TOWN OF NORTH HEMPSTEAD
STATE OF NEW YORK

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In the Matter of the Application of the Board of Commissioners of the Port Washington Water Pollution Control District for Approval of Improvements to District Facilities and Equipment, and the Financing of Said Improvements.

PETITION

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TO: THE TOWN BOARD OF NORTH HEMPSTEAD

NASSAU COUNTY)
) ss:
STATE OF NEW YORK)

The Port Washington Water Pollution Control District, a Commissioner Elected Special Improvement District in the Town of North Hempstead, makes the following application pursuant to § 216 of the Town Law of the State of New York and, in support thereof, respectfully submits the following:

PREAMBLE

1. That the undersigned are the duly elected and qualified Board of Commissioners of the Port Washington Water Pollution Control District (hereinafter "Board").

2. The Port Washington Water Pollution Control District (hereinafter "District") owns and maintains a wastewater treatment and collection system serving a population of approximately 25,500 people. The system includes approximately 67 miles of sanitary sewer (including just over 1 mile of siphon line), most of which was built in the 1950's. The District's collection system is also augmented by 17 remote wastewater pumping stations. The wastewater that is collected is then treated at the District's Wastewater Treatment Plant ("WWTP") located at 70 Harbor Road, Port

Washington, New York. The treatment plant currently treats an average of 2.8 Million Gallons per Day ("MGD"). The treatment plant is designed and permitted for an average flow of 4.0 MGD and a design peak flow of 7.0 MGD.

3. The Board requests on behalf of the District that the North Hempstead Town Board, pursuant to its legal authority, authorize a Capital Facilities Improvement Bond in an amount not to exceed $59,000,000 and authorize the financing thereof through bonds to be issued by the Town.

4. The District expects that the projects covered by the bond will be undertaken in 2024-2027. When the bond is fully expended the tax increase to the consumer of an average house in Port Washington will be approximately $81 per year or $6.76 per month.

CAPITAL IMPROVEMENT BOND ISSUE 2023 –
DETAILED DESCRIPTION OF WORK SUMMARY

5. In the second half of 2022, the Board directed the District's Superintendent and Engineer to prepare appropriate engineering reports to outline capital improvements required to upgrade the District's wastewater treatment and collection system. This effort culminated in two engineering reports both of which are submitted simultaneously with this Petition and are incorporated by reference herein:

- July 2022 Improvements to Reduce Sanitary Sewer System Overflows (SSO's) and Wastewater Treatment System Outfall Inspection and Repairs
- September 2022 Wastewater Treatment Plant and Pump Station Capital Improvements

6. On or about August 14, 2023 and prior to the District's local hearing, D & B submitted to the Board their "Capital Improvement Bond Issue 2023 – Detailed Description of Work Summary" ("Work Summary" annexed hereto as Exhibit "A").

PRINCIPAL PROJECTS UNDER THE 2023 BOND

7. Nearly all of the projects replace and/or upgrade equipment and facilities at the wastewater treatment plant, the remote pump stations and within the collection system which have outlasted their useful life. For example, (a) the Motor Control Center ("MCC") and Automatic Transfer Switch ("ATS") were installed in Pump Station A approximately 50 years ago; (b) the two (2) 75-gallon pneumatic ejectors were installed over 80 years ago. There are three main categories of improvements:

A. Wastewater Treatment Plant Improvements (8 upgrades);
B. Wastewater Collection System (8,300 linear feet of sewer main lining);
C. Collection System Improvements (14 wastewater pump stations).

A. Wastewater Treatment Plant Improvements

RAS Pumping System Upgrade:

The four (4) Return Activated Sludge ("RAS") pumps are an essential component to the Biological Nutrient Removal (Nitrogen Removal) process. The RAS pumps were installed in 2010 and are now reaching the end of their useful life. Each RAS pump is a 30 hp, dry pit close-coupled type pump, rated at 1,000 gpm each require a seal water system to operate. The seal water system utilizes a significant amount of clean potable water. The District will replace these pumps with dry-pit submersible type pumps of equal capacity. Dry-pit submersible pumps do not require a seal water system for their mechanical seals to operate. Also, should the basement of the Recirculation Pump Station ever flood to a level that submerges the RAS pumps, the proposed replacement pumps would not be damaged and would remain in operation. This replacement is in line with the District's continued efforts for both "water conservation" as well as "flood hardening" of their WWTP to combat future severe weather events caused by climate change. Due to the centerline changes required

in the piping and the age of the valves in the pumping system, the District will also be replacing the valves and piping servicing each pump.

