TOWN OF SOUTHAMPTON
Department of Community Preservation
24 W Montauk Hwy, Hampton Bays, NY 11946
Ph: 631-287-5720 Fx: 631-728-1920
WWW.SOUTHAMPTONTOWNNY.GOV/CPF

WATER QUALITY IMPROVEMENT PROGRAM
PROPOSAL SUMMARY

Project Applicant: Village of Southampton

Project Title: Southampton Village Water Quality Improvement Project Plan

Project Manager: Gary Goleski

Name	Gary Goleski
Title	Superintendent of Public Works
Organization	Village of Southampton
Address	23 Main Street, Southampton NY 11968
Phone	631-283-0247
Email	ggoleski@southamptonvillage.org

Property Owner (if different from Project Manager organization):

Name	Same
Affiliation	
Mailing Address	
Phone	
Email	

Project Location

Address	N/A
SCTM#(s)	N/A

Type of Project (check all that apply):

- ☑ **Reduction**
- ☑ **Remediation**
- ☐ **Restoration**

Project Summary: (add text 2-3 Sentences only)

The proposed project is a village-wide Water Quality Improvement Project Plan which will provide a basis for, and description of the Village of Southampton water quality improvement projects for which internal and external funding resources will be sought.

1. **PROJECT TYPE**
Must meet at least one of the definitions of "Water Quality Improvement Project" per State Law Chapter 551 cited above. Check all that apply.

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

Note: Monitoring costs are only potentially eligible for CPF funding within Aquatic habitat restoration projects.

2. **PRIORITY AREA(S)**
Priority areas are defined in the Water Quality Improvement Project Plan (WQIPP).

- [x] **High**
- [x] **303(d) Impaired**
- [x] **Medium**
- [x] **Outside High and Medium priority areas***

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

This is a Village-wide plan that will focus primarily on high and medium priority areas.

3. **PROJECT DESCRIPTION**

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

See Attachment 1.

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.

See Attachment 1.

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

N/A

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).

See Attachment 1.

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	
☐	☑	**If stormwater system or drainage is proposed:** The project must indicate compliance with the New York State Stormwater Design Manual (2015 and as updated).
☐	☑	**If project is related to farmland**: Describe any Agricultural Stewardship Plan or other long term strategy for Nitrogen abatement.
☐	☑	**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.
☐	☑	**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.
☐	☑	**If the project is requesting grant match for the Peconic Estuary Program:** 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.

See Attachment 1.

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

See Attachment 1.

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

See Attachment 1.

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.

See Attachment 1.

5b. Describe any matching funds to be provided.

See Attachment 1.

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.

See Attachment 1.

6. MANAGEMENT, EXPERIENCE, ABILITY

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

See Attachment 1

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

See Attachment 1

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

See Attachment 1

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.

See Attachment 1

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.

See Attachment 1

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

See Attachment 1

9. ATTESTATION

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

☑ **Check box to certify that funds will not be directed for projects for the purpose of accommodating new growth.**

Signature: _____ **Date** 8/14/2020

10. 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) **http://it.tetratech-ffx.com/steplweb/** 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

11. 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.

See Attachment 1.

VILLAGE OF SOUTHAMPTON

WATER QUALITY IMPROVEMENT PROJECT PLAN

ATTACHMENTS

Attachment 1 – Supplemental Narratives

Budget worksheet

Town of Southampton WQIPP Map/Location Map

SEQRA

Southampton Village Resolution

Cost Estimates

Vendor qualifications

VILLAGE OF SOUTHAMPTON

WATER QUALITY IMPROVEMENT PROJECT PLAN

ATTACHMENT 1
SUPPLEMENTAL NARRATIVES

3. PROJECT DESCRIPTION

3a. Existing Conditions

Eight of the nine waterbodies in the Village are located within the Town of Southampton Water Quality Improvement Project Plan (WQIPP) High Priority area, which is focused on nitrogen reduction. Of these, four (Heady Creek, Taylor Creek, Agawam Lake and Old Town Pond) are included in the 2016 NYS Section 303(d) List of Impaired/TMDL waters. In addition, all of the Village's coastline is within the Town's WQIPP high priority area. Heady Creek, Taylor Creek, Halsey Neck Pond, and Coopers Neck Pond lie within the South Shore Estuary Reserve.[1] Agawam Lake, Old Town Pond, Wickapogue Pond, Phillips Pond and Pheasant Pond are adjacent to the SSER. The SSER has more impaired surface waters due to nitrogen loading than any other region of New York State, making nitrogen pollution a priority concern.[2]

The Village of Southampton is not served by sanitary sewers. Previous studies by Suffolk County[3] and Stony Brook University have established that on-site sanitary treatment systems, known sources of nitrogen pollution, are contributing to local water quality impairments. In addition, portions of the Village are subject to the threat of flooding, storm surge and coastal erosion.

Water quality planning efforts of the Village have largely focused on discrete watersheds, specifically Lake Agawam, Old Town Pond, and Wickapogue Pond. In addition, a post-Sandy assessment provided recommendations for addressing coastal erosion concerns. Previous reports[4] include:

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[1] https://ny.water.usgs.gov/maps/sser/
[2] https://www.dos.ny.gov/opd/sser/comprehensive_management_plan.html
[3] https://www.suffolkcountyny.gov/Departments/Health-Services/Environmental-Quality/Water-Resources/Comprehensive-Water-Resources-Management-Plan
[4] https://www.southamptonvillage.org/200/Village-Studies and https://www.southamptonvillage.org/240/Clean-Water-Committee

- *Harmful Algal Bloom Action Plan Lake Agawam*, NYS Department of Environmental Conservation, 2020
- *Quantifying Nitrogen Loading from Southampton Village to Surrounding Water Bodies and their Mitigation by Creating a Sewer District*, Dr. Christopher Gobler, Stony Brook University School of Marine and Atmospheric Sciences, 2017
- *Map and Plan for Formation of Village of Southampton Sewer System*, H2M architects + engineers, 2015
- *Coastal Erosion Management Post Sandy Considerations*, First Coastal and Coastal Science & Engineering Inc., 2013
- *Lake Agawam Water Quality Restoration Action Plan,* Lombardo Associates for Peconic Baykeeper, 2013
- *Southampton Village Center Vision Plan*, Ehrenkrantz, Eckstut & Kuhn Architects, 2009
- *Lake Agawam Comprehensive Management Plan*, Nelson, Pope & Voorhis, 2009
- *Southampton Village Comprehensive Plan, Buckhurst Fish & Jacquemart, Inc.,* 2000

The Village of Southampton Clean Water Committee, which functions as an advisory body to the Village Board, has produced reports that present a number of water quality improvement strategies. These include *New Hope for Lake Agawam*, 2020 and *Old Town Pond & Wickapogue 2020 Management Plan*, 2020.

The findings and recommendations contained in the above reports have supported the Village's capital planning and grant development efforts over the past decade to advance a number of significant community projects. For example, the Village secured approximately $1.6M in grant funding to support water quality improvement projects for Agawam Lake valued at nearly $3M. Additionally, the Village has self-funded the design and construction of numerous other stormwater improvements for Lake Agawam as annual budgetary resources allowed.

Now, there is a need for a village-wide analysis that will support planning and prioritization of projects that will benefit water quality across all village watershed areas. Key priorities include poorly functioning septic systems as well as stormwater runoff.

The proposed project will revisit and build upon the above reports to produce a village-wide WQIPP to identify, define and prioritize water quality improvement projects for near, medium and long term action. When complete, the plan will provide the basis for investments to be made by the Village as well as requests for external support that will be submitted to the Town of Southampton CPF, Suffolk County, New York State, federal, private and other available 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.

The Village of Southampton WQIPP is intended to provide a prioritized plan for projects that will reduce nitrogen and other pollutants in the region's groundwater and surface water. The plan will be based on the following outline:

Water Quality Improvement Project Plan

1.0 Introduction
- 1.1 Purpose and Need
- 1.2 Integration with Town of Southampton CPF Program
- 1.3 Town of Southampton WQIPP

2.0 Village of Southampton Water Resource Protection
- 2.1 Village Comprehensive Plan
- 2.2 Village Regulations
- 2.3 Consistency with Prior Plans

3.0 Physical Characteristics and Natural Resources
- 3.1 Topography
- 3.2 Water Resources
- 3.3 Water Quality Issues/Standards
- 3.4 Depth to Groundwater
- 3.5 Groundwater Time of Travel Zones
- 3.6 Wetlands and Surface Waters

4.0 Zoning, Land Use and Groundwater Management Zones

5.0 Infrastructure
- 5.1 Stormwater Systems
- 5.2 Water Supply
- 5.3 Private Sanitary Systems
- 5.4 Village Wastewater Treatment Initiatives/Feasibility Study
  - 5.4.1 Clustered Innovative Alternative Onsite Wastewater Treatment Systems (I/A OWTS)
  - 5.4.2 New centralized treatment facility that can be modularly expanded
  - 5.4.3 Sanitary sewer connection to the existing Southampton Hospital STP (Hospital) with consideration made for a future connection to a new treatment facility located on the Stony Brook Southampton Campus.

6.0 Analysis and Input
- 6.1 Study Team Resource Analysis
- 6.2 Study Team Field Analysis
- 6.3 Village Board Presentation of Resource Analysis/Preliminary Findings
- 6.4 Development of Issues/Opportunities for Water Quality Improvements
- 6.5 Development of Priority Strategy

7.0 Recommendations
- 7.1 Stormwater Management
- 7.2 Habitat Management
- 7.3 Wastewater Management (Includes wastewater section: summarize sanitary flow projections for the Phase 1 sanitary service area boundary, conceptual design/layout for each sanitary infrastructure

alternative, and capital construction and operation and maintenance cost opinions for each alternative. Identify recommended alternative that is identified as cost effective, environmentally sensitive, and socially, and economically acceptable to the surrounding community.)

7.4 Other Legislative, Policy and Implementation Recommendations

8.0 Action Plan

8.1 Prioritization

8.2 Implementation

9.0 Summary and Conclusion

Draft List of Tables

1. Unsewered Developed Parcels Less than Lot Sizes per SCSC Article 6
2. Unsewered Developed Parcels Less than Lot Sizes per SCSC Article 6 and in Areas with Less than 10 feet to Groundwater
3. Village of Southampton- Recommended Water Quality Improvement Projects

Draft List of Figures

1. Aerial Photograph
2. Surface Water Resources
3. NYS DEC Wetlands
4. National Wetlands Inventory
5. Priority Waterbodies List
6. DEC Draft MS4 Pathogens TMDL Retrofit Area
7. Sewered Areas Map
8. Water Table Contours
9. Lot Size Map
10. Nautical Chart
11. Topography
12. Topographical Contours
13. Depth to Water Table
14. Groundwater Contributing Area Map
15. FEMA Map
16. SLOSH Map
17. Surface Watersheds within Area Map
18. Publicly Owned Lands Map
19. High Priority Parcels
20. Southampton CPF Village of Southampton Priority Areas
21. Recommended Water Quality Improvement Projects

Draft List of Appendices

A. Recommended Green Infrastructure and Stormwater Conceptual Design Guidelines
B. Preliminary Project Locations and Diagrams
C. Summary of Pending/Approved Projects
D. Lake Agawam HABS
E. Recommended Project Identification and Water Quality Data

The Village of Southampton intends to use resources wisely and systematically to approach the nitrogen problem and other pollutants of concern in high priority areas. In devising its list

of recommended water quality improvement projects, the Village will concentrate first on **reduction** tactics (to reduce source loads), and then consider **remediation** (to mitigate loads that are already within the groundwater system), and **restoration** tactics to restore coastal and marine habitats. This approach mirrors the hierarchy of principles and priorities defined by the Town of Southampton in its own WQIPP.

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).

Long Island South Shore Estuary Reserve Comprehensive Management Plan (SSER CMP)[5]

The NYSDEC PWL indicates that the waterbody is included within the South Shore Estuary Reserve (SSER). The SSER CMP is an element of the LI Nitrogen Action Plan. The project is supported by SSER Recommendations to reduce and control nonpoint source pollution, including Item 1, *Complete assessments of nonpoint source pollution management practices and identify and implement needed preventive measures based on priorities.* To this point, the plan states, "Towns should consider assisting villages within their borders with the completion of such assessments." Chapter 2, p.16. Implementation actions supported include item *1-6., Development of watershed action plans.*

Suffolk County Subwatershed Plan[6]

Five of the nine Village waterbodies are included in the plan as Priority 1 subwatersheds for nitrogen reduction via wastewater management (p. 2-74). These are Taylor Creek, Halsey Neck Pond, Agawam Lake, Old Town Pond, and Wickapogue Pond. HABs have been recorded in Halsey Neck Pond, Agawam Lake, Old Town Pond, Wickapogue Pond, and Phillips Pond. The WQIPP will describe and prioritize water quality improvement projects that will directly support the nitrogen reduction aims of this plan, inclusive of wastewater management, stormwater management and other initiatives.

Suffolk County Comprehensive Water Resources Management Plan[7]

The project supports the following recommendations:

- Nitrogen recommendation 1.1, *As a result of Superstorm Sandy in an effort to promote resilience create and/or expand sewer districts for existing communities identified as priority areas and upgrade current wastewater infrastructure*. The project will aim to decrease nitrogen loading that has been degrading wetland defenses against storm surge, and reducing shellfish populations.
- Coastal Resilience and Surface Water Quality Recommendation 7.8, *Develop a robust stormwater management program in coordination with local municipalities and New York State*

[5] https://www.dos.ny.gov/opd/sser/pdf/Full%20CMP%20Document.pdf
[6] https://suffolkcountyny.gov/Portals/0/formsdocs/planning/CEQ/2020/RevisedComplete%20SWP2-21-20.pdf
[7] https://www.suffolkcountyny.gov/Departments/Health-Services/Environmental-Quality/Water-Resources/Comprehensive-Water-Resources-Management-Plan

- Coastal Resilience and Surface Water Quality Recommendation 7.14, *Continue to evaluate and promote development of improved pollution control management measures and structures*

Town of Southampton Water Quality Improvement Project Plan[8]
Eight of the nine waterbodies in the Village are located within the Town of Southampton Water Quality Improvement Project Plan (WQIPP) High Priority area. The proposed village WQIPP will describe and prioritize projects that will contribute toward achieving nitrogen reduction aims of the Town plan.

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

Nitrogen and other POCs per item 3a. Target reduction will be addressed on a per-project basis as the Village advances to the implementation phase.

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

The Village of Southampton will continue to partner with Stony Brook University for water quality monitoring.

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

The plan will inform capital improvements that are expected to begin upon completion of the plan, and will continue to roll out over the next decade. Recommended projects are expected to have a useful life well in excess of 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.

The Village of Southampton has received cost proposals from two firms that will partner to complete the WQIPP. See attached.

Nelson, Pope & Voorhis is the Village's engineering consultant of record and has an extensive history in the preparation of this type of plan. The firm has a long history with the Village, having authored the Lake Agawam Comprehensive Management Plan, and participated in development of the HAB Action Plan for Lake Agawam.

H2M architects and engineers has highly qualified staff experienced in preparation of plans for wastewater treatment systems and sewer districts. The firm previously completed a map and plan for the Village in 2015. While district formation did not move forward at the time, the Village has asked H2M to partner with NPV in order to leverage the vast amount of

[8] https://www.southamptontownny.gov/DocumentCenter/View/7318/Water-Quality-Improvement-Plan-CPF-Referendum-PDF?bidId=

information and institutional knowledge that was amassed in creating the map and plan. By leveraging this previous work, the WQIPP can be completed more economically.

