

PHASE 2 WWTF -AND- TRANSMISSION SYSTEM FACILITIES PLAN PRESENTATION

FOR



Town of Lake Hamilton



January 9, 2024

PROJECT BACKGROUND

Project Scope:

Phase 2 WWTF: Redundancy and other improvements eliminated from Phase 1 Project;

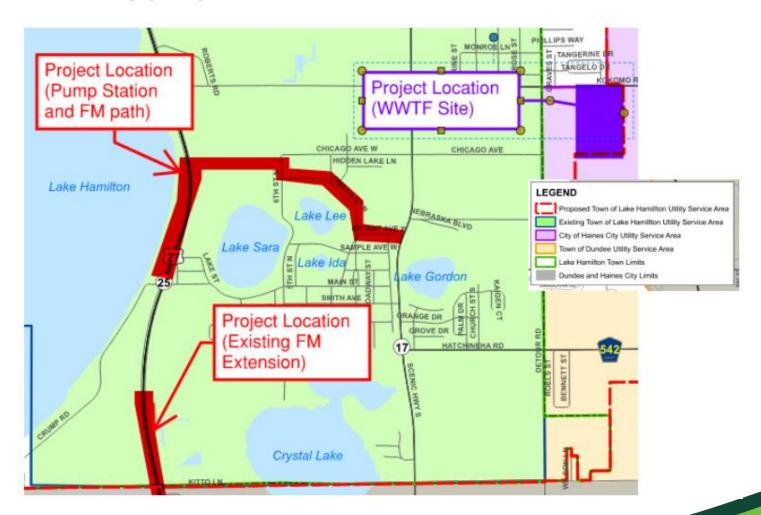
Transmission System: Pump station/force main improvements to direct wastewater from US 27 corridor to WWTF

Proposed Funding: FDEP State Revolving Fund (SRF) - \$9,057,633 (grant/loan)

Facilities Plan: December 23, 2023



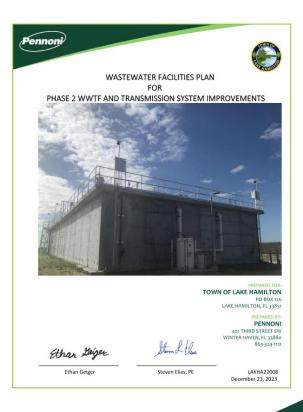
PROJECT AREA





FACILITIES PLAN OVERVIEW

- Requirement to obtain FDEP SRF funding
- Establish need for project
- Alternatives analysis
- Description of selected alternative
- Environmental review
- Capital Financing Plan
- Public Hearing for adoption by Town Council





ALTERNATIVES ANALYSIS

- Alternative 1: No Action
- Alternative 2: Phase 2 WWTF Resiliency Improvements (0.5 MGD) and Pump Station & Force Main to Town WWTF
- Alternative 3: Phase 2 WWTF Resiliency and Reuse Improvements (0.5 MGD) and Pump Station & Force Main to Town WWTF





COST ANALYSIS

Opinion of Probable Construction Cost (Present Worth):

- Alternative 2: Phase 2 WWTF resiliency improvements (0.5 MGD) and pump station & force main to Town WWTF:
 - Capital Cost: \$9.058 million
 - Present Worth Cost (20 year): \$8.633 million
- Alternative 3: Phase 2 WWTF resiliency and reuse improvements (0.5 MGD) and pump station & force main to Town WWTF
 - Capital Cost: \$16.225 million
 - Present Worth Cost (20 year): \$13.863 million



SELECTED ALTERNATIVE

Phase 2 WWTF (0.5 MGD) Resiliency Improvements:

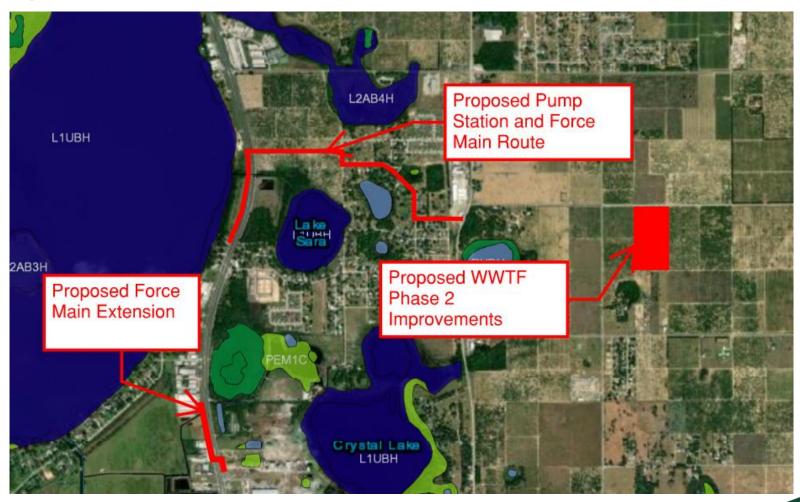
- Elevated Headworks (grit and mechanical screen;
- Surge tank;
- Additional treatment train; and
- Operations building.

Pump Station and Force Main:

- Master pumping station upgrade (15 Hp to 50 Hp);
- Redirect US 27 commercial customer flows;
- 5,700 ft. large force main (6" and 8"); and
- 1,717 ft. small force main (3").



SELECTED ALTERNATIVE





ENVIRONMENTAL REVIEW

- Performed per FDEP SRF requirements
- Pipelines to be constructed in previously disturbed public R/W and an open field
- WWTF improvements to be constructed on existing Townowned WWTF site
- WWTF Environmental assessments previously performed (Town-owned 19.7 acre site):
 - State Clearinghouse review
 - Minimal potential impacts (sand skinks outside project area)
- No environmental issues discovered that are anticipated to affect construction of Project



CAPITAL FINANCING PLAN

- Required attachment to Facilities Plan
- Summarizes financial plan for Project
- Ability to pay loan analysis



FINANCIAL PLAN - PROJECT COSTS

Total Estimated Capital Cost: \$9,057,633

• Funding (estimated): 80% grant: **\$7,246,106***

20% loan: **\$1,811,527**

Loan Terms:
20 year loan

• Payment Schedule (base): \$96,355/year*

Designated funding sources:
 Biannual payments
 Utility Enterprise funds

Utility Impact fees

NOTE: * A portion of total capital cost could be determined to not be grant eligible (growth infrastructure %, segment cap limitations, etc.)



NEXT STEPS

- ullet Dec. 2023 Facilities Plan, Plans, Specifications and RFI Submitted ullet
- 1/9/24 Town Council Adopt Facilities Plan (via Resolution)
- 2/14/24 SRF Hearing Funding Approval
- 6/1/24 SRF Funding Agreement Executed
- 8/15/24 Bid/Construct Project (~16 month construction)



QUESTIONS?



