

# Informational Meeting to Discuss North Castle Water District #9 Water Distribution System & Proposed Extension

Sal Misiti  
October 2025

# Presentation Overview

## **I. Background/History**

- AI Engineering Study of Potential System --July 2023
- Recent Improvements—WJWW approx. 854 feet completed June 2025

## **II. District Description**

- System Details
- Distribution System Overview

## **III. Proposed District Extension**

- Areas of extension
- System obstacles & concerns
- Estimated Cost

## **IV. Next Steps**

- Public hearing to extend WD9
- Authorize the consultant to begin design
- Bond resolution for overall borrowing
- Grant applications
- Regulatory approvals
- Preparation of Bid documents
- Bid Construction
- Construction management

## **V. Funding**

- Funding/Grants
- Cost per district property

## **Questions/ Discussion**

# BACKGROUND / HISTORY

I



# Background Overview

- Town issued a Request for Proposals- for professional Engineering Services for a potential water distribution system in the Quarry Heights area. November 2022
- North Castle Town Board issued a Resolution in support of the WJWW distribution system improvements offer May 4, 2023
- AI Engineering Study of Potential System completed --July 2023
- WJWW issues plans for approval for a portion of the Quarry Heights area, Health Department approved their plans –October 3,2024
- North Castle issued a letter October 1, 2024 authorizing WJWW to construct water mains within the Town roadways.
- North Castle Town Board on January 8, 2025 issued an order calling for a public hearing to be held on February 12, 2025 to establish North Castle Water District No.9
- Recent Improvements—WJWW approx. 854 feet completed June 2025
- WD9 District Description includes the area completed by WJWW and the eleven (11) properties with the connection proximity to the installed improvements.

# Water District #9 Background

In efforts to get a public water supply for the area WJWW offered in lieu of penalties for some of their regulatory issues, that they would construct a water system in a good faith effort. Their Board authorized 1.1 million for the project. The plan was they would construct as far as the dollars earmarked would allow.

The WJWW efforts resulted in approximately 854 feet of a water distribution system covering James Street and part of Williams Street, constructed in 2024, they supply the water to the system. A condition of the WJWW improvement was North Castle would form a water district and take over responsibility and operation of the infrastructure.

Water District #9 was established in the Quarry Heights section of town. The district entered into an agreement with WJWW for the wholesale purchase of water for district use. The current WJWW wholesale rate is \$4,543.49/million gallons. WD9 will then sell the water to the end users.



# DISTRICT DESCRIPTION

II



# WD9 Existing System



## Water District No. 9 – General Statistics

- 💧 Supplies domestic water and fire protection to Quarry Heights
- 💧 Potential for approximately 55 Service **connections**
- 💧 **All Residential**
- 💧 Direct purchase of the water supplied from WJWW at their wholesale rate.
- 💧 Currently there is 854 feet of water mains
- 💧 Installed pipe diameter 6"
- 💧 Currently three fire hydrants

# WJWW Recent Improvements

Health Department approved the WJWW plans for construction October 3, 2024

The County Health Department issued an approval of completed works on June 13, 2025

## System Includes:

- Metering vault at the intersection of Old Orchard Street & Williams Street, which houses a master meter and backflow prevention device.
- 854' of 6" ductile iron water main, installed within Williams Street & James Street.
- Three fire hydrants provided on the WD9 distribution system mains.
- Future interconnection/extension tees with valves.
- Of the eleven WD9 properties within the initial service area, two of the homes have connected.



# PROPOSED DISTRICT EXTENSION

III



## Water District No.9 extension service area

The initial service area of WD9 includes 11 properties, two of the homes have connected.

Properties within the extension area are predominantly single-family residences on one-half acre or one-acre parcels, consistent with zoning in the rest of Quarry Heights. The land use is entirely residential, and no commercial or industrial users are located within the proposed extension boundaries.

The proposed extension of Water District No. 9 will provide reliable public water service to 44 additional properties in Quarry Heights, eliminating reliance on private wells and improving fire protection. The design integrates with the existing WD9 system through two connection points and includes new mains, valves, hydrants, and master meter vaults sized to current standards.

