



TOWN OF SOUTHAMPTON

Department of Community Preservation
 24 W Montauk Hwy, Hampton Bays, NY 11946
 Ph: 631-287-5720 Fx: 631-728-1920
WQIPP@southamptontownny.gov

Entity: _____

Project Name: _____

2024

COMMUNITY PRESERVATION FUND (CPF)
WATER QUALITY IMPROVEMENT PROGRAM
 PROPOSAL SUMMARY

Project Applicant: _____

Project Title: _____

Project Manager Name: _____

Entity Anticipating Grant and Funding: _____

Name	
Title	
Organization	
Address	
Phone	
Email	

Property owner (if different from Project manager organization):

Name	
Affiliation	
Organization	
Address	
Phone	
Email	

Project Address: _____ SCTM #(S) _____

Type of Project (Check all that apply):

- Reduction Remediation Restoration

Project Summary: (Provide a brief narrative description of proposed WQIPP project)



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If additional information is needed to describe the project; a project narrative can accompany the application. Please limit the narrative to approximately 3 pages of project description, provide a summary of water quality benefits/objectives of approximately 2 pages and provide a cost estimate of approximately 2 to 4 pages with supporting estimates. Any additional materials should be focused specifically on the proposed project with references to other studies that are pertinent

1. PROJECT TYPE (check all that apply)

Must meet at least one of the definitions of "Water Quality Improvement Project" per State Law Chapter 551 cited above. Check all that apply. **Note: Monitoring costs are only potentially eligible for CPF funding within Aquatic habitat restoration projects.**

- Wastewater Treatment Improvement Project
- Non-point source abatement and control
- Aquatic habitat restoration
- Pollution prevention
- Operation of Peconic Bay National Estuary Program (Grant Match)

2. PRIORITY AREA(S) (check all that apply)

Priority areas are defined in the [Water Quality Improvement Project Plan \(WQIPP\)](#).

- 303(d) Impaired
- Peconic Estuary Program - [PEP map](#)
- High
- Medium
- Outside High and Medium priority areas*

*If Outside High and Medium priority areas, explain how the project is relevant to WQIPP goals.

3. PROJECT DESCRIPTION

3a. Existing conditions of applicable groundwater/sub-watershed/waterbody and most recent and relevant data available (provide sources).

3b. How the proposed solution addresses the issue in the context of Reduction, Remediation and/or Restoration as per the CPF Water Quality Project Plan. Note all remediation and restoration projects must assure that reduction measures are also addressed.



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3c. Describe the proposed technology and its demonstrated efficacy in similar settings. May include published data.

[Blank response area for 3c]

3d. How the project supports Town of Southampton, Suffolk County, NYSDEC, Long Island Nitrogen Action Plan (LINAP) or other adopted goals/policies (provide references with page numbers).

[Blank response area for 3d]

3e. Review the following statements and indicate whether they are applicable to your project. For all "Yes" responses, please indicate how your project addresses the requirements indicated.

YES	N/A	
<input type="checkbox"/>	<input type="checkbox"/>	If stormwater system or drainage is proposed: The project must indicate compliance with the New York State Stormwater Design Manual (2015 and as updated).
<input type="checkbox"/>	<input type="checkbox"/>	If project is related to farmland: Describe any Agricultural Stewardship Plan or other long term strategy for Nitrogen abatement.
<input type="checkbox"/>	<input type="checkbox"/>	If the project is for habitat restoration: The narrative must address how underlying causes are being ameliorated and expected outcomes for local species populations or other ecological considerations are given.
<input type="checkbox"/>	<input type="checkbox"/>	If project is a Sewage Treatment Plant (STP) or cluster treatment system: Fund allocation request is based on cost for reduction of pre-existing conditions and not for purpose of accommodating new density (describe pre-existing density and associated flow (gallons per day) and total projected nitrogen reduction in narrative). Include detailed information on how many homes the system would treat as well as potential for formation of Sewer District, if required by Suffolk County Health Department or Town Law.
<input type="checkbox"/>	<input type="checkbox"/>	If the project is requesting grant match: Include information related to funding program source and purpose of application and any relevant items on this checklist. Note: A Town Board resolution will be required in order to encumber matching funds for grant applications.

4. WATER QUALITY BENEFIT

4a. Identify Nitrogen, Pathogen or Pollutant of Concern (POC) including Existing Condition and Target Reduction.

[Blank response area for 4a]

4b. Describe plans for collecting and reporting on water quality over time.

[Blank response area for 4b]



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4c. Indicate useful life of proposed technology (must meet or exceed five years).

5. COST FACTORS

5a. Explain how you have confirmed that the proposed budget is reasonable, appropriate and necessary. If available, provide third party estimates or other documentation of how costs were determined.

5b. Describe any matching funds to be provided.

5c. Explain: i. Why project cannot proceed and intended benefits cannot be achieved without external funding.
ii. if funds are awarded at a lower level than requested, or if there are cost overruns, explain how the project will proceed.

6. MANAGEMENT, EXPERIENCE, ABILITY

6a. Describe applicant's experience in completing similar projects.

6b. Describe community support or opposition to project. If there is opposition, explain how this is to be addressed.

6c. Describe any permits needed and time frame/status of approvals. If permits are approved, indicate same.



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Entity: Library Avenue Owners Cor
Project Name: Sewer System Installati

2024

7. MAINTENANCE, MONITORING, EVALUATION

Estimate ongoing maintenance costs and explain how these will be supported. Explain stewardship and monitoring activities planned for ensuring sustainability of the project.

Please see attached responses.

8. DURATION OF PROJECT

8a. Provide a projected project timeline. Note: The Committee will only make recommendations for shovel-ready projects that can commence this fiscal year.

Please see attached responses.

8b. If project is multi-year or phased, provide a breakdown of budget and milestones for each year and phase.

Please see attached responses.

9. ATTESTATION

Allocation of CPF funds will not be for the purpose of accommodating new growth, as this is prohibited by State law. Check all boxes & sign.

- We certify that funds will not be directed for projects for the purpose of accommodating new growth.
- We understand that progress reports will need to be generated as specified in our Water Quality Improvement Contract AND a final report showing qualitative and/or quantitative data will be generated upon project completion. .
- I authorize the subject property to be inspected by Town Personnel.

Signature: *David Alvin* Date 3/15/24

10. REQUIRED ATTACHMENTS Confirm that the following required documents are attached to this application:

11. REQUIRED ATTACHMENTS Confirm that the following required documents are attached to this application:

- Photos of existing conditions
- Location Map
- State Environmental Quality Review Act (SEQRA) Long or Short Environmental Assessment Form (EAF)
<https://www.dec.ny.gov/permits/6191.html>
- Completed EPA Spreadsheet Tool for Evaluating Pollutant Load (STEPL)
<https://www.epa.gov/nps/spreadsheet-tool-estimating-pollutant-loads-step1> or similar standardized methodology (describe)
- Project budget (see attached template)
- Ownership commitment is provided via letter of intent (LOI) for non-municipal owners or municipal resolution for municipal owners
- Public agencies must complete SEQRA on the project and submit determination of significance and associated documentation.

12. OTHER ATTACHMENTS

List other attachments provided, including cost estimates, bids, plans, documentation of matching funds, and other as appropriate to demonstrate project readiness, quality, feasibility, and cost effectiveness.



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BUDGET PROPOSAL

Is the applicant incorporated or organized as a Not-for-Profit corporation or Not-for Profit limited liability company?
 Yes No **(If Yes, please submit a copy of the Certificate of Incorporation/Organization with this application)**

Is the applicant a municipality? Yes No

If yes, please enter the request date or anticipated request date of RFP (Request for Proposals) _____.

PLANNING/ENGINEERING/DESIGN	Town CPF Request	Matching Funds Committed	Matching Funds Pending	Estimated Total Project Costs
Task 1-	\$-	\$-	\$-	\$-
Task 2-	\$-	\$-	\$-	\$-
Task 3-	\$-	\$-	\$-	\$-
Task 4-	\$-	\$-	\$-	\$-
Task 5-	\$-	\$-	\$-	\$-
Task 6-	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
Planning/Engineering/Design Cost Total	\$-	\$-	\$-	\$-

Contractual Services				
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
Contractual Services Cost Total	\$-	\$-	\$-	\$-

Construction & Site Improvements				
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
Construction & Site Improvements Cost Total	\$-	\$-	\$-	\$-



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Equipment/Materials/Supplies	Town CPF Request	Matching Funds Committed	Matching Funds Pending	Estimated Total Project Costs
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
Equipment/Materials/Supplies Total	\$-	\$-	\$-	\$-

Additional Cost				
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
	\$-	\$-	\$-	\$-
Additional Cost Total	\$-	\$-	\$-	\$-

Planning/Engineering/Design Cost Total (from page 7)	\$-	\$-	\$-	\$-
---	-----	-----	-----	-----

Total Project Cost	\$-
Applicant matching funds committed	\$-
Applicant matching funds pending approval (e.g. grant request submitted pending determination)	\$-
Total CPF Funds Requested	\$-

Note: all values on pages 7 and 8 should be shown as positive, not negative. The form contains a formatting error.