5b. Describe any matching funds to be provided.

The Village is conducting a dredging feasibility study for Lake Agawam. The project's deliverables will inform development of the WQIPP.

Lake Agawam North End dredge sampling: $20,000 (completed)

Lake Agawam Dredging Feasibility Study: $68,000 (pending kickoff 2020)

- Bathymetry $15,000
- Dredge sampling $4,000 (south end)
- Lake sampling $14,000
- Analysis and report on sediment samples $35,000

The Dredging Feasibility Study is supported by a $30,000 NYSDEC grant and $38,000 commitment by the Village. The contract for this project is under development and will be provided upon request.

The dredge sampling and feasibility study will provide a plan for dredging as a Best Management Practice (BMP) for in-waterbody control of nutrients in Lake Agawam. Deliverables of these efforts will include lab reports, bathymetric mapping, dredged material volume computations, and an overall Lake Agawam Dredging Feasibility Planning Report that compiles information on Lake Agawam, coordinates with permitting agencies, outlines alternative material removal technologies, and arrives at a recommended method to facilitate final design, project permitting and implementation. This work will inform development of recommendations/priority actions within the village-side WQIPP. Technical details on this study will be provided upon request.

In addition, in 2015 the Village self-funded development of the *Map and Plan for Formation of Village of Southampton Sewer System* by H2M architects + engineers, at the total cost of $113,000. Elements of the plan that will be utilized and built upon for the WQIPP include the buildout analysis, identification of service areas, modeling to determine nitrogen reduction to be associated with sewers, archaeological surveys, SEQRA, Phase IA cultural resource survey. As this investment was made five years ago it is not included in the CPF request budget. However, these materials enable the Village to complete the village-wide WQIPP more cost effectively than would otherwise be possible.

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.

The Village has invested and continues to invest substantial funding to complete numerous water quality improvement initiatives throughout the Village over the past 10+ years. In 2020 alone, investments exceeded $150,000 in stormwater work on Hampton Road and Meetinghouse Lane to prevent runoff to Lake Agawam and Old Town Pond. Becase its funding needs far outweigh available local resources, the Village has attempted to leverage

Suffolk County, Community Preservation Fund (CPF), NYS, local, and other sources whenever possible. If funds are not awarded by CPF, or are awarded at a lower level than requested, the project may be delayed due to the need to identify alternate sources of funding. Due to the budgetary impacts of the COVID-19 pandemic, other external County or State funding sources are uncertain at this time.

Cost overruns are not anticipated. The project budget is based on proposals provided by Village consulting engineers and will be contractually limited to the amounts shown.

6.MANAGEMENT, EXPERIENCE, ABILITY

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

Gary Goleski, Superintendent of Public Works, will perform the role of Project Manager. He has a degree in Public Sector Management from Cornell University and has been with the Village for more than 25 years. His educational and experiential background make him well qualified to oversee successful implementation of the proposed project.

Under Mr. Goleski's direction, the Village has successfully administered several prior CPF, Suffolk County and New York State grant awards in compliance with Town and County requirements.

The firm Nelson, Pope & Voohis (NPV) will prepare the plan with input from H2M architects + engineers on the elements relating to wastewater treatment, as noted in the attached quotation by NPV. Statements of qualifications are provided with the application attachments.

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

The WQIPP development process will include engagement with the public and stakeholders at meetings of the Village Board. Community feedback will be incorporated in the final project recommendations.

The Village has received feedback from external funding agencies that a village-wide plan will be useful to provide a more holistic plan for action than the piecemeal plans that currently exist. The proposed WQIPP will have several benefits: it will support leadership decision making, assist with external funding requests, and serve as an important public messaging tool.

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

As this is a planning project, no permits or approvals are required.

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.

As this is a planning project, there will be no maintenance costs. Stewardship and monitoring will be ongoing as the Village implements recommended projects. These efforts will occur under direction of the Mayor and Village Board, and with input from the Village of Southampton Clean Water Committee and community stakeholders, which includes residents and partners with the Town of Southampton, Suffolk County, and New York State.

8.DURATION OF PROJECT

8a. Provide a projected project timeline.

The following Project Schedule is anticipated in connection with this project, assuming a start date in November 2020.

Task	Start	Compete
1.0 Introduction	November 2020	December 2020
2.0 Village of Southampton Water Resource Protection	November 2020	December 2020
3.0 Physical Characteristics & Natural Resources	December 2020	January 2021
4.0 Zoning, Land Use & Groundwater Management Zones	December 2020	January 2021
5.0 Infrastructure	November 2020	February 2021
6.0 Analysis and Input	December 2020	February 2021
7.0 Recommendations	February 2020	April 2021
8.0 Action Plan	April 2021	June 2021
9.0 Summary and Conclusion	June 2021	July 2021

Total project schedule is 8-9 months from start date.

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

PLANNING/ENGINEERING/DESIGN	Town CPF Request	Matching Funds Committed	Matching Funds Pending	Estimated Total Project Costs
In-house labor (provide separate sheet with calculations)				
Task 1-	$-	$-	$-	$-
Task 2-	$-	$-	$-	$-
Task 3-	$-	$-	$-	$-
Task 4-	$-	$-	$-	$-
Task 5-	$-	$-	$-	$-
Task 6-	$-	$-	$-	$-
	$-	$-	$-	$-
In House Labor Total	**$-**	**$-**	**$-**	**$-**

Materials/Supplies				
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
Materials/Supplies Total	**$-**	**$-**	**$-**	**$-**

Contractual Services				
Professional Services – NPV Dredging Feasibility Study	**$-**	**$-68,000**	**$-**	**$-68,000**
Professional Services – H2M – WQIPP Development	**$-50,000**	**$-**	**$-**	**$-50,000**
Professional Services – NPV – WQIPP Development	**$-33,000**	**$-**	**$-**	**$-33,000**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
	$-	**$-**	**$-**	**$-**
Contractual Services Total	**$-83,000**	**$-68,000**	**$-**	**$-154,000**

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ENGINEERING TOTAL	$-	$-	$-	$-
CONSTRUCTION AND SITE IMPROVEMENTS	**Town CPF Request**	**Matching Funds Committed**	**Matching Funds Pending**	**Estimated Total Project Costs**
In-house labor (provide separate sheet with calculations)				
Task 1-	$-	$-	$-	$-
Task 2-	$-	$-	$-	$-
Task 3-	$-	$-	$-	$-
Task 4-	$-	$-	$-	$-
Task 5-	$-	$-	$-	$-
Task 6-	$-	$-	$-	$-
	$-	$-	$-	$-
In House Labor Total	$-	$-	$-	$-

Equipment/Materials/Supplies				
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
Equipment/Materials/Supplies Total	$-	$-	$-	$-

Contractual Services				
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
	$-	$-	$-	$-
Contractual Services Total	$-	$-	$-	$-

ENGINEERING TOTAL	$-83,000	$-68,000	$-	$-154,000

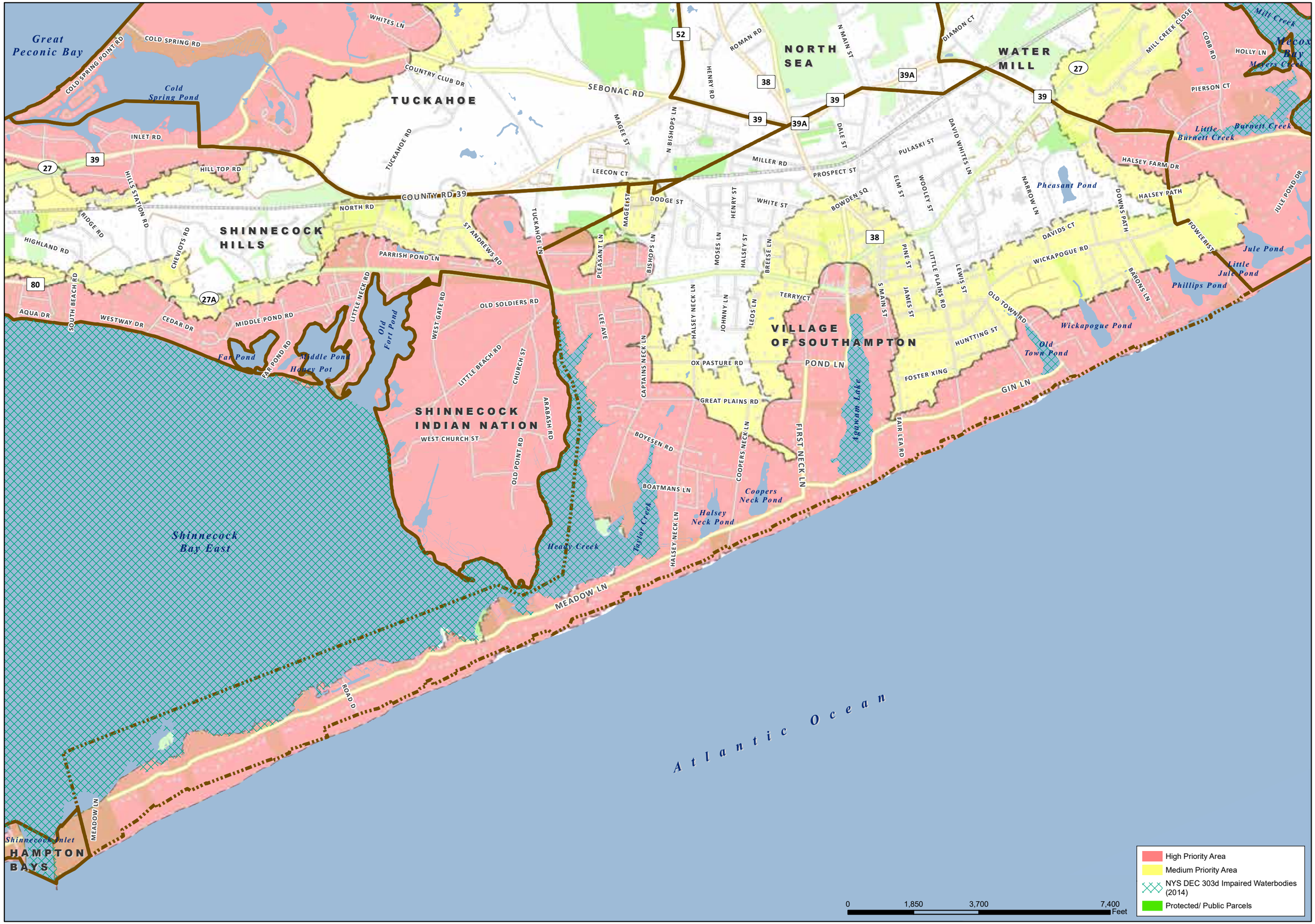
Total Project Cost	$-154,000
Total CPF Funds Requested	$-83,000

Applicant matching funds committed	$-68,000
Applicant matching funds pending approval (e.g. grant request submitted pending determination)	$-

Source of matching funds	Amount
Village of Southampton – Dredging Feasibility Study	$38,000
NYSDEC – Dredging Feasibility Study	$30,000

Town of Southampton CPF Water Quality Improvement Project Plan

VILLAGE OF SOUTHAMPTON



Prepared By:The Town of Southampton Dept of Geographic Information Systems Date: 7/5/2016 - MAP ID: 2514

VILLAGE ENVIRONMENTAL PLANNER
23 Main Street
Southampton, NY 11968
(631) 283-0247

NELSON, POPE & VOORHIS, LLC
70 Maxess Road
Melville, NY 11747
(631) 427-4665

MEMORANDUM

To: Jesse Warren, Mayor and Village Trustees
cc: Brian T. Egan, Esq., Village Attorney
Gary Goleski, DPW Superintendent
Jennifer Mesiano
From: Kathryn J. Eiseman, AICP
Date: August 11, 2020
Re: **Village Water Quality Improvement Project Plan (WQIPP)**

Based upon our review of the proposed action referenced above and the scope of work prepared by Nelson, Pope & Voorhis, LLC, the action involves a study to determine existing conditions, needs, and future locations for Green Infrastructure and conceptual design guidelines to reduce impacts from stormwater runoff in the Village. SEQRA regulations were reviewed and based on the following, **the proposed WQIPP may be classified as a Type II Action, and therefore, does not require review under SEQRA at this time**.

> information collection including basic data collection and research, water quality and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations and soils studies that do not commit the agency to undertake, fund or approve any Type I or Unlisted action (6 NYCRR Part 617 (SEQR), Subsection 617.5(24)); and
>
> retrofit of an existing structure and its appurtenant areas to incorporate green infrastructure (6 NYCRR Part 617 (SEQR), Subsection 617.5(3)).

NPV recommends that further assessment be made once the WQIPP is completed and accepted by the Trustees for specific project implementation to determine whether, based on the specific locations, types of improvements (whether or not the improvements meet SEQRA's green infrastructure definition), and project sizes proposed, additional SEQRA review is required.

Village of Southampton

23 MAIN STREET
SOUTHAMPTON, NEW YORK 11968-4899

Phone: (631) 283-0247 • Fax: (631) 283-4990
Website: www.southamptonvillage.org • email: info@southamptonvillage.org

STATE OF NEW YORK)
ss:
COUNTY OF SUFFOLK)

This is to certify that the following is a true, accurate, and complete copy of a resolution which was adopted by the Board of Trustees of the Village of Southampton on August 13, 2020. The original of this resolution is on file in the Clerk's office in Village Hall, 23 Main Street, Southampton, N.Y. 11968.

RESOLVED, that the Board of Trustees hereby declares the Village of Southampton's commitment to carry out the following projects subject to funding approval by the Town of Southampton Community Preservation Fund (CPF), and approves submission of requests for funding to CPF for the following projects:

Old Town Pond Green Infrastructure
Permeable Reactive Barrier Phase II Feasibility Study
Village-Wide Watershed Management Plan

On a roll call vote the resolution was unanimously approved.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Village of Southampton this 14th day of August, 2020.

Russell A Kratoville
Village Administrator
Incorporated Village of Southampton

NELSON POPE VOORHIS
environmental • land use • planning

70 Maxess Road
Melville, New York 11747
631.427.5665

VILLAGE WATER QUALITY IMPROVEMENT PROJECT PLAN (WQIPP)

SCOPE AND COST OF SERVICES

Prepared by: Nelson, Pope & Voorhis, LLC
572 Walt Whitman Road
Melville, New York 11747
Contact: Charles J. Voorhis, CEP, AICP
Managing Partner

Prepared for: Village of Southampton
Department of Public Works
102 Willow Street
Southampton, New York 11968
Contact: Gary J. Goleski
Superintendent

Date: August 14, 2020

1) Water Quality Improvement Project Plan – prepare a Village-wide Water Quality Improvement Project Plan (WQIPP) based on the following outline:

1.0 Introduction
- 1.1 Purpose and Need
- 1.2 Integration with Town of Southampton CPF Program
- 1.3 Town of Southampton WQIPP

2.0 Village of Southampton Water Resource Protection
- 2.1 Village Comprehensive Plan
- 2.2 Village Regulations
- 2.3 Consistency with Prior Plans

3.0 Physical Characteristics and Natural Resources
- 3.1 Topography
- 3.2 Water Resources
- 3.3 Water Quality Issues/Standards
- 3.4 Depth to Groundwater
- 3.5 Groundwater Time of Travel Zones
- 3.6 Wetlands and Surface Waters

4.0 Zoning, Land Use and Groundwater Management Zones

5.0 Infrastructure
- 5.1 Stormwater Systems
- 5.2 Water Supply
- 5.3 Private Sanitary Systems (to be completed by team member H2M and inserted into report)
- 5.4 Village Wastewater Treatment Initiatives/Feasibility Study (subsections to be completed by team member H2M and inserted into report)
  - 5.4.1 Clustered Innovative Alternative Onsite Wastewater Treatment Systems (I/A OWTS)
  - 5.4.2 New centralized treatment facility that can be modularly expanded
  - 5.4.3 Sanitary sewer connection to the existing Southampton Hospital STP (Hospital) with consideration made for a future connection to a new treatment facility located on the Stony Brook Southampton Campus.

