH PER FLORIDA DEPARTMENT OF TRANSPORTATION PER RIGHT OF WAY MAP PROJECT 5209-RD(8) OF POLK COUNTY ; THENCE ALONG THE EAST LINE OF SCENIC HIGHWAY NORTH THE FOLLOWING FIVE (5) COURSES AND DISTANCES: N02°51'16"E, A DISTANCE OF 128.34 FEET; THENCE S90°00'00"W, A DISTANCE OF 151.65 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE WESTERLY HAVING A RADIUS OF 1687.12 FEET, A CENTRAL ANGLE OF 04°39'37", A CHORD BEARING OF N07°53'51"E AND A CHORD DISTANCE OF 137.19 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 137.22 FEET TO THE END OF SAID CURVE; THENCE N84°25'58"W, A DISTANCE OF 17.00 FEET TO A POINT ON A NON-TANGENT CURVE CONCAVE WESTERLY HAVING A RADIUS OF 1670.12 FEET, A CENTRAL ANGLE OF 01°45'32", A CHORD BEARING OF N04°41'16"E AND A CHORD DISTANCE OF 51.27 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 51.27 FEET TO THE END OF SAID CURVE; THENCE DEPARTING SAID EAST LINE, RUN N89°14'11"E, A DISTANCE OF 89.31 FEET; THENCE N00°45'49"W, A DISTANCE OF 180.00 FEET; THENCE S89°14'11"W, A DISTANCE OF 84.00 FEET TO A POINT ON THE EAST LINE OF SCENIC HIGHWAY NORTH PER FLORIDA DEPARTMENT OF TRANSPORTATION PER RIGHT OF WAY MAP PROJECT 5209-RD(8) OF POLK COUNTY ; THENCE N00°45'49"W, ALONG SAID EAST RIGHT OF WAY LINE, A DISTANCE OF 174.32 FEET TO A POINT ON THE NORTH LINE OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 16 ; THENCE S89°34'39"E, ALONG SAID NORTH LINE, A DISTANCE OF 142.03 FEET; THENCE DEPARTING SAID NORTH LINE, N00°45'49"W, A DISTANCE OF 335.14 FEET TO A POINT ON THE SOUTH OF THE NORTH 1/2 OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION

16; THENCE S89°35'21"E, ALONG SAID SOUTH LINE, A DISTANCE OF 1147.16 FEET TO A POINT ON THE WEST LINE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 16; THENCE N00°39'21"W, ALONG SAID WEST LINE, A DISTANCE OF 335.36 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SECTION 16; THENCE S89°36'03"E, ALONG SAID SOUTH LINE, A DISTANCE OF 661.41 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 SECTION 16; THENCE N00°36'07"W, ALONG SAID WEST LINE, A DISTANCE OF 670.98 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF THE NORTHEAST 1/4 SECTION 16 ; THENCE S89°37'27"E, ALONG SAID SOUTH LINE, A DISTANCE OF 662.04 FEET TO A POINT ON THE WEST LINE OF SECTION 15; THENCE N00°32'54"W, ALONG SAID WEST LINE, A DISTANCE OF 671.24 FEET TO THE POINT OF BEGINNING.

TOGETHER WITH:

PARCEL 1

A PORTION OF SECTION 21, TOWNSHIP 28 SOUTH, RANGE 27 EAST, POLK COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE CENTER CORNER OF SAID SECTION 21; THENCE N89°42'09"E, ALONG THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 21, A DISTANCE OF 28.76 FEET TO THE POINT OF BEGINNING AND ALSO BEING THE EAST RIGHT OF WAY LINE OF EAST LINE OF SCENIC HIGHWAY NORTH PER FLORIDA DEPARTMENT OF TRANSPORTATION PER RIGHT OF WAY MAP PROJECT 5209-RD(8) OF POLK COUNTY; THENCE ALONG THE SAID EAST RIGHT OF WAY LINE THE FOLLOWING TWO (2) COURSES AND DISTANCES; N00°20'43"W, A DISTANCE OF 713.49 FEET TO A POINT OF CURVATURE OF A CURVE CONCAVE WESTERLY HAVING A RADIUS OF 5763.12 FEET, A CENTRAL ANGLE OF 05°09'30", A CHORD BEARING OF N02°55'28"W AND A CHORD DISTANCE OF 518.67 FEET; THENCE RUN NORTHERLY ALONG THE ARC OF SAID CURVE, A DISTANCE OF 518.84 FEET TO THE END OF SAID CURVE; THENCE DEPARTING SAID EAST RIGHT OF WAY LINE, RUN N00°05'35"W, A DISTANCE OF 106.22 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 21; THENCE N89°51'55"E, ALONG SAID NORTH LINE, A DISTANCE OF 1318.69 FEET TO A POINT ON THE EAST LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 21; THENCE S00°13'08"E, ALONG SAID EAST LINE, A DISTANCE OF 1334.09 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHWEST 1/4 OF THE NORTHEAST 1/4 OF SAID SECTION 21; THENCE S89°42'09"W, ALONG THE SAID SOUTH LINE, A DISTANCE OF 1292.86 FEET TO THE POINT OF BEGINNING.

PARCEL 2

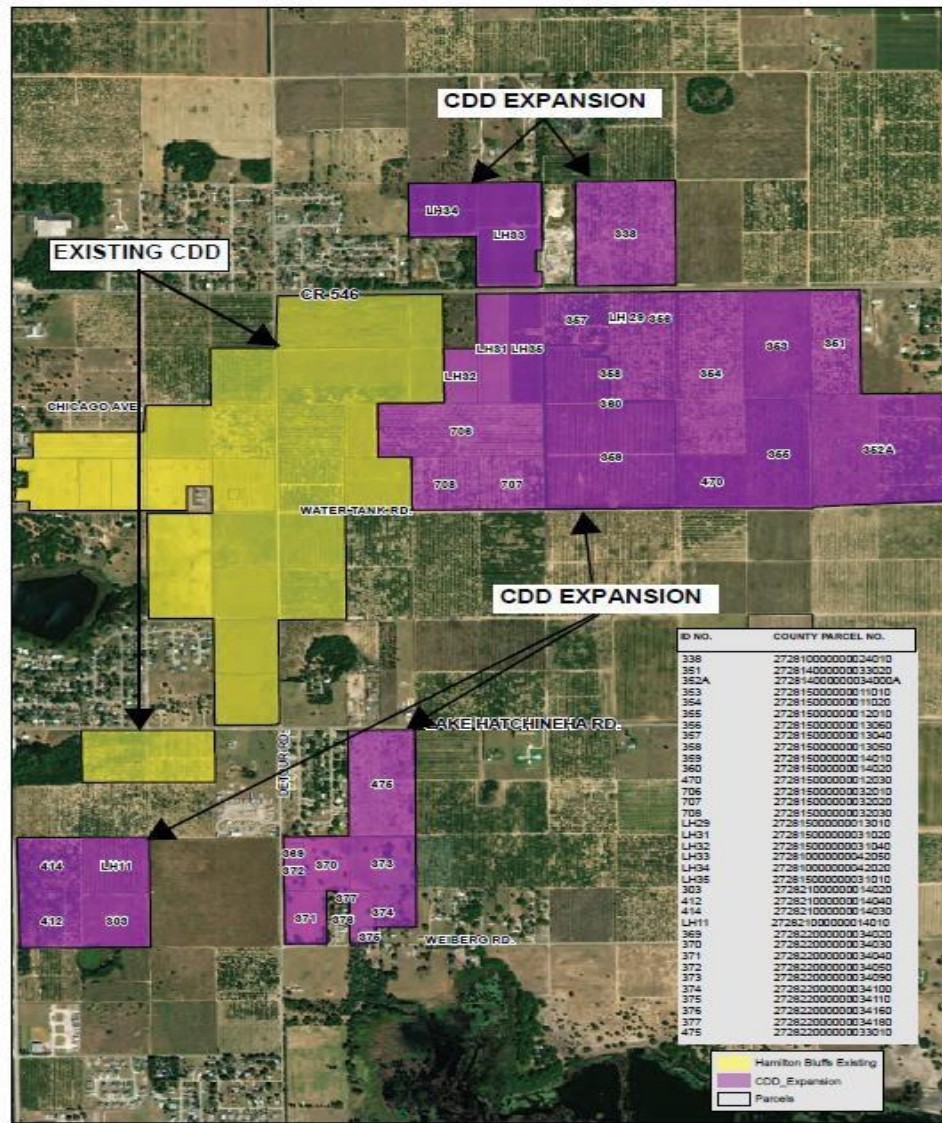
A PORTION OF SECTION 22, TOWNSHIP 28 SOUTH, RANGE 27 EAST, POLK COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID SECTION 22; THENCE N89°22'01"E, ALONG THE NORTH LINE OF SAID SECTION 22, A DISTANCE OF 662.05 FEET TO THE POINT OF BEGINNING; THENCE N89°22'01"E, ALONG THE NORTH LINE OF SECTION 22, A DISTANCE OF 662.05 FEET TO A POINT ON THE WEST LINE OF THE E 1/2 OF SAID SECTION 22; THENCE S00°21'23"E, ALONG SAID WEST LINE, A DISTANCE OF 2459.44 FEET; THENCE DEPARTING SAID WEST LINE, RUN N90°00'00"W, A DISTANCE OF 404.02 FEET; THENCE S00°00'00"E, A DISTANCE OF 186.33 FEET; THENCE S89°24'17"W, A DISTANCE OF 257.22 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE NORTHWEST

1/4 OF SECTION 22; THENCE N00°20'35"W, ALONG SAID WEST LINE, A DISTANCE OF 645.28 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SAID SECTION 22; THENCE S89°23'43"W, ALONG SAID SOUTH LINE, A DISTANCE OF 223.00 FEET; THENCE DEPARTING SAID SOUTH LINE, RUN S00°21'03"E, A DISTANCE OF 645.24 FEET; THENCE S89°24'17"W, A DISTANCE OF 439.30 FEET TO A POINT ON THE WEST LINE OF THE NORTHWEST 1/4 OF SECTION 22; THENCE N00°20'43"W, ALONG SAID WEST LINE, A DISTANCE OF 1310.34 FEET TO A POINT ON THE NORTH LINE OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22; THENCE N89°23'09"E, ALONG SAID NORTH LINE, A DISTANCE OF 662.18 FEET TO A POINT ON THE WEST LINE OF THE EAST 1/2 OF THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 22; THENCE N00°21'03"W, ALONG SAID WEST LINE, A DISTANCE OF 1330.56 FEET TO THE POINT OF BEGINNING.

TOTAL EXITING CDD LIMITS = 710 ACRES MORE OR LESS

HAMILTON BLUFF COMMUNITY DEVELOPMENT DISTRICT



RESOLUTION NUMBER R-2024-2

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF LAKE HAMILTON, FLORIDA, RELATING TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) STATE REVOLVING FUND (SRF), ADOPTION OF THE WASTEWATER FACILITY PLAN FOR THE IMPLEMENTATION OF PHASE 2 WWTF AND PUMP STATION IMPROVEMENTS, EFFECTIVE THIS DATE

WHEREAS, Florida Statutes provide for loans to local government agencies to finance the construction of wastewater facilities; and Florida Administrative Code requires the formal authorization by Town Council to formally adopt a facility plan outlining necessary Phase 2 WWTF and Pump Station facility improvements to comply with State of Florida funding requirements;

WHEREAS, formal adoption of the proposed Facility Plan is required for the Town of Lake Hamilton to participate in the State Revolving Loan Fund Program;

WHEREAS, the Town Council of the Town of Lake Hamilton, Florida agrees with the findings and summary of necessary improvements as outlined in the Facility Plan for the purpose of Phase 2 WWTF and Pump Station Construction funding;

NOW THEREFORE BE IT RESOLVED by the Town Council of the Town of Lake Hamilton, Florida formally approves and adopts the Town of Lake Hamilton Facility Plan as written and presented to the Town Council on this date;

SECTION 1. FINDINGS

The foregoing findings are incorporated herein by reference and made a part hereof.

The Town of Lake Hamilton Florida, is authorized to approve the proposed Facility Plan.

The Town Manager is hereby designated as the authorized representative to provide the assurances and commitments that will be required by the Facility Plan.

The Mayor is hereby designated as the authorized representative to execute the Facility Plan which will become the foundation of all activities related to the wastewater facility improvements. The Mayor is authorized to represent the Town in carrying out the Town's responsibilities under the Facility Plan. The Mayor is authorized to delegate responsibility to appropriate Town Staff to carry out technical, financial, and administrative activities associated with the Facility Plan.

The legal authority for adoption of this facility plan is pursuant to the Town Charter, Town Code of Ordinances, and the Laws of the State of Florida.

All Resolutions or part of Resolutions in conflict with any of the provisions of this Resolution are hereby repealed.

If any section or portion of a section of this Resolution proves to be invalid, unlawful, or unconstitutional, it shall not be held to invalidated or impair the validity, force, or effect or any other section or part of this Resolution.

SECTION 2. EFFECTIVE DATE

This Resolution shall take effect upon its approval and adoption by the Town Council.

APPROVED AND ADOPTION THIS 5TH DAY OF MARCH, 2024.

**TOWN COUNCIL
TOWN OF LAKE HAMILTON, FLORIDA**

MICHAEL KEHOE, MAYOR (SEAL)

ATTEST:

**APPROVED AS TO FORM AND
CORRECTNESS:**

JACQUELINE BORJA, TOWN CLERK

HEATHER R. MAXWELL, TOWN ATTORNEY

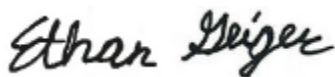
Record of Vote	Yes	No
Slavens		
Roberson		
Tomlinson		
Wagner		
Kehoe		

WASTEWATER FACILITIES PLAN
FOR
PHASE 2 WWTF AND TRANSMISSION SYSTEM IMPROVEMENTS



PREPARED FOR:
TOWN OF LAKE HAMILTON
PO BOX 126
LAKE HAMILTON, FL 33851

PREPARED BY:
PENNONI
401 THIRD STREET SW
WINTER HAVEN, FL 33880
863-324-1112



Ethan Geiger



Steven Elias, PE

LAKHA22008
December 23, 2023

Project No. LAKHA22008

Mr. Steven Hunnicutt, Town Administer
Town of Lake Hamilton
Post Office Box 126
Lake Hamilton, Florida 33851

RE: PRELIMINARY ENGINEERING REPORT – PHASE 2 WASTEWATER TREATMENT FACILITY AND TRANSMISSION SYSTEM IMPROVEMENTS

Dear Mr. Hunnicutt:

We are pleased to submit the enclosed Preliminary Engineering Report (PER) for the referenced Project. The purpose of this Report is to evaluate wastewater improvements, provide recommendations, and associated costs.

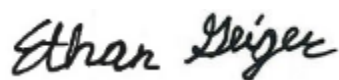
Upon adoption by the Town Council, this PER will be the basis of a grant/loan funding application request to the Florida Department of Environmental Protection (FDEP) via their State Revolving Fund (SRF) Program

Please contact our office if you have any questions related to our findings. We sincerely appreciate the opportunity to assist the Town of Lake Hamilton with this important Project.

Sincerely
Pennoni



Steven L. Elias, P.E.
Associate Vice President



Ethan Geiger
Project Engineer

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Wastewater Facilities Plan – Phase 2 WWTF and Transmission System Improvements**Town of Lake Hamilton, Florida****Project No. LAKHA22008**

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- E. Public Hearing Documentation

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

EXECUTIVE SUMMARY

Project Background

The Town of Lake Hamilton (Town) is located in central Florida along the eastern shore of Lake Hamilton and serves approximately 1,600 residents with potable water and 150 residents with central wastewater treatment services.

In 2021, the Town was awarded Clean Water State Revolving Fund (CWSRF) funding to design and construct a Phase 1 Wastewater Treatment Facility (WWTF). This WWTF project was constructed in 2023 in conjunction with a septic to sewer replacement project to create an initial gravity sewer system and provide seeding flows to the WWTF. Several planned Phase 1 treatment plant components had to be removed and/or omitted from the scope due to elevated bid prices and lack of funding (surge tank, headworks, back-up treatment train, operations building, paved driveway, and other treatment system components to meet the stringent local BMAP discharge water quality requirements, etc.).



Now that the Phase 1 WWTF has been completed, the Town desires to construct the remaining planned improvements as part of the Phase 2 Project to ensure the Town has adequate and durable facilities to reliably handle flow surges and meet the stringent local effluent discharge requirements to provide service for existing and future users.

In parallel with the Phase 2 WWTF improvements, the Town desires to redirect collection system flows from customers along US 27 to the Town's new WWTF. In 2018, the Town constructed a wastewater pumping collection system and master pumping station located on US-27 that collects wastewater from the residents and businesses on the US-27 corridor and transmits the flows south to the Town of Dundee for treatment. Due to Dundee treatment capacity limitations and contractual obstacles, the Town must now redirect wastewater flows from the US 27 corridor to its new WWTF.

Project Purpose

To evaluate the benefits of additional treatment processes, meet FDEP regulations for WWTF and effluent quality, and provide backup reliability to an expanding wastewater system, the Town has tasked Pennoni to prepare this Facilities Plan and position the Town to apply for construction funding via the FDEP CWSRF program. Following the substantial completion of the Phase 1 WWTF in 2023, the Town is pursuing the construction of a Phase 2 facility expansion on the existing Water Tank Road WWTF site and the redirecting flows from the existing pump station wastewater collection system on US-27. These Phase 2 improvements will extend the life of existing treatment equipment, provide treatment redundancy with an additional treatment train and extensive influent screening treatment, allow the Town an operations center for emergency preparedness and coordination, and provide additional avenues of septic tank conversion through force main or conventional gravity wastewater collection.

The Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) created a partnership to provide communities with low-cost financing for a variety of water quality infrastructure projects. The CWSRF is part of that program and has certain documentation requirements as set forth in Chapter 62-503.700(2) of the Florida Administrative Code (FAC). The Town of Lake Hamilton (Town) intends to utilize this program to help fund the second phase of their wastewater treatment facility.

Project Recommendations

The project presented here for consideration in this Wastewater Facilities Plan consists of the construction of additional WWTF improvements on an existing WWTF site located on the east side of Town, east of Detour Road and south of Water Tank Road. Based on the existing Phase 1 treatment equipment and increasingly stringent effluent standards, the Town desires to proceed with building WWTF improvements with a total treatment capacity of 0.5 MGD and additional screening capabilities. The proposed improvements to the wastewater system include but are not limited to:

- Additional Treatment Train with Anoxic and Aerobic Chambers
- Elevated Headworks with fine screening and grit removal
- Influent Flow Meter
- Influent Surge Tank
- Onsite Operations Building
- Pump Station Rehabilitation
- Offsite Force Main

The proposed projects have a total opinion of probable construction cost of \$9,057,633. The project is proposed to be funded via the CWSRF Program with potentially principal forgiveness on the loan. The Town charges residents a wastewater use charge for all connections to the WWTF, which will be used to repay this FDEP SRF loan.

Wastewater Facilities Plan – Phase 2 WWTF Improvements Town of Lake Hamilton, Florida

A. INTRODUCTION

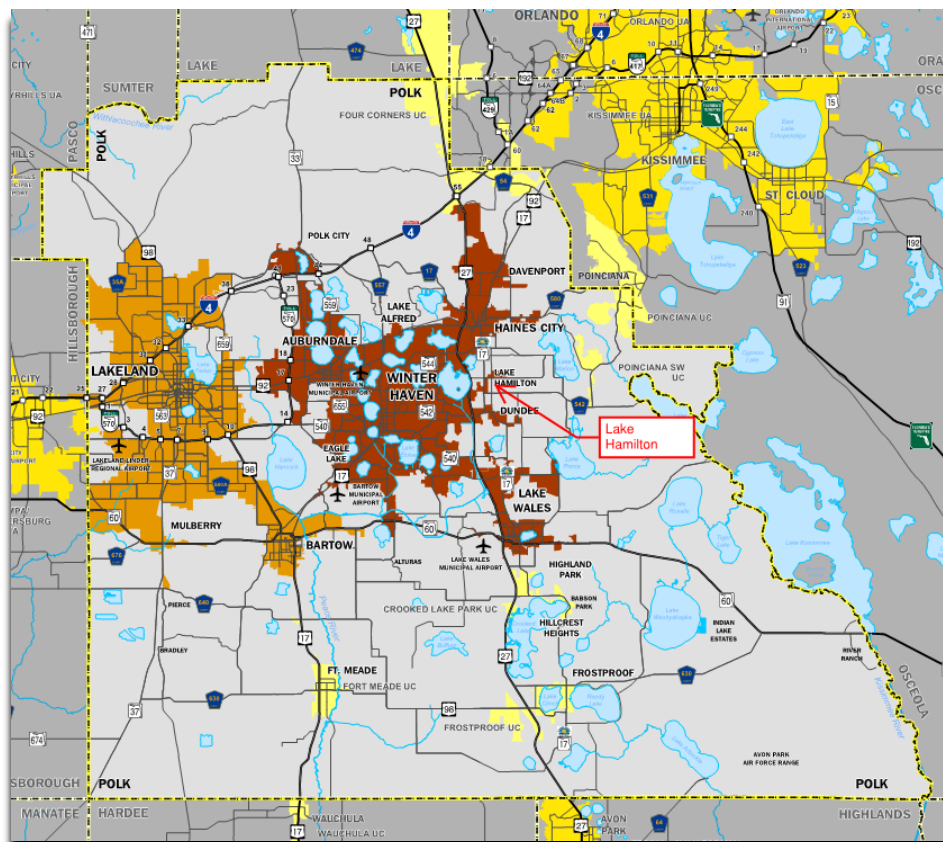
1. Project Background

The Town of Lake Hamilton is located in central Florida along the eastern shore of Lake Hamilton and serves approximately 1,600 residents with potable and central wastewater treatment services. The Town provides wastewater treatment via their recently constructed Phase 1 WWTF with disposal of effluent via rapid infiltration basin (RIBS) groundwater discharge. The initial Phase 1 WWTF construction consisted of a dual train packaged concrete plant with clarification, sludge digestion, chlorination chambers, and tie in points for a Phase 2 along the outer post-tensioned walls of the structure.

Prior to the construction of the WWTF, residents and businesses of the Town of Lake Hamilton relied solely on septic tanks for wastewater treatment. To retain capacity redundancy, extend life expectancy of WWTF equipment, and improve effluent wastewater quality as flows continue to accumulate at the WWTF, the Town proposes to construct improvements on the existing 0.250 MGD plant. A concurrent pump station rehabilitation and force main installation project will occur



Figure 1: Town of Lake Hamilton Location Map



Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

with the Phase 2 WWTF improvements to convey an existing pressurized wastewater system to the Town's plant for treatment. The proposed force main system will replace an existing force main that transports wastewater to a non-Town owned facility which provides treatment for Lake Hamilton wastewater prior to Town WWTF construction. This existing conveyance system is completely reliant on the available unused capacity of the offsite facility.

The Town commissioned a Technical Memorandum dated December 1, 2023 to evaluate the feasibility of constructing Phase 2 WWTF improvements on the existing Town-owned WWTF along Water Tank Road. Phase 2 improvements to include an influent headworks to increase treatment plant effectiveness and prevent damage to WWTF equipment (ie. Pumps, scrapper arms, etc.) as fine grit and debris will be filtered out prior to further treatment processes, an influent surge tank to protect treatment equipment from wastewater surge flows, an additional treatment train for capacity redundancy, and an onsite WWTF operations building that can double as an emergency operations building during storm events.

2. Project Purpose

The purpose of this Facilities Plan is to illustrate the need for the Town's existing WWTF to receive Phase 2 improvements and implement additional centralized wastewater treatment capacity and redundancy measures, reduce aquifer nutrient introduction via RIB disposal, and prevent the proliferation of septic tanks within the region.

The proposed project plans to use funding provided by the CWSRF program. The CWSRF is part of that program and has certain documentation requirements as set forth in Chapter 62-503.700(2) of the Florida Administrative Code (FAC). This plan was developed to comply with the program requirements and assess the benefits and costs of the proposed project.

3. Project Location & Study Area

The Town of Lake Hamilton is one of seventeen municipalities in Polk County located in central Florida (**Figure 1**). The project area is the existing WWTF site along the south side of Water Tank Road in the northeastern portion of the Town of Lake Hamilton.

The Town's WWTF has been constructed on a 19.74 acre site on the east side of the Town limits. The existing site has previously been evaluated and improved upon during Phase 1 design. Phase 2 construction will take place on the south side of the existing WWTF site adjacent to the existing treatment tankage, and a concurrent force main project will take place approximately two miles west of the WWTF site (**Figure 2**). Prior to additional improvements, the Town tasked Pennoni with performing a preliminary site evaluation and conceptual WWTF planning effort to help identify potential development challenges and develop the initial implementation schedule.

The WWTF site is adjacent to the Lake Okeechobee River Basin, and while no improvements will be made within the area, the Town will be required to construct additional treatment processes and improve their effluent treatment standards if they choose to discharge within the basin.

The existing Pump Station is located along the west side of US-27 highway on a 1.28 acre parcel owned by the Town with an existing force main pipeline within Florida Department of Transportation (FDOT) right-of-way.

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

The rerouted pipeline will remain in FDOT right-of-way, will use of an easement along an undeveloped orange grove, and will remain in Town right-of-way once through the provided easement.

