



**REGULAR MEETING OF THE  
GREATER NEW HAVEN WATER POLLUTION CONTROL AUTHORITY  
BOARD OF DIRECTORS  
WEDNESDAY, JUNE 11, 2025 6:00 P.M.  
260 EAST STREET  
NEW HAVEN, CONNECTICUT**

**AGENDA**

1. Approval of minutes of May 14, 2025 – Regular Meeting.
2. Public participation relating to agenda items.
3. Consideration and approval of a resolution (i) approving the design and construction of flood protection measures at the Morris Cove and Union Street pump stations related to Project No. SSR 2022-04 FEMA Flood Resiliency Morris Cove & Union PS, for an aggregate amount not to exceed \$3,940,250, and (ii) authorizing the Executive Director, Sidney J. Holbrook, to negotiate, execute and deliver an agreement with Arcadis U.S., Inc. for design services related thereto, for an aggregate amount not to exceed \$500,000.
4. Consideration and approval of a resolution authorizing the Executive Director, Sidney J. Holbrook, to negotiate, execute and deliver an agreement with National Water Main Cleaning Company for professional services related to Project No. SSR 2017-04 Boulevard Interceptor Repair at Route 1, for an aggregate amount not to exceed \$500,000.
5. Consideration and approval of a certain Departmental Budget Transfer Request.
6. Executive Summary and department updates and presentations.
7. Consideration and approval, as necessary, of any other new business of the Authority.
8. Call to the public.
9. Adjournment.



## MEMORANDUM

DATE: June 2, 2025

TO: Sidney J. Holbrook

FROM: Thomas Sgroi, PE  
Director of Engineering

RE: Project and Design Authorization  
**Design and Construction of Flood Protection Measures at Morris Cove and Union Street Pump Stations**  
**Project No. SSR 2022-04 FEMA Flood Resiliency Morris Cove & Union PS**

Sid:

The Engineering Department requests that the following item be added to the June 11, 2025 Board Agenda for resolution:

The Engineering Department seeks Board approval to proceed with the design and construction of flood protection measures at both the Morris Cove and Union Street Pump Stations. The scope of work also includes installation of a new standby generator at the Union Street location.

Design and construction activities will be completed in accordance with the scope outlined in the sub-grant award issued by the Division of Emergency Management & Homeland Security on April 23, 2025, totaling \$3,940,250, with a federal grant share of \$2,732,609.

In alignment with this award, the Engineering Department also requests authorization to negotiate fees and scope of work under the on-call contract with ARCADIS, in an amount not to exceed \$500,000, to ensure timely project delivery.

This project is consistent with the Authority's goals and is funded under the FY24 Capital Budget.

  
Thomas V. Sgroi, PE  
Director of Engineering

cc: Fin. - Gabe Varca, Lou Criscuolo (e-copy)  
Ops - Gary Zrelak, Joe Megale (e-copy)  
Eng - Nick Stevens, Isabella Schroeder (e-copy)

## ATTACHMENT C

### Morris, Union, Long Wharf Pump Station Resiliency Implementation

#### Scope of Work

#### FEMA DR-4500-CT

The project includes improvements to the three stations to protect against catastrophic weather events in accordance with the City of New Haven's Hazard Mitigation Plan and Connecticut Public Act No. 18-82. This includes reducing or eliminating the long-term risk of flood damage and power loss for the Morris Cove, Union, and Long Wharf wastewater pumping stations located in New Haven, CT. The improvements will also be constructed to meet or exceed the latest New England Interstate Water Pollution Control Commission's (NEIWPCC's) Technical Report #16 (TR-16) guidelines for the design of wastewater treatment works.

During the grant period of performance, activities to mitigate flood and power loss hazards include:

- construction of flood walls and barriers (Morris Cove and Union),
- relocation of the Long Wharf PS equipment to the north side of I95 outside of the AE zone, where it is protected from storm surges, flooding, and public access, and
- installation of a permanent generators (Union and Long Wharf) and diesel fuel tanks (Morris Cove, Union, and Long Wharf) that meet new TR-16 run-time guidelines.

