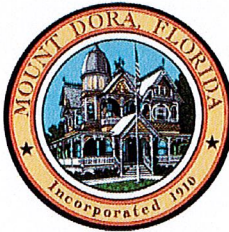


**CITY OF
MOUNT DORA, FLORIDA
CITY COUNCIL
WORK SESSION
MINUTES**



**March 13, 2023
City Hall
510 N. Baker St.
Mount Dora, FL 32757**

CALL TO ORDER

Having been duly advertised as required by law, Mayor Crissy Stile called the Work Session of City Council to order at 5:00 p.m. in the Mount Dora City Hall Council Chambers.

MOMENT OF SILENCE & PLEDGE OF ALLEGIANCE

A Moment of Silence and Pledge of Allegiance to the Flag was led by Councilmember Dawson.

ROLL CALL

Members Present

Councilmember Cataldo
Councilmember Rolfson
Councilmember Dawson
Councilmember Walker
Councilmember Bryant
Vice-mayor Crail
Mayor Stile

Presenters

Scott Breitenstein, Vice President and
Associate, CPH Engineering
Casie Brown, Professional Engineer,
CPH Engineering
William Marshall, Senior Manager,
Wharton Smith, Inc.
Drew Gumieny, Project Executive,
Wharton Smith, Inc.

Also Present

Patrick C. Comiskey, City Manager
Aneta Barton, Budget Director
Chet Cramer, Construction Project Manager
Jeanann Hand, City Clerk
James Klein, Chief Water Treatment Plant Operator
Josh Kramm, Water/Waste Water Utility Manager
Merry Lovern, Executive Assistant to the City
Manager
George Marek, Director of Public Works
Vince Sandersfeld, Director of Planning
Richard Shepherd, Chief Waste Water Treatment
Plant Operator

DISCUSSION ITEMS

1.1. Options for Waste Water Treatment Plant (WWTP) #1 Rehabilitation

City Manager Comiskey described the current conditions with two sewer plants experiencing different issues. He mentioned considerations of financing, permits, and required standards of operation. He reviewed work and planning that had taken place under staff no longer employed by the city. He explained no decision would be made at this meeting, and that the meeting was for discussion purposes only.

Mr. Breitenstein presented a PowerPoint (attached to the minutes as Exhibit A) containing information on WWTP #1, reviewing the history of CPH and Wharton Smith (Construction Manager at Risk)s' contributions at the plant and their proposed improvements.

The plant currently has an operating permit and has applied for permit renewal. A number of components are at the end of their useful life. Loans and funding through the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) Loan and the Saint John's River Water Management District (SJRWMD) were explored for this project, but certain performance measurements at the plant did not qualify for that funding. CPH spoke of the ways their proposal would provide environmental and economic benefit to the city. Mr. Breitenstein mentioned the advantages of a Biological Nutrient Removal (BRN) process.

A slide was presented showing an overhead photo of the plant with numbers on the photo indicating areas of the plant listed below the photo. Proposed elements of the project were divided into three categories, prioritizing them as Must Haves, Should Haves, and Nice to Haves. All items need to be accomplished at some point. Mr. Breitenstein described the purpose of each item on the category lists and how each was evaluated to be placed in its category. Must Haves are an upgrade to the Supervisory Control and Data Acquisition (SCADA) monitoring; improvements for treatment redundancy; installation of a new clarifier to function as an aeration treatment basin during the project, and afterward to serve as an upgrade to the existing clarifiers; replacement of the travel and bridge filters; and adjustment of the sampling location to comply with FDEP requirements. The Should Haves comprise a generator upgrade and sludge dewatering improvement. The Nice to Haves comprise rehabilitating existing clarifiers to be reused, replacing pond liners, and obtaining a new influent screen.

Mr. Breitenstein presented a proposed improvement site plan. He pointed out the oxidation tank CPH plans to have refurbished and repurposed for BNR treatment, and the new clarifier. Mr. Comiskey confirmed the large tank is to be used temporarily while the oxidation ditch is converted into two units. Once the tank is converted for BNR, the existing clarifiers would keep the plant functioning. BNR could take place without a new clarifier. The 24 million dollars available for this project would fund all of the Must Haves and the generator in the Should Have list, but not the remaining items. Methods of funding past the 24 million were explored.

Mr. Marshall from Wharton Smith described their role in the project and what they have done to date. He explained their process for arriving at a Guaranteed Maximum Price.

