Memorandum

To:	Mr. Benjamin Schachtner Woodstock Youth Center Task Force16 Rock Ledge Road Woodstock, NY 12498
From:	Jere Tatich, Project Manager
Date:	July 18, 2024
Reference:	Wetland and Stream Delineation and Approximation Summary Town of Woodstock Town of Woodstock, Ulster County, New York
EDR Project No:	24093

At the request of Town of Woodstock, Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR) conducted a wetland and stream delineation on an approximately 4.4-acre area located at 56 Rock City Road (the Study Area) on July 1, 2024. These delineation efforts were conducted to support a proposed public recreational venue that will host both indoor and outdoor facilities with operational support elements to serve the Town of Woodstock and surrounding communities. The Study Area occurs on portions of parcels 27.10-3-2 and 27.10-3-1.100. In addition to providing detailed delineations within the Study Area, EDR also provided resource approximations while on site for a 6.86-acre area, which spanned a portion of parcel 27.10-3-2 and on parcel 27.10-3-11.200 (the Approximation Study Area). The Study Area and Approximation Study Area are shown on Figure 1 (Appendix A).

Review of Background Data

Prior to conducting our field work, EDR performed a desktop review of publicly available wetland resources data, including the National Wetland Inventory (NWI) mapping and New York State Department of Environmental Conservation (NYSDEC) Freshwater Wetlands. Our review indicated there are no NWI mapped features or NYSDEC mapped wetlands within the Study Area, but there are two forested (PFO1C) NWI mapped wetlands within the Approximation Study Area. No NYSDEC-mapped wetlands are located in the Approximation Study Area. The closest NYSDEC wetland is WT-12, a class 3 wetland which is approximately 0.23 miles southeast of the Study Area. There are no NYSDEC mapped streams within the Study Area, however, one NYSDEC Class C(T) stream is located approximately 470 feet east of the Study Area (Figure 2).

A review of the Study Area and the Approximation Study Area on Web Soil Survey maps identified six distinct soil series; Morris-Tuller complex, gently sloping, very bouldery, which is classified as predominantly non-hydric, Raynham silt loam, which is classified as predominantly non-hydric, Wellsboro and Wurtsboro

soils, gently sloping, very bouldery, which is classified as non-hydric, Williamson silt loam, 0 to 3 percent slopes, which is classified as non-hydric, Oquaga-Arnot-Rock outcrop complex, sloping, which is classified as non-hydric, and Tunkhannock gravelly loam, 0 to 3 percent slopes, which is classified as non-hydric. Although soil mapping units may have a non-hydric rating in the online databases indicating non-hydric or potentially non-hydric conditions, this is for general use and does not supersede specific conditions documented in the field.

Field Visit and Methodology

On July 1, 2024, two EDR Environmental Scientists visited the site to delineate the wetlands and streams present within the Study Area.

The identification of wetland boundaries was based on the methodology described in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987). Determination of wetland boundaries was also guided by the methodologies presented in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (Regional Supplement) (USACE, 2012). Attention was given to the size of the wetland (including portions that may extend outside the Study Area), evidence of disturbance, and the identification of potential hydrologic connections between wetlands, as these factors could influence jurisdictional status. Wetland boundaries were defined in the field with sequentially numbered pink surveyor's flagging and mapped using a GPS unit.

Delineated features were characterized according to the wetlands and deepwater habitats classification system used in NWI mapping (Cowardin et al., 1979). Data were collected from sample plots in representative wetland cover types and recorded on Routine Wetland Determination forms (see Appendix B) The data collected at each delineated wetland included dominant vegetation, hydrology indicators, and soil characteristics. Data to confirm upland areas were also collected adjacent to wetland boundaries and in areas where aerial photograph signatures or existing wetland mapping suggested potential wet conditions. Upland data were also documented and recorded on United States Army Corps of Engineers (USACE) Routine Wetland Determination forms (see Appendix B)

Wetland hydrology was evaluated based on the presence of primary and secondary indicators. The Regional Supplement lists the following primary indicators of wetland hydrology: (A1) surface water, (A2) high water table, (A3) saturation, (B1) water marks, (B2) sediment deposits, (B3) drift deposits, (B4) algal mat or crust, (B5) iron deposits, (B7) inundation visible on aerial imagery, (B8) sparsely vegetated concave surface, (B9) water-stained leaves, (B13) aquatic fauna, (B15) marl deposits, (C1) hydrogen sulfide odor, (C3) oxidized rhizospheres on living roots, (C4) presence of reduced iron, (C6) recent iron reduction in tilled soils, and (C7) thick muck surface. Per the Regional Supplement, the presence of any one of these primary indicators is sufficient evidence that wetland hydrology is present. In addition, the Regional Supplement identifies the following secondary indicators, which were also used by EDR to determine wetland hydrology: (B6) surface soil cracks, (B10) drainage patterns, (B16) moss trim lines, (C2) dry-season water table, (C8) crayfish burrows, (C9) saturation visible on aerial imagery, (D1) stunted or stressed plants, (D2) geomorphic position, (D3)

shallow aquitard, (D4) microtopographic relief, and (D5) results of the FAC-neutral test. In accordance with the Regional Supplement, in the absence of a primary indicator, the presence of any two secondary indicators is considered a suitable indication of wetland hydrology.