Facility	Base Flood Elevation (NAVD88)	First Floor Elevation (NAVD88)	Lowest Floor Elevation (NAVD88)	Flood Protection Elevation (FT)	Existing Generator Size (KW)	New Generator Size (KW)	Existing Gen Fuel Capacity (Peak Hrs)	New Gen Fuel Capacity (Peak Hrs)
<b>Morris Cove PS</b>	11	10.5	-5.05	14.8	750	NA	15	48
<b>Union PS</b>	11	10.8	-15	14.8	None	750	None	48
<b>Long Wharf PS</b>	12	7	NA	Relocate out of AE Zone	None	100	None	48

The proposed flood improvements should have no flood impacts on any upstream downstream or adjacent properties. They will reduce risk of sewer backups for upstream customers.

These improvements will allow these stations to maintain continuous operations during emergencies and natural storm disasters to protect the health and welfare of the customers and environment. It will reduce/eliminate future damage costs and allow for quick economic recovery after such emergencies. All work for Morris Cove and Union will be conducted with the property limits. For Long Wharf, work will be conducted primarily within the GNHWPCA easements located within the Connecticut Department of

Transportations (DOT) right of way. DOT communications and permit compliance will be maintained to coordinate requirements for all work and staging areas that spill outside the existing easement area.

The scope of work required to furnish and install the resiliency improvements will include preparing Contract Drawings and Specifications and public bidding of the projects. Bid prices will be solicited from qualified contractors and the Contract will be awarded to the company with the lowest responsible bid. Once selected, the Contractor will be required to provide proof of insurance, a performance bond, and all required permits. The Contractor will also be required to provide a submittal of all materials required. These submittals will be reviewed by the GNHWPCA and the Engineer before they are purchased and installed by the Contractor.

### **Flood-Proof Walls, Doors, Hatches, and Windows**

The Pump Station buildings (Union and Morris Cove) will be flood proofed to the elevations required to meet the FEMA and TR16 guidance taking into account the latest projections of sea level rise and storm surge. This protects these buildings to elevation 14'8" which is 3'8" above the base flood elevation of 11 feet and above the 500-year flood elevation (which is 14 feet). The Union and Morris Cove PS are midsized stations that service a significant number of customers and accept flow from other pumping stations.

#### **Union PS**

The work at the Union PS will include dry flood proofing approximately 180 linear feet of walls and wet proofing approximately 80 feet of walls. The majority (approximately 160 feet of the 180 feet) of the dry proofing will be on the interior walls and the wet proofing will be on the exterior of the walls. This will require some reworking of conduits and piping located below the protection level of 14'8" that pass through or run along these walls.

Construction of both the interior and exterior flood walls can be accomplished using the existing building foundation. The flood proofing work will also include installation of flood barriers where building access is required to prevent overflow flooding of the below ground systems and facilities. This includes the front entrance door and the south-side garage door.

In addition, the two outside hatches will require water-tight hatch covers and the wet well vents will need to be extended to above the protection level of 14'8".

#### **Morris Cove PS**

The walls of the Morris Cove PS are reinforced and grouted concrete masonry units that should be sufficient to withstand the projected hydrostatic pressure of the water during a flood. For added protection a waterproof membrane/epoxy coating is proposed to assure a water-resistant envelope to block flood water intrusion.

The building door openings, windows, hatches, louvers and outdoor equipment will require flood proofing to elevation 14'8". Flood barriers will be provided for the four street facing windows and the front access door. In addition, approximately 150 linear feet of free-standing flood walls will be constructed outside along the sides and back of the station on the existing foundations that

support the outside equipment and access hatches. This exterior flood wall will not only protect the outside equipment and hatches but also the access doors and louver vents on the back and sides of the station. The exterior flood wall will require installation of two equipment access gate/flood barriers.