Councilmember Bryant requested a glossary of terms common to the industry for future similar meetings. Information about pond liners was shared. Timelines of usability were estimated. The attainment, nature, and terms of the FDEP loan were clarified.

Councilmembers discussed with staff and presenters reasons for capacity decisions, environmental benefits related to unused reclaimed water, conversion of homes from septic to sewer, the inability of the city to receive loan forgiveness because of median home income, and the necessity and prioritizing of proposed feature improvements. The escalation of FDEP standards for an upgraded facility was noted.

City staff then presented Option B (attached to the minutes as Exhibit B) describing a second plan for addressing the rehabilitation of WWTP #1, which began with staff's assessment of specific conditions at the plant.

Ms. Barton spoke about the history of consultants and upgrades at the plant. With information supplied by staff, Council weighed factors to help them determine the better option for the city. Considerations included timing, costs, and funding. Option B will allow the city more control over the timeline of the project, which will provide more flexibility for funding other projects that might be necessary, including imminent work at WWTP #2.

The effect on taxpayers resulting from funding the project was mentioned, as was new development impact fees. Council discussed with staff the purposes of past waste water spending, and possible variations of the options presented. When making this decision, the city must consider other waste water spending needs, including ongoing maintenance to ensure well-functioning plants and systems in the future. Staff answered questions about comparisons between rehabilitated and new elements.

Staff is still working with the FDEP to determine true sources of odor in the area of WWTP #2. New technology at WWTP #1 would address odor remediation. Water quality in the city is good.

There is a possibility the reclaimed water clients not within the city may become clients of Apopka/Orange County, which would lower the city's FDEP reclaim requirements. The same possibility exists for service to Sorrento. It would be more advantageous to the city for Sorrento to be served by Apopka.

Option B would not involve the SJRWMD grant or the FDEP loan, although a different loan could be sought. Cost effect on taxpayers was further considered. Staff would provide more detailed information on the topic, showing impacts from both options. Insurance and warranty possibilities were explored.

Heightened permitting and chemical requirements would be needed if Option A were chosen. WWTP #1 would continue to be FDEP compliant under Option B. Staff recommends Option B. Council would like to see the liner in the perc ponds prioritized if Option B is chosen.

There is a possibility the city will be under a consent order for WWTP #2. Staff is working with Kimley-Horn on the counter proposal. Mr. Comiskey spoke about other nearby sources of odor. The city is endeavoring to reduce its gases in order to demonstrate to the FDEP that WWTP #2 is not the cause for the odor complaints.

Vice-mayor Crail asserted the actual source causing odor complaints in the area needs to be confirmed before the city devotes additional spending to odor remediation at WWTP #2, and that the other possible sources contributing to odor complaints in the area need to contribute to solutions as well. Staff is working toward that end, but must satisfy the FDEP in the process.

City staff will present further information on the impact of funding Option A, including the resulting debt ratio. The city must be prepared to fund other projects that may appear with urgency.

This item will be put to a vote at the April 18th Council meeting. Council requested further specific information, including a loading data table, the effect of either option on the overall wastewater plan for the city, and cost projections.

2 Running Utility Lines to Sorrento

Mr. Comiskey explained the reason supplying utility lines to Sorrento was considered in the past, and whether this was still of benefit to the city. The city's priority is serving the city and the areas in the Joint Planning Agreement. This item may come up on a future agenda if more requests are made for utility lines.

3. Update on Waste Water Treatment Plant #2

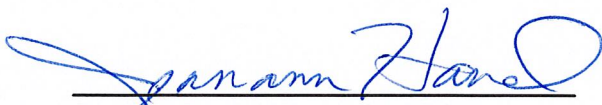
This item was addressed during the discussion of item one.

**MOTION BY COUNCILMEMBER ROLFSON TO ADJOURN;
COUNCILMEMBER WALKER SECONDED THE MOTION. MOTION APPROVED
BY A UNANIMOUS VOICE VOTE.**

There being no further business for discussion, the meeting adjourned at approximately 7:38 p.m.



