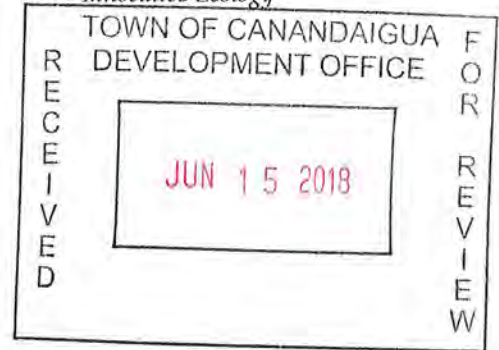




DIEHLUX, LLC

- Innovative Ecology -



April 1, 2018

Jeff Carson
249 North Pleasant Street
Canandaigua, NY 14424

RE: 5600 BUFFALO STREET SINGLE-FAMILY RESIDENTIAL DEVELOPMENT PROJECT
SECTION-BLOCK-LOT: 83.00-1-25.112
TOWN OF CANANDAIGUA, ONTARIO COUNTY, NEW YORK
FRESHWATER WETLANDS & WATERBODY DELINEATION REPORTING

Dear Mr. Carson:

The following represents our findings, recommendations, and conclusions upon completion of the freshwater wetlands and waterbody delineation services authorized by Jeff Carson, herein referred to as "the Client" on April 10, 2018. The proposed project includes the feasibility review for the development of single-family residence within the northwestern portion of an approximately 39-acre parcel north of Buffalo Street Extension, Town of Canandaigua, Ontario County, New York (Site). This service was performed to assist the Client with the investigation of existing field conditions and potential current environmental permitting and compliance requirements to advance and complete the project. Based on the sketch of proposed work area provided by the Client (Appendix I) on April 10, 2018, the focus of this review focused solely on the western portion of the subject parcel.

A. Purpose

The purpose of this investigation was to determine the potential for regulated activities at the Site within state or federally-regulated freshwater wetlands, watercourses, or water bodies, as well as any environmental permitting requirements associated with Articles 15 and 24 of the New York State Environmental Conservation Law (ECL), as well as Sections 404 and 401 of the Clean Water Act. Generally, these environmental regulations pertain to the protection and preservation of wetlands, watercourses and waterbodies throughout New York and/or the United States.

DIEHLUX, LLC

2434 COUNTY ROAD 39, EAST BLOOMFIELD 14469 - (607)-742-0977 - WWW.DIEHLUXLLC.COM

B. Preliminary Review

As part of the freshwater wetlands and waterbody field delineation services, a preliminary review of the existing Site conditions was performed prior to our Site visit utilizing reasonably available data and mapping obtained from the following resources:

- United States Geological Survey (USGS) Topographic Map(s);
- County GIS Map(s), if available;
- New York State (NYS) Department of Environmental Conservation (DEC) Environmental Resource Mapper Freshwater Wetlands Map(s);
- United States Fish & Wildlife Services (USFWS) National Wetland Inventory (NWI) Map(s);
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Soils Map(s);
- Google Earth satellite imagery; and
- Project Documents, Reports, etc. (as provided by the Client or Client representative)

Copies of these maps and associated documents are included as Appendix II.

C. Freshwater Wetlands Field Delineations

A field investigation of any upland/wetland, watercourse, or water body boundaries was completed on the Site. The field investigation was completed in accordance with the following technical manual(s):

- Environmental Laboratory. (1987). "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.
- U.S. Army Corps of Engineers. 2011. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

D. Field Findings

The Site is located immediately north of Buffalo Street Extension, approximately ¼ mile east of Routes 5&20 intersection. The parcel is entirely wooded and generally slopes to the east draining into a watercourse along the eastern edge of property. Residential homes are in the surrounding area north and south of Buffalo Street. An active farm field is located upslope forming the western property line. A historical gas right-of-way (ROW) bisects the property

in an east-west direction in the central portion of the parcel. A mapped federally regulated forested wetland and watercourse is located along the central to eastern portion of the property. The wetland is largely forested dominated by buckthorn and ash with a few pockets of scrub shrub.