The Contract Drawings will show typical wall sections, flood gate and barrier mounting details, watertight hatch details and a site plan. Minimal site excavation is anticipated for the flood walls and barriers as they will be built on top of existing foundations. Specifications will include front-end documents required by the GNHWPCA and information required to furnish and install the walls and barriers.

### **Raise Utilities and Intake Vents**

For the Union PS, the two exterior wet well air vents and the electrical meter will need to be extended to above elevation 14'8". For the Morris Cove PS the stems and controls for the influent chamber and the air vent in the front building will need to be extended to above elevation 14'8". In addition, the electrical transformer at the Morris Cove PS will need to be raised. No excavation is anticipated as the raising of these utilities can be accomplished within the existing foundation supports.

### **Other**

Morris Cove PS will also require that the Influent Gate on New Haven Line be automated to prevent combined sewer flood waters from backing up into and flooding the station; as well as installing an outdoor sump pump to remove ponding rain water from being trapped inside the new flood walls.

### **Generator - Backup Emergency Power and Controls Above Flood Elevations**

The work will include installation of a dedicated backup emergency generator and automated transfer switches (ATS) for the Union PS and Long Wharf PS at an elevation that meets or exceeds the required FEMA and TR-16 guidance elevations. For the Long Wharf PS the generator can be placed on grade. For the Union PS, this will include construction of an elevated foundation pad and controls for generator to provide a function system including but not limited to critical exhaust silencer, dampers, vibrations isolating systems, block/coolant heaters, belly tanks, fuel tank vent and fill piping, and generator communication systems. Minor excavation will be required to construct the foundations for the Union and Long-Wharf generators.

The generators will be sized to start up and run the wastewater pumps needed to convey the peak flows at these station as well as lighting, ventilation, pump controls, and the sump pump, as applicable. The fuel tanks will be sized to provide enough fuel to operate under peak load for at least 48 hours or normal load for 96 hours, whichever is greater.

For the Morris Cove station there is an existing generator that is appropriately sized except for the fuel tank which has a run time of less than 15 hours at peak load. Therefore, the work will also include installation of a larger fuel storage tank for the Morris Cove PS to meet the new TR-16 guidance for fuel supply run time hours.

Contract Drawings that include a site plan showing the generator and fuel tanks for the PSs will be created. Specifications that describe the proposed generator, conduit, wiring and other information needed to furnish and install the generator and fuel tanks will also be created. The new generators at Union and Long Wharf will be started and tested and training will be provided to the GNHWPCA staff to ensure that they are properly maintained.

### **Relocation of Long Wharf Station**

The Long-Wharf pump station is located in a City Park between I95 and the Long Island Sound (immediately adjacent to a ball field and the Long Island Sound School access and parking lot). The ground elevation at this location is only 7 feet and the pump station controls for this submersible station is at elevation 5 feet. Although the pumps are designed to be submerged; the electrical service connections and controls are not.

In order to protect this station at this location the controls would need to be raised to elevation 15' 8". It is not practical to construct an elevated station at this location, especially when a practical solution to relocate it out of the flood zone in an easement on the elevated north side of I95, where it is protected from flooding, sea level rise, storm surges and daily public access. Relocating the station to the north side is also in keeping with the City's goal to protect the Union Train Station which is serviced by the Long Wharf PS. The City's plans include building a wall along the Interstate 95 corridor. Relocation of the station to the protected side of I95 will require reconfiguration of some of the sewer lines and upgrades to the pumps to meet the revised pressure conditions.

The station will be relocated upstream, within our existing sewer easement located in the Department of Transportation right-of-way on the north side of I95, outside of the AE zone and also protected by I95 and the future wall to be constructed by the City as part of its BRIC grant. The only customer currently serviced by the existing station south of the proposed location is the Sound School. To service this customer, an ejector pump will be installed at the Sound School to convey flows directly to the Boulevard Pump Station.

The relocation of the Long Wharf PS will require the installation of a force main to pump the flow from the station to an existing gravity sewer that transports flow to the Boulevard pump station. The old forcemain that pumped directly into the Boulevard PS can continue to be used by the Sound School.

