BERGMANN
ARCHITECTS ENGINEERS PLANNERS

Van Cortlandt Manor Restoration Project

New York State Department of Environmental Conservation - Region 3

Article 24 Freshwater Wetlands Permit Application

Prepared For:
Historic Hudson Valley
639 Bedford Road
Pocantico Hills, NY 10591

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1.0 Introduction

This document and its attachments serve as an application for an Article 24 Freshwater Wetlands (FWW) Permit from the New York State Department of Environmental Conservation (NYSDEC) Region 3 (refer to Appendix A, Joint Application for Permits) for the Restoration of Van Cortlandt Manor Project ("Project") proposed by Historic Hudson Valley. The Project will provide site improvements at an existing property of Van Cortlandt Manor property located at 525 South Riverside Avenue in the Village of Croton-on-Hudson, Westchester County, New York (refer to Figure 1, Site Location Map and Appendix B, Project Drawings).

The Project area was initially field reviewed by Bergmann representatives on November 24, 2014. The purpose of the field review was to delineate wetlands and other potential Waters of the U.S., which are regulated by the Corps and/or the NYSDEC. The Project site was reviewed again by Bergmann representatives on April 3, 2019 and November 12, 2020 in an effort to re-delineate the wetland boundary on the Project site.

This report is also intended to be a reference document that describes proposed procedures to be used by Historic Hudson Valley in an effort to minimize and/or avoid potential environmental impacts associated with this Project to the maximum extent practicable. Included herein is a description of the proposed Project activities, site description, information on permits and approvals, general construction sequence, information on erosion and sediment controls and a discussion of maintenance and monitoring of the Project area.

2.0 Project Description

The following subsections describe the purpose and need of the Project and a description of the proposed activities.

2.1 PURPOSE AND NEED

The Project is a Locally Administered Federal Aid project that involves completing renovations to the National Historic Landmark Van Cortlandt Manor (VCM) property for the not-for-profit education organization, Historic Hudson Valley (HHV). HHV interprets and promotes historic landmarks of national significance in the Hudson Valley for the benefit and enjoyment of the public. The proposed work is part of a larger Project that has included previous site improvement at Van Cortlandt Manor.

The purpose of this Project involves enhancing visitor's access to the historic area by strengthening the site's identity and making it more welcoming and modern, all while maintaining its historic accuracy. This will provide the visitors with an understanding of the site and the history it represents. The Project will also improve site safety and security upgrades to protect historic resources and visitors. Significant portions of Van Cortlandt Manor are of a historic nature and as such require renovations to ensure they maintain their historical accuracy and do not fall into disrepair. Improvements are also required to ensure the site is accessible to any visitors. Increased lighting and security, electric charging stations and improved signage will allow for a more informative and safer experience, while rehabilitation of existing structures within Van Cortlandt Manor will help preserve the historical nature of the site. These enhancements will also allow for Van Cortlandt Manor to accommodate guests easier, allowing for events at the site to run to their full efficiency, especially The Great Jack O'Lantern Blaze, which occurs yearly at Van Cortlandt Manor. Without these improvements, Van Cortlandt Manor's buildings could fall into a state of disrepair and guests could find the site inaccessible. This would lead to a decrease in visitors to Van Cortlandt Manor, in turn decreasing the revenue generating capability of the Historic Van Cortlandt Manor property. This would put a greater economic strain on Historic Hudson, impacting their ability to care for this National Register-listed building and property.

2.2 DESCRIPTION OF PROPOSED WORK

The proposed Project consists of the following site improvements. The proposed work has been broken down to show what will be occurring within the National Historic Landmark Boundary and outside of the boundary.

Outside of National Historic Landmark Boundary:

South Riverside Avenue:

- Extend Americans with Disabilities Act (ADA) compliant concrete sidewalks and provide crosswalk and security lighting.
- Improve the existing site entrance signs and security entrance gate.
- Install bike racks.

Former Drive-in Parcel:

- Improve existing entrance gate to the parcel from the ShopRite parking lot.

Within the National Historic Landmark Boundary:

- Provide concrete pads for visitor reception courtyard tent area, which includes utilities (water, sanitary sewer, electrical, data).

- Provide electric vehicle charging stations.
- Resurface existing concrete road with micro-surface treatment.
- Replace existing Long Walk brick pavers with a wider ADA accessible walkway, along with 'dark sky' compliant site lighting.
- Clean up existing brush and plantings, restore stone retaining walls and other landscape features, and provide drainage improvements as required along driveways and walkways.
- Install electric and data for site lighting and security cameras.
- Replace roofing systems at the Visitor Accommodation Building and the Office Building.

Proposed work within the NYSDEC regulated 100-ft adjacent area will be comprised of 0.65-acres of permanent impacts and 1.02-acres of temporary impacts. No impacts to the NYSDEC FWW are proposed. Permanent impacts to the adjacent area will involve installation of concrete pads and grass pavers, along with minor earthwork in the form of grading. Temporary impacts within the adjacent area will include disturbance related to resurfacing of existing intrusions located within the 100-ft adjacent area in the form of paved walkways, trenching for utility line instillation and temporary disturbances as a result of construction activities. Most of the work proposed involves improvements to existing structures or minor construction in previously disturbed areas. Selective tree clearing and cutting is proposed for this Project; however, no tree clearing will occur within the NYSDEC regulated 100-ft adjacent area. No impacts to any delineated wetlands or other waters of the U.S. are proposed. Refer to Appendix B, Project Drawings for a detailed plan of all proposed work. Construction on the Project is anticipated to begin in January of 2022 with work concluding in August of 2023.

3.0 Project Area Description

Bergmann representatives conducted a Project area site visit on November 12, 2020. The purpose of the visit was to confirm the boundary of a wetland previously delineated by Bergmann or to document any changes to the wetland boundary, to assess habitat within the Project area in relation to potential threatened and/or endangered species, to visually assess the site for obvious historic resources and to document general conditions of the Project area.

Generally, the Project area consists of developed land and mowed/shrubby fields. Van Cortlandt Manor is located within the Project area and includes existing buildings, paved roadways and parking areas. An upland deciduous forest surrounds the property to the north and northeast, with an emergent wetland present to the east, west and south. A shopping center and South Riverside Avenue are present to the northwest (refer to Figure 2, Aerial Imagery Map).

3.1 WETLAND AND WATERCOURSE DELINEATION SUMMARY

A delineation of aquatic resources including wetlands and potential other waters of the U.S. was conducted by Bergmann on November 12, 2020 in accordance with the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual and its accompanying Northcentral and Northeast Regional Supplement. The delineation included the approximately 18.61-acres of the property on which the Project is located. The general boundary of the wetland was similar to the previous delineated boundaries, with the delineation extending further north than previous site visits. Bergmann field staff delineated one (1) PEM wetland (Wetland 1) (refer to Appendix C, Wetland and Watercourse Delineation Report). Wetland 1 is understood to be an extension of the NYSDEC jurisdictional FWW H-3. Wetland 1 occurs outside the Project area and will not be impacted by the proposed Project; however, the Project encroaches on the NYSDEC regulated adjacent area that extends 100 feet from the wetland boundary. Detailed information regarding the delineated resources including USACE Wetland Determination Data Forms and photographs can be found in in Appendix C.

4.0 Proposed Impacts

The following subsections discuss the alternatives considered to avoid regulated areas and a description of how the chosen Project design minimizes impacts to the regulated areas to the maximum extent practicable.

4.1 ALTERNATIVES ANALYSIS

We are identifying herewith two (2) options to address the need for site improvements.

Alternative 1

The first option is a no-action alternative. If Historic Hudson Valley does not provide the necessary site improvements, Van Cortlandt Manor will continue to be less accessible to all individuals and out of compliance with the Americans with Disabilities Act (ADA), while also not allowing for rehabilitation of historical buildings. A less accessible and historically accurate Manor will likely result in decreased revenue, potentially leading to the termination of programs providing essential support for the historic resource that is the Van Cortlandt Manor. For this reason, the no action alternative is not the preferred action.

Alternative 2 (Proposed)

The second alternative involves the proposed activities of restoration and improving multiple facets around Van Cortlandt Manor. This option meets the purpose and need of the Project while utilizing the existing and previously disturbed areas around Van Cortlandt Manor. This option has been designed so no impacts to the NYSDEC wetland H-3 occur, while minimizing impacts to the wetland 100-foot buffer. Impacts to the wetland buffer will occur within previously disturbed areas, further reducing the impact of the Project. This option will make Van Cortland Manor a more welcoming and historically accurate place for all visitors, while reducing impacts to environmentally sensitive areas.

The Project's proposed impacts involve 1.02-acres of temporary impacts and 0.65-acres of permanent impacts within the NYSDEC 100-ft regulated adjacent area. The proposed work has been designed to avoid impacts within NYSDEC wetland H-3, while minimizing the impacts to the 100-foot adjacent area to the maximum extent practicable. Tables 1 and 2 summarize the proposed impacts to the wetland and its regulated adjacent area on the Project site. It should be noted that the majority of the work proposed within the regulated buffer occurs in land that has been previously disturbed from past construction associated with Van Cortlandt Manor.

Table 1
Proposed Impacts

Resource ID	Area of Temporary Impacts (sq. ft./ac.)	Area of Permanent Impacts (sq. ft./ac.)
Wetland 1 (NYSDEC H-3)	0.00	0.00
Wetland 1 Adjacent Area	44,250/1.02	28,500/0.65

Table 2
Proposed Impacts by Activity Type

Disturbance Description	Total Area of Permanent Impacts (sq. ft./ac.)
Concrete Pads	4,000 / 0.09
Grass paver Installation	8,000 / 0.18
Earthwork (Fill)	16,500 / 0.38
Total	28,500 / 0.65
Disturbance Description	Area of Temporary Impacts (sq. ft./ac.)
Roadway Resurfacing	17,000 / 0.39
Utility Conduit Instillation	4,500 / 0.10
Construction Activities Disturbance	15,500 / 0.36
Brush Clearing	7,250 / 0.17
Total	44,250 / 1.02

5.0 Permits and Approvals

The following sections provide information on permits and approvals that are applicable to this Project.

5.1 UNITED STATES ARMY CORPS OF ENGINEERS (USACE) PERMITS

The proposed Project does not require any USACE permits, as no impacts to any Waters of the United States are proposed.

5.2 CULTURAL RESOURCES

The Project involves impacts to Van Cortlandt Manor which is a listed property on the National Register of Historic Places (NR Number: 90NR02530) and National Historic Landmark. Impacts to the facility have been reviewed by The New York State Department of Transportation ("NYSDOT"), New York State Historic Preservation Office ("SHPO"), National Parks Service ("NPS") and the Federal highway Administration ("FHWA"). It has been determined that the Project will have "no adverse effect" on historic resources. The FHWA issued a consolidated response letter documenting the "no effect" determination of each of these agencies and has been included as Appendix D.

5.3 THREATENED AND ENDANGERED SPECIES REVIEW

U.S. Fish and Wildlife Service

The Project area was reviewed using the United States Fish and Wildlife Service's (USFWS's) online Information, Planning and Consultation System (IPaC). The IPaC Official Species Lists obtained from USFWS on July 30, 2021 (Consultation Codes: 05E1NY00-2021-SLI-2258 and 05E1LI00-2021-SLI-0471). The Official Species List indicates that there are no federally listed threatened, endangered or candidate species expected to occur within the Project area. There is no USFWS designated Critical Habitat within the Project area. Refer to Appendix E, Threatened and Endangered Species Correspondence for a copy of the Project's Official Species List

State Listed Species

The Project area was reviewed using the NYSDEC Environmental Resource Mapper (ERM). The Project area occurs within the "Rare Plants and Animals Layer" and the "Significant Natural Communities Layer" as mapped by the New York State Natural Heritage Program (NYNHP), indicating that there are records of state listed threatened or endangered species expected to occur within the Project area. A request for information was made of the NYSDEC Natural Heritage Program on August 7, 2020. In a letter dated September 8, 2020, the NYSDEC Natural Heritage Program stated that the NYS Threatened Bald Eagle (Haliaeetus leucocephalus) had been documented nesting within 0.5 miles of the Project site. The NYSDOT was able to determine that the bald eagle nesting location is ~0.4 mi away from the Project limits. There are also nonbreeding/ winter locations mapped immediately adjacent to the Project area. In Step 6 of the U.S. Fish & Wildlife Service Project Review website, if the Project action area is not within 660 feet (0.125 mile or 1/8 mile) of a bald eagle nest, the Project is unlikely to disturb nesting bald eagles. As there is no blasting needed to construct the Project, it is anticipated that the Project activities would not require a permit issued under the Bald and Golden Eagle Protection Act (Appendix E).

In an email from NYSDEC Region 3 dated January 19, 2021, it was stated that Project area is located within proximity to documented bald eagle nest and wintering area. Department staff have reviewed the location and the Project information relative to the known eagle nest and determined that based on the distance to the nest, the intervening land use, and the ambient noise conditions in the vicinity, no additional noise-related impacts are anticipated to the nest from the proposed work. The email also said to avoid impacts to wintering eagles, work should be conducted from April 1 to November 1. Correspondence is currently ongoing with NYSDEC Region 3

separate to this application to ensure that the work that is proposed to occur outside of that time window will not impact wintering eagles.

The letter from the Natural Heritage Program also included following plants as having been documented in the vicinity of the Project site: the endangered New England Bulrush (Bolboschoenus novae-angliae), endangered Water Pigmyweed (Crasula aquatica) and threatened Spongy-Leaved Arrowhead (Sagittaria montevidensis ssp. Spongiosa). Each of these plants require wetland and aquatic habitat. The nearest location of suitable habitat for any of these plants would be the Croton River, located outside of the Project area. None of these species were observed during the wetland delineation field work in both the 2014 and 2020 field work. As the Project will not include any in-water or wetland work; therefore, will be no impacts to these state listed plants as a result of the Project.

The NYSDEC Natural Heritage Program letter also included a statement that "Croton Bay and the Croton River, including adjacent to the Project site, is a recognized state-significant Anadromous Fish Concentration Area. A high concentration of anadromous fish occupy this area at critical stages of their lives, and so Croton Bay and the Croton River are of conservation concern." As stated earlier, the Project will not include any in-water work; therefore, there are no anticipated impacts to the Anadromous Fish Concentration Area as a result of the Project (refer to Appendix E).

5.4 STATE ENVIRONMENTAL QUALITY REVIEW ACT (SEQRA)

The Village of Croton-on-Hudson Water Control Commission is the SEQRA lead agency as per 6 NYCRR Part 617 "State Environmental Quality Review." The Water Control Commission ("WCC") of Croton-on-Hudson has determined that this Project is a SEQRA Type I Action in accordance with 6 NYCRR Part 617.4. A Negative Declaration was issued by the WCC on May 19, 2021. A copy of the Negative Declaration Resolution is included in this application (refer to Appendix F, Negative Declaration Resolution).

5.5 NYSDEC PERMITS

The proposed Project involves impacts to a regulated freshwater wetland 100-foot adjacent area. As such, an Article 24 permit from the NYSDEC is required. The proposed Project is understood to be classified as a "major Project" under the Uniform Procedures Act. The required Joint Application for Permit Form is included in Appendix A. A check for $200.00 is also included for payment.

The Project as proposed will disturb over one (1) acre of land and therefore will require coverage from NYSDEC under the SPDES General Permit for Construction 0-20-001. As such, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared. A Notice of Intent (NOI) will be submitted and the NYSDEC acknowledgement of coverage under the GP 0-20-001 will be forwarded upon receipt.

5.6 NYSDOS PERMITS

As the proposed Project is located within the New York State Coastal Zone, an individual consistency concurrence determination will be required. A completed Federal Consistency Assessment Form (FCAF) has been submitted as part of the Village of Croton-on-Hudson Wetland Activities Permit Application. A copy of the form can be found in Appendix G, Federal Consistency Assessment Form). The Project as proposed is consistent with the enforceable State Coastal Policies and/or the Village of Croton-on-Hudson Local Waterfront Revitalization Program (LWRP) policies 5, 6, 7, 12, 14, 17, 23, 33, 35, 37, 41, and 44.