A wetland, watercourse and water body field investigation was completed at the proposed Site by qualified wetlands biologist on April 11, 2018. The average temperature was 40° Fahrenheit. Field conditions were not problematic and conducive to performing the fieldwork. In total, one (1) aquatic feature was identified during the delineation. Table 1 below outlines the findings of our investigation(s):

Table 1.

Resource(s)	Flagging	Location	Type	Vegetation
Federally Regulated Freshwater Wetland (PSS1/PFO1)	A-1 to A-36	Central portion of Site	Wetland: Palustrine, Scrub Shrub, Broad-leaved Deciduous/ Palustrine, Forested, Broad-leaved Deciduous	Glossy Buckthorn Green Ash Cottonwood American Hornbeam Swamp White Oak Honeysuckle Sensitive Fern Sedge Sphagnum Moss

Site photographs are documented as Appendix III.

E. Conclusions and Recommendations

As part of the wetlands investigation for this project Site, we included an evaluation of Section 401 and 404 jurisdictions and permitting applicability, as well as potential regulatory or permitting requirements under Articles 15 and 24 of the NYS ECL, or local municipal government.

The following outlines our conclusions and recommendations regarding wetlands and watercourse permitting requirements for this proposed project:

- A. The Town of Canandaigua, New York, does not appear to have a separate Chapter for local regulation of wetlands, waterbodies or watercourses. Therefore, no specific/separate local wetlands, watercourse, or water body permits should be required by the Town of Canandaigua.
- B. According to the NYS DEC Environmental Resource Map, no state-regulated wetlands or watercourses are located on-Site. A Section 401 Water Quality Certification (WQC) from Region 8 NYSDEC office will be required if a Section 404 permit from USACE is needed. At this point no consultation with NYS DEC Region 8 office regarding Articles 15 and 24 of the

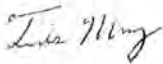
Environmental Conservation Law (ECL) is anticipated. Copies of NYS DEC Environmental Resource maps are documented in Appendix II.

- C. According to the U.S. Fish & Wildlife Service National Wetlands Inventory Map, the identified wetland (Wetland A) is the NWI mapped wetland (PSS1E). A mapped DEC blue-line watercourse is shown along the western edge of parcel outside this project's review area. An additional wetland (PFO1E) is located along the northern property edge outside the project scope. No other wetlands were observed on-site within aforementioned review area. Please refer to Appendix II for NWI mapping.

Based upon our visual interpretation of the proposed Site layout in the field, it appears that federally regulated Waters of the US (WOUS) can be avoided to construct the proposed access drive/driveway and private residence. Given the project is in close proximity to a federally regulated wetland it is important to not disturb (cut/fill) the delineated wetland immediately east of proposed work area. Therefore, based on the current sketch map provided by the Client, DIEHLUX does not anticipate consultation with the U.S. Army Corps of Engineers (USACE) Buffalo District Office or NYSDEC Region 8 office to be warranted in accordance with Section 404 of the Clean Water Act and Articles 15 and 24 of the Environmental Conservation Law (ECL) based on current project scope. Should the project scope be updated or revised to incorporate additional areas of disturbance beyond those previously reviewed during the Site visit on April 11, 2018, DIEHLUX recommends additional evaluation of the property.

We appreciate the opportunity to be involved in your project and hope that you have found our services helpful. We are happy to assist with any required permit applications or follow up should you need our assistance. Please contact us if you have any questions, comments, concerns or requests for additional information.

Respectfully Submitted,



Travis Money
Manager of Ecological Services/Senior Ecologist

Attachments: Appendix I – Site Location & Sketch Map
Appendix II - Preliminary Site Review Data
Appendix III – Site Photographs
Appendix IV – Wetland Flag Coordinates

