Terrestrial Environmental Specialists, inc.
23 COUNTY ROUTE 6, SUITE A, PHOENIX, NY 13135
(315) 695-7228 FAX (315) 695-3277 E-MAIL: tesinc@tesenvironmental.com

December 5, 2012

Mr. Jeffrey R. Smetana, CPA
Newman Development Group, LLC
Box 678
3101 Shippers Road
Vestal, New York 13851

Re: Environmental Investigation at the Blodgett Drive Site in the
City of Oneonta, Otsego County, New York
TES File No. 3807

Dear Jeff:

As requested, Terrestrial Environmental Specialists, Inc. (TES) performed an environmental investigation at a site in the City of Oneonta, Otsego County, New York. The site is approximately 14 acres in size and is located north of Blodgett Drive. A student housing project is proposed at the site.

The TES investigation consisted of a review of available background information, agency contacts, a field review for wetlands, and an endangered and threatened (E/T) species habitat assessment. This report addresses the results of our background information and field reviews. It also includes a discussion of regulatory status and permitting. Figures correspondence, photographs, and field data are included with this report.

Background Information Review

Prior to the field investigation at the site, TES assembled and reviewed available background information. This information included:

- New York State Department of Transportation (NYSDOT) Topographic map (Oneonta Quadrangle) (Figure 1);
- the New York State Department of Environmental Conservation (NYSDEC) New York State Freshwater Wetlands map (Figure 2);
- the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) map (figure 3);
- the Natural Resources Conservation Service (NRCS) Soil Survey map (Figure 4);
- the New York State Surface Waters Classification map (Figure 5); and
- a 2010 aerial photograph obtained from the NYSGIS Clearinghouse (Figure 6).

These maps are provided in Attachment A.

The NYSDOT Topographic map shows that the site is located north of Blodgett Drive (Figure 1). Slopes on the site are moderate to fairly steep. There are no mapped streams or other waterbodies on the site (Figure 1).

The NYSDEC New York State Freshwater Wetlands map does not show any state-regulated wetlands on or near the site (Figure 2).

According to the USFWS NWI map, there are no mapped wetlands on or near the site (Figure 3).

The NRCS Soil Survey map shows a variety soil types on the site (Figure 4). These soil types include Lordstown, Chadakoin, and Manlius soils, 25 to 50 percent slopes, very rocky (LrE); Mardin channery silt loam, 8 to 15 percent slopes (MeC); Oquaga-Arnot complex, 1 to 8 percent slopes, rocky (OgB); and Oquaga-Arnot complex, 8 to 15 percent slopes, rocky OgC) (Figure 4). None of these soil types are listed by the NRCS (formerly the USSCS) as hydric (wetland) soils (USDA NRCS 2012).

The New York Surface Waters Classification map does not show any mapped streams on the site (Figure 5).

The 2010 aerial photograph shows that the site is primarily wooded land (Figure 6). Residential and undeveloped lands border the site.

Agency Contacts

TES contacted the NYSDEC Albany Control Office and the NYSDEC Region 4 Office in Stamford and requested available information on E/T or state-listed plants and animals known to occur on or in the vicinity of the study area (Attachment B). The USFWS website was reviewed to determine what federal-listed species and candidate species are known from or likely to occur in Otsego County (Attachment B).

The NYSDEC Albany Office responded to the information request and wrote "*We have no records of rare or state-listed animals or plants, or significant natural communities on or in the immediate vicinity of your site.*"

The USFWS list indicates that there are records of bald eagle (*Haliaeetus leucocephalus*) (federally delisted, but protected under the Bald and Golden Eagle Protection Act and state-listed as threatened) and bog turtle (*Glyptemys muhlenbergii*) (federal threatened and state endangered) from Otsego County.

Field Investigation for Wetlands and E/T Species

On November 20, 2012 TES performed a site review for wetlands that could be regulated by the U.S. Army Corps of Engineers (Corps). Two field biologists walked the site looking for potential wetlands.

Based on our field review, there are no areas of the site that meet the three parameter criteria for identifying wetlands according to the methods described in the Corps 2012 Supplement to the 1987 Wetlands Delineation Manual. The site consists primarily of deciduous forest upland cover type (Figure 7). TES took photographs (Attachment C) and collected sample plot data and recorded vegetation, soils, and hydrologic conditions (Attachment D). Photograph and sample plot locations are shown on Figure 7.

Common tree species observed on the site included red oak (*Quercus rubra*), trembling aspen (*Populus tremuloides*), red maple (*Acer rubrum*), American beech (*Fagus grandifolia*), eastern hemlock (*Tsuga canadensis*), sweet birch (*Betula lenta*), sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), and white pine (*Pinus strobus*). Species found in the shrub layer included hawthorn (*Crataegus* sp.), multiflora rose (*Rosa multiflora*), autumn olive (*Elaeagnus umbellata*), American beech and sweet birch saplings. The herbaceous layer was sparse but contained hayscented fern (*Dennstaedtia punctilobula*), sweet fern (*Comptonia peregrina*), strawberry (*Fragaria virginiana*), bluegrass (*Poa* sp.), and orchard grass (*Dactylis glomerata*).

Bog Turtles require specific fen wetlands as habitat. Since there are no wetlands on the site, there is no habitat for bog turtle. The site does not represent habitat for bald eagle, as these birds usually nest and forage along large bodies of water including rivers, lakes, reservoirs, and large open water wetland complexes. No other endangered or threatened species were observed on the site and none are expected to use the site as habitat.

Regulatory Status and Permitting

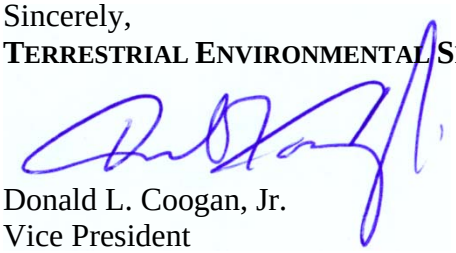
Since there are no mapped state-regulated wetlands on or adjacent to the study area, an Article 24 (Freshwater Wetlands) permit would not be needed from the NYSDEC to develop the site. Furthermore, there are no mapped state-protected streams or other waterbodies on the site. Therefore, no Article 15 (Protection of Waters) permit would be needed from the NYSDEC.

There are no federal wetlands or other waters of the United States on the site. Therefore, no Section 404 permit would be needed from the Corps to develop the site.

The site has no habitat for any federal or state-listed E/T species. Therefore, E/T species should not be an issue during the State Environmental Quality Review (SEQR) process.

I trust this report is sufficient for your needs at this time. If you have any questions or if we can assist you further, please feel free to contact me.