# Water District No.9 extension service area

The proposed extension will add 44 properties to the district, broken down as follows:

Johnson Place: 4

Memorial Lane: 5

Starkey Road: 9

Old Orchard Street: 16

William Street: 8

McClure Street: 2

# Water District #9 Distribution System

## Water Main Data

Status	Location	Diameter (In.)	Fire Hydrants	Length (Ft.)	% of Total
Installed	James & William	6"	3	854'	18.3%
Proposed	Johnson	6"	1	270'	5.8%
	Memorial	6"	1	385'	8.2%
	William	8"	1	295'	6.3%
	Starkey	8"	2	1,200'	25.7%
	McClure & Old Orchard	8"	3	1,670'	35.7%
		Total	11	4,674'	100%

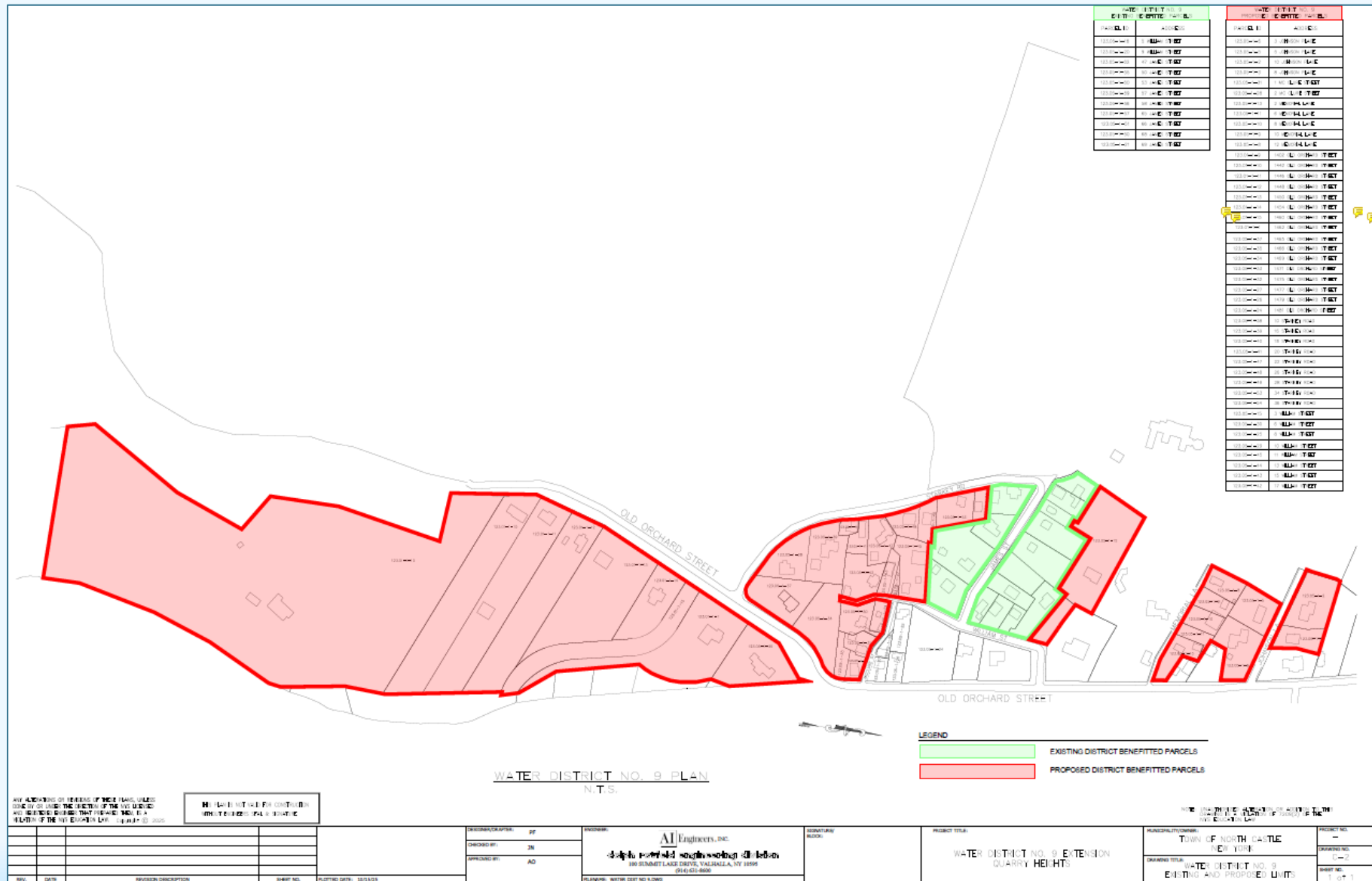
# Water District #9 Distribution System

## Water Main Data

Status	Location	Dia. (In.)	Fire Hyds.	Length (Ft.)	% of Total	Cost	