APPENDIX I

BASEMAPS >

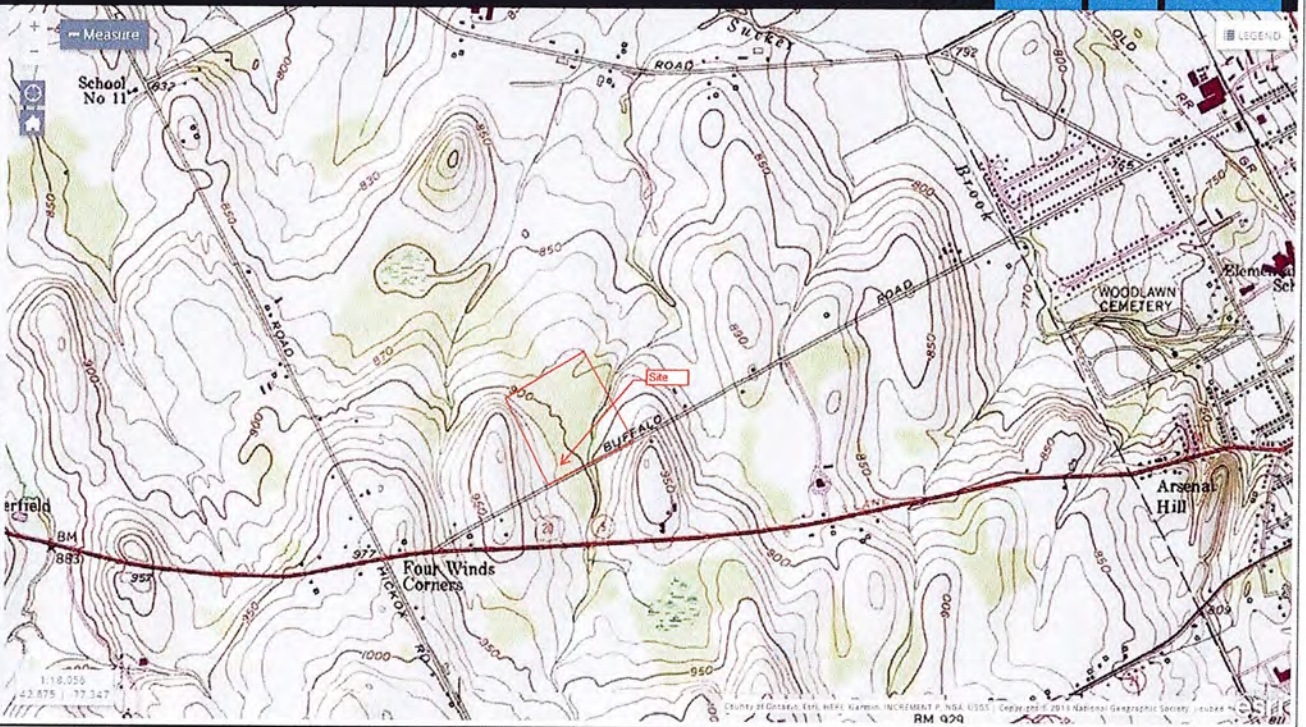
Measure

- STREETS
- SATELLITE
- HYBRID
- TOPO
- TERRAIN
- GRAY
- OPEN STREET MAP
- NATGEO
- USGS TOPO
- NAT'L MAP

MAP LAYERS >

- ☐ Wetlands
- ☐ Riparian
- ☐ Riparian Mapping Areas
- ☒ Data Source
 - ☐ Source Type
 - ☐ Image Scale
 - ☐ Image Year
- ☐ Areas of Interest
- ☐ FWS Managed Lands
- ☐ Historic Wetland Data

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National Wetlands Inventory

surface waters and wetlands

ABOUT

GET DATA

PRINT

FIND LOCATION

BASEMAPS >

Measure

- STREETS
- SATELLITE
- HYBRID
- TOPO
- TERRAIN
- GRAY
- OPEN STREET MAP
- NATGEO
- USGS TOPO
- NAT'L MAP

MAP LAYERS >

- ☐ Wetlands 00
- ☐ Riparian 00
- ☐ Riparian Mapping Areas 00
- ☒ Data Source 00
 - ☐ Source Type
 - ☐ Image Scale
 - ☐ Image Year
- ☐ Areas of Interest 0
- ☐ FWS Managed Lands 00
- ☐ Historic Wetland Data 00

1:18,056
42.875 | -77.356

LEGEND



County of Ontario, Esri, HERE, Garmin, INCREMENT P, NOAA, USGS

1,749
40

N/F
Baskera Living Trust
L. 943 P. 150

Town Lot 55

N 18.40'00" W 1342.53' to E

67 107 umol

☆ 107 4M

1309.53

Handwritten text: *Handwritten text, possibly a signature or date.*

Horse

III. *Andropogon*.

	Approximate	Centerline	Of Gas Pipe
	628	P.	378
Easement	Per L.	437	P.
Easement	Per L.		354

Alternative
Born location
if possible

Woods

Found

Summary

Highway Boundary

Utility Pole
(Typical)

P.O.B.