Wetland vegetation is indicated by a dominance of hydrophytic plant species, or species that have adapted to grow in areas of inundation and soil saturation. Assessment of vegetation focused on the identification of dominant plant species in four categories: trees (greater than or equal to 3 inches diameter at breast height), saplings/shrubs (less than 3 inches diameter at breast height and greater than 3.2 feet tall), herbs (all vegetation less than 3.2 feet tall), and woody vines. Dominance was determined by visually estimating those species having the greatest absolute percent cover within each stratum. Vascular plant nomenclature and wetland indicator status for dominant plant species were determined by the Wildnote field data collection application, which refers to the USDA PLANTS Database (USDA NRCS, 2021) and the National Wetland Plant List, an interagency effort compiled by the USACE (2020). The indicator status represents a plant's likelihood of occurring in wetlands. The five indicator statuses and their probability of being observed in a wetland are as follows:

- Obligate (OBL): Plants occur within wetlands more than 99% of the time
- Facultative Wetland (FACW): Plants occur within wetlands 67 to 99% of the time
- Facultative (FAC): Plants occur within wetlands 33 to 67% of the time
- Facultative Upland (FACU): Plants occur within wetlands 1 to 33% of the time
- Upland (UPL): Plants occur within wetlands less than 1% of the time

Those plant species that are not assigned an indicator status in the National Wetland Plant List are assumed to always be found in uplands and assigned an indicator status of UPL. Wetlands are indicated by a dominance and/or prevalence of hydrophytic plant species (i.e., those assigned an indicator status of OBL, FACW, or FAC).

Hydric soils are those that are poorly drained and are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part of the soil layer. The presence of hydric soils is indicative of the possible presence of wetlands (Environmental Laboratory, 1987). Hydric soil conditions were determined in the field through observation of soils composition, color, and morphology. Soils data were collected by using a Dutch auger and tiling spade to examine the soil profile. Soil colors were determined using Munsell Soil Charts (Munsell Color, 2009). Information concerning soil series, color, texture, and matrix and concentration color was recorded at each sample location and used to determine whether the soils displayed hydric characteristics.

Streams were identified according to the Cowardin et al. (1979) classification system, and stream boundaries were determined based on the presence of ordinary high-water mark (OHWM) characteristics, including a "clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris" (33 CFR 329.11). Stream boundaries were defined and mapped in the field using the same method as described above for wetlands. The OHWM, if present, was determined

through evaluation of hydrologic, geomorphic, and biological characteristics in accordance with the USACE *National Ordinary High Water Mark Field Delineation Manual for Rivers and Streams: Interim Version* (David et al., 2022). Data regarding stream morphology, stream bank and channel width, water depth, stream bed substrate, in-stream cover, and biological indicators were collected and recorded on OHWM data forms (see Appendix B).

At each wetland or stream within the Approximation Study Area, general observations of vegetation, soils, and hydrology were recorded following the general guidance within the U.S. Army Corps of Engineers (USACE) *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0 (*USACE, 2012), and the *New York State Freshwater Wetland Delineation Manual* (NYSDEC, 1995). Where wetlands and streams were observed, the approximate boundaries of the features were mapped using GPS equipment.

Photographs were taken of each wetland and stream delineated/approximated within the Study Area (see Appendix C).

Findings

Wetland Delineation

One wetland (26-W001) totaling 1.04-acres was delineated within the Study Area. A detailed description of this wetland, and its associated upland, can be found below. Wetland 26-W001 consists of both forested and emergent community types and spans 1.04 acres within the Study Area.

The forested portion of this wetland lies on the west side of the Study Area and spans 0.64 acre. The canopy of this wetland was dominated by red maple (*Acer rubrum*) with a single eastern white pine (*Pinus strobus*) sapling. The herbaceous layer was dominated by fringed sedge (*Carex crinita*) and pointed broom sedge (*Carex scoparia*).

The indicators of wetland hydrology observed in this wetland included sparsely vegetated concave surface (B8), water-stained leaves (B9), and the results of FAC-neutral test (D5).

Soil samples in the forested portion of wetland 26-W001 included a surface layer from 0-10 inches with a matrix of dark grayish brown (10YR 4/2) with strong brown (7.5YR 4/6) found as concentrations in the matrix. A single subsurface soil layer was found from 10-18 inches which had a dark grayish brown (10YR 4/2) matrix with dark yellowish brown (10YR 4/6) and gray (10YR 6/1) redoximorphic features found as concentrations and depletions in the matrix. This soil profile satisfies the hydric soil indicator of depleted matrix (F3). The soil texture within this soil was silty clay loam. Wetland 26-W001 continues north outside of the Study Area and spans approximately 4.5-acres across the adjacent parcel.

