COUNTY OF SUFFOLK

STEVEN BELLONE
COUNTY EXECUTIVE

DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING
DIVISION OF PLANNING AND ENVIRONMENT

COUNCIL ON ENVIRONMENTAL QUALITY

LAWRENCE SWANSON
Chairperson
CEQ

MEMORANDUM

TO: Interested Parties/Involved Agencies

FROM: John Corral, Senior Planner JC

DATE: October 12, 2017

RE: Proposed Suffolk County Sanitary Code Article 6 Phase 1 Amendments for Replacement/Retrofits of Existing Systems and "Grandfathering" of Commercial Sites

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Enclosed is an Environmental Assessment Form for the above referenced County project which has been submitted to the Council on Environmental Quality (CEQ) for review. Pursuant to Title 6 NYCRR Part 617 and Chapter 450 of the Suffolk County Code, the CEQ must recommend a SEQRA classification for the action and determine whether it may have a significant adverse impact on the environment which would require the preparation of a Draft Environmental Impact Statement (DEIS).

The Council would like to know your environmental concerns regarding this proposal and whether you think a DEIS or a determination of non-significance is warranted. This project will be discussed at the **October 18, 2017** CEQ meeting. If you are unable to attend the meeting to present your views, please forward any recommendations or criticisms to this office prior the date of the meeting. **If the Council has not heard from you by the meeting date, they will assume that you feel that the action will not have significant adverse environmental impacts and should proceed accordingly.**

JC/cd
Enc.

cc: John Sohngen, Assoc. Public Health Engineer
Suffolk County Department of Health Services
Andrew P. Freleng, Chief Planner
Department of Economic Development and Planning
Howard Zucker, M.D. J.D. Commissioner, NYSDH
Stephen S. Marshall, P.E., NYSDH
Carrie Meek-Gallagher, Director, NYSDEC
Koon S. Tang, Director, NYSDEC
Anthony Leung, P.E. M.B.A., NYSDEC

COUNTY OF SUFFOLK

STEVEN BELLONE
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

JAMES L. TOMARKEN, MD, MPH, MBA, MSW
Commissioner

October 11, 2017

Mr. John Corral
Suffolk County
Department of Economic Development and Planning
H. Lee Dennison Building
100 Veterans Memorial Highway, 11th Floor
Hauppauge, NY 11788

RE: Suffolk County Sanitary Code Article 6 Phase 1 Policy Amendments

Dear Mr. Corral,

Enclosed herewith, please find an electronic copy of Part 1 of the Long Environmental Assessment Form and all required attachments for the above referenced project. We would appreciate if you could place this on the October 18, 2017 meeting of the Council on Environmental Quality.

Thank you for your assistance. If you have any questions, comments, or require additional iformation please don't hesitate to contact me at (631) 852-5750 or by email at john.sohngen@suffolkcountyny.gov.

Sincerely,

John Sohngen, P.E.
Principal Public Health Engineer
Office of Ecology

Cc. C. Capobianco (SCDHS)
W. Dawydiak (SCDHS)

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 1 – Environment and Setting

Instructions: Part 1 is to be completed by the applicant or project sponsor. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information. If a question is not applicable to the proposed project indicate with "N/A".

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information

Name of Action/Project: Suffolk County Sanitary Code Article 6 Phase 1 Amendments for replacements/retrofits of existing systems and "Grandfathering" of Commercial Sites
Project Location (specify Town, Village, Hamlet and attach general location map*): Suffolk County (County Wide)
Street Address: N/A
Name of Property or Waterway: N/A

* Maps of Property and Project: Attach relevant available maps including a location map (note: use road map, Hagstrom Atlas, USGS topography map, tax map or equivalent) and preliminary site plans showing orientation, scale, buildings, roads, landmarks, drainage systems, area to be altered by project, etc.

Type of Project: New ☒ Expansion ☐

Capital Program: Item # N/A Date Adopted: N/A Amount: $N/A

Brief Description of Proposed Action (include purpose or need/attach relevant design reports, plans, etc.):

Please see the attached Project / Action Description

Note: The proposed action only involves the legislative adoption of a plan, local law, ordinance, administrative rule or regulation.

Project Status:

	Start	Completion
Proposal	N/A	N/A
Study	N/A	N/A
Preliminary Planning	N/A	N/A
Final Plans: Specs	N/A	N/A
Site Acquisition	N/A	N/A
Construction	N/A	N/A
Other	N/A	N/A

Departments Involved:

	Dept. Performing Design & Construction	Initiating Dept. (if different)
Name:	Suffolk County Dept. of Health Services	
Street/PO:	360 Yaphank Ave, Suite 2B	
City, State:	Yaphank, NY	
Zip:	11980	
Contact Person:	John Sohngen, P.E.	
Business Phone:	631-852-5750	
Email:	john.sohngen@suffolkcountyny.gov	

B. Government Approvals, Funding or Sponsorship
("Funding" includes grants, loans, tax relief and any other forms of financial assistance)

	Government Entity			If "Yes": Identify Agency and Approval(s) Required	Application Date (Actual or Projected)
i.	City Council, Town Board or Village Board of Trustees	Yes ☐	No ☒		
ii.	City, Town or Village Planning Board or Commission	Yes ☐	No ☒		
iii.	City, Town or Village Zoning Board of Appeals	Yes ☐	No ☒		
iv.	Other local agencies	Yes ☐	No ☒		
v.	County agencies	Yes ☒	No ☐	Suffolk County Board of Health	LOT 11/8/17

				and Suffolk County Legislature	Introduced 10/18/17
vi.	Regional agencies	Yes ☐	No ☒		
vii.	State agencies	Yes ☐	No ☒		
viii.	Federal agencies	Yes ☐	No ☒		

ix. Coastal Resources

Is the project site within a Coastal Area or the waterfront area of a Designated Inland Waterway? Yes ☐ No ☒

If YES,

Is the project site located in a community with an approved Local Waterfront Revitalization Program?	Yes ☐ No ☐
Is the project site within a Coastal Erosion Hazard Area?	Yes ☐ No ☐

C. Planning and Zoning

C.1. Planning and Zoning Actions

Will administrative or legislative adoption or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? Yes ☒ No ☐

C.2. Adopted Land Use Plans

a. Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? Yes ☐ No ☒

If Yes:

Does the comprehensive plan include specific recommendations for the site where the proposed action would be located?
Yes ☐ No ☐

b. Is the site of the proposed action within any local or regional special planning district (i.e. Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; et. al)? Yes ☐ No ☒

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? Yes ☐ No ☒

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance? Yes ☐ No ☒

If Yes, what is the zoning classification(s) including any applicable overlay district?

b. Is the use permitted or allowed by a special or conditional use permit? Yes ☐ No ☒

c. Is a zoning change requested as part of the proposed action? Yes ☐ No ☒

If Yes, what is the proposed new zoning for the site?

C.4. Existing Community Services
a. In what school district is the project site located? N/A
b. What police or other public protection forces serve the project site? N/A
c. Which fire protection and emergency medical services serve the project site? N/A
d. What parks serve the project site? N/A

D. Project Details

D.1. Proposed and Potential Development	
a. What is the general nature of the proposed action? (if mixed, include all components) Residential ☐; Industrial ☐; Commercial ☐; Recreational ☐; Other ☒: Rulemaking	
b. Total acreage of the site of the proposed action:	N/A acres
c. Total acreage to be physically disturbed:	N/A acres
d. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor:	N/A acres
e. Is the proposed action an expansion of an existing project or use? **If Yes,** what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet, etc.)?	Yes ☐ No ☒
f. Is the proposed action a subdivision, or does it include a subdivision? **If Yes:** *i.* Purpose or type of subdivision? (if mixed, specify types) Residential ☐; Industrial ☐; Commercial ☐; Recreational ☐; Other ☐ *ii.*	Yes ☐ No ☒

Is a cluster/conservation layout proposed?	Yes ☐ No ☐
Number of lots proposed:	
Minimum and maximum proposed lot sizes:	

g. Will proposed action be constructed in multiple phases? — Yes ☐ No ☒

If No, What is the anticipated period of construction?

N/A

If Yes:

Total number of phases anticipated:
Anticipated commencement date of phase I (including demolition):
Anticipated completion date of final phase:
Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

h. Does the project include new residential uses? — Yes ☐ No ☒

If Yes, show number of units proposed.

	Single Family	Two Family	Three Family	Multi-Family (4+)
Initial Phase				
At Completion				

i. Does the proposed action include new non-residential construction (including expansions)? — Yes ☐ No ☒

If Yes:

Total Number of Structures:
Dimensions of largest proposed structure:
Approximate extent of building space to be heated or cooled:

j. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? **If Yes:** Purpose of the impoundment: If a water impoundment, the principal source of the water: Ground Water ☐; Surface Water Streams ☐; Other ☐ (specify): If other than water, identify the type of impounded/contained liquids and their source: Approximate size of the proposed impoundment (include units): Volume: Surface area: Dimensions of the proposed dam or impounding structure: Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock wood, concrete):	Yes ☐ No ☒
D.2. Project Operations	
a. Does the proposed action include any excavation, mining or dredging, during construction, operations or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) **If Yes:** What is the purpose of the excavation or dredging? How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? Volume: Over what duration of time: Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them:	Yes ☐ No ☒

D.2.a (cont.) – only answer following if checked "Yes" above	
Will there be onsite dewatering or processing of excavated materials? **If Yes**, describe: What is the total area to be dredged or excavated? What is the maximum area to be worked at any one time? What would be the maximum depth of excavation or dredging? Will the excavation require blasting? Summarize site reclamation goals and plans:	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, water body, shoreline, beach or adjacent area?

Yes ☐ No ☒

If Yes:

Identify the wetland or water body which would be affected (by name, water index number, wetland map number or geographic description):
Describe how the proposed action would affect that water body or wetland, e.g. excavation, fill, placement of structures or creation of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
Will proposed action cause or result in disturbance to bottom sediments? **If Yes**, describe:
Will proposed action cause or result in the destruction or removal of aquatic vegetation?

If Yes:

Area of vegetation proposed to be removed:
Expected acreage of aquatic vegetation remaining after project completion:
Purpose of proposed removal (e.g., beach clearing, invasive control, boat access):
Proposed method of plant removal:
If chemical/herbicide treatment will be used, specify product(s):

Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use or create a new demand for water?

Yes ☐ No ☒

If Yes:

Total anticipated water usage/demand per day:
Will the proposed action obtain water from an existing public water supply?

If Yes:

Name of district/service area:
Does the existing public water supply have capacity to serve the proposal? Yes ☐ No ☐
Is the project site in the existing district? Yes ☐ No ☐
Is expansion of the district needed? Yes ☐ No ☐
Do existing lines serve the project site? Yes ☐ No ☐

Will line extension within an existing district be necessary to supply the project?

If Yes:

Describe extensions or capacity expansions proposed to serve this project:
Source(s) of supply for the district:

Is a new water supply district or service area proposed to be formed to serve the project site?

If Yes:

Applicant/sponsor for new district:
Date application submitted or anticipated:
Proposed source(s) of supply for new district:

If a public water supply will not be used, describe plans to provide water supply for the project:
If water supply will be from wells (public or private), what will be the maximum pumping capacity?

d. Will the proposed action generate liquid wastes?

Yes ☐ No ☒

If Yes:

Total anticipated liquid waste generation per day:

Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):

If sanitary wastewater identify proposed disinfection technology and treatment goals for the following:

Disinfection technology:
Nitrogen:
Phosphorus:
Total Suspended Soilds (TSS):
Biological Oxygen Demand (BOD):

Will the proposed action use any existing public wastewater treatment facilities?

If Yes:

Name of wastewater treatment plant to be used:

Name of district:

Does the existing wastewater treatment plant have capacity to serve the project?
Yes ☐ No ☐

Is the project site in the existing district?
Yes ☐ No ☐

Is expansion of the district needed?
Yes ☐ No ☐

Do existing sewer lines serve the project site?
Yes ☐ No ☐

Will line extension within an existing district be necessary to serve the project?

If Yes:

Describe extensions or capacity expansions proposed to serve this project:

Will a new wastewater (sewage) treatment district be formed to serve the project site?

If Yes:

Applicant/Sponsor for new district:

Date application submitted or anticipated:

What is the receiving water for the wastewater discharge?

If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

Describe any plans or designs to capture, recycle or reuse liquid waste:

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? **If Yes:** How much impervious surface will the project create in relation to total size of project parcel? Area of Impervious Surface: Area of Parcel: Describe types of new point sources: Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? If to surface waters, identify receiving water bodies or wetlands: Will stormwater runoff flow to adjacent properties? Yes ☐ No ☐ Does proposed plan minimize impervious surfaces use pervious materials or collect and re-use stormwater? Yes ☐ No ☐	Yes ☐ No ☒
f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? **If Yes,** identify: Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles): Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers): Stationary sources during operations (e.g., process emissions, large boilers, electric generation):	Yes ☐ No ☒
g. Will any air emission sources named in D.2.f (above) require a NY State Air Registration, Air Facility Permit or Federal Clean Air Act Title IV or Title V Permit? **If Yes:** Is the project site located in an Air Quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes ☐ No ☐ In addition to emissions as calculated in the application, the project will generate: - Tons/year (metric) of Carbon Dioxide (CO_2) - Tons/year (metric) of Nitrous Oxide (N_2O) - Tons/year (metric) of Perfluorocarbons (PFCs) - Tons/year (metric) of Sulfur Hexafluoride (SF_6) - Tons/year (metric) of Carbon Dioxide equivalent of Hydroflorocarbons (HFCS) - Tons/year (metric) of Hazardous Air Pollutants (HAPs)	Yes ☐ No ☒

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? **If Yes:** Estimate methane generation in tons/year (metric): N/A - there will be no new methane production since all sites impacted by the Article 6 amendments are existing with existing onsite sewage disposal systems. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): - onsite sewage disposal systems (including I/A OWTS) must be properly vented in accordance with codes/standards	Yes ☒ No ☐
i. Will the proposed action result in the release of air pollutants from open-air operations or processes such as quarry or landfill operations? **If Yes,** describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):	Yes ☐ No ☒
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? **If Yes:** When is the peak traffic expected? (check all that apply) Morning ☐; Evening ☐; Weekend ☐; Randomly ☐ between the hours of to For commercial activities only, projected number of semi-trailer truck trips/day: Parking spaces: Existing: Proposed: Net Increase/Decrease: Does the proposed action include any shared use parking? Yes ☐ No ☐ If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? Yes ☐ No ☐ Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes ☐ No ☐ Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes ☐ No ☐	Yes ☐ No ☒

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?

Yes ☒ No ☐

If Yes:

Estimate annual electricity demand during operation of the proposed action: The Article 6 amendment to require I/A OWTS for pre-existing grandfathered commercial sites will minimally increase electrical demand. The average annual electricity demand per gallon of wastewater treated per year from the use of I/A OWTS for grandfathered commercial sites is approximately 1.1kWh/gallon to 3.5kWh/gallon
Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility or other): grid/local utility
Will the proposed action require a new, or an upgrade to, an existing substation? Yes ☐ No ☒

l. Hours of operation (Answer all items which apply)

N/A ☒

During Construction	During Operations
Monday-Friday:	Monday-Friday:
Saturday:	Saturday:
Sunday:	Sunday:
Holidays:	Holidays:

m. Does the proposed action produce noise that will exceed existing ambient noise levels during construction, operation or both?

Yes ☒ No ☐

If Yes:

Provide details including sources, time of day and duration:
Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Yes ☐ No ☐ Describe: N/A

n. Will the proposed action have outdoor lighting?

Yes ☐ No ☒

If Yes:

Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:
Will proposed action remove existing natural barriers that could act as a light barrier or screen? Yes ☐ No ☐ Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day?

Yes ☒ No ☐

If Yes:

Describe possible sources, potential frequency and duration of odor emissions and proximity to nearest occupied structures: All sites impacted by the Article 6 amendments are existing with existing onsite sewage disposal systems that have the potential to produce odors. Proper maintenance of an onsite sewage disposal system (including I/A OWTS) will reduce or eliminate any potential odor emissions. I/A OWTS must be maintained in accordance with Article 19 of the Suffolk County Sanitary Code

p. Will the proposed action include any bulk storage of petroleum (over 1,100 gallons) or chemical products (over 550 gallons)?

Yes ☐ No ☒

If Yes:

Product(s) to be stored:
Volume(s): per unit time: (e.g., month, year)
Generally describe proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?

Yes ☐ No ☒

If Yes:

Describe proposed treatment(s):
Will the proposed action use Integrated Pest Management Practices? Yes ☐ No ☐

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?

Yes ☐ No ☒

If Yes:

Describe any solid waste(s) to be generated during construction or operation of the facility:
Construction: tons per (unit of time)
Operation: tons per (unit of time)
Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
Construction:
Operation:
Proposed disposal methods/facilities for solid waste generated on-site:
Construction:
Operation:

s. Does the proposed action include construction or modification of a solid waste management facility?

Yes ☐ No ☒

If Yes:

Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill or other disposal activities):
Anticipated rate of disposal/processing:
tons/month, if transfer or other non-combustion/thermal treatment, or
tons/hour, if combustion or thermal treatment
If landfill, anticipated site life: years

t. Will proposed action at the site involve the commercial generation, treatment, storage or disposal of hazardous waste? **If Yes:** Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: Generally describe processes or activities involving hazardous wastes or constituents: Specify amount to be handled or generated: tons/month Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? Yes ☐ No ☐ **If Yes:** Provide name and location of facility: **If No:** Describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:	Yes ☐ No ☒
u. Will proposed action adhere to Leadership in Energy and Environmental Design (LEED) or any other green building principals? **If Yes:** Describe proposed green building methods and attempted level of certification, if any:	Yes ☐ No ☒
v. Does the project sponsor propose the use of energy benchmarking to monitor and adjust project energy needs? **If Yes, explain:**	Yes ☐ No ☒
w. Will the proposed action use native plants for all landscaping needs? **Identify species to be used and method of irrigation:**	Yes ☐ No ☒
x. Does the proposed action promote local tourism? **If Yes, explain:**	Yes ☐ No ☒

E. Site and Setting of Proposed Action

E.1. Land Uses on and Surrounding the Project Site

a. Existing land uses (Check all uses the occur on, adjoining and near the project site): (include map)

Urban ☐ Industrial ☐ Commercial ☐ Residential ☐ Rural ☐
Forest ☐ Agriculture ☐ Aquatic ☐ Other ☒ Specify: N/A

If mix of uses, generally describe:

b. Land uses and cover types on the project site:

Land Use or Cover Type	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
Roads, buildings and other paved or impervious surfaces			
Forested			
Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
Agricultural (includes active orchards, fields, greenhouse, etc.)			
Surface water features (lakes, ponds, streams, rivers, etc.)			
Wetlands (freshwater or tidal)			
Non-Vegetated (bare rock, earth or fill)			
Other Describe:			
TOTAL:			

c. Is the project site presently used by members of the community for public recreation? Yes ☐ No ☒

If Yes, explain:

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers or group homes) within 1,500 feet of the project site? Yes ☐ No ☒

If Yes, identify facilities:

e. Does the project site contain an existing dam? Yes ☐ No ☒

If Yes:

Dimensions of the dam and impoundment:
- Dam height: feet
- Dam length: feet
- Surface area: acres
- Volume impounded: gallons or acre-feet

Dam's existing hazard classification:

Provide date and summarize results of last inspection:

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? **If Yes:** Has the facility been formally closed? Yes ☐ No ☐ If Yes, cite sources/documentation: Describe the location of the project site relative to the boundaries of the solid waste management facility: Describe any development constraints due to the prior solid waste activities:	Yes ☐ No ☒
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? **If Yes:** Describe waste(s) handled and waste management activities, including approximate time when activities occurred:	Yes ☐ No ☒
h. Has there been a reported contamination spill at the proposed project site or have any remedial actions been conducted at or adjacent to the proposed site? **If Yes:** Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? (Check all that apply) ☐ Yes – Spills Incidents database Provide DEC ID number(s): ☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): ☐ Neither database If site has been subject to RCRA corrective activities, describe control measures: Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes ☐ No ☐ **If Yes:** DEC ID number(s): Describe current status of site(s):	Yes ☐ No ☒
E.1.h. (cont.) – only answer following if checked "Yes" above	

Is the project site subject to an institutional control limiting property uses?

If Yes:

DEC site ID number(s):
Describe the type of institutional control (e.g., deed restriction or easement):
Describe any use limitations:
Describe any engineering controls:
Will the project affect the institutional or engineering controls in place? Yes ☐ No ☐ Explain:

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site:
N/A feet

b. Are there bedrock outcroppings on the project site? Yes ☐ No ☒

If Yes:

What proportion of the site is comprised of bedrock outcroppings?
%

c. Predominant soil type(s) present on project site: (include map)

1. N/A	% of site
2. N/A	% of site
3. N/A	% of site
4. N/A	% of site

d. What is the average depth to the water table on the project site?
N/A

e. Drainage status of project site soils:

1. ☐ Well Drained	N/A% of site
2. ☐ Moderately Well Drained	N/A% of site
3. ☐ Poorly Drained	N/A% of site

f. Approximate proportion of proposed action site with slopes: (include topographic map)

1. ☐ 0-10%	N/A% of site
2. ☐ 11-15%	N/A% of site
3. ☐ 16% or greater	N/A% of site

g. Are there any unique geologic features on the project site? Yes ☐ No ☒

If Yes, describe:

h. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?	Yes ☐ No ☒
i. Do any wetlands or other waterbodies adjoin the project site?	Yes ☐ No ☒

If Yes to either E.2.h or E.2.i, continue. If No, skip to E.2.m

j. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? (include map)	Yes ☐ No ☒

k. For each identified wetland and waterbody on the project site, provide the following information:

Streams:	Name:	Classification:
Lakes or Ponds:	Name:	Classification:
Wetlands:	Name:	Approx. Size:
Wetland No. (if regulated by DEC):		

l. Are any of the above waterbodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes ☐ No ☒

If Yes, name of impaired water body/bodies and basis for listing as impaired:

m. Is the project site in a designated floodway?	Yes ☐ No ☒
n. Is the project site in the 100 year floodplain?	Yes ☐ No ☒
o. Is the project site in the 500 year floodplain?	Yes ☐ No ☒

p. Is the project site located over or immediately adjoining a primary, principal or sole source aquifer? Yes ☐ No ☒

If Yes:

Name of aquifer:
Source of information:

q. Identify the predominant wildlife species that occupy or use the project site:

r. Does the project site contain a designated significant natural community? Yes ☐ No ☒

If Yes:

Describe the habitat/community (composition, function and basis for designation:
Source(s) of description or evaluation:
Extent of community/habitat: - Currently: acres - Following completion of project as proposed: acres - Gain or loss (indicate + or –): acres

s. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? Yes ☐ No ☒

If Yes:

Species and listing (endangered or threatened):
Nature of use of site by the species (e.g., resident, seasonal, transient):

t. Does project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? **If Yes:** Species and listing: Nature of use of site by the species (e.g., resident, seasonal, transient):	Yes ☐ No ☒
u. Is the project site or adjoining area currently used for hunting, trapping, fishing or shellfishing? If Yes, give a brief description of how the proposed action may affect that use:	Yes ☐ No ☒
E.3. Designated Public Resources On or Near Project Site	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? **If Yes**, provide county plus district name/number:	Yes ☐ No ☒
b. Are agricultural lands consisting of highly productive soils present? **If Yes:** Acreage(s) on project site: Source(s) of soil rating(s):	Yes ☐ No ☒
c. Does the project site contain all or part of, or is it substantially contiguous to a registered National Natural Landmark? **If Yes:** Nature of the natural landmark: ☐ Biological Community; ☐ Geological Feature Provide brief description of landmark, including values behind designation and approximate size/extent:	Yes ☐ No ☒
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area, including Special Groundwater Protection Areas? **If Yes:** CEA name: Basis for designation: Designating agency and date:	Yes ☐ No ☒
e. Does the project site contain, or is it substantially contiguous to, a building, archeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places? **If Yes:** Nature of historic/archaeological resource: ☐ Archaeological Site; ☐ Historic Building or district Name: Brief description of attributes on which listing is based:	Yes ☐ No ☒

f.	Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	Yes ☐ No ☒
g.	Have additional archaeological or historic site(s) or resources been identified on the project site? **If Yes:** Describe possible resource(s): Basis for identification:	Yes ☐ No ☒
h.	Would the project site be visible from any officially designated and publicly assessable federal, state or local scenic or aesthetic resource? **If Yes:** Identify resource: Nature of, or basis for designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Distance between project and resource:	Yes ☐ No ☒
i.	Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR Part 666? **If Yes:** Identify the name of the river and its designation: Is the activity consistent with development restrictions contained in 6 NYCRR Part 666? Yes ☐ No ☐	Yes ☐ No ☒

F. Additional Information

Attach any additional information which may be needed to clarify your project.
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name: John Sohngen, P.E. Date: 10/11/2017

Signature: _____ Title: Principal Public Health Engineer

Suffolk County

Attachment to Part 1 of the Full Environmental Assessment Form

Name of Action: *Suffolk County Sanitary Code Article 6 Phase 1 Amendments for replacements/retrofits of existing systems and "Grandfathering" of Commercial Sites*

Brief Description of Proposed Action:

Background:

The Suffolk County Sanitary Code Article 6 (Article 6) defines the means and methods for wastewater treatment requirements in Suffolk County with respect to new construction (including additions to existing buildings or changes of use of existing buildings). Suffolk County is proposing to amend the current version of Article 6 to include requirements to address replacements/retrofits of existing onsite sewage disposal systems and to revise the exemption section of Article 6 to addressing "other construction projects" (e.g. other than single-family residential divisions of land, multi-family housing, condominiums, commercial projects/centers, or industrial projects/centers) to improve wastewater treatment.

The exemption for pre-existing other construction projects permit a site to maintain a sanitary flow discharge that exceeds Article 6 density requirements, if the project meets certain criteria stated in the current exemption, when an application is submitted to the Suffolk County Department of Health Services (SCDHS) Office of Wastewater Management (WWM) for approval of sanitary and water supplies. Note, at the time of an application to WWM the existing sanitary system, under review, must meet current SCDHS standards or be upgraded to meet current standards. The current WWM standards require the installation of a septic tank and leaching structure(s) at a minimum, which have little to no nitrogen removal capabilities. Other construction projects meeting the current exemptions in Article 6 are commonly referred to as "grandfathered". The proposed amendment to Article 6 would not permit increased sanitary flow but would require certain grandfathered sites to install an improved wastewater treatment with nitrogen removing capabilities (known as an innovative and alternative onsite wastewater treatment system or I/A OWTS) at the time of application to WWM for approval of their sanitary and water supply for increased protection of water resources (applications are required when there is new construction which includes additions to existing buildings or changes of use of existing buildings).

These proposed Article 6 amendments are known as phase 1 policy changes. In addition to the phase 1 policy changes, language has been added to Article 6 to provide the Department with the ability to develop standards for the implementation of wastewater management practices and technologies that permit the re-use of wastewater in a manner that protects public health and preserves water resources. There have been other formatting revisions to the document. A copy of the Suffolk County Sanitary Code Article 6 with the changes is attached as "Exhibit A".

The process of developing a revised Article 6 required valuable input from our sub-committee, work group, and stakeholders meeting attendees. These included County Legislators, County staff, Staff from various towns/villages, non-governmental organizations, and the public.

Policy 1 is to modify the exemptions in Article 6 to address grandfathering of pre-existing other construction projects (i.e. I/A OWTS) and to prevent the use transfer of development rights being sent from grandfathered sites. In general, the exemption language in Article 6 is proposed to be revised to allow the exemption for pre-existing other construction projects, where an application is submitted to the WWM for approval of sanitary and water supplies, that have an active and continuous use for the same purpose; not vacant for more than two (2) years prior to the application; proposing less than an 10% increase in the footprint/gross floor area not to exceed 1,000 square feet, whichever is less; and not increasing the sanitary wastewater flow compared to previous WWM approvals. All other pre-existing other construction project sites that do not meet the existing density requirements of Article 6 or the exemption may be permitted with the installation of an II/A OWTS.

Policy 2 is to require permits for replacements and repairs of onsite sewage disposal systems. This policy would effectively eliminate the right to install a cesspool as a means of onsite sewage disposal upon failure and require, at a minimum, a conventional system consisting of a septic tank (non-leaching structure to retain solids) and leaching structure. This policy change will become effective in two (2) parts. The 1st part will require the reporting of pump-outs and replacement/retrofits to the Department beginning July 1, 2018. The 2nd part would begin January 1, 2019 and require Department permits for replacements and retrofits of existing onsite sewage disposal systems.

Relationship of Suffolk County Sanitary Code Article 6 Phase 1 Policy Changes to the Generic Environmental Impact Statement prepared as part of the Suffolk County Subwatersheds Wastewater Management Plan

As part of the Suffolk County Subwatersheds Wastewater Management Plan (SWP) a Generic Environmental Impact Statement (GEIS) is being prepared. A final scoping document was created in February 2017 outlining the issues to be addressed as part of the GEIS. The proposed GEIS action is as follows:

- A recommended wastewater management strategy to reduce nitrogen pollution emanating from non-point wastewater sources. The recommended wastewater management strategy will be developed using the methodology described in Attachment A;
- The establishment of a water quality protection district;
- The use of innovative/alternative onsite wastewater treatment systems (I/A OWTS) in lieu of conventional septic systems;
- The use of clustered/decentralized systems in select areas where individual onsite treatment systems are infeasible but where conventional sewage treatment plants (STPs) are not economically feasible;

- The use of conventional STPs where existing studies confirm they are economically feasible; and,

- The implementation of wastewater pilot areas to confirm the effectiveness of the proposed wastewater management nitrogen reduction approaches provided in the SC SWP.

<u>The GEIS will address Article 6 phase 2 policy changes. The proposed phase 1 policy changes are functionally independent of the phase 1 policy changes and are being considered at this time based on the following:</u>

Phase 1 Policy 1 change is to modify the exemptions in Article 6 to address grandfathering of pre-existing other construction projects (Other Than Single Family Residential) and to prevent the use transfer of development rights being sent from grandfathered sites. The SCDHS currently receives approximately 25 applications a year for the approval of onsite sewage disposal systems for grandfathering pre-existing other construction projects that exceed Article 6 density requirements but are permitted since they were constructed prior to the establishment of the Article 6 density requirements. These are applications for a change of use, addition, or reconstruction of an existing commercial site, which require SCDHS approval of their sewage disposal system.

The SWP GEIS is evaluating trigger points to require the upgrading of sanitary systems to nitrogen removing technologies (such as an I/A OWTS). One of the trigger points is grandfathered pre-existing other construction projects, even in the absence of reconstruction or expansion (e.g., on property transfer, or by a date certain). The current SWP GEIS states that the upgrading of existing sanitary systems to nitrogen removing technologies could be based on a phased approach where highest priority area would require upgrades first, and one of the trigger points for these upgrades may be grandfathered commercial sites.

Therefore, this policy change will move forward independently of the SWP GEIS as it is not priority area based and does not address wastewater treatment requirements for replacement buildings, or expansion of buildings with grandfathered flow. Since these are outside the explicit scope of the GEIS, this class of activity should be dealt with immediately and separately. This policy change requires pre-existing grandfathered other construction projects that do not meet the revised exemptions in Article 6 to install am I/A OWTS at the time an application is submitted to SCDHS for approval of their sewage disposal system. This requirement will improve the sewage disposal system treatment requirements for grandfathered other construction projects when approval is required from the SCDHS for a change of use, addition, or reconstruction of a site that pre-dates the density requirements of Article 6.

Phase 1 Policy 2 change is to require permits for replacements and repairs of onsite sewage disposal systems. This policy would effectively eliminate the right to install a cesspool as a means of onsite sewage disposal upon failure and require, at a minimum, a conventional system. The SCHDS currently estimates that there are approximately 5,000 to 9,000 retrofits/replacements occurring annually that do not require approval from the SCDHS and may be installing systems that do not meet current SCDHS construction standards. The current GEIS is addressing the upgrading of existing sewage disposal systems to nitrogen reducing technologies (such as an I/A OWTS) which one of the methods being considered to trigger an upgrade to a nitrogen removal system is a cesspool failure.

This policy change will require permits from the SCDHS for failed systems that require replacement or a retrofit of an existing onsite sewage disposal system (regardless if a cesspool, conventional system, or nitrogen removing system) and disallows the use of a cesspool as a replacement. This policy change

requires the replacement or retrofit to comply with current SCDHS construction standards which require a conventional system. This helps to ensure systems are at least installed with a septic tank and leaching pool, and meet current hydraulic capacity, installation, and setback requirements to the greatest extent possible. This policy change is proceeding separately from the SWP GEIS as the SWP GEIS does not specifically address this issue and is independent of the SWP GEIS since it will not require retrofits or replacements to be upgraded to a nitrogen reducing system, as being examined as part of the GEIS.

In addition, the proposed phase 1 policy 1 change is being considered now because requiring I/A OWTS for "Grandfathered" other construction projects may not occur as part of the SWP GEIS and the requirement for a "Grandfathered" other construction projects to install a I/A OWTS system is speculative under the SWP GEIS based on the following:

As stated previously, the SWP GEIS is evaluating trigger points to require the upgrading of sanitary systems to nitrogen removing technologies. One of the trigger points is grandfathered sites, even in the absence of reconstruction or expansion (e.g., on property transfer, or by a date certain). The current SWP GEIS states that the upgrading of existing sanitary systems to nitrogen removing technologies could be based on a phased approach where highest priority area would require upgrades first, and one of the trigger points for these upgrades may be grandfathered other construction projects. Based on the proposed phased approach for these upgrades some future phases may never occur, which would allow the continued use of onsite sewage disposal systems with little to no nitrogen removal capabilities for grandfathered other construction projects when approval is required from the SCDHS for a change of use, addition, or reconstruction if the site is not located in a priority area, which would have been required to upgrade to an I/A OWTS under the current policy change.

Finally, the trigger point to require grandfathered other construction projects to upgrade appears to be speculative at this time since it does not clearly define when their sanitary system must be upgrade to an I/A OWTS or if grandfathered other construction project will definitely be a trigger point to upgrade to an I/A OWTS. Whereas the phase 1 policy 1 change, being considered at this time, clearly defines when an I/A OWTS must be installed for a grandfathered other construction project and is therefore not speculative.

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 2 – Identification of Potential Project Impacts

Instructions: Part 2 is to be completed by the lead agency. It is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

Tips for completing Part 2:

- _____ Review all of the information provided in Part 1.
- _____ Review any application, maps, supporting materials and the Full EAF Workbook.
- _____ Answer each of the 18 questions in Part 2.
- _____ If you answer "**YES**" to a numbered question, please complete all the questions that follow in that section.
- _____ If you answer "**NO**" to a numbered question, move on to the next numbered section.
- _____ Check appropriate column to indicate the anticipated size of the impact.
- _____ Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "**Moderate to large impact may occur**."
- _____ The reviewer is not expected to be an expert in environmental analysis.
- _____ If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- _____ When answering a question consider all components of the proposed activity, that is, the "whole action."
- _____ Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- _____ Answer the question in a reasonable manner considering the scale and context of the project.

1. _____ **Impact on Land** The proposed action may involve construction on, or physical alteration of the land surface of the proposed site. (See Part 1.D.1) *If "YES", answer questions a-h. If "NO", move on to Section 2.*		YES ☒ NO ☐	
	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may involve construction on land where depth to water table is less than 3 feet.	E.2.d	☒	☐
b. _____ The proposed actin may involve construction on slopes of 15% or greater.	E.2.f	☒	☐
c. _____ The proposed actin may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E.2.a	☒	☐
d. _____ The proposed action may involve the excavation and removal of more than 1,000 tons of natural	D.2.a	☒	☐

material.			
e. _____ The proposed action may involve construction that continues for more than one year or in multiple phases.	D.1.g	☒	☐
f. _____ The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D.2.e D.2.q	☒	☐
g. _____ The proposed action is, or may be, located within a Coastal Erosion hazard area.	B.*ix*	☒	☐
h. _____ Other impacts:		☐	☐

2. _____ Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1.E.2.g)

YES ☐ NO ☒

If "YES", answer questions a-c. If "NO", move on to Section 3.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ Identify the specific land form(s):	E.2.g	☐	☐
b. _____ The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature:	E.3.c	☐	☐
c. _____ Other impacts:		☐	☐

3. _____ Impact on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes).
(See Part 1.D.2 & E.2.h)

YES ☒ NO ☐

If "YES", answer questions a-l. If "NO", move on to Section 4.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may create a new water body	D.1.j D.2.b	☒	☐
b. _____ The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D.2.b	☒	☐
c. _____ The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D.2.a	☒	☐
d. _____ The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E.2.h E.2.i	☒	☐
e. _____ The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by	D.2.a D.2.h	☒	☐

disturbing bottom sediments.			
f. _____ The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D.2.c	☒	☐
g. _____ The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D.2.d	☒	☐
h. _____ The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D.2.e	☒	☐
i._____ The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E.2.h – E.2.l	☒	☐
j._____ The proposed action may involve the application of pesticides or herbicides in or around any water body.	D.2.q E.2.h – E.2.l	☒	☐
k. _____ The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D.1.a D.2.d	☒	☐
l._____ Other impacts:		☐	☐

4. _____ **Impact on Groundwater**
The proposed action may result in new or additional use of groundwater, or may have the potential to introduce contaminants to groundwater or an aquifer. (See Part 1.D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "YES", answer questions a-h. If "NO", move on to Section 5.

YES ☒ NO ☐

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D.2.c	☒	☐
b. _____ Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source:	D.2.c	☒	☐
c. _____ The proposed action may allow or result in residential uses in areas without water and sewer services.	D.1.a D.2.c – D.2.d	☒	☐
d. _____ The proposed action may include or require wastewater discharged to groundwater.	D.2.d E.2.p	☒	☐
e. _____ The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D.2.c E.1.f – E.1.h	☒	☐
f. _____ The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D.2.p E.2.p	☒	☐
g. _____ The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	D.2.q E.2.h – E.2.l E.2.p D.2.c	☒	☐

h. _____ Other impacts:		☐	☐

5. _____ **Impact on Flooding** The proposed action may result in development on lands subject to flooding. (See Part 1.E.2) *If "YES", answer questions a-g. If "NO", move on to Section 6.*	YES ☒ NO ☐		
	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may result in development in a designated floodway.	E.2.m	☒	☐
b. _____ The proposed action may result in development within a 100 year floodplain.	E.2.n	☒	☐
c. _____ The proposed action may result in development within a 500 year floodplain.	E.2.o	☒	☐
d. _____ The proposed action may result in, or require, modification of existing drainage patterns.	D.2.b D.2.e	☒	☐
e. _____ The proposed action may change flood water flows that contribute to flooding.	D.2.b E.2.m – E.2.o	☒	☐
f._____ If there is a dam located on the site of the proposed action, the dam has failed to meet one or more safety criteria on its most recent inspection.	E.1.e	☒	☐
g. _____ Other impacts:		☐	☐

6. _____ **Impact on Air** The proposed action may include a state regulated air emission source. (See Part 1.D.2.f, D.2.h, D.2.g) *If "YES", answer questions a-f. If "NO", move on to Section 7.*	YES ☐ NO ☒		
	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. _____ More than 1000 tons/year of carbon dioxide (CO2)	D.2.g	☐	☐
ii. _____ More than 3.5 tons/year of nitrous oxide (N20)	D.2.g	☐	☐
iii. _____ More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D.2.g	☐	☐
iv. _____ More than .045 tons/year of sulfur hexafluoride (SF6)	D.2.g	☐	☐
v. _____ More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflurocarbons (HCFCs) emissions	D.2.g	☐	☐
vi. 43 tons/year or more of methane	D.2.h	☐	☐
b. _____ The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous	D.2.g	☐	☐

air pollutants.			
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU=s per hour.	D.2.f D.3.g	☐	☐
d. _____ The proposed action may reach 50% of any two or more of the thresholds in "a" through "c", above.	D.1.i D.2.k	☐	☐
e. _____ The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D.2.s	☐	☐
f. _____ Other impacts:	☒	☐	☐

7. _____ Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. YES ☒ NO ☐

(See Part 1.E.2.q – E.2.u)

If "YES", answer questions a-j. If "NO", move on to Section 8.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.s	☒	☐
b. _____ The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E.2.s	☒	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.t	☒	☐
d. _____ The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E.2.t	☒	☐
e. _____ The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E.3.c	☒	☐
f._____ The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source:	E.2.r	☒	☐
g. _____ The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E.2.q	☒	☐
h. _____ The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source:	E.1.b	☒	☐
i._____ Proposed action (commercial, industrial or recreational projects, only) involves use of	D.2.q	☒	☐

herbicides or pesticides.			
j._____ Other impacts:		☐	☐

8. _____ **Impact on Agricultural Resources** The proposed action may impact agricultural resources. (See Part 1.E.3.a & E.3.b) *If "YES", answer questions a-h. If "NO", move on to Section 9.*	YES ☐ NO ☒		
	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E.2.c E.3.b	☐	☐
b. _____ The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.).	E.1.a E.1.b	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E.3.b	☐	☐
d. _____ The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District or more than 10 acres if not within an Agricultural District.	E.1.b E.3.a	☐	☐
e. _____ The proposed action may disrupt or prevent installation of an agricultural land management system.	E.1.a E.1.b	☐	☐
f._____ The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C.2.c, C.3 D.2.c, D.2.d	☐	☐
g. _____ The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C.2.c	☐	☐
h. _____ Other impacts:		☐	☐

9. _____ **Impact on Aesthetic Resources** The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (See Part 1.E.1.a, E.1.b, E.3.h) *If "YES", answer questions a-g and complete Appendix B - Visual EAF Addendum. If "NO", move on to Section 10.*	YES ☐ NO ☒		
	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E.3.h	☐	☐
b. _____ The proposed action may	C.2.b	☐	☐

result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E.3.h		
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	 E.3.h E.3.h	 ☐ ☐	 ☐ ☐
d. _____ The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E.3.h E.2.u E.1.c	 ☐ ☐	 ☐ ☐
e. _____ The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E.3.h	☐	☐
f._____ There are similar projects visible within the following distance of the proposed project: 0 – ½ mile ½ – 3 mile 3 – 5 mile 5+ mile	D.1.a D.1.h D.1.i E.1.a	 ☐ ☐ ☐ ☐	 ☐ ☐ ☐ ☐
g. _____ Other impacts:		☐	☐

10. _____ Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to an historic or archaeological resource. (See Part 1.E.3.e, E.3.f, E.3.g) YES ☒ NO ☐

If "YES", answer questions a-e. If "NO", move on to Section 11.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E.3.e	☒	☐
b. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E.3.f	☒	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source:	E.3.g	☒	☐
d. _____ Other impacts:		☐	☐
e. _____ If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3: i. The proposed action may result in the destruction or alteration of all or part of the site or property.	 E.3.e – E.3g	 ☐	 ☐

ii. The proposed action may result in the alteration of the property's setting or integrity.	E.1.a, E.1.b E.3.e – E.3.g	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	C2, C3 E.3.g, E.3.h	☐	☐

11. _____ Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1.C.2.c, E.1.c, E.2.u)

YES ☐ NO ☒

If "YES", answer questions a-e. If "NO", move on to Section 12.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, and wildlife habitat.	D.2.e, E.1.b E.2.h – E.2.l E.2.q – E.2.t	☐	☐
b. _____ The proposed action may result in the loss of a current or future recreational resource.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C.2.c, E.1.c	☐	☐
e. _____ Other impacts:		☐	☐

12. _____ Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1.E.3.d)

YES ☒ NO ☐

If "YES", answer questions a-c. If "NO", move on to Section 13.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☒	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☒	☐
c. _____ Other impacts:		☐	☐

13. _____ Impact on Transportation

The proposed action may result in a change to existing transportation systems. (See Part 1.D.2.j)

YES ☐ NO ☒

If "YES", answer questions a-f. If "NO", move on to Section 14.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Projected traffic increase	D.2.j	☐	☐

may exceed capacity of existing road network.			
b. _____ The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D.2.j	☐	☐
c. _____ The proposed action will degrade existing transit access.	D.2.j	☐	☐
d. _____ The proposed action will degrade existing pedestrian or bicycle accommodations.	D.2.j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D.2.j	☐	☐
f._____ Other impacts:		☐	☐

14. _____ **Impact on Energy**
The proposed action may cause an increase in the use of any form of energy (See Part 1.D.2.k) YES ☒ NO ☐
If "YES", answer questions a-e. If "NO", move on to Section 15.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action will require a new, or an upgrade to an existing, substation.	D.2.k	☒	☐
b. _____ The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D.1.h D.1.i D.2.k	☒	☐
c. _____ The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D.2.k	☒	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D.1.i	☒	☐
e. _____ Other impacts:		☐	☐

15. _____ **Impact on Noise, Odor and Light**
The proposed action may result in an increase in noise, odors or outdoor lighting (See Part 1.D.2.m, D.2.n, D.2.o) YES ☐ NO ☒
If "YES", answer questions a-f. If "NO", move on to Section 16.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may produce sound above noise levels established by local regulation.	D.2.m	☐	☐
b. _____ The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D.2.m E.1.d	☐	☐
c. _____ The proposed action may result in routine odors for more than one hour per day.	D.2.o	☐	☐
d. _____ The proposed action may result in light shining onto adjoining properties.	D.2.n	☐	☐
e. The proposed action may result in lighting that creates sky-glow brighter than existing-area conditions.	D.2.n E.1.a	☐	☐

f._____ Other impacts:		☐	☐

16. _____ **Impact on Human Health**
The proposed action may have an impact on human health from exposure to new or existing sources of contaminants (See Part 1.D.2.q, E.1.d, E.1.f, E.1.g, E.1.h)
If "YES", answer questions a-m. If "NO", move on to Section 17.

YES ☐ NO ☒

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E.1.d	☐	☐
b. _____ The site of the proposed action is currently undergoing remediation.	E.1.g, E.1.h	☐	☐
c. _____ There is a completed emergency spill remediation or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E.1.g E.1.h	☐	☐
d. _____ The site of the action is subject to an institutional control limiting the use of the property (e.g. easement, deed restriction)	E.1.g E.1.h	☐	☐
e. _____ The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E.1.g E.1.h	☐	☐
f._____ The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D.2.t	☐	☐
g. _____ The proposed action involves construction or modification of a solid waste management facility.	D.2.q E.1.f	☐	☐
h. _____ The proposed action may result in the unearthing of solid or hazardous waste.	D.2.q E.1.f	☐	☐
i._____ The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D.2.r D.2.s	☐	☐
j._____ The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E.1.f – E.1.h	☐	☐
k. _____ The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E.1.f E.1.g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D.2.r, D.2.s E.1.f	☐	☐
m._____ Other impacts:		☐	☐

17. _____ **Consistency with Community Plans**
The proposed action is not consistent with adopted land use plans. (See Part 1.C.1, C.2, C.3)
If "YES", answer questions a-h. If "NO", move on to Section 18.

YES ☐ NO ☒

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C.2, C.3, D.1.a, E.1.a, E.1.b	☐	☐
b. _____ The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C.2	☐	☐
c. _____ The proposed action is inconsistent with local land use plans or zoning regulations.	C.2, C.3	☐	☐
d. _____ The proposed action is inconsistent with any County plans, or other regional land use plans.	C.2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C.3 D.1.e, D.1.f, D.1.h, E.1.b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C.4, D.2.c, D.2.d, D.2.j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C.2.a	☐	☐
h. _____ Other impacts:	☒	☐	☐

18. _____ Consistency with Community Character

The proposed action is inconsistent with the existing community character (See Part 1.C.2, C.3, D.2, E.3) YES ☐ NO ☒

If "YES", answer questions a-g. If "NO", move on to Part 3.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E.3.e, E.3.f, E.3.g	☐	☐
b. _____ The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C.4	☐	☐
c. _____ The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C.2, C.3,D.1.h, D.1.i, E.1.a	☐	☐
d. _____ The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C.2, E.3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C.2, C.3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C.2, C.3, E.1.a, E.1.b, E.2.g – E.2.l	☐	☐
g. _____ Other impacts:	☒	☐	☐

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 3 – Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

* _____ Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
* _____ Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
* _____ The assessment should take into consideration any design element or project changes.
* _____ Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
* _____ Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
* _____ For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
* _____ Attach additional sheets, as needed.

See attached EAF Part 3 Narrative

Determination of Significance
Type 1 and Unlisted Actions

SEQR Status: Type I ☒ Unlisted ☐

Identify portions of EAF completed for this project: Part 1 ☒ Part 2 ☒ Part 3 ☒

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of as lead agency that:

☒ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action: Suffolk County Sanitary Code Article 6 Phase 1 Amendments for replacements/retrofits of existing systems and "Grandfathering" of Commercial Sites

Name of Lead Agency: Suffolk County

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer in Lead Agency:

Signature of Responsible Officer in Lead Agency: Date:

Signature of Preparer (if different from Responsible Officer) Date:

For Further Information:
Contact Person: John Sohngen, P.E.
Address: Suffolk County Department of Health Services Division of Environmental Quality Office of Ecology
Telephone Number: 631-852-5750
Email: john.sohngen@suffolkcountyny.gov

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:
Chief Executive Officer of the political subdivision in which the action will be principally located (Town/City/Village)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

"EXHIBIT A"

ARTICLE 6
SINGLE-FAMILY RESIDENCES, REALTY SUBDIVISIONS, DEVELOPMENTS AND OTHER CONSTRUCTION PROJECTS

§760--601 Declaration of Policy

Water is the single most significant resource which Suffolk County and its residents bear the responsibility to protect and preserve. The County has long recognized the importance of managing and protecting its water resources, has, over time, developed and implemented groundwater and surface water management regulations and has instituted changes to these regulations as evolving circumstances dictate. Water resource management and protection are of utmost importance in the County, since residents rely upon Long Island's Federally-designated sole source aquifer to supply their drinking water needs. The surface water quality of Suffolk County's freshwater streams and marine waters are directly impacted by policies to protect groundwater and drinking water supplies, since groundwater provides stream base-flow and discharges to surrounding coastal waters. Therefore, Suffolk County intends to facilitate the best available wastewater management policies and technologies, to minimize and prevent the impacts of water pollution from nitrogen and other constituents (such as pharmaceuticals, personal care products, and volatile organic compounds) in sanitary wastewater to protect public health and water resources. Suffolk County's intent is also to investigate the use of wastewater management practices and technologies which permit the re-use of wastewater, such as for agricultural irrigation and fertilization, in a manner that protects public health and preserves water resources.

§760-602 Statement of Intent and Purpose

It is the intent and purpose of this Article to promote public health and safeguard the water resources of Suffolk County. The County's drinking water must meet strict quality standards to protect public health. Elevated levels of contaminants in the County's groundwater raise serious concern. Many of the County's rivers, estuaries and bays are impaired as the result of eutrophication. Nitrogen, which primarily emanates from Subsurface Sewage Disposal Systems, Cesspools, and fertilizer impacts drinking water supplies and causes hypoxia, harmful algal blooms, diminution of sea and shellfisheries, and degradation of the County's protective natural infrastructure. Sea level rise is projected to raise groundwater levels, thus further compromising on-site wastewater treatment infrastructure.