Source of matching funds	Amount



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COMMUNITY PRESERVATION FUND (CPF) WATER QUALITY IMPROVEMENT PROGRAM LETTER OF INTENT

APPLICANT'S INFORMATION

Owner: _____

Contact First and Last Name: _____

Contact Address: _____

Contact Phone: _____

Contact Email: _____

CONTRACT RECIPIANT INFORMATION

Name/Organization: _____

Contact Person/Officer: _____

Contact Address: _____

Contact Phone: _____

Contact Email: _____

PROJECT INFORMATION

Project Title: _____

Project Location: _____

Project Description (1-3 sentences): _____

ANTICIPATED PROJECT TIMELINE

Begin: _____

Complete: _____

Notes: _____

**TOWN OF SOUTHAMPTON
2024 COMMUNITY PRESERVATION FUND**

APPLICATION ATTACHMENTS

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Provided as separate attachments:

Final Construction plans and specifications

Responses to Application Questions

PROJECT OVERVIEW

This application requests supplemental funding for the Harbour House sewer installation project. The project received \$394,000 in CPF funding in 2022 (per Town Board Resolution 2022-1093). During the project presentation to the Town Board in 2022, Harbour House representatives noted that the grant request was based on an engineer's estimate. We requested future consideration for any adjustments that may be necessary if the bid process resulted in higher costs. Town representatives agreed to this request, with the caveat that any supplemental funding would be subject to Town review. After completing the bid process and negotiating with the selected contractor, we have determined that the actual project cost is \$451,000. Therefore, we are seeking a supplemental award of \$66,000.

As described herein, the project scope of work has not changed relative to the 2022 proposal.

The Library Avenue Owner's Corporation, d/b/a Harbour House proposes to install sanitary sewer infrastructure that will enable it to connect to the Village of Westhampton Beach Phase I Sewer Service System. Specifically, Harbour House will install upgraded on-site low-pressure piping, new gravity building connections, and duplex pump stations in order to convey sanitary wastewater from the community's 50 residential units and support buildings to Suffolk County Sewer District #24— Gabreski Sewage Treatment Plant (STP).

The entire property is located within the 0-2 year groundwater contributing area to surface waters, and is located in a high priority area for nitrogen reduction as defined by the Town of Southampton Water Quality Improvement Project Plan. When the project is complete, nitrogen loading due to sanitary wastewater to groundwater on the property will be reduced by 100%. The onsite systems will be abandoned and sanitary wastewater will be pumped to the STP. This equates to a reduction of 2,427 lbs. of Nitrogen per year from the property.

3. PROJECT DESCRIPTION

3a. Existing conditions of applicable groundwater/sub-watershed/waterbody and most recent and relevant data available (provide sources).

EXECUTIVE SUMMARY

The surface water bodies of the eastern portion of Moriches Bay, Moniebogue Bay, and Quantuck Bay that surround the Inc. Village of Westhampton Beach (Village) have experienced an increase in recurring red, brown and rust tides. Due to these conditions, the water bodies were added to the New York State Department of Environmental Conservation (NYSDEC) Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy in 2010. The pollutants of concern identified by the NYSDEC are nitrogen and low dissolved oxygen with onsite wastewater disposal systems and urban runoff as the suspected sources. The impacts from the

ongoing degradation of these surface water bodies can be seen through the significant loss of native plant and shellfish species. A recent study prepared by Dr. Christopher Gobler has also identified the high nutrient loading to be attributed to outdated onsite septic systems and cesspools serving the surrounding homes and businesses located within the Village of Westhampton Beach (Village).¹

As a first step towards mitigating the existing water quality issues, the Village implemented a sewer system to collect and convey 60,000 gallons per day (GPD) of sanitary wastewater generated within the Main Street business corridor (i.e. Phase 1 service area) to the existing Suffolk County Sewer District No. 24 (SCSD #24) wastewater treatment plant located at Gabreski Airport. In order to realize the benefits of wastewater treatment, the properties located within the Phase 1 area must first connect to the Village infrastructure and abandon their conventional on-site sanitary disposal systems.

The sanitary wastewater flow from the Harbour House property is estimated at 12,265 gallons per day or approximately 20% of the total phase 1 flows. Prior to connecting to the Village system, Harbour House needs to install on-site low-pressure piping, new gravity building connections, and duplex pump stations in order to convey the flow from each unit and pump it off-site. Once the new systems are online and flow is being discharged to the Village sewer the existing on-site disposal systems will need to be abandoned in accordance with Suffolk County Office of Pollution Control requirements. The connection of Harbour House puts the goals identified under the Village's Phase 1 sewer plans a step closer to being achieved. By connecting the high-density residential units and support facilities the benefit is roughly equivalent to the connection of 50 single-family homes, providing a major cost-per-gallon benefit for connection.

BACKGROUND

The existing Harbour House community, located at 35 Library Avenue in the Village of Westhampton Beach, New York is comprised of fifty (50) residential units in six (6) 3-story buildings, one (1) 2-story building, one (1) 1-story building, and one (1) maintenance building. The buildings are all located on a 5.24 acre property that borders Stevens Lane to the South, 23 Library Avenue co-op to the North, Library Avenue to the East, and Moniebogue Canal to the West. Occupancy of the units is a combination of seasonal and year-round residents. The parcel is located within the Phase 1 service area of the proposed Village Sewer System. The Village is currently in the process of constructing the sanitary wastewater collection and conveyance infrastructure for the Village's Phase 1 service area.

The entirety of the parcel is located within the 0-2 year groundwater contributing area to surface waters, as defined by Suffolk County's Subwatersheds Wastewater Plan, meaning that contaminants from on-site disposal systems discharging to groundwater in these areas will

¹ Dr. Christopher J. Gobler, PhD. [Quantifying Nitrogen Loading to from Village of Westhampton Beach to Surrounding Water Bodies and Their Mitigation by Creating a Sewer District](#). June 2017. Prepared for the Village of Westhampton Beach, Village Board of Trustees.

reach surface waters in as little as 0-2 years.² The property is also in a Town of Southampton Priority Area as defined by its Community Preservation Fund Water Quality Improvement Project Plan.³ This proximity to surface water and the density of the existing units make this site an ideal candidate for connection to a centralized sewage treatment plant. Connection to a centralized sewer system is an important step towards preventing the degradation of water quality by reducing the quantity of nutrients and pollutants that can make their way to surface waters.

Existing On-Site Sanitary Disposal Systems

Each of the eight (8) existing buildings is served by a dedicated on-site sanitary disposal system. Each system consists of a septic tank and two (2) or three (3) cesspools, that discharge directly to ground. The existing systems for the six (6) 3-story buildings numbered 2 through 7 are located in a berm to the North side of the units, the existing systems for buildings 1 and 8 are located to the South of the respective buildings. In addition to the single family residential units there is an existing maintenance building that has two (2) separate disposal system: one (1) for four (4) laundry machines to the Southeast of the Building and one (1) for a single bathroom to the Northeast of the Building. The laundry machines are for resident use only. The pool filter backwash also has a separate disposal system.

Geological Conditions

The topography of the site generally slopes from north to south and east to west towards Moniebogue Creek. Ground surface elevations within this area generally range between approximately 10-feet to 5-feet above mean sea level (MSL) based on commercially available topographical mapping information through the New York State GIS Clearinghouse. Groundwater elevations at the site range between approximately 5-feet to 10-feet below ground surface (BGS) based on the Long Island Depth to Water Viewer hosted by USGS.⁴ The frost line in Suffolk County can vary based on soil conditions from 3 to 4 feet below grade.

Environmental Resources

The closest limit of construction disturbances to surface water for the proposed work is approximately 50 feet from Moniebogue canal, approximately 0.9 miles upstream of where it discharges to Quantuck Canal, which feeds Quantuck Bay to the east and eastern portion of Moriches Bay to the west. As defined by the US Fish & Wildlife Service National Wetland Inventory, at the point of discharge, Moniebogue Bay and the downstream water bodies are classified as estuarine and marine deep-water habitat (E1UBL)⁵. The NYS DEC (6 CRR-NY X A 2 701) classifies these water bodies as Class SA, which is defined “as a saline surface water for

² <https://suffolkcountyny.gov/Portals/0/formsdocs/planning/CEQ/2019/Appendix%20B%20-20SWP%20Executive%20Summary%20August%202019.pdf?ver=2019-08-16-113254-687>

³ <https://ny-southampton.civicplus.com/DocumentCenter/View/7318>

⁴ <https://ny.water.usgs.gov/maps/li-dtw/>

⁵ Data was obtained from: <https://www.fws.gov/wetlands/data/Mapper.html>

shell fishing for market purposes, primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival.”⁶

Flood Plain Considerations

The entirety of the site is located within the 1% annual chance flood hazard zone (Zone AE) with a base flood elevation (BFE) of 8-ft as described by FEMA Flood Insurance Rate Map (FIRM) number 36103C0767H, effective on September 25, 2009.

3b. How the proposed solution addresses the issue in the context of Reduction, Remediation and/or Restoration as per the CPF Water Quality Project Plan.

The Village sewer project provided one (1) 2” Ø low-pressure sewer (LPS) stub to the property along the Library Avenue frontage. Low-pressure sewers are pressured sewer mains that convey flow through small diameter pipe through the use of grinder pump units (GPUs) at each property. The GPUs are owned and maintained by the individual property owners while the LPS main in the road will be operated and maintained by Suffolk County Department of Public Works. The on-site infrastructure required to connect to the low-pressure sewer will consist of on-site low-pressure piping, new gravity building connections, and duplex pump stations. All sewers will be designed a minimum of 4.5 feet below grade to prevent freezing. Any infrastructure installed, including pump stations, cleanouts, and manholes will be either installed above flood elevation or designed with flood proof covers.

