APPENDIX F – WETLAND DELINEATION REPORT

WETLAND DELINEATION REPORT
FOR THE
SALES DISTRIBUTION CENTER PROJECT

TOWN OF SCHODACK, RENSSELAER COUNTY, NEW YORK

Prepared for:

BERGMANN ASSOCIATES
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December 2011

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1.0 INTRODUCTION

Terrestrial Environmental Specialists, Inc. (TES) was contracted by Bergmann Associates to perform a wetland investigation on a site in the Town of Schodack, Rensselaer County, New York. The study area is approximately 106 acres in size and is located south of Schodack Valley Road (NYS Route 150), north of Julianne Road, east of Interstate Route 90, and west of Columbia Turnpike (NYS Routes 9 and 20) (Figure 1).

The TES wetland investigation consisted of a review of available background information and a field delineation of wetlands and other regulated waters. This report addresses the results of the background information review and the wetland delineation. A variety of figures are included with this report, along with photographs and field data sheets.

2.0 BACKGROUND INFORMATION REVIEW

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

- the New York State Department of Transportation (NYSDOT) Topographic Map (East Greenbush quadrangle) (Figure 1);
- the New York State Department of Environmental Conservation (NYSDEC) New York State Freshwater Wetlands Map (Figure 2);
- the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Map (Figure 3);
- the Rensselaer County Soil Survey Map prepared by the Natural Resources Conservation Service (Figure 4);
- the New York State Surface Water Classification Map (Figure 5);
- the Town of Rensselaer Flood Insurance Rate Map prepared by the Federal Emergency Management Agency (Figure 6); and
- an aerial photograph obtained from the New York State GIS Clearinghouse (Figure 7).

All figures are provided after the text.

3.0 METHODS

The agency resource information maps, soils descriptions, and the aerial photograph discussed above were used during the field review of the site. These maps and this information assisted in the initial identification of potential wetland areas.

Flagging of the wetlands on the site and data collection along the boundaries were performed by TES on November 15 and 16, 2011. The boundaries were delineated using the federal criteria for vegetation, soils, and hydrology (U.S. Army Corps of Engineers 2009, Environmental Laboratory 1987, Reed 1988, and NRCS 2011).

Surveyor's ribbons were placed along the wetland boundaries based on observations of vegetation, soils, and hydrology conditions. These observations were made along transects located perpendicular to the wetland boundaries. Additional observations of vegetation, soils, and hydrology were made at intermediate locations between the transects for the placement of additional flagging. Each wetland flag was labeled with a letter identifier of the wetland and was numbered consecutively (for example, A-1, A-2, A-3, *etc*.). The flagged wetland boundaries were surveyed by Brewer Engineering.

To further support the wetland boundaries, data on vegetation, soils, and hydrology were collected during the field effort in plots along transects located perpendicular to the wetland boundaries on the site. TES sampled 17 plots in and around the wetlands and in other representative areas of the site. Plots were generally located on the wetland and upland sides of the flagged wetland boundaries. The plot data were recorded on data sheets similar to those used in the regional supplement (U.S. Army Corps of Engineers 2009).

Vegetation data were collected in all the plots. Ocular estimates of the percent areal cover by plant species for each vegetation layer (tree, shrub, and herbaceous layers) were recorded. The plots varied in size by vegetation layer being sampled. The sizes were: 30-foot radius for the trees, 15-foot radius for the shrubs, 5-foot radius for the herbaceous layer, and 30-foot radius for vines.

The presence of wetland vegetation was determined when more than 50 percent of the dominant species in a sample plot had an indicator status of obligate (OBL), facultative-wet (FACW), or facultative (FAC). The dominant species for each layer in a plot were determined by ranking the species in decreasing order of percent cover and recording those species which, when cumulatively totaled, immediately exceeded 50 percent of the total cover of that layer. Additionally, any plant species that comprised 20 percent or more of the total cover for each layer was considered to be a dominant species.

Scientific nomenclature for plant species follows *A Checklist of New York State Plants* (Mitchell and Tucker 1997). The indicator status for each dominant plant species was determined using the *National List of Plants that Occur in Wetlands: Northeast (Region 1)* (Reed 1988), excluding the positive (+) or negative (-) modifiers for facultative indicator categories. For any species not included in the list, the indicator status was designated using the *Manual of Vascular Plants of Northeastern United States and Adjacent Canada* (Gleason and Cronquist 1991), *New Britton and Brown Illustrated Flora* (Gleason 1952), and *Gray's Manual of Botany* (Fernald 1950).

Soil and hydrology data were collected in soil pits or soil borer holes to a minimum depth of 20 inches within each sample plot. Soil characteristics were noted along the soil profile at the depth specified by the Corps criteria (U.S. Army Corps of Engineers 2009). Procedures for identifying hydric soils as outlined in the *Field Indicators of Hydric Soils in the United States* (USDA NRCS 2010) were also followed. Soil colors were determined by using the Munsell© color chart. Primary and secondary indicators of hydrology were also noted at each sample plot. The wetland boundaries were refined on the basis of intermediate soil borer holes along each transect.

4.0 RESULTS

The following section of the report provides a site description and wetland descriptions at the sales distribution center project site.

4.1 Site Description

The NYSDOT topographic map (Figure 1) shows the site located north of Julianne Road, west of Columbia Turnpike (NYS Routes 9 and 20), south of Schodack Valley Road (NYS Route 150), and east of NYS Interstate Route 90 in the Town of Schodack, Rensselaer County, New York (Figure 1). Elevations on the site range from approximately 270 to 374 feet above mean sea level (amsl). The northeast portion of the site was used as a sand and gravel quarry. The southwestern portion of the property contained two depressions and a saddle landform feature. There are two streams associated with the site (Figure 5). The Moordener Kill flows along the northwestern boundary of the site with a steep slope leading down to the stream bank. A tributary of the Moordener Kill flows along the northeast boundary of the site.