三

36' x 72' pole barn

BUFFALO S.

NOISE

VERA

- Driveway 10' wide
- ↳ Approx 13' either side to be cleared if possible
- Two wooden stakes mark approx location of start of driveway
- Future site of 36' x 72' pole barn

APPENDIX II



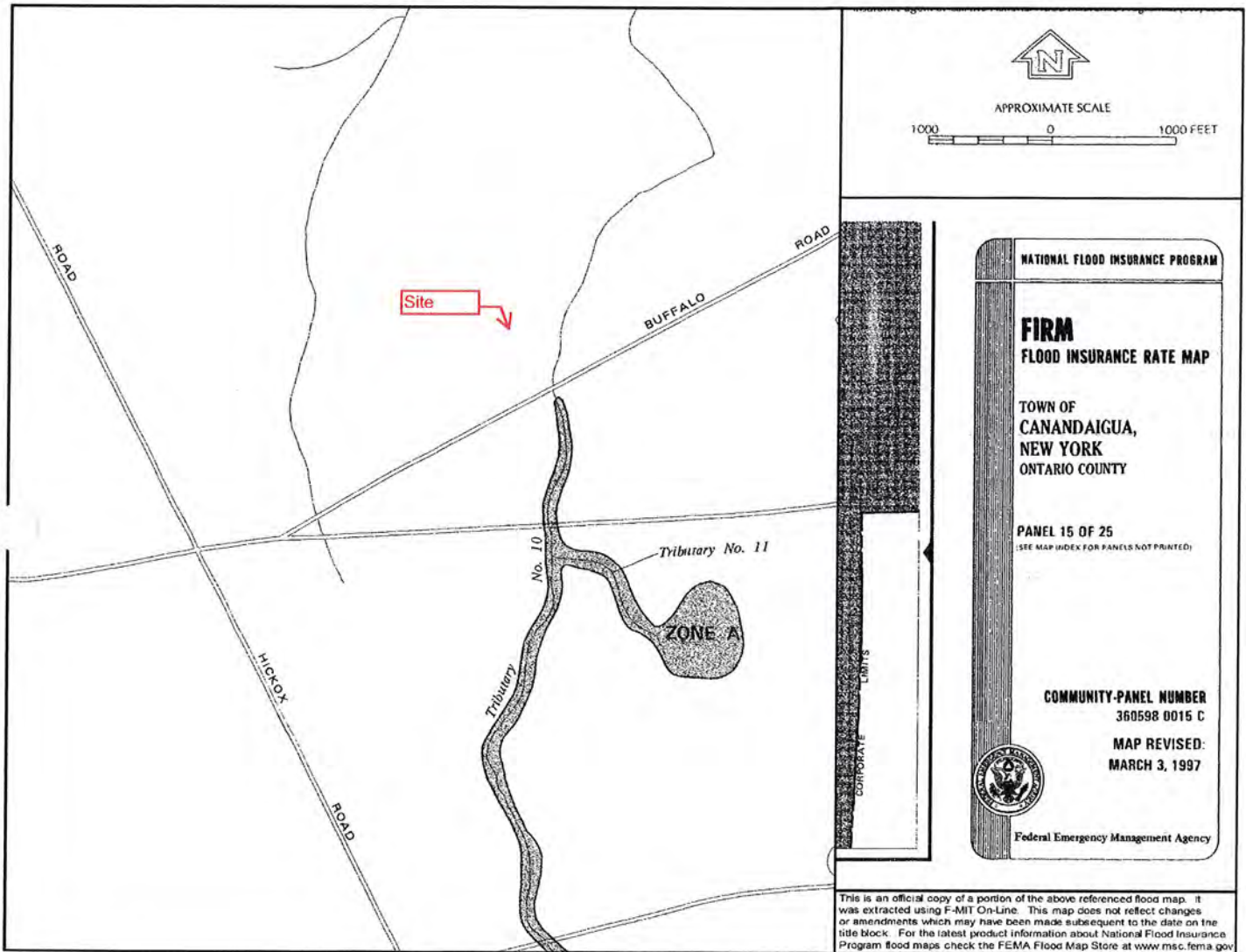


Environmental Resource Mapper

Base Map: Satellite with Labels | Map Info

- Search
- Tools
- Layers and Legend
- All Layers
- ☒ Unique Geological Features
- ☒ Waterbody Classifications for Rivers/Streams
- ☒ Waterbody Classifications for Lakes
- ☒ State Regulated Freshwater Wetlands
- ☐ State Regulated Wetland Checkbook
- ☐ Natural Communities
- ☐ Natural Communities Near This Location
- ☐ Rare Plants or Animals
- Other Wetland Layers
- Reference Layers
- Get Me More
- Need A Permit?
- Contacts





APPROXIMATE SCALE

1000 0 1000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

TOWN OF
CANANDAIGUA,
NEW YORK
ONTARIO COUNTY

PANEL 15 OF 25
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
360598 0015 C

MAP REVISED:
MARCH 3, 1997



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

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

Custom Soil Resource Report for **Ontario County, New York**



April 12, 2018

Preface

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

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

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

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

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

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

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

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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

Custom Soil Resource Report

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

Soil Map

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

Custom Soil Resource Report Soil Map



Map Scale: 1:4,290 if printed on A landscape (11" x 8.5") sheet
 0 50 100 200 300 Meters
 0 200 400 800 1200 Feet
 Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)		Spoil Area
Area of Interest (AOI)		Stony Spot
Soils		Very Stony Spot
Soil Map Unit Polygons		Wet Spot
Soil Map Unit Lines		Other
Soil Map Unit Points		Special Line Features
Special Point Features		
Blowout	Water Features	Streams and Canals
Borrow Pit	Transportation	
Clay Spot	Rails	
Closed Depression	Interstate Highways	
Gravel Pit	US Routes	
Gravelly Spot	Major Roads	
Landfill	Local Roads	
Lava Flow	Background	