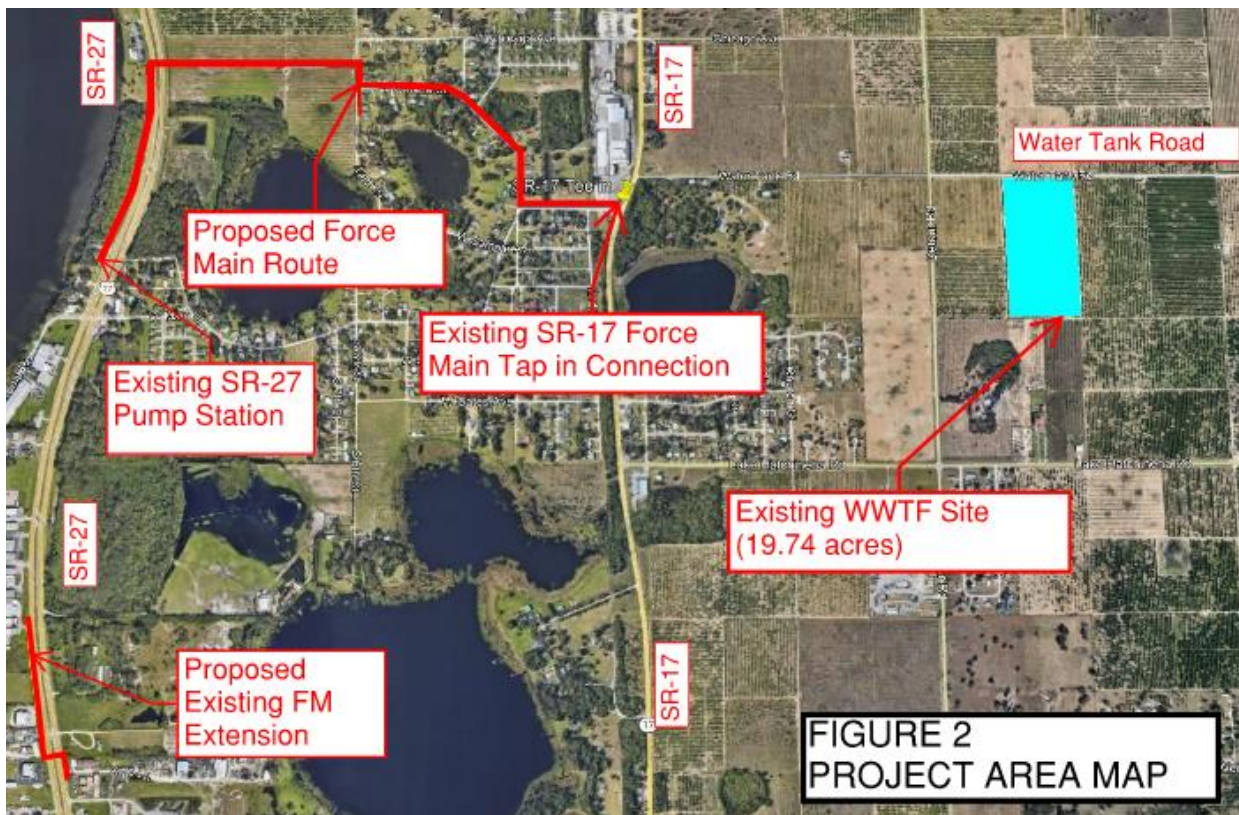


Figure 2: Project Area Map

4. Project Scope and Approach

The scope of the Wastewater Facilities Plan is described below:

- Identify the project(s) with water quality and/or public health risk components which the Town desires to construct.
- Establish design goals for the project.
- Identify and evaluate various alternatives to satisfy the needs of the project.
- Recommend the most cost-effective and environmentally sound facilities to meet the goals of the project.
- Describe in detail the recommended facilities improvements and their costs.
- Present a schedule of implementation of the recommended facilities.
- Identify any adverse environmental impacts and propose mitigating measures.

5. Need and Justification for Project

Prior to 2023, all residents, businesses, and municipal buildings of the Town of Lake Hamilton relied on septic systems and drain fields for treatment and disposal of wastewater. Despite central sewer installation and septic conversion projects, septic failures, and infiltration of the aquifer by biologic materials continue to be a potential public health hazard and water quality issue in areas where no sewer collection system is available.

As of 2023, the Town has completed construction of their Phase 1 wastewater treatment facility with an initial 0.25 MGD capacity to provide an alternative wastewater treatment method to existing septic systems. The original Phase 1 design was a standard prepackaged plant with anoxic, aerobic, clarifier, sludge digestion, and basic chlorination processes to meet basic wastewater treatment and effluent standards. While this approach provided a strong foundation to the Town's wastewater collection and treatment system, it will not continue to meet capacity or treatment requirements as the plant ages and the equipment is worn down by usage due to lack of screening and headworks. Another factor accentuating the plant's need for improvement is due to budgetary restrictions, some components of the Phase 1 design were removed, with prior FDEP notification and acceptance, on conditional acceptance that these removed items would be constructed as part of a future Phase 2 design. These include necessary components such as an influent surge tank, flow meter, and chlorine tank level indicator, which are included in the Phase 2 expansion discussed in this report. The influent surge tank will be used to control and prevent rapid surges of wastewater from overwhelming the treatment processes and equipment via a holding tank and pumping equipment to mimic a constant design flow reaching the treatment equipment. With no means to handle surging flows, the treatment equipment will be at the mercy of common residential diurnal flows, leading to inefficient and quickly worn-down treatment equipment.

The second portion of this SRF project is the redesign of an existing pump station to redirect wastewater from the US 27 corridor to the Town's WWTF rather than a City of Dundee owned WWTF. Lake Hamilton currently pays per gallon of wastewater sent to the Dundee plant via a Lake Hamilton US-27 pump station, force main, and flow meter. The ability for Lake Hamilton to convey wastewater for treatment is contingent on the continued situation that the Dundee plant has the open capacity to receive wastewater. Should the Dundee plant reach a flow near its permitted capacity, the Town will be forced to pause transmittal of its US-27 collected wastewater, leaving many residents without wastewater disposal. Removing Lake Hamilton's reliance on the Dundee plant capacity and providing an alternate force main to the Town owned WWTF will ensure no potential failures in the event that Dundee no longer has any capacity and provide the Town with an avenue for additional septic conversions and central sewer installation along the proposed force main path.

To continue moving forward with eliminating the risks associated with continued reliance on septic systems and meet FDEP WWTF treatment and monitoring requirements, additional treatment and storage capacity of the existing plant are necessary. The Town desires to continue its septic to sewer conversion projects and provide wastewater treatment for new residents, but the existing basic treatment approach will not be able to reliably provide wastewater treatment without significant upgrades and infrastructure.

B. PROJECT PLANNING

1. Planning Area

The existing WWTF project is located in Section 15, Township 28 South, Range 27 East. More specifically, the East ½ of the Northwest ¼ of the Southwest ¼ Less Road right-of-way, of Sec. 17, Twn 27 S., Rng 28 E. The

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

wastewater improvements evaluated in this report will be constructed on property owned by the Town of Lake Hamilton and already disturbed by Phase 1 WWTF construction.

Land use on the Town's 19.7 acre parcel is fully cleared of previous orange groves and the site is dedicated as wastewater treatment facility area.

The pump station site is located in Section 17 Township 28 South, Range 27 East and the force main path will go through Section 16 Township 28 South, Range 27 East.

Land use on the existing Pump Station site is dedicated to use as a park and surrounded by commercial property. The proposed force main path will be installed along FDOT and Town right-of-way with previously built-out parcels and through an existing orange grove via an easement provided by the current parcel owners.

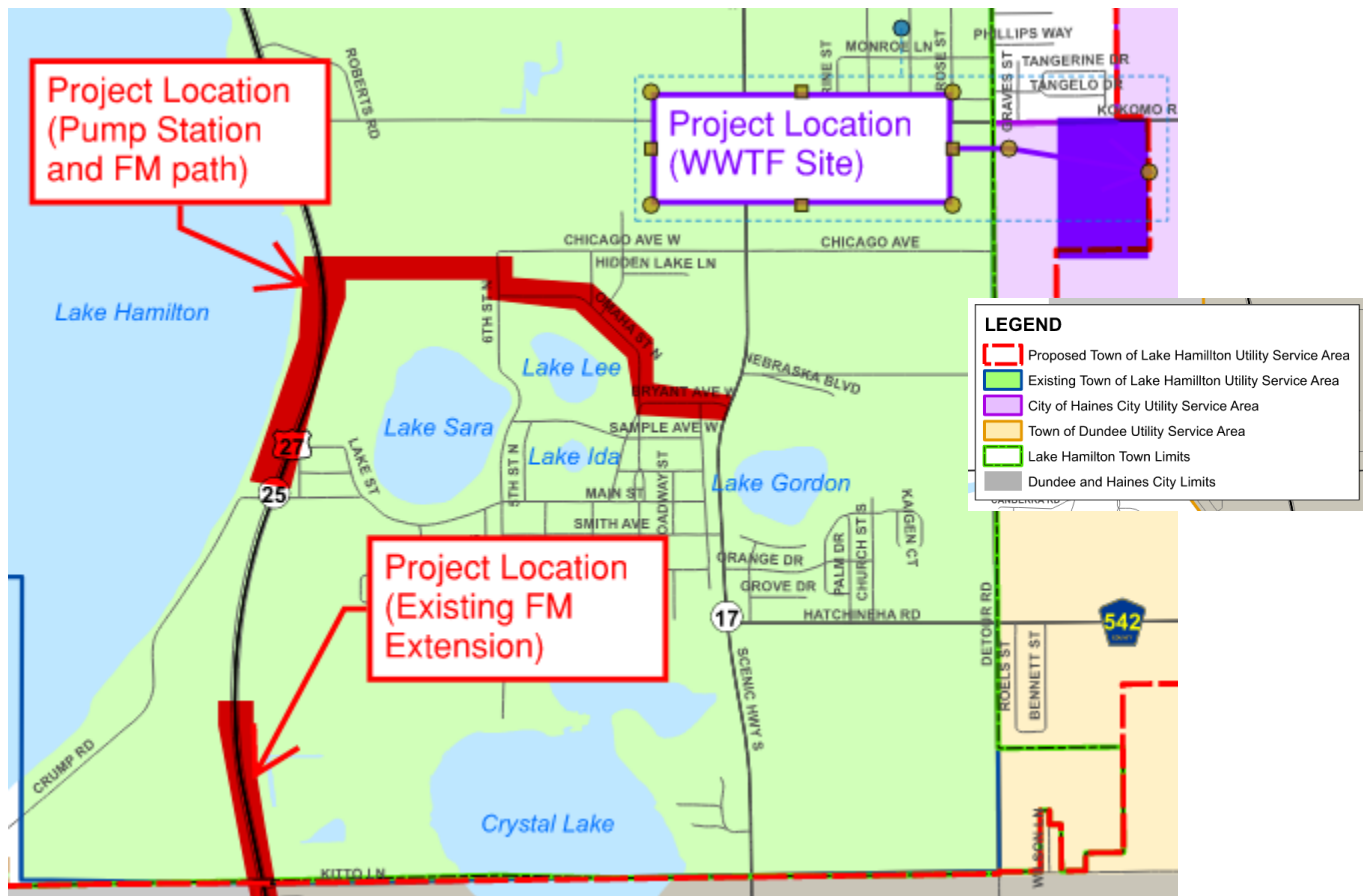


Figure 3: Project Service Area Map
(WWTF and PUMP STATION SITE)

2. Planning Year

This Wastewater Facilities Plan describes the proposed Phase 2 WWTF Expansion and US-27 Force Main Projects. The project service area (**Figure 3**) is expected to have some growth as the Town expands and needs additional treatment capacity throughout the Town's service area. Accordingly, this Wastewater Facilities Plan addresses reasonable projection of growth for a specified planning period within the project area.

Additional flows will also be added by the simultaneous US-27 Pump Station project discussed within this Facilities Plan. The area of which the proposed force main will be placed is planned as a single-family residency area, with a tentative master pump station and gravity system to connect to the US-27 station for final conveyance to the WWTF.

The alternative cost analysis for the Project is based on a standard design life of 20 years, which results in a planning year of 2043.

3. Existing Wastewater Utility System

The Town has previously constructed a wastewater treatment facility (Phase 1 WWTF) and central sewer system (SR-17 Sewer Installation) with FDEP CWSRF funding as well as owns a pressurized collection system (US-27) that conveys collected wastewater to a separate non-Town owned treatment facility. Approximately ninety homes and businesses were connected to the central sewer system and WWTF during the Phase 1 construction to provide initial flows, with an additional seventy to be connected to the in use gravity sewer.

The US-27 pump station collects wastewater from thirty-one local commercial connections, all of which is currently sent to the city of Dundee for treatment via a force main tie in point into the Dundee's collection system. A portion of the customers are directly connected to the effluent 8" FM via a grinder station tie in, which will be capped, abandoned in place, and replumbed to the connect to a proposed 3" FM during construction.

C. DEVELOPMENT OF ALTERNATIVES

Three potential project alternatives were considered to provide wastewater treatment for the proposed residences as described below.

1. Cost Analysis Methodology

Present worth has been used to compare the various wastewater treatment alternatives developed in this Facilities Plan document. The present worth analysis performed incorporates the following considerations:

- Planning period of 20 years;
- Discount rate from the latest revision of OMB Circular A-94 Appendix C (currently 0.4%)
- Capital costs including contingency, engineering, and administrative costs;
- Salvage value;
- Operation and maintenance costs;
- Opinions of probable construction costs are based on similar past project; and
- Loan requirements for compliance with Davis-Bacon wage rates and American Iron and Steel requirements.

2. Alternatives Analysis

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Alternative 1: No Action

The no action alternative would consist of no expansion to the existing WWTF or force main and allowing existing residences to continue to utilize their onsite treatment and disposal systems (septic tanks) and require future residential developments to also utilize septic tanks. The No Action alternative is not considered viable. Both public health and water quality risks exist due to potential future additional septic system overflows and backups, along with nutrient discharges to surface waters/groundwater within and adjacent to the Lake Okeechobee Basin Management Action Plan (BMAP) area is not feasible due to State of FL water quality goals.

Alternative 2: Resiliency and expansion improvements of existing 0.25 MGD WWTF (to 0.5 MGD)

This alternative consists of a number of resiliency improvements which will expand the capacity of the existing 0.25 MGD WWTF to a 0.5 MGD system and a rehabilitated pump station and force main network. The Phase 2 expansion includes an elevated headworks, equalization tanks, a second treatment train for treatment, and an onsite operations building which may also function as an extreme storm emergency operations center. The elevated headworks will consist of a mechanical fine screen, a bypass static screen, and a grit tank. This alternative will supply the Town with treatment capacity redundancy while also protecting the existing equipment with increased screening and filtration. The Town's initial Phase 1 WWTF construction was designed to facilitate expansion to a 0.5 MGD plant with an additional treatment train via post-tensioning caps on the concrete tankage. The force main and pump station is proposed for an already developed area, with only previously disturbed area in the project route. Some existing customers will require additional piping to connect to the force main feeding the pump station wetwell but the in-use grinder stations will be used to provide flow pressure to reach the wetwell.

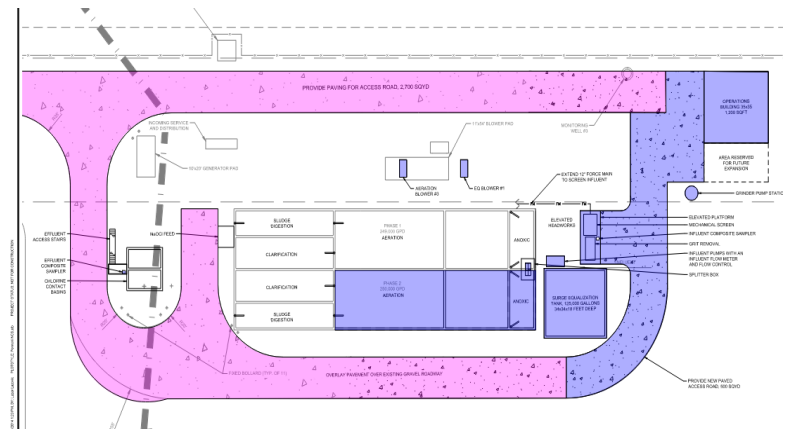


Figure 4: Project Layout – Alternative 2

This alternative will supply the Town with treatment capacity redundancy while also protecting the existing equipment with increased screening and filtration. The Town's initial Phase 1 WWTF construction was designed to facilitate expansion to a 0.5 MGD plant with an additional treatment train via post-tensioning caps on the concrete tankage. The force main and pump station is proposed for an already developed area, with only previously disturbed area in the project route. Some existing customers will require additional piping to connect to the force main feeding the pump station wetwell but the in-use grinder stations will be used to provide flow pressure to reach the wetwell.

This alternative consists of the following wastewater collection system improvements:

- Elevated headworks with screening and grit removal;
- Grit tank system;
- Influent surge equalization tanks;
- Anoxic treatment tank;
- Aerobic treatment tank;
- WWTF Site grinder pump station and drain line;
- WWTF Operations Building
- Paving, parking, and other site improvements;
- Other resiliency improvements;
- Existing pump station rehabilitation (mechanical and electrical);
- Approximately 1,550' of 6" force main;

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- Approximately 3,700' of 8" force main;
- Approximately 1,470' of 3" force main;
- Six existing grinder station to FM abandonments;
- Six grinder station connections to 3" FM;

The estimated design and construction cost of this alternative is \$9,057,633 (see **Table 1**). This alternative will require the use an easement along the proposed force main route which is currently privately owned. The immediate need for increased treatment capacity and allowance for redundancy make this an attractive alternative.

TABLE 1: Cost Analysis – Expansion to 0.5 MGD WWTF and Pump Station Rehabilitation (Alt. 2)

Capital Cost					
Item	Description	Quantity	Unit	Cost	Total
1	Civil and General Work	1	LS	\$209,850	\$209,850
2	Elevated Headworks (Screening and Grit)	1	LS	\$744,000	\$744,000
3	Surge Tank and Influent Pump and Piping	1	LS	\$525,060	\$525,060
4	Additional Treatment Train	1	LS	\$2,400,000	\$2,400,000
5	Yard Piping			\$6,000	\$6,000
6	Operations Building	1	LS	\$450,000	\$450,000
7	Electrical Power, and Controls	1	LS	\$520,189	\$520,189
8	Existing Site Equipment Improvements (Lighting cells, davit cranes, etc.)	1	LS	\$41,500	\$41,500
9	WWTF Grinder Pump Station	1	LS	\$62,501	\$62,501
10	Chlorine Access Stairs	1	LS	\$39,400	\$39,400
11	Paved Access Road	1	LS	\$186,400	\$186,400
12	Access Sidewalks	1	LS	\$18,000	\$18,000
13	Potable Water Well Fence and Gate	1	LS	\$7,200	\$7,200
14	Influent Flow Meter	1	LS	\$13,000	\$13,000
15	Composite Samplers	1	LS	\$16,000	\$16,000
16	US-27 Pump Station Rehabilitation	1	LS	\$335,000	\$335,000
17	US-27 8" HDPE Bore	105	LF	\$271	\$28,449
18	US-27 6" HDPE Bore	230	LF	\$203	\$42,674
19	US-27 3" HDPE Bore	105	LF	\$101.61	\$10,669
19	8" PVC Force Main	3,700	LF	\$96	\$355,200
20	6" PVC Force Main	1,550	LF	\$85	\$131,595
21	3" PVC Force Main	1,717	LF	\$71	\$103,856

Wastewater Facilities Plan – Phase 2 WWTF Improvements

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22	Existing Grinder Station to 3" FM Connection	6	EA	\$2,500	\$15,000
23	2" Existing Force Main Abandonment	6	EA	\$1,920	\$11,520
24	Misc. valves, fittings, tap in connection, etc.	1	LS	\$144,523	\$144,523
Subtotal					\$6,417,585
Contingency (15%)					\$641,759
Design					\$717,970
Technical Services During Construction					\$692,678
Mobilization					\$587,640
Capital Cost Total					\$9,057,633

Salvage Value

Useful Life for Salvage Value: Assumes 50 years on all items except for duplex and grinder pump station and controls, WWTF site improvements, flow meter, composite sampler, and electrical power, and controls (15 years). Assumes 20-year planning period. $N = 0.4\%$ real discount rate.

Salvage value at year 20:	\$3,388,317
PW Salvage Value = $F(1+i)^{-N}$	\$3,669,935

Annual Operation and Maintenance

WWTF Infrastructure and Pump Station	Repl. Cost	Useful Life	Quantity	Annual Repl. Cost
Electrical Power and Controls	\$50,000	15	1	\$3,333
Existing Site Equipment Improvements	\$15,000	20	1	\$750
Grinder Pump Station	\$20,000	20	1	\$1,000
Potable Water Well Fence and Gate	\$2,500	20	1	\$83
Influent Flow Meter	\$15,000	20	1	\$750
Composite Sampler	\$8,000	20	1	\$400
Subtotal Equipment Replacement Cost				\$6,717
Piping	Unit Price	Length of Pipe	Annual Pipe O&M Cost	
Annual cost per LF of pipe	\$2.00 / ft every 5 yrs	7,140	\$2,856	
Power Cost	Power Cost	Quantity	Annual Power Cost	
Flat Rate	\$ 12.00 / month	12	\$144	
Energy Charge	\$0.0914 / kWh	322.09 kWh/day	\$128,944	
Demand Charge	\$6.93 / kW	325.38 kW	\$27,059	
Subtotal Power Cost				\$156,146

Wastewater Facilities Plan – Phase 2 WWTF Improvements
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$PW_{O\&M} = \{A[(1+i)^N - 1]/[i(1+i)^N]\}$	Total Annual O&M Cost			\$165,719
A = annual O&M value (assumed constant)	PW O&M Cost			\$3,245,787
i = discount rate OMB Circular A-94, App C = 0.2%				
N = number of years in evaluation period				

Alternative 2 Present Worth Analysis Summary

			Capital Cost	\$9,057,633
			PW Salvage Value	(\$3,669,935)
			PW O&M Costs	\$3,245,787
			Grand Total	\$8,633,486

Alternative 3: Expansion of existing 0.25 MGD WWTF (to 0.5 MGD; including public access reuse)

An alternative to a capacity and screening improvements via 0.5 MGD WWTF expansion as described in Alternative 2, is an expansion of the plant to 0.5 MGD and include treatment and storage equipment for public access reuse water. Currently, the Town requires all future developments to install piping infrastructure for public access reuse but does not have treatment or storage capability for reuse water. The alternative will consist of an additional anoxic and aerobic treatment train, plant operation building, two 25'x25' chlorine contact chambers, two 40' diameter clarifiers, a new 1.0 MG reuse storage tank, additional RAS/WAS and reclaim pumps and piping, and cloth disk filters. The additional treatment equipment will be constructed on the existing WWTF site with no additional land purchase required.

This alternative consists of the following wastewater collection system improvements:

- One anoxic treatment tank;
- One aerobic treatment tank;
- Plant operations building;
- Two 25'x25' chlorine contact chambers;
- Two 40' secondary clarifiers;
- One 1.0 MG reuse water storage tank;
- Additional RAS/WAS pumping system;
- Cloth disk filters;
- Existing pump station rehabilitation (mechanical and electrical);
- Approximately 1,550' of 6" force main;
- Approximately 3,700' of 8" force main;
- Approximately 1,470' of 3" force main;
- Six existing grinder station to FM abandonments;
- Six grinder station connections to 3" FM;

Wastewater Facilities Plan – Phase 2 WWTF Improvements

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The estimated construction cost of this alternative is \$16,224,755 (see **Table 2**). Design costs are excluded as they are being paid separately by the Town and others. This alternative positions the Town to begin treatment improvements up to public access reuse standards, and provides an alternative water source (AWS) that are currently being heavily encourage by potable water regulations (Central Florida Water Initiative (CFWI), Water Use Permit (WUP), etc.). As part of the Town's recent WUP approval, the Town will be given a gap quantity of Upper Floridan Aquifer (UFA) well water past 2025 to meet any demands at that time. This gap quantity will last only until the Town is able to provide an AWS to meet the demand of its utility customers, which will only require more retrofitting and infrastructure cost as the Town expands to 2025. While the regulations do not require these AWS improvements within the next two years, heading off the improvement with the Town's current situation would be beneficial to planning and economic growth.

TABLE 2: Cost Analysis – Increase to 0.5 MGD with Public Access Reuse (Alternative 3)

Capital Cost					
Item	Description	Quantity	Unit	Cost	Total
1	Civil and General Work	1	LS	\$227,925	\$227,925
2	Elevated Headworks	1	LS	\$1,102,000	\$1,102,000
3	Treatment Equipment – Modular Treatment Train with EQ Tanks	1	LS	\$2,500,000	\$2,500,000
4	Yard Piping	1	LS	\$70,000	\$70,000
5	Operations Building	1	LS	\$550,000	\$550,000
6	Electrical Power and Controls	1	LS	\$555,000	\$555,000
7	High Level Disinfection (25'x25' CCL)	2	EA	\$200,000	\$400,000
8	Clarifiers (40' Diameter)	2	EA	\$600,000	\$1,200,000
9	Storage Tank (1.0 MG Tank)	1	LS	\$1,250,000	\$1,250,000
10	VFD Pumps and Piping	4	EA	\$112,500	\$450,000
11	RAS/WAS Pumping System	1	LS	\$200,000	\$200,000
12	Cloth Disk and Elevated Platform	1	LS	\$1,000,000	\$1,000,000
13	Reuse Transmission Line	1	LS	\$1,250,000	\$1,250,000
14	SCADA and Wiring	1	LS	\$180,000	\$180,000
15	Electrical Power for Reuse Components	1	LS	\$164,000	\$164,000
16	Pump Station Rehabilitation	1	LS	\$335,000.00	\$335,000
17	Northern SR-27 8" HDPE Bore Casing	105	LF	\$270.94	\$28,449
18	Northern SR-27 6" HDPE Bore Carrier	210	LF	\$203.21	\$42,674
18	Southern SR-27 3" HDPE Bore Carrier	105	LF	\$101.61	\$10,669
19	6" PVC Force Main	1550	LF	\$84.90	\$131,595
20	8" PVC Force Main	3700	LF	\$96	\$355,200

Wastewater Facilities Plan – Phase 2 WWTF Improvements

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21	3" PVC Force Main	1470	LF	\$71	\$103,856
23	Existing Grinder Station to 3" Force Main Connection	6	EA	\$2,500	\$15,000
24	2" Existing Force Main Abandonment	6	EA	\$1,920	\$11,520
25	Misc. valves, fittings, tap in connection, etc.	1	LS	\$144,523	\$144,523
Subtotal					\$11,672,485
Contingency (10%)					\$1,167,249
Design					\$1,400,698
Mobilization					\$1,050,524
Technical Services During Construction					\$933,799
Capital Cost Total					\$16,224,755

Salvage Value

Useful Life for Salvage Value: Assumes 50 years on all items except for Electrical Power and Controls, Process Pumps, and SCADA and wiring (15 years). Assumes 20-year planning period. $N = 0.2\%$ real discount rate.