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

According to the USFWS NWI Map (Figure 3), two wetland types occur on the property. They are designated by the USFWS as palustrine, emergent, persistent, semipermanently flooded (PEM1F) and palustrine, forested, broad-leaved deciduous, seasonally flooded/saturated (PFO1E) wetland cover types. These areas are located in the southwestern and southeastern portions of the site. The wetland in the southeastern corner of the property has both emergent and broad-leaf deciduous forest cover types. The wetland in the southwestern corner is a broad-leaf deciduous forest. They are associated with Wetlands A and E (Figure 10).

The Rensselaer County Soil Survey prepared by the Natural Resources Conservation Service indicates that nine different soils occur on the site (Figure 4):

- Castile gravelly silt loam, 0 to 5 percent slopes (CbA);
- Fluvaquents-Udifluvents complex, 0 to 3 percent slopes (FIA);
- Hoosic gravelly sandy loam, 3 to 8 percent slopes (HoB);
- Hoosic gravelly sandy loam, rolling (HoC);
- Hoosic gravelly sandy loam, steep (HoE);
- Limerick silt loam, 0 to 3 percent slopes (LmA);
- Nassau-Manlius complex, rolling (NaC);
- Pits, gravel (Pg); and
- Saprists and Aquents, ponded (Sa).

Fluvaquents-Udifluvents complex, Limerick silt loam, and Saprists and Aquents are recognized as hydric soils. These soils are located in the northwest and southeast portions of the site and are associated with Stream 2 and Wetland A.

The New York State Surface Water Classification map (Figure 5) shows a tributary of the Moordener Kill, as well as the Moordener Kill, flowing through the property. The tributary runs along the northeast border, and a small portion of the Moordener Kill passes through the northwest border of the property. This tributary is designated with a water quality of Class C with C Standards, and this creek is designated with a water quality of Class C with C(TS) Standards by the NYDEC. The Moordener Kill is a state-protected waterbody since it has a Classification or Standard of CT (trout) or higher.

The Town of Rensselaer Flood Rate Insurance Map prepared by the Federal Emergency Management Agency (Figure 6) shows small portions of the site in Zones A2 and B, and the majority of the site located within Zone C. Zone A2 indicates areas of 100-year flood; base flood elevations and flood hazard factors are determined. Zone B indicates areas between the limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. Zone C indicates areas of minimal flooding.

The 2007 (Figure 7) aerial photograph shows that the site is undeveloped land. The majority of the site is evergreen forest and deciduous forest uplands. The northern portion of the site contained an old sand and gravel quarry.

The drainage basin for the site (Figure 8) is approximately 160 acres in size. This figure shows the location of two relatively permanent waterbody (RPW) streams located on the site. The Moordener Kill (stream order 3) and a tributary of the Moordener Kill (stream order 1) are located in the northeastern and northwestern portions of the site. The Moordener Kill is a tributary to the Hudson River, a traditional navigable water (TNW) (Figure 9).

4.2 Site Ecology

The site consisted of quarries, deciduous forest upland, evergreen forest upland, wetlands, and streams.

The quarry consisted primarily of bare soil with scattered plants. Lespedeza bush clover (*Lespedeza capitata*) was the dominant herbaceous plant.

The majority of the site was deciduous forest upland, which comprised the central and western portions of the site. The dominant species found in the tree layer were black cherry (*Prunus serotina*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), red oak (*Quercus rubra*), black oak (*Quercus velutina*), shagbark hickory (*Carya* ovata), big tooth aspen (*Populus grandidentata*), black birch (*Betula* lenta), green ash (*Fraxinus pensylvanica*), eastern white pine (*Pinus strobus*), and pitch pine (*Pinus rigida*). The dominant species found in the shrub layer were shagbark hickory, white ash (*Fraxinus americana*), tatarian honeysuckle (*Lonicera tatarica*), eastern hop hornbeam (*Ostrya virginia*), white pine, and sugar maple. The herbaceous layer contained Christmas fern (*Polystichum achrosticoides*), evergreen woodfern (*Dryopteris intermedia*), white pine, garlic mustard (*Alliaria petiolata*), tatarian honeysuckle, Canada goldenrod (*Solidago canadensis*), orchard grass (*Dactylis glomerata*), fescue (*Fescuta* sp.), and highbush blueberry (*Vaccinium corymbosum*).

The evergreen forest upland cover type contained white pine and pitch pine in the tree layer. The dominant species in the shrub layer were white pine, eastern hop hornbeam, and red maple. The herb layer contained highbush blueberry. This cover type is located in the central and southeastern portions of the site.

Wetlands and streams will be described in the following section.

4.3 Wetlands Descriptions

Four wetlands were found on the site and are referred to as Wetland A, Wetland D, Wetland E, and Wetland F. Two streams were found on the site and are referred to as Stream 1 (Wetland B) and Stream 2 (Wetland C). The boundaries of the wetlands and streams were flagged with coded surveyor's ribbon using the methods described in the Corps 2009 Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual. The delineated wetland boundaries are shown on Figure 10 and were surveyed by Brewer Engineering. Wetlands A, D, E and F total 3.54 acres. Streams 1 and 2 are located along the property boundary of the site. Stream 1 occupies approximately 0.05 acre of the site with a length of 237 feet within the property boundary. Stream 2 has a length of 234 feet within the property boundary.

Wetland sample plot and photograph locations are shown on Figure 11. Photographs and field data sheets are provided in Appendix A and Appendix B respectively.

