

**PORT WASHINGTON
WATER DISTRICT
2021 BOND ISSUE**

**CAPITAL IMPROVEMENT PROJECTS
FOR YEARS 2021-2025**

NEED FOR WATER SUPPLY SYSTEM IMPROVEMENTS

- ▶ Second phase of capital improvement program proposed to begin implementation this year
- ▶ Builds upon projects which were initially identified in Phase 1's bond in 2019
- ▶ Projects in Phase 1 are finishing detailed design and heading into construction
- ▶ This bond issue is necessary to allow for the construction phase to begin for certain projects and for the design and construction phases for other, new projects
- ▶ These projects have been identified as **CRITICAL** based on both need for emerging contaminants treatment and general infrastructure improvement

Notifying the Public



Community
Information
Meetings via Zoom

June 3, 2021
2 p.m. and 7 p.m.



District Public
Hearing via Zoom

June 9, 2021
7 p.m.



Notice of District Public
Hearing was mailed to all
residents as a postcard on
May 24, 2021.

In addition, the Notice was
posted on the District
website on May 24, 2021.
Also, the Notice was printed
as a legal ad in the Port
Washington News on
May 26, 2021.

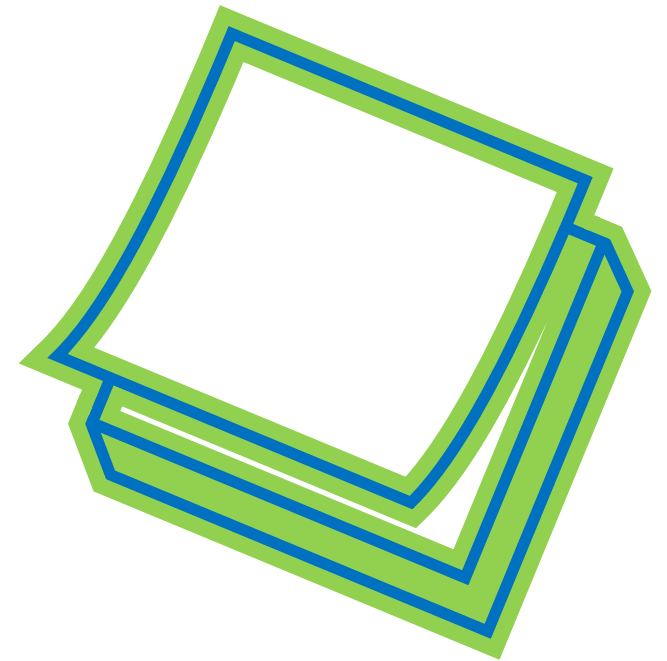


Town of North
Hempstead
Public Hearing

Will be held at a
regular Town
Board meeting on
July 8, 2021 at
7:30 p.m.

REGULATION OF EMERGING CONTAMINANTS IN DRINKING WATER

- ▶ The New York State Department of Health (NYSDOH) implemented new drinking water regulations in August of 2020, which created Maximum Contaminant Levels (MCLs) for three emerging contaminants – 1,4-Dioxane, Perfluorooctanoic Acid (PFOA), and Perfluorooctanesulfonic Acid (PFOS). PFOA and PFOS are part of a larger group of contaminants known as PFAS.
- ▶ These regulations have impacted some Port Washington Water District water supply wells which exhibit these contaminants at various concentrations.
- ▶ The District has implemented conservation requirements and made operational changes to ensure the use of these wells are minimized or avoided while treatment is being installed.
- ▶ Many of the projects in this bond issue are driven in some way by these new regulations promulgated by the United States Environmental Protection Agency and the NYSDOH and locally enforced by the Nassau County Department of Health (NCDOH).



MORLEY PARK STATION ADVANCED OXIDATION PROCESS TREATMENT AND MISC. IMPROVEMENTS

- ▶ Morley Park Wells 8, 9, and 11 are located on the same site and have been impacted by the contaminants included in the new NYSDOH regulations.
- ▶ The maximum levels historically detected for 1,4-dioxane, PFOA, and PFOS are either approaching or higher than the NYS MCLs.
- ▶ The proposed treatment for the contaminants is a system currently under design - Advanced Oxidation Process (AOP) and Granular Activated Carbon (GAC).
- ▶ The construction and start-up of the AOP/GAC system is included in this bond issue. Various improvements to the site also will be done such as interior improvements to the well and PTAS buildings, replacement of well pumps and motors, and replacement of a transfer pump in the PTAS building.