Salvage value at year 20:	\$5,774,091
PW Salvage Value = $F(1+i)^{-N}$	\$6,254,000

Annual Operation and Maintenance

WWTF Infrastructure	Repl. Cost	Useful Life	Quantity	Annual Repl. Cost
Electrical Power and Controls	\$75,000	15	1	\$5,000
Pumps and Piping	\$50,000	20	1	\$2,500
RAS/WAS Pumping System	\$30,000	20	1	\$1,500
SCADA and Wiring	\$40,000	15	1	\$2,667
Electrical Power for Reuse Process	\$17,500	15	1	\$1,167
Subtotal Equipment Replacement Cost				\$12,833
Piping	Unit Price	Length of Pipe	Annual Pipe O&M Cost	
Annual cost per LF of pipe	\$2.00 / ft every 5 yrs	7,140	\$2,856	
Power Cost	Power Cost	Quantity	Annual Power Cost	
Flat Rate	\$ 12.00/ month	12	\$144	
Energy Charge	\$0.0914/ kWh	383.83 kWh/day	\$153,658	
Demand Charge	\$6.93/ kW	387.74 kW	\$32,245	
Subtotal Power Cost				\$186,047
$PW_{O\&M} = \{A[(1+i)^N - 1]\} / [i(1+i)^N]$				Total Annual O&M Cost
A = annual O&M value (assumed constant)				\$198,736
i = discount rate OMB Circular A-94, App C = 0.2%				PW O&M Cost
N = number of years in evaluation period				\$3,892,463

Alternative 3 Present Worth Analysis Summary				
			Capital Cost	\$16,224,755
			PW Salvage Value	(\$6,254,000)
			PW O&M Costs	\$3,892,463
			Grand Total	\$13,863,218

3. Cost to Construct Alternatives

The cost details for the proposed alternatives are presented on **Tables 1** and **2**. The following summary tabulation presents the total project cost inclusive of the non-construction items.

3.1. Alternative 1: No Action

No capital, engineering or Operation and Maintenance cost.

3.2. Alternative 2: Cost Analysis – Sewer/Force Main to Haines City

Capital Cost	\$	9,057,633
Present Worth Salvage Value	\$	(3,669,935)
Present Worth O&M Costs	\$	<u>3,245,787</u>
20-YEAR PRESENT WORTH COST	\$	8,633,486

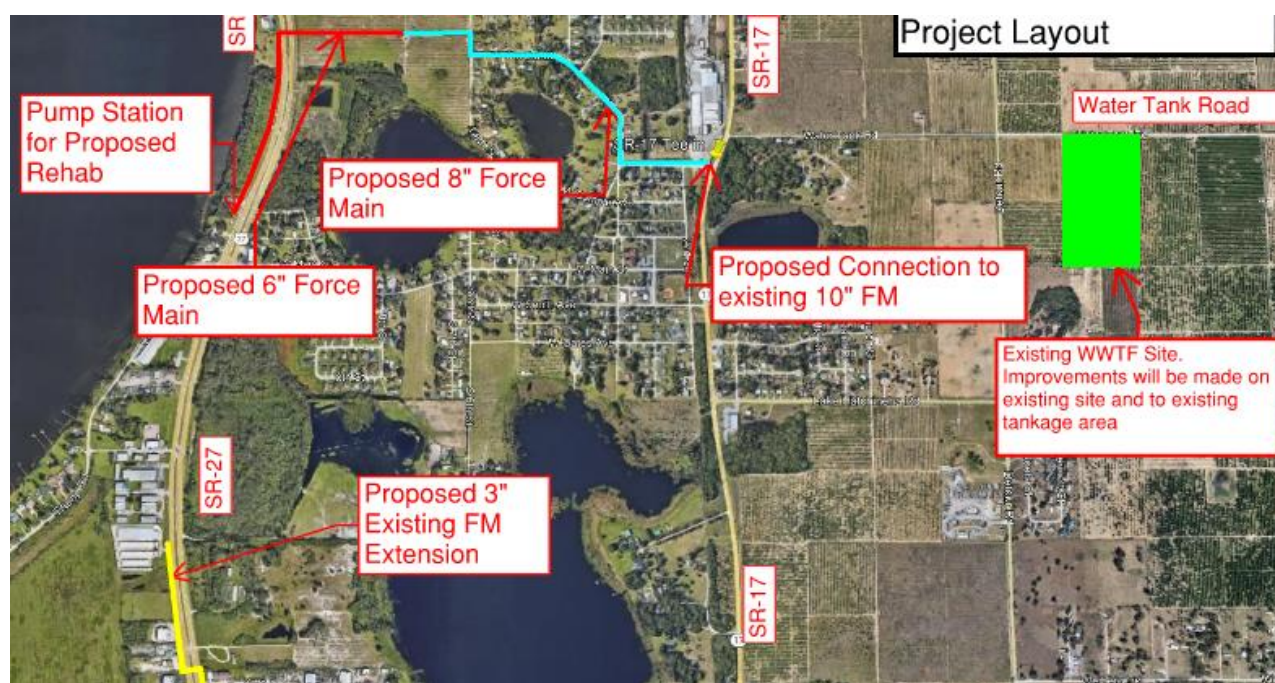
3.3. Alternative 3: Sewer/Force Main to New Town WWTF

Capital Cost	\$	16,224,755
Present Worth Salvage Value	\$	(6,254,000)
Present Worth O&M Costs	\$	<u>3,892,463</u>
20-YEAR PRESENT WORTH COST	\$	123,863,218

D. SELECTED ALTERNATIVE

The preferred Project alternative is Alternative 2, described as the construction of existing WWTF improvements with 0.5 MGD capacity and the concurrent rehabilitation of an existing pump station and pressurized force main conveyance system. The project would construct an additional treatment train of anoxic and aerobic tanks and tie into the existing post-tensioned concrete tank structure, an elevated headworks for screening and grit removal, an onsite operations building, and an influent surge tank and influent pumping system. The cost to improve the WWTF system to utilize public access reuse water was deemed too expensive and unneeded for the current wastewater system that will require more residential connections to provide enough consistent wastewater flow to adequately use and generate reuse water. An expansion to utilize public access reuse would be beneficial to the Town as an alternative water source a

Figure 5: Conceptual Project Design



more stringent water source regulations arise (CFWI, effluent regulations, etc.), but this focus is better put to improve the base level treatment ability at the existing plant. **Figure 5** illustrates the layout of the proposed Project.

The Project will be permitted through the FDEP's Tampa district office. Plans and specifications will be submitted to the FDEP Bureau of Water Facilities Funding. A copy of the FDEP Construction Permit approvals will be provided to the FDEP upon receipt. Additionally, the Florida Department of Transportation (FDOT) will be contacted to acquire a right-of-way use permit as the proposed force main will use US-17 right-of-way.

E. ENVIRONMENTAL REVIEW

The project alternative chosen in this Facilities Plan takes place in areas of both prior improvement and unimproved orange groves. The WWTF, pump station improvement, and force main will be constructed on

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

significantly disturbed areas of residential neighborhoods, WWTF site, and FDOT road right-of-way. A portion of the force main will be installed in an existing orange grove, which while not developed to the same standards as a WWTF site or neighborhood, has still been disturbed by intensive agricultural operations involved with the management of citrus groves.

Short-term impacts during construction of the proposed project would include increased noise levels, increased airborne particulates, surface run-off during rainfall on the site, temporary pausing of both potable and wastewater services, and surface run-off during rainfall. Control measures will be implemented to minimize these temporary effects.

The proposed project will be constructed within previously disturbed areas and will not have significant adverse impacts on wild and scenic rivers, flora, fauna, threatened or endangered plant or animal species, prime agricultural lands, wetlands, undisturbed natural areas, or the socio-economic character of the project areas. These factors were evaluated via a field and desktop evaluation (**Appendix A**) and is documented and discussed herein.

1. Climate

The Lake Hamilton area is warm and temperate with mild winters and long summers. According to 2022 Climate Data, the average annual daily temperature is 72.3° F with a high average of 80.8° F in August and a low average of 60.4° in January. Rare extreme temperatures reach highs in the low 100s to lows in the low 50s.

The average annual rainfall is approximately 42.6 inches. Rainfall is seasonally distributed. Approximately 57 percent of the average annual precipitation falls during the months of June through September. Most rainfall in summer comes as thundershowers of short duration during the afternoon and early evening hours.

2. Topography and Drainage

According to information obtained from the United States Geological Survey (USGS) Dundee, Florida quadrangle map, the native ground surface elevation across the site area ranges from approximately +200 to +215 feet National Geodetic Vertical Datum (NGVD). The site is located approximately 0.5 mile east of Lake Gordon. Based on the USGS map, the normal high-water elevation in Lake Gordon is about +120 feet NGVA. The soil on the property (Candler fine sand) is sandy, excessively well drained with no stormwater runoff features.

Wastewater Facilities Plan – Phase 2 WWTF Improvements Town of Lake Hamilton, Florida

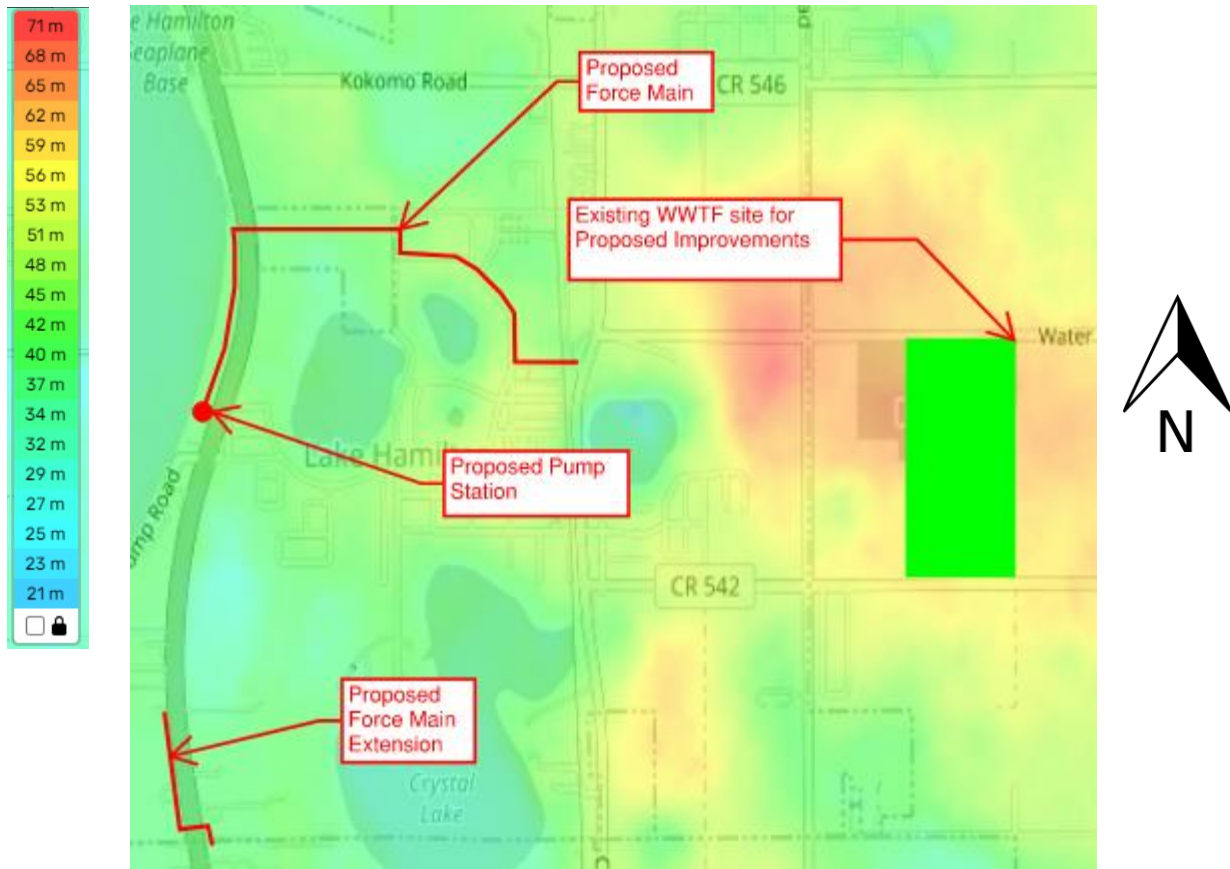


Figure 6: Town of Lake Hamilton Topography

3. Geology, Soils, and Physiography

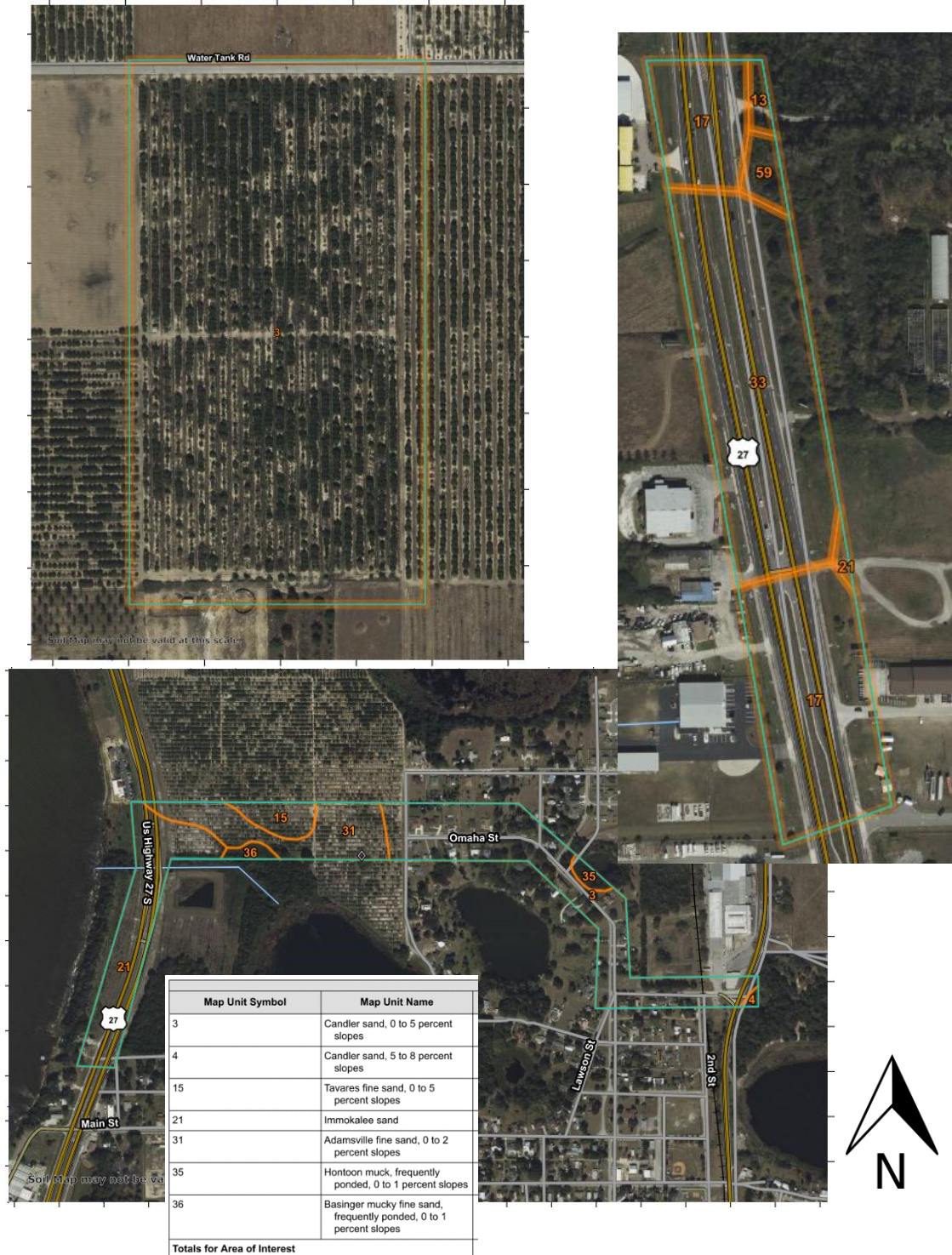
Geographically the WWTF and force main are located within the Lake Hamilton Ridge (upland) physiographic area of Polk County (USDA, 1990). Most of Polk County lies within in the Polk and Lake Uplands area designation. The project area lies within the Lake Hamilton Ridge watershed and the Peace River Drainage Basin.

A USDA Natural Resource Conservation Service (NRCS) Polk County Soil Survey was conducted and summarized in this Facilities Plan for both project areas (**Appendix B**). The survey indicates the native underlying project area contains multiple soil mapping units. The WWTF only indicated one native soil type mapped within the project boundary according to the USDA NRCS Soil Survey of Polk County, Florida is Candler fine sand, 0 to 5 percent slopes. This soil type is classified in hydrologic group “A” and has excessively well drained drainage characteristics. The depth of published seasonal high water is greater than 6-feet.

The proposed force main route survey indicated seven total soil types mapped within the project boundary. The majority of the soils are Candler sand, 0 to 5 percent slope, Immokalee sand, and Adamsville fine sand, 0 to 2 percent slopes. The majority of other soil types are below 10% and can be avoided during force main installation. The Immokalee sand is defined as having poor drainage qualities with only six to eighteen inches to the water table. The final majority soil type within the area is Adamsville fine sand, 0 to 2 percent slope. This is defined as somewhat poorly draining capabilities with depth to water table of about eighteen to forty-

Wastewater Facilities Plan – Phase 2 WWTF Improvements Town of Lake Hamilton, Florida

two inches. These soils are not believed to negatively impact the project due to the backfilling nature of the pipeline project.



4. Surface water Hydrology, Water Quality, and Water Uses

4.1. Surface Water Hydrology

The Town does not contain and is not located near Outstanding Florida Waters, Rivers, or Lakes as defined in Chapter 62-302-700 F.A.C. The proposed force main will be installed near Lake Hamilton, Lake Sara, and Lake Lee, but no discharge will be made into the lakes, nor will any piping be required to be under or over the water bodies.

Water quality regulations developed by the Florida Department of Environmental Protection (FDEP) provide use standards for water bodies (Chapter 62.302.400 F.A.C.) as defined in the following five classes:

- Class I waters are for potable water supplies;
- Class II waters are for shellfish propagation or harvesting;
- Class III waters are for recreation and propagation and maintenance of a healthy, well-balanced population of fish and wildlife;
- Class IV waters are for agricultural water supplies; and
- Class V waters are for navigation, utility and industrial use.

As specified in Chapter 62.302.400(14) F.A.C., surface waters within the Town of Lake Hamilton area are classified as Class III Waters.

The planning area is located within the Peace River Drainage Basin. The nearest significant surface water bodies are Lake Hamilton, Lake Sara, Lake Lee, and Lake Gordon. These water bodies are all located within a mile of the proposed WWTF and force main site.

4.2. Groundwater

Aquifer systems in the Lake Hamilton area include a shallow surficial aquifer, an intermediate aquifer system, and the Floridan aquifer. The upper Floridan consists of several hundred feet of limestone and dolomite and is the principal source of groundwater for public supply in the planning area, including the Town of Lake Hamilton's public supply wells.

A portion of the project area, including the WWTF site and force main route, lie within a Florida Department of Environmental Protection (FDEP) groundwater contamination zone for ethylene dibromide (EDB). The Town may be required to conduct sampling and enhanced treatment if EDB is discovered within the UFA.

4.3. Water Uses

Potable water and landscape irrigation in the area are provided by the Town of Lake Hamilton Monroe St. Water Treatment Plant (WTP).

Surface water bodies in the area are used for recreation and some irrigation. The surficial aquifer is used for some agricultural irrigation, and the upper Floridan aquifer is used as the drinking water source and agricultural irrigation.

5. Environmentally Sensitive Areas or Features

The proposed WWTF is located on a previously disturbed property parcel as described in the introduction to Section E above. The property is currently owned by the Town and impacts to environmentally sensitive areas or features are not reasonably expected to occur. An existing sand skink buffer on the south side of the property is currently in place.

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

The proposed force main will be on Polk County right-of-way, Town owned public right-of-way, and land that is currently used for citrus growing purposes. The improvements are anticipated to have little impacts due to location inside previously disturbed areas.

The conclusions of a “Preliminary Ecological Site Assessment” (**Appendix B**) for the proposed route are summarized as follows:

- The majority of vegetation community consisted of herbaceous plants, Bahia and Saint Augustine grass inside road right-of-way, and citrus groves with orange trees and minor groundcover.
- A 100% gopher tortoise survey was conducted on November 16th and no gopher tortoises were observed within 25 feet of the proposed pipeline route. If any gopher tortoise burrows are discovered that the potential to be impacted (cannot be avoided by 25 feet), they will be excavated/trapped and relocated offsite. A Florida Fish and Wildlife Conservation Commission (FWC) permit will be gathered if necessary.
- The sand skink and bluetail mole skink are listed as Threatened by the US Fish and Wildlife Services (USFWS) and FWC. Much of the assessment area does not contain suitable habitat outside of the citrus grove. However impacts to sand skinks are not expected as the project is a temporary activity and soils to be replaced after project completion will be loosened, thus creating more suitable habitat conditions for sand skinks than what currently exists.
- The bald eagle was delisted by USFWS and FWS in August 2007, but are still protected through the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. A database of bald eagle nests revealed one (1) documented nest (opposite side of road than the Town’s pipeline project) within less than 300 feet of the assessed area to the at the southwest boundary. A consultation with the US Fish and Wildlife Service (FWS) will be conducted to reduce the protection zone due to the project being significantly close to an active roadway.
- No sign of wood stork, Audubon’s crested caracara, Florida Scrub-Jay, Everglade snail kite, Florida grasshopper sparrow, southeastern American kestrel, sandhill crane, Florida burrowing owl, or any other listed species was observed in the project area.

5.1. Wetlands

The proposed improvements will occur within a previously disturbed residential, public institution, and agricultural use areas. There are jurisdictional wetlands near the proposed project area, but not within the project areas, therefore no impacts are anticipated (**Figure 8**). If any wetlands would be discovered during design (not anticipated), wetland impact will be minimized by directional drilling under or avoiding construction near the wetland as well as use of best management practices.

Wastewater Facilities Plan – Phase 2 WWTF Improvements Town of Lake Hamilton, Florida

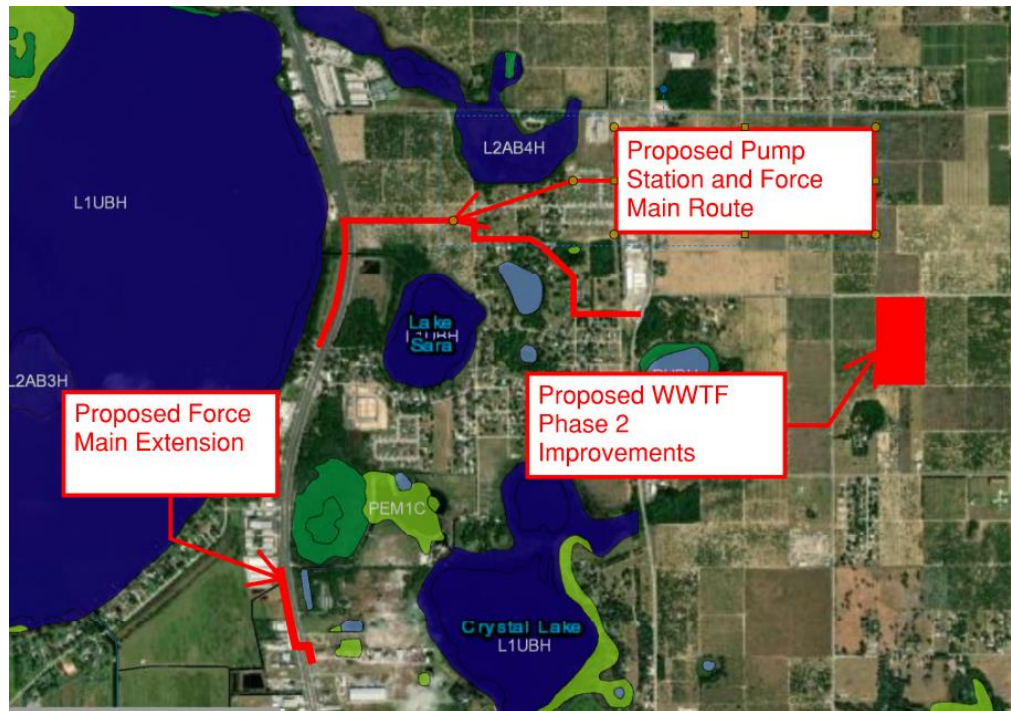


Figure 8: WWTF Site Wetlands

5.2. Archeological and Historical Sites

The National Park Service's National Historic Landmarks Program internet database was searched for national or natural landmarks in the planning area (**Appendix C**). No such sites are found for the WWTF site or surrounding property.

The project will be constructed on existing previously disturbed Town-owned property. No archeological and/or historical sites will be disturbed.

Historic structures will not be encroached upon.

5.3. Flood Plain

Flood zones for the Town are designated based on the Flood Insurance Rate Map (FIRM). The proposed WWTF will be constructed on upland property that has been previously disturbed and will not be impacted by 100-year flood events. The proposed pipeline will not be affected by flood events due to the nature of the improvement, as the pump station rehabilitation is not in a flood zone, only a portion of the force main route and extension will be within flood areas.