- Policy 5: Encourage the location of development in area where public services and facilities essential to development are adequate.
- Policy 6: Expedite permit procedures in order to facilitate the siting of development activities at suitable locations.
- Policy 7: Significant coastal fish and wildlife habitats will be protected, preserved and where practical, restored as to maintain their viability as habitats.
- Policy 12: Activities or development in the coastal area will be undertaken so as to minimize damage to natural resources and property from flooding and erosion by protecting protective features including beaches, dunes, barrier islands and bluffs.
- Policy 14: Activities and development, including the construction or reconstruction of erosion protection structures, shall be undertaken so that there will be no measurable increase in erosion or flooding at the site of such activities or development, or at other locations.
- Policy 17: Non-structural measures to minimize damages to natural resources and property from flooding and erosion shall be used whenever possible.
- Policy 23: Protect enhance and restore structures, districts, or sites that are of significance in the history, architecture, archeology or culture of the State, its communities, or the Nation.
- Policy 33: Best management practices will be used to ensure the control of stormwater run-off and combined sewer overflows draining into coastal waters.
- Policy 35: Dredging and filling in coastal waters and disposal of dredged materials will be undertaken in a manner that meets existing State dredging permit requirements and protects significant fish and wildlife habitats, scenic resources, natural protective features, important agricultural lands and wetlands.
- Policy 37: Best management practices will be utilized to minimize the non-point discharge of excess nutrients, organics, and eroded soils into coastal waters.
- Policy 41: Land use or development in the coastal area will not cause national or State air quality standards to be violated.
- Policy 44: Preserve and protect tidal and freshwater wetlands and preserve the benefits derived from these areas.

5.7 VILLAGE OF CROTON-ON-HUDSON APPROVALS

The Village of Croton-on-Hudson requires an application for wetlands activity in order to perform work within a wetland or wetland buffer of 120 feet. A Wetland Activity Permit (#20210001) was issued on May, 25, 2021 by the Village of Croton on Hudson (refer to Appendix H, Croton-on-Hudson Wetland Activity Permit).

6.0 General Construction Sequence

The following is a general construction activity sequence for the proposed Project.

1) Install perimeter silt fence.
2) Begin clearing and grubbing operations. Clearing and grubbing shall be done only in areas where earthwork will be performed and only in areas where construction is planned to commence within 14 days after clearing and grubbing.
3) Strip topsoil and stockpile in a location acceptable to construction manager. When stockpile is complete, install perimeter silt fence.
4) Commence earthwork cut and fills. The work shall be progressed to allow a reasonable transfer of cut and fill earth for rough grading and earth moving. The contractor will be given some latitude to vary from the following schedule to meet the field conditions encountered. Contractor shall review variations with design engineer prior to implementation.
5) Stabilize all areas as soon as practicable, idle in excess of 7 days and in which construction will not commence within 14 days.
6) Following rough grading, utility installation should begin, trench excavation/backfill areas should be stabilized progressively at the end of each workday with seed and straw mulch at a rate of 100% perennial rye grass at 2-4 lbs./1000 sf. mulched at 90-100 lbs./1000 sf.
7) Install inlet/outlet protection at the ends of all exposed storm sewer pipes prior to backfilling.
8) Construct concrete gutter as shown on the plans.
9) Grading for the culverts and lower areas will be completed first, with site cuts and fills to occur as necessary to supply needed fill.
10) Stabilize all areas idle in excess of 7 days in which construction will not commence within 14 days.
11) As landscaped areas are brought to grade, stabilize with topsoil, seeding and mulching per the plans.
12) Remove temporary construction entrance/exit.
13) Remove erosion & sedimentation controls once the site is fully stabilized.

7.0 Erosion and Sediment Control Measures

Temporary and permanent erosion and sediment controls will be used during the maintenance activity to avoid and/or minimize effects of construction. Historic Hudson Valley will have a field supervisor overseeing all work to ensure proper installation and maintenance of erosion and sediment controls. A detailed SWPPP is being prepared for the Project.

7.1 TEMPORARY MEASURES (GENERAL)

The following temporary erosion and sediment control measures are proposed (refer to Appendix B, Project Drawings):

- Silt fence and/or compost filter socks will be placed around the Project area bordering the wetlands. The filter sock/silt fence will retain sediment within stormwater that runs through Project area as sheet flow, preventing soil loss.
- Refueling of equipment and vehicles will be performed over 100-feet away from the regulated 100-foot adjacent area and other potential waters of the U.S. Refueling activities, if required, will take place within an area surrounded by compost filter sock installed to specifications required by New York State. Any spilled fuel or oil will be immediately remedied by the site contractor in accordance with State and Federal requirements.

7.2 PERMANENT MEASURES (GENERAL)

The following permanent erosion and sediment control measures are proposed (refer to Appendix B, Project Drawings):

- Re-vegetation in disturbed areas (as necessary) will be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (NYSDEC, 2005).
- A Site Erosion Control & Sediment Control Plan have been prepared and included specific erosion and sedimentation controls.

8.0 Maintenance and Monitoring

Contractor personnel will be present during construction activities to inspect erosion and sediment controls daily and after storm events. Care will be taken to avoid discharge of any waste materials into the regulated NYSDEC FWW. Damaged erosion and sediment control structures will be repaired or replaced as needed. Erosion and sediment controls will be maintained on site until the disturbed area has been re-vegetated and stabilized.

FIGURES

Historic Hudson Valley
Van Cortlandt Manor Restoration Project

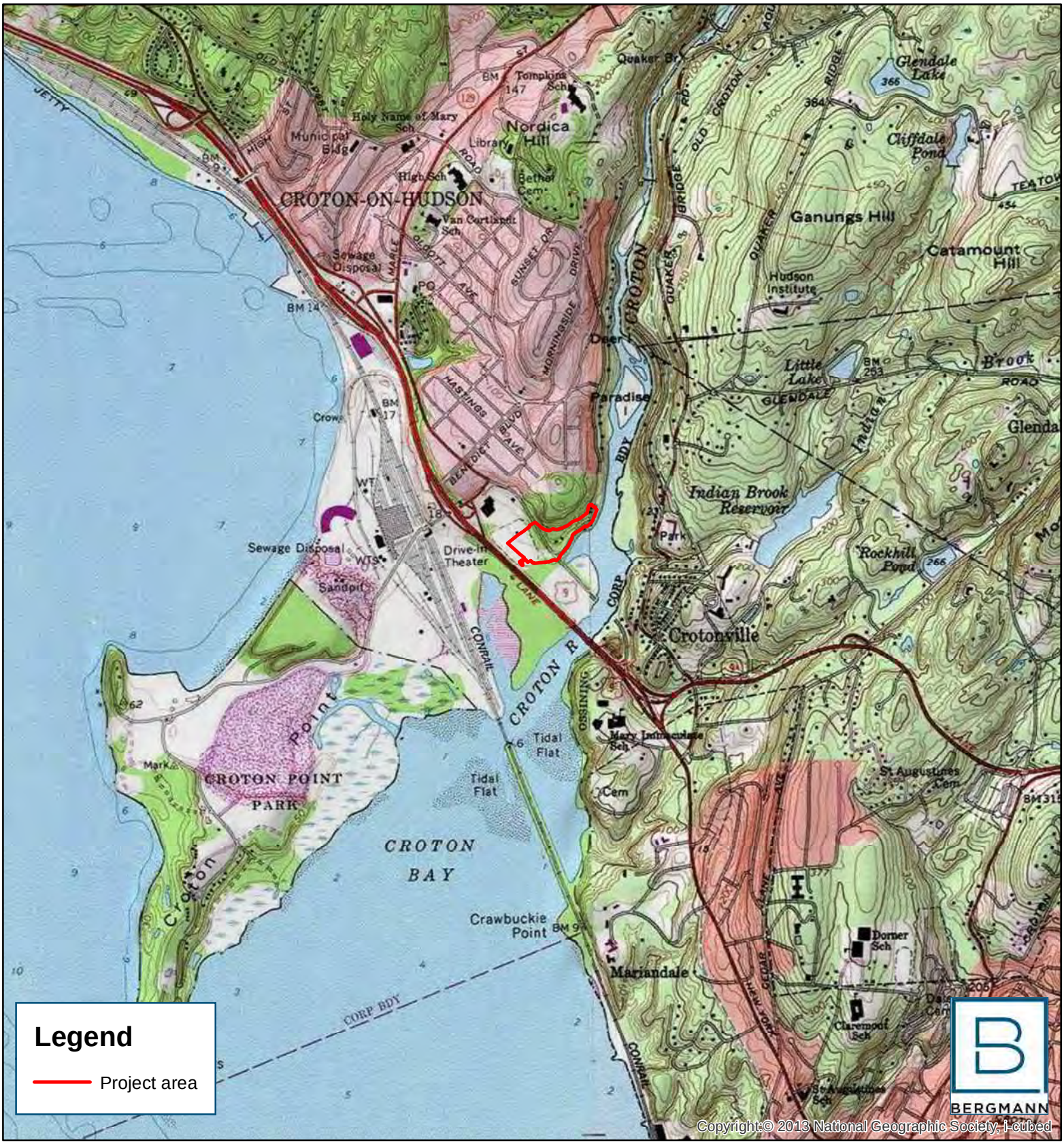
PROJECT LOCATION MAP

Fig. 1

2,000 Feet

N

Village of Croton-on-Hudson, Westchester County, New York



Historic Hudson Valley
Van Cortlandt Manor Restoration Project

AERIAL IMAGERY MAP

Fig. 2

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York

APPENDIX A
Joint Permit Application Form

NEW YORK STATE | Department of Environmental Conservation | Office of General Services | Department of State

US Army Corps of Engineers

JOINT APPLICATION FORM

For Permits for activities activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

1. **Applications To:**

>NYS Department of Environmental Conservation ☑ Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:

- ☐ Stream Disturbance
- ☐ Excavation and Fill in Navigable Waters
- ☐ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☐ 401 Water Quality Certification *
- ☑ Freshwater Wetlands
- ☐ Tidal Wetlands
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Coastal Erosion Management
- ☐ Water Withdrawal
- ☐ Long Island Well
- ☐ Incidental Take of Endangered / Threatened Species

* See Instructions Page 3

>US Army Corps of Engineers ☐ Check here to confirm you sent this form to USACE.

Check all permits that apply: ☐ Section 404 Clean Water Act ☐ Section 10 Rivers and Harbors Act

Is the project Federally funded? Yes No

If yes, name of Federal Agency:

General Permit Type(s), if known:

Preconstruction Notification: Yes No

>NYS Office of General Services ☐ Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:

☐ State Owned Lands Under Water

☐ Utility Easement (pipelines, conduits, cables, etc.) ☐ Docks, Moorings or Platforms

>NYS Department of State ☑ Check here to confirm you sent this form to NYSDOS.

Check if this applies: ☑ Coastal Consistency Concurrence

2. **Name of Applicant**

Historic Hudson Valley c/o Richard Torres

Taxpayer ID (if applicant is NOT an individual)

Mailing Address: 639 Bedford Road

Post Office / City: Pocantico Hills

State: NY

Zip: 10591

Telephone: 914.366.6914

Email: rtorres@hudsonvalley.org

Applicant Must be (check all that apply): ☑ Owner ☐ Operator ☐ Lessee

3. **Name of Property Owner (if different than Applicant)**

Mailing Address

Post Office / City

State

Zip

Telephone

Email

For Agency Use Only	Agency Application Number:

4. **Name of Contact / Agent**

Rita Kozak

Mailing Address	Post Office / City	State	Zip
280 E. Broad Street, Suite 200	Rochester	NY	14604

Telephone 567.318.1547 Email rkozak@bergmannpc.com

5. **Project / Facility Name**

Van Cortlandt Manor Restoration Project

Property Tax Map Section / Block / Lot Number: 79.17-2-7

Project Street Address, if applicable	Post Office / City	State	Zip
525 South Riverside Avenue	Corton-On-Hudson	NY	10520

Provide directions and distances to roads, intersections, bridges and bodies of water

The proposed project area is approximately 1,500 feet southeast of the intersection of South Riverside Avenue and Croton Point Avenue in the Village of Croton-on-Hudson, Westchester County, New York.

Town	✔ Village	City	County	Stream/Waterbody Name
Croton-on-Hudson			Westchester	Near Croton and Hudson Bay

Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:

Latitude: 41 ° 11 ' 31 " Longitude: 73 ° 52 ' 39 "

6. **Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:

The purpose of this project is to provide site upgrades to the historic Van Cortlandt Manor site that is safe and enhances the experience of visitors to the property

b. Description of current site conditions:

Currently the Project area generally consists of developed land and mowed/shrubby fields located within the Van Cortlandt Manor Property . A detailed Site Condition description is provided in the enclosed Application document.

c. Proposed site changes:

Refer to the enclosed application document for Project Drawings.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):

0.65 acres of permanent fill is proposed within a NYSDEC regulated adjacent area. Refer to Section 4 of the enclosed Application document for detailed information regarding the proposed ecological impacts.

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:

Excavation is limited to construction of swales and utility line instillation, which will partially occur within the NYSDEC regulated adjacent area. Excavated materials will be temporarily side cast into an upland area while the construction occurs and then backfilled to pre-construction contours.

f. Is tree cutting or clearing proposed? Yes If Yes, explain below. ✔ No

Timing of the proposed cutting or clearing (month/year): N/A

Number of trees to be cut: N/A Acreage of trees to be cleared: N/A

g. Work methods and type of equipment to be used:

Typical site development and earthwork equipment.

h. Describe the planned sequence of activities:

Refer to section 6 of the enclosed Application document.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Erosion and sediment controls will be installed prior to earth disturbance activities. Please refer to Section 7 of the enclosed Application document, as well as the Project Drawings, for further information.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

Silt fencing will be installed to prevent impacts to water quality.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

The project has minimized impacts by adjusting placement and size of the proposed improvements to lessen impacts to the 100 foot adjacent area on-site, while having no impacts on the DEC H-3 wetland.

l. Proposed use: ☐ Private ☑ Public ☐ Commercial

m. Proposed Start Date: January 2022 Estimated Completion Date: August 2023

n. Has work begun on project? Yes If Yes, explain below. ☑ No

o. Will project occupy Federal, State, or Municipal Land? ___ Yes If Yes, explain below. ☑ No

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

USACE: NAN-2019-01025
DEC: 3-5522-00352/00002, 3-5522-00352/00003
DOS: F-2019-0495

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

☑ Yes If Yes, list below. ___ No

This project requires and has recieved a Wetland Activity Permit form the Village of Croton-on-Hudson.

7. **Signatures.**

Applicant and Owner (If different) must sign the application. If the applicant is the landowner, the **landowner attestation form** can be used as an electronic signature as an alternative to the signature below, if necessary. Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant | Date

Richard J Torres | 7/23/2021

Applicant Must be (check all that apply): ☑ Owner ☐ Operator ☐ Lessee

Printed Name | Title

Historic Hudson Valley c/o Richard Torres | Director of Building, Grounds & Security

Signature of Owner (if different than Applicant) | Date

Printed Name | Title

Signature of Contact / Agent | Date

Rita Kozak | 8/6/2021

Printed Name | Title

Bergmann c/o Rita Kozak | Ecological Project Manager

For Agency Use Only **DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name | Title

Signature | Date

APPENDIX B
Project Drawings

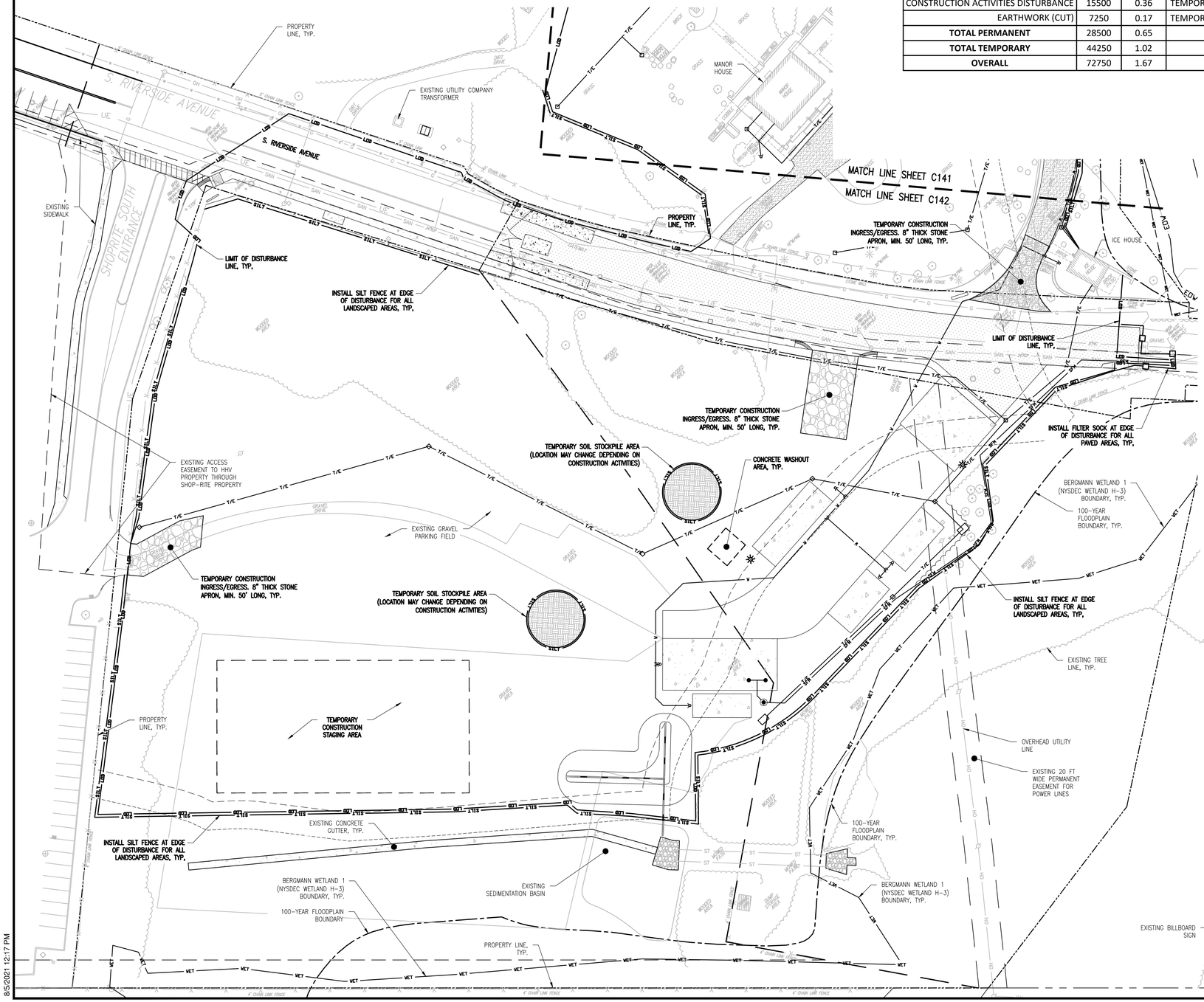
ANSI D 22x34

WETLAND AND WETLAND BUFFER DISTURBANCE TABLE:

