

National Endowment for the Humanities

Environmental Assessment

for the

Historic Hudson Valley

Philipsburg Manor Millpond Restoration

CHA-295061

May 13th, 2024

Ann E. Piesen, MCP
Federal Preservation and Environmental Officer
Senior Grants Policy Analyst
Office of Grant Management
National Endowment for the Humanities

Re: CEA for Historic Hudson Valley, Philipsburg Manor Mill Pond Dredge Project

Dear Ms. Piesen:

Historic Hudson Valley is pleased to submit the attached Full Environmental Assessment Form to fulfill its obligation to be in compliance with the National Environmental Policy Act and ensure that the Philipsburg Manor Mill Pond (PMMP) Dredge Project is protective of environment, human health and the historic and archeological resources that allow Historic Hudson Valley to fulfill its educational mission.

The dredging of the PMMP will restore the full function of the 18th century grist mill and restore the ecology and hydrology of the pond.

Please feel free to contact me or our environmental consultant, EcoAssessment if you have any questions. We look forward to continuing to work with the National Endowment of the Humanities to preserve our history and educate the people we serve.

Sincerely,



Richard Torres

Director of Buildings, Grounds and Security
Historic Hudson Valley

Historic Hudson Valley
Philipsburg Manor Mill Pond Dredge

381 N. Broadway
Sleepy Hollow, NY 10591

Environmental Assessment



TRANSMITTAL

- 1) Cover Letter
- 2) Narrative and Work Plan
- 3) Full Environmental Assessment used in Joint Application for permits from the New York State Department of Environmental Conservation and the United States Army Corps of Engineers.

List of Attachments:

- A. USGS Quadrangle Location Map
- B. Philips Manor Mill Pond Tax Map
- C. Google Earth image Philips Manor Dredge Project Area
- D. Google Earth Image NYSDEC Remediation Site
- E. Bathymetric Survey Philips Manor Mill Pond
- F. Conceptual Layout of Geotubes
- G. National Wetlands Inventory Map Philipsburg Manor Mill Pond
- H. FEMA FIRM for Philipsburg Manor
- I. New York State Historic Preservation Office Determination and Application
- J. NYSDEC Sediment Classification Letter June 8th, 2022
- K. NYSDEC Sediment Testing Protocol Approval Letter October 15th, 2021
- L. Sediment Testing Results Phoenix Laboratories
- M. Mud Cat SP-915 Hydro Dredge Unit Specifications

ECOASSESSMENT

May 13th, 2024

Ann E. Piesen, MCP
Federal Preservation and Environmental Officer
Senior Grants Policy Analyst
Office of Grant Management
National Endowment for the Humanities

Re: CEA for Historic Hudson Valley, Philipsburg Manor Mill Pond Dredge Project

Dear Ms. Piesen:

Please find a New York State Department of Environmental Conservation (NYSDEC) Full Environmental Assessment Form (FEAF) and attachments for your review for the Philipsburg Manor Mill Pond Dredge Project. We believe that this form and the attachments meet the requirements of the Consolidated Environmental Assessment required under the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations for implementing NEPA (44 CFR Parts 1500 through 1508) and the National Endowment for the Humanities NEPA Implementing Procedures.

Please let me know if you have any questions regarding this review and environmental assessment.

Sincerely,



Timothy K. Judge

Environmental Permitting and Ecological Assessment

EcoAssessment, LLC
436 Benedict Ave., Tarrytown, NY 10591
845-222-6135 judget@alum.rpi.edu

Preparer Certification

I hereby certify that the information I have provided is complete and accurate, to the best of my knowledge:


Timothy K. Judge

30 May 2024
Date

President
Title

EcoAssessment
Organization

Recipient Certification (must be signed by an authorized official; may not be delegated to consultant)

I hereby certify that the information provided is complete and accurate to the best of my knowledge. I also recognize and agree that construction activity, including but not limited to site preparation, demolition, or land disturbance, is limited by 40 CFR §1506.1 - Limitations on actions until the NEH issues a final environmental decision for the proposed project(s) and until compliance with all other applicable NEH approval actions (e.g., all conditions of the grant award have been met) have occurred. All applicable Federal, State, and local permits required shall be obtained before proceeding with the proposed action.


Richard Torres
Director of Buildings, Grounds
and Security

Historic Hudson Valley, Inc.

NEH Decision

Having reviewed the above information, certified by the responsible official, the proposed projects warrant environmental processing as indicated below:

- The proposed action has been found to qualify for a Condensed Environmental Assessment.
The Finding of No Significant Impact is attached.
- The proposed development action exhibits conditions that require the preparation of a detailed Environmental Assessment.
- The proposed development action requires preparation of an Environmental Impact Statement.



7/8/2024

Ann E. Piesen, MCP
Federal Preservation and Environmental Officer
National Endowment for the Humanities

Date

Philipsburg Manor Mill Pond Dredge Project

Narrative and Work Plan



Background

Philipsburg Manor, a National Historic Landmark site, located in Sleepy Hollow, New York, is a former provisioning plantation with a manor house, wharf, mill, barn, and a modern Visitor Center. In 1964, the site was restored to recreate its historic appearance circa the 1730s-40s, when it included a dam across the Pocantico River to create a millpond and hydropower for the Philipsburg Manor gristmill.

The Need

In recent years, a series of storms—culminating with Hurricane Ida in 2021—deposited large amounts of sediment and debris into the millpond. The millpond, which is intended to have 14 acre-feet of reservoir capacity, is now filled with approximately 13 acre-feet of solid material that allows almost no waterflow. As a result, the Philipsburg Manor Mill Pond (PMMP) is no longer functional as a reservoir and has lost flow, volume and water pressure needed to turn the waterwheel that powers the mill. This creates added stress for the dam, makes the areas downstream of the millpond vulnerable to storm flooding, and significantly disrupts the historic landscape at Philipsburg Manor.

Project Description

The proposed project will remove approximately 20,000 cubic yards of sediment and debris from the PMMP, restoring the property to its original function and historic appearance and reservoir capacity. Utilizing both mechanical and hydraulic dredging methods, the sediment will be dewatered using GeoTubes that retain the dredged sediments and allow the water to return to the Pocantico River. The sediments in the pond were sampled and tested using a New York State Department of Environmental Conservation (NYSDEC) approved protocol. The chemical

analysis was reviewed by the NYSDEC, and the sediments have been categorized as general fill.

Benefit

The dredging of the PMMP will return the grist mill to operation and restore the reservoir capacity of pond. The restoration of the reservoir capacity is crucial to helping to mitigate flooding of the Pocantico River downstream of the dam. The ability to reduce the water level of the pond prior to a major storm event can help alleviate the severity of flooding in the tidal portion of the Pocantico River. This will help protect the investment being made by the Village of Sleepy Hollow. Dredging the Mill Pond will also help restore the ecology of the lower Pocantico River, both above and below the dam. The pond is used as habitat by fish species upstream of the dam and is utilized by several bird species reliant on aquatic habitat for foraging.

Alternative Considered

The only alternative to dredging the PMMP is to take no action and let the sediments remain in place. This is not practical or desirable. Leaving the sediments in place will deprive the historic grist mill of flowing water needed to power the mill, eliminate the reservoir capacity of the PMMP and exacerbate flooding both above and below the dam. Allowing the accumulated sediments to remain in place will also alter the hydrology and ecology of the Pocantico River.

Work Plan

An earthen pad of approximately 280 feet by 175 feet will be built to ensure that the geotubes have a level surface to be used for dewatering. Once the pad is completed, the hydraulic dredge unit, Mudcat SP-915, will be lowered by crane into the PMMP. Continuous, 6" heat welded PVC pipe will be deployed between dredge unit and the dewatering pad. The pipe will be connected from the dredge unit to the geotubes through a manifold system allowing for the even distribution of the sediments within the geotubes for dewatering.

After a period of at least 3 months, the dewatering tubes will be cut open and the sediments removed using a bucket loader. The dewatered sediments will be loaded into dump trucks and taken to a NYSDEC permitted composting facility.

Upon completion of the project, the remains of the geotubes will be disposed of, and the earthen pad removed. There will be no alteration of the existing landscape.

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. 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; 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.

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 to the initial question 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 applicant or project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Applicant/Sponsor Information.

Name of Action or Project:		
Project Location (describe, and attach a general location map):		
Brief Description of Proposed Action (include purpose or need):		
Name of Applicant/Sponsor:		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Project Contact (if not same as sponsor; give name and title/role):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

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)
a. City Council, Town Board, or Village Board of Trustees <input type="checkbox"/> Yes <input type="checkbox"/> No		
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No		
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources. <ul style="list-style-type: none"> <li data-bbox="121 829 1485 861">i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input type="checkbox"/> No <li data-bbox="121 892 1485 924">ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes <input type="checkbox"/> No <li data-bbox="121 924 1485 955">iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input type="checkbox"/> 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

- **If Yes**, complete sections C, F and G.
- **If No**, proceed to question C.2 and complete all remaining sections and questions in Part 1

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 (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) 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,

i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? _____

b. What police or other public protection forces serve the project site?

c. Which fire protection and emergency medical services serve the project site?

d. What parks serve the project site?

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?

b. a. Total acreage of the site of the proposed action? _____ acres
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

c. Is the proposed action an expansion of an existing project or use? Yes No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? Yes No
If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? Yes No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? Yes No

i. If No, anticipated period of construction: _____ months

ii. If Yes:

- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year

• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? Yes No
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? Yes No
 If Yes,

i. Total number of structures _____

ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length

iii. Approximate extent of building space to be heated or cooled: _____ square feet

h. 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? Yes No
 If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: Ground water Surface water streams Other specify: _____

iii. If other than water, identify the type of impounded/contained liquids and their source.

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? Yes No
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
 If Yes:

i. What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

iv. Will there be onsite dewatering or processing of excavated materials? Yes No
 If yes, describe. _____

v. What is the total area to be dredged or excavated? _____ acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? Yes No

ix. Summarize site reclamation goals and plan: _____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? Yes No
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? Yes No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? Yes No

If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? Yes No

If Yes:

- Name of district or 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

iii. 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: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? Yes No

If Yes:

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

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

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? Yes No

If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

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

iii. 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 a line extension within an existing district be necessary to serve the project? Yes No
 If Yes:
 • Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? Yes No
 If Yes:
 • Applicant/sponsor for new district: _____
 • Date application submitted or anticipated: _____
 • What is the receiving water for the wastewater discharge? _____

v. 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):

vi. 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:
 i. How much impervious surface will the project create in relation to total size of project parcel?
 _____ Square feet or _____ acres (impervious surface)
 _____ Square feet or _____ acres (parcel size)
 ii. Describe types of new point sources. _____

iii. 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

iv. Does the 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:
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

 iii. 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:
 i. 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
 ii. In addition to emissions as calculated in the application, the project will generate:
 • _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
 • _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
 • _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
 • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
 • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)
 • _____ Tons/year (short tons) 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)? Yes No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? Yes No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

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? Yes No

If Yes:

i. When is the peak traffic expected (Check all that apply): Morning Evening Weekend
 Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? Yes No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? Yes No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? Yes No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? Yes No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? Yes No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____

iii. 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.

<p><i>i.</i> During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p><i>ii.</i> During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
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<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>	
<p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p> <p>_____</p> <p>_____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally, describe the proposed storage facilities: _____</p> <p>_____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ _____ • Operation: _____ _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: _____ _____ • Operation: _____ _____ 	

s. Does the proposed action include construction or modification of a solid waste management facility? Yes No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? Yes No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

 ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. 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:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.
 i. Check all uses that occur on, adjoining and near the project site.
 Urban Industrial Commercial Residential (suburban) Rural (non-farm)
 Forest Agriculture Aquatic Other (specify): _____
 ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertypes	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, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____ _____			

c. Is the project site presently used by members of the community for public recreation? Yes No
i. 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 1500 feet of the project site? Yes No
If Yes,
i. Identify Facilities:

e. Does the project site contain an existing dam? Yes No
If Yes:
i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____
iii. 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? Yes No
If Yes:
i. Has the facility been formally closed? Yes No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

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? Yes No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? Yes No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: Yes No
 Yes – Spills Incidents database Provide DEC ID number(s): _____
 Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
 Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? Yes No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

v. Is the project site subject to an institutional control limiting property uses? Yes No

- If yes, DEC site ID number: _____
- 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? _____ 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: _____ %
 _____ %
 _____ %

d. What is the average depth to the water table on the project site? Average: _____ feet

e. Drainage status of project site soils: Well Drained: _____ % of site
 Moderately Well Drained: _____ % of site
 Poorly Drained _____ % of site

f. Approximate proportion of proposed action site with slopes: 0-10%: _____ % of site
 10-15%: _____ % of site
 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? Yes No
 If Yes, describe: _____

h. Surface water features.

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

ii. Do any wetlands or other waterbodies adjoin the project site? Yes No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? Yes No

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

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

v. Are any of the above water bodies 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: _____

i. Is the project site in a designated Floodway? Yes No

j. Is the project site in the 100-year Floodplain? Yes No

k. Is the project site in the 500-year Floodplain? Yes No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? Yes No
 If Yes:
 i. Name of aquifer: _____



m. Identify the predominant wildlife species that occupy or use the project site: _____ _____ _____	
n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Describe the habitat/community (composition, function, and basis for designation): _____ _____ <i>ii.</i> Source(s) of description or evaluation: _____ <i>iii.</i> Extent of community/habitat: <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
o. 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? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Species and listing (endangered or threatened): _____ _____ _____	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Species and listing: _____ _____	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input type="checkbox"/> No <i>i.</i> If Yes: acreage(s) on project site? _____ <i>ii.</i> 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? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature <i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <i>i.</i> CEA name: _____ <i>ii.</i> Basis for designation: _____ <i>iii.</i> Designating agency and date: _____	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? Yes No

If Yes:

i. Nature of historic/archaeological resource: Archaeological Site Historic Building or District

ii. Name: Washington Irving Memorial Bridge, Philipsburg Manor, Dutch Reformed Church, Sleepy Hollow Cemetary

iii. Brief description of attributes on which listing is based: _____

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? Yes No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: SHPO

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? Yes No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? Yes No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? Yes No

F. Additional Information

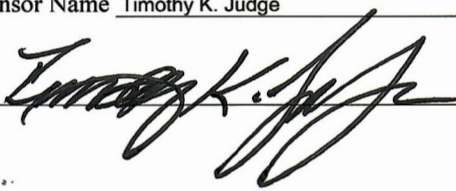
Attach any additional information which may be needed to clarify your project.

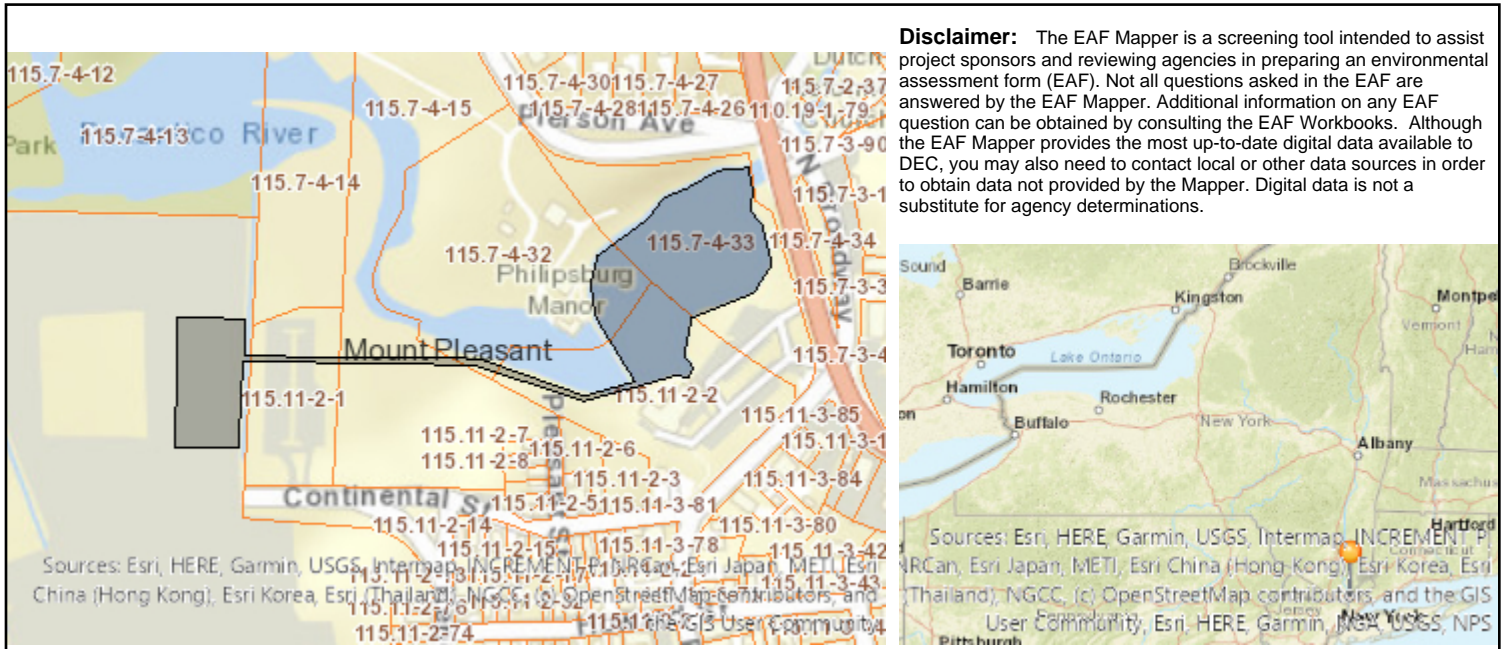
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

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

Applicant/Sponsor Name Timothy K. Judge Date 5/13/24

Signature  Title President and preparer, EcoAssessment



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

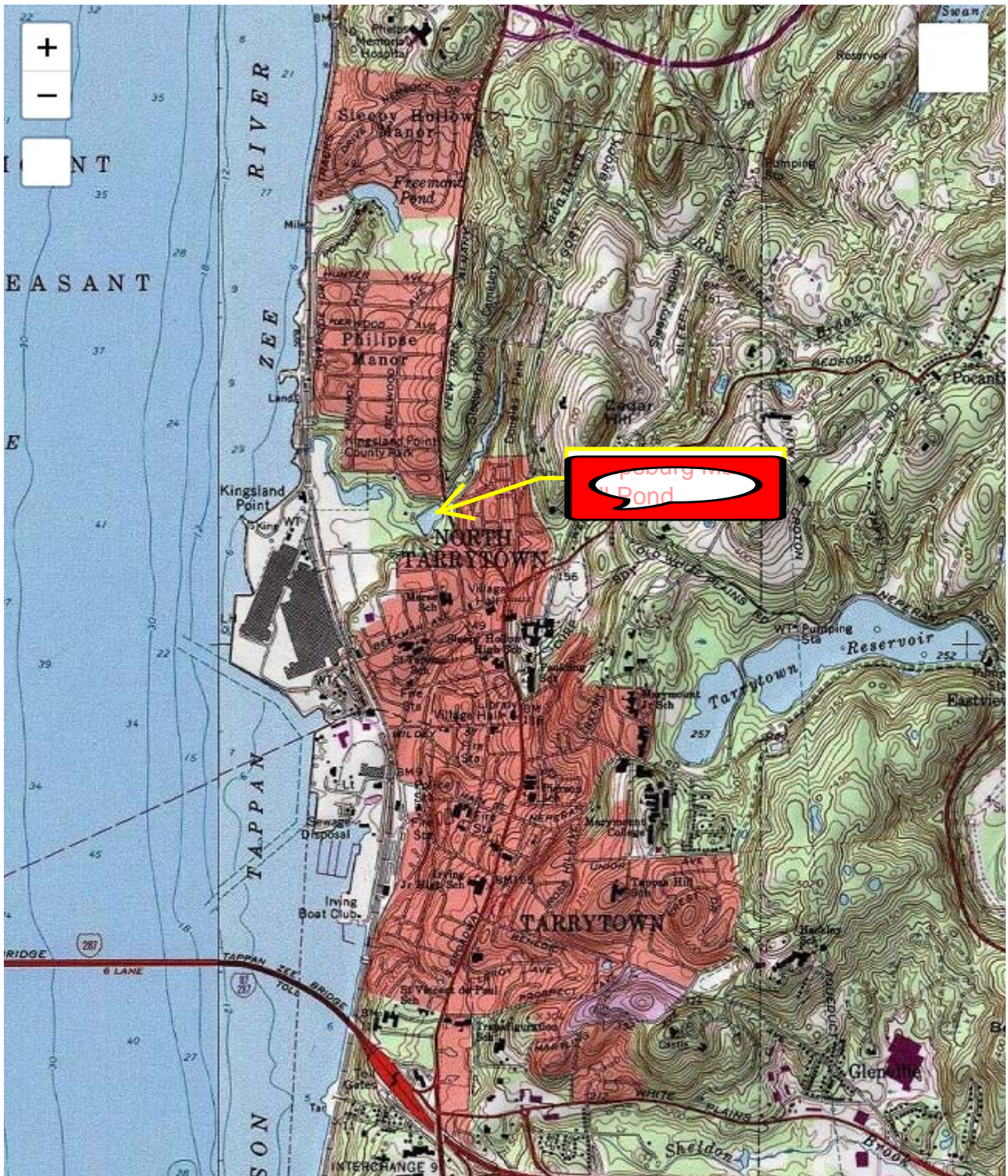
B.i.i [Coastal or Waterfront Area]	Yes
B.i.ii [Local Waterfront Revitalization Area]	Yes
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	Remediation Sites:C360070B
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Yes - Digital mapping data for Spills Incidents are not available for this location. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Yes
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Yes
E.1.h.i [DEC Spills or Remediation Site - DEC ID Number]	C360070B
E.1.h.iii [Within 2,000' of DEC Remediation Site]	Yes
E.1.h.iii [Within 2,000' of DEC Remediation Site - DEC ID]	360011, C360070, C360070B, 546031
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	864-21, 864-24, 864-20
E.2.h.iv [Surface Water Features - Stream Classification]	C(T), B, SB
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters

E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Yes
E.2.j. [100 Year Floodplain]	Yes
E.2.k. [500 Year Floodplain]	Yes
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	Yes
E.2.o. [Endangered or Threatened Species - Name]	Atlantic Sturgeon, Shortnose Sturgeon
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	Yes
E.3.d [Critical Environmental Area - Name]	Hudson River
E.3.d.ii [Critical Environmental Area - Reason]	Exceptional or unique character
E.3.d.iii [Critical Environmental Area – Date and Agency]	Agency:Westchester County, Date:1-31-90
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:WASHINGTON IRVING MEMORIAL BRIDGE, Philipsburg Manor, Dutch Reformed Church, Sleepy Hollow Cemetery
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Attachment

A

Sleepy Hollow Topo Map in Westchester County New York



[Print this map](#)

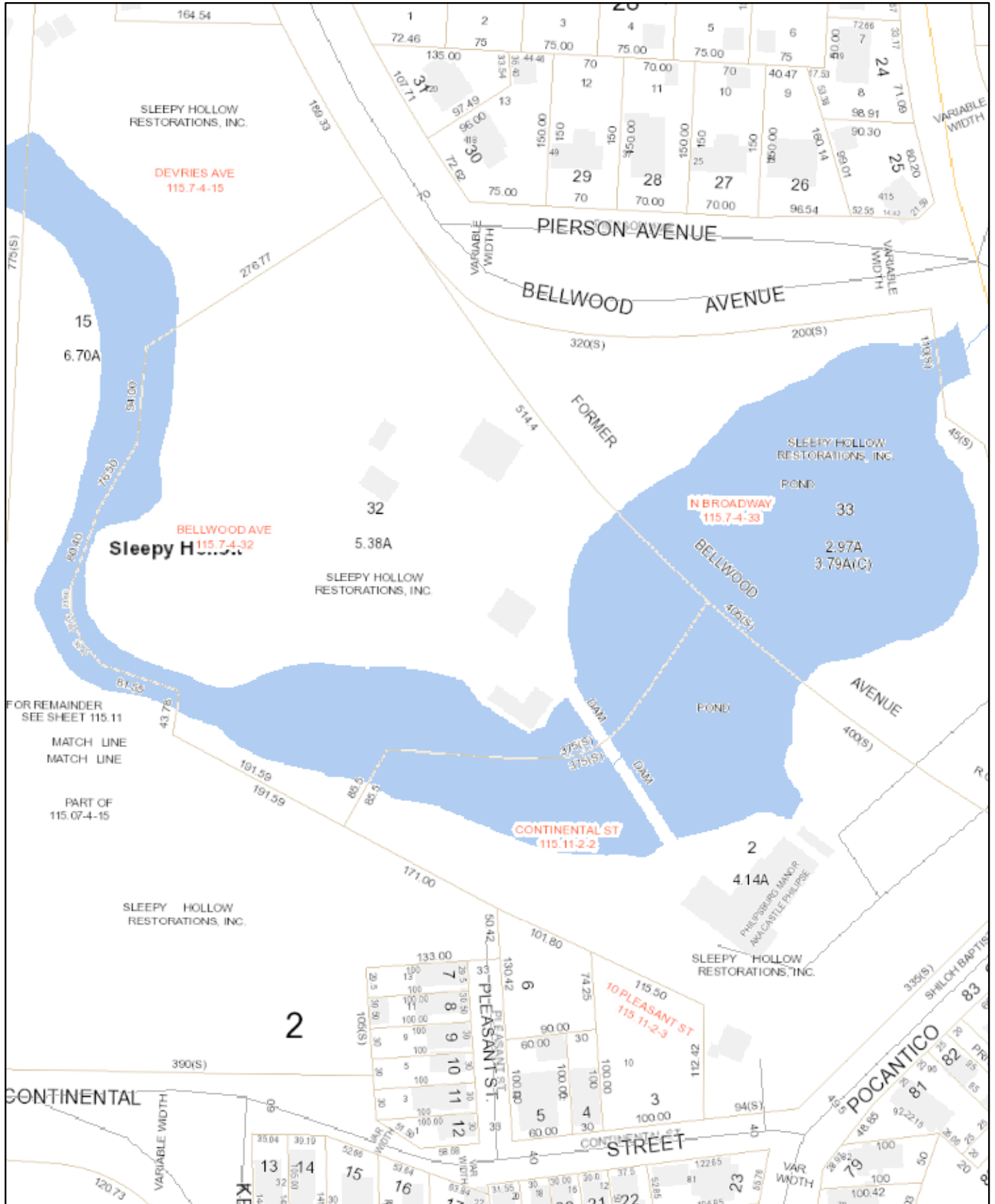
Map provided by TopoZone.com

Attachment

B



Philipsburg Manor Mill Pond Dredge Project Tax Map



Philipsburg Manor Mill Pond Tax Map



Westchester County GIS

30 15 0 30 Meters



Attachment

C

Philips Manor Dredge Project

Write a description for your map.

Legend



DREDGE PROJECT OVER

Pierson Ave

Headless Horseman

Devries Park

Hudson River Recreation - Sleepy Hollow

Headless Horseman Statue

Old Broadway

Dredge Area

Pocantico River

Sunoco Gas Station

Philipsburg Manor

Temporary Pipe Laydown Area

Sediment Storage Area

Continental St

Kendall Ave

Hudson Valley French Bulldogs

Howard St

Pocantico St

Van Tassel Tarrytown

Em St

The James F. Gaigano Building Sleepy...

600 ft

Google Earth

© 2023 Google



Attachment

D

NYSDEC Remediated Sites

Write a description for your map.

NYSDEC CONTAMINATED SITES

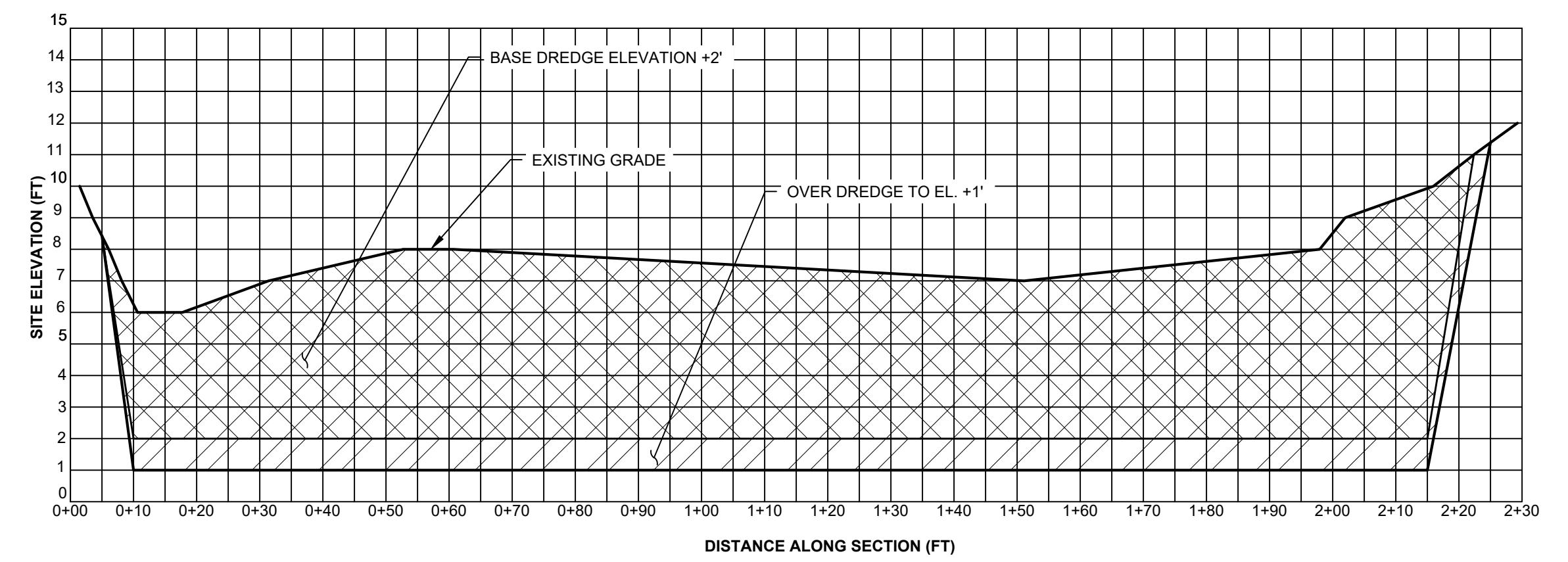
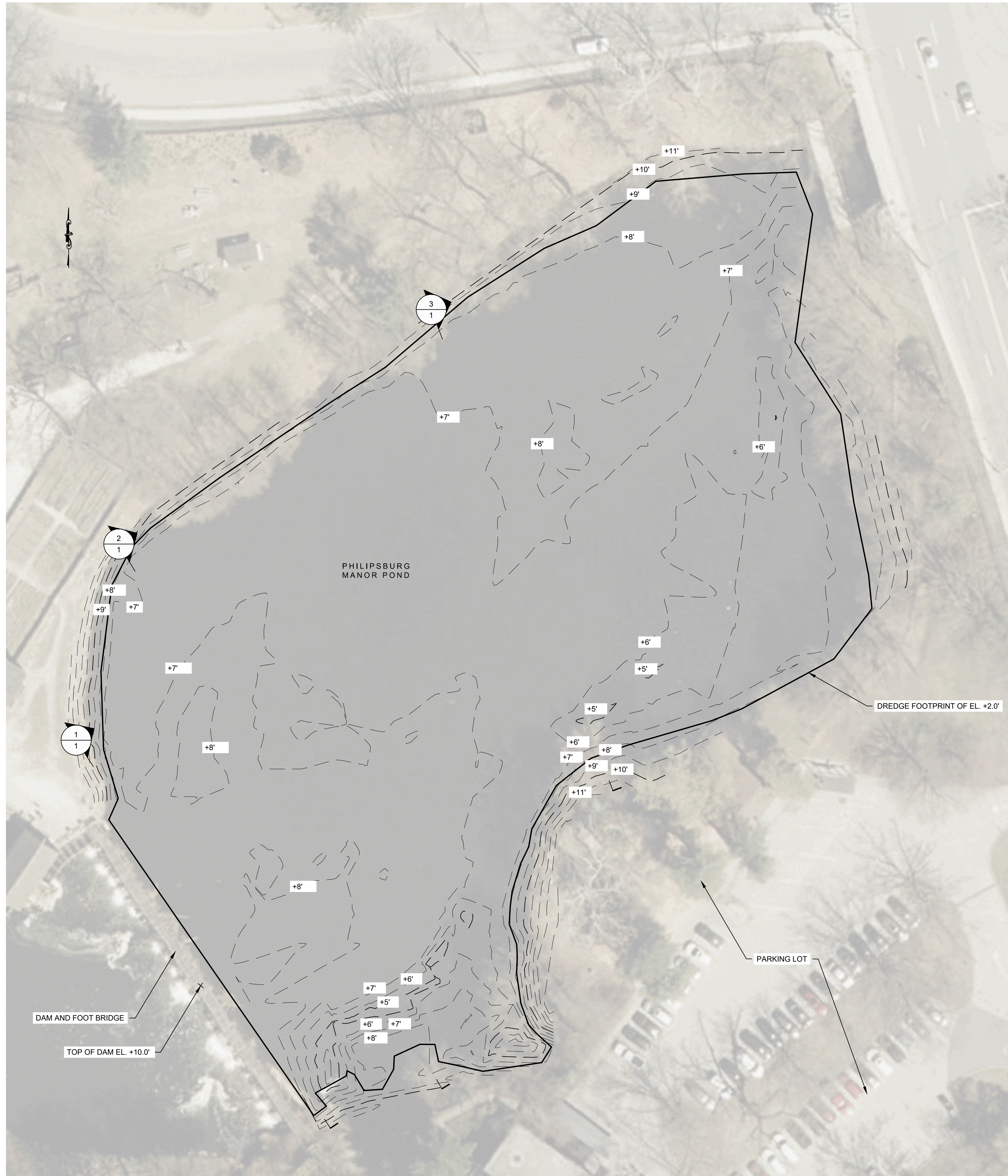
3607008,

360070,

Andrews Ln

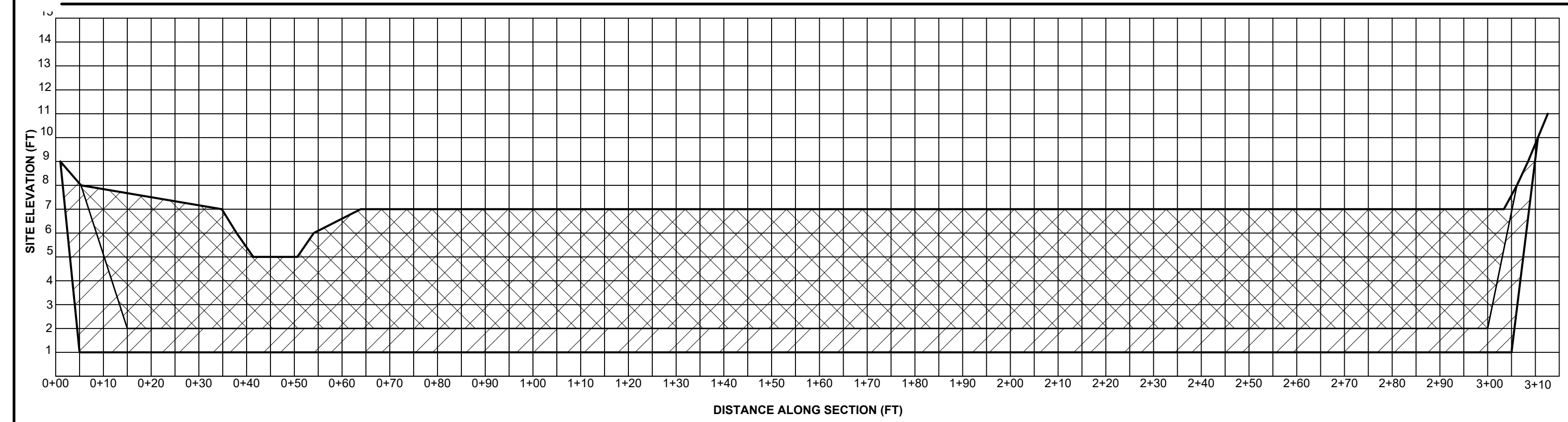
Attachment

E



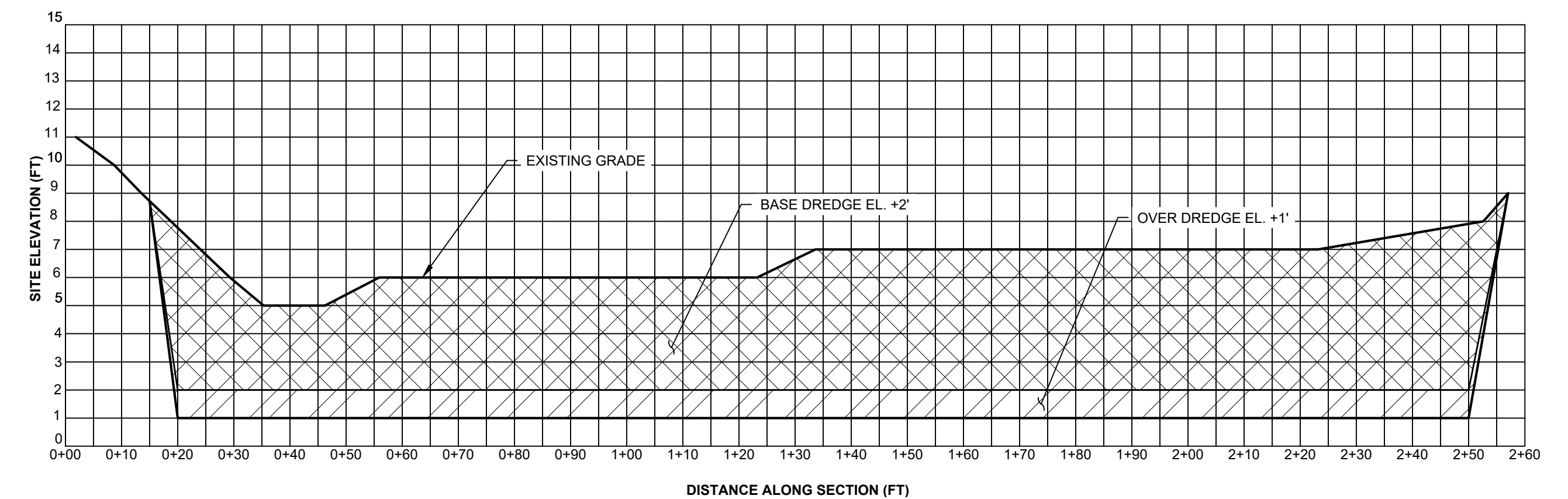
SECTION 1

VERTICAL SCALE: 1"= 4'-0", HORIZONTAL SCALE 1"=20'



SECTION 2

VERTICAL SCALE: 1"= 4'-0", HORIZONTAL SCALE 1"=20'



SECTION 3

VERTICAL SCALE: 1"= 4'-0", HORIZONTAL SCALE 1"=20'

NOTE(S):

1. CONDITION SURVEY PERFORMED BY RACE COASTAL ENGINEERING, PC (RACE) ON JULY 8, 2021.
2. HORIZONTAL AND VERTICAL POSITION OBTAINED USING REAL TIME KINETICS (RTK).
3. EARTH WORK PROCESSING USING CARLSON 2021 SOFTWARE.
4. COORDINATES REFER TO U.S. STATE PLANE COORDINATE SYSTEM, NAD 1983, NEW YORK EAST.
5. SITE ELEVATION BASED ON TOP OF DAM FROM DRAWING PREPARED BY TERRY BERGENDORFF COLLINS, TITLED "MAP OF SPOT ELEVATIONS, PREPARED FOR ABBOTT & PRICE AS PART OF BRIDGE & WHARF, AT PHILIPSBURG MANOR, SITUATE IN VILLAGE OF SLEEPY HOLLOW" DATED JULY 30, 2019.
6. THE NGVD 29 TO NAVD88 CONVERSION FOR THIS PROJECT IS 1.09' PER NOAA VDATUM. NGVD 29 IS LOCATED BELOW NAVD88, THEREFORE THE CORRECTION SHOULD BE SUBTRACTED TO NGVD 29 TO CONVERT TO NAVD88.
7. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED, AND CAN ONLY BE CONSIDERED AS INDICATING CONDITIONS EXISTING AT THAT TIME.

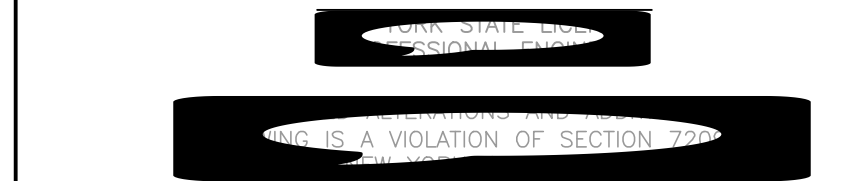
REV	DATE	DESCRIPTION
PROGRESS NOT FOR CONSTRUCTION		
RACE		611 Access Road Stratford, CT 06615 Tel.: 203-377-0663 racecoastal.com
<small>OWNERSHIP AND CONDITIONS OF USE: Drawings and Specifications, as instruments of professional service, are and shall remain the property of RACE Coastal Engineering, PC. Documents are not to be used, in whole or in part, for other projects or purposes or by any other parties than those authorized by contract without the specific written authorization of RACE Coastal Engineering, LLC. The use of this document is contingent upon payment to RACE Coastal Engineering, LLC for services rendered. Non-payment shall give RACE Coastal Engineering, LLC the authority to bar document use by any and all parties.</small>		
THIS DRAWING IS COPYRIGHTED		
Prepared for		HISTORIC HUDSON VALLEY 639 BEDFORD ROAD POCANTICO HILLS, NY 10591
Project		PHILIPSBURG MANOR POND DREDGING SLEEPY HOLLOW, NY 10591
Drawing		PROJECT NOTES
Designed	Drawn	Checked
CBK	CBK	CGE
Job No.	Date	Drawing No.
2021063	08/03/2021	1 of 1

Attachment

F

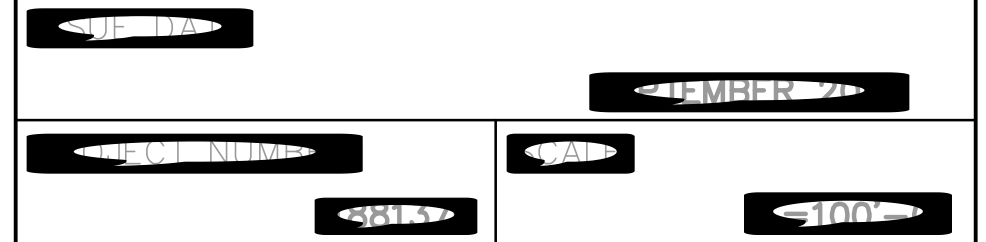


WSP USA INC.
500 Summit Lake Drive, Suite 450
Valhalla, NY 10595
(914) 747-1120



SLEEPY HOLLOW EAST PARCEL PROJECT - PHASE II

VILLAGE OF SLEEPY HOLLOW
WESTCHESTER COUNTY, NEW YORK



OVERALL SITE PLAN

MATCH LINE - SEE THIS SHEET

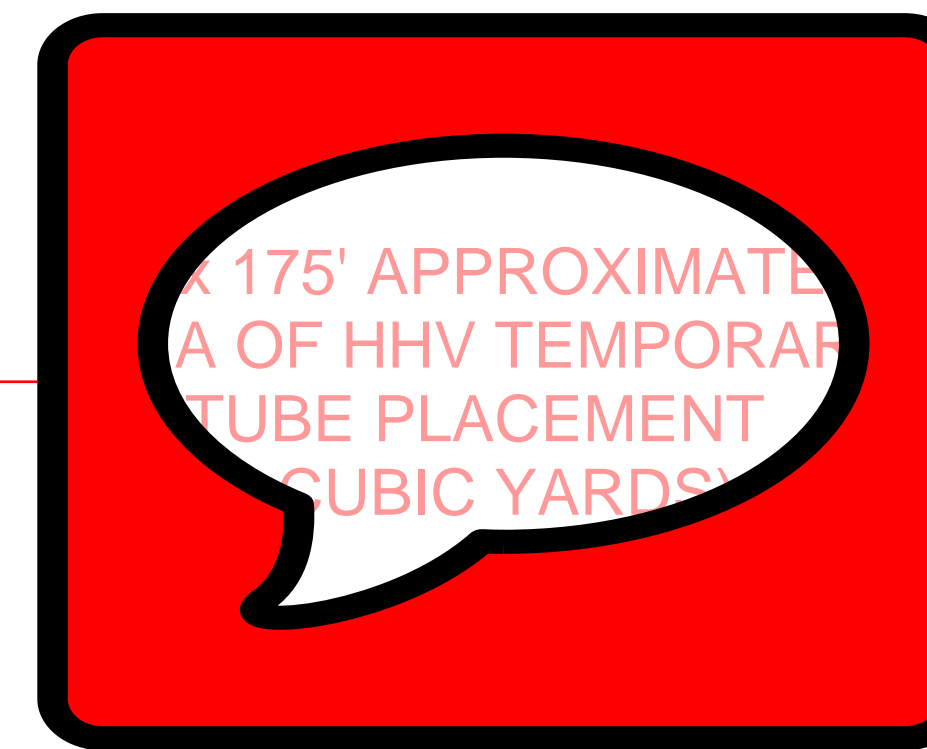
EXISTING VIADUCT STRUCTURE
(REMOVED BY OTHERS)

