

# Welcome

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MIKE SABATINO, PORT SHELDON TOWNSHIP SUPERVISOR

# SHELDON DUNES WATER SUPPLY SYSTEM

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8/19/25



Prein&Newhof

# Meeting Agenda

- Recent Background
- Current Water System
- Options Considered
- Cost Estimates and Rate Impact
- Additional Considerations
- Next Steps
- Questions

# Recent Background

- Low water pressure/no water. Service line plugging with iron.
- Generator failure in 2023. \$30,000 to \$50,000 to replace. Repaired for \$1,400.
- Concerns with increases in emergency repairs and rate impact.
- Hired Prein & Newhof to review options in 2024. Ken Bosma, P.E. - Holland Office.

# Current Issue – Iron Buildup



# Current System – Type 1 Well

- Designed and built in 1973 (two phases).
- Design capacity = 220 gpm; firm capacity = 150 gpm
- Consists of the following:
  - Three wells with submersible pumps (2x8-inch, 1x6-inch)
  - Well house with hydropneumatic tank (2,350 gallons) and air supply system
  - Emergency generator
  - Approximately 7400 feet of 6” and 8” water main.

# Project Options

1. Replace Current System
2. Replace Current System with optional improvements  
(fire flow, iron removal)
3. Retail Connection to Grand Haven Township for original  
service area
4. Retail Connection to Grand Haven Township for  
expanded service area

# Watermain Replacement?



## Reasons to replace.

- Water main life span - 50 to 100 years, depending on factors.
- Once they go, they go. Georgetown Twp, Grand Haven City experiences.
- Other parts (valves and hydrants) have shorter life spans.
- Grand Haven Township retail options requires main replacement.
- Any Grand Rapids water option with existing mains would require pilot study due to different water sources.
- Undersized for today's design.

## Reasons to keep.

- Repair history good. One break due to outside force.
- Good environmental factors (soils, water table, external loads).
- Costly to replace.
- Requires road replacement.



# Replace Current System Type 1 Well



# Replace Current System

## Suggested Improvements:

- Replace hydropneumatic tank
- Replace pump motors and install variable frequency drives
- Replace electrical gear
- Replace one well with lowest flow rate
- Replace generator and transfer switch
- Replace heat system
- Replace building roof and paint siding and fascia
- Replace 6" and 8" water main and water services

Estimated Project Cost = \$4,081,250

# Replace Current System Type 1 Well

Plus:

Iron removal system.

Water storage tank.



# Replace Current System - Optional Improvements

## Optional Improvements:

- Iron removal system
- Building addition for treatment
- Replace production well with 90 gpm, 8 inch well
- 120,000-gallon storage tank for fire flow

Estimated Optional Project Cost = \$3,550,000

Total Estimated Project Cost = \$7,631,250

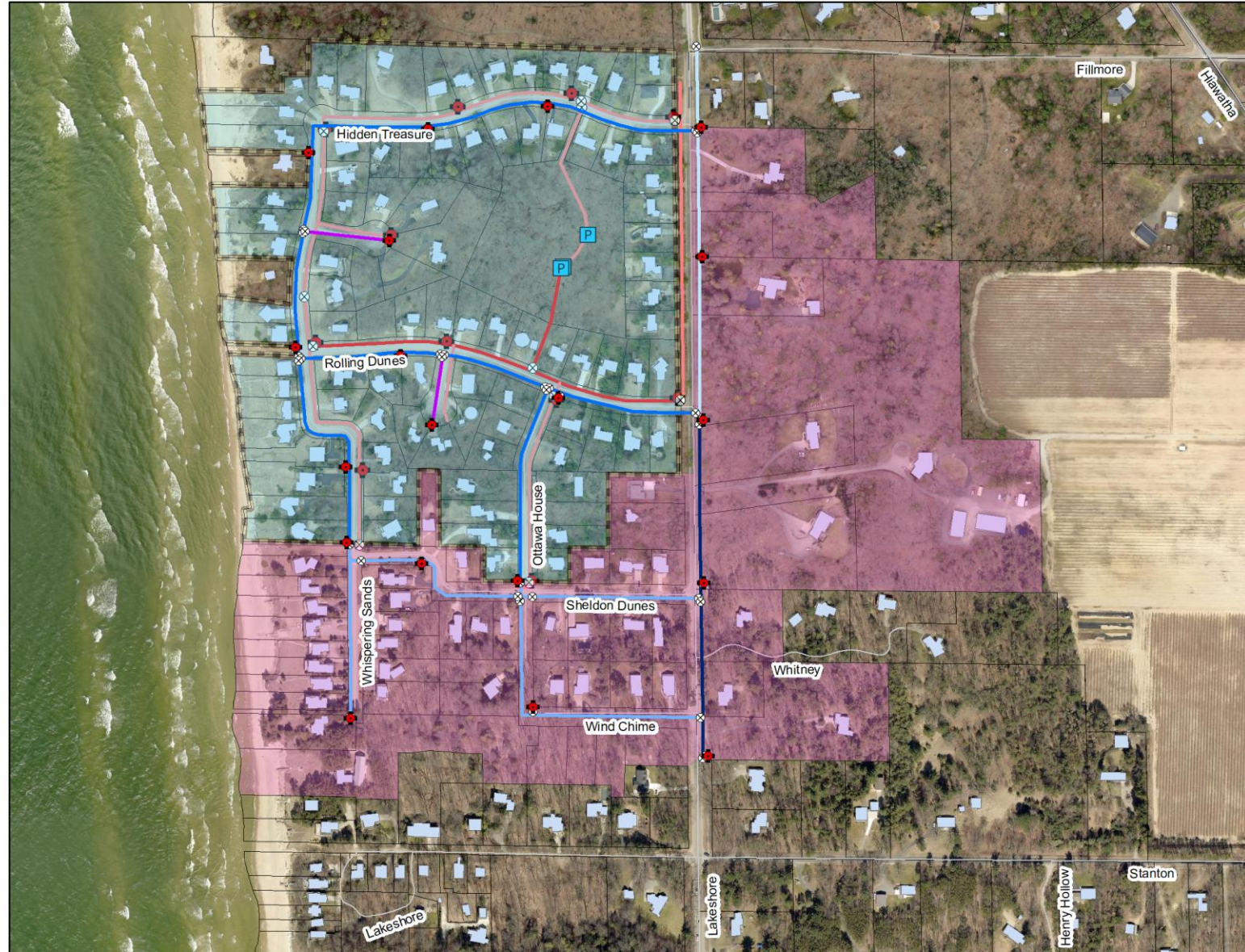
# Retail Connection Original Service Area