Photographs 1 and 2 in Appendix C depict the forested portion of wetland 26-W001 and the associated upland. The wetland/upland boundary was abrupt, generally followed site topography and presence of

water-stained leaves. The upland was a mixed coniferous-deciduous forest which was dominated by eastern white pine and sugar maple (*Acer saccharum*) in the canopy with partridgeberry (*Mitchella repens*), garlic mustard (*Alliaria petiolata*), cleavers (*Galium aparine*), and swans' sedge (*Carex swanii*) dominating the herbaceous layer. No evidence of wetland hydrology or hydric soils occurred in the upland.

The emergent portion of wetland 26-W001 lies on the north side of the Study Area and spans 0.40 acre. This wetland is fed by an intermittent stream from the west and feeds another stream north out of the Study Area.

There were multiple white pine trees and saplings within the boundaries of the wetland, but it was not a dominant species throughout. The only shrub found within the wetland was multiflora rose (*Rosa multiflora*) but was not dominant throughout. Herbaceous species dominant in the wetland included reed canary grass (*Phalaris arundinacea*), uptight sedge (*Carex stricta*), and sensitive fern (*Onoclea sensibilis*).

The hydrology indicators observed in this wetland included drainage patterns (B10), microtopographic relief (D4), and the results of FAC-neutral test (D5).

Two layers were observed in the soil profile. The surface layer from 0-10 inches was 90% very dark grayish brown (2.5Y 3/2) with 10% dark yellowish brown (10YR 3/6) redoximorphic concentrations in the matrix. The subsurface layer from 10-18 inches was 70% dark gray (10YR 4/1) in the matrix with 30% strong brown (7.5YR 4/6) redoximorphic features in the soil matrix. This soil profile satisfied the redox dark surface (F6) hydric soil indicator. The soil textures found in this soil profile were clay loam and silt loam.

Photographs 3 and 4 in Appendix C depict the emergent portion of wetland 26-W001 and the associated upland. The wetland/upland boundary was abrupt as it generally followed site topography. The adjacent upland was a meadow which was dominated by reed canary grass and black swallow wort (*Cynanchum louiseae*), The prevalence of reed canary grass, a FACW species, in the upland made the vegetation pass the prevalence index indicator, however the upland did not show any evidence of wetland hydrology or hydric soils.

Stream Delineation

Three streams were observed within the Study Area totaling 493.3 linear feet. Two of these streams were ephemeral, while the one was intermittent.

The ephemeral streams (26-ST002, 26-ST003) found on-site were similar and both collected runoff from nearby residential yards which flowed south into intermittent stream 26-ST001. The ephemeral streams had widths ranging between 2 and 3 feet based on OHWM on the opposing banks. These streams were categorized by a gentle gradient through their reaches and dramatic break in slope. The substrate of these streams was silt or clay. Indicators used in defining the streams OHWM were break in slope and change in vegetation type and density from absent to graminoids. Biological indicators were absent at the time of survey. Baseflow was present at the time of survey, however there was significant rain in the area the day

before the survey. Photographs 5 and 6 in Appendix C depict characteristics used to determine the OHWM of streams 26-ST002 and 26-ST003.

Intermittent stream 26-W001 lies on the north side of the Study Area and flows east into wetland 26-W001. At the time of survey, Stream 26-ST001 has a width ranging from 3 to 6 feet based on OHWM on the opposing banks with water depths of 8 inches deep. This stream was characterized by a gentle gradient, overhanging vegetation, and a substrate of gravel, silt, and cobbles. Baseflow was present at the time of survey due to recent heavy rain. The indicators used to determine this streams OHWM included: break in slope, change in particle size distribution from cobbles to silt, change in vegetation density from absent to graminoids, and the presence of organic litter. Photographs 7 and 8 in Appendix C depicts the characteristics used to determine the OHWM of stream 26-ST001

Wetland and stream approximation

A total of 4.62 acres of forested wetlands were approximated within the Approximation Study Area during this field effort. Dominant vegetation within these wetlands included red maple, yellow birch, uptight sedge, bladder sedge (*Carex intumescens*), and fringed sedge. Upland hummocks were present within the wetland which typically had eastern white pine, shagbark hickory (*Carya ovata*), or Japanese barberry (*Berberis thunbergii*) on them, but these lied within the greater wetland complex. The wetland-upland boundary typically followed site topography with the wetlands lying at the toe of hillslopes. Photographs 9 in Appendix C depict the interior of approximated forested wetlands.

A total of 0.15 acre of open water wetlands were approximated within the Approximation Study Area during this field effort. This wetland lies in a bowl-shaped depression and is connected to a larger forested wetland. duck weed (*Lemna minor*) was dominant on the water surface with upland vegetation surrounding the edge of the wetland. Photograph 10 in Appendix C shows the approximated open water wetland.