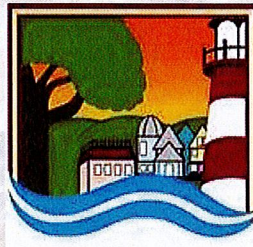
CRISSY STILE, MAYOR
City of Mount Dora



JEANANN HAND, CITY CLERK
City of Mount Dora

Mt. Dora City Council Work Session WWTF #1 Improvements

Monday, March 13th, 2023



CITY OF
MOUNT
D O R A



Project History



- CPH, LLC. Was awarded Design and Permitting services August 20, 2019, with Resolution No. 2019-110.
- Wharton-Smith CMAR Agreement on March 16, 2021.
- Summer/Fall of 2021 during final design estimated cost of project coming in high. CPH and Wharton Smith conducted an evaluation of an alternate design that would meet the same project goals within the City's budget
- Redesign was bid and GMP is at +/- \$24 Million

Project Status Update



CITY OF
MOUNT
DORA



FDEP Permitting:

Project was submitted to FDEP and received approval. WWTF #1 Permit renewal currently being processed.



SRF Funding:

Agreement signed for Project Cost of \$24 Million; Authorized Loan Amount to Date \$12 Million



SJRWMD Funding:

Grant approval for \$3 Million received



Project Goals



CITY OF
MOUNT
DORA

Cost effectively rehabilitate existing facility to provide 1.5 MGD and readily upgraded to 1.8 MGD of treatment.

Create Environmental Benefits

- Consistent high quality reclaimed water
- Minimize reject volume
- Improve odor control

Create Economic Benefits

- Install more efficient filters
- Install more energy efficient motors and blowers
- Install SCADA to allow for existing manpower to continue with expanded flows



Benefits of BNR Process



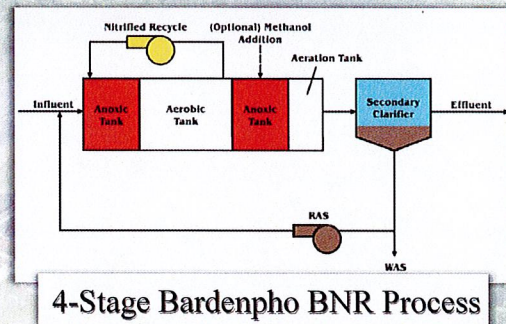
BOD < 5 mg/L

TN < 3 mg/L

TSS < 5 mg/L

TP < 1 mg/L

Improved Effluent
Water Quality!



Utilizing Existing Facility Components



**Existing components to remain or be
rehabilitated:**

- | | | |
|----------------------------|-------------------------|------------------------|
| 1) Sludge Holding Tank | 4) Clarifiers No. 1 & 2 | 7) Operating Building |
| 2) Aerobic Digester | 5) Oxidation Ditch | 8) Reject Storage Pond |
| 3) Chlorine Contact Basins | 6) Lift Station | |

The Must Have's List



The Team met on-site to carefully review the existing facilities and the proposed project to come up with a "must have's" list

Must Have's

- SCADA Upgrade
- Treatment Redundancy
- Clarifier Capacity
- Filters
- Fixed FDEP Sampling Location