Wastewater Facilities Plan – Phase 2 WWTF Improvements Town of Lake Hamilton, Florida

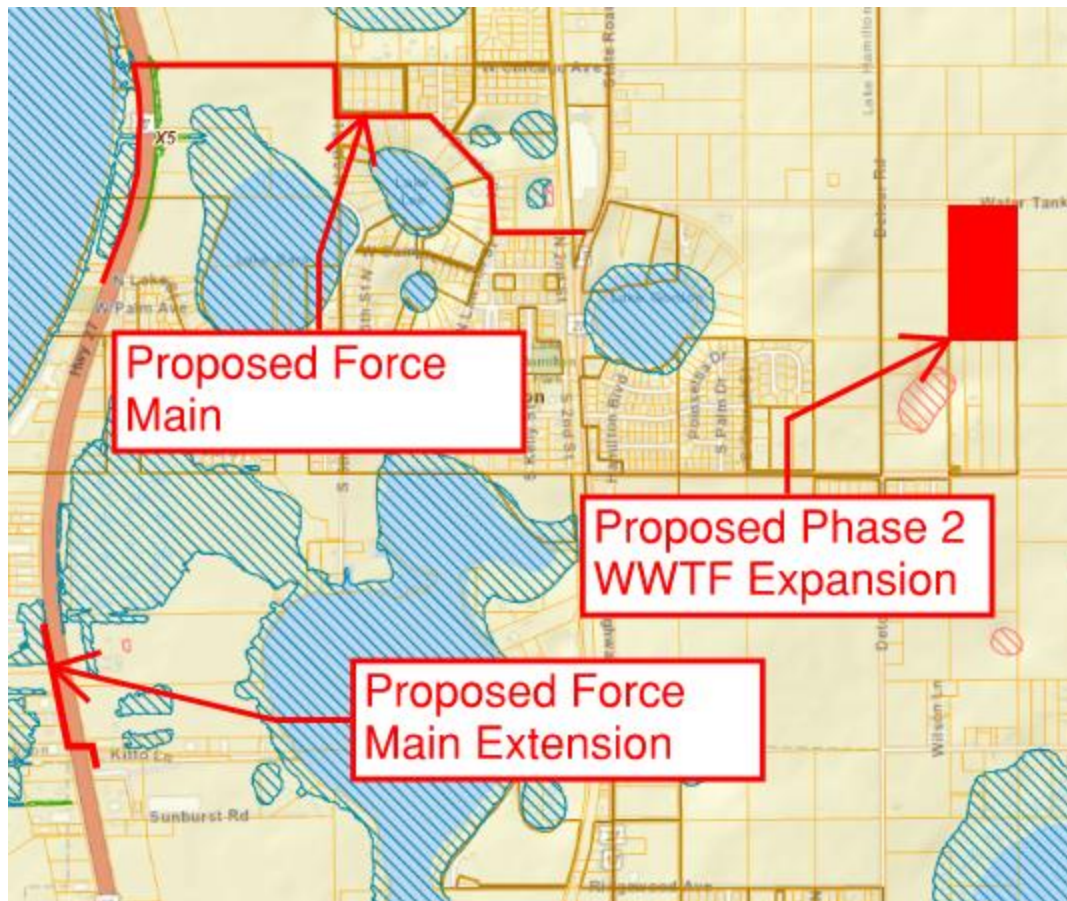


Figure 9: FEMA Flood Map, Town of Lake Hamilton and Project Site

5.4. Air Quality

The air quality in Polk County is generally good and according to F.A.C. Chapter 62-204.340 is classified as an area of attainment with respect to the National Ambient Air Quality Standards. An extended aeration activated sludge process is proposed with equipment located in the interior of the site. In addition, a minimum of a 100' buffer for all process equipment from property boundaries was designed into the Phase 1 construction. As such, the Project is not anticipated to have a significant adverse impact on the existing ambient air quality.

6. Socio-Economic Conditions

6.1. Population

The population that is provided water service by the Town is the current population within the Town of Lake Hamilton corporate limits, which was 1,537 persons as determined from 2020 U.S. Census data. This is an increase of 306 persons from the 2010 U.S. Census count of 1,231 persons. This project will serve approximately thirty wastewater customers who currently have wastewater treated via the US-27 pump station. Increasing the capacity of the WWTF will prepare the plant to receive additional flows as additional septic-to-sewer conversion is completed.

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

The 2020 Census indicates that the average age of the Lake Hamilton population is 39.1, which is lower than the state average age of 42.4 years old. The median household income is \$40,658, which is lower than the state median household income of \$57,703. Approximately 20.1% of the Town's residents live at or below the poverty level, which is higher than the percentage of people in the State living at or below the poverty level. The homeownership rate in the Town is 85.4% which is significantly higher than the state's 66.2% home ownership.

6.2. Land Use and Development

The 19.74-acre project site has previously been used for agriculture as a citrus grove (FLUCFCS 2210 – Citrus groves) prior to Phase 1 construction. The proposed force main route will include areas of commercial highway, agricultural, and single-family residential zoning. The agricultural areas are planned to be converted to single and multi-family residential within the next five years. As of 2021 (prior to acquisition of the Town's 19.7 acre WWTF site), an updated breakdown of Lake Hamilton's mixture of land uses including agriculture, open land/recreation, residential, commercial, industrial, and institutional uses is summarized in **Table 3**.

Table 3: Town of Lake Hamilton – Existing Land Use (2021)

Existing Land Use	Florida Land Use Cover Classification System (FLUCCS)	Acreage	Percent of total acreage
Open Land (Vacant)	1900	163.73	5.7%
Single family residential	1200	260.55	9.1%
Muti-family (<10 units/acre)	1330	3.57	0.12%
Commercial/office	1400	38.24	1.33%
Industrial	1500	112.87	3.92%
Institutional	1700	44.09	1.53%
Agriculture	2000	1,163.50	40.4%
Transportation (Right-of-way)	8140	146.53	5.1%
Open water (Lakes)	5200	593.0	20.6%
Wetlands/floodplains	6000	350.29	12.2%
TOTAL		2,876.37	100%

Source: Town of Lake Hamilton 2030 Comprehensive Plan, Adopted September 2011
Polk County Property Appraiser data base, Polk GIS Mapping, 2020 aerial photography.

Wastewater Facilities Plan – Phase 2 WWTF Improvements Town of Lake Hamilton, Florida

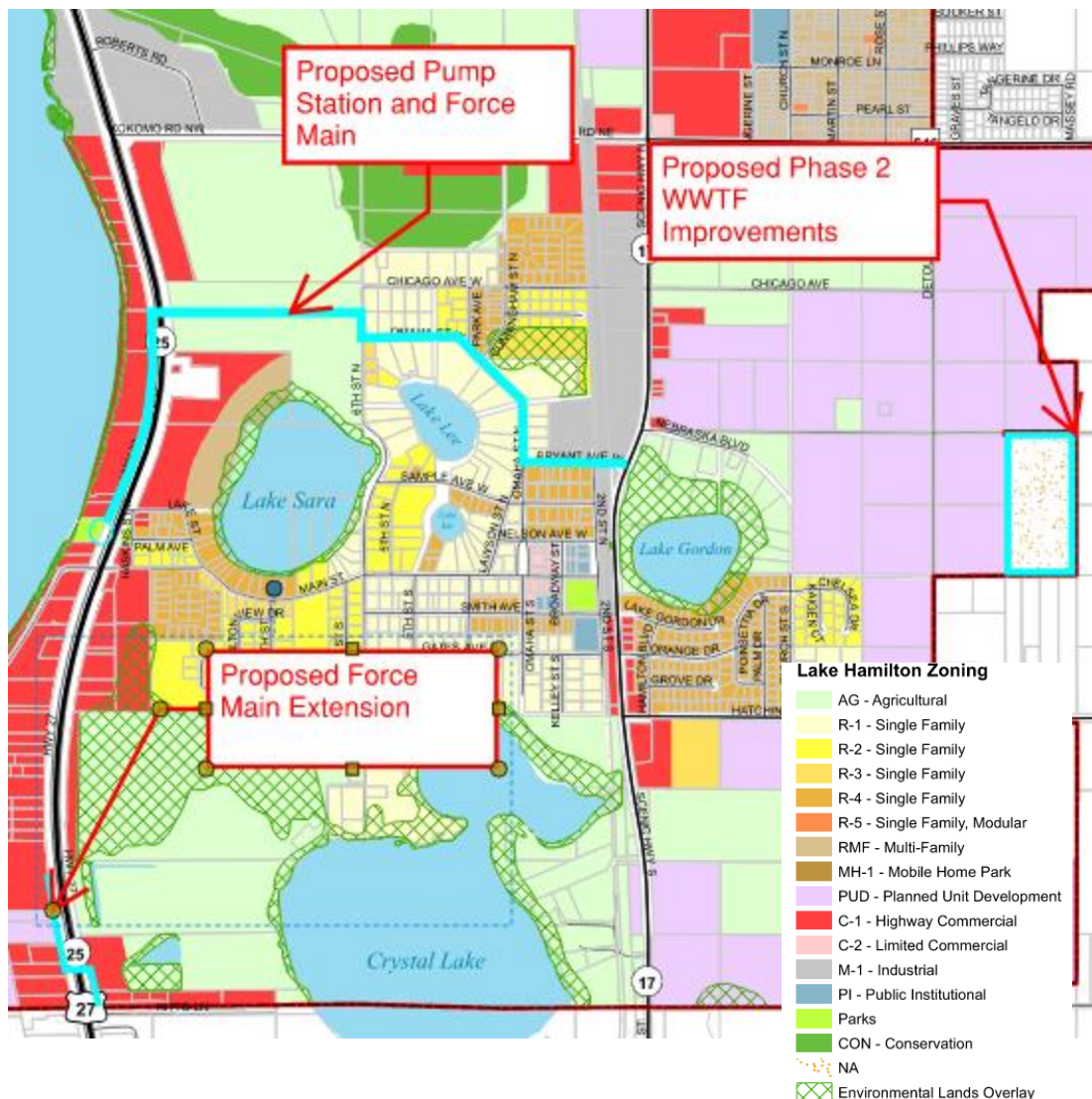


Figure 10: Town of Lake Hamilton Zoning

F. IMPLEMENTATION AND COMPLIANCE

1. Financial Sustainability

It is anticipated that loan funding from the FDEP Clean Water State Revolving Fund will be used to finance the proposed project. A Capital financing Plan has been prepared by Town staff to explain to the public and to the FDEP what the financial impacts on the users of the Lake Hamilton utility systems will be (**Appendix D**)

2. Regulatory Agency Review

To qualify for a subsidized loan from the SRF, various governmental agencies must be satisfied with the way the Town of Lake Hamilton's wastewater system issues are to be solved. Prior to submitting this revised Facilities Plan, the Town provided a copy of the Town's WWTF Preliminary Engineering and Environmental Assessment Reports to FDEP Clean Water SRF staff to advertise and seek review comments from the following governmental agencies:

Wastewater Facilities Plan – Phase 2 WWTF Improvements

Town of Lake Hamilton, Florida

- USDA Natural Resources Conservation Service;
- U.S. Fish and Wildlife Service; and
- Florida State Clearinghouse

3. Permits Required

The permits required to implement the proposed project are an FDEP General Permit for Wastewater Collection/Transmission Systems, an FDOT right-of-way permit, and a FDEP Wastewater Treatment Facility Construction Permit. Application for the permits are currently being made to acquire the necessary permits prior to bidding.

4. Public Participation Process

A public meeting to present this revised Wastewater Facilities Plan and the Capital Financing Plan is scheduled to be held at Town Hall in January 2024. The meeting will be advertised in accordance with Town noticing requirements. The public will be given the opportunity to offer comments concerning the Facilities Plan and Capital Financing Plan. The Affidavit of Advertisement for the public hearing and copies of the Town Commission Meeting Agenda and Meeting Minutes for the January 2024 public hearing will be submitted following the meeting (**Appendix E**). It is anticipated that the Town Council will adopt this revised Wastewater Facilities Plan inclusive of the Capital Financing Plan.

5. Implementation

The Town of Lake Hamilton has responsibility and authority to implement the recommended facilities. The Town will bid the pump station and force main project separately from the WWTF construction project, as that will require two different specialty contractors. The Town will have adequate capacity at its new WWTF to serve the 30 existing pressurized sewer connections proposed by this Project (approximately 9000 gpd of capacity). The Town of Lake Hamilton's WWTF is currently accepting flows from the previously completed septic to sewer conversion project.

6. Implementation Schedule

- January 2024 – Hold public hearing on Facilities Plan and Capital Financing Plan.
- December 2023 – Submit final revised Facilities Plan to FDEP.
- December 2023 – Design plans, specifications, and permits submitted to FDEP.
- January 2024 – FDEP approves Wastewater Facilities Plan.
- January 2024 – SRF design grant/loan agreement is executed.
- January 2024 – FDEP approves plans and specifications.
- February 2024 – Project added to priority list for construction funding.
- March 2024 – Grant/loan application submitted to FDEP for construction funding.
- June 2024 – SRF construction grant/loan agreement is executed.
- August 2024 – Advertise for bids.
- September 2024 – Open construction bids.
- October 2024 – Award construction contract.
- December 2024 – Start project construction.
- January 2026 – Complete Project construction.
- February 2026 – Close out project.
- August 2026 – Begin SRF loan repayments to the FDEP.

7. Compliance

The wastewater system improvements and lift station will be designed in compliance with regulatory requirements set forth in Chapter 62-604 F.A.C.

The environmental aspects of the proposed facilities are satisfactory.

The recommended facilities are consistent with the Town's Comprehensive Plan and with Polk County's Comprehensive Plan.

G. REFERENCES

Environmental Site Review, R. Bruce Williams, Environmental Consultant, Austin Environmental Consultants, Inc., December 6, 2023.

Florida Department of Environmental Protection, Chapter 62-604 Florida Administrative Code.

Phase 2: Lake Hamilton Wastewater Treatment Facility, Lake Hamilton, Florida, Preliminary Engineering Report, prepared by Pennoni, December 1, 2023.

Polk County, Florida Property Appraiser data [[Home Page \(polkpa.org\)](http://polkpa.org)]

Recommended Standards for Wastewater Facilities, 2014 Edition, Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers.

U.S. Census Bureau Data for Lake Hamilton, Florida, 2010, 2020.

U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Highlands County, Florida, 1989.

Florida Aquifer Vulnerability Assessment (FAVA): Contamination potential of Florida's principal aquifer systems; Arthur, Baker, Cichon, Wood, and Rudin; 2005 [FAVA final dep report](#)

FIGURES

LARGER FORMAT

SMALLER VERSIONS

INCLUDED IN REPORT TEXT

092

Polk County

2010 Urbanized Area Boundaries

Urbanized Area (UA) and Urban Cluster (UC) Boundaries

Lakeland

Winter Haven

Other Urbanized Areas

Urban Clusters

Note: The TPO Study Area includes the Lakeland and Winter Haven TMA's, as well as all of Polk County.

Urbanized Area (UA) and Urban Cluster (UC) Population

UA	2010
Lakeland	262,596
Winter Haven	201,289
Avon Park - Sebring ^{1 2}	61,625
Kissimmee ²	314,071
Orlando ²	1,510,516
Tampa/St. Pete ²	2,441,770
Zephyrhills ²	66,609

UC	2010
Poinciana ²	41,922
Four Corners ²	35,549
Frostproof	7,626
Fort Meade	6,234
Poinciana SW	5,501
Crooked Lake Park	4,335
Wauchula ²	14,621

1. New Urbanized Area 2. All or a portion of the UA/UC is outside of Polk County.

0

2.5

5

10

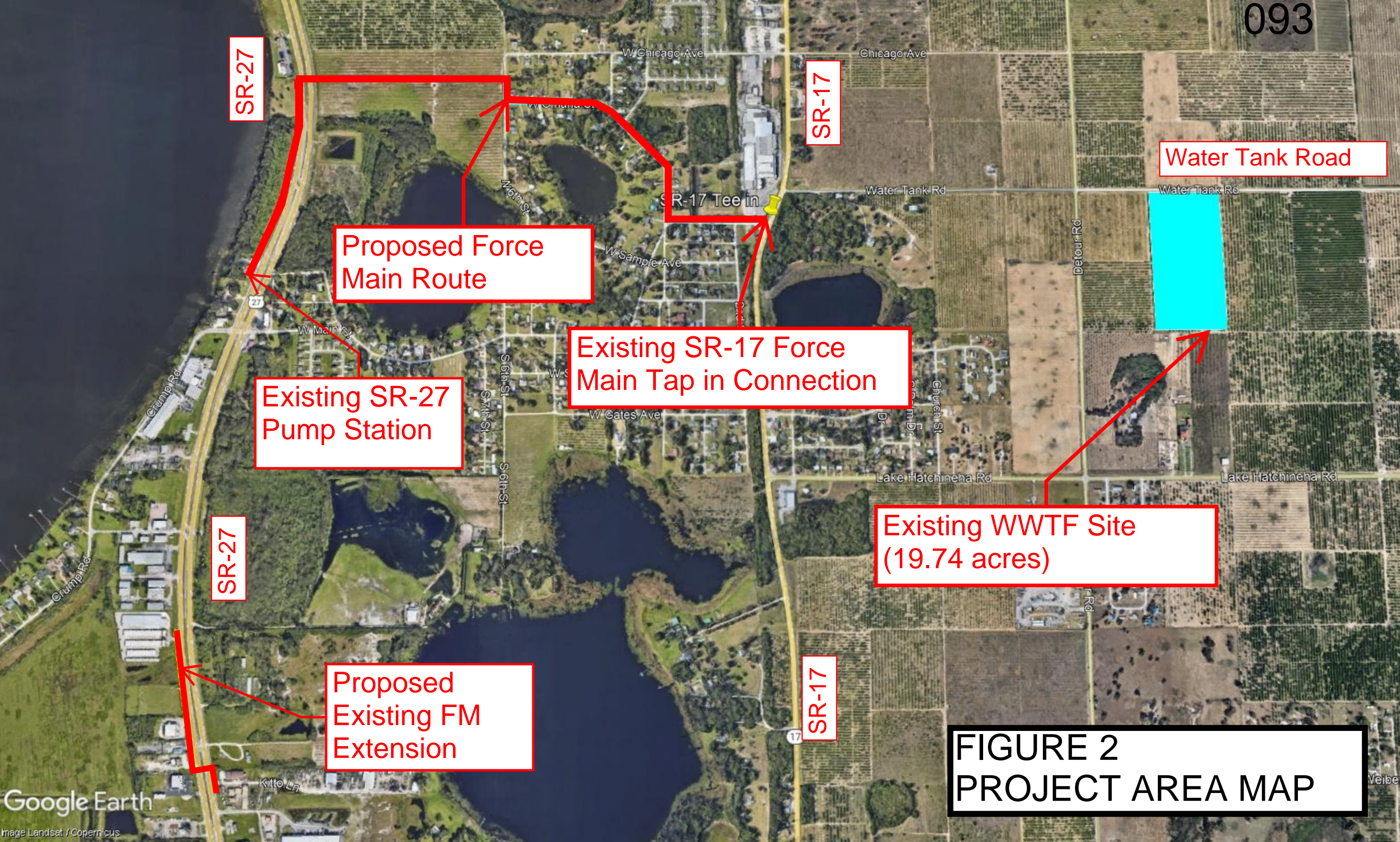
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Miles

N

FIGURE 1

TOWN LOCATION MAP



SR-27

SR-17

Water Tank Road

Proposed Force
Main RouteExisting SR-17 Force
Main Tap in ConnectionExisting SR-27
Pump StationExisting WWTF Site
(19.74 acres)

SR-27

Proposed
Existing FM
Extension

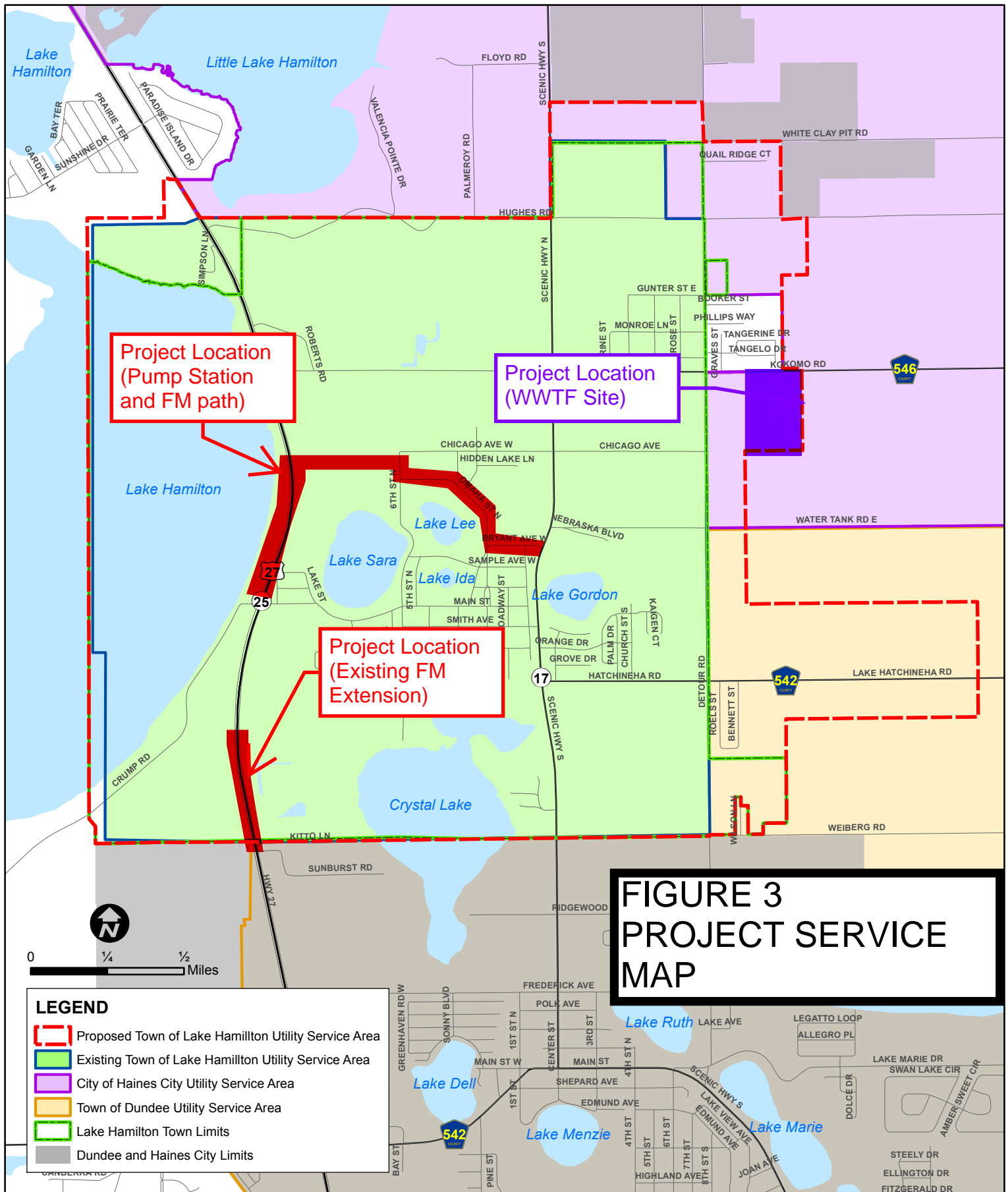
SR-17

FIGURE 2
PROJECT AREA MAP

EXHIBIT "A"

LAKE HAMILTON UTILITY SERVICE AREA

Ordinance O-20-11





PENNONI ASSOCIATES INC.
401 Third Street SW
Winter Haven, FL 33880
T 863.324.1112 F 863.294.6185
COA #0007819

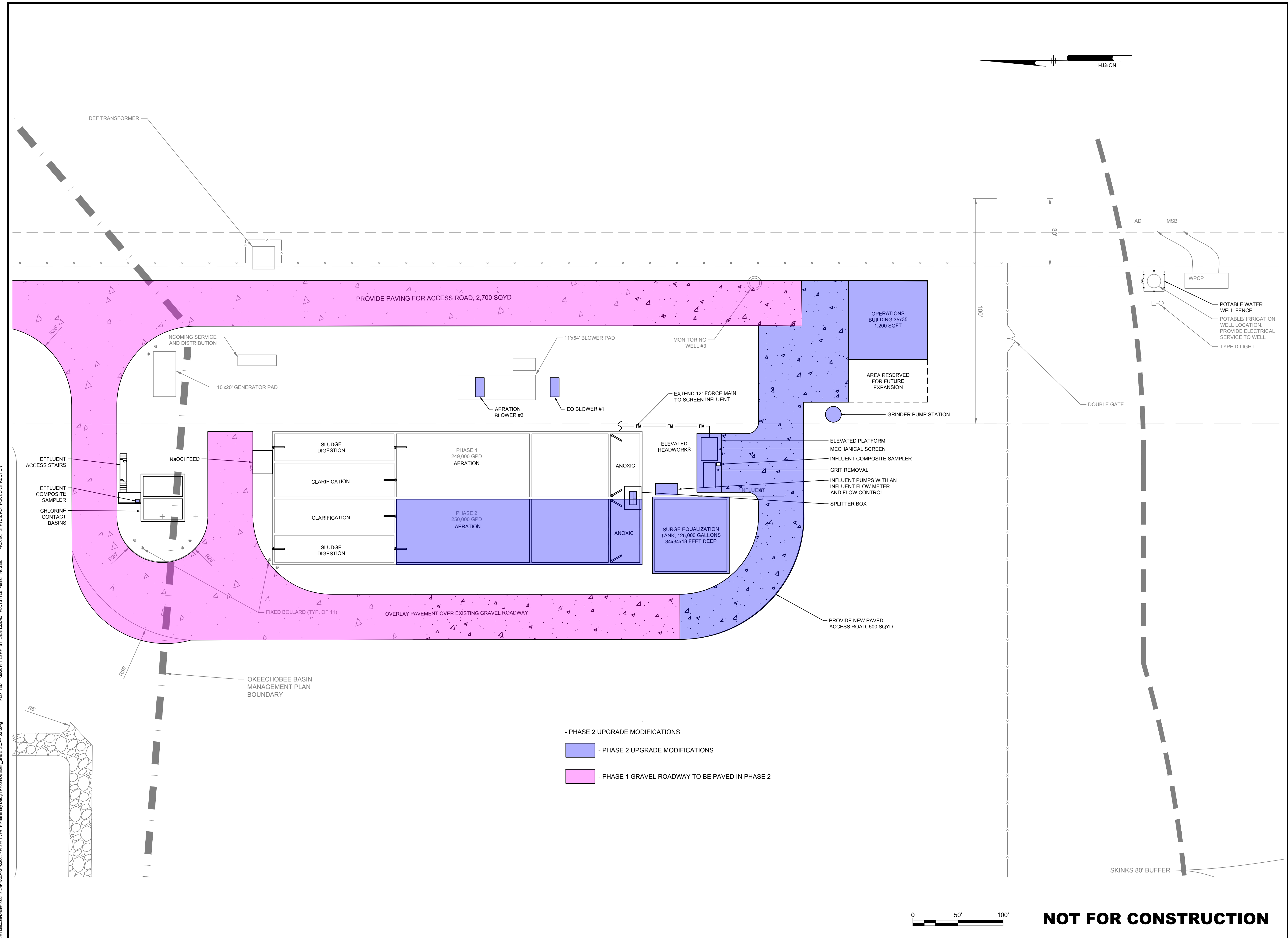
ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK

PHASE 2 - CAPACITY EXPANSION
WATER TANK ROAD
LAKE HAMILTON, FLORIDA 33851
TREATMENT SYSTEM
MODIFICATIONS CONCEPTUAL
LAYOUT
TOWN OF LAKE HAMILTON
100 SMITH AVENUE
LAKE HAMILTON, FLORIDA 33851