Wetland A

Wetland A is the largest wetland on the site and is 3.03 acres. It is located in the southeastern portion of the site (Figure 10), and is associated with two USFWS NWI wetlands, including PEM1F and PFO1E (Figure 3). Wetland A is approximately 80 percent open water, and 20 percent shrub fringe surrounding the open water. The shrub fringe surrounding the open water consisted of a sparse tree layer as well as shrub and herb layers. The tree layer contained red maple and American elm (*Ulmus americana*). The shrub layer included silky dogwood (*Cornus amomum*), common buttonbush (*Cephalanthus occidentalis*), and northern arrow-wood (*Viburnum dentatum*). The herb layer contained blueflag (*Iris versicolor*) and purple loosestrife (*Lythrum salicaria*).

The soils of Wetland A are mapped as hydric and include Saprists and Aquents, ponded; and Limerick silt loam, 0 to 3 percent slopes (Figure 4). These soils fit three of the NRCS hydric soil indicators including A11 (depleted below dark surface), F2 (loamy gleyed matrix), and F3 (depleted matrix). The topsoil at the north end of the wetland consisted of black (7.5YR 2.5/1) loam, and the subsoil consists of dark gray (N 4/0) silt loam. The topsoil layer at the south end of the wetland consisted of black (10YR 2/1) loam. The subsoil at the south end consisted of gray (10YR 5/1) clay loam with brownish yellow (10YR 6/6) mottles.

Hydrology indicators in Wetland A included surface water, saturation, water marks, inundation visible on aerial imagery, and moss trim lines. This wetland has a surface water connection to a tributary of the Moordener Kill that flows along the eastern boundary of the site. Therefore, this wetland is considered to be a Corps-jurisdictional area.

Wetland D

Wetland D is 0.05 acre and is found in the southwestern portion of the site in a depression that can be seen on the topographic map (Figure 10). Wetland D is a vernal pool and contained only shrub and herb layers. There was silky dogwood in the shrub layer, and the herbaceous layer consisted of sedge (*Carex sp.*), and skunk-cabbage (*Symplocarpus foetidus*).

Soils in Wetland D are mapped as Castile gravelly silt loam, 0 to 5 percent slopes (Figure 4), a non-hydric soil. While not located in an area of hydric soils, soils consisted of dark gray (10YR 4/1) loam in the topsoil layer. The subsoil layer contained dark gray (10YR 4/1) silt loam with strong brown (7.5YR 5/8) mottles. This soil fits the NRCS F3 indicator (depleted matrix).

Hydrology indicators throughout this wetland included surface water, water stained leaves, and hydrogen sulfide odor. This wetland does not appear to be connected to a tributary system and is, therefore, considered isolated. The Corps should be consulted regarding the jurisdictional status of Wetland D.

Wetland E

Wetland E is 0.12 acre and is found in the southwestern corner of the site in a depression that can also be seen on the topographic map (Figure 10). It is associated with USFS NWI wetland PFO1E (Figure 3). Wetland E is a vernal pool and contained no tree or shrub layers. The herbaceous layer consisted of sedge and royal fern (*Osmunda regalis*).

Soils in Wetland E are mapped as Hoosic gravelly sandy loam, steep (Figure 4), a non-hydric soil. While not located in an area of hydric soils, soils consisted of brown (10YR 5/3) loam in the topsoil layer. The subsoil layer contained dark gray (10YR 4/1) clay loam. This soil fits the NRCS F3 indicator (depleted matrix).

Hydrology indicators throughout this wetland included surface water, and water stained leaves. This wetland does not appear to be connected to a tributary system and is, therefore, considered isolated. The Corps should be consulted regarding the jurisdictional status of Wetland E.

Wetland F

Wetland F is 0.34 acre and is found in the southwestern portion of the site (Figure 10). Wetland F is a deciduous forest wetland located in a low area associated with a saddle landform feature. The tree layer contained green ash (*Fraxinus pennsylvanica*) and red maple. The shrub layer consists of American elm.

Soils in Wetland F are mapped as Castile gravelly silt loam, 0 to 5 percent slopes (Figure 4), a non-hydric soil. While not located in an area of hydric soils, soils consisted of very dark grayish brown (10YR 3/2) silt loam in the topsoil and subsoil layers. The subsoil also contained brown (7.5YR 4/4) mottles. This soil fits the NRCS A11 (depleted below dark surface) and F3 (depleted matrix) indicators.

Hydrology indicators throughout this wetland included water marks, sediment deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, water-stained leaves, oxidized rhizospheres along living roots, drainage patterns, moss trim lines, geomorphic position, and mircotopographic relief. Wetland F appears to receive storm water/upland drainage from a residential development via a constructed swale to the south. This wetland does not have an outlet and is not connected to a tributary system and is, therefore, considered isolated. The Corps should be consulted regarding the jurisdictional status of Wetland F.

Stream 1

Stream 1 (Wetland B) is located along the northeastern boundary of the site, and occupies approximately 0.05 acre of the site (Figure 10). The stream enters and exits the property several times along the site boundary, and 237 feet of this stream occurs within the boundary of the site. This stream appears to be an intermittent RPW, and contained 5 inches of water at the time of the delineation. Stream 1 is a tributary of the Moordener Kill and is a Class C stream with C standards. Because Stream 1 has a connection to the Hudson River via the Moordener Kill, it is considered a Corps jurisdictional waterbody because the Hudson River is considered a TNW.

Stream 2

Stream 2 is a perennial RPW located along the northwestern boundary of the site (Figure 10). The average depth was approximately 18 inches and 234 feet of this stream occured within the boundary of the site. There is a steep slope leading down to the edge of the stream bank. Stream 2 is part of the Moordener Kill and is a Class C stream with C(TS) Standards. This stream is a state-protected waterbody since has a Classification or Standard of CT (trout) or higher. The Moordener Kill flows into the Hudson River to the west. The Hudson River a TNW, therefore the Moordener Kill is a Corps jurisdictional waterbody.