6.0 Analysis and Input (subsections to have relevant input on sanitary systems/wastewater management from team member H2M)
- 6.1 Study Team Resource Analysis
- 6.2 Study Team Field Analysis
- 6.3 Village Board Presentation of Resource Analysis/Preliminary Findings
- 6.4 Development of Issues/Opportunities for Water Quality Improvements
- 6.5 Development of Priority Strategy

7.0 Recommendations
- 7.1 Stormwater Management
- 7.2 Habitat Management
- 7.3 Wastewater Management (to be completed by team member H2M and inserted into report): Wastewater section to include: summary of sanitary flow projections for the Phase 1 sanitary service area boundary, conceptual design/layout for each sanitary infrastructure alternative, and capital construction and operation and maintenance cost opinions for each alternative. Identify recommended alternative that is identified as cost effective, environmentally sensitive, and socially, and economically acceptable to the surrounding community.
- 7.4 Other Legislative, Policy and Implementation Recommendations

8.0 Action Plan (with input from team member H2M on sanitary system/wastewater sections)
- 8.1 Prioritization
- 8.2 Implementation

9.0 Summary and Conclusion

Draft List of Tables

1. Unsewered Developed Parcels Less than Lot Sizes per SCSC Article 6
2. Unsewered Developed Parcels Less than Lot Sizes per SCSC Article 6 and in Areas with Less than 10 feet to Groundwater
3. Village of Southampton- Recommended Water Quality Improvement Projects

Draft List of Figures

1. Aerial Photograph
2. Surface Water Resources
3. NYS DEC Wetlands
4. National Wetlands Inventory
5. Priority Waterbodies List
6. DEC Draft MS4 Pathogens TMDL Retrofit Area
7. Sewered Areas Map
8. Water Table Contours
9. Lot Size Map
10. Nautical Chart
11. Topography
12. Topographical Contours
13. Depth to Water Table
14. Groundwater Contributing Area Map
15. FEMA Map
16. SLOSH Map
17. Surface Watersheds within Area Map
18. Publicly Owned Lands Map
19. High Priority Parcels
20. Southampton CPF Village of Southampton Priority Areas
21. Recommended Water Quality Improvement Projects

Draft List of Appendices

A. Recommended Green Infrastructure and Stormwater Conceptual Design Guidelines
B. Preliminary Project Locations and Diagrams
C. Summary of Pending/Approved Projects
D. Lake Agawam HABS
E. Recommended Project Identification and Water Quality Data

Budget: $30,000.00
Final budget to be determined based on approved billing rates and hours expended

5) **Meetings, Conference Calls, Presentations** - attend two (2) Village Board meetings (Initial Meeting and Meeting just prior to plan completion); prepare meeting presentation materials; coordinate with WQIPP team.

Budget: $3,000.00
Final budget to be determined based on approved billing rates and hours expended

H 2 M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747 | tel 631.756.8000

August 17, 2020

Mr. Jesse Warren, Mayor
Village of Southampton
23 Main Street
Southampton, New York 11968

Re: Statement of Work #1: for Additional Professional Engineering Services under our Southampton Sewer System Consulting Agreement for Water Quality Improvement Project Plan (WQIPP) Assistance

Dear Mayor Warren:

H2M architects + engineers (H2M) has prepared this Statement of Work (SOW) #1 in response to a request received from Superintendent Goleski to provide additional professional engineering services under our standing Southampton Sewer System Consulting Agreement to assist with the development of a village-wide Water Quality Improvement Project Plan (WQIPP). The additional scope of services covered under SOW #1 will include the following tasks:

1) Report preparation for the WQIPP specific to identify, define and prioritize near, medium and long term sanitary infrastructure projects based on the findings of our ongoing on-call engineering services defined in our previously submitted and accepted letter proposal, LP191323 (enclosed).

2) Prepare for and attend meetings as directed by Superintendent Goleski to discuss and coordinate the sanitary infrastructure project report write-up for inclusion in the overall WQIPP being managed/prepared by others

3) Prepare for and attend two (2) public presentations.

Based upon the above information and varied scope we propose to provide the SOW #1 services based on hourly rates of labor plus travel expenses in accordance with our current labor rate schedule on file with the Village. We suggest the Village establish an initial maximum not-to-exceed budget of $10,000. H2M will perform the above services under direction from Superintendent Goleski with the understanding that the initial maximum not-to-exceed budget would not be exceeded without prior written approval from your office. In the event additional tasks and/or services are desired by the Village, H2M will submit a formal Statement of Work (SOW) to define the specific scope for the additional tasks/services along with a proposed fee for subsequent authorization.

H2M will commence work on the scope of services outlined herein this proposal upon receipt of your authorization. Services for the project would be invoiced monthly as work is completed. This offer to perform the proposed services shall remain open for ninety (90) days from the date of this proposal shown above. The current hourly billing rates will remain in effect through December 2020. Extensions of this proposal shall be in writing only. Should you find this proposal acceptable, please execute a copy of this letter and attached proposal statement and return it our office.

Thank you again for the opportunity to continue assisting the Village on this important environmental and revitalization project. Please feel free to contact our office at (631) 756-8000 extension 1428, if you have any questions or require additional information.

Very truly yours,

H2M architects + engineers

Nicholas F. Bono, P.E.
Sr. Associate - Discipline Engineer

cc: Village Board
Russell Kratoville – Village Administrator
Paul Travis – Planning Commissioner Chair
Gary Goleski – Department of Public Works, Superintendent

PROPOSAL AGREED & ACCEPTED BY:

Signature: _____

Print Name: _____

Title: _____

Client: Village of Southampton
Address: 23 Main Street
Southampton, New York 11968

Date: _____

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architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747 | tel 631.756.8000

January 17, 2020

Mr. Jesse Warren, Mayor
Village of Southampton
23 Main Street
Southampton, New York 11968

Re: Proposal for Professional Engineering Services
Southampton Sewer System Consulting
H2M Proposal No.: LP191323 (Revised)

Dear Mayor Warren:

It was a pleasure for Mr. George Desmarais and Mr. Nick Bono to meet with you and members of the Village Planning Commission on September 5, 2019 at Village Hall to discuss the Village's interest in future planning concepts for the formation of a sewer district to serve the downtown Village commercial area. As you are aware, our office prepared a document, dated November 2015, for the previous Village administration entitled *Map and Plan for the Formation of the Inc. Village of Southampton Sewer System* (Report). The Report included the following information that outlined the steps necessary and options available for the development and legal formation of a Village sanitary sewer system:

- Background Including Regulatory Status
- Sewer Service Area and Boundary Description
- Sanitary Flow Projections
- Collection System Options
- Wastewater Treatment Alternatives
- Legal Considerations
- Map & Plan Formation
- Permitting and Regulatory Approval
- Anticipated Project Schedule
- Estimated Capital and O&M Costs
- Financial Impacts and Options
- Figures and Tables

Following our meeting this past September, H2M architects + engineers (H2M) submitted a proposal dated October 2, 2019, which focused on revising the previously submitted Report with updated sanitary collection, conveyance and treatment alternatives including project cost opinions, as well as to identify and assist the Village with pursuing current grant opportunities. Based upon our discussion at the September 5, 2019 meeting, it is our understanding that the Village would like to re-evaluate the Report with consideration taken for a phased approach that is initially focused on the downtown Main Street business corridor (i.e. Phase 1) and include an evaluation of alternatives that were not initially viable when the previous report was prepared in 2015. At the September 5, 2019 meeting, it was also discussed how H2M's recent experience successfully assisting the Inc. Village of Westhampton Beach on a similar type of project could benefit the Village of Southampton with regards to navigating grant opportunities and local regulatory requirements.

H2M understands the importance of developing a phased approach for projects of this type, since a phased implementation allows for flexibility to accommodate logistical and financial constraints as well as development changes that may occur over time while maximizing the desired benefits for end-user(s). As such, H2M proposes to perform an Alternatives Analysis to evaluate the viability, costs and benefits associated with several options to relieve the current sanitary restrictions that limit as-of-right development within the Phase 1 sewer service area, which is comprised of the tax lots that abut Main Street between Jobs Lane and Nugent Street.

The proposed analysis will consider the following three (3) sanitary alternatives: 1) clustered Innovative Alternative Onsite Wastewater Treatment Systems (I/A OWTS); 2) a new centralized treatment facility that can be modularly expanded; and 3) a sanitary sewer connection to the existing Southampton Hospital STP (Hospital) with consideration made for a future connection to a new treatment facility located on the Stony Brook Southampton Campus (Campus). H2M proposes to offer our professional engineering services on an on-call basis to provide the Village with information necessary to select a cost-effective alternative to realize improved sanitary wastewater conditions. We propose this effort to include the following tasks:

- Prepare for and attend meetings with Village officials and regulatory agencies (i.e., NYSDEC, SCDHS, SCDPW).
- Prepare for and attend meetings with Southampton Hospital and their management team to discuss options for development of a shared services plan for sanitary infrastructure and future connection to sanitary facilities planned for Stony Brook Southampton Campus.
- Review Innovative/Alternative Onsite Wastewater Treatment Systems (I/A OWTS) approved by SCDHS as an alternative to central collection, conveyance and treatment infrastructure for the Village Main Street business corridor.
- Review prior siting analysis for construction of a new treatment facility within the Village and identify any new locations for further consideration that were not previously identified.
- Prepare an Alternatives Analysis report that summarizes sanitary flow projections for the Phase 1 sanitary service area boundary, conceptual design/layout for each sanitary infrastructure alternative, and capital construction and operation and maintenance cost opinions for each alternative. The proposed report will conclude with the recommended alternative that is identified as cost effective, environmentally sensitive, and socially, and economically acceptable to the surrounding community.

Based upon the above information and varied scope we propose to provide the on-call engineering services based on hourly rates of labor plus travel expenses in accordance with a labor rate schedule to be provided under separate cover. We suggest the Village establish an initial maximum not-to-exceed budget of $40,000. H2M will perform the above services under direction from your office with the understanding that the initial maximum not-to-exceed budget would not be exceeded without prior written approval from your office. In the event additional tasks and/or services are desired by the Village, H2M will submit a formal Statement of Work (SOW) to define the specific scope for the additional tasks/services along with a proposed fee for subsequent authorization.

H2M will commence work on the scope of services outlined herein this proposal upon receipt of your authorization. Services for the project would be invoiced monthly as work is completed. This offer to perform the proposed services shall remain open for ninety (90) days from the date of this proposal shown above. The billing rates will remain in effect through December 2020. Extensions of this proposal shall be in writing only. Should you find this proposal acceptable, please execute a copy of this letter and attached proposal statement and return it our office.

Thank you again for the opportunity to discuss this important environmental and revitalization project with the Village officials. Please feel free to contact our office at (631) 756-8000 extension 1428, if you have any questions or require additional information.

Very truly yours,

H2M architects + engineers

Steven C. Hearl, P.E., LEED AP
Vice President

Nicholas F. Bono, P.E.
Discipline Engineer

cc: Village Board
Russell Kratoville – Village Administrator
Paul Travis – Planning Commissioner Chair

Encl.

PROPOSAL AGREED & ACCEPTED BY:

Signature: _____

Print Name: Jesse Warren

Title: Mayor

Client: Village of Southampton
Address: 23 Main Street
Southampton, New York 11968

Date: May 29, 2020

J:\LPS\2019\LP191323 SHPV Sewer Sys Consult\LP191323 SHPV Sewer Sys Consult (Revised).docx

H2M architects + engineers

PROPOSAL STATEMENT

PROPOSAL TO: Inc. Village of Southampton DATE: January 17, 2020

PROJECT: Village of Southampton Sewer System Consulting

The following clauses constitute H2M architects + engineers' terms, hereinafter referred to as H2M, by which H2M agrees to perform services under this proposal. Should the parties agree to modify same, it must be accomplished by the parties by written instrument. On acceptance of the proposal and/or commencement of the work, this proposal statement and the proposal shall constitute the agreement between Client and H2M.

1. **EXTENT OF PROPOSAL STATEMENT:** This statement and the attached proposal represents the entire and integrated proposal statement between Client and H2M and supersedes all prior negotiations, representations, or agreements, either written or oral. This agreement may be amended only by written instrument signed by both Client and H2M.

2. **GOVERNING LAW:** Unless otherwise specified within this proposal statement, this statement shall be governed by the law of the principal place of business of H2M.

3. **GENERAL:**

3.1 If a dispute arises out of any of the provisions contained herein, H2M and the Client agree to exercise good faith efforts to resolve the matter fairly, amicably and in a timely manner. If the dispute cannot be settled through discussion, each party agrees to endeavor to settle the dispute through non-binding mediation. The mediation shall be conducted under the auspices of the American Arbitration Association (AAA) and in accordance with the construction industry mediation rules of the AAA. The parties agree to resort to arbitration, litigation or other court proceedings, only in the event mediation efforts fail to resolve the dispute. Regardless of the outcome of the mediation, the costs associated with the mediation, exclusive of attorney fees, expert fees and other costs not related to the actual cost of administering the mediation, shall be borne equally by the parties.

3.2 Neither party shall hold the other responsible for damages or delay in performance caused by Acts of God, strikes, lockouts, accidents, or other events beyond the control of the other or the other's employees and agents.

3.3 In the event any provisions of this statement shall be held to be invalid and unenforceable, the remaining provisions shall be valid and binding upon the parties. One or more waivers by either party of any provision, term, condition or covenant shall not be construed by the other party as a waiver of a subsequent breach of the same by the other party.

3.4 H2M intends to render its services under this agreement in accordance with generally accepted professional practices for the intended use of the project and makes no warranty either expressed or implied.

3.5 Any opinion of the construction cost prepared by H2M represents its judgment as a design professional and is supplied for the general guidance of the Client. Since H2M has no control over the cost of labor and materials, competitive bidding or market conditions, H2M does not guarantee the accuracy of such opinions as compared to contractor bids or actual cost to client.

3.6 H2M has not been retained or compensated to provide design and construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences, or procedures required for the Contractor to perform his work, but not relating to the final or completed structure. Omitted services include but are not limited to shoring, scaffolding, underpinning, temporary retainment of excavations and any erection methods and temporary bracing.

3.7. Both, the Client and H2M certify that the individual that has executed this statement on their behalf is empowered to execute and bind their respective party to the terms and conditions of this proposal statement.

4. **TERMINATION:** This agreement may be terminated by either party by seven (7) days written notice in the event of substantial failure to perform in accordance with the terms of this agreement by the other party through no fault of the terminating party. If this agreement is terminated, H2M shall be paid for services performed to the termination notice date plus termination expenses. Termination expenses are defined as reimbursable expenses directly attributable to termination plus 15 percent of the total compensation unearned at the time of termination to account for H2M's rescheduling adjustments, reassignment of personnel and related costs incurred due to termination.

5. **DELEGATION OF DUTIES:** Neither Client nor H2M shall delegate his duties under this agreement without the written consent of the other.

