Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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May 2, 2023

Town of Washington C/O Kathleen Velletri Highway Department PO Box 1404 Millbrook, NY 12545

Re: Wetland Delineation

Killearn Road

Town of Washington, Dutchess County, New York

C.T. Male Project No. 23.3211

Dear Ms. Velletri,

C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. (C.T. Male) has completed a as completed a delineation of wetlands and waterbodies for the project site located at Killearn Road in the Town of Washington, Dutchess County, New York. A site location map is included in **Attachment 1**.

Site Information

The site consists of approximately 36± acres along the entire length (3.5± miles) of Killearn Road. The site includes a 50 foot wide area along the Killearn Road corridor composed of residential property, forested land, streams, and wetlands. Properties surrounding the site are dominated by rural residential land, agricultural land, and forested land. Topography throughout the site is mixed with rolling hills along the length of the road and moderately sloped areas from the east down to the west in the central portion. a

Existing wetland and soils information were obtained from the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), the NYSDEC Environmental Resource Mapper (ERM), and the U.S. Department of Agriculture (USDA) Web Soil Survey for Dutchess County, NY. Resource Maps are included in **Attachment 1**, and are summarized below:

NWI mapping depicts a riverine system running north to south in the southern
portion of the site at the intersection of Killearn Road and Chestnut Ridge Road.
Several small areas of forested (PFO), scrub-shrub (PSS), emergent (PEM)
wetlands, and several small (<1 acre) ponds (PUB) are depicted along Killearn
Road.

Wetland Delineation Killearn Road Page - 2

- ERM mapping depicts a Class C perennial stream running north to south in the southern portion of the site at the intersection of Killearn Road and Chestnut Ridge Road. ERM mapping does not depict any mapped NYSDEC Freshwater Wetlands within or adjacent to the site.
- The Dutchess County web soil survey shows a mixture of poorly to well drained silt loam soils throughout the site. None of the mapped soil units are classified as hydric.

Wetland Delineation

C.T. Male conducted a field delineation of wetlands and waterbodies at the project site on April 4-7, 2023. Field work was done in accordance with the 1987 U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual and the Northcentral and Northeast Regional Supplement, as well as the NYSDEC Freshwater Wetland Delineation Manual dated July 1995. Labeled flagging was placed in the field. Flag locations and other pertinent features were collected with a Trimble Geo7x GPS unit.

The results of the delineation are presented below. The wetland delineation map is attached to this letter report and depicts approximate wetland and waterbody boundaries. Corps data forms are included as **Attachment 2**, and photographs are included as **Attachment 3**.

Wetland Area	Covertype	Approx. Size (Acres)*	Jurisdictional Opinion
A	PEM	±0.72	Corps Jurisdictional
В	PSS	±0.01	Corps Jurisdictional
С	PFO	±0.09	Corps Jurisdictional
D	PFO	±0.16	Corps Jurisdictional
Е	PEM	±0.17	Non-jurisdictional
F	PEM	±0.23	Corps Jurisdictional
G	PSS	±0.02	Non-jurisdictional
Н	PEM	±0.16	Corps Jurisdictional
Pond 1	PUB	±0.11	Corps Jurisdictional
Pond 2	PUB	±0.06	Corps Jurisdictional
Stream	Type	Status	Jurisdictional Opinion
PS-1	Perennial	Class C	NYSDEC/Corps Jurisdictional
4.4	1 1	1 1	0.6

^{*}Acreages represent the area of wetlands and ponds occurring within the 50 foot site boundary along Killearn Road.

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Wetland A is a Palustrine Emergent (PEM) wetland located in the southeastern portion of the site covering approximately 0.72 acres on the north and south side of Killearn Road. Several indicators of wetland hydrology were observed including high water table, saturation, geomorphic position, and FAC-neutral test. Wetland A is dominated by several species of hydrophytic vegetation including weeping willow (*Salix babylonica*), purple willow (*Salix purpurea*), narrow-leaf cattail (*Typha angustifolia*), and tussock sedge (*Carex stricta*). Hydric silt-loam soils were also observed.

Wetland A receives drainage offsite from a pond and a perennial stream (PS-1) and drains offsite to the same stream. Wetland A is assumed to be under the jurisdiction of the Corps due to observed surface water connections to other resources.

Wetland B is a Palustrine Scrub-shrub (PSS)/vernal pool wetland covering approximately 0.01 acres within the southern portion of the site. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, inundation visible on aerial imagery, aquatic fauna, geomorphic position, and FAC-neutral test. Wetland B is dominated by several species of hydrophytic vegetation including speckled alder (*Alnus incana*), and tussock sedge. Hydric silt loam soils were also observed.

Wetland B receives drainage from an offsite residential pond with the majority of its area (>1 acre) occurring offsite and drains offsite to Pond 1. Faerie shrimp (*Branchinecta lynchi*), an obligate vernal pool species, were also observed. Wetland B is assumed to be under the jurisdiction of the Corps due to its overall size and likely offsite connections to other resources.

Wetland C is a Palustrine Forested (PFO) wetland that covers approximately 0.09 acres within the southern portion of the site along the east and west side of Killearn Road. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, moss trim lines, geomorphic position, and FAC-neutral test. Wetland C is dominated by several species of hydrophytic vegetation including red maple (*Acer rubrum*), dwarf honeysuckle (*Lonicera xylosteum*), and skunk cabbage (*Symplocarpus foetidus*). Hydric muck and silt loam soils were also observed.

Wetland C receives drainage from adjacent uplands and extends offsite to the east and west. Wetland C is likely to have offsite connections to other resources and is assumed to be under the jurisdiction of the Corps.

Wetland Delineation Killearn Road Page - 4

Wetland D is a PFO wetland that covers approximately 0.16 acres in the southern portion of the site on the west side of Killearn Road and extends offsite to the west. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, moss trim lines, geomorphic position, and FAC-neutral test. Wetland D is dominated by several species of hydrophytic vegetation including red maple, dwarf honeysuckle, tussock sedge, and skink cabbage. Hydric muck and silt loam soils were also observed.

Wetland D receives drainage from adjacent uplands and extends offsite to the west. Wetland D is likely to have offsite connections to other resources and is assumed to be under the jurisdiction of the Corps.

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Wetland E is a PEM wetland covering approximately 0.17 acres within the central portion of the site on the west side of Killearn Road. Several indicators of wetland hydrology were observed including surface water, high water table, saturation, inundation visible on aerial imagery, and geomorphic position. Wetland E is dominated by several species of hydrophytic vegetation including narrow-leaf cattail. Hydric silt-loam soils were also observed.

Wetland E receives drainage from adjacent uplands and appears to be hydrologically isolated with no observed surface water outlets. Wetland C is potentially non-jurisdictional as an isolated wetland.

Wetland F is a PEM wetland covering approximately 0.23 acres in the northern portion of the site on the east side of Killearn Road. Several indicators of wetland hydrology were observed including saturation, geomorphic position, and FAC-neutral test. Wetland F is dominated by several species of hydrophytic vegetation including narrow-leaf cattail and sensitive fern (*Onoclea sensibilis*). Hydric silt loam soils were also observed.

Wetland F continues offsite to the east and receives drainage from adjacent uplands and a residential pond (Pond 2) via a culvert under Killearn Road. Wetland F is assumed to be under the jurisdiction of the Corps due to surface water connections with other resources.

Wetland G is a PSS wetland covering approximately 0.02 acres in the northern portion of the site on the west side of Killearn Road and appears to be hydrologically isolated with no surface water connections to other resources. Several indicators of wetland hydrology were observed including surface water, saturation, geomorphic position, and FAC-

Wetland Delineation Killearn Road Page - 5

neutral test. Wetland G is dominated by several species of hydrophytic vegetation including grey dogwood (*Cornus racemosa*). Hydric silt loam soils were also observed.

Wetland G is hydrologically isolated with no surface water connections to other resources and is assumed to be a non-jurisdictional feature.

Wetland H is a PEM wetland covering approximately 0.16 acres on the west side of Killearn Road. Several indicators of wetland hydrology were observed including saturation, geomorphic position, and FAC-neutral test. Wetland H is dominated by several species of hydrophytic vegetation including common reed (*Phragmites australis*) and purple loosestrife (*Lythrum salicaria*). Hydric silt-loam soils were also observed.

Wetland H drains east under Killearn Road via a culvert into a drainage ditch which in turn drains to offsite wetland areas. Wetland H is assumed to be under the jurisdiction of the Corps due to surface water connections with other resources.

Stream PS-1 is a mapped NYSDEC Class C perennial stream located in the southeastern portion of the site adjacent to the intersection of Killearn Road and Chestnut Ridge Road. PS-1 flows north to south within the boundaries of Wetland A. Channel width is approximately three feet with an average bank height of one foot. Bed materials consist of sand, silt, and pebbles. PS-1 is assumed to be under the jurisdiction of NYSDEC and the Corps as a permanent water feature with surface water connections to other water resources.

Pond 1 is located in the southern portion of the site along the west side of Killearn Road covering approximately 0.11 acres. Pond 1 appears to be either constructed or modified as a residential water feature which drains northeast under Killearn Road via a culvert to a constructed drainage ditch. Pond 1 receives drainage from adjacent uplands and offsite drainage from Wetland B. Pond 1 conducts water both from and to other water resources and is potentially a Corps jurisdictional feature.

Pond 2 is located in the northern portion of the site along the west side of Killearn Road covering approximately 0.11 acres within the site. Pond 2 appears to be either constructed or modified as a residential water feature which drains northeast under Killearn Road via a culvert to Wetland F.

Pond 2 is assumed to be Corps jurisdictional due to observed surface water connections to other resources (Wetland F).

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Conclusions

All resources observed during the field visit with the exception of Wetlands E and G are assumed to be Corps jurisdictional due known surface water connections and/or such close proximity to one another as to be considered adjacent wetlands/streams. Any proposed project activities within wetlands or streams should be coordinated with the Corps.