5.0 SUMMARY

Terrestrial Environmental Specialists, Inc. (TES) was contracted by Bergmann Associates to perform a wetland investigation on a site in the Town of Schodack, Rensselaer County, New York. The study area is approximately 106 acres and is located south of Schodack Valley Road (NYS Route 150), north of Julianne Road, east of Interstate Route 90, and west of Columbia Turnpike (NYS Routes 9 and 20).

TES collected and reviewed available background information and maps including a topographic map, wetland maps, soils map and descriptions, surface water classification map, flood rate insurance map, and an aerial photograph to locate potential wetlands on the site. There are no mapped state-regulated wetlands on the site.

Delineation of the wetlands on the site and data collection along the boundaries were performed by TES on November 16-17, 2011. The boundaries were delineated using the federal criteria for vegetation, soils, and hydrology (U.S. Army Corps of Engineers 2009, Reed 1988, and NRCS 2011).

Four wetlands were delineated and are referred to as Wetland A (3.03 acres), Wetland D (0.05 acre), Wetland E (0.12 acre) and Wetland F (0.34 acre). There are also two streams on the site referred to as Stream 1 (Wetland B) and Stream 2 (Wetland C). Wetland A is an open water wetland associated with Stream 1. This wetland is a federal-jurisdictional area since it is associated with tributary systems to navigable waters. Wetland A is located in the southeastern portion of the site.

Wetland D is a vernal pool located in the southwestern portion of the site. Wetland E is also a vernal pool located in the southwestern portion of the site. Wetland F is a deciduous forest wetland located in the southwestern portion of the site and does not have an outlet.

Stream 1 is located along the northeastern boundary of the site, and appears to be an intermittent RPW. It is a tributary of the Moordener Kill and is designated as a Class C stream with C Standards. Stream 2 is located along the northwestern boundary of the site and is a perennial RPW. It is part of the Moordener Kill and is designated as a Class C stream with C(TS) Standards. Stream 2 is a state-protected waterbody since it has a Classification or Standard of CT (trout) or higher. Streams 1 and 2 are considered Corps jurisdictional water bodies as they are both associated with tributary systems to navigable waters.

Since Wetland A has an apparent surface water connection to a tributary system of navigable waters, it is not an isolated wetland. Therefore, TES considers this wetland to be a Corps-jurisdictional area. Wetlands D, E, and F are not considered jurisdictional wetlands because it would appear they meet the definition of an isolated wetland.