6. **HOURLY RATES OF COMPENSATION:** Where hourly rates of compensation are proposed as the method of payment, it shall be computed as: TOTAL PAYROLL COST plus 1.5 times TOTAL PAYROLL COST as an allowance for overhead and profit for the number of hours that employees are directly employed on the project including travel. TOTAL PAYROLL COST is calculated as the sum of: 1) direct salary charged to the project; and 2) the ratio of the latest fiscal year benefits of all employees (vacations, sick leave, holidays, insurance, taxes, pensions, and other benefits) to all direct salaries; multiplied by direct salary charged to the project. Additional services, when required, will be invoiced at hourly rates of compensation plus reimbursable expenses.

7. **REIMBURSABLE EXPENSES:** Reimbursable expenses are in addition to compensation to H2M for basic and additional services and include expenditures made by H2M, its employees or consultants in the interest of the project. Reimbursable expenses include but are not limited to:

7.1 Expenses of transportation, subsistence and lodging when traveling in connection with the project.

7.2 Expenses of long distance, toll telephone calls, telegrams, messenger service, faxes, express charges, computer charges, reproduction, and fees paid for securing approval of authorities having jurisdiction over the project.

7.3 Sub-contractor expenses, plus a 10 percent mark-up to cover H2M handling and administration costs.

7.4 When authorized in advance by Client, expense of overtime work requiring higher than normal rates, and expense of preparing perspectives, renderings or models.

8. **PAYMENTS TO H2M:**

8.1 Progress payments shall be made in proportion to services rendered and as indicated within this proposal and shall be due and owing within thirty (30) days of H2M's submittal of its invoice. Past due amounts owed shall include a charge at the maximum legal rate of interest from the thirtieth (30th) day.

8.2 If Client fails to make payments due H2M, H2M may, after giving seven (7) days written notice to Client, suspend services under this proposal and seek full payment plus interest and all reasonable attorney fees incurred for collection of said fees. If H2M suspends work due to non-payment, H2M will not be responsible for any delays or associated costs incurred by the Client.

8.3 The amount of any sales, excise, value added, gross receipts or any other type of tax that may be imposed by any taxing entity or authority shall be in addition to fees and costs described in the proposal and proposal statement.

8.4 Payment of invoices for services shall not be subject to or contingent upon receipt of payment from third parties, unless otherwise agreed in writing.

8.5 A Cost of Living adjustment shall be made to lump sum or unit price fees, and maximum fees, wherever they appear, if the Consumer Price Index (CPI-U), U.S. City Average, exceeds six (6) percent in any 12-month period commencing with the first day of the month of the date of the proposal. The adjustment shall be calculated based on the percentage increase in CPI-U, from the inception date of the proposal, for the effort completed each month. The adjustment shall be added to the lump sum or unit costs, or to the maximum fee.

9. **INSURANCE, INDEMNITY AND LIABILITY:**

9.1 H2M INSURANCE: H2M shall acquire and maintain statutory workers compensation insurance coverage, employer's liability, comprehensive general liability insurance coverage and professional liability insurance coverage. Upon request, H2M can provide the Client a certificate of insurance.

9.2 LIMITATION OF PROFESSIONAL LIABILITY: The Client agrees to limit H2M's liability to the Client on the project, due to H2M's professional negligent acts, errors or omissions such that the total aggregate liability of H2M shall not exceed fifty thousand ($50,000) dollars or H2M's total fee for services rendered on this project, whichever is greater.

9.3 HAZARDOUS WASTE CLAIM (*Definition*): "Hazardous Waste Claim" shall mean any claim arising out of, or based upon, the dispersal, discharge, escape, release or saturation of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other materials, irritant, contaminant or pollutant, whether such discharge is sudden or gradual.

9.4 LIMITATION OF LIABILITY: Client agrees to bring no claim against H2M either directly or by means of impleader, third party claim or cross claim, in any action relating in whole or in part to any hazardous waste claim as defined in 9.3.

9.5 CLAIM INDEMNIFICATION: In the event H2M is a party to any action arising out of a hazardous waste claim, Client agrees to indemnify H2M to the maximum extent permitted by law, award, judgment or settlement against the H2M provided that such indemnification shall not apply to such portion of the award judgment or settlement unrelated to the hazardous waste claim.

9.6 DEFENSE COST INDEMNIFICATION-CLIENT'S OPTION TO DEFEND:

9.6.1 In the event H2M is a party to any action arising in whole or part out of a hazardous waste claim, Client agrees to indemnify H2M for all costs (including attorneys' fees) incurred by H2M in defending such action.

9.6.2 Client may, at its option, elect to defend H2M in any action described in 9.6.1 provided that Client indemnifies H2M for any judgment, settlement or other payment to any claimant whether or not attributable to the hazardous waste claim portion of such action.

9.7 CONTRACTOR'S INSURANCE: The Client shall require all Contractors and any Subcontractors, prior to the commencement of their work, to submit evidence that they have obtained for the period of the Construction Contract and guarantee period comprehensive general liability insurance coverage (including completed operations coverage). This coverage shall provide for bodily injury and property damage arising directly or indirectly out of, or in connection with, the performance of the work under the Construction Contract, and have a limit of not less than $1 million for all damages arising out of bodily injury, sickness or death of one person and an aggregate of $3 million for damages arising out of bodily injury, sickness and death of two or more persons in any one occurrence. The property damage portion will provide for a limit of not less than $500,000 for all damages arising out of injury to or destruction of property of others arising directly or indirectly out of or in connection with the performance of the work under the Construction Contract and in any one occurrence including explosion, collapse and underground exposures. Included in such coverage will be contractual coverage sufficiently broad to insure the provision of 9.8 "Indemnity." The comprehensive general liability insurance will include as additional named insureds: Client; H2M and each of its officers, agents and employees.

H2M ARCHITECTS + ENGINEERS

PROPOSAL STATEMENT

9.8 INDEMNITY: Client will require that any Contractor or Subcontractors performing work in connection with Drawings and Specifications produced under this agreement to hold harmless, indemnify and defend, Client and H2M, its consultants, and each of its officers, agents and employees from any and all liability claims, losses or damage arising out of, or alleged to arise from, the Contractor's (or Subcontractor's) negligence in the performance of the work described in the Construction Contract documents, but not including liability that may be due to the sole negligence of Client, H2M, its consultants or officers, agents and employees.

10. CLIENT'S RESPONSIBILITIES: Client shall

10.1 Designate in writing a person authorized to act as Client's representative. Client or his representative shall receive and examine documents submitted by H2M, interpret and define Client's policies and render decisions and authorization in writing promptly to prevent unreasonable delay in the progress of H2M services.

10.2 Furnish soils data including but not limited to reports, test borings, test pits, probings, subsurface exploration, soil bearing values, percolation tests, ground corrosion and resistivity test, all with appropriate professional interpretation, as may be required.

10.3 Guarantee full and free access for H2M to enter upon all property required for the performance of H2M services under this agreement.

10.4 Hold all required special meetings, serve all required public and private notices, receive and act upon all protests and fulfill all requirements necessary in the development of the contracts and pay all costs incident thereto, including special application fees for review of project documents.

10.5 Provide H2M with standard bid documents required and advertise for proposals from bidders, open the proposals at the appointed time and place and pay costs incident thereto.

11. NOMINAL/RESIDENT CONSTRUCTION REVIEW SERVICES:

11.1 If requested by Client, or recommended by H2M and approved in writing by Client, H2M shall provide one or more full time resident project representatives to assist H2M in order to render more extensive representation at the project site during the construction phase. Such resident construction review services shall be paid for by Client as Additional Services as defined within this agreement. The limits of the authority, duties and responsibilities of a resident project representative shall be described before such services begin by written instruments.

11.2 By means of the more extensive on-site observations of the work in progress, H2M will endeavor to provide further protection for Client against defects and deficiencies in the Contractor's work, but the furnishing of such services shall not include construction review of the Contractor's construction means, methods, techniques, sequences or procedures, or of any safety precautions and programs in connection with the work, and H2M shall not be responsible for the Contractor's failure to carry out the work in accordance with the Construction Contract.

11.3 On projects where H2M has been engaged to provide nominal (periodic) or resident construction observation services, H2M will provide these services based on an agreed upon construction observation schedule. If the schedule is extended due to changes/actions of the client, contractor or another party other than H2M, than the fee paid to H2M shall be increased to cover the additional costs incurred or the services under construction observation will be terminated as of that date.

12. OWNERSHIP OF DOCUMENTS: All drawings, specifications and other work product of H2M for the project are instruments of service for this project only and shall remain the property of H2M whether the project is completed or not. Reuse of any of the instruments of service of H2M by Client on extensions of this project or on any other project without the written permission of H2M shall be at Client's risk and Client agrees to defend, indemnify and hold harmless H2M from all claims, damages, and expenses including attorneys' fees arising out of such unauthorized reuse of H2M instruments of service by Client or by others acting through Client. Any reuse or adaptation of H2M instruments of service shall entitle H2M to further compensation in amounts to be agreed upon by Client and H2M.

13. PROPOSAL EXPIRATION: The offer to perform the proposed services described in the cover letter attached herewith is extended for ninety (90) days from the date of said letter. Extensions of this proposal shall be in writing only.

AGREED AND ACCEPTED:

CLIENT: Inc. Village of Southampton

SIGNED BY: Jesse Warren

TITLE: Mayor

DATE: May 29, 2020

H2M architects + engineers

SIGNED BY: Steven C Heard

TITLE: Vice President

DATE: January 17, 2020

Village of Southampton
2020 Rate Schedule

Job Title	Rate
ACCOUNTING ANALYST 1	$130.50
ACCOUNTING ANALYST 2	$144.75
ACCOUNTING CLERK	$66.00
ACCOUNTING SUPERVISOR	$144.75
ACCOUNTS PAYABLE SPECIALIST 1	$102.00
ACCOUNTS PAYABLE SPECIALIST 2	$115.50
ACCOUNTS RECEIVABLE SPECIALIST 1	$102.00
ACCOUNTS RECEIVABLE SPECIALIST 2	$102.00
ADMINISTRATIVE SUPPORT PROFESSIONAL	$90.00
APPLICATION SUPPORT COORDINATOR	$84.00
ASSISTANT CONTROLLER	$186.00
ASSISTANT DEPARTMENT MANAGER-ENG	$217.50
ASSISTANT DEPARTMENT MANAGER-SCI	$189.00
ASSISTANT DIRECTOR OF HUMAN RESOURCES	$225.00
ASSISTANT PROJECT CONTROLS SPECIALIST 2	$105.00
ASSISTANT STUDIO DIRECTOR	$230.85
BIM SPECIALIST	$141.00
BUSINESS DEVELOPMENT ADVISOR	$339.00
BUSINESS DEVELOPMENT SPECIALIST	$186.00
BUSINESS DEVELOPMENT SPECIALIST 1	$115.50
CAD / BIM PROGRAM MANAGER	$156.00
CADD TECHNICIAN	$66.00
CADD TECHNICIAN 1	$66.00
CADD TECHNICIAN 2	$81.00
CFO	$450.00
CHIEF HUMAN RESOURCES OFFICER	$300.00
CHIEF INFORMATION OFFICER	$300.00
CHIEF OPERATING OFFICER	$450.00
CHIEF PLANNER	$285.00
CHIEF SURVEYOR	$285.00
CIVIL 3D SPECIALIST	$156.00
COATINGS INSPECTOR 1	$99.00
COATINGS INSPECTOR 2	$120.00
COATINGS INSPECTOR 3	$135.00
COATINGS INSPECTOR DEPARTMENT MANAGER	$285.00
COATINGS INSPECTOR FIELD SUPERVISOR	$180.00
COMMUNICATIONS SPECIALIST	$84.00
COMMUNICATIONS SPECIALIST 2	$102.00
COMPLIANCE ANALYST	$144.75
COMPLIANCE COORDINATOR	$115.50
COMPLIANCE SPECIALIST 1	$115.50
COMPLIANCE SPECIALIST 2	$130.50
CONSTRUCTION ADMIN.	$168.00
CONSTRUCTION ADMINISTRATOR	$168.00
CONSTRUCTION INSPECTOR 1	$99.00
CONSTRUCTION INSPECTOR 2	$132.75
CONSTRUCTION INSPECTOR 3	$135.00
CONTROLLER	$300.00
CORP. BUSINESS DEV. MGR.	$225.00
CORPORATE COUNSEL	$300.00
CORPORATE RISK ADVISOR	$450.00
CRM ADMINISTRATOR	$144.75
DEPARTMENT MANAGER-ENG	$285.00
DEPARTMENT MANAGER-PLAN	$285.00
DEPARTMENT MANAGER-PLAN	$285.00
DEPARTMENT MANAGER-SCI	$285.00
DEPUTY CHIEF OPERATING OFFICER	$450.00
DEPUTY DISCIPLINE DIRECTOR	$300.00

Job Title	Rate
DEPUTY MARKET DIRECTOR	$300.00
DEPUTY OFFICE DIRECTOR	$300.00
DIR OF SALES & BUS DEV	$300.00
DIRECTOR OF FACILITIES	$186.00
DIRECTOR OF GIS SERVICES	$285.00
DIRECTOR OF INFORMATION TECHNOLOGY	$300.00
DIRECTOR OF MARKETING	$300.00
DIRECTOR OF OPERATIONS	$339.00
DIRECTOR OF QA/QC	$339.00
DIRECTOR TITLE	$285.00
DISCIPLINE DIRECTOR	$339.00
DISCIPLINE ENGINEER	$217.50
ENVIRONMENTAL TECHNICIAN	$75.00
EVIDENCE TECHNICIAN	$96.00
EXECUTIVE ASSISTANT	$150.00
FACILITY MAINTENANCE TECHNICIAN	$66.00
FACILITY SUPPORT ADMINISTRATOR	$90.00
FACILITY SUPPORT COORDINATOR	$90.00
FIELD SUPERVISOR-CONSTRUCTION	$150.00
FIRE INVESTIGATOR	$150.00
FORENSIC MARKET STRATEGIST	$214.50
FORENSIC SERVICES AND CLAIMS MANAGER	$189.00
FRONT DESK ADMINISTRATOR	$90.00
GIS DEPARTMENT MANAGER	$285.00
GIS SENIOR LEVEL HOLD	$189.00
GIS SENIOR LEVEL HOLD	$214.50
GIS SPECIALIST	$135.00
GIS SPECIALIST 1	$120.00
GIS SPECIALIST 2	$135.00
GIS TECHNICIAN 1	$66.00
GIS TECHNICIAN 2	$81.00
GRAPHIC DESIGN MANAGER	$156.00
GRAPHIC DESIGNER 1	$102.00
GRAPHIC DESIGNER 2	$115.50
HELPDESK ADMINISTRATOR	$130.50
HR BUSINESS PARTNER	$130.50
HR COORDINATOR	$84.00
HR GENERALIST	$102.00
HUMAN RESOURCES MANAGER	$186.00
IT SUPPORT TECHNICIAN	$84.00
IT SYSTEMS ADMINISTRATOR	$144.75
IT SYSTEMS SPECIALIST 1	$115.50
IT SYSTEMS SPECIALIST 2	$130.50
JUNIOR ACCOUNTANT	$84.00
LEARNING AND DEVELOPMENT MANAGER	$186.00
MANAGER OF CONSTRUCTION INSPECTION	$180.00
MANAGER OF IT SERVICES	$225.00
MANAGER OF MARKETING SERVICES	$186.00
MANAGER OF PROJECT ACCOUNTING	$186.00
MARKET DIRECTOR	$339.00
MARKETING COMM. MGR	$156.00
MARKETING COORDINATOR	$84.00
MGR OF CONSTRUCTION INSPECTION	$180.00
MULTIMEDIA DESIGNER	$130.50
MUNICIPAL BUS. DEV. MGR.	$339.00
NETWORK ADMINISTRATOR	$144.75
OFFICE DIRECTOR	$339.00
OFFICE SURVEYOR 1	$135.00
OFFICE SURVEYOR 2	$150.00
PLANT OPERATIONS & COMPLIANCE MANAGER	$189.00
PRACTICE LEADER/MANAGER - ARCH	$285.00
PRACTICE LEADER/MANAGER - LA	$285.00
PRACTICE LEADER/MANAGER-ENG	$285.00
PRACTICE LEADER/MANAGER-PLAN	$285.00
PRACTICE LEADER/MANAGER-PLAN	$285.00
PRACTICE LEADER/MANAGER-SCI	$285.00