# Retail Connection to Grand Haven Township – Original Service Area

- Requires a water service agreement between Townships.
  - Requires all water main to be ductile iron. The project includes approximately 1,300 feet of 16” water main and approximately 5,300 of 8” water main.
  - Requires all water services to be copper to the house.
  - Individual meters will be required to be installed at each service connection (in basement or meter pit).
- Estimated Project Cost = \$3,920,000

# Retail Connection Expanded Service Area



# Retail Connection to Grand Haven Township – Expanded Service Area

- Requires a water service agreement between Townships.
- Requires all water main to be ductile iron. The project includes approximately 1,300 feet of 16” water main and approximately 5,300 of 8” water main (base option).
- Adds approximately 1,200 feet of 16” watermain and approximately 3,000 feet of 8” water main.
- Requires all water services to be copper to the house.
- Individual meters will be required to be installed at each service connection (in basement or meter pit).
- Estimated Project Cost = \$5,218,125

# System Costs – Debt Service

## System costs - Debt Service

	Project Cost	Approximate Assessment	Annual (20 yrs, 5.5%)
Current System Replacement	\$ 4,081,250	\$ 43,884	\$ 3,673.78
Current System w/ Improvements	\$ 7,631,250	\$ 82,056	\$ 6,869.36
GH Twp - Retail Service Area	\$ 3,920,000	\$ 42,151	\$ 3,528.63
GH Twp - Expanded Retail Service Area	\$ 5,218,125	\$ 38,653	\$ 3,235.82

# System Costs – Connection Fees (2025)

## Connection Fees - GH Twp

Trunkage Fee	\$	905
Meter Fee	\$	700
<b>Total due at time of application</b>	<b>\$</b>	<b>1,605</b>

## On-lot Costs

1-inch copper service (75' at \$45/ft)	\$	3,375.00
Plumbing to install meter	\$	625.00
<b>Estimated private contractor cost due at time of connection</b>	<b>\$</b>	<b>4,000.00</b>

# System Costs – User Costs

## User Costs - GH Twp

Average monthly water bill \$ 36.91

\*2025 rates, based on average daily usage of 220 gpd

Current rates = \$325/year or \$27.08/month

# Additional Considerations

- The current system is over 50 years old.
- The current system does not provide for fire protection.
- The current system limits expansion.
- The current system has no treatment.

# Summary of Options

- Do Nothing (Big). Develop capital improvement plan based on cost estimates to repair/replace major components.
- Current System Improvements. Determine how much of the current system should be replaced / improved now.
- Grand Rapids Water. Determine project scope and type of service contract desired.

# Next Steps

- Feedback from users and nearby residents.
- If a Project is desired: Creation of a Special Assessment District.
- If GR Water is desired. Service contract negotiations with GH Twp (depending on option).
- Project Design, Financing, and Construction.
- Ordinance Updates.
- End of 2027 is soonest a new system would be operational.

# Special Assessment District Procedures

- Establish a Special Assessment District (SAD).
  - Petitions from 51% of the landowners in the proposed SAD.
  - Initiation by Twp Board without petitions (if 20% in SAD oppose, petitions required).
  - Act 342 Contract. (if 20% in Twp oppose, financing is impacted).
- Petitions prepared, circulated, received and verified by 51% in the proposed SAD.
  - Resolution No. 1 - Prepare plans and specifications and cost estimate.
  - Resolution No. 2 - Call a hearing on necessity.
  - Resolution No. 3 - Direct preparation of assessment roll.
  - Resolution No. 4 - Hearing on assessment roll.
- Need some someone to work with Township/County to prepare legal petition.

# Questions