Construction will be sequenced to both minimize site access impacts, maintain sanitary service to all units for duration of work and to prevent any unpermitted discharge of sanitary wastewater. To further minimize the impact of construction activities such as excavation and demolition, erosion and sediment control (E & SC) measures will be utilized during construction. Please see attached draft site plan.

Sanitary Flow Determination

The sanitary flow used for basis of design of the sewer connection is determined by using Suffolk County Department of Health Services Standards for Approval of Plans and Construction for Sewage Disposal Systems other than Single-Family Residences. Using Table 1 – Project Density Loading Rates the relevant density loadings are Housing Units between 601-1200 sq. ft. at 225 gpd/unit and Housing Units greater than 1200 sq. ft. at 300 gpd/unit. Flows from the maintenance building are determined using the process flow from the laundry machines. The flows from the pool filter backwash are not considered, as this discharge will continue via existing separate disposal system. See Table 1 and Table 2 below for breakdown of unit count per building and SCDHS flows.

⁶ Data was obtained from:
[https://govt.westlaw.com/nycrr/Document/14ed840c2cd1711dda432a117e6e0f345?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/nycrr/Document/14ed840c2cd1711dda432a117e6e0f345?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

Table 1 – Unit Count by Building

Building #	Unit Count	
	601-1200 SF	1200 SF
1	7	1
2	4	2
3	4	2
4	4	2
5	4	2
6	4	2
7	4	2
8	6	0
Total	37	13

Table 2 – SCDHS Design Sewage Flow

Criteria	Unit Count	SCDHS Density Load	Flow (gpd)
601-1200 sq. ft. Housing Unit	37 Units	225 gpd	8,325 gpd
> 1200 sq. ft. Housing Unit	13 Units	300 gpd	3,900 gpd
Maintenance Building*	1325 sf	0.03 gpd/sf	40 gpd
Total			12,265 gpd

3c. Describe the proposed technology and its demonstrated efficacy in similar settings. May include published data.

On-Site Sanitary Infrastructure Improvements

The design plans for all on-site sanitary infrastructure were completed in accordance with SCDHS and SCDPW requirements. The on-site low-pressure sewer grinder pump station(s) will be sized with sufficient capacity to accommodate peak flow generated by the subject site. The grinder pumps will be capable of providing a shut-off head no less than 80 psi (185 feet total dynamic head) and a flow rate not to exceed 11 gpm per grinder pump. The on-site pump station design will also include a control panel with remote alarm beacon and audible horn to alert owner personnel of pump station alarm conditions.

The on-site low-pressure sewer force main pipe will be a minimum of 1.25-inch diameter and constructed from butt-fused HDPE DR-11 piping. In order to connect all eight (8) buildings to the proposed lateral stub at the property line a combination of 1.25-inch, 1.5-inch, and 2-inch piping will be required along with associated fittings and appurtenances. The building connections from each building will be intercepted and rerouted as required with minimum 6”

Ø SDR-35 PVC pipe and will connect to the proposed GPUs. All proposed building connections will be constructed with a minimum slope of ¼" per foot or ~2%. Each GPU will have a control panel with audible and visual alarm condition indicators and an emergency generator connection for use in the case of power failure. In total nine (9) GPUs are anticipated to replace the 9 (nine) dedicated on-site sanitary disposal systems.

The design of all sanitary infrastructure will be prepared in accordance with local regulatory requirements and adhere to Ten States Recommended Design Standards for Wastewater Facilities, Suffolk County Department of Health Services, and Suffolk County Department of Public Works design standards.

Suffolk County Sewer District #24 – Gabreski Sewage Treatment Plant

In April 2021, the Village of Westhampton Beach broke ground on its Phase 1 Sewer Service Area project. Under this project, the Village constructed a sewer system to collect and convey 60,000 gallons per day (GPD) of sanitary wastewater generated within the Main Street business corridor (i.e. Phase 1 service area) to the existing Suffolk County Sewer District No. 24 (SCSD #24) wastewater treatment plant located at Gabreski Airport in Westhampton Beach. Treated effluent discharged from the existing wastewater treatment plant is reintroduced to the ground via subsurface leaching pools with the total nitrogen concentration reduced below the current drinking water standard and permit discharge limit of 10 mg/L. Therefore, the Village's sewer system will remove nitrogen-rich onsite wastewater point sources from continuing to discharge to groundwaters with less than 2-year travel time, thereby contributing to the improvement of water quality in the surrounding water bodies.

Materials of Construction

All materials used for construction of the on-site sanitary infrastructure improvements will be intended for use as part of a sanitary wastewater collection system. All low-pressure sewers will be constructed of butt-fusion welded DR-11 HDPE pipe suitably sized for transmission of sewage from the grinder pump units. Grinder pump units will be manufactured by E-one and consist of a duplex pumping system with a sentry plus control panel. Due to the flood plain considerations all grinder pump units will be installed with watertight covers and vents extended above the 500-year flood plain elevation. All gravity sewer piping/building connections will be constructed of minimum SDR-35 PVC piping. In the event of a power failure two (2) portable generators will be provided as well as a 10'x10' storage shed.

3d. How the project supports Town of Southampton, Suffolk County, NYSDEC, Long Island Nitrogen Action Plan (LINAP) or other adopted goals/policies (provide references with pages numbers).

Town of Southampton Water Quality Improvement Project Plan (WQIPP)⁷

In accordance with State Law Chapter 551, a “wastewater treatment improvement project,” is a “water quality improvement project” that is eligible for CPF funding. Under the statute, “wastewater treatment improvement project” means “the planning, design, construction, acquisition, enlargement, extension, or alteration of a wastewater treatment facility, including alternative systems to a sewage treatment plant or traditional septic system, to treat, neutralize, stabilize, eliminate or partially eliminate sewage or reduce pollutants in treatment facility effluent.” Therefore, the proposed project is eligible for CPF funding.

The WQIPP quotes the Suffolk County Comprehensive Water Resources Management Plan (2015), which states that, “nitrogen pollution from septic systems has clearly emerged as the most widespread and least well addressed of the region’s growing list of water pollutants.” The plan goes on to say that “nitrogen loading to watersheds of Southampton must be reduced in order to restore ecological health and maintain drinking water standards.”

Harbour House is located in a WQIPP High Priority area (P. 54). See attached map.

Suffolk County Subwatershed Plan⁸

Quantuck Bay, Quantuck Canal, and Moniebogue Bay are identified as a Priority 1 subwatershed for nitrogen reduction via wastewater management (p. 2-74).

Suffolk County Water Resources Management Plan⁹

The proposed project supports Nitrogen recommendation 1.15, “Seek ways to remediate existing nitrogen pollution and its impacts.” Key Milestone b., “Advance sewer expansion projects as funding becomes available,” is also supported. (Table 9-1)

3e. If project is a Sewage Treatment Plant (STP) or cluster treatment system: Fund allocation request is based on cost for reduction of pre-existing conditions and not for purpose of accommodating new density (describe pre-existing density and associated flow (gallons per day) and total projected nitrogen reduction in narrative). Include detailed information on how many homes the system would treat as well as potential for formation of Sewer District, if required by Suffolk County Health Department or Town Law.

The project will service the 50 existing units and support buildings in the Harbour House cooperative community. No increase in density will be accommodated by the project.

⁷ <https://www.southamptontownny.gov/DocumentCenter/View/7318/Water-Quality-Improvement-Plan-CPF-Referendum-PDF?bidId=>

⁸ <https://suffolkcountyny.gov/Portals/0/formsdocs/planning/CEQ/2020/RevisedComplete%20SWP2-21-20.pdf>

⁹ <https://www.suffolkcountyny.gov/Portals/0/FormsDocs/Health/EnvironmentalQuality/ComprehensiveWaterResourceManagementPlan/Section%209%20Plan%20Implementation.pdf>

4a. Identify Nitrogen, Pathogen or Pollutant of Concern (POC) including Existing Condition and Target Reduction.

The pollutant load reduction from the connection of Harbour House to the Village collection system can be estimated based on the current level of treatment through the on-site systems and the future level of treatment when connected to Suffolk County Sewer District #24 – Gabreski Sewage Treatment Plant. The pollutant of concern for surface water on Long Island is Nitrogen, which has been linked to harmful algae blooms and water quality degradation. Typical Nitrogen concentration from residential sanitary wastewater without treatment is 65 mg/L. Once connected to the collection and conveyance system the wastewater will be conveyed to the Gabreski STP and be treated to a Nitrogen concentration of 10 mg/L. This is a reduction of 55 mg/L of Nitrogen or roughly 85% reduction. The reduction on the actual site is even greater because the wastewater is being pumped off-site, and therefore the Nitrogen loading due to sanitary wastewater to groundwater on the Harbour House property will be reduced to 0 mg/L. This equates to a reduction of 2,427 lbs. of Nitrogen per year from the site itself.

4b. Describe plans for collecting and reporting on water quality over time.

Harbour House will be supportive of partnerships with the Village of Westhampton Beach, Stony Brook University School of Marine and Atmospheric Sciences, or other community partners with regard to ongoing water quality monitoring efforts.