Installed	James & William	6"	3	854'	18.3%	1.1 M	
Proposed	Johnson	6"	1	270'	5.8%	C	\$361,598
						E	\$96,000
	Memorial	6"	1	385'	8.2%	C	\$437,008
						E	\$112,000
	William	8"	1	295'	6.3%	C	\$414,623
						E	\$105,000
	Starkey	8"	2	1,200'	25.7%	C	\$1,154,076
						E	\$265,000
	McClure & Old Orchard	8"	3	1,670'	35.7%	C	\$1,622,885
						E	\$357,000
C=	CONSTRUCTION	Total	11	4,674'	100%	C	\$3,696,173
E=	ENGINEERING					E	\$875,000

Grand Total Proposed = \$4,571,173 --- say 4.6M

# Water District #9 Distribution Area





NEXT STEPS

IV



# Water District No.9 next steps

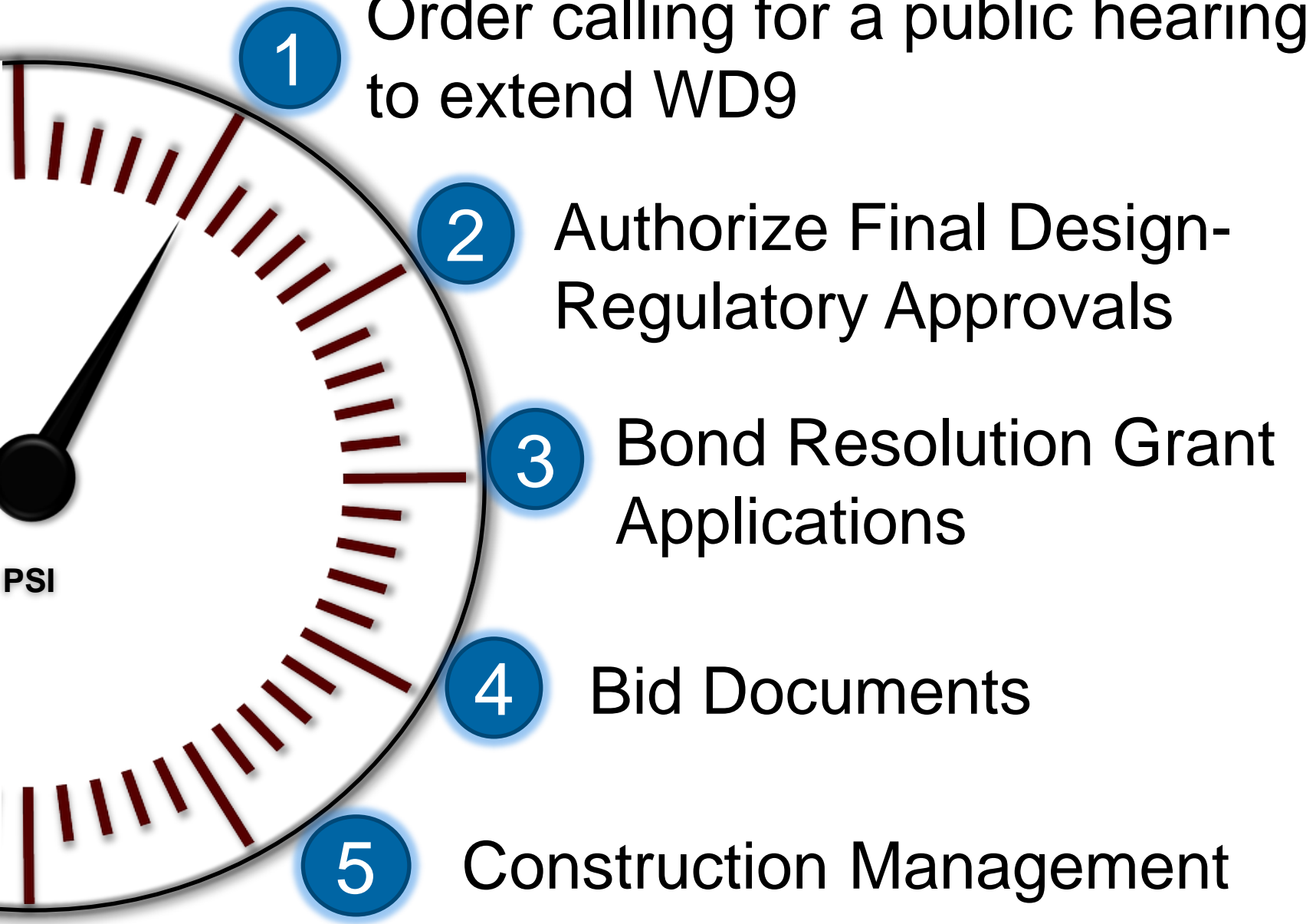
The number one task in having this plan become a reality is the potential grant funds that may be available.