WETLAND TYPE	WETLAND AREA (SF / AC)	AREA OF IMPACT		100' DEC BUFFER AREA	ADJACENT AREA OF IMPACT		120' WCC BUFFER AREA	ADJACENT AREA OF IMPACT	
		TEMPORARY	PERMANENT		TEMPORARY	PERMANENT		TEMPORARY	PERMANENT
BERGMANN WETLAND 1 (NYSDEC H-3)	617,613 SF / 12.72 AC	0	0	72,750 SF / 1.67 AC	44,250 SF / 1.02 AC	28,500 SF / 0.65 AC	261,848 SF / 5.39 AC	122,422 SF / 2.52 AC	139,426 SF / 2.87 AC

WETLAND BUFFER FILL CHART	
DESCRIPTION	VOLUME (CY)
EARTHWORK (FILL)	316
CONCRETE PADS	74
GRASS PAVERS	204

WETLAND BUFFER DISTURBANCE			
DISTURBANCE DESCRIPTION	AREA OF IMPACT		DISTURBANCE TYPE
	SF.	AC	
CONCRETE PADS	4000	0.09	PERMANENT
GRASS PAVER INSTALLATION	8000	0.18	PERMANENT
EARTHWORK (FILL)	16500	0.38	PERMANENT
ROADWAY RESURFACING	17000	0.39	TEMPORARY
UTILITY CONDUIT INSTALLATION	4500	0.10	TEMPORARY
CONSTRUCTION ACTIVITIES DISTURBANCE	15500	0.36	TEMPORARY
EARTHWORK (CUT)	7250	0.17	TEMPORARY
TOTAL PERMANENT	28500	0.65	
TOTAL TEMPORARY	44250	1.02	
OVERALL	72750	1.67	



E&SC LEGEND:

- SILT — SILT FENCE
- FILTER SOCK
- LOD — LIMITS OF EARTH DISTURBANCE
- INLET PROTECTION
- CONCRETE WASHOUT AREA

0 40 80 120 FT

1" = 40' SCALE BAR

EROSION CONTROL NOTES:

1. THE DEVELOPER SHALL PROVIDE A QUALIFIED INSPECTOR TO INSPECT THE PROJECT AT THE END OF EACH WORK WEEK AND PROVIDE A REPORT AT LEAST ONCE PER WEEK.
2. INSTALL SILT FENCE, DIVERSION SWALES/BERMS, CHECK DAMS AND ALL OTHER EROSION CONTROL MEASURES AS INDICATED ON THE PLAN PRIOR TO THE START OF ANY EXCAVATION WORK. EROSION CONTROL MEASURES WILL BE IMPLEMENTED IN ACCORDANCE WITH THE NEW YORK STATE GUIDELINES FOR URBAN EROSION SEDIMENT CONTROL MANUAL, NEW YORK STATE HEALTH DEPARTMENT, AND THE GOVERNING TOWN REQUIREMENTS.
3. CONSTRUCT INTERCEPTOR/DIVERSION SWALES/BERMS & TEMPORARY SEDIMENT BASIN'S TO INTERCEPT SURFACE WATER AND DIRECT IT AWAY FROM WORK AREA AS INDICATED ON PLAN. SEDIMENT SHALL BE REMOVED FROM BASINS BEFORE THEY REACH 25% CAPACITY.
4. REMOVE AND STOCKPILE TOPSOIL AS DIRECTED BY THE CONSTRUCTION MANAGER REPLACE TOPSOIL TO A MINIMUM 4" DEPTH. ALL DISTURBED AREAS TO BE HYDROSEEDED AS DIRECTED BY THE CONSTRUCTION MANAGER TO PROMOTE VEGETATION AS SOON AS PRACTICABLE.
5. IF THE SEASONS PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE "STANDARDS", NETTING OR LIQUID MULCH BINDER.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REMOVAL OF TEMPORARY SEDIMENTATION CONTROLS. EROSION CONTROL MEASURES SHALL NOT BE REMOVED BEFORE 80% UNIFORM VEGETATION HAS BEEN ACHIEVED.
7. INSTALL INLET PROTECTION, AND RIP RAP APRONS PROGRESSIVELY AS STORM SEWER, AND DISCHARGE POINTS ARE INSTALLED.
8. ALL EROSION CONTROL MEASURES ARE TO BE REPLACED WHENEVER THEY BECOME CLOGGED OR INOPERABLE AND SHALL BE REPLACED WHEN THEY HAVE REACHED THE DESIGN LIFE INDICATED IN THE NYS GUIDELINES FOR URBAN EROSION SEDIMENT CONTROL DESIGN MANUAL .
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORATION OF TOPSOIL TO ALL DISTURBED AREAS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION CONTROL MEASURES AT ALL TIMES.
10. THE CONTRACTOR SHALL DESIGNATE A MEMBER OF HIS/HER FIRM TO BE RESPONSIBLE TO MONITOR EROSION CONTROL, EROSION CONTROL STRUCTURES, TREE PROTECTION AND PRESERVATION THROUGHOUT CONSTRUCTION.
11. ALL DISTURBED AREAS SHALL BE FINISH GRADED TO PROMOTE VEGETATION ON ALL EXPOSED AREAS AS SOON AS PRACTICABLE. STABILIZATION PRACTICES (TEMPORARY/PERMANENT SEEDING, MULCHING, GEOTEXTILES, ETC.)MUST BE IMPLEMENTED WITHIN SEVEN (7) DAYS WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, AND NOT EXPECTED TO RESUME WITHIN FOURTEEN (14) DAYS.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. ALL CONSTRUCTION DEBRIS AND SEDIMENT SPOILS, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
13. DUST SHALL BE CONTROLLED BY WATERING.
14. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.
15. DIVERSION SWALES/BERMS, AND SEDIMENT TRAPS SHOULD BE RELOCATED INWARD AS PERIMETER SLOPE CONSTRUCTION PROGRESSES AND RECONSTRUCTED TO THE NYS STANDARDS & SPECIFICATIONS AT THE END OF EACH DAY TO DIVERT RUNOFF FROM SLOPED AREAS AND DIRECT TO APPROPRIATE BASINS.
16. PERIMETER AREAS SHALL BE TEMPORARILY STABILIZED WITH SEED AND MULCH AT LEAST ONCE A WEEK, AT A MINIMUM, WITH 100% PERENNIAL RYEGRASS MIX AT A RATE OF 2-4 LBS PER 1000 SF AND MULCH 90-100 lbs/1000 SF OF WEED FREE STRAW.
17. SLOPE TRACKING SHALL BE IMPLEMENTED ON ALL SLOPE 1 ON 3 OR GREATER AT THE END OF EACH WORK DAY AND PRIOR TO FINAL SLOPE GRADING AND STABILIZATION.

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HISTORIC HUDSON VALLEY

639 BEDFORD ROAD
POCANTICO HILLS, NY

RESTORATION OF VAN CORTLANDT MANOR ENTRANCE
PIN 8760.11

525 S RIVERSIDE AVENUE
CROTON-ON-HUDSON
WESTCHESTER, NY

Date Revised	Description

60% PROGRESS SET
NOT FOR CONSTRUCTION

Project Manager	Discipline Lead
G. URSPRUNG, PE	R. DARLING, PE
Designer	Reviewer
P. HOLSBERGER	R. DARLING, PE
Date Issued	Project Number
8/12/2021	10107.00

Sheet Name

EROSION AND SEDIMENT CONTROL PLAN - I

Drawing Number

C141

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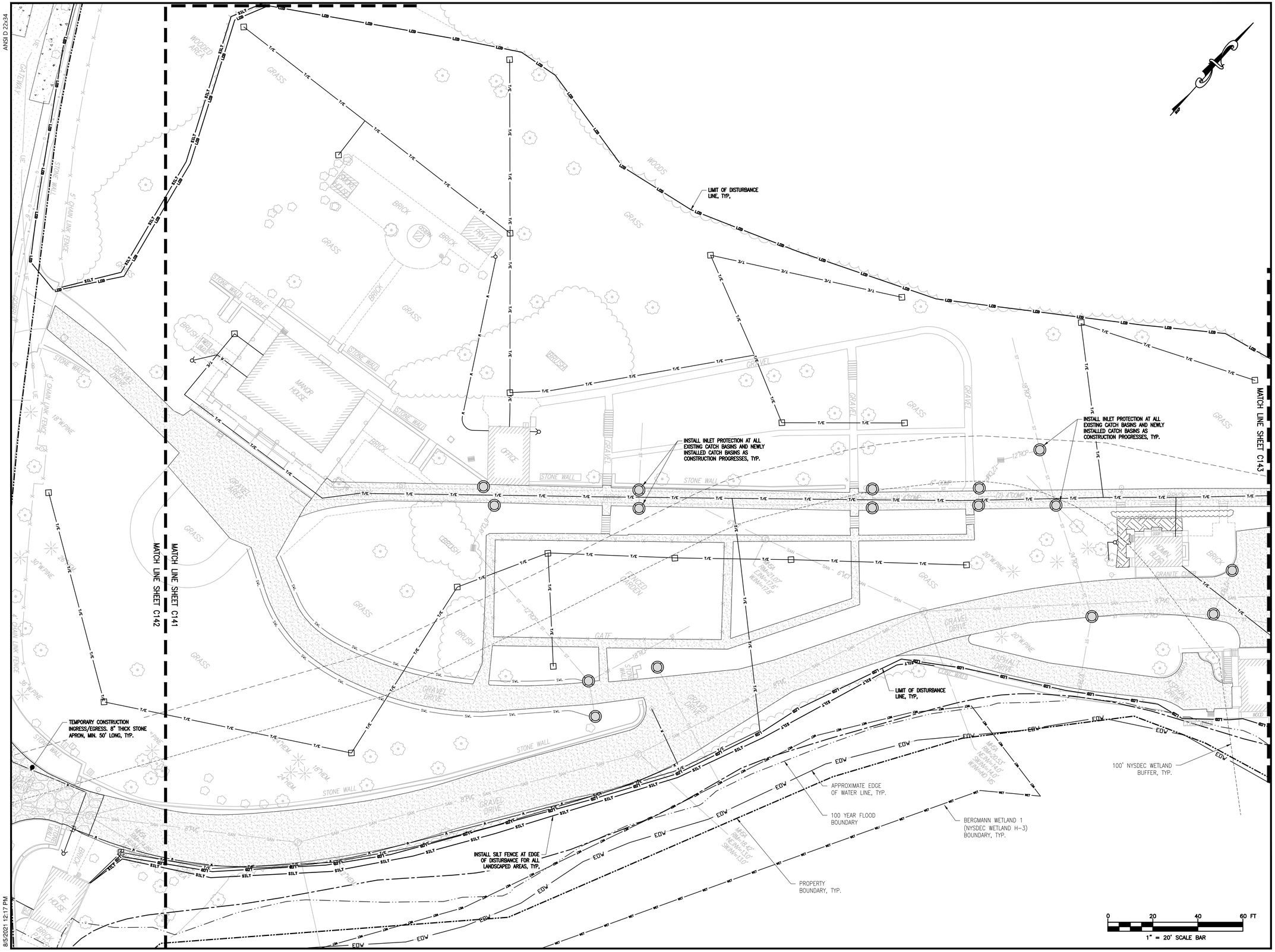

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Designer	Reviewer
P. HOLSBERGER	R. DARLING, PE
Date Issued	Project Number
8/12/2021	10107.00

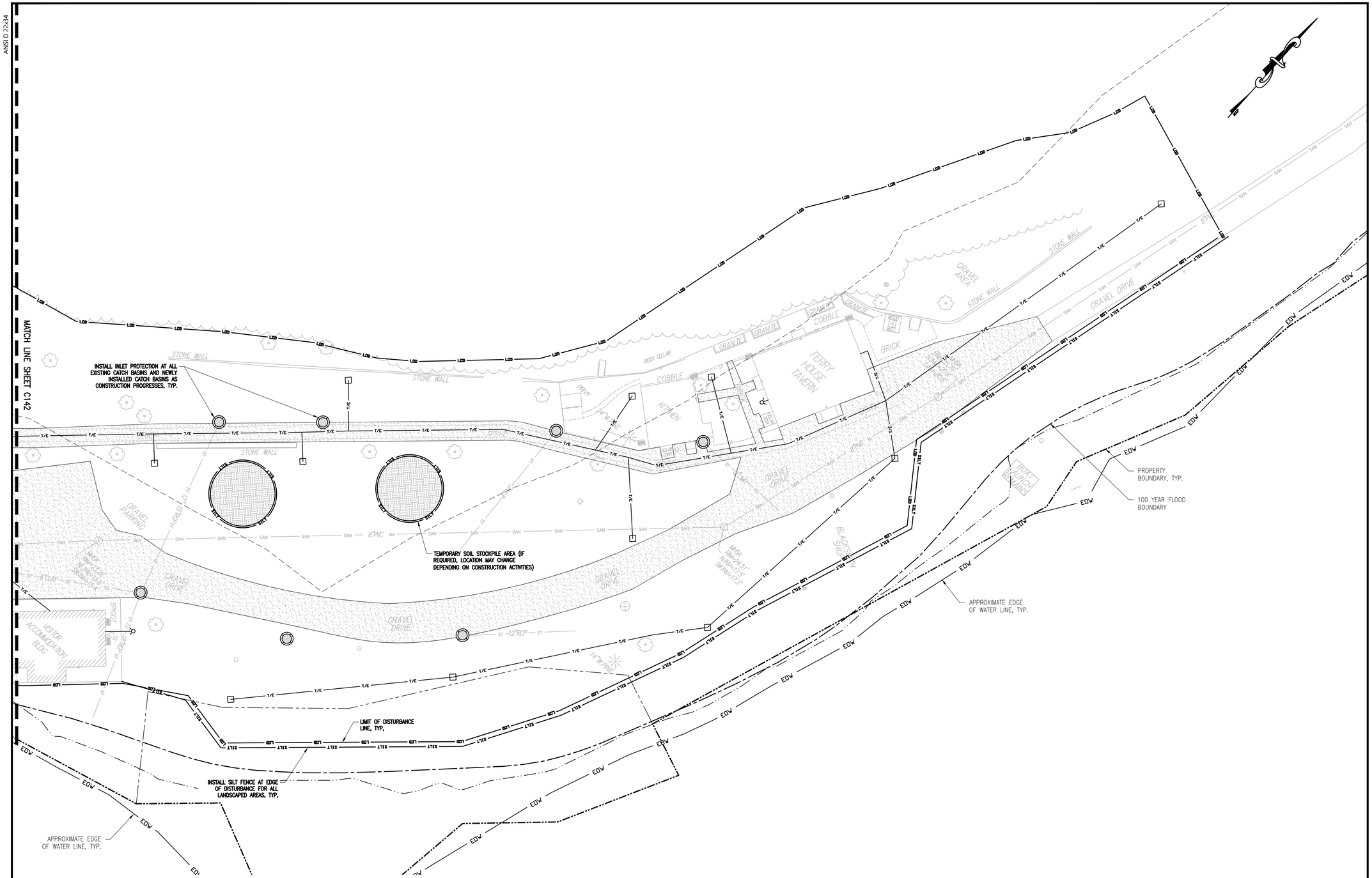
Sheet Name

EROSION AND SEDIMENT CONTROL PLAN - II

Drawing Number

C142

ANSI D 22x34



0 20 40 60 FT

1" = 20' SCALE BAR

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RESTORATION OF VAN CORTLANDT MANOR ENTRANCE PIN 8760.11

525 S RIVERSIDE AVENUE
CROTON-ON-HUDSON
WESTCHESTER, NY

Date Revised	Description

60% PROGRESS SET
NOT FOR CONSTRUCTION

Project Manager	Discipline Lead
G. URSPRUNG, PE	R. DARLING, PE
Designer	Reviewer
P. HOLSBERGER	R. DARLING, PE
Date Issued	Project Number
8/12/2021	10107.00

Sheet Name

EROSION AND SEDIMENT CONTROL PLAN - III

Drawing Number

C143

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ARCHITECTS ENGINEERS PLANNERS

APPENDIX C
Wetland and Watercourse Delineation Report

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

January 04, 2021

Mr. Richard Torres
Director – Buildings, Grounds & Security
Historic Hudson Valley
639 Bedford Road
Pocantico Hills, NY 10591

Re: Wetland/Watercourse Delineation Report
Van Cortlandt Manor Project
Parcel I.D. No. 79.17-2-4, 79.17-2-6, 79.17-2-7, 79.17-2-9
Village of Croton-on-Hudson, Westchester County, New York

Dear Mr. Torres:

In accordance with our Scope of Services, Bergmann performed a wetland and watercourse delineation study of the Van Cortlandt Manor Project (Project) site located on Westchester County parcel I.D. numbers 79.17-2-4, 79.17-2-6, 79.17-2-7 and 79.17-2-9. The Project's Study Area is located in the Village of Croton-on-Hudson, Westchester County, New York (refer to Figure 1, Study Area Location Map). The field delineation was performed by Bergmann on November 12, 2020. The intent of the field visit was to identify and delineate the boundaries of any potentially jurisdictional aquatic resources (i.e. wetlands and streams) that may be located within the Study Area (refer to Figure 2, Aerial Location Map).