6.0 REFERENCES

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FIGURES

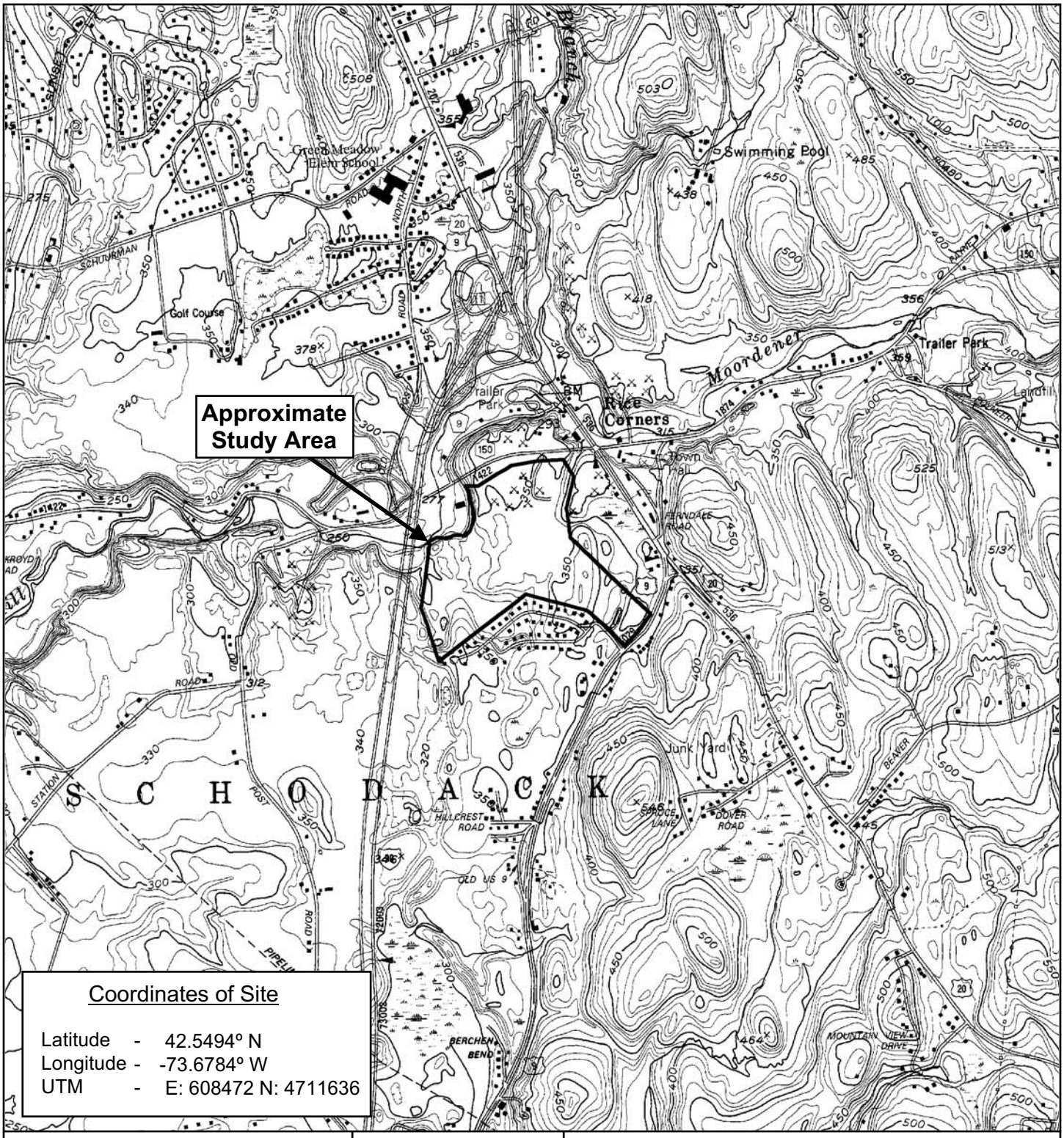


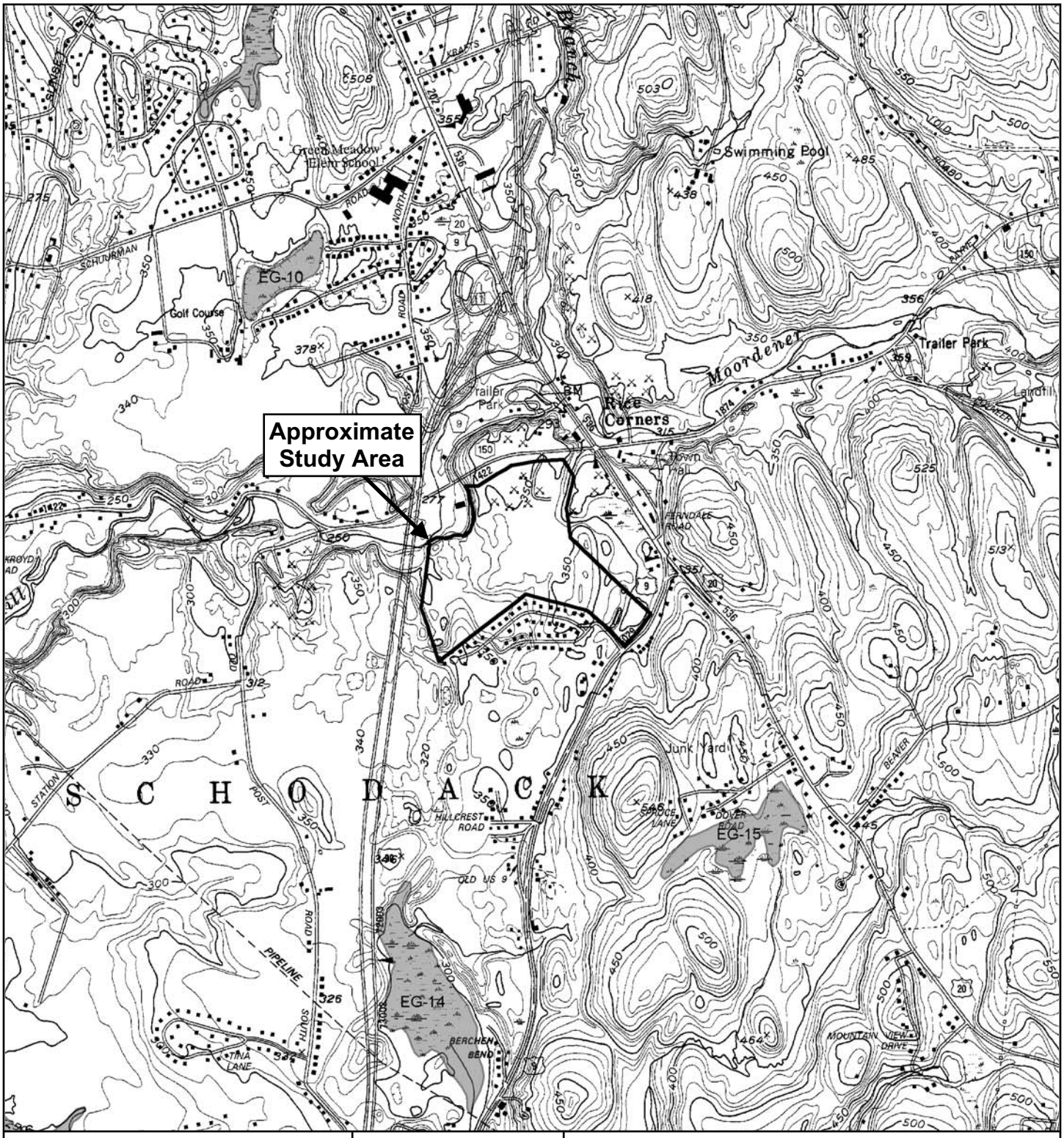
Figure 1. Site Location

NYS DOT Topographic Map

East Greenbush Quadrangle
1993

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES file: BGA-3713/3713-Fig1.dsf\11-11-11



QUADRANGLE LOCATION

0' 1000' 2000'

SCALE 1" = 2000'

NORTH

Figure 2. NYS Freshwater Wetlands Map

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

East Greenbush Quadrangle 1998

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES file: BGA-3713\3713-Fig2.dsf\11-11-11