4c. Indicate useful life of proposed technology (must meet or exceed five years).

The useful life of the project meets or exceeds the CPF five-year requirement. The proposed low pressure pumping system force main is to be made of HDPE – a durable material expected to have a minimum 50-year service life. Fittings, valves, grinder pumps and other ancillary equipment associated with the force main would be expected to have a 15-20 year service life.

The Village of Westhampton Beach Engineering Design Report (Volume 2) presents a 30-year life cycle for upgrades to occur at the STP.

5. COST FACTORS

5a. Explain how you have confirmed that the proposed budget is reasonable, appropriate and necessary. If available, provide third party estimates or other documentation of how costs were determined.

Harbour House retained the firm H2M architects + engineers to prepare engineering designs for this project. H2M is optimally situated to perform this work, as it is also the consulting engineer for the Village of Westhampton Beach for its Phase 1 Sewer Service System Collection and Conveyance System and the Gabreski STP expansion. It is also the engineer of record for other residential owners in the Phase I Sewer Service Area. H2M’s staff of engineers and other

professionals are highly qualified and experienced in design and implementation of wastewater treatment systems.

H2M prepared the cost estimate that was provided with the original 2022 CPF application, and supported Harbour House with the bidding process in 2023-24. The following table presents the cost variation between the original project cost estimate and the actual cost as negotiated with the contractor (All Island Plumbing).

ITEM	2022 CPF GRANT REQUEST	2024 ACTUAL COST	DIFFERENCE
Engineering	\$55,000	\$55,000	-
Permitting & Sampling Fees	\$20,000	\$20,000	-
On-Site Sanitary Infrastructure & existing system abandonment	\$319,000	\$385,000	\$66,000
Totals	\$394,000	\$385,000	\$66,000

The \$66,000 cost overage relates to escalation in current market conditions. Please see attached executed construction contract for further detail.

5b. Describe any matching funds to be provided.

Harbour House will support costs relating to the following aspects of the project:

1. Repurpose existing cesspools as roof leader recharge. This will allow the cesspools to remain in place after being pumped and connected to a building roof leader(s). By repurposing the leaching pools the amount of drainage runoff that leaves the site is reduced, further benefiting water quality in the area. The projected cost of this work in 2022 was \$44,000. This cost has since escalated by approximately \$10,000 to \$54,000.
2. Repair and restore parking areas to be disturbed during sewer system installation. The projected cost of this work in 2022 was \$165,116. This cost has since escalated by approximately \$63,000 to \$228,116.
3. Additional topographic survey.
4. Additional soil borings and related geotechnical report.
5. Invasive investigation (i.e., test pits).
6. Fees to be paid to permitting agencies associated with required permits and approvals including but not limited to Village of Westhampton Beach SCDPW, SCDHS, and NYS DEC permit fees.
7. Operation and Maintenance of grinder pump units.
8. Construction observation beyond 80 hours.
9. Treatment and/or removal of contaminated soils and groundwater.
10. Legal counsel.
11. Grant assistance.

5c. Explain: i. Why project cannot proceed and intended benefits cannot be achieved without external funding. ii. if funds are awarded at a lower level than requested, or if there are cost overruns, explain how the project will proceed.

This is a request for supplemental funding as the bid costs exceeded the original projection. Construction costs are now contractually agreed and no additional adjustments are anticipated.

Harbour House has made every effort to minimize costs to CPF by implementing this project in coordination with its parking lot reconstruction project, which is not part of in this grant request. The parking lot improvements will involve ground disturbance, paving and installation of curbing in the same areas where sewer mains and grinder pumps will be installed for the sewer connection. Installing the sewer infrastructure before the site improvements is cost beneficial for both Harbour House and the CPF. The benefit to the CPF is that funds will not be requested for restoration costs, as these are part of the paving project. Phasing the two projects together will produce a cost savings compared to the cost that would be incurred if the sewer installation occurred as a standalone initiative.

6. MANAGEMENT, EXPERIENCE, ABILITY

6a. Describe applicant's experience in completing similar projects.

Members of the Harbour House HOA board will oversee the project with professional support provided by consulting engineer H2M architects + engineers. Harold Levine, President of Harbour House HOA, is a former hospital administrator who is familiar with management of major institutional construction projects. Derrick Grieco, Vice President, has 25 years' experience with an engineering consulting firm with deep experience in managing design production schedules, MEP systems, and is an experienced project manager. Other members of the HOA will provide support as needed for the procurement and administrative tasks required to advance the project, including grant award administration.

H2M is supporting all aspects of engineering and design for the sewer project, and will provide construction observation and administration services. Please see their attached statement of qualifications.

Prior capital projects managed and successfully completed by the HOA Board include:

- 2016-2018: Resurfaced building roofs in a phased, multiyear effort at an approximate cost of \$435,000.
- 2018: Pool upgrade – \$22,000.
- 2017: oil tank removals for a total of \$3,500; new fencing \$17,000.
- 2016: Rebuilt six (6) building support structures to eliminate risk of failure of cantilevered decks – \$225,000.

- 2012: completed boiler plant upgrade – transition from diesel to natural gas. The system feeds hot water and heating systems for 7 of 9 buildings. The project cost was \$70,000, and produced cost savings estimated at \$50,000 annually.
- General dock replacements each year.

All Island Plumbing was selected to perform construction services following a competitive bid and negotiation process. The firm was founded in 1980 and is based in Holbrook, NY. All Island provides specialized services relating to septic systems, sewer hook-ups and other plumbing projects for municipal, industrial, and residential properties.

6b. Describe community support or opposition to project. If there is opposition, explain how this is to be addressed.

The HOA Board has secured professional engineering services to advance the project and has presented the initiative to the community to ensure that costs, scope of work and timelines are understood. Feedback from residents has been positive since the project’s inception in 2021, and no opposition has been noted.

6c. Describe any permits needed and time frame/status of approvals. If permits are approved, indicate same.

All required permits have been secured. These include Westhampton Beach Village and Suffolk County Department of Public Works.

7. MAINTENANCE, MONITORING, EVALUATION

Estimate ongoing maintenance costs and explain how these will be supported. Explain stewardship and monitoring activities planned for ensuring sustainability of the project.

All improvements will occur within the common areas of the property. As such, all ongoing maintenance will be managed by existing staff employed by Harbour House through common charges paid by the community. A schedule of maintenance and associated costs will be provided by H2M as part of the engineering design.

8. DURATION OF PROJECT

8a. Provide a projected project timeline.

- March 2024: Execute contract with selected contractor
- March 2024: Construction Start
- May 2024: Construction Completion

The timeline provided with the 2022 CPF application projected a 2023 construction timeframe. This timeline was impacted by delays associated with the Village of Westhampton Beach’s

Gabreski STP expansion. The STP's available flow capacity is tied to milestones in the Gabreski Upgrade contract, which is outside of the control of Harbour House. Due to lead time issues the Gabreski contract was extended 121 days (~ 4 months) for delivery of the Motor control Center. This delay also delayed our ability to connect to the Village sewer system. This issue is now resolved, but has had a cascading affect on your schedule.

As the window for construction at Harbour House needed to fall within our off-season, we missed the first opening for construction. The start date was therefore delayed approximately 1 year.

8b. If project is multi-year or phased, provide a breakdown of budget and milestones for each year and phase.

N/A

Short Environmental Assessment Form

Part 1 - Project Information

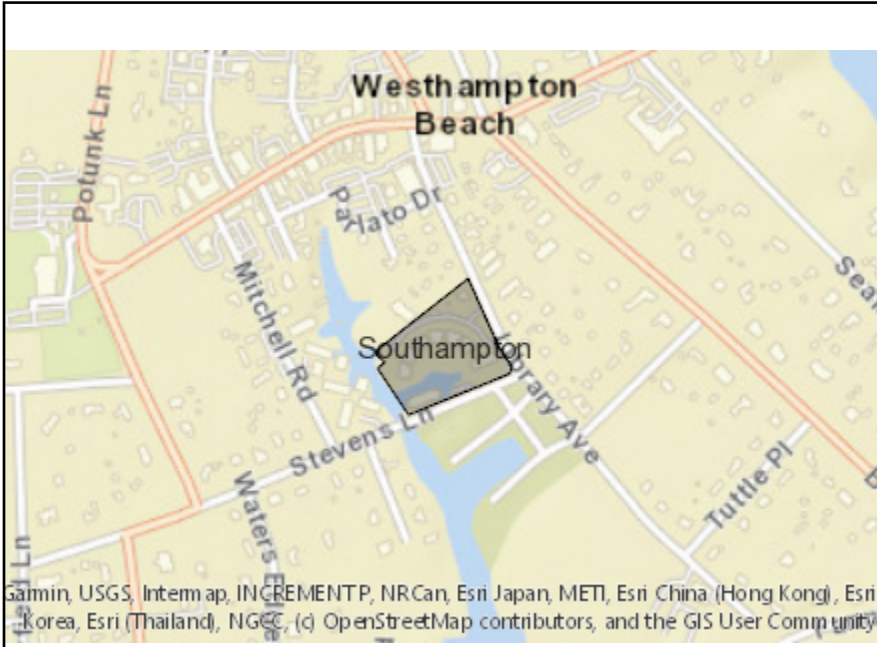
Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information			
Name of Action or Project:			
Project Location (describe, and attach a location map):			
Brief Description of Proposed Action:			
Name of Applicant or Sponsor:		Telephone:	
		E-Mail:	
Address:			
City/PO:		State:	Zip Code:
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:			NO <input type="checkbox"/>
			YES <input type="checkbox"/>
3. a. Total acreage of the site of the proposed action? _____ acres			
b. Total acreage to be physically disturbed? _____ acres			
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres			
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. Urban Rural (non-agriculture) Industrial Commercial Residential (suburban)			
<input type="checkbox"/> Forest Agriculture Aquatic Other(Specify):			
<input type="checkbox"/> Parkland			