ADD ALTERNATES 1 & 2
(SEE SITE PLAN-7 FOR DETAILS)

CLINTON STREET
EXTENSION

BEEKMAN
AVENUE

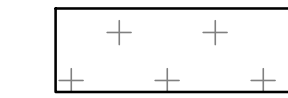
HISTORIC
HUDSON
VALLEY



LEGEND



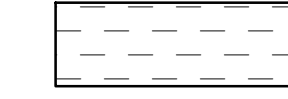
UNDISTURBED AREA FOR HHV OVERFLOW
PARKING (85,000 SF±)



UNDISTURBED AREA FOR VILLAGE DPW USE
(150,000 SF±)



AREA FOR CONTRACTOR STAGING AND EQUIPMENT STORAGE.
FOR AREAS OF ROUGH GRADING, SEE GRADING AND
DRAINAGE PLANS. ALL AREAS WHERE EXISTING ASPHALT
PAVEMENT IS REMOVED (ASSUME 12" DEPTH), FILL WITH
MINIMUM 2' OF FILL MATERIAL FROM SURCHARGE



PROPOSED DRAINAGE SWALE AND TURF ESTABLISHMENT



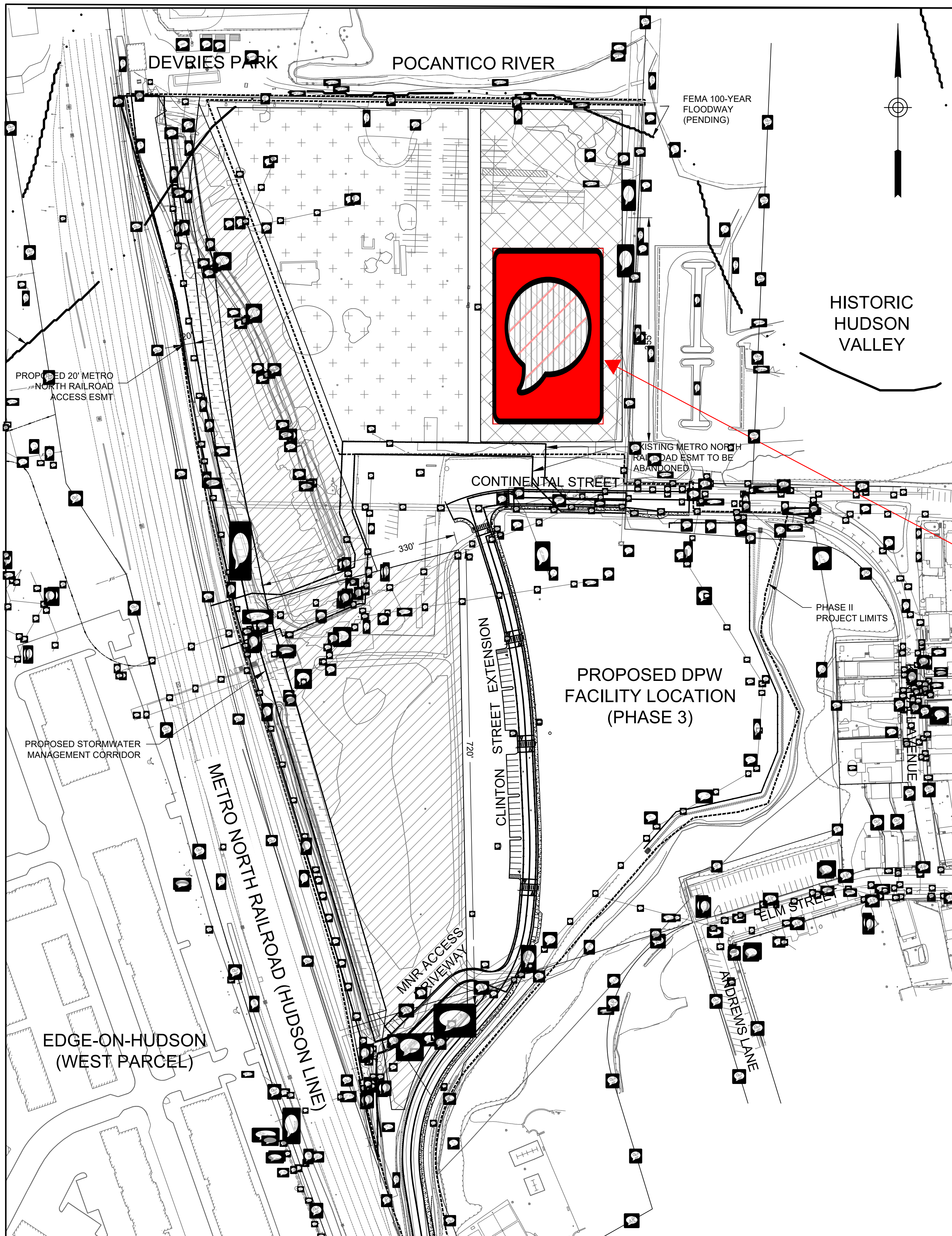
LIMIT OF DISTURBANCE

NOTE:

- EXISTING SIDING BALLAST STONE AND EXTRA MANHOLE RISER EXTENSIONS SHALL BE STORED FOR VILLAGE DPW USE. SPECIFIC STORAGE LOCATIONS TO BE DETERMINED BY THE ENGINEER.
- WORK FOR FINAL SANITARY SEWER AND TEMPORARY WATER MAIN HAVE BEEN PREVIOUSLY SUBMITTED TO THE DEPARTMENT OF HEALTH.

0 100 200
SCALE IN FEET

MATCH LINE - SEE THIS SHEET



PROPOSED 20' METRO
NORTH RAILROAD
ACCESS ESMT

FEMA 100-YEAR
FLOODWAY
(PENDING)

EXISTING METRO NORTH
RAILROAD ESMT TO BE
ABANDONED

CLINTON STREET
EXTENSION

PROPOSED DPW
FACILITY LOCATION
(PHASE 3)

PHASE II
PROJECT LIMITS

PROPOSED STORMWATER
MANAGEMENT CORRIDOR

METRO NORTH RAILROAD (HUDSON LINE)

MNR ACCESS
DIVEWAY

ELM STREET

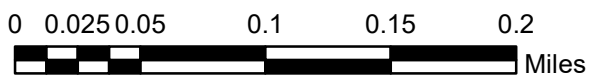
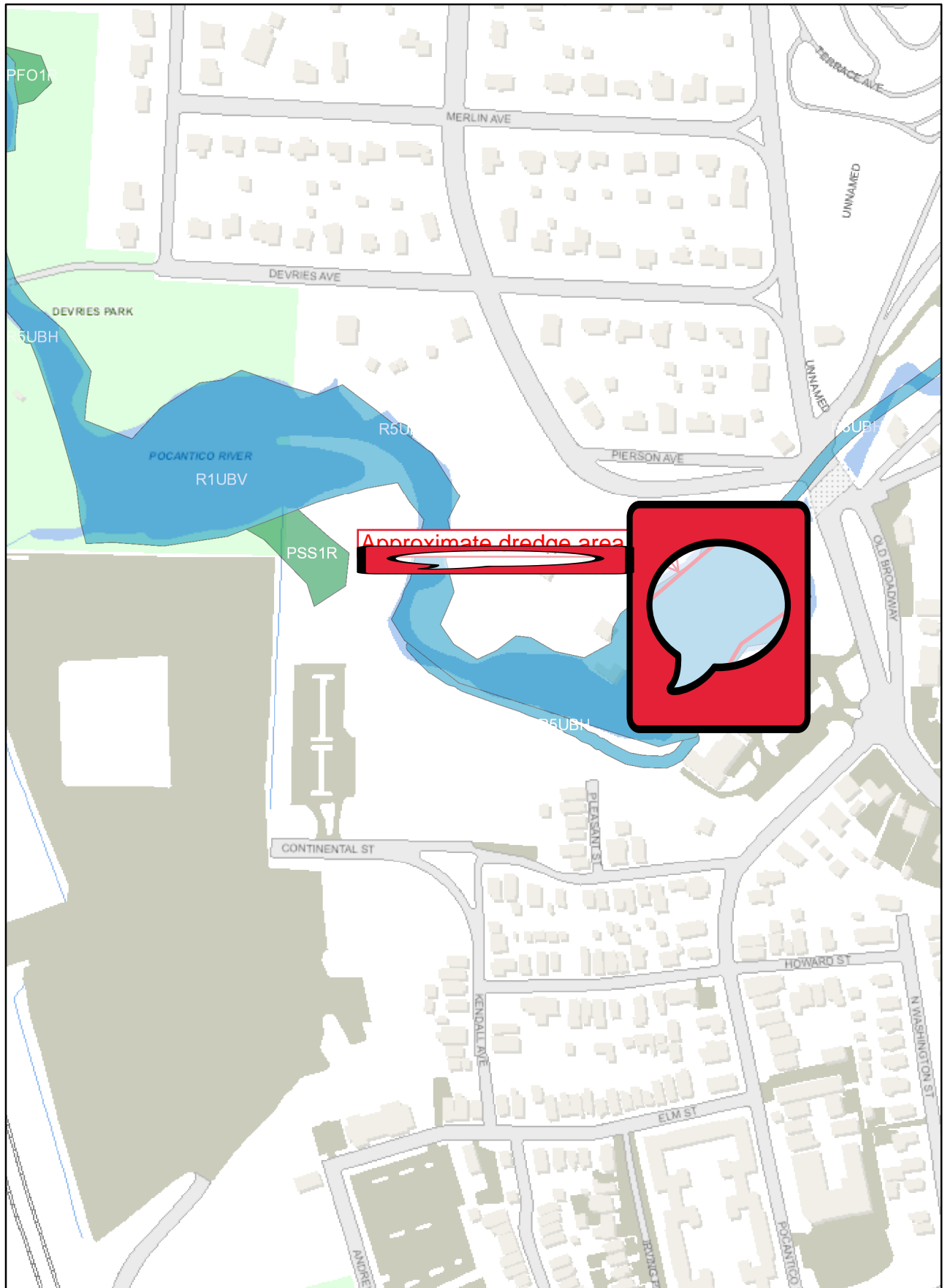
ANDREWS LANE

EDGE-ON-HUDSON
(WEST PARCEL)

Attachment

G

National Wetlands Map Philipsburg Manor Mill Pond

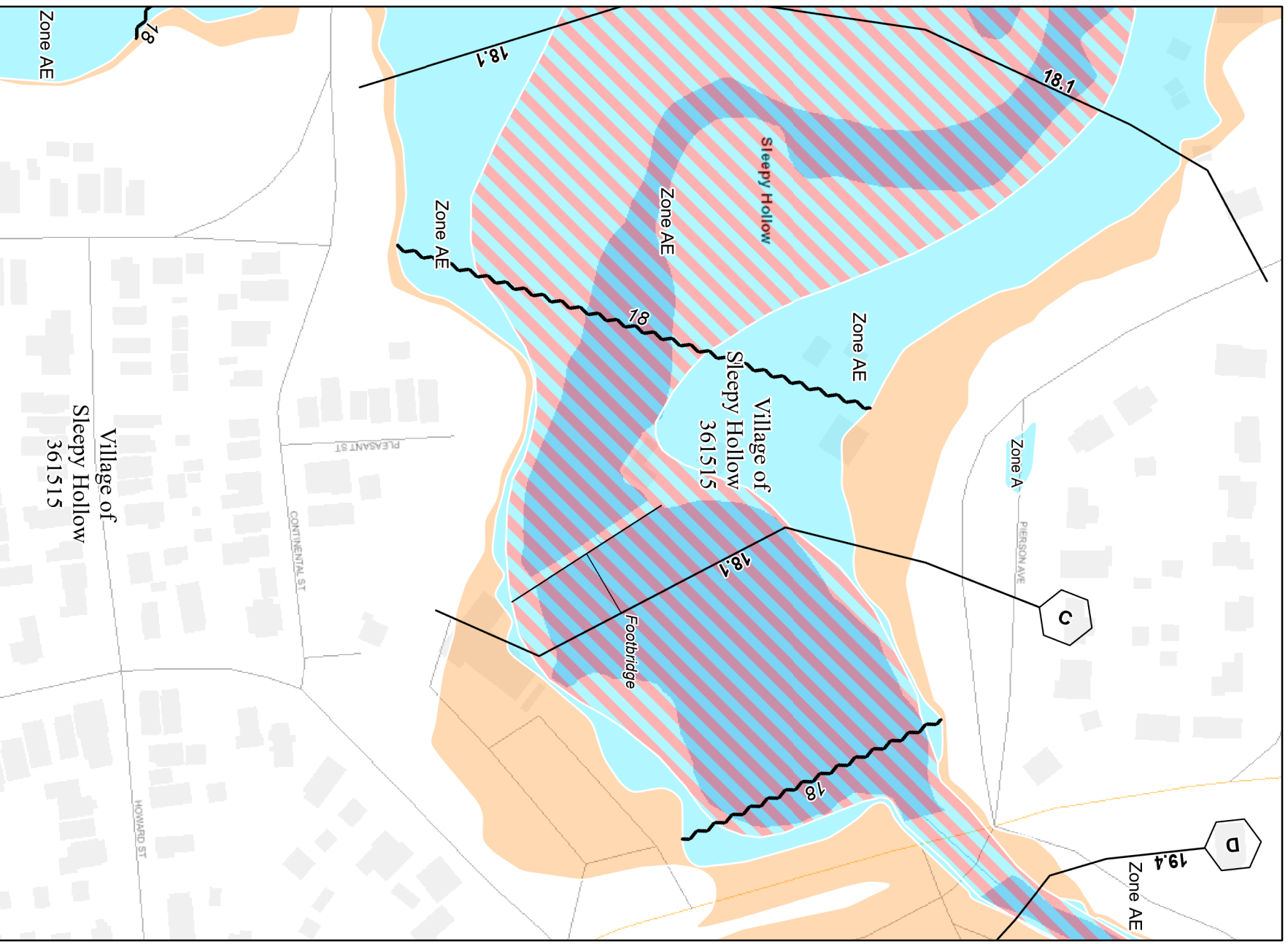


Service Layer Credits: U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands_team@fws.gov
Westchester County GIS

Attachment

H

FEMA Flood Insurance Rate Map Phillipsburg Manor Mill Pond



Westchester County GIS service Base Map WGS84
FEMA FIRMette/NFHLREST_FIRMette

Attachment

I



**New York State
Parks, Recreation and
Historic Preservation**

KATHY HOCHUL
Governor

RANDY SIMONS
Commissioner *Pro Tempore*

May 8, 2024

Timothy Judge
Principal
Eco Assessment, LLC
18 Maple Ave.
Tarrytown, NY 10591

Re: USACE
Philipsburg Manor Mill Pond dredge.
381 N Broadway, Sleepy Hollow, NY 10591
24PR03164
NYSDEC 3-5534-00133/00004 (Previous Dredge 2000), NYSDEC 3-5534-00133/00009
(Stream Disturbance for sediment borings)

Dear Timothy Judge:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the provided documentation in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project.

We note that the Philipsburg Manor Mill Pond is a contributing resource to the Philipsburg Manor which is listed in the State and National Registers of Historic Places. We further note there is an active preservation covenant on the property due to prior Environmental Protection Fund grant funding. We have reviewed the project description and the re-classification of sediments letter dated June 8, 2022, all submitted to our office on April 11, 2024. Based on that review, it is SHPO's opinion that the removal of sediment and debris, as described, will have No Adverse Effect on historic or archeological resources.

If you have any questions, you can e-mail me at the contact information below.

Sincerely,

Mariana Staines
Historic Site Restoration Coordinator
mariana.montesstaines@parks.ny.gov

cc: C. Vandrei – DEC

Subject: NY SHPO: Initial Consultation Submission AT9EFCOQG1CE Received
From: New York State Parks CRIS Application <cris.web@parks.ny.gov>
Date: 3/28/2024, 12:58 PM
To: <judgetk@bestweb.net>

Initial Submission Received

The New York State Historic Preservation Office (SHPO) has received the following initial submission.

Initial Submission Token: AT9EFCOQG1CE

Project Type: Consultation

Project Name: Philipsburg Manor Mill Pond dredge.

New York State Historic Preservation Office

Peebles Island State Park, P.O. Box 189, Waterford, NY 12188-0189

518-237-8643 | <https://parks.ny.gov/shpo>

CRIS: <https://cris.parks.ny.gov>

Are you registered to vote? [Register to vote online today](#). Moved recently? Update your information with the NYS Board of Elections. Not sure if you're registered to vote? [Search your voter registration status](#).

Who sent this email?

This email is a notification from the [New York State Cultural Resource Information System \(CRIS\)](#). CRIS is an online service administered by the [New York State Division for Historic Preservation](#), also known as the New York State Historic Preservation Office (SHPO), which is a division of [New York State Parks, Recreation & Historic Preservation](#).

This message pertains to a submission for a consultation project. Please see SHPO's [Environmental Review](#) web page for more information about the consultation process.

Why did I receive this email?

The submission's contact list includes your email address.

What do I need to do?

You do not need to take any action at this time. The submission is now in SHPO's processing queue.

What will happen next?

If SHPO accepts your submission, you will receive an "Initial Submission Accepted" email notification and SHPO will begin reviewing the project. That email will include the new Project Number.

If SHPO needs more information to process your submission, you will receive an "Initial Submission Found Insufficient" email with the reviewer's comments. You may then revise the submission and resend it to SHPO.

What else can I do?

Please see the following help topics for more information about managing initial submissions in CRIS:

- [How do I check the status of my initial submission?](#)
- [View an Initial Submission](#)
- [Continue or Edit an Existing Initial Submission](#)

Where can I get help?

Please visit the CRIS Online Help System: <https://cris.parks.ny.gov/CRISHelp>

If you still have questions about CRIS, please contact CRIS Help at CRISHelp@parks.ny.gov.

For any other questions, please call SHPO at 518-237-8643.

1. Contact Information

 [ADD A NEW CONTACT](#)

[VIEW](#) [EDIT](#) [MAKE PRIMARY](#) [DELETE](#)

First Name	Last Name	Organization	Email	Is Primary ↓
<input type="checkbox"/> TIMOTHY	JUDGE	EcoAssessment, LLC	judgetk@bestweb.net	Yes
				Contacts: 1

Contact Information Help

Enter the information for the primary contact person for this project. The accuracy of this information is extremely important as all communication and correspondence regarding the review of this project will be sent to them.

2. Project Overview

Project Name*
220 characters remaining

Project Description*
663 characters remaining

- Involves Ground Disturbance*
- Previous Ground Disturbance on this Property

Please describe previous ground disturbance*

 [SAVE CHANGES](#)

 [FINISH LATER](#)

 [SUBMIT TO SHPO](#)

Project Overview Help

Please enter information regarding the nature and extent of this project. This information will help SHPO understand your project at a glance. You may copy and paste text from a document into these fields.

One or More Buildings or Structures Present*

Type of Permit/Approval DEC for Stream Disturbance, DOS CZM, USACE NW3

3 characters remaining

Reference Number e.g. FF-689765-A4

200 characters remaining

3. Agency Information

 SELECT ADDITIONAL AGENCIES

MAKE PRIMARY DELETE

Agency Code	Agency Name	Agency Type	Primary Agency
<input type="checkbox"/> DEC	Department of Environmental Conservation	State	Yes
<input type="checkbox"/> USACE	US Army Corps of Engineers	Federal	No
<input type="checkbox"/> DOS	Department of State	State	No

Agencies: 3

Agency Information Help




Select the agencies that are requiring you to perform a review with SHPO. The Primary Agency will be selected first. If both State and Federal agencies are involved, the Federal agency will be the primary.

4. Project-Level Attachments

 ADD ATTACHMENT

EDIT DELETE

Name	File Name
<input type="checkbox"/> NYSDEC Letter re classification of ediments	2024-03-28T12-16-10Philipsburg_Manor_Mill_Pond.2022-06-08.Letter.pdf

Att  SAVE CHANGES  FINISH LATER  SUBMIT TO SHPO

Project-Level Attachments Help

Project-level attachments are optional. Examples:

- Streetscapes
- Photo key maps
- Floor plans or sketches of existing and proposed conditions
- Specifications for proposed work, including methods and



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Project area is located in the following county:

Westchester

General map tips



Click the following button on the map to change the basemap



6. Built Resources

[ADD BUILT RESOURCE](#)

[EDIT](#) [DELETE](#)

Name	Property Address	Municipality
<input type="checkbox"/> Philipsburg Manor Grist Mill	381 N Broadway	Sleepy Hollow

Built Resources: 1

Built Resources Help

Please enter information on buildings or structures that are located within your project area. Only one property can be added at a time.

[SAVE CHANGES](#)

[FINISH LATER](#)

[SUBMIT TO SHPO](#)

Attachment

J

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Region 3
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3000 | F: (845) 255-3414
www.dec.ny.gov

June 8, 2022

Timothy Judge
EcoAssesment LLC
250 Highland Avenue
Sleepy Hollow NY 10591

RE: Philipsburg Manor Mill Pond, Sleepy Hollow, Westchester County

Dear Timothy Judge,

Solid Waste staff has finished its review of the analytical results for samples in support of the removal of a total of approximately 21,000 cubic yards of sediment from the Philipsburg Manor Mill Pond, Sleepy Hollow, Westchester County.