The existing submersible pumps are sized to transport the correct amount of flow at the pressure needed to transport the wastewater through the force main and may require upgrade or replacement to meet revised pressure conditions. Utility excavations will be necessary for installation of the wetwell, electrical conduits, forcemain and sewer connections and junction boxes. The work is anticipated to remain within the existing permitted GNHWPCA sewer easements.

Relocation construction will require temporary bypass pumping service to maintain continuous pump station operations. The contract drawings and specifications will specify bypass pumping system design, redundant systems/standby agreements, operation, and oversight.

For the Long Wharf PS, upon completion of the relocation of the station and below ground systems no longer to be used will be properly abandoned. This will include capping of the abandoned sewer line and filling in of the old wet well.

Drawings and photo's showing the physical areas affected by the project are presented in Sections D and F of the application. A discussion of alternatives is presented in Section G and Exhibit 3 of the application, including



## MEMORANDUM

DATE: June 2, 2025

TO: Sidney J. Holbrook

FROM: Thomas Sgroi, PE  
Director of Engineering

RE: Contract Award Recommendation  
**Project No. SSR 2017-04**  
**Boulevard Interceptor Repair at Route 1**

Sid:

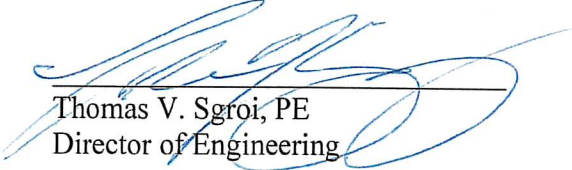
I request that the above-mentioned recommendation be added to the June 11, 2025 Board Agenda for resolution.

The Engineering Department seeks Board approval to authorize National Watermain Main Cleaning Company, Canton, MA to perform rehabilitation work on the brick 72" x 64" circa-1888 Boulevard Interceptor. The scope of work includes the removal of an abandoned water main and gas main intersecting the interior of the pipe at the 12 o'clock position. Additionally, approximately 150 feet of longitudinal cracks along the brick joints will be repaired.

This work is expected to begin in July and will primarily be performed during overnight hours to minimize traffic disruption and to coincide with periods of low sewer flow.

The total cost for this project shall not exceed \$500,000 and will be conducted under the Authority's on-call contract with National Watermain on a time and materials basis.

This project is consistent with and budgeted from the Authority's FY19 & FY25 Capital Funds.

  
Thomas V. Sgroi, PE  
Director of Engineering

cc: Fin. - Gabe Varca ,Lou Criscuolo (e-copy)  
Ops - Gary Zrelak, Joe Megale (e-copy)  
Eng - Nick Stevens, Ricardo Ceballos (e-copy)



Greater New Haven Water Pollution Control Authority

260 East Street New Haven, CT 06511

203.466.5280 p 203 772.1564 f www.gnhwpc.com

To: Director of Finance and Administration

From: Gary Zrelak, Director of Operations

Date: 06/02/25

Re: Operations - Capital Fund Transfer Request

Transfer Amount	Transfer From	Transfer To
\$ 50,000.00	02.0000.024.7584	02.0000.025.7647
	Collections Maint Building	Boulevard Grit Washer
\$ 50,000.00	Total	

Explanation: Additional Funds needed to install a Grit washer at the Blvd Pump Station will include replacement of conveyor and addition of Grit Classifier

Department Signature:

Approved by: Director of Finance and Administration

Approved by: Executive Director

Board Approval: Date of Meeting

Notes: All departmental budget transfers to and from Regular Wage (5010), Temporary & Part Time Wage (5011), and Overtime Wage (5015) Accounts shall be submitted to the Executive Director for review and approval. All fund transfers between departmental budgets and cost centers less than \$10,000 shall be submitted by the Director of Finance and Administration to the Executive Director for review and approval. All fund transfers between departmental budgets and cost centers equal to and greater than \$10,000 shall be approved by the Board of Directors.