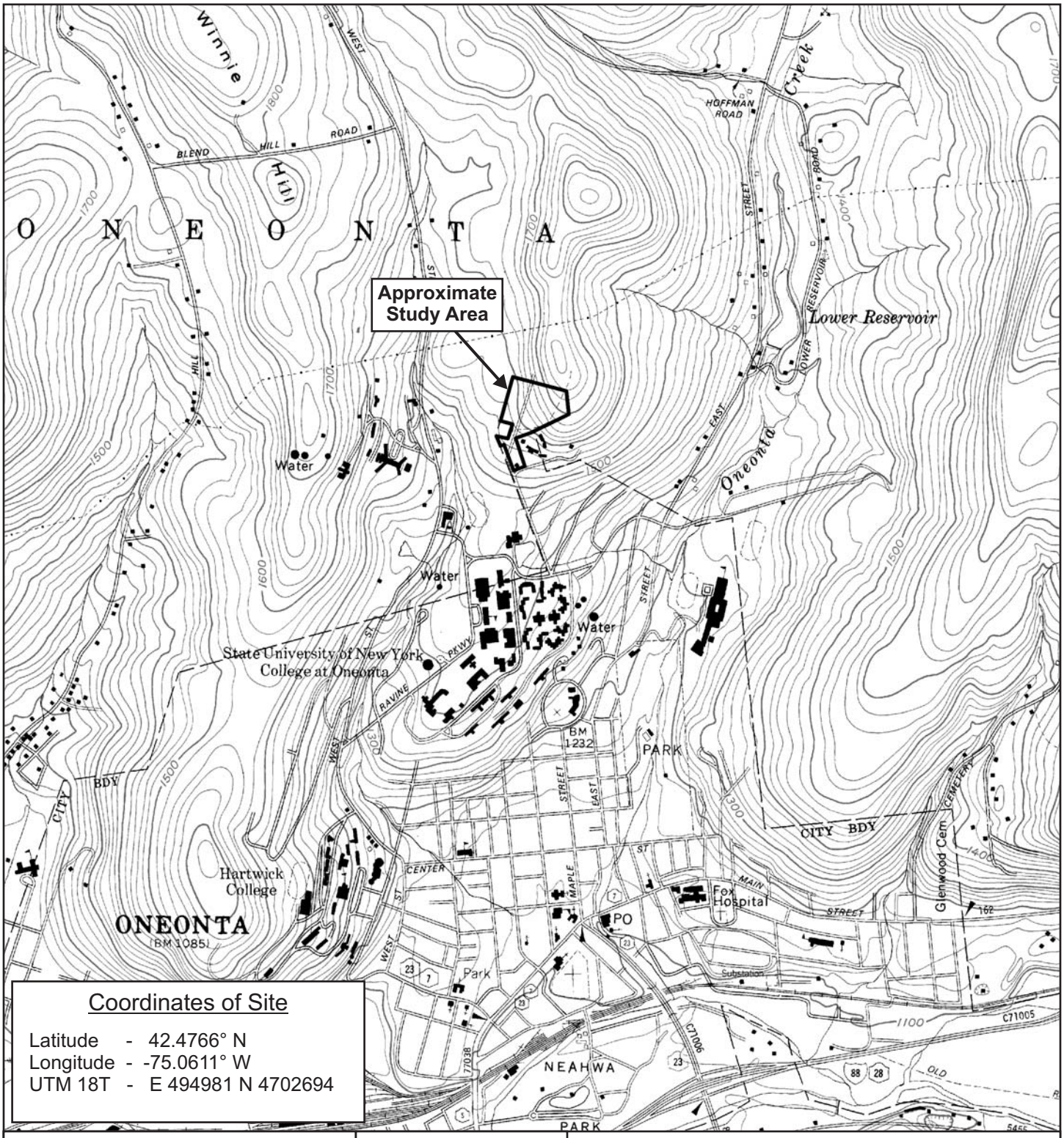
Sincerely,
TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.



Donald L. Coogan, Jr.
Vice President

DLC/dmm
Attachments – Figures, Correspondence, Photographs, Field Data

Attachment A – Figures



QUADRANGLE LOCATION

0' 1000' 2000'

SCALE 1" = 2000'