SANDY HOLLOW STATION IMPROVEMENTS

- ▶ At the Sandy Hollow Station, the existing well pump and motor for Well 2 will be raised above grade to comply with NCDOH requirements.
- ▶ Various site improvements will be completed including increasing the emergency generator capacity, replacement of site fencing, installation of barbed wire on site fencing, installation of a powered sliding gate, and installation of card readers/access control.
- ▶ Various improvements will be made to the Administration Building including heating system improvements, roof replacement, replacement of sidewalk and front steps, and repaving of parking lot.
- ▶ Various improvements will be made to the site buildings such as heating system upgrades, replacement of doors, windows, lighting, and grating, repair of a roof deck, and rehabilitation of a bathroom.
- ▶ Various improvements will be made to the electrical and controls systems.



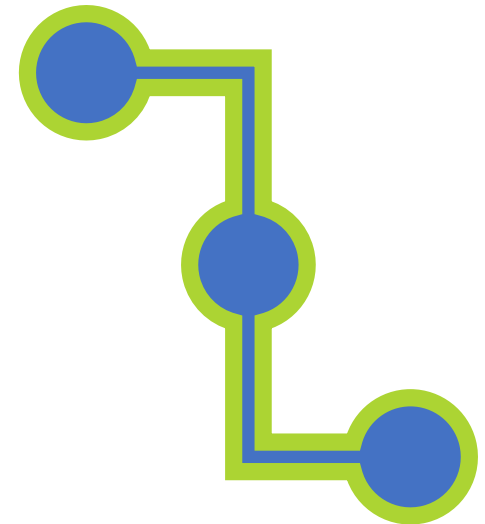
STONYTOWN STATION ADVANCED OXIDATION PROCESS AND NITRATE TREATMENT SYSTEM AND MISC. IMPROVEMENTS

- ▶ Stonytown Well 10 has been impacted by the newly regulated 1,4-dioxane and PFOA, as well as by increasing levels of nitrates.
- ▶ The existing GAC facility removes the PFOA contaminants but does not remove 1,4-dioxane and nitrates.
- ▶ The maximum level detected for 1,4-dioxane has reached the NYS MCL. The maximum detected level for nitrates is over 80% of the NYS MCL (not over the limit but we are approaching).
- ▶ The proposed treatment includes the installation of both the AOP process and nitrate treatment process.
- ▶ The previous bond included funding for the AOP process and this bond will include the remaining funding necessary to install the nitrate treatment system at the same time.



SOUNDVIEW DRIVE WATER MAIN REPLACEMENT PART 2

- ▶ The District has completed water main replacements in the northwest section of the Village of Port Washington North to eliminate water mains which have a history of frequent breaks and are at the end of their useful life.
- ▶ Water main replacements have been completed in the Soundview Drive area as Part 1 of this program and Part 2 will be included in this bond issue.
- ▶ Approximately 4,000 linear feet of water main will be replaced.



COW NECK ROAD WATER MAIN REPLACEMENT

- ▶ As mentioned earlier, water main replacements are being done throughout the northwest service area to replace water mains with a history of failure.
- ▶ This water main replacement program will be done in the Cow Neck Road area.
- ▶ Approximately 4,200 linear feet of water main will be replaced.



REPLACEMENT OF UNDERSIZED WATER MAINS

- ▶ To ensure adequate water supply for fire protection and maximum and peak hour conditions, the District needs to meet certain criteria for water mains in terms of pressure and flow.
- ▶ Water mains which are less than six inches in diameter will be replaced with larger mains.
- ▶ The undersized water mains included in this replacement are located in the Manorhaven area of the District.



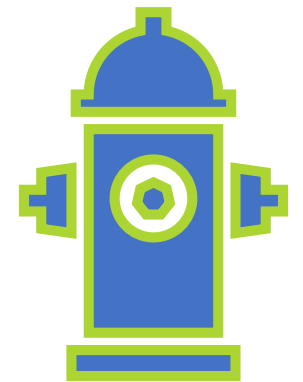
24-INCH PCCP TRANSMISSION MAIN EVALUATION

- ▶ The District owns and operates a 24-inch pre-stressed concrete cylinder pipe (PCCP) which supplies water from the off-peninsula Morley Park Station which contains three wells.
- ▶ The main is more than 50 years old and its continued reliability is important to the District to be able to meet consumer demands.
- ▶ A condition assessment will be conducted to evaluate the transmission main for leaks, gas pockets, and any areas needing repair or replacement.
- ▶ This is an important project as 60 percent of the District's water during peak periods travels through this water main.