Uplands within the Approximation Study Area consisted of forested hillslopes which were typically dominated by sugar maple and white pine with Japanese barberry in the understory. These areas were typically hillslopes or hill tops with moderate slopes leading down to the wetlands. Photograph 11 depicts a typical upland forest found within the Approximation Study Area.

Five intermittent streams were observed within the Approximation Study Area totaling 1,341.63 linear feet. The stream gradients were gentle (0-5%) to moderate (6-11%). These streams were linear and had channel bed substrates of boulders, cobbles, gravel, sand and silt. These streams typically had heavily vegetated stream banks and collected water from the surrounding wetland. Photograph 12 in Appendix C depict typical characteristics of approximated streams.

Conclusion and Next Steps

Within the Study Area, EDR identified a single wetland, 26-W001, totaling 1.04 acres. Wetland 26-W001 continues beyond the Study Area to the north and desktop analysis indicates there is an offsite stream which, based on desktop review, is a tributary to a water of the US (WOTUS). Therefore, it is likely that wetland 26-W001 will be considered federally jurisdictional by the USACE.

Of the three streams delineated within the Study Area, one (26-ST001) is anticipated to be considered jurisdictional by the USACE under section 404 of the Clean Water Act. The remaining two delineated streams are anticipated to be non-jurisdictional because they are both ephemeral (i.e., temporary drainage features flowing only in direct response to precipitation events).

Wetland 26-W001 is not anticipated to fall under NYSDEC jurisdiction based on current 6 NYCRR Part 664 regulations because it is less than 12.4 acres, is not a wetland of unusual local importance, and does not have a connection to a mapped NYSDEC wetland. However, due to changes to 6 NYCRR Part 664 to become effective in 2025 EDRs anticipated jurisdiction determination may be subject to change. No streams delineated within the Study Area are anticipated to be considered jurisdictional by the NYSDEC based on NYSDEC stream classification/mapping. However, final determination of jurisdictional status of all waters delineated within the Study Area must be made by the USACE and NYSDEC.

Within the Approximated Study Area, EDR identified another section of wetland 26-W001 within the Approximation Study Area. Since this portion of the wetland also shares a connection to a tributary to WOTUS, it is also anticipated to be considered federally jurisdictional by the USACE. The streams approximated on site also appear to be tributaries to WOTUS and are also anticipated to be considered federally jurisdictional by the USACE. However, final determinations of state or federal jurisdictional status can only be made by the USACE and/or NYSDEC following the completion of formal wetland and stream delineations.

Dredge or fill (impacts) to regulated Waters of the United States (WOTUS) may require permit coverage under Sections 404 and 401 of the Clean Water Act in accordance with Nationwide Permit 42 (Recreational Facilities). All conditions of Nationwide Permit 42 and the NYSDEC Blanket Water Quality Certification must be satisfied for the proposed action to receive coverage. Conditions of the DEC Blanket Water Quality Certification can be found in Attachment 3 of the New York State Water Quality Certification Decision dated October 15, 2021. If the proposed impact exceeds the half-acre threshold of Nationwide permit 42, then an individual permit will be, along with a Section 401 Water Quality Certification. However, if impacts are less than 1/10 of an acre, a nationwide permit will likely not be needed.