Preliminary Data Gathering

Preliminary data gathering was used to compile and review information that may be helpful in identifying wetlands and/or areas of interest during the field delineation. Preliminary data gathering included a review of the following resources:

- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soil survey mapping for Westchester County, New York,
- United States Federal Emergency Management Agency (FEMA) Floodplain maps for Westchester County, New York,
- United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) mapping,
- New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands (FWW) mapping, and
- New York State Water Quality Classifications mapping.

The NRCS Westchester County Soil Survey showed that the Study Area contained the following eight (8) soil types and their hydric soil classifications (refer to Figure 3, NRCS Hydric Soil Survey Map and Attachment B, NRCS Custom Soil Resource Report for Westchester County, New York:

- Fluvaquents-Udifluvents complex, frequently flooded (Ff). Rated 59% hydric.
- Hinckley loamy sand, 8 to 15 percent slopes (HnC). Rated 0% hydric.
- Knickerbocker fine sandy loam, 8 to 15 percent slopes (KnC). Rated 0% hydric.
- Natchaug and Catden mucks, ponded, 0 to 2 percent slopes (NdA). Rated 98% hydric.
- Riverhead loam, 3 to 8 percent slopes (RhB). Rated 0% hydric.

- Riverhead loam, 25 to 50 percent slopes (RhE). Rated 0% hydric.
- Udorthents, wet substratum (Uc). Rated 6% hydric.
- Urban land (Uf). Rated 0% hydric.

Review of the available FEMA data indicated that the Study Area is located on two (2) Flood Insurance Rate Map (FIRM) (Panels #36119C0109F and #36119C0128F). the Study Area is within four zones: Zone AE – "Regulatory Floodway," Zone AE "1% Annual Chance Flood Hazard," Zone X – "0.2% "Annual Chance Flood Hazard" and Zone X – "Area of Minimal Flood Hazard." (refer to Figure 4, FEMA Flood Hazard Area Map).

A desktop review of the available USFWS NWI digital data indicated that the Study Area is located within the Lower Hudson Watershed (HUC 02030101). There are three (3) NWI mapped features within the Study Area. One (1) estuarine and marine wetland (E2EM1P6), one (1) estuarine and marine deepwater (E1UBL6) and one (1) freshwater forested/shrub wetland (PFO1S) (refer to Figure 5, National Wetland Inventory Map).

Review of the available NYSDEC freshwater wetland (FWW) mapping indicated there is one (1) NYSDEC FWW (ID: H-3, Class 1) and its corresponding checkzone located within the Study Area (refer to Figure 6, NYSDEC Freshwater Wetland and Stream Map.)

Review of the New York State Water Quality Classification mapping identified no New York State streams within the Study Area (please refer to Figure 6).

Field Delineation Results

During the field delineation, wetlands were identified and delineated in accordance with the Corps of Engineers 1987 Wetland Delineation Manual and accompanying 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0. Any location meeting the three (3) wetland criteria (wetland hydrology, hydrophytic vegetation and hydric soils) was identified and delineated. Streams were identified and delineated based on morphological and hydrological characteristics of the channel.

The newly implemented federal Navigable Waters Protection Rule (NWPR) specifies which aquatic features (i.e. wetlands and streams) are considered federally jurisdictional Waters of the United States (WOTUS). In general, perennial, and intermittent streams and wetlands that are directly adjacent to a perennial or intermittent stream are considered WOTUS. It is important to note that some streams and wetlands may be delineated but are not considered federally jurisdictional WOTUS under the NWPR and are therefore not regulated by the U.S. Army Corps of Engineers ("Corps" or "USACE)". Jurisdictional status is based on the professional opinion of Bergmann and must be confirmed through the Jurisdictional Determination (JD) process by Corps.

Generally, the upland habitat encountered within the Study Area consisted of developed land and mowed/shrubby fields. An upland deciduous forest surrounded the Study Area to the north and northeast, with an emergent wetland surrounding the Study Area to the east, west and south. A shopping center and South Riverside Ave were present to the northwest of the Study Area.

One (1) Palustrine emergent (PEM) wetland and one (1) stormwater detention basin were identified and delineated within the Study Area (Figure 7, Delineated Resources Map). In order to document site conditions, a U.S. Army Corps of Engineers (Corps) Wetland Determination Data Form was completed for each wetland and upland reference (Attachment D, USACE Wetland Determination Data Forms & Linear Waters of the U.S. Field

Classification Forms). Information on the delineated wetlands can be found in Table 1 and photographs of the wetland are included in Attachment C.

It should be noted that the recently constructed stormwater detention basin was delineated to show its location, however it was not determined to be a wetland. As such, a USACE data form was not filled out for it.

No streams were delineated within the Study Area.

Table 1: Wetlands Identified within the Study Area

Wetland I.D.[1]	Cowardin Classification[2]	Latitude[3]	Longitude[3]	Size[4] (acres)	Jurisdiction[5]	Hydrology Indicator(s)[6]	Dominant Species[6]	Hydric Soil Indicator(s)[6]
Wetland 1	PEM	41.190749	-73.878114	4.11	USACE / NYSDEC	A1, A3, B9, C1, D3	Acer platanoides, Acer saccharinum, Phragmites australis, Vitis riparia, Rosa multiflora	A4, S7

Notes:

1. Bergmann map designation.
2. PEM – Palustrine Emergent
3. Center of wetland in North American Datum, 1983.
4. Total acreage of wetland located within the Study Area.
5. Jurisdictional status is the opinion of Bergmann and must be confirmed by the USACE and/or state agencies through the JD process.
6. As determined using the USACE Wetland Determination Data Form, Northcentral & Northeast Regional Supplement.

If you have any questions or require additional information, contact me by phone at 518.669.7277 or email at jhill@bergmannpc.com.

Sincerely,

Jake Hill
Natural Resource Scientist, BERGMANN

Attachments:

- Attachment A: Figures
  - Figure 1. Study Area Location Map
  - Figure 2. Aerial Imagery Map
  - Figure 3. NRCS Hydric Soil Survey Map
  - Figure 4. FEMA Flood Hazard Area Map
  - Figure 5. National Wetland Inventory Map
  - Figure 6. NYSDEC Freshwater Wetland and Stream Map
  - Figure 7. Delineated Resources Map
- Attachment B: NRCS Custom Soil Resource Report for Westchester County, New York
- Attachment C: Representative Study Area Photographs
- Attachment D: USACE Wetland Determination Data Forms & Linear Waters of the U.S. Field Classification Forms