Respectfully Submitted,

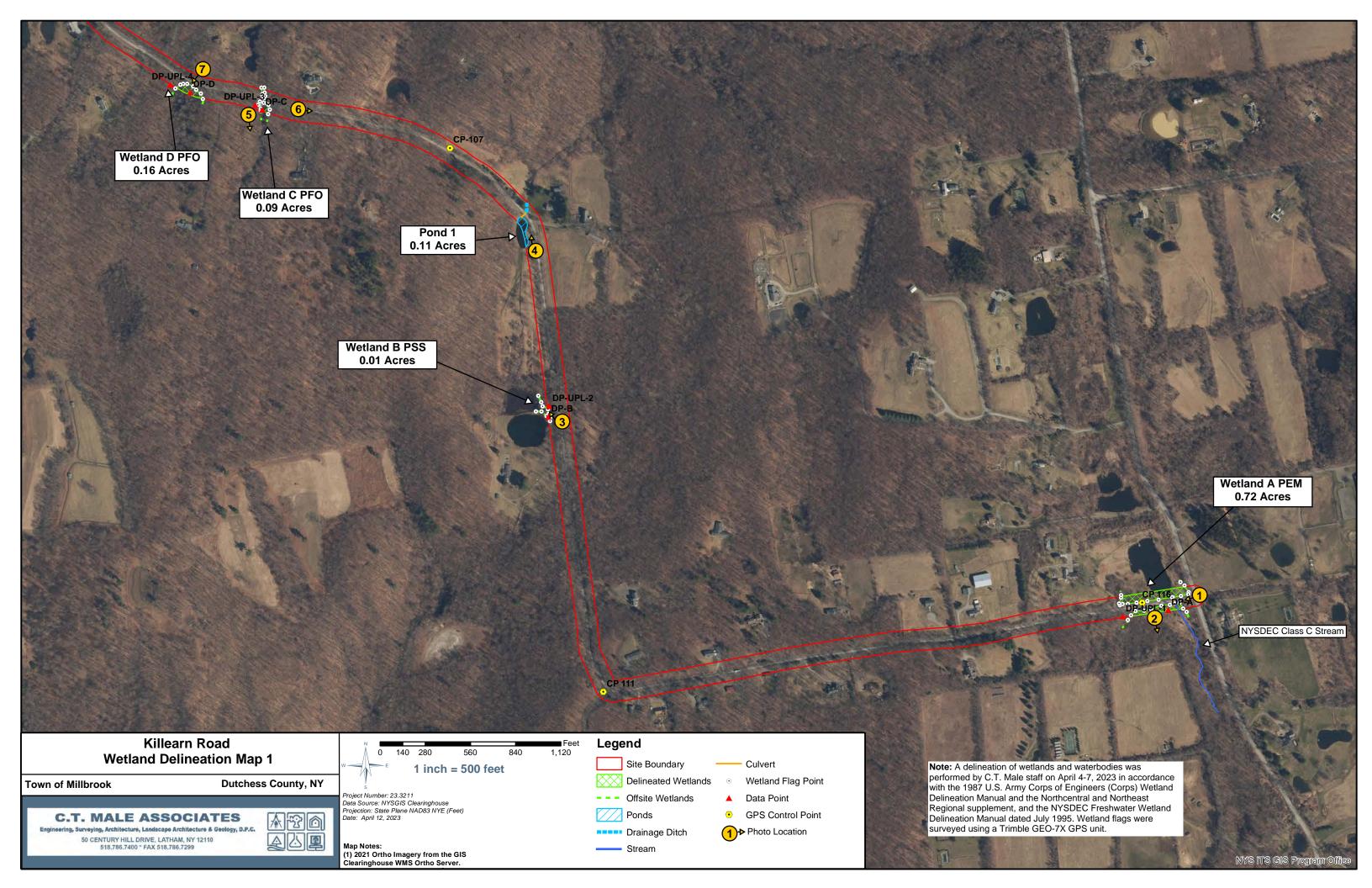
C.T. MALE ASSOCIATES

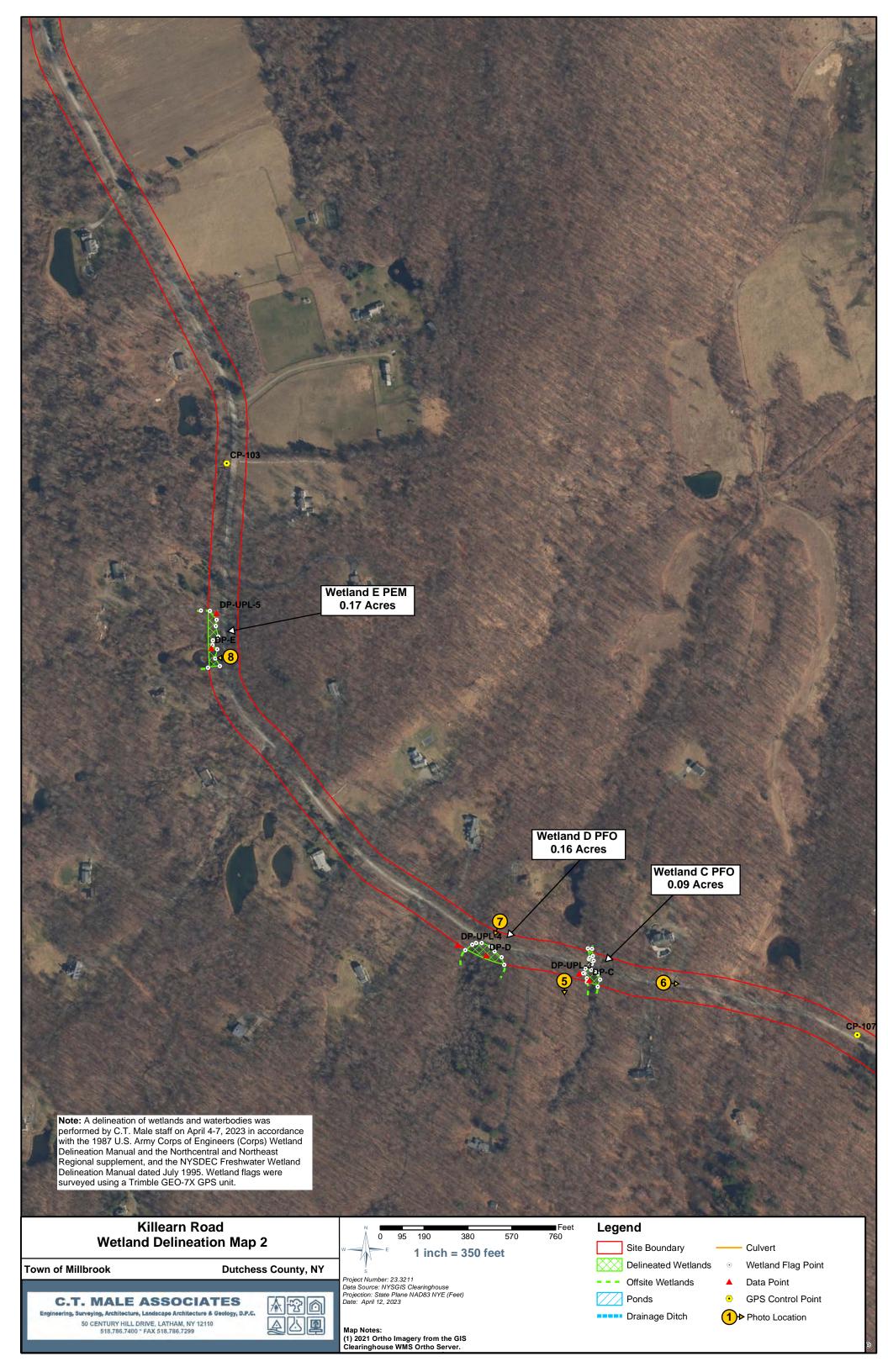
Jorel Spain

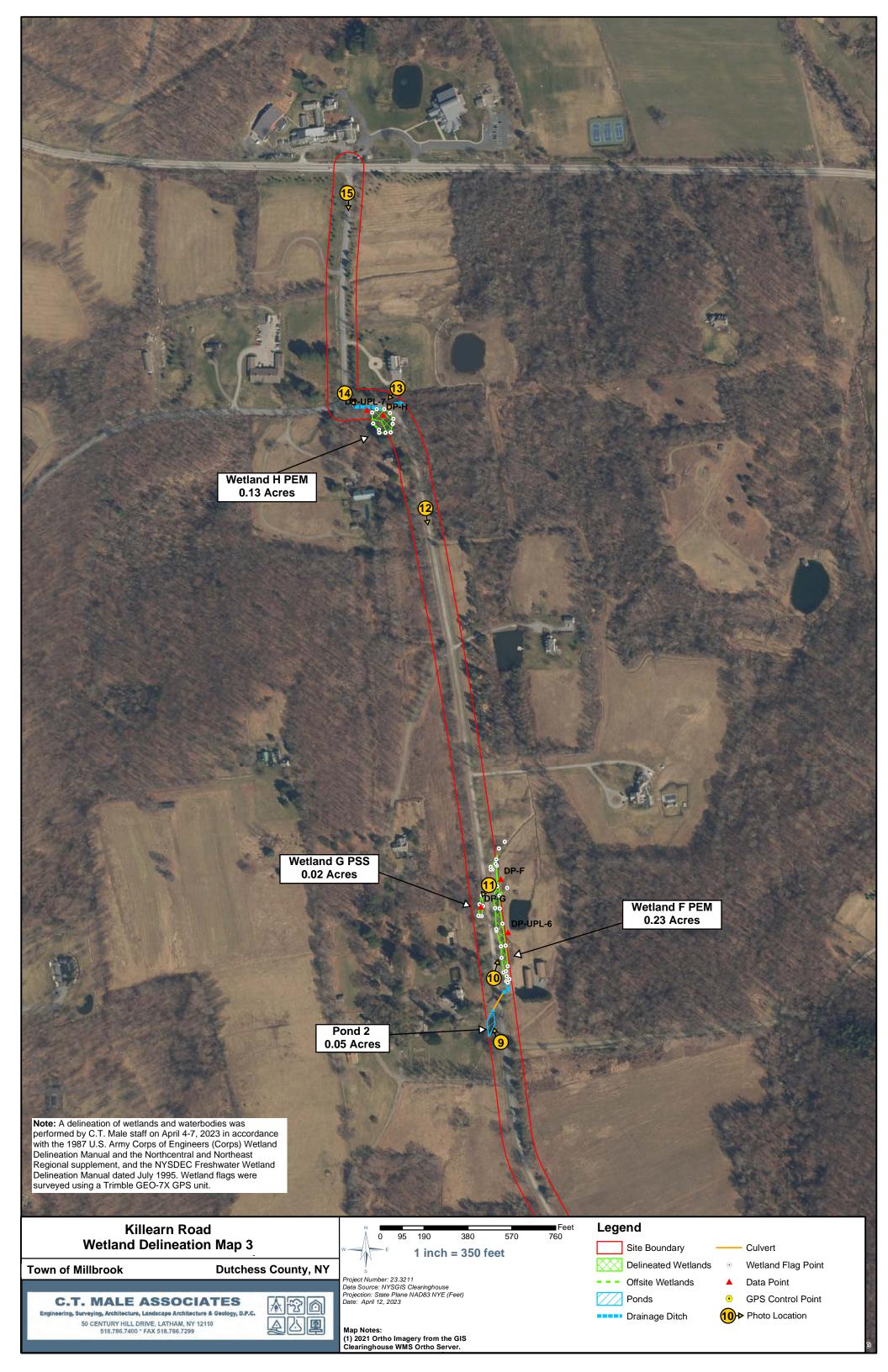
Wetland Scientist

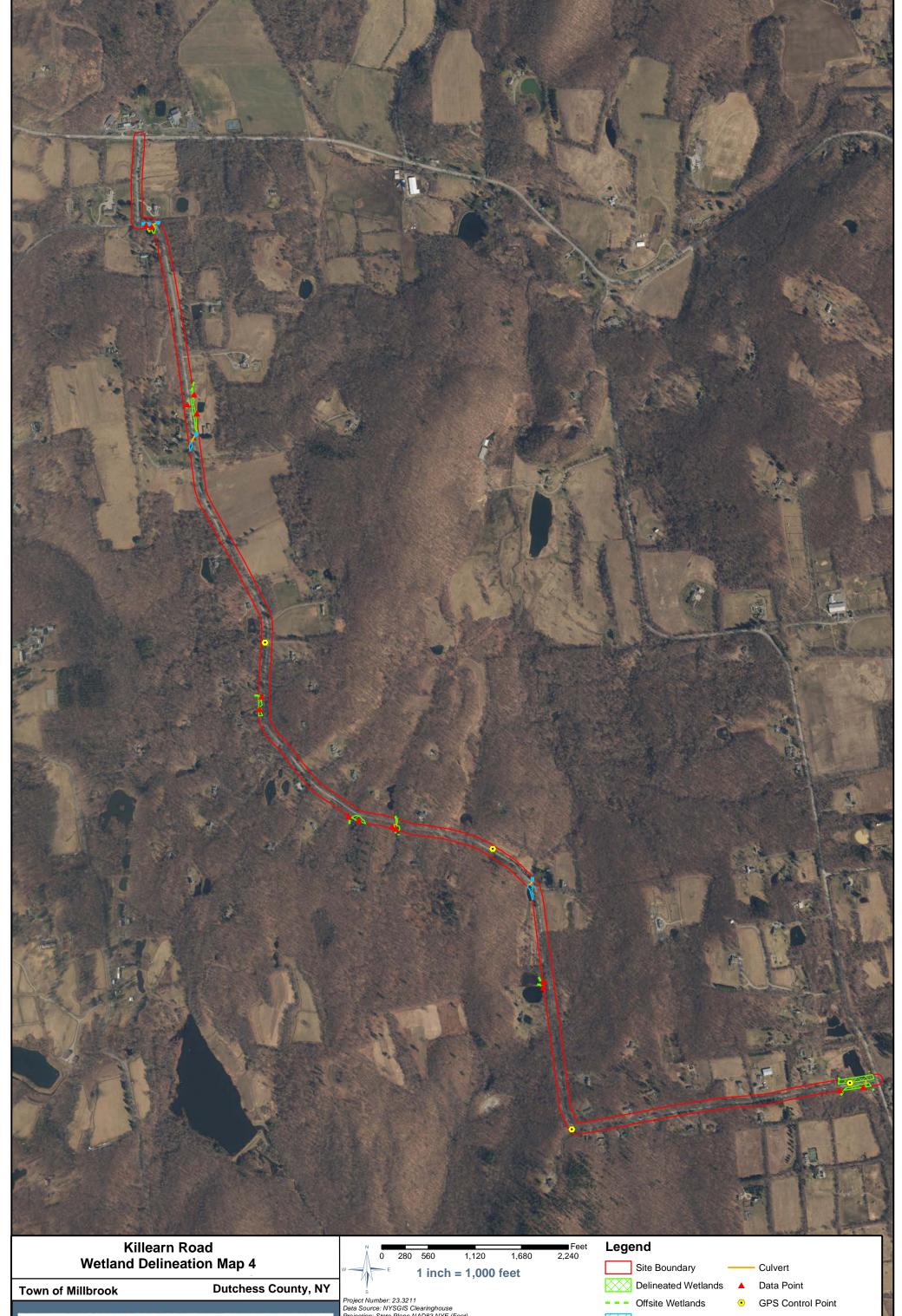
Chris Koenig Project Manager

Environmental Services









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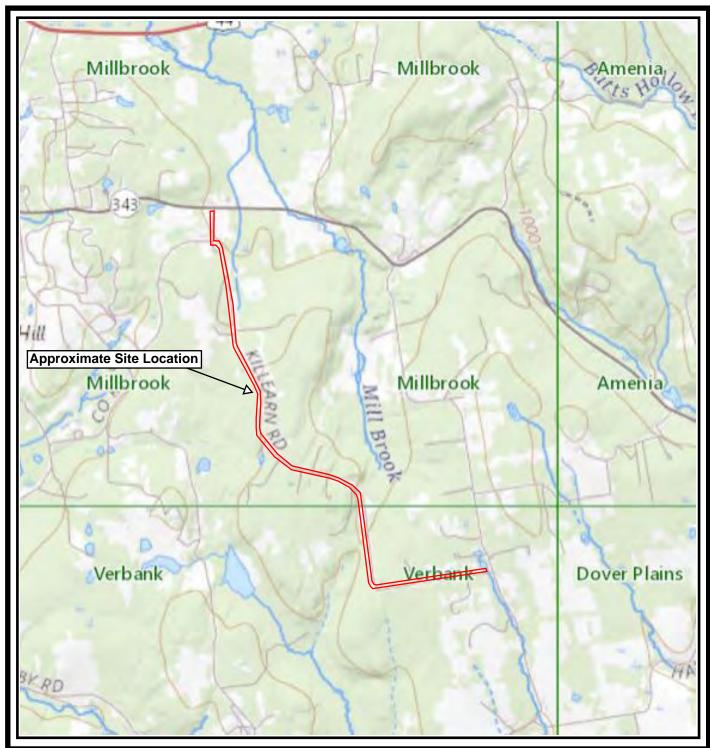
Project Number: 23.3211 Data Source: NYSGIS Clearinghouse Projection: State Plane NAD83 NYE (Feet) Date: April 12, 2023

Map Notes: (1) 2021 Ortho Imagery from the GIS Clearinghouse WMS Ortho Server.

Ponds

Drainage Ditch

Attachment 1 Resource Maps



MAP REFERENCE

United States Geological Survey 7.5 Minute Series Topographic Map Quadrangle: Milbrook/Verbank, NY

Date: 2019





SCAPE ARCHITECTURE & GEOLOGY, D.P.C.

50 CENTURY HILL DRIVE
LATHAM, NY 12110

FIGURE 1 - SITE LOCATION MAP

TOWN OF MILBROOK

DUTCHESS COUNTY, NY

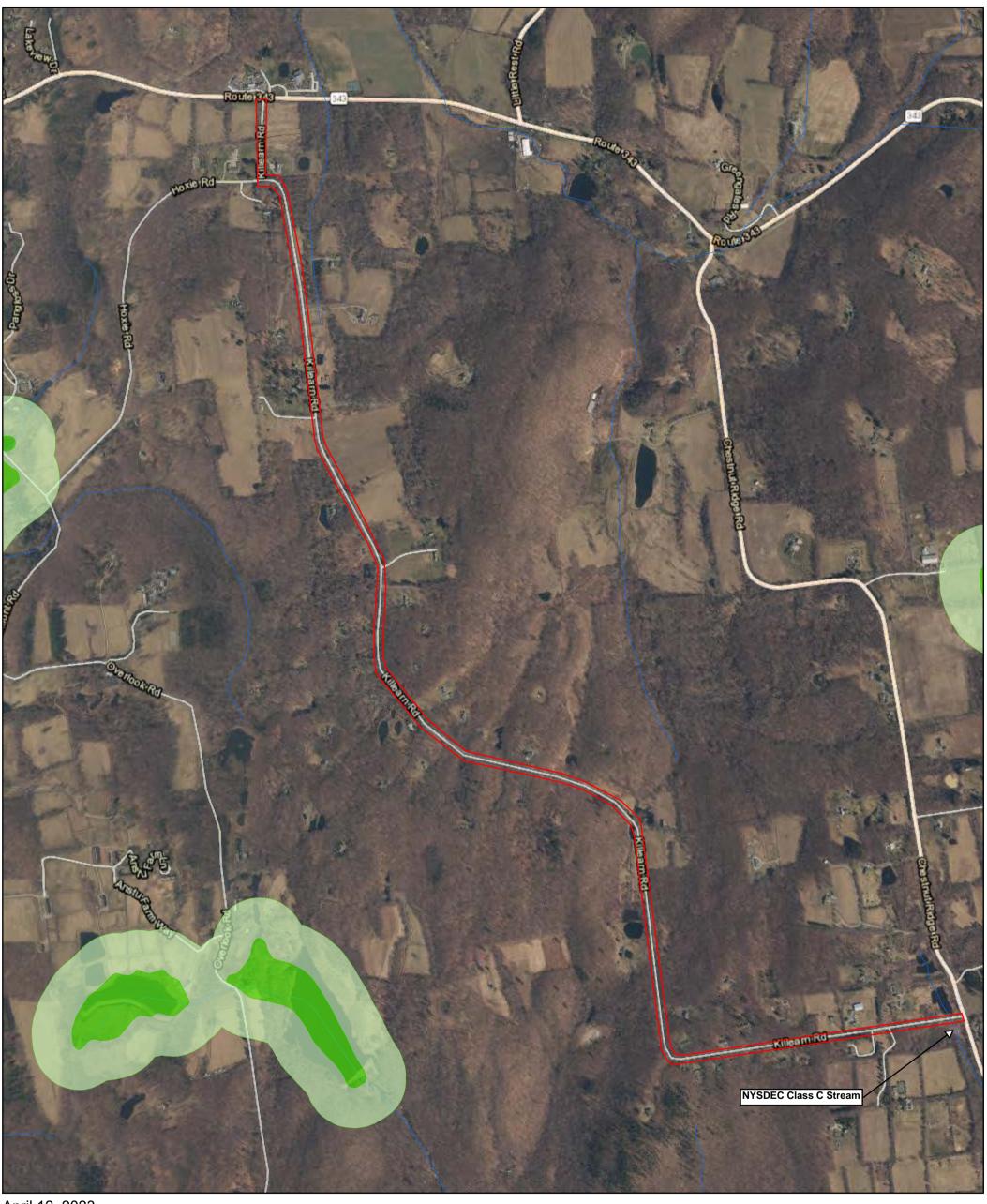
NO SCALE

DRAFTER: JRS

PROJECT No: 23.3211

The locations and features depicted on this map are approximate and do not represent an actual survey.