NO.	DATE	REVISIONS	BY

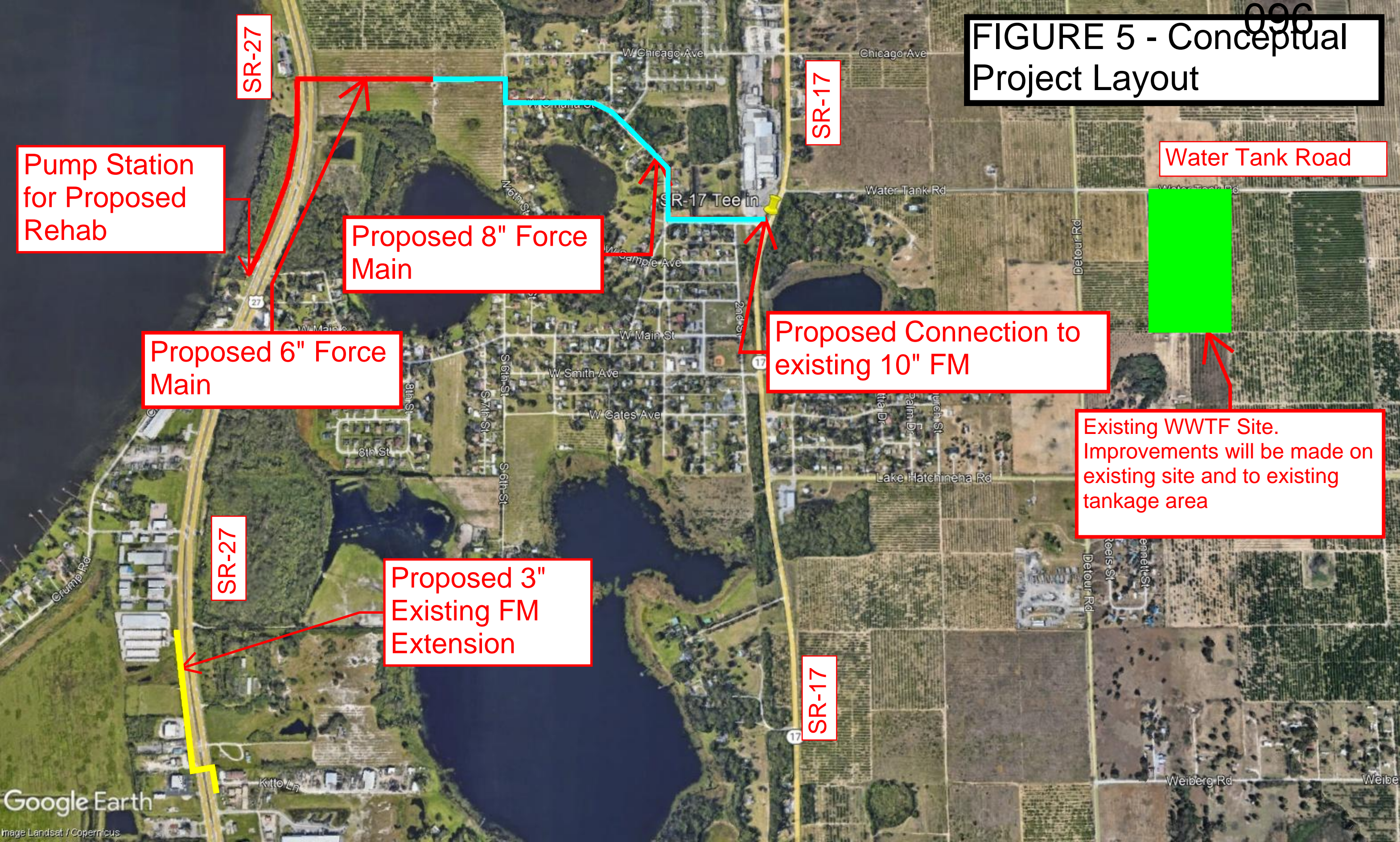
ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PROJECT	LAKHA22005
DATE	2022-11-13
DRAWING SCALE	1"=20'
DRAWN BY	LL
APPROVED BY	TD



\\pennoni.com\\Data\\Accounts\\LAK\\LAKHA22005 - Phase 2\\WWTf Preliminary Design\\Report\\DESIGN SHEETS\\CM-1001.dwg PLOTTED: 4/30/2024 1:23 PM BY: Lacey, Lacey PLOT STYLE: Pennoni NCS.dpt PROJECT STATUS: NOT FOR CONSTRUCTION

FIGURE 5 - Conceptual Project Layout



Pump Station
for Proposed
Rehab

Proposed 8" Force
Main

Proposed 6" Force
Main

Proposed Connection to
existing 10" FM

Water Tank Road

Existing WWTF Site.
Improvements will be made on
existing site and to existing
tankage area

Proposed 3"
Existing FM
Extension

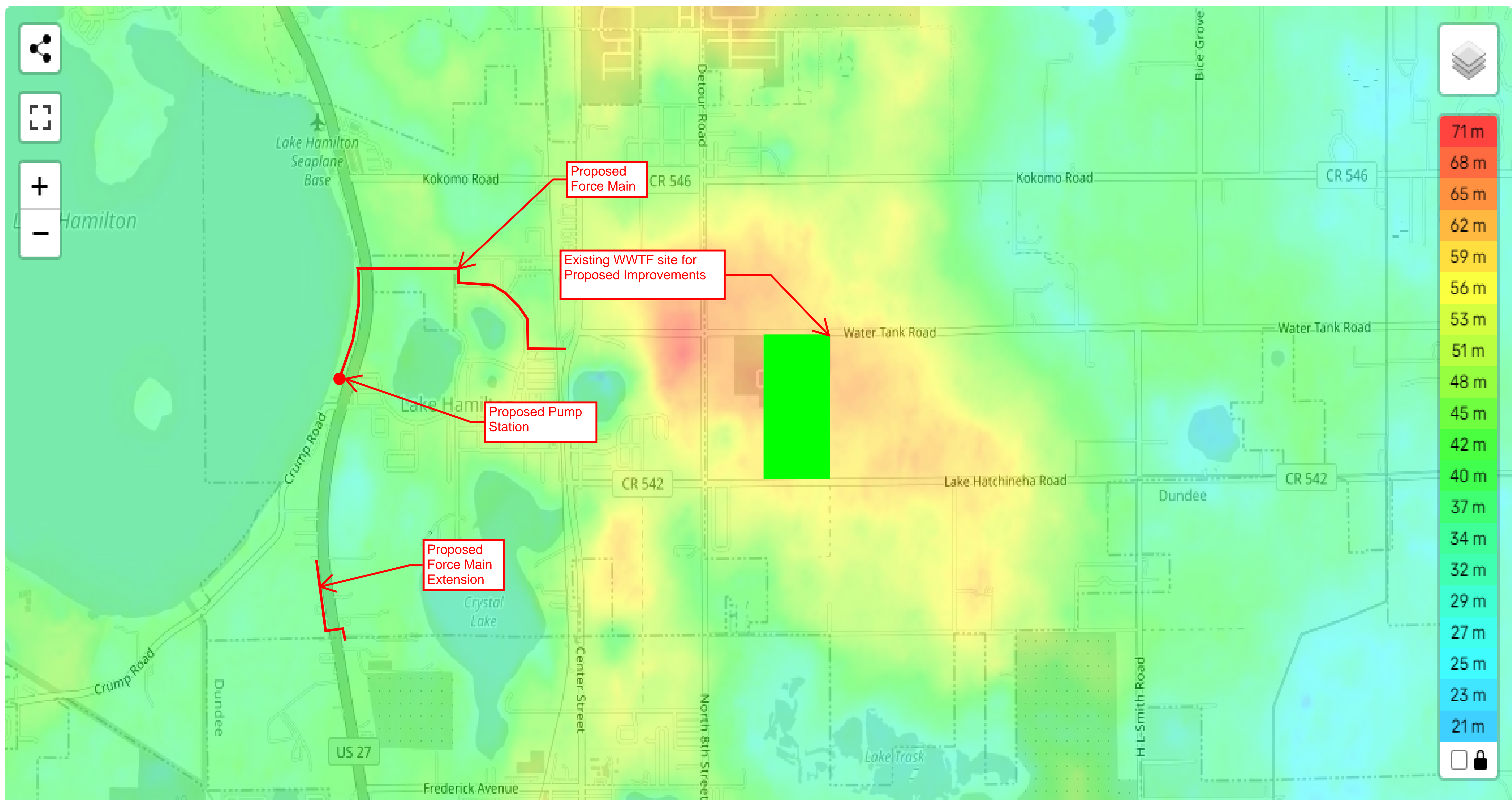


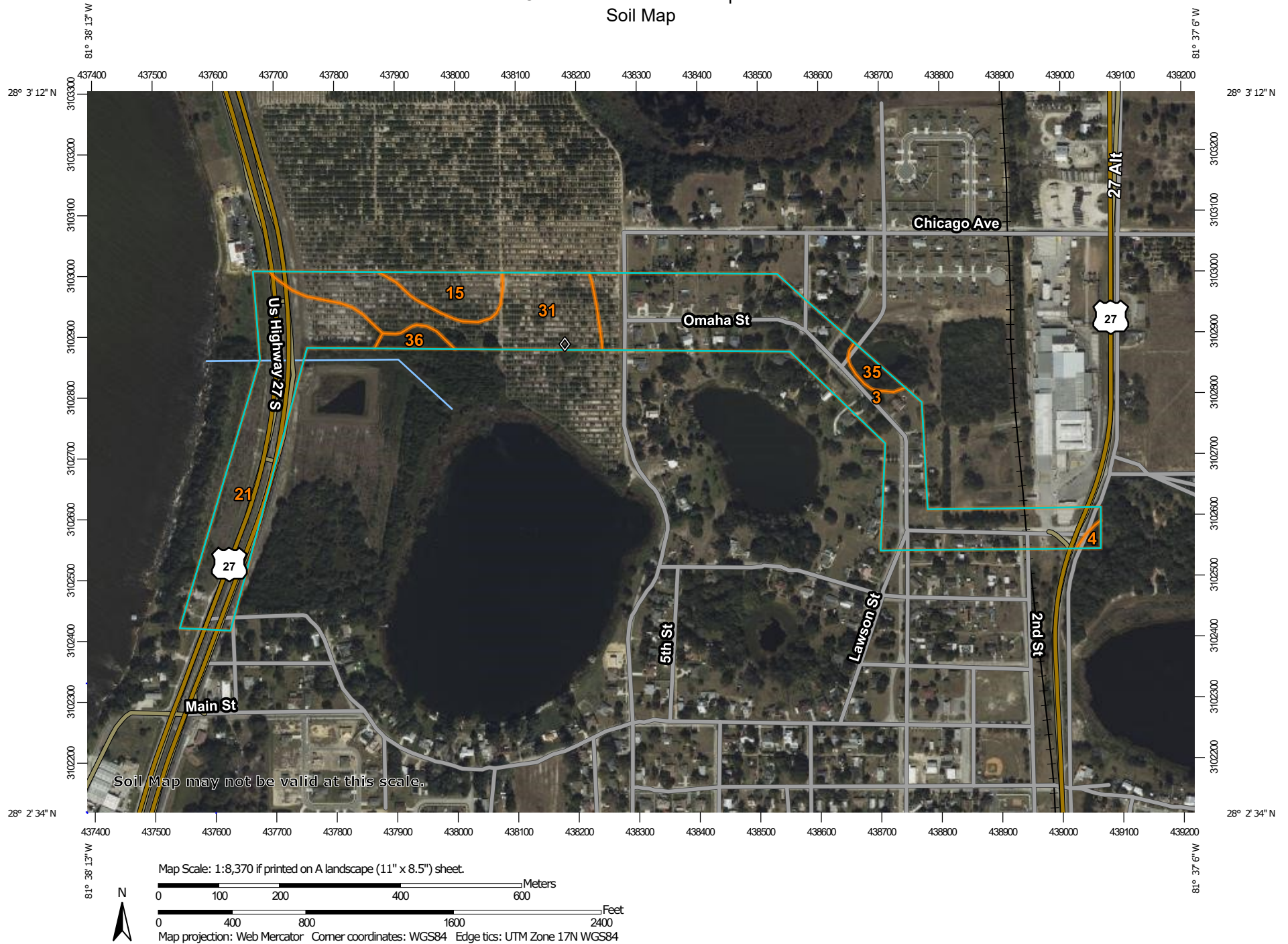
FIGURE 6 - PROJECT TOPOGRAPHY

Custom Soil Resource Report
Soil Map



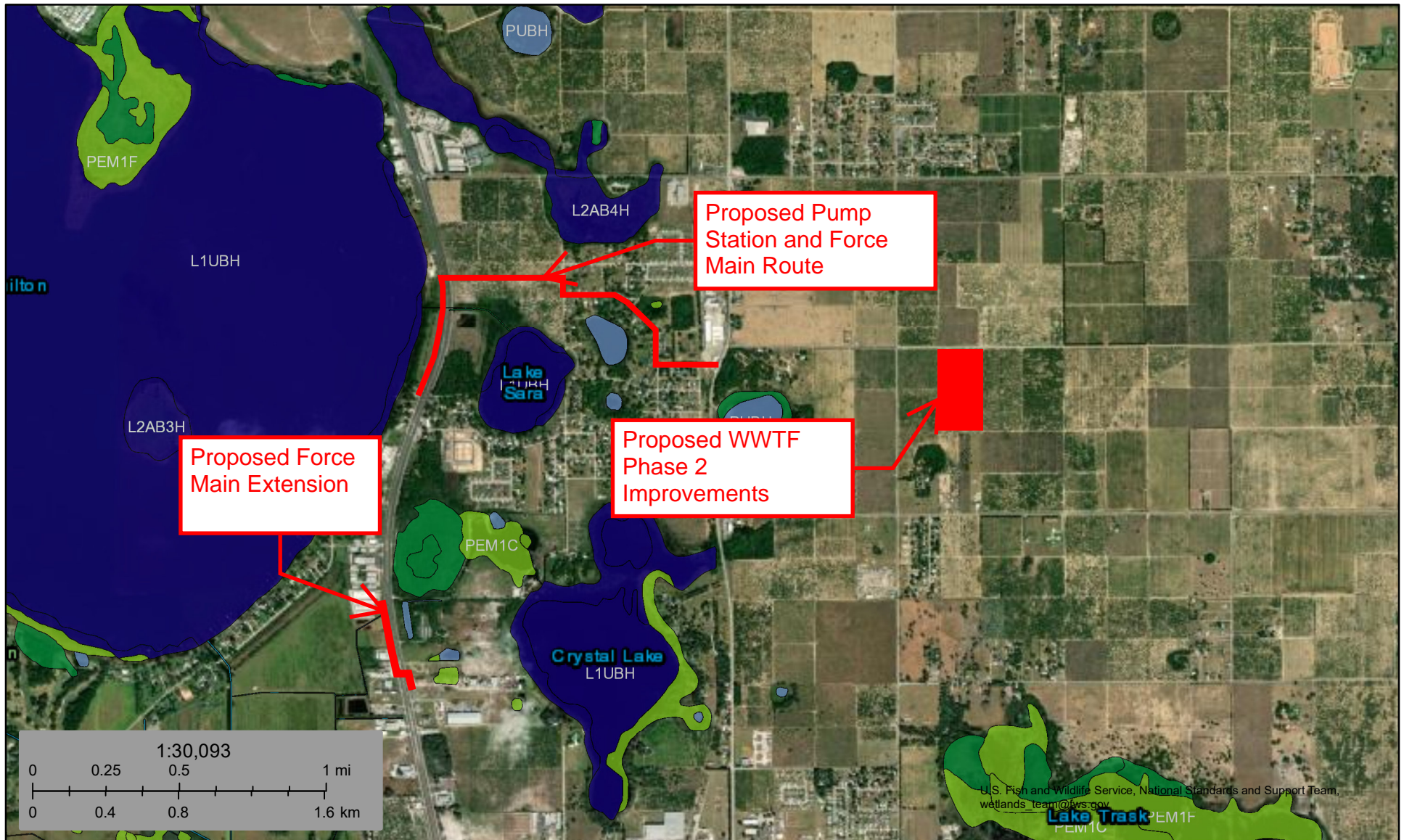
Custom Soil Resource Report
Soil Map

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Custom Soil Resource Report
Soil Map





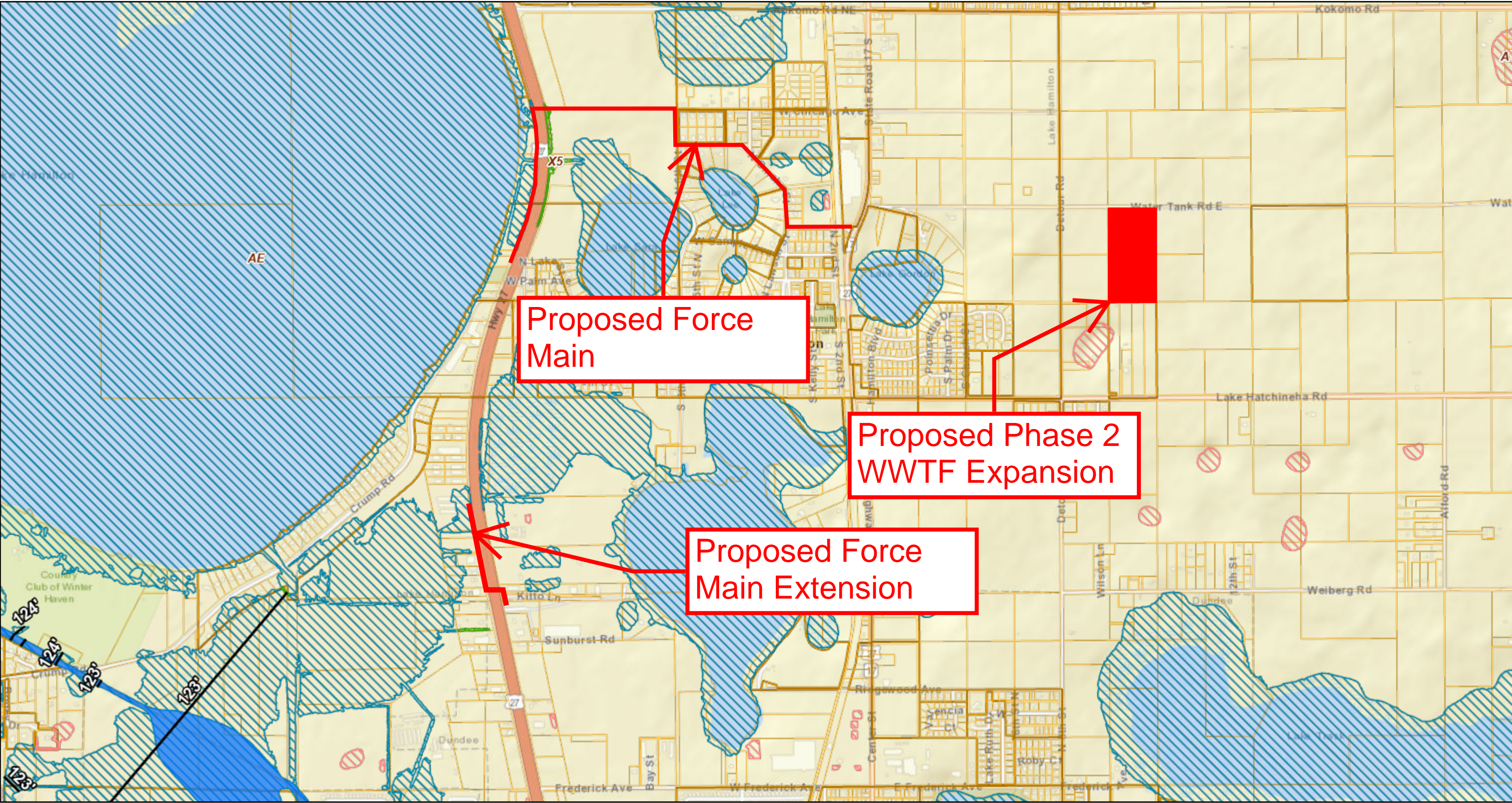
December 13, 2023

Wetlands

- | | | |
|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland |  Lake |
|  Estuarine and Marine Wetland |  Freshwater Forested/Shrub Wetland |  Other |
| |  Freshwater Pond |  Riverine |


This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.





Figure 9 - Floodplain Map



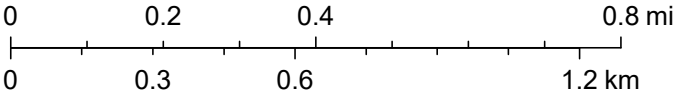
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FEMA Flood Zones 2016 (visible at 1:18,056)

-  Flood Zone A
-  Flood Zone AE
-  Flood Zone X5

-  FEMA Floodways
-  Base Flood Elevations (visible at 1:18,490)
-  Subdivision
-  Parcels

1:18,056



University of South Florida, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

Legend

Lake Hamilton Town Boundary

Parcels

US Highways

State Roads

County Roads

Local Roads

Water Bodies

Lake Hamilton Zoning

AG - Agricultural

R-1 - Single Family

R-2 - Single Family

R-3 - Single Family

R-4 - Single Family

R-5 - Single Family, Modular

RMF - Multi-Family

MH-1 - Mobile Home Park

PUD - Planned Unit Development

C-1 - Highway Commercial

C-2 - Neighborhood Commercial

M-1 - Industrial

PI - Public Institutional

Parks

CON - Conservation

NA

Environmental Lands Overlay

TOWN OF LAKE HAMILTON

Town of Lake Hamilton

100 Smith Avenue, P.O. Box 126

Lake Hamilton, FL 33651

Phone: (863) 439-1910

www.townoflakehamilton.com

CFRPC

CENTRAL FLORIDA REGIONAL PLANNING COUNCIL

555 East Church Street, Bartow, FL 33830-3931

P.O. Box 2089, Bartow, FL 33831-2089

(863) 534-7130 - Fax (863) 534-7138

www.cfrpc.org

Town Boundary Updated per Ordinance no. O-22-02

April 5, 2022

Zoning Updated per Ordinance no. O-22-08

March 1, 2022

I hereby certify that this is the Official Zoning Map of the Town of Lake Hamilton, Florida.

Michael Kehoe

Michael Kehoe, Mayor

N

W

E

S

0

1/4

1/2

Miles

DISCLAIMER:

The information on this map should be considered conceptual and subject to change. This map is not a survey.

Data Sources:

Central Florida Regional Planning Council

Florida Department of Transportation

Polk County Property Appraiser

Town of Lake Hamilton

ORD NO	DESCRIPTION	ORD DATE
2004-06	5.73 AC FROM AG TO C-1, E SIDE OF US 27, N	11/2/2005
2006-1	FIGURE 10 - Zoning Map	
2007-1		
2007-1		
2008-02	0.34 AC FROM C-2 TO C-1, NE COR OF SMITHAV & OMAHA ST, MAPPED 12/9/11	2/5/2008
2008-04	22.65 AC FROM AG TO R-1, E SIDE OF LK GORDON, MAPPED 12/9/11	3/4/2008
2008-07	38.88 AC FROM AG TO R-3, SE COR OF SR 17 & HUGHES RD, MAPPED 12/9/11	4/1/2008
2008-08	19.48 AC TO R-3, BTWN HUGHES RD & WHITE CLAY PIT RD, MAPPED 12/9/11	4/1/2008
2008-10	12.73 AC FROM C-2 & AG TO C-1&R-3, SE OF SR 17 & HATCHINEHA RD, MAPPED 12/9/11	4/1/2008
2008-12	0.11 AC FROM RMF TO C-2, NW COR OF MARTIN ST & MONROE LN, MAPPED 12/9/11	10/7/2008
2012-01	35.57 AC FROM A-1 TO C-1 AND RMF, BOTH SIDES OF US-27, N OF LAKE ST	3/6/2012
2013-03	ADOPTION OF UPDATED ZONING MAP	4/2/2013
2013-15	22.635 AC FROM R-1 AND R-3 TO AG, EAST SIDE OF LAKE GORDON, S OF WATER TANK RD	11/5/2013
2013-16	4.73 AC FROM AG TO M-1, NE CORNER OF INT OF KOKOMO RD AND ROBERTS RD	1/7/2014
2016-03	185 AC REZONED FROM R-3 TO C-1 SE CRNR SR-17 AND HATCHINEHA RD	3/1/2016
2016-04	77.87 AC REZONED FROM R-3 TO M-1	8/2/2016
2017-02	AMENDED LDC; ADDING A NEW ZONING DISTRICT; R-5 (SINGLE FAMILY, MODULAR)	3/7/2017
2017-06	8 AC REZONED FROM R-2 TO R-5	5/2/2017
2017-12	.82 AC FROM AG TO M-1 N OF KOKOMO RD NE, W OF SCENIC HWY N	9/1/2017
2017-13	103 AC FROM RMF TO R-5, CHURCH ST & PEARL ST AND ROSE ST & MONROE LN	9/1/2017
2017-14	1128 AC FROM R-1 TO R-4; N OF CHICAGO AVE, ADJACENT TO DUKE ENERGY PLANT	2/6/2018
O-19-07	9.3 AC FROM R-3 TO R-4, S SIDE OF MAIN ST, W OF LAKE ST, IN S21-TWN28S-RNG27E	11/5/2019
O-20-01	10.24 AC FROM AG TO PUD, 660 FT E OF SR 17, S SIDE OF TOWN	2/4/2020
O-20-02	77.61 AC FROM IND & AG TO PUD, SCENIC HWY, HUGHES RD, DETOUR RD AREA	2/4/2020
O-20-10	8.196 AC FROM AG TO C-1 E OF US 27, S OF KOKOMO RD	12/8/2020
O-21-29	1.14 AC FROM R-1 TO R-4, NE CRNR INT OF MAIN ST & FIFTH ST	2/1/2021
O-21-11	19172 AC ADOPTING PUD (SCENIC TERRACE SOUTH), N & S HUGHES RD, SR 17	6/1/2021
O-21-16	242.3 AC PUD, HAMILTON BLUFF, BTWN HATCHINEHA RD, S OF KOKOMO, N SR 17	10/5/2021
O-21-24	10.17 AC FROM AG TO M-1, W DETOUR RD, 552 FT S DETOUR RD & HATCHINEHA RD	11/2/2021
O-21-25	0.34 AC FROM C-1 TO C-2, NE CRNR OMAHA ST & SMITH AVE	11/2/2021
O-22-08	66.31+ AC PUD (WEIBERG WEST), S21-T28-R27 & S22-T28-R27 (OLD OLSON PUD)	3/1/2022

Document Path: D:\Projects\Current_Jurisdiction_maps\Lake Hamilton\LakeHamilton_ZON_index_102723.mxd

APPENDIX A

PRELIMINARY ECOLOGICAL

SITE ASSESSMENT





Austin Ecological Consultants

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December 6th, 2023

Pennoni
Steven Elias, P.E.
401 Third Street SW
Winter Haven, FL 33880

RE: Environmental Site Review

Submitted via email: Steven Elias, SElias@Pennoni.com

RE: Preliminary Environmental Site Assessment
LAKHA23001 WTF Pipeline Project

Mr. Elias:

The approximate 9-acre linear water treatment and pipeline improvements project is located in the Lake Hamilton area of Polk County, Florida. The assessment area includes parcels 272817000000012010, 272816000000041020, 272816823500003010, 272816000000031020, 272817000000011030 and the Right-of Ways (ROW) of 6th Street North, Omaha Street, Bryant Avenue West, and approximately 0.5 mile within the western ROW of US-27 (See attached **Location/Aerial Map**).