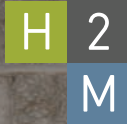
<p>5. Is the proposed action,</p> <p>a. A permitted use under the zoning regulations?</p> <p>b. Consistent with the adopted comprehensive plan?</p>	NO	YES	N/A
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?</p> <p>If Yes, identify: _____</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>8. a. Will the proposed action result in a substantial increase in traffic above present levels?</p> <p>b. Are public transportation services available at or near the site of the proposed action?</p> <p>c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>9. Does the proposed action meet or exceed the state energy code requirements?</p> <p>If the proposed action will exceed requirements, describe design features and technologies:</p> <p>_____</p> <p>_____</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>10. Will the proposed action connect to an existing public/private water supply?</p> <p>If No, describe method for providing potable water: _____</p> <p>_____</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>11. Will the proposed action connect to existing wastewater utilities?</p> <p>If No, describe method for providing wastewater treatment: _____</p> <p>_____</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?</p> <p>b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
<p>13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?</p> <p>b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?</p> <p>If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____</p> <p>_____</p> <p>_____</p>	NO	YES	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Yes
Part 1 / Question 20 [Remediation Site]	No



Here at H2M, we value people.



H2M was organized in 1933 and founded on the principles of professional excellence, hard work, and integrity.

Practical Approach. Creative Results.

H2M is a multi-disciplined professional consulting, and design firm, proud of our long history of client service and consistent ability to meet tough architectural, engineering, and environmental challenges head-on. Since 1933, H2M has helped plan, design, and build many of our local communities: from water treatment facilities to firehouses, schools to road reconstruction, and Environmental Site Assessments (ESAs) to groundwater remediation. Since our early roots, our focus has remained steadfast: to provide quality service with sound judgment and serve our clients as an honest and professional resource. We offer a practical approach with creative results.

Our Staff

H2M prides itself on the breadth of its comprehensive in-house service capabilities. With a diverse staff of over 480 engineers, architects, surveyors, scientists, planners, landscape architects, and technical support specialists, we offer our clients the benefit of a full “under one roof” consulting network.

 60 Registered Architects	 93 Professional Engineers	 02 Registered Landscape Architects
 07 Professional Geologists	 06 Professional Planners	 02 Professional Land Surveyors
 39 LEED Accredited Professionals	 14 LEED Green Associates	 05 Licensed Site Remediation Professionals

OPERATING PHILOSOPHY

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Our People

We commit to developing our people and rewarding hard work with growth opportunities in an inclusive professional environment.

Our Clients

We commit to being trusted advisors for our clients and delivering problem solving value and quality on every project.

Our Communities

We commit to creating thriving and healthy communities by giving of ourselves and developing sustainable solutions that benefit everyone.

V
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We exist to improve the quality of life for everyone in our reach by empowering our diverse talent to sustainably solve the challenges of the built environment.

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We Stand as One H2M

Inclusive. Supportive. Collaborative. No matter where you are.

We Challenge One Another

We show up curious and push boundaries.

We Do the Right Thing

Our character is built on doing what is right and ethical.

We Work Safely

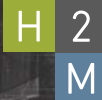
We care for the lives of our people and their families.

We Own it

We hold ourselves accountable for team success and personal achievement.

We Embrace Diversity

We acknowledge and honor the fundamental value and dignity of all individuals.



H2M Services

Architecture

- Architectural design
- Comprehensive grant programs
- LEED design processes
- Interior design
- Removal of barriers to the handicapped
- Master plans and revisions
- Needs assessments
- Planning studies
- Building conditions surveys
- Restoration of historic structures
- Restaurant and kitchen design
- Zoning ordinance review
- Educational facilities design
- Assisted living facilities design

Civil/Site & Structural Engineering

- Roadway reconstruction and resurfacing
- Site plan design
- Street lighting
- Flood control and drainage
- Irrigation systems
- Sidewalks and curbs
- Storm drainage systems
- Water mains
- Local roadway study and design
- Subdivision design
- Streetscape design and improvements
- Parks, playgrounds, athletic fields
- Parking fields
- Highway planning studies
- Intersection design and improvements
- Visual impact analyses
- Resident engineering inspections
- Geographic Information Systems (GIS)
- Green infrastructure design
- Structural conditions assessments
- Structural building design
- Structural renovations/alterations
- Cause and origin investigations
- Retaining walls, bulkhead, and culvert design
- Storm hardening/resiliency
- Expert testimony

Construction Phase Services

- Inspection
- Shop drawing review
- Scheduling
- Construction administration
- Site safety plans
- Grant administration
- MWBE/SDVOB compliance
- Startup
- Commissioning
- Drone progress photos
- O&M manuals
- Utility coordination
- Response to RFIs
- Job progress meetings
- Prepare punch list
- Project closeout
- Record drawings

Environmental Services

- Air and water pollution control
- Hazardous waste management
- Hazardous materials storage design
- Waste minimization

- Environmental Impact Statements (EISs)
- Wetland delineation
- Environmental Site Assessments (ESAs)
- Environmental compliance audits
- Environmental permitting
- Site investigations
- Brownfield assessments
- Remedial investigations/feasibility studies
- Risk assessments
- Above and underground tank management
- Soil and groundwater remediation
- Soil vapor intrusion studies
- Regulatory compliance programs
- Industrial hygiene
- Indoor air quality
- CM/LBP/mold inspections and abatement
- Computer modeling
- Asbestos investigation and removal
- Geographic Information Systems (GIS)

Land Surveying

- Boundary and title surveys
- Topographical surveys
- Horizontal and vertical control surveys
- Hydrographic surveys
- Route surveys
- Subdivision planning
- Sanitary and drainage study maps
- Legal descriptions
- Construction layout services
- As-built surveys
- Architectural surveys
- Structural surveys
- Under-construction inspection surveys
- Easement survey and description

Landscape Architecture

- Tree inventory and assessment
- Tree mitigation
- Landscape design and restoration
- Conceptual site design
- Landscape planning
- Illustrative renderings
- Landscape architectural detailing
- Streetscape and urban design
- Parks and playgrounds design
- Campus landscape design
- Private estate and residential design
- Planting design
- Wetlands mitigation
- Green infrastructure

MEP Services

- Electrical systems design
- Feasibility and implementation studies
- Power supply
- Exterior and interior building services
- Closed-circuit television security systems
- Emergency power generation
- Site/systems and load evaluations
- Energy studies
- Site lighting design
- Fire and security systems
- SCADA systems
- Utility company rebates and incentives
- HVAC systems design
- Heat and cooling load analysis
- Steam systems
- Hydronics

- Heat recovery systems
- Chillers and cooling towers
- Laboratory ventilation systems
- Site/systems evaluations
- Feasibility/implementation studies
- Energy conservation
- Cost/benefit analysis
- Commissioning/testing

Planning

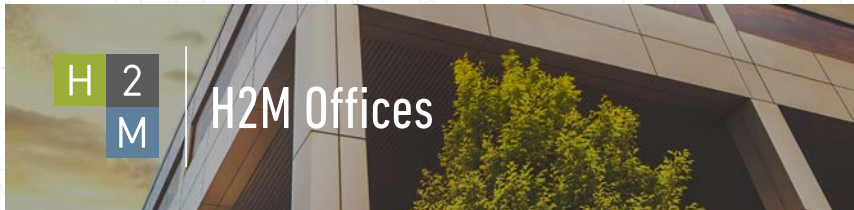
- Comprehensive Master Planning
- Parks, Open Space and Recreation Planning
- Environmental and Natural Resource Planning
- SEQRA and EIS Documentation and Process Support
- Community Visioning
- Zoning Ordinances and Analysis
- Redevelopment Studies and Plans
- Geographic Information Systems (GIS)
- Urban Design
- Design Guidelines
- Renderings
- Feasibility Studies and Conceptual Plans
- Downtown Revitalization
- Expert Private Testimony
- Municipal Board Representation