Properly designed, sited, installed, managed, and maintained wastewater treatment infrastructure provides a cost-effective and environmentally sound means of protecting Suffolk County's water resources and improving public health protection. To promulgate the use of Community Sewerage Systems and improve the effectiveness of Subsurface Sewage Disposal Systems, the intent and purpose of this Article is to:

a) Continue the lot size and Population Density Equivalent requirements of this Article.
b) Establish requirements for the retrofit and replacement of Cesspools and Subsurface Sewage Disposal Systems.
c) Establish requirements for the use of I/A OWTS for pre-existing Other Construction Projects which exceed the Population Density Equivalent requirements of this Article.
d) Permit the use of Transfer of Development Rights in accordance with this Article to allow growth while protecting the water resources of the County.

§760-603 Definitions

As used in this ~~Code~~Article, unless the context otherwise requires:

1. ~~A.~~ **Absorption Area** means the area of a Leaching Structure that allows the effluent wastewater to infiltrate the surrounding soil.

2. **Cesspool** means any buried chamber, including, but not limited to any perforated metal tank, perforated concrete or block vault or hollow excavation, which receives direct discharges of wastewater from a building sewer for the purpose of collecting solids and discharging liquid to the surrounding soil.

~~1.~~3. **Clustered Realty Subdivision** means a realty subdivision consisting of one or more relatively undersized parcels, which is designed in such a manner so as to allow a substantial unimproved portion of the Tract to stand open and uninhabited.

~~2.~~4. ~~B.~~ **Commercial or Industrial Center** means a Realty Subdivision, Development, or ~~development~~Clustered Realty Subdivision to be used for non-~~residential~~-Single-Family Residence purposes.

~~3.~~5. ~~C.~~ **Community Sewerage System** means a system utilized for the collection and disposal of Sewage or other waste of a liquid nature, including the various devices for the treatment of such wastes, serving more than one parcel, whether owned by a municipal corporation, private utility, or otherwise.

~~4.~~6. ~~D.~~ **Community Water System** means a source of water and necessary appurtenances together with a distribution system serving more than one parcel, whether owned by a municipal corporation, private utility, or otherwise.

7. ~~E.~~ **Construction Project** means a Single-Family Residence or Conventional Single-Family Residential Subdivision or Development to be used for Single-Family Residence purposes.

8. **Conventional Septic System or Conventional Onsite Wastewater Treatment System (OWTS)** means an onsite sanitary system consisting of a septic tank and any associated interconnecting piping, a leaching structure(s) and any associated interconnecting piping that does not have any active or mechanical means of treatment or any supplemental filtration components.

9. Conventional Single-Family Residential Subdivision or Development means a Realty Subdivision, Development or Clustered Realty Subdivision to be used for Single-Family Residence purposes.

10. Density Load means the quantity of Sewage expected to be discharged from existing and/or proposed permanent structure(s) on a parcel, excluding Kitchen/Gray Load, expressed in gallons per day per applicable unit and utilized to evaluate the need for Sewage treatment when compared to the Population Density Equivalent for the project.

11. Density Loading Rate means the flow factor established by Department standards to determine the Density Load of an Other Construction Project parcel based on the use(s) of the parcel.

~~5.~~12. Department means the Suffolk County Department of Health Services.

13. ~~F.~~ Design Sewage Flow means the sum of the Hydraulic Load(s) from all uses of a building(s) on an Other Construction Project parcel and utilized to determine the size of the Sewage disposal system(s).

~~6.~~14. Developer means any person or group of persons, or any legally cognizable entity or entities or any combination of the foregoing, ~~who~~that:

1. ~~1.~~ is undertaking or participating in the establishment of a ~~realty subdivision~~Construction Project or Other Construction Project:

   a. either individually, or
   b. pursuant to a common scheme, plan or venture, or

2. owns, acquires, possesses, controls or creates a Construction Project or Other Construction Project.

~~7.~~15. ~~G.~~ Development means two, three or four contiguous parcels located wholly or partially within the County of Suffolk, or any Tract of land located wholly or partially within the County of Suffolk which has, is or will be divided into two, three, or four identifiable parcels.

~~8.~~16. Development Rights ~~shall be~~is defined in the same way as under section 261-a (1) of the Town Law (McKinney's, 1995).

17. ~~I.~~ Failed System means any Cesspool or Individual Sewerage System that does not adequately treat and/or disperse wastewater so as to create a public or private nuisance or threat to public health or environmental quality, as evidenced by and including, but not limited to, one or more of the following conditions:

   1. Continued failure to accept wastewater into the building sewer;

2. Continued discharge of wastewater to a basement, subsurface drain, stormwater collection, conveyance or treatment device, or watercourse unless expressly permitted by the Department;
3. Wastewater rising to the surface of the ground over or near any part of an OWTS or seeping from the Absorption Area at any change in grade, bank or road cut;
4. Where pumping of the Cesspool, septic tank, I/A OWTS, or Leaching Structure is required more than two times per year due to the infiltration of groundwater into the system, a collapsed Leaching Structure, or clogged Absorption Area which does not allow effluent to infiltrate the surrounding soils. This condition excludes grease trap maintenance or commercially reasonable, regular/scheduled preventative maintenance of a Cesspool, septic tank, I/A OWTS, or Leaching Structure. The Department may promulgate standards pursuant to this Article defining commercially reasonable, regular/scheduled preventative maintenance;
5. Where groundwater seeps into a septic tank, Cesspool, pump tank/basin, distribution box/manhole, or Leaching Structure after it is pumped;
6. Any structural damage or deterioration that has caused structural damage to the Individual Sewerage System, as determined by a NYS Licensed Design Professional or a contractor/Developer holding an active Liquid Waste License pursuant to Chapter 563 Article VII (Septic Industry Businesses) through the Suffolk County Department of Labor, Licensing and Consumer Affairs. A determination of structural damage or deterioration that causes structural damage by a NYS Licensed Design Professional (registered architect or licensed professional engineer) shall supersede a Liquid Waste License holder's determination.

~~9.~~18. Groundwater Management Zone means any of the areas delineated in Suffolk County by the "Long Island Comprehensive Waste Treatment Management Plan (L.I. 208 Study)," as revised by the "Long Island Groundwater Management Plan," and subsequent revisions adopted by the Board identifying differences in regional hydrogeologic and groundwater quality conditions. ~~–~~The boundaries of the Groundwater Management Zones are set forth on a map adopted by the Board, filed in the Office of the Commissioner ~~in Hauppauge, New York~~.

19. ~~J.~~ Hydraulic Load means the sum of the Density Load and Kitchen/Gray Load for a particular use of a building on a parcel expressed in terms of gallons per day per applicable unit.

~~10.~~20. Individual Sewerage System means ~~a single~~any onsite sanitary system ~~of~~ consisting of a septic tank and/or I/A OWTS tank(s) with any associated interconnecting piping, ~~tanks, or other facilities serving only a single parcel and disposing of sewage or other liquid waste into the soil of such parcel~~a leaching structure(s) and any associated interconnecting piping. OWTS and I/A OWTS are classified as Individual Sewerage Systems.

~~11.~~21. ~~K.~~ Individual Water Supply System means a single system of piping, tanks, or other facilities together with a source of water intended to supply only a single parcel.

22. ~~L.~~ Innovative and Alternative Onsite Wastewater Treatment System(s) (I/A OWTS) means an onsite decentralized wastewater treatment system(s) that, at a minimum, is designed

to reduce total nitrogen in treated effluent to 19 mg/l. An I/A OWTS can serve more than one parcel, but shall not be considered sewering, Community Sewerage Systems, or Modified Subsurface Sewage Disposal (denitrification) by the Department under this Article of the Code.

23. Kitchen/Gray Load means the volume of Sewage discharged from food preparation and service areas, or other gray water uses from Other Construction Projects (excluding uses from residential parcels such as, but not limited to, condominiums, Two Family Residences, Multi-Family Housing) expressed in terms of gallons per day per applicable unit, which has been omitted from the Density Load.

24. Leaching Structure means a perforated structure placed below grade, conforming to Department standards, from which septic tank and/or IA OWTS effluent will infiltrate the surrounding soil.

25. Major Reconstruction means to re-build or modify an existing Other Construction Project permanent structure(s) located on a parcel of land where the cost of the reconstruction is more than 50 percent of the market value of the existing permanent structure(s) as determined by a New York State certified real estate appraiser. Market value pertains only to the existing permanent structure itself, and does not pertain to the land, landscaping, or detached accessory structures on the parcel of land. Items to be excluded when calculating reconstruction costs or market value include, but are not limited to, plans, specifications, survey costs, permit fees, and outside costs such as landscaping, sidewalks, parking lots, swimming pools, fences, detached structures, irrigation systems, exterior drainage structures, and exterior utilities. Market value and reconstruction cost (cost of work) shall be calculated in accordance with sections 4.4 and 4.5 of the United States Federal Emergency Management Agency publication "Substantial Improvement/Substantial Damage Desk Reference," FEMA P-758/May 2010.

26. Modified Subsurface Sewage Disposal System means an onsite Sewage Treatment System or Treatment Works which includes processes capable of meeting applicable discharge standards and where the designed Sewage treatment capacity of the system shall not exceed 15,000 gallons per day.

~~12.~~27. Multi-Family Housing means dwelling units designed for occupancy by more than two ~~separate~~ single-family units.

~~13.~~28. ~~M.~~ Non-Residential Parcel means any parcel that is not a residential parcel.

~~14.~~29. ~~N.~~ Other Construction Project means a project other than a ~~conventional single-family residential subdivision~~Single-Family Residence, or ~~development;~~Conventional Single-Family Residential Subdivision or Development, including, but not limited to ~~cluster subdivisions,~~ condominiums, Two-Family Residences, Multi-Family Housing, and ~~projects~~Commercial or Industrial Centers, whether or not there is a ~~split~~division of land involved.

30. ~~O.~~ OWTS Replacement means the abandonment and/or removal of an existing Individual Sewerage System or Cesspool and installation of a new Individual Sewerage System. Applications for OWTS Replacement shall not propose any change of use, new Construction Project, Other Construction Project, or change the amount of Sewage discharged from a permanent structure.

31. OWTS Retrofit means the modification or alteration of an existing Cesspool or Individual Sewerage System. Such modification or alteration shall include, but not be limited to: the replacement or addition of a septic tank, grease trap, components of an I/A OWTS, lift station, pump station, distribution box or manhole to an existing Sewage disposal system; replacement or addition of new leaching structures to an existing Sewage disposal system; or replacement, addition, or re-configuration of Sewage disposal system piping, control panel, pumps or other appurtenances. Applications for OWTS Retrofit shall not propose any change of use, new Construction Project or Other Construction Project, or change the amount of Sewage discharged from a permanent structure.

~~15.~~32. Population Density Equivalent means ~~an expression of the quantity of domestic sewage in terms of~~ the maximum Density Load permitted to be discharged from a parcel utilizing an Individual Sewerage System in the absence of a Community Sewerage System, a Sewage Treatment System or a Modified Subsurface Sewage Disposal System, based on the calculated population per unit area ~~which would normally contribute the same amount of sewage.~~expressed in gallons per day.

33. ~~P.~~ Property Owner means the holder of the legal and/or equitable title to real property.

~~16.~~34. Realty Subdivision means a realty subdivision as defined in section 1115 of the Public Health Law of the State of New York and section 17-1501 of the Environmental Conservation Law of the State of New York as such statutes may be amended from time to time.

~~17.~~35. ~~Q.~~ Residential Parcel means any parcel of land of five (5) acres or less located wholly or partially in the County of Suffolk, any point on the boundary line of which is less than one-half mile from any point on the boundary line of another such lot in the same Tract, unless any such lot may not legally be used for residential purposes. Without limiting the generality of the foregoing, the term residential shall include temporary, seasonal and permanent residential use.

36. Sewage means water-carried human or animal wastes from residences, institutions, businesses, commercial buildings and establishments, and industrial buildings and establishments or a combination thereof, together with Kitchen/Gray Load. Industrial wastes or other wastes shall not be considered Sewage for purposes of this Article unless otherwise stated. "Industrial wastes" and "other wastes" have the meanings as defined in Environmental Conservation Law sections 17-0105(5) and (6).

~~18.~~37. Sewage Collection ~~and Treatment Systems~~System means the structures, devices and processes installed for the purposes of collecting~~, treating and disposing sewage~~ Sewage and sludge.

~~S. Subsurface Sewage Disposal System means the septic tank and leaching pools and interconnecting piping.~~

38. ~~T.~~ Sewage Treatment System means a Sewage disposal system consisting of a Sewage Collection System and Treatment Works.

39. Single-Family Residence means a single dwelling unit, i.e. one or more rooms with provision for living, cooking, sanitary and sleeping facilities arranged for the use of one family.

40. Subsurface Sewage Disposal System means a Sewage disposal system designed to treat and dispose of septic tank, I/A OWTS or other treatment facility effluent, in the absence of a Community Sewerage System, Sewage Treatment System or Modified Subsurface Sewage Disposal System, by application of the effluent to a soil surface at a depth below the surface of the ground.

~~19.~~41. Tract means any real property, including contiguous parcels of land, which is held, owned, controlled or possessed, either singularly, jointly, commonly or otherwise, by a person or group of persons, or any legally cognizable entity or entities, or any combination of the foregoing, who are acting with reference to such body of land in concert or as part of a common scheme, plan or venture.

~~20.~~42. ~~U.~~ Transfer of Development Rights means the process by which Development Rights are transferred from one lot, parcel or area of land to another designated lot, parcel or area where increased density development is permitted by the ~~Suffolk County Sanitary~~ Code.

43. ~~V.~~ Treatment Works means a facility designed for the purposes of removing certain components from Sewage by mechanical, chemical or biological means, and stabilizing and disposing of Sewage.

~~21.~~44. Two-Family Residence means a dwelling unit designed for occupancy by two separate single-family units.

§760-~~602~~604 Department Approval of ~~Realty Subdivision, Development, or Plans for~~ Construction Projects or Other Construction Projects

A. No Developer or Property Owner shall, after the effective date of this Article:

1. engage in the creation of a Realty Subdivision, or sell, rent, offer for sale or lease any parcel in a Realty Subdivision unless prior Department approval has been obtained ~~of~~for the existing or proposed water supply and Sewage disposal facilities in the ~~subdivision~~Realty Subdivision;

2. engage in the creation of a Development, or lease, rent, give, devise, or otherwise dispose of any parcel in a Development, or erect or cause to be erected any permanent building on any parcel in the Development unless prior Department approval has been obtained for the existing or proposed water supply and Sewage disposal facilities in the Development;

3. engage in the creation of a ~~construction project~~Single-Family Residence or Other Construction Project, or erect or cause to be erected any permanent building unless prior Department approval has been obtained for the existing or proposed water supply and Sewage disposal facilities for the Single-Family Residence or Other Construction Project.

B. A Tract of land which is divided shall constitute either a Development or Realty Subdivision notwithstanding:

1. the method or purpose of such division, or the allowable types of use applicable to such Tract, whether commercial, residential, industrial, or other authorized use under local ordinances;

2. the method used to describe such Tract whether by metes and bounds, or by reference to a map of the property, or otherwise.

§760-605 Licensing Requirements and Department Approval of Retrofits and Replacements

A. After July 1, 2018, contractors or Developers:

1. holding an active Liquid Waste License pursuant to Chapter 563 Article VII (Septic Industry Businesses) through the Suffolk County Department of Labor, Licensing and Consumer Affairs must report all pumping of septic tanks, I/A OWTS, Cesspools, grease traps, and Leaching Structures to the Department in accordance with standards established by the Department.

2. holding an active Liquid Waste License pursuant to Chapter 563 Article VII (Septic Industry Businesses) through the Suffolk County Department of Labor, Licensing and Consumer Affairs must report all OWTS Replacements or OWTS Retrofits to the Department in accordance with standards established by the Department.

B. After January 1, 2019:

1. no Property Owner, contractor, or Developer shall engage in an OWTS Replacement or an OWTS Retrofit of an existing Cesspool or Individual Sewerage System for any permanent structure unless prior Department approval has been obtained for the proposed OWTS Retrofit or OWTS Replacement of the Individual Sewerage System.

2. a Property Owner, contractor, or Developer with a Failed System, as defined in section 760-603 of this Article, shall correct said Failed System with an OWTS Replacement or OWTS Retrofit in accordance with this Article.

3. no Property Owner, contractor, or Developer shall engage in the replacement or retrofit of an existing Cesspool with a new Cesspool.

C. No contractor or Developer shall:

1. engage in the OWTS Replacement of a Cesspool or Individual Sewerage System with a new Individual Sewage System for any permanent structure unless said contractor or Developer holds an active Liquid Waste License pursuant to Chapter 563 Article VII (Septic Industry Businesses) through the Suffolk County Department of Labor, Licensing and Consumer Affairs.

2. engage in the OWTS Retrofit of a Cesspool or Individual Sewerage System for any permanent structure unless said contractor or Developer holds an active Liquid Waste License pursuant to Chapter 563 Article VII (Septic Industry Businesses) through the Suffolk County Department of Labor, Licensing and Consumer Affairs.

3. engage in the installation of a new Individual Sewerage System for any new Construction Project or Other Construction Project unless said contractor or Developer holds an active Liquid Waste License pursuant to Chapter 563 Article VII (Septic Industry Businesses) through the Suffolk County Department of Labor, Licensing and Consumer Affairs.

§760-606 Applications for Approval

A. Applications for Department approval of existing and/or proposed water supply and Sewage disposal facilities, as required by ~~§760-602~~section760-604 above, shall:

1. conform with the standards and regulations prescribed in this Code; and

2. conform with all other Department bulletins, regulations, and requirements; and

3. be made on forms provided by the Department; and

4. be accompanied by such maps, plans, reports, specifications, and data as the Department may require or direct.

B. Plans other than those for ~~community water and/or sewerage systems~~a Community Water System, Community Sewerage System, and/or an I/A OWTS shall indicate water and/or sewerage systems located upon each parcel.

C. Plans other than those for ~~community water~~a Community Water System, Community Sewerage System, and/or ~~sewerage systems~~an I/A OWTS shall not propose to furnish water to more than one parcel and/or dispose of Sewage from more than one parcel.

D. Where a Developer proposes to obtain and furnish water supply and/or sewerage facilities for a ~~realty subdivision, development,~~Construction Project or Other Construction Project by connection to an existing ~~community water~~Community Water System, Community Sewerage System, and/or ~~sewerage system~~I/A OWTS, the Developer shall supply the Department with a certification in writing by the owner of the utility that such facilities ~~will~~shall be furnished and kept available in good operating condition for the ~~realty subdivision, development,~~Construction Project or Other Construction Project.

E. The Department, in its discretion, may require the Developer to furnish a performance bond to the owner of such utility conditioned upon the Developer's making connection to the utility within a specified reasonable period of time.

F. The Department shall have the authority to promulgate procedures, protocols and standards as necessary for the implementation of wastewater management practices and technologies which permit the re-use of wastewater, such as for agricultural irrigation and fertilization, in a manner that protects public health and preserves water resources in accordance with the Code. Water re-use proposals shall require Department approval in accordance with the established procedures, protocols and standards.

§760-~~604~~ 607 Filing Requirements

Every ~~developer who~~Developer that obtains Department approval of a Realty Subdivision or Development, as required by ~~§~~section 760-~~602~~604, shall thereafter file a map of such Realty Subdivision or ~~development~~Development, as the case may be, bearing the stamp of approval of the Department, in the Office of the Clerk of the County of Suffolk within one (1) year of the date of approval of the Department.

§760-~~605 608~~ Sewage Facilities Requirements for Construction Projects (Single-Family Residences and Conventional Single-Family Residential ~~Realty~~ Subdivisions ~~and~~or Developments)

A. A Community Sewerage System method of Sewage disposal is required when any of the following conditions are present:

1. ~~—~~ the ~~realty subdivision or development,~~Construction Project or any portion thereof, is located within an existing sewer district~~;~~

~~a. .~~; This requirement shall apply in the absence of proof satisfactory to the Department that the Developer cannot effect arrangements for the installation and/or connection of the sewerage system to the existing sewer district~~.~~;

2. ~~2. the realty subdivision or development~~the Construction Project is located in an area where the subsoil or groundwater conditions are not conducive to the proper functioning of Individual Sewerage Systems;

3. ~~3.~~ the ~~realty subdivision or development~~Construction Project is located outside of Groundwater Management Zones III, V and VI, and ~~any parcel in the realty subdivision or development is~~the Construction Project parcels are less than 20,000 square feet in area, unless the Realty Subdivision or Development meets the Population Density Equivalent requirements of paragraph B.1.a. of this section. This condition does not apply to a Construction Project that has an exemption pursuant to section 760-612 of this Article; or

4. the Construction Project

~~4.~~ ~~the realty subdivision or development~~ is located within Groundwater Management Zones III, V or VI, and ~~any parcel in the realty subdivision or development~~the Construction Project is less than 40,000 square feet in area, unless the Realty Subdivision or Development meets the Population Density Equivalent requirements of paragraph B.2 ~~of this section~~.a. of this section. This condition does not apply to a Construction Project that has an exemption pursuant to section 760-612 of this Article.

B.

~~B.~~ Individual Sewerage Systems may be approved by the Department as to the method of Sewage disposal provided ~~all of~~ the following conditions are met:

1. ~~1. the realty subdivision or development is~~For Construction Projects located outside of Groundwater Management Zones III, V, and VI~~, and all parcels of the realty subdivision or development consist of~~;

   a. the Construction Project consists of parcels which have an area of at least 20,000 square feet; or the Realty Subdivision or Development has a Population Density Equivalent equal to or less than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 20,000 square feet; or the Construction Project has an exemption pursuant to section 760-612 of this Article; and

the ~~realty subdivision or development is located within Groundwater Management Zones III, V or VI, and all parcels in the realty subdivision or development consist of an area of at least 40,000 square feet; or the realty subdivision or development has a population density equivalent equal to or less than that of a realty subdivision or development of single-family residences in which all parcels consist of an area of at least 40,000 square feet;~~

   b. ~~3. the realty subdivision or development~~Construction Project, or any portion thereof, is not located within an existing sewer district and is located in an area where subsoil and groundwater conditions are conducive to the proper functioning of Individual Sewerage Systems; and

   c. ~~4. the individual sewerage systems~~Individual Sewerage Systems comply with the Department's current ~~Standards~~standards and the minimum State requirements as set forth in 10 New York Code of Rules and Regulations (" NYCRR"), Part 75, to the extent applicable to Suffolk County; and

d. the requirements of section 760-609 hereof are complied with.

2. For Construction Projects located within Groundwater Management Zones III, V, or VI;

a. the Construction Project consists of parcels which have an area of at least 40,000 square feet; or the Realty Subdivision or Development has a Population Density Equivalent equal to or less than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet; or the Construction Project has an exemption pursuant to section 760-612 of this Article; and

b. the Construction Project, or any portion thereof, is not located within an existing sewer district and is located in an area where subsoil and groundwater conditions are conducive to the proper functioning of Individual Sewerage Systems; and

~~a.~~c. the Individual Sewerage Systems comply with the Department's current standards and the minimum State requirements as set forth in 10 NYCRR, Part 75, to the extent applicable to Suffolk County; and

~~b.~~d.~~5.~~ the requirements of ~~§~~section 760~~-606~~-609 hereof are complied with.

~~C. Parcels in realty subdivisions or developments of less than 40,000 square feet in area within Groundwater Management Zones III, V or VI may be permitted using transfer of development rights in conformance with standards established by the Department.~~

3. ~~D. Parcels in realty subdivisions or developments~~Realty Subdivisions or Developments may have parcels of less than 20,000 square feet in areas within Groundwater Management Zones I, II, IV, VII or VIII ~~may be permitted using transfer of development rights~~with the use of Transfer of Development Rights in conformance with standards established by the Department.

4. Realty Subdivisions or Developments may have parcels of less than 40,000 square feet in areas within Groundwater Management Zones III, V or VI with the use of Transfer of Developments Rights in conformance with standards established by the Department.

§760-~~606~~609 Water Facilities Requirements for Construction Projects (Single-Family Residences and Conventional Single-Family Residential Subdivisions or Developments)

A. A Community Water System method of water supply is required when any of the following conditions are present:

1. ~~1.~~ the ~~realty subdivision or development~~Construction Project, or any portion thereof, is located within an existing water district or water service area; or

~~2. the realty subdivision or development~~the Construction Project is reasonably accessible to an existing water district or water service area~~; or~~

2. ~~a.~~ . This requirement shall apply in the absence of proof satisfactory to the Department that the Developer cannot effect arrangements for the installation and/or connection of the water system to the existing water district or water service area facilities~~.~~; or

3. ~~3.~~ individual wells cannot provide an average yield of five (5) gallons per minute of fresh, potable water; or

4. groundwaters in the area are nonpotable or potentially hazardous; or

~~5. any parcel in the realty subdivision or development is less than 40,000 square feet in area.~~
5. the parcels of the Construction Project are less than 40,000 square feet in area. Parcels less than 40,000 square feet in area, however, may not require a Community Water System method of water supply if the Construction Project has an exemption pursuant to section 760-612 of this Article and the Construction Project does not meet the conditions of paragraphs A.1. to A.4. of this section.

B. The following are minimum requirements for Community Water Systems:

1. ~~Community water systems~~they shall be capable of delivering water at an average rate of 100 gal/capita/day when service connections are unmetered, or 75 gal/capita/day when service connections are metered~~.~~;

2. ~~Community water systems~~they shall be designed to deliver water meeting the quality requirements of the New York State Sanitary Code~~.~~;

3. ~~Community water systems~~they shall provide for continuity of water service to the satisfaction of the Commissioner~~.~~;

4. ~~The community water supply system~~ they shall have at least two (2) separate wells as a source of supply~~.~~; and

5. ~~Community water systems~~they shall have at least one day's available storage at design average consumption.

6. ~~6. The~~the relevant provisions of Part 5 of the New York State Sanitary Code and Bulletin 42 of the New York State Department of Health entitled "Recommended Standards for Water Works" will be the basis upon which all plans, specifications and reports for Community Water Systems will be reviewed for approval by the Department.

C. Individual Water Supply Systems may be approved by the Department as the method of water supply for a ~~realty subdivision or development~~Construction Project, provided all of the following conditions are met:

~~1. all parcels in the realty subdivision or development consist of an area of at least 40,000 square feet; and~~

1. the Construction Project consists of an area of at least 40,000 square feet; Clustered Realty Subdivisions must have a Population Density Equivalent equal to or less than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet, and all Residential Parcels in the Clustered Realty Subdivision must consist of an area of at least 20,000 square feet each. These conditions do not apply to a Construction Project that has an exemption pursuant to section 760-612 of this Article; and

2. the ~~realty subdivision or development~~Construction Project, or any portion thereof, is not located within an existing water district or water service area and is not reasonably accessible thereto, and individual wells can provide an average yield of five (5) gallons per minute of fresh potable water; and

3. the Individual Water Supply Systems comply with the Department's current standards and the minimum State requirements as set forth in 10 NYCRR, Part 75, to the extent applicable to Suffolk County.

§760-~~607~~ 610 Sewage Facilities Requirements for Other Construction Projects (Other Than Single-Family Residences and Conventional Single-Family Residential ~~Realty~~ Subdivisions ~~and~~or Developments)

A. A Community Sewerage System method of Sewage disposal is required for Other Construction Projects when any of the following conditions are present:

1. ~~1.~~ the ~~construction project~~Other Construction Project is located within Groundwater Management Zones III, V or VI, and the Population Density Equivalent is greater than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet; or

2. the ~~construction project~~Other Construction Project is located outside of Groundwater Management Zones III, V and VI, and the Population Density Equivalent is greater than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 20,000 square feet; or

3. the ~~construction project~~Other Construction Project, or any portion thereof, is located within an existing sewer district~~;~~

~~a.~~ . This requirement shall apply in the absence of proof satisfactory to the Department that the Developer cannot effect arrangements for the installation of the sewerage system to the existing sewer district~~.~~; or

4. the ~~construction project~~Other Construction Project is located in an area where the subsoil or groundwater conditions are not conducive to the proper functioning of Individual Sewerage Systems or Subsurface Sewage Disposal Systems.

B. Individual Sewerage Systems or Subsurface Sewage Disposal Systems may be approved by the Department as to the method of Sewage disposal for ~~a construction project~~Other Construction Projects provided ~~all of~~ the following conditions are met:

~~1. the construction project is located within Groundwater Management Zones III, V or VI, and the population density equivalent is equal to or less than that of a realty subdivision or development of single-family residences in which all parcels consist of an area of at least 40,000 square feet;~~

1. ~~2. the construction project is~~For Other Construction Projects located outside of Groundwater Management Zones III, V and VI~~, and~~ ;

   a. the Population Density Equivalent is equal to or less than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 20,000 square feet; and

   b. ~~3.~~ the ~~construction project~~Other Construction Project, or any portion thereof, is not located within an existing sewer district and is located in an area where subsoil and groundwater conditions are conductive to the proper functioning of Individual Sewerage Systems or Subsurface Sewage Disposal Systems; and

   c. the Individual Sewerage System or Subsurface Sewage Disposal System complies with the Department's current standards and the minimum State requirements as set forth in 10 NYCRR, Part 75, to the extent applicable to Suffolk County.

2. For Other Construction Projects located within Groundwater Management Zones III, V or VI;

   a. the Population Density Equivalent is equal to or less than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet; and

   b. the Other Construction Project, or an any portion thereof, is not located within an existing sewer district and is located in an area where subsoil and groundwater conditions are conducive to the proper functioning of Individual Sewerage Systems or Subsurface Sewage Disposal Systems; and

   c. the Individual Sewerage System or Subsurface Sewage Disposal System complies with the Department's current standards and the minimum State requirements as set forth in 10 NYCRR, Part 75, to the extend applicable to Suffolk County.

C. Modified Subsurface Sewage Disposal Systems.

I. Modified Subsurface Sewage Disposal Systems may be approved by the Department as a method of Sewage disposal for a ~~construction project~~Construction Project or Other Construction Project, provided all of the following conditions are met:

1. the construction project is located either:

   a. within Groundwater Management Zones III, V, or VI, and the Population Density Equivalent is greater than that of a Realty Subdivision or Development of Single Family Residences in which all parcels consist of an area of at least 40,000 square feet; or

   b. outside of Groundwater Management Zones III, V, or VI, and the Population Density Equivalent is greater than that of a Realty Subdivision or Development of Single Family Residences in which all parcels consist of an area of at least 20,000 square feet; and

2. ~~2. the construction project~~the Construction Project or Other Construction Project, or any portion thereof, is not located within an existing sewer district, or does not have the ability to connect to an existing sewer district as shown by proof satisfactory to the Department that the Developer cannot effect arrangements for the connection of the project to the existing sewer district; and

3. the subsoil and groundwater conditions are conducive to the proper functioning of a Modified Subsurface Sewage Disposal System; and

4. the ~~construction~~Construction Project or Other Construction project is on a single parcel that is provided with a Community Water System, which parcel is not part of a ~~subdivision~~Realty Subdivision or Development that is proposed or has already been approved by the Department; and

5. the Modified Subsurface Sewage Disposal System is capable of producing a discharge of no more than 10 mg/l total nitrogen in the effluent stream where the ~~total design sewage flow for the parcel (kitchen and sanitary)~~designed Sewage treatment capacity of the system does not exceed 15,000 gallons per day; and

6. if an application for approval is received by the Department after February 9, 1989, two irrevocable letters of credit are issued by a bank located in New York to the Department in accordance with the following conditions:

   a. the total amount of the two letters of credit shall equal the estimated cost of the Modified Subsurface Sewage Disposal System (the "system"), as certified by the professional engineer who designed the system and accepted by the Department as a reasonable estimated cost (the "estimated cost"); and

b. the first letter of credit shall be in an amount equal to 65% of said estimated cost ~~and shall be known as the "~~, ("construction letter of credit~~";~~"); and

c. the second letter of credit shall be in an amount equal to 35% of said estimated cost ~~and shall be known as the "~~("second construction letter of credit~~"~~") until the final Modified Subsurface Sewage Disposal System is approved by the Department, and thereafter shall be ~~converted to and be~~ known as the "modification letter of credit;" and

d. the construction letter of credit and the second construction letter of credit shall be callable by the Department simultaneously upon terms and conditions ~~to be~~ satisfactory to the Department to assure that the system is properly constructed; and

e. if the construction letter of credit and/or the second construction letter of credit are called by the Department, the proceeds thereof shall ~~be held by the Department and shall~~ not be released until the system is completed and ~~is~~ approved by the Department (except nothing contained herein shall prevent application of the proceeds by the Department for a lawful purpose requested by the Department and authorized by a court of law); and

f. the construction letter of credit shall be released only upon approval by the Department of the completed system and proof satisfactory to the Department that the second construction letter of credit has been converted to a modification letter of credit; and

g. the modification letter of credit shall serve as security to assure that any required modification of the installed system is achieved, and said letter of credit shall be released only upon a showing certified by a professional engineer, and accompanied by findings of a certified testing laboratory reasonably consistent with any independent findings of the Department, that, for a period of three consecutive months, the monthly average effluent total nitrogen, based on no fewer than bi-weekly samples, did not exceed 10 mg/l, and building occupancy averaged over three months was not less than 80% of floor space, and actual flow was not less than 50% of design flow; and

7. ~~a~~A one-time non-refundable payment by the Developer equal to $1.00 per gallon of total daily design Sewage flow (kitchen and sanitary) is deposited into an interest-bearing account maintained by the Department, which monies are to be used by the Department exclusively for the following purposes:

a. to undertake all necessary environmental reviews of a proposed permanent amendment to the Code which, if adopted, will give express authorization to the Department to approve Modified Subsurface Sewage Disposal Systems, which review is necessitated by the Board's positive declaration pursuant to the State Environmental Quality Review Act on January 17, 1989. (Upon completion of the environmental review process and payment of all costs associated therewith, the above one-time non-refundable payment shall be reduced to $0.50 per gallon of total daily design

Sewage flow [kitchen and sanitary] for all applications pending or received after the reduction to $0.50.); and

b. to provide maintenance, sampling, and analysis of samples required by applicable standards or permits at facilities in Suffolk County serviced by a Modified Subsurface Sewage Disposal System, where, despite written notice to the owner and/or operator of the facility from the Commissioner that said maintenance, sampling, or analysis must be performed by a specified date, the owner and/or operator of the facility fails to comply (Owners or operators of facilities with Modified Subsurface Sewage Disposal Systems that exist as of the effective date of this ~~provision~~subparagraph 7. shall pay the sum required by this ~~subdivision~~subparagraph 7. upon renewal of the State Pollutant Discharge Elimination System ~~Permit~~("SPDES") permit for the facility~~);~~.); and

8. the ~~construction project~~Construction Project or Other Construction Project provides for an unpaved and uncovered area for expansion of the Modified Subsurface Sewage Disposal System that, at the option of the applicant, is either equal in size to 150% of the area of the installed Modified Subsurface Sewage Disposal System or is sufficient to allow for the installation of a Sewage treatment plant in the event that the Modified Subsurface Sewage Disposal System fails to meet the requirements of its SPDES permit. (This requirement is applicable to all applications received after February 9, 1989; applications pending as of February 9, 1989 must provide for an unpaved and uncovered area for expansion of the Modified Subsurface Sewage Disposal System that is equal in size to 50% of the area of the installed Modified Subsurface Sewage Disposal System.); and

9. the Modified Subsurface Sewage Disposal System complies with the Department's current standards and the minimum State requirements as set forth in 10 NYCRR, Part 75, to the extent applicable to Suffolk County.

~~D~~II. Enforcement of Directives issued by the Commissioner pursuant to ~~§~~section 760-~~607~~610.C.7. Whenever the owner or operator of a Modified Subsurface Sewage Disposal System fails to comply with a written directive issued by the Commissioner pursuant to ~~§~~section 760-~~607~~610.C.7 to provide any maintenance, sampling, or analysis required by applicable standards or permits, the Commissioner may provide said maintenance, sampling or analysis with funds contained in the interest-bearing account described in ~~§~~section 760-~~607~~610.C.7, and may thereafter bring a civil action to recover said sums expended plus interest from the owner and/or operator of the facility where the Modified Subsurface Sewage Disposal System is located.

a. ~~1.~~ The obligation imposed upon the owner and/or operator of a facility with a Modified Subsurface Sewage Disposal System by any applicable standard or permit to provide maintenance, and to take and analyze samples, is a continuing obligation.

b. ~~2.~~ Nothing contained herein shall be construed to require the Commissioner or the Department to provide maintenance, sampling, or analysis of any system~~, and the failure of~~. The failure of the owner or operator to comply with the requirements of applicable

standards or permits with regard to maintenance, sampling, or analysis shall be subject to section 760- 218.2 of this Code. Each day or part of a day the required maintenance, sampling, or analysis is not performed shall constitute a separate violation and may further subject the owner and/or operator of the facility to additional civil penalties under any applicable law, code, statute, or regulation.

D. An Other Construction Project within Groundwater Managements Zones III, V or VI may have a Population Density Equivalent to a ~~single-family residential subdivision or development~~Conventional Single-Family Residential Subdivision or Development with parcels less than 40,000 square feet in area using Transfer of Development Rights in conformance with standards established by the Department.

E. An Other Construction Project within Groundwater Management Zones I, II, IV, VII or VIII may have a Population Density Equivalent to a ~~single-family residential subdivision or development~~Conventional Single-Family Residential Subdivision or Development with parcels less than 20,000 square feet in area using Transfer of Development Rights in conformance with standards established by the Department.

§760-~~608~~ 611 Water Facilities Requirements for Other Construction Projects (Other than Single-Family Residences and Conventional Single-Family Residential ~~Realty~~ Subdivisions ~~and~~ or Developments)

A. A Community Water System method of water supply is required when any of the following conditions are present:

1. the Other Construction Project, or any portion thereof, is located within an existing water district or water service area; or

2. the Other Construction Project is reasonably accessible to an existing water district or water service area~~; or~~

~~a.~~ . This requirement shall apply in the absence of proof satisfactory to the Department that the Developer cannot effect arrangements for the installation and/or connection of the water system to the existing water district or water service area facilities~~.~~; or

3. individual wells cannot provide a sufficient yield of freshwater meeting Department requirements or standards; or

4. groundwaters in the area are nonpotable or potentially hazardous; or

5. the ~~construction project~~Other Construction Project has a Population Density Equivalent that is greater than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet, or any ~~residential~~ parcel ~~that~~ of the Other Construction Project has an area of less than 20,000 square feet. Parcels that have a Population Density Equivalent that is greater than that of a Realty Subdivision

or Development of Single-Family Residences in which all parcels consist of an area less than 40,000 square feet may not require a Community Water System method of water supply if the Other Construction Project has an exemption pursuant to section 760-612 of this Article and does not meet the conditions of paragraphs A.1. to A.4. of this section.

B. The following are minimum requirements for Community Water Systems:

1. they shall be capable of delivering water at an average rate of 100 gal/capita/day when service connections are unmetered, or 75 gal/capita/day when service connections are metered.; and

2. Community water systemsthey shall be designed to deliver water meeting the quality requirements of the New York State Sanitary Code.; and

3. Community water systems they shall provide for continuity of water service to the satisfaction of the Commissioner.; and

4. The community water supply systemthey shall have at least two (2) separate wells as a source of supply.; and

5. Community water systems they shall have at least one day's average storage at design average consumption.

6. the relevant provisions of Part 5 of the New York State Sanitary Code and Bulletin 42 of the New York State Department of Health entitled "Recommended Standards for Water Works" will be the basis upon which all plans, specifications, and reports for Community Water Systems will be reviewed for approval by the Department.

C. Individual Water Supply Systems may be approved by the Department as the method of water supply for a construction project,an Other Construction Project provided all of the following conditions are met:

1. the Population Density Equivalent of the construction projectOther Construction Project is equal to or less than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet, and all residential parcels in the Other Construction Project consist of an area of at least 20,000 square feet each;. Parcels that have a Population Density Equivalent that is greater than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area less than 40,000 square feet may be permitted to use an Individual Water Supply System if the Other Construction Project has an exemption pursuant to section 760-612 of this Article and meets the conditions of paragraphs C.2. and C.3. of this section; and

2. the Other Construction Project, or any portion thereof, is not located within an existing water district or water service area and is not reasonably accessible thereto, and individual wells

can provide sufficient yield of fresh, potable water meeting Department requirements and standards; and

3. the Individual Water Supply Systems comply with the Department's current standards and the minimum requirements of the New York State Sanitary Code.

§760-609 612 Variances, Waivers and Exemptions

A. Variances and Waivers. The Commissioner of the Department of Health Services, in his or her discretion, and upon recommendation of the Board of Review, may grant or deny a variance or waiver from the specific sections of this Article after an application requesting such relief is made and supporting evidence has been presented to the Board of Review. The Commissioner may grant an application only if the variance or waiver will be in harmony with the general purpose and intent of this Article to protect groundwater, drinking water supplies, surface water and other natural resources, and public health, safety and welfare.

1. The determination whether the variance or waiver will be in harmony with the general purpose and intent of this Article shall be made upon findings relating to the following criteria:

   a. Whether the use is in general conformity with this Article;

   b. Whether the uses of groundwater, surface water, and drinking water supplies will be impaired, taking into account the direction of groundwater flow;

   c. Whether the application of the proposed variance or waiver to other parcels within the same Groundwater Management Zone will unreasonably impair groundwater, surface water, and/or drinking water supplies;

   d. Whether the application conforms to a comprehensive groundwater management plan;

   e. e. Whether granting the proposed variance or waiver will adversely affect the design of an adequate on-site water supply and/or Sewage disposal system, taking into account soil conditions, depth to groundwater, direction of groundwater flow, and site-specific physical conditions;

   f. Whether the amount of Sewage flow from the project based upon Sewage flow design criteria will adversely affect groundwater, surface water and/or drinking water supplies;

   g. Whether the application can be modified so that the project will not violate the Sanitary Code;

   h. Whether an application for a variance or waiver to another municipal entity would obviate the need for consideration of the application before the Board of Review, and if it would, whether such application has been made and ruled upon;

i. Any other factor which the Board of Review ~~Board~~ in its discretion deems necessary to consider in order to determine whether the granting of a variance or waiver will be in harmony with the general purpose and intent of this Article, provided that the applicant is given notice of the additional factors and reasonable opportunity to present evidence to the Board of Review with regard thereto.

2. Economic injury alone cannot provide the basis for a variance or waiver from this Article.

~~3.~~ 3. Development Rights originating from an existing Other Construction Project parcel(s) which exceeds the Population Density Equivalent requirements of this Article shall not be transferred to a Construction Project or Other Construction Project by the Board of Review through a variance or waiver.

4. In all proceedings before the Board of Review, the burden of proof of demonstrating that a variance or waiver should be granted shall be on the applicant.

B. Exemptions. ~~Requirements of this Article~~Minimum lot size and/or Population Density Equivalent requirements shall not apply to the following:

1. Realty Subdivisions which have previously been approved by the Department or the New York State Department of Health~~, and~~ that have been filed in the Office of the Clerk of the County of Suffolk;

2. ~~developments or other construction projects~~Developments which have previously been approved by the Department;

3. ~~3. developments or other construction projects, other than realty subdivisions~~Other Construction Project parcel(s) with only a single-tenant permanent structure(s) which have previously been approved by the Department's Office of Wastewater Management meeting all of the following criteria:

a. The permanent structure(s) has had an active, continuous use for the same purpose from the time of a previous Office of Wastewater Management approval to the time of submission of the current application to the Department for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article.

b. The permanent structure(s) has not been vacant for a period of two (2) or more years immediately prior to the submission of the current application to the Department for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article.

c. There is no increase in the proposed Density Load from the permanent structure(s) at the time of submission of an application to the Department compared to a previous Office of Wastewater Management approval.

d. For applications submitted to the Office of Wastewater Management on or after January 1, 2018 for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article, there is less than a 10% increase in the footprint or gross floor area, whichever is greater, of the permanent structure, but in no event exceeding a total increase in area of 1,000 square feet. For purposes of determining the percentage of increase, the Office of Wastewater Management shall compare the footprint or gross floor area of previous applications submitted to the Office for the same permanent structure.

e. Applications submitted to the Office of Wastewater Management prior to January 1, 2018 for such approvals shall be governed by section 760-609 of the Suffolk County Sanitary Code as it existed on December 31, 2017.

f. The Other Construction Project does not involve the total replacement of a permanent structure(s) or Major Reconstruction of a permanent structure(s);

4. Other Construction Project parcel(s) with multi-tenant permanent structure(s) which have previously been approved by the Department's Office of Wastewater Management meeting all of the following criteria:

a. The multi-tenant permanent structure(s) has not had more than 50% of the tenant spaces vacant for a period of more than two (2) years immediately prior to the time of submission of the current application to the Department for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article.

b. There is no increase in the proposed Density Load from the permanent structure(s) at the time of submission of an application to the Department compared to a previous Office of Wastewater Management approval.

c. For applications submitted to the Office of Wastewater Management on or after January 1, 2018 for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article, there is less than a 10% increase in the footprint or gross floor area, whichever is greater, of the permanent structure, but in no event exceeding a total increase in area of 1,000 square feet. For purposes of determining the percentage of increase, the Office of Wastewater Management shall compare the footprint or gross floor area of previous applications submitted to the Office for the same permanent structure.

d. Applications submitted to the Office of Wastewater Management prior to January 1, 2018 for such approvals shall be governed by section 760-609 of the Suffolk County Sanitary Code as it existed on December 31, 2017.

e. The Other Construction Project does not involve the total replacement of a permanent structure(s) or Major Reconstruction of a permanent structure(s);

~~3.~~5. Developments, other than Realty Subdivisions, which have been approved by a town or village planning or zoning board of appeals prior to January 1, 1981, and which met the requirements of the Department in effect at that time;

~~4.~~6. ~~4. density requirements for one-family residences on parcels~~A Single-Family Residence on a parcel which appeared as separately assessed on the Suffolk County Tax Map as of January 1, 1981, which presently constitutes a buildable parcel under applicable municipal zoning ordinances and which met the Department requirements in effect on January 1, 1981. No automatic ~~waiver~~exemption of these requirements of this Article shall be granted where five (5) or more of such parcels are owned by a Developer.

§760-613 I/A OWTS Sewage Facilities Requirements for Existing Other Construction Projects

A. At the time an application is made to the Department for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article, an I/A OWTS shall be required by the Department as the method of Sewage disposal for an Other Construction Project which has existed prior to January 1, 2018, if all of the following conditions exist:

1. The Other Construction Project meets the following criteria:

   a. There is no increase in the current Density Load established by a previous approval using current Department Density Loading Rates and such previous approval shall have included either:

      I. Permits issued by the Department's Division of Environmental Quality;
      II. Permits which have been previously issued by the Department's Division of Public Health for temporary residences or food establishments; or
      III. Town or village approvals which were granted prior to January 1, 1981, and which met the requirements of the Department in effect at that time.

2. The existing permanent structure must be habitable according to current building codes at the time of application for Department of approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article.

3. The existing Other Construction Project meets one (1) of the following criteria at the time of current application to the Department for approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article:

   a. the Other Construction Project is located within Groundwater Management Zones III, V or VI, and the Population Density Equivalent is greater than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 40,000 square feet without the use of Transfer of Development Rights in conformance with standards established by the Department; or

b. the Other Construction Project is located outside of Groundwater Management Zones III, V and VI, and the Population Density Equivalent is greater than that of a Realty Subdivision or Development of Single-Family Residences in which all parcels consist of an area of at least 20,000 square feet without the use of Transfer of Development Rights in conformance with standards established by the Department.

4. The Other Construction Project has previously been approved by the Department or approved by a town or village planning or zoning board or appeals board prior to January 1, 1981 and does not meet the criteria for an exemption as stated in section 760-612 of this Article.

5. The Other Construction Project, or any portion thereof, is not located within an existing sewer district and is located in an area where subsoil and groundwater conditions are conducive to the proper functioning of Individual Sewerage Systems or Subsurface Sewage Disposal Systems.

B. Section 760-613 paragraph A. shall apply to Other Construction Projects which exceed the current Population Density Equivalent based on a Density Load established by Department or town/village approvals prior to January 1, 1981 without the use of Transfer of Development Rights but propose to increase the established Density Load with the use of Transfer of Development Rights in conformance with the standards established by the Department.

C. For multi-tenant structures, the requirements of Section 760-613 paragraph A. shall apply to the tenant space(s) for an Other Construction Project that requires Department approval of water supply and Sewage disposal facilities in accordance with section 760-606 of this Article.

D. I/A OWTS shall comply with the Department's current standards and the minimum State requirements as set forth in 10 NYCRR, Part 75, to the extent applicable to Suffolk County.