Job Title	Rate
PRINCIPAL	$450.00
PRINCIPAL MARKET DIRECTOR	$450.00
PRINCIPAL OFFICE DIRECTOR	$450.00
PROJ LANDSCAPE ARCHITECT	$147.00
PROJECT ACCOUNTANT 1	$102.00
PROJECT ACCOUNTANT 2	$115.50
PROJECT ACCOUNTING TEAM LEADER	$144.75
PROJECT ARCHITECT 1	$128.25
PROJECT ARCHITECT 2	$150.75
PROJECT ARCHITECT 3	$167.25
PROJECT CONTROLS SPECIALIST 1	$120.00
PROJECT CONTROLS SPECIALIST 2	$141.00
PROJECT DESIGNER 1-ARCH	$124.50
PROJECT DESIGNER 1-ENG	$120.00
PROJECT DESIGNER 2-ARCH	$147.00
PROJECT DESIGNER 2-ENG	$135.00
PROJECT DESIGNER 3-ARCH	$163.50
PROJECT DOCUMENT CONTROL COORDINATOR	$120.00
PROJECT ENGINEER 1	$135.00
PROJECT ENGINEER 2	$159.00
PROJECT ENVIRONMENTAL PLANNER 1	$120.00
PROJECT ENVIRONMENTAL PLANNER 2	$135.00
PROJECT PERMITTING SPECIALIST 1	$120.00
PROJECT PERMITTING SPECIALIST 2	$135.00
PROJECT PLANNER 1	$120.00
PROJECT PLANNER 2	$135.00
PROJECT SCIENTIST 1	$120.00
PROJECT SCIENTIST 2	$135.00
PROJECT SURVEYOR	$120.00
PROPOSAL COORDINATOR	$84.00
PROPOSAL COORDINATOR 2	$102.00
PROPOSAL MANAGER	$156.00
RESIDENT ARCHITECT	$258.00
RESIDENT ENGINEER	$258.00
SAFETY MANAGER	$258.00
SENIOR GRAPHIC DESIGNER	$130.50
SENIOR PROJECT CONTROLS SPECIALIST	$225.00
SENIOR SURVEYOR	$135.00
SR ACCOUNTS PAYABLE SPECIALIST 1	$130.50
SR ACCOUNTS PAYABLE SPECIALIST 2	$144.75
SR CADD TECHNICIAN 1	$90.00
SR CADD TECHNICIAN 2	$120.00
SR DESIGNER 1-ENG	$156.00
SR DESIGNER 2	$189.00
SR ENVIRONMENTAL PLANNER	$214.50
SR MARKETING COORDINATOR	$102.00
SR PLANNER	$214.50
SR PROJECT ACCOUNTANT 1	$130.50
SR PROJECT ACCOUNTANT 2	$130.50
SR PROJECT PLANNER	$156.00
SR PROPOSAL COORDINATOR 1	$115.50
SR PROPOSAL COORDINATOR 2	$130.50
SR. ADMINISTRATIVE SUPPORT PROFESSIONAL	$120.00
SR. ARCHITECT 1	$180.00
SR. ARCHITECT 2	$201.75
SR. ARCHITECT 3	$230.85
SR. CADD TECHNICIAN	$105.00
SR. COATINGS INSPECTOR 1	$150.00
SR. COATINGS INSPECTOR 2	$165.00
SR. COATINGS INSPECTOR 3	$180.00
SR. CONSTRUCTION INSPECTOR 1	$150.00
SR. CONSTRUCTION INSPECTOR 2	$165.00
SR. CONSTRUCTION INSPECTOR 3	$180.00
SR. DESIGNER 1-ARCH	$171.00
SR. DESIGNER 2-ARCH	$187.50
SR. DESIGNER 3-ARCH	$201.75

Job Title	Rate
SR. DISCIPLINE ENGINEER	$300.00
SR. ENVIRONMENTAL PLANNER 1	$189.00
SR. ENVIRONMENTAL PLANNER 2	$214.50
SR. ENVIRONMENTAL SCIENTIST 1	$189.00
SR. ENVIRONMENTAL SCIENTIST 2	$214.50
SR. GIS SPECIALIST 1	$141.00
SR. GIS SPECIALST 2	$156.00
SR. IT SYSTEMS ADMINISTRATOR	$156.00
SR. LANDSCAPE ARCHITECT	$187.50
SR. PERMITTING SPECIALIST 1	$141.00
SR. PERMITTING SPECIALIST 2	$156.00
SR. PLANNER 1	$189.00
SR. PLANNER 2	$214.50
SR. PROJECT CONTROLS SPECIALIST 1	$189.00
SR. PROJECT CONTROLS SPECIALIST 2	$214.50
SR. PROJECT ENGINEER 1	$195.00
SR. PROJECT ENGINEER 2	$202.50
SR. PROJECT ENTITLEMENT SPECIALIST	$214.50
SR. PROJECT ENTITLEMENT SPECIALIST 1	$189.00
SR. PROJECT ENTITLEMENT SPECIALIST 2	$214.50
SR. PROJECT ENVIRONMENTAL PLANNER 1	$141.00
SR. PROJECT ENVIRONMENTAL PLANNER 2	$156.00
SR. PROJECT PLANNER 1	$141.00
SR. PROJECT PLANNER 2	$156.00
SR. PROJECT SCIENTIST 1	$141.00
SR. PROJECT SCIENTIST 2	$156.00
SR. SITE PLANNER	$214.50
SR. WATER PLANT OPERATOR	$180.00
STAFF ACCOUNTANT 1	$84.00
STAFF ACCOUNTANT 2	$115.50
STAFF DATA ANALYST 1	$90.00
STAFF DESIGNER 1	$95.25
STAFF DESIGNER 2	$99.00
STAFF DESIGNER 3	$105.00
STAFF ENGINEER 1	$108.00
STAFF ENGINEER 2	$120.00
STAFF ENVIRONMENTAL PLANNER 1	$90.00
STAFF ENVIRONMENTAL PLANNER 2	$105.00
STAFF INTERIOR DESIGNER 1	$95.25
STAFF INTERIOR DESIGNER 2	$95.25
STAFF LANDSCAPE ARCHITECT	$99.00
STAFF PERMITTING SPECIALIST 1	$90.00
STAFF PERMITTING SPECIALIST 2	$105.00
STAFF PLANNER 1	$90.00
STAFF PLANNER 2	$105.00
STAFF SCIENTIST 1	$90.00
STAFF SCIENTIST 2	$105.00
STUDENT INTERN	$75.00
STUDIO DIRECTOR	$285.00
SURVEY CREW MEMBER	$99.00
SYSTEMS IMPLEMENTATION SPECIALIST	$144.75
TANK ASSET COORDINATOR	$90.00
TECHNICAL ADVISOR-ENG	$285.00
TECHNICAL WRITER	$144.75

Please Note:

1. When employees are part of the survey crew working on projects where we are required to pay NYS prevailing wage rates, we pay the employee the prevailing wage rate or the hourly rate, whichever is greater.

STATEMENT OF QUALIFICATIONS
WATER QUALITY ASSESSMENTS
WATER QUALITY IMPROVEMENT PROJECT PLANS

NELSON POPE VOORHIS

environmental • land use • planning

70 Maxess Road
Melville, NY 11747
Contact: Charles J. Voorhis, CEP, AICP, Partner
o: 631.427.5665 | cvoorhis@nelsonpopevoorhis.com

August 2020

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INTRODUCTION

Nelson, Pope & Voorhis, LLC ("Nelson Pope Voorhis" or "NPV") is an environmental planning and consulting firm established in 1997 that serves governmental and private sector clients preparing creative solutions specialized in the area of complex environmental project management and land use planning/analysis. Our offices are strategically located in Melville, Long Island, NY and Suffern, NY in the Hudson River Valley. NPV consists of three divisions, created to better serve clients with high quality, innovative and responsive consulting services in all aspects of environmental planning. The three divisions are:

- **Environmental Resource and Wetland Division:** conducts ecological assessment and planning, landscape and coastal restoration, wetland delineation and restoration, habitat assessment, conducts stormwater modeling and green infrastructure planning and implementation. This division assists clients through permitting and SEQRA processes.

- **Environmental and Community Planning Division:** prepares comprehensive plans, long-term planning studies, corridor redevelopment studies, brownfield plans and comprehensive and strategic zoning amendments. The group is effective in the use of geographic information systems (GIS) mapping to evaluate issues and present baseline data. Effective community outreach strategies are developed and tailored for each project and the community in which the project is taking place. The group represents a number of planning boards in the region.

- **Phase I/II ESA and Remediation Division:** prepares Phase I/II Environmental Site Assessments with soil and groundwater sampling services, lead based paint, asbestos and radon inspection services, and all forms of environmental sampling. The division evaluates the implications of past and/or present contamination and property uses on future land uses.

The primary focus of the firm is to provide quality planning services that meet the needs and goals of our clients while respecting the environment. We pride ourselves being extremely responsive to each client. Clients rely on NPV's depth of experience and expertise to provide solutions to each unique project within budget and on schedule. Our clientele, some of whom we have represented for decades, recognize NPV's capabilities and are secure in knowing that they receive quality professional services from project inception through completion. NPV's multidisciplinary staff includes AICP-certified planners, economists, ecologists, hydrologists, certified environmental professionals, grants specialists, and GIS specialists.

As a local firm, NPV has significant expertise in performing Water Quality Assessments. We have served as a primary planner to many municipalities and have established a solid track-record of completed projects and local government references throughout Long Island.

NPV has the capabilities to provide the following services:

ENVIRONMENTAL AND WETLAND ASSESSMENT

ENVIRONMENTAL ANALYSIS
NYS SEQRA/NYC CEQR Administration
NEPA Analysis/Documentation
EIS/EAF Preparation
GEIS & Regional Impact Analysis
Noise Monitoring & Assessment
Air Impact Analysis
Visual Assessment

STORMWATER MANAGEMENT
Stormwater Permitting
Stormwater Pollution Prevention Plans (SWPPP)
Erosion & Sediment Control Plans
NYSDEC "Qualified Inspectors'' for Construction Field Monitoring
Stormwater Management Programs
NYSDEC Annual Reports
Construction Stormwater Field Monitoring
Outfall & Infrastructure Inventory
GIS Mapping & Analysis
Stormwater BMP's
Stormwater Management Planning
Low Impact Design

ECOLOGY & WETLANDS
Wetland Delineation and Permits
Permit Plans
Restoration/Mitigation Plans
Ecological Studies and Surveys
Endangered Species Surveys
Pond Management Plans
Invasive Species Control
Water Quality Evaluation
Habitat Management
Watershed Management Plans
Environmental Education /Outreach

COASTAL & WATERFRONT MANAGEMENT
Waterfront Management Plans
Waterfront Certifications
Coastal Erosion Hazard Area
FEMA Compliance
Shoreline Restoration Planning
Ecological Landscape Design

COMMUNITY AND LAND PLANNING

PLANNING
Development of Feasibility Studies
LEED Planning
Public Outreach Meetings
Demographic Analysis
Municipal Review Services
Planning & Zoning Analysis
Build Out Analysis
GIS Analysis
Code Preparation & Review
Downtown Revitalization
Regional Planning & Land Use Plans
Recreation Planning
LWRP & Harbor Management Plans
Grant Writing & Administration
Public Outreach & Community Surveys
Community Visioning
District Mapping
Spatial Analysis of Call Database
Needs Assessment
Demographic Analysis

ECONOMIC
Fiscal Impact Analysis
Economic Impact Analysis
IMPLAN and RIMS II Economic Impact Modeling
School District/Community Service Impact Analysis
Market Studies
Niche Market Analysis
Demographic Studies
Economic Development Planning
Business Retention & Expansion Strategies
Downtown Revitalization
IDA Financing Assistance

PHASE I/II ESA AND REMEDIATION

ENVIRONMENTAL AUDITS
Phase I ESA & Due Diligence Investigations
Phase II ESA
Groundwater Investigations
Soil Sampling, Boring and Classifications
Soil Gas Surveys
Monitoring Wells & Piezometers
Tank Sampling
Pesticide Sampling & Plans
Soil Management Plans
Remediation
Brownfield/Voluntary Cleanup Plans
RCRA Closures
Superfund Sites
Asbestos Surveys
Influent/Effluent Sampling
Lead Based Paint Surveys
Subsurface Investigations
Ground Penetrating Radar (GPR) Dewatering Services
Pipe Camera
Magnetometer
Groundwater Monitoring Studies
Flow Studies
Water Supply Studies
Nitrogen Load/TMDL Evaluation

Watershed Management

Water quality protection through proper land use management. What is applied to the land determines water quality through direct stormwater runoff and groundwater outflow. Inventory of watershed conditions, identification of best management practices (BMP's) and implementation are the critical analyses used by NPV in

creating sound and innovative Watershed Management Plans to New York State Department of State (DOS) and other recognized specifications.

Groundwater & Water Quality Studies

Monitoring of surface and groundwaters for migration and contaminant control. NPV routinely conducts groundwater assessments to determine migration patterns and contaminant levels. Surface water quality monitoring is critical to fingerprint pollutant types to link to sources in order to monitor development pollution controls. Our expertise in these areas is a mainstay of our business.

KEY PERSONNEL

All NPV professionals are available to assist on an as-needed basis. Charles J. Voorhis, CEP, AICP will serve as the project coordinator, working as the primary contact and assigning projects to the various professionals on the team. Specific individuals expected to provide services and their individual roles for Environmental Site Assessments initiatives are noted as follows:

Personnel	Qualifications, Project Role
Charles J. Voorhis, CEP, AICP Managing Partner	Project Coordinator
Carrie O'Farrell, AICP Senior Partner	Stormwater Management, Environmental Resource Management; Village MS4 Reporting
Kathryn Eiseman, AICP Partner	Village Plans/Planning; Village Regulations, GIS/Graphics, Land Use and Zoning
Eileen Keenan Senior Planner	Report Preparation/Quality Control, Stormwater Regulations/Infrastructure, Village MS4 Reporting
Rusty Schmidt Landscape Ecologist	Stormwater Retrofits, Bioswales, Green Infrastructure; Landscape Restoration; WQ Benefits
Cassandra Castano Asst. Landscape Ecologist	Bioswales, Green Infrastructure, Landscape Restoration, Project Concept Plans
Eric Arnesen, PG Licensed Professional Geologist	Site Inspections, Groundwater Resource Analysis, Environmental Testing
Beth Cartwright Environmental Engineer/GIS Specialist	Graphics/Map Design; Watershed Evaluation, Report Figures, GIS Mapping, WQ Benefits

Nelson Pope Voorhis is managed by a select group of partners. Each provides specific expertise in the field of environmental planning, land use planning/analysis, remediation, engineering and land surveying that is unique within the industry. The diverse leadership of NPV couples the experience of our senior partners with the innovation and enthusiasm of our younger partners. Many of the team's staff have advanced technical degrees and/or technical certifications. Such as LEED Accredited Professional (LEED AP), OSHA 40 Hour HAZWOPER, and American Institute of Certified Planners (AICP), etc. Partner qualifications are below and full partner/staff resumes along with copies of licenses/certifications can be provided upon request.