List of Appendices

EDR

Memorandum

References

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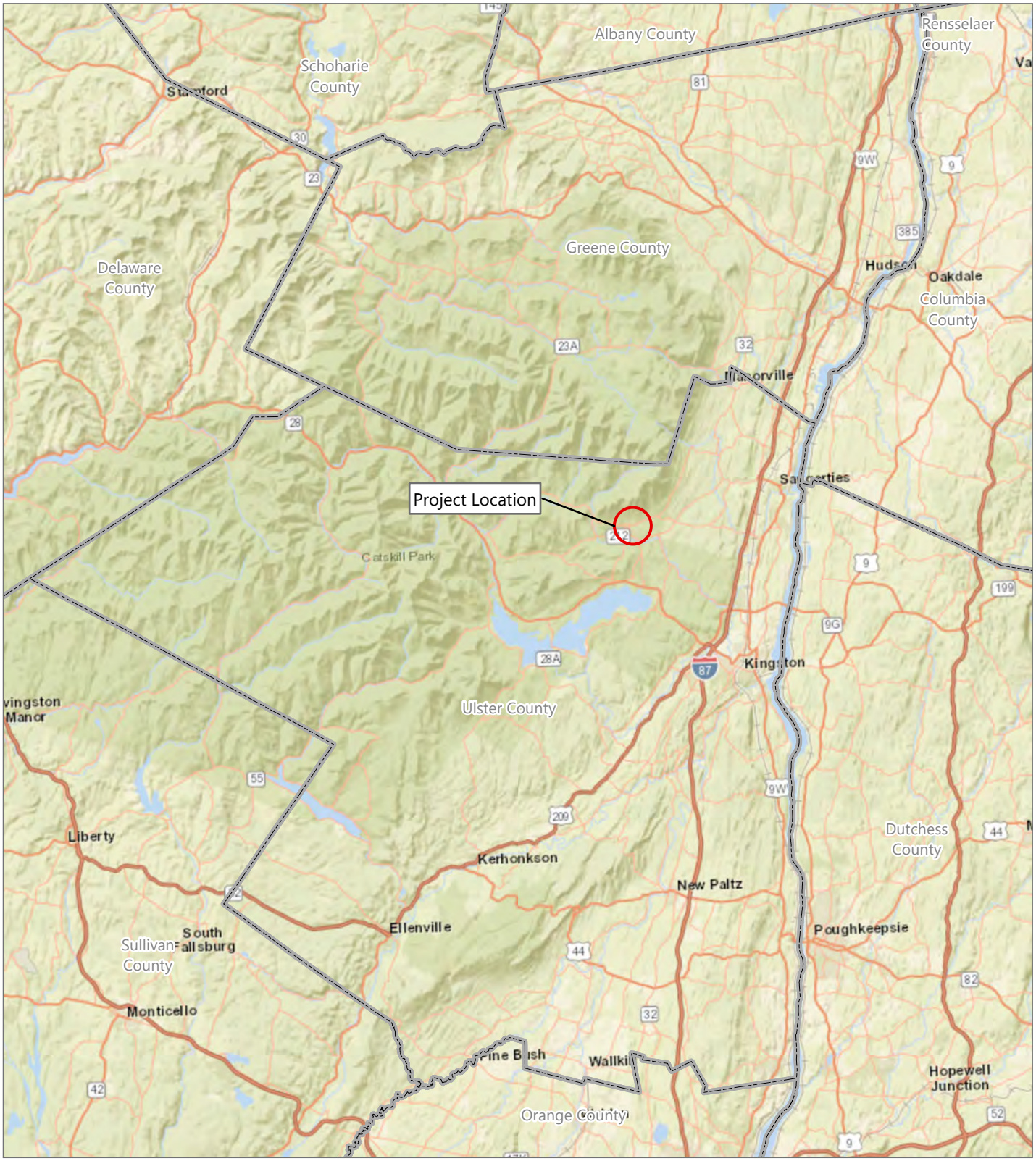
Appendix A

Figures

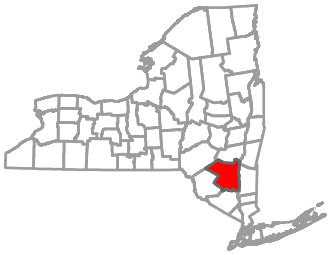
Figure 1. Regional Project Location



Town of Woodstock

Town of Woodstock,
Ulster County, New York

Wetland and Stream Delineation Memorandum



0 2.5 5 10
Miles

Prepared July 11, 2024
Basemap: Esri "World Street Map" map service

EDR

Figure 2. Mapped Wetlands and Streams

Town of Woodstock

Town of Woodstock, Ulster County, New York

Wetland and Stream Delineation Memorandum

NYSDEC Stream Classification
- Class A, B, C(TS), or C(T) Stream
- NWI Mapped Wetland
- NWI Mapped Pond/Riverine
- Project Site
- Wetland Study Area