Adopted 11/19/1980; Amended 4/15/1981, 6/3/1981, 6/24/1981, 1/12/1983, 4/9/1986, 6/25/1986, 1/14/1987, 3/4/1987, 3/8/1989, 5/24/1989, 1/24/1990, 9/30/1992, 6/28/1995, X/XX/XXXX)

lst: 7/1/96

(Joins sheet 54)

2 250 000 FEET

NESCONSET

S M I T H T O W N

ISLIP

LAKE RONKONKOMA

Lake Ronkonkoma

BROOKHAVEN

RONKONKOMA

East Hauppauge

LONG ISLAND EXPRESSWAY

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(Joins sheet 77)

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Scale 1:20 000

5 000 Feet 0 1 000 2 000 3 000 4 000 5 000

215 000 FEET

N

DRAWN BY: KAW
CHECKED BY: RM
DESIGNED BY: RM

SYMBOL	DESCRIPTION	APPROVED	DATE
	REVISIONS		

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

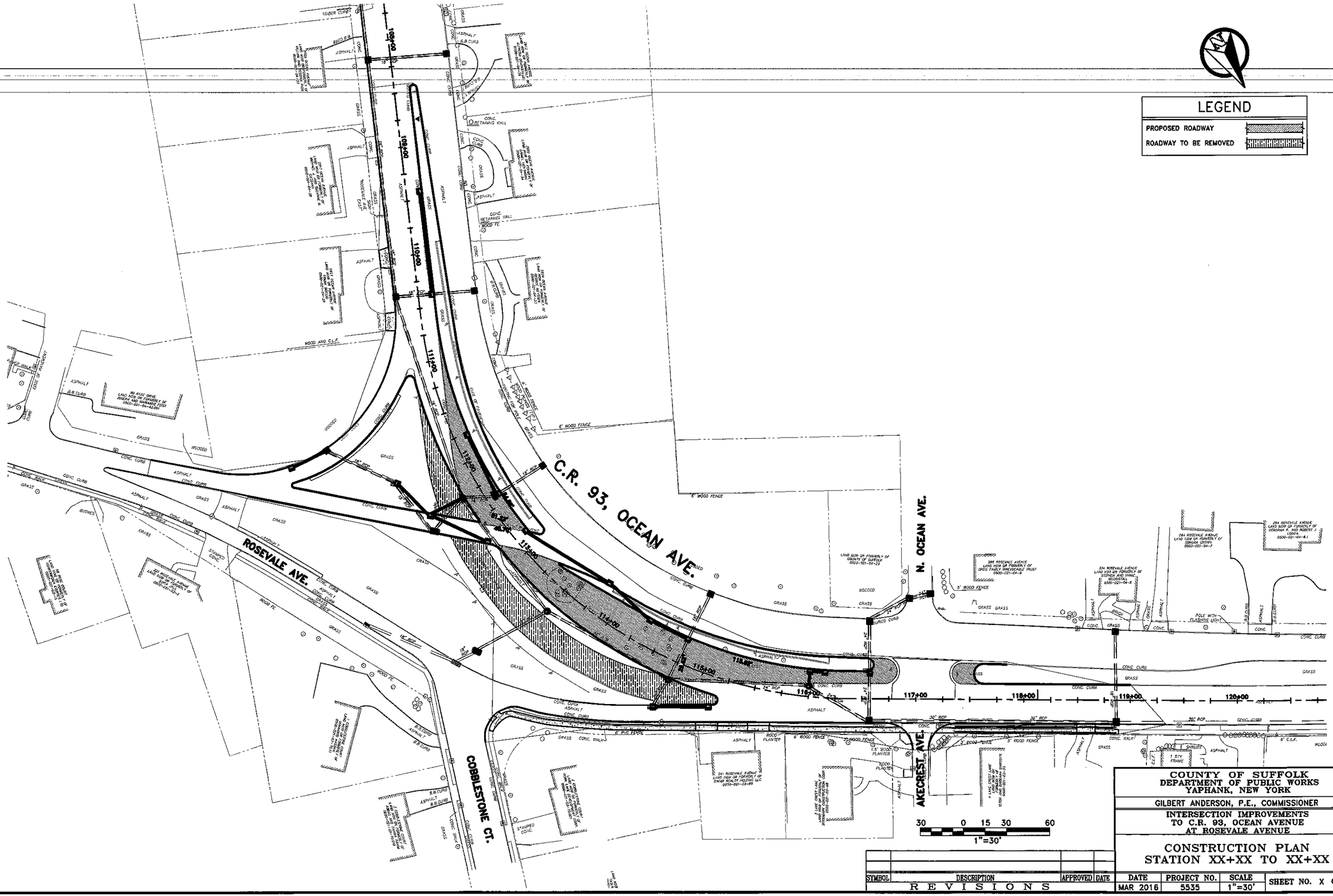
GILBERT ANDERSON, P.E., COMMISSIONER

INTERSECTION IMPROVEMENTS TO C.R. 93, OCEAN AVE. AT ROSEVALE AVENUE

AERIAL

DATE	PROJECT NO.	SCALE	SHEET NO. 1 OF 1
2017	5535	NONE	

DESIGNED BY: RM
DRAWN BY: KAW
CHECKED BY: VK



SYMBOL	DESCRIPTION	APPROVED	DATE
	REVISIONS		

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

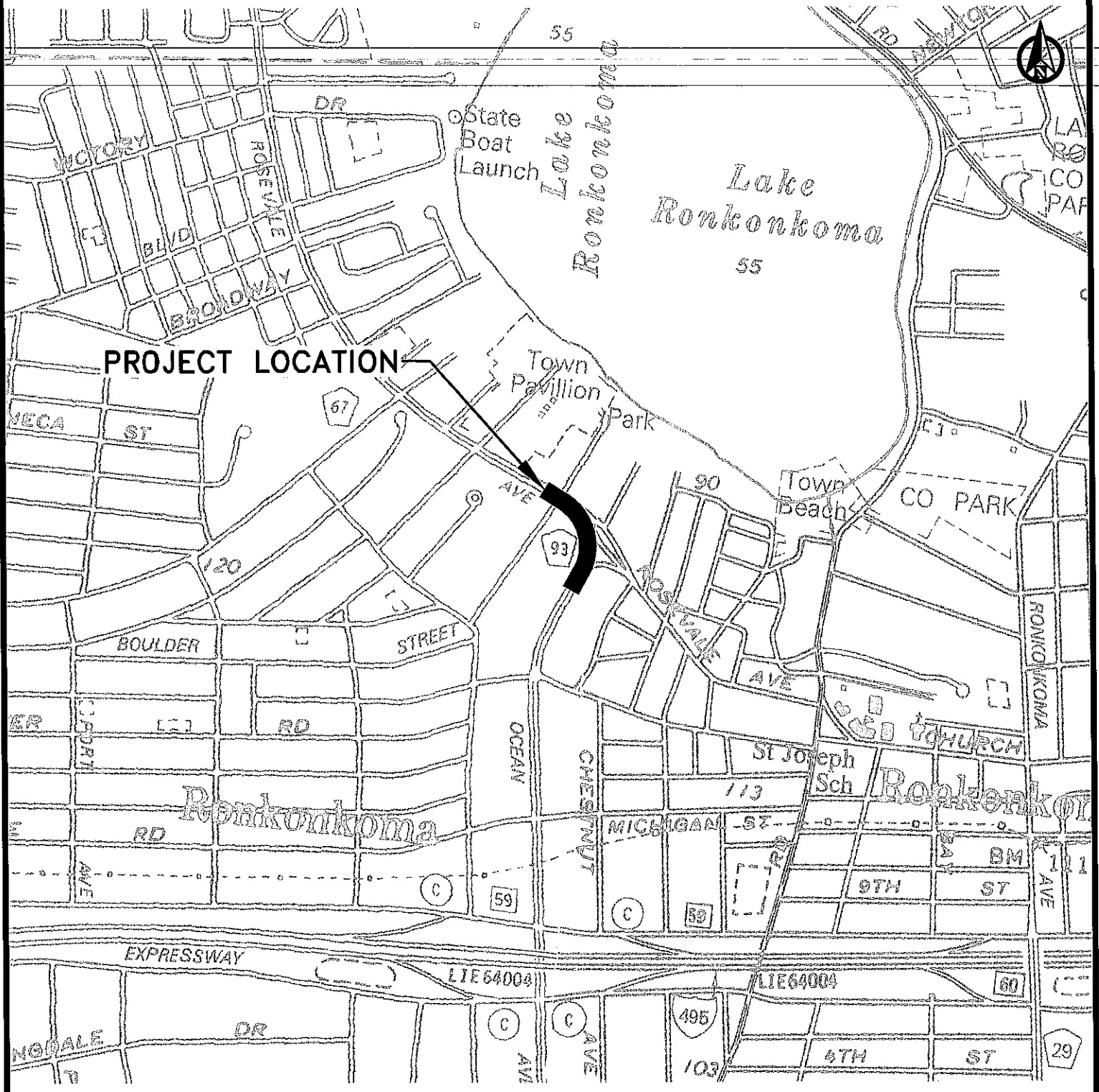
GILBERT ANDERSON, P.E., COMMISSIONER

INTERSECTION IMPROVEMENTS
TO C.R. 93, OCEAN AVENUE
AT ROSEVALE AVENUE

CONSTRUCTION PLAN
STATION XX+XX TO XX+XX

DATE	PROJECT NO.	SCALE	SHEET NO. X OF XX
MAR 2016	5535	1"=30'	

LOCATION MAP



INTERSECTION IMPROVEMENTS TO C.R.93, OCEAN AVENUE AT ROSEVALE AVENUE CAPITAL PROJECT 5535

CENTRAL ISLIP & PATCHOGUE QUADRANGLES
New York–Suffolk County
7.5 Minute Series

Published by the New York State Department of Transportation in cooperation with the U.S. Department of Transportation, Federal Highway Administration
Map Base from U.S. Geological Survey 7.5 minute quadrangle. Revisions made in 1990.
Scale: 1"=1000'

COUNTY OF SUFFOLK

STEVEN BELLONE
COUNTY EXECUTIVE

DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING
DIVISION OF PLANNING AND ENVIRONMENT

COUNCIL ON ENVIRONMENTAL QUALITY

LAWRENCE SWANSON
Chairperson
CEQ

MEMORANDUM

TO: Interested Parties/Involved Agencies

FROM: John Corral, Senior Planner JC

DATE: October 11, 2017

RE: Proposed Intersection Improvements to CR-93, Ocean Avenue at Rosevale Avenue, Town of Islip

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Enclosed is an Environmental Assessment Form for the above referenced County project which has been submitted to the Council on Environmental Quality (CEQ) for review. Pursuant to Title 6 NYCRR Part 617 and Chapter 450 of the Suffolk County Code, the CEQ must recommend a SEQRA classification for the action and determine whether it may have a significant adverse impact on the environment which would require the preparation of a Draft Environmental Impact Statement (DEIS).

The Council would like to know your environmental concerns regarding this proposal and whether you think a DEIS or a determination of non-significance is warranted. This project will be discussed at the **October 18, 2017** CEQ meeting. If you are unable to attend the meeting to present your views, please forward any recommendations or criticisms to this office prior the date of the meeting. **If the Council has not heard from you by the meeting date, they will assume that you feel that the action will not have significant adverse environmental impacts and should proceed accordingly.**

JC/cd
Enc.

cc: John Sohngen, Assoc. Public Health Engineer
Suffolk County Department of Health Services
Andrew P. Freleng, Chief Planner
Department of Economic Development and Planning
Sy Gruza, Esq. PSEG Long Island
Alex Pozdnyakov, Assistant General Counsel, LIPA
Angie Carpenter, Supervisor Town of Islip
Ron Meyer, Commissioner of Planning, Town of Islip

COUNTY OF SUFFOLK

STEVEN BELLONE
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF PUBLIC WORKS

PHILIP A. BERDOLT
DEPUTY COMMISSIONER

GILBERT ANDERSON, P.E.
COMMISSIONER

DARNELL TYSON, P.E.
DEPUTY COMMISSIONER

September 29, 2017

Mr. Lawrence Swanson
Suffolk County Department of Planning
H. Lee Dennison Building
P.O. Box 6100
Hauppauge, NY 11788

RE: Intersection Improvements on CR 93, Ocean Avenue at Rosevale Avenue

Dear Mr. Swanson:

Enclosed herein, please find 15 copies and a disk containing one electronic copy of the Environmental Assessment Form for the above referenced project. We would appreciate a project review to be scheduled for the October 18, 2017 meeting of the Council on Environmental Quality.

Thank you for your continued cooperation. If you have any questions or require additional information concerning this matter, please feel free to contact me at (631)852-4117.

Sincerely,

Russ Mackey, P.E.
Senior Civil Engineer

Enc.

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 1 – Environment and Setting

Instructions: Part 1 is to be completed by the applicant or project sponsor. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information. If a question is not applicable to the proposed project indicate with "N/A".

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information

Name of Action/Project: Intersection Improvements to C.R. 93, Ocean Avenue at Rosevale Avenue
Project Location (specify Town, Village, Hamlet and attach general location map*): Ronkonkama, Town of Islip
Street Address:
Name of Property or Waterway:

* Maps of Property and Project: Attach relevant available maps including a location map (note: use road map, Hagstrom Atlas, USGS topography map, tax map or equivalent) and preliminary site plans showing orientation, scale, buildings, roads, landmarks, drainage systems, area to be altered by project, etc.

Type of Project: New ☒ Expansion ☐

Capital Program: Item # 5535 Date Adopted: Amount: $1,500,000

Brief Description of Proposed Action (include purpose or need/attach relevant design reports, plans, etc.): This project will realign the northbound lanes of CR 93, OceanAvenue in order to install a larger radius curve. In addition, a left turn lane from Northbound CR 93 onto North Ocean Avenue will also be constructed. New drainage will be installed to accommodate the realignment of the road and existing drainage will be replaced in kind. This project may include work to be performed by various utility companies, which may include relocating underground and or overhead electric, underground and or overhead telephone/communications, and underground gas, water and/or sewer infrastructure as necessary to construct the highway improvements proposed by this capital improvement project.

Project Status:

	Start	Completion
Proposal	2007	
Study	2014	2015
Preliminary Planning	2016	2016
Final Plans: Specs	2016	2017
Site Acquisition	Na	
Construction	2018	2018
Other		

Departments Involved:

	Dept. Performing Design & Construction	Initiating Dept. (if different)
Name:	Suffolk County DPW	
Street/PO:	Yaphank Ave.	
City, State:	Yaphank, New York	
Zip:	11980	
Contact Person:	Russ Mackey	
Business Phone:	(631) 852-4117	
Email:	rmackey@suffolkcountyny.gov	

B. Government Approvals, Funding or Sponsorship
("Funding" includes grants, loans, tax relief and any other forms of financial assistance)

	Government Entity			If "Yes": Identify Agency and Approval(s) Required	Application Date (Actual or Projected)
i.	City Council, Town Board or Village Board of Trustees	Yes ☐	No ☒		
ii.	City, Town or Village Planning Board or Commission	Yes ☐	No ☒		
iii.	City, Town or Village Zoning Board of Appeals	Yes ☐	No ☒		
iv.	Other local agencies	Yes ☐	No ☒		
v.	County agencies	Yes ☒	No ☐	County Legislature funding reso	
vi.	Regional agencies	Yes ☐	No ☐		
vii.	State agencies	Yes ☐	No ☐		
viii.	Federal agencies	Yes ☐	No ☐		

ix. Coastal Resources
Is the project site within a Coastal Area or the waterfront area of a Designated Inland Waterway? Yes ☐ No ☒

If YES,

Is the project site located in a community with an approved Local Waterfront Revitalization Program?	Yes ☐ No ☐
Is the project site within a Coastal Erosion Hazard Area?	Yes ☐ No ☐

C. Planning and Zoning

C.1. Planning and Zoning Actions	
Will administrative or legislative adoption or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	Yes ☒ No ☐
C.2. Adopted Land Use Plans	
a. Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? **If Yes:** Does the comprehensive plan include specific recommendations for the site where the proposed action would be located? Yes ☐ No ☐	Yes ☐ No ☒
b. Is the site of the proposed action within any local or regional special planning district (i.e. Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; et. al)? **If Yes**, identify the plan(s):	Yes ☐ No ☒
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? **If Yes**, identify the plan(s):	Yes ☐ No ☒
C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance? **If Yes**, what is the zoning classification(s) including any applicable overlay district? Residence B	Yes ☒ No ☐
b. Is the use permitted or allowed by a special or conditional use permit?	Yes ☐ No ☒
c. Is a zoning change requested as part of the proposed action? **If Yes**, what is the proposed new zoning for the site?	Yes ☐ No ☒
C.4. Existing Community Services	
a. In what school district is the project site located? Connetquot	
b. What police or other public protection forces serve the project site? Suffolk County Police	
c. Which fire protection and emergency medical services serve the project site? Lakeland Fire District (837)	
d. What parks serve the project site? NA	

D. Project Details

D.1. Proposed and Potential Development	
a. What is the general nature of the proposed action? (if mixed, include all components) ~~Residential ☐; Industrial ☐; Commercial ☐; Recreational ☐; Other ☒: Infrastructure~~	
b. Total acreage of the site of the proposed action:	2.1 acres
c. Total acreage to be physically disturbed:	2.1 acres
d. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor:	2.1 acres
e. Is the proposed action an expansion of an existing project or use? **If Yes,** what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet, etc.)? [ ]	Yes ☐ No ☒
f. Is the proposed action a subdivision, or does it include a subdivision? **If Yes:** *i.* Purpose or type of subdivision? (if mixed, specify types) Residential ☐; Industrial ☐; Commercial ☐; Recreational ☐; Other ☐ *ii.* Is a cluster/conservation layout proposed? Yes ☐ No ☐ Number of lots proposed: Minimum and maximum proposed lot sizes:	Yes ☐ No ☒
g. Will proposed action be constructed in multiple phases? **If No,** What is the anticipated period of construction? **10 months** **If Yes:** Total number of phases anticipated: Anticipated commencement date of phase I (including demolition): Anticipated completion date of final phase: Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:	Yes ☐ No ☒

h. Does the project include new residential uses?

If Yes, show number of units proposed.

	Single Family	Two Family	Three Family	Multi-Family (4+)
Initial Phase				
At Completion				

Yes ☐ No ☒

i. Does the proposed action include new non-residential construction (including expansions)?

If Yes:

Total Number of Structures:
Dimensions of largest proposed structure:
Approximate extent of building space to be heated or cooled:

Yes ☐ No ☒

j. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?

If Yes:

Purpose of the impoundment:
If a water impoundment, the principal source of the water: Ground Water ☐; Surface Water Streams ☐; Other ☐ (specify):
If other than water, identify the type of impounded/contained liquids and their source:
Approximate size of the proposed impoundment (include units): Volume: Surface area:
Dimensions of the proposed dam or impounding structure:
Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock wood, concrete):

Yes ☐ No ☒

D.2. Project Operations

a. Does the proposed action include any excavation, mining or dredging, during construction, operations or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)

If Yes:

What is the purpose of the excavation or dredging?
How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? Volume: Over what duration of time:
Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them:

Yes ☐ No ☒

D.2.a (cont.) – only answer following if checked "Yes" above

Will there be onsite dewatering or processing of excavated materials? **If Yes**, describe:
What is the total area to be dredged or excavated?
What is the maximum area to be worked at any one time?
What would be the maximum depth of excavation or dredging?
Will the excavation require blasting? No
Summarize site reclamation goals and plans:

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, water body, shoreline, beach or adjacent area?

Yes ☐ No ☒

If Yes:

Identify the wetland or water body which would be affected (by name, water index number, wetland map number or geographic description):
Describe how the proposed action would affect that water body or wetland, e.g. excavation, fill, placement of structures or creation of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
Will proposed action cause or result in disturbance to bottom sediments? **If Yes**, describe:
Will proposed action cause or result in the destruction or removal of aquatic vegetation? **If Yes:** Area of vegetation proposed to be removed: Expected acreage of aquatic vegetation remaining after project completion: Purpose of proposed removal (e.g., beach clearing, invasive control, boat access): Proposed method of plant removal: If chemical/herbicide treatment will be used, specify product(s):
Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use or create a new demand for water?

If Yes:

Total anticipated water usage/demand per day:

Will the proposed action obtain water from an existing public water supply?

If Yes:

Name of district/service area:
Does the existing public water supply have capacity to serve the proposal? Yes ☐ No ☐
Is the project site in the existing district? Yes ☐ No ☐
Is expansion of the district needed? Yes ☐ No ☐
Do existing lines serve the project site? Yes ☐ No ☐

Will line extension within an existing district be necessary to supply the project?

Yes ☐ No ☒

If Yes:

Describe extensions or capacity expansions proposed to serve this project:
Source(s) of supply for the district:

Is a new water supply district or service area proposed to be formed to serve the project site?

If Yes:

Applicant/sponsor for new district:
Date application submitted or anticipated:
Proposed source(s) of supply for new district:

If a public water supply will not be used, describe plans to provide water supply for the project:

If water supply will be from wells (public or private), what will be the maximum pumping capacity?

d. Will the proposed action generate liquid wastes?

If Yes:

Total anticipated liquid waste generation per day:

Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):

If sanitary wastewater identify proposed disinfection technology and treatment goals for the following:

Disinfection technology:
Nitrogen:
Phosphorus:
Total Suspended Soilds (TSS):
Biological Oxygen Demand (BOD):

Will the proposed action use any existing public wastewater treatment facilities?

Yes ☐ No ☒

If Yes:

Name of wastewater treatment plant to be used:

Name of district:

Does the existing wastewater treatment plant have capacity to serve the project?
Yes ☐ No ☐

Is the project site in the existing district?
Yes ☐ No ☐

Is expansion of the district needed?
Yes ☐ No ☐

Do existing sewer lines serve the project site?
Yes ☐ No ☐

Will line extension within an existing district be necessary to serve the project?

If Yes:

Describe extensions or capacity expansions proposed to serve this project:

Will a new wastewater (sewage) treatment district be formed to serve the project site?

If Yes:

Applicant/Sponsor for new district:

Date application submitted or anticipated:

What is the receiving water for the wastewater discharge?

If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

Describe any plans or designs to capture, recycle or reuse liquid waste:

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?	
If Yes: How much impervious surface will the project create in relation to total size of project parcel? Area of Impervious Surface: Area of Parcel: Describe types of new point sources: Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? If to surface waters, identify receiving water bodies or wetlands: Will stormwater runoff flow to adjacent properties? Yes ☐ No ☐ Does proposed plan minimize impervious surfaces use pervious materials or collect and re-use stormwater? Yes ☐ No ☐	Yes ☒ No ☐
f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? **If Yes,** identify: Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles): Heavy construction equipment, delivery vehicles Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers): Stationary sources during operations (e.g., process emissions, large boilers, electric generation):	Yes ☒ No ☐
g. Will any air emission sources named in D.2.f (above) require a NY State Air Registration, Air Facility Permit or Federal Clean Air Act Title IV or Title V Permit? **If Yes:** Is the project site located in an Air Quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) Yes ☐ No ☐ In addition to emissions as calculated in the application, the project will generate: - Tons/year (metric) of Carbon Dioxide (CO_2) - Tons/year (metric) of Nitrous Oxide (N_2O) - Tons/year (metric) of Perfluorocarbons (PFCs) - Tons/year (metric) of Sulfur Hexafluoride (SF_6) - Tons/year (metric) of Carbon Dioxide equivalent of Hydroflorocarbons (HFCS) - Tons/year (metric) of Hazardous Air Pollutants (HAPs)	Yes ☐ No ☒

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? **If Yes:** Estimate methane generation in tons/year (metric): Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring):	Yes ☐ No ☒
i. Will the proposed action result in the release of air pollutants from open-air operations or processes such as quarry or landfill operations? **If Yes,** describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):	Yes ☐ No ☒
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? **If Yes:** When is the peak traffic expected? (check all that apply) Morning ☐; Evening ☐; Weekend ☐; Randomly ☐ between the hours of to For commercial activities only, projected number of semi-trailer truck trips/day: Parking spaces: Existing: Proposed: Net Increase/Decrease: Does the proposed action include any shared use parking? Yes ☐ No ☐ If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? Yes ☐ No ☐ Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes ☐ No ☐ Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes ☐ No ☐	Yes ☐ No ☒
k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? **If Yes:** Estimate annual electricity demand during operation of the proposed action: Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility or other): Will the proposed action require a new, or an upgrade to, an existing substation? Yes ☐ No ☐	Yes ☐ No ☒

l. Hours of operation (Answer all items which apply)

During Construction	During Operations
Monday-Friday:	Monday-Friday:
Saturday:	Saturday:
Sunday:	Sunday:
Holidays:	Holidays:

N/A ☒

m. Does the proposed action produce noise that will exceed existing ambient noise levels during construction, operation or both?

Yes ☒ No ☐

If Yes:

Provide details including sources, time of day and duration: Construction anticipated to take place 8 AM - 5 PM

Will proposed action remove existing natural barriers that could act as a noise barrier or screen?
Yes ☐ No ☐ Describe:

n. Will the proposed action have outdoor lighting?

Yes ☒ No ☐

If Yes:

Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: Relocation of existing highway lighting

Will proposed action remove existing natural barriers that could act as a light barrier or screen?
Yes ☐ No ☒ Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day?

Yes ☒ No ☐

If Yes:

Describe possible sources, potential frequency and duration of odor emissions and proximity to nearest occupied structures: During construction activities, from construction vehicles.

p. Will the proposed action include any bulk storage of petroleum (over 1,100 gallons) or chemical products (over 550 gallons)?

Yes ☐ No ☒

If Yes:

Product(s) to be stored:

Volume(s): per unit time: (e.g., month, year)

Generally describe proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?

Yes ☐ No ☒

If Yes:

Describe proposed treatment(s):

Will the proposed action use Integrated Pest Management Practices?
Yes ☐ No ☐

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?

Yes ☐ No ☒

If Yes:

Describe any solid waste(s) to be generated during construction or operation of the facility:

Construction:	tons per	(unit of time)
Operation:	tons per	(unit of time)

Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

Construction:
Operation:

Proposed disposal methods/facilities for solid waste generated on-site:

Construction:
Operation:

s. Does the proposed action include construction or modification of a solid waste management facility?

Yes ☐ No ☒

If Yes:

Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill or other disposal activities):

Anticipated rate of disposal/processing:

tons/month, if transfer or other non-combustion/thermal treatment, or

tons/hour, if combustion or thermal treatment

If landfill, anticipated site life: years

t. Will proposed action at the site involve the commercial generation, treatment, storage or disposal of hazardous waste?

Yes ☐ No ☒

If Yes:

Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility:

Generally describe processes or activities involving hazardous wastes or constituents:

Specify amount to be handled or generated:
tons/month

Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents:

Will any hazardous wastes be disposed at an existing offsite hazardous waste facility?
Yes ☐ No ☐

If Yes:

Provide name and location of facility:

If No:

Describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

u. Will proposed action adhere to Leadership in Energy and Environmental Design (LEED) or any other green building principals? **If Yes:** Describe proposed green building methods and attempted level of certification, if any:	Yes ☐ No ☒
v. Does the project sponsor propose the use of energy benchmarking to monitor and adjust project energy needs? **If Yes, explain:**	Yes ☐ No ☒
w. Will the proposed action use native plants for all landscaping needs? **Identify species to be used and method of irrigation:**	Yes ☒ No ☐
x. Does the proposed action promote local tourism? **If Yes, explain:**	Yes ☐ No ☒

E. Site and Setting of Proposed Action

E.1. Land Uses on and Surrounding the Project Site

a. Existing land uses (Check all uses the occur on, adjoining and near the project site): (include map)

Urban ☐ Industrial ☐ Commercial ☐ Residential ☒ Rural ☒
Forest ☐ Agriculture ☐ Aquatic ☐ Other ☐ Specify:

If mix of uses, generally describe:

b. Land uses and cover types on the project site:

Land Use or Cover Type	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
Roads, buildings and other paved or impervious surfaces	1.28	1.58	+ 0.3
Forested			
Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.81	0.51	- 0.3
Agricultural (includes active orchards, fields, greenhouse, etc.)			
Surface water features (lakes, ponds, streams, rivers, etc.)			
Wetlands (freshwater or tidal)			
Non-Vegetated (bare rock, earth or fill)			
Other Describe:			
TOTAL:	2.09	2.09	0

c. Is the project site presently used by members of the community for public recreation? **If Yes,** explain:	Yes ☐ No ☒
d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers or group homes) within 1,500 feet of the project site? **If Yes,** identify facilities:	Yes ☐ No ☒
e. Does the project site contain an existing dam? **If Yes:** Dimensions of the dam and impoundment: - Dam height: feet - Dam length: feet - Surface area: acres - Volume impounded: gallons or acre-feet Dam's existing hazard classification: Provide date and summarize results of last inspection:	Yes ☐ No ☒
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? **If Yes:** Has the facility been formally closed? Yes ☐ No ☐ If Yes, cite sources/documentation: Describe the location of the project site relative to the boundaries of the solid waste management facility: Describe any development constraints due to the prior solid waste activities:	Yes ☐ No ☒
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? **If Yes:** Describe waste(s) handled and waste management activities, including approximate time when activities occurred:	Yes ☐ No ☒

h. Has there been a reported contamination spill at the proposed project site or have any remedial actions been conducted at or adjacent to the proposed site?

Yes ☐ No ☒

If Yes:

Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? (Check all that apply)

☐ Yes – Spills Incidents database — Provide DEC ID number(s):
☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s):
☐ Neither database

If site has been subject to RCRA corrective activities, describe control measures:

Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes ☐ No ☐

If Yes:

DEC ID number(s):

Describe current status of site(s):

E.1.h. (cont.) – only answer following if checked "Yes" above

Is the project site subject to an institutional control limiting property uses?

If Yes:

DEC site ID number(s):

Describe the type of institutional control (e.g., deed restriction or easement):

Describe any use limitations:

Describe any engineering controls:

Will the project affect the institutional or engineering controls in place? Yes ☐ No ☐
Explain:

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site:
>400 feet

b. Are there bedrock outcroppings on the project site?

Yes ☐ No ☒

If Yes:

What proportion of the site is comprised of bedrock outcroppings?
%

c. Predominant soil type(s) present on project site: (include map)

1. Riverhead and Haven Soils	100% of site
2.	% of site
3.	% of site
4.	% of site

d. What is the average depth to the water table on the project site?
35 feet

e. Drainage status of project site soils:

1.	☒ Well Drained	100% of site
2.	☐ Moderately Well Drained	% of site
3.	☐ Poorly Drained	% of site

f. Approximate proportion of proposed action site with slopes: (include topographic map)

1.	☒ 0-10%	100% of site
2.	☐ 11-15%	% of site
3.	☐ 16% or greater	% of site

g. Are there any unique geologic features on the project site? Yes ☐ No ☒

If Yes, describe:

h. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes ☐ No ☒

i. Do any wetlands or other waterbodies adjoin the project site? Yes ☐ No ☒

If Yes to either E.2.h or E.2.i, continue. If No, skip to E.2.m

j. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? (include map) Yes ☐ No ☐

k. For each identified wetland and waterbody on the project site, provide the following information:

Streams:	Name:	Classification:
Lakes or Ponds:	Name:	Classification:
Wetlands:	Name:	Approx. Size:
Wetland No. (if regulated by DEC):		

l. Are any of the above waterbodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes ☐ No ☐

If Yes, name of impaired water body/bodies and basis for listing as impaired:

m. Is the project site in a designated floodway? Yes ☐ No ☒

n. Is the project site in the 100 year floodplain? Yes ☐ No ☒

o. Is the project site in the 500 year floodplain? Yes ☐ No ☒

p. Is the project site located over or immediately adjoining a primary, principal or sole source aquifer? Yes ☒ No ☐

If Yes:

Name of aquifer: Magothy Upper Glacial Aquifer
Source of information: Suffolk County Department of Health

q. Identify the predominant wildlife species that occupy or use the project site:

Oak, Pine, Maple, Grass,	Typical roadside vegetation	
Common indigineous land mamals and birds of Suffolk County		

r. Does the project site contain a designated significant natural community? Yes ☐ No ☒

If Yes:

Describe the habitat/community (composition, function and basis for designation:
Source(s) of description or evaluation:
Extent of community/habitat: - Currently: acres - Following completion of project as proposed: acres - Gain or loss (indicate + or –): acres

s. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? Yes ☐ No ☒

If Yes:

Species and listing (endangered or threatened):
Nature of use of site by the species (e.g., resident, seasonal, transient):

t. Does project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? Yes ☐ No ☒

If Yes:

Species and listing:
Nature of use of site by the species (e.g., resident, seasonal, transient):

u. Is the project site or adjoining area currently used for hunting, trapping, fishing or shellfishing? Yes ☐ No ☒

If Yes, give a brief description of how the proposed action may affect that use:

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? Yes ☐ No ☒

If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? Yes ☐ No ☒

If Yes:

Acreage(s) on project site:
Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to a registered National Natural Landmark? **If Yes:** Nature of the natural landmark: ☐ Biological Community; ☐ Geological Feature Provide brief description of landmark, including values behind designation and approximate size/extent:	Yes ☐ No ☒
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area, including Special Groundwater Protection Areas? **If Yes:** CEA name: Basis for designation: Designating agency and date:	Yes ☐ No ☒
e. Does the project site contain, or is it substantially contiguous to, a building, archeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places? **If Yes:** Nature of historic/archaeological resource: ☐ Archaeological Site; ☐ Historic Building or district Name: Brief description of attributes on which listing is based:	Yes ☐ No ☒
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	Yes ☐ No ☒
g. Have additional archaeological or historic site(s) or resources been identified on the project site? **If Yes:** Describe possible resource(s): Basis for identification:	Yes ☐ No ☒
h. Would the project site be visible from any officially designated and publicly assessable federal, state or local scenic or aesthetic resource? **If Yes:** Identify resource: Nature of, or basis for designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Distance between project and resource:	Yes ☐ No ☒
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR Part 666? **If Yes:** Identify the name of the river and its designation: Is the activity consistent with development restrictions contained in 6 NYCRR Part 666? Yes ☐ No ☐	Yes ☐ No ☒

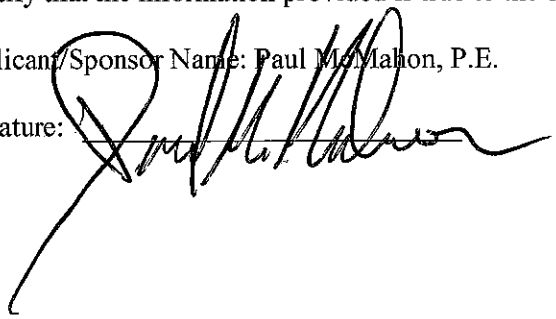
F. Additional Information

Attach any additional information which may be needed to clarify your project.
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name: Paul McMahon, P.E. Date: 8/28/2017

Signature:  Title: Principal Civil Engineer

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 2 – Identification of Potential Project Impacts

Instructions: Part 2 is to be completed by the lead agency. It is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

Tips for completing Part 2:

- _____ Review all of the information provided in Part 1.
- _____ Review any application, maps, supporting materials and the Full EAF Workbook.
- _____ Answer each of the 18 questions in Part 2.
- _____ If you answer "**YES**" to a numbered question, please complete all the questions that follow in that section.
- _____ If you answer "**NO**" to a numbered question, move on to the next numbered section.
- _____ Check appropriate column to indicate the anticipated size of the impact.
- _____ Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "**Moderate to large impact may occur**."
- _____ The reviewer is not expected to be an expert in environmental analysis.
- _____ If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- _____ When answering a question consider all components of the proposed activity, that is, the "whole action."
- _____ Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- _____ Answer the question in a reasonable manner considering the scale and context of the project.

1. _____ Impact on Land
The proposed action may involve construction on, or physical alteration of the land surface of the proposed site. (See Part 1.D.1)
If "YES", answer questions a-h. If "NO", move on to Section 2.
YES ☒ NO ☐

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may involve construction on land where depth to water table is less than 3 feet.	E.2.d	☒	☐
b. _____ The proposed actin may involve construction on slopes of 15% or greater.	E.2.f	☒	☐
c. _____ The proposed actin may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E.2.a	☒	☐
d. _____ The proposed action may involve the excavation and removal of more than 1,000 tons of natural	D.2.a	☒	☐

material.			
e. _____ The proposed action may involve construction that continues for more than one year or in multiple phases.	D.1.g	☒	☐
f. _____ The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D.2.e D.2.q	☒	☐
g. _____ The proposed action is, or may be, located within a Coastal Erosion hazard area.	B.*ix*	☒	☐
h. _____ Other impacts:		☐	☐

2. _____ Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1.E.2.g)

YES ☐ NO ☒

If "YES", answer questions a-c. If "NO", move on to Section 3.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Identify the specific land form(s):	E.2.g	☐	☐
b. _____ The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature:	E.3.c	☐	☐
c. _____ Other impacts:		☐	☐

3. _____ Impact on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes).
(See Part 1.D.2 & E.2.h)

YES ☐ NO ☒

If "YES", answer questions a-l. If "NO", move on to Section 4.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may create a new water body	D.1.j D.2.b	☐	☐
b. _____ The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D.2.b	☐	☐
c. _____ The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D.2.a	☐	☐
d. _____ The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E.2.h E.2.i	☐	☐
e. _____ The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by	D.2.a D.2.h	☐	☐

disturbing bottom sediments.			
f. _____ The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D.2.c	☐	☐
g. _____ The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D.2.d	☐	☐
h. _____ The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D.2.e	☐	☐
i. _____ The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E.2.h – E.2.l	☐	☐
j. _____ The proposed action may involve the application of pesticides or herbicides in or around any water body.	D.2.q E.2.h – E.2.l	☐	☐
k. _____ The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D.1.a D.2.d	☐	☐
l. _____ Other impacts:		☐	☐

4. _____ Impact on Groundwater

The proposed action may result in new or additional use of groundwater, or may have the potential to introduce contaminants to groundwater or an aquifer. (See Part 1.D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) YES ☐ NO ☒

If "YES", answer questions a-h. If "NO", move on to Section 5.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D.2.c	☐	☐
b. _____ Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source:	D.2.c	☐	☐
c. _____ The proposed action may allow or result in residential uses in areas without water and sewer services.	D.1.a D.2.c – D.2.d	☐	☐
d. _____ The proposed action may include or require wastewater discharged to groundwater.	D.2.d E.2.p	☐	☐
e. _____ The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D.2.c E.1.f – E.1.h	☐	☐
f. _____ The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D.2.p E.2.p	☐	☐
g. _____ The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	D.2.q E.2.h – E.2.l E.2.p D.2.c	☐	☐

h. _____ Other impacts:	☒	☐	☐

5. _____ Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1.E.2) YES ☐ NO ☒

If "YES", answer questions a-g. If "NO", move on to Section 6.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in development in a designated floodway.	E.2.m	☐	☐
b. _____ The proposed action may result in development within a 100 year floodplain.	E.2.n	☐	☐
c. _____ The proposed action may result in development within a 500 year floodplain.	E.2.o	☐	☐
d. _____ The proposed action may result in, or require, modification of existing drainage patterns.	D.2.b D.2.e	☐	☐
e. _____ The proposed action may change flood water flows that contribute to flooding.	D.2.b E.2.m – E.2.o	☐	☐
f. _____ If there is a dam located on the site of the proposed action, the dam has failed to meet one or more safety criteria on its most recent inspection.	E.1.e	☐	☐
g. _____ Other impacts:	☒	☐	☐

6. _____ Impact on Air

The proposed action may include a state regulated air emission source. (See Part 1.D.2.f, D.2.h, D.2.g) YES ☐ NO ☒

If "YES", answer questions a-f. If "NO", move on to Section 7.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. _____ More than 1000 tons/year of carbon dioxide (CO2)	D.2.g	☐	☐
ii. _____ More than 3.5 tons/year of nitrous oxide (N20)	D.2.g	☐	☐
iii. _____ More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D.2.g	☐	☐
iv. _____ More than .045 tons/year of sulfur hexafluoride (SF6)	D.2.g	☐	☐
v. _____ More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflurocarbons (HCFCs) emissions	D.2.g	☐	☐
vi. 43 tons/year or more of methane	D.2.h	☐	☐
b. _____ The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous	D.2.g	☐	☐

air pollutants.			
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU=s per hour.	D.2.f D.3.g	☐	☐
d. _____ The proposed action may reach 50% of any two or more of the thresholds in "a" through "c", above.	D.1.i D.2.k	☐	☐
e. _____ The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D.2.s	☐	☐
f. _____ Other impacts:		☐	☐

7. _____ **Impact on Plants and Animals**

The proposed action may result in a loss of flora or fauna. YES ☒ NO ☐

(See Part 1.E.2.q – E.2.u)

If "YES", answer questions a-j. If "NO", move on to Section 8.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.s	☒	☐
b. _____ The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E.2.s	☒	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.t	☒	☐
d. _____ The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E.2.t	☒	☐
e. _____ The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E.3.c	☒	☐
f._____ The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source:	E.2.r	☒	☐
g. _____ The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E.2.q	☒	☐
h. _____ The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source:	E.1.b	☒	☐
i._____ Proposed action (commercial, industrial or recreational projects, only) involves use of	D.2.q	☒	☐

herbicides or pesticides.			
j. _____ Other impacts:		☐	☐

8. _____ Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1.E.3.a & E.3.b) YES ☐ NO ☒

If "YES", answer questions a-h. If "NO", move on to Section 9.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E.2.c E.3.b	☐	☐
b. _____ The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.).	E.1.a E.1.b	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E.3.b	☐	☐
d. _____ The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District or more than 10 acres if not within an Agricultural District.	E.1.b E.3.a	☐	☐
e. _____ The proposed action may disrupt or prevent installation of an agricultural land management system.	E.1.a E.1.b	☐	☐
f. _____ The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C.2.c, C.3 D.2.c, D.2.d	☐	☐
g. _____ The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C.2.c	☐	☐
h. _____ Other impacts:		☐	☐

9. _____ Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (See Part 1.E.1.a, E.1.b, E.3.h) YES ☐ NO ☒

If "YES", answer questions a-g and complete Appendix B - Visual EAF Addendum. If "NO", move on to Section 10.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E.3.h	☐	☐
b. _____ The proposed action may	C.2.b	☐	☐

result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E.3.h		
c. The proposed action may be visible from publicly accessible vantage points:			
i. Seasonally (e.g., screened by summer foliage, but visible during other seasons)	E.3.h	☐	☐
ii. Year round	E.3.h	☐	☐
d. _____ The situation or activity in which viewers are engaged while viewing the proposed action is:	E.3.h		
i. Routine travel by residents, including travel to and from work	E.2.u	☐	☐
ii. Recreational or tourism based activities	E.1.c	☐	☐
e. _____ The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E.3.h	☐	☐
f. _____ There are similar projects visible within the following distance of the proposed project:	D.1.a		
0 – ½ mile	D.1.h	☐	☐
½ – 3 mile	D.1.i	☐	☐
3 – 5 mile	E.1.a	☐	☐
5+ mile		☐	☐
g. _____ Other impacts:		☐	☐

10. _____ Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to an historic or archaeological resource. (See Part 1.E.3.e, E.3.f, E.3.g) YES ☐ NO ☒

If "YES", answer questions a-e. If "NO", move on to Section 11.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E.3.e	☐	☐
b. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E.3.f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source:	E.3.g	☐	☐
d. _____ Other impacts:		☐	☐
e. _____ If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E.3.e – E.3g	☐	☐

ii. The proposed action may result in the alteration of the property's setting or integrity. iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E.1.a, E.1.b E.3.e – E.3.g C2, C3 E.3.g, E.3.h	☐ ☐	☐ ☐

11. _____ Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1.C.2.c, E.1.c, E.2.u)

YES ☐ NO ☒

If "YES", answer questions a-e. If "NO", move on to Section 12.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, and wildlife habitat.	D.2.e, E.1.b E.2.h – E.2.l E.2.q – E.2.t	☐	☐
b. _____ The proposed action may result in the loss of a current or future recreational resource.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C.2.c, E.1.c	☐	☐
e. _____ Other impacts:		☐	☐

12. _____ Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1.E.3.d)

YES ☐ NO ☒

If "YES", answer questions a-c. If "NO", move on to Section 13.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☐	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☐	☐
c. _____ Other impacts:		☐	☐

13. _____ Impact on Transportation

The proposed action may result in a change to existing transportation systems. (See Part 1.D.2.j)

YES ☒ NO ☐

If "YES", answer questions a-f. If "NO", move on to Section 14.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Projected traffic increase	D.2.j	☒	☐

may exceed capacity of existing road network.			
b. _____ The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D.2.j	☒	☐
c. _____ The proposed action will degrade existing transit access.	D.2.j	☒	☐
d. _____ The proposed action will degrade existing pedestrian or bicycle accommodations.	D.2.j	☒	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D.2.j	☒	☐
f. _____ Other impacts:		☐	☐

14. _____ Impact on Energy

The proposed action may cause an increase in the use of any form of energy (See Part 1.D.2.k) YES ☐ NO ☒

If "YES", answer questions a-e. If "NO", move on to Section 15.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action will require a new, or an upgrade to an existing, substation.	D.2.k	☐	☐
b. _____ The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D.1.h D.1.i D.2.k	☐	☐
c. _____ The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D.2.k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D.1.i	☐	☐
e. _____ Other impacts:		☐	☐

15. _____ Impact on Noise, Odor and Light

The proposed action may result in an increase in noise, odors or outdoor lighting (See Part 1.D.2.m, D.2.n, D.2.o) YES ☒ NO ☐

If "YES", answer questions a-f. If "NO", move on to Section 16.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may produce sound above noise levels established by local regulation.	D.2.m	☒	☐
b. _____ The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D.2.m E.1.d	☒	☐
c. _____ The proposed action may result in routine odors for more than one hour per day.	D.2.o	☒	☐
d. _____ The proposed action may result in light shining onto adjoining properties.	D.2.n	☒	☐
e. The proposed action may result in lighting that creates sky-glow brighter than existing-area conditions.	D.2.n E.1.a	☒	☐

f. _____ Other impacts:	☒	☐	☐

16. _____ Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants (See Part 1.D.2.q, E.1.d, E.1.f, E.1.g, E.1.h) YES ☐ NO ☒

If "YES", answer questions a-m. If "NO", move on to Section 17.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E.1.d	☐	☐
b. _____ The site of the proposed action is currently undergoing remediation.	E.1.g, E.1.h	☐	☐
c. _____ There is a completed emergency spill remediation or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E.1.g E.1.h	☐	☐
d. _____ The site of the action is subject to an institutional control limiting the use of the property (e.g. easement, deed restriction)	E.1.g E.1.h	☐	☐
e. _____ The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E.1.g E.1.h	☐	☐
f. _____ The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D.2.t	☐	☐
g. _____ The proposed action involves construction or modification of a solid waste management facility.	D.2.q E.1.f	☐	☐
h. _____ The proposed action may result in the unearthing of solid or hazardous waste.	D.2.q E.1.f	☐	☐
i. _____ The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D.2.r D.2.s	☐	☐
j. _____ The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E.1.f – E.1.h	☐	☐
k. _____ The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E.1.f E.1.g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D.2.r, D.2.s E.1.f	☐	☐
m. _____ Other impacts:	☒	☐	☐

17. _____ Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. YES ☐ NO ☒

(See Part 1.C.1, C.2, C.3)

If "YES", answer questions a-h. If "NO", move on to Section 18.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C.2, C.3, D.1.a, E.1.a, E.1.b	☐	☐
b. _____ The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C.2	☐	☐
c. _____ The proposed action is inconsistent with local land use plans or zoning regulations.	C.2, C.3	☐	☐
d. _____ The proposed action is inconsistent with any County plans, or other regional land use plans.	C.2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C.3 D.1.e, D.1.f, D.1.h, E.1.b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C.4, D.2.c, D.2.d, D.2.j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C.2.a	☐	☐
h. _____ Other impacts:	☒	☐	☐

18. _____ Consistency with Community Character

The proposed action is inconsistent with the existing community character (See Part 1.C.2, C.3, D.2, E.3) YES ☐ NO ☒

If "YES", answer questions a-g. If "NO", move on to Part 3.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E.3.e, E.3.f, E.3.g	☐	☐
b. _____ The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C.4	☐	☐
c. _____ The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C.2, C.3,D.1.h, D.1.i, E.1.a	☐	☐
d. _____ The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C.2, E.3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C.2, C.3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C.2, C.3, E.1.a, E.1.b, E.2.g – E.2.l	☐	☐
g. _____ Other impacts:	☒	☐	☐

COUNTY OF SUFFOLK

STEVEN BELLONE
COUNTY EXECUTIVE

DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING
DIVISION OF PLANNING AND ENVIRONMENT

COUNCIL ON ENVIRONMENTAL QUALITY

LAWRENCE SWANSON
Chairperson
CEQ

MEMORANDUM

TO: Interested Parties/Involved Agencies

FROM: John Corral, JC Senior Planner

DATE: October 11, 2017

RE: Proposed Woodhull's Dam Fish and Eel Passage, Town of Riverhead

Enclosed is an Environmental Assessment Form for the above referenced County project which has been submitted to the Council on Environmental Quality (CEQ) for review. Pursuant to Title 6 NYCRR Part 617 and Chapter 450 of the Suffolk County Code, the CEQ must recommend a SEQRA classification for the action and determine whether it may have a significant adverse impact on the environment which would require the preparation of a Draft Environmental Impact Statement (DEIS).

The Council would like to know your environmental concerns regarding this proposal and whether you think a DEIS or a determination of non-significance is warranted. This project will be discussed at the **October 18, 2017** CEQ meeting. If you are unable to attend the meeting to present your views, please forward any recommendations or criticisms to this office prior the date of the meeting. **If the Council has not heard from you by the meeting date, they will assume that you feel that the action will not have significant adverse environmental impacts and should proceed accordingly.**

JC/cd
Enc.

cc: John Sohngen, Assoc. Public Health Engineer
Suffolk County Department of Health Services
Andrew P. Freleng, Chief Planner
Department of Economic Development and Planning
Sean Walter, Supervisor Town of Riverhead
Jefferson Murphree, Administrator, Town of Riverhead
Carrie Meek-Gallagher, Regional Director, NYSDEC
Jeffrey Zappieri, NYSDOS
Steve Ryba, United States Army Core of Engineers

COUNTY OF SUFFOLK

STEVEN BELLONE
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF PUBLIC WORKS

DARNELL TYSON, P.E.
DEPUTY COMMISSIONER

GILBERT ANDERSON, P.E.
COMMISSIONER

THOMAS G. VAUGH
DEPUTY COMMISSIONER

October 2, 2017

Mr. Lawrence Swanson
Suffolk County Council on Environmental Quality
Department of Economic Development & Planning
PO Box 6100
H. Lee Dennison Building – 11th Floor
Veterans Memorial Highway

RE: CP 7180 -Woodhull's Dam Fish Passage

Mr. Swanson:

Enclosed herein, please find fifteen (15) copies of the following documents for the above referenced project.

- Long Environmental Assessment Form
- NYS Historic Preservation correspondence
- Soil map
- Set of project drawings

We would appreciate a project review scheduled for the Council on Environmental Quality meeting being held on October 18, 29017.

Thank you for your continued cooperation. If you have any questions or require additional information, please do not hesitate to contact this office at (631) 852-4078.

Very truly yours,

Kyle W. Swaringen, P.E., Director of
Bridges & Structures Engineering

cc: William Hillman, P.E., Chief Engineer

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 2 – Identification of Potential Project Impacts

Instructions: Part 2 is to be completed by the lead agency. It is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

Tips for completing Part 2:

- _____ Review all of the information provided in Part 1.
- _____ Review any application, maps, supporting materials and the Full EAF Workbook.
- _____ Answer each of the 18 questions in Part 2.
- _____ If you answer "**YES**" to a numbered question, please complete all the questions that follow in that section.
- _____ If you answer "**NO**" to a numbered question, move on to the next numbered section.
- _____ Check appropriate column to indicate the anticipated size of the impact.
- _____ Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "**Moderate to large impact may occur**."
- _____ The reviewer is not expected to be an expert in environmental analysis.
- _____ If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- _____ When answering a question consider all components of the proposed activity, that is, the "whole action."
- _____ Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- _____ Answer the question in a reasonable manner considering the scale and context of the project.