NORTH

Figure 1. Site Location

NYS DOT Topographic Map

Oneonta Quadrangle
1985

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig1.cdr\11-16-12

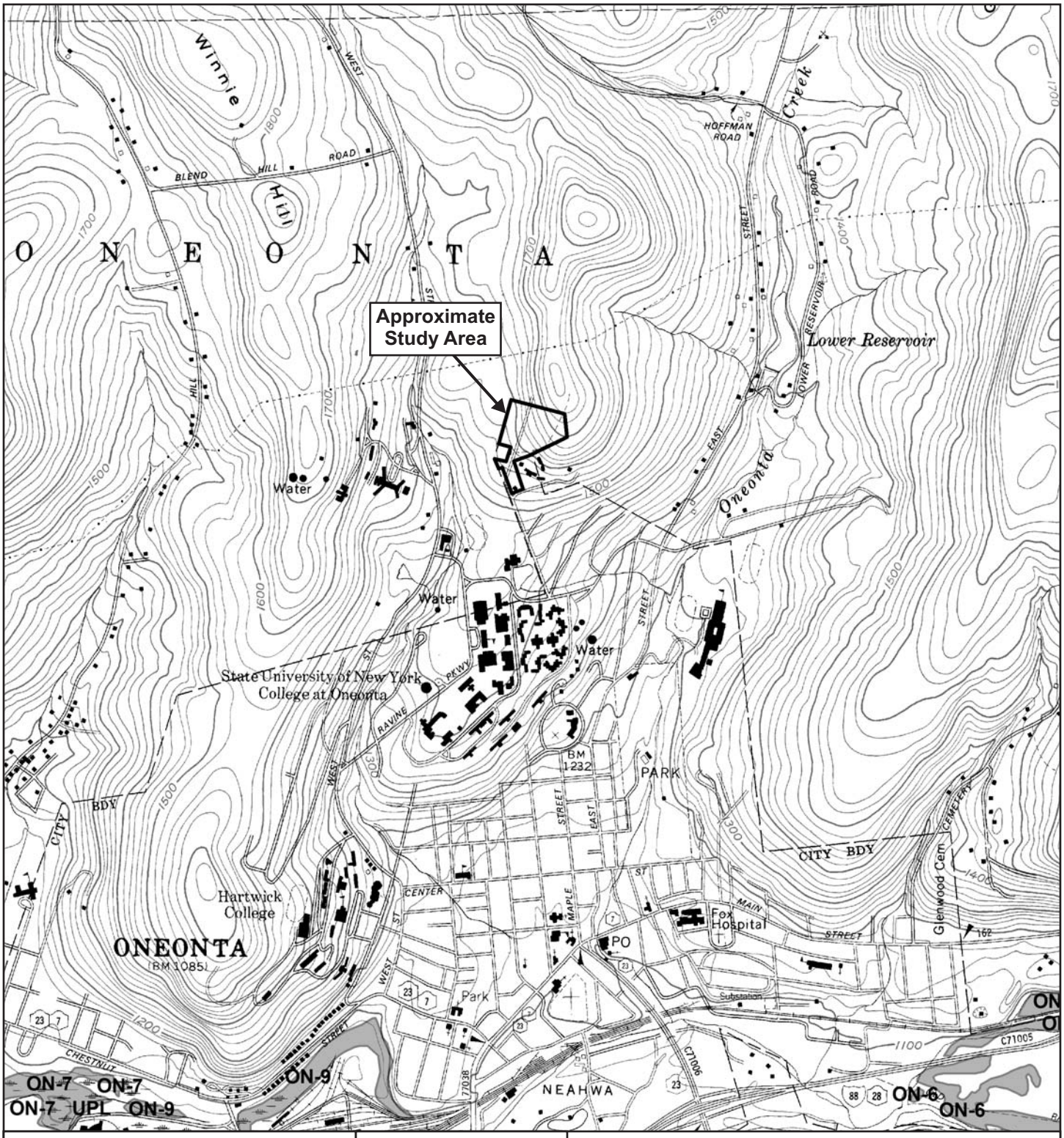


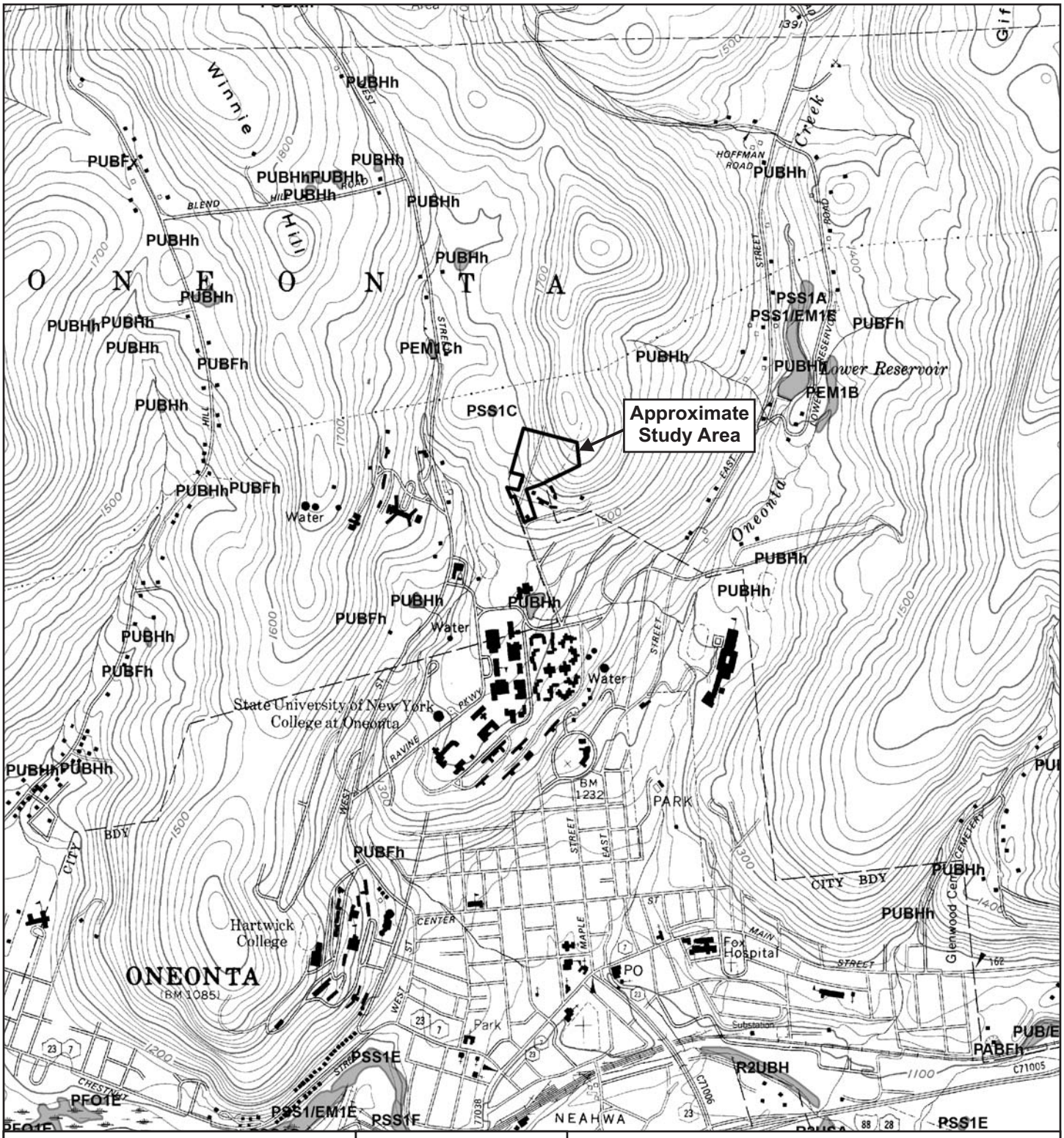
Figure 2. NYS Freshwater Wetlands Map

NYS Department of Environmental Conservation
cugir.mannlib.cornell.edu

Otsego County
1999

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig2.cdr\11-16-12



QUADRANGLE LOCATION

0' 1000' 2000'

SCALE 1" = 2000'