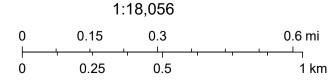
ERM Mapper Result - Killearn Road, Milbrook NY



April 12, 2023



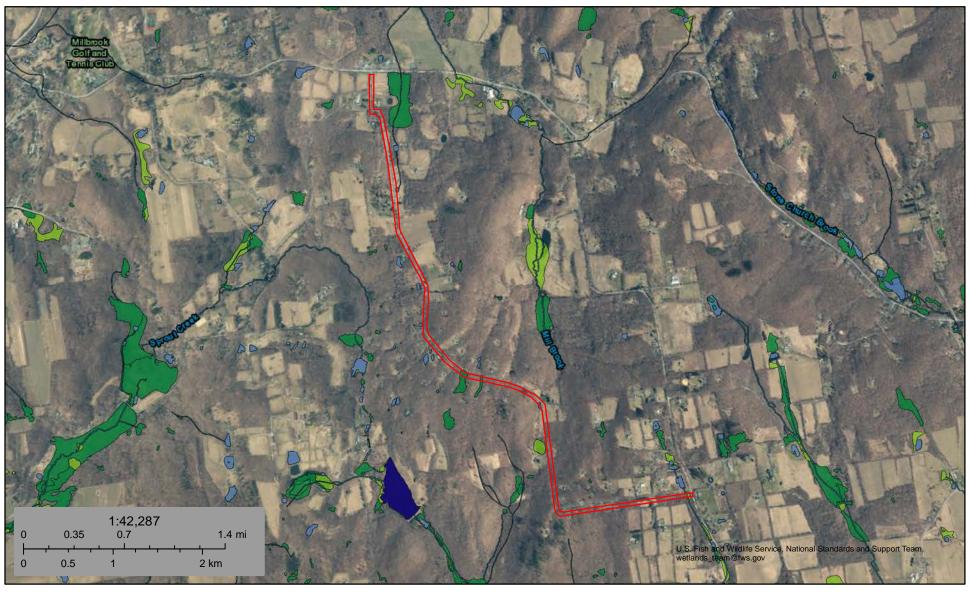
NYSDEC Freshwater Wetlands Checkzone



NYS ITS GIS Program Office, Westchester County GIS , Esri, HERE, Garmin, (c) OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

U.S. Fish and Wildlife Service National Wetlands Inventory

Killearn Road, Millbrook NY



April 12, 2023

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Subject Property

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond Riverine

Lake

Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



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 **Dutchess** County, New York



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.

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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.



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

o

Blowout

 \boxtimes

Borrow Pit

366

Clay Spot

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Closed Depression

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Gravel Pit

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Gravelly Spot

0

Landfill

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Lava Flow

Marsh or swamp

@

Mine or Quarry

X

Miscellaneous Water

0

Perennial Water
Rock Outcrop

į.

Saline Spot

. .

Sandy Spot

0 0

Severely Eroded Spot

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Sinkhole

8

Slide or Slip

Ø

Sodic Spot

8

Spoil Area

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Stony Spot
Very Stony Spot

Ø

Wet Spot Other

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Special Line Features

Water Features

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Streams and Canals

Transportation

Transp

Rails

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Interstate Highways

US Routes

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Major Roads

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Local Roads

Background

1

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24.000.

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: Dutchess County, New York Survey Area Data: Version 19, Sep 10, 2022

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

Date(s) aerial images were photographed: Oct 21, 2022—Oct 27, 2022

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
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	0.4	0.7%
CrB	Charlton-Chatfield complex, undulating, rocky	1.6	2.9%
CrC	Charlton-Chatfield complex, rolling, rocky	1.6	2.9%
DuB	Dutchess silt loam, 3 to 8 percent slopes	2.4	4.5%
DuC	Dutchess silt loam, 8 to 15 percent slopes	7.3	13.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	7.1	13.1%
DwC	Dutchess-Cardigan complex, rolling, rocky	20.9	38.5%
DwD	Dutchess-Cardigan complex, hilly, rocky	4.1	7.6%
GsB	Georgia silt loam, 3 to 8 percent slopes	3.6	6.7%
Su	Sun silt loam	5.2	9.6%
Totals for Area of Interest		54.2	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.

Dutchess County, New York

ChC—Charlton fine sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2wh0q

Elevation: 0 to 1,440 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: Farmland of statewide importance

Map Unit Composition

Charlton and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Ridges, ground moraines, hills Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex, linear Across-slope shape: Convex

Parent material: Coarse-loamy melt-out till derived from granite, gneiss, and/or

schist

Typical profile

Ap - 0 to 7 inches: fine sandy loam

Bw - 7 to 22 inches: gravelly fine sandy loam C - 22 to 65 inches: gravelly fine sandy loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

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: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Paxton

Percent of map unit: 5 percent

Landform: Ground moraines, hills, drumlins
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope

Down-slope shape: Convex, linear Across-slope shape: Convex Hydric soil rating: No

Sutton, fine sandy loam

Percent of map unit: 5 percent

Landform: Ridges, hills, ground moraines
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Linear Hydric soil rating: No

Chatfield

Percent of map unit: 3 percent

Landform: Ridges, hills

Landform position (two-dimensional): Summit, shoulder, backslope Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex

Across-slope shape: Linear, convex

Hydric soil rating: No

Canton

Percent of map unit: 2 percent

Landform: Ridges, ground moraines, hills

Landform position (two-dimensional): Summit, shoulder, backslope Landform position (three-dimensional): Nose slope, side slope, crest

Down-slope shape: Convex, linear Across-slope shape: Convex Hydric soil rating: No

CrB—Charlton-Chatfield complex, undulating, rocky

Map Unit Setting

National map unit symbol: 9rf2 Elevation: 100 to 1,130 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Charlton and similar soils: 50 percent

Chatfield and similar soils: 30 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Till plains, ridges, hills

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Typical profile

H1 - 0 to 8 inches: loam

H2 - 8 to 30 inches: gravelly loam H3 - 30 to 72 inches: gravelly loam

Properties and qualities

Slope: 1 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Chatfield

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 9 inches: fine sandy loam

H2 - 9 to 30 inches: loam

H3 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 1 to 6 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00

to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2s

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Hollis

Percent of map unit: 9 percent

Hydric soil rating: No

Georgia

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

Massena

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

Rock outcrop

Percent of map unit: 1 percent Hydric soil rating: Unranked

Sun

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

CrC—Charlton-Chatfield complex, rolling, rocky

Map Unit Setting

National map unit symbol: 9rf3 Elevation: 100 to 1,310 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Charlton and similar soils: 50 percent Chatfield and similar soils: 30 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Charlton

Setting

Landform: Till plains, ridges, hills

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Acid loamy till derived mainly from schist, gneiss, or granite

Typical profile

H1 - 0 to 8 inches: loam

H2 - 8 to 30 inches: gravelly loam H3 - 30 to 72 inches: gravelly loam

Properties and qualities

Slope: 5 to 16 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Chatfield

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from granite, gneiss, or schist

Typical profile

H1 - 0 to 9 inches: fine sandy loam

H2 - 9 to 30 inches: loam

H3 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 16 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00

to 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 1 percent

Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Hollis

Percent of map unit: 9 percent

Hydric soil rating: No

Georgia

Percent of map unit: 5 percent

Hydric soil rating: No

Massena

Percent of map unit: 4 percent

Hydric soil rating: No

Sun

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

Rock outcrop

Percent of map unit: 1 percent Hydric soil rating: Unranked

DuB—Dutchess silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9rfk Elevation: 50 to 1,000 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Dutchess and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dutchess

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from phyllite, slate, schist, and shale

Typical profile

H1 - 0 to 8 inches: silt loam H2 - 8 to 28 inches: silt loam

H3 - 28 to 86 inches: channery silt loam

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): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Georgia

Percent of map unit: 5 percent

Hydric soil rating: No

Massena

Percent of map unit: 4 percent

Hydric soil rating: No

Cardigan

Percent of map unit: 4 percent

Hydric soil rating: No

Nassau

Percent of map unit: 1 percent

Hydric soil rating: No

Sun

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

DuC—Dutchess silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9rfl Elevation: 50 to 1,000 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Dutchess and similar soils: 85 percent *Minor components:* 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dutchess

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from phyllite, slate, schist, and shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 28 inches: silt loam

H3 - 28 to 86 inches: channery silt loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Georgia

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

Massena

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

Cardigan

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

Sun

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

Nassau

Percent of map unit: 1 percent Hydric soil rating: No

DwB—Dutchess-Cardigan complex, undulating, rocky

Map Unit Setting

National map unit symbol: 9rfn Elevation: 0 to 1,330 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Dutchess and similar soils: 40 percent Cardigan and similar soils: 30 percent Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dutchess

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from phyllite, slate, schist, and shale

Typical profile

H1 - 0 to 8 inches: silt loam

H2 - 8 to 28 inches: silt loam

H3 - 28 to 86 inches: channery silt loam

Properties and qualities

Slope: 1 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Cardigan

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and

schist

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 20 inches: channery loam
H3 - 20 to 30 inches: channery silt loam
H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 1 to 6 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low

(0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Georgia

Percent of map unit: 10 percent

Hydric soil rating: No

Nassau

Percent of map unit: 9 percent

Hydric soil rating: No

Massena

Percent of map unit: 9 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent Hydric soil rating: Unranked

Sun

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

DwC—Dutchess-Cardigan complex, rolling, rocky

Map Unit Setting

National map unit symbol: 9rfp Elevation: 0 to 1,330 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Dutchess and similar soils: 40 percent Cardigan and similar soils: 30 percent

Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dutchess

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from phyllite, slate, schist, and shale

Custom Soil Resource Report

Typical profile

H1 - 0 to 8 inches: silt loam H2 - 8 to 28 inches: silt loam

H3 - 28 to 86 inches: channery silt loam

Properties and qualities

Slope: 5 to 16 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Cardigan

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Shoulder Landform position (three-dimensional): Crest

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and

schist

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 20 inches: channery loam
H3 - 20 to 30 inches: channery silt loam
H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 5 to 16 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low

(0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Georgia

Percent of map unit: 10 percent

Hydric soil rating: No

Massena

Percent of map unit: 9 percent

Hydric soil rating: No

Nassau

Percent of map unit: 9 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent Hydric soil rating: Unranked

Sun

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

DwD—Dutchess-Cardigan complex, hilly, rocky

Map Unit Setting

National map unit symbol: 9rfq Elevation: 20 to 1,230 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: Not prime farmland

Map Unit Composition

Dutchess and similar soils: 40 percent Cardigan and similar soils: 30 percent

Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dutchess

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till derived mainly from phyllite, slate, schist, and shale

Custom Soil Resource Report

Typical profile

H1 - 0 to 8 inches: silt loam H2 - 8 to 28 inches: silt loam

H3 - 28 to 86 inches: channery silt loam

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high

(0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: B

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Description of Cardigan

Setting

Landform: Ridges, hills

Landform position (two-dimensional): Backslope Landform position (three-dimensional): Side slope

Down-slope shape: Convex Across-slope shape: Convex

Parent material: Loamy till or colluvium derived from phyllite, slate, shale, and

schist

Typical profile

H1 - 0 to 8 inches: channery silt loam
H2 - 8 to 20 inches: channery loam
H3 - 20 to 30 inches: channery silt loam
H4 - 30 to 34 inches: unweathered bedrock

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 20 to 40 inches to lithic bedrock

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low

(0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: F144AY034CT - Well Drained Till Uplands

Hydric soil rating: No

Minor Components

Sun

Percent of map unit: 10 percent

Landform: Depressions Hydric soil rating: Yes

Nassau

Percent of map unit: 9 percent

Hydric soil rating: No

Georgia

Percent of map unit: 5 percent

Hydric soil rating: No

Massena

Percent of map unit: 5 percent

Hydric soil rating: No

Rock outcrop

Percent of map unit: 1 percent Hydric soil rating: Unranked

GsB—Georgia silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9rg6 Elevation: 90 to 1,000 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Georgia and similar soils: 80 percent *Minor components*: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Georgia

Settina

Landform: Till plains, hills, drumlinoid ridges Landform position (two-dimensional): Summit Landform position (three-dimensional): Crest

Down-slope shape: Concave Across-slope shape: Convex

Parent material: Loamy till derived mainly from limestone, shale, or slate

Typical profile

H1 - 0 to 8 inches: silt loam

Custom Soil Resource Report

H2 - 8 to 27 inches: loam

H3 - 27 to 80 inches: gravelly fine sandy loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 36 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Ecological site: F144AY038NY - Semi-Rich Moist Till Uplands

Hydric soil rating: No

Minor Components

Charlton

Percent of map unit: 5 percent

Hydric soil rating: No

Stockbridge

Percent of map unit: 5 percent

Hydric soil rating: No

Massena

Percent of map unit: 5 percent

Hydric soil rating: No

Dutchess

Percent of map unit: 3 percent

Hydric soil rating: No

Pittstown

Percent of map unit: 2 percent

Hydric soil rating: No

Su-Sun silt loam

Map Unit Setting

National map unit symbol: 9rj3 Elevation: 600 to 1,800 feet

Mean annual precipitation: 41 to 47 inches Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 115 to 195 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Sun and similar soils: 80 percent Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sun

Setting

Landform: Depressions

Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Base slope

Down-slope shape: Concave Across-slope shape: Concave

Parent material: Loamy till derived primarily from limestone and sandstone, with a

component of schist, shale, or granitic rocks in some areas

Typical profile

H1 - 0 to 4 inches: silt loam H2 - 4 to 22 inches: loam

H3 - 22 to 80 inches: gravelly 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

moderately high (0.06 to 0.20 in/hr) Depth to water table: About 0 inches

Frequency of flooding: None Frequency of ponding: Occasional

Calcium carbonate, maximum content: 15 percent

Available water supply, 0 to 60 inches: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w

Hydrologic Soil Group: C/D

Ecological site: F144AY039NY - Semi-Rich Wet Till Depressions

Hydric soil rating: Yes

Minor Components

Sun, stony

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

Massena

Percent of map unit: 5 percent

Hydric soil rating: No

Canandaigua

Percent of map unit: 5 percent Landform: Depressions Hydric soil rating: Yes

Custom Soil Resource Report

Palms

Percent of map unit: 5 percent Landform: Swamps, marshes Hydric soil rating: Yes

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.

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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.

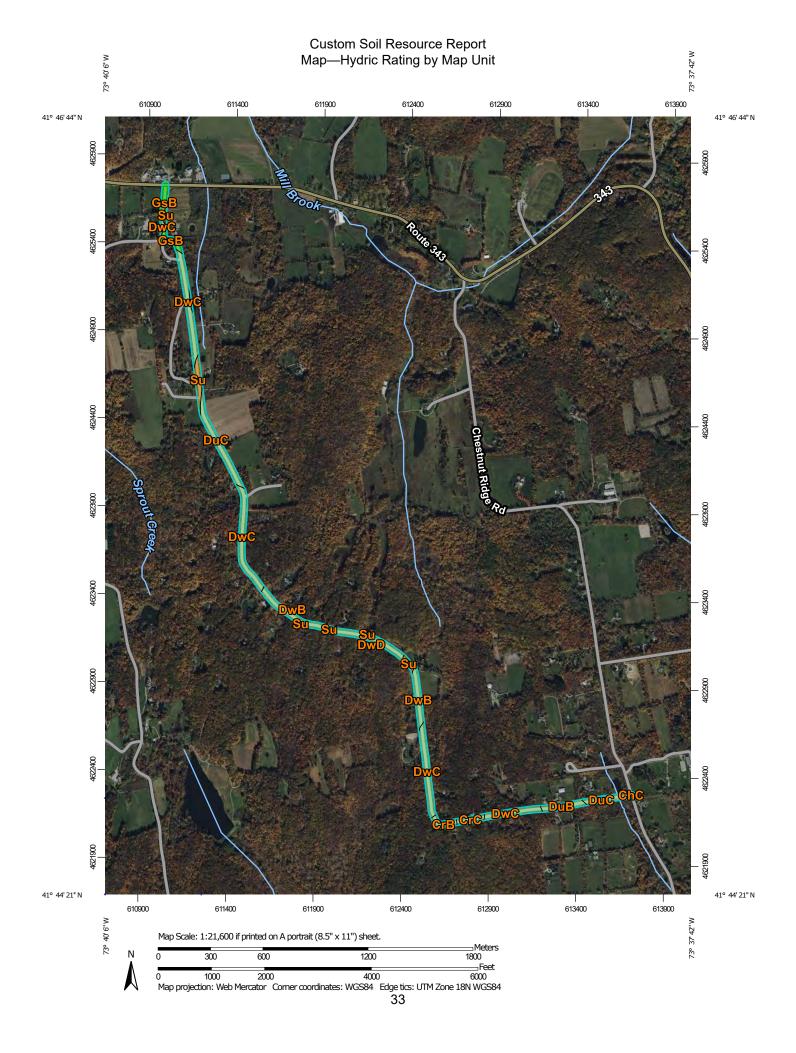
Federal Register. September 18, 2002. Hydric soils of the United States.