Marsh or swamp	Aerial Photography	
Mine or Quarry		
Miscellaneous Water		
Perennial Water		
Rock Outcrop		
Saline Spot		
Sandy Spot		
Severely Eroded Spot		
Sinkhole		
Slide or Slip		
Sodic Spot		

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Ontario County, New York
Survey Area Data: Version 14, Oct 8, 2017

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

Date(s) aerial images were photographed: Apr 22, 2013—Oct 11, 2016

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1A	Fluvaquents-Udifluvents complex, 0 to 3 percent slopes, frequently flooded	5.5	13.9%
101C	Honeoye loam, 8 to 15 percent slopes	1.7	4.3%
201A	Lima loam, 0 to 3 percent slopes	15.0	37.7%
201B	Lima loam, 3 to 8 percent slopes	12.7	31.8%
304A	Kendaia loam, 0 to 3 percent slopes	3.2	8.0%
304B	Kendaia loam, 3 to 8 percent slopes	1.7	4.3%
Totals for Area of Interest		39.8	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.

Ontario County, New York

1A—Fluvaquents-Udifluvents complex, 0 to 3 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 2m8gd
Elevation: 400 to 1,400 feet
Mean annual precipitation: 31 to 44 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 107 to 171 days
Farmland classification: Not prime farmland

Map Unit Composition

Fluvaquents, frequently flooded, and similar soils: 45 percent
Udifluvents, frequently flooded, and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fluvaquents, Frequently Flooded

Setting

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

Typical profile

H1 - 0 to 2 inches: gravelly loam
H2 - 2 to 60 inches: stratified extremely gravelly loamy sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 20.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Moderate (about 6.0 inches)

Interpretive groups

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

Description of Udifluvents, Frequently Flooded

Setting

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

Custom Soil Resource Report

Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium with a wide range of texture

Typical profile

H1 - 0 to 4 inches: very gravelly loam
H2 - 4 to 39 inches: extremely gravelly sandy loam
H3 - 39 to 60 inches: gravel

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to very high (0.06 to 20.00 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

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

Minor Components

Wayland

Percent of map unit: 10 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Naples creek