Qualified scientists with Austin Ecological Consultants, LLC. (AEC) reviewed the referenced project site to evaluate general site conditions and ecological constraints that may influence site development relative to wetlands and listed wildlife species. AEC conducted a site inspection on November 16, 2023, and also reviewed available online databases and published information.

METHODOLOGY

Land use and vegetative community types located within the project site were identified through aerial photographic interpretation, and verified in the field through site investigation. On-site land use forms were classified using the Florida Land Use, Cover, and Forms Classification System (FLUCCS) as defined by the Florida Department of Transportation (FDOT, 1999), and are described below (see attached **FLUCCS Map**).

The site was evaluated for the potential presence of wildlife species listed as threatened (T), endangered (E), or species of special concern (SSC) as defined by the United States Fish and Wildlife Service (USFWS) and/or the Florida Fish and Wildlife Conservation Commission (FWC) and their habitat. AEC scientists conducted a review of available published information from federal and state online databases, and reviewed literature from existing sources useful in identifying the occurrence or potential occurrence of wildlife species listed as T, E, or SSC (collectively recognized as listed species), as defined by USFWS and/or the FWC. In addition, the presence of designated consultation areas, critical habitat, and/or vegetative communities and land uses with the potential to support listed species was evaluated. During the site assessment conducted by AEC,

pedestrian transects were performed by staff environmental scientists throughout the project site. Pedestrian transects were appropriately spaced so as to accurately determine the presence/absence of protected wildlife species within the project site.

SOILS

The onsite soil types were classified according to the Soil Survey for Polk County, Florida and available USDA Natural Resource Conservation Service (NRCS) GIS layers (see attached **Soils Map**).

The onsite soils are limited to four (4) soil types, (see **Table 1**).

Table 1 - On-site Soil Types		
ID#	Soil Name	Hydric Rating
3	Candler Sand	No
15	Tavares fine sand	No
21	Immokalee sand	No
31	Adamsville fine sand	No

WETLANDS AND OTHER SURFACE WATERS

No wetlands or surface waters were observed on-site.

UPLANDS

Open Land (FLUCCS 190)

This community type represents an overgrown area with vegetation consisting mainly of herbaceous plants with a groundcover of beggar tick (*Bidens alba*), sandbur (*Cenchrus spinifex*), guinea grass (*Megathyrsus maximus*), ragweed (*Ambrosia spp.*), Hairy indigo (*Indigofera hirsutus*), Bermuda grass (*Cynodon dactylon*) and Balsam apple (*Momordica charantia*).

Citrus Groves (FLUCCS 221)

This citrus grove consists of orange trees (*Citrus spp.*), beggar tick, sandbur, and Bahia grass.

Transportation, Communication, and Utilities (FLUCCS 800)

These areas consist of the ROW for 6th Street North, Omaha Street, Bryant Avenue West, and US-27. Vegetation within the ROW consisted of maintained grass which was dominated by Bahia grass (*Paspalum notatum*), and Saint Augustine grass (*Stenotaphrum secundatum*).

Pump Station (FLUCCS 8172)

This land use consists of a pump station, and vegetation within this land-use consists mainly of maintained Bahia grass along the boundary.

LISTED SPECIES ASSESSMENT

The project site was evaluated for the potential presence of wildlife species listed as T, E, or SSC as defined by the USFWS and/or the FWC and their habitat. For listed species

which could potentially be affected by development of the project site, and therefore could potentially affect development, further detailed analysis is provided below. Due to the location and soils, special emphasis was given to the potential presence of sand skinks (*Neoseps reynoldsi*) and gopher tortoises (*Gopherus polyphemus*).

Gopher Tortoise (*Gopherus polyphemus*)

The gopher tortoise is listed as Threatened by FWC. The gopher tortoise inhabits subterranean burrows in a wide variety of upland habitats, both native and altered. The site contains upland habitats which are suitable for gopher tortoises. A 100% gopher tortoise survey was conducted on November 16th, and no gopher burrows were observed within 25 feet of the proposed pipeline route. Gopher tortoise surveys are only good for 90 days from the time of the initial survey. After 90 days, an updated 100% survey of all potentially suitable gopher tortoise habitat should be performed if construction activities have not started. If any tortoise burrows are discovered that have the potential to be impacted (cannot be avoided by 25 feet) by site manipulation, they must be excavated/trapped, and any resident tortoise relocated offsite. Accordingly, a permit from the FWC will be required to capture and relocate any resident tortoises discovered at a future date.

If the future project follows the FWC Gopher Tortoise Permitting Guidelines, the gopher tortoise is unlikely to be adversely affected by future development of the project site. In addition, the presence of this species is not anticipated to significantly affect future development of the project site.

Eastern Indigo Snake (*Drymarchon corais couperi*)

The Eastern indigo snake is listed as Threatened by both the USFWS and FWC. The Eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands and agricultural areas. Indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. If the future development project complies with the *USFWS Standard Protection Measures For The Eastern Indigo Snake*, and relocates any onsite gopher tortoises, then using the 2017 Indigo Snake Key the project keys out to A<B<C<D< NLAA (not likely to adversely affect). Therefore, the Eastern indigo snake is not anticipated to significantly affect future development of the project site.

Sand Skink (*Neoseps reynoldsi*) and Bluetail Mole Skink (*Eumeces egregius lividus*)

The sand skink and bluetail mole skink are listed as Threatened by the USFWS and FWC. The project is located within the USFWS Sand and Bluetail Mole Skink Consultation Area. Per review of the NRCS Soil Survey (see attached **Soils Map**) and available topographic data, the assessment area contains suitable sand skink soils (Tavares, Candler, Immokalee, and Adamsville sands) located 82 feet above sea level. These suitable soils are found throughout the assessment area.

While much of the assessment area does not contain suitable habitat, within the citrus grove there are open sandy areas that offer suitable habitat. However, impacts



to sand skinks are not expected as the project (pipeline installatin) is a temporary activity and soils to be replaced after project completion will be loosened, thus creating more suitable habitat conditions (loose swimmable soils clear of vegetation/citrus) for sands skinks than what currently exists within the project area.

The USFWS may request a coverboard survey within areas of open sand to verify the presence or absence of sand skinks. Formal surveys to document the absence of skinks can only be conducted between March 1 and May 15, and involve placing 2' x 2' plywood "coverboards" within all areas of suitable habitat at a density of forty (40) coverboards per-acre. Coverboards are checked once per week for four consecutive weeks for signs of sand skinks.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle was delisted by USFWS and FWC in August 2007 as a result of positive recovery of the species. Although the bald eagle was delisted, it continues to be protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Federal and state guidelines for the bald eagle require that certain activities be conducted outside a 660-foot radius distance outward from a nest tree. FWC's database of documented bald eagle nest sites, and Adudon's Egle Nest Locator database were queried. The database review revealed one (1) documented bald eagle nest (PO1316) within less than 300 feet of the assessment area at the southwest boundary (See attached **Wildlife Map**).

The protections for bald eagle nests are now outlined in the National Bald Eagle Protection Guidelines. The following is an excerpt from those guidelines, and provides a good summary of the standard protections provided to an active bald eagle nest in the absence of consultation and/or permitting.

Category A:

Building construction, 1 or 2 story, with project footprint of ½ acre or less. Construction of roads, trails, canals, power lines, and other linear utilities. Agriculture and aquaculture – new or expanded operations.

Alteration of shorelines or wetlands. Installation of docks or moorings.

Water impoundment.

Category B:

Building construction, 3 or more stories.

Building construction, 1 or 2 story, with project footprint of more than ½ acre.

Installation or expansion of marinas with a capacity of 6 or more boats.

Mining and associated activities.

Oil and natural gas drilling and refining and associated activities.

	<i>If there is no similar activity within 1 mile of the nest</i>	<i>If there is similar activity closer than 1 mile from the nest</i>
--	-------------------------------------------------------------------------	-----------------------------------------------------------------------------

<i>If the activity will be visible from the nest</i>	660 feet. Landscape buffers are recommended.	660 feet, or as close as existing tolerated activity of similar scope. Landscape buffers are recommended.
<i>If the activity will not be visible from the nest</i>	<p>Category A: 330 feet. Clearing, external construction, and landscaping between 330 feet and 660 feet should be done outside breeding season.</p> <p>Category B: 660 feet.</p>	330 feet, or as close as existing tolerated activity of similar scope. Clearing, external construction and landscaping within 660 feet should be done outside breeding season.

As outlined above, the standard protection zone for a bald eagle nest is 660-feet, however, it is not as rigid as it once was. The protection zone can be reduced to 330-feet if site work is not visible from the nest, and for other reasons. With the proposed activity being close to an active roadway, the protection zone can probably be reduced significantly through a simple consultation with the US Fish and Wildlife Service (FWS).

The US Fish and Wildlife Service (FWS) does issue Incidental Take permits for bald eagle nest sites. This permit does not allow destruction of the nest, but provides legal protection if site activities cause the eagles to abandon the nest site. It is recommended that site-specific coordination occur with the FWS during the site planning and design process.

Wood Stork (*Mycteria americana*)

The project is located within the USFWS designated Core Foraging Area (CFA) of several wood stork colonies. No wood storks were observed during the onsite inspection performed by AEC and there is no suitable habitat within the site. Accordingly, the project will have “no effect” on the wood stork.

Audubon’s Crested Caracara (*Polyborus plancus*)

The project site falls within the USFWS CA for this federally threatened raptor species. Caracara utilize open grasslands, including pastures, palmetto prairies, wet prairies, and freshwater marshes for foraging. The species prefers to nest in cabbage palms, although they have been documented to nest in other tree species. No caracara were observed onsite, or have been documented in available USFWS and FWC locality records. No suitable nesting habitat was identified on or immediately adjacent to the project site, although minimal suitable forage habitat (i.e., open land) does occur onsite. Based on the location of the project site within the surrounding urbanized landscape, it is not anticipated that this species would be encountered onsite or affected by development.

Florida Scrub-Jay (*Aphelocoma coerulescens*)

The project site is located within the USFWS CA for the Florida scrub-jay. This federally-listed, threatened species is native to Florida's xeric scrub communities, although it is known to utilize altered habitats including citrus groves and even residential areas. The USFWS considers the presence of scrub oaks to be the key indicator of suitable habitat. No Florida scrub-jays are known to occur within or immediately adjacent to the project site based on FWC and the USFWS locality records, and no suitable foraging habitat occurs onsite. Therefore, it is not anticipated that this species would be encountered onsite or affected by development.

Everglade Snail Kite (*Rostrhamus sociabilis plumbeus*)

The project site occurs within the USFWS CA for this federally-listed, endangered species. This small raptor's diet consists almost exclusively of apple snails (*Pomacea paludosa*). Snail kites require shallow freshwater marsh habitats that are capable of supporting healthy apple snail populations. They are found along the shorelines of freshwater lakes and marshes within the upper St. Johns River, and Kissimmee River basins. No snail kites were observed onsite, nor have they been documented to occur in the immediate vicinity of the project site. There is no suitable snail kite habitat onsite. The project is anticipated to have "no effect" on the snail kite.

Florida Grasshopper Sparrow (*Ammodramus savannarum floridanus*)

The project site is within the USFWS Consultation Area for the Florida grasshopper sparrow. The Florida grasshopper sparrow is federally listed as an Endangered species. The range of the grasshopper sparrow has been greatly reduced due to conversion of dry prairies to incompatible land uses such as pastures, sod farms, citrus groves, or pine plantations. As the majority of the groundcover within the project site is associated with disturbed sites, there is no suitable on-site habitat. The project is expected to have "no effect" on the Florida grasshopper sparrow.

Southeastern American Kestrel (*Falco sparverius paulus*)

The Southeastern American kestrel is a non-migratory subspecies of kestrel found in open pine savannahs, sandhills, prairies, and pastures. It has protections under the U.S. Migratory Bird Treaty Act and as a State-designated Threatened species by Florida's Endangered and Threatened Species Rule. The site is outside the boundary of the southeastern kestrel management units (KMUs), there is no nesting habitat (tree snags) and no southeastern American kestrels were observed on site during the site assessment. The project is expected to have "no effect" on the Southeastern American kestrel.

Sandhill crane (*Grus canadensis*)

The Florida sandhill crane is protected by the U.S. Migratory Bird Treaty Act and as a State-designated Threatened species by Florida's Endangered and Threatened Species Rule. This non-migratory species prefers to nest in freshwater ponds and marshes. Foraging habit includes open pastures and prairies. The breeding season for Florida sandhill cranes is December to August with nesting occurring primarily from February to April. There is no suitable nesting habitat onsite and due to the overgrown state of the site foraging habitat is minimal. The project is anticipated to have no effect on the sandhill crane.

Florida Burrowing Owl (*Athene cunicularia floridana*)

The Florida burrowing owl is listed as “threatened” by the State of Florida. Burrowing owls inhabit open prairies in Florida that have very little understory vegetation. These areas include golf courses, airports, pastures, agriculture fields, and vacant lots. The pedestrian survey identified no Florida burrowing owl burrows within the project site and no burrowing owls were observed at the time of the site assessment. Due to the urbanized surroundings, the burrowing owl is not anticipated to utilize the site.

Other Listed Species

No other listed species nor sign of their utilization of the project site was observed during the site inspection performed on October 4, 2023. Not considering species individually addressed above, no other listed species are anticipated to be affected by development of the project site.

SUMMARY OF FINDINGS

A 100% gopher tortoise survey was conducted on November 16th, and no gopher burrows were observed within 25 feet of the proposed pipeline route. Gopher tortoise surveys are only good for 90 days from the time of the initial survey. If at a future date any tortoise burrows are discovered that have the potential to be impacted by site manipulation they must be excavated/trapped, and any resident tortoise relocated offsite. Accordingly, a permit from the FFWCC will be required to capture and relocate any resident tortoises.

The project is located within the USFWS Sand and Bluetail Mole Skink Consultation Area. Per review of the NRCS Soil Survey (see attached **Soils Map**) and available topographic data, the assessment area contains suitable sand skink soils (Tavares, Candler, Immokalee, and Adamsville sands) located 82 feet above sea level.

While much of the assessment area does not contain suitable habitat, within the citrus grove there are open sandy areas that offer suitable habitat. However, impacts to sand skinks are not expected as the project (pipeline installation) is a temporary activity and soil to be replaced after project completion will be loosened, thus creating more suitable habitat conditions (loose swimmable soils clear of vegetation/citrus) for sand skinks than what currently exists within the project area.

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The protection zone can be reduced to 330-feet if site work is not visible from the nest, and for other reasons. With the proposed activity being close to an active roadway, the

protection zone can probably be reduced significantly through a simple consultation with the US Fish and Wildlife Service (FWS).

If you have any questions about the information contained in this report, please contact me.

Sincerely,

A handwritten signature in blue ink, consisting of a stylized 'R' followed by a large, loopy 'W'.