In the current stage of the project, much of what we have in place, particularly the engineering, does not qualify for the grant application process. One additional obstacle is not having a required bond resolution for the entire project.

This summer we had our grant writer look at what we have and the criteria for the application could not be accepted.

The following outlined steps will get us to the point of applying to secure grant funds.

# Next Steps =



# FUNDING

# V



# Water District No.9 proposed extension cost

The estimated project cost of approximately \$4.6 million accounts for construction, soft costs, and site-specific challenges such as shallow bedrock, limited rights-of-way, and contingencies. Financing will be secured through Town-issued bonds, repaid by annual assessments on benefited properties, with individual property owners responsible for service laterals.

Any and all grant opportunities will be pursued, many details need to be in place in order to file the required documentation with the given applications.

# FUNDING

Projected Amount To Bond = \$4,600,000

If no  
Grant  
\$\$

WD9 Assessed Value = \$359,650\*

WD9 Avg. Home  
Assessment = \$5,250\*

Current Interest Rate  
4.25%

\* estimated



# FUNDING

No Grant Funds Awarded

Bond Estimate = \$4,600,000 @ 4.25%

Term	25 Years	30 Years	40 Years
Annual District Debt Service	\$302,287	\$274,152	\$241,125
Average WD9 Home Annual Cost	\$4,412	\$4,002	\$3,520
Cost Home Annual	\$4,412	\$4,002	\$3,520

# FUNDING

w/ 50% Grant Award

Bond Estimate = \$2,300,000 @ 4.25%

Term	25 Years	30 Years	40 Years
Annual District Debt Service	\$151,143	\$137,076	\$120,562
Average WD9 Home Annual Cost	\$2,206	\$2,001	\$1,760
Cost Home Annual	\$25,506	\$25,001	\$21,560

# FUNDING



Bond Estimate = \$1,150,000 @ 4.25%

Term	25 Years	30 Years	40 Years
Annual District Debt Service	\$75,572	\$68,538	\$60,281
Average WD9 Home Annual Cost	\$1,103	\$1,001	\$880
Cost			
Home Annual			
WD9 Home			



Questions?