Rehabilitation/Upgrade of District Analytical Laboratory:

The District performs the majority of its wastewater/effluent sample testing in-house to reduce cost and to obtain results quickly to better operate the WWTP with "Real Time" information. The Laboratory was constructed in 1979 (43+ years) and has exceeded its useful life. It also requires upgrades to meet current standards. The rehabilitation/upgrading work for the laboratory includes:

- Replacement of the following testing equipment:
  - BOD incubator
  - Scale
  - Mixer
  - Misc. Laboratory equipment and labware
- Installation of a glassware washing/disinfecting machine
- Replace safety equipment (showers and eye basin)
- Replace balance table
- Replace Fume hoods
- Replace HVAC system
- Replace all plumbing fixtures including sinks, faucets, drains, etc.
- Replace lab cabinets and counter tops
- Replace flooring
- Architectural Improvements
- Replace refrigerator

Rehabilitation/Upgrade of Administration Building:

This critical infrastructure is the control/operation/administration center for the District. The building was constructed in 1950, over 70 years ago. Miscellaneous upgrades were last performed in 1979, 43+ years ago. This critical infrastructure has exceeded its useful life. Once this infrastructure

is upgraded, it will be greener, more energy efficient and more reliable. This rehabilitation/upgrade work will include architectural improvements, roof replacement, repairs to brick façade, window and door replacement, new flooring and interior walls, re-configuring of the interior work space and building access to be more efficient, bathroom upgrades, HVAC system improvements and upgrades to the plumbing and electrical systems.

Replacement of WWTP Main Electrical Switchgear:

The WWTP Main Electrical Switchgear was installed in 1986 and is located in an outdoor enclosure which has reached the end of its useful life as with various components are currently inoperative. This system distributes electrical power to the entire WWTP. Failure would be catastrophic and costly. Due to the age of this critical infrastructure, the District is performing a full replacement and possible relocation.

New Access Road:

To increase the access for maintenance vehicles to the existing process tanks and process equipment at the WWTP, and for first responder vehicles in the event of an emergency within the plant, a new access road is being proposed.

Plant Drainage System Upgrade/Hardening:

In September 2021, a flash flood occurred during Storm Ida which has never before been experienced at the WWTP. This high intensity rain event caused flooding of a portion of the plant site and ultimately the ultraviolet ("UV") disinfection system, resulting in its failure and subsequent replacement of various damaged components. The District began disinfecting the WWTP effluent immediately with a temporary chlorination method of disinfection until the UV system was back in operation. By virtue of the impact of the storm, the NYSDEC required an evaluation of the existing

WWTP storm drain system. It was determined that the existing drainage system becomes surcharged during/after a severe rain event, reducing its capacity. The rehabilitation of the existing on-site recharge basin, as well as other improvements to the existing drainage system (adding additional dry wells, catch basins, etc.) are required to increase its capacity to address future increases in rain intensity and frequency due to climate change.

Upgrades to WWTP Security:

The WWTP is fenced in and has four (4) access points/entrances. The gates at these entrances are over 30 years in age including the electrically actuated main entrance gate. In addition, other than the Administration Building, the WWTP currently does not have an electronic key system for these access gates into the plant or at any of the process buildings within the WWTP site. Consequently, not all areas of the plant are monitored by cameras. Security upgrades are necessary to protect this critical infrastructure. The District is replacing all access gates with electronically actuated gates; an electronic key system at each of the four (4) access points and at all entrances to the buildings at the WWTP; and will be expanding the camera system to include outdoor areas that are currently not monitored.