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 LEGEND MAP INFORMATION Area of Interest (AOI) The soil surveys that comprise your AOI were mapped at Transportation 1:24.000. Area of Interest (AOI) Rails Soils Interstate Highways Please rely on the bar scale on each map sheet for map Soil Rating Polygons measurements. **US Routes** Hydric (100%) Major Roads Source of Map: Natural Resources Conservation Service Hydric (66 to 99%) Web Soil Survey URL: Local Roads \sim Hydric (33 to 65%) Coordinate System: Web Mercator (EPSG:3857) Background Hydric (1 to 32%) Aerial Photography Maps from the Web Soil Survey are based on the Web Mercator Not Hydric (0%) projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Not rated or not available Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. Soil Rating Lines Hydric (100%) This product is generated from the USDA-NRCS certified data as Hydric (66 to 99%) of the version date(s) listed below. Hydric (33 to 65%) Soil Survey Area: Dutchess County, New York Hydric (1 to 32%) Survey Area Data: Version 19, Sep 10, 2022 Not Hydric (0%) Soil map units are labeled (as space allows) for map scales Not rated or not available 1:50,000 or larger. **Soil Rating Points** Date(s) aerial images were photographed: Oct 21, 2022—Oct Hydric (100%) 27, 2022 Hydric (66 to 99%) Hydric (33 to 65%) The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background Hydric (1 to 32%) imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident. Not Hydric (0%) Not rated or not available **Water Features** Streams and Canals

Table—Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ChC	Charlton fine sandy loam, 8 to 15 percent slopes	0	0.4	0.7%
CrB	Charlton-Chatfield complex, undulating, rocky	1	1.6	2.9%
CrC	Charlton-Chatfield complex, rolling, rocky	1	1.6	2.9%
DuB	Dutchess silt loam, 3 to 8 percent slopes	1	2.4	4.5%
DuC	Dutchess silt loam, 8 to 15 percent slopes	1	7.3	13.5%
DwB	Dutchess-Cardigan complex, undulating, rocky	1	7.1	13.1%
DwC	Dutchess-Cardigan complex, rolling, rocky	1	20.9	38.5%
DwD	Dutchess-Cardigan complex, hilly, rocky	10	4.1	7.6%
GsB	Georgia silt loam, 3 to 8 percent slopes	0	3.6	6.7%
Su	Sun silt loam	95	5.2	9.6%
Totals for Area of Inter-	est	1	54.2	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.

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.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_054262

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. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053577

Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2 053580

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

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

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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

Attachment 2 Corps Data Forms

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 4, 2023
Applicant/Owner: Town of Washington		State: <u>NY</u>	Sampling Point: <u>DP-A</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R La	at:	Long:	Datum:
Soil Map Unit Name: <u>DuC - Dutchess silt loam,</u>		NWI classif	ication: PEM
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes X	No (If no, explain in	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO	significantly disturbed?	Are "Normal Circumstances"	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology N	O naturally problematic?	(If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes X Yes X	No Within a W	pled Area /etland? Yes onal Wetland Site ID: Wetland]_ No 🗆
Remarks: (Explain alternative procedures here or i	n a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	cators (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soi	l Cracks (B6)
 	Water-Stained Leaves (B9)		atterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	Moss Trim I	Lines (B16) ı Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living		/isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	· · · -	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	oils (C6) 🗵 Geomorphi	c Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aq	` '
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutra	al Test (D5)
Field Observations: Surface Water Present? Yes No No	Donth (inches):		
Water Table Present? Yes X No C			
Saturation Present? Yes X No C		Wetland Hydrology Prese	ent? Yes 🗵 No 🗌
(includes capillary fringe)	, , , ,		
Describe Recorded Data (stream gauge, monitoring	g well, aerial priotos, previous inspec	tions), ii avaliable.	
Remarks:			

	Sampling Point: <u>DP-A</u>					
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test worksh		
. Weeping Willow (Salix babylonica)	15	YES	FACW	Number of Dominant Spe That Are OBL, FACW, or		
		-		Total Number of Dominan	t	
. <u> </u>		-		Species Across All Strata:		
·		-		Percent of Dominant Spec	cies	
i		_		That Are OBL, FACW, or		
S		_	_	Prevalence Index works	hoot:	
7						
		= Total Co		OBL species		
Sapling/Shrub Stratum (Plot size: 15')		-		FACW species		
1 . purple willow (Salix purpurea)		YES	FACW	FAC species	x 3 =	
2.				FACU species		
3				UPL species		
<u> </u>				Column Totals:	(A) (B)	
				Prevalence Index =	B/A =	
5				Hydrophytic Vegetation	Indicators:	
5				1 - Rapid Test for Hyd		
7				2 - Dominance Test is		
	25	= Total Co	ver	3 - Prevalence Index		
Herb Stratum (Plot size: 5')					aptations ¹ (Provide supporting	
Narrow-leaf cattail (Typha angustifolia)					r on a separate sheet)	
2. Tussock Sedge (Carex stricta)				☐ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata:		
3. Purple loosestrife (Lythrum salicaria)	10	NO	OBL			
4						
5						
6		-		Tree – Woody plants 3 in. (7.6 cm) or more in cat breast height (DBH), regardless of height.		
7		-				
3		-		Sapling/shrub – Woody and greater than or equal		
)		-			, ,	
10		-		Herb – All herbaceous (non size, and woody plants less t	-woody) plants, regardless of han 3.28 ft tall.	
11						
12		-		Woody vines – All woody vineight.	thes greater than 3.28 ft in	
	100	= Total Co	ver			
Noody Vine Stratum (Plot size: 30')						
. <i>N/A</i>						
2		-	_	Hydrophytic		
3		-		Vegetation Present? Yes	⊠ No □	
4		_				
··		= Total Co	ver			
			V C I			

SOIL Sampling Point: <u>DP-A</u>

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix			x Feature	<u>S</u> _ 1	. 2	
(inches) 0-4	Color (moist) 10YR 2/2	100	Color (moist)	%	Type ¹	_Loc ²	Texture Remarks silt loam
4-7	10YR 3/2	100					silt loam
7-14	10YR 3/2	80	10YR 5/6	20	<u>C</u>	<u>M</u>	silt loam
						-	
					-		
					-	-	
					_	-	
					_	_	
¹ Type: C=Co	oncentration. D=Dep	letion. RN	/i=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil							Indicators for Problematic Hydric Soils ³ :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy R Stripped Dark Sul	bipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface ork Surface (A12) lucky Mineral (S1) eleyed Matrix (S4) edox (S5) Matrix (S6) fface (S7) (LRR R, In	ILRA 14 9	Polyvalue Belov MLRA 149B Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress Redox Depress) ace (S9) (I Mineral (F ² Matrix (F2 x (F3) urface (F6) Surface (F6) Sions (F8)	_RR R, M 1) (LRR K 2)	LRA 149B	Dark Surface (S7) (LRR K, L, M) 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)
Restrictive I	_ayer (if observed):						
	ches):		-				Hydric Soil Present? Yes 🗵 No 🔲
Remarks:							

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 4, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-UPL-1</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): _LRR-R Lat:		Long:	Datum:
Soil Map Unit Name: <u>DuC—Dutchess silt loam</u>		NWI classific	cation: UPL
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes <u>X</u> 1	No (If no, explain in R	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO_	significantly disturbed?	Are "Normal Circumstances" إ	oresent? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Pemarks: (Evalage alternative procedures here or in a	No X within a W If yes, option		No 🗵
Remarks: (Explain alternative procedures here or in a upland forested area adjacent to Wetland A	a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check		Surface Soil	,
	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Pa☐ Moss Trim L	
	Marl Deposits (B15)	_	Water Table (C2)
	Hydrogen Sulfide Odor (C1)	Crayfish Bur	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) 🔲 Saturation V	isible on Aerial Imagery (C9)
	Presence of Reduced Iron (C4)	_	tressed Plants (D1)
	Recent Iron Reduction in Tilled Sc		Position (D2)
	Thin Muck Surface (C7)	Shallow Aqu	itard (D3) aphic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral	. , ,
Field Observations:		<u> </u>	1 Test (D3)
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Yes No	Depth (inches):		
	Depth (inches):	Wetland Hydrology Preser	nt? Yes 🔲 No 🛚
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspec	tions), if available:	
Remarks:			

EGETATION – Use scientific names of plants	Sampling Point: <u>DP-UPL-1</u>					
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshee		
1. <u>Red Maple</u>	45	YES	FAC	Number of Dominant Specie That Are OBL, FACW, or FA		(A)
2. <u>Red oak</u>	25	YES	FACU			_ (' ')
3- yellow birch		NO	FAC	Total Number of Dominant Species Across All Strata:	3	(B)
·						_ (/
·				Percent of Dominant Specie That Are OBL, FACW, or FA		(A/B
S				Prevalence Index workshe		
.				Total % Cover of:		
	/0	= Total Co	ver	OBL species		
Sapling/Shrub Stratum (Plot size: 15')				FACW species		
. Morrow's Honeysuckle (Lonicera morrowii)	50	YES	FACU	FACULARIA STATE OF THE STATE OF		
2				FACU species		
3		_		Column Totals:		
<u>. </u>		_		Column Totalo.	_ (/ (/	(D)
5				Prevalence Index = B/	'A =	
S				Hydrophytic Vegetation In	dicators:	
7				1 - Rapid Test for Hydro	phytic Vegetation	
-		= Total Co		2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹		
Herb Stratum (Plot size: 5')	30	_ Total 00	VCI			
<u> N/A Piot size. </u>			_ =	4 - Morphological Adapt data in Remarks or c		
2				Problematic Hydrophytic Vegetation ¹ (Explain)		
3				¹ Indicators of hydric soil and wetland hydrology m		v must
1.				be present, unless disturbed or problematic. Definitions of Vegetation Strata:		
5						
5				_		diamoto
·				at breast height (DBH), rega		diamete
3				Sapling/shrub – Woody pla	nts less than 3 in	DBH
				and greater than or equal to		
)				Herb – All herbaceous (non-w	oody) plants, regard	less of
10				size, and woody plants less than		
11				Woody vines – All woody vine	es greater than 3.28	ft in
2				height.		
		= Total Co	ver			
Noody Vine Stratum (Plot size: 30')						
. <u>N/A</u>						
2				Hydrophytic Vegetation		
3				Present? Yes	□ No ⊠	
4						
		= Total Co	ver			
34		- - = Total Co		Present? YesI	<u> </u>	

SOIL Sampling Point: DP-UPL-1

Profile Desc	ription: (Describe	to the de	oth needed to docum	nent the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix			K Features	<u>8</u> _ 1	. 2	
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-2	10YR 2/2	100					silt loam
2-10	10YR 3/2	100					silt loam
10-14	10Yr 3/3	100					silt loam
					_		
					-	-	
					_	_	
					_		
	-	. ———					
					-		
					-		
		letion, RM	I=Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I							Indicators for Problematic Hydric Soils ³ :
Histosol	, ,		Polyvalue Below		(S8) (LRF	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
Black Hi	oipedon (A2) stic (A3)		MLRA 149B) Thin Dark Surfa		.RR R. MI	RA 149B	Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydroge	n Sulfide (A4)		Loamy Mucky N	. , .			Dark Surface (S7) (LRR K, L, M)
	Layers (A5)		Loamy Gleyed N)		Polyvalue Below Surface (S8) (LRR K, L)
_	d Below Dark Surface ark Surface (A12)	e (A11)	Depleted Matrix Redox Dark Sur				☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
_	lucky Mineral (S1)		Depleted Dark S	. ,			Piedmont Floodplain Soils (F19) (MLRA 149B)
	Bleyed Matrix (S4)		Redox Depressi	•	,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5)						Red Parent Material (F21)
_	Matrix (S6) rface (S7) (LRR R, N	/II RA 149	B)				✓ Very Shallow Dark Surface (TF12)✓ Other (Explain in Remarks)
	f hydrophytic vegetate		etland hydrology mus	t be prese	ent, unless	disturbed	or problematic.
Type:	Layer (II observed).						
	ches):		- -				Hydric Soil Present? Yes No X
Remarks:							

Project/Site: 23.3211/Killearn Rd.	City/County: Milbi	rook/Dutchess	Sampling Date: Apr 4, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-B</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): _concave	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R Lat		Long:	Datum:
Soil Map Unit Name: <u>DwC - Dutchess-Cardigan complex</u>		NWI classific	cation: PSS
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes <u>X</u> ١	No (If no, explain in F	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO_	significantly disturbed?	Are "Normal Circumstances" ہ	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	nap showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Wetland Hydrology Present? Yes X	No If yes, optio	pled Area etland? Yes X onal Wetland Site ID: Wetland	No 🗆
Remarks: (Explain alternative procedures here or in PSS/Vernal pool wetland west side of road	a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; chec	k all that apply)	Secondary Indica	ators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Pa	,
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim L	
Saturation (A3)	Marl Deposits (B15)		Water Table (C2)
☐ Water Marks (B1) ☐	Hydrogen Sulfide Odor (C1)	Crayfish Bur	, ,
Sediment Deposits (B2)	Oxidized Rhizospheres on Living I Presence of Reduced Iron (C4)	` '	isible on Aerial Imagery (C9) tressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	<u></u>	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		X FAC-Neutral	Test (D5)
Field Observations:			
	Depth (inches):6-8"		
Water Table Present? Yes No Saturation Present? Yes No No	Depth (inches):0"		V 🗆
Saturation Present? Yes X No L (includes capillary fringe)	Depth (inches):0"	Wetland Hydrology Preser	nt? Yes 🗵 No 🗌
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspec	tions), if available:	
Remarks:			
Faerie Shrimp (Branchinecta lynchi) - obligate vernal poc	l species were observed		

	Sampling Point: DP-B					
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksh	eet:	
1. <i>N/A</i>				Number of Dominant Spec That Are OBL, FACW, or F		
				Total Number of Dominant Species Across All Strata:	<u>2</u> (B)	
3					、 ,	
l				Percent of Dominant Spec That Are OBL, FACW, or F		
5	·			That Ale OBE, I Aow, of I	A0. <u>100</u> (AB	
õ				Prevalence Index worksl	neet:	
7				Total % Cover of:	Multiply by:	
		= Total Co	ver	OBL species	x 1 =	
Sapling/Shrub Stratum (Plot size: 15')				FACW species		
l . <u>Speckled alder (Alnus incana)</u>	50	YES	FACW	FAC species		
2		-		FACU species		
3		_		UPL species		
i <u>.</u>					(A) (B)	
5				Prevalence Index =	B/A =	
5.				Hydrophytic Vegetation	Indicators:	
				1 - Rapid Test for Hyd		
7				2 - Dominance Test is		
	30	= Total Co	ver	3 - Prevalence Index i	s ≤3.0 ¹	
Herb Stratum (Plot size: 5')	70	\/F6	0.01		ptations ¹ (Provide supporting	
1_Tussock sedge (Carex stricta)				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)		
2				<u> </u>	, ,	
3				he present unless disturbed or problematic		
4. <u> </u>		_		B 5 W 4 W 60 4		
5		-				
6				Tree – Woody plants 3 in. (7.6 cm) or more in o		
7		_		at breast height (DBH), reg	gardiess of neight.	
8		-		Sapling/shrub – Woody pand greater than or equal		
9		-			, ,	
10		_		Herb – All herbaceous (non- size, and woody plants less the	woody) plants, regardless of	
11		_				
12		-	-	Woody vines – All woody vineight.	ines greater than 3.28 ft in	
	70	= Total Co	ver	8		
Noody Vine Stratum (Plot size: 30')		•				
1. N/A		_	_			
2.				Hydrophytic		
		-		Vegetation Present? Yes	⊠ No □	
3				10001111		
4	·					
		= Total Co	ver			

SOIL Sampling Point: DP-B

Profile Desc	ription: (Describe	to the de	pth needed to docui	ment the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix		Redo	x Features	<u>s</u>		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	
0-2	10YR 2/1	100	· 				silt loam
2-12	10YR 3/2	90	10YR 5/6	10	<u>C</u>	M	silt loam
						-	
						-	
		<u> </u>				_	
		<u> </u>					
					-	-	
					_	-	
					_	_	
¹ Type: C=Co	ncentration D=Dep	letion RN	/=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:	1011011, 1111	T TOGGGGG WALLE, W	o maonoa	Cana Or	anio.	Indicators for Problematic Hydric Soils ³ :
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sui	bipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surfactoric Surface (A12) lucky Mineral (S1) eleyed Matrix (S4) edox (S5) Matrix (S6) fface (S7) (LRR R, M	/ILRA 149	Polyvalue Belo MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress DB)) ace (S9) (L Mineral (F1 Matrix (F2 x (F3) urface (F6) Surface (F6) sions (F8)	.RR R, M 1) (LRR K)	LRA 149B	Dark Surface (S7) (LRR K, L, M) 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)
	ayer (if observed):		onana nyarenegy mas	5. 50 p. 000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Type:	phoo):		_				Hydric Soil Present? Yes 🗵 No 🔲
Remarks:	ches):		_				nydric Soil Present? Tes 🔼 No 🔲