NORTH

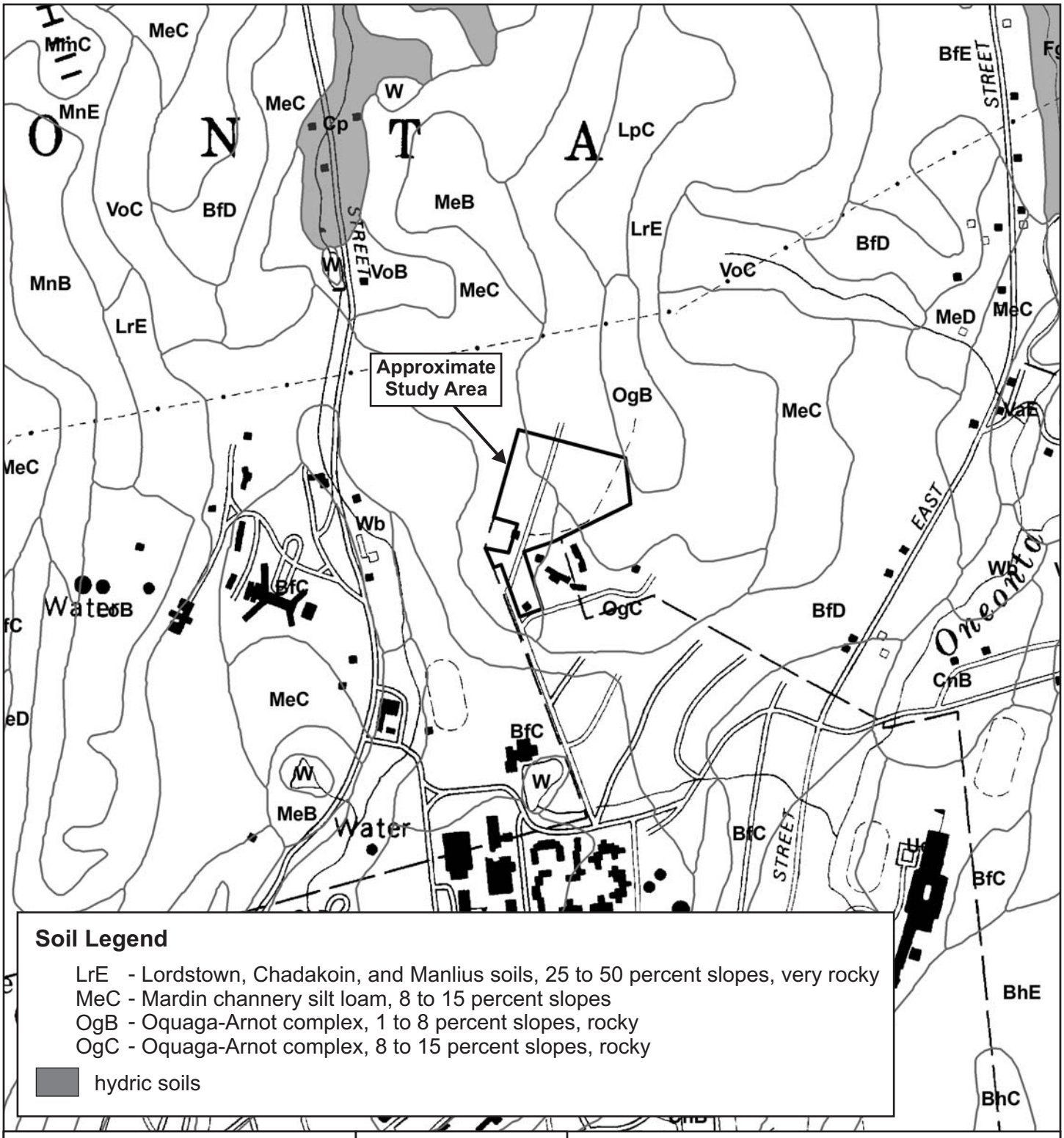
Figure 3. National Wetlands Inventory Map

U.S. Fish & Wildlife Service
www.fws.gov/nwi

Oneonta Quadrangle
1982

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig3.cdr\11-16-12



Soil Legend

LrE - Lordstown, Chadakoin, and Manlius soils, 25 to 50 percent slopes, very rocky
MeC - Mardin channery silt loam, 8 to 15 percent slopes
OgB - Oquaga-Arnot complex, 1 to 8 percent slopes, rocky
OgC - Oquaga-Arnot complex, 8 to 15 percent slopes, rocky

hydric soils

QUADRANGLE LOCATION

0' 500' 1000'

SCALE 1" = 1000'

NORTH

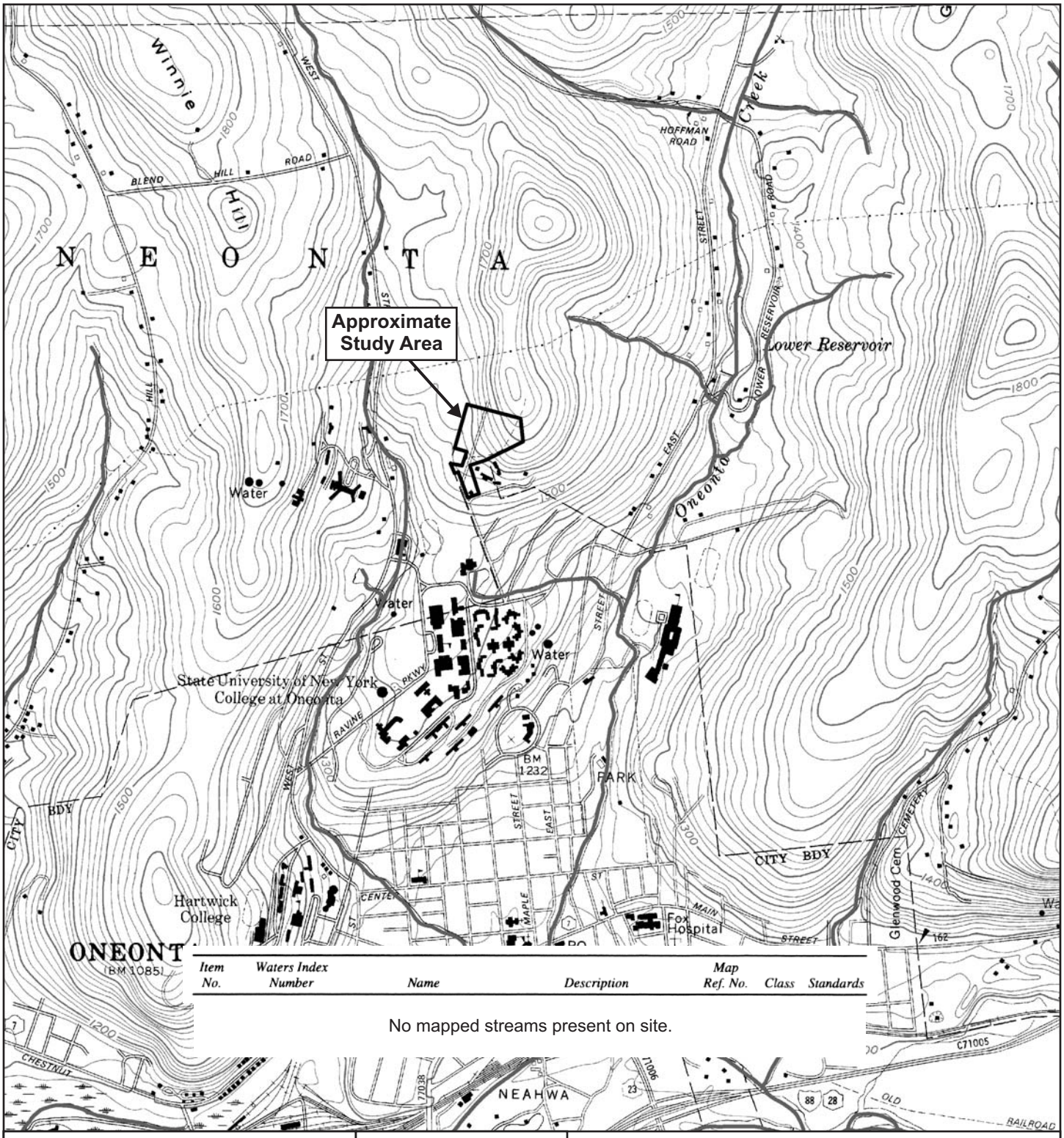
Figure 4. Soil Survey Map

Natural Resources Conservation Service
SoilDataMart.nrcs.usda.gov

Otsego County Soil Survey
2011

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig4.cdr\11-16-12



Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards

No mapped streams present on site.