1. _____ **Impact on Land**
The proposed action may involve construction on, or physical alteration of the land surface of the proposed site. (See Part 1.D.1) YES ☒ NO ☐
If "YES", answer questions a-h. If "NO", move on to Section 2.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may involve construction on land where depth to water table is less than 3 feet.	E.2.d	☐	☒
b. _____ The proposed action may involve construction on slopes of 15% or greater.	E.2.f	☒	☐
c. _____ The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E.2.a	☒	☐
d. _____ The proposed action may involve the excavation and removal of more than 1,000 tons of natural	D.2.a	☒	☐

material.			
e. _____ The proposed action may involve construction that continues for more than one year or in multiple phases.	D.1.g	☒	☐
f. _____ The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D.2.e D.2.q	☒	☐
g. _____ The proposed action is, or may be, located within a Coastal Erosion hazard area.	B.*ix*	☒	☐
h. _____ Other impacts:		☐	☐

2. _____ **Impact on Geological Features**

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1.E.2.g)

YES ☐ NO ☒

If "YES", answer questions a-c. If "NO", move on to Section 3.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ Identify the specific land form(s):	E.2.g	☐	☐
b. _____ The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature:	E.3.c	☐	☐
c. _____ Other impacts:		☐	☐

3. _____ **Impact on Surface Water**

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes).
(See Part 1.D.2 & E.2.h)

YES ☒ NO ☐

If "YES", answer questions a-l. If "NO", move on to Section 4.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may create a new water body	D.1.j D.2.b	☐	☒
b. _____ The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D.2.b	☒	☐
c. _____ The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D.2.a	☒	☐
d. _____ The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E.2.h E.2.i	☐	☒
e. _____ The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by	D.2.a D.2.h	☐	☒

disturbing bottom sediments.			
f. _____ The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D.2.c	☒	☐
g. _____ The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D.2.d	☒	☐
h. _____ The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D.2.e	☒	☐
i._____ The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E.2.h – E.2.l	☒	☐
j._____ The proposed action may involve the application of pesticides or herbicides in or around any water body.	D.2.q E.2.h – E.2.l	☒	☐
k. _____ The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D.1.a D.2.d	☒	☐
l._____ Other impacts:		☐	☐

4. _____ **Impact on Groundwater**
The proposed action may result in new or additional use of groundwater, or may have the potential to introduce contaminants to groundwater or an aquifer. (See Part 1.D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "YES", answer questions a-h. If "NO", move on to Section 5.

YES ☒ NO ☐

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D.2.c	☒	☐
b. _____ Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source:	D.2.c	☒	☐
c. _____ The proposed action may allow or result in residential uses in areas without water and sewer services.	D.1.a D.2.c – D.2.d	☒	☐
d. _____ The proposed action may include or require wastewater discharged to groundwater.	D.2.d E.2.p	☒	☐
e. _____ The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D.2.c E.1.f – E.1.h	☒	☐
f. _____ The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D.2.p E.2.p	☒	☐
g. _____ The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	D.2.q E.2.h – E.2.l E.2.p D.2.c	☒	☐

h. _____ Other impacts:		☐	☐

5. _____ **Impact on Flooding**

The proposed action may result in development on lands subject to flooding. (See Part 1.E.2) YES ☒ NO ☐

If "YES", answer questions a-g. If "NO", move on to Section 6.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in development in a designated floodway.	E.2.m	☒	☐
b. _____ The proposed action may result in development within a 100 year floodplain.	E.2.n	☐	☒
c. _____ The proposed action may result in development within a 500 year floodplain.	E.2.o	☒	☐
d. _____ The proposed action may result in, or require, modification of existing drainage patterns.	D.2.b D.2.e	☒	☐
e. _____ The proposed action may change flood water flows that contribute to flooding.	D.2.b E.2.m – E.2.o	☒	☐
f._____ If there is a dam located on the site of the proposed action, the dam has failed to meet one or more safety criteria on its most recent inspection.	E.1.e	☒	☐
g. _____ Other impacts:		☐	☐

6. _____ **Impact on Air**

The proposed action may include a state regulated air emission source. (See Part 1.D.2.f, D.2.h, D.2.g) YES ☐ NO ☒

If "YES", answer questions a-f. If "NO", move on to Section 7.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. _____ More than 1000 tons/year of carbon dioxide (CO2)	D.2.g	☐	☐
ii. _____ More than 3.5 tons/year of nitrous oxide (N20)	D.2.g	☐	☐
iii. _____ More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D.2.g	☐	☐
iv. _____ More than .045 tons/year of sulfur hexafluoride (SF6)	D.2.g	☐	☐
v. _____ More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflurocarbons (HCFCs) emissions	D.2.g	☐	☐
vi. 43 tons/year or more of methane	D.2.h	☐	☐
b. _____ The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous	D.2.g	☐	☐

air pollutants.			
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU=s per hour.	D.2.f D.3.g	☐	☐
d. _____ The proposed action may reach 50% of any two or more of the thresholds in "a" through "c", above.	D.1.i D.2.k	☐	☐
e. _____ The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D.2.s	☐	☐
f. _____ Other impacts:	☒	☐	☐

7. _____ Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. YES ☒ NO ☐

(See Part 1.E.2.q – E.2.u)

If "YES", answer questions a-j. If "NO", move on to Section 8.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.s	☒	☐
b. _____ The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E.2.s	☒	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.t	☒	☐
d. _____ The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E.2.t	☒	☐
e. _____ The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E.3.c	☒	☐
f._____ The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source:	E.2.r	☒	☐
g. _____ The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E.2.q	☒	☐
h. _____ The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source:	E.1.b	☒	☐
i._____ Proposed action (commercial, industrial or recreational projects, only) involves use of	D.2.q	☒	☐

herbicides or pesticides.			
j._____ Other impacts:		☐	☐

8. _____ **Impact on Agricultural Resources**

The proposed action may impact agricultural resources. (See Part 1.E.3.a & E.3.b) YES ☐ NO ☒

If "YES", answer questions a-h. If "NO", move on to Section 9.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E.2.c E.3.b	☐	☐
b. _____ The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.).	E.1.a E.1.b	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E.3.b	☐	☐
d. _____ The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District or more than 10 acres if not within an Agricultural District.	E.1.b E.3.a	☐	☐
e. _____ The proposed action may disrupt or prevent installation of an agricultural land management system.	E.1.a E.1.b	☐	☐
f._____ The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C.2.c, C.3 D.2.c, D.2.d	☐	☐
g. _____ The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C.2.c	☐	☐
h. _____ Other impacts:		☐	☐

9. _____ **Impact on Aesthetic Resources**

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (See Part 1.E.1.a, E.1.b, E.3.h) YES ☐ NO ☒

If "YES", answer questions a-g and complete Appendix B - Visual EAF Addendum. If "NO", move on to Section 10.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E.3.h	☐	☐
b. _____ The proposed action may	C.2.b	☐	☐

result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E.3.h		
c. The proposed action may be visible from publicly accessible vantage points:			
i. Seasonally (e.g., screened by summer foliage, but visible during other seasons)	E.3.h	☐	☐
ii. Year round	E.3.h	☐	☐
d. _____ The situation or activity in which viewers are engaged while viewing the proposed action is:	E.3.h		
i. Routine travel by residents, including travel to and from work	E.2.u	☐	☐
ii. Recreational or tourism based activities	E.1.c	☐	☐
e. _____ The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E.3.h	☐	☐
f._____ There are similar projects visible within the following distance of the proposed project:	D.1.a		
0 – ½ mile	D.1.h	☐	☐
½ – 3 mile	D.1.i	☐	☐
3 – 5 mile	E.1.a	☐	☐
5+ mile		☐	☐
g. _____ Other impacts:		☐	☐

10. _____ Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to an historic or archaeological resource. (See Part 1.E.3.e, E.3.f, E.3.g) YES ☐ NO ☒

If "YES", answer questions a-e. If "NO", move on to Section 11.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E.3.e	☐	☐
b. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E.3.f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source:	E.3.g	☐	☐
d. _____ Other impacts:		☐	☐
e. _____ If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E.3.e – E.3g	☐	☐

ii. The proposed action may result in the alteration of the property's setting or integrity.	E.1.a, E.1.b E.3.e – E.3.g	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	C2, C3 E.3.g, E.3.h	☐	☐

11. _____ Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1.C.2.c, E.1.c, E.2.u)

YES ☐ NO ☒

If "YES", answer questions a-e. If "NO", move on to Section 12.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, and wildlife habitat.	D.2.e, E.1.b E.2.h – E.2.l E.2.q – E.2.t	☐	☐
b. _____ The proposed action may result in the loss of a current or future recreational resource.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C.2.c, E.1.c	☐	☐
e. _____ Other impacts:		☐	☐

12. _____ Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1.E.3.d)

YES ☒ NO ☐

If "YES", answer questions a-c. If "NO", move on to Section 13.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☒	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☒	☐
c. _____ Other impacts:		☐	☐

13. _____ Impact on Transportation

The proposed action may result in a change to existing transportation systems. (See Part 1.D.2.j)

YES ☐ NO ☒

If "YES", answer questions a-f. If "NO", move on to Section 14.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Projected traffic increase	D.2.j	☐	☐

may exceed capacity of existing road network.			
b. _____ The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D.2.j	☐	☐
c. _____ The proposed action will degrade existing transit access.	D.2.j	☐	☐
d. _____ The proposed action will degrade existing pedestrian or bicycle accommodations.	D.2.j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D.2.j	☐	☐
f._____ Other impacts:		☐	☐

14. _____ **Impact on Energy**
The proposed action may cause an increase in the use of any form of energy (See Part 1.D.2.k) YES ☐ NO ☒
If "YES", answer questions a-e. If "NO", move on to Section 15.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action will require a new, or an upgrade to an existing, substation.	D.2.k	☐	☐
b. _____ The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D.1.h D.1.i D.2.k	☐	☐
c. _____ The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D.2.k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D.1.i	☐	☐
e. _____ Other impacts:		☐	☐

15. _____ **Impact on Noise, Odor and Light**
The proposed action may result in an increase in noise, odors or outdoor lighting (See Part 1.D.2.m, D.2.n, D.2.o) YES ☒ NO ☐
If "YES", answer questions a-f. If "NO", move on to Section 16.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may produce sound above noise levels established by local regulation.	D.2.m	☒	☐
b. _____ The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D.2.m E.1.d	☒	☐
c. _____ The proposed action may result in routine odors for more than one hour per day.	D.2.o	☒	☐
d. _____ The proposed action may result in light shining onto adjoining properties.	D.2.n	☒	☐
e. The proposed action may result in lighting that creates sky-glow brighter than existing-area conditions.	D.2.n E.1.a	☒	☐

f._____ Other impacts:		☐	☐

16. _____ Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants (See Part 1.D.2.q, E.1.d, E.1.f, E.1.g, E.1.h) YES ☐ NO ☒

If "YES", answer questions a-m. If "NO", move on to Section 17.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E.1.d	☐	☐
b. _____ The site of the proposed action is currently undergoing remediation.	E.1.g, E.1.h	☐	☐
c. _____ There is a completed emergency spill remediation or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E.1.g E.1.h	☐	☐
d. _____ The site of the action is subject to an institutional control limiting the use of the property (e.g. easement, deed restriction)	E.1.g E.1.h	☐	☐
e. _____ The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E.1.g E.1.h	☐	☐
f._____ The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D.2.t	☐	☐
g. _____ The proposed action involves construction or modification of a solid waste management facility.	D.2.q E.1.f	☐	☐
h. _____ The proposed action may result in the unearthing of solid or hazardous waste.	D.2.q E.1.f	☐	☐
i._____ The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D.2.r D.2.s	☐	☐
j._____ The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E.1.f – E.1.h	☐	☐
k. _____ The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E.1.f E.1.g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D.2.r, D.2.s E.1.f	☐	☐
m._____ Other impacts:		☐	☐

17. _____ Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. (See Part 1.C.1, C.2, C.3) YES ☐ NO ☒

If "YES", answer questions a-h. If "NO", move on to Section 18.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C.2, C.3, D.1.a, E.1.a, E.1.b	☐	☐
b. _____ The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C.2	☐	☐
c. _____ The proposed action is inconsistent with local land use plans or zoning regulations.	C.2, C.3	☐	☐
d. _____ The proposed action is inconsistent with any County plans, or other regional land use plans.	C.2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C.3 D.1.e, D.1.f, D.1.h, E.1.b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C.4, D.2.c, D.2.d, D.2.j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C.2.a	☐	☐
h. _____ Other impacts:	☒	☐	☐

18. _____ Consistency with Community Character

The proposed action is inconsistent with the existing community character (See Part 1.C.2, C.3, D.2, E.3) YES ☐ NO ☒

If "YES", answer questions a-g. If "NO", move on to Part 3.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E.3.e, E.3.f, E.3.g	☐	☐
b. _____ The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C.4	☐	☐
c. _____ The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C.2, C.3,D.1.h, D.1.i, E.1.a	☐	☐
d. _____ The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C.2, E.3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C.2, C.3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C.2, C.3, E.1.a, E.1.b, E.2.g – E.2.l	☐	☐
g. _____ Other impacts:	☒	☐	☐

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 3 – Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

* _____ Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
* _____ Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
* _____ The assessment should take into consideration any design element or project changes.
* _____ Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
* _____ Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
* _____ For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
* _____ Attach additional sheets, as needed.

See Attached EAF Part III for Woodhill's Dam Fish Passage

Determination of Significance
Type 1 and Unlisted Actions

SEQR Status: Type I ☐ Unlisted ☐

Identify portions of EAF completed for this project: Part 1 ☐ Part 2 ☐ Part 3 ☐

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of as lead agency that:

☐ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:

Name of Lead Agency:

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer in Lead Agency:

Signature of Responsible Officer in Lead Agency: Date:

Signature of Preparer (if different from Responsible Officer) Date:

For Further Information:
Contact Person:
Address:
Telephone Number:
Email:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:
Chief Executive Officer of the political subdivision in which the action will be principally located (Town/City/Village)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

SUFFOLK COUNTY
ENVIRONMENTAL ASSESSMENT FORM

Appendix A
Suffolk County Historic Trust

Application for Determination of Appropriateness for Alteration to Suffolk County Historic Trust Landmark or Site

1. APPLICANT
   Agency:
   Contact Person:
   Address:
   Telephone:

2. PROPERTY
   Structure Name:
   Location:
   Historic Trust Status: ☐ Designated; ☐ Eligible
   Use Category:
   Current Use:
   Proposed Use:
   Is the structure listed on or eligible for the National Register of Historic Places? ☐ Yes; ☐ No

3. PROPOSED WORK
   Scope of Work:
   Reason for Work:
   Architect/Engineer:
   Contractor:
   Construction Schedule:

4. FUNDING
   Estimated Cost of Project:
   Source(s) of Funding:

5. PROPERTY HISTORY
   Date of Original Construction:
   Original Architect/Builder:
   History of Use:
   History of Alterations:

6. SUBMISSIONS (check all that apply)

☐ Map	☐ Specifications	☐ Samples
☐ Drawings	☐ Environmental Assessment Form	☐ Other:
☐ HP-1 Form	☐ Photographs	

7. RELATED INFORMATION AND COMMENT:

The Suffolk County Historic Trust is hereby requested to review the scope of work proposed for the above mentioned landmark structure, owned by the County of Suffolk, New York, to determine the appropriateness of design and/or use as regulated by the Suffolk County Charter. Design review guidelines have been made available for reference and it is understood that submission or approval of this application does not relieve applicant's responsibility for securing any and all other permits and approvals as required by law.

SUFFOLK COUNTY
ENVIRONMENTAL ASSESSMENT FORM

Appendix B
Visual EAF Addendum

This form may be used to provide additional information relating to Question 9 of Part 1 of the Full Environmental Assessment Form

VISIBILITY

1. Would the project be visible from:	Distance Between Project and Resource (in miles) 0 - ¼	¼ - ½	½ -3	3-5	5+
a. A parcel of land which is dedicated to and available to the public for the use, enjoyment and appreciation of natural or man-made scenic qualities	☐	☐	☐	☐	☐
b. An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities	☐	☐	☐	☐	☐
c. A site or structure listed on the National or State Registers of Historic Places	☐	☐	☐	☐	☐
d. State Parks	☐	☐	☐	☐	☐
e. The State Forest Preserve	☐	☐	☐	☐	☐
f. National Wildlife Refuges and State Game Refuges	☐	☐	☐	☐	☐
g. National Natural Landmarks and other outstanding natural features	☐	☐	☐	☐	☐
h. National Park Service lands	☐	☐	☐	☐	☐
i. Rivers designated as National or State Wild, Scenic or Recreational	☐	☐	☐	☐	☐
j. Any transportation corridor of high exposure, such as part of the Interstate System or Amtrak	☐	☐	☐	☐	☐
k. A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation	☐	☐	☐	☐	☐
l. A site, area, lake, reservoir or highway designated as scenic	☐	☐	☐	☐	☐
m. Municipal park or designated open space	☐	☐	☐	☐	☐
n. County road	☐	☐	☐	☐	☐
o. State road	☐	☐	☐	☐	☐
p. Local road	☐	☐	☐	☐	☐

2. Is the visibility of the project seasonal? (i.e., screened by summer foliage but visible during other seasons)
☐ Yes ☐ No

3. Are any of the resources checked in question 1 used by the public during the time of year during which the project will be visible?
☐ Yes ☐ No

DESCRIPTION OF EXISTING VISUAL ENVIRONMENT

4. From each item checked in question 1, check those which generally describe the surrounding environment.

	Within ¼ mile*	Within 1 mile*
Essentially undeveloped	☐	☐
Forested	☐	☐
Agricultural	☐	☐
Suburban Residential	☐	☐
Industrial	☐	☐
Commercial	☐	☐
Urban	☐	☐
River, Lake, Pond	☐	☐
Cliffs, Overlooks	☐	☐
Designated Open Space	☐	☐
Flat	☐	☐
Hilly	☐	☐
Mountainous	☐	☐
Other:	☐	☐

NOTE: Add attachments as needed.

5. Are there visually similar projects within*:
½ mile: ☐ Yes ☐ No 1 mile: ☐ Yes ☐ No 2 miles: ☐ Yes ☐ No 3 miles: ☐ Yes ☐ No

* Distance from project site is provided for assistance. Substitute other distances as appropriate.

EXPOSURE

6. The annual number of viewers likely to observe the proposed project is:
NOTE: When user data is unavailable or unknown, use best estimate.

CONTEXT

7. The situation or activity in which the viewers are engaged while viewing the proposed action is:

	Frequency			
Activity	Daily	Weekly	Holidays/ Weekends	Seasonally
Travel to and from work	☐	☐	☐	☐
Involved in recreational activities	☐	☐	☐	☐
Routine travel by residents	☐	☐	☐	☐
At a residence	☐	☐	☐	☐
At worksite	☐	☐	☐	☐
Other:	☐	☐	☐	☐

EAF- Part III for Woodhill's Dam Fish Passage

Below is an analysis for the identified EAF Part II sub-questions which were found to be areas where a moderate to large impact may occur.

Question 1. Impact on Land, Impact on Plants and Animals, Impact on Energy, and Impact on Noise

- For EAF Part II Question 1.a which states "the proposed action may involve construction on land where depth to water table is less than 3 feet" the moderate to large box was checked because the proposed project is likely to involve construction in an area where the depth to water is less than 3 feet below the land surface. However, is not expected that the project will have a significant adverse impact on the water table because the project by its nature requires work to be done in and around a stream tributary which will have a depth to water that is less than 3 feet. This work, which is intended to restore and improve the ecosystem of the Peconic River system, will be done in accordance with New York State Department of Environmental Conservation and United States Army Core of Engineers Permits and Approval requirements. In addition, no work will be done outside of the limits of the Earthen Dam where the fish latter is to be installed and a turbidity curtain will be used to contain the disturbed bottom sediments.

Question 3. Impact on Surface Water

- For EAF Part II Question 3.a which states "the proposed action may create a new water body" the moderate to large box was checked because the project does propose to create a new pool and weir fish passage approximately 48 feet to the west of the existing spillway. However, this new pool is not expected to have a significant adverse impact on the environmental because it is limited in size and is part of the overall fish passage design which is anticipated to have a positive impact on the Peconic River system ecosystem. This new pool is proposed to be surrounded by native wetland plantings and will be completed in accordance with New York State Department of Environmental Conservation and United States Army Core of Engineers permits and approval requirements.

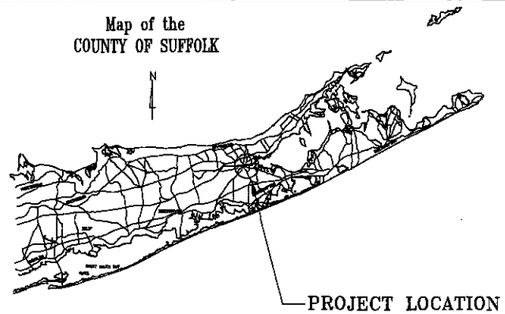
- For EAF Part II Question 3.d and 3.e. which state "the proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body" and "the proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediment" respectively, the moderate to large box was checked because the project does involve construction within a wetland and may create turbidity in a waterbody. However, the project is not expected to have a significant adverse impact due to the nature of the work and the mitigations that are incorporated into the proposed project. As part of the project design approximately 478 square feet of wetlands will be disturbed but this disturbance will be mitigated by the nearby creation of approximately 900 square feet of wetland area. The project also does have the potential to disturb bottom sediment but to minimize turbidity impacts a turbidity curtain will be employed during construction activities. In addition, this project will be completed in accordance with New York

State Department of Environmental Conservation and United States Army Core of Engineers permit and approval requirements.

Question 4. Impact on Flooding

- For EAF Part II Question 5.b which states "the proposed action may result in development in a 100 year floodplain" the moderate to large box was checked because the proposed project by definition does involve development within a 100 year floodplain. However, the project is not expected to have a significant adverse impact on the floodplain due to the limited scale of the project and due to the fact that the single spillway is to remain and will be able to be adjusted vertically to achieve the desired flow rate through the fish passage while also maintaining the existing water surface elevation of the upstream component. In addition, this work which is intended to restore and improve the ecosystem of the Peconic River system which includes the 100 year floodplain and will be done in accordance with New York State Department of Environmental Conservation and United States Army Core of Engineers permit and approval requirements.

As demonstrated in Part II of the EAF and for these above reasons it is determined that the proposed action will not have a significant adverse impact on the environment.



THIS PROJECT IS LOCATED BETWEEN THE NORTHEAST END OF COUNTY ROUTE 51 AND WOODHULL AVENUE; DIRECTLY ACROSS FROM SUFFOLK COUNTY SURROGATE COURTS IN THE TOWN OF RIVERHEAD, NEW YORK.

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS

PERMIT
PLANS FOR
THE CONSTRUCTION OF A
FISH PASSAGE AT WOODHULL'S DAM

BETWEEN THE NORTHEAST END OF COUNTY ROUTE 51 AND WOODHULL AVENUE

TOWN OF SOUTHAMPTON
SUFFOLK COUNTY, NEW YORK

APRIL 2017

INDEX OF DRAWINGS

DRAWING NAME:	SHEET NO.
COVER SHEET & INDEX	1 OF 6
GENERAL NOTES AND LEGEND	2 OF 6
EXISTING CONDITIONS	3 OF 6
GENERAL PLAN	4 OF 6
MISCELLANEOUS DETAILS	5 OF 6
LANDSCAPE DETAILS	6 OF 6

PREPARED AND RECOMMENDED BY: L. K. McLEAN ASSOCIATES, P.C. CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

APPROVED BY: _____ DATE: _____
RAY DiBIASE, P.E. – NYSPE Lic. No. 56985

LETTING DATE: _____

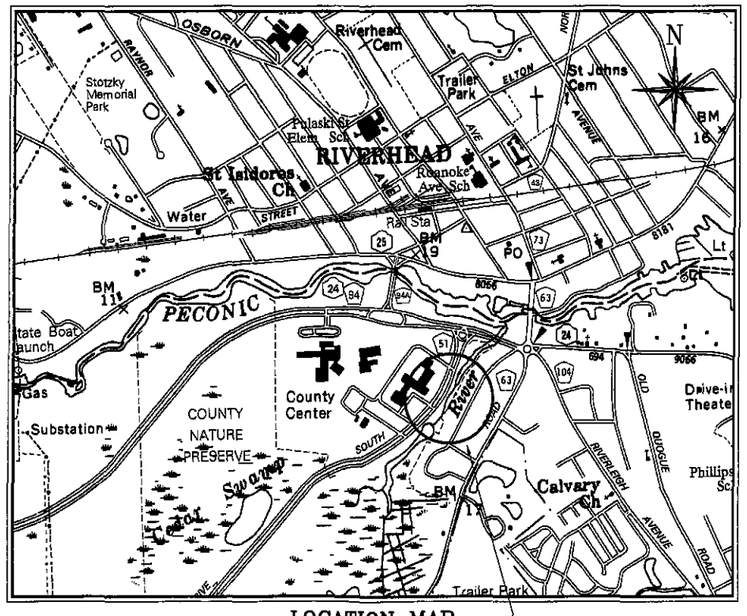
CONTRACTOR: _____

ENGINEER IN CHARGE: _____

COMPLETION DATE: _____

DESIGNED BY: .....
CHECKED BY: .....
DRAWN BY: .....
COMPARED BY: .....

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL BE COVERED BY AND IN CONFORMITY WITH THE SPECIFICATIONS ADOPTED NOVEMBER 1, 1968 AS AMENDED BY THE COMMISSIONER OF PUBLIC WORKS OF THE COUNTY OF SUFFOLK, N.Y., AND ENTITLED "PUBLIC WORKS SPECIFICATIONS" AS WELL AS THE GENERAL SPECIFICATIONS FOR TRAFFIC SIGNAL INSTALLATION, DATED JAN. 1980, AND THE ADDENDUM DATED JULY 1991 EXCEPT AS EXCEPT AS MODIFIED ON THIS PLAN AND IN THE PROPOSAL.



LOCATION MAP
0 1000 2000
SCALE IN FEET

APPROVED BY: _____ DATE: _____
WILLIAM HILLMAN, P.E., CHIEF ENGINEER

APPROVED BY: _____ DATE: _____
GILBERT ANDERSON, P.E., COMMISSIONER OF PUBLIC WORKS

PLAN REVIEWED BY		
SECTION	INITIAL	DATE

THE EDUCATION LAW OF THE STATE OF NEW YORK PROHIBITS ANY PERSON FROM ALTERING ANYTHING ON THE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATIONS, UNLESS IT'S UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, WHERE SUCH ALTERATIONS ARE MADE, THE PROFESSIONAL ENGINEER MUST SIGN AND SEAL, DATE AND DESCRIBE THE FULL EXTENT OF THE ALTERATION ON THE DRAWING AND/OR IN THE SPECIFICATION (NYS ED. LAW SECTION 7209-2).

Sep 29, 2017 - 11:36am
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GENERAL NOTES:

1. CONTRACTOR SHALL READ AND FOLLOW ALL PERMIT CONDITIONS AND SPECIAL CONDITIONS CONTAINED IN THE PERMIT (##) TO ENSURE COMPLIANCE DURING THE TERM OF THE PERMIT. THE PERMIT IS ATTACHED TO THE SPECIFICATION BOOK.
2. ALL CONSTRUCTION HALL BE COMPLETED WITHIN THE TIME FOR COMPLETION STATED IN THE CONTRACT. FAILURE TO MEET THIS DEADLINE MAY RESULT IN A PENALTY AS DEFINED IN THE CONTRACT AGREEMENT.
3. ANY DEBRIS OR EXCESS MATERIAL FROM CONSTRUCTION OF THIS PROJECT SHALL BE COMPLETELY REMOVED FROM THE ADJACENT AREA (UPLAND) AND REMOVED AT AN APPROVED UPLAND AREA FOR DISPOSAL. NO DEBRIS IS PERMITTED IN WETLANDS OR PROTECTED BUFFER AREAS.
4. THERE SHALL BE NO DISTURBANCE TO VEGETATED WETLANDS OR PROTECTED BUFFER AREAS AS A RESULT OF THE PERMITTED ACTIVITY.
5. ALL AREAS OF SOIL DISTURBANCE RESULTING FROM THIS PROJECT SHALL BE STABILIZED IMMEDIATELY FOLLOWING NECESSARY EARTHWORK AND GRADING OPERATIONS.
6. THE STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE AT LOCATIONS AS SHOWN ON THE PLANS OR A.O.B.E.
7. ALL DISTURBED AREAS WHERE SOIL WILL BE TEMPORARILY EXPOSED OR STOCKPILED FOR LONGER THAN ONE (1) WEEK SHALL BE CONTAINED BY A CONTINUOUS LINE OF STAKED HAY BALES/SILT CURTAIN (OR OTHER NYSDEC APPROVED METHOD) PLACED ON THE SEAWARD SIDE BETWEEN THE FILL AND WETLAND OR PROTECTED BUFFER AREA. TARPS ARE AUTHORIZED TO SUPPLEMENT THESE APPROVED METHODS.
8. IF SEEDING IS IMPRACTICAL DUE TO THE TIME OF YEAR, A TEMPORARY MULCH MUST BE APPLIED AND FINAL SEEDING PERFORMED AT THE EARLIEST OPPORTUNITY WHEN WEATHER CONDITIONS FAVOR GERMINATION AND GROWTH, BUT NOT MORE THAN SIX MONTHS AFTER PROJECT COMPLETION.
9. ANY NECESSARY FILL UNLESS OTHERWISE NOTED ON THE PLANS SHALL CONSIST OF "CLEAN" SAND, GRAVEL, OR SOIL (NOT ASPHALT, FLYASH, BROKEN CONCRETE OR DEMOLITION DEBRIS).
10. THE CONTRACTOR IS ADVISED THAT THE PLANS AND OTHER CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON THE BEST CURRENTLY AVAILABLE FIELD DATA. HOWEVER, ACTUAL FIELD CONDITIONS MAY VARY REQUIRING MODIFICATIONS TO THE CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL ADVISE THE ENGINEER OF VARIATIONS IN FIELD CONDITIONS, AND MODIFY HIS WORK TO CONFORM TO THESE CONDITIONS, AS ORDERED BY THE ENGINEER.
11. THE HORIZONTAL DATUM IS REFERENCED TO NAD83 (2011) AND THE VERTICAL DATUM IS NAVD88 (GEOID12A) THROUGH USE OF RTK GPS.
12. CLEAR AND GRUB AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER NO TREES SHALL BE REMOVED UNLESS SO ORDERED BY THE ENGINEER.
13. WHENEVER ITEMS IN THE CONTRACT REQUIRE MATERIAL TO BE REMOVED AND DISPOSED OF, THE COST OF SUPPLYING A DISPOSAL AREA AND TRANSPORTATION TO THAT AREA SHALL BE INCLUDED IN THE COST FOR THOSE ITEMS.
14. ANY TRENCH, PIT OR OTHER EXCAVATION THAT IS OPEN AND UNATTENDED SHALL BE PROTECTED, AS DIRECTED BY THE ENGINEER, WITH FENCE, BARRICADES OR ANOTHER APPROVED METHOD. NO DIRECT PAYMENT WILL BE MADE FOR THIS WORK, ALL EXCAVATIONS SHALL BE CONDUCTED IN COMPLIANCE WITH NEW YORK INDUSTRIAL CODE RULE NO. 23-1-33, 2-8, 53 AND OSHA SAFETY AND HEALTH STANDARDS (29CFR 1926/1910).
15. AT THE COMPLETION OF WORK COVERED BY THE CONTRACT, THE CONTRACTOR SHALL CLEAR ALL AREAS WITHIN THE R.O.W. OF CONSTRUCTION DEBRIS TO THE SATISFACTION OF THE ENGINEER AND LEAVE THE AREA IN A NEAT, ORDERLY CONDITION.
16. GRADE, PLACE SELECT MATERIAL, SEED AND MULCH AS SHOWN ON PLANS OR AS DIRECTED. USE MATERIAL AVAILABLE ON SITE UNLESS OTHERWISE STATED IN THE PLAN.
17. ALL SLOPES ARE TO BE TRIMMED AND GRADED TO MEET EXISTING GROUND CONDITIONS AS DIRECTED BY THE ENGINEER. ALL AREAS DISTURBED BY THE CONSTRUCTION SHALL BE GRADED AND FINISHED AS INDICATED ON THE TYPICAL SECTIONS OR AS DIRECTED BY THE ENGINEER.
18. THE CONTRACTOR'S ATTENTION IS ALSO DIRECTED TO THE POSSIBILITY OF ENCOUNTERING GROUNDWATER DURING EXCAVATION AND WILL PROCEED WITH THEIR WORK HAVING FULL KNOWLEDGE OF THIS FACT.
19. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE VEHICLE AND TRAFFIC LAW OF THE STATE OF NEW YORK IN REGARD TO THE SIZE AND WEIGHT OF VEHICLES. THE CONTRACTOR IS HEREBY NOTIFIED THAT NO VEHICLE IN EXCESS OF THE LIMITS SET BY THE VEHICLE AND TRAFFIC LAW WILL BE ALLOWED ON ANY PUBLIC ROAD.
20. WHERE PROPOSED CURB MEETS EXISTING CURB. THE CONTRACTOR SHALL REPLACE THE EXISTING CURB TO THE NEAREST JOINT BEYOND THE LIMIT SHOWN ON THE PLANS.
21. THE CONTRACTOR SHALL PERFORM ALL WORK WITH THE CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, OR WHICH ARE TO REMAIN THE PROPERTY OF THE COUNTY. THE DAMAGED MATERIALS SHALL BE REPLACED OR REPAIRED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
22. WATCHMAN SERVICE. THE CONTRACTOR SHALL NOT BE REQUIRED TO PROVIDE A WATCHMAN FOR THIS PROJECT HOWEVER, THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSURING THAT THE PROJECT AREA IS IN A SAFE CONDITION ALL TIMES DURING THE COURSE OF THIS PROJECT.
23. ANY TRENCH, PIT OR EXCAVATION THAT IS OPEN AND UNATTENDED SHALL BE PROTECTED AS DIRECTED BY THE ENGINEER WITH FENCE, BARRICADES OR OTHER APPROVED METHOD.
24. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY NECESSARY DEWATERING PERMITS.
25. GROUND WATER ELEVATIONS SHOWN ON PLAN WERE MEASURED AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY, CONTRACTOR SHALL BE AWARE THAT GROUND WATER ELEVATIONS CAN SIGNIFICANTLY VARY.
26. TYPES AND KIND OF MATERIAL TO BE USED IN CONCRETE ITEMS:
    PORTLAND CEMENT: TYPE II, WITH AN APPROVED AIR-ENTRAINING AGENT SHALL BE USED FOR ALL CONCRETE ITEMS. CEMENT SHALL BE NEW YORK STATE APPROVED.
    FINE AGGREGATE: TYPE A OR B SHALL BE USED IN CONCRETE ITEMS.
    COARSE AGGREGATE: CRUSHED STONE OR CRUSHED GRAVEL TYPE A OR B SHALL BE USED IN ALL CONCRETE ITEMS.
    ADMIXTURES: AN APPROVED RETARDING ADMIXTURE AND IDENTIFIER SHALL BE USED IN ALL CONCRETE ITEMS.
27. ALL WORK IS TO BE DONE WITHIN THE RIGHT OF WAY. THE CONTRACTOR SHALL ENSURE THAT NO WORKER ENCROACHES ON TO PRIVATE PROPERTY. IF IT IS DEEMED NECESSARY TO ENCROACH OF WORK ON PRIVATE PROPERTY, THE CONTRACTOR SHALL OBTAIN A WORK RELEASE SIGNED BY THE PROPERTY OWNER.
28. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE UTILITIES IN THE AREA. THE CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE EXACT LOCATION OF ALL UTILITIES AND WILL TAKE EVERY PRECAUTION NOT TO DISTURB THEM.

LEGEND

DESCRIPTION	EXISTING	PROPOSED
ASPHALT PAVEMENT – FULL DEPTH		
CONCRETE SLAB		
DRAINAGE PIPE, MANHOLE & CATCH BASIN		FLOW ARROW
TOPSOIL AND SEED		
SHEET PILING		
WATERMAIN AND VALVE	8"W	8"W
FENCE		
GUIDE RAIL		
ELEVATION IN PLAN	(27.42)	+ 27.82
BENCH MARK		
BORING LOCATION		
TAKING LINES & EASEMENTS		EASEMENT LINE / TAKING LINE
CONTOUR LINES	10	10

BUILDING FOUNDATION		DIRT DRIVEWAY OR ROAD		UNDERGROUND ELECTRIC AND MANHOLE	E MANH. E
SIGN; TRAFFIC, RR, ETC.	P	BUSH AND SHRUBS		UNDERGROUND TELEPHONE DUCT AND MANHOLE	T MANH. T
UTILITY POLE/GUY WIRE	HPT #17	TREE (SIZE & TYPE)	12" OAK	CONCRETE MONUMENT, AND RIGHT OF WAY LINE	CM / R.O.W.
UTILITY POLE/LIGHT	HPT #17	HEDGE		GAS MAIN AND VALVE	6"G 6"G
WATER METER & FIRE HYDRANT	HYDRANT	EDGE OF WOODS		DRAINAGE LINE AND CATCH BASIN	
LEACHING BASIN	L.B.	EDGE OF WATER OR STREAM		TREE REMOVAL	
				INDICATES LIMIT OF SAWCUT ITEM NO 205	

PERMIT PLAN

DATE	BY	DESCRIPTION	APPROV. BY
		REVISIONS	

LKMA

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

WOODHULL DAM FISH PASSAGE

GENERAL NOTES AND LEGEND

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

				Sheet No.
Designed By:	RAS	Scale:	AS NOTED	2
Drawn By:	KJM	Date:	APRIL 2017	
Approved By:	RAS	File No.	15084.000	

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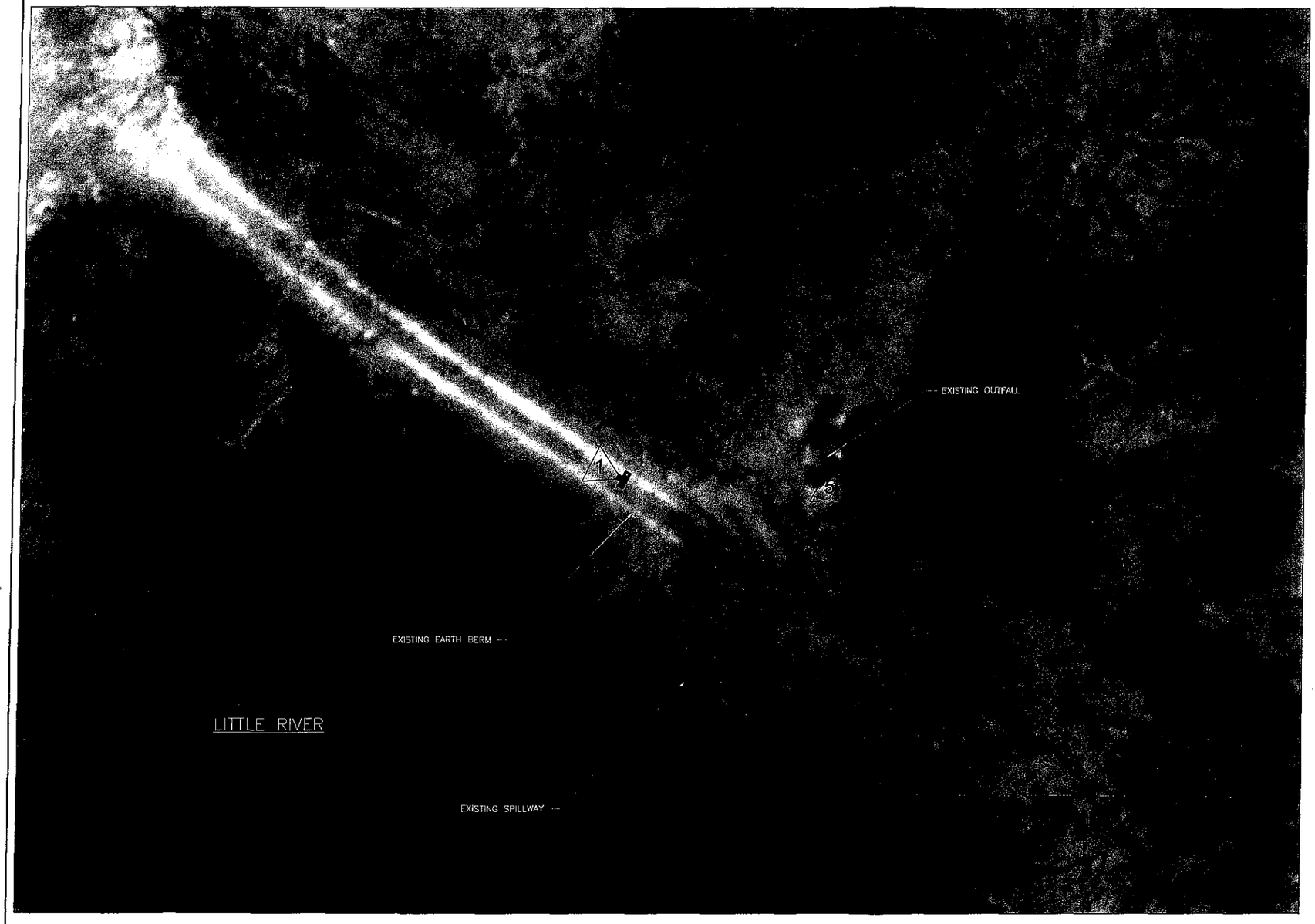

NORTH

LEGEND

PHOTOGRAPH LOCATION WITH DIRECTION TAKEN AND NUMBER

PHOTO 5: EXISTING OUTLET STRUCTURE

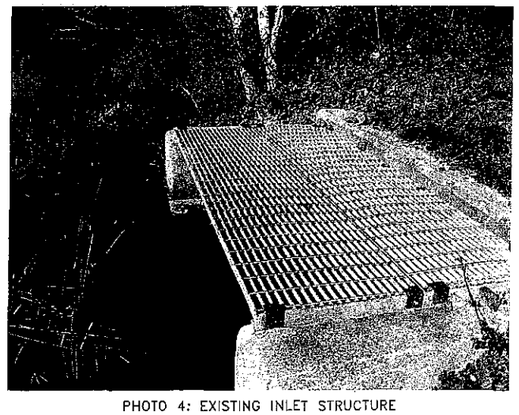

PHOTO 4: EXISTING INLET STRUCTURE

PHOTO 1: EXISTING EARTH BERM

PHOTO 2: UPPER POND

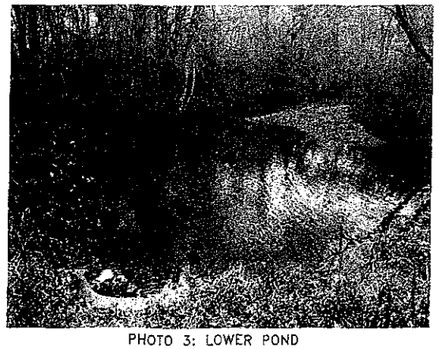

PHOTO 3: LOWER POND

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)

1 INCH = 10 FT.

PERMIT PLAN

DATE	BY	DESCRIPTION	APPROV. BY

REVISIONS

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

WOODHULL DAM FISH PASSAGE

EXISTING CONDITIONS

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

Designed By:	RAS	Scale: AS NOTED	Sheet No. 3
Drawn By:	KJM	Date: JULY 2016	
Approved By:	RAS	File No. 15084.000	

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CENTER DRIVE SOUTH (C.R. 51)

CONCRETE CURB

SUFFOLK COUNTY ROW (C.R. 51)

REMOVE EXISTING UPLAND VEGETATION, REGRADE EXISTING SLOPE AND REPLACE WITH NATIVE WETLAND PLANTINGS (APPROXIMATELY 820SF)

PROPOSED COIR FIBER LOG (SEE SECTION D-D)

WOODS

EDGE OF WATER

APPROXIMATE SUFFOLK COUNTY TAX MAP LINES

PROPOSED HYDROSEEDING

PROPOSED UNDERGROUND ELECTRICAL WIRING FOR SUBMERSIBLE PUMP (TO BE CONNECTED TO NEAREST UTILITY POLE)

8' CHAIN LINK SECURITY FENCE WITH GATE AND CYPHER LOCK ITEM 50

END COFFERDAM

SUBMERSIBLE PUMP AT INLET – INLET MUST BE SCREENED TO PREVENT CLOGGING OF PUMP/HOSE (TO SUPPLY ½" TO ¾" OF WATER FOR RAMP AND ATTRACTION WATER AT ENTRANCE)

WATER

REPLACE EXISTING WETLAND PLANTS (SEE NOTE 7)

PROPOSED RIP-RAP

TEMPORARY COFFERDAM

COUNTY OF SUFFOLK SCTM TAX MAP NO. 137/1/14.2

LIMIT OF DISTURBANCE (TYP.)

3' X 3' CONCRETE EXIT STRUCTURE WITH TIMBER WEIR (SEE DETAILS) CREST INVERT ELEVATION = 9.30 (1.5' WIDE)

NE INV. 8.83

24"ø RCP 25± LF

SW INV. 8.83

END COFFERDAM

ADJUST HEIGHT OF EXISTING TIMBER WEIR BOARDS A.O.B.E. COST TO BE INCLUDED UNDER OTHER ITEMS IN CONTRACT.

EXISTING 48"ø CMP INV. 6.06

EXISTING EARTH BERM

EXISTING 48"ø CMP OUTLET PIPE

EXISTING 48"ø CMP OUTFALL INV. 5.79

UPPER POND

EXISTING POND ELEVATION = 10.55± & VARIES

EXISTING WETLAND LIMITS

PROPOSED WEIR ELEVATION = 9.13

PROPOSED WEIR ELEVATION = 8.42

PROPOSED WEIR ELEVATION = 7.71

PROPOSED WEIR ELEVATION = 7.00

PROPOSED WEIR ELEVATION = 6.29

PROPOSED WEIR ELEVATION = 5.58

PROPOSED WEIR ELEVATION = 4.87

PROPOSED WEIR ELEVATION = 4.17

SHOREGUARD SERIES 850 VINYL SHEETING OR APPROVED EQUAL (SEE DETAILS)

5" THICK CONCRETE SLAB WITH WELDED WIRE MESH ITEM 27X-5

PROPOSED RIP-RAP

3' X 3' CONCRETE ENTRANCE STRUCTURE WITH TIMBER WEIR (SEE DETAILS) CREST INVERT ELEVATION = 4.17 (1.5' WIDE)

TURBIDITY CURTAIN

EEL PASSAGE ENTRANCE

LOWER POND

EARTH

EXISTING POND ELEVATION = 4.17± & VARIES

FASTEN PROPOSED VINYL SHEETING TO CONCRETE ENTRANCE STRUCTURE (SEE DETAILS)

SEE NOTE 6

DIANA DENISON SCTM MAP NO. 138/1/32

COUNTY OF SUFFOLK SCTM TAX MAP NO. 137/1/14.2

NORTH

NOTES:

1. SEE PROFILE AND MISCELLANEOUS DETAILS FOR INFORMATION NOT SHOWN.
2. ALUMINUM GRATE ON TOP OF FISH PASSAGE NOT SHOWN FOR CLARITY (SEE DETAILS).
3. CONTRACTOR SHALL USE TURBIDITY CURTAIN DURING CONSTRUCTION OF THE FISH PASSAGE.
4. EXISTING TREES AND BRUSH SHALL BE REMOVED FROM THE DAM AS REQUIRED BY THE NYSDEC.
5. ALL PROPOSED DRAINAGE PIPE SHALL HAVE WATER TIGHT JOINTS.
6. PROPOSED EEL PASSAGE SHALL BE AN 18" WIDE, ⅜" ALUMINUM BOX W/4" HIGH WALLS. BOTTOM OF EEL PASSAGE TO BE LINED WITH AKWADRAIN AND ENKAMAT OR APPROVED EQUALS (SEE DETAILS).
7. CLEARING SHALL BE MINIMIZED TO THE GREATEST EXTENT POSSIBLE. ALL CLEARED AND DISTURBED AREAS AS SHOWN ON THE PLAN SHALL BE REPLANTED WITH HYDROSEEDING AND NATIVE, WET TOLERANT, 3 GALLON SHRUBS PLANTED NO LESS DENSE THAN 6 FEET ON CENTER.

LEGEND

- LIMIT OF DISTURBANCE
- PROPOSED HYDROSEEDING
- PROPOSED WETLAND PLANTINGS
- REPLACE EXISTING WETLAND PLANTS (SEE NOTE 7)

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)

1 INCH = 10 FT.

PERMIT PLAN

DATE	BY	DESCRIPTION	APPROV. BY
REVISIONS			

LKMA

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

WOODHULL DAM FISH PASSAGE

GENERAL PLAN

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

Designed By:	RAS	Scale: AS NOTED	Sheet No. 4
Drawn By:	KJM	Date: APRIL 2017	
Approved By:	RAS	File No. 15084.000	

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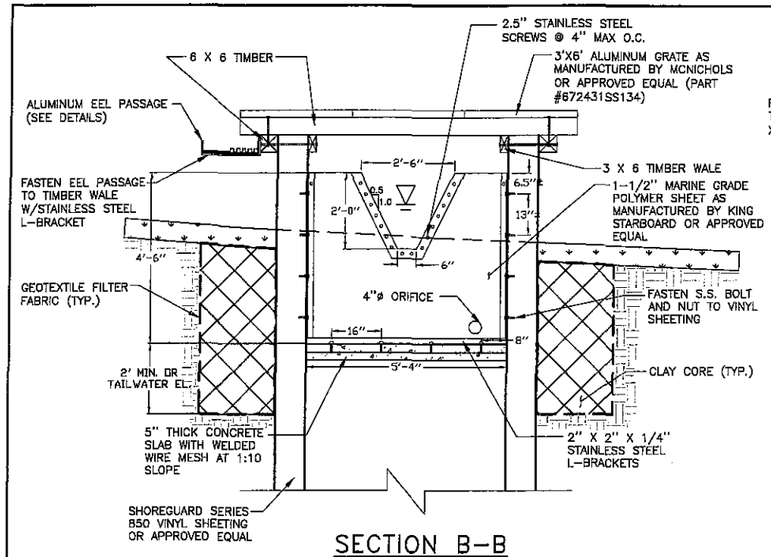
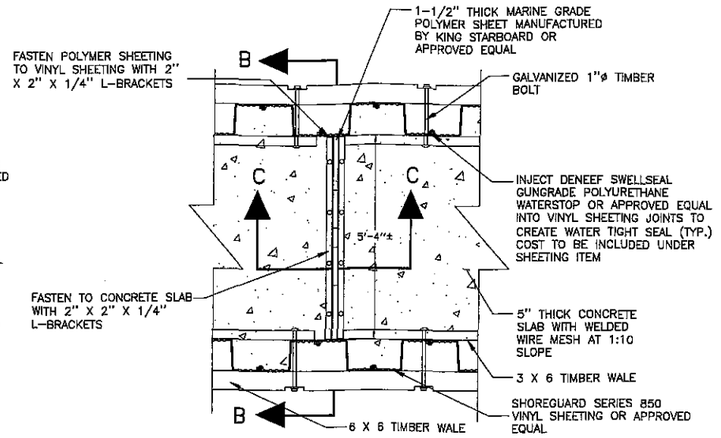
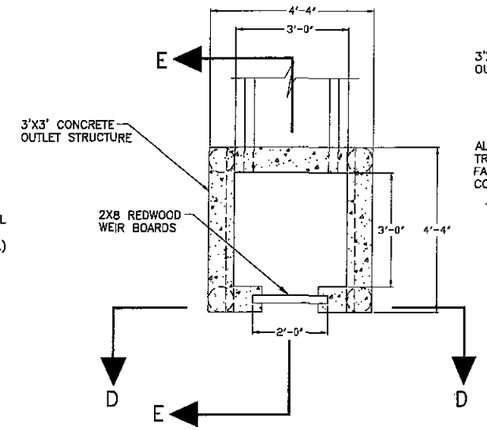


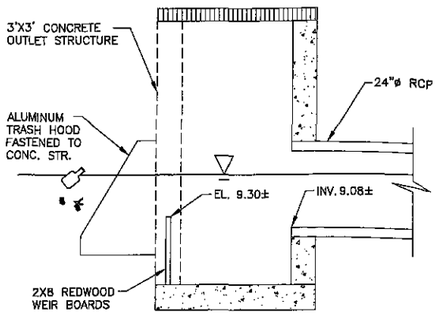
SECTION B–B
N.T.S.