PLEASANT AVENUE WATER MAIN REPLACEMENT

- ▶ During Part 1 of the Soundview Drive water main replacement, the 4-inch water main on Pleasant Avenue was identified as undersized and listed for future consideration to replace with a larger water main.
- ▶ This main replacement will assist in providing adequate fire protection and meeting maximum day and peak hour demands for the system.
- ▶ Approximately 2,100 linear feet of water main will be replaced.



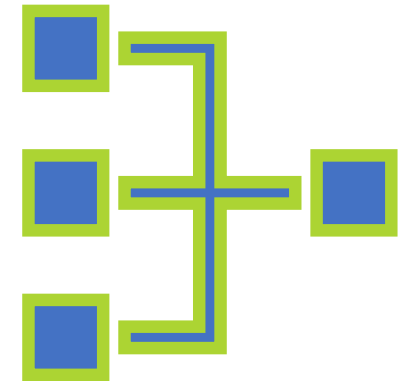
SANDY HOLLOW STATION TANK IMPROVEMENTS

- ▶ The Sandy Hollow Station water storage tank is a one-million gallon ground level tank which provides emergency water supply capacity for the District as well as adequate water for daily consumption.
- ▶ A recent tank condition assessment has identified several areas that need improvement to ensure continued reliability of the tank.
- ▶ Various improvements will be made to the tank, including replacement of façade bricks, repairs to the tank exterior, installation of a handrail and safety climb device on the tank, and maintenance on the tank exterior.



SCADA SYSTEM IMPROVEMENTS

- ▶ The District utilizes a Supervisory Control And Data Acquisition (SCADA) system to monitor its facilities, i.e., wells, tanks, booster stations, chemical treatment systems, etc.
- ▶ To maintain a consistent and reliable use of the SCADA system, several upgrades are needed for various components, as well as the replacement of three workstations.



SUMMARY OF PROJECT COSTS

Project Description	Total Estimated Costs
Morley Park AOP Treatment and Miscellaneous Improvements	\$10,577,000
Sandy Hollow Station Raising of Well 2 Above Grade, Site Generator, Administration Building Improvements, Building Improvements, and Electrical Improvements	\$4,677,000
Stonytown Station Combined AOP and Nitrate Treatment System and Misc. Improvements	\$5,077,000
Soundview Drive Water Main Replacement Part 2	\$2,810,000
Cow Neck Road Water Main Replacement	\$3,410,000
Replacement of Undersized Water Mains	\$7,500,000
24-Inch PCCP Transmission Main Evaluation	\$470,000
Pleasant Avenue Water Main Replacement	\$2,290,000
Sandy Hollow Station Tank Improvements	\$543,000
SCADA System Improvements	\$210,000
Bonding Costs	\$200,000
Legal Costs	\$15,000
Total Amount of Bond	\$37,779,000

OTHER POTENTIAL FUNDING SOURCES

- ▶ The District has been awarded \$18,076,600 in NYS Water Infrastructure Improvement Act (WIIA) grants. This grant funding is being used for the projects that combat emerging contaminants such as those affecting the Hewlett, Stonytown and Morley Park Stations.
- ▶ The District is engaged in lawsuits against the manufacturers of the chemical contaminating the wells.
- ▶ The District will also seek additional WIIA grants as they become available.
- ▶ If the District is successful in securing additional grants or other funds, the total amount of the bond will be decreased accordingly.



COST TO TYPICAL RESIDENT

TYPICAL RESIDENTIAL CLASS I COST

Home Value	Approximate Assessed Value	Approximate Maximum Annual Cost*
\$400,000	\$1,000	\$284.87
\$500,000	\$1,250	\$356.09
\$600,000	\$1,500	\$427.31
\$700,000	\$1,750	\$498.53
\$800,000	\$2,000	\$569.75
\$900,000	\$2,250	\$640.97
\$1,000,000	\$2,500	\$712.19
\$2,000,000	\$5,000	\$1,424.37

*Maximum annual cost over an estimated 20-year bond period

QUESTIONS?

▶ Contact Information:

- ▶ Italo J. Vacchio, Superintendent
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516-767-0171