Charles Voorhis, CEP, AICP is Managing Partner of NPV and has over 40 years of experience in environmental planning on Long Island and in the New York metropolitan area. Mr. Voorhis is a member of the American Institute of Certified Planners (AICP) and is a Certified Environmental Professional (CEP). He has a wealth of experience in managing large scale municipal projects including regional environmental planning, downtown revitalization and action planning, Generic Environmental Impact Statements, stormwater management, wetlands and coastal management, and municipal consulting. Mr. Voorhis oversaw completion of the Water Supply Management & Watershed Protection Strategy for the Town of Southold, completion of the Suffolk County North Shore Embayment's Watershed Management Plan, and the Lake Agawam Comprehensive Management Plan. Mr. Voorhis and his firm serve as environmental planning consultants to many of New York Towns and Villages, including special wetlands advisor to the Village of Southampton and the Village of Sag Harbor.

Carrie L. O'Farrell, AICP is Senior Partner and Division Manager of the Environmental Resource and Wetlands Assessment Division. Ms. O'Farrell is a trained environmental scientist with applied planning experience, and is expert in land use regulations, drainage and stormwater issues and wetland and stormwater permitting. She has overseen the preparation of numerous EISs, stormwater permitting and erosion control compliance documents and wetlands and coastal permits. Ms. O'Farrell has been at the forefront of the NYSDEC SPDES Phase II stormwater permitting & compliance program since 2002, both in assisting MS4 designated municipalities in Long Island with the creation and implementation of Stormwater Management Plans and in the preparation of Stormwater Pollution Prevention Plans (SWPPP) for construction projects. Ms. O'Farrell regularly works with staff engineers in development of stormwater management solutions in sensitive environmental areas and manages the completion of all SWPPPs prepared for construction projects (over 130 completed to date).

Kathryn J. Eiseman, AICP is a Partner and Division Manager of our Environmental & Community Planning Division. She has over 20 years of planning experience in environmental planning and manages both private and public planning projects. . Current and past projects include Brownfield Opportunity Area Studies (Steps I, II and III), Local Waterfront Revitalization Programs, corridor studies, customized zoning codes, TOD plans, and redevelopment feasibility studies. She is skillful in managing complex projects and working with team members both in house and as subconsultants. Her staff is proficient in the use of GIS and design software for preparation of high-quality graphic products. Ms. Eiseman is experienced in the art of public participation and education and tailors her approach to the unique needs of each project/community. She is an enthusiastic and creative planner who endeavors to bring a fresh approach to each project as well as to her position as Treasurer for the Long Island Section of the American Planning Association.

RELEVANT EXPERIENCE

Sag Harbor Water Quality Improvement Project Plan (WQIPP)

NPV was hired by the Village of Sag Harbor to develop a Water Quality Improvement Project Plan (WQIPP) to identify and rank water quality improvement projects within the Village of Sag Harbor. The plan assessed the local land use, water resource conditions, watershed priority areas and developed water quality improvement projects within the Village of Sag Harbor for which Community Preservation Fund (CPF) funding was sought. NPV the provided locations, feasibility, and cost estimates of potential projects to address non-point stormwater source abatements and reduction of stormwater with the use of green infrastructure improvements within the Village of Sag Harbor. The projects were then subsequently ranked by the cost per pound of Nitrogen removed for each project after modeling each project for effectiveness.

The Towns of East Hampton and Southampton awarded CPF grants in 2019 for the highest ranked projects, and N&P/NPV are currently preparing construction plans for various green infrastructure projects that will have significant benefits in reducing pollutant load to Sag Harbor. Project effectiveness will be evaluated with monitoring equipment to determine pollutant load reductions made by the green infrastructure systems and benefits to the receiving waterbody.

Sag Harbor Environmental Planner

NPV has served as the Village of Sag Harbor's planner and environmental consultant since 2016. In this role, NPV routinely reviews and tracks site plan and subdivision applications for the Village Planning Board; attends public meetings to present and answer questions and provides SEQRA review and administration. For wetlands applications, NPV delineates wetlands, reviews applications and provides feedback to applicants and the Village Harbor Committee, and prepares permits. In addition, NPV conducts Coastal Consistency reviews and prepares Recommendations for consideration by the Harbor Committee for consistency with the policies of the Village's adopted Local Waterfront Revitalization Program (LWRP).

NPV has completed a number of long range planning efforts on behalf of the Village.
NPV prepared the WQIPPP for the Village early in 2016 which identified multiple locations for implementation of Green Infrastructure throughout the Village. The WQIPP has been used as the basis for over a dozen grant funded implementation projects, for which NPV assisted in the grant applications. NPV and N+P have been responsible

for design and implementation of rain gardens as well as public engagement and monitoring to demonstrate the long term benefits of Green Infrastructure.

NPV is working on the LWRP Update which will incorporate an updated Harbor Management Plan including the Harbor Management Charts which were prepared by NPV and adopted by the Village in the spring of 2020 along with amendments to Chapter 278 Waterways.

Village of Southampton Planner and Environmental Consultant

NPV has served as the Village Environmental and Planning Consultant for the Village of Southampton since 2006. In this role, NPV provides day to day consulting services for each of the Village boards including application review, coastal and wetland permit review, wetland delineation, and SEQRA review and administration. Day to review of applications includes plan review, coordination with applicants and involved departments/agencies, preparation of resolutions and permits, and presentation of project reviews and reports to the Village Boards. Our affiliated firm, Nelson + Pope serves as the Village Engineer.

Since 2006, NPV has also provided planning and environmental services in the completion of long-range plans and support for grant funding. These special projects have included a watershed management plan for Lake Agawam whose recommendations are being implemented, the build out analysis and SEQRA for an addendum to the Comprehensive Plan and zoning amendments for the historic downtown village business district, a parking utilization study which produced a guide to public parking brochure for visitors, a study to support a change in zoning to restrict offices on the ground floor in the business district, and several green infrastructure design projects.

Northport Sub Watershed Assessment

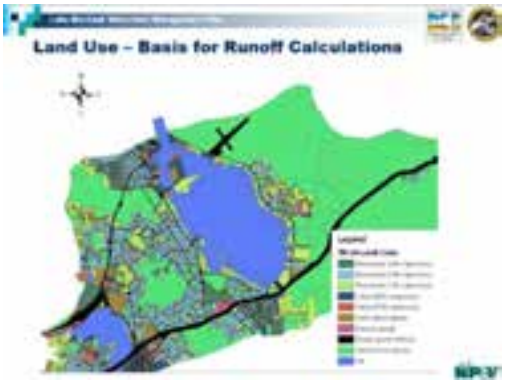
NPV was hired by the Village of Northport to assist the Village develop solutions for persistent flooding issues within the vicinity of Main Street and to address contributing areas and pollutant load to Northport Harbor. The Village approached the project in two phases, 1) conduct a sub-watershed assessment to identify the areas (or sub-watersheds) within the Village which contribute the most significant volumes of stormwater runoff and the greatest pollutant loads to the Northport Harbor, and 2) identify drainage improvement projects based on the results of the first phase. Potential drainage solutions were prioritized based effectiveness of both volume reduction and pollutant loads, availability of land and cost considerations. After careful consideration of the sub-watersheds, pollutant load modeling, and understanding of the watershed loads within the Village, NPV provided locations, feasibility, and cost estimates of potential projects to address non-point stormwater source abatements

and reduction of stormwater with the use of green infrastructure improvements for water quality along with traditional stormwater infiltration practices. The projects were then subsequently ranked based on effectiveness of pollutant removal and stormwater volume controls.

Great Cove Watershed Management Plan

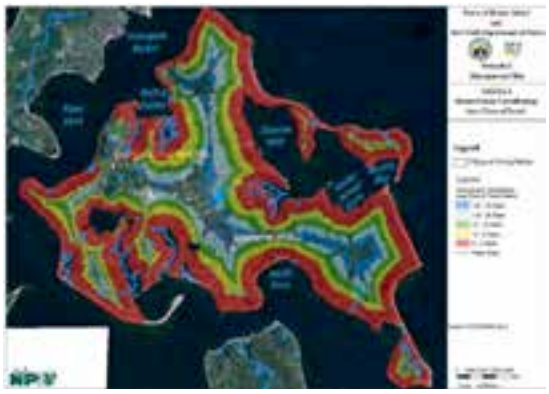
NPV prepared the Great Cove Watershed Management Plan for the Town of Islip (funded by the New York State Department of State). The study area includes the western half of the Town's frontage on the Great South Bay (16,000+ acres). The upland contributing drainage areas to Great Cove are comprised of industrial, commercial and higher population suburban areas constructed prior to 1970. Many areas within the watershed have high groundwater conditions, extensive impervious cover and drainage infrastructure and collection systems that discharge directly to Great Cove and the creeks tributary to it. The Management Plan focuses on improvement of water quality through the identification, control and reduction of non-point source pollution. The Management Plan focuses on improvement of water quality through the identification, control and reduction of non-point source pollution. Sixteen conceptual designs for drainage improvement projects within the watershed were prepared, of which three projects have been successfully implemented using grant funding. Conceptual designs and estimated construction costs were prepared for each location. Additionally, the project included a review of municipal operations and best management practices identified for salt storage, truck washing, roadway and stormwater system maintenance, and highway yard storage and drainage.

Lake Montauk Watershed Management Plan (WMP)



NPV completed the Lake Montauk Watershed Management Plan for the Town of East Hampton (funded by the New York State Department of State). NPV worked with the Town and CCE (who conducted surface water sampling and DNA analysis, as well as eel grass surveys and habitat assessments) to prepare a complete characterization of the Lake, gather input from the WMP advisory committee and furnish recommendations for watershed management. The upland contributing drainage areas to Lake Montauk are comprised of primarily residential uses with some commercial uses, marinas and yacht clubs located along or in immediate proximity to the waterfront. Many areas within the watershed have high groundwater conditions, poorly draining soils, and aged sanitary systems that impact the health of the Lake. The Management Plan focuses on improvement of water quality through the identification, control and reduction of non-point source pollution. Additionally, recommendations considered potential direct sanitary discharge to the Lake as evidence suggested contribution of coliform due to sanitary system failure. An implementation matrix that included sources of grant funding was prepared to aid in simple and rapid implementation of recommendations by the Town. The project was completed in July 2014.

Town of Shelter Island Watershed Management Plan



The Town of Shelter Island and Village of Dering Harbor retained NPV to prepare a watershed management plan for the entirety of the island. The plan was funded by a grant from the NYSDOS and developed according to NYSDOS guidelines for watershed management plans. This document characterizes the watershed's natural resources, identifies known impairments, inventories existing land uses and open space, provides a comprehensive stormwater infrastructure inventory, determines critical stormwater runoff areas, identifies gaps in existing local laws, programs and practices, recommends actions to prevent further degradation, as well as identifies an implementation strategy to restore the watershed. Recommendations considered non-point source pollution from runoff and sanitary systems, as well as methods for remediation of a phosphorus impaired pond. Development of the plan included public participation and outreach to the local community. The project was completed in July 2014.

Tuthills Creek Watershed Management Plan

NPV prepared a Watershed Management Plan for Tuthills Creek, a tributary to Patchogue Bay and the South Shore Estuary Reserve, located in the Town of Brookhaven, NY. The Watershed Management Plan was prepared to serve as a long-term strategy for the protection and restoration of water quality and ensure compatible land use and development in the Tuthills Creek watershed. The management plan characterized the waterbody and watershed, including an inventory of watershed features, demographic and population data; land use and land cover; water quality classifications; key aquatic habitats; and an assessment of pollutant loads. The Plan prioritized subwatersheds by pollutant load, assessed local laws, programs, and practices affecting water quality, identified management practices, approaches and strategies for watershed protection and restoration, identified potential water quality improvement projects and provided an implementation strategy and schedule.

Team Description

TEAM INFORMATION

H2M architects + engineers (H2M) has been providing consulting engineering services to municipalities across Long Island for over 80 years. Our local experience, qualifications and professional expertise in wastewater planning and project development are important to assist the Village with the successful formation of the Village of Westhampton Beach Sewer System.

H2M understands the intricacies of planning for sanitary infrastructure in Suffolk County, and has the ability to carefully integrate affordability, environmental improvement, protection of public health and support of long-term economic stability into projects of this type - all while complying with the regulatory requirements of: Suffolk County Department of Health Services (SCDHS), United States Environmental Protection Agency (USEPA), New York State Department of Environmental Conservation (NYSDEC), New York State Environmental Facilities Corporation (NYSEFC), New York State Municipal Law, and the New York State Health Commissioner.

H2M is a privately owned, multi-disciplined professional consulting firm providing architectural and engineering services to private industry, municipalities and governmental agencies in the New York metropolitan area.

H2M has its headquarters located at 538 Broad Hollow Road, 4th Floor East in Melville, New York, as well as offices in New York City, White Plains, New City, Suffern and Albany, New York and in Parsippany and Howell, New Jersey. H2M is a NYS Design Professional Corporation, licensed by the NYS Department of Education to provide professional engineering services in New York. H2M also has a fully owned subsidiary, H2M Associates Inc., and H2M Architects & Engineers Inc., as affiliated companies that can provide engineering and architecture services in New Jersey, respectively.

Founded in 1933, H2M was initially oriented towards the planning and design of municipal infrastructure projects. The company's capabilities have since grown to include full professional services in architecture, engineering and environmental consulting.

H2M currently has staff resources of 290 employees, including wastewater, chemical, civil, electrical, environmental, mechanical and structural engineers, architects, planners, geologists, hydrogeologists, environmental scientists, surveyors, industrial hygienists, construction managers and related technical support personnel. All projects are carried out under the direction of one or more of the firm's officers and managed by senior staff professionals. As a result of the multi-disciplined nature of the firm, H2M is able to assign project teams composed of staff specialists in the appropriate discipline(s) to meet the specific needs of our clients and their projects.

Operating Philosophy

The operating philosophy at H2M is based on the following core values:

Respect: We respect each other's ideas and contributions and are committed to open, honest communication.

Team Description

Dedication: We are responsive to our clients' needs and go above and beyond to get the job done.

Integrity: We are honest and ethical in our business practices and build trust with our clients and staff.

Teamwork: We cooperate, collaborate and work together as part of a team.

Community: We are committed to the health of our local communities and our legacy.

Creativity: We believe in the importance of innovation and seek new, creative and sustainable project solutions.

Practicality: We are dedicated to providing efficient, cost-effective solutions to our clients' problems.

Opportunity: Our success begins with our people. We value organic growth, empowering our employees and fostering their development.