Should Have's

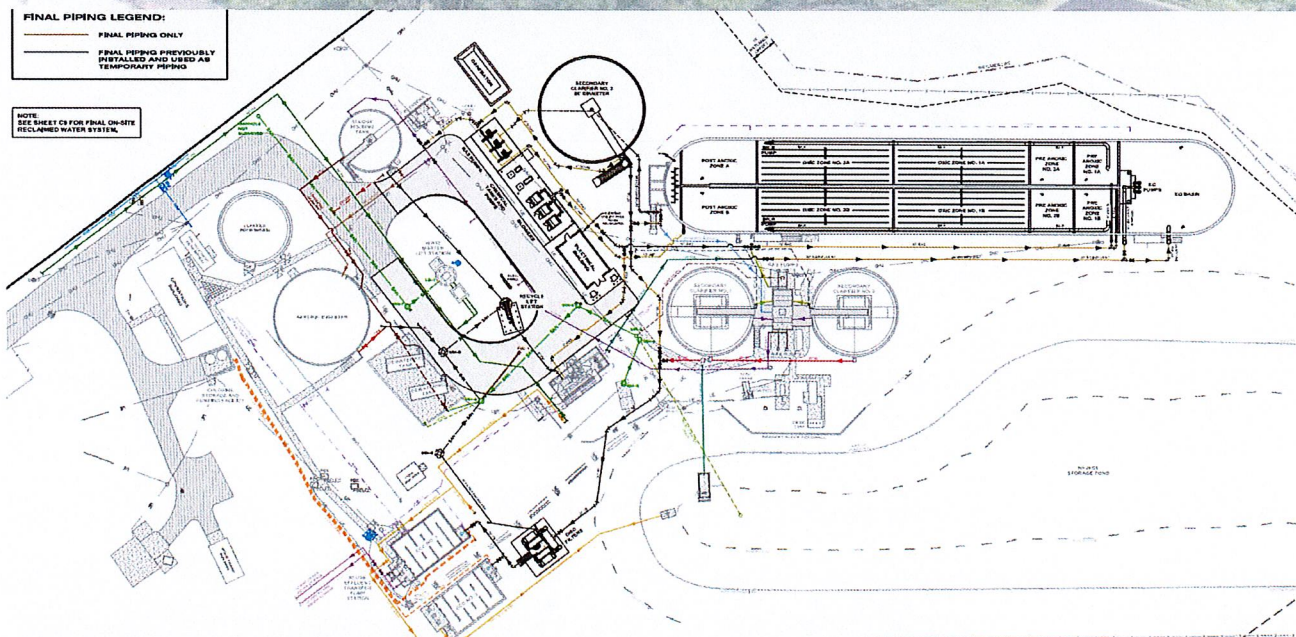
- Generator Upgrade
- Sludge Dewatering

Nice to Have's

- Rehab Existing Clarifiers
- Rehab Pond
- New Influent Screen



Proposed Improvements Site Plan



The GMP Process



A CMAR GMP (Guaranteed Maximum Price) is developed using competitive bidding of trades and equipment

Step 1: Bid Set received from CPH 11/16/2022

Step 2: Develops pre-qualified Bidders List of 52 firms, approved by City

Step 3: Produces 17 Bid Packages, for 30-day bidding period (SRF)

Step 4: Issues IFB 12/15/2022 to Bidders List, and publicly (SRF)

Step 5: Pre-bid Mtg held 1/5/2023, issues 4 Addendum, bids due 1/25/2023

Step 6: Receives 38 bids, reviews for Rec of Award, 2/1/2023

Step 7: Assemble GMP, with \$1.4M of cost reduction items, 2/15/2023



Questions?



Thank You!



WWTP 1 Alternative Improvement Plan - Option B

March 13, 2023 City Council Work Session

Presented by

George Marek, P.E.
Public Works Director

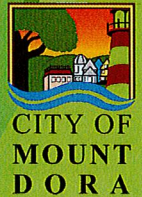
Josh Kramm
Water Utility Manager

Jimmy Klein
Chief Water Plant Operator

Jamie Hope
Wastewater Training Technician
Florida Rural Water Association

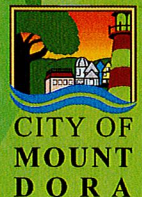
Aneta Barton
Budget Director

Richard Shepherd
Chief Wastewater Plant Operator

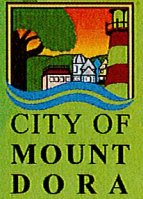
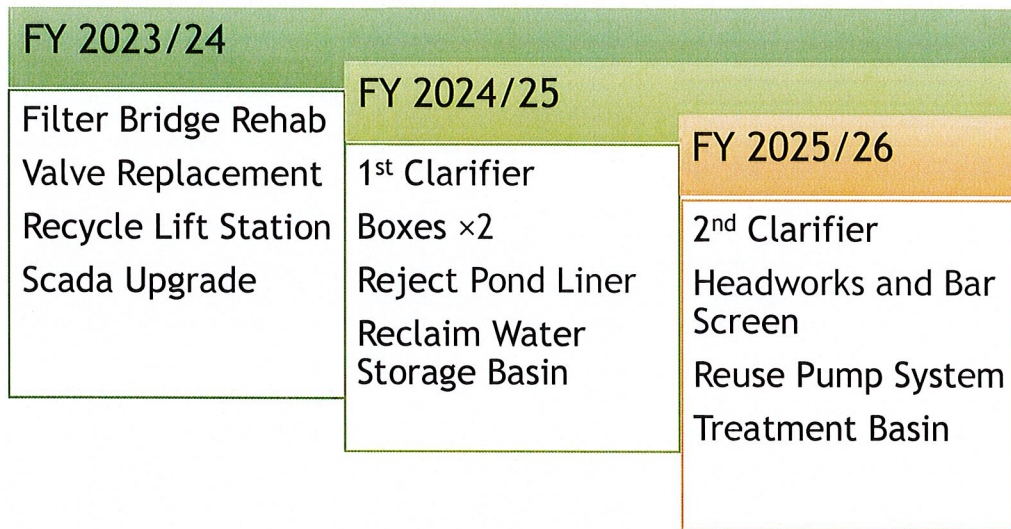


What is being rehabilitated with this plan?