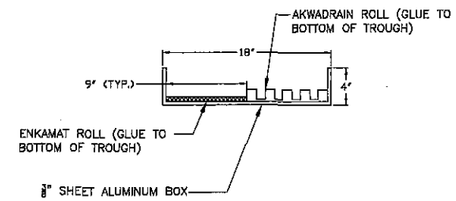
PARTIAL PLAN VIEW
N.T.S.



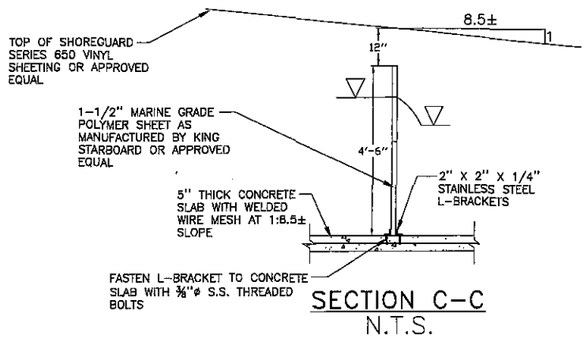
3'X3' OUTLET STRUCTURE
N.T.S.



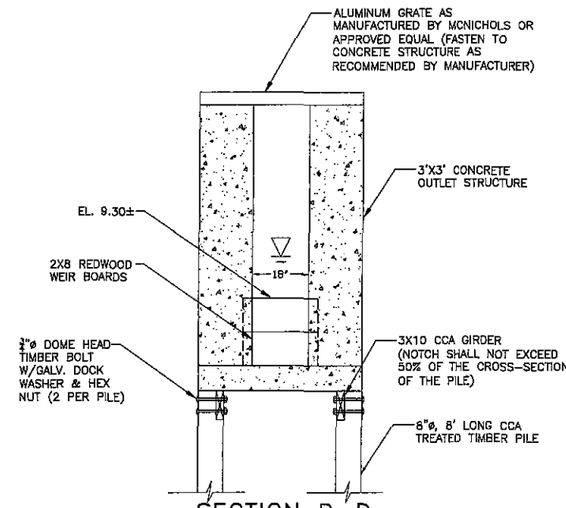
SECTION E–E
N.T.S.



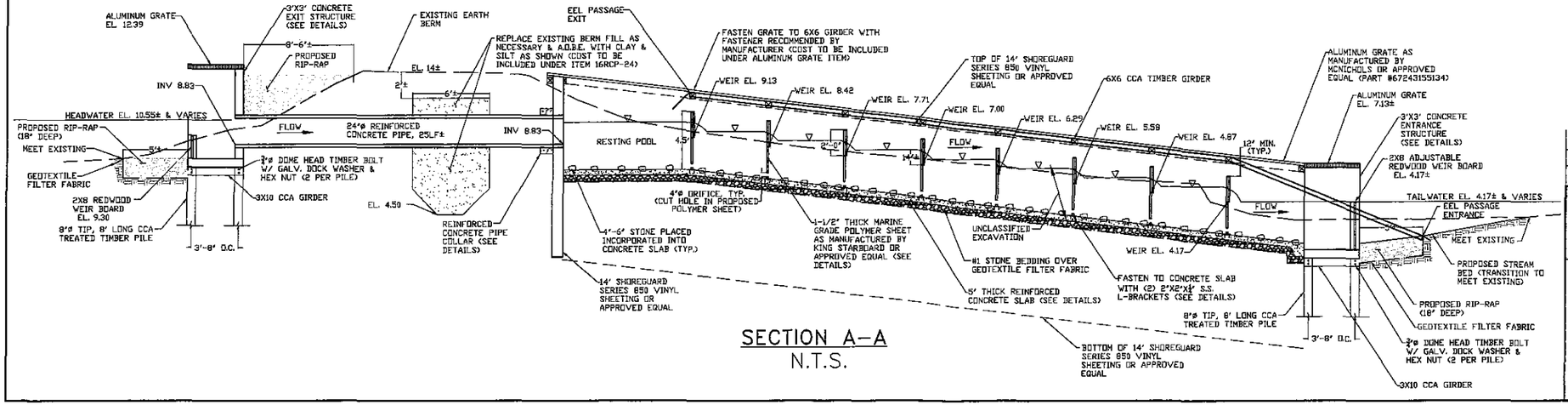
ALUMINUM BOX EEL PASSAGE
N.T.S.



SECTION C–C
N.T.S.



SECTION D–D
N.T.S.



SECTION A–A
N.T.S.

PERMIT PLAN

DATE	BY	DESCRIPTION	APPROV. BY
		REVISIONS	

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

WOODHULL DAM FISH PASSAGE

MISCELLANEOUS DETAILS

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

Designed By:	RAS	Scale: AS NOTED	Sheet No. 5
Drawn By:	KJM	Date: APRIL 2017	
Approved By:	RAS	File No. 15084.000	

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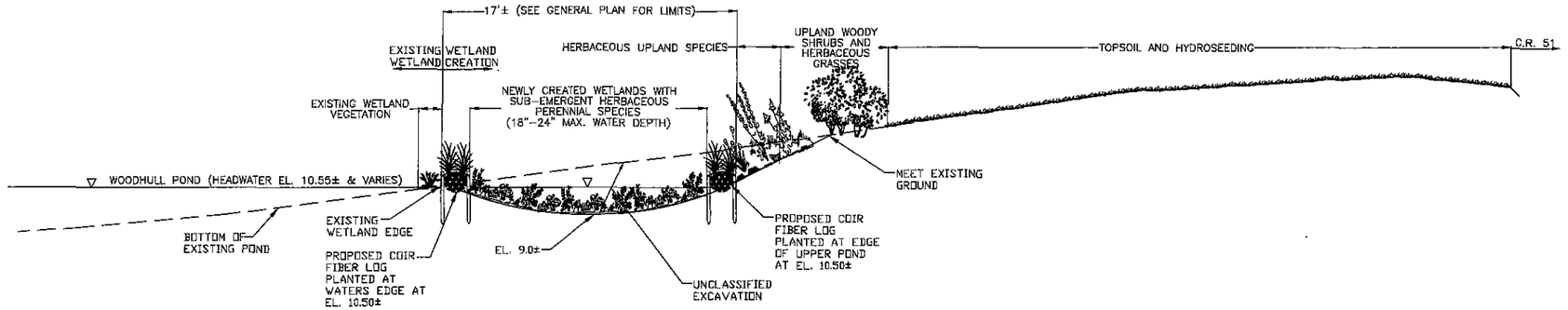

PROPOSED WETLAND CREATION
SECTION D-D
N.T.S.

PERMIT PLAN

DATE	BY	DESCRIPTION	APPROV. BY

REVISIONS

COUNTY OF SUFFOLK
DEPARTMENT OF PUBLIC WORKS
YAPHANK, NEW YORK

WOODHULL DAM FISH PASSAGE

LANDSCAPING DETAILS

L. K. McLEAN ASSOCIATES, P.C.
CONSULTING ENGINEERS 437 SOUTH COUNTRY RD., BROOKHAVEN, NEW YORK 11719

Designed By: RAS	Scale: AS NOTED	Sheet No.
Drawn By: KJM	Date: APRIL 2017	6
Approved By: RAS	File No. 15084.000	

Sep 29, 2017 - 11:46am
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SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 1 – Environment and Setting

Instructions: Part 1 is to be completed by the applicant or project sponsor. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information. If a question is not applicable to the proposed project indicate with "N/A".

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information

Name of Action/Project: Woodhull's Dam Fish Passage
Project Location (specify Town, Village, Hamlet and attach general location map*): Riverhead, NY (see attached location map)
Street Address: Woodhull Dam is located at Cranberry Bog Park along the Little River between the northeast end of County Route 51 and Woodhull Avenue.
Name of Property or Waterway: Little River

* Maps of Property and Project: Attach relevant available maps including a location map (note: use road map, Hagstrom Atlas, USGS topography map, tax map or equivalent) and preliminary site plans showing orientation, scale, buildings, roads, landmarks, drainage systems, area to be altered by project, etc.

Type of Project: New ☒ Expansion ☐

Capital Program: Item # Date Adopted: Amount: $

Brief Description of Proposed Action (include purpose or need/attach relevant design reports, plans, etc.):

This project entails the construction of a fish passage and eel passage at Woodhull's Dam located on the Little River which is a tributary to the Peconic River in Riverhead, NY. The project is proposed to restore and improve the ecosystem and fisheries of the Peconic River, which contains State-designated Significant Coastal Fish and Wildlife Habitats. This goal will be attained by providing passage for primary target species including Alewife and American Eel. No work outside of the limits of the existing earth dam is proposed.

Woodhull's dam is an earth dam with a single adjustable timber spillway. The single spillway is to remain and can be adjusted vertically to achieve the desired flow rate through the proposed fish passage while also maintaining the existing water surface elevation of the upstream impoundment.

A pool and weir fish passage will be constructed approximately 48 feet to the west of the existing spillway. The pool and weir fish passage will consist of a concrete exit structure supported on timber piles, 25 linear feet of 24" diameter RCP, 9 pools constructed out of vinyl sheeting (with water tight joints) and a concrete entrance structure supported on timber piles. A 5" thick concrete slab will be poured within the walls of the vinyl sheeting. This will be at an elevation of 4.5' below the top of the proposed pool weirs. The vinyl sheeting joints will be sealed watertight with De neef Swellseal Gungrade Polyurethane Waterstop or approved equal. In addition, a 2' wide clay core will be placed alongside the vinyl sheeting. The clay core will be placed directly below the proposed topsoil and seed and extend to a minimum depth of 2' below the concrete slab or to the tailwater elevation (whichever is greater). The clay core will be wrapped in geotextile filter fabric.

The weirs located between the pools will be constructed out of 1-1/2" thick marine grade polymer sheets. Each weir will be installed 8.50" higher than the one below it. A 4" diameter orifice will be drilled into each of the weirs directly above the concrete slab. An aluminum grate will be installed on top of the vinyl sheeting in order to prevent predators from interfering with the migration.

Flow through the proposed fish passage will be maintained via timber weirs installed at the concrete exit and entrance structures and the 6' wide existing timber weir. The weirs are critical in that they regulate the elevation of the upstream impoundment water and also establish a flow rate through the proposed fish passage that enables the target species to swim upstream.

The center of the berm must be excavated in order to install the 24" diameter pipe which connects the exit structure to the pool and weir fish ladder. The center of the dam is to be filled with impermeable clay and silt material as required. The top of the dam and side slopes will be stabilized with grass vegetation upon completion of the placement of backfill material. Rip-Rap is proposed to be placed around the entrance and exit structures to prevent scour at these two locations.

A separate eel passage will be installed along the south side of the pool and weir fish passage. The eel passage will be an 18" wide aluminum box with enkamat and akwadrain rolls glued to the bottom of the trough. The aluminum box will be covered with aluminum to prevent predators and fisherman from interfering with the eel migration. The eel passage will be equipped with a submersible pump and two hoses which will supply water at the exit to keep the ramp wet and water at the entrance to provide attraction flow. The pump will be powered via an electrical connection to the nearest utility pole.ee attached project description.

Project Status:

	Start	Completion
Proposal	3/16/15	4/6/15
Study		

Preliminary Planning		
Final Plans: Specs	10/23/15	11/23/17
Site Acquisition	NA	NA
Construction	1/1/18	3/28/18
Other		

Departments Involved:

	Dept. Performing Design & Construction	Initiating Dept. (if different)
Name:	SCDPW Bridges & Structures Division	Suffolk County Department of Parks & Recreation
Street/PO:	335 Yaphank Avenue	P.O. Box 144
City, State:	Yaphank, NY	Sayville, NY
Zip:	11980	11796
Contact Person:	Kyle Swaringen, PE	Nick Gibbons
Business Phone:	631-852-4078	631-854-4600
Email:	kyle.swaringen@suffolkcountyny.gov	nicholas.gibbons@suffolkcountyny.gov

B. Government Approvals, Funding or Sponsorship
("Funding" includes grants, loans, tax relief and any other forms of financial assistance)

Government Entity			If "Yes": Identify Agency and Approval(s) Required	Application Date (Actual or Projected)
i. City Council, Town Board or Village Board of Trustees	Yes ☐	No ☒		
ii. City, Town or Village Planning Board or Commission	Yes ☐	No ☒		
iii. City, Town or Village Zoning Board of Appeals	Yes ☐	No ☒		
iv. Other local agencies	Yes ☐	No ☒		
v. County agencies	Yes ☒	No ☐	SCDPW, CEQ	10/18/17
vi. Regional agencies	Yes ☐	No ☒		
vii. State agencies	Yes ☒	No ☐	NYSDEC, NYSDOS	7/15/2016
viii. Federal agencies	Yes ☒	No ☐	USACOE	7/15/2016

ix. Coastal Resources
Is the project site within a Coastal Area or the waterfront area of a Designated Inland Waterway? Yes ☒ No ☐

If YES,

Is the project site located in a community with an approved Local Waterfront Revitalization Program?	Yes ☐ No ☒
Is the project site within a Coastal Erosion Hazard Area?	Yes ☐ No ☒

C. Planning and Zoning

C.1. Planning and Zoning Actions

Will administrative or legislative adoption or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	Yes ☐ No ☒
C.2. Adopted Land Use Plans	
a. Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? **If Yes:** Does the comprehensive plan include specific recommendations for the site where the proposed action would be located? Yes ☐ No ☐	Yes ☐ No ☒
b. Is the site of the proposed action within any local or regional special planning district (i.e. Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; et. al)? **If Yes**, identify the plan(s): Town of Southampton Coastal Resources and Water Protection Plan April 2016	Yes ☒ No ☐
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? **If Yes**, identify the plan(s):	Yes ☐ No ☒
C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance? **If Yes**, what is the zoning classification(s) including any applicable overlay district? Town of Southampton Zone OSC - Open Space Conservation	Yes ☒ No ☐
b. Is the use permitted or allowed by a special or conditional use permit?	Yes ☒ No ☐
c. Is a zoning change requested as part of the proposed action? **If Yes**, what is the proposed new zoning for the site?	Yes ☐ No ☒
C.4. Existing Community Services	
a. In what school district is the project site located? Riverhead School District	
b. What police or other public protection forces serve the project site? Southampton Police	
c. Which fire protection and emergency medical services serve the project site? Riverhead 844	
d. What parks serve the project site? Cranberry Bog Suffolk County PArk	

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action? (if mixed, include all components)

Residential ☐; Industrial ☐; Commercial ☐; Recreational ☐; Other ☒:

b.	Total acreage of the site of the proposed action:	178 acres
c.	Total acreage to be physically disturbed:	.05 acres
d.	Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor:	178 acres

e. Is the proposed action an expansion of an existing project or use? — Yes ☐ No ☒

If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet, etc.)?

f. Is the proposed action a subdivision, or does it include a subdivision? — Yes ☐ No ☒

If Yes:

i. Purpose or type of subdivision? (if mixed, specify types)
Residential ☐; Industrial ☐; Commercial ☐; Recreational ☐; Other ☐

ii.

Is a cluster/conservation layout proposed?	Yes ☐ No ☐
Number of lots proposed:	
Minimum and maximum proposed lot sizes:	

g. Will proposed action be constructed in multiple phases? — Yes ☐ No ☒

If No, What is the anticipated period of construction?

3 Months

If Yes:

Total number of phases anticipated:
Anticipated commencement date of phase I (including demolition):
Anticipated completion date of final phase:
Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

h. Does the project include new residential uses? — Yes ☐ No ☒

If Yes, show number of units proposed.

	Single Family	Two Family	Three Family	Multi-Family (4+)
Initial Phase				
At Completion				

i. Does the proposed action include new non-residential construction (including expansions)? **If Yes:** Total Number of Structures: Dimensions of largest proposed structure: Approximate extent of building space to be heated or cooled:	Yes ☐ No ☒
j. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? **If Yes:** Purpose of the impoundment: If a water impoundment, the principal source of the water: Ground Water ☐; Surface Water Streams ☐; Other ☐ (specify): If other than water, identify the type of impounded/contained liquids and their source: Approximate size of the proposed impoundment (include units): Volume: Surface area: Dimensions of the proposed dam or impounding structure: Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock wood, concrete):	Yes ☐ No ☒
D.2. Project Operations	
a. Does the proposed action include any excavation, mining or dredging, during construction, operations or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) **If Yes:** What is the purpose of the excavation or dredging? Installation of Proposed Fish Passage How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? Volume: 180 CY Over what duration of time: 3 Months Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them: It is proposed to excavate (and dispose of soils) for the installation of the proposed fish passage, placement of rip-rap at the entrance and exit structures and creation of a new tidal wetland area. According to our soil borings, the soil to be excavated is primarily sand.	Yes ☒ No ☐

D.2.a (cont.) – only answer following if checked "Yes" above

Will there be onsite dewatering or processing of excavated materials? **If Yes**, describe: The will be no onsite dewatering or processing of excavated material.
What is the total area to be dredged or excavated? Approximately 2,200SF of area will be excavated.
What is the maximum area to be worked at any one time? 2,200SF
What would be the maximum depth of excavation or dredging? The maximum depth of excavation will be 6 feet below existing ground.
Will the excavation require blasting? No
Summarize site reclamation goals and plans: The project proposes to excavate for the installation a proposed pool and weir fish passage. In addition, in order to compensate for the filling of wetlands an area located on the west side of the site will be excavated to create a new freshwater wetland.

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, water body, shoreline, beach or adjacent area?

If Yes:

Identify the wetland or water body which would be affected (by name, water index number, wetland map number or geographic description): Little River

Describe how the proposed action would affect that water body or wetland, e.g. excavation, fill, placement of structures or creation of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres: Approximately 478SF of wetland area will be disturbed in order to install the proposed pool and weir fish passage, concrete entrance and exit structures, and rip-rap.

Will proposed action cause or result in disturbance to bottom sediments?
If Yes, describe: The proposed action will disturb the bottom sediments during excavation for the installation of the above mentioned project features. A turbidity curtain will be required to contain the disturbed bottom sediments.

Will proposed action cause or result in the destruction or removal of aquatic vegetation? Yes ☒ No ☐

If Yes:

Area of vegetation proposed to be removed: 450 SF

Expected acreage of aquatic vegetation remaining after project completion: N/A

Purpose of proposed removal (e.g., beach clearing, invasive control, boat access): Fish Passage

Proposed method of plant removal: Excavation using upland earth moving equipment

If chemical/herbicide treatment will be used, specify product(s): N/A

Describe any proposed reclamation/mitigation following disturbance: Creation of approximately 900SF of freshwater wetlands.

c. Will the proposed action use or create a new demand for water?

Yes ☐ No ☒

If Yes:

Total anticipated water usage/demand per day:
Will the proposed action obtain water from an existing public water supply?

If Yes:

Name of district/service area:
Does the existing public water supply have capacity to serve the proposal? Yes ☐ No ☐
Is the project site in the existing district? Yes ☐ No ☐
Is expansion of the district needed? Yes ☐ No ☐
Do existing lines serve the project site? Yes ☐ No ☐

Will line extension within an existing district be necessary to supply the project?

If Yes:

Describe extensions or capacity expansions proposed to serve this project:
Source(s) of supply for the district:

Is a new water supply district or service area proposed to be formed to serve the project site?

If Yes:

Applicant/sponsor for new district:
Date application submitted or anticipated:
Proposed source(s) of supply for new district:

If a public water supply will not be used, describe plans to provide water supply for the project:
If water supply will be from wells (public or private), what will be the maximum pumping capacity?

d. Will the proposed action generate liquid wastes?

Yes ☐ No ☒

If Yes:

Total anticipated liquid waste generation per day:

Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):

If sanitary wastewater identify proposed disinfection technology and treatment goals for the following:

Disinfection technology:
Nitrogen:
Phosphorus:
Total Suspended Soilds (TSS):
Biological Oxygen Demand (BOD):

Will the proposed action use any existing public wastewater treatment facilities?

If Yes:

Name of wastewater treatment plant to be used:

Name of district:

Does the existing wastewater treatment plant have capacity to serve the project?
Yes ☐ No ☐

Is the project site in the existing district?
Yes ☐ No ☐

Is expansion of the district needed?
Yes ☐ No ☐

Do existing sewer lines serve the project site?
Yes ☐ No ☐

Will line extension within an existing district be necessary to serve the project?

If Yes:

Describe extensions or capacity expansions proposed to serve this project:

Will a new wastewater (sewage) treatment district be formed to serve the project site?

If Yes:

Applicant/Sponsor for new district:

Date application submitted or anticipated:

What is the receiving water for the wastewater discharge?

If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

Describe any plans or designs to capture, recycle or reuse liquid waste:

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?

Yes ☐ No ☒

If Yes:

How much impervious surface will the project create in relation to total size of project parcel?
Area of Impervious Surface:
Area of Parcel:

Describe types of new point sources:

Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

If to surface waters, identify receiving water bodies or wetlands:

Will stormwater runoff flow to adjacent properties?
Yes ☐ No ☐

Does proposed plan minimize impervious surfaces use pervious materials or collect and re-use stormwater?
Yes ☐ No ☐

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?

Yes ☐ No ☒

If Yes, identify:

Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles):

Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers):

Stationary sources during operations (e.g., process emissions, large boilers, electric generation):

g. Will any air emission sources named in D.2.f (above) require a NY State Air Registration, Air Facility Permit or Federal Clean Air Act Title IV or Title V Permit?

Yes ☐ No ☒

If Yes:

Is the project site located in an Air Quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)
Yes ☐ No ☐

In addition to emissions as calculated in the application, the project will generate:

- Tons/year (metric) of Carbon Dioxide (CO_2)
- Tons/year (metric) of Nitrous Oxide (N_2O)
- Tons/year (metric) of Perfluorocarbons (PFCs)
- Tons/year (metric) of Sulfur Hexafluoride (SF_6)
- Tons/year (metric) of Carbon Dioxide equivalent of Hydroflorocarbons (HFCS)
- Tons/year (metric) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? **If Yes:** Estimate methane generation in tons/year (metric): Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring):	Yes ☐ No ☒
i. Will the proposed action result in the release of air pollutants from open-air operations or processes such as quarry or landfill operations? **If Yes,** describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):	Yes ☐ No ☒
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? **If Yes:** When is the peak traffic expected? (check all that apply) Morning ☐; Evening ☐; Weekend ☐; Randomly ☐ between the hours of to For commercial activities only, projected number of semi-trailer truck trips/day: Parking spaces: Existing: Proposed: Net Increase/Decrease: Does the proposed action include any shared use parking? Yes ☐ No ☐ If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? Yes ☐ No ☐ Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes ☐ No ☐ Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes ☐ No ☐	Yes ☐ No ☒
k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? **If Yes:** Estimate annual electricity demand during operation of the proposed action: Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility or other): Will the proposed action require a new, or an upgrade to, an existing substation? Yes ☐ No ☐	Yes ☐ No ☒

l. Hours of operation (Answer all items which apply)

During Construction	During Operations
Monday-Friday:	Monday-Friday:
Saturday:	Saturday:
Sunday:	Sunday:
Holidays:	Holidays:

N/A ☒

m. Does the proposed action produce noise that will exceed existing ambient noise levels during construction, operation or both?

If Yes:

Provide details including sources, time of day and duration:

Will proposed action remove existing natural barriers that could act as a noise barrier or screen?
Yes ☐ No ☐ Describe:

Yes ☐ No ☒

n. Will the proposed action have outdoor lighting?

If Yes:

Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Will proposed action remove existing natural barriers that could act as a light barrier or screen?
Yes ☐ No ☐ Describe:

Yes ☐ No ☒

o. Does the proposed action have the potential to produce odors for more than one hour per day?

If Yes:

Describe possible sources, potential frequency and duration of odor emissions and proximity to nearest occupied structures:

Yes ☐ No ☒

p. Will the proposed action include any bulk storage of petroleum (over 1,100 gallons) or chemical products (over 550 gallons)?

If Yes:

Product(s) to be stored:

Volume(s): per unit time: (e.g., month, year)

Generally describe proposed storage facilities:

Yes ☐ No ☒

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?

If Yes:

Describe proposed treatment(s):

Will the proposed action use Integrated Pest Management Practices?
Yes ☐ No ☐

Yes ☐ No ☒

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?

Yes ☐ No ☒

If Yes:

Describe any solid waste(s) to be generated during construction or operation of the facility:

Construction:	tons per	(unit of time)
Operation:	tons per	(unit of time)

Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

Construction:
Operation:

Proposed disposal methods/facilities for solid waste generated on-site:

Construction:
Operation:

s. Does the proposed action include construction or modification of a solid waste management facility?

Yes ☐ No ☒

If Yes:

Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill or other disposal activities):

Anticipated rate of disposal/processing:

tons/month, if transfer or other non-combustion/thermal treatment, or

tons/hour, if combustion or thermal treatment

If landfill, anticipated site life: years

t. Will proposed action at the site involve the commercial generation, treatment, storage or disposal of hazardous waste?

Yes ☐ No ☒

If Yes:

Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility:

Generally describe processes or activities involving hazardous wastes or constituents:

Specify amount to be handled or generated:
tons/month

Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents:

Will any hazardous wastes be disposed at an existing offsite hazardous waste facility?
Yes ☐ No ☐

If Yes:

Provide name and location of facility:

If No:

Describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

u. Will proposed action adhere to Leadership in Energy and Environmental Design (LEED) or any other green building principals? **If Yes:** Describe proposed green building methods and attempted level of certification, if any:	Yes ☐ No ☒
v. Does the project sponsor propose the use of energy benchmarking to monitor and adjust project energy needs? **If Yes, explain:**	Yes ☐ No ☒
w. Will the proposed action use native plants for all landscaping needs? **Identify species to be used and method of irrigation:** Native Sub-emergent herbaceous perennial species	Yes ☒ No ☐
x. Does the proposed action promote local tourism? **If Yes, explain:**	Yes ☐ No ☒

E. Site and Setting of Proposed Action

E.1. Land Uses on and Surrounding the Project Site

a. Existing land uses (Check all uses the occur on, adjoining and near the project site): (include map)

Urban ☐ Industrial ☐ Commercial ☐ Residential ☒ Rural ☐
Forest ☒ Agriculture ☐ Aquatic ☒ Other ☐ Specify:

If mix of uses, generally describe: The site consists of forest and aquatic areas and is adjacent to residential properties.

b. Land uses and cover types on the project site:

Land Use or Cover Type	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
Roads, buildings and other paved or impervious surfaces	0	0	0
Forested	0.1	0.084	-0.016
Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.16	0.157	-0.003
Agricultural (includes active orchards, fields, greenhouse, etc.)	0	0	0
Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	0
Wetlands (freshwater or tidal)	0.04	0.048	+0.008
Non-Vegetated (bare rock, earth or fill)	0	0.011	+0.011
Other Describe:	0	0	0
TOTAL:	0.30	0.30	

c. Is the project site presently used by members of the community for public recreation? **If Yes,** explain:	Yes ☐ No ☒
d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers or group homes) within 1,500 feet of the project site? **If Yes,** identify facilities:	Yes ☐ No ☒
e. Does the project site contain an existing dam? **If Yes:** Dimensions of the dam and impoundment: - Dam height: 12 feet - Dam length: 188 feet - Surface area: 88 acres - Volume impounded: 310 gallons or acre-feet Dam's existing hazard classification: A Provide date and summarize results of last inspection: N/A	Yes ☒ No ☐
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? **If Yes:** Has the facility been formally closed? Yes ☐ No ☐ If Yes, cite sources/documentation: Describe the location of the project site relative to the boundaries of the solid waste management facility: Describe any development constraints due to the prior solid waste activities:	Yes ☐ No ☒
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? **If Yes:** Describe waste(s) handled and waste management activities, including approximate time when activities occurred:	Yes ☐ No ☒

h. Has there been a reported contamination spill at the proposed project site or have any remedial actions been conducted at or adjacent to the proposed site?

Yes ☐ No ☒

If Yes:

Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? (Check all that apply)

☐ Yes – Spills Incidents database — Provide DEC ID number(s):

☐ Yes – Environmental Site Remediation database — Provide DEC ID number(s):

☐ Neither database

If site has been subject to RCRA corrective activities, describe control measures:

Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes ☐ No ☐

If Yes:

DEC ID number(s):

Describe current status of site(s):

E.1.h. (cont.) – only answer following if checked "Yes" above

Is the project site subject to an institutional control limiting property uses?

If Yes:

DEC site ID number(s):

Describe the type of institutional control (e.g., deed restriction or easement):

Describe any use limitations:

Describe any engineering controls:

Will the project affect the institutional or engineering controls in place? Yes ☐ No ☐

Explain:

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site:
1100 feet

b. Are there bedrock outcroppings on the project site?

Yes ☐ No ☒

If Yes:

What proportion of the site is comprised of bedrock outcroppings?
%

c. Predominant soil type(s) present on project site: (include map)

1. Bd-Berryland Mucky Sand	56% of site
2. CuB-Cut and fill, gently sloping	43% of site
3.	% of site
4.	% of site

d. What is the average depth to the water table on the project site?
0-10 feet

e. Drainage status of project site soils:

1.	☐ Well Drained	0% of site
2.	☒ Moderately Well Drained	100% of site
3.	☐ Poorly Drained	% of site

f. Approximate proportion of proposed action site with slopes: (include topographic map)

1.	☒ 0-10%	70% of site
2.	☐ 11-15%	% of site
3.	☒ 16% or greater	30% of site

g. Are there any unique geologic features on the project site? Yes ☐ No ☒

If Yes, describe:

h. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? Yes ☒ No ☐

i. Do any wetlands or other waterbodies adjoin the project site? Yes ☒ No ☐

If Yes to either E.2.h or E.2.i, continue. If No, skip to E.2.m

j. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? (include map) Yes ☒ No ☐

k. For each identified wetland and waterbody on the project site, provide the following information:

Streams:	Name: 921-34	Classification: C
Lakes or Ponds:	Name:	Classification:
Wetlands:	Name: Federal Waters	Approx. Size:
Wetland No. (if regulated by DEC):	R-5	

l. Are any of the above waterbodies listed in the most recent compilation of NYS water quality-impaired waterbodies? Yes ☐ No ☒

If Yes, name of impaired water body/bodies and basis for listing as impaired:

m. Is the project site in a designated floodway? Yes ☐ No ☒

n. Is the project site in the 100 year floodplain? Yes ☒ No ☐

o. Is the project site in the 500 year floodplain? Yes ☐ No ☒

p. Is the project site located over or immediately adjoining a primary, principal or sole source aquifer? Yes ☒ No ☐

If Yes:

Name of aquifer: Soil Source Aquifer; Nassau-Suffolk SSA
Source of information: NYSDEC EAP Mapper Application

q. Identify the predominant wildlife species that occupy or use the project site:

gray squirrel	whitetail deer	raccoon
eastern chipmunk	alewife	turkey

r. Does the project site contain a designated significant natural community? Yes ☒ No ☐

If Yes:

Describe the habitat/community (composition, function and basis for designation: Pitch Pine- Oak Forest, Coastal Plain Poor Fen, Coastal Altantic White Cedar Swamp, Red Maple-Blackgum Swamp, Coastal Plain Pond Shore
Source(s) of description or evaluation: NYSDEC EAF Mapper Application
Extent of community/habitat: - Currently: na acres - Following completion of project as proposed: na acres - Gain or loss (indicate + or –): na acres

s. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? Yes ☒ No ☐

If Yes:

Species and listing (endangered or threatened): northern long-eared bat, piping plover, red knot, roseate tern, sandplain gerardia, seabeach amaranth (non observed but has potential to be there)
Nature of use of site by the species (e.g., resident, seasonal, transient): all

t. Does project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? Yes ☐ No ☒

If Yes:

Species and listing:
Nature of use of site by the species (e.g., resident, seasonal, transient):

u. Is the project site or adjoining area currently used for hunting, trapping, fishing or shellfishing? Yes ☒ No ☐

If Yes, give a brief description of how the proposed action may affect that use:

Proposed action should improve the fishing environment by providing upstream access to alewife and american eel. These species

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? Yes ☐ No ☒

If Yes, provide county plus district name/number:

b. Are agricultural lands consisting of highly productive soils present? Yes ☐ No ☒

If Yes:

Acreage(s) on project site:
Source(s) of soil rating(s):

c. Does the project site contain all or part of, or is it substantially contiguous to a registered National Natural Landmark? **If Yes:** Nature of the natural landmark: ☐ Biological Community; ☐ Geological Feature Provide brief description of landmark, including values behind designation and approximate size/extent:	Yes ☐ No ☒
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area, including Special Groundwater Protection Areas? **If Yes:** CEA name: SGPA, Central Suffolk Pine Barrens, Aquifer Overlay District Basis for designation: Protect groundwater, benefit to human health & protect drinking water, preserve pure water quality Designating agency and date: Long Island Regional Planning, Suffolk County, Town of Southampton	Yes ☒ No ☐
e. Does the project site contain, or is it substantially contiguous to, a building, archeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places? **If Yes:** Nature of historic/archaeological resource: ☐ Archaeological Site; ☐ Historic Building or district Name: Brief description of attributes on which listing is based:	Yes ☐ No ☒
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	Yes ☐ No ☒
g. Have additional archaeological or historic site(s) or resources been identified on the project site? **If Yes:** Describe possible resource(s): Basis for identification:	Yes ☐ No ☒
h. Would the project site be visible from any officially designated and publicly assessable federal, state or local scenic or aesthetic resource? **If Yes:** Identify resource: Nature of, or basis for designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Distance between project and resource:	Yes ☐ No ☒

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR Part 666? **If Yes:** Identify the name of the river and its designation: Peconic River, Little River tributary (recreational river) Is the activity consistent with development restrictions contained in 6 NYCRR Part 666? Yes ☒ No ☐	Yes ☒ No ☐

F. Additional Information

Attach any additional information which may be needed to clarify your project.
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name: Robert Steele Date: 10/2/17

Signature: Title: PE

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 2 – Identification of Potential Project Impacts

Instructions: Part 2 is to be completed by the lead agency. It is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

Tips for completing Part 2:

- _____ Review all of the information provided in Part 1.
- _____ Review any application, maps, supporting materials and the Full EAF Workbook.
- _____ Answer each of the 18 questions in Part 2.
- _____ If you answer "**YES**" to a numbered question, please complete all the questions that follow in that section.
- _____ If you answer "**NO**" to a numbered question, move on to the next numbered section.
- _____ Check appropriate column to indicate the anticipated size of the impact.
- _____ Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "**Moderate to large impact may occur**."
- _____ The reviewer is not expected to be an expert in environmental analysis.
- _____ If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- _____ When answering a question consider all components of the proposed activity, that is, the "whole action."
- _____ Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- _____ Answer the question in a reasonable manner considering the scale and context of the project.

1. _____ **Impact on Land**
The proposed action may involve construction on, or physical alteration of the land surface of the proposed site. (See Part 1.D.1) YES ☐ NO ☐
If "YES", answer questions a-h. If "NO", move on to Section 2.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may involve construction on land where depth to water table is less than 3 feet.	E.2.d	☐	☐
b. _____ The proposed actin may involve construction on slopes of 15% or greater.	E.2.f	☐	☐
c. _____ The proposed actin may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E.2.a	☐	☐
d. _____ The proposed action may involve the excavation and removal of more than 1,000 tons of natural	D.2.a	☐	☐

material.			
e. _____ The proposed action may involve construction that continues for more than one year or in multiple phases.	D.1.g	☐	☐
f. _____ The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D.2.e D.2.q	☐	☐
g. _____ The proposed action is, or may be, located within a Coastal Erosion hazard area.	B.*ix*	☐	☐
h. _____ Other impacts:		☐	☐

2. _____ Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1.E.2.g)

YES ☐ NO ☐

If "YES", answer questions a-c. If "NO", move on to Section 3.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Identify the specific land form(s):	E.2.g	☐	☐
b. _____ The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature:	E.3.c	☐	☐
c. _____ Other impacts:		☐	☐

3. _____ Impact on Surface Water

The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1.D.2 & E.2.h)

YES ☐ NO ☐

If "YES", answer questions a-l. If "NO", move on to Section 4.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may create a new water body	D.1.j D.2.b	☐	☐
b. _____ The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D.2.b	☐	☐
c. _____ The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D.2.a	☐	☐
d. _____ The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E.2.h E.2.i	☐	☐
e. _____ The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by	D.2.a D.2.h	☐	☐

disturbing bottom sediments.			
f. _____ The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D.2.c	☐	☐
g. _____ The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D.2.d	☐	☐
h. _____ The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D.2.e	☐	☐
i._____ The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E.2.h – E.2.l	☐	☐
j._____ The proposed action may involve the application of pesticides or herbicides in or around any water body.	D.2.q E.2.h – E.2.l	☐	☐
k. _____ The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D.1.a D.2.d	☐	☐
l._____ Other impacts:		☐	☐

4. _____ Impact on Groundwater

The proposed action may result in new or additional use of groundwater, or may have the potential to introduce contaminants to groundwater or an aquifer. (See Part 1.D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) YES ☐ NO ☐

If "YES", answer questions a-h. If "NO", move on to Section 5.

	Relevant Part 1 Question(s)	**No, or small impact may occur**	**Moderate to large impact may occur**
a. _____ The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D.2.c	☐	☐
b. _____ Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source:	D.2.c	☐	☐
c. _____ The proposed action may allow or result in residential uses in areas without water and sewer services.	D.1.a D.2.c – D.2.d	☐	☐
d. _____ The proposed action may include or require wastewater discharged to groundwater.	D.2.d E.2.p	☐	☐
e. _____ The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D.2.c E.1.f – E.1.h	☐	☐
f. _____ The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D.2.p E.2.p	☐	☐
g. _____ The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	D.2.q E.2.h – E.2.l E.2.p D.2.c	☐	☐

h. _____ Other impacts:		☐	☐

5. _____ Impact on Flooding

The proposed action may result in development on lands subject to flooding. (See Part 1.E.2) YES ☐ NO ☐

If "YES", answer questions a-g. If "NO", move on to Section 6.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in development in a designated floodway.	E.2.m	☐	☐
b. _____ The proposed action may result in development within a 100 year floodplain.	E.2.n	☐	☐
c. _____ The proposed action may result in development within a 500 year floodplain.	E.2.o	☐	☐
d. _____ The proposed action may result in, or require, modification of existing drainage patterns.	D.2.b D.2.e	☐	☐
e. _____ The proposed action may change flood water flows that contribute to flooding.	D.2.b E.2.m – E.2.o	☐	☐
f. _____ If there is a dam located on the site of the proposed action, the dam has failed to meet one or more safety criteria on its most recent inspection.	E.1.e	☐	☐
g. _____ Other impacts:		☐	☐

6. _____ Impact on Air

The proposed action may include a state regulated air emission source. (See Part 1.D.2.f, D.2.h, D.2.g) YES ☐ NO ☐

If "YES", answer questions a-f. If "NO", move on to Section 7.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels:			
i. _____ More than 1000 tons/year of carbon dioxide (CO2)	D.2.g	☐	☐
ii. _____ More than 3.5 tons/year of nitrous oxide (N20)	D.2.g	☐	☐
iii. _____ More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs)	D.2.g	☐	☐
iv. _____ More than .045 tons/year of sulfur hexafluoride (SF6)	D.2.g	☐	☐
v. _____ More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflurocarbons (HCFCs) emissions	D.2.g	☐	☐
vi. 43 tons/year or more of methane	D.2.h	☐	☐
b. _____ The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous	D.2.g	☐	☐

air pollutants.			
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU=s per hour.	D.2.f D.3.g	☐	☐
d. _____ The proposed action may reach 50% of any two or more of the thresholds in "a" through "c", above.	D.1.i D.2.k	☐	☐
e. _____ The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D.2.s	☐	☐
f. _____ Other impacts:		☐	☐

7. _____ Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. YES ☐ NO ☐

(See Part 1.E.2.q – E.2.u)

If "YES", answer questions a-j. If "NO", move on to Section 8.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.s	☐	☐
b. _____ The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E.2.s	☐	☐
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E.2.t	☐	☐
d. _____ The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E.2.t	☐	☐
e. _____ The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E.3.c	☐	☐
f._____ The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source:	E.2.r	☐	☐
g. _____ The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E.2.q	☐	☐
h. _____ The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source:	E.1.b	☐	☐
i._____ Proposed action (commercial, industrial or recreational projects, only) involves use of	D.2.q	☐	☐

herbicides or pesticides.			
j. _____ Other impacts:		☐	☐

8. _____ Impact on Agricultural Resources

The proposed action may impact agricultural resources. (See Part 1.E.3.a & E.3.b) YES ☐ NO ☐

If "YES", answer questions a-h. If "NO", move on to Section 9.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E.2.c E.3.b	☐	☐
b. _____ The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc.).	E.1.a E.1.b	☐	☐
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E.3.b	☐	☐
d. _____ The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District or more than 10 acres if not within an Agricultural District.	E.1.b E.3.a	☐	☐
e. _____ The proposed action may disrupt or prevent installation of an agricultural land management system.	E.1.a E.1.b	☐	☐
f. _____ The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C.2.c, C.3 D.2.c, D.2.d	☐	☐
g. _____ The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C.2.c	☐	☐
h. _____ Other impacts:		☐	☐

9. _____ Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (See Part 1.E.1.a, E.1.b, E.3.h) YES ☐ NO ☐

If "YES", answer questions a-g and complete Appendix B - Visual EAF Addendum. If "NO", move on to Section 10.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource.	E.3.h	☐	☐
b. _____ The proposed action may	C.2.b	☐	☐

result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E.3.h		
c. The proposed action may be visible from publicly accessible vantage points:			
i. Seasonally (e.g., screened by summer foliage, but visible during other seasons)	E.3.h	☐	☐
ii. Year round	E.3.h	☐	☐
d. _____ The situation or activity in which viewers are engaged while viewing the proposed action is:	E.3.h		
i. Routine travel by residents, including travel to and from work	E.2.u	☐	☐
ii. Recreational or tourism based activities	E.1.c	☐	☐
e. _____ The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E.3.h	☐	☐
f._____ There are similar projects visible within the following distance of the proposed project:	D.1.a		
0 – ½ mile	D.1.h	☐	☐
½ – 3 mile	D.1.i	☐	☐
3 – 5 mile	E.1.a	☐	☐
5+ mile		☐	☐
g. _____ Other impacts:		☐	☐

10. _____ Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to an historic or archaeological resource. (See Part 1.E.3.e, E.3.f, E.3.g) YES ☐ NO ☐

If "YES", answer questions a-e. If "NO", move on to Section 11.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on or has been nominated by the NYS Board of Historic Preservation for inclusion on the State or National Register of Historic Places.	E.3.e	☐	☐
b. _____ The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E.3.f	☐	☐
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source:	E.3.g	☐	☐
d. _____ Other impacts:		☐	☐
e. _____ If any of the above (a-d) are answered "Yes", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E.3.e – E.3g	☐	☐

ii. The proposed action may result in the alteration of the property's setting or integrity.	E.1.a, E.1.b E.3.e – E.3.g	☐	☐
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	C2, C3 E.3.g, E.3.h	☐	☐

11. _____ Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1.C.2.c, E.1.c, E.2.u)

YES ☐ NO ☐

If "YES", answer questions a-e. If "NO", move on to Section 12.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, and wildlife habitat.	D.2.e, E.1.b E.2.h – E.2.l E.2.q – E.2.t	☐	☐
b. _____ The proposed action may result in the loss of a current or future recreational resource.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C.2.a, C.2.c E.1.c, E.2.u	☐	☐
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C.2.c, E.1.c	☐	☐
e. _____ Other impacts:		☐	☐

12. _____ Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1.E.3.d)

YES ☐ NO ☐

If "YES", answer questions a-c. If "NO", move on to Section 13.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☐	☐
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E.3.d	☐	☐
c. _____ Other impacts:		☐	☐

13. _____ Impact on Transportation

The proposed action may result in a change to existing transportation systems. (See Part 1.D.2.j)

YES ☐ NO ☐

If "YES", answer questions a-f. If "NO", move on to Section 14.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ Projected traffic increase	D.2.j	☐	☐

may exceed capacity of existing road network.			
b. _____ The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D.2.j	☐	☐
c. _____ The proposed action will degrade existing transit access.	D.2.j	☐	☐
d. _____ The proposed action will degrade existing pedestrian or bicycle accommodations.	D.2.j	☐	☐
e. The proposed action may alter the present pattern of movement of people or goods.	D.2.j	☐	☐
f._____ Other impacts:		☐	☐

14. _____ Impact on Energy

The proposed action may cause an increase in the use of any form of energy (See Part 1.D.2.k) YES ☐ NO ☐

If "YES", answer questions a-e. If "NO", move on to Section 15.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action will require a new, or an upgrade to an existing, substation.	D.2.k	☐	☐
b. _____ The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D.1.h D.1.i D.2.k	☐	☐
c. _____ The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D.2.k	☐	☐
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D.1.i	☐	☐
e. _____ Other impacts:		☐	☐

15. _____ Impact on Noise, Odor and Light

The proposed action may result in an increase in noise, odors or outdoor lighting (See Part 1.D.2.m, D.2.n, D.2.o) YES ☐ NO ☐

If "YES", answer questions a-f. If "NO", move on to Section 16.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may produce sound above noise levels established by local regulation.	D.2.m	☐	☐
b. _____ The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D.2.m E.1.d	☐	☐
c. _____ The proposed action may result in routine odors for more than one hour per day.	D.2.o	☐	☐
d. _____ The proposed action may result in light shining onto adjoining properties.	D.2.n	☐	☐
e. The proposed action may result in lighting that creates sky-glow brighter than existing-area conditions.	D.2.n E.1.a	☐	☐

f. _____ Other impacts:		☐	☐

16. _____ Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants (See Part 1.D.2.q, E.1.d, E.1.f, E.1.g, E.1.h) YES ☐ NO ☐

If "YES", answer questions a-m. If "NO", move on to Section 17.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E.1.d	☐	☐
b. _____ The site of the proposed action is currently undergoing remediation.	E.1.g, E.1.h	☐	☐
c. _____ There is a completed emergency spill remediation or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E.1.g E.1.h	☐	☐
d. _____ The site of the action is subject to an institutional control limiting the use of the property (e.g. easement, deed restriction)	E.1.g E.1.h	☐	☐
e. _____ The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E.1.g E.1.h	☐	☐
f. _____ The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D.2.t	☐	☐
g. _____ The proposed action involves construction or modification of a solid waste management facility.	D.2.q E.1.f	☐	☐
h. _____ The proposed action may result in the unearthing of solid or hazardous waste.	D.2.q E.1.f	☐	☐
i. _____ The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D.2.r D.2.s	☐	☐
j. _____ The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E.1.f – E.1.h	☐	☐
k. _____ The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E.1.f E.1.g	☐	☐
l. The proposed action may result in the release of contaminated leachate from the project site.	D.2.r, D.2.s E.1.f	☐	☐
m. _____ Other impacts:		☐	☐

17. _____ Consistency with Community Plans

The proposed action is not consistent with adopted land use plans. (See Part 1.C.1, C.2, C.3) YES ☐ NO ☐

If "YES", answer questions a-h. If "NO", move on to Section 18.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C.2, C.3, D.1.a, E.1.a, E.1.b	☐	☐
b. _____ The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C.2	☐	☐
c. _____ The proposed action is inconsistent with local land use plans or zoning regulations.	C.2, C.3	☐	☐
d. _____ The proposed action is inconsistent with any County plans, or other regional land use plans.	C.2	☐	☐
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C.3 D.1.e, D.1.f, D.1.h, E.1.b	☐	☐
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C.4, D.2.c, D.2.d, D.2.j	☐	☐
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C.2.a	☐	☐
h. _____ Other impacts:		☐	☐

18. _____ Consistency with Community Character

The proposed action is inconsistent with the existing community character (See Part 1.C.2, C.3, D.2, E.3) YES ☐ NO ☐

If "YES", answer questions a-g. If "NO", move on to Part 3.

	Relevant Part 1 Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. _____ The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E.3.e, E.3.f, E.3.g	☐	☐
b. _____ The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C.4	☐	☐
c. _____ The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C.2, C.3,D.1.h, D.1.i, E.1.a	☐	☐
d. _____ The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C.2, E.3	☐	☐
e. The proposed action is inconsistent with the predominant architectural scale and character.	C.2, C.3	☐	☐
f. Proposed action is inconsistent with the character of the existing natural landscape.	C.2, C.3, E.1.a, E.1.b, E.2.g – E.2.l	☐	☐
g. _____ Other impacts:		☐	☐

SUFFOLK COUNTY
FULL ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 3 – Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

Reasons Supporting This Determination:
To complete this section:

* _____ Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
* _____ Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
* _____ The assessment should take into consideration any design element or project changes.
* _____ Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
* _____ Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
* _____ For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
* _____ Attach additional sheets, as needed.

Determination of Significance
Type 1 and Unlisted Actions

SEQR Status: Type I ☐ Unlisted ☐

Identify portions of EAF completed for this project: Part 1 ☐ Part 2 ☐ Part 3 ☐

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of as lead agency that:

☐ A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.

☐ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.7(d)).

☐ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

Name of Action:

Name of Lead Agency:

Name of Responsible Officer in Lead Agency:

Title of Responsible Officer in Lead Agency:

Signature of Responsible Officer in Lead Agency: Date:

Signature of Preparer (if different from Responsible Officer) Date:

For Further Information:
Contact Person:
Address:
Telephone Number:
Email:

For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to:
Chief Executive Officer of the political subdivision in which the action will be principally located (Town/City/Village)
Other involved agencies (if any)
Applicant (if any)
Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html

SUFFOLK COUNTY
ENVIRONMENTAL ASSESSMENT FORM

Appendix A
Suffolk County Historic Trust

Application for Determination of Appropriateness for Alteration to Suffolk County Historic Trust Landmark or Site

1. APPLICANT
   Agency:
   Contact Person:
   Address:
   Telephone:

2. PROPERTY
   Structure Name:
   Location:
   Historic Trust Status: ☐ Designated; ☐ Eligible
   Use Category:
   Current Use:
   Proposed Use:
   Is the structure listed on or eligible for the National Register of Historic Places? ☐ Yes; ☐ No

3. PROPOSED WORK
   Scope of Work:
   Reason for Work:
   Architect/Engineer:
   Contractor:
   Construction Schedule:

4. FUNDING
   Estimated Cost of Project:
   Source(s) of Funding:

5. PROPERTY HISTORY
   Date of Original Construction:
   Original Architect/Builder:
   History of Use:
   History of Alterations:

6. SUBMISSIONS (check all that apply)

☐ Map	☐ Specifications	☐ Samples
☐ Drawings	☐ Environmental Assessment Form	☐ Other:
☐ HP-1 Form	☐ Photographs	

7. RELATED INFORMATION AND COMMENT:

The Suffolk County Historic Trust is hereby requested to review the scope of work proposed for the above mentioned landmark structure, owned by the County of Suffolk, New York, to determine the appropriateness of design and/or use as regulated by the Suffolk County Charter. Design review guidelines have been made available for reference and it is understood that submission or approval of this application does not relieve applicant's responsibility for securing any and all other permits and approvals as required by law.