Title 6 NYCRR, Chapter X
Article 17, Part 931.6 (1995)

Map L-19b

0' 1000' 2000'

SCALE 1" = 2000'

NORTH

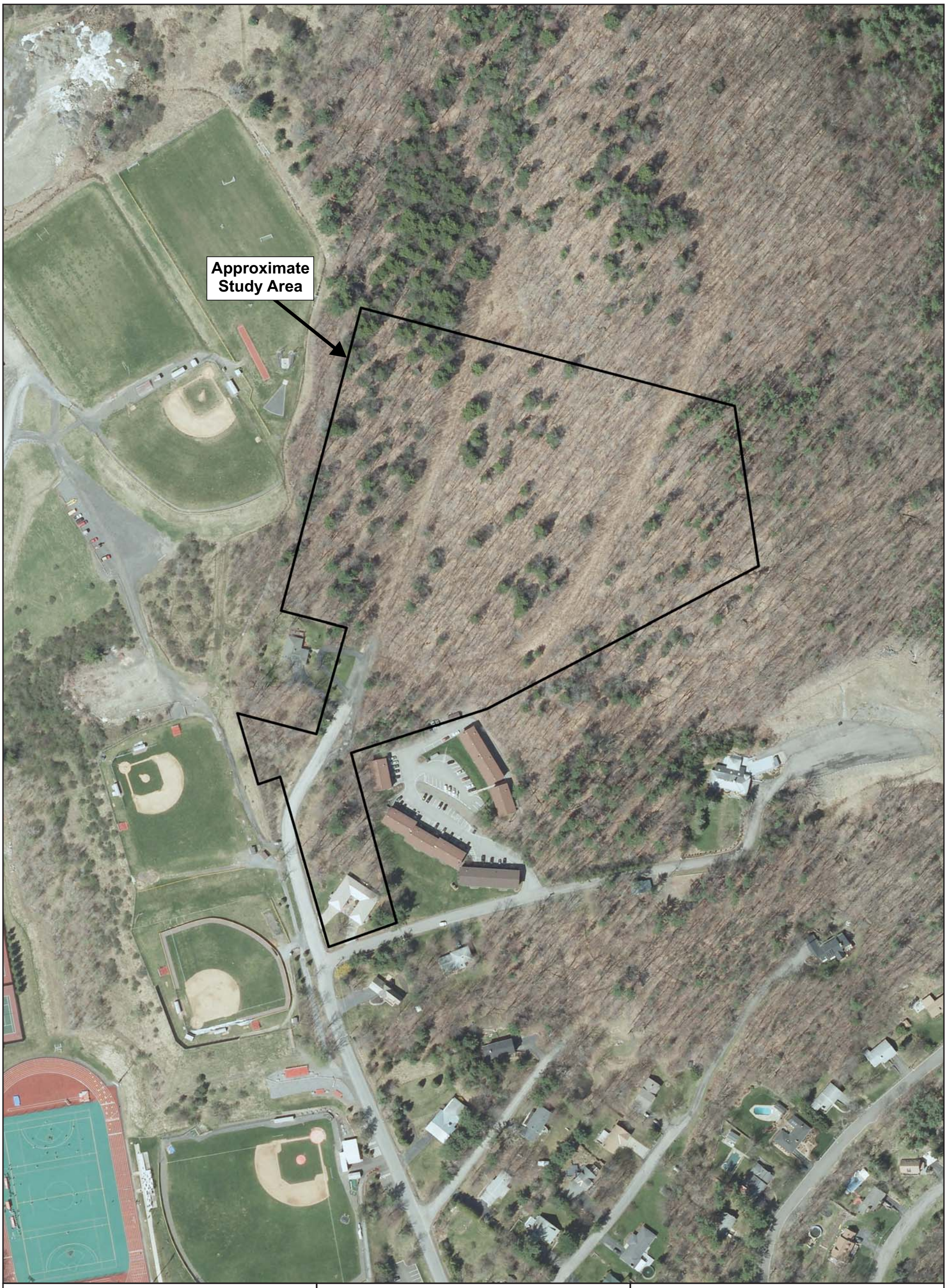
Figure 5.
Surface Water Classification Map

NYSDEC

Otsego Quadrangle

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig5.cdr\11-16-12



NORTH

0' 100' 200'

APPROXIMATE SCALE IN FEET

Aerial Photograph obtained
from NYS GIS Clearinghouse
2010

Figure Prepared by
Terrestrial Environmental
Specialists, Inc.

Figure 6.

**Aerial Photograph
of Site**

TES File: NEW-3807\3807-Aerial.cdr\11-16-12

LEGEND

UP-1 Sample Plot Location

1 → Photo Location and Direction

NORTH

0 100' 200'

APPROXIMATE SCALE IN FEET

2010 Aerial Photograph obtained from NYS GIS Clearinghouse

Figure Prepared by Terrestrial Environmental Specialists, Inc.

Figure 8.

Wetland Boundaries with Sample Plot and Photograph Locations

TES File: NEW-3807\3807plotphoto.cdr\11-26-12

Attachment B – Correspondence

Terrestrial Environmental Specialists, inc.
23 COUNTY ROUTE 6, SUITE A, PHOENIX, NY 13135
(315) 695-7228 FAX (315) 695-3277 E-MAIL: tesinc@tesenvironmental.com

November 16, 2012

Information Services
New York Natural Heritage Program
New York State Department of Environmental Conservation
625 Broadway, 5th Floor
Albany, NY 12233-4757

Re: Rare Plants and Animals and Significant Ecological Communities
Town of Oneonta, Otsego County, NY
TES File No. 3807

To Whom It May Concern:

I am writing to request information on any rare species of plants and animals and significant ecological communities known to occur on or in the vicinity of a 14-acre site located in the Town of Oneonta, Otsego County, New York (Figure 1). A student housing facility is proposed for the site, which is currently undeveloped. The information on rare species of plants and animals and significant ecological communities will assist us with the environmental review of the proposed project.