Experience

QUALIFICATIONS IN WASTEWATER ENGINEERING

H2M provides cost-effective and practical solutions to public and private sector clients for wastewater and other environmental challenges. The Clean Water Act, enacted in 1972, specifies regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment plant facilities, and manage polluted runoff. Some of the critical issues the law addresses are the requirement for states to develop Total Maximum Daily Loads (TMDL) to restore polluted waters and the need to construct, upgrade, repair, or replace wastewater facilities and sewage collection and conveyance systems to meet the provisions of the law. H2M is experienced in developing compliance strategies that meet both existing rules and anticipated changes. Success in navigating these regulatory issues and other wastewater challenges requires a strong team of engineers with insight, wisdom and experience gained through exceptional completion of successful projects. Our wastewater division includes wastewater engineers, wastewater treatment plant operators, LEED APs and specialists in the field of collection, conveyance, and treatment systems. Based on client needs and project requirements, H2M offers the following services:

Services

- Wastewater Treatment
- Biological Nutrient Removal
- Wastewater Collection/Conveyance
- Wastewater Reuse
- Scavenger Waste Treatment
- Sewer System Evaluations
- Sewer Use Regulations
- Wastewater Treatment
- Wastewater Characterization
- Residuals Management
- Facility Planning
- Operation Consulting
- Operation and Maintenance Manuals
- Discharge Monitoring
- Odor Control
- Health and Safety Programs
- Energy Audits and Commissioning
- Emergency Planning
- Security System
- Emergency Power Systems
- SCADA
- GIS
- Permitting
- Grant and SRF Loan Applications
- Construction Administration/Inspection
- Asset Management

At H2M we strive to fully understand the requirements of our clients and follow a unique problem solving approach that creates efficient and cost effective solutions that result in capital and operating cost savings for our clients.

Sewer District Formation Planning

H2M has extensive experience preparing Map and Plan documents for the formation of new sewer systems in Suffolk County. Most recently, H2M completed sewer capacity analyses and Map and Plan reports for Suffolk County Department of Public Works (SCDPW) to identify sewer systems to service unsewered areas in Bellport, Sayville, Ronkonkoma Hub, Mastic/Shirley and Southampton. In addition to preparing these reports for SCDPW, H2M was also retained by the Incorporated Villages of Bellport, Mastic Beach and Southampton to prepare Map and Plans specifically tailored to provide sanitary infrastructure in unsewered areas of need within each Village. H2M's responsibilities during the preparation of each report included finalizing the service area boundaries, calculating sanitary wastewater flow projections, planning for preliminary wastewater collection, conveyance and treatment infrastructure, and determining project cost opinions, associated scheduling components, cost escalation and financing alternatives and public outreach/education. In addition to the Map and Plan preparation, H2M was also retained by each Village to prepare an Environmental Assessment Form (EAF) to initiate the State Environmental Quality Review Act (SEQRA) compliance process.

H2M has also prepared numerous Map and Plan reports to facilitate out-of-district connections to existing sanitary facilities. These reports include evaluations of existing infrastructure; identify necessary infrastructure improvements, consisting of sewer improvements, pump station upgrades and treatment facility expansion, to accommodate the additional sanitary flow from the connecting areas as well as determine cost opinions associated with the connections. Specifically, H2M has prepared Map and Plan reports to connect to existing facilities within the Village of Patchogue Sewer District, Town of Riverhead Sewer District, Town of Huntington Sewer District, Calverton Sewer District, Oyster Bay Sewer District and various connections to existing Suffolk County sewer districts.

Suffolk County Sewer Capacity Study

H2M was one member of a multi-faceted consultant team where the main objective was to provide the client (SCDPW) with a comprehensive Sanitary Wastewater Infrastructure Feasibility Study evaluating different; sewage collection systems, treatment technologies and possible locations for the plant, and capital costs for seven unsewered areas under the Suffolk County Sewer Capacity Study. Implementation of sanitary wastewater infrastructure to these communities was identified as critical to bringing numerous economic, environmental and social benefits to each area. Sewering each of these areas is anticipated to reduce nitrogen loadings to groundwater, volatile organic compounds (VOC's), and pharmaceuticals and personal care product (PPCP's) from continuing to degrade present environmental conditions.

- Bellport Area

The Bellport study area includes two geographically distinct areas; the downtown area of Bellport Village and properties surrounding the Long Island Railroad (LIRR) Bellport Station. The first portion, of the study area consists of 57 individual lots covering approximately 21 acres. The second portion of the study area consists of 74 individual lots covering approximately 35 acres. Thus the total Bellport study area is 56 acres.

To estimate the generation of sanitary flow, the analysis was divided in two. The first analysis evaluated the Bellport Village where the projected average daily flow is approximately 60,000 gallons per day (gpd).The second analysis, for the North Bellport part, the projected generation of sanitary flow was estimated to be 100,000 gallons per day (gpd).

For the collection and conveyance system, a combination of gravity sewers and low-pressure sewers is recommended for the study area. The collection systems will meet at a proposed pumping station which then will convey wastewater to the Village of Patchogue Advanced Wastewater Treatment Facility (AWTF). The decision of pumping wastewater to the Village of Patchogue (AWTF) was made after evaluating different vacant publicly owned parcels and failing to identify an appropriate location. The additional flow to the Village of Patchogue AWTF will require upgrades in the process, and these required upgrades were also evaluated in the study.

The total anticipated project cost was estimated to be approximately $38,204,000. This cost opinion includes the Construction, Engineering and Soft Costs. The report was finalized and accepted by Suffolk County in the second quarter of 2014.

- Sayville Area

The Sayville study area includes and approximately one-mile reach along Montauk Highway and Rail Road Avenue, and it is bounded by the Long Island Rail Road to the north, Hiddink Street to the east, Sunset Drive to the west. It includes 167 individual tax lots summing up to 71 acres.

The area of study has no plans to redevelop, therefore wastewater flow projections were based upon 2010 Suffolk County Water Authority (SCWA) and estimated to be 130,000 gallons per day (gpd). In order to collect and convey this volume of wastewater, low-pressure system is proposed. This system will convey to a suggested pumping station that later will convey wastewater to the Village of Patchogue Advanced Wastewater Treatment Facility. The treatment facility will require to increase capacity. H2M proposed additional infrastructure that should be implemented at the plant.

The total anticipated project cost was estimated to be approximately $35,301,000. This cost opinion includes the Construction, Engineering and Soft Costs. The report was finalized and accepted by Suffolk County in the second quarter of 2014.

- Ronkonkoma Hub Area

The Ronkonkoma Hub study area is defined by

Union Avenue to the north, Village Plaza Drive to the east, the Long Island Rail Road to the south and County Route 29 to the west. It includes fifty four (54) individual tax lots covering approximately 58.

were the most appropriate option to convey the 500,000 gallons per day (gpd) that will be generated in the area. The identified the collection system will drain to a submerged pumping station and later to the wastewater treatment facility. The wastewater treatment technology selected for this area was the most cost effective option considering effluent limits and space requirements. A Modified Ludzack-Ettinger (MLE) process using; the STM-Aerotor for secondary treatment, and membrane-bioreactors to allow solids separation and filtration to sidestep final clarifiers.

The anticipated project costs were estimated to be approximately $6,895,000 for the collection and conveyance system, and $23,640,000 for the wastewater treatment facility. These costs include Construction, Engineering and Soft Costs.

The draft report was finalized in July 2012. This document was subsequently revised during the detailed Engineering Design phase of the project by SCDPW to replace the treatment facility with a pump station and force main connection to Suffolk County Sewer District No. 3 – Southwest where all sanitary wastewater would be treated at the Bergen Pont Wastewater Treatment Plant. This project is currently in the detailed engineering design phase of work, and is anticipated to move into construction within the next 12-18 months.

- Mastic/Shirley Area

The purpose of this project was to provide Suffolk County with a comprehensive Feasibility Study that identifies the environmental, economic and/or social factors associated with sewering the Mastic/Shirley area and a that could be used to move forward with the formation of the sewer district.

The final Mastic/Shirley study area boundary encompassed approximately 11,000 parcels across 3,300 acres. The average daily sanitary flow projection for this area was calculated to be 3.2 million gallons per day (MGD) based on maximum build-out of existing zoning and current Suffolk County Department of Health Services sanitary flow design criteria. The preliminary collection and conveyance system layout included 24 pump stations, 15 miles of force main and 111 miles of a combination of gravity and low pressure sewers. The treatment facility was based on using the Membrane Biological Reactor (MBR) process. The location of the treatment facility was identified to be on vacant lands at the southerly end of the Town of Brookhaven Calabro Airport. Provisions for odor control and compliance with FAA regulations for wildlife attractants and height restrictions were identified as key components to be considered during the detailed engineering design phase of the project should it move forward.

The total anticipated project cost opinion was estimated to be approximately $700,000,000. This cost opinion included construction, engineering, administration and inspection services. The report was finalized and accepted by Suffolk County in the second quarter of 2014.

This document was used by Suffolk County to procure federal funding assistance to move forward with this project. The County has since issued a Request for Proposal to retain the services of a design consultant to prepare detailed engineering design documents to construction sanitary collection, conveyance and treatment facilities to service the initial phases of the project identified in the Map and Plan. The County is expected to award the design project by end of 2015, which will require the consultant to complete the design services within 2 years of project start date.

- Southampton Area

The Southampton study area is bounded by Jaeger Lane to the north, Main Street and North Sea Road to the east, and Jobs Lane and Culver Street to the south, and Windmill Lane to the west. The 62 acre study area includes 151 individual lots located within the Village's business district.

The average daily flow that was projected for the community was estimated to be 145,052 gallons per day (gpd.). The recommended collection system based upon topography, relative depth to groundwater and because the study area is currently established, is a low-pressure collection system. In accordance with Suffolk County Department of Health and Services (SCDHS) requirements, it was determined that the wastewater treatment plant should be located on a 6.4 acre site that is owned by the Incorporated Village of Southampton Police. Since nitrogen loading is a major concern to the community because of its negative impact on water bodies, several technologies were evaluated to address this issue. A Membrane Biological Reactor (MBR) was selected to give solution to this problem not only because it allows an efficient removal, but also because it required less area which is an important consideration at this site.

The total anticipated project cost was estimated to be approximately $28,803,000. This cost opinion includes the Construction, Engineering and Soft Costs. The report was finalized and accepted by Suffolk County in the third quarter of 2014.

Village of Bellport

The Incorporated Village of Bellport (Village) determined that they would need a sanitary sewer system specifically tailored to improve public health and environmental quality in residential areas prone to tidal flooding and shallow groundwater, in addition to realizing their vision for a revitalized "Main Street" along South Country Road. The Village Board retained the services of H2M to prepare a Map and Plan for a sewer system. H2M's responsibilities included finalizing the service area boundary, calculating sanitary wastewater flow projections, planning for preliminary wastewater collection, conveyance and treatment infrastructure, and determining project cost opinions, associated scheduling components, cost escalation and financing alternatives. In addition to the Map and Plan, H2M also prepared an Environmental Assessment Form (EAF) to initiate the State Environmental Quality Review Act (SEQRA) compliance process.

The service area boundary encompasses approximately 235 parcels across 367 acres. The average daily sanitary flow projection

for this area was calculated to be 0.08 million gallons per day (MGD) based on maximum build-out of existing zoning and current Suffolk County Department of Health Services sanitary flow design criteria. The recommended preliminary collection and conveyance system was based on making an out-of-district connection to the Village of Patchogue Sewer District which currently has capacity available at the treatment plant. The proposed infrastructure required to connect the two municipalities included 1 pump station, 2.8 miles of force main, 3.0 miles of low pressure sewers and the replacement of 800 linear feet of existing gravity sewer within the Village of Patchogue. The Village must complete negotiations with the Village of Patchogue in parallel to moving forward with the final formation of the sewer system and subsequent detailed engineering design.

The total anticipated project cost opinion is approximately $17,300,000. This cost opinion included construction, engineering, administration and inspection services. The report was finalized in the second quarter of 2014.

Village of Mastic Beach

The Incorporated Village of Mastic Beach (Village) determined that they would need a sanitary sewer system to realize their vision for a revitalized "Main Street" along Neighborhood Road. In order to progress this project, the Village Board retained the services of H2M to prepare a for the formation of a sewer system. H2M's responsibilities included finalizing the service area boundary, calculating sanitary wastewater flow projections, planning for preliminary wastewater collection, conveyance and treatment infrastructure, and determining project cost opinions, associated scheduling components, cost escalation and financing alternatives. In addition to the , H2M also prepared an Environmental Assessment Form (EAF) to initiate the

compliance process. The purpose of this project was to provide the Village of Mastic Beach with a Map and Plan document and associated SEQRA documentation that could be used to move forward with the formation of a sewer district.

The service area boundary encompasses approximately 367 parcels across 125 acres. The average daily sanitary flow projection for this area was calculated to be 0.15 million gallons per day (MGD) based on maximum build-out of existing zoning and current Suffolk County Department of Health Services sanitary flow design criteria. The preliminary collection and conveyance system layout included 1 pump station, 0.5 miles of force main, 1.4 miles of gravity sewers and 2.4 miles of low pressure sewers. The treatment facility was based on using the Membrane Biological Reactor (MBR) process. The location of the treatment facility was identified to be on vacant lands at the southerly end of the former Shirley Links Golf Course property, which was transferred to the Town of Brookhaven (Town). The Village must complete negotiations with the Town to use this site for their treatment facility before they can move forward with the final formation of the sewer system.

The total anticipated project cost opinion is approximately $24,600,000. This cost

opinion included construction, engineering, administration and inspection services. The report was finalized in the second quarter of 2014.

Village of Southampton

The Incorporated Village of Southampton (Village) determined that they would need a sanitary sewer system to reduce the total nutrient load into Lake Agawam (Lake) thereby improving the quality of the Lake and to support "smart" growth of the Village Business (VB) District, which was re-zoned in 2012. The Village Board retained the services of H2M to prepare a Map and Plan for a sewer system. H2M's responsibilities included finalizing the service area boundary, calculating sanitary wastewater flow projections, planning for preliminary wastewater collection, conveyance and treatment infrastructure, and determining project cost opinions, associated scheduling components, cost escalation and financing alternatives. In additional to the Map and Plan, H2M was also retained to prepare an Environmental Assessment Form (EAF) to initiate the State Environmental Quality Review Act.

Central Wastewater Collection Design

Wyandanch Rising

The Wyandanch Rising is committed to the development of a viable downtown and business district in the hamlet of Wyandanch. A significant obstacle to redevelopment is the lack of a central sewer collection system for the disposal of wastewater. The Wyandanch Commercial and Industrial Corridor planning area is located in Groundwater Management Zones I and VII. Suffolk County Sanitary Code Article 6 limits the discharge of wastewater through conventional on-site sanitary systems in these zones to 600 gallons per day per acre. On-site sanitary systems contribute to the degradation of groundwater quality of Long Island's sole source groundwater supply. It is a direct benefit of the community residents, Town, and county that this study be conducted. The goal is to determine if a cost effective, environmentally accepted alternative exists to aid its revitalization and to improve environmental conditions.

H2M conducted a study for the Town to evaluate if a cost effective, environmentally accepted alternative exists to sewering the Wyandanch Commercial/Industrial corridor to aid its revitalization and improve environmental conditions. Regulatory and permit requirements associated with installation of a wastewater collection and conveyance systems were identified. Potential financing sources were also discussed. Based on SCDHS guidelines, H2M determined that the study area has an average daily design wastewater flow of 380,000 gpd. Three wastewater collection and conveyance systems alternatives to SCSD No. 3-Southwest were evaluated. The construction cost opinion including the current SCSD connection charge for the recommended alternative was $24.72 million. To eliminate the current practice of transporting leachate from the Town Solid Waste Management Facilities, sewer connection was also evaluated. The average daily design wastewater flow based on leachate generation data over a 14-year period was determined to be

36,000 gpd. The construction cost opinion for the leachate sewer connection including the current SCDPW connection charge was $3.48 million. The cost opinion for the leachate conveyance system considers that the gravity sewer associated with the Wyandanch corridor would be installed and that a portion of the corridor sewer system costs downstream of the leachate connection would be allocated on a design flow basis. Preparation of the DEIS was done concurrently with the Feasibility Study.