SUFFOLK COUNTY
ENVIRONMENTAL ASSESSMENT FORM

Appendix B
Visual EAF Addendum

This form may be used to provide additional information relating to Question 9 of Part 1 of the Full Environmental Assessment Form

VISIBILITY

1. Would the project be visible from:	Distance Between Project and Resource (in miles) 0 - ¼	¼ - ½	½ -3	3-5	5+
a. A parcel of land which is dedicated to and available to the public for the use, enjoyment and appreciation of natural or man-made scenic qualities	☐	☐	☐	☐	☐
b. An overlook or parcel of land dedicated to public observation, enjoyment and appreciation of natural or man-made scenic qualities	☐	☐	☐	☐	☐
c. A site or structure listed on the National or State Registers of Historic Places	☐	☐	☐	☐	☐
d. State Parks	☐	☐	☐	☐	☐
e. The State Forest Preserve	☐	☐	☐	☐	☐
f. National Wildlife Refuges and State Game Refuges	☐	☐	☐	☐	☐
g. National Natural Landmarks and other outstanding natural features	☐	☐	☐	☐	☐
h. National Park Service lands	☐	☐	☐	☐	☐
i. Rivers designated as National or State Wild, Scenic or Recreational	☐	☐	☐	☐	☐
j. Any transportation corridor of high exposure, such as part of the Interstate System or Amtrak	☐	☐	☐	☐	☐
k. A governmentally established or designated interstate or inter-county foot trail, or one formally proposed for establishment or designation	☐	☐	☐	☐	☐
l. A site, area, lake, reservoir or highway designated as scenic	☐	☐	☐	☐	☐
m. Municipal park or designated open space	☐	☐	☐	☐	☐
n. County road	☐	☐	☐	☐	☐
o. State road	☐	☐	☐	☐	☐
p. Local road	☐	☐	☐	☐	☐

2. Is the visibility of the project seasonal? (i.e., screened by summer foliage but visible during other seasons)
☐ Yes ☐ No

3. Are any of the resources checked in question 1 used by the public during the time of year during which the project will be visible?
☐ Yes ☐ No

DESCRIPTION OF EXISTING VISUAL ENVIRONMENT

4. From each item checked in question 1, check those which generally describe the surrounding environment.

	Within ¼ mile*	Within 1 mile*
Essentially undeveloped	☐	☐
Forested	☐	☐
Agricultural	☐	☐
Suburban Residential	☐	☐
Industrial	☐	☐
Commercial	☐	☐
Urban	☐	☐
River, Lake, Pond	☐	☐
Cliffs, Overlooks	☐	☐
Designated Open Space	☐	☐
Flat	☐	☐
Hilly	☐	☐
Mountainous	☐	☐
Other:	☐	☐

NOTE: Add attachments as needed.

5. Are there visually similar projects within*:
½ mile: ☐ Yes ☐ No 1 mile: ☐ Yes ☐ No 2 miles: ☐ Yes ☐ No 3 miles: ☐ Yes ☐ No

* Distance from project site is provided for assistance. Substitute other distances as appropriate.

EXPOSURE

6. The annual number of viewers likely to observe the proposed project is:
NOTE: When user data is unavailable or unknown, use best estimate.

CONTEXT

7. The situation or activity in which the viewers are engaged while viewing the proposed action is:

	Frequency			
Activity	Daily	Weekly	Holidays/ Weekends	Seasonally
Travel to and from work	☐	☐	☐	☐
Involved in recreational activities	☐	☐	☐	☐
Routine travel by residents	☐	☐	☐	☐
At a residence	☐	☐	☐	☐
At worksite	☐	☐	☐	☐
Other:	☐	☐	☐	☐

NEW YORK
STATE OF
OPPORTUNITY.

Parks, Recreation,
and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

August 23, 2016

Ms. Chiriga Talley
Cultural Resource Coordinator
NYS DEC Region 10
250 Veterans Memorial Hwy
Hauppauge, NY 11788

Re: DEC
Woodhull's Dam-Construction of Fish and Eel Passage
Little River, Southampton, NY
16PR05533

Dear Ms. Talley:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

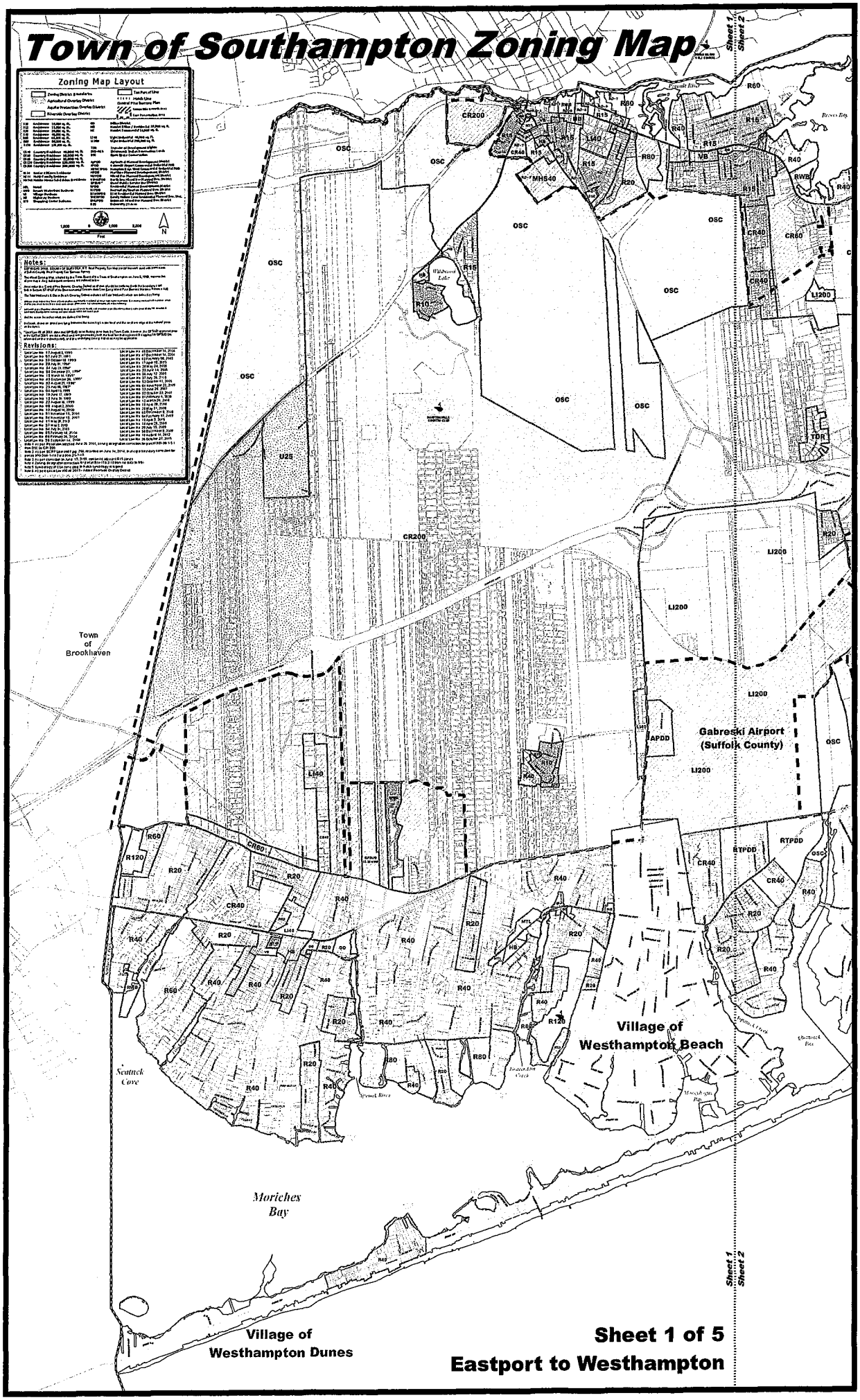
Sincerely,

Ruth L. Pierpont

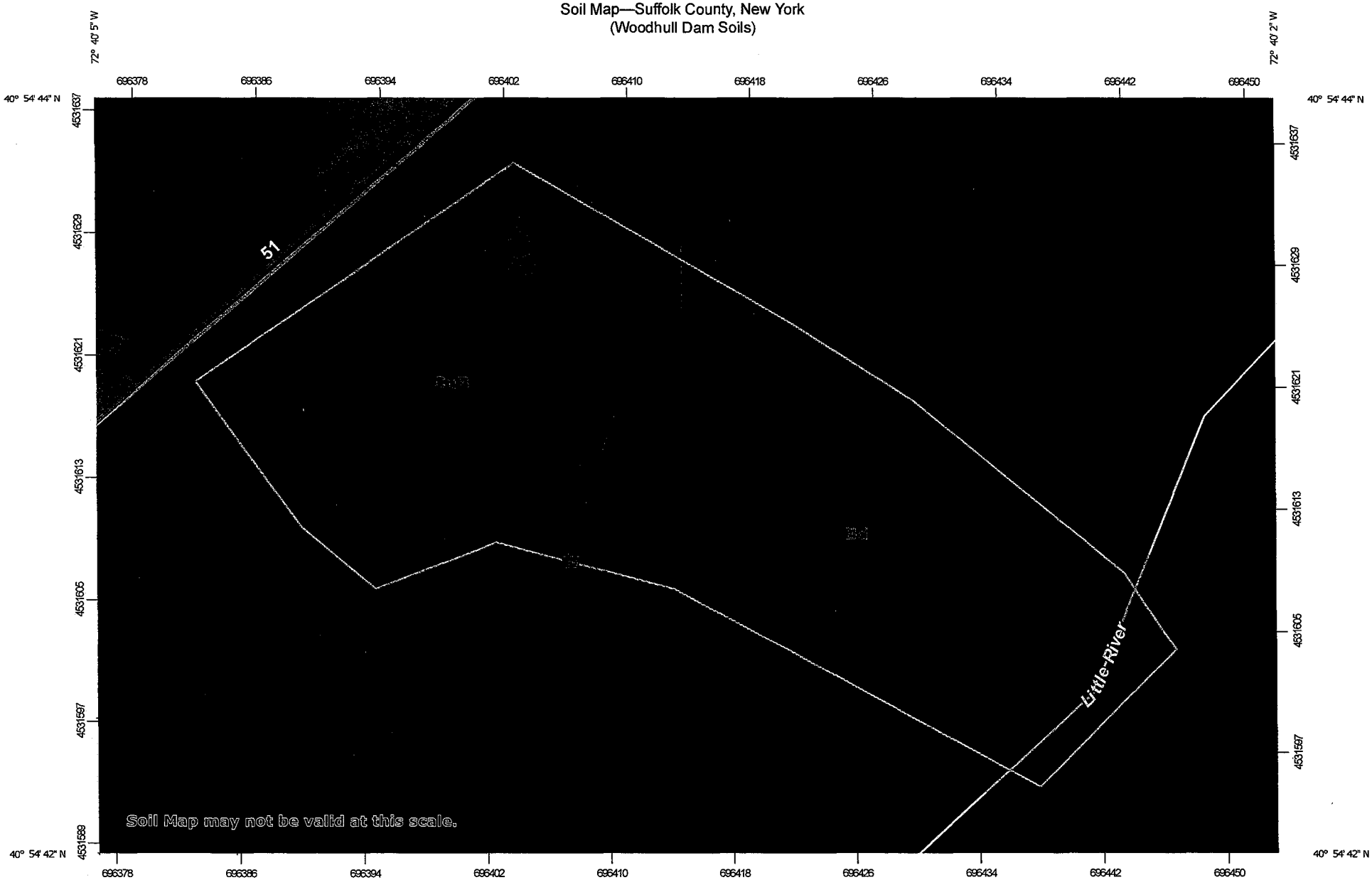
Ruth L. Pierpont

Deputy Commissioner for Historic Preservation

Town of Southampton Zoning Map



Soil Map—Suffolk County, New York
(Woodhull Dam Soils)



Map Scale: 1:349 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 15 30 60 90

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Suffolk County, New York
Survey Area Data: Version 14, Sep 24, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 13, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Suffolk County, New York (NY103)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Bd	Berryland mucky sand	0.2	56.9%
CuB	Cut and fill land, gently sloping	0.1	43.1%
W	Water	0.0	0.0%
Totals for Area of Interest		**0.3**	**100.0%**

COUNTY OF SUFFOLK

STEVEN BELLONE
COUNTY EXECUTIVE

DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING
DIVISION OF PLANNING AND ENVIRONMENT

COUNCIL ON ENVIRONMENTAL QUALITY

LAWRENCE SWANSON
Chairperson
CEQ

MEMORANDUM

TO: Interested Parties/Involved Agencies

FROM: John Corral, Senior Planner JC

DATE: October 11, 2017

RE: Proposed Indian Island Living Shoreline Project, Town of Riverhead

Enclosed is an Environmental Assessment Form for the above referenced County project which has been submitted to the Council on Environmental Quality (CEQ) for review. Pursuant to Title 6 NYCRR Part 617 and Chapter 450 of the Suffolk County Code, the CEQ must recommend a SEQRA classification for the action and determine whether it may have a significant adverse impact on the environment which would require the preparation of a Draft Environmental Impact Statement (DEIS).

The Council would like to know your environmental concerns regarding this proposal and whether you think a DEIS or a determination of non-significance is warranted. This project will be discussed at the **October 18, 2017** CEQ meeting. If you are unable to attend the meeting to present your views, please forward any recommendations or criticisms to this office prior the date of the meeting. **If the Council has not heard from you by the meeting date, they will assume that you feel that the action will not have significant adverse environmental impacts and should proceed accordingly.**

JC/cd
Enc.

cc: John Sohngen, Assoc. Public Health Engineer
Suffolk County Department of Health Services
Andrew P. Freleng, Chief Planner
Department of Economic Development and Planning
Sean Walter, Supervisor Town of Riverhead
Jefferson Murphree, Administrator, Town of Riverhead
Carrie Meek-Gallagher, Regional Director, NYSDEC
Jeffrey Zappieri, NYSDOS
Steve Ryba, United States Army Core of Engineers
RoAnn M. Destito, Commissioner NYSOGS

D&B ENGINEERS AND ARCHITECTS, P.C.

330 Crossways Park Drive, Woodbury, New York 11797

516-364-9890 • 718-460-3634 • Fax: 516-364-9045 • www.db-eng.com

October 2, 2017

Mr. Lawrence Swanson
Suffolk County Department of Planning
H. Lee Dennison Building
P.O. Box 6100
Hauppauge, NY 11788

Re: Indian Island County Park Erosion Mitigation
D&B No. 3328

Dear Mr. Swanson:

D&B Engineers and Architects, P.C. (D&B) respectfully submits on the behalf of the Suffolk County Department of Public Works and Suffolk County Parks, fifteen (15) copies of the following documents for the above referenced project.

- Project Narrative;
- Short Environmental Assessment Form (this form has been submitted to the environmental regulatory agencies as part of the permit process);
- Indian Island, NY Numerical Modeling Wave Analysis; and
- Project Presentation (if desired by the Council, D&B can present the major project components).

We would appreciate a project review to be scheduled for the October 18, 2017 meeting of the Council on Environmental Quality. Please do not hesitate to contact me at (516) 364-9890 if you have any questions or require additional information.

Very truly yours,

T. Schaefer

Tom Schaefer, P.E.
Associate

TS:t/cf
Enclosures
♦3328\TS100217LS_Ltr

PROJECT NARRATIVE

Indian Island Suffolk County Park
Proposed Living Shoreline Project
Project Narrative

Summary

The Indian Island Suffolk County Park living shoreline project is proposed as an environmentally sustainable method of providing protection, resiliency and stabilization to the coastal ecosystem (upland and wetland habitat) through the creation of natural and nature-based features (NNBF) within the Indian Island area. The Indian Island area has been experiencing chronic loss to the bluff, shoreline, and marshes. These losses are critically threatening important infrastructure (Circle Drive), navigation, and destroying productive marsh habitat.

The bluff in several key locations on Indian Island is experiencing ongoing, catastrophic and irreversible bluff loss that is resulting in a landward migration of the bluff threating the collapse of Circle Drive. Suffolk County has been forced to frequently place sand to keep the road from becoming undermined. Additionally, the marsh areas within Indian Island have been experiencing significant loss, reducing their size resulting in a loss of vital and productive tidal wetland habitat.

The project is proposed to provide increased protection to the area against flooding/erosion, stabilization of the shoreline and navigation channel, and restoration/ enhancement of the regional ecosystem, marsh and waterbody. The proposed living shoreline project contains three living segmented emergent rock sills, marsh habitat restoration/ enhancement consisting of compatible beach nourishment fill planted with wetland vegetation, and bluff stabilization consisting of an upland cantilevered PVC bulkhead covered with compatible fill and planted with beach grass.

1. **Living segmented emergent rock sills** – three living segmented emergent rock sills are proposed to be placed within the nearshore region of Flanders Bay. The "living" aspect of the sills is proposed to be accomplished by seeding them with encrusting shellfish such as oysters to increase habitat and water quality.

2. **Marsh habitat restoration/ enhancement** – existing marsh headlands within the area are proposed to be stabilized with the addition of coir logs and aquatic vegetation planting and invasive plants will be removed. Additional, marsh areas are proposed to be created landward of the living sills by the placement of approximately 1,500 CY beach compatible fill planted with aquatic vegetation.

3. **Bluff Stabilization**- A cantilevered PVC bulkhead is proposed to be installed in the existing the bluff landward of the spring high water. The bulkhead is proposed to be covered with approximately 2,000 CY beach compatible fill and planted with beach grass.

1. Living segmented emergent rock sills

The proposed segmented, emergent, living rock sills are proposed to provide increased protection to the shoreline and bluff of Indian Island against high frequency storm events containing moderate surge and wave heights. Storm energy will be dissipated as waves impact the structures. Additionally, the sills are designed to increase sand retention landward of structures resulting in an increase in the elevation of the beach that will further dissipate wave energy and limit wave interaction with the toe of the bluff.

The sills are also proposed to provide stabilization of the shoreline and existing marsh headlands in the area as well as create additional sheltered regions to facilitate the establishment of new marsh areas. The sill will also limit possible infilling of the existing navigation channel located to the north of Indian Island at the entrance of Meetinghouse and Terry Creeks by entrapping sand.

The living rock sills themselves will also provide productive rocky subaqueous marine habitat for finfish, shellfish, marine invertebrates, seaweeds, etc. Furthermore, the living rock sill areas are proposed to be seeded with shellfish such as oysters that through their filter feeding will improve water quality.

The proposed project will consist of three living segmented emergent rock sills that are approximately 15- 25 feet from the shoreline depending on their location and configuration (Please see attached plan for proposed location). These sills are the minimum size necessary to provide protection to the fringe wetlands. The sills proposed are emergent; therefore they will be above water level during high tide. The sills are proposed have a top elevation of +1.5' NAVD88. At the Indian Island site the MHW is approximately +1' NAVD88 and MLW is approximately -2' NAVD88. Therefore, at MHW the sill will be exposed by approximately half a foot and at MLW the sill will be exposed by approximately 3-1/2 feet.

The sills are proposed to have a crest width of 10 feet and will slope down on either side (seaward and landward) on a 1 to 1.5 slope where they will tie into the shoreface. The base width of the sills will vary from approximately 20-25 feet depending on the depth of water that the sill is located in.

The sills will be constructed of natural quarry stone and will be underlain by filter fabric. Filter fabric will be placed down that will then be covered with natural quarry bedding stone that is approximately 8" in diameter and two feet thick across the foot print of the sills. The core and armor stone will then be placed into the approved configuration.

2. Marsh habitat restoration/ enhancement

The proposed marsh habitat restoration and enhancement will provide increased stability and resiliency to the shoreline. The habitat restoration will enhance the existing marsh area to reduce loss, improve progression of the marsh, and sustain the vital native marsh habitat and ecosystem of the region. The habitat enhancement will create new areas of tidal wetland marsh that did not exist prior to the project that will additionally stabilize the area and will create new regions of essential marsh habitat to increase the productivity of the local ecosystem.

The marsh restoration of the area will consist of the addition of coir logs and wetland vegetation planting to stabilize the existing marsh areas of Indian Island. It will also consist of the removal of invasive plant species within the marsh. Additional, marsh areas are proposed to be created landward of the living sills by the placement of approximately 1,500 CY of beach compatible fill in the identified areas planted with wetland vegetation.

3. Bluff Stabilization

Bluff stabilization is proposed to provide protection to the bluff, upland property and the key infrastructure of Circle Drive, the access road to Indian Island. Bluff stabilization is proposed to provide protection against low frequency episodic storms with large waves and storm surges that will inundate the sills and beach allowing for direct wave action on the bluff.

As part of the bluff stabilization a cantilevered PVC bulkhead is proposed to be installed in the existing bluff face seaward of the bluff crest and landward of the bluff toe above spring high water. The bulkhead will provide protection against catastrophic bluff loss and the potential undermining of Circle Drive during these large storms.

The bulkhead is proposed to be covered with approximately 2,000 CY of beach compatible sand and is to be planted with beach grass three clums per hole 12" on center. Covering the bulkhead with sand and planting it will allow for it to be there for protection while still allowing for a natural dune to become established in the area to enhance the native ecosystem.

Bluff Loss On Property

The bluff on the subject property is experiencing ongoing, catastrophic and irreversible bluff loss. This bluff failure is resulting in a landward migration of the bluff on the subject property. The Suffolk County Parks Department has then been forced to frequently place upland sand on the bluff in several locations to provide protection to Circle Drive from undermining and collapse.

The bluff loss is a result of wave action at the toe of the bluff which leads to:

1) undercutting of the bluff toe
2) over steepening of the bluff face
3) undercutting of the bluff crest
4) the eventual collapse and slumping of the bluff crest threatening Circle Drive

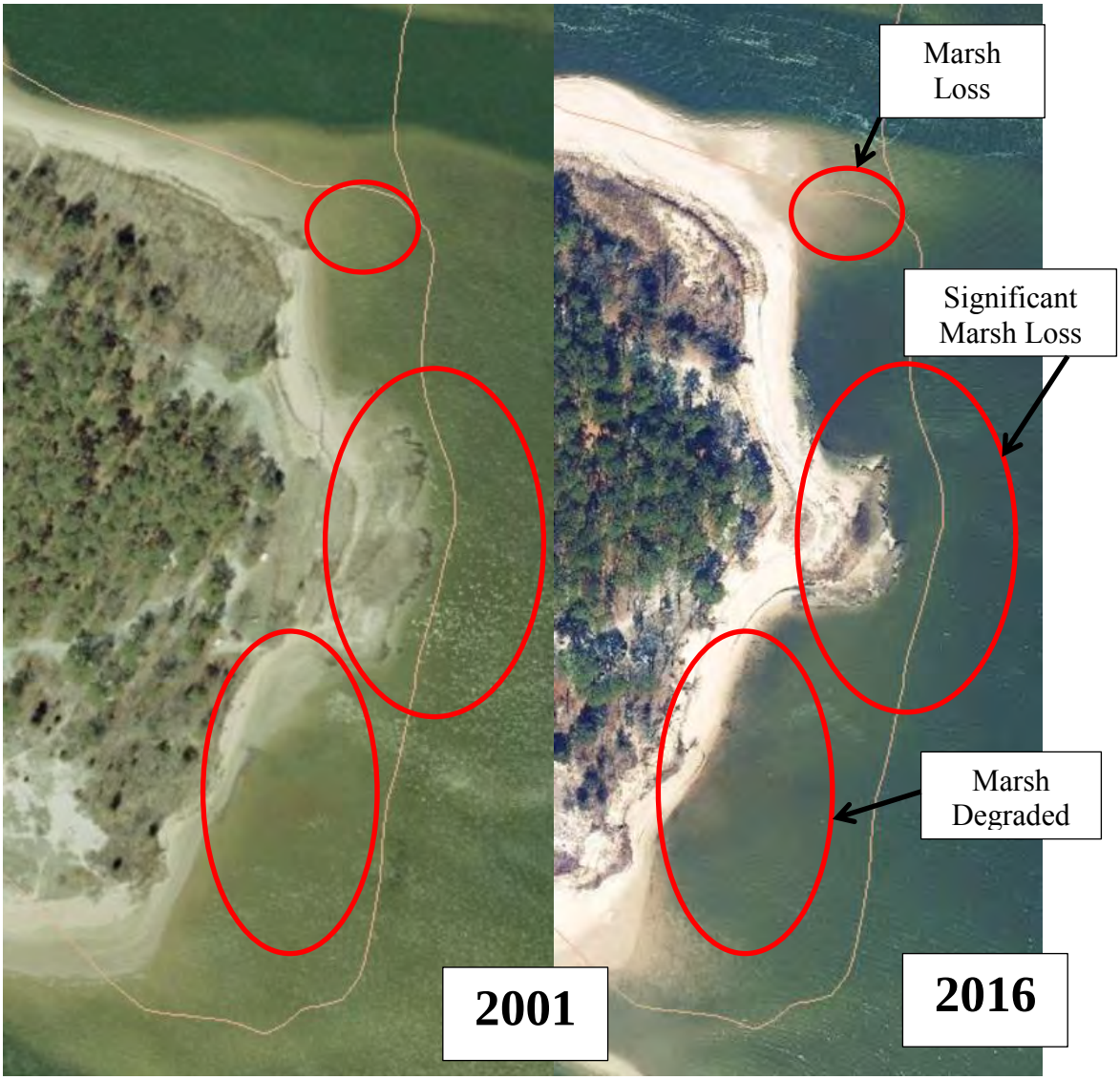
This bluff loss on the subject property is evident by:

1) the vertical scarps at the toe of the bluff caused by wave action undercutting the toe of the bluff
2) the bare soils and lack of vegetation present on the bluff face
3) the undercut/overhang present on the bluff crest
4) free floating islands of vegetation on the bluff face that have broken off and are moving downslope. In several areas of the bluff large rafts of the undercut bluff crest that have failed and slumped on to the lower portions of the bluff.

There is little to no evidence of bluff erosion due to stormwater runoff over the crest of the bluff or groundwater seepage through the bluff face. Although both of these mechanisms can destabilize the bluff, neither appear active at the site and bluff appeared mostly susceptible to damage by wave undercutting and subsequent catastrophic failure as described above.

Marsh Loss On Property

The marsh areas within Indian Island have been experiencing significant loss. The existing marsh has been degraded and is a fraction of its historic size. Wave action and ice undercutting on the marsh area is resulting in loss of the marsh headlands soils and vegetation. Without protection it is likely that some marsh areas will be completely destroyed in the near future, resulting in a loss of vital and productive habitat, as well as increased exposure of the bluff.



Increased Tidal Wetland Habitat

There are numerous scientific and scholarly reports/documents that have been released in recent years that identify the benefit of living shoreline projects on tidal wetland habitat. These documents identify that the NNBF of living shorelines result in an increase in habitat, ecological productivity and water quality for numerous species included but not limited to finish, shellfish, marine invertebrates, macro algae, migratory/wading birds and reptiles. These reports recognize that generally there is an increase in tidal wetland habitat and productivity for a living shoreline project when compared to the preexisting condition.

The NYSDEC recently released the "DRAFT Tidal Wetlands Guidance Document Living Shoreline Techniques in the Marine District of New York State, December 27, 2016" to provide guidance on the issuance of permits for living shoreline techniques and discusses the beneficial use of living shorelines. Furthermore, the USACE recently released a Nationwide Permit (54) for Living Shorelines.

Need for Sill and Retaining Wall

As part of this project modeling was undertaken, the modeling report is included under separate cover (Indian Island, NY Numerical Modeling Wave Analysis – December 2016). The modeling identifies that the proposed breakwaters are most effective in attenuating wave energy for high frequency storms containing moderate surge/ wave setup (1 in 10 year storm with 10% chance of occurrence annually). The reduced wave conditions resulting from the breakwaters will help reduce shoreline erosion and help reduce need for beach nourishment during these moderate surge/wave setup events.

Additionally, the analysis identified that when the breakwaters are submerged during large storms that their wave attenuation decreases. Therefore, in order to protect against large weather events, the proposed bulkhead landward is necessary to ensure that further bluff loss and potential endangerment of Circle Drive does not occur. Moreover, since the modeling identifies that during large scale storms with a wind direction of 90 deg the east facing shoreline is exposed to the largest wave energy, a retaining wall/bulkhead across this entire area is justified.

Therefore, this modeling demonstrates the benefits of the breakwater in reducing annual fill and the need for the sill and the retaining wall as well as the necessary length of the retaining wall/bulkhead.

Decreased frequency of fill placement

The modeling confirms that during high frequency storms containing moderate surge/ wave setup that the breakwaters significantly decrease wave energy transmission to the shoreline and bluff. Therefore, during these common events that historically lead to bluff and beach loss, the proposed addition of the breakwaters will reduce the loss to the bluff, resulting in a decrease in the frequency of placing fill.

SHORT ENVIRONMENTAL ASSESSMENT FORM

617.20
Appendix B
Short Environmental Assessment Form

Instructions for Completing

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

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

Part 1 - Project and Sponsor Information

Name of Action or Project:
Indian Island Living Shoreline

Project Location (describe, and attach a location map):
Indian Island Suffolk County Park, Riverhead, NY

Brief Description of Proposed Action:
The project consists of the construction of a living shoreline. Please see attached project narrative

Name of Applicant or Sponsor:	Telephone: 631-854-4600
Suffolk County Parks / Nicholas Gibbons	E-Mail: nicholas.gibbons@suffolkcountyny.gov

Address:
P.O. Box 144

City/PO:	State:	Zip Code:
West Sayville	NY	11796

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: USACE, NYSDOS, NYSOGS	☐	☑

3.a. Total acreage of the site of the proposed action? 275 acres
b. Total acreage to be physically disturbed? ~2 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 275 acres

4. Check all land uses that occur on, adjoining and near the proposed action.
☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____
☑ Parkland

	NO	YES	N/A
5. Is the proposed action, a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO ☐	YES ☑	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: Peconic Bay and Environs	NO ☐	YES ☑	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO ☑	YES ☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☑	☐	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☑	☐	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies:	NO ☑	YES ☐	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water:	NO ☑	YES ☐	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment:	NO ☑	YES ☐	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO ☑	YES ☐	
b. Is the proposed action located in an archeological sensitive area?	☑	☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO ☐	YES ☑	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☑	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: Flanders Bay less than 1 acre			

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☑ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☑ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100 year flood plain?	☐	☑
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☐ NO ☐ YES	☑	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☐ YES		

	NO	YES
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	☑	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	☑	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	☑	☐

I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor name: Suffolk County Parks / Nicholas Gibbons Date: 8/28/17

Signature: _____ FOR

KYLE SWARINGEN

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☑	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☑	☐
3. Will the proposed action impair the character or quality of the existing community?	☑	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☑	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☑	☐
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	☑	☐
7. Will the proposed action impact existing: a. public / private water supplies?	☑	☐
b. public / private wastewater treatment utilities?	☑	☐
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☑	☐
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☑	☐

	No, or small impact may occur	Moderate to large impact may occur
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☑	☐
11. Will the proposed action create a hazard to environmental resources or human health?	☑	☐

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

☑ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Suffolk County Parks Department	8/28/17
Name of Lead Agency	Date
Nicholas Gibbons	Principal Environmental Analyst
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
FOR KYLE SWARINGEN	
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

PRINT

INDIAN ISLAND, NY NUMERICAL MODELING WAVE ANALYSIS

INDIAN ISLAND NY

NUMERICAL MODELING WAVE ANALYSIS

DRAFT

01 GENERAL

This is a summary of the numerical modeling analysis conducted to evaluate the wave conditions on the Eastern shoreline of Indian Island located in the Town of Riverhead, Suffolk County, NY (**Figure 1**). Various storm conditions were simulated through numerical modeling and the wave climate assessed for each case to evaluate the level of shoreline protection from the proposed project including two breakwaters (BW). The preliminary results are presented herein for your consideration. The modeling results confirm that the proposed breakwaters are most effective in attenuating waves from high frequency storm events containing moderate surge/wave setup. The reduced wave conditions will help reduce the shoreline erosion and help reduce the need for beach nourishment.

02 NUMERICAL MODEL

02.01 MODEL INPUT

The local bathymetry for the project area was provided by Gayron de Bruin Land Surveying and Engineering, PC in a recent survey and the regional bathymetry was taken from the 1955 NOAA dataset. The numerical model was set up with and without the two proposed breakwaters with crest elevation at +0.5m (+1.5ft NAVD88). **Figure 1** shows a color coded contour map for both regional and local bathymetry. Depth within the marina ranges from 8 m in the Peconic Bay to around 1m near Indian Island.

The numerical model used to conduct the analysis was CMS-Wave, a component of the Coastal Modeling System developed by the US Army Corps of Engineers Coastal and Hydraulics Laboratory. CMS-Wave is a 2-D wave spectral transformation phase averaged model suitable for coastal and inlet modeling. The model allows for nested cells which permitted the use of larger cells away from the Park (100m) and finer cells in the vicinity of the Park (1.5m) where details are more relevant to the study. The model domain and cell detail are presented in **Figure 1**. The model was set up to cover most of the Great Peconic Bay including Indian Island.

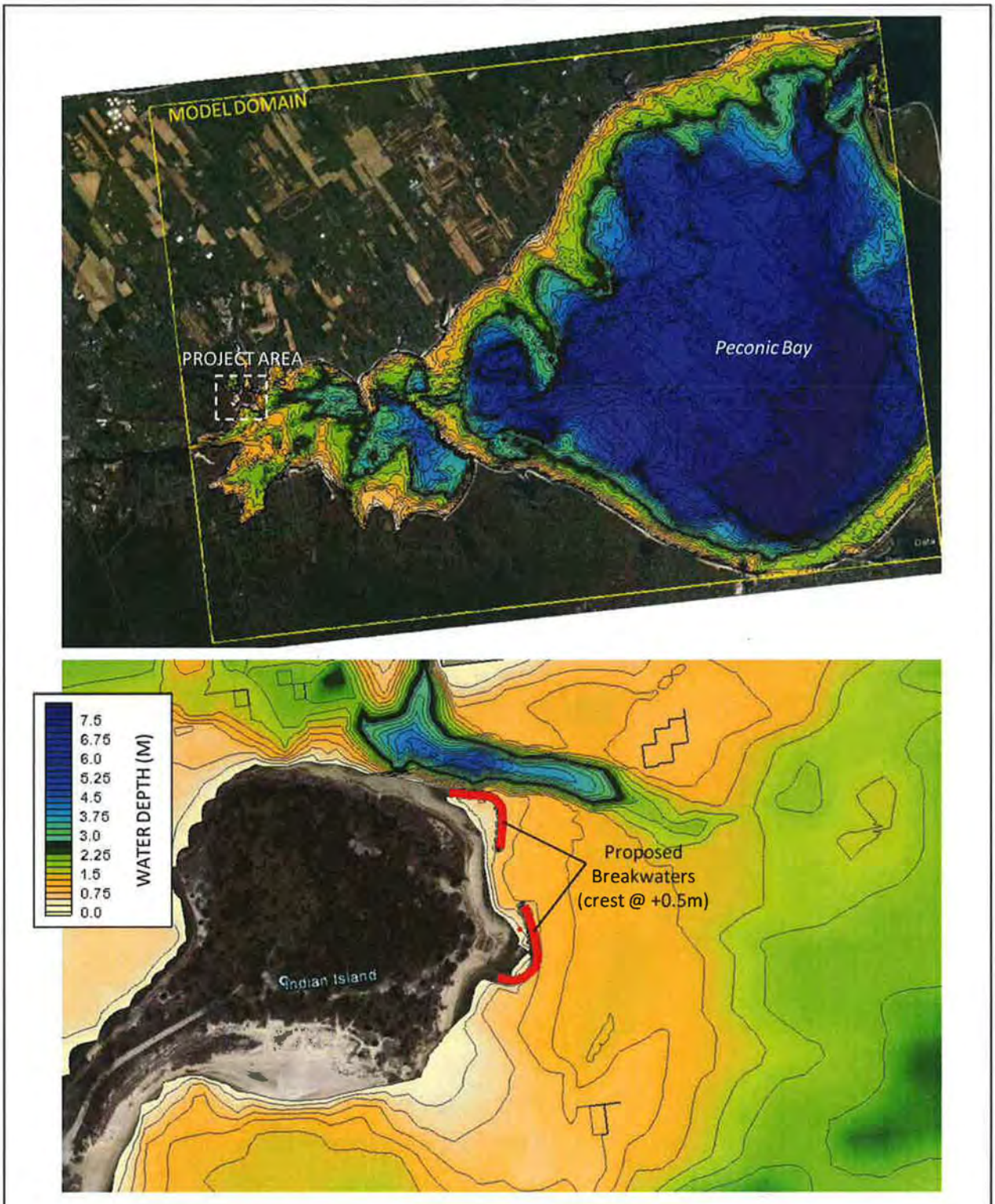


Figure 1: Project Location & Model Domain

The CMS-Wave model is able to determine the wave height from hindcast, using wind velocity and local and regional basin geometry and bathymetry as input. The model input wind speeds were derived from the Westhampton Airport 30-yr wind record. The storm surge was obtained from the FEMA Flood Insurance Study (FIS). The model input wind speed and surge extracted from the SLOSH model at the Indian Island Park location is summarized in **Table 1** below.

Table 1 – CMS-Wave Model Input

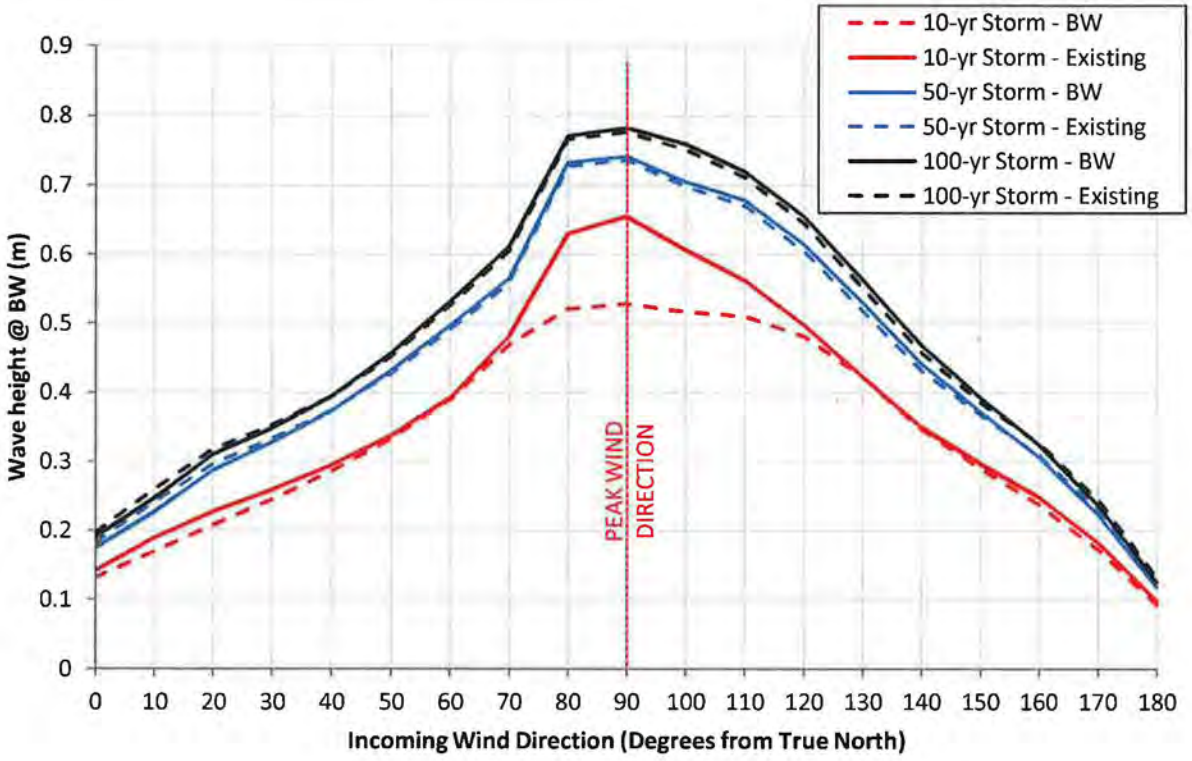
Storm	Storm Surge (m)	Wind Speed (m/s)
10% 10-yr	1.2	31
2% 50-yr	1.6	37
1% 100-yr	1.8	39

The numerical model was first set up to simulate the various storm categories for incoming wind directions ranging from 0° (North) to 180° (South) on a 10° increment. This was done to determine the direction from which the resulting wave heights are the highest. The simulation also included storm surge.

02.02 MODEL RESULTS

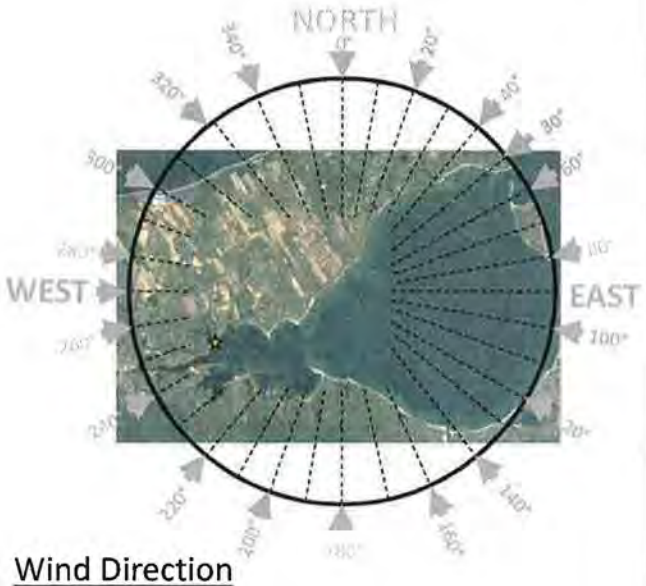
The numerical model results are summarized in **Figure 2**. In the figure, the model results are extracted at a location landward of the north breakwater and plotted over the various storms and wind directions modeled. Overall, the results show that wind from the East (90°) generates the largest waves and the storm surge significantly affects the effectiveness of the breakwaters. The graph in the figure shows that during 50 and 100 year storm conditions, wave attenuation from the structures is negligible, while waves from the 90° direction are attenuated by approximately 25% during a 10 year storm with associated storm surge. **Figures 3 through 5** show the model results for the respective 3 storm case scenarios (10%, 2% and 1% storms). In the figures, the resulting wave heights are represented in a color coded scale from blue to red with red capped at 1m, specific conditions modeled are described at the bottom.

While a storm surge was evaluated for the storm cases, the surge may only materialize when the storm generated winds are coming from the optimal direction, otherwise lower levels of storm surge may occur. Additionally, higher frequency storm events may also result in limited to no surge. In order to assess the effectiveness of structures during these more frequent conditions, another set of model runs were prepared for cases with limited surge (+0.5m). The simulations considered increasing wind speeds from the East (90°) both with and without the proposed structures. The results are summarized in **Figure 6**, they show that the proposed structures will



STORM		SURGE [1] (M)	WIND SPEED [2] (M/S)
10%	10-YR	1.2	31
2%	50-YR	1.6	37
1%	100-YR	1.8	39

Notes:
1. Surge elevations based on FEMA FIS.
2. Wind speed based on Westhampton Airport 1986-2015 record.