Misc. WWTP Improvements:

The proposed miscellaneous upgrades to WWTP include:

- Outfall Inspection and Rehabilitation - The WWTP subaqueous outfall section that extends into Manhasset Bay was last inspected approximately 25 years ago, in the late 1990's early 2000's. Due to recent severe storm activity, and the length of time since the last inspection, the District will inspect this section of the outfall to confirm overall condition and to assure that there is no debris/etc. in the diffusers which would impede flow.
- Valve Replacement - There are valves on process systems within the plant that are over 30 years in age and require replacement.
- Electrical Equipment and Control Replacement – There are several electrical power and control systems throughout the WWTP that are 30 plus years in age, requiring replacement.

Wastewater Collection System Improvements

Gravity Sanitary Sewer

In the District's ongoing effort to rehabilitate their aging gravity sanitary sewer infrastructure (~67 miles of sewer with pipe sizes ranging from 8" to 24" diameter, 50 to over 100 years in age) and mitigate the potential for "Sanitary Sewer Overflows" (SSO's) due to failed pipe, the District will rehabilitate deficient gravity sanitary sewer discovered during their routine Closed Circuit Television (CCTV) Inspections program.

The District will rehabilitate approximately 8,300 lineal feet of 8" to 24" diameter sanitary sewer mains throughout the District utilizing a cured-in-place pipe (CIPP) lining system which does not require excavation. All work is performed from the sanitary manholes. This system will have the least impact to the residents within the District.

B. Collection System Improvements – Wastewater Pump Stations

There are 17 remote wastewater pump stations located throughout the District, 16 of which are owned, operated and maintained by the District. The 17th pump station, Pump station "S", is currently owned by the Town of North Hempstead and operated and maintained by the District. Although improvement/upgrade work is required at all 16 District owned pump stations, the District has prioritized the work at these pump stations, taking into account their age, current condition and consequence of failure. The District's proposed priority improvement work at the existing wastewater pump stations is as follows:

Pump Station "A"

The 37 KW, gas driven Emergency Generator was installed in 1972 has reached the end of its useful life, requiring replacement.

The existing MCC and ATS both installed approximately 50 years ago have reached the end of their useful life, requiring replacement.

The lighting within the corrosive wet well environment ,installed approximately 50 years ago has reached the end of its useful life requiring replacement. The District will replace these existing light fixtures with more energy efficient lights.

Pump Station "B":

There are two (2) 75-gallon pneumatic sewage ejectors in the station. The ejectors were installed in 1935, approximately 88 years ago and have reached the end of their useful life. Additionally, there have been recent failures of the alternating valve assemblies of the ejector system. The parts are difficult to obtain since the system installed is now obsolete. The superstructure was constructed in the 1970's. The below-grade structure is original being constructed in 1935. The proposed work includes:

- Replacement of Superstructure Door System (1 door)
- Emergency Generator System Replacement
- Pneumatic Ejector System Elimination and Replacement with Submersible Package Pump Station
- MCC Replacement as well as incoming electrical breaker, ATS, etc.,
- Main electrical service upgrade.
- 400 LF of 6" Dia. Force Main Replacement

Pump Station "C":

The capacity of this station is 3.1 MGD. The three (3) main sewage pumps (Lead, Lag and Standby) each rated for 1075 GPM. All three are 60 hp dry pit close-coupled type pumps. This is a high flow critical station. The pumps, controls, piping and valves are 30+ years old (1987) and have reached the end of their useful life. The existing pumps require a seal water system for their mechanical seals to operate. A seal water system utilizes a significant amount of clean potable water.

The District will replace these pumps with Dry-Pit submersible type pumps of equal capacity as well as the replacement of the valves and piping. Dry-pit submersible pumps do not require seal water (clean potable water) for their mechanical seals. Also, should the pump station ever flood to a level that submerges the pumps, the proposed replacement pumps would not become damaged and will remain in operation. This replacement is in line with the District's continued efforts for both "water conservation" as well as "flood hardening" of their WWTP/Collection System, to combat future severe weather events caused by climate change.

The existing screening system, which protects the pumps, is a 5 HP electric grinder. Heavy rags, wipes and debris enter this station causing excessive wear generating continued/maintenance and grinder replacement. Also, many wipes and rags tend to pass through the grinder system and reaccumulate within the wet well causing the pumps to clog. The District will replace this antiquated system with a mechanical bar screen system and washer compactor which removes the rags and debris from the influent waste stream.