If you have any questions or need additional information, please feel free to contact me at 315-695-7228 or megan.caves@tesenvironmental.com.

Sincerely,

TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.

Megan Caves

Megan Caves
Assistant Environmental Scientist

mmc
Enclosures

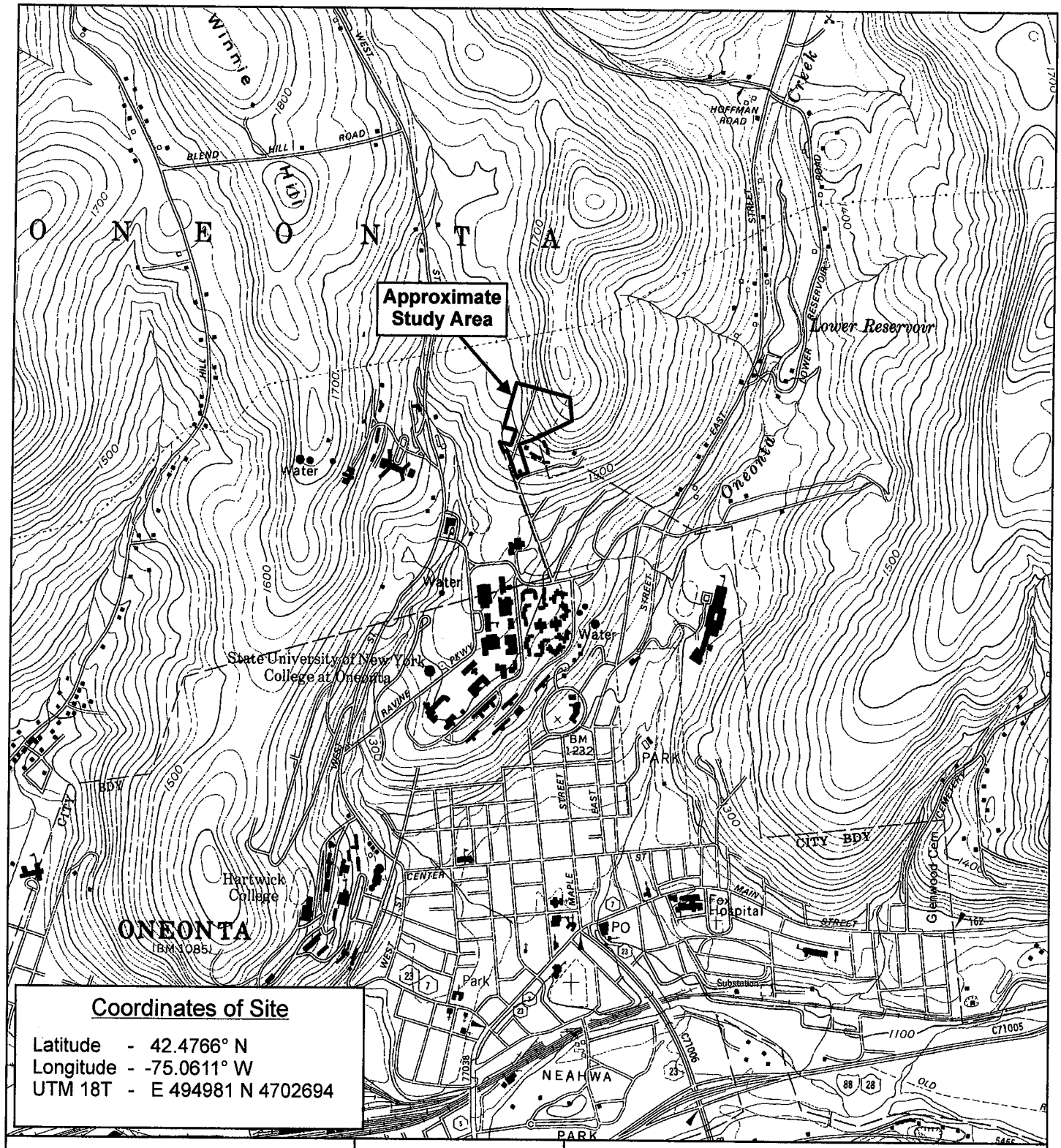


Figure 1. Site Location

NYS DOT Topographic Map

Oneonta Quadrangle 1985

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig1.cdr\11-16-12

Terrestrial Environmental Specialists, inc.
23 COUNTY ROUTE 6, SUITE A, PHOENIX, NY 13135
(315) 695-7228 FAX (315) 695-3277 E-MAIL: tesinc@tesenvironmental.com

November 16, 2012

Mr. Michael Clark
Biologist
New York State Department of Environmental Conservation, Region 4 Sub-office
65561 State highway 10, Suite 1
Stamford, NY 12167

Re: Endangered and Threatened Species Information Request
Town of Oneonta, Otsego County
TES File No. 3807

Dear Mr. Clark:

I am writing to request information on any endangered and threatened species known to occur on or in the vicinity of an approximately 14-acre site located in the Town of Oneonta, Otsego County, New York (Figure 1). A student housing facility is proposed for the site, which is currently undeveloped. The information on endangered and threatened species will assist us with the environmental review of the proposed project. We have contacted the New York Natural Heritage Program as well.

If you have any questions or need additional information, please feel free to contact me at 315-695-7228 or megan.caves@tesenvironmental.com.