ATTACHMENT A
Figures

Historic Hudson Valley
Van Cortlandt Manor

STUDY AREA LOCATION MAP

Fig. 1

2,000 Feet

N

Village of Croton-on-Hudson, Westchester County, New York

Historic Hudson Valley Van Cortlandt Manor

AERIAL IMAGERY MAP

Fig. 2

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York

Historic Hudson Valley
Van Cortlandt Manor

NRCS HYDRIC SOIL SURVEY MAP

Fig. 3

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York

Historic Hudson Valley Van Cortlandt Manor

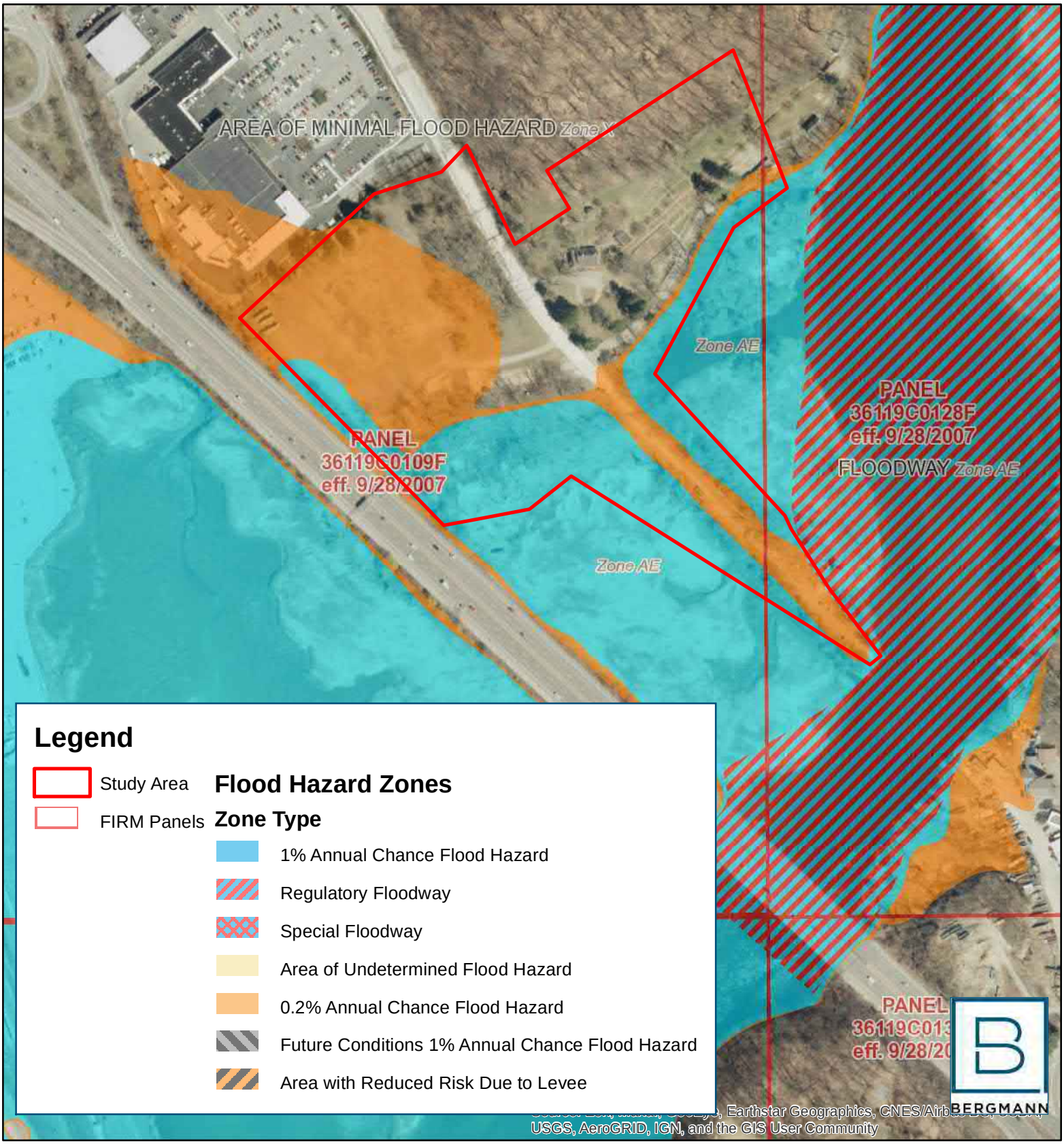
FEMA FLOOD HAZARD AREA MAP

Fig. 4

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York



Historic Hudson Valley
Van Cortlandt Manor

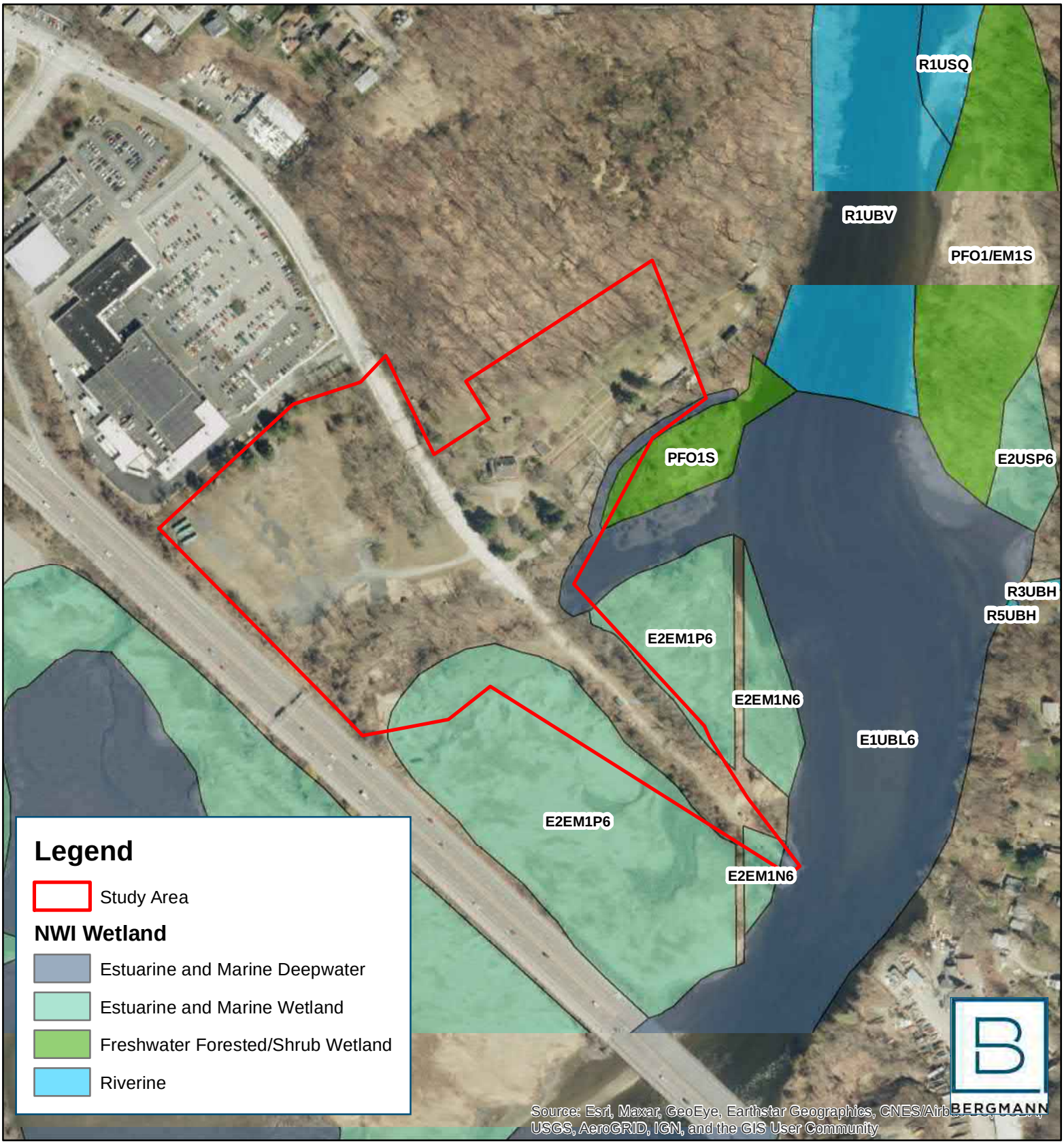
NATIONAL WETLAND INVENTORY MAP

Fig. 5

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York



Historic Hudson Valley Van Cortlandt Manor

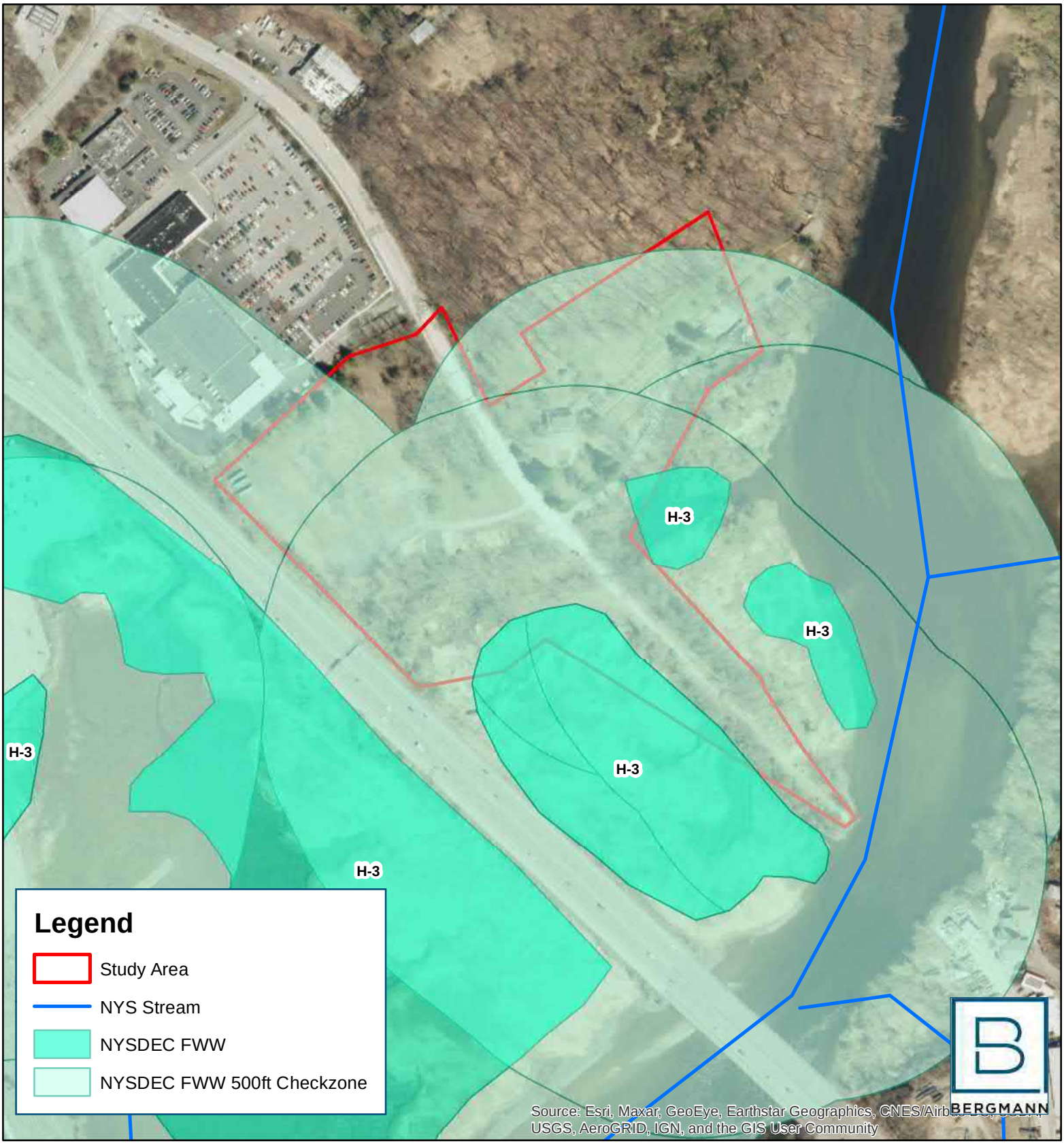
NYSDEC FRESHWATER WETLAND & STREAM MAP

Fig. 6

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York



Historic Hudson Valley
Van Cortlandt Manor

DELINEATED RESOURCES MAP

Fig. 7

300 Feet

N

Village of Croton-on-Hudson, Westchester County, New York

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

ATTACHMENT B
NRCS Custom Soil Resource Report for Westchester County, New York

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Westchester County, New York

November 20, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

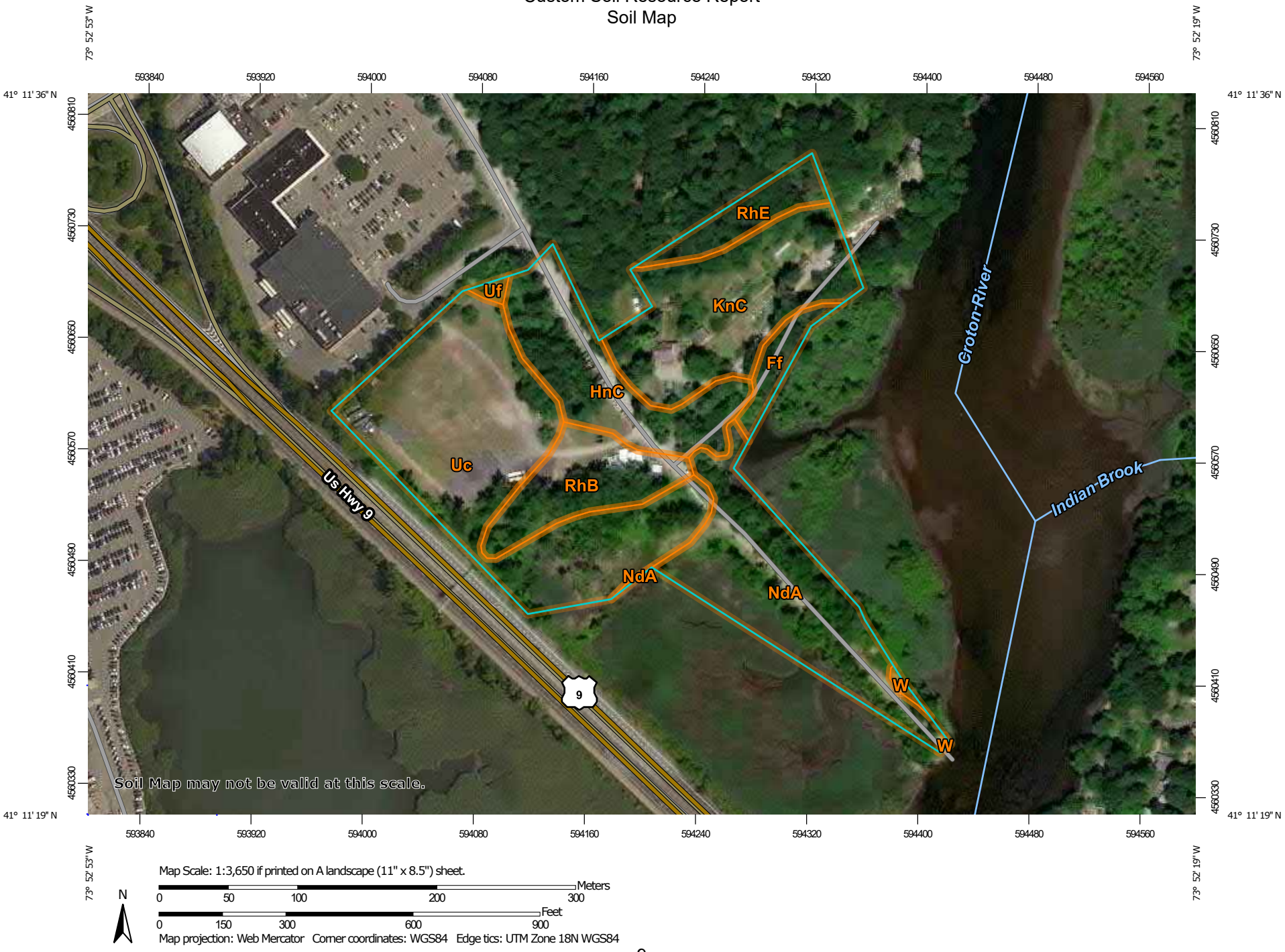
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:3,650 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2011—Oct 17, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ff	Fluvaquents-Udifluvents complex, frequently flooded	0.5	2.6%
HnC	Hinckley loamy sand, 8 to 15 percent slopes	2.5	13.2%
KnC	Knickerbocker fine sandy loam, 8 to 15 percent slopes	3.5	18.9%
NdA	Natchaug and Catden mucks, ponded, 0 to 2 percent slopes	3.4	18.3%
RhB	Riverhead loam, 3 to 8 percent slopes	1.6	8.7%
RhE	Riverhead loam, 25 to 50 percent slopes	0.8	4.3%
Uc	Udorthents, wet substratum	6.2	33.3%
Uf	Urban land	0.1	0.4%
W	Water	0.1	0.3%
Totals for Area of Interest		**18.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a

given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Westchester County, New York

Ff—Fluvaquents-Udifluvents complex, frequently flooded

Map Unit Setting

National map unit symbol: bd8k
Elevation: 100 to 3,000 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents and similar soils: 50 percent
Udifluvents and similar soils: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Alluvium with highly variable texture

Typical profile

H1 - 0 to 5 inches: gravelly silt loam
H2 - 5 to 70 inches: very gravelly silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: FrequentNone
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 15 percent
Available water capacity: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Udifluvents

Setting

Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise

Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Alluvium with a wide range of texture

Typical profile

H1 - 0 to 4 inches: gravelly silt loam
H2 - 4 to 70 inches: very gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 19.98 in/hr)
Depth to water table: About 24 to 72 inches
Frequency of flooding: FrequentNone
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Low (about 5.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Sun

Percent of map unit: 3 percent
Landform: Depressions
Hydric soil rating: Yes

Knickerbocker

Percent of map unit: 2 percent
Hydric soil rating: No

Riverhead

Percent of map unit: 2 percent
Hydric soil rating: No

Ridgebury

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Leicester

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Hinckley

Percent of map unit: 2 percent
Hydric soil rating: No

Palms

Percent of map unit: 1 percent
Landform: Swamps, marshes
Hydric soil rating: Yes

Carlisle

Percent of map unit: 1 percent
Landform: Marshes, swamps
Hydric soil rating: Yes

HnC—Hinckley loamy sand, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2svm9
Elevation: 0 to 1,480 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Hinckley and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hinckley

Setting

Landform: Outwash plains, kames, eskers, moraines, outwash terraces, outwash deltas, kame terraces
Landform position (two-dimensional): Shoulder, toeslope, footslope, backslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, riser
Down-slope shape: Convex, linear, concave
Across-slope shape: Linear, convex, concave
Parent material: Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 8 inches: loamy sand
Bw1 - 8 to 11 inches: gravelly loamy sand
Bw2 - 11 to 16 inches: gravelly loamy sand
BC - 16 to 19 inches: very gravelly loamy sand
C - 19 to 65 inches: very gravelly sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Low (about 3.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Sudbury

Percent of map unit: 5 percent
Landform: Outwash terraces, kame terraces, outwash plains, moraines, outwash deltas
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Base slope, tread
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Hydric soil rating: No

Merrimac

Percent of map unit: 5 percent
Landform: Eskers, moraines, outwash terraces, outwash plains, kames
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Side slope, head slope, nose slope, crest, riser
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Windsor

Percent of map unit: 5 percent
Landform: Outwash terraces, outwash deltas, kames, eskers, moraines, kame terraces, outwash plains
Landform position (two-dimensional): Shoulder, backslope, footslope, toeslope
Landform position (three-dimensional): Nose slope, side slope, crest, head slope, riser
Down-slope shape: Linear, concave, convex
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

KnC—Knickerbocker fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: bd8t
Elevation: 100 to 800 feet
Mean annual precipitation: 46 to 50 inches

Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Knickerbocker and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Knickerbocker

Setting

Landform: Deltas, terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Sandy glaciofluvial deposits or deltaic deposits

Typical profile

H1 - 0 to 9 inches: fine sandy loam
H2 - 9 to 19 inches: fine sandy loam
H3 - 19 to 31 inches: loamy fine sand
H4 - 31 to 60 inches: loamy fine sand

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: F144AY022MA - Dry Outwash
Hydric soil rating: No

Minor Components

Riverhead

Percent of map unit: 5 percent
Hydric soil rating: No

Hinckley

Percent of map unit: 5 percent
Hydric soil rating: No

Pompton

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed soils, occasionally flooded
Percent of map unit: 1 percent
Hydric soil rating: No

NdA—Natchaug and Catden mucks, ponded, 0 to 2 percent slopes

Map Unit Setting
National map unit symbol: 2w672
Elevation: 0 to 1,100 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition
Natchaug and similar soils: 45 percent
Catden and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Natchaug

Setting
Landform: Depressions, depressions, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Highly decomposed organic material over loamy glaciofluvial deposits and/or loamy glaciolacustrine deposits and/or loamy till

Typical profile
Oa1 - 0 to 12 inches: muck
Oa2 - 12 to 31 inches: muck
2Cg1 - 31 to 39 inches: silt loam
2Cg2 - 39 to 79 inches: fine sandy loam

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.01 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Very high (about 17.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Hydrologic Soil Group: B/D
Ecological site: F144AY042NY - Semi-Rich Organic Wetlands
Hydric soil rating: Yes

Description of Catden

Setting

Landform: Depressions, depressions, depressions
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Highly decomposed herbaceous organic material and/or highly decomposed woody organic material

Typical profile

Oa1 - 0 to 2 inches: muck
Oa2 - 2 to 79 inches: muck

Properties and qualities

Slope: 0 to 2 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.14 to 14.17 in/hr)
Depth to water table: About 0 to 6 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Very high (about 26.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8w
Hydrologic Soil Group: B/D
Ecological site: F144AY042NY - Semi-Rich Organic Wetlands
Hydric soil rating: Yes

Minor Components

Fredon

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Sun

Percent of map unit: 5 percent
Landform: Depressions
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Fluvaquents

Percent of map unit: 3 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Udifluvents

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

RhB—Riverhead loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: bd9g
Elevation: 0 to 930 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Riverhead and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting

Landform: Deltas, terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 25 inches: sandy loam
H3 - 25 to 30 inches: loamy sand
H4 - 30 to 60 inches: loamy sand

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.4 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Pompton
Percent of map unit: 5 percent
Hydric soil rating: No

Charlton
Percent of map unit: 4 percent
Hydric soil rating: No

Hinckley
Percent of map unit: 3 percent
Hydric soil rating: No

Knickerbocker
Percent of map unit: 3 percent
Hydric soil rating: No

RhE—Riverhead loam, 25 to 50 percent slopes

Map Unit Setting
National map unit symbol: bd9k
Elevation: 0 to 950 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition
Riverhead and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverhead

Setting
Landform: Terraces, deltas

Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy glaciofluvial deposits overlying stratified sand and gravel

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 25 inches: sandy loam
H3 - 25 to 30 inches: loamy sand
H4 - 30 to 60 inches: loamy sand

Properties and qualities

Slope: 25 to 50 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Pompton

Percent of map unit: 5 percent
Hydric soil rating: No

Charlton

Percent of map unit: 4 percent
Hydric soil rating: No

Hinckley

Percent of map unit: 3 percent
Hydric soil rating: No

Knickerbocker

Percent of map unit: 3 percent
Hydric soil rating: No

Uc—Udorthents, wet substratum

Map Unit Setting

National map unit symbol: bd7g
Elevation: 50 to 2,400 feet

Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Udorthents, wet substratum, and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents, Wet Substratum

Typical profile

H1 - 0 to 4 inches: gravelly loam
H2 - 4 to 72 inches: very gravelly loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 5.95 in/hr)
Depth to water table: About 6 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water capacity: Low (about 4.6 inches)

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Urban land

Percent of map unit: 5 percent
Hydric soil rating: Unranked

Raynham

Percent of map unit: 2 percent
Hydric soil rating: Yes

Fredon

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Paxton

Percent of map unit: 2 percent
Hydric soil rating: No

Ipswich

Percent of map unit: 2 percent
Landform: Tidal marshes
Hydric soil rating: Yes

Hinckley

Percent of map unit: 2 percent
Hydric soil rating: No

Uf—Urban land

Map Unit Setting

National map unit symbol: bd7j
Elevation: 50 to 2,400 feet
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Riverhead

Percent of map unit: 2 percent
Hydric soil rating: No

Chatfield

Percent of map unit: 2 percent
Hydric soil rating: No

Udorthents, wet substratum

Percent of map unit: 2 percent
Hydric soil rating: No

Unadilla

Percent of map unit: 2 percent
Hydric soil rating: No

Sutton

Percent of map unit: 2 percent
Hydric soil rating: No

W—Water

Map Unit Setting

National map unit symbol: bd7z
Mean annual precipitation: 46 to 50 inches
Mean annual air temperature: 46 to 52 degrees F

Frost-free period: 115 to 215 days
Farmland classification: Not prime farmland

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Soil Information for All Uses

Suitabilities and Limitations for Use

The Suitabilities and Limitations for Use section includes various soil interpretations displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each interpretation.

Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Hydric Rating by Map Unit

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

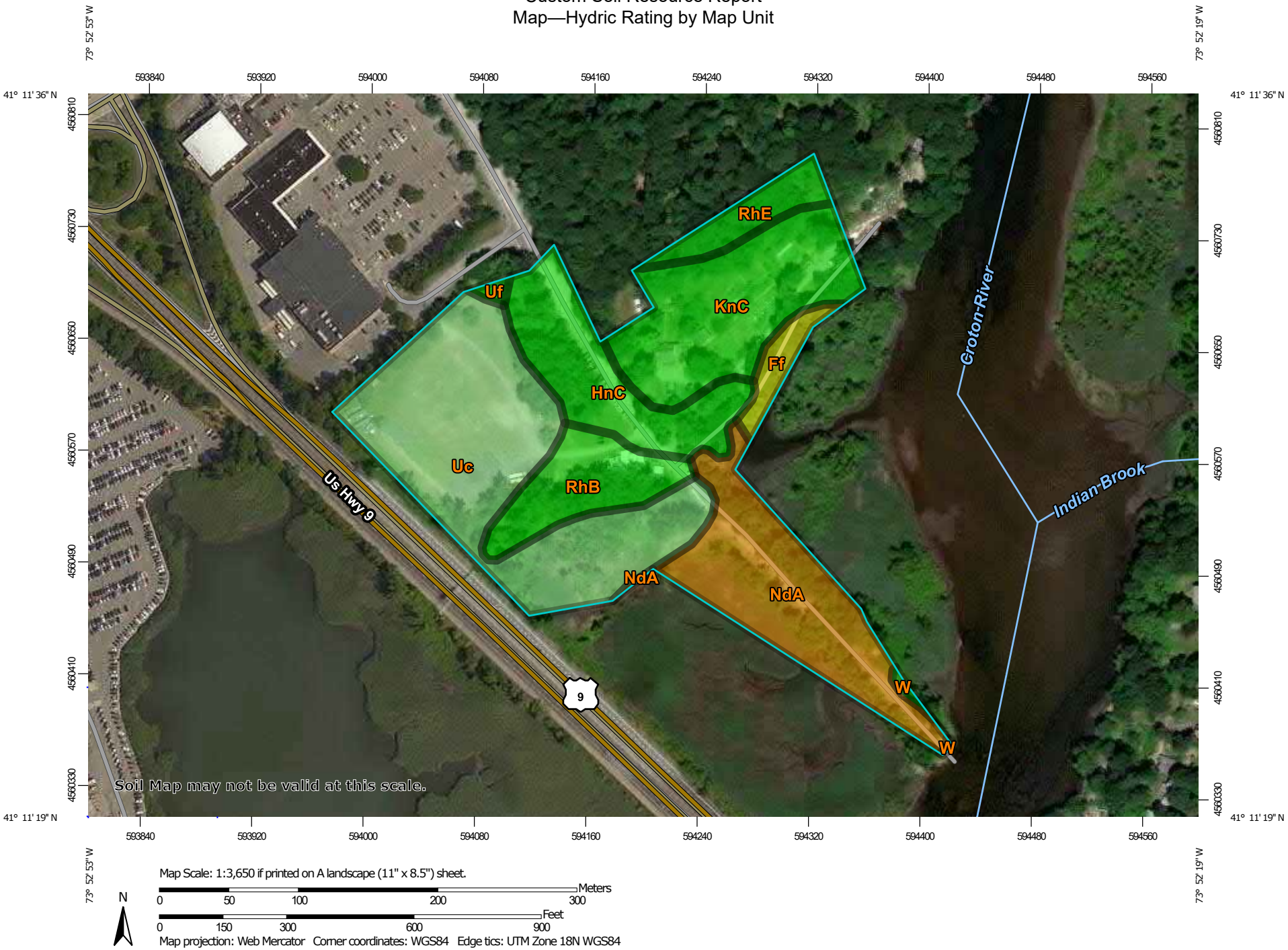
Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Map—Hydric Rating by Map Unit



Map Scale: 1:3,650 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 16, Jun 11, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 26, 2011—Oct 17, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ff	Fluvaquents-Udifluvents complex, frequently flooded	59	0.5	2.6%
HnC	Hinckley loamy sand, 8 to 15 percent slopes	0	2.5	13.2%
KnC	Knickerbocker fine sandy loam, 8 to 15 percent slopes	0	3.5	18.9%
NdA	Natchaug and Catden mucks, ponded, 0 to 2 percent slopes	98	3.4	18.3%
RhB	Riverhead loam, 3 to 8 percent slopes	0	1.6	8.7%
RhE	Riverhead loam, 25 to 50 percent slopes	0	0.8	4.3%
Uc	Udorthents, wet substratum	6	6.2	33.3%
Uf	Urban land	0	0.1	0.4%
W	Water	0	0.1	0.3%
Totals for Area of Interest			**18.6**	**100.0%**

Rating Options—Hydric Rating by Map Unit

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

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Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

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United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf

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ATTACHMENT C
Representative Study Area Photographs

Photo 1: Wetland 1, PEM, facing south.

Photo 2: Wetland 1, PEM, facing northeast.

Photo 3: Stormwater detention basin, facing northeast

Photo 4: Stormwater detention basin, facing southeast.

Photo 5: Representative upland habitat, facing northwest.

Photo 6: Representative upland habitat, facing southeast.

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ATTACHMENT D

USACE Wetland Determination Data Forms

&

Linear Waters of the U.S. Field Classification Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Van Cortlandt Manor City/County: Croton-on-Hudson/ Westchester Sampling Date: 11/12/2020

Applicant/Owner: Van Cortlandt Manor State: NY Sampling Point: W001 (PEM)

Investigator(s): M. Robson Ph.D., J.Hill Section, Township, Range: No PLSS

Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): None Slope %: 0

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 41.190336 Long: -73.877968 Datum: NAD 83

Soil Map Unit Name: Uc - Udorthents, wet substratum NWI classification: Estuarine and Marine Wetland (E2EM1P6)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation N , Soil N , or Hydrology Y significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N , Soil N , or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area**
Hydric Soil Present?	Yes X	No ____	**within a Wetland?** **Yes** X **No** ____
Wetland Hydrology Present?	Yes X	No ____	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Significantly disturbed hydrology casued by drainage ditch running along the western boundary of Study Area along with direct adjacency to Croton Expressway. Wetland point taken directly downgradient of drainage ditch. Representative PEM to Wetland 1.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- ____ High Water Table (A2)
- X Saturation (A3)
- ____ Water Marks (B1)
- ____ Sediment Deposits (B2)
- ____ Drift Deposits (B3)
- ____ Algal Mat or Crust (B4)
- ____ Iron Deposits (B5)
- ____ Inundation Visible on Aerial Imagery (B7)
- ____ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- ____ Aquatic Fauna (B13)
- ____ Marl Deposits (B15)
- X Hydrogen Sulfide Odor (C1)
- ____ Oxidized Rhizospheres on Living Roots (C3)
- ____ Presence of Reduced Iron (C4)
- ____ Recent Iron Reduction in Tilled Soils (C6)
- ____ Thin Muck Surface (C7)
- ____ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ____ Surface Soil Cracks (B6)
- ____ Drainage Patterns (B10)
- ____ Moss Trim Lines (B16)
- ____ Dry-Season Water Table (C2)
- ____ Crayfish Burrows (C8)
- ____ Saturation Visible on Aerial Imagery (C9)
- ____ Stunted or Stressed Plants (D1)
- ____ Geomorphic Position (D2)
- X Shallow Aquitard (D3)
- ____ Microtopographic Relief (D4)
- ____ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ____	Depth (inches): 0.5
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes X	No ____	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
N/A

Remarks:
Surface water present. Saturation of soils present at surface.

VEGETATION – Use scientific names of plants.

Sampling Point: W001 (PEM)

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer platanoides*	10	Yes	UPL
2. *Acer saccharinum*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *Absent*			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Phragmites australis*	80	Yes	FACW
2. *Solidago canadensis*	10	No	FACU
3. *Rubus idaeus*	10	No	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100	=Total Cover	
Woody Vine Stratum (Plot size: 15)			
1. *Vitis riparia*	20	Yes	FAC
2. *Rosa multiflora*	20	Yes	FACU
3.			
4.			
	40	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	90	x 2 =	180
FAC species	20	x 3 =	60
FACU species	40	x 4 =	160
UPL species	10	x 5 =	50
Column Totals:	160 (A)		450 (B)

Prevalence Index = B/A = 2.81

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point W001 (PEM)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	5YR 2.5/1	100					Muck	Heavy hydrogen sulfide smell
8-10	5YR 3/2	100					Sandy	Gravely sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- X Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- X Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: River Alluvium gravel

Depth (inches): 10

Hydric Soil Present? **Yes** X **No** ___

Remarks:

Refusal at 10 inches due to large amount of river alluvium gravel present. Multiple indicators present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Van Cortlandt Manor City/County: Croton-on-Hudson/ Westchester Sampling Date: 11/12/2020

Applicant/Owner: Van Cortlandt Manor State: NY Sampling Point: W001 (UPL)

Investigator(s): M. Robson Ph.D., J.Hill Section, Township, Range: No PLSS

Landform (hillside, terrace, etc.): Mowed field. Local relief (concave, convex, none): None Slope %: 0

Subregion (LRR or MLRA): LRR R, MLRA 144A Lat: 41.190613 Long: -73.878225 Datum: NAD 83

Soil Map Unit Name: Uc - Udorthents, wet substratum NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation Y , Soil N , or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation N , Soil N , or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area**
Hydric Soil Present?	Yes ____	No X	**within a Wetland?** **Yes** ____ **No** X
Wetland Hydrology Present?	Yes ____	No X	If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Upland representative to Wetland 1. Vegetation at area is disturbed due to regular mowing at sampling point.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? **Yes** ____ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
N/A

Remarks:
No primary or secondary indicators present.

VEGETATION – Use scientific names of plants.

Sampling Point: W001 (UPL)

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer platanoides*	15	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
	15	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15')			
1. *Elaeagnus umbellata*	15	Yes	UPL
2. *Lonicera tatarica*	10	Yes	FACU
3. *Rosa multiflora*	5	No	FACU
4.			
5.			
6.			
7.			
	30	=Total Cover	
Herb Stratum (Plot size: 5')			
1. *Poa pratensis*	60	Yes	FACU
2. *Solidago canadensis*	30	Yes	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	=Total Cover	
Woody Vine Stratum (Plot size: 15')			
1. *Vitis riparia*	10	Yes	FAC
2.			
3.			
4.			
	10	=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	10	x 3 =	30
FACU species	105	x 4 =	420
UPL species	30	x 5 =	150
Column Totals:	145 (A)		600 (B)

Prevalence Index = B/A = 4.14

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Vegetation disturbed at sampling point due to mowing.

SOIL

Sampling Point W001 (UPL)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 3/3	100					Loamy/Clayey	
5-12	10YR 4/6	100					Sandy	large amount of gravel present in profile.

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

[2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L)**
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock Layer

Depth (inches): 12

Hydric Soil Present? **Yes** ___ **No** X

Remarks:

Refusal at 12 inches from rock layer. Sandy layer from 5 to 12 inches had a large amount of gravel present. No indicators present.

APPENDIX D
Historic Preservation Office Consultation Correspondence

U.S. Department of Transportation
Federal Highway Administration

New York Division

Leo W. O'Brien Federal Building
11A Clinton Avenue, Suite 719
Albany, NY 12207
518-431-4127
Fax: 518-431-4121
New York.FHWA@dot.gov

January 4, 2021

In Reply Refer To:
HPD-NY

Kathleen Wolfanger
Regional Cultural Resource Coordinator
New York State Department of Transportation, Region 8
4 Burnett Boulevard
Poughkeepsie, NY 12063

Subject: PIN 8760.11 - Section 106 and Section 4(f) Consultation
Restoration of Van Cortlandt Manor Entrance
Village of Croton-on-Hudson, Westchester County

Dear Ms. Wolfanger:

Please reference your letter dated November 23, 2020 requesting our review and concurrence that the requirements of 36 CFR Part 800 and 23 CFR Part 774 have been met for the subject project.

The New York State Department of Transportation (NYSDOT) applied the criteria of effect in accordance with Section 800.5(b) of 36 CFR Part 800 and concluded that the undertaking will result in *No Adverse Effect* on historic resources on or eligible for inclusion on the National Register (NR) of Historic Places.

On November 20, 2020, the New York State Historic Preservation Office (SHPO) provided an opinion that based on their review of the submitted information the project will have *No Adverse Effect* upon historic resources.

On November 30, 2020, the National Park Service (NPS) was contacted regarding the subject project's proposed work, which is located on the Van Cortlandt Manor site and is a National Historic Landmark (NHL). The NPS did not provide a response within the 30 days they are allotted under current consultation procedures, resulting in their concurrence.

We have reviewed the information provided and have determined that this project will have *No Adverse Effect* on the Van Cortlandt Manor site, listed on the National Register of Historic Places. The requirements of 36 CFR Part 800 have been met for this project.

Your November 23 letter also requested our concurrence that the requirements of 23 CFR 774 have been met for the subject project. NYSDOT applied the *de minimis* impact criteria to the historic Section 4(f) resource. SHPO and NPS have been informed of the Federal Highway Administration's (FHWA) intent to make a Section 4(f) *de minimis* use finding as a result of their concurrence with the *No Adverse Effect* determination.

The proposed use of the Section 4(f) property for the subject project is considered minor and will not adversely affect the features, attributes, or activities that qualify for protection under Section 4(f). We have determined that the project will have a Section 4(f) *de minimis* use on the NR- and NHL-listed Van Cortlandt Manor site. The requirements of 23 CFR Part 774 have been met for this project.

During our review of the proposed scope of work for the subject project, FHWA noted several items that are ineligible for Federal-aid. Federal participation is limited to work related to the project's transportation purpose and need within the publicly-owned right-of-way. The work associated with the proposed concrete pads for visitor reception courtyard area, "Long Walk" brick pavers and lighting, landscaping, electric and data installation, Visitor Accommodation Building and Office Building roof systems replacement, site entrance signs and security gate, barn/workshop maintenance facility, and Starlight Drive-in entrance gate do not appear to be eligible for Federal-aid.

If you have any questions, please feel free to contact me at (518) 431-8855.