The lighting within the corrosive wet well environment installed 30 + years ago has reached the end of its useful life requiring replacement. The District will replace these existing light fixtures with more energy efficient lights.

The wet well ventilation installed 30+ years ago has reached the end of its useful life, requiring replacement. This pump station is adjacent to residential properties and there is currently no odor control system installed on the ventilation exhaust system. The District will be installing an odor control system to scrub the exhaust air.

Pump Station "D":

The current station was originally constructed in the 1960s. The configuration of this station does not meet current standards (Ten State Standards and NFPA) and is not fully code compliant.

Access to the wet well is through the dry well, a gas tight door (which, at over 50 years in age is of questionable integrity) and an access hatch in the floor of the dry well which is not gas tight. The superstructure windows, doors and roof are over 50 years in age. The electrical system including the Motor Control Center ("MCC") Automatic Transfer Switch ("ATS"), pump controls and ancillary electrical systems (lighting, receptacles, etc.) are all original to the 1960's construction. In addition, the standby Emergency Generator is also original from the 1960's construction, has reached the end of its useful life, and is no longer reliable requiring replacement. The existing pumps were replaced by the District in 2013 with dry-pit submersibles each rated at 520 gpm. The District will be performing a full rehabilitation of this station to conform to current standards by converting the station from a dry-pit to a submersible configuration and by replacing all the electrical systems and standby Emergency Generator system.

Pump Station "E":

The main sewage pump controls were installed in 1975 and are antiquated, obsolete, unreliable and have reached the end of their useful life requiring replacement.

Pump Station "F":

The capacity of this station is 3.0 MGD. The three (3) main sewage pumps (Lead, Lag and Standby) are each rated for 1050 GPM. All three are 60 hp Dry Pit close-coupled type pumps. These pumps, controls, valves and the piping were installed in 1989, over 30 years ago, and have reached the end of their useful life. This is a high flow critical station and the pumps, controls, piping and valves have reached the end of their useful life. In addition, the existing pumps require a seal water system for their mechanical seals to operate. A seal water system utilizes a significant amount of clean potable water. The District will replace these pumps with Dry-Pit submersible type pumps of equal capacity as well as the replacement of the valves, piping and controls. Dry-pit submersible

pumps do not require seal water (clean potable water) for their mechanical seals. Also, should the pump station ever flood to a level that submerges the pumps, the proposed replacement pumps would not become damaged and would remain in operation.

The existing screening system which protects the pumps consists of two (2) 10 HP electric grinders. Heavy rags, wipes and debris enter this station which causes excessive wear and tear requiring continued maintenance and grinder replacement. Also, many wipes and rags tend to pass through the grinder system and reaccumulate within the wet well, causing the pumps to clog. The District will replace this antiquated system with a mechanical bar screen system and washer compactor which removes the rags and debris from the influent waste stream.

Pump Station "H":

There are two (2) main sewage pumps (Lead and Standby) at the pump station each rated for 180 GPM. They are both 10 hp dry pit close-coupled type pumps, replaced in 1995. The valves, piping and controls were installed in 1981, over 40 years ago. The pumps, controls, valves and piping have reached the end of their useful life. In addition, these existing pumps require a seal water system for their mechanical seals to operate. A seal water system utilizes a significant amount of clean potable water. The District will replace these pumps with Dry-Pit submersible type pumps of equal capacity as well as the replacement of the valves, piping and controls. Dry-pit submersible pumps do not require seal water (clean potable water) for their mechanical seals. Also, should the pump station ever flood to a level that submerges the pumps, the proposed replacement pumps would not become damaged and would remain in operation. The wet well access hatch installed in 1987 is severely corroded and will be replaced in kind.

Pump Station "J":

The current configuration of the Bypass Chamber makes it difficult to connect temporary bypass piping during an emergency. In addition, the existing bypass valve within the chamber (over

40 years in age) is no longer operable and a temporary valve/blind flange has been installed. The District has pre-purchased new bypass valve and fittings. Modification of the Bypass Chamber is required for ease of access and the replacement of the valve and piping (with the pre-purchased fittings and valve) is proposed.