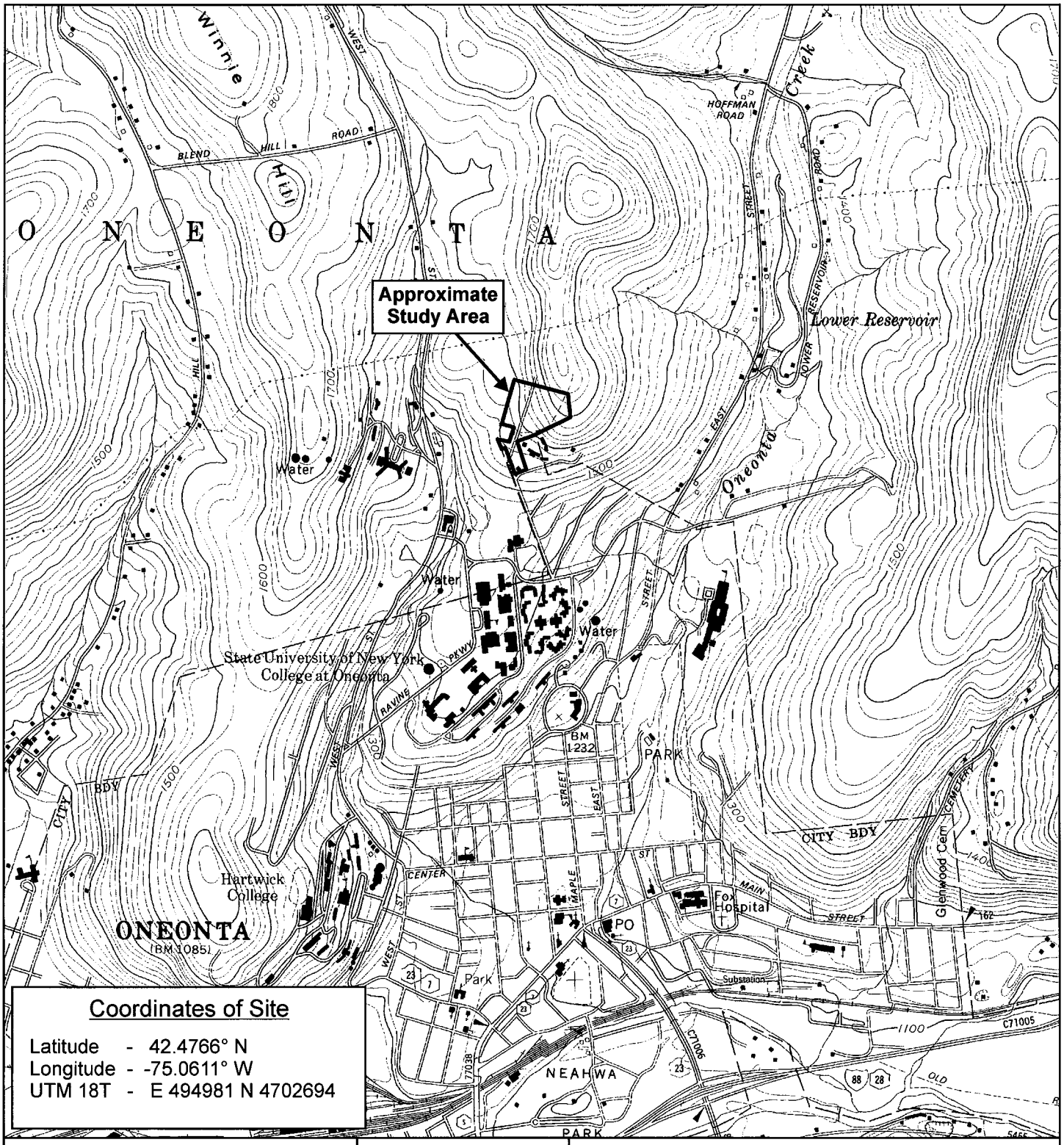
Sincerely,

TERRESTRIAL ENVIRONMENTAL SPECIALISTS, INC.

Megan Caves

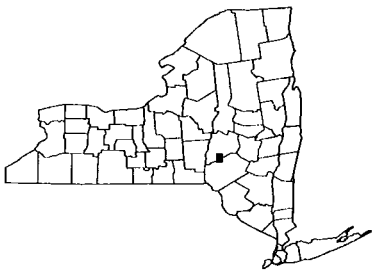
Megan Caves
Assistant Environmental Scientist

mmc
Enclosures



Coordinates of Site

Latitude - 42.4766° N
Longitude - -75.0611° W
UTM 18T - E 494981 N 4702694



QUADRANGLE LOCATION

0' 1000' 2000'

SCALE 1" = 2000'

NORTH

Figure 1. Site Location

NYS DOT Topographic Map

Oneonta Quadrangle
1985

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: NEW-3807\3807-Fig1.cdr\11-16-12

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Joe Martens
Commissioner

November 26, 2012

Megan Caves
Terrestrial Environmntl Specialists
23 County Rte 6, Suite A
Phoenix, NY 13135

RECEIVED 12/3/12

Dear Ms. Caves:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the Proposed 14-Acre Parcel – Student Housing Facility, Project # 3807, site as indicated on your enclosed map, located in the Town of Oneonta, Otsego County.

We have no records of rare or state listed animals or plants, or significant natural communities, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, or significant natural communities, do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Databases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Jean Pietrusiak, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg,. 4, Wildlife Mgr.

1111

Otsego County

Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

Common Name	Scientific Name	Status
Bald eagle [1]	*Haliaeetus leucocephalus*	D
Bog turtle *(Historic)*	*Clemmys [=Glyptemys] muhlenbergii*	T

Status Codes: E=Endangered, T=Threatened, P=Proposed, C=Candidate, D=Delisted.

[1] The bald eagle was delisted on August 8, 2007. While there are no ESA requirements for bald eagles after this date, the eagles continue to receive protection under the Bald and Golden Eagle Protection Act (BGEPA). Please follow the Service's May 2007 Bald Eagle Management Guidelines to determine whether you can avoid impacts under the BGEPA for your projects. If you have any questions, please contact the endangered species branch in our office.

Information current as of: 11/16/112

Attachment C – Photographs

Photo 1. Photo Facing South in Southern Portion of Study Area

Photo 2. Photo Facing North in Southern Portion of Study Area

Photo 3. Plot UP-4 Facing North

Photo 4. Photo Facing North Along Trail Path

Photo 5. Plot UP-1 Facing North

Photo 6. Plot UP-2 Facing Northwest

Photo 7. Plot UP-3 Facing North

Photo 8. Photo Facing South Along Trail Path

Attachment D – Field Data

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region (Draft)

Project/Site: NEW-3807/SUNY Oneonta Housing-w/Newman **City/County:** Oneonta/Otsego **Sampling Date:** 20-Nov-12

Applicant/Owner: **State:** NY **Sampling Point:** **UP-1**

Investigator(s): M.Caves, P. Rizza **Landform (hillslope, terrace, etc.):** Flat

Soil Map Unit Name: **Cover Type:** DFU

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, et

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

Remarks:
Photos # 4N and 5S

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fraxinus americana	50	☑ 41.7%	FACU
2. Tsuga canadensis	45	☑ 37.5%	FACU
3. Fagus grandifolia	20	☐ 16.7%	FACU
4. Ostrya virginiana	5	☐ 4.2%	FACU
5.	0	☐ 0.0%	
	120	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	0	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

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

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	**x 1 =**	0	
FACW species	0	**x 2 =**	0	
FAC species	0	**x 3 =**	0	
FACU species	120	**x 4 =**	480	
UPL species	0	**x 5 =**	0	
Column Totals:	120	**(A)**	480	**(B)**

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS

Soil

Sampling Point: UP-1

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type [1]	Loc [2]	Texture	Remarks
0-3	10YR 3/2	100%					Silt Loam	
3-6	5/6	60%	10YR 4/4	40%	D	M	Silt Loam	Rock below