Sincerely,

JARED ANDREW GROSS Digitally signed by JARED ANDREW GROSS
Date: 2021.01.04 12:52:07 -05'00'

Jared A. Gross, P.E.
Area Engineer

cc: M. Lynch, Division Director, NYSHPO (19PR02857)
C. Turton, Community Planner, NPS
O. Trocard, Local Projects Unit, NYSDOT Region 8
M. Zamierowski, Local Projects Unit, NYSDOT, Region 8
B. Repetti, Environmental Specialist, NYSDOT, Region 8

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

APPENDIX E
Threatened and Endangered Species Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
Phone: (631) 286-0485 Fax: (631) 286-4003

In Reply Refer To: July 30, 2021
Consultation Code: 05E1LI00-2021-SLI-0471
Event Code: 05E1LI00-2021-E-01871
Project Name: Restoration of Van Cortlandt Manor Entrance Road, South Riverside Avenue (CR 305), PIN 8760 Rev

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

Project Summary

Consultation Code: 05E1LI00-2021-SLI-0471
Event Code: 05E1LI00-2021-E-01871
Project Name: Restoration of Van Cortlandt Manor Entrance Road, South Riverside Avenue (CR 305), PIN 8760 Rev
Project Type: ** OTHER **
Project Description: Provide renovations to the National Register listed Van Cortlandt Manor which includes improvements to the entrance, drainage improvements, widened pathways, concrete pads for event tents, water/sewer/electrical utilities, a barn/workshop, improvements to existing buildings, and landscaping.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.1918996,-73.87697588571798,14z

Counties: Westchester County, New York

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
http://www.fws.gov/northeast/nyfo/es/section7.htm

In Reply Refer To: July 30, 2021
Consultation Code: 05E1NY00-2021-SLI-2258
Event Code: 05E1NY00-2021-E-11197
Project Name: Restoration of Van Cortlandt Manor Entrance Road, South Riverside Avenue (CR 305), PIN 8760 Rev

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/

eagle_guidance.html). Additionally, wind energy projects should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
(607) 753-9334

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Long Island Ecological Services Field Office
340 Smith Road
Shirley, NY 11967-2258
(631) 286-0485

Project Summary

Consultation Code: 05E1NY00-2021-SLI-2258
Event Code: 05E1NY00-2021-E-11197
Project Name: Restoration of Van Cortlandt Manor Entrance Road, South Riverside Avenue (CR 305), PIN 8760 Rev
Project Type: ** OTHER **
Project Description: Provide renovations to the National Register listed Van Cortlandt Manor which includes improvements to the entrance, drainage improvements, widened pathways, concrete pads for event tents, water/sewer/electrical utilities, a barn/workshop, improvements to existing buildings, and landscaping.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.1918996,-73.87697588571798,14z

Counties: Westchester County, New York

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Boggs, James

From:	Pacella, Christina (DEC) <Christina.Pacella@dec.ny.gov>
Sent:	Tuesday, January 19, 2021 11:47 AM
To:	Boggs, James
Cc:	dec.sm.DEP.R3; Fisher, Joshua M (DEC); dos.sm.Cstl.OPD; Masi, Lisa M (DEC); pdisanto@crotononhudson-ny.gov
Subject:	3-5522-00352_00004 (FW) PERMIT JURISDICTION REVIEW - RESTORATION OF VAN CORTLANDT MANOR ENTRANCE
Follow Up Flag:	Follow up
Flag Status:	Flagged

James Boggs
Bergmann Architects, Engineers, Planners
280 East Broad Street
Rochester, New York 14604

RE: Restoration of Van Cortlandt Manor Entrance
Village of Croton-on-Hudson, Westchester County
DEC Facility ID# 3-5522-00352/00004
Permit Jurisdiction Screening

Dear Mr. Boggs:

The New York State Department of Environmental Conservation (DEC or Department) has reviewed your inquiry received by this office on December 10, 2020. The project involves the restoration of the entrance to the Van Cortlandt Manor located in the Village of Croton-on-Hudson. Proposed restoration activities include extending Americans with Disabilities Act (ADA) compliant sidewalks; crosswalks, a bus turnaround, and bus shelter; formalized bus parking spaces; electric vehicle charging stations; concrete pads for visitor reception courtyard area; resurfacing the existing concrete road with oil and stone; replacing the existing “Long Walk” brick pavers with an ADA-accessible walkway with lighting; cleaning up existing landscaping, trimming/removing trees to protect historic buildings and restoring retaining walls; the installation of electric and data for site lighting and security cameras; new roofing systems at the Visitor Accommodation Building and the Office Building; and improved site entrance signs and security gate entrance located on South Riverside Avenue. A barn/workshop maintenance facility will be constructed on the former Starlight Drive-in parcel and the entrance gate to this parcel will be improved.

Based upon our review of your inquiry and submitted materials, the Department offers the following comments:

PROTECTION OF WATERS
The following stream is located within or near the site you indicated:

Name	Class	DEC Water Index Number	Status

Croton River	SC/B	H-31	Protected, Navigable

A Protection of Waters permit is required to physically disturb the bed or banks (up to 50 feet from stream) of any streams identified above as "protected." A Protection of Waters permit is required for any excavation or filling below the mean high-water line of any waterbodies and contiguous wetlands identified above as "navigable."

If a permit is not required, please note, however, you are still responsible for ensuring that work shall not pollute any stream or waterbody. Care shall be taken to stabilize any disturbed areas promptly after construction, and all necessary precautions shall be taken to prevent contamination of the stream or waterbody by silt, sediment, fuels, solvents, lubricants, or any other pollutant associated with the project.

FRESHWATER WETLANDS

Your project site is near or in Freshwater Wetland H-3, Class 1. A Freshwater Wetlands permit is required for any physical disturbance within these boundaries or within the 100-foot adjacent area. To have the boundary delineated, please contact Josh Fisher, Bureau of Ecosystem Health, at (845) 256-3113 or at joshua.fisher@dec.ny.gov.

WATER QUALITY CERTIFICATION

If the United States Army Corps of Engineers (ACOE) requires a permit for work completed in or impacting a federal wetland or waters of the U.S., you will need a Section 401 Water Quality Certification from the Department. Please contact the ACOE at (917) 790-8411 for a determination.

STATE-LISTED SPECIES

The DEC has reviewed the State's Natural Heritage records. We have determined that the site is located within or near records of the following state-listed species:

Name	Status
Bald eagle (*Haliaeetus leucocephalus*)	Threatened
Atlantic sturgeon (*Acipenser oxyrinchus*)	Endangered
Shortnose sturgeon (*Acipenser brevirostrum*)	Endangered

Any potential impacts of the proposed project on these species should be fully evaluated during the review of the project pursuant to the State Environmental Quality Review Act (SEQR). A permit is required for the incidental taking of any species identified as "endangered" or "threatened," which can include the removal of habitat. In addition, project modifications may be needed to avoid or adequately mitigate any potential impacts identified.

Bald eagle:

The project site is located within close proximity to a documented bald eagle nest and wintering area. Department staff have reviewed the location and the project information relative to the known eagle nest and determined that based on the distance to the nest, the intervening land use, and the ambient noise conditions in the vicinity, no additional noise-related impacts are anticipated to the nest from the proposed work. To avoid impacts to wintering eagles, work should be conducted from April 1st to November 1st. For work proposed outside of this window, additional information is needed, including when construction activities are proposed to take place, what equipment would be used, and noise levels from construction and operational activities as compared to ambient noise levels.

For technical questions regarding this species and their associated avoidance and mitigation measures, please contact Lisa Masi, Bureau of Wildlife at lisa.masi@dec.ny.gov.

Please note, information on eagle nest locations represents our current knowledge of these resources. New eagle nests could be documented with each breeding season and would, at that point, need to be addressed as well. It is best to check in each year to see if any new nests have been established.

Atlantic and shortnose sturgeon:
According to the submitted project information, no in-water work is proposed for this project. Therefore, impacts to sturgeon individuals and habitat are not anticipated. Further review of these species are not required at this time.

The absence of data does not necessarily mean that other rare or state-listed species, natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

STATE POLLUTION DISCHARGE ELIMINATION SYSTEM (SPDES) CONSTRUCTION
If the overall project will disturb one or more acres of land, the project sponsor must obtain coverage under the current SPDES General Permit for Stormwater Discharge from Construction Activity (GP-0-20-001) and develop a Stormwater Pollution Prevention Plan (SWPPP) that conforms to requirements of the General Permit.

As this site is within a Municipal Separate Storm Sewer System (MS4) community, the municipality is responsible for review and acceptance of the SWPPP, and the MS-4 Acceptance Form must be submitted to the Department. For information on stormwater and the general permits, see the DEC website at http://www.dec.ny.gov/chemical/8468.html.

CULTURAL RESOURCES
We have reviewed the statewide inventory of archaeological resources maintained by the New York State Museum and the New York State Office of Parks, Recreation, and Historic Preservation. These records indicate that the project is located within an area considered to be sensitive with regard to archaeological resources. In addition, the Van Cortlandt Manor is listed on the National Register of Historic Places. The project sponsor should submit project materials to the New York State Historic Preservation Office's online Cultural Resource Information System (CRIS) to initiate the review process. Information on submitting to the system and access to it are available at http://www.nysparks.com/shpo/.

FEMA FLOODPLAIN
The project site is located within a Federal Emergency Management Agency (FEMA) Floodplain. The municipality will determine if any additional jurisdictions are applicable to the proposal.

COASTAL MANAGEMENT ZONE, LOCAL WATERFRONT REVITALIZATION PLAN
The project site is located within the Coastal Management Zone. If the Department has individual permit approvals for this project, the Department would review it in accordance with Coastal Management Program requirements. For additional information about the Coastal Management Zone, please contact the NYS Department of State (DOS), (518) 474-6000. Furthermore, the project site is located

within a Local Waterfront Revitalization Plan (LWRP) area. Please contact the municipality to determine if further coordination is required.

OTHER

Other permits from this Department or other agencies may be required for projects conducted on this property now or in the future. Also, regulations applicable to the location subject to this determination occasionally are revised and the project sponsor should, therefore, verify the need for permits if your project is delayed or postponed. This determination regarding the need for permits will remain effective for a maximum of one year. More information about DEC permits may be found on our website, www.dec.ny.gov, under "Regulatory" then "Permits and Licenses." Application forms may be downloaded at http://www.dec.ny.gov/permits/6081.html.

Please contact this office if you have questions regarding the above information. Thank you.

Sincerely,
Christina Pacella
Division of Environmental Permits
Region 3, Telephone No. (845) 256-2250

cc: Josh Fisher, NYSDEC Bureau of Ecosystem Health
Lisa Masi, NYSDEC Bureau of Wildlife
NYSDOS Office of Planning and Development
Village of Croton-on-Hudson Village Clerk

Christina Pacella
Environmental Engineering Technician, Division of Environmental Permits
New York State Department of Environmental Conservation
21 South Putt Corners Road, New Paltz, NY 12561
P: (845) 256-2250 | F: (845) 255-4659 | christina.pacella@dec.ny.gov
www.dec.ny.gov

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program
625 Broadway, Fifth Floor, Albany, NY 12233-4757
P: (518) 402-8935 | F: (518) 402-8925
www.dec.ny.gov

September 8, 2020

Alyssa Hughes
Bergmann
2 Winners Circle, Suite 102
Albany, NY 12205

Re: Restoration of Van Cortlandt Manor Entrance Road Project, South Riverside Avenue (CR 305)
County: Westchester Town/City: Cortlandt

Dear Ms. Hughes:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 3 Office, Division of Environmental Permits, at dep.r3@dec.ny.gov, (845) 256-3054.

Sincerely,

Nicholas Conrad
Information Resources Coordinator
New York Natural Heritage Program

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The following state-listed animals have been documented in the vicinity of the project site.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed.

For information about any permit considerations for the project, please contact the NYSDEC Region 3 Office, Department of Environmental Permits, at dep.r3@dec.ny.gov, (845) 256-3054.

The following species has been documented nesting within .5 mile of the project site.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Bald Eagle	*Haliaeetus leucocephalus*	Threatened		15827
Breeding				

Bald Eagles have also regularly been documented during the winter at Croton Bay and the lower reach of the Croton River.

The following rare plants have been documented in the vicinity of the project site.

We recommend that potential impacts of the proposed project on these species be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following plants are listed as Endangered or Threatened by New York State, and are a vulnerable natural resource of conservation concern.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
The following aquatic and wetland plants have been documented along the Croton River within .25 mile of the project site.			
New England Bulrush	*Bolboschoenus novae-angliae*	Endangered	Critically Imperiled in NYS
Water Pigmyweed	*Crassula aquatica*	Endangered	Critically Imperiled in NYS
Spongy-Leaved Arrowhead	*Sagittaria montevidensis* ssp. *spongiosa*	Threatened	Imperiled in NYS

Croton Bay and the Croton River, including adjacent to the project site, is a recognized state-significant **Anadromous Fish Concentration Area**. A high concentration of anadromous fish occupy this area at critical stages of their lives, and so Croton Bay and the Croton River are of conservation concern. For more information on the Croton Bay and River Significant Coastal Fish and Wildlife Habitat, see https://www.dos.ny.gov/opd/programs/consistency/Habitats/HudsonRiver/Croton_River_and_Bay_FINAL.pdf.

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the NewYork Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to www.dec.ny.gov/animals/29384.html for Ecological Communities of New York State.

APPENDIX F
Negative Declaration Resolution

RESOLUTION

WHEREAS, Historic Hudson Valley has submitted an application to the **Water Control Commission (WCC)** of the Village of Croton-on-Hudson, for approval of a Wetland Activity Permit to implement site improvements including construction of concrete sidewalks, maintenance of historic brick walkway and stormwater management, landscape improvements, utility improvements, and roof replacements located at 525 South Riverside Avenue. Some of the site improvements will be within the 120 feet wetland/watercourse buffer zone;

WHEREAS, this proposal is considered a Type I Action under the State Environmental Quality Review Act (SEQRA); and

WHEREAS, the Water Control Commission circulated the application to other involved agencies; and

WHEREAS, the Water Control Commission declared itself Lead Agency on March 17, 2021; and

WHEREAS, a public hearing was held on March 17, 2021 after due notice; and

WHEREAS, the Water Control Commission referred the application to the Waterfront Advisory Committee to review the application for consistency with the Local Waterfront Revitalization Program (LWRP); and

WHEREAS, on May 5, 2021, the WAC reviewed the application and recommended consistency with the LWRP in its memo dated May 11, 2021; and

WHEREAS, on May 19, 2021 the Water Control Commission has reviewed the CAF dated March 2, 2021 and other documentation submitted with the application, all of which are incorporated herein by reference, and hereby determines after reviewing the LWRP policies and recommendation from the WAC that the Proposed Action complies with and is consistent with the policies, standards and conditions set forth in the Village's LWRP subject to any conditions listed below;

WHEREAS, based on the EAF and other documentation submitted with the application and the Water Control Commission's review of the criteria of significance in 6NYCRR617.7 the Water Control Commission hereby determines that there will be no significant adverse impacts resulting from the Proposed Action and hereby issues a Negative Declaration; and

WHEREAS, under Section 227-7(F) of the Village Code the Water Control Commission is the approving authority for the issuance of a Wetland Activity Permit and hereby issues a Wetland Activity Permit, subject to the conditions specified below.

NOW, THEREFORE, be it resolved, the Wetland Activity Permit application is approved, as shown on the Plan Set entitled "Restoration of Van Cortlandt Manor Entrance PIN 8760.11" Drawing Sheet CP-101 entitled "Site Plan-I", Drawing Sheet CP-102 entitled "Site Plan –II",

Drawing Sheet CP-103 entitled "Site Plan-III" dated March 8, 2021; Drawing entitled "Site Rendering" last revised May 2021, Coastal Assessment Form dated February 25, 2021; Environmental Assessment Form with USGS Topographic Map, dated March 2, 2021, Drawing Sheet CP-101 entitled "Concept Plan-1" dated April 29, 2021, and SWPPP dated April 2021, all drawings prepared by Bergmann, Architects, Engineers, Planners of Albany, New York; and correspondence submitted by NYSDOT dated April 23, 2021; subject to the conditions specified below:

1. The foregoing recitals are incorporated herein as if set forth at length.
2. That, the required permits from the NYSDEC and ACOE be obtained for any work in wetlands or buffer zones regulated by those agencies.
3. That, the final construction plans shall be provided to the Village Engineer and the Water Control Commission.
4. That, in accordance with Sections 227-8(F) and 227-8(G) of the Village Code the following conditions are established as part of the Wetland Activity Permit:
    a. That the work conducted under the Wetland Activity Permit shall be open to inspection during daylight hours, including weekends and holidays, by the approving authority or its designated representative or the Village Engineer.
    b. That the Wetland Activity Permit expiration date shall be 5/19/2022 or upon completion of the work specified therein.
    c. That the Applicant shall notify the Village Engineer of the date on which the work is to begin at least five days in advance of such commencement date.
    d. That the Wetland Activity Permit shall be prominently displayed or be available at the project site during the undertaking of the activities authorized by the permit.
    e. That, Best Management practices be used for erosion and sediment control, such as but not limited to, hay bales, silt fences, core logs, and filter bags if dewatering is needed and as shown on the plans referenced above.
    f. That, excavated soil shall be transferred to a truck and not be stock piled in the street ROW.
    g. Within 30 days after completion of all work authorized under a permit issued in accordance with this chapter, the applicant shall notify the Village Engineer of such completion which notification shall terminate the permit but not relieve the Applicant of its responsibility under this permit.
5. Within 30 days of the completion of the final restoration work, a certificate of completion of the work shall be submitted to the Village Engineer.