The Division of Materials Management has determined that the sampling results fall below the maximum concentration levels identified in Part 360.13(f) Table 2 for the per-determined beneficial use for "General Fill". Therefore, the sediments removed from the pond once properly de-watered can be used in accordance with Table 2 as "General Fill" which states: *"Any setting where the fill material meets the engineering criteria, for, use, except on undeveloped land and agricultural crop land"*.

You are reminded that all applicable local, state and federal permits must be in place before dredging occurs. If you have any questions regarding this matter, please do not hesitate to call me at (845) 256-3134.

Sincerely,



Lee E. Reiff
Region 3, Division of Materials Management

Ecc
D. Pollock, DMM Region 3

Attachment

K

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Region 3
21 South Putt Corners Road, New Paltz, NY 12561-1620
P: (845) 256-3000 | F: (845) 255-3414
www.dec.ny.gov

October 15, 2021

Timothy Judge
EcoAssesment LLC
250 Highland Avenue
Sleepy Hollow NY 10591

RE: Sediment Sampling and Analysis Plan, Philipsburg Manor Mill Pond, Sleepy Hollow, Westchester County

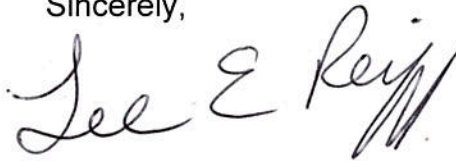
Dear Timothy Judge,

Solid Waste staff has finished its review of the Sediment Sampling and Analysis Plan prepared by EcoAssesment LLC in support of the removal of a total of approximately 21,000 cubic yards of sediment from the Philipsburg Manor Mill Pond, Sleepy Hollow, Westchester County.

The Solid Waste Program has determined that the proposed sampling plan is sufficient and will properly characterize the proposed excavated sediments as to its quality and their upland management options. The Solid Waste Program is hereby approving the plan as submitted.

If you have any questions regarding this matter, please do not hesitate to call me at (845) 256-3134.

Sincerely,



Lee E. Reiff
Region 3, Division of Materials Management

Ecc
D. Pollock, DMM Region 3



Department of
Environmental
Conservation

ECOASSESSMENT

12 October 2021

Via Electronic Mail

Mr. Lee Reiff
Environmental Program Specialist
Department of Materials Management
NYSDEC, Region 3
21 South Putt Corners Rd.
New Paltz, NY 12561-1696

Re: Proposed Sediment Sampling and Analysis Plan
Philipsburg Manor Mill Pond, Sleepy Hollow

Dear Mr. Reiff:

Historic Hudson Valley (HHV), the owner and operator of the Philipsburg Manor historical site is seeking a permit to dredge the mill pond on the Pocantico River in Sleepy Hollow, Westchester County, New York.

The mill pond had temporary fill placed behind the existing dam during a major restoration of the dam undertaken in 2003, and the pond has accumulated additional sediment since that time. The recent passing of Hurricane Ida overwhelmed the the mill pond, more debris and sediment was accumulated and further reduced the hydraulic storage capacity of the pond to help mitigate flooding on the tidal section of the Pocantico River downstream of the dam.

In preparation for the submission of a permit to dredge a non-tidal section of the Pocantico River upstream of the dam, HHV is proposing a Sediment Sampling and Analysis Plan and a Generic Beneficial Use Determination for the sediments. HHV is planning to keep the water levels in the mill pond low, to allow for the mechanical removal of the sediments and debris.

The attached documentation provides the information about the project as detailed in the on the NYSDEC web pages for *Designing A Dredging Sediment Sampling and Analysis Plan*, and the *Checklist for BUD Submissions*.

Please let me know if you need additional information or have any questions.

Sincerely,



Timothy K. Judge
President, EcoAssessment, LLC

Environmental Permitting and Ecological Assessment

EcoAssessment, LLC
18 Maple Ave., Tarrytown, NY 10591
845-222-6135 judget@alum.rpi.edu

Project Name: Philipsburg Manor Mill Pond Dredge Project

Owner: Historic Hudson Valley

Source Location: 381 N. Broadway, Sleepy Hollow, NY 10591

Project Agent: EcoAssessment, LLC, Tim Judge, 18 Maple Ave., Tarrytown, NY 10591

845-222-6135 judget@alum.rpi.edu

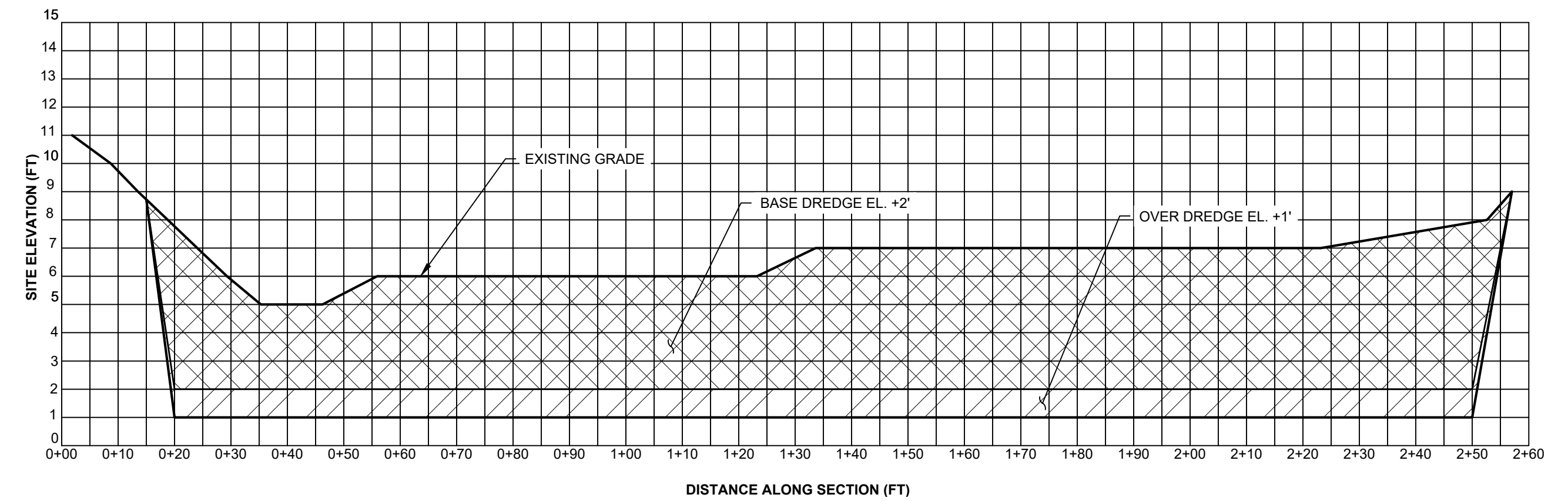
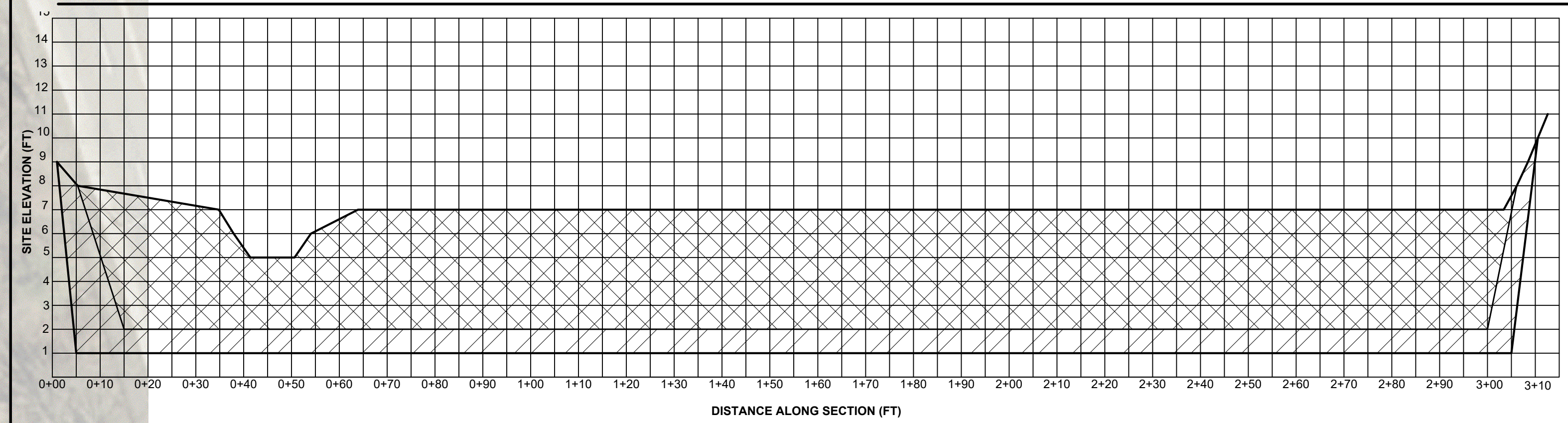
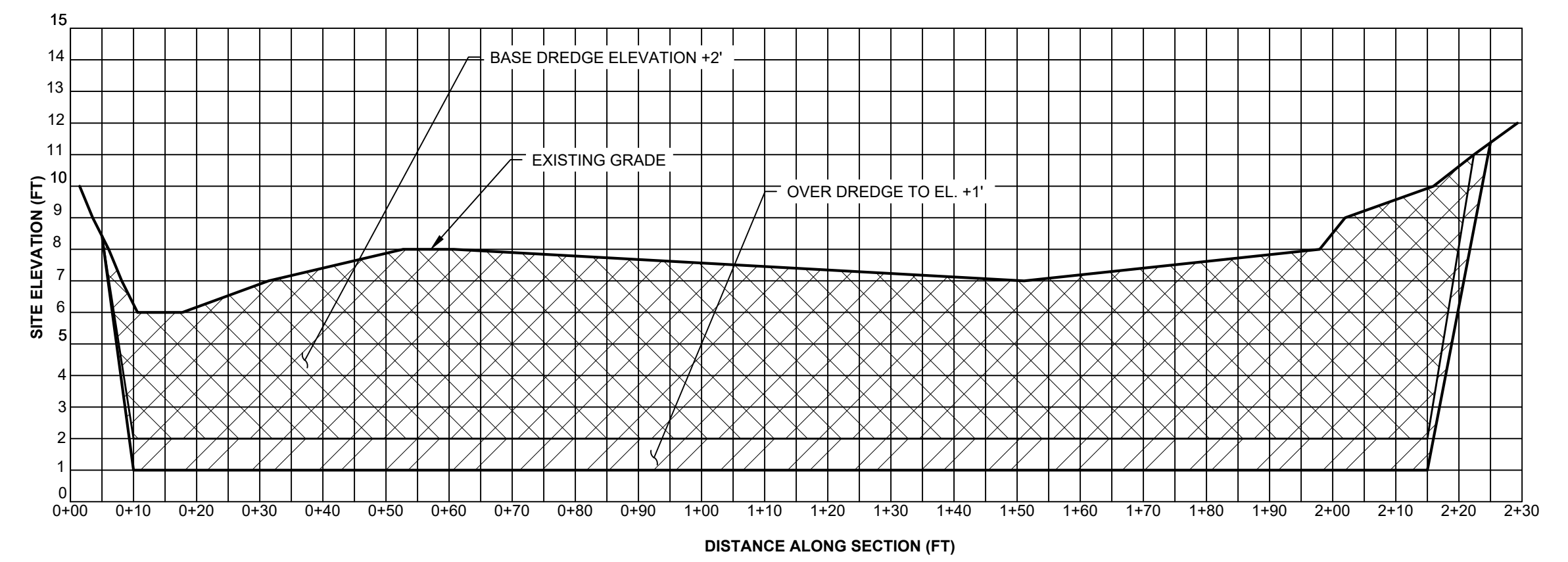
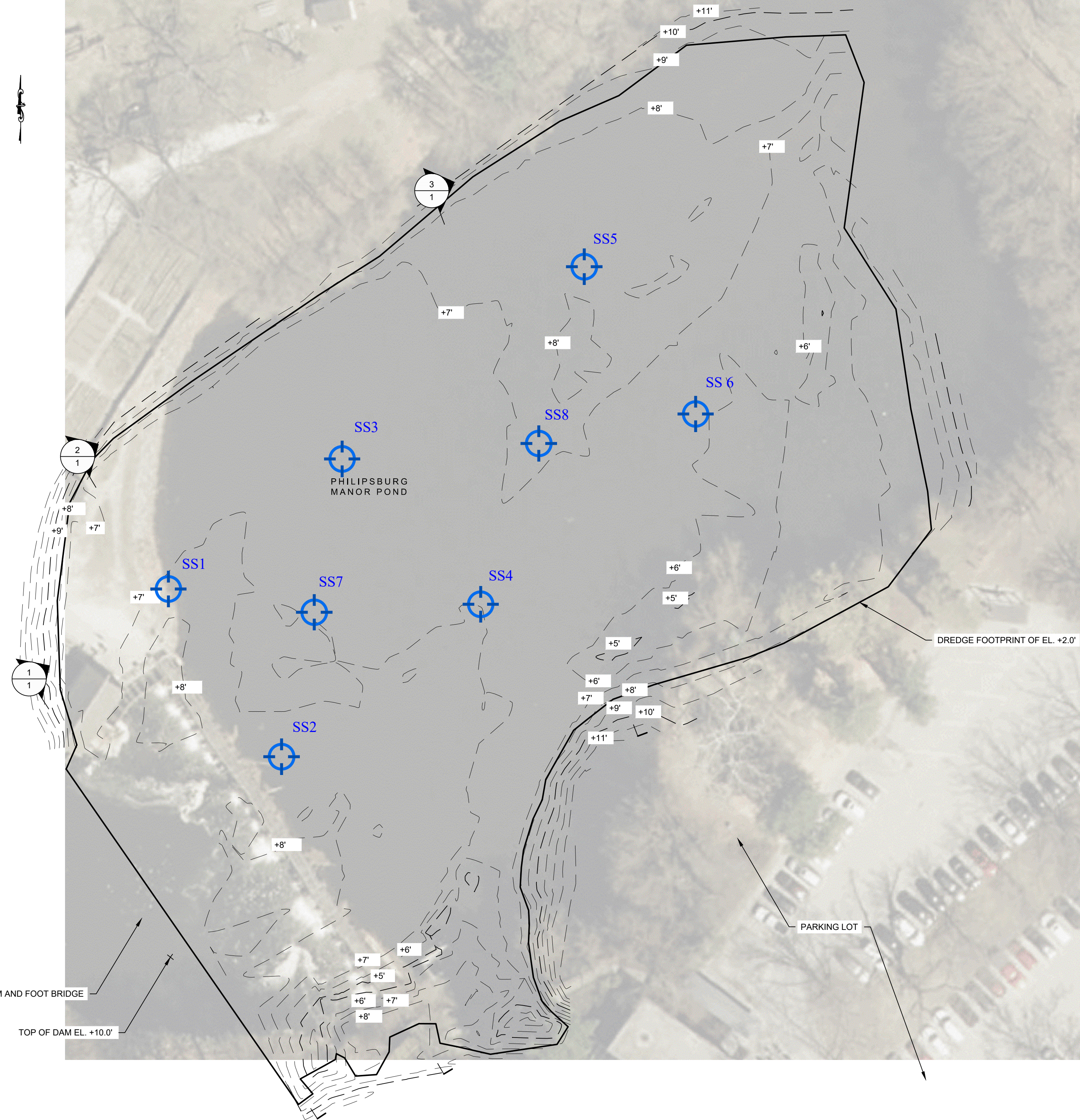
Project Description: Removal of up to 21,300 CY of sediment and debris to return the pond to a depth of five feet below the dam spillway. The pond was last dredged in 2003 and sediment sampling was last done in 1997 (chemical) and 1998 (grain size analysis).

The sediment and debris is from the Pocantico River watershed, and some fill was deposited behind the dam during reconstruction.

The pond was surveyed on August 8, 2021 and is attached.

The area is approximately 10,500 SY and using Baldock's Method eight core samples will be taken and paired for compositing and analysis.

Note: The SSAP was revised 10/13/2021 after discussion with L Reiff, NYSDEC R3 to increase the number of core samples from six to eight.

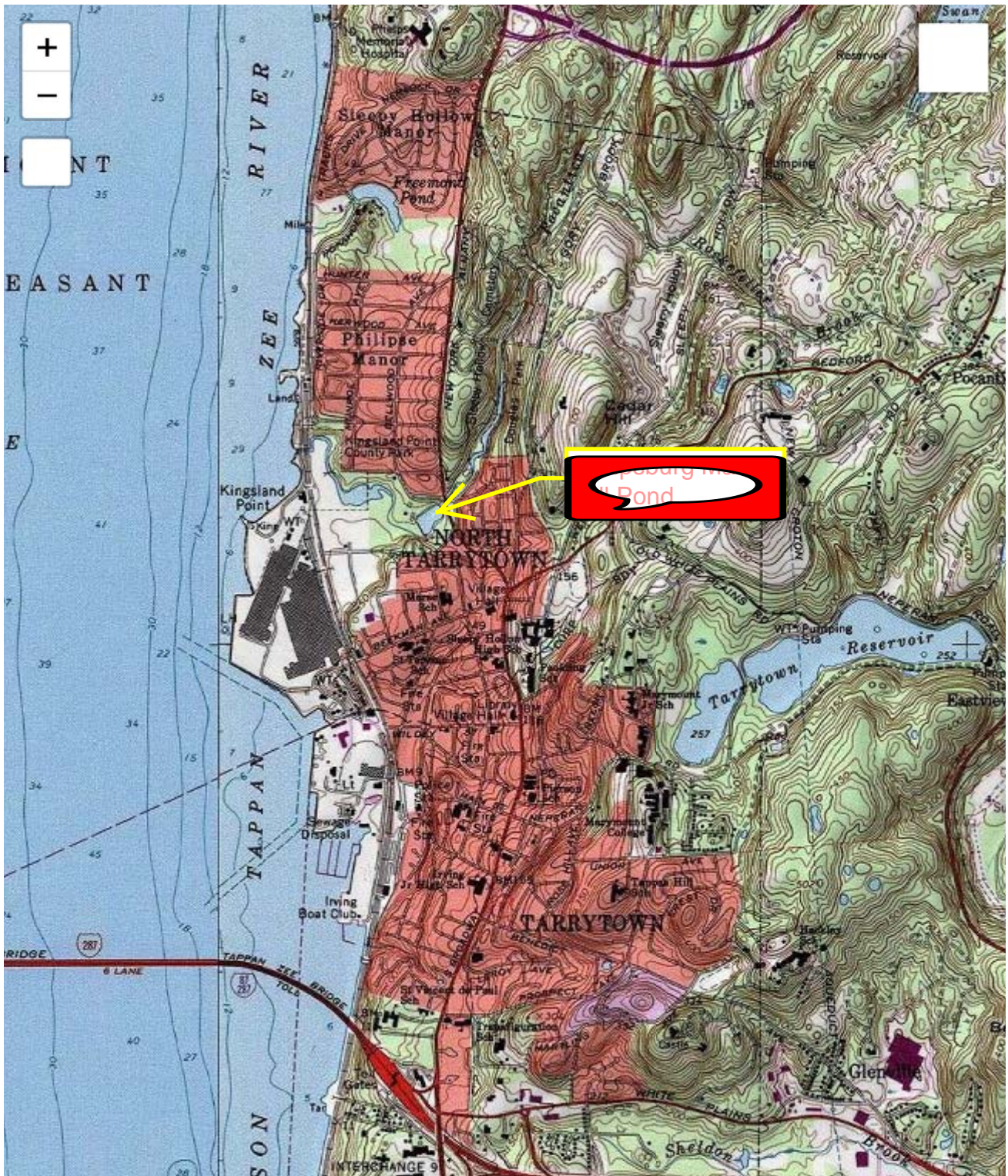


NOTE(S):

- CONDITION SURVEY PERFORMED BY RACE COASTAL ENGINEERING, PC (RACE) ON JULY 8, 2021.
- HORIZONTAL AND VERTICAL POSITION OBTAINED USING REAL TIME KINETICS (RTK).
- EARTH WORK PROCESSING USING CARLSON 2021 SOFTWARE.
- COORDINATES REFER TO U.S. STATE PLANE COORDINATE SYSTEM, NAD 1983, NEW YORK EAST.
- SITE ELEVATION BASED ON TOP OF DAM FROM DRAWING PREPARED BY TERRY BERGENDORFF COLLINS, TITLED "MAP OF SPOT ELEVATIONS, PREPARED FOR ABBOTT & PRICE AS PART OF BRIDGE & WHARF, AT PHILIPSBURG MANOR, SITUATE IN VILLAGE OF SLEEPY HOLLOW" DATED JULY 30, 2019.
- THE NGVD 29 TO NAVD88 CONVERSION FOR THIS PROJECT IS 1.09' PER NOAA VDUTUM. NGVD 29 IS LOCATED BELOW NAVD88, THEREFORE THE CORRECTION SHOULD BE SUBTRACTED TO NGVD 29 TO CONVERT TO NAVD88.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED, AND CAN ONLY BE CONSIDERED AS INDICATING CONDITIONS EXISTING AT THAT TIME.