Pump Station "L":

This station is an Ejector Station built over 30 years ago. It includes two 250-gallon pneumatic ejectors both rated at 45 ft of TDH. The ejector system has reached the end of its useful life, is obsolete and parts are difficult to obtain. The existing 6" diameter force main is also over 30 years old. The District will replace this station in its entirety with a packaged submersible pump station including the 500 lineal foot 6" diameter force main.

Pump Station "N":

The station is a packaged pneumatic ejector station which was installed in the 1960's. The system is antiquated, obsolete and unreliable. Parts are difficult to obtain, and the process equipment has reached the end of its useful life. The existing 4" Asbestos Cement Pipe ("ACP") force main is over 55 years old and has also reached the end of its useful life. The District will replace this station in its entirety with a packaged submersible pump station including the 300 lineal foot 4" diameter force main.

Pump Station "O":

The station includes two (2) main sewage pumps (Lead and Standby) each rated for 200 GPM. They are both 10 hp Dry Pit close-coupled type pumps, replaced in 1995. The valves, piping and controls themselves were all installed in the 1970's, approximately 50 years ago. The pumps, controls, valves and piping have reached the end of their useful life. In addition, these existing pumps require a seal water system for their mechanical seals to operate. A seal water system utilizes a

significant amount of clean potable water. The District will replace these pumps with Dry-Pit submersible type pumps of equal capacity as well as the replacement of the valves, piping and controls. Dry-pit submersible pumps do not require seal water (clean potable water) for their mechanical seals. Also, should the pump station ever flood to a level that submerges the pumps, the proposed replacement pumps would not become damaged and would remain in operation. The existing wet well has limited to no access, making cleaning and maintenance difficult. The existing manual bar screen is heavily corroded. The District will be modifying the wet well to provide improved access for cleaning and maintenance and will be replacing the manual bar screen.

Pump Station "P":

This station includes four (4) close-coupled main sewage pumps. Pumps No. 1 and 2 are 50 hp, each rated at 1150 gpm. Pump No 3 is 100 hp, rated at 2000 gpm. Pump No. 4 is 100 hp rated at 1500 gpm. Pumps No. 1 and 2 were replaced in 2013, No. 3 in 1967 and No. 4 in 1996. Pump No 3 is no longer operational. The valves and piping are original to the station and installed in 1967. These pumps are controlled by variable frequency drives ("VFD"s). The different size pumps were installed in the past to provide different capacities depending on community development and influent flows. This configuration is antiquated, in-efficient and no longer required at this station. The controls and VFD's were installed in 1996 and are antiquated, obsolete, unreliable and have reached the end of their useful life. This station services not only residential properties, but also St. Francis Hospital, making it an extremely critical station. The existing pumps require a seal water system for their mechanical seals to operate. A seal water system utilizes a significant amount of clean potable water. The District will replace these pumps with Dry-Pit submersible type pumps of equal capacity as well as the replacement of the valves, piping and controls. Dry-pit submersible pumps do not require seal water (clean potable water) for their mechanical seals. Also, should the pump station ever flood to a

level that submerges the pumps, the proposed replacement pumps would not become damaged and would remain in operation. The existing ATS and main electric service breaker both installed 30+ years ago have reached the end of their useful life, requiring replacement.

Pump Station "R"

The 300 KW Emergency standby Diesel driven generator installed in 1968 (53 plus years) and the diesel fuel storage system (over 25 years in age) have reached the end of their useful life. In addition, the existing ATS was installed 30+ years ago has reached the end of its useful life requiring replacement.

Moorewood Pump Station Improvements:

This station is a submersible pump station with two (2) 60 gpm submersible pumps. The current configuration of the pump power and control cables make it difficult to remove the existing pumps when performing maintenance. To improve ease of maintenance, the existing configuration requires improvement. The District is also proposing to replace the electrical conduit.

ENGINEER'S COST ESTIMATE

8. The engineers have calculated projected costs for each project which are set forth in the Cost Estimate which is part of Exhibit B. Each of the construction cost estimates include a Bonding Contingency and "Soft Costs".