Motion: Mr. Leo Wiegman

Second: Chairman Stuart Greenbaum

Vote: AYES 4 NAYS 0 (Ms. Sasso was absent)

Date: May 19, 2021

FINAL

APPENDIX H
Federal Coastal Consistency Form

Village of Croton-on-Hudson

COASTAL ASSESSMENT FORM

A. INSTRUCTIONS (Please print or type all answers)

1. *Applicants, or in the case of direct actions (city, town, village) agencies, shall complete this CAF for proposed actions which are subject to the consistency review law. This assessment is intended to supplement other information used by a (city, town, village) agency in making a determination of consistency.*

2. *Before answering the questions in Section C, the preparer of this form should review the policies and explanations of policy contained in the Local Waterfront Revitalization Program (LWRP), a copy of which is on file in the (city, town, village) clerk's office. A proposed action should be evaluated as to its significant beneficial and adverse effects upon the coastal area.*

3. *If any question in Section C on this form is answered "yes", then the proposed action may affect the achievement of the LWRP policy standards and conditions contained in the consistency review law. Thus, the action should be analyzed in more detail and, if necessary, modified prior to making a determination that it is consistent to the maximum extent practicable with the LWRP policy standards and conditions. If an action cannot be certified as consistent with the LWRP policy standards and conditions, it shall not be undertaken.*

B. DESCRIPTION OF SITE AND PROPOSED ACTION:

1. Type of (city, town, village) agency action (check appropriate response):
   a) Directly undertaken (e.g. capital construction, planning activity, agency regulation, land transaction) _____
   b) Financial assistance (e.g. grant, loan, subsidy) _____
   c) Permit, approval, license, certification Wetlands Activity Permit
   d) Agency undertaking action _____

2. Describe nature and extent of action: The proposed project consists of site improvements that include the construction of concrete sidewalks, maintenance of historic brick walkway, landscape improvements, utility (elec., security, irrigation) improvements, roof replacements, and expansion of sedimentation basin (500 +/- SF), some of which will occur within the 120' wetland buffer.

3. Location of actions: 525 S Riverside Avenue, Croton-On-Hudson, NY 10520
   (street or site description)
4. Size of site: 46.9± acres

5. Present land use: National Historic Landmark
6. Present zoning classification: C-2, General Commercial; RA-40 Residential

7. List and describe any unique or unusual land forms within or contiguous to the project site (i.e. bluffs, dunes, swales, ground depressions, other geological formations):
None

8. Percent of site which contains slopes of 15% or greater: 0%

9. List and describe streams, lakes, ponds or wetlands existing within or contiguous to the project area. Give name and size of each if available:

a) Name: State Regulated Wetland H-3

b) Size (in acres): 44.1± acres

10. If an application for the proposed action has been filed with the (city, town, village) agency, the following information shall be provided:

a) Name of applicant: _____

b) Mailing address: _____

c) Telephone number: (area code) (_____) _____

d) Application number, if any: _____

11. Will the action be directly undertaken, require funding or approval by a state or federal agency? NO _____ YES X

If yes, which state or federal agency? NYSDOT/NYSDEC/FHWA

12. If the proposed action is a law, or planning or zoning document, SKIP Section "C" and go to Section "E".

C. COASTAL ASSESSMENT:

	YES	NO	N/A
1. Will the proposed action be located in, or contiguous to, or have a potentially adverse effect upon any of the resource areas identified on the coastal area map:		X	
a) Significant fish or wildlife habitats?		X	
b) Scenic resources of local or statewide significance?		X	
c) Natural protective features in an erosion hazard area?		X	

If the answer to any question above is "yes", please explain in Section D any measures which will be undertaken to mitigate any adverse effects.

	YES	NO	N/A
2. Will the proposed action have a significant effect upon:			
a) Commercial or recreational use of fish and wildlife resources?		X	
b) Scenic quality of the coastal environment?		X	
c) Development of future or existing water dependent uses?		X	
d) Operation of the State's major ports?		X	
e) Land or water uses within a small harbor area?		X	
f) Stability of the shoreline?		X	
g) Surface or groundwater quality?		X	
h) Existing or potential public recreation opportunities?		X	
i) Structures, sites or districts of historic, archeological or cultural significance to the (city, town, village), State or nation?		X	
3. Will the proposed action involve or result in any of the following:			
a) Physical alteration of land along the shoreline, land under water or coastal waters?		X	
b) Physical alteration of two (2) acres or more of land located elsewhere in the coastal area?		X	
c) Expansion of existing public services or infrastructure in undeveloped or low density areas of the coastal area?		X	
d) Energy facility not subject to Article VII or VIII of the Public Service Law?		X	
e) Mining, excavation, filling or dredging in coastal waters?		X	
f) Reduction of existing or potential public access to or along the shore?		X	
g) Sale or change in use of publicly-owned lands located on shoreline or under water?		X	
h) Development within a designated flood or erosion hazard area?	X		
i) Development on a beach, dune, barrier island or other natural feature that provides protection against flooding or erosion?		X	
j) Construction or reconstruction of erosion protective structures?		X	
k) Diminished surface or groundwater quality?		X	
l) Removal of ground cover from the site?		X	

4. Project	YES	NO	N/A
a) If project is to be located adjacent to shore:			
1. Will water-related recreation be provided?		X	
2. Will public access to the foreshore be provided?		X	
3. Does the project require a waterfront site?		X	
4. Does it supplant a recreational or maritime use?		X	
5. Do essential public services and facilities presently exist at or near the site?		X	
6. Is it located in a flood prone area?	X		
7. Is it located in an area of high erosion?		X	
b) If the project site is publicly owned:			
1. Will the project protect, maintain and/or increase the level and industrial facilities into coastal facilities?			X
2. If located in the foreshore, will access to those and adjacent lands be provided?			X
3. Will it involve the siting and construction of major energy facilities?			X
4. Will it involve the discharge of effluent from major steam electric generating and industrial facilities into coastal facilities?			X
c) Is the project site presently used by the community neighborhood as an open space or recreation area?		X	
d) Does the present site offer or include scenic views or vistas known to be important to the community?		X	
e) Is the project site presently used for commercial fishing or fish processing?		X	
f) Will the surface area of any waterways or wetland area be increased or decreased by the proposals?		X	
g) Does any mature forest (over 100 years old) or other locally important vegetation exist on this site which will be removed by the project?		X	
h) Will the project involve any waste discharges into coastal waters?		X	
i) Does the project involve surface or subsurface liquid waste disposal?		X	
j) Does the project involve transport, storage, treatment or disposal of solid waste or hazardous materials?		X	
k) Does the project involve shipment or storage of petroleum products?		X	

4. Project (continued)

	YES	NO	N/A
l) Does the project involve discharge of toxic hazardous substances or other pollutants into coastal waters?		X	
m) Does the project involve or change existing ice management practices?		X	
n) Will the project affect any area designated as a tidal or freshwater wetland?		X	
o) Will the project alter drainage flow, patterns or surface water runoff on or from the site?		X	
p) Will best management practices be utilized to control storm water runoff into coastal waters?	X		
q) Will the project utilize or affect the quality or quantity of sole source or surface water supplies?		X	
r) Will the project cause emissions which exceed federal or state air quality standards or generate significant amounts of nitrates or sulfates?		X	

D. REMARKS OR ADDITIONAL INFORMATION.

For questions answered "yes" in Section C, explain methods you will undertake to reduce adverse effects. Review the LWRP to see if the project is consistent with each policy. List policies the project is not consistent with and explain all mitigating actions.

(Add any additional sheets necessary to complete this form)

The existing sedimentation basin will be expanded as required, outside of the wetland.

The existing drainage patterns are maintained and stormwater drainage velocity is

being reduced via the use of erosion control measures.

E. SUBMISSION REQUIREMENTS.

The final version of this form shall be sent to the Department of State *(New York State Dept. of State, Coastal Management Program, 162 Washington Avenue, Albany, NY 12231)* if any question in Section C is answered "yes" and either of the following conditions is met.

- Section B.1 (a) or B.1 (b) is checked **OR**
- Section B.1 (c) and B.11 is answered "yes"

==========

If assistance or further information is needed to complete this form, please contact the Village Engineer at (914) 271-4783.

Preparer's Name: Richard Torres

Title: Director of Building, Grounds and Security

Agency: Historic Hudson Valley

Telephone No.: (914) 366-6914 E-mail: rtorres@hudsonvalley.org

Date: 3/2/2021

BERGMANN
ARCHITECTS ENGINEERS PLANNERS

APPENDIX H
Croton-on-Hudson Wetland Activity Permit

Village of **Croton-on-Hudson**

Building Department
Stanley H. Kellerhouse Municipal Building
One Van Wyck Street
Croton-on-Hudson, NY 10520-2501
Tel: 914-271-4783, Fax:914-271-3790

WETLAND PERMIT
20210001

DATE ISSUED: 05/25/2021
EXPIRATION DATE:05/25/2022

Application No.: 20210120 Application Date: 03/10/2021

Location: 525 SOUTH RIVERSIDE AVENUE

Parcel number: 079.13-004-035.00 Subdivision: Lot #

Permission is hereby granted to:

Owner Name: HISTORIC HUDSON VALLEY
639 BEDFORD ROAD
POCANTICO HILLS, NY 10591-1203

Contractor HISTORIC HUDSON VALLEY
639 BEDFORD ROAD
POCANTICO HILLS, NY 10591-1203

for the following authorized work:

SITE IMPROVEMENTS AT HISTORIC HUDSON VALLEY (VAN CORTLANDT MANOR)

at premises located at:

525 SOUTH RIVERSIDE AVENUE

pursuant to above numbered application, any other permits issued and plans and specifications approved by the Village Engineer and subject to the following conditions.

1. **This permit must be kept on the premises with one set of approved plans and specifications until full completion of the work authorized. There shall be no work performed between the hours of 8:00 p.m. and 8:00 a.m. Sunday through Saturday and between the hours of 8:00 p.m. Saturday and 10:00 a.m. Sunday.**
2. **Work conducted under a permit shall be open to inspection during daylight hours, including weekends and holidays, by the approving authority or its designated representative or the Village Engineer.**
3. **The permit holder shall notify the approving authority of the date on which the work is to begin at least five days in advance of such commencement date. Work must be inspected by the Building Department; the owner and contractor are responsible for scheduling all necessary inspections.**
4. **This permit is non-transferable and is issued based on the contractor's insurance documentation submitted with the application. This permit shall automatically become null and void if there is any lapse or cancellation of insurance coverage.**
5. **The approving authority's permit shall be prominently displayed at the project site during the undertaking of the activities authorized by the permit. Erosion and sediment control devices must be installed and inspected prior to any work commencing.**
6. **All provisions of the Village Wetland Law, Zoning Law and all other Village laws, County and State laws applicable thereto must be complied within the execution of the work authorized under this permit, whether or not shown on plans or specified in the specifications or application.**
7. **All permits shall expire upon the completion of the work specified therein. The validity of any work duly completed pursuant to an existing permit shall not be affected by the expiration of the permit, but such work shall not be continued beyond the expiration date.**
8. **Within 30 days after completion of all work authorized under a permit issued in accordance with this chapter, the applicant shall notify the Village Engineer of such completion.**

Cost of Construction: **$275.00**
Fee Received: **$275.00**

Daniel O'Connor, P.E. Village Engineer/Building Inspector

FORM NO. 1 (11/05)

VILLAGE OF CROTON-ON-HUDSON, NY

WETLAND PERMIT

PERMIT # 20210001

LOCATION OF AUTHORIZED WORK: 525 SOUTH RIVERSIDE AVENUE

DATE ISSUED: 05/25/2021
EXPIRATION DATE: 05/25/2022

Daniel O'Connor, P.E. Village Engineer/Building Inspector

NOTICE

Do not fail to apply for a Certificate of Completion upon completion of work.

This card must be prominently displayed, visible from the street at all times, until a Certificate of Completion has been granted for the work covered by the above referenced permit. This placard is only notification that a permit has been granted and is not a permit.

Village of Croton-on-Hudson

Building Department
Stanley H. Kellerhouse Municipal Building
One Van Wyck Street
Croton-on-Hudson, NY 10520-2501
Tel: 914-271-4783, Fax: 914-271-3790

Application for Wetlands Activity Permit

(Form # Eng-§227)
(Revision Date 03/2012)

APPLICATION DATE: 3/2/2021 Is this application relevant to a building permit? ☐Yes ■No

APPLICATION #: Building Permit #:

Property Information:

Section: 79.17 Block: 2 Lot: 4,7 79.13-4-35

Property Location (street address) 525 S Riverside Avenue

# of Acres or Sq. Ft.: 46.9 AC Zoning District: C-2, RA-40 Commercial Lot: ■ yes ☐ no Vacant Lot: ☐ yes X no

Applicant Information: (Person or Company Doing Work: ■ Owner ☐ Contractor ☐ Other) _____

Last Name: Torres First Name: Richard MI: J.

Company: Historic Hudson Valley

Address: 639 Bedford Road, Pocantico Hills, NY 10591

Office #: (914) 366-6900 Cell #: (914) 610-5778 Fax # N/A E-mail: rtorres@hudsonvalley.org

Property Owner: ■ Same As Above

Last Name: First Name: MI:

Company:

Address:

Phone #: Cell #: E-mail:

Description of proposed work in wetland or wetland buffer: The proposed project consists of site improvements that include construction of concrete sidewalks, maintenance of historic brick walkway with stormwater management, landscaping improvements, utility (elec., security, irrigation) improvements, roof replacements, some of which will occur within the 120' wetland buffer.

Plans & Specifications: *Note: See §227-7 of the Village Code for all requirements.*

Detail plans & specifications for the proposed wetland activity, drawn to a scale of not smaller than 1" = 50', shall show the following:

1. Estimated quantities of material to be deposited or removed
2. Pre- and post-development impervious surface area.
3. Location of any well and any septic or other waste disposal system with 50 ft. of the area to be disturbed.
4. Details of any proposed drainage system, both for the construction and the final development & maintenance requirements.
5. If creation, modification or enlargement of a pond is proposed, details of the construction of any dams, embankments, outlets or other water-control devices & deposition of the spoil material.
6. List all beneficial functions of the wetland, waterbody or watercourse which will be affected by the proposed activities.
7. Erosion and sediment controls must be provided and a schedule for their installation & maintenance.
8. Additional information may be requested by the approving authority

INSTRUCTIONS:

1. Submit eight (8) copies of all specified supporting plans & documentation when WCC is approving authority, three (3) copies when Village Engineer is approving authority and fourteen (14) copies when Planning Board is approving authority. (Note: PDF's or other acceptable electronic copies of all documents must be submitted if WCC or Planning Board is approving authority.)
2. Include a completed environmental assessment form (EAF), a Coastal Assessment Form (CAF) and a USGS topographic map with the property outlined. When the Village Engineer is approving authority, an EAF and CAF are not required.
3. If proposed project qualifies as a land development activity, a Stormwater Pollution Prevention Plan (SWPP) consistent with the requirements of Chapter 196, Article I must be submitted.
4. The approving authority for all applications is the Water Control Commission; exceptions are listed on page 2.

5. Attach Certificate of Liability Insurance naming the Village of Croton-on-Hudson as additional insured and certificate holder and documentation of Disability and Workers Compensation Insurance with the Village listed as certificate holder.

I, certify that the above information is accurate, and I am the property owner or authorized by the owner to file this application on their behalf and that I will indemnify and hold the Village harmless against any damage or injury that may be caused by or arise out of any entry onto the property in connection with the processing of the application, during construction or performance of the work or within one year after the completion of the work

Richard J. Torres — Applicant Name (please print) | Applicant's Signature | Date 5/2/2021

FOR VILLAGE USE ONLY:

Fee $_____ **Fee Paid on** _____ **(date)** **Received by:**_____

APPROVED BY: _____ (signature)

WCC VILLAGE ENGINEER PLANNING BOARD (circle one)

Approving authorities – Wetlands Law -Section 227 – F:

The approving authority for all applications shall be the Water Control Commission, except as follows:

(1) The Planning Board shall be the approving authority for any application involving property that is also the subject of a pending site plan, minor site plan, subdivision or special permit application, or fill or excavation permit, in accordance with the Code of the Village of Croton-on-Hudson, and for any application that also involves the construction or establishment of a principal building or use.

(2) The Village Engineer shall be the approving authority for any of the following activities proposed to be conducted on property not subject to regulation by the State of New York, and no public hearing shall be required:

(a) Removing water-deposited silt and/or other material in order to restore the preexisting land elevations, provided that the total amount removed does not exceed 15 cubic yards of material.

(b) Restoring land elevations that have been altered by erosion or storm damage.

(c) The construction, expansion or improvement of private residential or recreational facilities, as otherwise legally permitted, provided that the total amount of material deposited, removed or regraded does not exceed 15 cubic yards.

(d) The construction of driveways not associated with any other construction approvals where alternative means of access are proved to be impractical, provided that the amount of material to be deposited or regraded in connection with such construction does not exceed 100 cubic yards.

(e) The use of harmless chemicals, dyes and other similar substances to maintain or study any wetland.

(f) Decorative landscaping and planting in wetlands when covering less than 1/10 of an acre.

(3) Where the Water Control Commission or Village Engineer initiates a review of an application submitted pursuant to this chapter and determines that because of the scope, nature, location or potential environmental impact of the action which could result from approval of the wetlands permit a public hearing would be either necessary or appropriate, the application shall be immediately forwarded to the Planning Board for public hearing, whereupon the Planning Board shall become the approving authority for such application.