R. Bruce Williams, Environmental Consultant
Austin Ecological Consultants, LLC.

PHOTOGRAPHS



FLUCCS 190 : Open Land



FLUCCS 221 : Citrus Groves

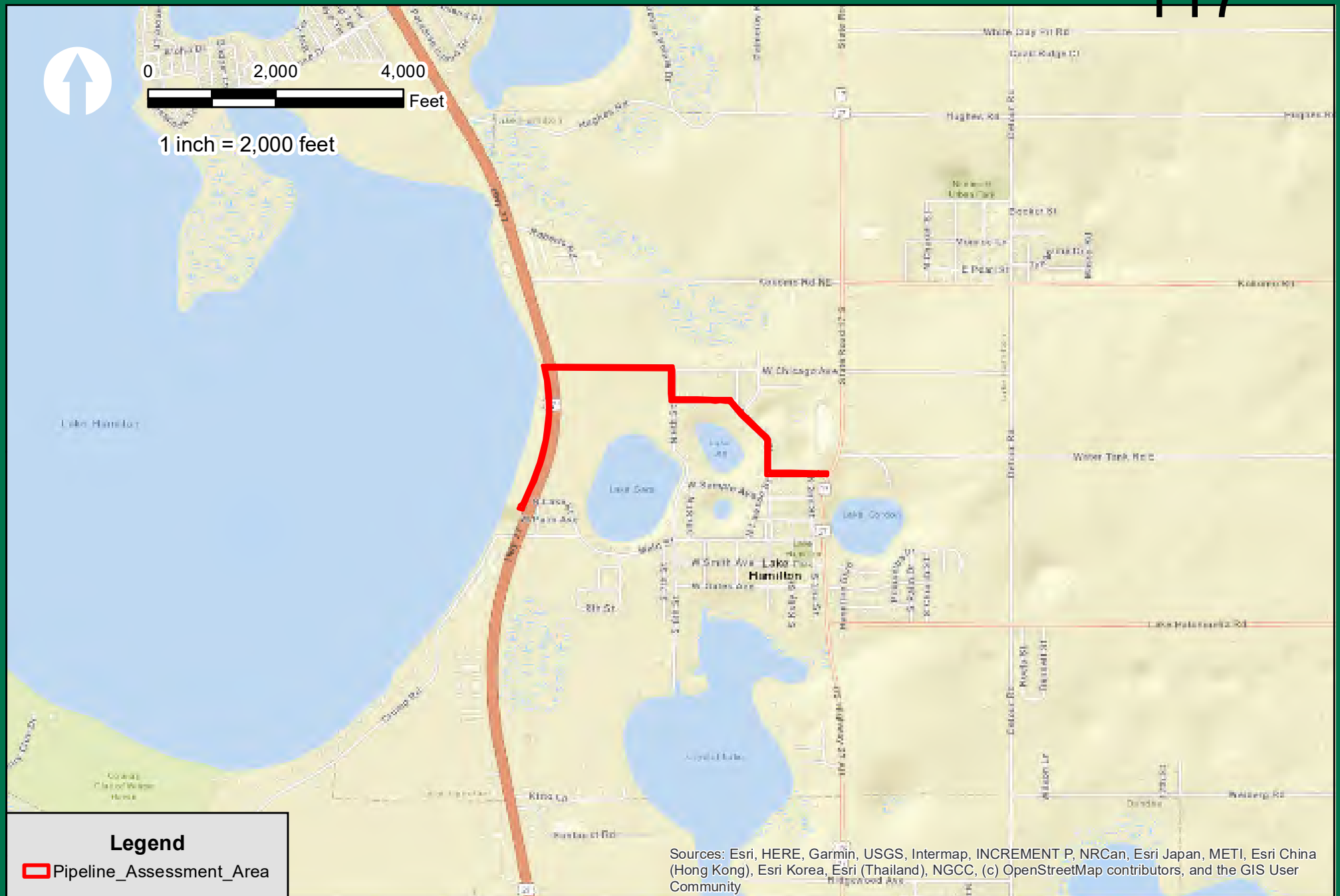


FLUCCS 800 : Transportation, Communication, and Utilities



FLUCCS 8172 : Water Pump

ATTACHMENTS

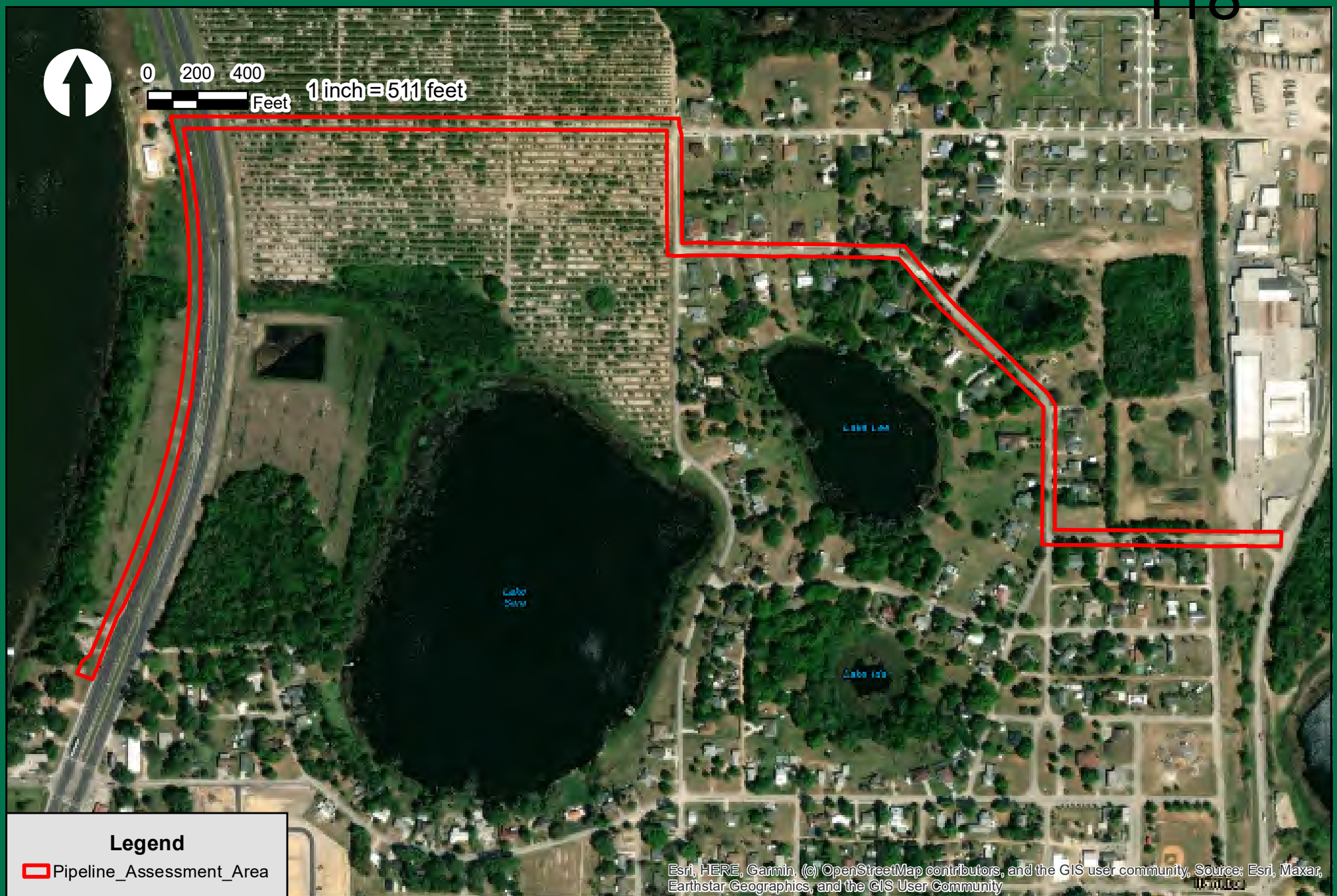


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LOCATION MAP

LAKHA23001

Polk County, FL

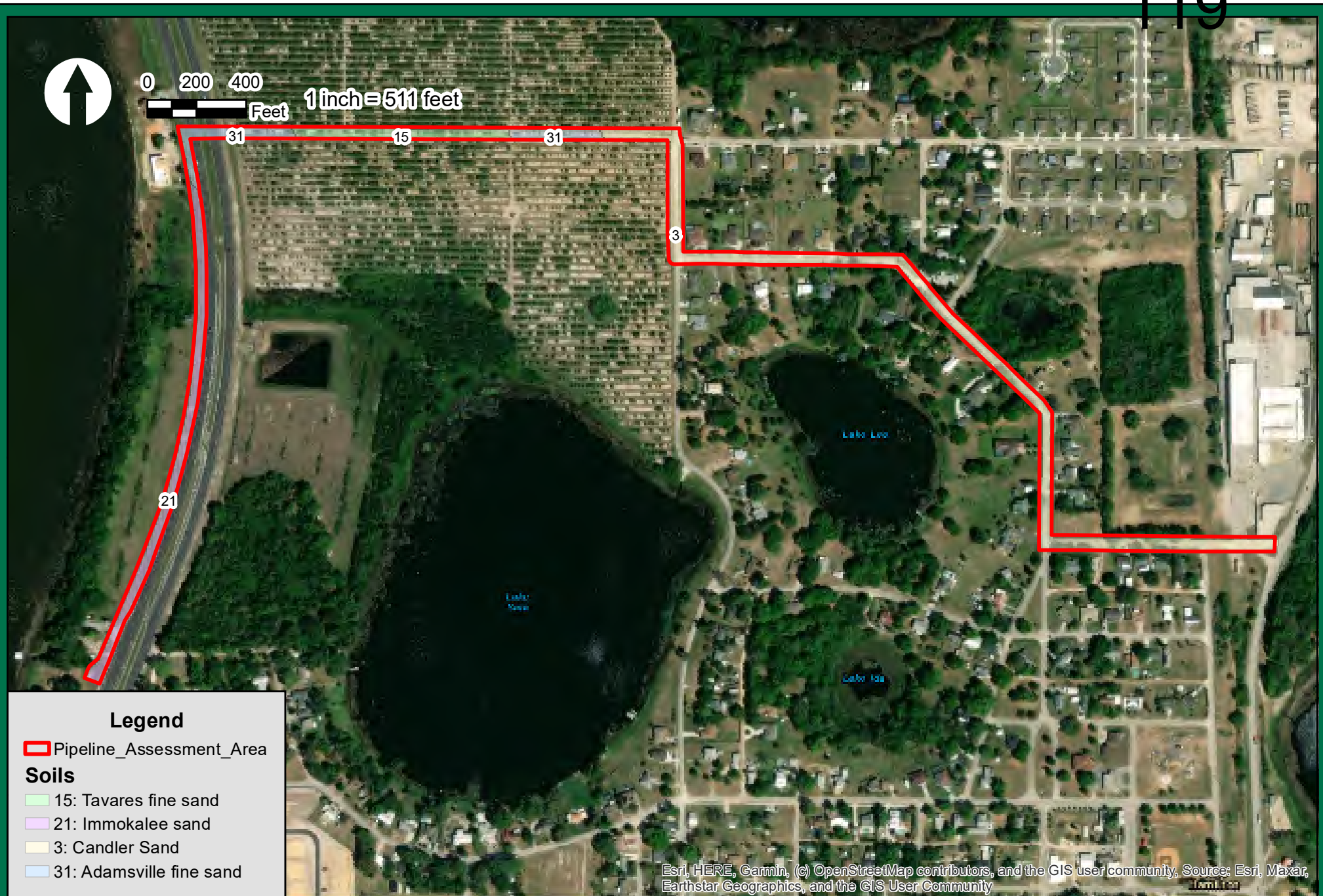


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AERIAL MAP

LAKHA23001

Polk County, FL

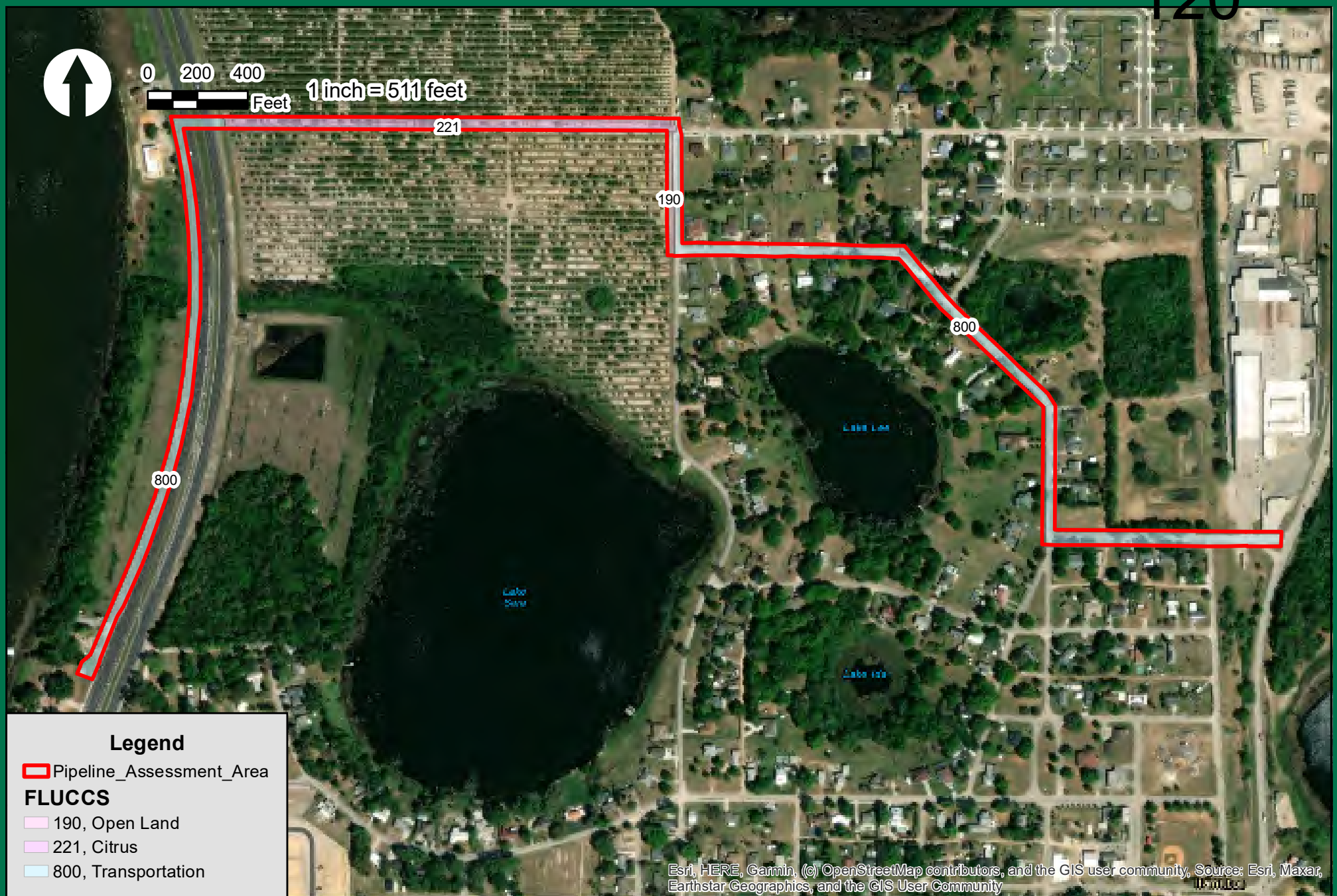


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SOILS MAP

LAKHA23001

Polk County, FL



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FLUCCS MAP

LAKHA23001

Polk County, FL



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WILDLIFE MAP

LAKHA23001

Polk County, FL

APPENDIX B

SOILS REPORT



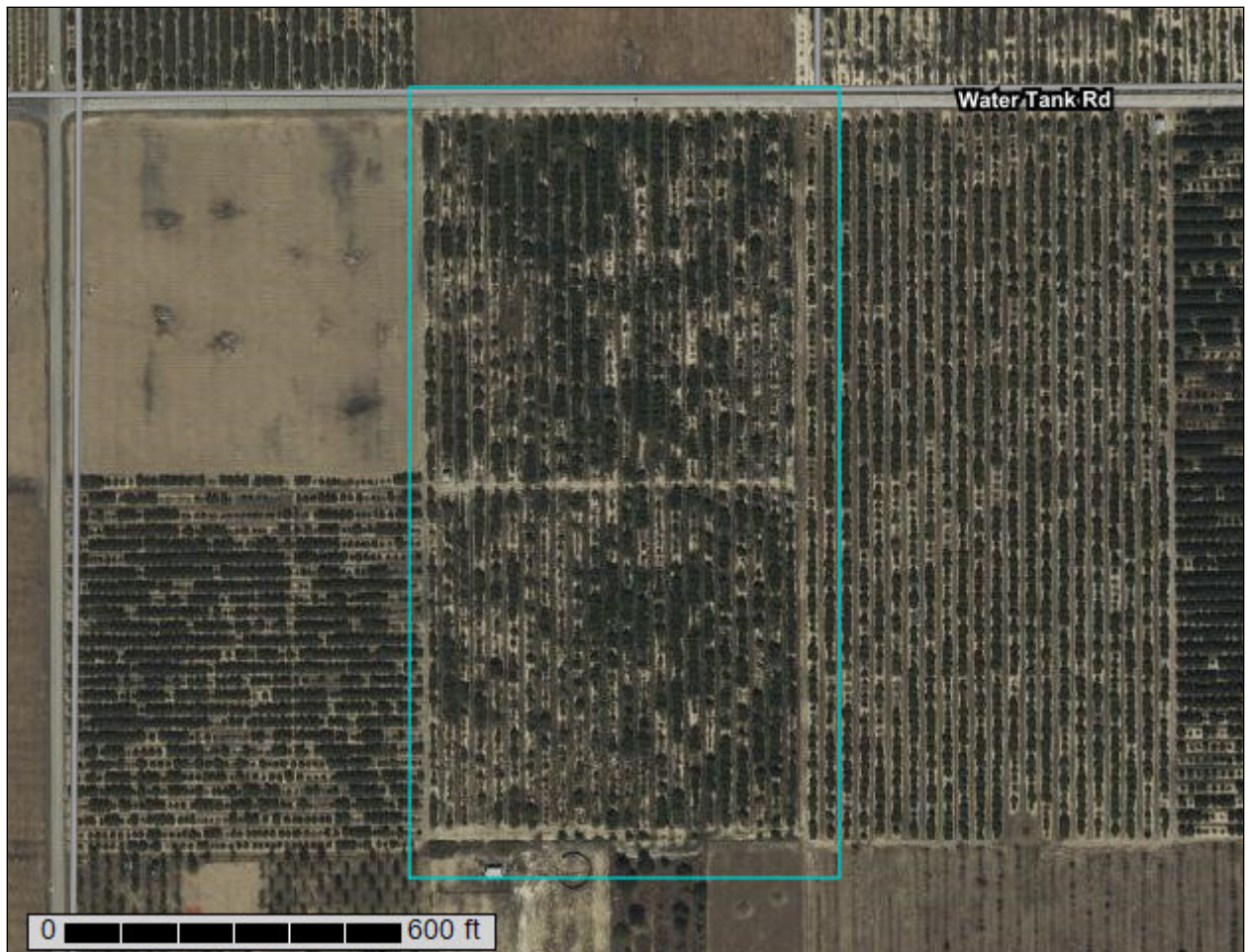
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Polk County, Florida**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.


Soil Map


The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report
Soil Map





Custom Soil Resource Report


MAP LEGEND**Area of Interest (AOI)**
 Area of Interest (AOI)
Soils
 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points
Special Point Features
 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot


 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry


 Miscellaneous Water


 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot



 Spoil Area


 Stony Spot

 Very Stony Spot

 Wet Spot



 Other

 Special Line Features
Water Features
 Streams and Canals
Transportation
 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads
Background
 Aerial Photography
MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Polk County, Florida
Survey Area Data: Version 21, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 6, 2022—Mar 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Candler sand, 0 to 5 percent slopes	24.8	100.0%
Totals for Area of Interest		24.8	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Polk County, Florida**3—Candler sand, 0 to 5 percent slopes****Map Unit Setting***National map unit symbol:* 2t3z1*Elevation:* 10 to 260 feet*Mean annual precipitation:* 47 to 56 inches*Mean annual air temperature:* 68 to 77 degrees F*Frost-free period:* 280 to 365 days*Farmland classification:* Farmland of unique importance**Map Unit Composition***Candler and similar soils:* 90 percent*Minor components:* 10 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Candler****Setting***Landform:* Knolls on marine terraces, ridges on marine terraces*Landform position (two-dimensional):* Backslope*Landform position (three-dimensional):* Side slope, interfluvium, tread*Down-slope shape:* Convex*Across-slope shape:* Convex*Parent material:* Eolian deposits and/or sandy and loamy marine deposits**Typical profile***A - 0 to 6 inches:* sand*E - 6 to 63 inches:* sand*E and Bt - 63 to 80 inches:* sand**Properties and qualities***Slope:* 0 to 5 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Excessively drained*Runoff class:* Negligible*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)*Depth to water table:* More than 80 inches*Frequency of flooding:* None*Frequency of ponding:* None*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 4.0*Available water supply, 0 to 60 inches:* Very low (about 2.5 inches)**Interpretive groups***Land capability classification (irrigated):* None specified*Land capability classification (nonirrigated):* 4s*Hydrologic Soil Group:* A*Forage suitability group:* Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)*Other vegetative classification:* Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL), Longleaf

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Pine-Turkey Oak Hills (R155XY002FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Minor Components**Tavares**

Percent of map unit: 5 percent
Landform: Ridges on marine terraces
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave, convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

Millhopper

Percent of map unit: 5 percent
Landform: Ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

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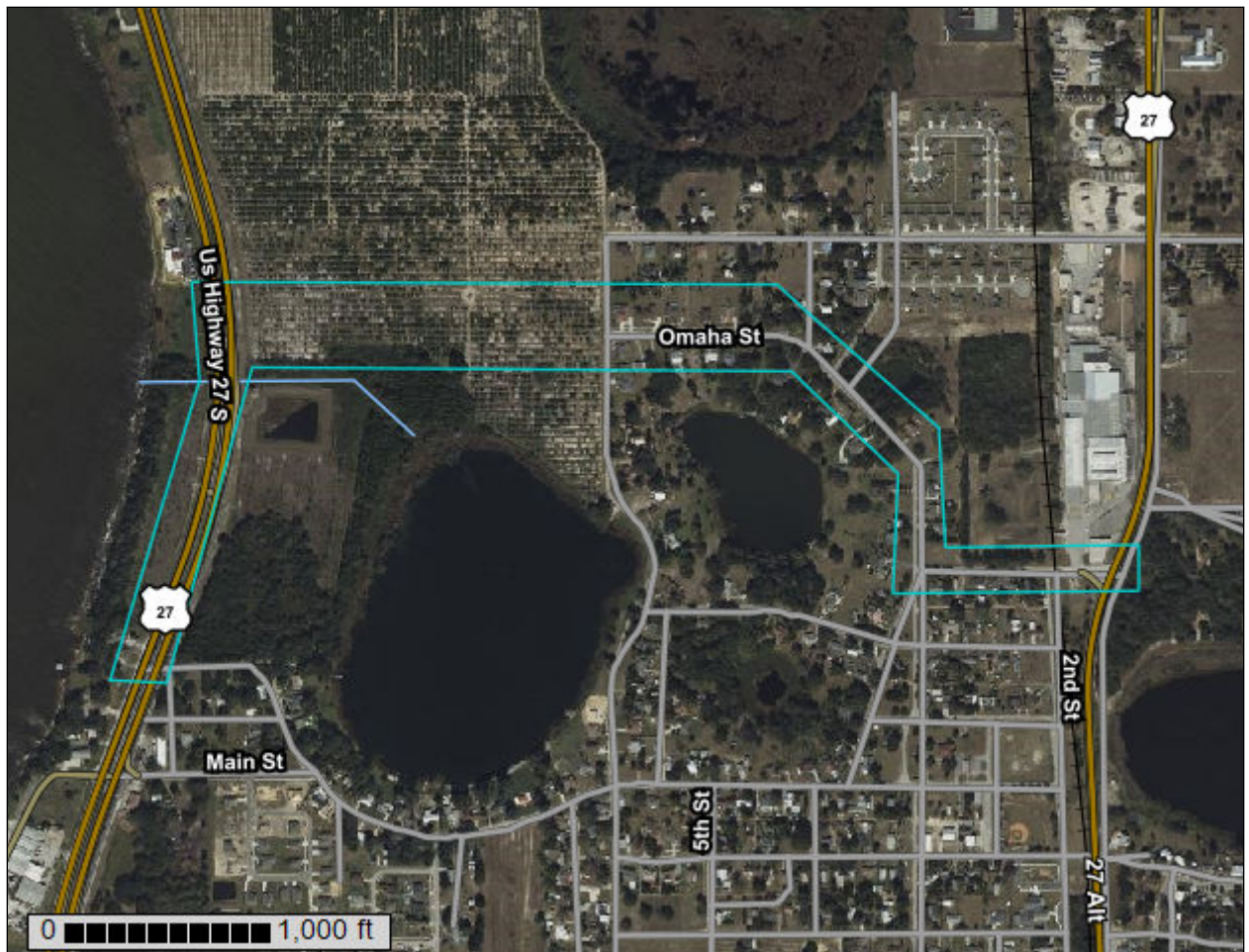
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for **Polk County, Florida**



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

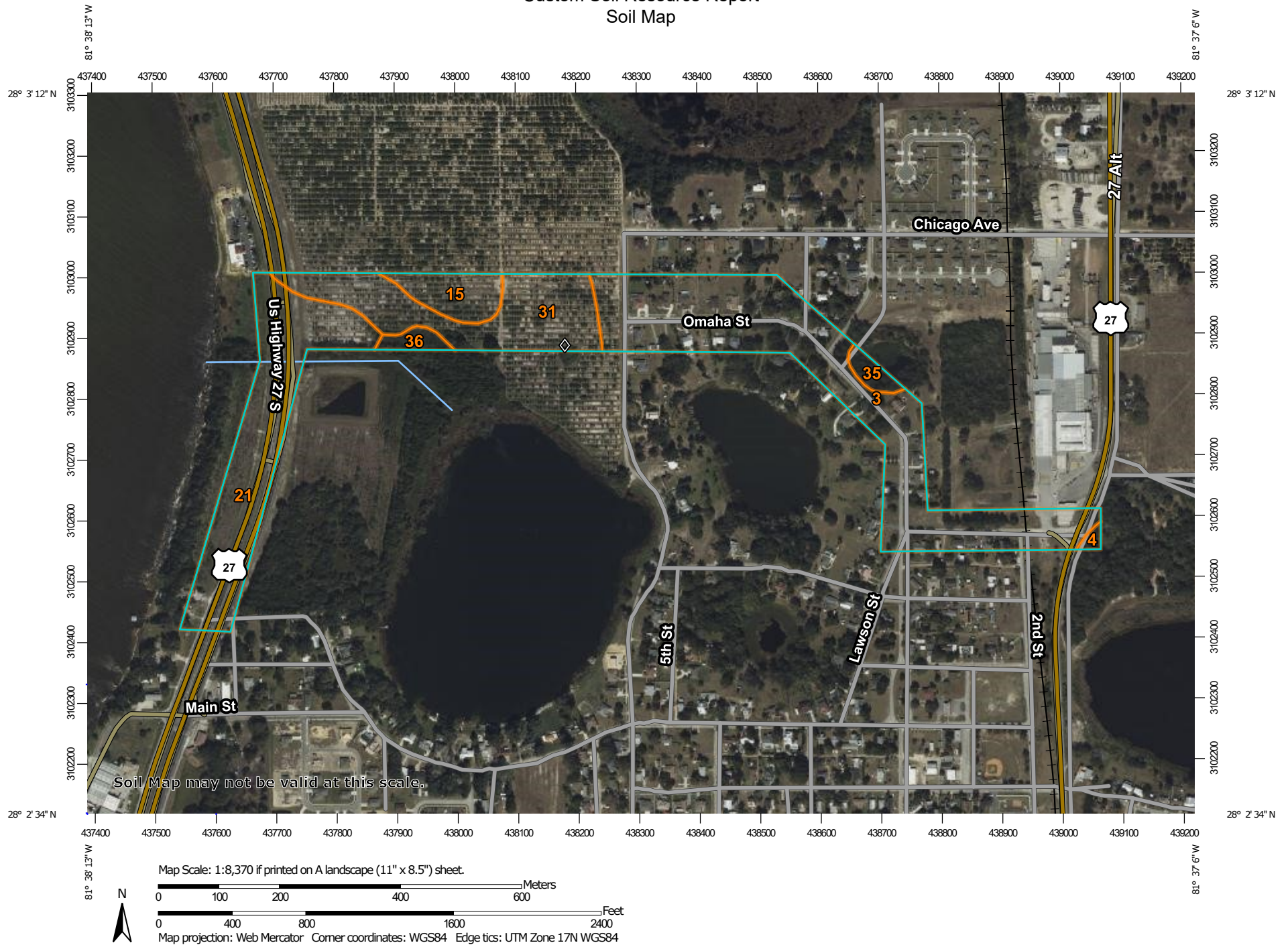
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report Soil Map



Custom Soil Resource Report


MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Polk County, Florida

Survey Area Data: Version 21, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 6, 2022—Mar 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	Candler sand, 0 to 5 percent slopes	22.7	45.0%
4	Candler sand, 5 to 8 percent slopes	0.3	0.5%
15	Tavares fine sand, 0 to 5 percent slopes	2.8	5.5%
21	Immokalee sand	13.3	26.3%
31	Adamsville fine sand, 0 to 2 percent slopes	9.8	19.3%
35	Hontoon muck, frequently ponded, 0 to 1 percent slopes	0.8	1.7%
36	Basinger mucky fine sand, frequently ponded, 0 to 1 percent slopes	0.8	1.7%
Totals for Area of Interest		50.5	100.0%

Map Unit Descriptions

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Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit

descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

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An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Polk County, Florida

3—Candler sand, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3z1
Elevation: 10 to 260 feet
Mean annual precipitation: 47 to 56 inches
Mean annual air temperature: 68 to 77 degrees F
Frost-free period: 280 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Candler and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Candler

Setting

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope, interfluvium, tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian deposits and/or sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: sand
E - 6 to 63 inches: sand
E and Bt - 63 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL), Longleaf

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Pine-Turkey Oak Hills (R155XY002FL), Sandy soils on ridges and dunes of xeric uplands (G155XB111FL)
Hydric soil rating: No

Minor Components**Tavares**

Percent of map unit: 5 percent
Landform: Ridges on marine terraces
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave, convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

Millhopper

Percent of map unit: 5 percent
Landform: Ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

4—Candler sand, 5 to 8 percent slopes**Map Unit Setting**

National map unit symbol: 1jttm
Elevation: 20 to 150 feet
Mean annual precipitation: 46 to 54 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Candler and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Candler**Setting**

Landform: Knolls on marine terraces, hillslopes on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex

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Parent material: Eolian deposits and/or sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: sand
E - 7 to 63 inches: sand
E and Bt - 63 to 80 inches: sand

Properties and qualities

Slope: 5 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Forage suitability group: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL)
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

Minor Components**Astatula**

Percent of map unit: 4 percent
Landform: Hills on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

Millhopper

Percent of map unit: 4 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL), Upland Hardwood Hammock (R154XY008FL)
Hydric soil rating: No

Apopka

Percent of map unit: 4 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve, side slope

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Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

Tavares

Percent of map unit: 3 percent
Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)
Hydric soil rating: No

15—Tavares fine sand, 0 to 5 percent slopes**Map Unit Setting**

National map unit symbol: 2w0pz
Elevation: 30 to 160 feet
Mean annual precipitation: 44 to 56 inches
Mean annual air temperature: 68 to 75 degrees F
Frost-free period: 290 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Tavares and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tavares**Setting**

Landform: Knolls on marine terraces, ridges on marine terraces
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve, side slope, tread, rise
Down-slope shape: Convex, linear
Across-slope shape: Linear
Parent material: Eolian or sandy marine deposits

Typical profile

A - 0 to 5 inches: fine sand
C - 5 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Negligible

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Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 42 to 60 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3s

Hydrologic Soil Group: A

Forage suitability group: Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

Other vegetative classification: Longleaf Pine-Turkey Oak Hills (R154XY002FL), Sandy soils on rises, knolls, and ridges of mesic uplands (G154XB121FL)

Hydric soil rating: No

Minor Components

Candler

Percent of map unit: 5 percent

Landform: Knolls on marine terraces, ridges on marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, tread

Down-slope shape: Linear, convex

Across-slope shape: Linear, convex, concave

Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)

Hydric soil rating: No

Apopka

Percent of map unit: 4 percent

Landform: Ridges on marine terraces, knolls on marine terraces

Landform position (two-dimensional): Summit, shoulder, footslope

Landform position (three-dimensional): Crest, side slope, nose slope

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on ridges and dunes of xeric uplands (G154XB111FL), Longleaf Pine-Turkey Oak Hills (R154XY002FL)

Hydric soil rating: No

Zolfo

Percent of map unit: 3 percent

Landform: Knolls on marine terraces, rises on marine terraces

Landform position (three-dimensional): Interfluve, rise

Down-slope shape: Convex, linear

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), North Florida Flatwoods (R154XY004FL)

Hydric soil rating: No

Narcoossee

Percent of map unit: 3 percent

Landform: Knolls on marine terraces, rises on marine terraces

Landform position (three-dimensional): Interfluve, rise

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Down-slope shape: Linear, convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G155XB131FL), Upland Hardwood Hammock (R154XY008FL)

Hydric soil rating: No

21—Immokalee sand

Map Unit Setting

National map unit symbol: 1jtv4

Elevation: 50 to 260 feet

Mean annual precipitation: 46 to 54 inches

Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Immokalee, non-hydric, and similar soils: 75 percent

Immokalee, hydric, and similar soils: 10 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Immokalee, Non-hydric

Setting

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: sand

E - 7 to 39 inches: sand

Bh - 39 to 58 inches: sand

E' - 58 to 66 inches: sand

B'h - 66 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 6 to 18 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

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Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)

Hydric soil rating: No

Description of Immokalee, Hydric**Setting**

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: sand

E - 7 to 39 inches: sand

Bh - 39 to 58 inches: sand

E' - 58 to 66 inches: sand

B'h - 66 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)

Hydric soil rating: Yes

Minor Components**Basinger***Percent of map unit:* 5 percent*Landform:* Drainageways on marine terraces*Landform position (three-dimensional):* Dip*Down-slope shape:* Linear*Across-slope shape:* Concave*Ecological site:* R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), Slough (R154XY011FL)*Hydric soil rating:* Yes**Smyrna, non-hydric***Percent of map unit:* 5 percent*Landform:* Flats on marine terraces*Landform position (three-dimensional):* Talf*Down-slope shape:* Convex*Across-slope shape:* Linear*Ecological site:* F155XY120FL - Sandy Flatwoods and Hammocks*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)*Hydric soil rating:* No**Myakka***Percent of map unit:* 5 percent*Landform:* Flatwoods on marine terraces*Landform position (three-dimensional):* Talf*Down-slope shape:* Convex*Across-slope shape:* Linear*Ecological site:* F155XY120FL - Sandy Flatwoods and Hammocks*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)*Hydric soil rating:* No**31—Adamsville fine sand, 0 to 2 percent slopes****Map Unit Setting***National map unit symbol:* 2r8h8*Elevation:* 10 to 100 feet*Mean annual precipitation:* 47 to 56 inches*Mean annual air temperature:* 68 to 75 degrees F*Frost-free period:* 290 to 365 days*Farmland classification:* Farmland of unique importance**Map Unit Composition***Adamsville and similar soils:* 95 percent*Minor components:* 5 percent

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Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adamsville**Setting**

Landform: Flats on marine terraces, rises on marine terraces

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve, talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

Ap - 0 to 7 inches: fine sand

C1 - 7 to 20 inches: fine sand

C2 - 20 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Somewhat poorly drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 18 to 42 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: A/D

Forage suitability group: Sandy soils on rises and knolls of mesic uplands (G154XB131FL), Sandy soils on rises and knolls of mesic uplands (G155XB131FL)

Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G154XB131FL), South Florida Flatwoods (R154XY003FL), Upland Hardwood Hammock (R155XY008FL), Sandy soils on rises and knolls of mesic uplands (G155XB131FL)

Hydric soil rating: No

Minor Components**Myakka**

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Tread, talf

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)