Wastewater Engineering

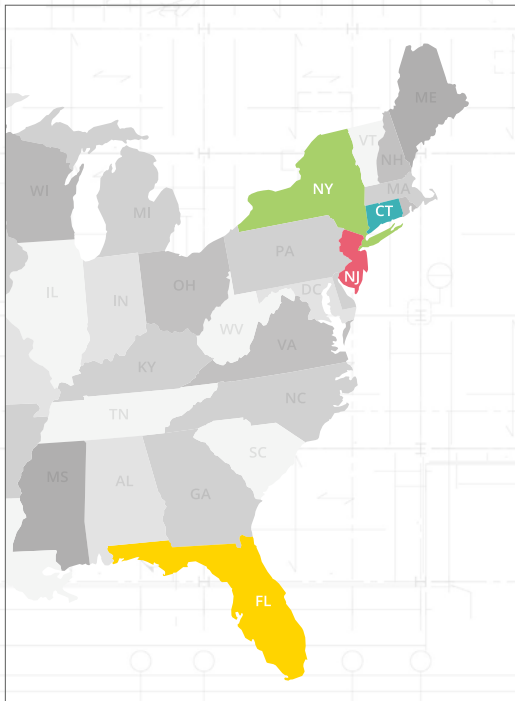
- Characterization/quantification of waste
- Treatment facility evaluation
- Scavenger waste facility design
- Outfalls and leaching systems design
- Chemical feed systems design
- Monitoring and control systems
- Nutrient removal treatment systems design
- Facility planning studies
- Wastewater treatment studies
- Wastewater treatment plant design
- Wastewater reuse design
- Standby power systems
- Sludge thickening, dewatering
- Sludge treatment, disposal
- Odor control
- UV and chemical disinfection systems
- Sewer system extension planning
- User cost analysis
- Sanitary sewer design
- Sewer rehabilitation studies and design
- Infiltration/Inflow evaluation
- Pump station evaluations and design
- Odor control
- Security systems
- Geographic Information Systems (GIS)
- Discharge monitoring reports
- Plant performance monitoring
- Preparation of O&M manuals
- Facility start-up and operations
- Groundwater/effluent monitoring programs
- Operator training
- Industrial pretreatment programs
- Prepare/revise sewer use ordinance

Water Engineering

- Supply well design
- Plant rehabilitation design
- Water treatment systems
- Water filtration systems design
- VOC removal treatment systems design
- Distribution system analysis and design
- Distribution hydraulic modeling
- Automated mapping/facilities mapping
- Storage tank rehabilitation/repainting
- Storage tank design
- Tank and coatings inspection
- Instrumentation and computer control designs
- Comprehensive groundwater modeling
- Geographic Information Systems (GIS)
- Aquatics and park design
- Public swimming pool design
- O&M programs
- Training programs
- Asset management



H2M Office Locations | New York Offices



-  538 Broad Hollow Road, 4th Floor East
Melville, NY 11747
-  127 West 30th Street, 9th Floor
New York, NY 10001
-  737 Roanoke Avenue
Riverhead, NY 11701
-  2 Executive Boulevard, Suite 401
Suffern, NY 10901

-  2700 Westchester Avenue, Suite 415
Purchase, NY 10577
-  3 Lear Jet Lane, Suite 205
Latham, NY 12110
-  119 Cherry Hill Road, Suite 110
Parsippany, NJ 07054
-  4810 Belmar Boulevard
Wall Township, NJ 07753

-  360 Bloomfield Avenue, Suite 301
Windsor, CT 06095
-  880 SW 145th Avenue, Suite 106
Pembroke Pines, FL 33027

“H2M” refers to H2M Architects, Engineers, Land Surveying and Landscape Architecture, D.P.C. and/or its subsidiary H2M Associates, Inc., and/or its affiliate H2M Architects & Engineers, Inc. and Pacheco Ross Architects, a division of H2M architects + engineers, as appropriate to the context. Pacheco Ross Architects was acquired by H2M in 2016, and specializes in the design of emergency response facilities. Each company’s professional resources are available to the others to the maximum extent permitted by applicable state laws. H2M will not practice, and should not be interpreted to be offering to practice, any professional service for which it and its cognate employees are not properly licensed.

H2M Architects, Engineers, Land Surveying and Landscape Architecture, DPC (dba: H2M architects + engineers) is a NYS Design Professional Corporation. It maintains New York Certificates of Authorization to provide professional architecture, engineering, land surveying, and landscape architecture services.

H2M Associates, Inc. is a New Jersey business corporation. It is a wholly owned subsidiary of the parent company. It maintains New Jersey Certificates of Authorization to provide professional engineering, land surveying, and landscape architecture services.

H2M Architects & Engineers, Inc. is a New Jersey business corporation. It is an affiliate of the parent company, being under the ownership and control of a group of appropriately licensed officers of the parent company. It maintains New Jersey Certificates of Authorization to provide architecture and professional engineering services. It is also appropriately structured to maintain certificates of authority to provide architecture and professional engineering services in Connecticut, Florida, Massachusetts, Pennsylvania, and Virginia.



The Core of Excellence is an H2M exclusive initiative that sets us apart from the competition with a focus on excellence and quality as a core element of our services. It's a firm-wide commitment to deliver excellence through innovative and best-in-class service to our clients, colleagues, and ourselves. H2M's Core of Excellence is comprised of four key components:



QA/QC

We demonstrate our commitment to ensuring quality at the corporate level through our appointment of a full-time Director of Corporate QA/QC to lead the development, implementation, and oversight of H2M's Quality Management System (QMS). This commitment is further reinforced by established quality assurance team members who, independent of the project design team, assure that H2M's components of quality are incorporated. H2M's QMS is comprised of a combination of processes, tools and resources available to all H2M staff. These include Quality Control Checklists, established QA/QC communication channels, and templates all made accessible through H2M's comprehensive Project Management Framework.



SCHEDULING

We recognize the importance of timely project delivery and take great pride in our ability to quickly mobilize, assign staff, and complete projects on time. H2M developed a custom scheduling interface allowing for consistent data inputs from the entire firm on a bi-weekly basis. This is transitioning to a centralized scheduling database that allows real-time total team scheduling updates and awareness, allowing H2M to actively adapt our resources to meet the needs of even the most demanding project schedules. We can share detailed, easy to read graphic schedules with our clients, allowing them to always have their finger on the pulse of their project's timeline.



SPECIFICATIONS

Our focus and commitment to excellence and quality is further reflected in our Master CSI-based Specifications Library. A dedicated, full-time Specifications Manager oversees the continual development, standardization, and maintenance of our Master Specifications. H2M utilizes a cloud-based specification software platform that allows all users direct access to our Master Specifications Library to develop project-specific spec books. This process ensures that our project specifications include the latest updates in product data and reference standards.



BIM/CAD

Building Information Modeling (BIM) has revolutionized the A/E/C industry. By using intelligent 3-D digital models to generate our designs, H2M can achieve a higher level of quality, consistency, and efficiency in our production process, minimizing the potential for change orders during construction. We employ a full-time, dedicated, and independent team comprised of design professionals and BIM-CAD specialists whose primary responsibilities are to create, deploy, and maintain company-wide standards, templates, procedures, and workflows. Our adoption of BIM has been the single most important change in how we design and manage our projects.



CLIENT BENEFITS

- ★ Well-coordinated construction documents that reduce project change orders and minimize cost overruns
- ★ Consistent quality and proven performance
- ★ Optimized resource allocation to meet project demands
- ★ Increased compliance with the latest industry and regulatory standards
- ★ Enhanced project visualization via 3D modeling
- ★ Improved collaboration among all project stakeholders



H2M Health and Safety Program Overview

H2M is committed to protecting the health and safety of our employees. H2M is currently implementing management systems for ISO 45001 Occupational Health and Safety certification. The goal of our Health, Safety and Environmental (HSE) program is to develop a corporate safety mindset to ensure the safety of site personnel, the general public, and the environment on all projects on a day to day basis. Health and Safety is an H2M fundamental value and provides a framework for our business operations.

Our employees are our most important assets and their safety at the worksite is our greatest responsibility. H2M management provides all mechanical and physical facilities required for the personal safety and health of each of its employees. Inherent to H2M's HSE program is our employee's proper attitude toward injury and illness prevention which is driven from the firm's corporate leadership. It also requires cooperation in all safety and health matters, not only between corporate management, our safety team members, supervisors and employees, but also between employees and their co-workers.

H2M's HSE program is dynamic and continually evolving to meet or exceed requirements detailed in the Code of Federal Regulations (CFR) Parts 1910 and 1926 and now ISO 45001. The program includes the following components and/or highlights:

- **Participation in a third-party HSE contractor and supplier management service (ISNetworld)**
- **Formal safety committee and designated safety representatives**
- **H2M general safety training required for all personnel that conduct field work or construction site visits**
- **Mandatory OSHA 40-hour HAZWOPER and 10-hour construction safety training for H2M environmental staff**
- **Corporate Health and Safety Plan (HASP)**
- **Corporate employee manual with HSE framework and commitment**
- **Corporate HASP subcommittee to periodically review and update HASP**
- **Standardized HSE incident reporting forms**
- **Corporate ladder safety plan**
- **Corporate bloodborne pathogen plan**
- **Corporate respiratory protection plan**
- **Medical surveillance program**
- **Commitment to ensuring all personnel have necessary PPE, including hardhats, safety vests, gloves, and safety glasses at no cost to the employee**
- **Reimbursement program for other safety equipment, as needed, including ASTM/ANSI-rated safety shoes/boots**
- **Implementation of evacuation plans for all H2M offices**
- **Safety orientation for all new employees and interns**
- **Installation of AEDs in all offices**
- **CPR/AED/first aid training to all employees on a voluntary basis**

“H2M management provides all mechanical and physical facilities required for the personal safety and health of each of its employees.”