REV	DATE	DESCRIPTION
PROGRESS NOT FOR CONSTRUCTION		
RACE COASTAL ENGINEERING		611 Access Road Stratford, CT 06615 Tel.: 203-377-0663 racecoastal.com
<small>OWNERSHIP AND CONDITIONS OF USE: Drawings and Specifications, as instruments of professional service, are and shall remain the property of RACE Coastal Engineering, PC. Documents are not to be used, in whole or in part, for other projects or purposes or by any other parties than those authorized by contract without the specific written authorization of RACE Coastal Engineering, LLC. The use of this document is contingent upon payment to RACE Coastal Engineering, LLC for services rendered. Non-payment shall give RACE Coastal Engineering, LLC the authority to bar document use by any and all parties.</small>		
THIS DRAWING IS COPYRIGHTED		
Prepared for	HISTORIC HUDSON VALLEY 639 BEDFORD ROAD POCANTICO HILLS, NY 10591	
Project	PHILIPSBURG MANOR POND DREDGING SLEEPY HOLLOW, NY 10591	
Drawing	PROJECT NOTES	
Designed	Drawn	Checked
Job No.	Date	Drawing No.
CBK	2021063	CBK
	08/03/2021	CGE
1 of 1		

Sleepy Hollow Topo Map in Westchester County New York



[Print this map](#)

Map provided by TopoZone.com

Philipsburg Manor Mill Pond Dredge Project
Sediment Sampling and Analysis Plan: Proposed Analytes

Volatiles

1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
2,2-Dichloropropane
2-Chlorotoluene
2-Hexanone
2-Isopropyltoluene
4-Chlorotoluene
4-Methyl-2-pentanone
Acetone
Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform

Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
m&p-Xylene
Methyl Ethyl Ketone
Methyl t-butyl ether (MTBE)
Methylene chloride
Naphthalene
n-Butylbenzene
n-Propylbenzene
o-Xylene
p-Isopropyltoluene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethene
Tetrahydrofuran (THF)
Toluene
Total Xylenes
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
trans-1,4-dichloro-2-butene
Trichloroethene
Trichlorofluoromethane
Trichlorotrifluoroethane
Vinyl chloride

Philipsburg Manor Mill Pond Dredge Project
Sediment Sampling and Analysis Plan: Proposed Analytes

Semi-volatiles

1,2,4,5-Tetrachlorobenzene
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,2-Diphenylhydrazine
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol (o-cresol)
2-Nitroaniline
2-Nitrophenol
3&4-Methylphenol (m&p-cresol)
3,3'-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Acetophenone
Aniline
Anthracene
Benz(a)anthracene
Benzidine
Benzo(a)pyrene
Benzo(b)fluoranthene
Benzo(ghi)perylene

Benzo(k)fluoranthene
Benzoic acid
Benzyl butyl phthalate
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
Bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Carbazole
Chrysene
Dibenz(a,h)anthracene
Dibenzofuran
Diethyl phthalate
Dimethylphthalate
Di-n-butylphthalate
Di-n-octylphthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodimethylamine
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachloronitrobenzene
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Pyridine

Philipsburg Manor Mill Pond Dredge Project
Sediment Sampling and Analysis Plan: Proposed Analytes

Pesticides

4,4' -DDD
4,4' -DDE
4,4' -DDT
a-BHC
a-Chlordane
Aldrin
b-BHC
Chlordane
d-BHC
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
g-BHC
g-Chlordane
Heptachlor
Heptachlor epoxide
Methoxychlor
Toxaphene

Chlorinated Herbicides

2,4,5-T
2,4,5-TP (Silvex)
2,4-D
2,4-DB
Dalapon
Dicamba
Dichloroprop
Dinoseb

1,4-dioxane

1,4-dioxane

Metals

Arsenic
Barium
Beryllium
Cadmium
Chromium
Copper
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Trivalent Chromium
Zinc

PCBs

PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260
PCB-1262
PCB-1268

Miscellaneous/Inorganics

Percent Solid
Chromium, Hexavalent
pH - Soil
Redox Potential
Total Cyanide (SW9010C Distill.)

Attachment

L



Friday, May 20, 2022

Attn: Mr. Tim Judge
EcoAssessment, LLC
18 Maple Ave
Tarrytown, NY 10591

Project ID: PHILIPSBURGH MANOR MILL POND
SDG ID: GCL29292
Sample ID#s: CL29292 - CL29295

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



SDG Comments

May 20, 2022

SDG I.D.: GCL29292

CL29292 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.

CL29293 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.

CL29294 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.

CL29295 - Client provided soil jar for volatile analysis. Phoenix prepared sample per method 5035.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

May 20, 2022

SDG I.D.: GCL29292

Project ID: PHILIPSBURGH MANOR MILL POND

Client Id	Lab Id	Matrix
HHV C1-220220511	CL29292	SEDIMENT
HHV C3-220220511	CL29293	SEDIMENT
HHV C5-6-220220511	CL29294	SEDIMENT
HHV C7-8-220220511	CL29295	SEDIMENT



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

May 20, 2022

FOR: Attn: Mr. Tim Judge
 EcoAssessment, LLC
 18 Maple Ave
 Tarrytown, NY 10591

Sample Information

Matrix: SEDIMENT
 Location Code: ECOASSESS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/11/22
 05/12/22

Time

13:30
 15:30

Laboratory Data

SDG ID: GCL29292
 Phoenix ID: CL29292

Project ID: PHILIPSBURGH MANOR MILL POND
 Client ID: HHV C1-220220511

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.55	0.55		mg/Kg	1	05/13/22	EK	SW6010D
Arsenic	2.4	1.1		mg/Kg	1	05/13/22	EK	SW6010D
Barium	102	0.55		mg/Kg	1	05/13/22	EK	SW6010D
Beryllium	< 0.44	0.44		mg/Kg	1	05/13/22	EK	SW6010D
Cadmium	1.14	0.55		mg/Kg	1	05/13/22	EK	SW6010D
Chromium	23.7	0.55		mg/Kg	1	05/13/22	EK	SW6010D
Copper	31.4	1.1		mg/kg	1	05/13/22	EK	SW6010D
Mercury	< 0.04	0.04		mg/Kg	1	05/18/22	IE	SW7471B
Manganese	386	5.5		mg/Kg	10	05/16/22	CPP	SW6010D
Nickel	20.5	0.55		mg/Kg	1	05/13/22	EK	SW6010D
Lead	23.8	0.55		mg/Kg	1	05/13/22	EK	SW6010D
Selenium	< 2.2	2.2		mg/Kg	1	05/13/22	EK	SW6010D
Trivalent Chromium	23.7	0.55		mg/kg	1	05/19/22		CALC 6010-7196
Zinc	77.2	1.1		mg/Kg	1	05/13/22	EK	SW6010D
Percent Solid	61			%		05/12/22	K	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.56	0.56		mg/Kg	1	05/19/22	EG	SW7196A
pH at 25C - Soil	6.56	1.00		pH Units	1	05/12/22 23:41	ER	SW846 9045D 1
Redox Potential	-119			mV	1	05/12/22	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.82	0.82		mg/Kg	1	05/17/22	M/B/G	SW9012B
Extraction for SVOA SIM	Completed					05/13/22	O/L	SW3545A
Soil Extraction for PCB	Completed					05/12/22	O/Y	SW3545A
Soil Extraction for Pesticide	Completed					05/12/22	O/Y	SW3545A
Field Extraction	Completed					05/11/22		SW5035A 1
Mercury Digestion	Completed					05/16/22	KL/KL	SW7471B
Soil Extraction for SVOA	Completed					05/16/22	I	SW3546
Soil Extraction for Herbicide	Completed					05/16/22	M/D	SW3550C
Total Metals Digest	Completed					05/12/22	M/AG	SW3050B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Chlorinated Herbicides</u>								
2,4,5-T	ND	140		ug/Kg	10	05/17/22	JRB	SW8151A
2,4,5-TP (Silvex)	ND	140		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-D	ND	270		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-DB	ND	2700		ug/Kg	10	05/17/22	JRB	SW8151A
Dalapon	ND	140		ug/Kg	10	05/17/22	JRB	SW8151A
Dicamba	ND	140		ug/Kg	10	05/17/22	JRB	SW8151A
Dichloroprop	ND	270		ug/Kg	10	05/17/22	JRB	SW8151A
Dinoseb	ND	270		ug/Kg	10	05/17/22	JRB	SW8151A
<u>QA/QC Surrogates</u>								
% DCAA	88			%	10	05/17/22	JRB	30 - 150 %
% DCAA (Confirmation)	87			%	10	05/17/22	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1221	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1232	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1242	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1248	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1254	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1260	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1262	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1268	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	69			%	10	05/14/22	KCA	30 - 150 %
% DCBP (Confirmation)	60			%	10	05/14/22	KCA	30 - 150 %
% TCMX	52			%	10	05/14/22	KCA	30 - 150 %
% TCMX (Confirmation)	55			%	10	05/14/22	KCA	30 - 150 %
<u>Pesticides - Soil</u>								
4,4' -DDD	ND	3.2		ug/Kg	2	05/15/22	AW	SW8081B
4,4' -DDE	ND	3.2		ug/Kg	2	05/15/22	AW	SW8081B
4,4' -DDT	ND	3.2		ug/Kg	2	05/15/22	AW	SW8081B
a-BHC	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
a-Chlordane	ND	5.4		ug/Kg	2	05/15/22	AW	SW8081B
Aldrin	ND	5.4		ug/Kg	2	05/15/22	AW	SW8081B
b-BHC	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Chlordane	ND	54		ug/Kg	2	05/15/22	AW	SW8081B
d-BHC	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Dieldrin	ND	5.4		ug/Kg	2	05/15/22	AW	SW8081B
Endosulfan I	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Endosulfan II	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Endosulfan sulfate	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Endrin	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Endrin aldehyde	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Endrin ketone	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
g-BHC	ND	2.2		ug/Kg	2	05/15/22	AW	SW8081B
g-Chlordane	ND	5.4		ug/Kg	2	05/15/22	AW	SW8081B
Heptachlor	ND	11		ug/Kg	2	05/15/22	AW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	11		ug/Kg	2	05/15/22	AW	SW8081B
Methoxychlor	ND	54		ug/Kg	2	05/15/22	AW	SW8081B
Toxaphene	ND	220		ug/Kg	2	05/15/22	AW	SW8081B
<u>QA/QC Surrogates</u>								
% DCBP	40			%	2	05/15/22	AW	30 - 150 %
% DCBP (Confirmation)	31			%	2	05/15/22	AW	30 - 150 %
% TCMX	48			%	2	05/15/22	AW	30 - 150 %
% TCMX (Confirmation)	46			%	2	05/15/22	AW	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,1-Trichloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2-Trichloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloropropene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichloropropane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromoethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichlorobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloropropane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichlorobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichloropropane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
1,4-Dichlorobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
2,2-Dichloropropane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
2-Chlorotoluene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
2-Hexanone	ND	L 41		ug/Kg	1	05/13/22	JLI	SW8260C
2-Isopropyltoluene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
4-Chlorotoluene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
4-Methyl-2-pentanone	ND	L 41		ug/Kg	1	05/13/22	JLI	SW8260C
Acetone	49	SL 41		ug/Kg	1	05/13/22	JLI	SW8260C
Acrylonitrile	ND	L 16		ug/Kg	1	05/13/22	JLI	SW8260C
Benzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Bromobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Bromochloromethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Bromodichloromethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Bromoform	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Bromomethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon Disulfide	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon tetrachloride	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Chlorobenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroform	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Chloromethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
cis-1,3-Dichloropropene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromochloromethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromomethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Dichlorodifluoromethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Ethylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Hexachlorobutadiene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Isopropylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
m&p-Xylene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl Ethyl Ketone	ND	L 41		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	L 16		ug/Kg	1	05/13/22	JLI	SW8260C
Methylene chloride	ND	L 16		ug/Kg	1	05/13/22	JLI	SW8260C
Naphthalene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
n-Butylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
n-Propylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
o-Xylene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
p-Isopropyltoluene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
sec-Butylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Styrene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
tert-Butylbenzene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrachloroethene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrahydrofuran (THF)	ND	L 16		ug/Kg	1	05/13/22	JLI	SW8260C
Toluene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Total Xylenes	ND	8.1		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,2-Dichloroethene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,3-Dichloropropene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	L 16		ug/Kg	1	05/13/22	JLI	SW8260C
Trichloroethene	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorofluoromethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorotrifluoroethane	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
Vinyl chloride	ND	L 8.1		ug/Kg	1	05/13/22	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	94			%	1	05/13/22	JLI	70 - 130 %
% Bromofluorobenzene	98			%	1	05/13/22	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/13/22	JLI	70 - 130 %
% Toluene-d8	97			%	1	05/13/22	JLI	70 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
1,2,4-Trichlorobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Dichlorobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Diphenylhydrazine	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
1,3-Dichlorobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
1,4-Dichlorobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,2'-Oxybis(1-Chloropropane)	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,4,5-Trichlorophenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,4,6-Trichlorophenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dichlorophenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dimethylphenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dinitrophenol	ND	810		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2,6-Dinitrotoluene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2-Chloronaphthalene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2-Chlorophenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylnaphthalene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylphenol (o-cresol)	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitroaniline	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitrophenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
3,3'-Dichlorobenzidine	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
3-Nitroaniline	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
4-Bromophenyl phenyl ether	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloro-3-methylphenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloroaniline	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitroaniline	ND	1300		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitrophenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthylene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Acetophenone	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Aniline	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Anthracene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benz(a)anthracene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benzidine	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(a)pyrene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(b)fluoranthene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(ghi)perylene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(k)fluoranthene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Benzoic acid	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Benzyl butyl phthalate	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethyl)ether	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Carbazole	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Chrysene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Dibenz(a,h)anthracene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Dibenzofuran	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Diethyl phthalate	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Dimethylphthalate	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-butylphthalate	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-octylphthalate	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Fluoranthene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Fluorene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobutadiene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorocyclopentadiene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Hexachloroethane	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Naphthalene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Nitrobenzene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodimethylamine	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodiphenylamine	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Pentachloronitrobenzene	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Pentachlorophenol	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
Phenanthrene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Phenol	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Pyrene	ND	560		ug/Kg	1	05/17/22	WB	SW8270D
Pyridine	ND	810		ug/Kg	1	05/17/22	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	44			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorobiphenyl	37			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorophenol	40			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	39			%	1	05/17/22	WB	30 - 130 %
% Phenol-d5	40			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	40			%	1	05/17/22	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	110	110	ug/Kg	1	05/17/22	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	55			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	60			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	72			%	1	05/17/22	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Volatile Comment:

L flag signifies that this sample was not collected in accordance with EPA method 5035. NELAC requires the laboratory to qualify the volatile soil data as biased low.

Hexavalent Chromium:

This sample is in a reducing state.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

May 20, 2022

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

May 20, 2022

FOR: Attn: Mr. Tim Judge
 EcoAssessment, LLC
 18 Maple Ave
 Tarrytown, NY 10591

Sample Information

Matrix: SEDIMENT
 Location Code: ECOASSESS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/11/22
 05/12/22

Time

13:47
 15:30

Laboratory Data

SDG ID: GCL29292
 Phoenix ID: CL29293

Project ID: PHILIPSBURGH MANOR MILL POND
 Client ID: HHV C3-220220511

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.66	0.66		mg/Kg	1	05/13/22	EK	SW6010D
Arsenic	2.6	1.3		mg/Kg	1	05/13/22	EK	SW6010D
Barium	125	0.66		mg/Kg	1	05/13/22	EK	SW6010D
Beryllium	< 0.53	0.53		mg/Kg	1	05/13/22	EK	SW6010D
Cadmium	1.26	0.66		mg/Kg	1	05/13/22	EK	SW6010D
Chromium	23.7	0.66		mg/Kg	1	05/13/22	EK	SW6010D
Copper	36.9	1.3		mg/kg	1	05/13/22	EK	SW6010D
Mercury	0.05	0.04		mg/Kg	1	05/18/22	IE	SW7471B
Manganese	468	6.6		mg/Kg	10	05/16/22	CPP	SW6010D
Nickel	21.2	0.66		mg/Kg	1	05/13/22	EK	SW6010D
Lead	25.6	0.66		mg/Kg	1	05/13/22	EK	SW6010D
Selenium	< 2.6	2.6		mg/Kg	1	05/13/22	EK	SW6010D
Trivalent Chromium	23.7	0.66		mg/kg	1	05/19/22		CALC 6010-7196
Zinc	85.2	1.3		mg/Kg	1	05/13/22	EK	SW6010D
Percent Solid	54			%		05/12/22	K	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.62	0.62		mg/Kg	1	05/19/22	EG	SW7196A
pH at 25C - Soil	6.63	1.00		pH Units	1	05/12/22 23:41	ER	SW846 9045D 1
Redox Potential	-183			mV	1	05/12/22	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.84	0.84		mg/Kg	1	05/17/22	M/B/G	SW9012B
Extraction for SVOA SIM	Completed					05/13/22	O/L	SW3545A
Soil Extraction for PCB	Completed					05/12/22	O/E	SW3545A
Soil Extraction for Pesticide	Completed					05/12/22	O/E	SW3545A
Field Extraction	Completed					05/11/22		SW5035A 1
Mercury Digestion	Completed					05/16/22	KL/KL	SW7471B
Soil Extraction for SVOA	Completed					05/16/22	I	SW3546
Soil Extraction for Herbicide	Completed					05/16/22	M/D	SW3550C
Total Metals Digest	Completed					05/12/22	M/AG	SW3050B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Chlorinated Herbicides</u>								
2,4,5-T	ND	200		ug/Kg	10	05/17/22	JRB	SW8151A
2,4,5-TP (Silvex)	ND	200		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-D	ND	390		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-DB	ND	3900		ug/Kg	10	05/17/22	JRB	SW8151A
Dalapon	ND	200		ug/Kg	10	05/17/22	JRB	SW8151A
Dicamba	ND	200		ug/Kg	10	05/17/22	JRB	SW8151A
Dichloroprop	ND	390		ug/Kg	10	05/17/22	JRB	SW8151A
Dinoseb	ND	390		ug/Kg	10	05/17/22	JRB	SW8151A
<u>QA/QC Surrogates</u>								
% DCAA	104			%	10	05/17/22	JRB	30 - 150 %
% DCAA (Confirmation)	98			%	10	05/17/22	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1221	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1232	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1242	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1248	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1254	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1260	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1262	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1268	ND	610		ug/Kg	10	05/14/22	KCA	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	111			%	10	05/14/22	KCA	30 - 150 %
% DCBP (Confirmation)	51			%	10	05/14/22	KCA	30 - 150 %
% TCMX	64			%	10	05/14/22	KCA	30 - 150 %
% TCMX (Confirmation)	69			%	10	05/14/22	KCA	30 - 150 %
<u>Pesticides - Soil</u>								
4,4' -DDD	ND	3.7		ug/Kg	2	05/13/22	AW	SW8081B
4,4' -DDE	4.5	3.7		ug/Kg	2	05/13/22	AW	SW8081B
4,4' -DDT	ND	3.7		ug/Kg	2	05/13/22	AW	SW8081B
a-BHC	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
a-Chlordane	ND	6.1		ug/Kg	2	05/13/22	AW	SW8081B
Aldrin	ND	6.1		ug/Kg	2	05/13/22	AW	SW8081B
b-BHC	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Chlordane	ND	61		ug/Kg	2	05/13/22	AW	SW8081B
d-BHC	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Dieldrin	ND	6.1		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan I	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan II	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan sulfate	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Endrin	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Endrin aldehyde	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Endrin ketone	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
g-BHC	ND	2.4		ug/Kg	2	05/13/22	AW	SW8081B
g-Chlordane	ND	6.1		ug/Kg	2	05/13/22	AW	SW8081B
Heptachlor	ND	12		ug/Kg	2	05/13/22	AW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	12		ug/Kg	2	05/13/22	AW	SW8081B
Methoxychlor	ND	61		ug/Kg	2	05/13/22	AW	SW8081B
Toxaphene	ND	240		ug/Kg	2	05/13/22	AW	SW8081B
<u>QA/QC Surrogates</u>								
% DCBP	63			%	2	05/13/22	AW	30 - 150 %
% DCBP (Confirmation)	49			%	2	05/13/22	AW	30 - 150 %
% TCMX	55			%	2	05/13/22	AW	30 - 150 %
% TCMX (Confirmation)	56			%	2	05/13/22	AW	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,1-Trichloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2-Trichloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloropropene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichloropropane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromoethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichlorobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloropropane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichlorobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichloropropane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
1,4-Dichlorobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
2,2-Dichloropropane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
2-Chlorotoluene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
2-Hexanone	ND	L 46		ug/Kg	1	05/13/22	JLI	SW8260C
2-Isopropyltoluene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
4-Chlorotoluene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
4-Methyl-2-pentanone	ND	L 46		ug/Kg	1	05/13/22	JLI	SW8260C
Acetone	ND	L 46		ug/Kg	1	05/13/22	JLI	SW8260C
Acrylonitrile	ND	L 18		ug/Kg	1	05/13/22	JLI	SW8260C
Benzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Bromobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Bromochloromethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Bromodichloromethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Bromoform	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Bromomethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon Disulfide	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon tetrachloride	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Chlorobenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroform	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Chloromethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
cis-1,3-Dichloropropene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromochloromethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromomethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Dichlorodifluoromethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Ethylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Hexachlorobutadiene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Isopropylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
m&p-Xylene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl Ethyl Ketone	ND	L 46		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	L 18		ug/Kg	1	05/13/22	JLI	SW8260C
Methylene chloride	ND	L 18		ug/Kg	1	05/13/22	JLI	SW8260C
Naphthalene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
n-Butylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
n-Propylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
o-Xylene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
p-Isopropyltoluene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
sec-Butylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Styrene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
tert-Butylbenzene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrachloroethene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrahydrofuran (THF)	ND	L 18		ug/Kg	1	05/13/22	JLI	SW8260C
Toluene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Total Xylenes	ND	9.2		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,2-Dichloroethene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,3-Dichloropropene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	L 18		ug/Kg	1	05/13/22	JLI	SW8260C
Trichloroethene	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorofluoromethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorotrifluoroethane	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
Vinyl chloride	ND	L 9.2		ug/Kg	1	05/13/22	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	94			%	1	05/13/22	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	05/13/22	JLI	70 - 130 %
% Dibromofluoromethane	103			%	1	05/13/22	JLI	70 - 130 %
% Toluene-d8	98			%	1	05/13/22	JLI	70 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
1,2,4-Trichlorobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Dichlorobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Diphenylhydrazine	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
1,3-Dichlorobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
1,4-Dichlorobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,2'-Oxybis(1-Chloropropane)	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,4,5-Trichlorophenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,4,6-Trichlorophenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dichlorophenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dimethylphenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dinitrophenol	ND	920		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2,6-Dinitrotoluene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2-Chloronaphthalene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2-Chlorophenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylnaphthalene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylphenol (o-cresol)	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitroaniline	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitrophenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
3,3'-Dichlorobenzidine	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
3-Nitroaniline	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
4-Bromophenyl phenyl ether	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloro-3-methylphenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloroaniline	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitroaniline	ND	1500		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitrophenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthylene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Acetophenone	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Aniline	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Anthracene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benz(a)anthracene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benzidine	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(a)pyrene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(b)fluoranthene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(ghi)perylene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(k)fluoranthene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Benzoic acid	ND	1800		ug/Kg	1	05/17/22	WB	SW8270D
Benzyl butyl phthalate	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethyl)ether	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Carbazole	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Chrysene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Dibenz(a,h)anthracene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Dibenzofuran	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Diethyl phthalate	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Dimethylphthalate	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-butylphthalate	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-octylphthalate	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Fluoranthene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Fluorene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobutadiene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorocyclopentadiene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Hexachloroethane	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Naphthalene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Nitrobenzene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodimethylamine	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodiphenylamine	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Pentachloronitrobenzene	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Pentachlorophenol	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
Phenanthrene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Phenol	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Pyrene	ND	650		ug/Kg	1	05/17/22	WB	SW8270D
Pyridine	ND	920		ug/Kg	1	05/17/22	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	58			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorobiphenyl	47			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorophenol	52			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	51			%	1	05/17/22	WB	30 - 130 %
% Phenol-d5	50			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	56			%	1	05/17/22	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	120	120	ug/Kg	1	05/17/22	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	53			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	56			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	74			%	1	05/17/22	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

L flag signifies that this sample was not collected in accordance with EPA method 5035. NELAC requires the laboratory to qualify the volatile soil data as biased low.