City staff have developed this alternative plan to improve and rehabilitate the equipment that is already in place.



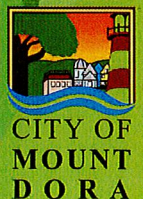
Option B timeline



Year 1 Proposed Improvements

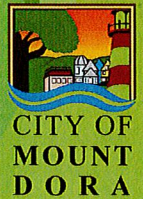
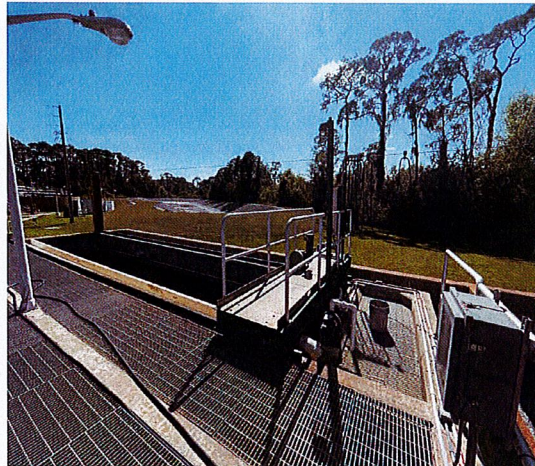
Year 1: FY 2023/24

Filter Bridge Rehab
Valve Replacement
Recycle Lift Station
Scada Upgrade



Year 1 Proposed Improvements

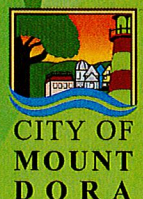
Filter Bridge Rehab (\$465,000) & Valve Replacement (\$67,031)



Year 1 Proposed Improvements

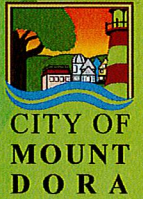
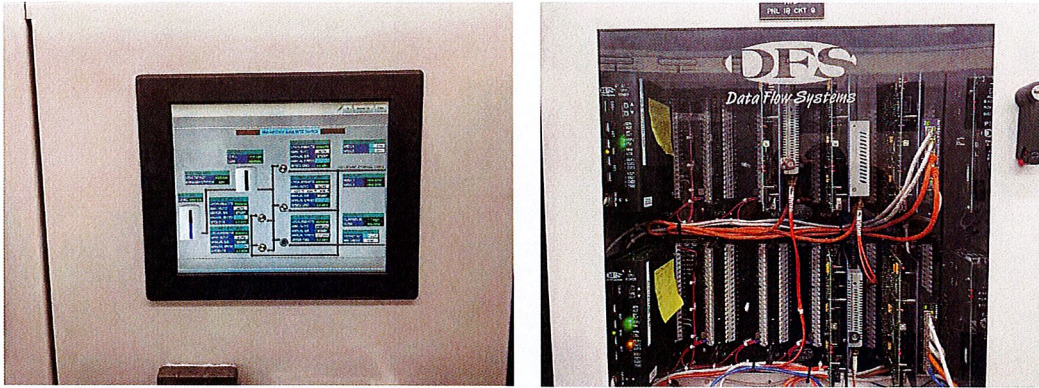
Recycle lift station (\$375,000)

The new lift station will allow the daily process water to be taken away from the influent composite sampler.



Year 1 Proposed Improvements

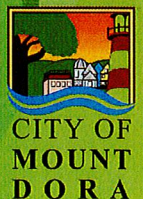
SCADA Upgrade (\$250,000)



Year 2 Proposed Improvements

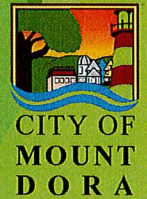
Year 2: FY 2024/25

1st Clarifier
Sludge Dewatering Boxes ×2
Reject Pond Liner
Reclaim Water Storage Basin



Year 2 Proposed Improvements

1st Clarifier (\$1,000,000)