Low Pressure Sewer System

Inc. Village of Patchogue

Patchogue, NY

Construction Cost: \$0 million or N/A

SERVICES
PROVIDED

Bid Services

Collection System

Hydraulic Modeling

Construction Observation

Cost Estimates and
Opinions

Design Engineering



◆ ASCE L.I. Branch - Quality of Life Award

◆ ACEC New York - Platinum Award

The Inc. Village of Patchogue needed to prepare a map and plan and construction bid documents for installation of drainage improvements in conjunction with the installation of a low pressure sewer system with a grinder pump station at each home along River Avenue (south of Price Street), Sunset Lane, Price Street and Maple Avenue.

Existing drainage systems in the area were limited and not adequate to drain stormwater runoff. Streets were flooding regularly. Groundwater was approximately two feet below grade which limited the function of the on-site sanitary system for the homes. All parcels were within the zero to two year groundwater travel time to the Great South Bay. Over time, what was once an area of summer homes and beach bungalows transitioned to homes with full-time residencies. Several studies have documented the impacts of excessive nitrogen from sanitary systems in reducing dissolved oxygen levels to the detriment of aquatic life and in supporting harmful algal blooms. In conjunction with this study to extend the Village sanitary sewer system to serve 46 homes, we investigated the feasibility of making storm drainage-related improvements to help address existing flooding conditions related to the proposed sanitary sewer improvements. The report identified potential drainage improvements that could be implemented while the roadways were disturbed during the construction of the sanitary sewers.

During design, we conducted a utility coordination meeting with representatives of National Grid, the Village DPW and the Suffolk County Water Authority. Our personnel also met with homeowners to review the proposed installation location of the on-site pump station and low pressure sewer connection. Plans were submitted to and approved by the Suffolk County Department of Health Services.

The drainage improvements included the installation of approximately 4,750 linear feet of porous concrete gutter, along with drainage pipe and underground stone storage space along the shoulders of each of the roadways. In addition, a shallow vegetated stormwater management basin was proposed to temporarily store excess runoff during storm events. This system was incorporated to help alleviate flooding during storm events and improve drainage in this flat, low-lying section of Patchogue.



We worked with the Dormitory Authority of the State of New York (DASNY), Suffolk County and the Village of Patchogue in order to receive funding through two DASNY grants, an Infrastructure Program Grant provided by Suffolk County, and the Village of Patchogue Sewer Fund. Remaining funds were bonded by the Village.

We provided a resident engineer during construction. Construction phase services included full time construction inspection, shop drawing review, review of contractor payment requests and periodic meetings. During construction the project scope was expanded to include the abandonment of the existing on site sanitary system at each home.

The implementation of the project was so successful that aspects of the community outreach and design techniques are now being utilized by Suffolk County and the Village for the Suffolk County Patchogue River Watershed Sewer Project.

Investigation of Alternative On-Site Sewage Treatment Systems

Suffolk County Dept. of Health Services East

Yaphank, NY

Construction Cost: N/A

SERVICES PROVIDED

Evaluation of Treatment
Laboratory Analysis

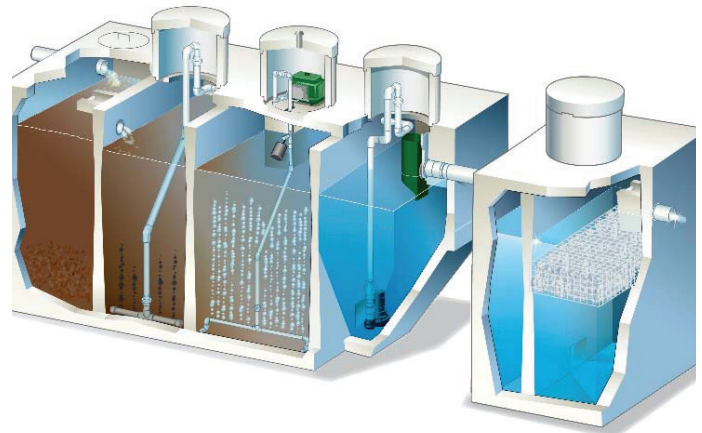
Technologies

H2M prepared a multi-report study for the Suffolk County Department of Health Services (SCDHS) on an investigation of alternate water resource recovery facilities that could possibly replace current systems, or be required for new construction.

The SCDHS undertook the investigation of alternative on-site water resource recovery facilities (OSWRRF) to better manage total nitrogen discharge to groundwater. The intent of the investigation was to evaluate systems that provide a viable, low cost, and environmentally acceptable means to protect public health. The overriding criterion of the study was that the alternative OSWRRF had to consistently achieve an effluent total nitrogen concentration of not greater than 10 mg/L. The investigation covered two different treatment categories. The first category was defined as single-family residential dwellings with flows from 300 to 1,000 gallons per day (GPD); the second category was defined as the other than single-family dwellings comprised of commercial or high-density residential properties, with flows from 1,000 GPD to 30,000 GPD.

The first report presented to the SCDHS consisted of the research performed by H2M. Over 60 websites were studied yielding over 150 downloads of information. Products developed for advanced on-site treatment were technically screened for further evaluation. Standards from national agencies such as the National Sanitation Foundation (NSF), the United States Environmental Protection Agency (EPA), and the states of New York, New Jersey, Massachusetts, Rhode Island and Washington were used as part of the screening process to determine the on-site wastewater alternatives that would be considered by Suffolk County.

Following the research of existing alternative OSWRRF, the list of acceptable technologies capable of reducing total nitrogen to 10 mg/L was significantly reduced. The subsequent report included the evaluation, selection, and sampling of these alternative systems. Two technologies were considered viable for residential use and four technologies were considered viable for commercial use. Two systems for each technology in each flow category were chosen to be field sampled. This phase also allowed for an independent evaluation of the manufacturer's claims of



performance. H2M Labs was responsible for the analysis of the influent and effluent grab samples that were collected around the country by a subconsultant. The parameters analyzed included BOD, TSS, TKN, Total Nitrogen, alkalinity, and pH.

Following the sampling of the alternative OSWRRF for each flow category, a thorough assessment of each technology was undertaken. Each technology was evaluated for the ability to meet the design and operations criteria that were established by the SCDHS. A schematic depicting a typical installation in Suffolk County for each technology was provided.

In the next report of the study, H2M developed a cost/benefit analysis for the selected technologies using the established assessment criteria. The selected alternative systems are expected to reduce influent nitrogen concentrations by 87 percent compared to only a 50 percent reduction in a conventional system. The cost opinions presented included estimates for the design, construction, installation, and operation and maintenance for each alternative facility.

The fourth report presented the investigation and evaluation of the conditions and restrictions under which alternative on-site treatment systems are permitted in Massachusetts, Rhode Island, New Jersey, and Maryland. A description of the approval process and regulations set in each of these states was also described in this report.

Innovative Alternative On-site Wastewater Treatment System



Springs Union Free School District

East Hampton, NY

Construction Cost: \$1.57 million

SERVICES PROVIDED

Engineering Design

Construction Services



H2M was retained by BBSA to prepare detailed design documents and engineering during construction services for the approval and installation of an Innovative Alternative Onsite Wastewater Treatment System (I/A OWTS) with supplemental nitrogen reducing biofilters at the Springs Union Free School District.

BBSA was looking to retain a qualified design profession with experience associated with the design and approval of I/A OWTS in Suffolk County. The objectives of this project were to replace the existing conventional onsite sanitary disposal system to allow for the construction of a planned building addition while improving the effluent water quality that is discharged from the school.

Springs UFSD wanted to go above and beyond the minimum requirements to replace their existing on-site sanitary disposal system. This required H2M to identify options for supplemental treatment in addition to the approved I/A OWTS. H2M reached out to the Stony Brook University Center for Clean Water Technology (SBU CCWT) and selected additional Nitrogen Reducing Biofilters (NRB) as the best alternative to meet the school's needs. These systems have shown promise in removing a high percentage of total nitrogen but have not been implemented on a large scale commercially. H2M worked with the CCWT to size and design the NRB to best fit the schools need. This required the development of details for NRB implementation within a

leaching galley structure to minimum the area required to treat and dispose of the I/A OWTS effluent.

A major challenge H2M faced with this project was designing and sourcing an NRB system that would fit within the proposed sanitary disposal system without greatly increasing total project costs and minimizing the impact to the site. To accomplish this goal H2M designed an innovative NRB vessel that can be installed within SCDHS standard leaching galley. By combining the NRB and Leaching Galley into one unit the land area required for treatment and disposal is significantly reduced as well as the costs associated with clearing, excavating, and restoring that area.

H2M worked with the Client (BBSA) and the school to identify project goals above and beyond those required by the Suffolk County Department of Health Services (SCDHS). Using these strict limits H2M designed a unique system for the treatment and disposal of the sanitary waste generated by the school.

On-Site Wastewater Treatment Research Facility

NYS Center for Clean Water Technology

Stony Brook, NY

Construction Cost: N/A

SERVICES
PROVIDED

Engineering Design

Construction Administration



H2M was selected to develop design concepts and construction bid documents to construct a research facility that would allow the client to test alternative technologies for on-site, household wastewater treatment systems.

The Center for Clean Water Technology selected H2M to assist them with the development of design concepts and construction bid documents to construct a research facility that would allow them to further their ongoing research by providing a location where they could test alternative technologies for on-site, household wastewater treatment systems, which pose a major threat to surface and groundwater resources. The Center for Clean Water Technology aims to find the most home-owner friendly on-site wastewater treatment system that will protect the greatest asset of our area, our water.