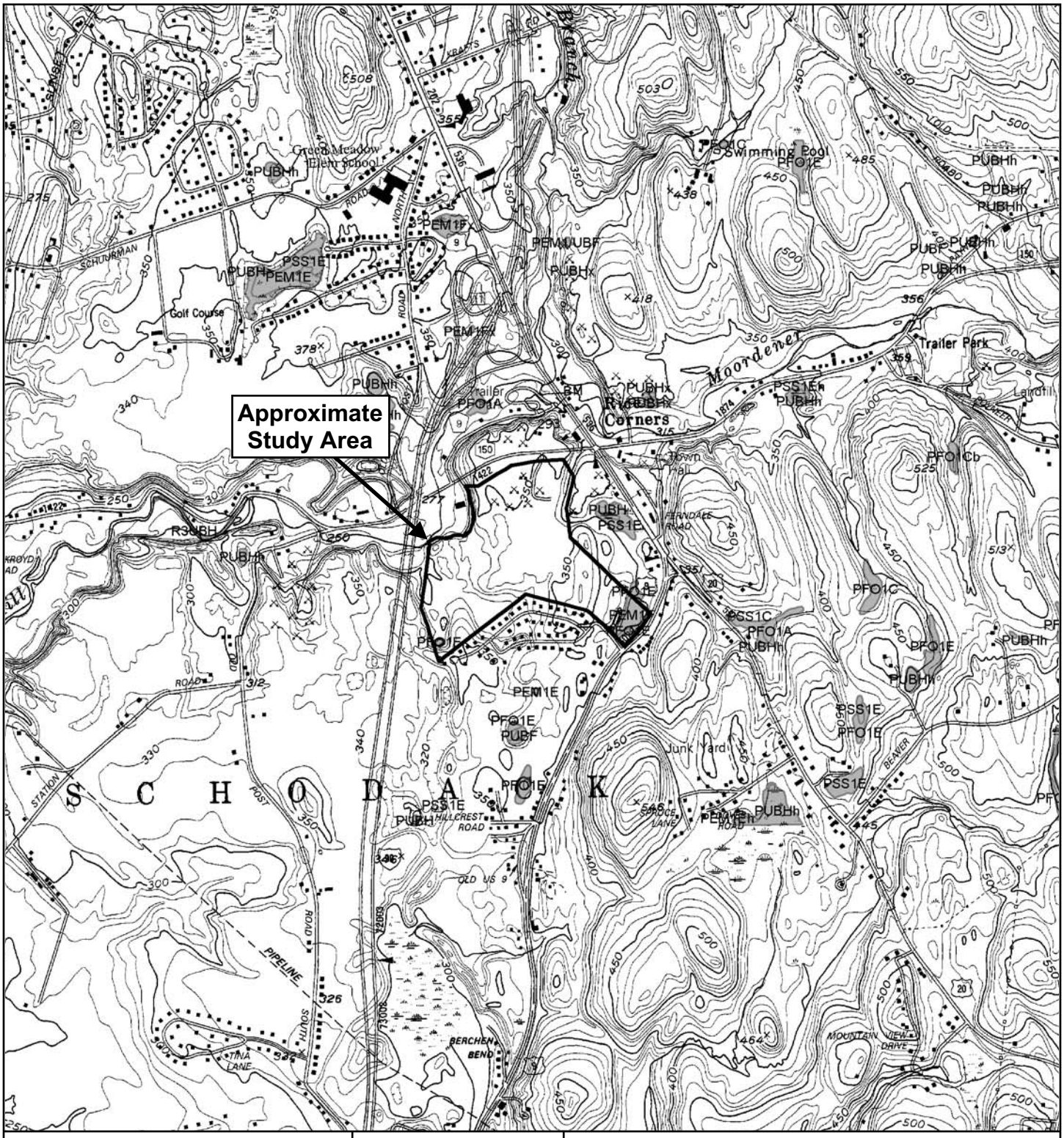


Figure 3. National Wetlands Inventory Map

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

East Greenbush Quadrangle
2010

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES file: BGA-3713\3713-Fig3.dsf\11-11-11