Hydric soil rating: No

Basinger*Percent of map unit:* 2 percent*Landform:* Drainageways*Landform position (three-dimensional):* Dip, talf*Down-slope shape:* Concave, linear*Across-slope shape:* Concave, convex*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Slough (R155XY011FL)*Hydric soil rating:* Yes**35—Hontoon muck, frequently ponded, 0 to 1 percent slopes****Map Unit Setting***National map unit symbol:* 2vbpq*Elevation:* 0 to 250 feet*Mean annual precipitation:* 43 to 63 inches*Mean annual air temperature:* 68 to 77 degrees F*Frost-free period:* 300 to 365 days*Farmland classification:* Not prime farmland**Map Unit Composition***Hontoon and similar soils:* 85 percent*Minor components:* 15 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Hontoon****Setting***Landform:* Depressions on marine terraces*Landform position (three-dimensional):* Tread, dip*Down-slope shape:* Concave*Across-slope shape:* Concave*Parent material:* Herbaceous organic material**Typical profile***Oa - 0 to 75 inches:* muck*AC - 75 to 80 inches:* sandy loam**Properties and qualities***Slope:* 0 to 1 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Very poorly drained*Runoff class:* Negligible*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)*Depth to water table:* About 0 inches*Frequency of flooding:* None*Frequency of ponding:* Frequent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 4.0

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Available water supply, 0 to 60 inches: Very high (about 23.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7w

Hydrologic Soil Group: A/D

Forage suitability group: Organic soils in depressions and on flood plains
(G154XB645FL)

Other vegetative classification: Organic soils in depressions and on flood plains
(G154XB645FL), Freshwater Marshes and Ponds (R154XY010FL)

Hydric soil rating: Yes

Minor Components**Samsula**

Percent of map unit: 5 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Organic soils in depressions and on flood plains
(G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Hontoon, drained

Percent of map unit: 5 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Organic soils in depressions and on flood plains
(G154XB645FL), Freshwater Marshes and Ponds (R154XY010FL)

Hydric soil rating: Yes

Placid

Percent of map unit: 3 percent

Landform: Drainageways on marine terraces, depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Sandy soils on stream terraces, flood plains, or in
depressions (G155XB145FL), Freshwater Marshes and Ponds
(R155XY010FL)

Hydric soil rating: Yes

Basinger

Percent of map unit: 2 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G155XB141FL)

Hydric soil rating: Yes

36—Basinger mucky fine sand, frequently ponded, 0 to 1 percent slopes**Map Unit Setting***National map unit symbol:* 2y9hl*Elevation:* 50 to 230 feet*Mean annual precipitation:* 45 to 55 inches*Mean annual air temperature:* 70 to 77 degrees F*Frost-free period:* 350 to 365 days*Farmland classification:* Not prime farmland**Map Unit Composition***Basinger and similar soils:* 85 percent*Minor components:* 15 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Basinger****Setting***Landform:* Depressions on marine terraces*Landform position (three-dimensional):* Dip, tal*Down-slope shape:* Concave, linear*Across-slope shape:* Concave, linear*Parent material:* Sandy marine deposits**Typical profile***A - 0 to 7 inches:* mucky fine sand*E - 7 to 19 inches:* fine sand*E/Bh - 19 to 39 inches:* fine sand*C - 39 to 80 inches:* fine sand**Properties and qualities***Slope:* 0 to 1 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Very poorly drained*Runoff class:* Negligible*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 20.00 in/hr)*Depth to water table:* About 0 inches*Frequency of flooding:* None*Frequency of ponding:* Frequent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 4.0*Available water supply, 0 to 60 inches:* Moderate (about 6.3 inches)**Interpretive groups***Land capability classification (irrigated):* None specified*Land capability classification (nonirrigated):* 7w*Hydrologic Soil Group:* A/D*Forage suitability group:* Sandy soils on stream terraces, flood plains, or in depressions (G154XB145FL)

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Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G154XB145FL), Freshwater Marshes and Ponds (R154XY010FL)
Hydric soil rating: Yes

Minor Components**Placid**

Percent of map unit: 4 percent
Landform: Depressions on marine terraces, drainageways on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Pompano

Percent of map unit: 4 percent
Landform: Drainageways on marine terraces, flats on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Linear
Across-slope shape: Concave, linear
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Slough (R155XY011FL)
Hydric soil rating: Yes

Samsula

Percent of map unit: 4 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

St. Johns

Percent of map unit: 3 percent
Landform: Depressions on marine terraces, flats on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear
Across-slope shape: Concave
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), South Florida Flatwoods (R155XY003FL)
Hydric soil rating: Yes

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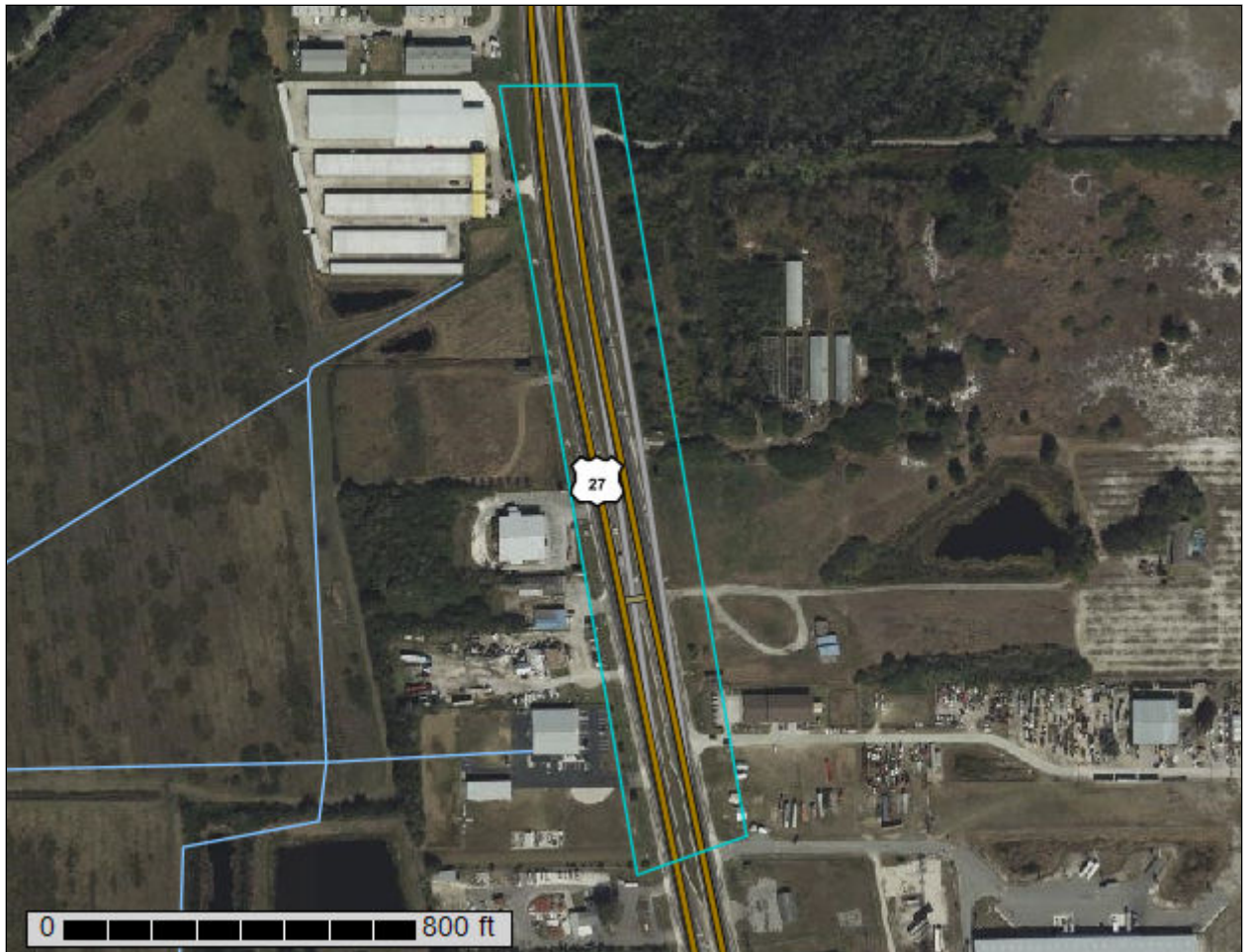
United States
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NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Polk County, Florida



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

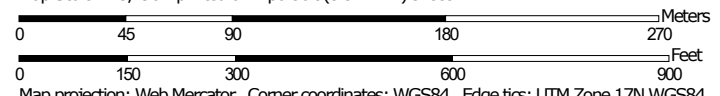
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

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Soil Map



Map Scale: 1:3,190 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

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MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)


Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot


 Closed Depression

 Gravel Pit


 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals


Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Polk County, Florida

Survey Area Data: Version 21, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 6, 2022—Mar 21, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
13	Samsula muck, frequently ponded, 0 to 1 percent slopes	0.2	1.6%
17	Smyrna and Myakka fine sands	4.8	45.7%
21	Immokalee sand	0.1	0.8%
33	Holopaw fine sand, frequently ponded, 0 to 1 percent slopes	5.2	48.9%
59	Arents-Urban land complex, 0 to 5 percent slopes	0.3	3.0%
Totals for Area of Interest		10.6	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Polk County, Florida**13—Samsula muck, frequently ponded, 0 to 1 percent slopes****Map Unit Setting***National map unit symbol:* 2tzw9*Elevation:* 0 to 250 feet*Mean annual precipitation:* 44 to 63 inches*Mean annual air temperature:* 68 to 77 degrees F*Frost-free period:* 335 to 365 days*Farmland classification:* Not prime farmland**Map Unit Composition***Samsula and similar soils:* 85 percent*Minor components:* 15 percent*Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Samsula****Setting***Landform:* Depressions on marine terraces*Landform position (three-dimensional):* Tread, dip*Down-slope shape:* Concave*Across-slope shape:* Concave*Parent material:* Herbaceous organic material over sandy marine deposits**Typical profile***Oa1 - 0 to 24 inches:* muck*Oa2 - 24 to 32 inches:* muck*Cg1 - 32 to 35 inches:* sand*Cg2 - 35 to 44 inches:* sand*Cg3 - 44 to 80 inches:* sand**Properties and qualities***Slope:* 0 to 1 percent*Depth to restrictive feature:* More than 80 inches*Drainage class:* Very poorly drained*Runoff class:* Negligible*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)*Depth to water table:* About 0 inches*Frequency of flooding:* None*Frequency of ponding:* Frequent*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*Sodium adsorption ratio, maximum:* 4.0*Available water supply, 0 to 60 inches:* Very high (about 13.9 inches)**Interpretive groups***Land capability classification (irrigated):* None specified*Land capability classification (nonirrigated):* 7w*Hydrologic Soil Group:* A/D*Ecological site:* R155XY100FL - Organic Freshwater Isolated Marshes and Swamps*Forage suitability group:* Organic soils in depressions and on flood plains (G155XB645FL)

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Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Minor Components**Myakka**

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Kaliga

Percent of map unit: 3 percent
Landform: Depressions on flatwoods on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: R155XY100FL - Organic Freshwater Isolated Marshes and Swamps
Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL), Freshwater Marshes and Ponds (R155XY010FL)
Hydric soil rating: Yes

Basinger

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL)
Hydric soil rating: Yes

Anclote

Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Convex, concave
Across-slope shape: Linear, concave
Ecological site: R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Hydric soil rating: Yes

Floridana

Percent of map unit: 2 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave, linear

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Across-slope shape: Concave, linear

Ecological site: R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps

Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)

Hydric soil rating: Yes

Sanibel

Percent of map unit: 2 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Linear, concave

Across-slope shape: Concave

Ecological site: R155XY100FL - Organic Freshwater Isolated Marshes and Swamps

Other vegetative classification: Organic soils in depressions and on flood plains (G155XB645FL)

Hydric soil rating: Yes

17—Smyrna and Myakka fine sands**Map Unit Setting**

National map unit symbol: 1jtv1

Elevation: 20 to 260 feet

Mean annual precipitation: 46 to 54 inches

Mean annual air temperature: 70 to 77 degrees F

Frost-free period: 350 to 365 days

Farmland classification: Not prime farmland

Map Unit Composition

Smyrna, non-hydric, and similar soils: 41 percent

Myakka and similar soils: 39 percent

Smyrna, hydric, and similar soils: 15 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Smyrna, Non-hydric**Setting**

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand

E - 4 to 12 inches: fine sand

Bh - 12 to 25 inches: fine sand

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E' - 25 to 42 inches: fine sand
B'h - 42 to 48 inches: fine sand
C - 48 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: No

Description of Myakka**Setting**

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: fine sand
E - 7 to 25 inches: fine sand
Bh - 25 to 36 inches: fine sand
C - 36 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: No

Description of Smyrna, Hydric**Setting**

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
E - 4 to 12 inches: fine sand
Bh - 12 to 25 inches: fine sand
E' - 25 to 42 inches: fine sand
B'h - 42 to 48 inches: fine sand
C - 48 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G154XB141FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: Yes

Minor Components**Basinger***Percent of map unit:* 2 percent*Landform:* Drainageways on marine terraces*Landform position (three-dimensional):* Dip*Down-slope shape:* Linear*Across-slope shape:* Concave*Ecological site:* R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), Slough (R154XY011FL)*Hydric soil rating:* Yes**Pomona, non-hydric***Percent of map unit:* 1 percent*Landform:* Flatwoods on marine terraces*Landform position (three-dimensional):* Talf*Down-slope shape:* Convex*Across-slope shape:* Linear*Ecological site:* F155XY120FL - Sandy Flatwoods and Hammocks*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)*Hydric soil rating:* No**Ona, non-hydric***Percent of map unit:* 1 percent*Landform:* Flats on marine terraces*Landform position (three-dimensional):* Talf*Down-slope shape:* Convex*Across-slope shape:* Linear*Ecological site:* F155XY120FL - Sandy Flatwoods and Hammocks*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)*Hydric soil rating:* No**Immokalee, non-hydric***Percent of map unit:* 1 percent*Landform:* Flatwoods on marine terraces*Landform position (three-dimensional):* Talf*Down-slope shape:* Convex*Across-slope shape:* Linear*Ecological site:* F155XY120FL - Sandy Flatwoods and Hammocks*Other vegetative classification:* Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)*Hydric soil rating:* No

21—Immokalee sand**Map Unit Setting***National map unit symbol: 1jtv4**Elevation: 50 to 260 feet**Mean annual precipitation: 46 to 54 inches**Mean annual air temperature: 70 to 77 degrees F**Frost-free period: 350 to 365 days**Farmland classification: Not prime farmland***Map Unit Composition***Immokalee, non-hydric, and similar soils: 75 percent**Immokalee, hydric, and similar soils: 10 percent**Minor components: 15 percent**Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Immokalee, Non-hydric****Setting***Landform: Flatwoods on marine terraces**Landform position (three-dimensional): Talf**Down-slope shape: Convex**Across-slope shape: Linear**Parent material: Sandy marine deposits***Typical profile***A - 0 to 7 inches: sand**E - 7 to 39 inches: sand**Bh - 39 to 58 inches: sand**E' - 58 to 66 inches: sand**B'h - 66 to 80 inches: sand***Properties and qualities***Slope: 0 to 2 percent**Depth to restrictive feature: More than 80 inches**Drainage class: Poorly drained**Runoff class: High**Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)**Depth to water table: About 6 to 18 inches**Frequency of flooding: None**Frequency of ponding: None**Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)**Sodium adsorption ratio, maximum: 4.0**Available water supply, 0 to 60 inches: Low (about 5.3 inches)*

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)

Hydric soil rating: No

Description of Immokalee, Hydric**Setting**

Landform: Flats on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Concave

Across-slope shape: Linear

Parent material: Sandy marine deposits

Typical profile

A - 0 to 7 inches: sand

E - 7 to 39 inches: sand

Bh - 39 to 58 inches: sand

E' - 58 to 66 inches: sand

B'h - 66 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Poorly drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: About 0 to 12 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 4.0

Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: B/D

Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks

Forage suitability group: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
(G154XB141FL), South Florida Flatwoods (R154XY003FL)

Hydric soil rating: Yes

Minor Components**Basinger**

Percent of map unit: 5 percent

Custom Soil Resource Report

Landform: Drainageways on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
 (G154XB141FL), Slough (R154XY011FL)
Hydric soil rating: Yes

Smyrna, non-hydric

Percent of map unit: 5 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
 (G154XB141FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: No

Myakka

Percent of map unit: 5 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands
 (G154XB141FL), South Florida Flatwoods (R154XY003FL)
Hydric soil rating: No

33—Holopaw fine sand, frequently ponded, 0 to 1 percent slopes**Map Unit Setting**

National map unit symbol: 2x9g8
Elevation: 0 to 190 feet
Mean annual precipitation: 46 to 63 inches
Mean annual air temperature: 68 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Holopaw and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Holopaw**Setting**

Landform: Depressions on marine terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Linear, concave
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
Eg - 4 to 50 inches: fine sand
Btg - 50 to 66 inches: fine sandy loam
Cg - 66 to 80 inches: loamy fine sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 4 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Ecological site: R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps
Forage suitability group: Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Other vegetative classification: Freshwater Marshes and Ponds (R155XY010FL), Sandy soils on stream terraces, flood plains, or in depressions (G155XB145FL)
Hydric soil rating: Yes

Minor Components**Basinger**

Percent of map unit: 6 percent
Landform: Drainageways on marine terraces, flats on marine terraces
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Concave, convex
Across-slope shape: Linear, concave
Ecological site: R155XY070FL - Sandy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G155XB141FL), Slough (R155XY011FL)
Hydric soil rating: Yes

Riviera*Percent of map unit:* 4 percent*Landform:* Depressions on marine terraces*Landform position (three-dimensional):* Tread, dip*Down-slope shape:* Concave*Across-slope shape:* Concave*Ecological site:* R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps*Other vegetative classification:* Freshwater Marshes and Ponds (R155XY010FL), Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL)*Hydric soil rating:* Yes**Floridana***Percent of map unit:* 3 percent*Landform:* Depressions on marine terraces*Landform position (three-dimensional):* Tread, dip*Down-slope shape:* Concave*Across-slope shape:* Linear, concave*Ecological site:* R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps*Other vegetative classification:* Sandy over loamy soils on stream terraces, flood plains, or in depressions (G155XB245FL), Freshwater Marshes and Ponds (R155XY010FL)*Hydric soil rating:* Yes**Manatee***Percent of map unit:* 2 percent*Landform:* Depressions on marine terraces*Landform position (three-dimensional):* Tread, dip*Down-slope shape:* Concave*Across-slope shape:* Linear, concave*Ecological site:* R155XY090FL - Loamy and Clayey Freshwater Isolated Marshes and Swamps*Other vegetative classification:* Loamy and clayey soils on stream terraces, flood plains, or in depressions (G155XB345FL), Freshwater Marshes and Ponds (R155XY010FL)*Hydric soil rating:* Yes**59—Arents-Urban land complex, 0 to 5 percent slopes****Map Unit Setting***National map unit symbol:* 1jtw7*Elevation:* 50 to 210 feet*Mean annual precipitation:* 46 to 54 inches*Mean annual air temperature:* 70 to 77 degrees F*Frost-free period:* 350 to 365 days*Farmland classification:* Not prime farmland

Map Unit Composition*Arents and similar soils: 55 percent**Urban land: 45 percent**Estimates are based on observations, descriptions, and transects of the mapunit.***Description of Arents****Setting***Landform: Rises on marine terraces**Landform position (three-dimensional): Rise**Down-slope shape: Convex**Across-slope shape: Linear**Parent material: Altered marine deposits***Typical profile***C - 0 to 80 inches: sand***Properties and qualities***Slope: 0 to 5 percent**Depth to restrictive feature: More than 80 inches**Drainage class: Somewhat poorly drained**Runoff class: Negligible**Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)**Depth to water table: About 18 to 36 inches**Frequency of flooding: None**Frequency of ponding: None**Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)**Sodium adsorption ratio, maximum: 4.0**Available water supply, 0 to 60 inches: Very low (about 3.0 inches)***Interpretive groups***Land capability classification (irrigated): None specified**Land capability classification (nonirrigated): 6s**Hydrologic Soil Group: A**Forage suitability group: Forage suitability group not assigned (G154XB999FL)**Other vegetative classification: Forage suitability group not assigned (G154XB999FL)**Hydric soil rating: No***Description of Urban Land****Setting***Landform: Marine terraces**Landform position (three-dimensional): Interfluve, tal**Down-slope shape: Linear**Across-slope shape: Linear**Parent material: No parent material***Interpretive groups***Land capability classification (irrigated): None specified**Forage suitability group: Forage suitability group not assigned (G154XB999FL)**Other vegetative classification: Forage suitability group not assigned (G154XB999FL)**Hydric soil rating: Unranked*

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APPENDIX C

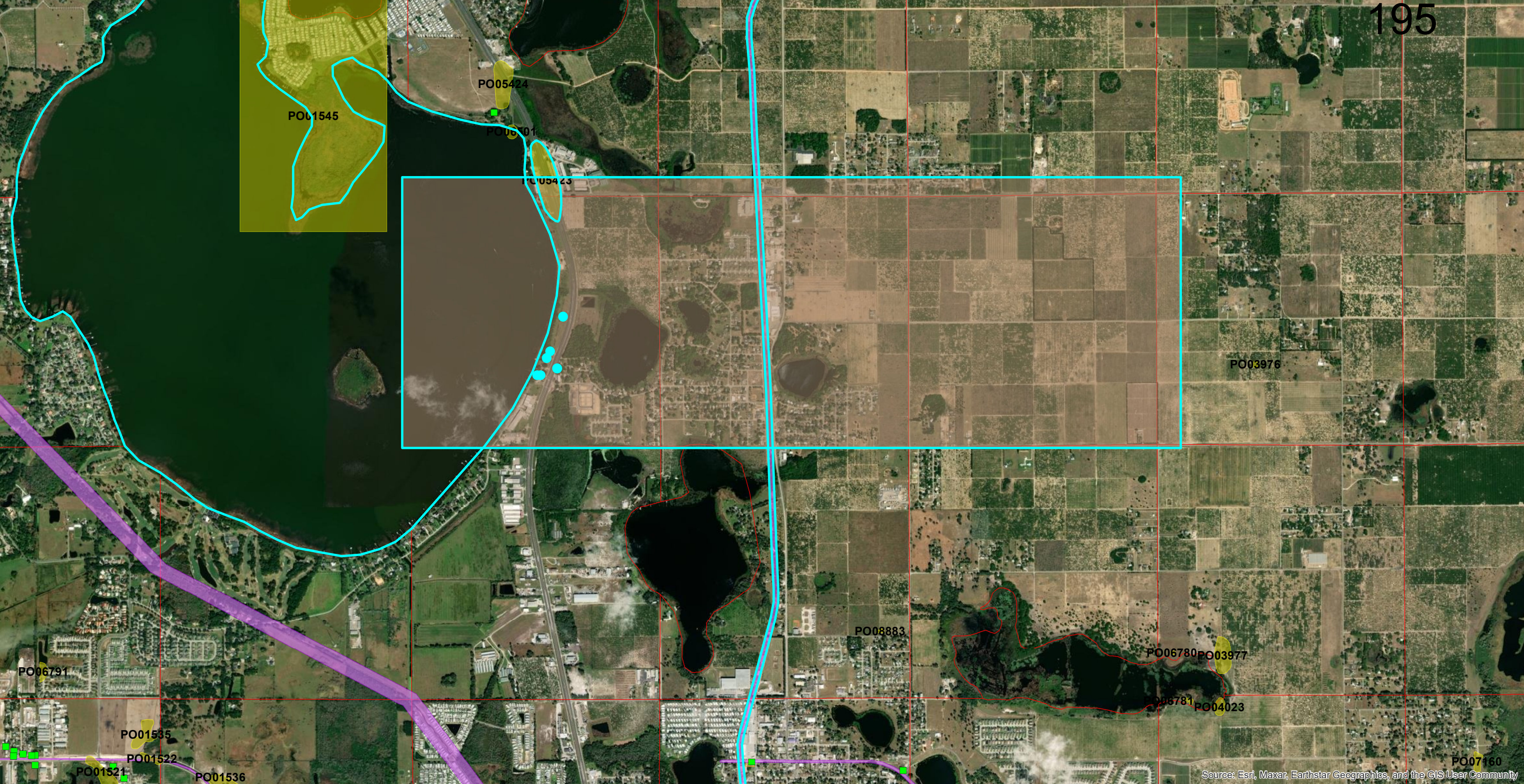
HISTORICAL AND ARCHEOLOGICAL SURVEY



AR=1
SS=6
CM=0
RG=1
BR=0
Total=8

Cultural Resource Roster

SiteID	Type	Site Name	Address	Additional Info	SHPO Eval	NR Status
PO05392	SS	JOHN WARD'S CUSTOM PAINTING (A)	72 US 27, LAKE HAMILTON	c1945 Frame Vernacular	Not Eligible	
PO05393	SS	JOHN WARD'S CUSTOM PAINTING (B)	72 US 27, LAKE HAMILTON	c1945 Frame Vernacular	Not Eligible	
PO05394	SS	36 W PALM AVENUE	36 W PALM AVE, LAKE HAMILTON	c1935 Frame Vernacular	Not Eligible	
PO05395	SS	AQUA MANIA RESIDENTIAL BUILDING	104 US 27, LAKE HAMILTON	c1930 Frame Vernacular	Not Eligible	
PO05396	SS	AQUA MANIA COMMERCIAL BUILDING	104 US 27, LAKE HAMILTON	c1945 Frame Vernacular	Not Eligible	
PO05397	SS	GROVE STORE	NONE US 27, LAKE HAMILTON	c1930 Frame Vernacular	Not Eligible	
PO05423	AR	LAKE HAMILTON 1	HAINES CITY		Not Eligible	
PO06512	RG	RAILROAD BED	Haines City	Linear Resource	Not Eligible	



PO01545

PO05424

PO05423

PO03976

PO08883

PO06780 PO03977

PO04023

PO07160

PO06791

PO01535

PO01522

PO01521

PO01536

APPENDIX D

CAPITAL FINANCING PLAN

**To be provided and
inserted prior to
Hearing**

APPENDIX E

PUBLIC NOTICE RECORD AND PUBLIC HEARING SUMMARY



Town of Lake Hamilton
Town Council
March 5, 2024, Regular Town Meeting
Agenda Summary Report

TO: Lake Hamilton Town Council

FROM: Michael W. Kehoe, Mayor

AGENDA ITEM: New Town Administrator Search

DATE: February 26, 2024

SUMMARY: The Mayor will discuss with the Town Council, the process moving forward in the search for a New Town Administrator

CONSENT AGENDA ☐ **OLD BUSINESS** ☐ **NEW BUSINESS** ☐

ATTORNEY REVIEW: YES: ☐ NO: ☐ N/A: ☐

FINANCIAL IMPACT: YES: ☐ NO: ☐ If Yes, Please Explain:

RECOMMENDATION: None

ATTACHMENTS: None