H2M worked with the research team and program directors, through in-office design meetings and various conversations, to design a user-friendly research facility that would be easily modifiable for various tests the researchers will perform. The research facility

property was given to the Center for Clean Water Technology by the Suffolk County Dept. of Public Works (SCDPW). SCDPW's involvement was pivotal for success of this project as the facility location is adjacent to a County-owned sewage treatment plant (STP). With the working relationship H2M has with SCDPW, the design was based around using a side-stream of flow to the County facility for testing by the research team at the designed facility.

Coordinating the electric service to the research facility was difficult as SCDPW was required to keep the facility separate from their feed. The communication between H2M, SCDPW, the electric utility provider, and client was kept open through presenting multiple design options and agreed upon based on feasibility, cost and constructability.

Sanitary Evaluation and Repair

Springs Union Free School District

East Hampton, NY

Construction Cost: N/A

SERVICES
PROVIDED

Construction Administration

Engineering Support

Construction Inspection



H2M was a subcontractor to BBS Architects in providing engineering evaluation and repair oversight for the Springs Union Free School District's existing sanitary disposal system.

The school was facing issues with odors and sanitary backups that posed health risks to students and faculty. To minimize these risks, the school was paying to have their sanitary waste hauled away multiple times each week. The local community began to question the school administration and criticize for allowing students on campus with such a potential direct health hazard. With the school district planning a vote for a capital bond upgrade, they needed to ensure the community adequate lifespan of the existing sanitary system that would last until project approval, when they could upgrade to a SCDHS approved "Innovative/Alternative Onsite Wastewater Treatment System" (IAOWTS).

H2M was subcontracted by BBS, along with a contractor, and held responsible as much as the contractor to give direction for the sanitary system exploratory dig through BBS to the contractor as the system was buried under the existing school parking area. We had calculated the number of pools required for the school to maintain compliance with SCDHS code and the exact total depth required for the existing system to handle sanitary flow from the school. We informed BBS of the system requirements and through clear communication were able to direct the contractor

to find all the components of the system. We were also able to give BBS direction for the contractor to take for the necessary repairs to reconnect the existing system. We reviewed existing conditions, gathered information from school representatives, evaluated existing sanitary disposal system capacity, and provided oversight and direction to the contractor hired to perform exploratory digging and repair to the existing system.

H2M was objective, direct and exact with all aspects of the project, ranging from our measurements and calculations of the existing system to our discussions with BBS and interested school faculty on site during the dig.

The existing sanitary system was reconnected so that sanitary waste could flow to all leaching pools originally installed, saving the school district money that was planned to be spent on installing a nutrient reducing IAOWTS as a part of the capital bond upgrade. The project also resulted in improved relations with between the local community and school administration as the public health risks associated with exposure to sanitary waste and odors were eliminated.

Harbour House

Town of Southamptton Community Preservation Fund
Location Map



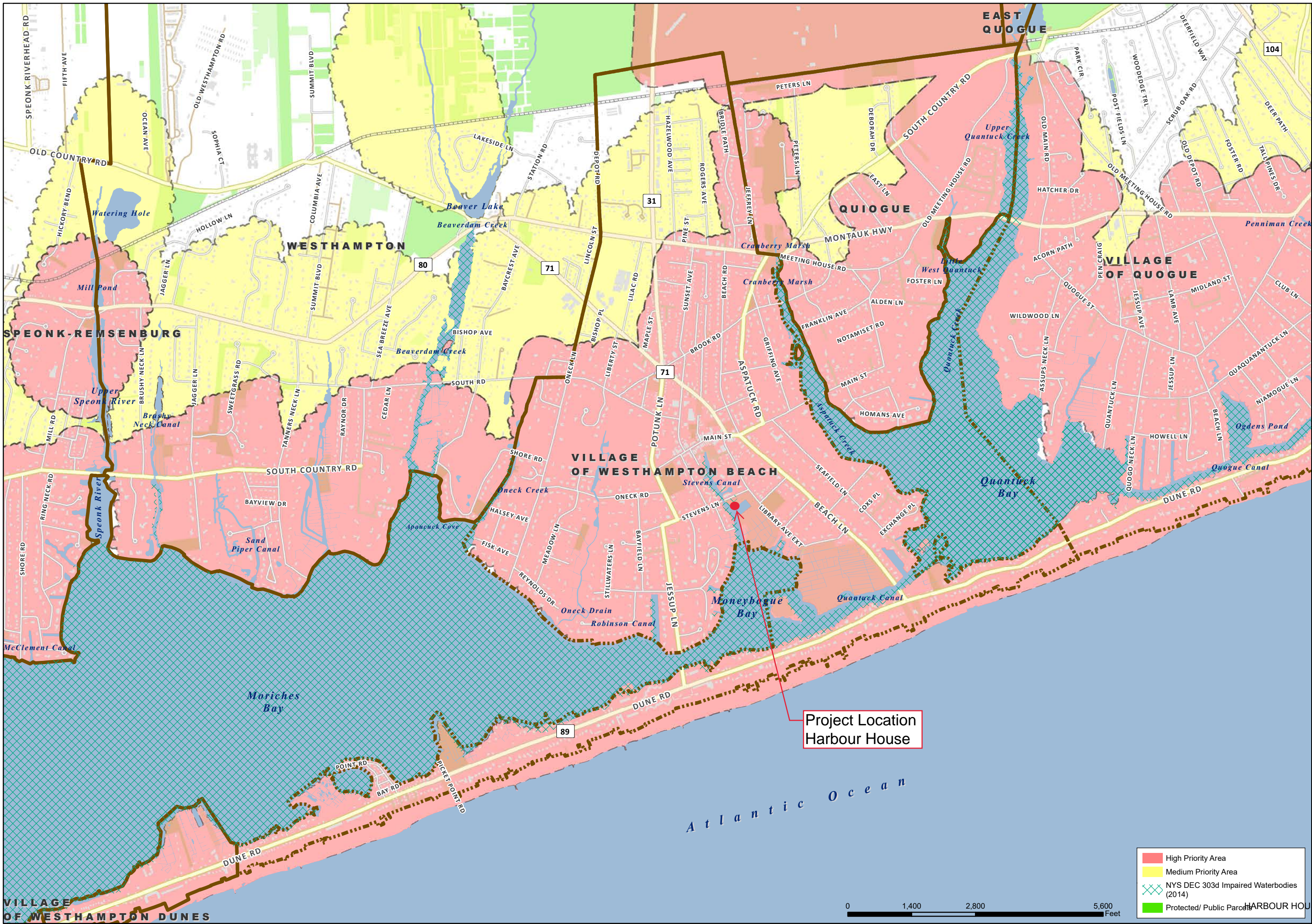
Harbour House



Harbour House

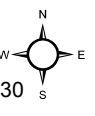
Town of Southampton Community Preservation Fund
Location Map & Existing Conditions





Town of Southampton CPF Water Quality Improvement Project Plan

VILLAGE OF WESTHAMPTON BEACH



Suffolk County Real Property Tax Service
 COPYRIGHT 2016, COUNTY OF SUFFOLK, N.Y.
 This property tax map parcel line work used with permission of
 Suffolk County Real Property Tax Service Agency (R.P.T.S.A.)

Payment schedule as follows:

PAYMENT #1:	Deposit given	\$100,000.00
PAYMENT #2:	Due upon start of project with pumps onsite	\$142,500.00
PAYMENT #3:	Due upon SCDPW certification	\$142,500.00
Balance Due:		\$385,000.00
Deposit Received:		\$100,000.00
Balance Due:		\$285,000.00

Acceptance of Contract-above prices, specifications & conditions are satisfactory & are hereby accepted. You are authorized to do the work as specified.

DATE: 3/11/24
SIGNATURE: *Harold Alvin* President
SIGNATURE: *DM*
DOUGLAS MEES, PRESIDENT

ALL ISLAND PLUMBING

916 Lincoln Avenue
Holbrook, NY 11741
(631) 563-3845/ (631) 244-2935
islandhelical@yahoo.com

CONTRACT

Dated: February 29, 2024

RE: Westhampton Beach Harbor House
85 Library Avenue
Westhampton Beach, NY 11978

To: Harold Levine

Installation of (9) Zoeller low pressure pumps

All materials and labor including low pressure piping with DR-11 1 ½" & 2" approx. 900 LF of 2" & 400 LF of 1 ½".

All connections to the pumps & to the county supplied house connection on library avenue.

All gravity lines from building to pumps to include cleanouts connections to pump & sampling manholes if necessary.

Electrical Work: Supply and install new 200 AMP breaker panel with breakers, All conduit & wiring from new breaker panel in maintenance building to each pressure pump.

All wiring to be encased in 1" electrical conduit.

All connections to control panels and anything else needed for electrical operation.

Abandon existing septic tanks and repurpose cesspools to accept water from gutters and leaders.

Any other work required by SCDPW necessary; S9 certifications from SCDPW.

Any wires, sprinkler, pipe, curbs, or asphalt broken from installation of sewer system will be repaired by All Island Plumbing at no extra charge.

All excavation in parking lot area will be permanently patched with blacktop.

Perform all items in H2M Bid Specifications (attached) dated June 2023 except for electrical upgrade

Electrical work consists of wiring from maintenance garage to individual pumps

Does not include upgrade of service from street

TOTAL: \$385,000.00