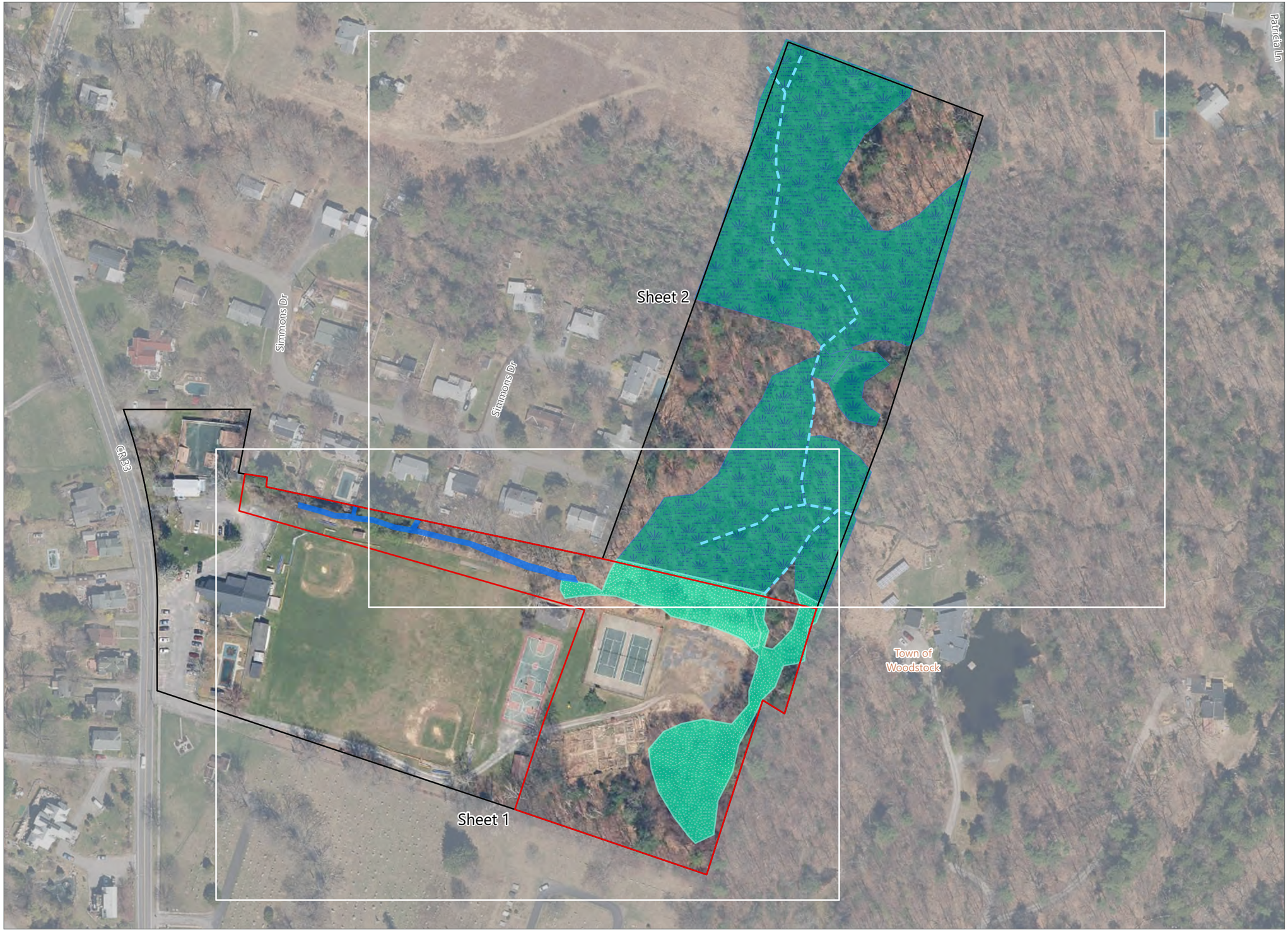
0 50 100 200
Feet

Prepared July 11, 2024
Basemap: NYSDOP "2021" orthoimagery map service

EDR

Figure 3. Delineated Wetlands and Streams

Index



Town of Woodstock

Town of Woodstock, Ulster County, New York

Wetland and Stream Delineation Memorandum

- Approximate Stream
- Approximate Wetland
- Delineated Stream
- Delineated Wetland
- Project Site
- Wetland Study Area

0 75 150 300

Feet

Prepared July 11, 2024
Basemap: NYSDOP "2021" orthoimagery map service

EDR

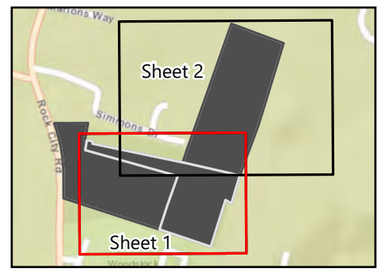
Figure 3. Delineated Wetlands and Streams

Town of Woodstock

Town of Woodstock, Ulster County, New York

Wetland and Stream Delineation Memorandum

- Datapoint Stream
- Datapoint Wetland
- Stream Flag
- Wetland Flag
- Wetland Continues
- Approximate Stream
- Approximate Wetland
- Delineated Stream
- Delineated Wetland
- Delineated Stream outside Study Area
- Delineated Wetland outside Study Area
- Project Site
- Wetland Study Area



0 25 50 100

Feet

Prepared July 17, 2024
Basemap: NYSDOP "2021" orthoimagery map service

EDR

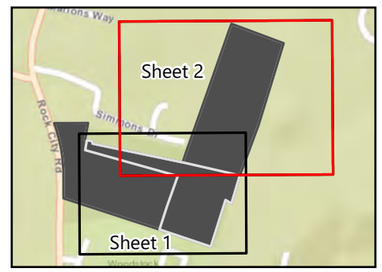
Figure 3. Delineated Wetlands and Streams

Town of Woodstock

Town of Woodstock, Ulster County, New York

Wetland and Stream Delineation Memorandum

- Datapoint Stream
- Datapoint Wetland
- Stream Flag
- Wetland Flag
- Wetland Continues
- Approximate Stream
- Approximate Wetland
- Delineated Stream
- Delineated Wetland
- Delineated Stream outside Study Area
- Delineated Wetland outside Study Area
- Project Site
- Wetland Study Area