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

101C—Honeoye loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2w3nr
Elevation: 440 to 1,400 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

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

Description of Honeoye

Setting

Landform: Till plains, drumlins, ridges
Landform position (two-dimensional): Backslope, shoulder, summit
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 8 inches: silt loam
E - 8 to 10 inches: silt loam
Bt/E - 10 to 14 inches: loam
Bt1 - 14 to 23 inches: loam
Bt2 - 23 to 29 inches: gravelly loam
C - 29 to 79 inches: gravelly loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Custom Soil Resource Report

Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Lima

Percent of map unit: 5 percent
Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Lansing

Percent of map unit: 4 percent
Landform: Drumlins, hills, till plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Kendaia

Percent of map unit: 4 percent
Landform: Till plains, drumlins, ridges
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Wassaic

Percent of map unit: 2 percent
Landform: Till plains, benches, ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

201A—Lima loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2w3jv
Elevation: 470 to 1,190 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lima and similar soils: 85 percent

Minor components: 15 percent

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

Description of Lima

Setting

Landform: Drumlins, ridges, till plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Linear

Across-slope shape: Convex

Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 9 inches: loam

Bt/E - 9 to 12 inches: loam

Bt1 - 12 to 16 inches: loam

Bt2 - 16 to 25 inches: gravelly loam

C - 25 to 79 inches: gravelly loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)

Depth to water table: About 18 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 40 percent

Available water storage in profile: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D

Hydric soil rating: No

Minor Components

Honeoye

Percent of map unit: 5 percent

Landform: Drumlins, hills, till plains

Landform position (two-dimensional): Summit, shoulder, backslope

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Appleton

Percent of map unit: 3 percent

Landform: Ridges, till plains, drumlins

Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Kendaia

Percent of map unit: 3 percent
Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Lyons

Percent of map unit: 2 percent
Landform: Drainageways, depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Cazenovia

Percent of map unit: 2 percent
Landform: Reworked lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

201B—Lima loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w3kf
Elevation: 410 to 1,360 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: All areas are prime farmland

Map Unit Composition

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

Description of Lima

Setting

Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 9 inches: loam
Bt/E - 9 to 12 inches: loam
Bt1 - 12 to 16 inches: loam
Bt2 - 16 to 25 inches: gravelly loam
C - 25 to 79 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)
Depth to water table: About 18 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Available water storage in profile: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components

Honeoye

Percent of map unit: 6 percent
Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Hydric soil rating: No

Appleton

Percent of map unit: 3 percent
Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Kendaia

Percent of map unit: 3 percent
Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Cazenovia

Percent of map unit: 2 percent
Landform: Reworked lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Concave
Across-slope shape: Convex
Hydric soil rating: No

Lyons

Percent of map unit: 1 percent
Landform: Depressions, drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

304A—Kendaia loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2w5j3
Elevation: 410 to 1,490 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

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

Description of Kendaia

Setting

Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear

Custom Soil Resource Report

Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 8 inches: loam
Bw - 8 to 15 inches: silt loam
Bg - 15 to 20 inches: gravelly silt loam
BCg - 20 to 24 inches: gravelly loam
C - 24 to 79 inches: gravelly loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components

Lima

Percent of map unit: 6 percent
Landform: Drumlins, till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Lyons

Percent of map unit: 5 percent
Landform: Depressions, drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Ovid

Percent of map unit: 2 percent
Landform: Till plains, reworked lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Churchville

Percent of map unit: 2 percent
Landform: Till plains, lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, rise, tal
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

304B—Kendaia loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w5j8
Elevation: 410 to 1,510 feet
Mean annual precipitation: 31 to 57 inches
Mean annual air temperature: 41 to 50 degrees F
Frost-free period: 100 to 190 days
Farmland classification: Prime farmland if drained

Map Unit Composition

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

Description of Kendaia

Setting

Landform: Drumlins, ridges, till plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous loamy lodgment till derived from limestone, sandstone, and shale

Typical profile

Ap - 0 to 8 inches: loam
Bw - 8 to 15 inches: silt loam
Bg - 15 to 20 inches: gravelly silt loam
BCg - 20 to 24 inches: gravelly loam
C - 24 to 79 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 1.42 in/hr)
Depth to water table: About 6 to 18 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 40 percent
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: B/D
Hydric soil rating: No