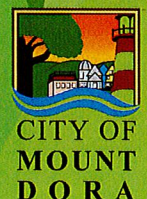
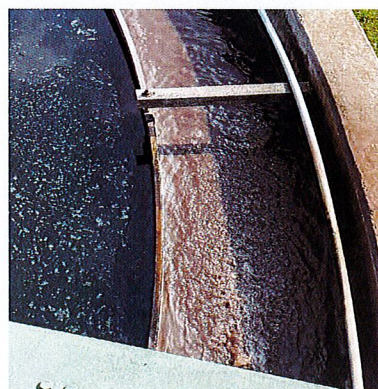


Year 2 Proposed Improvements

These photos show the current configuration of the clarifiers at WWTP 1

Effluent ring is in the center on the current clarifiers

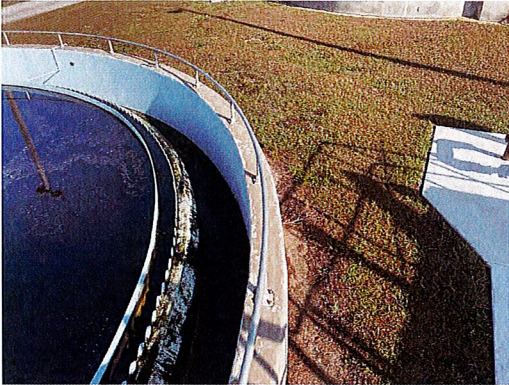
And the influent ring is on the outside



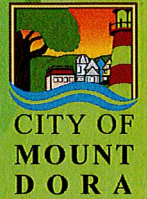
Year 2 Proposed Improvements

This shows that they will be reconfigured to resemble the clarifiers at WWTP 2.

The effluent weir runs around the outside wall and will have more area

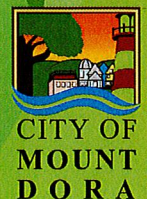
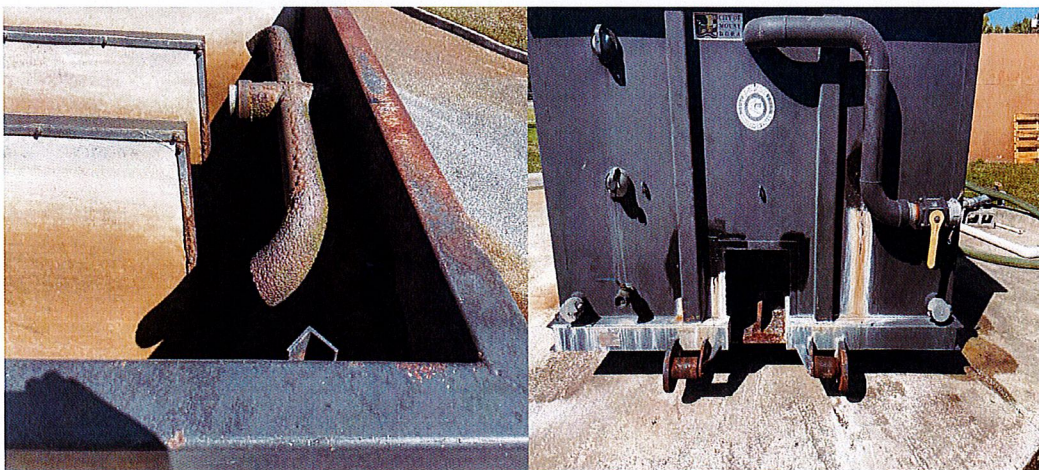


The influent will enter in the center



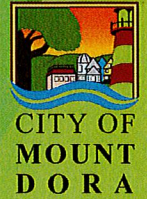
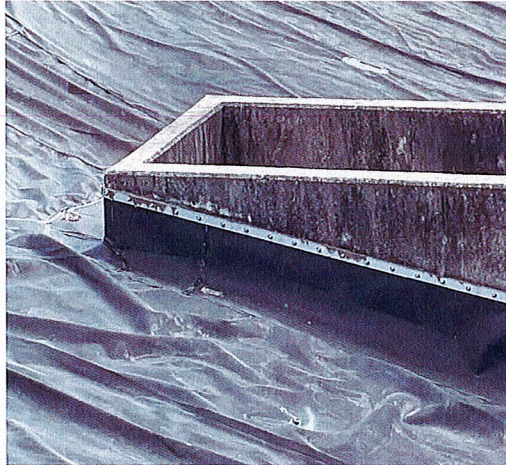
Year 2 Proposed Improvements