0 25 50 100

Feet

Prepared July 17, 2024
Basemap: NYSDOP "2021" orthoimagery map service

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Appendix B

Routine Wetland Determination Data Sheets

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 24093 Town of Woodstock City/County: Ulster County Sampling Date: 07/01/2024
Applicant/Owner: Town of Woodstock State: New York Sampling Point: 26-W001-1U
Investigator(s): AL RN Section, Township, Range: Town of Woodstock
Landform (hillslope, terrace, etc): Flat Local relief (concave, convex, none): none Slope (%): 0-5
Subregion (LRR or MLRA): LRR R Lat: 42.044637 Long: -74.11505283333334 Datum: WGS 1984
Soil Map Unit Name: Raynham silt loam NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 ____
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X
If yes, optional Wetland Site ID: ____

Remarks: (Explain alternative procedures here or in a separate report.)
Upland area passes hydrophytic vegetation due to extensive reed canary grass infestation. No evidence of wetland soils or hydrology present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one 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:

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: 26-W001-1U

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Phalaris arundinacea* / Reed canary grass	80	Yes	FACW
2. *Cynanchum louiseae* / Louise's swallow-wort	30	Yes	NI
3. *Toxicodendron radicans* / Eastern poison ivy	15	No	FAC
4. *Linaria vulgaris* / Butter and eggs, Butter-and-eggs	5	No	NI
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	130	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
3.			
4.			
	0	= 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: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	80	x 2 =	160
FAC species	15	x 3 =	45
FACU species	0	x 4 =	0
UPL species	35	x 5 =	175
Column Totals:	130 (A)		380 (B)

Prevalence Index = B/A = 2.92

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- X 3 - Prevalence Index ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting
- ___ 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: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: 26-W001-1U

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
0-18	10YR 2/1	100					Gravelly Loam	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R,MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ 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)

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)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 24093 Town of Woodstock City/County: Ulster County Sampling Date: 07/01/2024
Applicant/Owner: Town of Woodstock State: New York Sampling Point: 26-W001-1W
Investigator(s): AL RN Section, Township, Range: Town of Woodstock
Landform (hillslope, terrace, etc): Lowland Local relief (concave, convex, none): concave Slope (%): 0-5
Subregion (LRR or MLRA): LRR R Lat: 42.04479966666667 Long: -74.1150635 Datum: WGS 1984
Soil Map Unit Name: Raynham silt loam NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)
Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___
Are Vegetation ___, Soil ___, or Hydrology ___ 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 ___
Hydric Soil Present? Yes X No ___
Wetland Hydrology Present? Yes X No ___

Is the Sampled Area within a Wetland? Yes X No ___
If yes, optional Wetland Site ID: 26-W001-1W

Remarks: (Explain alternative procedures here or in a separate report.)
PEM portion of wetland is fed by sheet flow from surrounding land and nearby intermittent stream. upland plant coverage sparse within wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one 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)
- X 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)
- X Microtopographic Relief (D4)
- X 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 X No ___

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

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: 26-W001-1W

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus* / Eastern white pine	15	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Pinus strobus* / Eastern white pine	10	Yes	FACU
2. *Rosa multiflora* / Multiflora rose, Multiflora rosa	5	Yes	FACU
3.			
4.			
5.			
6.			
7.			
	15	= Total Cover	
Herb Stratum (Plot size: 5-ft)			
1. *Onoclea sensibilis* / Sensitive fern	20	Yes	FACW
2. *Phalaris arundinacea* / Reed canary grass	20	Yes	FACW
3. *Carex stricta* / Uptight sedge	20	Yes	OBL
4. *Carex lurida* / Shallow sedge	15	No	OBL
5. *Typha latifolia* / Broadleaf cattail, Broad-leaved cattail	10	No	OBL
6. *Juncus effusus* / Common bog rush, Soft or lamp rush	10	No	OBL
7. *Microstegium vimineum* / Japanese stilt grass	10	No	FAC
8. *Impatiens capensis* / Spotted jewelweed	5	No	FACW
9.			
10.			
11.			
12.			
	110	= Total Cover	
Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
3.			
4.			
	0	= 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: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	55	x 1 =	55
FACW species	45	x 2 =	90
FAC species	10	x 3 =	30
FACU species	30	x 4 =	120
UPL species	0	x 5 =	0
Column Totals:	140 (A)		295 (B)

Prevalence Index = B/A = 2.11

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- X 3 - Prevalence Index ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting
- ___ 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: (Explain alternative procedures here or in a separate report.)
White pine tree and sapling are located along boundary of wetland, they are not dominant throughout the wetland.