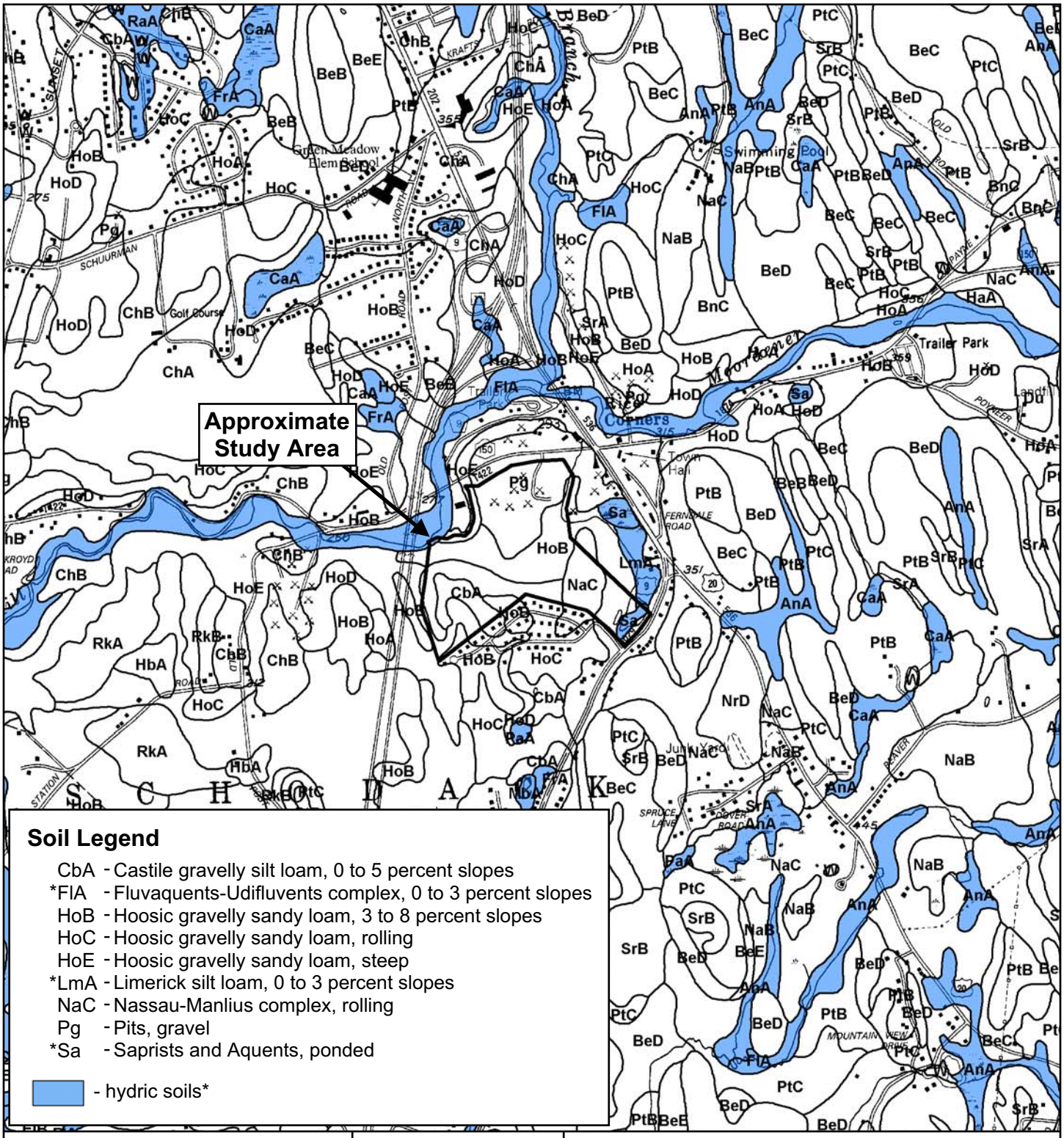


Figure 4. Soil Survey Map

Natural Resources Conservation Service
SoilDataMart.nrcs.usda.gov

Rensselaer County Soil Survey
2010

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

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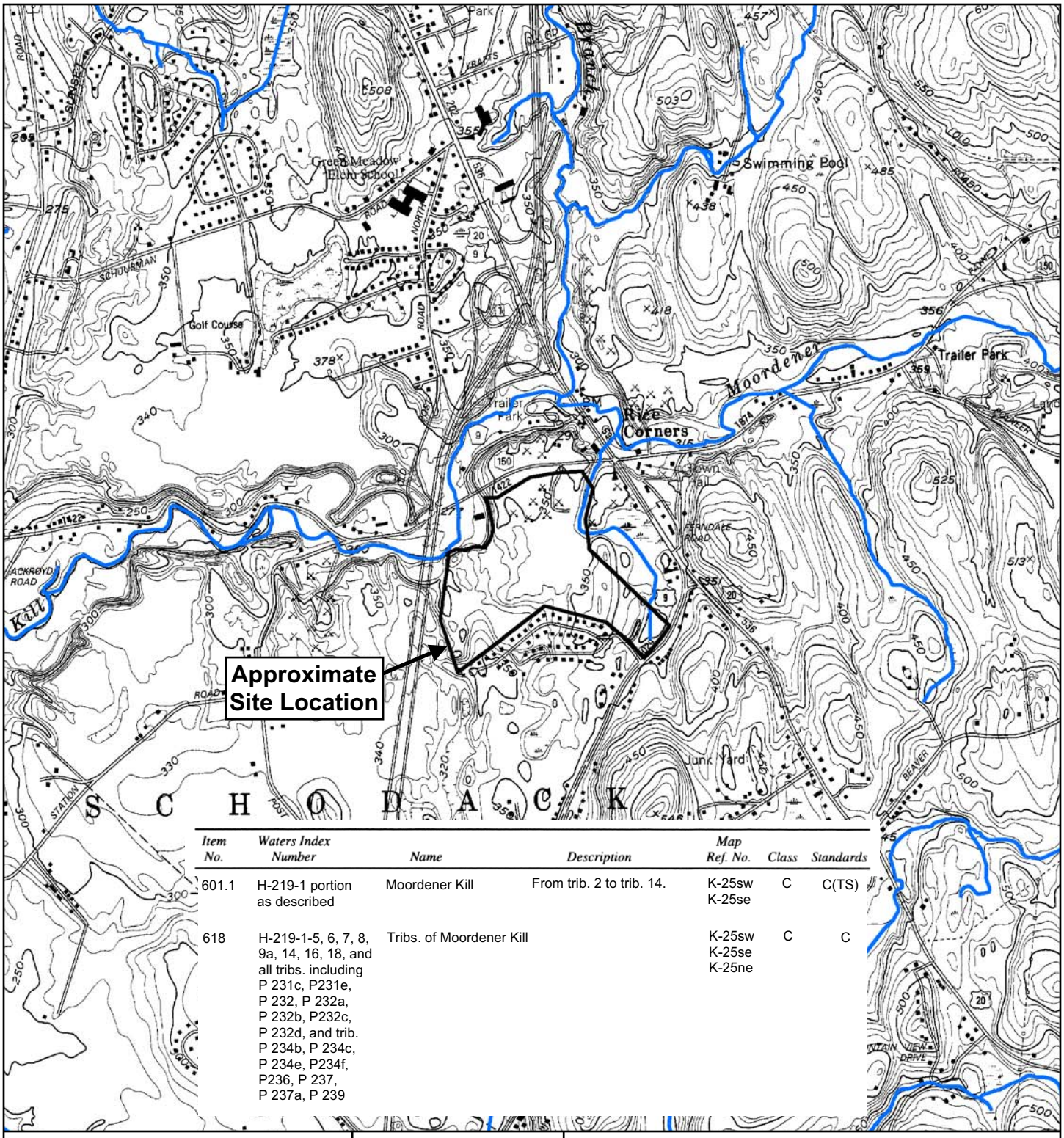


Item No.	Waters Index Number	Name	Description	Map Ref. No.	Class	Standards
601.1	H-219-1 portion as described	Moordener Kill	From trib. 2 to trib. 14.	K-25sw K-25se	C	C(TS)
618	H-219-1-5, 6, 7, 8, 9a, 14, 16, 18, and all tribs. including P 231c, P231e, P 232, P 232a, P 232b, P232c, P 232d, and trib. P 234b, P 234c, P 234e, P234f, P236, P 237, P 237a, P 239	Tribs. of Moordener Kill		K-25sw K-25se K-25ne	C	C

Title 6 NYCRR, Chapter X
Article 10, Part 863.6 (1996)

Map K-25sw

0' 1000' 2000'

SCALE 1" = 2000'

NORTH

Figure 5.