BOND ADMINISTRATION

9. In addition to retaining the services of D & B as the District's Design Engineers, your petitioners have retained the law firm of Carman Callahan & Ingham, LLP, as attorneys for the District, to perform the necessary legal services required in connection with the Petition and bond application.

10. The District designated itself as Lead Agency concerning the environmental quality review of the new improvements proposed under this Bond. Environmental Assessment Forms

("EAF") forms were prepared by D & B for these projects. After reviewing the EAFs, and receiving advice from both the engineers and counsel that all of the projects constituted Type II Actions under SEQRA, the Board of Commissioners resolved on October 24, 2023 to declare all of the improvements "replacements in kind" qualifying for Type II treatment under SEQRA requiring no further environmental review. October 24, 2023 SEQRA Resolution annexed hereto as Exhibit "C".

11. On September 16, 2023 and October 4, 2023 respectively, the District received letters from the Office of New York State Parks, Recreation and Historic Preservation that the District's projects "will have no adverse impact on historic structures" (Exhibit "D").

12. As a prelude to petitioning the Town Board, the District held a Public Hearing/Information Meeting on October 17, 2023, to inform the public about the proposed increase and improvements to the District's collection system and bond petition and to solicit input and answer questions from the public. As required, the District notified its constituents of the Public Hearing/Information Meeting by advertising in the Port Washington News. The affidavit of publication in Newsday published on October 12, 2023 is annexed as Exhibit "E". The District also undertook a postcard mailing . The meeting was also posted on the District's website. The sample postcard and affidavit of mailing are annexed as Exhibit "F".

13. On October 17, 2023, the Public Hearing/Information Meeting was held at the District's Headquarters at 70 Harbor Road, Port Washington, New York. Several residents from the neighborhood attended. All parties expressing an interest were heard and their questions were positively answered. The hearing commenced at 7:00 p.m. and concluded at 8:30 p.m. The minutes of the meeting are annexed as Exhibit "G".

14. The Board has duly considered the need for the proposed projects, the cost and financing thereof, the fiscal and tax impacts of said financing and all statements made with respect thereto.

15. On October 24, 2023, the Commissioners formally adopted a resolution authorizing the District to file a bond petition with the Town Board of the Town of North Hempstead. Resolution annexed as Exhibit "H".

16. That if this Petition is approved, it is the intention of your petitioners to refurbish, replace and make additions and improvements to the District's wastewater facilities as described.

17. That as a result of the investigation which your petitioners have cause to be made as aforesaid, it is imperative that these proposed improvements to the District's facilities be instituted with all deliberate speed.

18. For all the above reasons, the District respectfully requests that the Town Board of the Town of North Hempstead approve this petition in a principal amount not to exceed FIFTY-NINE MILLION ($59,000,000) DOLLARS and to provide financing for said appropriation, pursuant to applicable provisions of the Local Finance Law.

19. The District respectfully requests that this matter be scheduled for a public hearing by the Town Board at its December 5, 2023 meeting, and undertake all other applicable and necessary steps to effectuate the bond issue as required under the Town law.

IN WITNESS WHEREOF, the undersigned consisting of the Board of Commissioners of the PORT WASHINGTON WATER POLLUTION CONTROL DISTRICT, have hereunto affixed their signatures this 24th day of October 2023.

BOARD OF COMMISSIONERS
Port Washington Water Pollution Control District

Melanie Cassens, Chairperson

Eddy Marinelli, Treasurer

Brandon S. Kurz, Secretary

STATE OF NEW YORK)

) ss.:

COUNTY OF NASSAU)

Melanie Cassens, Eddy Marinelli and Brandon Kurz and, being duly sworn, depose and say that they are the duly elected and qualified Commissioners for the Port Washington Water Pollution Control District and the petitioners herein; that they have read the foregoing Petition and know the contents thereof; that they know the same to be true to their own knowledge, except as to those matters therein stated to be alleged on information and belief, and that as to those matters they believe it to be true.

Sworn to before me this
24th day of October 2023

Notary Public

GIOVANNA DIFIORE
Notary Public - State of New York
NO. 01DI6374749
Qualified in Nassau County
My Commission Expires May 7, 2026