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3) (except in MLRA 143)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6) (Drop in LRR R?
- ☐ Dark Surface (S7) (MLRA 149B of LRR S)
- ☐ Polyvalue Below Surface (S8) (LRR R, S)
- ☐ Thin Dark Surface (S9) (LRR R, S)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (LRR K, L, S)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12)
- ☐ Piedmont Floodplain Soils (F19)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region (Draft)

Project/Site: NEW-3807/SUNY Oneonta Housing-w/Newman **City/County:** Oneonta/Otsego **Sampling Date:** 20-Nov-12

Applicant/Owner: **State:** NY **Sampling Point:** UP-2

Investigator(s): M.Caves, P. Rizza **Landform (hillslope, terrace, etc.):** Flat

Soil Map Unit Name: **Cover Type:** OF-Turnaround

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, et

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

Remarks:
Photo # 8

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	0	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Solidago sp.	10	☐ 5.4%	FAC
2. Comptonia peregrina	25	☑ 13.4%	UPL
3. Poa sp.	85	☑ 45.7%	FAC
4. Cirsium vulgare	5	☐ 2.7%	FACU
5. Fragaria virginiana	15	☐ 8.1%	FACU
6. Aster sp.	10	☐ 5.4%	FAC
7. Prunella vulgaris	5	☐ 2.7%	FAC
8. Dactylis glomerata	25	☑ 13.4%	FACU
9. Carex sp.	3	☐ 1.6%	FAC
10. Daucus carota	3	☐ 1.6%	UPL
	186	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	113	x 3 =	339
FACU species	45	x 4 =	180
UPL species	28	x 5 =	140
Column Totals:	186 (A)		659 (B)

Prevalence Index = B/A = 3.543

Hydrophytic Vegetation Indicators:

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS

Soil

Sampling Point: UP-2

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc[2]	Texture	Remarks
0-6	5Y	4/3	100%						Silt Loam	Rock below

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3) (except in MLRA 143)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6) (Drop in LRR R?
- ☐ Dark Surface (S7) (MLRA 149B of LRR S)
- ☐ Polyvalue Below Surface (S8) (LRR R, S)
- ☐ Thin Dark Surface (S9) (LRR R, S)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (LRR K, L, S)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12)
- ☐ Piedmont Floodplain Soils (F19)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region (Draft)

Project/Site: NEW-3807/SUNY Oneonta Housing-w/Newman **City/County:** Oneonta/Otsego **Sampling Date:** 20-Nov-12

Applicant/Owner: **State:** NY **Sampling Point:** **UP-3**

Investigator(s): M.Caves, P. Rizza **Landform (hillslope, terrace, etc.):** Hillside

Soil Map Unit Name: **Cover Type:** DFU

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, et

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

Remarks:
Photos # 11N and 12S

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1. Fagus grandifolia	65	☑ 61.9%	FACU
2. Betula alleghaniensis	20	☐ 19.0%	FAC
3. Acer rubrum	20	☐ 19.0%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	105	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Fagus grandifolia	15	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	15	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Dennstaedtia punctilobula	60	☑ 100.0%	UPL
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	60	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 3 (B)

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

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	80	x 4 =	320
UPL species	60	x 5 =	300
Column Totals:	180 (A)		740 (B)

Prevalence Index = B/A = 4.111

Hydrophytic Vegetation Indicators:

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS

Soil

Sampling Point: UP-3

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc[2]	Texture	Remarks
0-3	10YR	3/2	100%						Organic Matter	
3-12	10YR	6/6	100%						Silt Loam	Rock below

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3) (except in MLRA 143)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6) (Drop in LRR R?
- ☐ Dark Surface (S7) (MLRA 149B of LRR S)
- ☐ Polyvalue Below Surface (S8) (LRR R, S)
- ☐ Thin Dark Surface (S9) (LRR R, S)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (LRR K, L, S)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12)
- ☐ Piedmont Floodplain Soils (F19)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region (Draft)

Project/Site: NEW-3807/SUNY Oneonta Housing-w/Newman **City/County:** Oneonta/Otsego **Sampling Date:** 20-Nov-12

Applicant/Owner: **State:** NY **Sampling Point:** **UP-4**

Investigator(s): M.Caves, P. Rizza **Landform (hillslope, terrace, etc.):** Hillside

Soil Map Unit Name: **Cover Type:** DFU

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

Are Vegetation ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ No ○

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

Summary of Findings - Attach site map showing sampling point locations, transects, important features, et

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

Remarks:
Photos # 20N and 21S

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fagus grandifolia	45	☑ 33.3%	FACU
2. Tsuga canadensis	25	☐ 18.5%	FACU
3. Quercus rubra	55	☑ 40.7%	FACU
4. Betula lenta	10	☐ 7.4%	FACU
5.	0	☐ 0.0%	
	135	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Fagus grandifolia	25	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	25	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	0	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 3 (B)

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

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	0	x 3 =	0	
FACU species	160	x 4 =	640	
UPL species	0	x 5 =	0	
Column Totals:	160	(A)	640	(B)

Prevalence Index = B/A = 4.000

Hydrophytic Vegetation Indicators:

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

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

Hydrophytic Vegetation Present? Yes ○ No ◉

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

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS

Soil

Sampling Point: UP-4

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

Depth (inches)	Matrix Color (moist)		%	Redox Features Color (moist)		%	Type [1]	Loc[2]	Texture	Remarks
0-2	10YR	3/2	100%						Organic Matter	
2-4	7.5YR	4/6	100%						Silt Loam	Rock below

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3) (except in MLRA 143)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6) (Drop in LRR R?
- ☐ Dark Surface (S7) (MLRA 149B of LRR S)
- ☐ Polyvalue Below Surface (S8) (LRR R, S)
- ☐ Thin Dark Surface (S9) (LRR R, S)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (LRR K, L, S)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3)
- ☐ Dark Surface (S7) (LRR K, L)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12)
- ☐ Piedmont Floodplain Soils (F19)
- ☐ Red Parent Material (TF2)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if observed):

Type:

Depth (inches):

Hydric Soil Present? Yes ○ No ◉

Remarks:

Hydrology

Wetland Hydrology Indicators:

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

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

Secondary Indicators (minimum of two required)

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

Field Observations:

Surface Water Present? Yes ○ No ◉ Depth (inches):

Water Table Present? Yes ○ No ◉ Depth (inches):

Saturation Present? (includes capillary fringe) Yes ○ No ◉ Depth (inches):

Wetland Hydrology Present? Yes ○ No ◉

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

Remarks:

References

U.S. Army Corps of Engineers. 2012. 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.

United States Department of Agriculture Natural Resource Conservation Service. 2012. List of Hydric Soils: National List; All States. Available online at: soils.usda.gov/use/hydric.