Sludge Dewatering Boxes (\$130,000 or \$65,000 each)



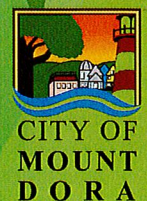
Year 2 Proposed Improvements

Reject Pond Liner (\$550,000)



Year 2 Proposed Improvements

Reclaim Water Storage Basin (\$650,000)



Year 3 Proposed Improvements

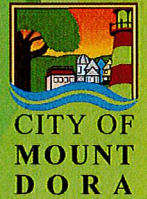
Year 3: FY 2024/25

2nd Clarifier

Headworks and Bar Screen

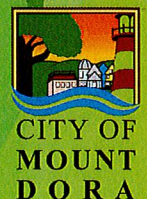
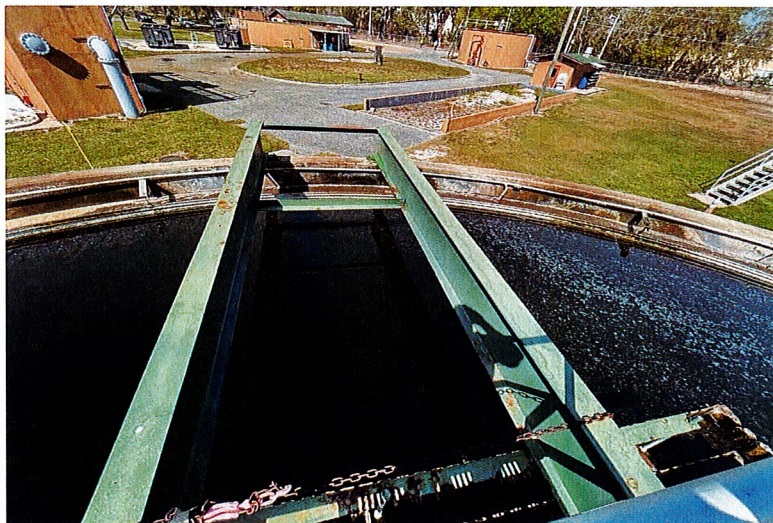
Reuse Pump System

Treatment Basin



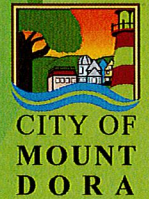
Year 3 Proposed Improvements

2nd Clarifier (\$1,000,000)



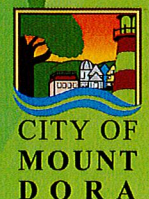
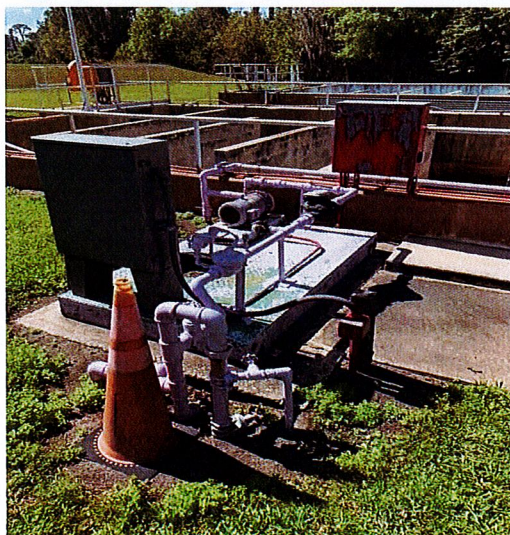
Year 3 Proposed Improvements

Headworks & Bar Screen (\$350,000)



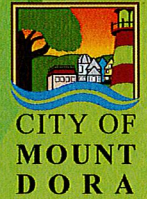
Year 3 Proposed Improvements

Reuse Pump System (\$10,000)

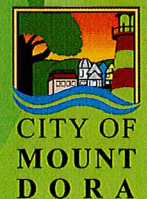


Year 3 Proposed Improvements

Treatment Basin (TBD)



This alternative project plan schedule may be altered to meet the needs of the Wastewater Treatment Plant staff and the budget for each year.