Hexavalent Chromium:

This sample is in a reducing state.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

May 20, 2022

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

May 20, 2022

FOR: Attn: Mr. Tim Judge
 EcoAssessment, LLC
 18 Maple Ave
 Tarrytown, NY 10591

Sample Information

Matrix: SEDIMENT
 Location Code: ECOASSESS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/11/22
 05/12/22

Time

14:03
 15:30

Laboratory Data

SDG ID: GCL29292
 Phoenix ID: CL29294

Project ID: PHILIPSBURGH MANOR MILL POND
 Client ID: HHV C5-6-220220511

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.54	0.54		mg/Kg	1	05/13/22	EK	SW6010D
Arsenic	1.6	1.1		mg/Kg	1	05/13/22	EK	SW6010D
Barium	98.2	0.54		mg/Kg	1	05/13/22	EK	SW6010D
Beryllium	< 0.43	0.43		mg/Kg	1	05/13/22	EK	SW6010D
Cadmium	1.14	0.54		mg/Kg	1	05/13/22	EK	SW6010D
Chromium	17.8	0.54		mg/Kg	1	05/13/22	EK	SW6010D
Copper	27.9	1.1		mg/kg	1	05/13/22	EK	SW6010D
Mercury	< 0.04	0.04		mg/Kg	1	05/18/22	IE	SW7471B
Manganese	310	5.4		mg/Kg	10	05/16/22	CPP	SW6010D
Nickel	17.6	0.54		mg/Kg	1	05/13/22	EK	SW6010D
Lead	20.0	0.54		mg/Kg	1	05/13/22	EK	SW6010D
Selenium	< 2.2	2.2		mg/Kg	1	05/13/22	EK	SW6010D
Trivalent Chromium	17.8	0.54		mg/kg	1	05/19/22		CALC 6010-7196
Zinc	74.3	1.1		mg/Kg	1	05/13/22	EK	SW6010D
Percent Solid	59			%		05/12/22	K	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.62	0.62		mg/Kg	1	05/19/22	EG	SW7196A
pH at 25C - Soil	6.68	1.00		pH Units	1	05/12/22 23:41	ER	SW846 9045D 1
Redox Potential	-174			mV	1	05/12/22	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.77	0.77		mg/Kg	1	05/17/22	M/B/G	SW9012B
Extraction for SVOA SIM	Completed					05/13/22	O/L	SW3545A
Soil Extraction for PCB	Completed					05/12/22	O/E	SW3545A
Soil Extraction for Pesticide	Completed					05/12/22	O/E	SW3545A
Field Extraction	Completed					05/11/22		SW5035A 1
Mercury Digestion	Completed					05/16/22	KL/KL	SW7471B
Soil Extraction for SVOA	Completed					05/16/22	I	SW3546
Soil Extraction for Herbicide	Completed					05/16/22	M/D	SW3550C
Total Metals Digest	Completed					05/12/22	M/AG	SW3050B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Chlorinated Herbicides</u>								
2,4,5-T	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
2,4,5-TP (Silvex)	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-D	ND	350		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-DB	ND	3500		ug/Kg	10	05/17/22	JRB	SW8151A
Dalapon	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
Dicamba	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
Dichloroprop	ND	350		ug/Kg	10	05/17/22	JRB	SW8151A
Dinoseb	ND	350		ug/Kg	10	05/17/22	JRB	SW8151A
<u>QA/QC Surrogates</u>								
% DCAA	96			%	10	05/17/22	JRB	30 - 150 %
% DCAA (Confirmation)	92			%	10	05/17/22	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1221	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1232	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1242	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1248	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1254	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1260	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1262	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1268	ND	550		ug/Kg	10	05/14/22	KCA	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	74			%	10	05/14/22	KCA	30 - 150 %
% DCBP (Confirmation)	79			%	10	05/14/22	KCA	30 - 150 %
% TCMX	72			%	10	05/14/22	KCA	30 - 150 %
% TCMX (Confirmation)	71			%	10	05/14/22	KCA	30 - 150 %
<u>Pesticides - Soil</u>								
4,4' -DDD	ND	3.3		ug/Kg	2	05/13/22	AW	SW8081B
4,4' -DDE	4.3	3.3		ug/Kg	2	05/13/22	AW	SW8081B
4,4' -DDT	ND	3.3		ug/Kg	2	05/13/22	AW	SW8081B
a-BHC	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
a-Chlordane	ND	5.6		ug/Kg	2	05/13/22	AW	SW8081B
Aldrin	ND	5.6		ug/Kg	2	05/13/22	AW	SW8081B
b-BHC	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Chlordane	ND	56		ug/Kg	2	05/13/22	AW	SW8081B
d-BHC	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Dieldrin	ND	5.6		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan I	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan II	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan sulfate	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endrin	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endrin aldehyde	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endrin ketone	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
g-BHC	ND	2.2		ug/Kg	2	05/13/22	AW	SW8081B
g-Chlordane	ND	5.6		ug/Kg	2	05/13/22	AW	SW8081B
Heptachlor	ND	11		ug/Kg	2	05/13/22	AW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Methoxychlor	ND	56		ug/Kg	2	05/13/22	AW	SW8081B
Toxaphene	ND	220		ug/Kg	2	05/13/22	AW	SW8081B
<u>QA/QC Surrogates</u>								
% DCBP	50			%	2	05/13/22	AW	30 - 150 %
% DCBP (Confirmation)	56			%	2	05/13/22	AW	30 - 150 %
% TCMX	63			%	2	05/13/22	AW	30 - 150 %
% TCMX (Confirmation)	65			%	2	05/13/22	AW	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,1-Trichloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2-Trichloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloropropene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichloropropane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromoethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichlorobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloropropane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichlorobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichloropropane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
1,4-Dichlorobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
2,2-Dichloropropane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
2-Chlorotoluene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
2-Hexanone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
2-Isopropyltoluene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
4-Chlorotoluene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
4-Methyl-2-pentanone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
Acetone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
Acrylonitrile	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Benzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Bromobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Bromochloromethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Bromodichloromethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Bromoform	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Bromomethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon Disulfide	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon tetrachloride	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Chlorobenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroform	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Chloromethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
cis-1,3-Dichloropropene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromochloromethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromomethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Dichlorodifluoromethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Ethylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Hexachlorobutadiene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Isopropylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
m&p-Xylene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl Ethyl Ketone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Methylene chloride	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Naphthalene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
n-Butylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
n-Propylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
o-Xylene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
p-Isopropyltoluene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
sec-Butylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Styrene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
tert-Butylbenzene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrachloroethene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrahydrofuran (THF)	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Toluene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Total Xylenes	ND	8.4		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,2-Dichloroethene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,3-Dichloropropene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Trichloroethene	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorofluoromethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorotrifluoroethane	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
Vinyl chloride	ND	L 8.4		ug/Kg	1	05/13/22	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	95			%	1	05/13/22	JLI	70 - 130 %
% Bromofluorobenzene	97			%	1	05/13/22	JLI	70 - 130 %
% Dibromofluoromethane	100			%	1	05/13/22	JLI	70 - 130 %
% Toluene-d8	96			%	1	05/13/22	JLI	70 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
1,2,4-Trichlorobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Dichlorobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Diphenylhydrazine	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
1,3-Dichlorobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
1,4-Dichlorobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,2'-Oxybis(1-Chloropropane)	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,4,5-Trichlorophenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,4,6-Trichlorophenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dichlorophenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dimethylphenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dinitrophenol	ND	830		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2,6-Dinitrotoluene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2-Chloronaphthalene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2-Chlorophenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylnaphthalene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylphenol (o-cresol)	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitroaniline	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitrophenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
3,3'-Dichlorobenzidine	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
3-Nitroaniline	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
4-Bromophenyl phenyl ether	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloro-3-methylphenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloroaniline	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitroaniline	ND	1300		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitrophenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthylene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Acetophenone	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Aniline	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Anthracene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benz(a)anthracene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benzidine	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(a)pyrene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(b)fluoranthene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(ghi)perylene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(k)fluoranthene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Benzoic acid	ND	1700		ug/Kg	1	05/17/22	WB	SW8270D
Benzyl butyl phthalate	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethyl)ether	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Carbazole	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Chrysene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Dibenz(a,h)anthracene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Dibenzofuran	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Diethyl phthalate	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Dimethylphthalate	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-butylphthalate	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-octylphthalate	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Fluoranthene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Fluorene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobutadiene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorocyclopentadiene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Hexachloroethane	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Naphthalene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Nitrobenzene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodimethylamine	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodiphenylamine	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Pentachloronitrobenzene	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Pentachlorophenol	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
Phenanthrene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Phenol	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Pyrene	ND	580		ug/Kg	1	05/17/22	WB	SW8270D
Pyridine	ND	830		ug/Kg	1	05/17/22	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	55			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorobiphenyl	46			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorophenol	49			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	48			%	1	05/17/22	WB	30 - 130 %
% Phenol-d5	48			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	51			%	1	05/17/22	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	110	110	ug/Kg	1	05/17/22	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	58			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	61			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	80			%	1	05/17/22	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Volatile Comment:

L flag signifies that this sample was not collected in accordance with EPA method 5035. NELAC requires the laboratory to qualify the volatile soil data as biased low.

Hexavalent Chromium:

This sample is in a reducing state.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

May 20, 2022

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

May 20, 2022

FOR: Attn: Mr. Tim Judge
 EcoAssessment, LLC
 18 Maple Ave
 Tarrytown, NY 10591

Sample Information

Matrix: SEDIMENT
 Location Code: ECOASSESS
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by:
 Received by: CP
 Analyzed by: see "By" below

Date

05/11/22
 05/12/22

Time

14:20
 15:30

Laboratory Data

SDG ID: GCL29292
 Phoenix ID: CL29295

Project ID: PHILIPSBURGH MANOR MILL POND
 Client ID: HHV C7-8-220220511

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.60	0.60		mg/Kg	1	05/13/22	EK	SW6010D
Arsenic	< 1.2	1.2		mg/Kg	1	05/13/22	EK	SW6010D
Barium	86.8	0.60		mg/Kg	1	05/13/22	EK	SW6010D
Beryllium	< 0.48	0.48		mg/Kg	1	05/13/22	EK	SW6010D
Cadmium	0.86	0.60		mg/Kg	1	05/13/22	EK	SW6010D
Chromium	15.2	0.60		mg/Kg	1	05/13/22	EK	SW6010D
Copper	17.8	1.2		mg/kg	1	05/13/22	EK	SW6010D
Mercury	< 0.04	0.04		mg/Kg	2	05/18/22	IE	SW7471B
Manganese	400	6.0		mg/Kg	10	05/16/22	CPP	SW6010D
Nickel	13.4	0.60		mg/Kg	1	05/13/22	EK	SW6010D
Lead	11.5	0.60		mg/Kg	1	05/13/22	EK	SW6010D
Selenium	< 2.4	2.4		mg/Kg	1	05/13/22	EK	SW6010D
Trivalent Chromium	15.2	0.60		mg/kg	1	05/19/22		CALC 6010-7196
Zinc	54.8	1.2		mg/Kg	1	05/13/22	EK	SW6010D
Percent Solid	60			%		05/12/22	K	SW846-%Solid
Chromium, Hex. (SW3060 digestion)	< 0.58	0.58		mg/Kg	1	05/19/22	EG	SW7196A
pH at 25C - Soil	6.63	1.00		pH Units	1	05/12/22 23:41	ER	SW846 9045D 1
Redox Potential	-202			mV	1	05/12/22	ER	SM2580B-09 1
Total Cyanide (SW9010C Distill.)	< 0.49	0.49		mg/Kg	1	05/17/22	M/B/G	SW9012B
Extraction for SVOA SIM	Completed					05/13/22	O/L	SW3545A
Soil Extraction for PCB	Completed					05/12/22	O/E	SW3545A
Soil Extraction for Pesticide	Completed					05/12/22	O/E	SW3545A
Field Extraction	Completed					05/11/22		SW5035A 1
Mercury Digestion	Completed					05/16/22	KL/KL	SW7471B
Soil Extraction for SVOA	Completed					05/16/22	I	SW3546
Soil Extraction for Herbicide	Completed					05/16/22	M/D	SW3550C
Total Metals Digest	Completed					05/12/22	M/AG	SW3050B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
<u>Chlorinated Herbicides</u>								
2,4,5-T	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
2,4,5-TP (Silvex)	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-D	ND	340		ug/Kg	10	05/17/22	JRB	SW8151A
2,4-DB	ND	3400		ug/Kg	10	05/17/22	JRB	SW8151A
Dalapon	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
Dicamba	ND	170		ug/Kg	10	05/17/22	JRB	SW8151A
Dichloroprop	ND	340		ug/Kg	10	05/17/22	JRB	SW8151A
Dinoseb	ND	340		ug/Kg	10	05/17/22	JRB	SW8151A
<u>QA/QC Surrogates</u>								
% DCAA	78			%	10	05/17/22	JRB	30 - 150 %
% DCAA (Confirmation)	74			%	10	05/17/22	JRB	30 - 150 %
<u>Polychlorinated Biphenyls</u>								
PCB-1016	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1221	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1232	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1242	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1248	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1254	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1260	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1262	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
PCB-1268	ND	540		ug/Kg	10	05/14/22	KCA	SW8082A
<u>QA/QC Surrogates</u>								
% DCBP	84			%	10	05/14/22	KCA	30 - 150 %
% DCBP (Confirmation)	76			%	10	05/14/22	KCA	30 - 150 %
% TCMX	75			%	10	05/14/22	KCA	30 - 150 %
% TCMX (Confirmation)	68			%	10	05/14/22	KCA	30 - 150 %
<u>Pesticides - Soil</u>								
4,4' -DDD	ND	3.3		ug/Kg	2	05/13/22	AW	SW8081B
4,4' -DDE	ND	3.3		ug/Kg	2	05/13/22	AW	SW8081B
4,4' -DDT	ND	3.3		ug/Kg	2	05/13/22	AW	SW8081B
a-BHC	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
a-Chlordane	ND	5.4		ug/Kg	2	05/13/22	AW	SW8081B
Aldrin	ND	5.4		ug/Kg	2	05/13/22	AW	SW8081B
b-BHC	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Chlordane	ND	54		ug/Kg	2	05/13/22	AW	SW8081B
d-BHC	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Dieldrin	ND	5.4		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan I	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan II	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endosulfan sulfate	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endrin	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endrin aldehyde	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Endrin ketone	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
g-BHC	ND	2.2		ug/Kg	2	05/13/22	AW	SW8081B
g-Chlordane	ND	5.4		ug/Kg	2	05/13/22	AW	SW8081B
Heptachlor	ND	11		ug/Kg	2	05/13/22	AW	SW8081B

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Heptachlor epoxide	ND	11		ug/Kg	2	05/13/22	AW	SW8081B
Methoxychlor	ND	54		ug/Kg	2	05/13/22	AW	SW8081B
Toxaphene	ND	220		ug/Kg	2	05/13/22	AW	SW8081B
<u>QA/QC Surrogates</u>								
% DCBP	57			%	2	05/13/22	AW	30 - 150 %
% DCBP (Confirmation)	60			%	2	05/13/22	AW	30 - 150 %
% TCMX	58			%	2	05/13/22	AW	30 - 150 %
% TCMX (Confirmation)	63			%	2	05/13/22	AW	30 - 150 %
<u>Volatiles</u>								
1,1,1,2-Tetrachloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,1-Trichloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2,2-Tetrachloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,1,2-Trichloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloroethene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,1-Dichloropropene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichlorobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,3-Trichloropropane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trichlorobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2,4-Trimethylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromo-3-chloropropane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dibromoethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichlorobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,2-Dichloropropane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,3,5-Trimethylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichlorobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,3-Dichloropropane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
1,4-Dichlorobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
2,2-Dichloropropane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
2-Chlorotoluene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
2-Hexanone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
2-Isopropyltoluene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
4-Chlorotoluene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
4-Methyl-2-pentanone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
Acetone	44	SL 42		ug/Kg	1	05/13/22	JLI	SW8260C
Acrylonitrile	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Benzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Bromobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Bromochloromethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Bromodichloromethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Bromoform	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Bromomethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon Disulfide	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Carbon tetrachloride	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Chlorobenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Chloroform	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Chloromethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
cis-1,2-Dichloroethene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
cis-1,3-Dichloropropene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromochloromethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Dibromomethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Dichlorodifluoromethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Ethylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Hexachlorobutadiene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Isopropylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
m&p-Xylene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl Ethyl Ketone	ND	L 42		ug/Kg	1	05/13/22	JLI	SW8260C
Methyl t-butyl ether (MTBE)	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Methylene chloride	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Naphthalene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
n-Butylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
n-Propylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
o-Xylene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
p-Isopropyltoluene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
sec-Butylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Styrene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
tert-Butylbenzene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrachloroethene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Tetrahydrofuran (THF)	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Toluene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Total Xylenes	ND	8.3		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,2-Dichloroethene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,3-Dichloropropene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
trans-1,4-dichloro-2-butene	ND	L 17		ug/Kg	1	05/13/22	JLI	SW8260C
Trichloroethene	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorofluoromethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Trichlorotrifluoroethane	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
Vinyl chloride	ND	L 8.3		ug/Kg	1	05/13/22	JLI	SW8260C
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	93			%	1	05/13/22	JLI	70 - 130 %
% Bromofluorobenzene	96			%	1	05/13/22	JLI	70 - 130 %
% Dibromofluoromethane	99			%	1	05/13/22	JLI	70 - 130 %
% Toluene-d8	96			%	1	05/13/22	JLI	70 - 130 %
<u>Semivolatiles</u>								
1,2,4,5-Tetrachlorobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
1,2,4-Trichlorobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Dichlorobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
1,2-Diphenylhydrazine	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
1,3-Dichlorobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
1,4-Dichlorobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,2'-Oxybis(1-Chloropropane)	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,4,5-Trichlorophenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,4,6-Trichlorophenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dichlorophenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dimethylphenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,4-Dinitrophenol	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
2,4-Dinitrotoluene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2,6-Dinitrotoluene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2-Chloronaphthalene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2-Chlorophenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylnaphthalene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2-Methylphenol (o-cresol)	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitroaniline	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
2-Nitrophenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
3&4-Methylphenol (m&p-cresol)	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
3,3'-Dichlorobenzidine	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
3-Nitroaniline	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
4,6-Dinitro-2-methylphenol	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
4-Bromophenyl phenyl ether	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloro-3-methylphenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
4-Chloroaniline	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
4-Chlorophenyl phenyl ether	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitroaniline	ND	2500		ug/Kg	1	05/17/22	WB	SW8270D
4-Nitrophenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Acenaphthylene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Acetophenone	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Aniline	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Anthracene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benz(a)anthracene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benzidine	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(a)pyrene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(b)fluoranthene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(ghi)perylene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benzo(k)fluoranthene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Benzoic acid	ND	3100		ug/Kg	1	05/17/22	WB	SW8270D
Benzyl butyl phthalate	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethoxy)methane	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-chloroethyl)ether	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Bis(2-ethylhexyl)phthalate	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Carbazole	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Chrysene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Dibenz(a,h)anthracene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Dibenzofuran	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Diethyl phthalate	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Dimethylphthalate	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-butylphthalate	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Di-n-octylphthalate	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Fluoranthene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Fluorene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorobutadiene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Hexachlorocyclopentadiene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Hexachloroethane	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Indeno(1,2,3-cd)pyrene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Isophorone	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Naphthalene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Nitrobenzene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodimethylamine	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodi-n-propylamine	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
N-Nitrosodiphenylamine	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Pentachloronitrobenzene	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Pentachlorophenol	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
Phenanthrene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Phenol	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Pyrene	ND	1100		ug/Kg	1	05/17/22	WB	SW8270D
Pyridine	ND	1600		ug/Kg	1	05/17/22	WB	SW8270D
<u>QA/QC Surrogates</u>								
% 2,4,6-Tribromophenol	68			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorobiphenyl	58			%	1	05/17/22	WB	30 - 130 %
% 2-Fluorophenol	61			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	59			%	1	05/17/22	WB	30 - 130 %
% Phenol-d5	62			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	62			%	1	05/17/22	WB	30 - 130 %
<u>1,4-Dioxane</u>								
1,4-dioxane	ND	110	110	ug/Kg	1	05/17/22	WB	SW8270D (SIM)
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	34			%	1	05/17/22	WB	30 - 130 %
% Nitrobenzene-d5	41			%	1	05/17/22	WB	30 - 130 %
% Terphenyl-d14	56			%	1	05/17/22	WB	30 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low LOD=Limit of Detection MDL=Method Detection Limit1

QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Volatile Comment:

L flag signifies that this sample was not collected in accordance with EPA method 5035. NELAC requires the laboratory to qualify the volatile soil data as biased low.

Hexavalent Chromium:

This sample is in a reducing state.

All soils, solids and sludges are reported on a dry weight basis unless otherwise noted in the sample comments.

S - Laboratory solvent, contamination is possible.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

May 20, 2022

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

May 20, 2022

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
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QA/QC Batch 625406 (mg/kg), QC Sample No: CL30241 40X (CL29292, CL29293, CL29294, CL29295)

Chromium, Hexavalent - Sediment

Chromium, Hexavalent	BRL	0.40	<0.37	<0.37	NC	103						85 - 115	30
Chromium, Hexavalent (Ins)						92.2			109			85 - 115	30
Chromium, Hexavalent (Sol)						94.2			88.8			85 - 115	30

QA/QC Batch 624840 (mg/kg), QC Sample No: CL28777 (CL29292, CL29293, CL29294, CL29295)

Mercury - Soil	BRL	0.03				108	95.8	12.0	NC			70 - 130	30
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Comment:

This batch consists of a Blank, LCS, LCSD and MS.

Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.

QA/QC Batch 624499 (mg/kg), QC Sample No: CL29351 (CL29292, CL29293, CL29294, CL29295)

ICP Metals - Soil

Arsenic	BRL	0.67	9.47	10.3	8.40	114	118	3.4	102			75 - 125	35
Barium	BRL	0.33	43.8	45.0	2.70	110	115	4.4	103			75 - 125	35
Beryllium	BRL	0.27	0.38	0.41	NC	107	103	3.8	102			75 - 125	35
Cadmium	BRL	0.33	0.89	0.96	NC	106	104	1.9	97.8			75 - 125	35
Chromium	BRL	0.33	18.4	19.4	5.30	112	113	0.9	99.4			75 - 125	35
Copper	BRL	0.67	18.7	20.5	9.20	103	110	6.6	96.7			75 - 125	35
Lead	BRL	0.33	118	130	9.70	103	108	4.7	97.0			75 - 125	35
Manganese	BRL	0.33	146	163	11.0	107	107	0.0	115			75 - 125	35
Nickel	BRL	0.33	11.7	12.2	4.20	111	111	0.0	99.9			75 - 125	35
Selenium	BRL	1.3	<1.5	<1.5	NC	123	81.3	40.8	112			75 - 125	35
Silver	BRL	0.33	<0.37	<0.38	NC	107	114	6.3	98.6			75 - 125	35
Zinc	BRL	0.67	49.9	51.0	2.20	111	116	4.4	104			75 - 125	35

Comment:

Additional Criteria: LCS acceptance range is 80-120% MS acceptance range 75-125%.

r = This parameter is outside laboratory RPD specified recovery limits.



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QA/QC Report

May 20, 2022

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 624835 (mg/Kg), QC Sample No: CL30241 50X (CL29292, CL29293, CL29294, CL29295)													
Total Cyanide (SW9010C Distill.)	BRL	0.50	<0.48	<0.53	NC	89.8			96.5			80 - 120	30
Comment:													
Additional: LCS acceptance range is 80-120% for soils MS acceptance range 75-125% for soils													
QA/QC Batch 624568 (PH), QC Sample No: CL28768 (CL29292, CL29293, CL29294, CL29295)													
pH at 25C - Soil			6.52	6.48	0.60	100						85 - 115	20



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QA/QC Report

May 20, 2022

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 624888 (ug/Kg), QC Sample No: CL30047 10X (CL29292, CL29293, CL29294, CL29295)										
Chlorinated Herbicides - Sediment										
2,4,5-T	ND	83	71	71	0.0	74	67	9.9	40 - 140	30
2,4,5-TP (Silvex)	ND	83	74	73	1.4	76	67	12.6	40 - 140	30
2,4-D	ND	170	73	72	1.4	79	71	10.7	40 - 140	30
2,4-DB	ND	1700	64	64	0.0	81	70	14.6	40 - 140	30
Dalapon	ND	83	73	70	4.2	48	67	33.0	40 - 140	30
Dicamba	ND	83	71	70	1.4	75	64	15.8	40 - 140	30
Dichloroprop	ND	83	79	77	2.6	77	74	4.0	40 - 140	30
Dinoseb	ND	83	61	60	1.7	71	61	15.2	40 - 140	30
% DCAA (Surrogate Rec)	102	%	102	98	4.0	108	97	10.7	30 - 150	30
% DCAA (Surrogate Rec) (Confirm)	99	%	105	103	1.9	114	99	14.1	30 - 150	30

Comment:

Additional criteria: LCS acceptance range is 40-140% MS acceptance range 30-150%.

QA/QC Batch 624483 (ug/Kg), QC Sample No: CL29292 2X (CL29292, CL29293, CL29294, CL29295)

Polychlorinated Biphenyls - Sediment

PCB-1016	ND	33	73	82	11.6	56	62	10.2	40 - 140	30
PCB-1221	ND	33							40 - 140	30
PCB-1232	ND	33							40 - 140	30
PCB-1242	ND	33							40 - 140	30
PCB-1248	ND	33							40 - 140	30
PCB-1254	ND	33							40 - 140	30
PCB-1260	ND	33	98	103	5.0	70	75	6.9	40 - 140	30
PCB-1262	ND	33							40 - 140	30
PCB-1268	ND	33							40 - 140	30
% DCBP (Surrogate Rec)	100	%	113	118	4.3	75	79	5.2	30 - 150	30
% DCBP (Surrogate Rec) (Confirm)	86	%	100	103	3.0	64	71	10.4	30 - 150	30
% TCMX (Surrogate Rec)	68	%	76	78	2.6	58	58	0.0	30 - 150	30
% TCMX (Surrogate Rec) (Confirm)	74	%	78	81	3.8	61	62	1.6	30 - 150	30

QA/QC Batch 624484 (ug/Kg), QC Sample No: CL29292 2X (CL29292, CL29293, CL29294, CL29295)

Pesticides - Sediment

4,4' -DDD	ND	1.7	103	116	11.9	73	91	22.0	40 - 140	30
4,4' -DDE	ND	1.7	91	101	10.4	69	83	18.4	40 - 140	30
4,4' -DDT	ND	1.7	75	93	21.4	62	89	35.8	40 - 140	30
a-BHC	ND	1.0	82	84	2.4	53	62	15.7	40 - 140	30
a-Chlordane	ND	3.3	80	89	10.7	55	79	35.8	40 - 140	30
Aldrin	ND	1.0	84	87	3.5	53	75	34.4	40 - 140	30
b-BHC	ND	1.0	87	99	12.9	52	74	34.9	40 - 140	30
Chlordane	ND	3.3	86	92	6.7	70	95	30.3	40 - 140	30
d-BHC	ND	3.3	63	83	27.4	46	62	29.6	40 - 140	30
Dieldrin	ND	1.0	87	95	8.8	59	70	17.1	40 - 140	30
Endosulfan I	ND	3.3	84	87	3.5	55	71	25.4	40 - 140	30

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
Endosulfan II	ND	3.3	93	99	6.3	55	68	21.1	40 - 140	30	
Endosulfan sulfate	ND	3.3	87	92	5.6	48	67	33.0	40 - 140	30	r
Endrin	ND	3.3	88	98	10.8	62	74	17.6	40 - 140	30	
Endrin aldehyde	ND	3.3	85	91	6.8	48	52	8.0	40 - 140	30	
Endrin ketone	ND	3.3	92	95	3.2	54	61	12.2	40 - 140	30	
g-BHC	ND	1.0	93	94	1.1	55	70	24.0	40 - 140	30	
g-Chlordane	ND	3.3	86	92	6.7	70	95	30.3	40 - 140	30	
Heptachlor	ND	3.3	80	71	11.9	45	73	47.5	40 - 140	30	r
Heptachlor epoxide	ND	3.3	84	89	5.8	60	73	19.5	40 - 140	30	
Methoxychlor	ND	3.3	100	101	1.0	62	77	21.6	40 - 140	30	
Toxaphene	ND	130	NA	NA	NC	NA	NA	NC	40 - 140	30	
% DCBP	81	%	86	94	8.9	55	70	24.0	30 - 150	30	
% DCBP (Confirmation)	58	%	78	70	10.8	35	51	37.2	30 - 150	30	r
% TCMX	73	%	79	79	0.0	51	69	30.0	30 - 150	30	
% TCMX (Confirmation)	66	%	74	69	7.0	43	67	43.6	30 - 150	30	r

QA/QC Batch 624920 (ug/kg), QC Sample No: CL30241 (CL29292, CL29293, CL29294, CL29295)

Semivolatiles - Sediment

1,2,4,5-Tetrachlorobenzene	ND	230	51	42	19.4	47	57	19.2	40 - 140	30	
1,2,4-Trichlorobenzene	ND	230	52	42	21.3	49	57	15.1	40 - 140	30	
1,2-Dichlorobenzene	ND	180	50	37	29.9	45	54	18.2	40 - 140	30	I
1,2-Diphenylhydrazine	ND	230	55	46	17.8	48	59	20.6	40 - 140	30	
1,3-Dichlorobenzene	ND	230	49	36	30.6	43	53	20.8	40 - 140	30	I,r
1,4-Dichlorobenzene	ND	230	49	36	30.6	43	53	20.8	40 - 140	30	I,r
2,2'-Oxybis(1-Chloropropane)	ND	230	45	35	25.0	40	49	20.2	40 - 140	30	I
2,4,5-Trichlorophenol	ND	230	60	50	18.2	54	64	16.9	40 - 140	30	
2,4,6-Trichlorophenol	ND	130	64	50	24.6	59	68	14.2	30 - 130	30	
2,4-Dichlorophenol	ND	130	60	50	18.2	56	66	16.4	30 - 130	30	
2,4-Dimethylphenol	ND	230	64	52	20.7	58	66	12.9	30 - 130	30	
2,4-Dinitrophenol	ND	230	46	11	122.8	41	47	13.6	30 - 130	30	I,r
2,4-Dinitrotoluene	ND	130	60	50	18.2	52	65	22.2	30 - 130	30	
2,6-Dinitrotoluene	ND	130	60	49	20.2	52	62	17.5	40 - 140	30	
2-Chloronaphthalene	ND	230	57	47	19.2	54	60	10.5	40 - 140	30	
2-Chlorophenol	ND	230	57	45	23.5	52	61	15.9	30 - 130	30	
2-Methylnaphthalene	ND	230	54	44	20.4	50	60	18.2	40 - 140	30	
2-Methylphenol (o-cresol)	ND	230	63	49	25.0	55	66	18.2	40 - 140	30	
2-Nitroaniline	ND	330	83	69	18.4	67	86	24.8	40 - 140	30	
2-Nitrophenol	ND	230	59	47	22.6	55	62	12.0	40 - 140	30	
3&4-Methylphenol (m&p-cresol)	ND	230	64	50	24.6	57	70	20.5	30 - 130	30	
3,3'-Dichlorobenzidine	ND	130	67	54	21.5	57	68	17.6	40 - 140	30	
3-Nitroaniline	ND	330	68	58	15.9	59	72	19.8	40 - 140	30	
4,6-Dinitro-2-methylphenol	ND	230	58	26	76.2	46	54	16.0	30 - 130	30	I,r
4-Bromophenyl phenyl ether	ND	230	59	49	18.5	54	61	12.2	40 - 140	30	
4-Chloro-3-methylphenol	ND	230	61	51	17.9	55	68	21.1	30 - 130	30	
4-Chloroaniline	ND	230	59	49	18.5	51	60	16.2	40 - 140	30	
4-Chlorophenyl phenyl ether	ND	230	57	49	15.1	51	61	17.9	40 - 140	30	
4-Nitroaniline	ND	230	63	52	19.1	57	66	14.6	40 - 140	30	
4-Nitrophenol	ND	230	65	48	30.1	54	70	25.8	30 - 130	30	
Acenaphthene	ND	230	58	48	18.9	52	61	15.9	30 - 130	30	
Acenaphthylene	ND	130	51	43	17.0	46	55	17.8	40 - 140	30	
Acetophenone	ND	230	50	40	22.2	45	54	18.2	40 - 140	30	
Aniline	ND	330	47	39	18.6	42	47	11.2	40 - 140	30	I
Anthracene	ND	230	59	50	16.5	53	62	15.7	40 - 140	30	

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
Benz(a)anthracene	ND	230	59	49	18.5	53	64	18.8	40 - 140	30	
Benzidine	ND	330	48	42	13.3	21	28	28.6	40 - 140	30	m
Benzo(a)pyrene	ND	130	57	47	19.2	49	60	20.2	40 - 140	30	
Benzo(b)fluoranthene	ND	160	61	49	21.8	54	68	23.0	40 - 140	30	
Benzo(ghi)perylene	ND	230	62	53	15.7	58	64	9.8	40 - 140	30	
Benzo(k)fluoranthene	ND	230	56	48	15.4	52	62	17.5	40 - 140	30	
Benzoic Acid	ND	670	12	<10	NC	39	35	10.8	30 - 130	30	l
Benzyl butyl phthalate	ND	230	63	52	19.1	53	64	18.8	40 - 140	30	
Bis(2-chloroethoxy)methane	ND	230	57	46	21.4	51	59	14.5	40 - 140	30	
Bis(2-chloroethyl)ether	ND	130	51	39	26.7	45	54	18.2	40 - 140	30	l
Bis(2-ethylhexyl)phthalate	ND	230	61	51	17.9	51	60	16.2	40 - 140	30	
Carbazole	ND	230	59	50	16.5	53	63	17.2	40 - 140	30	
Chrysene	ND	230	60	50	18.2	53	64	18.8	40 - 140	30	
Dibenz(a,h)anthracene	ND	130	62	52	17.5	55	62	12.0	40 - 140	30	
Dibenzofuran	ND	230	56	46	19.6	50	59	16.5	40 - 140	30	
Diethyl phthalate	ND	230	58	49	16.8	50	61	19.8	40 - 140	30	
Dimethylphthalate	ND	230	59	50	16.5	53	62	15.7	40 - 140	30	
Di-n-butylphthalate	ND	670	61	51	17.9	51	62	19.5	40 - 140	30	
Di-n-octylphthalate	ND	230	62	52	17.5	53	62	15.7	40 - 140	30	
Fluoranthene	ND	230	58	49	16.8	51	64	22.6	40 - 140	30	
Fluorene	ND	230	57	48	17.1	52	62	17.5	40 - 140	30	
Hexachlorobenzene	ND	130	59	50	16.5	53	62	15.7	40 - 140	30	
Hexachlorobutadiene	ND	230	50	40	22.2	48	55	13.6	40 - 140	30	
Hexachlorocyclopentadiene	ND	230	21	24	13.3	33	34	3.0	40 - 140	30	l,m
Hexachloroethane	ND	130	47	36	26.5	43	52	18.9	40 - 140	30	l
Indeno(1,2,3-cd)pyrene	ND	230	66	56	16.4	62	69	10.7	40 - 140	30	
Isophorone	ND	130	51	41	21.7	45	53	16.3	40 - 140	30	
Naphthalene	ND	230	52	43	18.9	49	57	15.1	40 - 140	30	
Nitrobenzene	ND	130	54	42	25.0	48	59	20.6	40 - 140	30	
N-Nitrosodimethylamine	ND	230	57	44	25.7	45	54	18.2	40 - 140	30	
N-Nitrosodi-n-propylamine	ND	130	57	44	25.7	51	61	17.9	40 - 140	30	
N-Nitrosodiphenylamine	ND	130	58	47	21.0	49	61	21.8	40 - 140	30	
Pentachloronitrobenzene	ND	230	59	48	20.6	51	60	16.2	40 - 140	30	
Pentachlorophenol	ND	230	54	35	42.7	49	60	20.2	30 - 130	30	r
Phenanthrene	ND	130	58	48	18.9	51	62	19.5	40 - 140	30	
Phenol	ND	230	63	49	25.0	55	64	15.1	30 - 130	30	
Pyrene	ND	230	59	49	18.5	52	66	23.7	30 - 130	30	
Pyridine	ND	230	41	32	24.7	31	41	27.8	40 - 140	30	l,m
% 2,4,6-Tribromophenol	58	%	63	52	19.1	57	65	13.1	30 - 130	30	
% 2-Fluorobiphenyl	53	%	53	44	18.6	51	56	9.3	30 - 130	30	
% 2-Fluorophenol	56	%	57	44	25.7	50	60	18.2	30 - 130	30	
% Nitrobenzene-d5	50	%	52	42	21.3	48	58	18.9	30 - 130	30	
% Phenol-d5	53	%	58	47	21.0	52	61	15.9	30 - 130	30	
% Terphenyl-d14	54	%	56	47	17.5	48	60	22.2	30 - 130	30	

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 624680 (ug/kg), QC Sample No: CL29292 (CL29292, CL29293, CL29294, CL29295)

Polynuclear Aromatic HC - Sediment

1,4-dioxane	ND	67	44	45	2.2	47	46	2.2	30 - 130	30	
% 2-Fluorobiphenyl	86	%	63	81	25.0	63	52	19.1	30 - 130	30	
% Nitrobenzene-d5	84	%	63	78	21.3	58	56	3.5	30 - 130	30	

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blank	Bik RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
% Terphenyl-d14	88	%	71	93	26.8	75	70	6.9	30 - 130	30

Comment:

Additional 8270 criteria: 20% of compounds can be outside of acceptance criteria as long as recovery is at least 10%. (Acid surrogates acceptance range for aqueous samples: 15-110%, for soils 30-130%)

QA/QC Batch 624640 (ug/kg), QC Sample No: CL29363 (CL29292, CL29293, CL29294, CL29295)

Volatiles - Sediment (Low Level)

1,1,1,2-Tetrachloroethane	ND	5.0	105	105	0.0	92	92	0.0	70 - 130	30
1,1,1-Trichloroethane	ND	5.0	103	103	0.0	100	100	0.0	70 - 130	30
1,1,2,2-Tetrachloroethane	ND	3.0	98	100	2.0	<10	<10	NC	70 - 130	30
1,1,2-Trichloroethane	ND	5.0	99	97	2.0	88	85	3.5	70 - 130	30
1,1-Dichloroethane	ND	5.0	101	101	0.0	100	100	0.0	70 - 130	30
1,1-Dichloroethene	ND	5.0	107	108	0.9	110	112	1.8	70 - 130	30
1,1-Dichloropropene	ND	5.0	104	105	1.0	102	100	2.0	70 - 130	30
1,2,3-Trichlorobenzene	ND	5.0	104	104	0.0	57	54	5.4	70 - 130	30
1,2,3-Trichloropropane	ND	5.0	95	96	1.0	89	84	5.8	70 - 130	30
1,2,4-Trichlorobenzene	ND	5.0	101	102	1.0	56	53	5.5	70 - 130	30
1,2,4-Trimethylbenzene	ND	1.0	100	102	2.0	81	80	1.2	70 - 130	30
1,2-Dibromo-3-chloropropane	ND	5.0	106	106	0.0	81	78	3.8	70 - 130	30
1,2-Dibromoethane	ND	5.0	101	102	1.0	91	90	1.1	70 - 130	30
1,2-Dichlorobenzene	ND	5.0	101	102	1.0	75	75	0.0	70 - 130	30
1,2-Dichloroethane	ND	5.0	97	99	2.0	95	92	3.2	70 - 130	30
1,2-Dichloropropane	ND	5.0	101	102	1.0	97	97	0.0	70 - 130	30
1,3,5-Trimethylbenzene	ND	1.0	103	105	1.9	86	85	1.2	70 - 130	30
1,3-Dichlorobenzene	ND	5.0	99	100	1.0	74	73	1.4	70 - 130	30
1,3-Dichloropropane	ND	5.0	100	101	1.0	93	91	2.2	70 - 130	30
1,4-Dichlorobenzene	ND	5.0	100	102	2.0	74	73	1.4	70 - 130	30
2,2-Dichloropropane	ND	5.0	107	106	0.9	102	98	4.0	70 - 130	30
2-Chlorotoluene	ND	5.0	107	109	1.9	89	89	0.0	70 - 130	30
2-Hexanone	ND	25	91	87	4.5	79	73	7.9	70 - 130	30
2-Isopropyltoluene	ND	5.0	104	107	2.8	84	84	0.0	70 - 130	30
4-Chlorotoluene	ND	5.0	104	105	1.0	82	82	0.0	70 - 130	30
4-Methyl-2-pentanone	ND	25	97	94	3.1	92	86	6.7	70 - 130	30
Acetone	ND	10	80	78	2.5	73	74	1.4	70 - 130	30
Acrylonitrile	ND	5.0	98	97	1.0	89	87	2.3	70 - 130	30
Benzene	ND	1.0	101	103	2.0	98	98	0.0	70 - 130	30
Bromobenzene	ND	5.0	103	106	2.9	86	87	1.2	70 - 130	30
Bromochloromethane	ND	5.0	101	101	0.0	96	96	0.0	70 - 130	30
Bromodichloromethane	ND	5.0	102	103	1.0	94	94	0.0	70 - 130	30
Bromoform	ND	5.0	104	104	0.0	84	84	0.0	70 - 130	30
Bromomethane	ND	5.0	91	103	12.4	112	116	3.5	70 - 130	30
Carbon Disulfide	ND	5.0	99	102	3.0	97	98	1.0	70 - 130	30
Carbon tetrachloride	ND	5.0	104	104	0.0	98	97	1.0	70 - 130	30
Chlorobenzene	ND	5.0	101	102	1.0	89	89	0.0	70 - 130	30
Chloroethane	ND	5.0	111	112	0.9	119	123	3.3	70 - 130	30
Chloroform	ND	5.0	98	97	1.0	96	95	1.0	70 - 130	30
Chloromethane	ND	5.0	97	95	2.1	103	106	2.9	70 - 130	30
cis-1,2-Dichloroethene	ND	5.0	101	100	1.0	98	97	1.0	70 - 130	30
cis-1,3-Dichloropropene	ND	5.0	102	103	1.0	93	93	0.0	70 - 130	30
Dibromochloromethane	ND	3.0	105	105	0.0	91	90	1.1	70 - 130	30
Dibromomethane	ND	5.0	102	103	1.0	96	95	1.0	70 - 130	30
Dichlorodifluoromethane	ND	5.0	87	88	1.1	119	118	0.8	70 - 130	30
Ethylbenzene	ND	1.0	104	103	1.0	92	92	0.0	70 - 130	30

QA/QC Data

SDG I.D.: GCL29292

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
	Blank	RL									
Hexachlorobutadiene	ND	5.0	108	108	0.0	66	66	0.0	70 - 130	30	m
Isopropylbenzene	ND	1.0	106	107	0.9	92	92	0.0	70 - 130	30	
m&p-Xylene	ND	2.0	101	102	1.0	89	89	0.0	70 - 130	30	
Methyl ethyl ketone	ND	5.0	91	82	10.4	81	77	5.1	70 - 130	30	
Methyl t-butyl ether (MTBE)	ND	1.0	95	95	0.0	97	91	6.4	70 - 130	30	
Methylene chloride	ND	5.0	83	86	3.6	96	92	4.3	70 - 130	30	
Naphthalene	ND	5.0	102	102	0.0	70	67	4.4	70 - 130	30	m
n-Butylbenzene	ND	1.0	109	112	2.7	80	79	1.3	70 - 130	30	
n-Propylbenzene	ND	1.0	106	108	1.9	89	89	0.0	70 - 130	30	
o-Xylene	ND	2.0	101	101	0.0	88	88	0.0	70 - 130	30	
p-Isopropyltoluene	ND	1.0	107	108	0.9	83	83	0.0	70 - 130	30	
sec-Butylbenzene	ND	1.0	106	107	0.9	86	86	0.0	70 - 130	30	
Styrene	ND	5.0	101	102	1.0	85	86	1.2	70 - 130	30	
tert-Butylbenzene	ND	1.0	106	108	1.9	90	90	0.0	70 - 130	30	
Tetrachloroethene	ND	5.0	104	104	0.0	94	94	0.0	70 - 130	30	
Tetrahydrofuran (THF)	ND	5.0	93	89	4.4	87	82	5.9	70 - 130	30	
Toluene	ND	1.0	102	104	1.9	96	95	1.0	70 - 130	30	
trans-1,2-Dichloroethene	ND	5.0	107	109	1.9	105	105	0.0	70 - 130	30	
trans-1,3-Dichloropropene	ND	5.0	101	102	1.0	89	87	2.3	70 - 130	30	
trans-1,4-dichloro-2-butene	ND	5.0	103	102	1.0	83	81	2.4	70 - 130	30	
Trichloroethene	ND	5.0	104	105	1.0	165	165	0.0	70 - 130	30	m
Trichlorofluoromethane	ND	5.0	110	109	0.9	118	119	0.8	70 - 130	30	
Trichlorotrifluoroethane	ND	5.0	102	101	1.0	103	103	0.0	70 - 130	30	
Vinyl chloride	ND	5.0	103	103	0.0	116	116	0.0	70 - 130	30	
% 1,2-dichlorobenzene-d4	95	%	103	101	2.0	101	100	1.0	70 - 130	30	
% Bromofluorobenzene	101	%	100	100	0.0	100	100	0.0	70 - 130	30	
% Dibromofluoromethane	102	%	100	99	1.0	97	96	1.0	70 - 130	30	
% Toluene-d8	97	%	101	101	0.0	103	101	2.0	70 - 130	30	

Comment:

Additional 8260 criteria: 10% of LCS/LCSD compounds can be outside of acceptance criteria as long as recovery is 40-160%, 25-160% for Chloroethane-HL and Trichlorofluoromethane-HL.