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 4, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-UPL-2</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): concave	Slope (%): <u>0</u>
Subregion (LRR or MLRA): _LRR-R Lat:		Long:	Datum:
Soil Map Unit Name: <u>DwC—Dutchess-Cardigan complex</u>	(NWI classific	cation: UPL
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes <u>X</u> 1	No (If no, explain in R	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO_	significantly disturbed?	Are "Normal Circumstances" إ	present? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a	No X within a W If yes, option		No ⊠
Upland forested area adjacent to Wetland B	а ѕерагате героп.,		
HYDROLOGY			
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; check		Surface Soil	,
	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Pa☐ Moss Trim L	
	Marl Deposits (B15)	_	Water Table (C2)
	Hydrogen Sulfide Odor (C1)	Crayfish Bur	
	Oxidized Rhizospheres on Living		isible on Aerial Imagery (C9)
	Presence of Reduced Iron (C4)		Stressed Plants (D1)
	Recent Iron Reduction in Tilled Sc		Position (D2)
	Thin Muck Surface (C7) Other (Explain in Remarks)	Shallow Aqu	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral	. ,
Field Observations:		<u></u>	1001 (20)
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Yes No	Depth (inches):		_
Saturation Present? Yes No (includes capillary fringe)	Depth (inches):	Wetland Hydrology Preser	nt? Yes 🔲 No 🗵
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous inspec	tions), if available:	
Remarks:			

	5.			S		
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?		Dominance Test worksh		
. Red oak (Quercus rubra)	60	YES	FACU	Number of Dominant Spec That Are OBL, FACW, or F		
. White ash (Fraxinus americana)		YES	FACU		, , ,	
			-	Total Number of Dominant Species Across All Strata:	<u>4</u> (B)	
				Percent of Dominant Spec	ios	
5				That Are OBL, FACW, or F		
S						
				1 TOVAICTION ITTACK WOTKS		
·		= Total Co				
0 - 1 - 10 - 1 - 0 - 1 - 0 - 1 - 1 - 1 -	90	_ = Total Co	ver	OBL species		
Sapling/Shrub Stratum (Plot size: 15')	20	\/F6	EAG.	FAC species		
1 . <u>Staghorn sumac (Rhus typhina)</u>				FACU species		
2. <u>Buckthorn (Rhamnus cathartica)</u>				UPL species		
3				Column Totals:	(A) (B)	
1		-			D/A =	
5		-		Prevalence Index =	D/A =	
5		_				
7		-		1 - Rapid Test for Hyd		
	50	= Total Co	ver	2 - Dominance Test is 3 - Prevalence Index i		
Herb Stratum (Plot size: 5')				4 - Morphological Ada	ptations ¹ (Provide supportin	
l					on a separate sheet)	
2		-	- =	Problematic Hydrophytic Vegetation ¹ (Explain		
3		-	- =	he present unless disturbed or problematic		
4						
5	-			Definitions of Vegetation Strata:		
6				at broast boight (DRH) roa	(7.6 cm) or more in diamete	
7	-				-	
3				I and greater than or equal:		
9		-			,	
10		_		size, and woody plants less the	woody) plants, regardless of nan 3.28 ft tall.	
11		-		Woody vines – All woody vi	ings greater than 2.79 ft in	
12	-			height.	mes greater than 3.28 It in	
		= Total Co	ver			
Noody Vine Stratum (Plot size: 30')						
. <u>N/A</u>		_				
2.		_		Hydrophytic Vegetation		
3				Present? Yes _	□ No ⊠	
4.		Talal Oa	·or			
4		= Total Co	vei			

SOIL Sampling Point: DP-UPL-2

Profile Desc	ription: (Describe	to the de	oth needed to docum	ent the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			k Features	<u>s</u>	2	
(inches)	Color (moist)	%	Color (moist)	<u></u> %	Type ¹	_Loc ² _	
0-6	10YR 3/3	100					silt loam
6-14	10YR 3/4	100					silt loam
					-	-	
					_	_	
							·
					-		
							·
					-	-	
					_	_	
¹ Type: C=Co	ncentration. D=Dep	letion. RN	=Reduced Matrix, MS	= =Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I			, , , , , , , , , , , , , , , , , , , ,				Indicators for Problematic Hydric Soils ³ :
	ipedon (A2)		Polyvalue Below MLRA 149B)				2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black His Hydroge	stic (A3) n Sulfide (A4)		Thin Dark Surfa	. , .			5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M)
	Layers (A5)	(4.44)	Loamy Gleyed N)		Polyvalue Below Surface (S8) (LRR K, L)
_	l Below Dark Surfac irk Surface (A12)	e (A11)	Depleted Matrix Redox Dark Sur				☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy M	lucky Mineral (S1)		Depleted Dark S	Surface (F			Piedmont Floodplain Soils (F19) (MLRA 149B)
	leyed Matrix (S4)		Redox Depressi	ons (F8)			Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	edox (S5) Matrix (S6)						Red Parent Material (F21) Very Shallow Dark Surface (TF12)
_	face (S7) (LRR R, N	/ILRA 149	B)				Other (Explain in Remarks)
			etland hydrology mus	t be prese	ent, unless	disturbed	d or problematic.
	ayer (if observed):						
Type:	ches):		-				Hydric Soil Present? Yes No
Remarks:			-				nyane con riesent. Fes <u>II</u> no <u>II</u>

Project/Site: 23.3211/Killearn Rd.	City/C	ounty: Milbrook/Dutchess	Sampling Date: Apr 5, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-C</u>
Investigator(s): J. Spain	Sectio	n, Township, Range:	
Landform (hillslope, terrace, etc.): depressi	ion Local reli	ef (concave, convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R	Lat:	Long:	Datum:
Soil Map Unit Name: Su - Sun silt loam		NWI cla	ssification: PFO
Are climatic / hydrologic conditions on the s	site typical for this time of year? Ye	es 🔲 No 🔲 (If no, explain	in Remarks.)
Are Vegetation NO, Soil NO, or Hyd	drology NO significantly disturb	ped? Are "Normal Circumstanc	es" present? Yes 🔲 No 🔲
Are Vegetation NO , Soil NO , or Hyd	drology <u>NO</u> naturally problema	tic? (If needed, explain any ar	nswers in Remarks.)
SUMMARY OF FINDINGS – Atta	ach site map showing sam	pling point locations, transe	ects, important features, etc.
Hydric Soil Present?	, , ,	Is the Sampled Area within a Wetland? Yes If yes, optional Wetland Site ID: Wet	
Torested/vernal pool wedand on east/west	sides of load, conflect via curvert		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary I	ndicators (minimum of two required)
Primary Indicators (minimum of one is rec	quired; check all that apply)	Surface	Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves	· '	e Patterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	-	rim Lines (B16) ason Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odd		Burrows (C8)
Sediment Deposits (B2)			on Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	_	phic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C	· —	Aquitard (D3)
Inundation Visible on Aerial Imagery			pographic Relief (D4)
Sparsely Vegetated Concave Surface Field Observations:	e (B8)	FAC-Ne	eutral Test (D5)
	No Depth (inches):8-12"		
Water Table Present? Yes X			
Saturation Present? Yes X		Wetland Hydrology Pr	resent? Yes 🗵 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge,	monitoring well periol photos, prov		
Describe Necorded Data (Stream gauge,	monitoring well, aerial priotos, pre-	nous inspections), it available.	
Remarks:			

	VEGETATION – Use scientific names of plants.						
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:			
. Red oak (Quercus rubra)	10	YES	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)			
<u>Red maple (Acer rubrum)</u>		YES	FAC				
S				Total Number of Dominant Species Across All Strata: 4 (B)			
l				Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/I			
5				(100)			
S				Prevalence Index worksheet:			
7							
	20	= Total Co	ver	OBL species x 1 =			
Sapling/Shrub Stratum (Plot size: 15')				FACW species x 2 =			
. dwarf honeysuckle (Lonicera xylosteum)	30	YES	FACW	FAC species x 3 =			
2		_		FACU species x 4 =			
3		_		UPL species x 5 = Column Totals: (A) (B			
4		_					
5				Prevalence Index = B/A =			
5				Hydrophytic Vegetation Indicators:			
7				1 - Rapid Test for Hydrophytic Vegetation			
		= Total Co					
Laula Christiana (Diataina) El	50	_ = 10tal C0	vei	3 - Prevalence Index is ≤3.0 ¹			
Herb Stratum (Plot size: 5')	20			4 - Morphological Adaptations ¹ (Provide supporting			
1 skunk cabbage (Symplocarpus foetidus)				data in Remarks or on a separate sheet)			
2				☐ Problematic Hydrophytic Vegetation¹ (Explain)			
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
4							
5		_		Definitions of Vegetation Strata:			
6		_		Tree – Woody plants 3 in. (7.6 cm) or more in diamet			
7		_		at breast height (DBH), regardless of height.			
3		-		Sapling/shrub – Woody plants less than 3 in. DBH			
9		_		and greater than or equal to 3.28 ft (1 m) tall.			
10		-	-	Herb – All herbaceous (non-woody) plants, regardless of			
11		_	-	size, and woody plants less than 3.28 ft tall.			
12.		_		Woody vines – All woody vines greater than 3.28 ft in			
14-	20	= Total Co		height.			
March March Obstance (Distriction 20)	20	_ = 10tal C0	vei				
Noody Vine Stratum (Plot size: 30')							
I. <u>N/A</u>		-		Hydrophytic			
				Vegetation			
- ·				Present? Yes No			
2							

SOIL Sampling Point: DP-C

Profile Desc	ription: (Describe	to the de	pth needed to docu	ment the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Feature	<u>S</u> _ 1	. 2	
(inches)	Color (moist) 10YR 2/1	100	Color (moist)	%	Type ¹	_Loc ²	Texture Remarks muck
0-4	-						·
4-9	10YR 3/2	100					silt loam
9-16	1-YR 5/1	85	10YR 5/4	15	<u>-</u> C	M	silt loam
						_	
						-	
					-	-	
					_	-	
					_	_	
¹ Type: C=Cd	ncentration D=Den	letion RN	M=Reduced Matrix, M	S=Masker	Sand Gr	ains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	ndicators:	iction, re	W-reduced Wattix, W	0-Maskec	Oana On	all 13.	Indicators for Problematic Hydric Soils ³ :
Histosol Histic Ep Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Su Black Hi Hydroge	(A1) pipedon (A2) stic (A3) n Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) flucky Mineral (S1) fleyed Matrix (S4) fledox (S5) Matrix (S6) fface (S7) (LRR R, M	/ILRA 14 ! tion and v	Polyvalue Belo MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress PB)) ace (S9) (I Mineral (F' Matrix (F2 x (F3) urface (F6) Surface (F6) sions (F8)	LRR R, MI 1) (LRR K)	LRA 149B , L)	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, M) 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)
Type: Depth (ind	ches):		_				Hydric Soil Present? Yes X No
Remarks:							

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 5, 2023
Applicant/Owner: Town of Washington		State: <u>NY</u>	Sampling Point: <u>DP-UPL-3</u>
Investigator(s): <u>J. Spain</u>	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): hillslope	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>5</u>
Subregion (LRR or MLRA): LRR-R La	t:	Long:	Datum:
Soil Map Unit Name: <u>Su—Sun silt loam</u>		NWI classific	cation:
Are Vegetation NO, Soil NO, or Hydrology NO	significantly disturbed?	Are "Normal Circumstances" p	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology NO	State: NY Sampling Point: Dp-upL3		
SUMMARY OF FINDINGS – Attach site r	nap showing sampling poi	nt locations, transects	, important features, etc.
Hydric Soil Present? Yes Wetland Hydrology Present? Yes	No X within a W	etland? Yes	
Upland hillslope adjacent to Wetland C			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
	1		,
1 -	ī ` ´		
	· · · · · · · · · · · · · · · · · · ·	_	, ,
	1		
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) 🔲 Saturation V	isible on Aerial Imagery (C9)
	ī ` ` ´ ·	_	` /
	1		
1 -	` ′		
1 =	Other (Explain in Remarks)	=	. ,
		FAC-Neutral	Test (D3)
	Depth (inches):		
	_ Depth (inches):	Wetland Hydrology Preser	nt? Yes 🔲 No 🛚
Soil Map Unit Name: Su_Sunsilt loam			
Remarks:			
Applicant/Owner Town of Washington State: NY Sampling Point: De-UPL-3 Investigator(s): L-Spain Section, Township, Range: Landform (illislope Local relief (concave, convex, none):			
Applicant/Owner: Town of Washington			

	S.			5	
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test worksh	eet:
1. <u>N/A</u>				Number of Dominant Spec That Are OBL, FACW, or	
2					
				Total Number of Dominan Species Across All Strata:	
3					
l					cies FAC: <u>0</u> (A/E
5		-		That Ale OBE, I Aov, or	7.0. <u>0</u> (AL
				Prevalence Index works	neet:
7				Total % Cover of:	Multiply by:
		= Total Co	over	OBL species	x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species	
. <u>N/A</u>		_		FAC species	
2		-		FACU species	
3			_	UPL species	
1.				Column Totals:	(A) (B)
5				Prevalence Index =	B/A =
6				Hydrophytic Vegetation	Indicators:
				1 - Rapid Test for Hyd	
7				2 - Dominance Test is	
		= Total Co	over	3 - Prevalence Index	s ≤3.0 ¹
Herb Stratum (Plot size: 5') Lupland grasses (Poa sp.)	80	YES	FACU	4 - Morphological Ada	ptations ¹ (Provide supportir r on a separate sheet)
2. reed canary grass (Phalaris arundinacea)				Problematic Hydrophy	
3.				¹ Indicators of hydric soil as	nd wetland hydrology must
				be present, unless disturb	
4 -				Definitions of Vegetation	Strata:
5					
6				at breast height (DBH), re	(7.6 cm) or more in diamete gardless of height.
7				Sapling/shrub – Woody p	lants less than 3 in DRH
3				and greater than or equal	
9		-		Herh – All herbaceous (non-	woody) plants, regardless of
10		-		size, and woody plants less the	
11				Woody vines – All woody v	ines greater than 3.28 ft in
12		-		height.	6
	90	= Total Co	over		
Noody Vine Stratum (Plot size: 30')					
. <u>N/A</u>		_			
2.				Hydrophytic Vegetation	
3			¯	Present? Yes_	⊠ No □
4		_	_		
		= Total Co	over		
		- Total oc	7 4 61		

SOIL Sampling Point: DP-UPL-3

Profile Desc	ription: (Describe	to the de	pth needed to document the	indicator	or confirm	n the absence of indicators.)
Depth	Matrix		Redox Featur	es		
(inches)	Color (moist)	%	Color (moist) %	Type ¹	Loc ²	Texture Remarks
0-3	10YR 2/2	100			-	silt loam
3-12	10YR 3/2	100				silt loam
						- <u></u>
				_	-	
				_		
				-	-	
				_	_	
					_	
						· ·
17		J.C. DA	A Deducation MO Mark		-	21
Hydric Soil		oletion, RN	1=Reduced Matrix, MS=Mask	ed Sand G	rains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol			Polyvalue Below Surface	e (S8) (LF	RR,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
	pipedon (A2)		MLRA 149B)			Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3) en Sulfide (A4)		Thin Dark Surface (S9) Loamy Mucky Mineral (5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M)
	d Layers (A5)		Loamy Gleyed Matrix (F		τ, Ξ/	Polyvalue Below Surface (S8) (LRR K, L)
	d Below Dark Surfac	e (A11)	Depleted Matrix (F3)			Thin Dark Surface (S9) (LRR K, L)
	ark Surface (A12) Mucky Mineral (S1)		Redox Dark Surface (Find Depleted Dark Surface			☐ Iron-Manganese Masses (F12) (LRR K, L, R) ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
	Gleyed Matrix (S4)		Redox Depressions (F8	. ,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	Redox (S5)					Red Parent Material (F21)
	l Matrix (S6) rface (S7) (LRR R, I	MI RA 149	JB)			☐ Very Shallow Dark Surface (TF12) ☐ Other (Explain in Remarks)
	f hydrophytic vegeta Layer (if observed)		vetland hydrology must be pre	sent, unles	s disturbed	d or problematic.
Type:	Layer (II observed)	•				
Depth (in	ches):		-			Hydric Soil Present? Yes No X
Remarks:						