Wind Direction

Figure 2: CMS-Wave Model Results for Existing Conditions & Breakwater Project during 10, 50 & 100 Year Storms

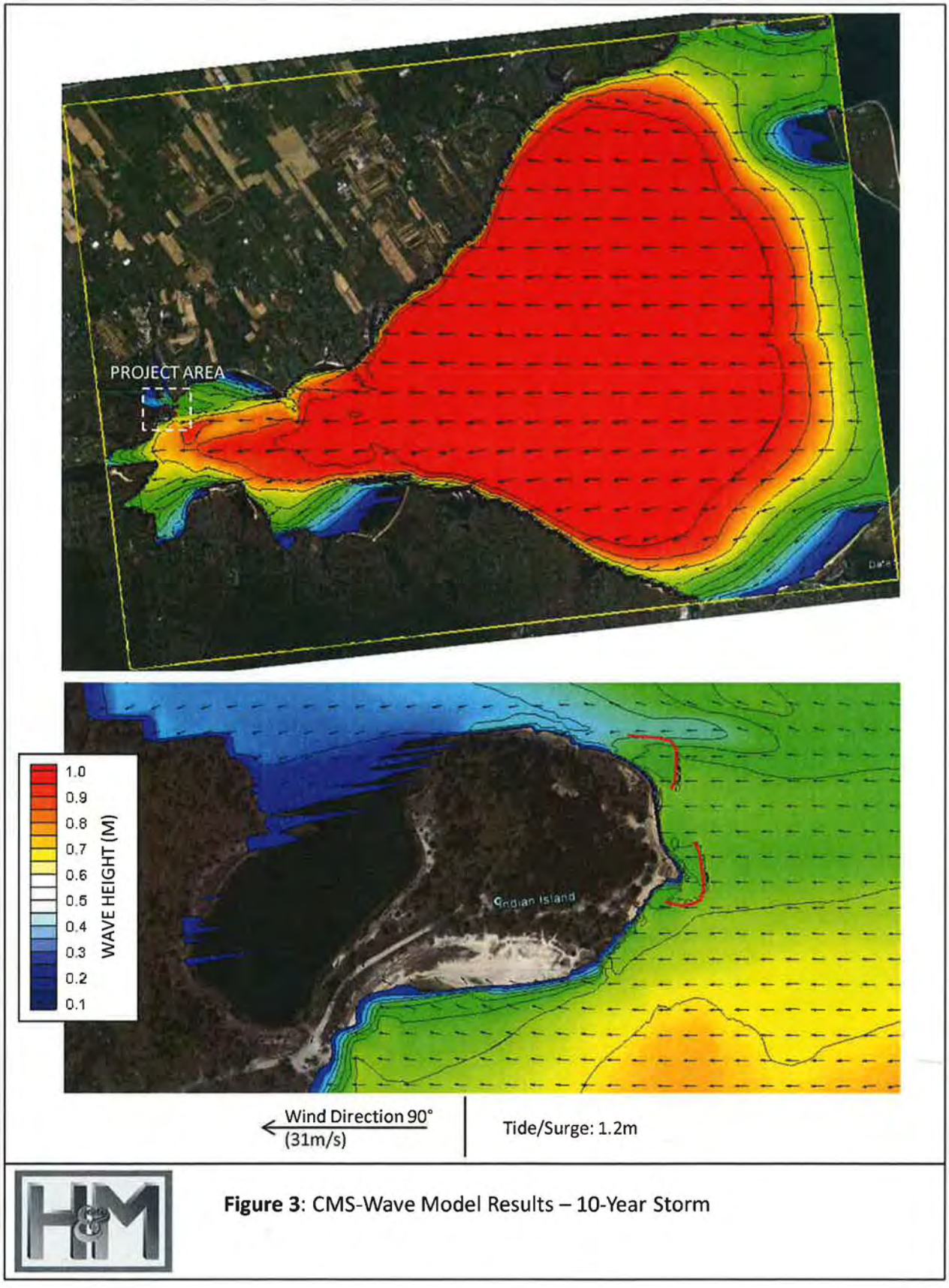


Figure 3: CMS-Wave Model Results – 10-Year Storm

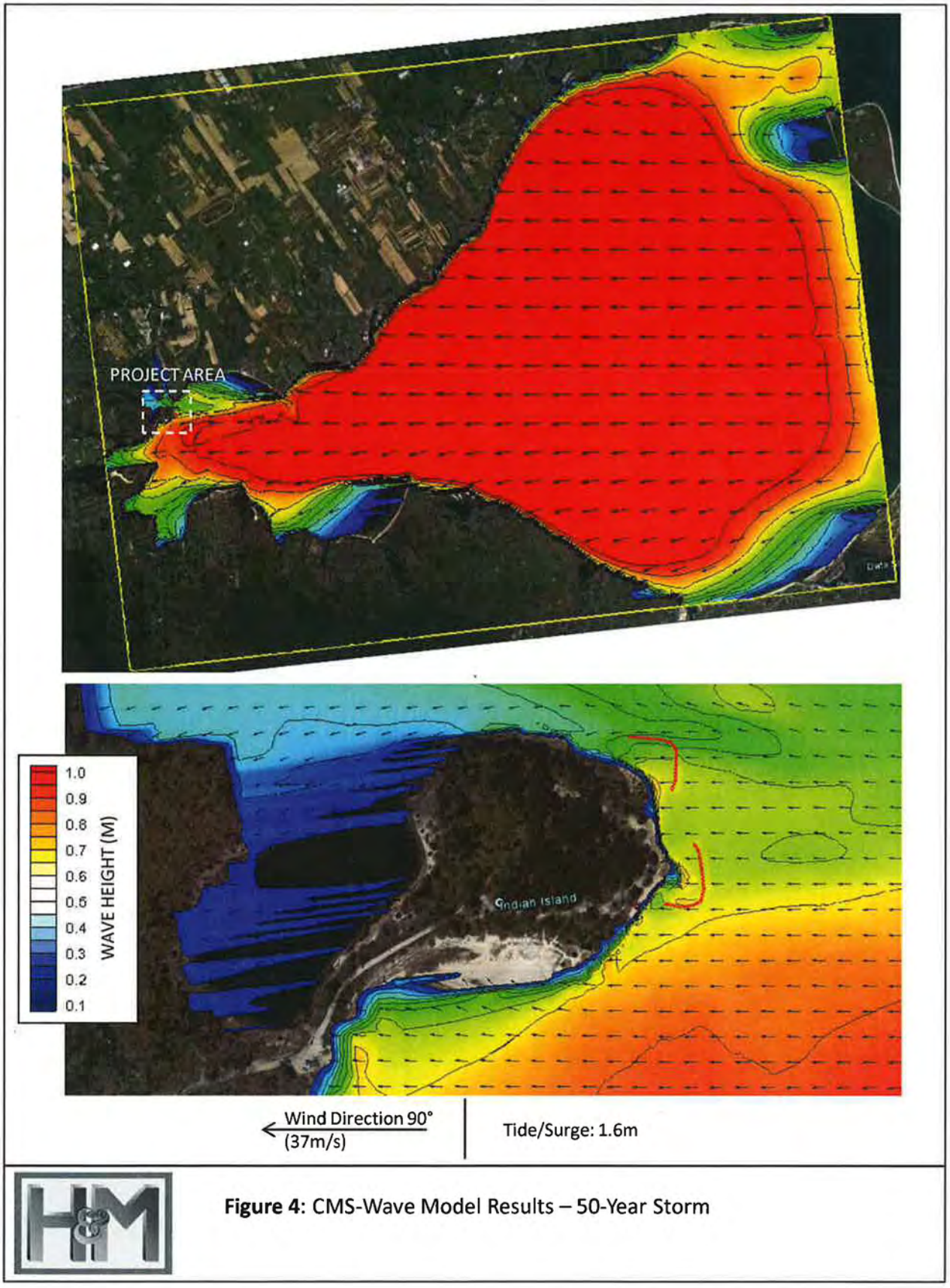


Figure 4: CMS-Wave Model Results – 50-Year Storm

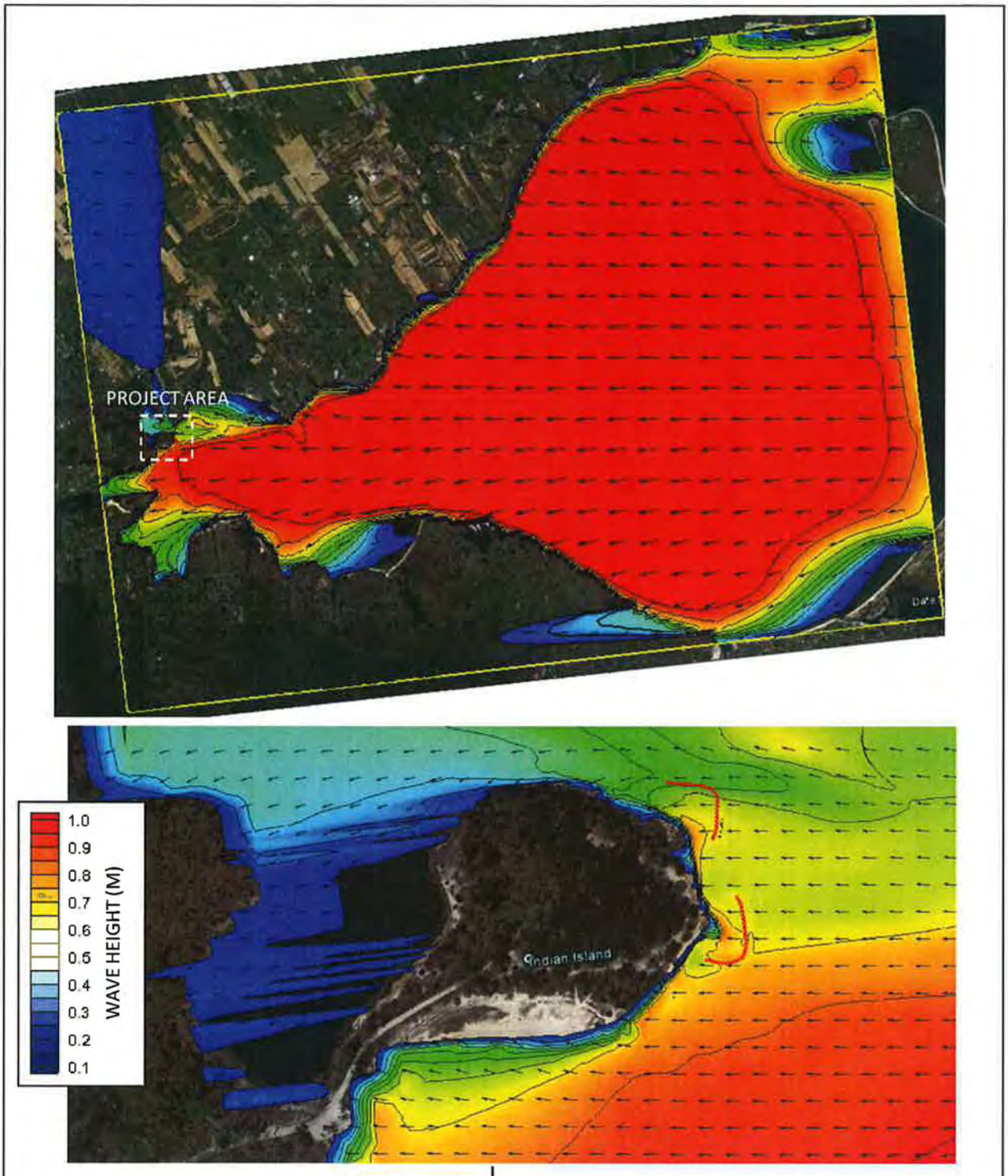
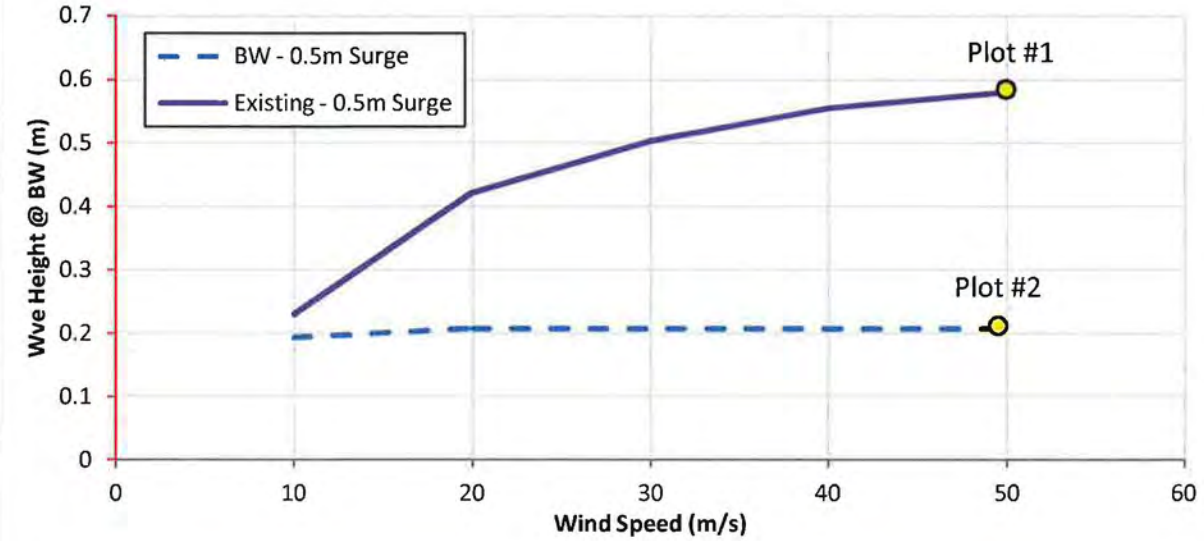


Figure 5: CMS-Wave Model Results – 100-Year Storm



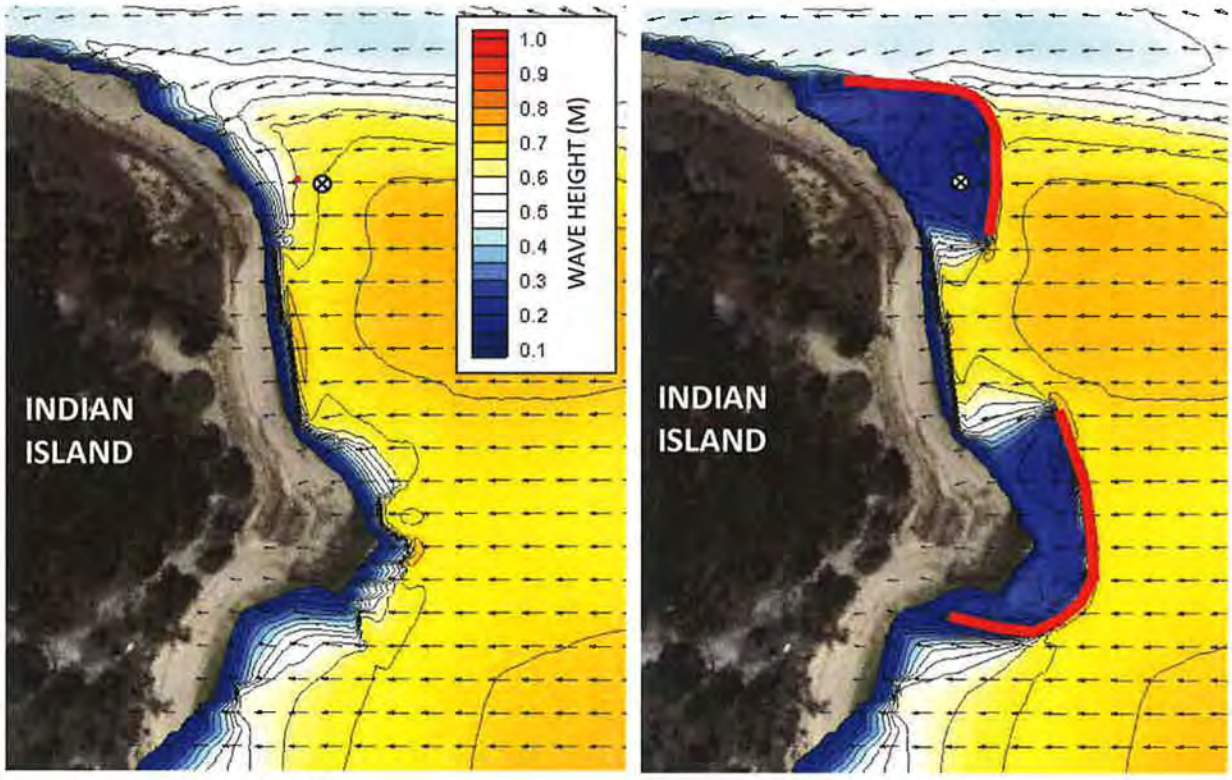


Figure 6: CMS-Wave Model Results for Existing Conditions & Breakwater Project without Storm Surge & Moderate Surge/Tide

provide wave sheltering during typical conditions and high frequency storm events. This should result in lower erosion rates and increased protection of upland sites.

An additional set of model run were prepared for the modified design using three breakwater segments. **Figure 7** shows a sample of the results with a comparison of the wave height for existing conditions, the proposed design and the modified design. The storm condition modeled in the example consists of a limited storm surge /tide of 0.5m and 30 m/s winds. In the figure, the wave field was extracted along a profile that follows the shoreline of the island and is plotted in a graph for the three design conditions. The results suggest that a more linear structure design could allow for the addition of a third structure, which would increase the wave sheltering effect on the island. This alternative is provided as a suggestion for consideration.

03 CONCLUSION/RECOMMENDATION

The report provided a review of the existing data available at the project site. The Army Corp CMS-Wave model was set up and run for various storm conditions. Based on the model results discussed above, the following observations and recommendations are provided:

- When the water level resulting from storm surge and tide combination is higher than the structure's crest, the wave attenuation function of the structures is significantly reduced.
- The proposed breakwaters will help reduce wave induced shoreline erosion in their lee during typical conditions, high frequency storms or storm conditions that do not include significant storm surge.
- The proposed design could be modified to protect a larger section of shoreline by slightly reducing the gap between structures and re-configuring the 2 proposed segments into three more linear segments with overall same cumulative length.

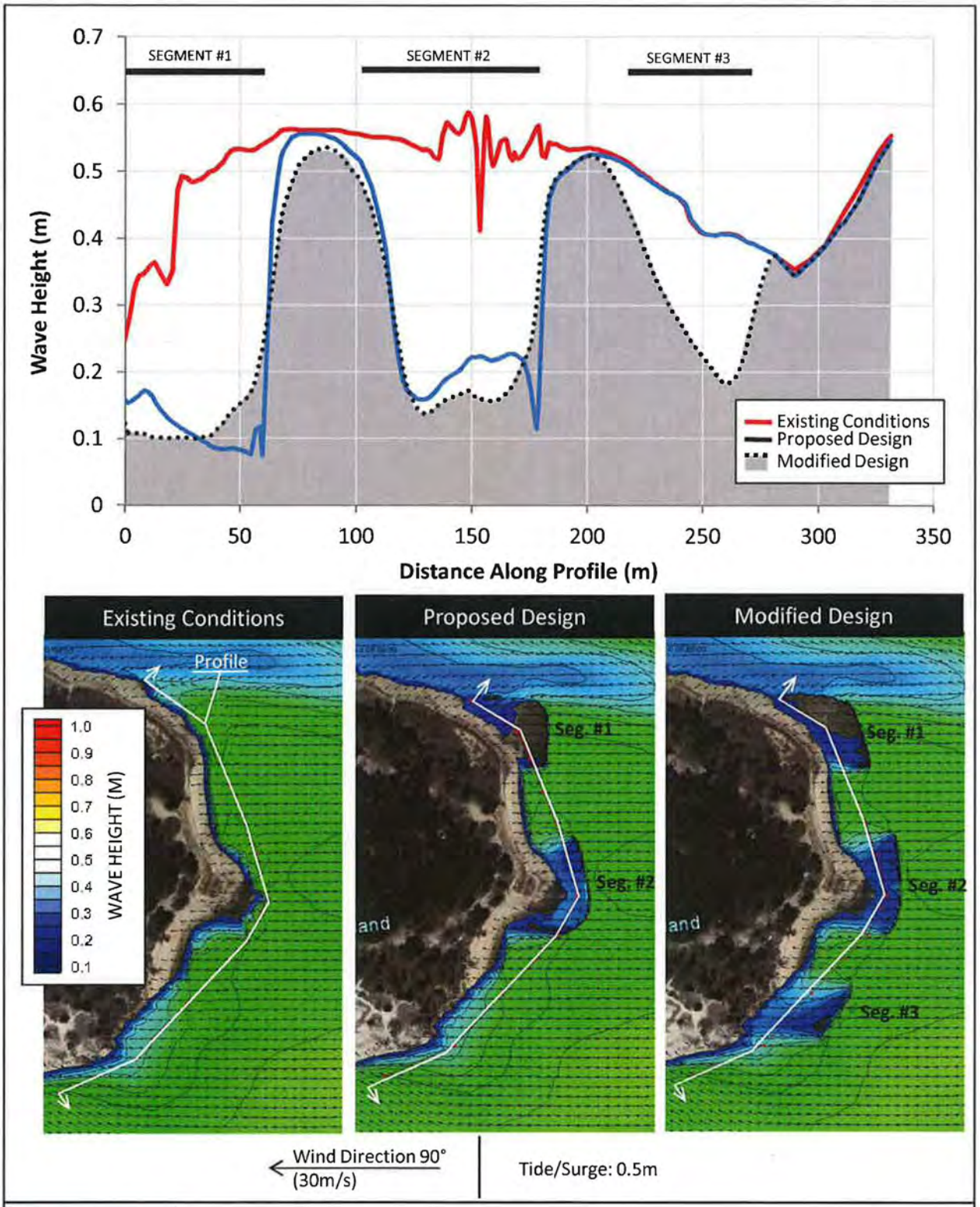


Figure 7: CMS-Wave Model Results – Modified Design

PROJECT PRESENTATION

Indian Island County Park
Living Shoreline Protection Project
CEQ Meeting: 10/18/2017

SUFFOLK COUNTY DEPARTMENT OF PUBLIC WORKS

SUFFOLK COUNTY PARKS

D&B ENGINEERS AND ARCHITECTS, P.C.

FIRST COASTAL CORPORATION

John Schreck, P.E.

Tom Schaefer, P.E.

Aram Terchunian

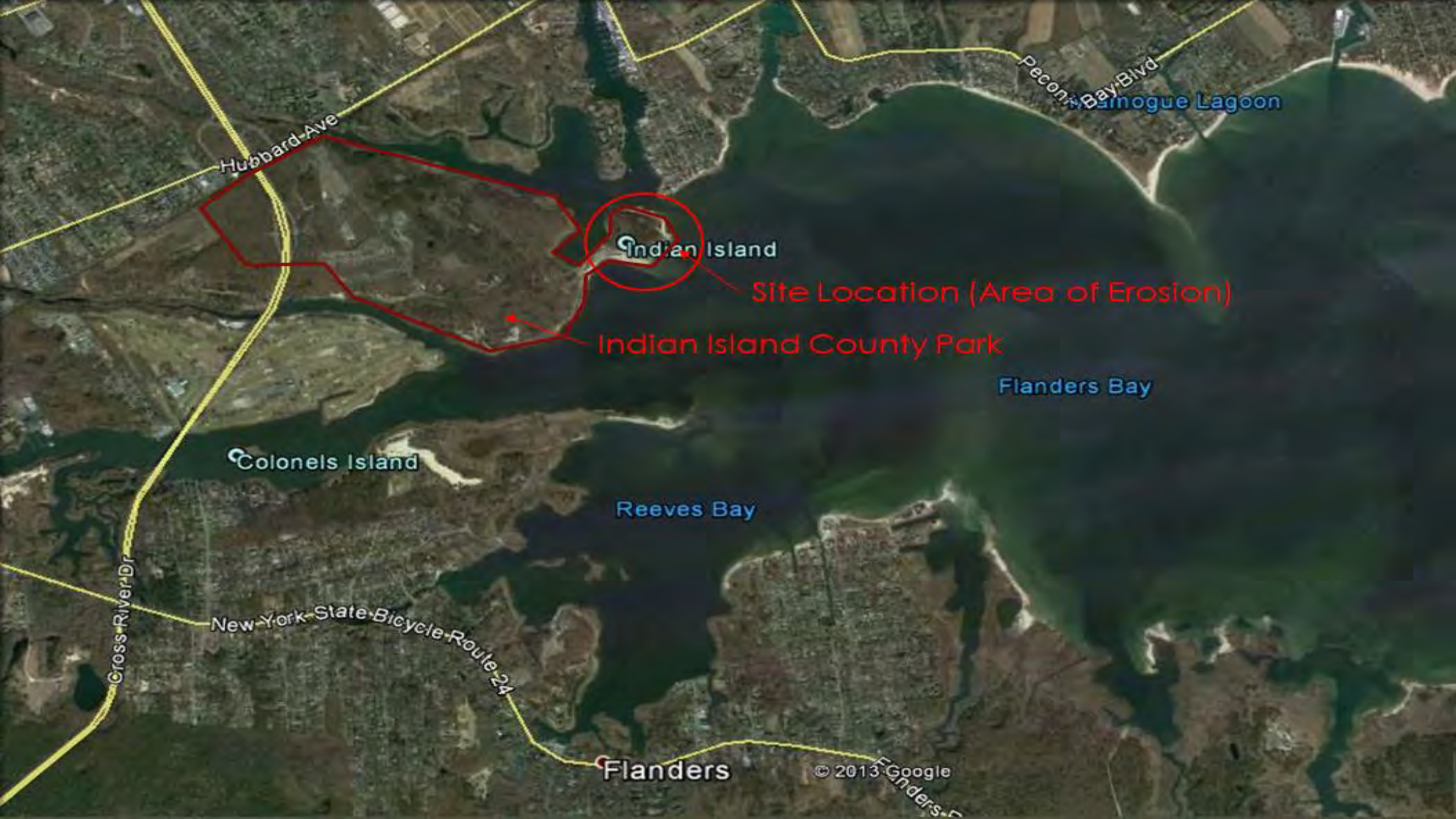
Benjamin Spratford

Project Summary

The Indian Island Suffolk County Park living shoreline project is proposed as an environmentally sustainable method of providing protection, resiliency and stabilization to the coastal ecosystem (upland and wetland habitat) through the creation of natural and nature-based features (NNBF) within the Indian Island area.

The bluff in several key locations on Indian Island is experiencing ongoing, catastrophic and irreversible bluff loss that is resulting in a landward migration of the bluff, thereby threatening the collapse of Circle Drive. Suffolk County has been forced to frequently place sand to keep the road from becoming undermined and there have been multiple FEMA-related projects to repair damage at this site. Additionally, possible Indian artifacts may be present at the site and the continual erosion will result in the loss of these artifacts. Lastly, the marsh areas within Indian Island have been experiencing significant loss, decreasing their size resulting in a reduction of vital and productive tidal wetland habitat.

The project is proposed to provide increased protection to the area against flooding/erosion, stabilization of the shoreline and navigation channel, and restoration/enhancement of the regional ecosystem, marsh and waterbody. The proposed living shoreline project contains three living segmented emergent rock sills, marsh habitat restoration/enhancement consisting of compatible beach nourishment fill planted with wetland vegetation, and bluff stabilization consisting of an upland cantilevered PVC bulkhead covered with compatible fill and planted with beach grass.


Hubbard Ave
Pecon Bay Blvd
Peconic Lagoon
Indian Island
Site Location (Area of Erosion)
Indian Island County Park
Flanders Bay
Colonels Island
Reeves Bay
Cross River Dr
New York State Bicycle Route 24
Flanders
© 2013 Google

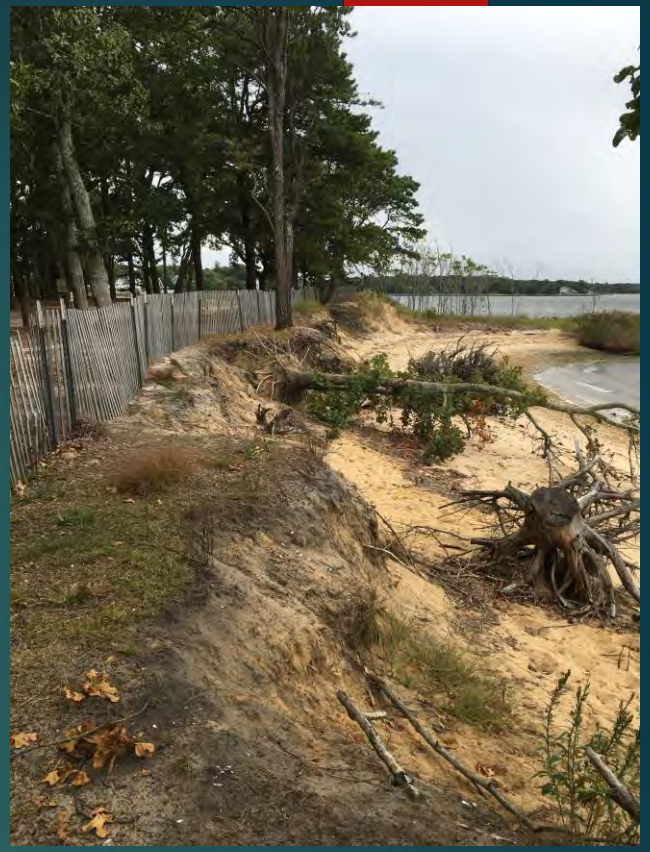
Project Location

Indian Island County Park is a 275 acre park located at the estuarine mouth of the Peconic River, where the freshwater of the Peconic River and saltwater of Flanders Bay meet, just off Cross River Drive (Route 105) in the County of Suffolk, Town of Riverhead, NY.

The site of the project is at the easternmost point of Circle Drive on Indian Island within Indian Island County Park. The project area is bounded by Flanders Bay to the east, the Peconic River to the south, and Terry Creek and Meetinghouse Creek to the north. Indian Island is connected to the main portion of Indian Island County Park via Indian Point Road, which crosses over a sandy spit or tombolo.

Existing Conditions

- The project site is a sand beach and sandy bluff shoreline fronted by a *spartina_alterniflora* marsh headland to the south along the Peconic River and small patches of *spartina alterniflora* to the north along Meetinghouse Creek. Both the beach and the bluff contain similar medium-to-fine grained sand.
- The beach is relatively narrow (less than 10 feet wide at high tide) and is moderately sloped. The partially submerged concrete block wall east of the beach is discontinuous and does not appear to be sufficiently effective at breaking wave energy to protect the beach and bluff.
- In 2005, Indian artifacts were discovered at the site after a large storm.
- The following figures present photographic evidence of ongoing erosion at the site.



Existing Conditions/Erosion at Beach and Bluff

Existing Conditions/Erosion at Marsh Headland

Evidence of Bluff Erosion

The bluff loss on the subject property is evident by:

1) the vertical scarps at the toe of the bluff caused by wave action undercutting the toe of the bluff

2) the bare soils and lack of vegetation present on the bluff face

3) the undercut/overhang present on the bluff crest

4) free floating islands of vegetation on the bluff face that have broken off and are moving downslope. In several areas of the bluff, large rafts of the undercut bluff crest have failed and have slumped onto the lower portions of the bluff.

The bluff loss is a result of wave action at the toe of the bluff which will lead to the eventual collapse and slumping of the bluff crest, thereby threatening Circle Drive.

Evidence of Significant Marsh Loss

2001 2016

The marsh headland to the south is also showing signs of erosion, including significant portions that have calved off the main body of the marsh, leaving the seaward face of the marsh a vertical escarpment. Despite this erosion, the marsh headland currently provides the only shoreline stability function along the shoreline.

The marsh areas within Indian Island have been experiencing significant loss. The existing marsh has been degraded and is a fraction of its historical size. Wave action and ice undercutting on the marsh area is resulting in loss of the marsh headlands soils and vegetation. Without protection, it is likely that some marsh areas will be completely destroyed in the near future, resulting in a loss of vital and productive habitat, as well as increased exposure of the bluff.

Aerial Photographs 1974 (Left) and 2013 (Right) Showing Evidence of Erosion

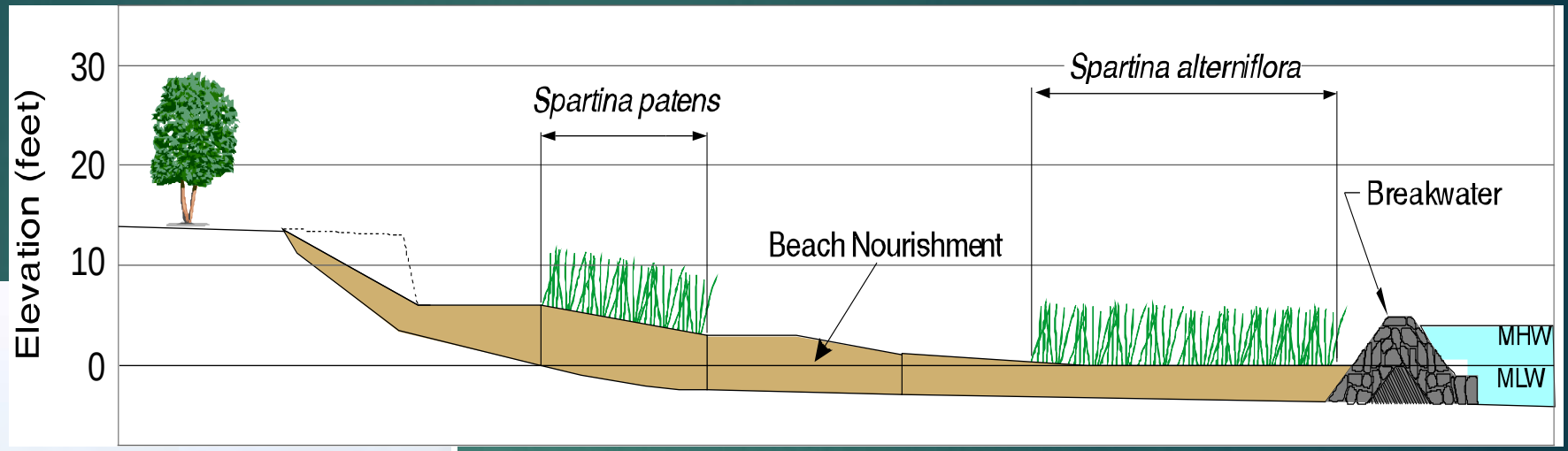
Wind/Wave Climatology and Littoral Transport

- The region of the shoreline that faces the largest fetch or open body of water typically receives the largest amount of wave energy.
- Therefore, with an open fetch facing directly east of almost 10 miles to Robins Island across Flanders Bay and Great Peconic Bay, the eastern side of Indian Island experiences the highest rates of erosion.
- The wave energy generated results in the erosion and littoral transport of sediment to the northern and southern deposition areas seen at the project site.

Proposed Project: Natural Living Shoreline with Breakwaters, Seawall with Nourishment, and Vegetation

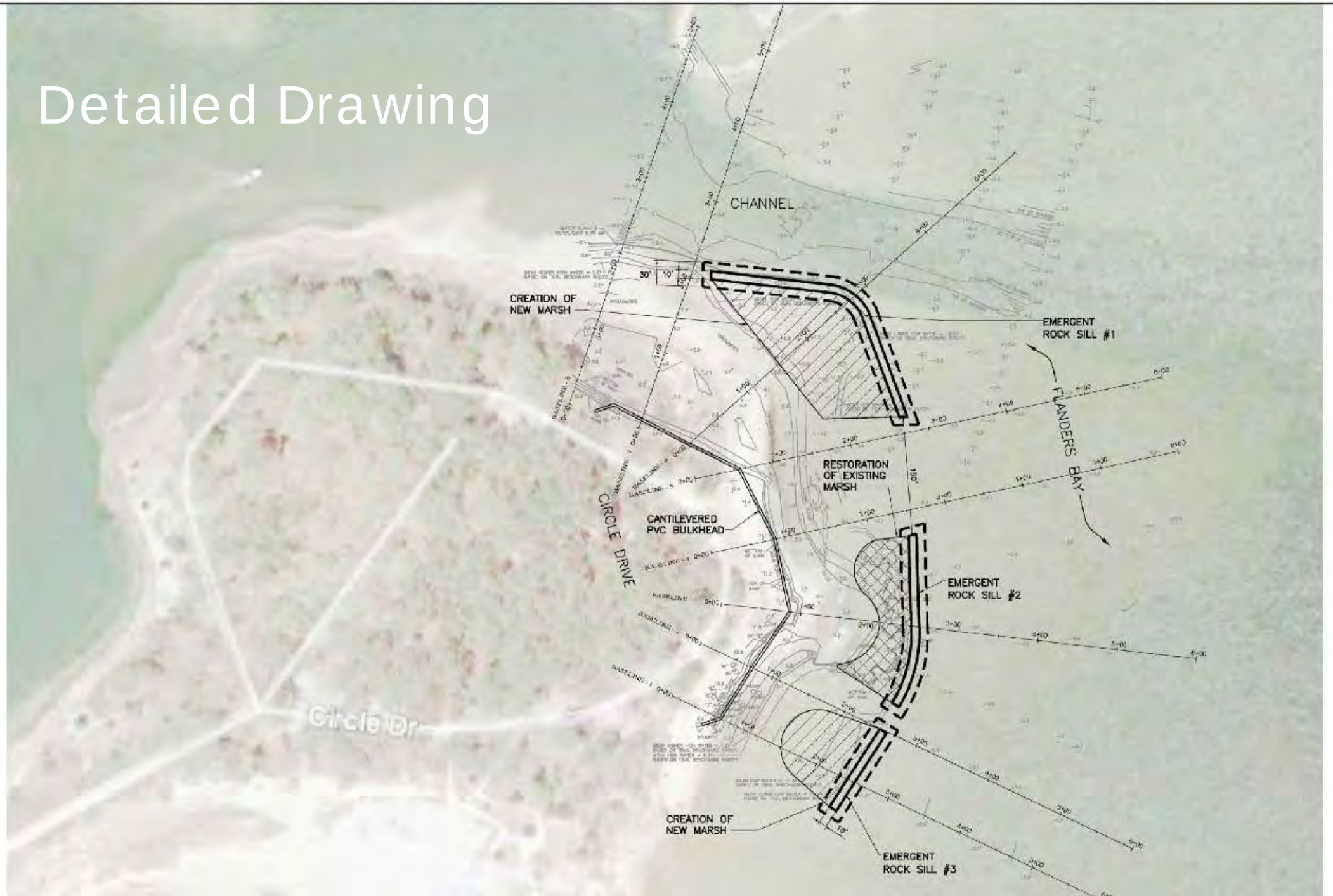
- A Living Shoreline is a method of shoreline protection and erosion control that protects, restores, or enhances natural shoreline habitat while maintaining coastal processes through the placement of plants, stone, sand fill, and other structural materials.
- Living Shorelines help preserve and sustain the native ecosystems of the area and produce new vibrant habitats for plants, fish, shellfish, birds, animals and the public to enjoy.
- The natural shoreline evolution at the project site appears to be a rock bound spartina headland that connects to the shoreline and provides shelter for the bluff and beach. Reinforcing and replicating this natural marsh headland will provide the highest degree of flood protection, erosion control, habitat creation and long-term sustainability.

Natural Living Shoreline Example



Proposed Project Schematic

Detailed Drawing



Proposed Project – Natural Living Shoreline with Breakwaters, Seawall with Nourishment, and Vegetation

- The proposed living shoreline project contains three living segmented emergent rock sills, marsh habitat restoration/enhancement consisting of compatible beach nourishment fill planted with wetland vegetation, and bluff stabilization consisting of an upland cantilevered PVC bulkhead covered with compatible fill and planted with beach grass.

- Living segmented emergent rock sills – three living segmented emergent rock sills are proposed to be placed within the nearshore region of Flanders Bay. The "living" aspect of the sills is proposed to be accomplished by seeding them with encrusting shellfish such as oysters to improve habitat and water quality.

- Marsh habitat restoration/enhancement – existing marsh headlands within the area are proposed to be stabilized with the addition of coir logs and aquatic vegetation planting and invasive plants will be removed. Additionally, marsh areas are proposed to be created landward of the living sills by the placement of approximately 1,500 CY of beach compatible fill planted with aquatic vegetation.

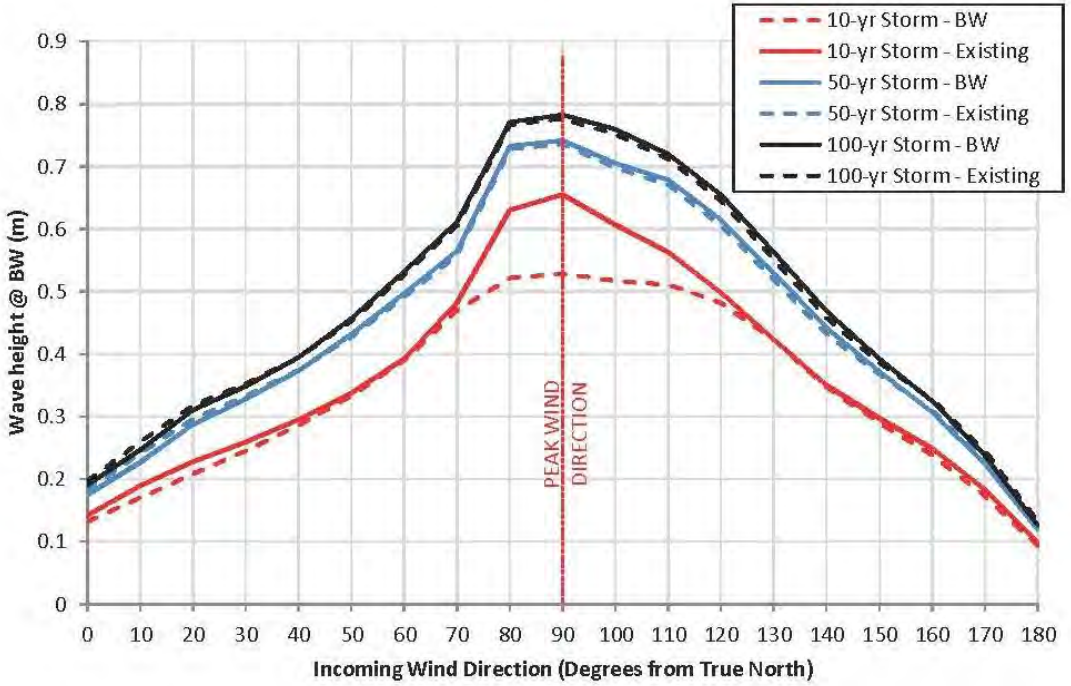
- Bluff Stabilization- A cantilevered PVC bulkhead is proposed to be installed in the existing the bluff landward of the spring high water. The bulkhead is proposed to be covered with approximately 2,000 CY of beach compatible fill and planted with beach grass.

Proposed Project – Natural Living Shoreline Emergent Rock Sill Components

- The proposed project will consist of three living segmented emergent rock sills that are approximately 15-75 feet from the shoreline depending on their actual location and configuration. These sills are the minimum size necessary to provide protection to the fringe wetlands. The sills proposed are emergent; therefore they will be above water level during high tide. The sills are proposed to have a top elevation of +1.5' NAVD88. At the Indian Island site the MHW is approximately +1' NAVD88 and MLW is approximately -2' NAVD88. Therefore, at MHW the sill will be exposed by approximately 6 inches and at MLW the sill will be exposed by approximately 3 -1/2 feet.
- The sills are proposed to have a crest width of 10 feet and will slope down on either side (seaward and landward) on a 1 to 1.5 slope where they will tie into the shoreface. The base width of the sills will vary from approximately 20-25 feet depending on the depth of water in which the sill is located.
- The living rock sills themselves will provide productive rocky subaqueous marine habitat for finfish, shellfish, marine invertebrates, seaweeds, etc. Furthermore, the living rock sill areas are proposed to be seeded with shellfish such as oysters which through their filter feeding, will improve water quality.

Proposed Project Analysis

- The CMS-Wave Model was utilized to develop wave heights to analyze the required level of protection at the project site.
- The numerical model was first set up to simulate the various storm categories for incoming wind directions ranging from 0° (North) to 180° (South) in 10° increments. This was done to determine the direction from which the resulting wave heights are the highest. The highest wave heights were obtained from a 90° (East) direction.
- The proposed project was evaluated through the model for a 10-yr, 50-yr and 100-yr storm, utilizing input wind speeds from the Westhampton Airport 30-yr wind record and storm surges obtained from the FEMA Flood Insurance Study (FIS).
- The results are summarized as follows:



STORM		SURGE [1] (M)	WIND SPEED [2] (M/S)
10%	10-YR	1.2	31
2%	50-YR	1.6	37
1%	100-YR	1.8	39

Notes:
1. Surge elevations based on FEMA FIS.
2. Wind speed based on Westhampton Airport 1986-2015 record.

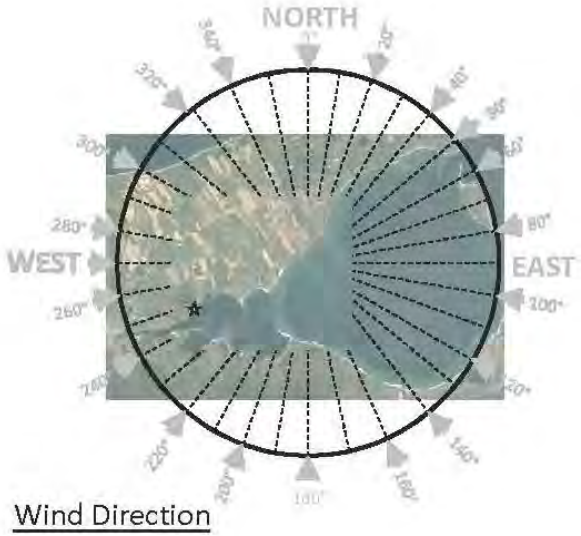


Table 1 – CMS-Wave Model Input

Storm	Storm Surge (m)	Wind Speed (m/s)
10% 10-yr	1.2	31
2% 50-yr	1.6	37
1% 100-yr	1.8	39

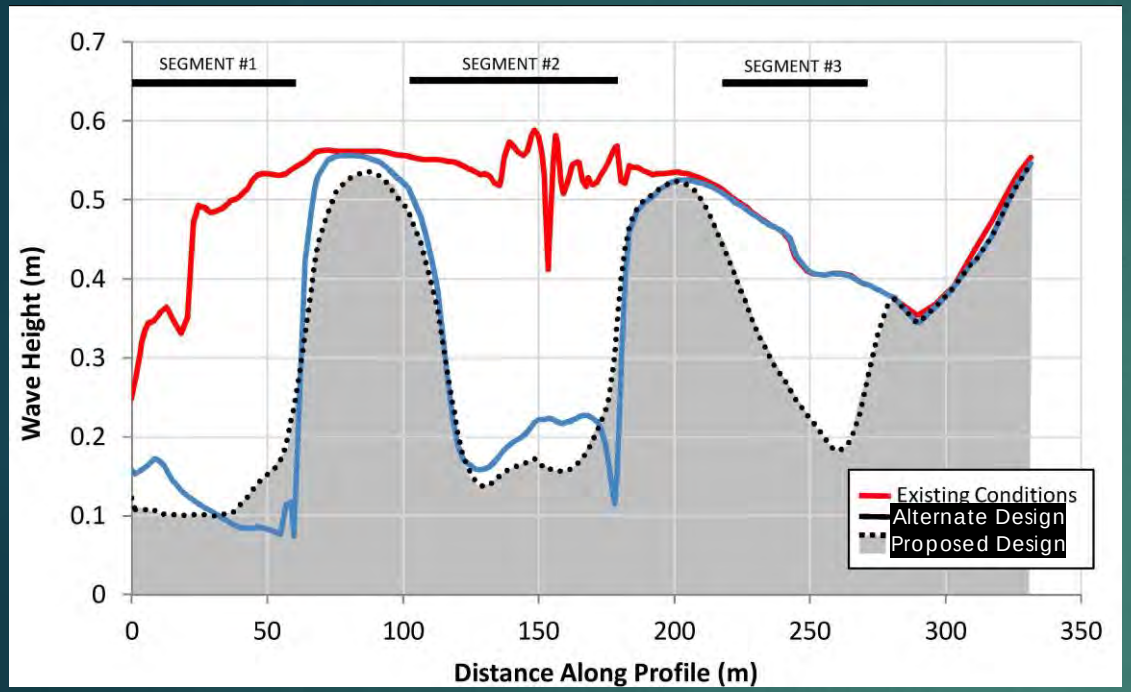
The graph in the figure on the left shows that during 50 and 100 year storm conditions, wave attenuation from the structures is negligible, while waves from the 90° direction are attenuated by approximately 25% during a 10 year storm with associated storm surge.

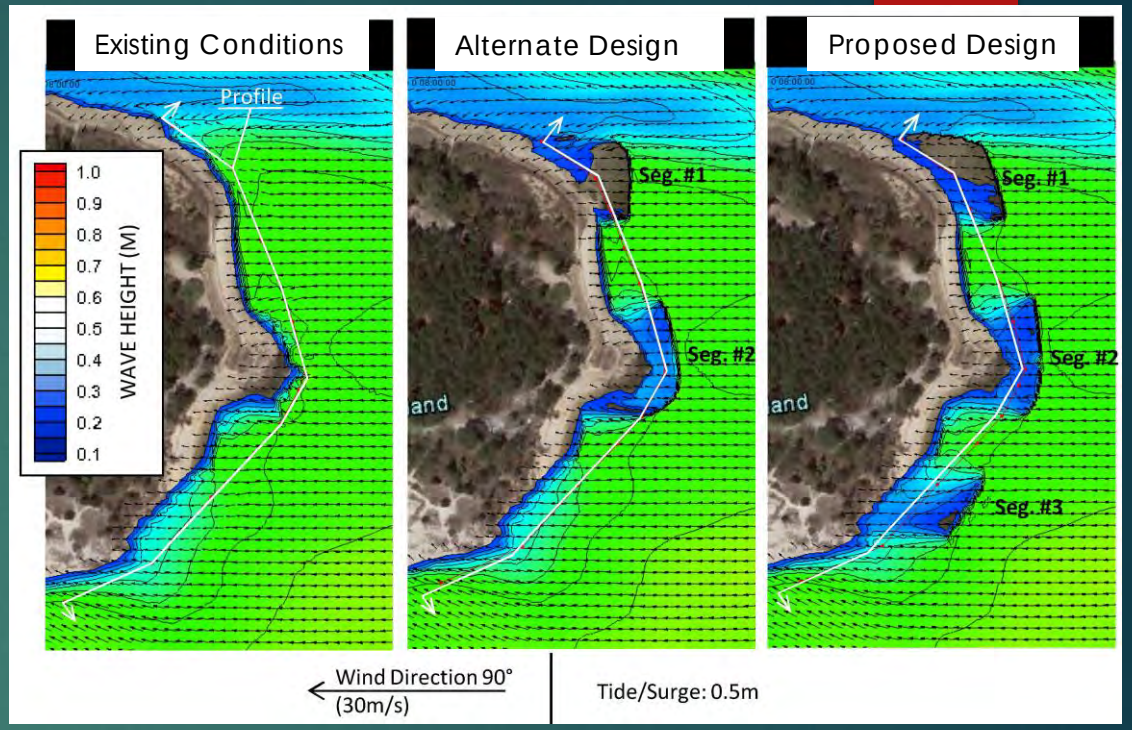
Proposed Project Analysis

While storm surges were evaluated for the storm cases (10-yr, 50-yr and 100-yr), the surge may only materialize when the storm-generated winds are coming from the optimal direction (east), otherwise lower levels of storm surge are likely occur.

Additionally, higher frequency storm events may also result in limited-to-no surge. In order to assess the effectiveness of structures during these more frequent conditions, another set of model runs were prepared for cases with limited surge (+0.5m).

The simulations considered increasing wind speeds from the East (90°) both with and without the proposed structures. The results are summarized as follows:





The results in the graph above demonstrate that the proposed structures will provide wave sheltering during typical conditions and high frequency storm events. This should result in lower erosion rates and increased protection of upland sites.

Proposed Project Analysis

Modeling performed identifies that the proposed breakwaters are most effective in attenuating wave energy for high frequency storms containing moderate surge/ wave setup (1 in 10 year storm with 10% chance of occurrence annually). The reduced wave conditions resulting from the breakwaters will help reduce shoreline erosion and help reduce need for beach nourishment during these moderate surge/wave setup events.

Since the modeling identifies that during large scale storms (storms greater than 1 in 10 year storm) with a wind direction of 90 deg., the east facing shoreline is exposed to the largest wave energy, a retaining wall/bulkhead across this entire area is justified.

Goals Accomplished

Living rock sills are proposed to provide increased protection to the shoreline and bluff of Indian Island against high frequency storm events containing moderate surge and wave heights.

- Protecting Circle Drive from eventual collapse
- Protecting the loss of additional Indian artifacts
- Reducing the need for placing beach sand fill
- Reducing the need for FEMA repair projects

Living rock sills are proposed to provide increased protection to the existing marsh headland and to facilitate the establishment of new marsh area.

- Limit possible infilling of the existing navigation channel located to the north of Indian Island at the entrance of Meetinghouse and Terry Creeks by entrapping sand.
- The living rock sills will create a rocky subaqueous marine habitat for finfish, shellfish, marine invertebrates, seaweeds, etc.
- The living rock sill areas are proposed to be seeded with shellfish such as oysters which through their filter feeding, will improve water quality.

COUNTY OF SUFFOLK

STEVEN BELLONE
COUNTY EXECUTIVE

DEPARTMENT OF ECONOMIC DEVELOPMENT AND PLANNING
DIVISION OF PLANNING AND ENVIRONMENT

COUNCIL ON ENVIRONMENTAL QUALITY

LAWRENCE SWANSON
CHAIRPERSON
CEQ

MEMORANDUM

TO: Interested Parties/Involved Agencies

FROM: JC
John Corral, Senior Planner

DATE: October 11, 2017

RE: Proposed Vector Control 2018 Annual Plan of Work

Enclosed please find the 2018 Annual Plan of Work for the Suffolk County Vector Control Pesticide Management Committee which has been submitted to the Council on Environmental Quality (CEQ) for review. Pursuant to Title 6 NYCRR Part 617 and Chapter 450 of the Suffolk County Code, the CEQ must recommend a SEQRA classification for the action and determine whether it may have a significant adverse impact on the environment which would require the preparation of a Draft Environmental Impact Statement (DEIS).

The Council would like to know your environmental concerns regarding this proposal and whether you think a DEIS or a determination of non-significance is warranted. This project will be discussed at the October 18, 2017 CEQ meeting. If you are unable to attend the meeting to present your views, please forward any recommendations or criticisms to this office prior the date of the meeting. **If the Council has not heard from you by the meeting date, they will assume that you feel that the action will not have significant adverse environmental impacts and should proceed accordingly.**

JC/cd
Enc.

cc: John Sohngen, Assoc. Public Health Engineer
Suffolk County Department of Health Services
Andrew P. Freleng, Chief Planner
Department of Economic Development and Planning
Carrie Meek-Gallagher, NYSDEC

COUNTY OF SUFFOLK

STEVEN BELLONE
SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF PUBLIC WORKS

DARNELL TYSON, P.E.
DEPUTY COMMISSIONER

GILBERT ANDERSON, P.E.
COMMISSIONER

THOMAS G. VAUGHN
DEPUTY COMMISSIONER

MEMORANDUM

TO: Jason Richberg
Clerk of the Suffolk County Legislature

FROM: Gilbert Anderson, P.E.
Commissioner of Public Works

DATE: September 29, 2017

RE: **Division of Vector Control 2018 Annual Work Plan**

Pursuant to Article VIII, Section C8-4, B(2) of the Suffolk County Administrative Code, enclosed please find a copy of the 2018 Annual Plan of Work for the Division of Vector Control for distribution to all members of the Legislature. This Annual Plan is consistent with the Findings of the Vector Control and Wetlands Management Long Term Plan and GEIS as approved by the Legislature in Resolution 285-2007 on March 20, 2007 and signed by the County Executive on March 22, 2007. As such, no further compliance under SEQRA is required.

A resolution for approval of the 2018 Plan of Work will be submitted to the Legislature by the County Executive's Office.

Thank you for your cooperation.

Attachments: Plan of Work, EAF, Long Term Plan Resolution with Findings

cc: Dennis Cohen, Chief Deputy County Executive
Theresa Ward, Deputy County Executive & Commissioner, Economic Development and Planning
Darnell Tyson, Deputy Commissioner of Public Works
Thomas Vaughn, Deputy Commissioner of Public Works
Thomas Iwanejko, Vector Control Director
John Corral, CEQ

SUFFOLK COUNTY
SHORT ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

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

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

Part 1 – Project and Sponsor Information

Name of Action/Project: Vector Control 2018 Annual Plan of Work		
Project Location (include map): Throughout the County		
Brief Description of Proposed Action (include purpose, intent and the environmental resources that may be affected): 2018 Annual Plan of Work for the County's ongoing mosquito control program, to be conducted pursuant to the Vector Control and Wetlands Management Long Term Plan and GEIS (the Long Term Plan).		
Name of Applicant/Project Sponsor: Suffolk County DPW, Division of Vector Control	Email: Tom.Iwanejko@suffolkcountyny.gov Telephone #: 631 852-4270	
Address: 335 Yaphank Ave		
City/P.O.: Yaphank	State: NY	Zip Code: 11980
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule or regulation? **If Yes**, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. **If No**, continue to question 2.		Yes ☒ No ☐
2. Does the proposed action require a permit, approval or funding from any other governmental agency? **If Yes**, list agency(s) name and permit or approval: NYSDEC Article 15 & 24 Permits are in place as is Clean Water Act NOI w DEC		Yes ☒ No ☐
3a. Total acreage of the site of the proposed action: Acres treated varies according to results of surveillance of mosquito populations and virus findings.		
3b. Total acreage to be physically disturbed: Acres treated varies according to results of surveillance of mosquito populations and virus findings.		
3c. Total acreage (project site and contiguous properties) owned or controlled by the applicant or project sponsor: Acres treated varies according to results of surveillance of mosquito populations and virus findings.		