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference



Phyllis Shiller, Laboratory Director

May 20, 2022

Friday, May 20, 2022

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCL29292 - ECOASSESS

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.





Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

May 20, 2022

SDG I.D.: GCL29292

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

Herbicide Narration

AU-ECD2 05/17/22-1: CL29292, CL29293, CL29294, CL29295

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CL29292, CL29293, CL29294, CL29295
Preceding CC 517A015 - Dalapon (1) 27%H (15%)
Succeeding CC 517A027 - Dalapon (1) 21%H (15%)

PCB Narration

AU-ECD3 05/13/22-1: CL29293

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CL29293
Preceding CC 513B038 - DCBP SURR 18%L (15%)
Succeeding CC 513B051 - None.

PEST Narration

AU-ECD7 05/13/22-1: CL29293, CL29294, CL29295

The following Continuing Calibration compounds did not meet % deviation criteria:

Samples: CL29294, CL29295
Preceding CC 513B019 - Methoxychlor 25%L (20%)
Succeeding CC 513B032 - Methoxychlor 25%L (20%)

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

Samples: CL29293

Preceding CC 513B032 - Methoxychlor 25%L (20%)
Succeeding CC 513B057 - Methoxychlor 28%L (20%)

A low "1A" standard was run after the samples to demonstrate capability to detect any compounds outside of the CC acceptance criteria. All reported samples were ND for the affected compounds.

SVOA Narration

CHEM28 05/17/22-1: CL29292, CL29293, CL29294, CL29295

For 8270 full list, the DDT breakdown and pentachlorophenol & benzidine peak tailing were evaluated in the DFTPP tune and were found to be in control.

For 8270 BN list, benzidine peak tailing was evaluated in the DFTPP tune and was found to be in control.

The following Initial Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.078 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

The following Continuing Calibration compounds did not meet % deviation criteria: 3,3'-Dichlorobenzidine 33%L (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation criteria: None.

The following Continuing Calibration compounds did not meet recommended response factors: Hexachlorobenzene 0.084 (0.1)

The following Continuing Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.

VOA Narration



Environmental Laboratories, Inc.
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Analysis Comments

May 20, 2022

SDG I.D.: GCL29292

CHEM14 05/12/22-3: CL29292, CL29293, CL29294, CL29295

The following Initial Calibration compounds did not meet RSD% criteria: Acetone 34% (20%), Chloroethane 31% (20%), Methylene chloride 27% (20%)

The following Initial Calibration compounds did not meet maximum RSD% criteria: None.

The following Initial Calibration compounds did not meet recommended response factors: Acetone 0.089 (0.1)

The following Initial Calibration compounds did not meet minimum response factors: None.

Up to eight compounds can be outside of ICAL %RSD criteria and up to sixteen compounds can be outside of CCAL %Dev criteria if less than 40%.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



NY Temperature Narration

May 20, 2022

SDG I.D.: GCL29292

The samples in this delivery group were received at 2.6°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

NY/NJ/PA CHAIN OF CUSTODY RECORD



587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
 Email: info@phoenixlabs.com Fax (860) 645-0823
 Client Services (860) 645-8726

Cooler: Yes No
 Coolant: IPK ICE
 Temp 2.8°C Pg of

Contact Options:

Phone: _____
 Fax: _____
 Email: _____

Project P.O:

Project: PHILIPSBURGH MANOR MIN FORD
 Report to: TIM JUDGE - EVALUATION
 Invoice to: _____
 QUOTE #: _____

This section **MUST** be completed with Bottle Quantities.

Sampler's Signature: [Signature] Date: 5/11/22
 Client Sample - Information - Identification
 Matrix Code: DW=Drinking Water GW=Ground Water SW=Surface Water WM=Waste Water
 RW=Raw Water SE=Sediment SL=Sludge S=Soil SD=Solid W=Wipe
 OIL=Oil B=Bulk L=Liquid

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Analysis Request
29292	HHV C1-2 20220511	SE	5/11/22	13:30	2 1
29293	HHV C3-4 20220511	SE	5/11/22	13:47	2 1
29294	HHV C5-6 20220511	SE	5/11/22	14:03	2 1
29295	HHV C7-8 20220511	SE	5/11/22	14:20	2 1

Relinquished by: TK JUDGE Accepted by: [Signature] Date: 5/12/22 09:35
 Time: 5/12/22 15:30
 Turnaround: 1 Day* 2 Days* 3 Days* 5 Days 10 Days Other
 * SURCHARGE APPLIES
 Data Format: Phoenix Std Report EQuIS Excel NJ Hazsite EDD PDF NY EZ EDD (ASP) GIS/Key Other
 Comments, Special Requirements or Regulations: _____

NY TOGS GW Res. Criteria NJ Reduced Deliv.* Other
 CP-51 SOIL Non-Res. Criteria Impact to GW Soil Impact to GW soil screen GW Criteria
 Unrestricted Soil Cleanup Criteria Residential Soil Commercial Soil
 375SSCO Residential Restricted Soil 375SSCO Industrial Soil
 PA Soil Restricted PA Soil non-restricted Support 5 DW
 State Samples Collected? _____

GL Amber 3 oz. WH3PO4 GL Soil container () oz
 GL Amber 1000ml 1.5L [HCl] GL Amber 250ml
 PL Amber 1000ml 1.5L [H2SO4] PL Amber 250ml
 PL Amber 1250ml 1.5L [H2SO4] PL Amber 250ml
 Bacteria Bottle with Bacteria Bottle as is

GCL 29292

Teatown Lake Dredge Project
Sediment Sampling and Analysis Plan: Proposed Analytes

Volatiles

1,1,1,2-Tetrachloroethane
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,1-Dichloropropene
1,2,3-Trichlorobenzene
1,2,3-Trichloropropane
1,2,4-Trichlorobenzene
1,2,4-Trimethylbenzene
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,2-Dichloroethane
1,2-Dichloropropane
1,3,5-Trimethylbenzene
1,3-Dichlorobenzene
1,3-Dichloropropane
1,4-Dichlorobenzene
2,2-Dichloropropane
2-Chlorotoluene
2-Hexanone
2-Isopropyltoluene
4-Chlorotoluene
4-Methyl-2-pentanone
Acetone
Acrylonitrile
Benzene
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromoform
Bromomethane
Carbon Disulfide
Carbon tetrachloride
Chlorobenzene
Chloroethane
Chloroform

Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Dibromomethane
Dichlorodifluoromethane
Ethylbenzene
Hexachlorobutadiene
Isopropylbenzene
m&p-Xylene
Methyl Ethyl Ketone
Methyl t-butyl ether (MTBE)
Methylene chloride
Naphthalene
n-Butylbenzene
n-Propylbenzene
o-Xylene
p-Isopropyltoluene
sec-Butylbenzene
Styrene
tert-Butylbenzene
Tetrachloroethene
Tetrahydrofuran (THF)
Toluene
Total Xylenes
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
trans-1,4-dichloro-2-butene
Trichloroethene
Trichlorofluoromethane
Trichlorotrifluoroethane
Vinyl chloride

Teatown Lake Dredge Project
Sediment Sampling and Analysis Plan: Proposed Analytes

Semi-volatiles

1,2,4,5-Tetrachlorobenzene	Benzo(k)fluoranthene
1,2,4-Trichlorobenzene	Benzoic acid
1,2-Dichlorobenzene	Benzyl butyl phthalate
1,2-Diphenylhydrazine	Bis(2-chloroethoxy)methane
1,3-Dichlorobenzene	Bis(2-chloroethyl)ether
1,4-Dichlorobenzene	Bis(2-chloroisopropyl)ether
2,4,5-Trichlorophenol	Bis(2-ethylhexyl)phthalate
2,4,6-Trichlorophenol	Carbazole
2,4-Dichlorophenol	Chrysene
2,4-Dimethylphenol	Dibenz(a,h)anthracene
2,4-Dinitrophenol	Dibenzofuran
2,4-Dinitrotoluene	Diethyl phthalate
2,6-Dinitrotoluene	Dimethylphthalate
2-Chloronaphthalene	Di-n-butylphthalate
2-Chlorophenol	Di-n-octylphthalate
2-Methylnaphthalene	Fluoranthene
2-Methylphenol (o-cresol)	Fluorene
2-Nitroaniline	Hexachlorobenzene
2-Nitrophenol	Hexachlorobutadiene
3&4-Methylphenol (m&p-cresol)	Hexachlorocyclopentadiene
3,3'-Dichlorobenzidine	Hexachloroethane
3-Nitroaniline	Indeno(1,2,3-cd)pyrene
4,6-Dinitro-2-methylphenol	Isophorone
4-Bromophenyl phenyl ether	Naphthalene
4-Chloro-3-methylphenol	Nitrobenzene
4-Chloroaniline	N-Nitrosodimethylamine
4-Chlorophenyl phenyl ether	N-Nitrosodi-n-propylamine
4-Nitroaniline	N-Nitrosodiphenylamine
4-Nitrophenol	Pentachloronitrobenzene
Acenaphthene	Pentachlorophenol
Acenaphthylene	Phenanthrene
Acetophenone	Phenol
Aniline	Pyrene
Anthracene	Pyridine
Benz(a)anthracene	
Benzidine	
Benzo(a)pyrene	
Benzo(b)fluoranthene	
Benzo(ghi)perylene	

Teatown Lake Dredge Project
Sediment Sampling and Analysis Plan: Proposed Analytes

Pesticides

4,4' -DDD
4,4' -DDE
4,4' -DDT
a-BHC
a-Chlordane
Aldrin
b-BHC
Chlordane
d-BHC
Dieldrin
Endosulfan I
Endosulfan II
Endosulfan sulfate
Endrin
Endrin aldehyde
Endrin ketone
g-BHC
g-Chlordane
Heptachlor
Heptachlor epoxide
Methoxychlor
Toxaphene

Chlorinated Herbicides

2,4,5-T
2,4,5-TP (Silvex)
2,4-D
2,4-DB
Dalapon
Dicamba
Dichloroprop
Dinoseb

1,4-dioxane

1,4-dioxane

Metals

Arsenic
Barium
Beryllium
Cadmium
Chromium
Copper
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Trivalent Chromium
Zinc

PCBs

PCB-1016
PCB-1221
PCB-1232
PCB-1242
PCB-1248
PCB-1254
PCB-1260
PCB-1262
PCB-1268

Miscellaneous/Inorganics

Percent Solid
Chromium, Hexavalent
pH - Soil
Redox Potential
Total Cyanide (SW9010C Distill.)

Attachment

M

MACHINE SPECIFICATIONS

Model SP-915

General:	Length (O.A.)	39'5½"
	Width (O.A.)	9'0"
	Height (O.A.)	8'8"
	Weight	23,000 lbs. dry
	Draft	21"
	Fuel Capacity	360 gallons
Flotation:	Pontoons—Two 36" x 32" x 33'0" 10 Gauge Steel with Internal Bulkheads and Stiffeners; formed for rigidity; polyurethane foam filled.	
Cutter Assembly:	Auger:	
	Diameter	13½"
	Pitch	11"
	Flighting	¾"
	Speed	Variable to 92.5 RPM
	Cutter Knives	Detachable Heat-Treated Blades
	Auger Torque	16,660 in. lbs.
Mud Shield:	19"x9' Hydraulically Adjustable	
Working Capacity:	Cut 9' wide x 18" maximum depth	
	Operating Depth	15' maximum
Engine:	Detroit Diesel 6-71 N; 175 Continuous BHP @ 1800 RPM	
Drive:	Engine	
	Engine	Direct Hydraulic Dual Pump Drive
Pump:	Centrifugal Recessed Impeller	
	Impeller Diameter	18"
	Suction Diameter	8" (10" available as option)*
	Discharge Diameter	6"
	Nominal Pump Performance	2000 GPM @ 1180 RPM against 124' Head (water)
	Lead in screw (option)*	
Hydraulic System:	Auger and Accessory Drive—Dual Pumps	
	Capacity Total	26.1 GPM @ 1800 RPM (Engine Speed)
	Reservoir	47 Gallons at full mark
	Circuit One	Auger Drive
	Circuit Two	Boom, Mud Shield and Winch
	Relief Valve Setting:	
	Auger	3000 PSI
	Others	1800 PSI
	Main Pump Drive—Single Pump	
	Variable Displacement Hydraulic Pump	
	Fixed Displacement Hydraulic Motor	
	Capacity	76 GPM @ 1800 RPM (Engine Speed)
	Reservoir	30 Gallons at full mark
	Relief Valve Setting	3750 PSI
Propulsion:	Double Wrap Sheave Hydraulic Winch	
	Traverse Speed	31 FPM Maximum Forward & Reverse
	Average Cutting Speed	8 to 12 FPM
Electrical System:	Voltage	
	Alternator Output	65 Ampere
	Batteries	(2) 12V, 205 Ampere Hour, Parallel Wired
	Circuits	2 Wire System Full Ground
Finish:	Polyurethane finish coat on corrosion inhibitive epoxy primer.	
Colors:	Standard Colors	
	Standard Colors	Red, White and Blue.
NOTE:	Specifications Subject To Change Without Notice.	
	Optional configurations quoted upon request.	
	*These options are recommended for applications involving thick viscous sludges.	

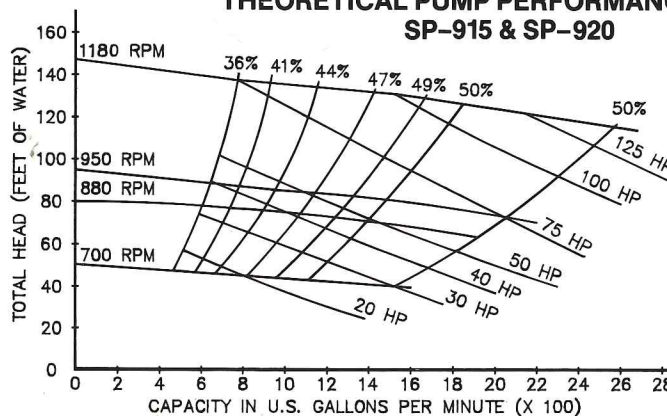


1611 Bush Street
Baltimore, Maryland
21230 U.S.A.

MUD CAT machines are operating in a growing list of countries throughout the world. To obtain complete information, call the MUD CAT DIVISION of ELLICOTT MACHINE CORPORATION
Phone: 301/837-7900,
FAX: 301/752-3294
Telex: 87621.

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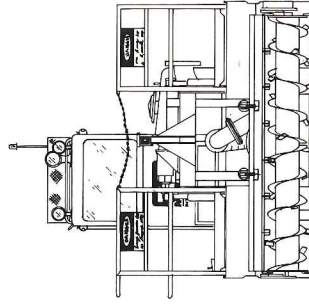
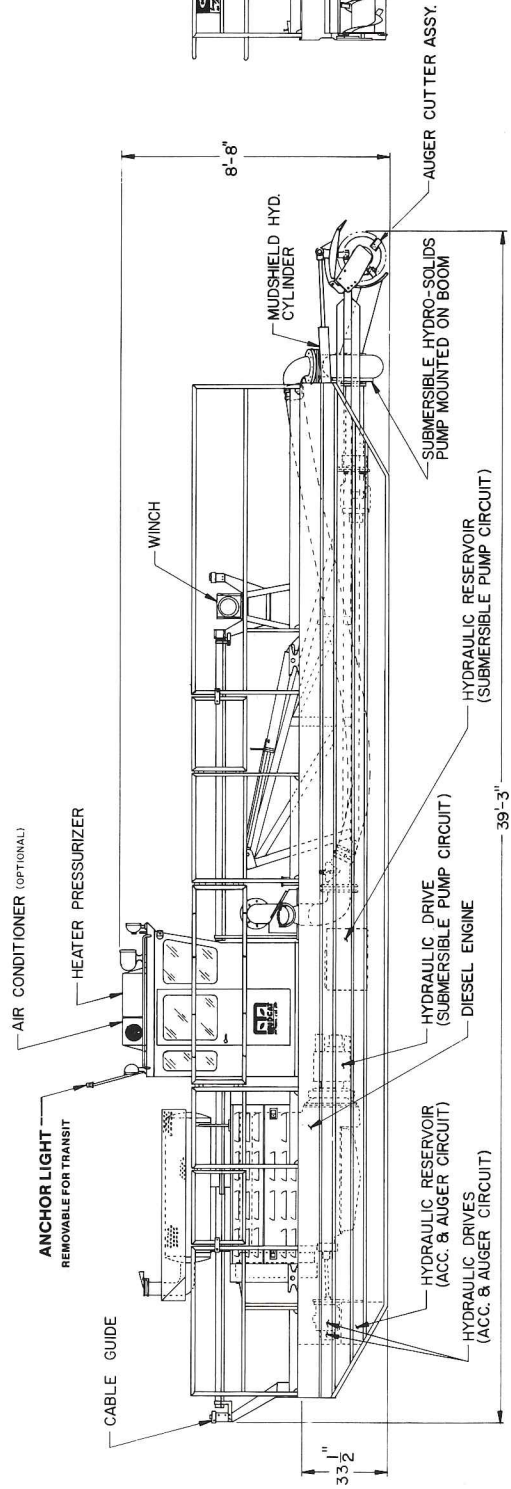
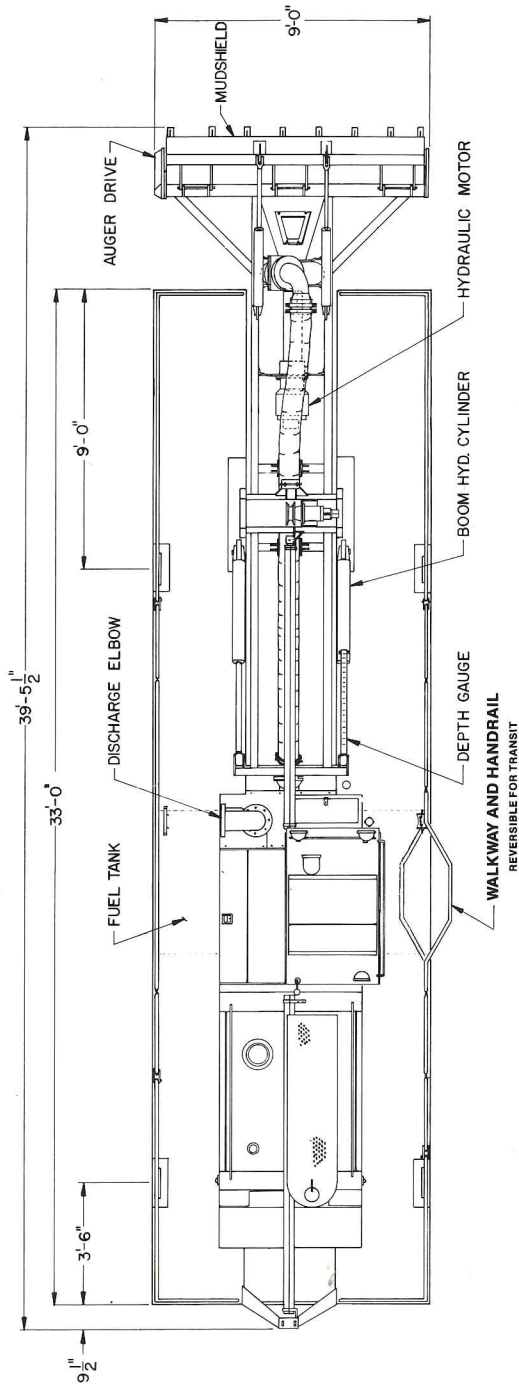
THEORETICAL PUMP PERFORMANCE CURVE SP-915 & SP-920



Impeller Dia — 18 Inch
No. of Vanes — 8
Type of Vanes — Recessed
S.G. of Liquid — 1.0

NOTE:

The theoretical performance curve indicates capacity for pumping water only. Contact MUD CAT DIV. ELLICOTT for information regarding capacities for pumping material.



MUD CAT DIVISION ELLCOTT MACHINE CORP.	BALTIMORE MARYLAND
MUD CAT MODEL SP 915	
DATE 8/8/88	DWG NO. D9185