Minor Components

Lima

Percent of map unit: 7 percent
Landform: Drumlins, till plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Lyons

Percent of map unit: 4 percent
Landform: Depressions, drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Ovid

Percent of map unit: 2 percent
Landform: Till plains, reworked lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Churchville

Percent of map unit: 2 percent
Landform: Till plains, lake plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, rise, talf
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

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Custom Soil Resource Report

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APPENDIX III

5600 BUFFALO STREET EXTENSION – PRIVATE RESIDENCE FEASIBILITY REVIEW
WETLAND & ENVIRONMENTAL PERMITTING SERVICES
TOWN OF CANANDAIGUA, NY



PHOTO 1 View north from Buffalo Street along western property line



PHOTO 2 View north of approximate private residence location in upland forest

5600 BUFFALO STREET EXTENSION – PRIVATE RESIDENCE FEASIBILITY REVIEW
WETLAND & ENVIRONMENTAL PERMITTING SERVICES
TOWN OF CANANDAIGUA, NY



PHOTO 3 Representative photo of Wetland A/mapped federal wetland at DP-1



PHOTO 4 View east of historical gas ROW that bisects property in west/east direction

5600 BUFFALO STREET EXTENSION – PRIVATE RESIDENCE FEASIBILITY REVIEW
WETLAND & ENVIRONMENTAL PERMITTING SERVICES
TOWN OF CANANDAIGUA, NY



PHOTO 5 View north of wetland A at Data Point 2



PHOTO 6 View north of southern wetland edge at Buffalo Street

APPENDIX IV

5600 Buffalo Street
Wetland Flags - 4/11/2018 by DIEHLUX, LLC

ID	Longitude	Latitude	Elevation	Flag No/Comment
1	-77.32899375	42.88676064	767.548	A-1 at northern property line
2	-77.32891871	42.88660353	797.861	A-2
3	-77.32884877	42.88646654	791.73	A-3
4	-77.32881628	42.88637224	795.654	A-4
5	-77.32871959	42.88646836	786.471	A-5
6	-77.32861117	42.8865261	783.135	A-6
7	-77.32846081	42.88645988	813.075	A-7
8	-77.32836425	42.88627364	809.551	A-8
9	-77.32823229	42.88608552	781.48	A-9
10	-77.32807877	42.88601008	795.202	A-10
11	-77.32784195	42.88597812	831.274	A-Wet-1
12	-77.32794533	42.88585287	797.249	A-11
13	-77.32808556	42.88582151	810.157	A-Up-1
14	-77.32787996	42.88568805	817.126	A-12
15	-77.3279346	42.88541734	807.577	A-14
16	-77.32788619	42.88553708	803.595	A-13
17	-77.32805144	42.88531162	805.22	A-15
18	-77.32816528	42.88523421	812.3	A-16
19	-77.32822996	42.8850777	813.191	A-17
20	-77.32815809	42.88490087	801.747	A-18
21	-77.32808117	42.88478233	802.683	A-19
22	-77.32797265	42.88470968	796.177	A-20 at ROW
23	-77.32795297	42.88456394	750.109	A-21
24	-77.32802184	42.8843827	799.143	A-22
25	-77.32800178	42.88426882	783.44	A-23
26	-77.32776157	42.88439447	787.22	A-Wet-2
27	-77.3280453	42.88417957	792.658	A-24
28	-77.32817498	42.88406231	825.035	A-25
29	-77.32807489	42.88390398	793.087	A-26
30	-77.32824427	42.88381768	796.959	A-Up-2
31	-77.32800928	42.88381868	794.74	A-27
32	-77.32786612	42.88388568	812.695	A-28
33	-77.32775371	42.88380607	819.717	A-29
34	-77.32769828	42.88376551	797.305	A-30
35	-77.32776744	42.88365589	796.962	A-31
36	-77.32786098	42.88355846	798.543	A-32
37	-77.32782022	42.88348404	793.861	A-33
38	-77.32772947	42.88342332	794.669	A-34
39	-77.32766069	42.88335004	791.962	A-35 at road edge
40	-77.32743553	42.88342953	789.914	A-36 end at road edge