4. Check all land uses that occur on, adjoining and near the proposed action: ☒ Urban ☒ Forest ☒ Parkland ☒ Agriculture ☒ Rural (non-agriculture) ☒ Industrial ☒ Aquatic ☒ Commercial ☒ Residential (suburban) ☐ Other:	
5a. Is the proposed action a permitted use under the zoning regulations?	Yes ☐ No ☐ N/A ☒
5b. Is the proposed action consistent with an adopted comprehensive plan?	Yes ☒ No ☐ N/A ☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	Yes ☐ No ☐ N/A ☒
7. Is the site of the proposed action located in, or adjoining a state listed Critical Environmental Area (CEA)? **If Yes**, identify CEA: Site varies, but adhears to NYSDEC specified permited locations and applications.	Yes ☐ No ☐
8a. Will the proposed action result in a substantial increase in traffic above present levels? 8b. Are public transportation services available at or near the site of the proposed action? 8c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No ☒
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies:	Yes ☐ No ☐ N/A ☒
10. Will the proposed action connect to an existing public/private water supply? **If Yes**, does the existing system have capacity to provide service? Yes ☐ No ☐ **If No**, describe method for providing potable water:	Yes ☐ No ☐ N/A ☒
11. Will the proposed action connect to existing wastewater utilities? **If Yes**, does the existing system have capacity to provide service? Yes ☐ No ☐ **If No**, describe method for providing wastewater treatment:	Yes ☐ No ☐ N/A ☒
12a. Does the site contain a structure that is listed on either the State or National Register of Historic Places or dedicated to the Suffolk County Historic Trust? 12b. Is the proposed action located in an archeological sensitive area?	Yes ☐ No ☒ Yes ☐ No ☒
13a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	Yes ☒ No ☐

13b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? **If Yes**, identify the wetland or waterbody and extent of alterations in square feet or acres: ☐	Yes ☐ No ☒
14. Identify the typical habitat types that occur on, or are likely to be found on the project site (check all that apply): ☒ Shoreline ☒ Forest ☒ Agricultural/grasslands ☒ Early/mid-successional ☒ Wetland ☒ Urban ☒ Suburban	
15. Does the site of the proposed action contain any species of animal or associated habitats, listed by the State or Federal government as threatened or endangered?	Yes ☒ No ☐
16. Is the project site located in the 100 year flood plain?	Yes ☒ No ☐
17. Will the proposed action create storm water discharge, either from point or non-point sources? **If Yes,** a. Will storm water discharges flow to adjacent properties? Yes ☐ No ☐ b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? Yes ☐ No ☐ **If Yes,** describe: ☐	Yes ☐ No ☒
18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? **If Yes,** explain size and purpose: ☐	Yes ☐ No ☒
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? **If Yes,** describe: ☐	Yes ☐ No ☒
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? **If Yes,** describe: ☐	Yes ☐ No ☒
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/Sponsor Name: Thomas Iwanejko Signature:	Date: 9/29/2017

SUFFOLK COUNTY
SHORT ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 2 – Impact Assessment (To be completed by Lead Agency)

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	☒	☐
2. Will the proposed action result in a change in the use or intensity of use of land?	☒	☐
3. Will the proposed action impair the character or quality of the existing community?	☒	☐
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	☒	☐
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	☒	☐
6. Will the proposed action cause an increase in the use of energy and fail to incorporate reasonably available energy conservation or renewable energy opportunities?	☒	☐
7. Will the proposed action impact existing public/private water supplies?	☒	☐
8. Will the proposed action impact existing public/private wastewater treatment utilities?	☒	☐
9. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	☒	☐
10. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	☒	☐
11. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	☒	☐
12. Will the proposed action create a hazard to environmental resources or human health?	☒	☐

SUFFOLK COUNTY
SHORT ENVIRONMENTAL ASSESSMENT FORM
6 NYCRR Part 617
State Environmental Quality Review

Part 3 – Determination of Significance

The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts. Attach additional pages as necessary.

Coordinated review and GEIS have already been conducted for the Suffolk County Vector Control program and this Annual Plan of Work is fully consistent with the March 22, 2007 Findings for the GEIS. As such, no further SEQRA review is necessary. A copy fo the findings statement is attached to this application.

☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required. (Positive Declaration)

☒ Check this box if you have determined, based on the information and analysis above, and any supporting documentation that the proposed action will not result in any significant adverse environmental impacts. (Negative Declaration)

Name of Lead Agency	Date
Print or Type Name of Responsible Officer in Lead Agency	Title of Responsible Officer
Signature of Responsible Officer in Lead Agency	Signature of Preparer (if different from Responsible Officer)

SUFFOLK COUNTY DEPARTMENT OF PUBLIC WORKS
DIVISION OF VECTOR CONTROL

2018 ANNUAL PLAN OF WORK

Introduction: The Suffolk County Department of Public Works, Division of Vector Control, is responsible under the County Charter for controlling mosquito infestations that are of public health importance. The Division's responsibility is to control mosquito infestations that significantly threaten public health, or create social or economic problems for the communities in which they occur. The Division meets its responsibilities in consultation with the Suffolk County Department of Health Services (SCDHS) and appropriate federal, state and local agencies.

Background: Suffolk County has a long history of mosquito control efforts that first began under the United States Department of Agriculture (USDA) in 1900 with experimental projects for malaria and salt marsh mosquito control. Additional control efforts were often undertaken by owners of large estates and resorts located along the coastline seeking control of salt marsh mosquitoes through private ditch construction. Demand for a structured mosquito control program grew in Suffolk as effective levels of mosquito control were seen in Nassau County, New York City and New Jersey through both wetland filling and the ditching of marshes. In 1933, countywide mosquito control began under the Suffolk County Emergency Work Relief Bureau, which provided jobs during the Great Depression. The Suffolk County Mosquito Extermination Commission was created in 1934 to unite the individual town and private control efforts under a central agency. A significant increase in mosquito control efforts was further funded under the Federal Works Project Administration (WPA) in 1937 employing over 650 workers to assist the Suffolk County Mosquito Extermination Commission. It was during the years of 1933-1938 that the majority of our 9.5 million feet of mosquito ditches were created throughout Suffolk.

In 1974, the Suffolk County Charter was amended transferring the mosquito control functions and authority from the Mosquito Control Commission to the Suffolk County Department of Health Services, Division of Public Health, Bureau of Vector Control. During 1992, due to budget deficits, the county legislature transferred Vector Control from Health Services to the Department of Public Works, Division of Vector Control.

Vector Control Annual Plan of Work:

The Suffolk County Charter and New York State law requires an annual Vector Control plan of work for the succeeding year be submitted by resolution for legislative approval each year. This Plan of Work has been prepared pursuant to and in compliance with the Vector Control and Wetlands Management Long Term Plan and Generic Environmental Impact Statement (the

Long Term Plan). The Long Term Plan was approved by the County Legislature as Resolution 285-2007 on March 20, 2007 and signed by the County Executive on March 22, 2007. The 2018 Annual Plan of Work is therefore governed by State Environmental Quality Review Act (SEQRA) Regulation 617.10(d)(1) which provides the following: "When a final generic EIS has been filed under this part (1) no further SEQR compliance is required if a subsequent proposed action will be carried out in conformance with the conditions and thresholds established for such actions in the generic EIS or its findings statement." This issue is also discussed in the Findings, appended hereto, pages 7 and 58. The 2015 Plan of Work added the use of a new active ingredient, prallethrin, which required a modification of the Long Term Plan. In accordance with the Findings, a SEQR review of prallethrin was conducted in order to allow the use of the new active ingredient. This review was completed with the issuance of a Negative Declaration as CEQ Resolution 34-2014 and the modification of the Long Term Plan approved by the Legislature as Resolution 706-2014. This Annual Plan complies with the reporting requirements in Executive Order 15-2007 (Suffolk County Vector Control Pesticide Management Committee) and Resolution 285-2007 (which adopts the Findings Statement for the Long-Term Plan). The reporting requirements of Resolution 285-2007 are satisfied within this Annual Plan, and the Pesticide Management Committee submits a report to CEQ independently to satisfy Executive Order 15-2007.

On October 17, 2013, the County approved Resolution 797-2013 requiring this Plan of Work to include a section on the "steps being taken to reduce the incidence of tick-borne diseases in Suffolk County". Accordingly, the 2018 Plan of Work includes a section on current tick surveillance, research and control activities. For 2018, these steps will continue to be limited to planning, information gathering, outreach, technical assistance, and small scale tick control trials and as such will be Type II actions under SEQRA Section 617.5 (c) (20), (21) and (27).

2017 SUMMARY OF VECTOR CONTROL ACTIVITIES

1. Service Requests: For 2017, a total of 1,281 calls were taken by office staff concerning mosquito issues.

2. Public Education: Vector Control staff have given several presentations to community associations and commercial pest control applicators on mosquito issues including Zika virus, the expanding Asian Tiger mosquito issue and mosquito surveillance and control, and on ticks. Field crews during inspections of private property will talk with the homeowners about steps residents can take around their home and leave an educational flyer on mosquito control if no one is home. In addition, Health Services staff hold informative meetings, post to social media and update the County website with information and findings on mosquito borne diseases, steps homeowners can take and updating postings for spray events.

3. Water Management: Wetland activities conform to the guidelines outlined in the Long Term Plan and GEIS Finding statement's Wetlands Best Management Practices (BMP's). The Wetlands Stewardship Program finalized the Wetlands Stewardship Strategy in 2015. Maintenance of existing structures (select ditches and culverts) will be conducted as described in BMP's 2, 3 and 4 in the Findings Statement and Long Term Plan. Water management projects beyond BMP's 2, 3, and 4 will undergo full review under SEQRA, and

would be subject to Suffolk County's Council of Environmental Quality (CEQ) review and legislative approval.

With the Wetlands Stewardship Strategy finalized, the County is undertaking several Integrated Marsh Management (IMM) projects as called for under the plan. The County has received $1.3M in Sandy funding from the National Fish and Wildlife Foundation Coastal Resiliency grant for IMM work to be done in the Towns of Islip and Brookhaven and in cooperation New York State Department of Environmental Conservation. These projects are now in the final permiting stage with work expected to begin during the upcoming winter months of 2017-18. The County has also received $560,000 from a Federal Hazard Mitigation Grant Program under FEMA for IMM work at Smith Point County Park in Shirley for costal marsh resiliency. Permits have also been applied for from the NYSDEC for this project with construction targeted for the winter of 2018-19 completion.

SC Parks has secured grant funding from the New York Department of State for wetlands restoration at the County's Beaverdam Creek Park in Brookhaven Hamlet for the re-establishment of a wetlands complex at a dredge spoil impacted marsh. This project is a cooperative undertaking between several County agencies and the Post Morrow Foundation who owns part of the site. The goal of this restoration project is to return tidal circulation to a diked marsh that is a mostly phragmites and several low areas that breed mosquitoes. A tidal creek will be created to allow for the return of salt marsh vegetation, phragmites control and a reduction in mosquitoes by allowing killifish access to the low areas of the site.

A cooperative project with the Town of East Hampton and the Nature Conservancy is underway to map mosquito breeding activity in Accabonac Harbor with the potential goals of pesticide reduction and preliminary designing for a wetlands restoration project. The project began in 2017 with Stony Brook University Student Interns seeking breeding locations of mosquitoes which are logged by GPS, compiled and characterized by location and level of activity. Using the data, aerial treatment zones will be remapped allowing for reduced pesticide use and for planning of wetland restoration actions. This pilot project will be used as a guide to invite other cooperators to develop similar programs at marsh complexes within their jurisdictions. This program will greatly benefit the County through cost savings from reduced pesticide and helicopter usage and through restoration of wetlands resulting in environmental benefits to the marsh community and those who depend on its flora and fauna.

A NYSDEC grant for the restoration of a former Terry Creek marsh at the Indian Island County Park in Riverhead is underway. Plans for the restoration are being finalized and permits will be applied for in 2018. The site is a former salt marsh that was filled with dredge material from Terry and Meetinghouse Creek. Plans for the restoration include restoring a historic tidal creek at the site, establishing tidal wetland vegetation and installing a culvert over an active park roadway.

4. Larval Control: Perform approximately 9,000 inspections of larval sites. Checked and treat as required 21,336 catch basins in communities with past history of West Nile virus positive pools or human cases. Treated approximately 15,000 acres with the biorational larvicides:

Bacillus thuringiensis israelensis (Bti), Bacillus sphaericus or methoprene depending on mosquito stage of development, weather, coastal tides and virus findings.

5. Adult Control: Conduct adult control when infestations are severe and widespread and/or necessary to respond to the presence of mosquito-borne pathogens. Due to the presence of Eastern Equine Encephalitis (EEE) in mosquitoes collected from Manorville this year, an emergency aerial adulticide application was undertake on 7,000 acres. This spraying was in response to SC Health mosquito traps testing positive with 4 samples of mosquitoes for EEE. EEE virus has a high case mortality outcome and has its greatest impacts on young children. The Suffolk Health Commissioner petitioned the NYS Health Department to declare an imminent threat to public health due to the EEE findings. The declaration allowed the County to promptly undertake the required control actions and allows greater reimbursement from the State (50%) for work undertaken and pesticides applied in response to the EEE threat.

6. Research and Surveillance: Vector Control field crews and lab staff collect and identify over 10,000 larval and adult mosquito samples each season, depending on mosquito population and viral activity levels. In addition, Health Services Arthropod-Borne Disease Laboratory (ABDL) collects and process approximately 50,000 mosquitoes for arbovirus surveillance. Vector Control responds to virus isolations in consultation with the Health Commissioner and staff and evaluates the effectiveness of treatments in cooperation with the ABDL. Vector staff perform special studies of new mosquito problem areas, monitoring for pesticide resistance, identifying the sources of unusual infestations or researching introduced vector species, including the Asian Tiger Mosquito.

Technical and Institutional Framework for Vector Control

To achieve this goal, the Division employs an integrated control program also referred to as integrated pest management or IPM. Control measures are employed in a hierarchical manner that emphasizes prevention of the concern, and are guided by a surveillance program to ensure that control measures are only directed to address a clear need. Control proceeds from the long-term, environmentally sound measures such as wetland management and biological control to the use of highly specific larvicides, and only uses chemical control by adulticiding if other measures prove to be either insufficient or not feasible. This integrated approach is recognized as the most effective and environmentally sound manner in which to conduct a mosquito control program.

Because mosquitoes are of high public health importance, the Division works closely with SCDHS Arthropod Borne Disease Laboratory (ABDL). The ABDL concentrates its efforts on surveillance for mosquito-borne pathogens, primarily the arboviruses West Nile Virus (WNV), Zika and Eastern Equine Encephalitis (EEE). The Division conducts laboratory work that concentrates on estimating populations of mosquito adults and larvae. The Division also conducts laboratory work related to special projects designed to improve the control program and to evaluate the impacts of wetlands management. The results of this surveillance are used to guide and evaluate the Division's ongoing control work. During times of a declared public health threat, the Division comes under the operational control of SCDHS. However, these declarations

are rare and are issued by the New York State Health Commissioner as was the case in 2017 for the finding of EEE in Manorville.

The New York State Department of Health (DOH) provides important support to the program by analyzing mosquito samples for pathogens, providing technical advice and guidelines and determining when a public health threat declaration is required. DOH also provides significant assistance with public education, as well as financial aid for vector surveillance and control. Because mosquito control involves work in environmentally sensitive areas and the use of pesticides, environmental compliance and protection are important components of the program. The Division is heavily regulated and subject to inspection under a series of New York State Department of Environmental Conservation (DEC) permits, as well as regulations pertaining to the use of pesticides and licensing of applicators. Close contact is maintained with DEC, United States Fish and Wildlife Services (USFWS), EPA and other agencies throughout the year to ensure that all work is conducted to a high environmental standard.

2018 PROGRAM COMPONENTS

WATER MANAGEMENT: Field personnel conduct this component from January 1 to April 30, and October 1 to December 31 (varies due to seasonal weather). Water management during the winter months is a functional way to reduce the need for pesticide applications during the summer, by keeping mosquito ditches and creeks free of blockages. The Division expects to conduct water management in each of the County's ten towns, as needed. Highest priority is assigned to larval habitats where adult mosquito infestations have the greatest potential for negative impact. In particular, areas that had virus isolations or showed unexpectedly high infestations in 2017 will have high priority over the coming winter. Water management activities will be carried out in such a manner so that the primary goal of the work will be to protect the health of the marsh, while also reducing mosquito numbers.

Water management minimizes mosquito production through maintaining or improving systems of tidal channels, ditches, culverts and other structures that drain off surface water and/or allow access to potential larval habitats by predatory fish. In some cases, the current ditch system has become an important component of the wetland as it exists today, and maintenance of the system is necessary to maintain tidal flow, fish habitat, or existing vegetative patterns. Much of this is maintenance work that may not require a permit, but is nonetheless conducted after consultation with the New York State Department of Environmental Conservation (DEC) to ensure consistency with conservation of the wetland. More extensive work to rehabilitate wetlands in a manner that restores and preserves resource values while also reducing mosquito production is now underway under the umbrella term Integrated Marsh Management (IMM). In accordance with the Long Term Plan, all water management activities will be conducted with appropriate notification to and oversight by the Council for Environmental Quality (CEQ), as outlined in the Findings Statement of the Suffolk County Legislature that was adopted by Suffolk County Resolution 285-2007.

The Wetlands Stewardship Committee completed its work in establishing standards for wetlands Best Management Practices (BMP's) and a Wetlands Stewardship Strategy was issued by Executive Order 01-2015 on July 13, 2015. With that Strategy in place, plans for 2018 will

include more extensive marsh projects. These will be projects that restore and enhance the natural resource values of the wetlands while also reducing or eliminating the need for pesticides to control mosquitoes. All work will be planned in partnership with the landowner and NYSDEC, USFWS and other natural resources agencies and undergo SEQRA review as required.

CONTROL OF MOSQUITO LARVAE: All field personnel conduct larval control during the active mosquito season. Most crews conduct ground larviciding, while a heavy equipment crew assists in helicopter larvicide applications. This component is conducted during the active mosquito season of May 1 to September 30. Larval control is required when water management has not been able to completely prevent mosquito production. It also is used when water management has not been conducted or is not appropriate. Larval control is the Division's second most important control method. Ground crews visit known larval habitats, check for the presence of larvae, obtain larval specimens for identification in the laboratory and apply larvicide if necessary. Field crews also eliminate larval habitats by unclogging pipes, removing containers or otherwise eliminating standing water. While the acreage of these sites is small, their proximity to residential areas makes them important. Ground crews also respond to complaints from the public. The Division's most intense efforts are directed to the major salt marshes and wetland complexes, which require use of the helicopter. These marshes are surveyed weekly, or after extreme flood tides. If larvae are discovered, a contract helicopter applies larvicide. For salt marshes and similar habitats, either Bti (Bacillus thuringiensis israelensis), Altosid (methoprene), or a combination of materials are applied, based on larval stage, temperature, and weather conditions. Larval control is employed if inspection of a site reveals larval production is occurring or the site has great potential to breed mosquitoes.

The larval control products to be used in 2018 and the conditions under which they are used are described as follows:

Altosid Liquid Larvicide Concentrate (methoprene, EPA 2724-446) – Aerial application to tidal and freshwater marshes.

Altosid Liquid Larvicide (methoprene, EPA 2724-392) – Ground application to tidal and freshwater marshes, as well as other temporarily flooded areas.

Altosid Pellets (methoprene, EPA 2724-448) – Ground application to intermittently or permanently flooded areas such as freshwater swamps, catch basins, drainage areas and recharge basins, provided that they are not fish habitats.

Altosid XR-G (methoprene, EPA 2724-451) – Ground or aerial application to tidal wetlands; ground application to intermittently flooded freshwater areas; aerial application in freshwater areas in response to Eastern Equine Encephalitis (EEE) or West Nile Virus (WNV) with required approval by DEC.

Altosid XR Briquets (methoprene, EPA 2724-421) – Catch basins and other drainage or artificial structures that are not fish habitats.

Aquabac 200G (Bti, EPA 62637) – Ground application to intermittently flooded freshwater and tidal areas.

Sphaeratax SPH (50G) (B. sphaericus, EPA 84268-2) - Ground application to freshwater and brackish areas that hold stagnant water such as ditches, impounded marshes, swamps, puddled areas, sewage lagoons; late season application to catch basins.

Valent BioSciences Vectobac 12 AS (Bti, EPA 73049-38) – Aerial application to tidal and freshwater marshes; ground application to intermittently flooded areas such as tidal and freshwater marshes.

Summit B.t.i. Briquets (Bti, EPA 6218-47) – Catch basins, ground depressions, artificial sites.

Fourstar Briquets 90 (Bti plus B. sphaericus, EPA 83362-3) – Catch basins, ground depressions, artificial sites

Valent VectoPrime (Bti and methoprene EPA 73049-501) Ground and aerial application to tidal and freshwater marshes, as well as other temporarily flooded areas.

Valent VectoBac WDG (Bti EPA 73049-56) Ground and aerial application to tidal and freshwater marshes, as well as other temporarily flooded areas.

The equipment to be used for larval control includes various trucks for crew transportation, samplers such as dippers and mosquito traps, truck-mounted hydraulic sprayers, backpack sprayers and granular blowers, plus specially-equipped helicopters for larvicide applications on areas too large or inaccessible for ground treatment. All pesticide applications will use EPA and DEC-registered materials and be conducted under appropriate DEC permits and in accordance with label directions and other relevant State and Federal law.

The Division has developed technical guidelines for larval surveillance and control that determine where and when larvicides are used and what materials are selected for a particular situation. These guidelines emphasize the use of bacterial products when possible and reserve methoprene for those situations where bacterial products are unlikely to be effective. As per the Findings for the Long Term Plan and Executive order 15-2007, the Pesticide Management Committee has reported on the results of its review of literature on methoprene and potential impacts, as well as on research sponsored by the County. The Committee found no significant new concerns regarding the use of methoprene. The County is committed to implementing a Pesticide Reduction Action Plan, that will seek to further accelerate pesticide reduction. As part of this Pesticide Reduction Action Plan, the County will continue to work with technical experts to further refine protocols related to larval monitoring and larvicide usage, consistent with the Long-Term Plan and GEIS. The County is not aware of any new data, studies or reports which contravene research, reports and Findings of the Long Term Plan with respect to larval treatment guidelines or thresholds. Therefore, those Findings are still valid, and control this Annual Plan.

In accordance with the Division's priorities and goals, approximately 1,500 of the 2,000 plus major larval habitats known to the Division will be surveyed and controlled as necessary throughout the active season. These known historic mosquito habitats consist primarily of

freshwater wetlands and salt marshes, as well as roadside ditches, recharge areas and other non-wetland sites. The remaining major larval habitats and the countless artificial container larval sites will be controlled on a service requested basis, as resources permit. Maps showing major larval habitats requiring control are on file at the Division's office in Yaphank.

CONTROL OF ADULT MOSQUITOES: This control method is conducted generally from May through September, but is highly weather dependent. It is carried out only when adult infestations constitute an immediate threat of mosquito-borne disease or there is a severe and widespread infestation of vector species, as determined by surveys and/or numerous public complaints. While the need for adult control can be reduced by the other program components, it is not possible to control all larval sites in Suffolk County for a variety of reasons including shifting weather patterns, disease findings and storm events. In addition, some Federal lands are restricted as Wilderness including extensive portions of Fire Island National Seashore and William Floyd Estate in Mastic Beach. It is also not appropriate to treat for adult mosquitoes in every area where residents express a concern, nor is it appropriate to treat small areas or individual properties for adult mosquitoes. Adult control is conducted only when it is clear, based on complaints, Division surveillance and/or SCDHS consultation that a substantial portion of a community is infested with vector species or there is a threat of mosquito-borne disease. Then, the entire affected area is treated so as to give relief to the greatest number of residents in an environmentally sound and cost effective manner. The guidelines for adult control in this Plan are consistent with those described in the GEIS Findings Statement.

Adult control can be deemed to be necessary under two separate operational scenarios in the GEIS. One is defined as a “Vector Control” (public health nuisance) application, the other is defined as “Health Emergency” application. Vector Control adulticide applications are made to reduce excessive numbers of human biting mosquitoes that could impact public health and quality of life by their biting activities. These high populations also represent potential vectors if a pathogen is present or appears in the area. Health Emergency applications are made when an unacceptably high risk of disease transmisson to humans is detected, based on the ongoing presence of pathogens in mosquitoes. In either case, pesticide use decisions are only made on the basis of scientifically-determined surveillance data.

The need for Health Emergency treatments is determined by the New York State Department of Health West Nile Virus Response Plan and the County’s Zika Action Plan, adapted for local conditions by staff experts at Vector and Health Services. Because of the persistent presence of WNV in the County, the County perpetually begins each year in Risk Category 2. The New York State Department of Health has determined that there is an ongoing threat to the public health from West Nile Virus, and no longer declares health threats each year. The determination of when the threat of west Nile rises to the level that requires adulticiding is made by the County Vector Control staff in consultation with the Health Commissioner and ABDL staff. As additional pathogenes including Zika virus becomes established in the US; the CDC, NYS Health and Suffolk continually reevalute the risk to County residents. Currently, only travel related Zika cases have been repoted in Suffolk, but Health ABDL continues to monitor Asian Tiger mosquitoes that have shown competence to carry Zika.

The need for adulticiding in response to WNV varies greatly from year to year. An analysis of Suffolk County's WNV history during the years 2000-2015 indicates that most years, (10 of 16) the number of human cases of WNV is low, 0-4 cases. Under such conditions, the WNV human transmisson risk level is low, even when WNV is found in the County. In these low risk years, determining exactly where and when to adulticide is nearly impossible with limited data. As a result, in low years, adulticiding is usually not warranted due to the difficulty in delinating specific areas to target. High risk years are caused largely by environmental conditions favorable to virus amplification in birds and mosquitoes, such as a warm spring and a hot dry summer weather. These conditions manifest themselves in late July and early August through higher than normal numbers of positive mosquito samples and infection rates. WNV history also demonstrates that, in years when WNV activity is higher than normal, human cases are more likely to occur in some parts of the County than others. In years with early indicators of high risk, adulticiding targeted to these high risk areas can measurably reduce the risk of human transmission and is therefore warranted. When a high risk year is identified, these WNV applications generally take place in late July and August. Responding to early indications of high risk is important, because adulticiding should occur before peak human transmisson occurs in the first 2-3 weeks of August. Waiting to see if transmission results in actual human cases is not appropriate because by the time cases are detected, transmission has been ongoing for several weeks and it may be to late to prevent further transmission.

As indicators of risk of transmisson to humans accumulate, Vector Control and Health determines when control measures are best suited to the situation and which areas should be targeted for maximum benefit. The Commissioner of the SCDHS makes the final determination of the need for adult control in reponse to pathogens. By limiting the use of adulticides for virus response to only those years and areas where a benefit is likely, the risks associated with adulticiding can be reduced while still providing a high level of public health protection. This strategy is consistent with the goal in the Findings to reduce the use of pesticides by a targeted approach.

To ensure adulticides are used only when there is a clear need and a likely benefit, the criteria for conducting an adulticide treatment will include:

1. Evidence of high numbers of mosquitoes biting residents and visitors (Vector Control):

- Service requests from public - mapped to determine extent of problem.
- Requests from community leaders, elected officials.
- New Jersey trap counts higher than generally found for area in question (at least 25 females of human-biting species per night).
- Centers for Disease Control (CDC) portable light trap counts of 100 or more.
- Confirmatory crew reports from the problem area or adjacent larval habitat, with landing rates of over one biting mosquito per minute over a five minute period.

2. Higher than normal risk of human disease transmission that can be reduced by adulticiding (Health Emergency):

- Indications of a higher than normal year for WNV activity County-wide as determined by such measures as infection rates and/or the number or proportion of positive mosquito

samples, especially by late July or early August. In a year with normal or below normal levels of WNV activity, adulticiding is generally not indicated.

- In a high risk year, adulticiding may be warranted when there are indications of higher than normal levels of WNV risk (such as the number of positive mosquito samples, infection rates, vector species populations and history of human transmission) in particular areas. Adulticiding priority will be given to those parts of the County where WNV cases have occurred in multiple years and at high densities compared to the rest of the County.
- Zika response will occur when positive mosquitoes are found in traps or local transmission by mosquitoes is suspected due to aquired cases without travel history.
- Adulticiding will be strongly considered if EEE is detected during July, August or September when human transmission is most likely.
- Adulticiding in reponse to other pathogens (such as dengue, chikungunya, malaria or other emerging pathogens) will be considered on a case-by case basis based on the vector ecology of the pathogen involved.

3. Control is technically and environmentally feasible:

- A target area can be clearly defined based on geographic features and the distribution of vector species and other risk factors.
- Weather conditions are predicted to be suitable for ULV application when mosquitoes are active. Aerial applications in response to WNV are particularly dependent on weather conditions, and near-ideal conditions of low wind combined with high temperatures and humidity are needed for truly effective results.
- The road network is adequate and appropriate when truck applications are considered.
- Legal restrictions on the treatment of wetlands, open water buffers, and no-spray list members in the treatment zone will not create untreated areas that would prevent adequate coverage to ensure treatment efficacy.
- There are no issues regarding listed or special concern species in the treatment area.
- Meeting label restrictions for selected compounds will not compromise expected treatment efficacy.

4. Likely persistence or worsening of problem without intervention:

- Considerations regarding the history of the area, such as the identification of a chronic problem area for biting mosquitoes or a history of virus transmission.
- Seasonal cycles of pathogen activity, such as whether or not the treatment is in time to prevent WNV transmission or whether it is too late and most transmission has already occurred.
- Determination if the problem will spread beyond the currently affected area absent intervention, based on the life history and habits of the species involved.
- Crew reports from adjacent larval habitats suggest adults will soon move into populated areas.
- Life history factors of mosquitoes present – i.e., if a brooded species is involved, determining if the brood is young or is naturally declining.
- Weather factors, in that cool weather generally alleviates immediate problems, but warm weather and/or the onset of peak viral seasons exacerbate concerns.

- Determining, if the decision is delayed, if later conditions will prevent treatment at that time or not. Conversely, adverse weather conditions might remove most people from harm's way.

In essence, criteria 1 and/or 2 are necessary thresholds which should be met, prior to a treatment being considered, while criteria 3 and 4 are countervailing factors that would indicate treatment may not be required. Treatment will not occur unless criteria 1 or 2 are satisfied through a combination of surveillance indicators, although not all surveillance techniques may be feasible in every setting and situation. The County is not aware of any new data, studies or reports which contravene the research, reports and Findings of the Long Term Plan with respect to adulticide treatment guidelines or thresholds. Therefore, those Findings remain valid and guide this Annual Work Plan.

Vector Control applications will normally be made by truck since that technique has been shown to be effective for the most common species involved, although aerial application remains an option for unusually widespread problems or areas with limited road networks. Health Emergency applications will be done by aerial application due to the need to treat large areas. Necessary public notices will be issued in a timely manner (normally, at least 24 hours pre-application), and appropriate precautions will be made to meet DEC restrictions on applications, and to avoid "No Spray" properties. If necessary, to protect sensitive resources, buffer areas will be provided between the sensitive area and the application equipment. A 150-foot buffer from freshwater wetlands will be provided to avoid the need for DEC Article 24 (Freshwater Wetlands) permits unless a permit or other authorization from DEC has been received.

In 2009 and previous years, an Emergency Authorization were requested from DEC if freshwater wetlands were involved to eliminate the need for an Article 24 (Freshwater Wetlands) permit. In 2011, NYSDEC issued Vector control an Article 24 permit to allow adulticide applications in freshwater wetlands or adjacent areas if necessary to protect the public health and replace the use of Emergency Authorizations. This permit controls the use of adulticides in and adjacent to freshwater wetlands during the term of that permit, 2011-2020. The permit covers Health Emergency applications throughout the County and will also allow Vector Control applications in and adjacent to some freshwater wetlands in heavily developed areas of southern Brookhaven Town. Appropriate required public notices will be issued in collaboration with Health, including CodeRed telephone alerts, website and phone hotline notices and social media updates. If an aerial application is required, the helicopter is equiped with a GPS and weather monitoring guidance technology will be used to optimize the delivery of the pesticide specifically to the targeted zone.

Efficacy measurements will be made following adulticide applications as weather conditions and staff resources allow. The Long-Term Plan also calls for the establishment of resistance testing for the more commonly used compounds. Continued testing of local mosquitoes against resmethrin (Scourge), sumithrin (Anvil) and Duet (sumithrin and prallethrin) in 2016 and 2017 revealed no local resistance to these materials in several pest species of mosquitoes tested. Species recently tested included the Asian Tiger Mosquito (potential carrier for Zika), Culex pipiens (WNV) and several salt marsh species including Aedes sollicitans (EEE and dog heartworm) and Aedes taeniorhynchus (Rift Valley and Venezelan Equine Encephalitis viruses).

The Long-Term Plan proposed a general reliance on resmethrin, a synthetic pyrethroid, as the adulticide pesticide. However, the Federal and State re-registration for resmethrin products is ending by the manufacturer and existing stocks are nearly exhausted. Sumithrin, a similar pyrethroid, was proposed by the Long Term Plan to be the primary back-up to resmethrin, and the primary pesticide for hand-held applications. Sumithrin has now become the Division's primary adulticide material. Sumithirn, like resmethrin has been found to be an effective pesticide for mosquito control, can be used for ultra-low volume applications for truck and aerial delivery, undergoes rapid decay in the environment, and, as discussed below, has few identified non-target effects when applied as proposed under the Long-Term Plan. The Division has also begun use of Duet, the Long Term Plan has been modified to include it and its active ingredients, sumithrin and prallethrin. Duet is similar to the Division's primary sumithrin product, Anvil, in that both products contain sumithrin and the synergist piperonyl butoxide (PBO). However, in addition to 5% sumithrin and 5% PBO, Duet also contains 1% prallethrin. This amount of prallethrin is not sufficient to control mosquitoes, but it does induce them to fly, a phenomenon known as "benign agitation". Benign agitation casues mosquitoes that are resting to fly so that they will encounter the aerosol droplets and be exposed to a lethal dose of sumithrin. Duet has been shown to be particularly effective against mosquitoes that tend to rest during the optimal time of the day for aerosol treatment, that is, at night. The primary use for Duet will be against the Asian Tiger mosquito (ATM), *Aedes albopictus* and may be used for control of other daytime species including salt marsh mosquitoes. The ATM is an introduced species that inhabits containers and tends to bite during the daytime, making it a significant biting pest that is difficult to control because it is less active at night. The Long-Term Plan also identifies two other pyrethroids, permethrin and natural pyrethrins, as potential adulticide compounds. Neither is preferred; however, as permethrin is a widely available product that is manufactured for many homeowner pest and farm uses that may increase mosquito resistence to the material. Natural pyrethrins are identified as a potentially useful compound because its label allows for use over agricultural areas. In addition to the pyrethroids, malathion, an organophosphate pesticide, was identified as a potential adulticide. Malathion would only be considered for use under very specialized conditions, such as Zika response if a thermal fogging application was required, daylight applications were called for, or if resistance testing indicated pyrethroid applications would be ineffective in meeting the goals for public health protection. All of these pesticides are applied at the label rates, in the best way of achieving effective mosquito control and to avoid the development of pesticide resistance. The adulticides included in this Annual Plan have been fully evaluated in the GEIS for the Long-Term Plan, and this Annnual Plan is fully consistent with the attached Findings. Vector Control continually reviews available pesticides and alternatives, including emerging materials and application techniques for the most environmentally suitable control methods.

PUBLIC EDUCATION: Mosquito problems resulting from larval habitats around homes and yards, containers, drains and the like, is generally brought to the Division's attention through residents' requests for service. Control of these "domestic" container mosquitoes is promoted through education and appeal to individual property owners to 'Dump the Water'. Given the Zika and WNV threat posed by these container mosquitoes, especially the Asian Tiger Mosquito *Aedes albopictus* and the House Mosquito *Culex pipiens*, Vector and SCDHS have taken on a leading role in public education. Sanitarians are utilized to require property owners to clean up

potential mosquito larval sites. Public education includes the distribution of pamphlets, telephone contact, site visits, media exposure and presentations to various citizens' groups and associations. In addition, the Division offers assistance to residents in eliminating sources of mosquitoes on their property, and leaves "door hangers" with educational information at properties they visit. Educational materials are also available on the County Web site. The appearance of introduced, container-breeding species *Aedes japonicus* and *Aedes albopictus* and continued Zika concerns means this component must take on increasing importance, since the public's cooperation is required to control these backyard container larval habitats.

PUBLIC NOTIFICATION AND THE "NO-SPRAY" REGISTRY: In 2000, the County passed new laws to improve required public notification for adult mosquito control. As a result, there is now an increased use of the media and extensive outreach to local officials. The Health Services and Vector Control Websites are used to post spray notices and maps. For each adulticide application, over e-mails and faxes are sent to various officials and other interested parties. Newsday and News12 often post spray schedules and maps. And Health has begun posting spraying updates to social media including Facebook and Twitter. It is important to recognize that adulticide applications are very sensitive to the weather, especially aerial applications. The need to inform the public needs to be balanced with the need to conduct operations promptly, within weather windows and before the problem spreads and more acreage needs treatment. It is usually not appropriate to provide more than 24 hours' notice in most cases, because beyond that time, weather forecasts are not very reliable. Attempts to provide more than 24-hour notice often result in aerial spray operations being announced and then cancelled. These cancellations are confusing to the public and difficult to reschedule. Despite these difficulties, the County provides 48-hour notice for aerial adulticide applications whenever possible for non-virus response.

In addition to the previous public notification procedures, the County has implemented a County law, passed in 2010, requiring the use of its "Code Red" automated calling and messaging system to provide more thorough public notice for adulticiding. This system allows automated phone calls to be placed to all landline telephones in an area designated for treatment. These messages provide basic information about the operation, such as spray hours, and refer the recipient to additional sources of information. The system ensures that nearly everyone in the area knows about the operation. Use of the Code Red system has been very successful and provides a new level of public information for the program. Residents can also register their cellphones or e-mail addresses to receive the Code red updates through FRES.

The Division also maintains a "no-spray" registry of residences where adult mosquito control is not desired. During ground applications the application unit is shut off 150 feet prior to passing such a residence and not turned on until 150 feet after. This registry represents an effort to balance the desires of those residents who want control of adult mosquitoes with those who oppose the use of pesticides. In 2017, the "no-spray" registry listed 326 properties, including those with health concerns, beekeeper hive locations and organic farms. When control is required to deal with a public health emergency, the Commissioner of SCDHS can override the list. Even then list members are contacted prior to applications in their area through the Code Red system. In addition to this legally required registry, the Division maintains on the listing beekeepers and organic farms who register. Beekeepers' properties are generally avoided and beekeepers are notified via Code Red before treatments so that they can take any additional actions they may

deem necessary to protect their hives. In addition, several steps are taken to avoid impacts to bees including timing of applications to the evening hours when bees are not foraging. Vector also uses mosquito control materials least likely to impact bees and through adjustment of spray equipment and technique using an ultra-low volume (ULV) droplet size that will impact mosquitoes, but not larger bodied insects, including bees. Certified organic farms are avoided and a buffer zone around the farm is included.

Although not required to do so by law, the County also provides public notification for aerial larviciding. An e-mail notice of the marshes to be treated by helicopter is sent each week to Legislators, local governments and other interested parties. In addition, a list of marshes to be treated is posted each week on the County Web site and the list is sent to the media, including Newsday.

SURVEILLANCE AND RESEARCH: All control operations are based on information obtained from surveillance and research. This a cooperative effort between Vector Control staff in the Department of Public Works and the Arthropod Borne Disease Laboratory in the Department of Health Services. Knowledge of mosquito populations, species composition and arbovirus activity is used to guide and evaluate control measures. Arbovirus surveillance allows the Division, in cooperation with the County and State Health Departments, to gauge the potential for disease transmission and take appropriate action.

A) Mosquito population surveillance: Approximately 12,000 larval and adult mosquito surveys are analyzed each year. These surveys are necessary for locating infestations, directing control efforts and evaluating the effectiveness of those efforts. The mosquito species that breed in various locations are determined from larval samples. Numbers of adult mosquitoes in residential areas are estimated from a network of approximately 29 New Jersey light traps in fixed locations throughout the County. New Jersey traps provide staff with ongoing population trends and are compared with service requests in a community to assist in determining the need for adult mosquito spraying. Some 50,000-100,000 mosquitoes per year from these traps are identified and counted. This work is conducted by DPW staff. In addition, Vector maintains an array of specialized Mosquito Magnet type traps to monitor seasonal cycles and long term trends in populations of the introduced exotic, container-breeding species *Aedes japonicus* and *Aedes albopictus* (The Asian Tiger Mosquito).

B) Arbovirus surveillance in mosquitoes: Viral surveillance is conducted primarily by the ABDL and will be directed primarily at the main pathogens, WNV, Zika and EEE. Surveillance will be conducted according to the latest CDC and State DOH guidelines, modified for Suffolk County's unique environment. To monitor virus activity, CDC light traps and gravid traps are placed on a weekly or rotating basis at various locations throughout the County. These sites are chosen based on their history of viral activity or the presence of viral indicators such as the finding of birds with WNV in the area. The ABDL and the Division collect and process approximately 50,000 live, adult mosquitoes annually for viral analysis. Mosquitoes collected are sorted by species, frozen, and sent to Albany for arbovirus analysis in the State DOH laboratory.

C) Human, avian and other surveillance: SCDHS, State DOH, DEC and CDC monitor other WNV and EEE indicators such as unusual bird deaths or the number of dead birds sighted in an area. The presence of WNV-positive birds is an indicator of virus activity in an area, and ABDL picks up selected dead birds for WNV testing. The County conducts a rapid RNA test (the RAMP test) to check for WNV in dead birds. There are also indications that the number of dead bird sightings in an area is a surrogate indicator of risk. SCDHS and NYS also monitor hospitals, blood banks and outreach to physicians to quickly detect human cases of Zika, WNV and other emerging vector borne illnesses.

D) Efficacy monitoring: While the Division has always monitored the effectiveness of the control program in a variety of ways, there has been an increased effort in this area, based on trial work to develop methods conducted in 2007. In particular, trapping of adult mosquitoes before and after adulticide events is conducted using carbon dioxide baited CDC light traps, NJ traps or reviewing service request logs. In addition, indicators of virus activity before and after treatment are followed to be sure the desired effect is achieved. While the number of adult mosquitoes in New Jersey traps and other traps is a key indicator of the overall success of the larval control program, additional effort will be directed toward before and after sampling of treated areas to confirm the efficacy of the treatment methods used.

E) Special surveys and field investigations: Vector's Control staff conduct special surveys to determine the source of mosquito problems when these turn up in places where they are not expected. Special surveys of problems that appear early in a season can allow larval crews to prevent further trouble through the summer. Given the somewhat unpredictable ways mosquitoes can cause problems for residents of and visitors to the County, it is important that the Division retain a flexible ability to investigate issues as they are identified.

F) Support for Wetlands Restoration/Stewardship activities: Vector Control continues to provide support for monitoring and other investigations related several wetland restoration activities. In particular, Division staff assist in the ongoing monitoring of the Integrated Marsh Management (IMM) projects at Wertheim and Seatuck National Wildlife Refuges. In addition, the Division will assist the Wetlands Stewardship Program in identifying and evaluating prospective sites for future IMM projects, particularly those that will help meet Long Term Plan goals for pesticide use reduction. With the completion of the Wetlands Stewardship Strategy and the availability of grant funding, this component of the program will continue in 2018 with several funded restoration projects.

<u>COOPERATIVE EFFORTS AND OUTREACH</u>:

Other provisions of the Work Plan notwithstanding, Vector Control may participate in research, monitoring, and demonstration projects in cooperation with other levels of government such as the State, Towns or Federal agencies such as the US Fish and Wildlife Service or Army Corps of Engineers. These activities may be subject to separate DEC permitting and SEQRA compliance, and to CEQ and Wetlands Stewardship Committee review as well.

Vector Control will also continue to work with the various local governments, including the cooperative effort with East Hampton Town to provide framework to develop, plan and construct

wetland restoration projects that will restore wetland functions, values and lead to a reduction in pesticide use, while still protecting human health and quality-of-life through reduced mosquito numbers.

TICK RESEARCH SURVEILLANCE AND CONTROL:

In 2013, the Division began work under Resolution 797-2013 to determine how the County might best be able to reduce the impact of tick-borne diseases. This was a follow-up to the Tick Management Task Force (TMTF) that was submitted to the Legislature in May of 2008 in response to Resolution 1123-2006. In addition, Resolution 132-2014 created the Tick Control Advisory Committee (TCAC) to advise Vector on tick control planning. Large scale effort to reduce the number of ticks on a countywide landscape, such as those described by the TMTF, would have the potential for adverse impacts on the environment and would need full SEQRA review. While no large scale control efforts can be undertaken without an environmental review of tick control under SEQRA and potentially an EIS of the plan, several interim actions are being undertaken. The development of a Tick Control Plan and environmental review, therefore, is a major effort that has yet to be funded. Re-establishment of the TCAC under Resolution 1668-2016 is assisting the County to develop a plan of action and identify the resources needed going forward to fully develop a County-wide environmentally sound tick control plan.

In 2018, Vector Control will continue to work on developing a County-wide tick control plan with the limited resources available. Studies are currently restricted to research activities that would not require full environmental review under SEQRA. Vector is also working to improve the technical basis for control efforts and provide practical information to the various public and private entities currently undertaking localized tick control programs. These cooperative efforts can help leverage the County's limited resources through partnership efforts.

The 2018 tick control efforts include:

1. In 2015 the County created a new position and hired an Entomologist for tick-related activities. Having this person devoted full time to tick research and control was a major step forward in understanding the tick problem in Suffolk.
2. We will continue to work with the TCAC in 2018 to explore tick control and funding options that may be available to the County. Most importantly, the TCAC will allow for the continued input and feedback from stakeholders needed to gauge what options might be feasible and acceptable for implementation at each local level. This is a significant task, since each of the available control options have their own unique local benefits and drawbacks
3. Several long-term and seasonal surveillance sites have been tracking baseline tick populations across Suffolk County since late 2015. Bi-weekly sites were expanded in 2017 to include a western sampling site, due to observed variation in species and activity. This continued surveillance effort has provided important locally based data such as species composition, abundance, seasonal cycles, and present pathogens. This information will help design and conduct control efforts by other jurisdictions and private pest control operators.

4. Vector staff will continue tick sampling for pathogen testing by NYSDOH and assist SCDOH with sample collections for future County based testing. Samples have been sent to NYSDOH for 2016 and spring of 2017.
5. Past tick collections in 2015 and 2016 with collaborations at Columbia University have produced a published study with novel pathogen testing methods and a second virome study manuscript is underway. Collaborators at The City University of New York are currently testing samples collected in collaboration with Vector Control; a fall collection is being organized. Staff will continue to assist DEC, local municipalities, government agencies and others with tick or tick pathogen related sample collections.
6. Vector Control will continue to search the literature on the subject in order to improve the Division's technical expertise in tick control and the environmental effects thereof.
7. We will continue our efforts to reach out to experts for their advice and input and attend related seminars and conferences in the field. These efforts have already proven very helpful in gaining knowledge that may not be published but is highly valuable and allow fostering of mutually beneficial collaborations and potential funding sources.
8. Vector staff will continue to provide technical advice and tick management program design to landowners, government agencies, municipalities and civic groups that are conducting tick control or are considering doing so. These activities will continue to provide further opportunities to learn what techniques local entities are interested in adopting, currently using, or which may be useful to the County and others.
9. In 2017, Vector Control and Cornell Cooperative Extension held a tick management workshop based on continued interest from 2016 efforts for private pest control operators. These workshops allow us to collect information on locally used materials in tick management, discuss application techniques and provide technical assistance to commercial tick control providers within Suffolk County.
10. Vector staff will continue to give presentations at various pest control association meetings, municipalities and civic groups as time and resources allow.
11. Vector Control, in cooperation with Cornell Cooperative Extension, will continue local field trial assessment of tick management materials and area-wide management strategies as opportunities and resources allow.
12. Vector Control and Cornell Cooperative Extension (CCE) successfully completed an awarded small grant awarded in 2016, for educational workshops and initial funding of field acaricide testing. Currently, Vector staff and CCE are preparing a proposal for potential state funding through the newly launched Northeast Regional Center for Excellence in Vector-Borne Diseases at Cornell University.

The prevention of tick-borne diseases in the County is a difficult and complex issue. It is particularly difficult because the biology of these vectors and diseases are significantly linked to deer overpopulation, expansion of range and limited management. In addition, tick control technology suitable for large scale application is not as well developed as mosquito control techniques. A proper plan with concurrent SEQRA compliance would require additional resources to undertake an EIS, beyond those currently available to Vector. However, tick-borne diseases and the adverse impacts ticks have on the ability of County residents to utilize the outdoors, and even their own property, are important issues that need continued investigation.

The Findings Statement for the Long Term Plan requires Vector Control to provide an annual report of pesticide use to the Legislature. The table below summarizes the use of pesticides by the Division in 2017.

Suffolk County Pesticide Acreage Estimates for 2017					
Product	**Active Ingredient**	**Amount Used**	**Units**	**Air/Ground Application**	**2017 Acreage**
Ground Larvicides					
Altosid Liquid Larvicide 5%	Methoprene	0	gal	Ground	0
Altosid Pellets	Methoprene	44	lbs	Ground	9
Altosid XR-G	Methoprene	15	lbs	Ground	3
Vectobac 12 AS - Ground	Bti	0	gal	Ground	0
Summit Bti Briquets	Bti	96	ea	Ground	1
Fourstar 90 Briquets	Bti/*B. sphaericus*	4656	ea	Ground	11
VectoPrime FG	Bti/Methoprene	10,160	lbs	Ground	6,340
Aquabac 200G	Bti	1,200	lbs	Ground	120
Altosid XR briquets - Basins	Methoprene	21,120	ea	Ground	49
Spheratax 50G	*B. sphaericus*	3,200	lbs	Ground	213
Ground Larvicide Acres				***Total Acres***	**6,748**
Aerial Larvicide:					
Duplex: Altosid 20% + Vectobac 12AS	Methoprene + Bti mix (Liquid)	85 ALL 20% 2,040 12AS Bti	gal	Aerial	14,506
VectoPrime FG	Bti/Methoprene (Granular)	15,200	lbs	Aerial	3,800
Aerial Larvicide Acres				***Total Acres***	**18,306**
Larvicide Ground & Air				***Total Acres***	**25,052**
Adulticides					
Scourge 18+54	Resmethrin	0	gal	Ground	0
Anvil 10+10 ULV	Sumithrin	172.5	gal	Ground/Air	36,800
Duet	Sumithrin + Prallethrin	0	gal	Ground	0
Adulticide Ground & Air				***Total Acres***	**36,800**