Project/Site: 23.3211/Killearn Rd.	City/Co	ounty: <u>Milbrook/Dutchess</u>	Sampling Date: Apr 5, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-D</u>
Investigator(s): <u>J. Spain</u>	Sectio	n, Township, Range:	
Landform (hillslope, terrace, etc.): depres	ssion Local relia	ef (concave, convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R	Lat:	Long:	Datum:
Soil Map Unit Name: <u>Su - Sun silt Ioam</u>		NWI clas	ssification: PFO
Are climatic / hydrologic conditions on the	e site typical for this time of year? Ye	es 🔲 No 🔲 (If no, explain	in Remarks.)
Are Vegetation NO, Soil NO, or H	lydrology NO significantly disturb	ped? Are "Normal Circumstanc	es" present? Yes 🔲 No 🔲
Are Vegetation NO , Soil NO , or H	lydrology <u>NO</u> naturally problema	tic? (If needed, explain any ar	nswers in Remarks.)
SUMMARY OF FINDINGS – Att	tach site map showing sam	pling point locations, transe	ects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedur	res here or in a separate report.)	Is the Sampled Area within a Wetland? If yes, optional Wetland Site ID: Wetl	
Forested/vernal pond wetland on west sid	le of Killearn rd		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Ir	ndicators (minimum of two required)
Primary Indicators (minimum of one is re	equired; check all that apply)	Surface	Soil Cracks (B6)
Surface Water (A1) High Water Table (A2)	Water-Stained Leaves	· '	e Patterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	_	im Lines (B16) son Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odd		Burrows (C8)
Sediment Deposits (B2)			on Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced	Iron (C4) Stunted	or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction	n in Tilled Soils (C6) 💹 Geomor	phic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C	<i>'</i>	Aquitard (D3)
Inundation Visible on Aerial Imagery			pographic Relief (D4)
Sparsely Vegetated Concave Surfa Field Observations:	ICE (B8)	FAC-Ne	utral Test (D5)
_	No Depth (inches):2-4"		
	No Depth (inches):0"		
I	No Depth (inches):0"	Wetland Hydrology Pro	esent? Yes 🗵 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge	o monitoring well periol photos prov		
Describe Recorded Data (stream gauge	s, monitoring well, aerial photos, pre-	nous inspections), ii available.	
Remarks:			

'EGETATION – Use scientific names of plants	· .			Gan	pling Point: DP-D	
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet	:	
I . <u>Red maple (Acer rubrum)</u>		YES	FAC	Number of Dominant Species That Are OBL, FACW, or FAC		(A)
2. Red oak (Quercus rubra)		YES	FACU		. <u>1</u>	_ (/ (/
3				Total Number of Dominant Species Across All Strata:	5	(B)
l				Percent of Dominant Species		. ,
5				That Are OBL, FACW, or FAC		(A/B
5						
7				Prevalence Index workshee		
		= Total Co		Total % Cover of: OBL species		
Conling/Shrub Stratum (Diot aiza: 15'	40	10tal C0	vei	FACW species		
Sapling/Shrub Stratum (Plot size: 15')	F0	VEC	EACW.	FAC species		
1. <u>Dwarf honeysuckle</u>				FACU species		
2				UPL species		
3				Column Totals:	(A)	(B)
4				Prevalence Index = B/A	\ =	
5		-				
6		-		Hydrophytic Vegetation Ind		
7				1 - Rapid Test for Hydrop 2 - Dominance Test is >5		
	50	= Total Co	ver	3 - Prevalence Index is ≤		
Herb Stratum (Plot size: 5')				4 - Morphological Adapta	tions ¹ (Provide su	pporting
1_tussock sedge (Carex stricta)				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)		
2 Skunk cabbage (Symplocarpus foetidus)				Problematic Hydrophytic	vegetation (Expi	ain)
3				¹ Indicators of hydric soil and was be present, unless disturbed		must
4		-			•	
5				Definitions of Vegetation St	rata:	
6				Tree – Woody plants 3 in. (7. at breast height (DBH), regard		iamete
7		-				
3				Sapling/shrub – Woody plan and greater than or equal to 3		ВH
9					, ,	C
10		_		Herb – All herbaceous (non-wo size, and woody plants less than		ess of
11		-		Woody vines – All woody vines	greater than 2.29 ft	in
12		-		height.	greater than 3.28 ft	111
	45	= Total Co	ver			
Noody Vine Stratum (Plot size: 30')						
1. <i>N/A</i>		_	_ =			
2.		_		Hydrophytic Vegetation		
3		_		Present? Yes	No 🗌	
4		_	_			
		= Total Co	ver			
Remarks: (Include photo numbers here or on a separate	sheet.)					
Remarks: (Include photo numbers here or on a separate	sheet.)					

SOIL Sampling Point: <u>DP-D</u>

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix		Redo	x Features	3		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-5	10YR 2/1	100				-	mucky
5-12	10YR 5/2	90	10YR 5/4	10	<u>C</u>	M	silt loam
					_		
						_	
						_	
						_	
		· ·					
					-	-	
					_	-	
					_	_	
¹ Type: C=Co	ncentration D=Dep	letion, RM	/=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:	1001011, 101	T TOGGGGG WIGHTX, INC	<u> </u>	ound on	unio.	Indicators for Problematic Hydric Soils ³ :
Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) I Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) fface (S7) (LRR R, M	ILRA 149 ion and w	Polyvalue Belov MLRA 149B Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress Redox Depress) ace (S9) (L Mineral (F1 Matrix (F2 x (F3) urface (F6) Surface (F6) sions (F8)	RR R, M) (LRR K)	LRA 149B)	Dark Surface (S7) (LRR K, L, M) 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)
Restrictive L	.ayer (if observed):						
	:hes):		-				Hydric Soil Present? Yes X No X
Remarks:							

Project/Site: 23.3211/Killearn Rd.	City/County: Milbi	ook/Dutchess	Sampling Date: Apr 5, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: DP-UPL-4
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): <u>terrace</u>	Local relief (concave,	convex, none): concave	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R	Lat:	Long:	Datum:
Soil Map Unit Name: Su—Sun silt loam		NWI classifi	cation: UPL
Are climatic / hydrologic conditions on the site typic			
Are Vegetation NO , Soil NO , or Hydrology	NO significantly disturbed?	Are "Normal Circumstances"	present? Yes X No
Are Vegetation NO , Soil NO , or Hydrology		(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site	e map showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes		pled Area etland? Yes	<u>l</u> № ⊠
Remarks: (Explain alternative procedures here of Upland forested area adjacent to wetland D	r in a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; cl	heck all that apply)	Surface Soil	Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)		atterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	Moss Trim L	Lines (B16) Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living F		/isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	· · · -	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So	oils (C6) 🔲 Geomorphic	Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	, ,
Inundation Visible on Aerial Imagery (B7)	U Other (Explain in Remarks)	= ' '	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)			I Test (D5)
Field Observations: Surface Water Present? Yes No	Depth (inches):		
· —	Depth (inches):		
	Depth (inches):	Wetland Hydrology Prese	nt? Yes ☐ No ☒
(includes capillary fringe)			165 <u>-</u> 160 <u>-</u>
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspect	tions), if available:	
Remarks:			

'EGETATION – Use scientific names of plants	o.				Sampling Point: DP-U	IPL-4
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	t Indicator Status	Dominance Test worksh		
. <u>Red oak (Quercus rubra)</u>	50	YES	FACU	Number of Dominant Spec That Are OBL, FACW, or I		(A)
<u>Red maple (Acer rubrum)</u>		YES	FAC			_ ('')
White ash (Fraxinus americana)		YES	FACU	Total Number of Dominan Species Across All Strata:	: _5	(B)
·						_ ` '
5				Percent of Dominant Spec That Are OBL, FACW, or I		_ (A/B
5.				Prevalence Index works		
<u>, </u>	100					
151	100	= Total Co	ver	OBL species		
Sapling/Shrub Stratum (Plot size: 15')				FACW species		
1 . <u>Morrow' s honeysuckle (Lonicera morrowii)</u>				FACU species		
2. <u>Red oak</u>				UPL species		
3				Column Totals:		
1						, ,
5		-		Prevalence Index =	B/A =	
6		_		Hydrophytic Vegetation		
7		_		1 - Rapid Test for Hyd		
	45	= Total Co	ver	2 - Dominance Test is		
Herb Stratum (Plot size: 5')				3 - Prevalence Index i		
1. <i>N/A</i>		-	-	4 - Morphological Ada data in Remarks of	ptations (Provide si on a separate shee	ipportin t)
2				Problematic Hydrophy	rtic Vegetation ¹ (Exp	lain)
3.				¹ Indicators of hydric soil ar	nd wetland hydrology	/ must
4				be present, unless disturb		
5				Definitions of Vegetation	Strata:	
6				Tree – Woody plants 3 in.		diamoto
				at breast height (DBH), reg		ulalliele
7				Sapling/shrub – Woody p	lants less than 3 in	DRH
3				and greater than or equal		DDII
9				Herb – All herbaceous (non-	woody) plants, regard	less of
10				size, and woody plants less the		
11		-		Woody vines – All woody v	ines greater than 3.28 f	t in
12		-		height.		
		= Total Co	ver			
Noody Vine Stratum (Plot size: 30')						
I . <u>N/A</u>		_				
2		_		Hydrophytic Vegetation		
3		_		Present? Yes _	U No ⊠	
4. <u> </u>		_				
		= Total Co	ver			
Remarks: (Include photo numbers here or on a separate		= Total Co	ver			

SOIL Sampling Point: <u>DP-UPL-4</u>

Profile Desc	ription: (Describe	to the de	pth needed to docum	nent the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Features	<u>8</u> _ 1	. 2	
(inches)	Color (moist)	100	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-3	10YR 2/2	100					silt loam
3-8	10Yr 3/3	100			-		silt loam
8-16	10YR 3/4	100			-		silt loam
		_					
					_	-	
					_	_	
					_	_	
-					_	_	
						_	· —— ——
							-
		-					-
		letion, RM	1=Reduced Matrix, MS	3=Masked	Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Stripped Dark Su	(A1) pipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Matrix (S6) rface (S7) (LRR R, I	MLRA 149	Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi	ce (S9) (L Mineral (F1 Matrix (F2 (F3) face (F6) Surface (F ions (F8)	.RR R, MI I) (LRR K)	_RA 149B	Dark Surface (S7) (LRR K, L, M) 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)
Type:	ches):		-				Hydric Soil Present? Yes No
Remarks:			-				

Project/Site: 23.3211/Killearn Rd.	City/County: Milbi	rook/Dutchess	Sampling Date: Apr 5, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-E</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R Lat	II	Long:	Datum:
Soil Map Unit Name: <u>DwC - Dutchess-Cardigan complex</u>	X	NWI classific	cation: PEM
Are climatic / hydrologic conditions on the site typical f	or this time of year? Yes <u>X</u> ١	No (If no, explain in F	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO	significantly disturbed?	Are "Normal Circumstances"	present? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Wetland Hydrology Present? Yes X	No Within a Wo	pled Area etland? Yes X	No
Remarks: (Explain alternative procedures here or in PEM cattail marsh on west side of road	a separate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:	ala all that and A		ators (minimum of two required)
Primary Indicators (minimum of one is required; chec	Water-Stained Leaves (B9)	<u>U</u> Surface Soil <u>D</u> Drainage Pa	,
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim L	
Saturation (A3)	Marl Deposits (B15)	Dry-Season	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bur	, ,
Sediment Deposits (B2) Drift Deposits (B3)	Oxidized Rhizospheres on Living I Presence of Reduced Iron (C4)		Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	, ,
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopogra	aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)		FAC-Neutral	I Test (D5)
Field Observations:			
Surface Water Present? Yes X No \(\subseteq \)	_ Depth (inches):12"		
Water Table Present? Yes ☒ No ☐ Saturation Present? Yes ☒ No ☐	_ Depth (inches):0" _ Depth (inches):0"	Wetland Hydrology Preser	nt? Yes 🗵 No 🗌
(includes capillary fringe)			iit: Tes EI NO EI
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspec	tions), if available:	
Remarks:			

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	t Indicator Status	Dominance Test worksh	
· N/A				Number of Dominant Spec That Are OBL, FACW, or	
2					、 ,
				Total Number of Dominan Species Across All Strata:	
3					(D)
l				Percent of Dominant Spec That Are OBL, FACW, or I	
5				That Are Obc, FACVV, or I	AC. <u>100</u> (A/B
S	-			Prevalence Index works	neet:
7		_		Total % Cover of:	Multiply by:
		= Total Co	ver	OBL species	x 1 =
Sapling/Shrub Stratum (Plot size: 15')				FACW species	x 2 =
I. <i>N/A</i>		-	-	FAC species	x 3 =
2.				FACU species	x 4 =
				UPL species	x 5 =
3				Column Totals:	(A) (B)
4				Prevalence Index =	R/A =
5					•
5		-		Hydrophytic Vegetation	
7				1 - Rapid Test for Hyd	
		= Total Co	ver	2 - Dominance Test is	
Herb Stratum (Plot size: 5')				3 - Prevalence Index	s ≤3.0 ptations¹ (Provide supporting
Narrow leaf cattail (Typha angustifolia)	90	YES	OBL		r on a separate sheet)
2				Problematic Hydrophy	rtic Vegetation¹ (Explain)
3		-			nd wetland hydrology must
4		_		be present, unless disturb	ed or problematic.
5		-	-	Definitions of Vegetation	Strata:
6				Tree - Woody plants 3 in	(7.6 cm) or more in diamete
7				at breast height (DBH), re	
				Sapling/shrub – Woody p	plants less than 3 in DBH
3				and greater than or equal	
9				Herb – All herbaceous (non-	woody) plants, regardless of
10		-		size, and woody plants less the	
11		-		Woody vines – All woody v	ines greater than 3.28 ft in
12		_		height.	mes greater than 3.20 it in
	90	= Total Co	ver		
Noody Vine Stratum (Plot size: 30')					
. N/A		-	-		
2.		_		Hydrophytic	
3.		_		Vegetation Present? Yes	⊠ No □
				_	
4					
		= Total Co	ver		

SOIL Sampling Point: <u>DP-E</u>

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Features	<u>S</u>	2	
(inches)	Color (moist) 10YR 2/1	<u></u> %	Color (moist)	%	Type ¹	_Loc ² _	
0-8							
8-14	10YR 3/2	90	10YR 5/4	10	<u>C</u>	<u>M</u>	silt loam
-							
					-	-	
					_	-	
					_	-	
					_	-	
					-	-	
					-	-	
					_	-	
					-	-	
					_	_	
1Type: C=Cc	ncentration D=Den	letion RN	- ∕/=Reduced Matrix, M	S=Masked	Sand Gr	ains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I		iotion, rti	T TOGGOOG WIGHTX, WI	<u>o maonea</u>	Carla Cr	unio.	Indicators for Problematic Hydric Soils ³ :
Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	(A1) ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	ILRA 14 9	Polyvalue Below MLRA 149B Thin Dark Surfa Loamy Mucky Name of the Loamy Gleyed Depleted Matrix Redox Dark Surfa Redox Depress Redox Depress PB)	ace (S9) (L Mineral (F1 Matrix (F2 x (F3) urface (F6) Surface (F sions (F8)	.RR R, M 1) (LRR K)	LRA 149B	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, M) 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)
Type: Depth (inc	:hes):		-				Hydric Soil Present? Yes 🗵 No 🔲
Remarks:	,		<u>-</u>				