To assist in the evaluation, the Suffolk County GIS base map maintained by Suffolk County Real Property Tax Service was obtained. From the base map, different layers were overlaid to present different conditions. The planning area boundary was defined. A groundwater contour layer was used to aid in preparing the cost opinion for the conveyance system. The groundwater contours were used to identify locations where dewatering is considered to be needed. A layer with town, county, and state owned parcels was used to aid in identifying potential locations for the wastewater pump station. A separate layer was created to indicate the preliminary layout of the sewers, manholes and force mains for each of the wastewater conveyance system alternatives considered in this report. Other layers added to the report GIS included bus routes, bicycle routes, Water Authority wells, county and town parks, NYSDEC mapped wetlands, significant buildings and public facilities, preliminary sewer and force main layout, potential strategic sites within the boundaries of the Wyandanch Downtown Revitalization Plan.

Federal and state programs that may be available to fund or finance a portion of the work were described in the report. Implementation steps for a contract connection and those for a district extension were also presented in the report.

Smithtown and Kings Park Business Districts

H2M was commissioned by the (SCDPW) to prepare an Engineering Design Report and design for the sewerage systems of the . A feasibility study performed by a consultant to SCDPW was used to develop existing and future flow rates for each business district as well as guidance for layout of the proposed sewers, force mains and pump stations to convey the wastewater to Suffolk County Sewer District No. 6 (SCSD No. 6). Due to the distance between the areas, H2M has prepared two separate reports: one for the Smithtown Business District and one for Kings Park Business District.

Currently, all wastewater within both business districts is treated by onsite sanitary systems consisting of cesspools, septic tanks and leaching fields. The capacity of these onsite sanitary systems is limited by nitrogen loading and parcel acreage, thereby inhibiting the potential for future development of the area. Providing sewers to both Business Districts can benefit existing businesses and make future construction of apartments, medical offices/ practices and restaurants possible.

The Kings Park Business District consists of approximately 140 business establishments across a 65-acre area located along New York State Route 25A within the Town of Smithtown. The proposed sewer system will be serviced by

8,200 LF of gravity sewers and a conventional pump station with a 1.4 mile long force main. In order to service the entire business district the gravity sewer will require jacking underneath the LIRR. The projected average daily design wastewater flow from the Kings Park Business District is approximately 329,000 gallons per day. The proposed pump station and force main will convey wastewater collected within the service area to SCSD No. 6.

The Smithtown Business District consists of approximately 350 business establishments across a 280-acre area located along New York State Route 25 (NYS Rt. 25) within the Town of Smithtown. A portion of this service area is within the Village of the Branch. Based upon topography of the area, the proposed sewer system will be serviced by 22,500 LF of low pressure sewer and 1,600 LF of gravity sewer, and a conventional pump station with a 3.2 mile long force main. The projected average daily design wastewater flow from the Smithtown Business District is approximately 538,000 gallons per day. The proposed pump station will be located along the westerly boundary of the business district to minimize the overall length of force main required to convey wastewater from the service area to SCSD No. 6.

The total anticipated project cost opinions are $24.9 million for the town of Smithtown $17.4 million for the town of Kings Park. These costs include construction, engineering, administration and inspection services.

Upon approval of the engineering reports, H2M will proceed with the design phase for both sewerage systems and begin the subsequent planning and design for the filter and effluent pump station upgrades to the SCSD No. 6 Sewage Treatment Plant as commissioned by SCDPW.

Village of Patchogue - 1998

The initiated a project to extend the boundaries of the The Village retained H2M to provide engineering services associated with the planning, design and construction of the sewers to serve the area.

The extension included properties along both sides of West Avenue between Division Street and Laurel Street. H2M prepared the planning report that included the calculation for the average daily design flow and a basis of design for the system. The design flow for the extension was 62,000 gallons per day. The report and plans were submitted to and approved by the Suffolk County Department of Health Services.

Due to the relatively shallow depth to groundwater, a low-pressure sewer system was designed to serve the area. Wastewater from the low pressure sewer was conveyed to a new wastewater pump station and force main to convey the flow from the district extension to the existing wastewater collection system. The project also included the design of conventional gravity sewers in Railroad Street to parallel the force main installation.

The project consisted of the installation of 1,500 feet of force main, 1,280 feet of gravity sewer and 2,400 feet of low-pressure sewer. To minimize the profile of the station, submersible wastewater cutter pumps were utilized within the wet well.

The pump station wet well was configured to allow for future expansion.

H2M received approvals from the health department for the installation of the backflow prevention device at the pump station and from the Long Island Railroad for the installation of a jacked crossing for the low pressure sewer under the railroad tracks near the pump station. H2M also provided construction observation and construction administration services to the Village during the construction phase.

The total anticipated project cost opinion is approximately $635,000. This cost opinion includes $555,000 for construction and $80,000 for engineering services.

Village of Patchogue - 2007

H2M prepared Map & Plan – Engineering Report for an out-of-district sewer connection to the collection system.

The proposed Bay Village Condominiums development is a 63-unit condominium project located on South Ocean Avenue approximately 100-feet north of the Great South Bay in the Village of Patchogue. The report is based upon a design for low-pressure sewers, as a gravity system is not possible and a single sanitary pump station with force main is too costly. The design flow is 19,500 gallons per day (gpd) from the development and H2M projected an additional future flow of 21,900 gpd from properties along the route of the connection pipe; for which connection point facilities were provided by the developer during construction. The low-pressure connection main is a 3-inch diameter HDPE pipe increasing to a 4-inch diameter HDPE pipe, 3,350 feet long and at an estimated cost of $565,000. Total project budget for the developer is $1,232,500 which includes design and construction administration fees.

Village of Patchogue - 2009

The is an existing marina located at the mouth of the Patchogue River on the Great South Bay in the Village of Patchogue, New York. The Town planned to expand the ferry terminal facilities. To provide wastewater disposal, an out-of-district sewer connection from the new terminal building to the Village Sewer District was required. A new duplex pump station was required to convey the marina's wastewater through this connection.

The report and design documents are based upon a low-pressure sewer system. A gravity system is not feasible due to the shallow depth to groundwater and coastal location. A single sanitary pump station with force main was determined to be not cost effective. The marina design flow is 11,000 gallons per day (gpd) with an additional future flow of 20,000 gpd from the properties along the route of the low-pressure sewer. Laterals will be installed to the property line for each property during construction. The low-pressure main consists of 2,600 feet of 2-inch and 3-inch diameter HDPE pipe. H2M prepared a topographic survey of the sewer route. H2M also provided administration and observation services during construction.

- Prepared Map and Plan – Engineering Report for an out-of-district sewer connection

to the Village of Patchogue's Sewer District collection system.

- Prepared Design Documents – Developed plans and specifications for the out-of-district sewer connection and a commercial, duplex pump station.
- Construction Administration and Observation – Coordinated bidding process and performed construction administration and inspection services during the installation of the sewer connection.

Total project budget for the developer is $1,261,000 which includes design and construction administration fees.

Village of Patchogue - 2013

H2M prepared bid documents for the replacement of the existing East Main Street pump station in the Inc. Village of Patchogue for the Town of Brookhaven. The East Main Street sanitary pump station has reached its useful life and also needed to increase capacity due to additions to the service area. The East Main Street Wastewater Pump Station provides conveyance for sanitary wastewater collected by in-district gravity sewers and out-of-district low pressure sewers located east of South Ocean Avenue

The project included the demolition of the existing pump station, installation of a new pump station, gravity sewer improvements, and installation of a low pressure sewer force main extension (900 feet of 6-inch diameter HDPE pipe, 150 feet of 3-inch diameter HDPE pipe and 150 feet of 2-inch diameter HDPE pipe). The average daily design flow (ADF) from the Village of Patchogue is 81,853 gallons per day, and the future ADF expected from the Town of Brookhaven Sewer Improvement Area No. 1 is 179,492 gallons per day. Therefore, the total ADF for the pump station is 261,345 gallons per day

In order to relocate the pump station from the shoulder of the road and to provide additional capacity, H2M worked with the Village and the Town to obtain a 17 foot x 20 foot area in the northwest corner of the adjacent United Stated Post Office site. To minimize visual impacts, a below grade precast wet well with two submersible pumps was designed. The existing handicap ramp to the Post Office was rebuilt. The standby generator and electric service were located remotely on a portion of a Village parking lot. The bid documents included the identification of work zone safety measures that the contractor needed to follow to ensure construction activities were isolated from the public.

The pump station's control panel, motor control center (MCC), electrical service and standby emergency power generator are located in a municipal parking lot approximately 200 feet south of the easement area. A public walkway provides access between the parking lot and pump station easement.

Both the pump station and MCC, electrical service and emergency standby power generator areas are enclosed by fencing. The pump station area is surrounded by a 4 foot tall black coated decorative steel fence. The control panel, MCC, electrical service and emergency standby power generator area is surrounded by an 8 foot tall green powder coated chain link fence with matching green privacy slats. Swing gates are

provided at both locations to facilitate access to each area for operation and maintenance purposes.

The total anticipated project cost opinion is approximately $1,235,000. This cost opinion included construction, engineering, administration and inspection services.

Village of Patchogue - 2015

H2M prepared a map and plan and bid documents for installation of low pressure sewer main, installation of the low pressure grinder pump station and sewer connection and drainage improvements on River Avenue, Sunset Lane, Price Street and Mapes Avenue for the

This design for the locating and connection of the forty-six (46) Low Pressure Grinder pumps for this project included a house to house field reconnaissance program that was develop with Village personnel to be implemented as the template for the Coastal Resiliency Nitrogen Mitigation Plan for the Patchogue River that utilized Trimble hand held GPS location device along with Newforma Capture App to document as existing field conditions of each home.

The design also included the installation of 680 feet of twin 3-inch diameter pipes, 1535 feet single 3-inch diameter pipe, 570 feet of single 2-inch diameter pipe and 53 connection spurs for potential use by properties along the route of this sewer.

During construction, H2M has been retained to provide construction observation, construction administration, review shop drawings, and review contractor payment requests.

Funding for the project was received through a number of sources including two (2) $500,000 Grants provide by the Dormitory Authority of the State of New York, and $577,500 from Infrastructure Program Grant provided by Suffolk County; $300,000 Village of Patchogue Sewer Fund. The remaining $761,500 will be bonded by the Village.

Heckscher State Park Low Pressure Sewer System Connection to SCSD No. 3

The

(NYSPRHP) retained H2M to prepare an Engineering Report to evaluate a sewer connection to Suffolk County Sewer District (SCSD) No. 3 for the facilities at Heckscher State Park.

Heckscher State Park has long served the region as an important recreation asset. The 1,600 acres of the park offer beach access as well as picnic tables, playgrounds, and playing fields, trails for hiking and biking, fishing, cross-country skiing, various recreation programs, a boat launch, and food concessions during summer daytime hours. The south and east side of the Park front the Great South Bay.

When preparation of the report was authorized, NYSPRHP was in the process of renovating the Field No. 1 comfort station. Associated with the renovation was the proposed replacement of the on-site sanitary system. The high groundwater elevation required a large area for effluent disposal. NYSPRHP wanted an evaluation of the

installation of a sewer connection for wastewater disposal instead of constructing a new on-site sanitary system. In addition to this comfort station, NYSDPRHP wanted an evaluation of a sewer connection that would serve all eighteen (18) Park facilities serviced by an individual on-site sanitary system under the SPDES Permit.

The Park is currently within the boundaries of SCSD No. 3. The nearest existing sewers where a connection could be made are located outside the northwesterly corner of the Park. Utilizing Suffolk County Department of Health Services standards, the design wastewater flow was calculated to be 73,915 gallons per day.

Flat topography, shallow depth to groundwater, and distance between wastewater systems in the Park are conditions that are not favorable to a gravity sewer system. Consequently, a low pressure sewer system was recommended for the sewer connection of each building to SCSD No. 3. To minimize restoration, the force main piping would be installed using directional drilling. Excluding the Park Office, Police Station and Park Superintendent Residence and the other not for public use buildings, the other park facilities are open seasonally.

Sewering the Park facilities will involve installing approximately 22,700 linear feet of low pressure sewer main and 6,600 linear feet of low pressure sewer laterals. Based on the design flow and pipe layout, H2M prepared a preliminary plan. The sizes of the low pressure sewer mains range from 1.5-inch diameter to 4-inch diameter piping.

Items addressed in the report included:

- An average daily design wastewater flow for the facilities in the Park.
- A preliminary layout and basis for design for the low pressure sewer system that would serve all existing buildings in the Park currently served by an on-site sanitary system.
- Sewer Connection application requirements that NYSPRHP would need to follow in order to make the proposed sewer connection for the Park.
- A construction cost opinion for the proposed wastewater conveyance system, and
- A cost opinion for the abandonment of existing on-site sanitary systems.

Town of Huntington

Helen Keller Services is located on New York State Route 110 in the Town of Huntington. They requested to Huntington Sewer District (HSD) to abandon their on-site wastewater disposal system and connect to the HSD. Four other parcels located nearby are also in the HSD boundaries but were not connected. To provide connection to the HSD system, a new sewer main was required.

The report and design documents are based upon a low-pressure sewer system. A gravity system is not feasible due to the distance of the property to the existing sewer and the shallow depth of the existing sewer. The design flow for the five properties is 19,000 gallons per day (gpd). Laterals will be installed to the property line for each property during construction. The

low-pressure main consists of 640 feet of 2-inch diameter HDPE pipe, which was installed by directional drilling. H2M prepared a topographic survey of the sewer route. H2M also provided administration and observation services during construction. A strict deadline for construction completion was met to ensure eligibility for grant funds.

- Prepared Design Documents – Developed plans and specifications for the out-of-district sewer connection and a commercial duplex pump station.
- Construction Administration and Observation – Coordinated bidding process and performed construction administration and inspection services during the installation of the sewer connection.

The total anticipated project cost opinion is approximately $200,000. This cost opinion included construction, engineering, administration and inspection services.

Gabreski Airport Sewer System

H2M completed the design and construction phase engineering services of a 100,000-gallon per day (gpd) SBR plant with groundwater discharge for the Francis S. Gabreski Airport in Westhampton Beach. This facility serves the redevelopment of the airport and the New York Air National Guard base. The project was jointly undertaken by Suffolk County Department of Public Works (Division of Sanitation), and the New York Air National Guard. H2M was the planning, design, and construction engineering consultant selected by Suffolk County to implement this project and to design the new SBR sewage treatment plant, pump station and NYANG / airport sewage collection system. SCDPW staffed the project with county resident engineers that oversaw the entire construction. This $4 million project was completed under budget. H2M prepared the design documents for the sewage treatment plant, sanitary pump station, 6,900 foot force main and a 7,500 linear foot sanitary collection system according to a project schedule required by the federal government to remain eligible for fiscal year funding. The sewer design was complex due to the extensive degree of underground utilities that had to be avoided in order to service the NYANG buildings. H2M reviewed shop drawings, attended project meetings, prepared meeting minutes, provided a construction inspector for the sewer system installation and prepared an Operation and Maintenance Manual for the treatment facility.