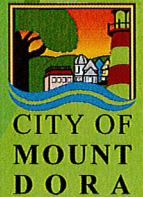
Scope & Summary Comparison

Option A: Partial Upgrade Not Mandated by Regulation

- ◆ Scope:
 - ◆ Increase capacity from 1.5 MGD ADF to 1.8 MGD ADF
 - ◆ Existing Oxidation Ditch converted to parallel 4-stage BNR with influent equalization storage/pumping
 - ◆ New 60-foot diameter secondary clarifier #3 and RAS/WAS pump station
 - ◆ New Recycle and Equalization Pump Stations, Disk Filters, Blowers, Chemical Storage/Metering, Metal Canopy, Electrical Building, Diesel Engine Generator, plus Electrical, I&C, and civil site improvements
- ◆ Additional costs not included in project for 2 clarifiers, headworks & bar screen, 2 sludge dewatering boxes, 2 reject pond liners & reclaim storage basin totaling \$3,680,000
- ◆ Option changes the process for handling wastewater

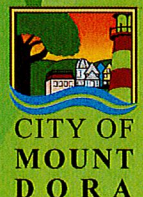
Option B: Scheduled Upgrades

- ◆ Scope:
 - ◆ 2 Clarifiers
 - ◆ Headworks & bar screen
 - ◆ 2 Sludge dewatering boxes
 - ◆ 2 Reject pond liners
 - ◆ Reclaim storage basin
- ◆ Addresses urgent needs of WWTP#1 over 3 year period
- ◆ Utilizes monies already programmed for debt service payment to fund improvements
- ◆ Allows staff to plan for and fund improvements to distribution system
- ◆ Option maintains current process for handling wastewater



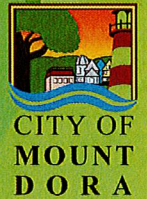
Option A vs Option B financials

			20 year loan				No loan - budget
			Option A: WWTP#1 Partial Upgrades				Option B: Scheduled Upgrades
SRF LOAN							
	Loan		\$ 21,000,000			\$ -	
	Loan fee		\$ 400,000			\$ -	
	Grant		\$ 3,000,000			\$ -	
	Total loan		\$ 24,400,000				
	Annual Payment estimate		\$ 1,528,001		Annual Budget	\$ 1,528,001	
PROJECT	See GMP Proposal from Wharton-Smith for details						
ADDITIONAL COSTS NOT PART OF THE PROJECT							
	Clarifiers x2	\$ 1,000,000	\$ 2,000,000		Filter Bridge Relab	\$ 465,000.00	\$ 465,000
	Headworks and Bar Screen	\$ 350,000	\$ 350,000		Valve Replacement	\$ 67,031.00	\$ 67,031
	Boxes x2	\$ 65,000	\$ 130,000		Recycle Lift Station	\$ 375,000.00	\$ 375,000
	Reject Pond Liner	\$ 275,000.00	\$ 275,000		Scada Upgrade	\$ 250,000.00	\$ 250,000
	Reclaim Water Storage Basin	\$ 650,000	\$ 650,000		Clarifiers x2	\$ 1,000,000	\$ 2,000,000
	Treatment Basin	TBD	TBD		Boxes x2	\$ 65,000.00	\$ 130,000
			\$ 3,405,000		Reject Pond Liner	\$ 275,000.00	\$ 275,000
					Headworks and Bar Screen	\$ 350,000.00	\$ 350,000
					Reuse Pump System	\$ 10,000.00	\$ 10,000
					Reclaim Water Storage Basin	\$ 650,000.00	\$ 650,000
					Treatment Basin	TBD	TBD
	Total Cost		\$ 27,805,000				\$ 4,572,031



Option B: Scheduled Upgrades Timeline & Cost Estimates

	FY 2023/24	FY 2024/25	FY 2025/26
Filter Bridge Rehab	\$ 465,000		
Valve Replacement	\$ 67,031		
Recycle Lift Station	\$ 375,000		
Scada Upgrade	\$ 250,000		
Clarifier Boxes ×2		\$ 1,000,000	
Reject Pond Liner		\$ 130,000	
Reclaim Water Storage Basin		\$ 275,000	
		650000	
Clarifier			\$ 1,000,000
Headworks and Bar Screen			\$ 350,000.00
Reuse Pump System			\$ 10,000.00
Treatment Basin			TBD
	\$ 1,157,031	\$ 2,055,000	\$ 1,360,000
		<i>Total Project Estimates</i>	\$ 4,572,031
Annual Payment estimate build into the rates	\$ 1,528,001	\$ 1,528,001	\$ 1,528,001
NET	\$ 370,970	\$ (156,030)	\$ 11,971



QUESTIONS