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 5, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-UPL-5</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): flat	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): 0
Subregion (LRR or MLRA): LRR-R Lat	· ·	Long:	Datum:
Soil Map Unit Name: Su—Sun silt loam		NWI classific	cation: UPL
Are climatic / hydrologic conditions on the site typical f	for this time of year? Yes <u>X</u> 1	No (If no, explain in F	Remarks.)
Are Vegetation NO, Soil NO, or Hydrology NO	significantly disturbed?	Are "Normal Circumstances"	present? Yes 🗵 No 🔲
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling poi	nt locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in	No X within a W If yes, optio		No ⊠
Upland forested area adjacent to Wetland E	а ѕерагате тероп.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; chec		Surface Soil	,
Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Pa☐ Moss Trim L	
Saturation (A3)	Marl Deposits (B15)	_	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bur	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) 🔲 Saturation V	isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	_	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So		Position (D2)
☐ Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqu	
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral	aphic Relief (D4)
Field Observations:		<u> </u>	Trest (D3)
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Yes No	Depth (inches):		
Saturation Present? Yes No 🗵	_ Depth (inches):	Wetland Hydrology Preser	nt? Yes 🔲 No 🛚
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspec	tions), if available:	
Remarks:			

)	Dominant Species? YES YES	Status FAC FACU	Dominance Test workshop Number of Dominant Spec That Are OBL, FACW, or F Total Number of Dominant Species Across All Strata:	ies 'AC: <u>1</u> (A)
)	YES -	FACU -	That Are OBL, FACW, or F Total Number of Dominant	FAC: 1 (A)
)	-		Total Number of Dominant	
	-			
			openios / toroco / tir otrata.	<u> </u>
		_		
			Percent of Dominant Speci That Are OBL, FACW, or F	
	-		That the OBE, I MOVV, of I	710
			Prevalence Index worksh	neet:
			Total % Cover of:	Multiply by:
)	= Total Cov	ver	OBL species	x 1 =
			FACW species	x 2 =
)	YES	FACU	FAC species	x 3 =
	-	-	FACU species	
			Column Totals:	(A) (E
			Prevalence Index = I	B/A =
			Hardward C. W. and C. and	
)	= Total Cov	ver	1 =	
			4 - Morphological Ada	ptations ¹ (Provide supporti
			<u> </u>	
			-	-
			Definitions of Vegetation	Strata:
			Tree – Woody plants 3 in.	
	_		at breast height (DBH), reg	gardless of height.
	_		Sapling/shrub – Woody p	
	-	-	and greater than or equal t	o 3.28 ft (1 m) tall.
	-	_	Herb – All herbaceous (non-	
			size, and woody plants less th	an 3.28 ft tall.
			Woody vines – All woody vi	nes greater than 3.28 ft in
			height.	
	= Total Cov	ver		
			Hardward at the	
				_
			Present? Yes _	□ No 🗵
	= Total Cov	ver		
et.)				
		D = Total Cov YES		OBL species FACW species FACU species FACU species FACU species UPL species UPL species Column Totals:

SOIL Sampling Point: DP-UPL-5

Profile Desc	ription: (Describe	to the de	oth needed to docum	nent the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Features	<u>s</u>	2	
(inches)	Color (moist)		Color (moist)	<u></u> %	Type ¹	_Loc ² _	
0-3	10YR 2/1	100					silt loam
3-12	10YR 3/3	100					silt loam
					-	-	
					_	_	
					-		
							· ——
					-		
					-	-	
					_	_	
1 _{Type:} C=Ce	noontration D-Don	lotion DM			Sand Cre		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I		ielion, Riv	-Reduced Matrix, MS	<u></u>	Sand Gra	airis.	Indicators for Problematic Hydric Soils ³ :
Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surfacerk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	/ILRA 149 tion and w	Polyvalue Below MLRA 149B) Thin Dark Surfar Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi Redox Depressi	ce (S9) (L Mineral (F1 Matrix (F2 (F3) face (F6) Surface (F ions (F8)	RR R, MI () (LRR K)	.RA 149B	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, M) 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)
Type:	ches):						Hydric Soil Present? Yes NoX
Remarks:			•				ilyano don ricconti il co

Project/Site: 23.3211/Killearn Rd.	City/County: Milbs	rook/Dutchess	Sampling Date: Apr 6, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: DP-F
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): concave	Slope (%): 0
Subregion (LRR or MLRA): LRR-R Lat	;	Long:	Datum:
Soil Map Unit Name: <u>DwC - Dutchess-Cardigan complex</u>	(NWI classific	ation: PSS
Are climatic / hydrologic conditions on the site typical f	or this time of year? Yes <u>X</u> 1	No (If no, explain in R	emarks.)
Are Vegetation NO, Soil NO, or Hydrology NO_	significantly disturbed?	Are "Normal Circumstances" p	oresent? Yes 🗵 No 🔲
Are Vegetation NO_, Soil NO_, or Hydrology NO	naturally problematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling poi	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Wetland Hydrology Present? Yes X	No Within a W	pled Area etland? Yes X onal Wetland Site ID: Wetland I	No 🗆
Remarks: (Explain alternative procedures here or in Emergent wetland, linear depression along east side of H			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; chec		Surface Soil	, ,
☐ Surface Water (A1) ☐ High Water Table (A2) ☐	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Pat☐ Moss Trim Li	
Saturation (A3)	Marl Deposits (B15)		Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burr	rows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living I		sible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	<u></u>	tressed Plants (D1)
☐ Algal Mat or Crust (B4) ☐ Iron Deposits (B5) ☐	Recent Iron Reduction in Tilled So Thin Muck Surface (C7)	oils (C6) <u>M</u> Geomorphic Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		uphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	Other (Explain III Remarks)	FAC-Neutral	Test (D5)
Field Observations:		<u> </u>	
Surface Water Present? Yes No	_ Depth (inches):		
	_ Depth (inches):		
Saturation Present? Yes X No (includes capillary fringe)	_ Depth (inches):	Wetland Hydrology Presen	t? Yes 🗵 No 🗌
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspec	tions), if available:	
Remarks:			

Absolute				
	Dominant Species?		Dominance Test worksheet:	
	-		Number of Dominant Species That Are OBL, FACW, or FAC: 1	(\(\)
	-			(A)
	_		Total Number of Dominant Species Across All Strata: 1	(B)
				(D)
				(A/R)
			111dt/110 OBE, 171OW, 01171O	(700)
			Prevalence Index worksheet:	
			Total % Cover of: Multiply by:	
	= Total Co	/er		
	-			
	_			
			(/)	_ (ט)
			Prevalence Index = B/A =	
			Hydrophytic Vegetation Indicators:	
			1 - Rapid Test for Hydrophytic Vegetation	
			2 - Dominance Test is >50%	
	rotal oo	701	3 - Prevalence Index is ≤3.0 ¹	
30	YES	OBL		
			Problematic Hydrophytic Vegetation ¹ (Expla	in)
	-	-	¹ Indicators of hydric soil and wetland hydrology	must
			be present, unless disturbed or problematic.	
			Definitions of Vegetation Strata:	
			Trae Woody plants 3 in (7.6 cm) or more in di	amoto
			at breast height (DBH), regardless of height.	arrictor
			Sapling/shrub – Woody plants less than 3 in. D	ВН
			and greater than or equal to 3.28 ft (1 m) tall.	
	-		Herb – All herbaceous (non-woody) plants, regardle	ss of
			size, and woody plants less than 3.28 ft tall.	
			Woody vines – All woody vines greater than 3.28 ft	in
	-		height.	
3 5	= Total Co	/er		
	-		Hydraphytia	
	_		Hydrophytic Vegetation	
			Present? Yes X No	
3	95	- Total Cov	<u> </u>	That Are OBL, FACW, or FAC: 100 Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FACW species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Application FACW 3 - Prevalence Index is \$3.0¹ 4 - Morphological Adaptations¹ (Provide supdata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explata in Remarks or on a separate sheet) Tree - Woody plants 3 in. (7.6 cm) or more in diatoreast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. Dand greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardlessize, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height.

SOIL Sampling Point: DP-F

Profile Desc	cription: (Describe	e to the de	pth needed to docu	ment the i	ndicator	or confirn	n the absence of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	<u>S</u>	_Loc ²	Texture Remarks
0-5	10YR 2/1	100	Coloi (moist)	/0	- Type	-	muck
5-8	10YR 3/2	100					silt loam
8-14	10YR 3/2	90	10YR 5/6	10		M	silt loam
0-14	101K 3/2		1011 3/0	10		IVI	SILIOAIII
						-	
						-	
		_				-	·
			-,		-		
			_		-		
						_	- <u></u>
						-	
			_		-		
		pletion, RN	M=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Histosol Histic E Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy F Stripped Dark Su	Indicators: (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) (LRR R, of hydrophytic veget	nce (A11) MLRA 149 ation and v	Polyvalue Belo MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress	w Surface) ace (S9) (I Mineral (F- Matrix (F2 x (F3) urface (F6) Surface (F8)	(S8) (LR LRR R, M 1) (LRR K 2)	R R, LRA 149B (, 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) Dark Surface (S7) (LRR K, L, M) 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)

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 7, 2023
Applicant/Owner: Town of Washington		State: <u>NY</u>	Sampling Point: DP-UPL-6
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R La	at:	Long:	Datum:
Soil Map Unit Name: <u>Su—Sun silt loam</u>		NWI classific	cation: UPL
Are climatic / hydrologic conditions on the site typical			
Are Vegetation NO, Soil NO, or Hydrology NO	significantly disturbed?	Are "Normal Circumstances" p	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling poi	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in	No X within a W		No 🗵
upland mowed area adjacent to wetland F and G			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; che	-	Surface Soil	,
Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	☐ Drainage Pa ☐ Moss Trim Li	
Saturation (A3)	Marl Deposits (B15)	_	Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Buri	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living I	Roots (C3) 🔲 Saturation Vi	isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	_	tressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Sc		Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aqui	itard (D3) aphic Relief (D4)
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Other (Explain in Remarks)	FAC-Neutral	. ,
Field Observations:		I AO-Neutrai	1681 (D3)
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Yes No	Depth (inches):		
Saturation Present? Yes No X	Depth (inches):	Wetland Hydrology Presen	nt? Yes 🔲 No 🛚
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previous inspec	tions), if available:	
Remarks:			

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	et:	
1. <u>N/A</u>				Number of Dominant Species That Are OBL, FACW, or FA		
2					()	
3				Total Number of Dominant Species Across All Strata:	_1(
5				Percent of Dominant Species That Are OBL, FACW, or FA		
5				Prevalence Index workshe		
<u>, </u>				Total % Cover of:		
151		= Total Co	ver	OBL species		
Sapling/Shrub Stratum (Plot size: 15')				FACW species		
l. <u>N/A</u>				FACU species		
2				UPL species		
3				Column Totals:		
l		-				
5				Prevalence Index = B	5/A =	
5		_		Hydrophytic Vegetation In		
7	-			1 - Rapid Test for Hydro		
		= Total Co	ver	2 - Dominance Test is		
Herb Stratum (Plot size: 5')				3 - Prevalence Index is 4 - Morphological Adap		
_ Upland grasses (Poa sp.)	85	YES	FACU		on a separate sheet)	
2. big leaf plantain (Plantago major)	10	NO	FACU	Problematic Hydrophyti	ic Vegetation¹ (Explain)	
3. red clover (Trifolium pratense)	5	NO	FACU	¹ Indicators of hydric soil and		
1		-		be present, unless disturbed or problematic.		
5		-		Definitions of Vegetation	Strata:	
S		-		Tree – Woody plants 3 in. (7.6 cm) or more in		
7		_		at breast height (DBH), rega	ardiess of neight.	
3		-		Sapling/shrub – Woody pla and greater than or equal to		
)	-				, ,	
10		-		Herb – All herbaceous (non-w size, and woody plants less tha		
l1		-				
12		_		Woody vines – All woody vin height.	es greater than 3.28 ft in	
	100	= Total Co	ver			
Noody Vine Stratum (Plot size: 30')						
. <i>N/A</i>						
2		-	_	Hydrophytic		
3		-		Vegetation Present? Yes	□ No ⊠	
4		_				
		= Total Co	ver			
				1		

SOIL Sampling Point: <u>DP-UPL-6</u>

Profile Desc	ription: (Describe	to the de	oth needed to docum	nent the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Features	<u>s</u>	2	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture Remarks
0-2	10YR 2/1	100					silt loam
2-12	10YR 3/3	100					silt loam
					-	-	
					_	_	
					-		
					-		
					-	-	
					_	_	
					_	_	
1 _{Type:} C=Ce	noontration D-Don	lotion DM			Sand Cre		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I		ielion, Riv	-Reduced Matrix, MS	<u></u>	Sand Gra	airis.	Indicators for Problematic Hydric Soils ³ :
Histosol Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur	ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surfacerk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M	/ILRA 149 tion and w	Polyvalue Below MLRA 149B) Thin Dark Surfar Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi B)	ce (S9) (L Mineral (F1 Matrix (F2 (F3) face (F6) Surface (F ions (F8)	RR R, MI () (LRR K)	.RA 149B	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, M) 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)
Type:	ches):		-				Hydric Soil Present? Yes NoX
Remarks:			-				nyano don ricconti roc <u> </u>

Project/Site: 23.3211/Killearn Rd.	City/County: Milb	rook/Dutchess	Sampling Date: Apr 6, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-G</u>
Investigator(s): <u>J. Spain</u>	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): LRR-R Lat	:	Long:	Datum:
Soil Map Unit Name: Su—Sun silt loam		NWI classifi	ication: PSS
Are climatic / hydrologic conditions on the site typical for			
Are Vegetation NO, Soil NO, or Hydrology NO_	significantly disturbed?	Are "Normal Circumstances"	present? Yes X No D
Are Vegetation NO , Soil NO , or Hydrology NO	naturally problematic?	(If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site n	nap showing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes Yes X	No within a W]_ No
Remarks: (Explain alternative procedures here or in Small (<0.10 acre) roadside wetland depression on west			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	cators (minimum of two required)
Primary Indicators (minimum of one is required; chec		Surface Soi	l Cracks (B6)
	Water-Stained Leaves (B9)		atterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	Moss Trim I	Lines (B16) i Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Bu	
Sediment Deposits (B2)	Oxidized Rhizospheres on Living I		/isible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	_	Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled So		c Position (D2)
☐ Iron Deposits (B5) ☐	Thin Muck Surface (C7)	Shallow Aqu	` '
☐ Inundation Visible on Aerial Imagery (B7) ☐	Other (Explain in Remarks)	<u> </u>	raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8) Field Observations:		<u>△</u> FAC-Neutra	ai lest (D5)
Surface Water Present? Yes X No \(\sigma\)	Denth (inches):2"		
Water Table Present? Yes No 🗵			
<u> </u>	Depth (inches):3"	Wetland Hydrology Prese	nt? Yes 🗵 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring)	well aerial photos previous inspec		
Describe recorded Data (stream gauge, monitoring	well, aeriai priotos, previous irispee	tions), ii availabio.	
Remarks:			

nce Test worksheet: of Dominant Species OBL, FACW, or FAC: mber of Dominant Across All Strata: of Dominant Species OBL, FACW, or FAC: of Dominant Species OBL, FACW, or FAC: ce Index worksheet 'Cover of: cies cies cies cies cies cies cies cies	1 (B) : 100 (A/B) :	
OBL, FACW, or FAC: mber of Dominant Across All Strata: of Dominant Species OBL, FACW, or FAC: ce Index worksheet I % Cover of: cies pecies cies cies cies cies cies cies cyalence Index = B/A ytic Vegetation India apid Test for Hydroph	1 (B) : 100 (A/B) :	
mber of Dominant Across All Strata: of Dominant Species OBL, FACW, or FAC: oce Index worksheet oce Index worksheet oceies oceies oceies ocies ocie	1 (B) : 100 (A/B) :	
Across All Strata: of Dominant Species OBL, FACW, or FAC: oce Index worksheet: '' Cover of: cies cies cies cies cies cotals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	:	
of Dominant Species OBL, FACW, or FAC: ce Index worksheet Cover of: cies cies cies cies cies cies cotals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	:	
OBL, FACW, or FAC: Ice Index worksheet I % Cover of: Cies Decies Cies City Cies Ciotals: Cies Cotals: Cotals:	:Multiply by: x 1 = x 2 = x 3 = x 4 = x 5 = (A)(B)	
cce Index worksheet 1 % Cover of: cies cies cies cies cies cies cies cotals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	:Multiply by: x 1 = x 2 = x 3 = x 4 = x 5 = (A)(B)	
I % Cover of: cies cotals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	Multiply by: x 1 = x 2 = x 3 = x 4 = x 5 = (A)(B)	
cies pecies pecies pecies pecies pecies pecies pecies pecies protals: protals: protals: protals: protals = B/A Solution State of	x 1 = x 2 = x 3 = x 4 = x 5 = (A)(B)	
pecies cies ecies cies cies rotals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	x 2 = x 3 = x 4 = x 5 = (A)(B)	
cies ecies cies Totals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	x 3 = x 4 = x 5 = (A)(B)	
ecies cies Fotals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	x 4 = x 5 = (A)(B)	
cies Totals: valence Index = B/A ytic Vegetation India apid Test for Hydroph	x 5 =(B)	
valence Index = B/A ytic Vegetation India apid Test for Hydroph	(A) (B)	
valence Index = B/A ytic Vegetation India apid Test for Hydroph		
ytic Vegetation Indicate property of the state of the sta	=	
apid Test for Hydroph		
apid Test for Hydroph	cators:	
revalence Index is ≤3		
lorphological Adaptati ata in Remarks or on	ions¹ (Provide supporting a separate sheet)	
lematic Hydrophytic \		
¹ Indicators of hydric soil and wetland hydrology mube present, unless disturbed or problematic.		
ns of Vegetation Str	ata:	
oody plants 3 in. (7.6 height (DBH), regard	cm) or more in diameter less of height.	
shrub – Woody plants	s less than 3 in. DBH	
ter than or equal to 3.	.28 ft (1 m) tall.	
ll herbaceous (non-woo	dy) plants, regardless of	
woody plants less than 3	.28 ft tall.	
nes – All woody vines s	greater than 3.28 ft in	
-41-		
on	_	
Yes X	No 🗆	
i	hytic ion :? Yes <u>X</u>	