SOIL

Sampling Point: 26-W001-1W

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
0-10	2.5Y 3/2	90	10YR 3/6	10	C	M	Silt Loam	
10-18	10YR 4/1	70	7.5YR 4/6	30	C	M	Clay Loam	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R,MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 24093 Town of Woodstock City/County: Ulster County Sampling Date: 07/01/2024
Applicant/Owner: Town of Woodstock State: New York Sampling Point: 26-W001-2U
Investigator(s): AL RN Section, Township, Range: Town of Woodstock
Landform (hillslope, terrace, etc): Midslope Local relief (concave, convex, none): convex Slope (%): 10-15
Subregion (LRR or MLRA): LRR R Lat: 42.04384616666667 Long: -74.11533683333333 Datum: WGS 1984
Soil Map Unit Name: Oquaga-Arnot-Rock outcrop complex, sloping NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ 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 lies in mixed coniferous deciduous forest on moderate slope leading down to wetland.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one 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:

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: 26-W001-2U

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Pinus strobus* / Eastern white pine	35	Yes	FACU
2. *Acer saccharum* / Sugar maple	30	Yes	FACU
3. *Populus deltoides* / Eastern cottonwood	20	No	FAC
4. *Catalpa speciosa* / Northern catalpa	20	No	FACU
5.			
6.			
7.			
	105	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Mitchella repens* / Partridge-berry	5	Yes	FACU
2. *Alliaria petiolata* / Garlic-mustard	5	Yes	FACU
3. *Galium aparine* / Cleavers, Goose grass	5	Yes	FACU
4. *Carex swanii* / Swan's sedge	5	Yes	FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	20	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
3.			
4.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

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

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	20	x 3 =	60
FACU species	105	x 4 =	420
UPL species	0	x 5 =	0
Column Totals:	125 (A)		480 (B)

Prevalence Index = B/A = 3.84

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting

___ 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: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: 26-W001-2U

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
0-18	10YR 4/4	100					Silt Loam	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R,MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ 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)

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)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: 24093 Town of Woodstock City/County: Ulster County Sampling Date: 07/01/2024
Applicant/Owner: Town of Woodstock State: New York Sampling Point: 26-W001-2W
Investigator(s): AL RN Section, Township, Range: Town of Woodstock
Landform (hillslope, terrace, etc): Lowland Local relief (concave, convex, none): concave Slope (%): 0-3
Subregion (LRR or MLRA): LRR R Lat: 42.04396383333334 Long: -74.11512333333333 Datum: WGS 1984
Soil Map Unit Name: Oquaga-Arnot-Rock outcrop complex, sloping NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil ____, or Hydrology ____ 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 within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	If yes, optional Wetland Site ID: 26-W001-2W
Wetland Hydrology Present?	Yes X	No ____	

Remarks: (Explain alternative procedures here or in a separate report.)
Depressional area in landscape.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one 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)
- X Sparsely Vegetated Concave Surface (B8)
- X 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)
- X 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 X No ____

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

Remarks:

VEGETATION - Use scientific names of plants. Sampling Point: 26-W001-2W

Tree Stratum (Plot size: 30-ft)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer rubrum* / Red maple	70	Yes	FAC
2. *Fraxinus pennsylvanica* / Green ash	5	No	FACW
3.			
4.			
5.			
6.			
7.			
	75	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15-ft)			
1. *Pinus strobus* / Eastern white pine	5	Yes	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	

Herb Stratum (Plot size: 5-ft)			
1. *Carex crinita* / Fringed sedge	20	Yes	OBL
2. *Carex scoparia* / Pointed broom sedge	10	Yes	FACW
3. *Acer rubrum* / Red maple	1	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	31	= Total Cover	

Woody Vine Stratum (Plot size: 30-ft)			
1.			
2.			
3.			
4.			
	0	= 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: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:		
OBL species	20	x 1 =	20	
FACW species	15	x 2 =	30	
FAC species	71	x 3 =	213	
FACU species	5	x 4 =	20	
UPL species	0	x 5 =	0	
Column Totals:	111	(A)	283	(B)

Prevalence Index = B/A = 2.55

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting
- ___ 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: (Explain alternative procedures here or in a separate report.)

SOIL

Sampling Point: 26-W001-2W

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
0-10	10YR 4/2	95	7.5YR 4/6	5	C	M	Slty Clay Loam	
10-18	10YR 4/2	80	10YR 4/6	15	C	M	Slty Clay Loam	
10-18			10YR 6/1	5	D	M	Slty Clay Loam	

[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) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R,MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

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)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ 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 (TF12)
- ___ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

Appendix C

Photo documentation

Photo 1

Representative photo of forested portion of 26-W001.

Photo 2

Representative photo of upland adjacent to forested wetland.

Photo 3

Representative photo of emergent portion of 26-W001.

Photo 4

Representative photo of upland adjacent to emergent wetland.

Photo 5

Representative photo of ephemeral stream 26-ST002.

Photo 6

Representative photo of ephemeral stream 26-ST003.

Photo 7

Representative photo of intermittent stream 26-ST001.

Photo 8

Representative photo of intermittent stream 26-W001.

Photo 9

Representative photo of approximated forested wetland.

Photo 10

Representative photo of approximated open water wetland.

Photo 11

Representative photo of forested upland.

Photo 12

Representative photo of approximated intermittent stream.