SOIL Sampling Point: <u>DP-G</u>

Profile Desc	ription: (Describe	to the de	pth needed to docur	ment the i	indicator	or confirm	n the absence of indicators.)
Depth	Matrix			x Feature	<u>s</u> _ 1	. 2	
(inches) 0-3	Color (moist) 10YR 2/1	100	Color (moist)	%	Type ¹	Loc ²	Texture Remarks muck
	-						·
3-7	10YR 3/2	100				-	silt loam
7-15	10YR 3/1	80	10YR 5/4	20	<u>C</u>	M	silt loam
						-	
						-	
						-	
					-	-	
			,		_	-	
¹ Type: C=Co	oncentration, D=Dep	letion, RN	/I=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:	,					Indicators for Problematic Hydric Soils ³ :
	pipedon (A2)		Polyvalue Below)			2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)
Black Hi	stic (A3) n Sulfide (A4)		Thin Dark Surfa	. , .)
Stratified	Layers (A5)		Loamy Gleyed	Matrix (F2		., –,	Polyvalue Below Surface (S8) (LRR K, L)
_	d Below Dark Surfac ark Surface (A12)	e (A11)	Depleted Matrix Redox Dark Su				☐ Thin Dark Surface (S9) (LRR K, L) ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
	lucky Mineral (S1)		Depleted Dark	, ,			Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy G	leyed Matrix (S4)		Redox Depress	sions (F8)	,		Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
	ledox (S5) Matrix (S6)						☐ Red Parent Material (F21) ☐ Very Shallow Dark Surface (TF12)
_	rface (S7) (LRR R, N	/ILRA 149	9B)				Other (Explain in Remarks)
			vetland hydrology mus	st be prese	ent, unles	s disturbed	I or problematic.
	_ayer (if observed):						
Type:	ches):		-				Hydric Soil Present? Yes 🗵 No 🔲
Remarks:							Hydric con rescale.

Project/Site: 23.3211/Killearn Rd.	City/Cou	ınty: Milbrook/Dutchess	Sampling Date: Apr 4, 2023
Applicant/Owner: Town of Washington		State: <u>NY</u>	Sampling Point: DP-H
Investigator(s): <u>J. Spain</u>	Section,	Township, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief	(concave, convex, none): _concav	e Slope (%): 0
Subregion (LRR or MLRA): LRR-R	Lat:	Long:	Datum:
Soil Map Unit Name: GsB—Georgia silt loam		NWI cla	assification: <u>PEM</u>
Are climatic / hydrologic conditions on the sit	e typical for this time of year? Yes	No (If no, explai	n in Remarks.)
Are Vegetation NO, Soil NO, or Hydr	ology NO significantly disturbe	d? Are "Normal Circumstan	ces" present? Yes 🔲 No 🔲
Are Vegetation NO , Soil NO , or Hydr	ology NO naturally problemation	c? (If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS – Attac	h site map showing samp	ling point locations, trans	ects, important features, etc.
Hydric Soil Present? Y Wetland Hydrology Present? Y	/es	s the Sampled Area vithin a Wetland? f yes, optional Wetland Site ID:	⊠ No □
Remarks: (Explain alternative procedures Roadside Phragmites marsh on west side of K		culvert	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is requ			e Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (· · —	ge Patterns (B10)
High Water Table (A2) Saturation (A3)	Aquatic Fauna (B13) Marl Deposits (B15)	_	rim Lines (B16) ason Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor		h Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres		tion Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Ir	on (C4)	d or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction i	• • —	orphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)		v Aquitard (D3)
Inundation Visible on Aerial Imagery (E	, —	rks) \square Microto	ppographic Relief (D4) eutral Test (D5)
Sparsely Vegetated Concave Surface Field Observations:	(88)	FAC-N	eutrai Test (D5)
_	No Depth (inches):		
Water Table Present? Yes			
Saturation Present? Yes X	No Depth (inches):0"	Wetland Hydrology P	resent? Yes 🗵 No 🗌
(includes capillary fringe) Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previo	bus inspections), if available:	
Remarks:			
Tomano.			
T. Control of the con			

	i.					
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominan Species?	t Indicator Status	Dominance Test worksh	eet:	
1. <i>N/A</i>				Number of Dominant Spec		
				That Are OBL, FACW, or	FAC: <u>1</u> (A)	
				Total Number of Dominan Species Across All Strata:		
3						
l				Percent of Dominant Spec That Are OBL, FACW, or		
5				mat Arc OBE, 1 AOVV, or	(A/B)	
5				Prevalence Index works	heet:	
7		-		Total % Cover of:	Multiply by:	
		= Total Co	ver	OBL species		
Sapling/Shrub Stratum (Plot size: 15')				FACW species		
. <u>N/A</u>				FAC species		
2		-		FACU species		
3		_		UPL species	X 5 (A) (B)	
4		_		Joidini Totals.	(r,) (D)	
5				Prevalence Index =	B/A =	
3				Hydrophytic Vegetation	Indicators:	
7				1 - Rapid Test for Hyd	drophytic Vegetation	
		= Total Co		2 - Dominance Test is	s >50%	
Herb Stratum (Plot size: 5')		_		3 - Prevalence Index		
1. Common Reed (Phragmites australis)	90	YES	FACW		nptations ¹ (Provide supporting r on a separate sheet)	
2. Purple loosestrife (Lythrum salicaria)				Problematic Hydrophytic Vegetation ¹ (Explain		
3		_		Indicators of hydric soil and wetland hydrology n		
4				be present, unless disturbed or problematic.		
5				Definitions of Vegetation	n Strata:	
6				Tree – Woody plants 3 in.	(7.6 cm) or more in diameter	
7				at breast height (DBH), re		
8.				Sapling/shrub – Woody p	plants less than 3 in. DBH	
9				and greater than or equal	to 3.28 ft (1 m) tall.	
10		_		Herb – All herbaceous (non-	-woody) plants, regardless of	
11		_		size, and woody plants less t	han 3.28 ft tall.	
				Woody vines – All woody v	ines greater than 3.28 ft in	
12	115			height.		
201	113	= Total Co	over			
Woody Vine Stratum (Plot size: 30')						
1. <i>N/A</i>				Hydrophytic		
2		-		Vegetation	☑ □	
			_ =	Present? Yes_	No 🗌	
3		_				
3 4						

SOIL Sampling Point: <u>DP-H</u>

Profile Desc	ription: (Describe	to the de	pth needed to docui	ment the i	ndicator	or confirm	n the absence of indicators.)
Depth	Matrix	0/		x Features	<u>S</u>	1 2	Today
(inches) 0-6	Color (moist) 10YR 2/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture Remarks muck
	10YR 3/2	90	10YR 5/4	10		Μ.	silt loam
6-10						M	. ———
10-16	10YR 3/1	80	10YR 5/4	20	<u>C</u>	M	silt loam
		· ——			-	-	
		· ——			-	-	
			· -			-	
						-	
					-	-	
						-	
			· · · · · · · · · · · · · · · · · · · 		-		
		letion, RN	M=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix.
Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy R Stripped Dark Sul	(A1) pipedon (A2) stic (A3) n Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) ducky Mineral (S1) dedox (S5) Matrix (S6) rface (S7) (LRR R, M	ILRA 14 9	Polyvalue Belom MLRA 149B Thin Dark Surfate Loamy Mucky National Loamy Gleyed Depleted Matrix Redox Dark Surfate Depleted Dark Redox Depress PB) Wetland hydrology musting MLRA 149B MINING M	ace (S9) (L Mineral (F1 Matrix (F2 x (F3) urface (F6) Surface (F8)	LRR R, M 1) (LRR K)	LRA 149B	□ Dark Surface (S7) (LRR K, L, M) □ 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)
Type:			_				
Depth (inc	ches):		_				Hydric Soil Present? Yes X No

Project/Site: 23.3211/Killearn Rd.	City/County: Milbr	ook/Dutchess	Sampling Date: Apr 7, 2023
Applicant/Owner: Town of Washington		State: NY	Sampling Point: <u>DP-UPL-7</u>
Investigator(s): J. Spain	Section, Township	, Range:	
Landform (hillslope, terrace, etc.): depression	Local relief (concave,	convex, none): concave	Slope (%): <u>0</u>
Subregion (LRR or MLRA): <u>LRR-R</u> Lat:		Long:	Datum:
Soil Map Unit Name:		NWI classif	ication:
Are climatic / hydrologic conditions on the site typical for this t			
Are Vegetation NO, Soil NO, or Hydrology NO sig	unificantly disturbed?	Are "Normal Circumstances"	present? Yes X No
Are Vegetation NO , Soil NO , or Hydrology NO nat		(If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes	within a Wo	pled Area etland? Yes nal Wetland Site ID:]_ No 🗵
Remarks: (Explain alternative procedures here or in a sepa Upland forested area adjacent to Wetland H	rate report.)		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	at apply)	Surface Soi	l Cracks (B6)
1 	-Stained Leaves (B9)		atterns (B10)
	ic Fauna (B13)	Moss Trim I	* *
	Deposits (B15)		Water Table (C2)
	ogen Sulfide Odor (C1) zed Rhizospheres on Living F	Crayfish Bu	/isible on Aerial Imagery (C9)
	nce of Reduced Iron (C4)	` ' 🗖	Stressed Plants (D1)
	nt Iron Reduction in Tilled So	_	c Position (D2)
	Muck Surface (C7)	Shallow Aq	
	(Explain in Remarks)		raphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	,	FAC-Neutra	, ,
Field Observations:			
Surface Water Present? Yes No Deptl	' '		
Water Table Present? Yes No Depti			
Saturation Present? Yes NoX_ Depti (includes capillary fringe)	n (inches):	Wetland Hydrology Prese	nt? Yes L No X
Describe Recorded Data (stream gauge, monitoring well, as	erial photos, previous inspect	tions), if available:	
Remarks:			

	ts.				
Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksh	neet:
. Red maple (Acer rubrum)	40	YES	FAC	Number of Dominant Spe That Are OBL, FACW, or	
. White ash (Fraxinus americana)		YES	FACU		
			-	Total Number of Dominar Species Across All Strata	
				Percent of Dominant Spe	oioo
				That Are OBL, FACW, or	
					·
5				Trevalence mack works	
151		= Total Co	ver	OBL species	
Sapling/Shrub Stratum (Plot size: 15')				FACW species	
1 . morrow's honeysuckle (Lonicera morrowii)				FACII species	
2				UPL species	
3					(A) (B)
1. <u> </u>					
5		_		Prevalence Index =	: B/A =
5. <u> </u>					
7		_		1 - Rapid Test for Hy	
	25	= Total Co	ver	2 - Dominance Test i	
Herb Stratum (Plot size: 5')				3 - Prevalence Index	
1. N/A					aptations ¹ (Provide supportin or on a separate sheet)
2		_		Problematic Hydroph	ytic Vegetation¹ (Explain)
3		_		he present unless disturbed or problematic	
4					
5		-		Definitions of Vegetatio	n Strata:
6					. (7.6 cm) or more in diameter
7		-		at breast height (DBH), re	egardless of height.
B		_		Sapling/shrub – Woody and greater than or equal	plants less than 3 in. DBH
9		_			, ,
10		_		Herb – All herbaceous (non size, and woody plants less	n-woody) plants, regardless of
11		_		, , , , , ,	
12			-	Woody vines – All woody vineight.	vines greater than 3.28 ft in
		= Total Co	ver		
Noody Vine Stratum (Plot size: 30')					
. N/A		_	_		
2.		_		Hydrophytic	
3		_		Vegetation Present? Yes	□ No ⊠
7					
1		= Total Co	ver		
4					

SOIL Sampling Point: DP-UPL-7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			x Features	<u>s</u> _ 1	. 2			
(inches) 0-3	Color (moist) 10YR 2/2	100	Color (moist)	%	Type ¹	Loc ²			
	-								
3-7	10YR 3/2	100			-		silt loam		
7-15	10YR 3/3	100					silt loam		
						-			
					-				
					-	-			
					_	_			
		-			_	_			
-					_				
1Typo: C=C	ancontration D-Don	lotion PM	I-Poducod Matrix MS		Sand Gr		² Location: PL=Pore Lining, M=Matrix.		
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: 2 Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :									
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 149)			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)			_RA 149B	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, M) 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)		
Type:	ches):						Hydric Soil Present? Yes No		
Remarks:			·				nyane com recommend		

Supplemental Form B Linear Waters of the U.S. Field Classification Form

Whenever an ephemeral stream, intermittent stream, or perennial stream is identified on a project site, use this form to document field observations in support of the field interpreted stream classification.

Stream Feature	:PS-1		Watershed:
⊠Surface water	flow within a define		icable):
	dinary High Water I present, place a stake	Mark e to mark its location).	
□Water seeping	g from banks (<i>or ice al</i>	ong banks in winter)	
	floodplain or observ		
☐ Presence of fis ☐ Primarily eros	h or macroinvertebra	ates	
Recent sedime	ent deposits or accun	nulations in channel	
☐ Algae growing	g on bed materials		
Rooted plants	growing in channel	bed	
⊠ Hydric soils ir	n sides of channel		
Antecedent weat	ther conditions 50°	sunny	in remarks section if necessary):
Position of chann	nel within the draina	ge basin (high, middle, low)? lov	v
Gradient of the cl	hannel (steep, modera	tely sloping, flat)? Flat	
	ology (linear/meander		1 ()
Width of channe		ft. Height of bank? e or below defined channel? A	
			t from surrounding ground surface):
Sand.silt.pebble	S		
Topographic maj	p designation? Inter	mittent 🗌 Perennial 🛛 No	t mapped 🗌
Describe off-si	te conditions:		
		nannel? Rural residential pro	operty
		etention basin) regulating the f	
	through culvert at I		
Remarks: NYSDEC Class wetland (Wetla		rth to south across Killearn I	Rd within boundaries of emergent
Based on obser Ephemeral Stre		ze the stream type (circle or Intermittent Stream	ne): Perennial Stream
Project Name:	Killearn Rd	Date of Field Rev	riew: April 5, 2023
Project Number:	23.3211	Field Reviewer:	J.Spain

Attachment 3 Representative Photographs

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



1. Killearn Road corridor viewed west



2. Wetland A viewed south

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



3. Wetland B viewed northwest



4. Pond 1 viewed north

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



5. Wetland C viewed west



6. Killearn Road corridor viewed south

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



7. Wetland D viewed west



8. Wetland E viewed west

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



9. Pond 2 viewed northwest



10. Wetland F viewed north

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



11. Wetland G viewed southwest



12. Killearn Road corridor viewed south

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



13. Wetland H viewed southwest



14. Drainage ditch viewed southeast

Project No. 23.3211 Killearn Road, Milbrook NY April 4-7, 2023



15. Killearn Road Corridor viewed south