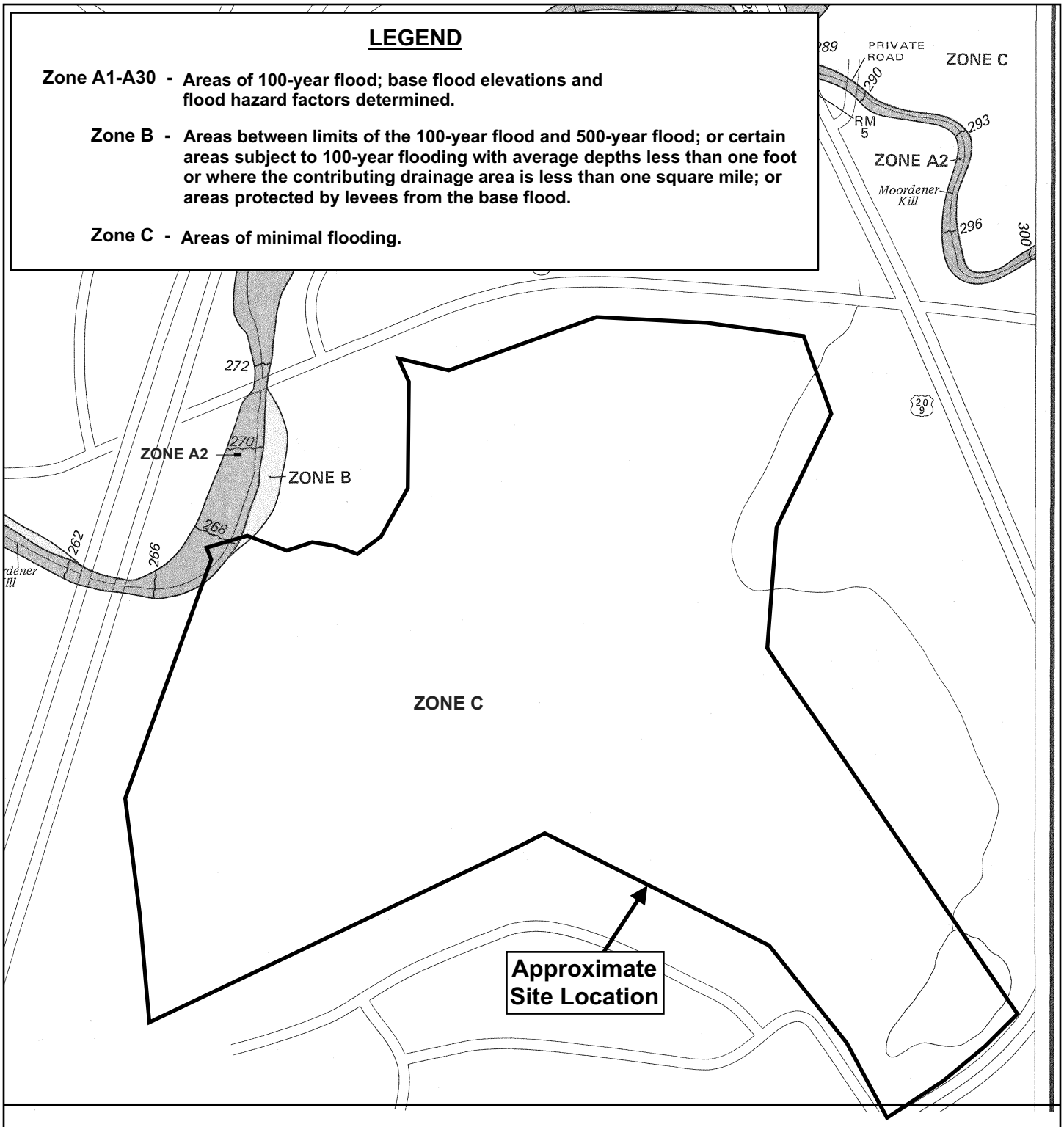
Surface Water Classification Map

NYSDEC

East Greenbush Quadrangle

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES file: BGA-3713\3713-Fig5.dsf\11-28-2011



0' 250' 500'

SCALE 1" = 500'

NORTH

Panel Number:

361169 0004 A
(Effective Date 8/15/84)

Figure 6. Flood Insurance Rate Map

Federal Emergency Management Agency

Town of Rensselaer, NY

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES File: BGA-3713\3713-Fig6.dsf\11-29-11

NORTH

0' 150' 300'

APPROXIMATE SCALE IN FEET

Aerial Photograph obtained from NYS GIS Clearinghouse 2007

Figure Prepared by Terrestrial Environmental Specialists, Inc.

Figure 7.

Aerial Photograph of Site

TES File: BGA-3713\3713-aerial.dsf\11-14-11

Legend

- Wetlands
- Drainage Basin
- Intermittent RPW
- Perennial RPW

Stream 1
Intermittent-RPW

Stream 2
Perennial-RPW

Approximate Study Area

Wetland F

Wetland D

Wetland A

Wetland E

Approximate Drainage Basin (approximately 160 acres)

UTM Coordinates (NAD 83 18T)

Site - E 608472 N 4711636

Stream 1 Intermittent - RWP - (Stream Order 1)
Head - E 608670 N 4711677
Discharge - E 608681 N 4711893

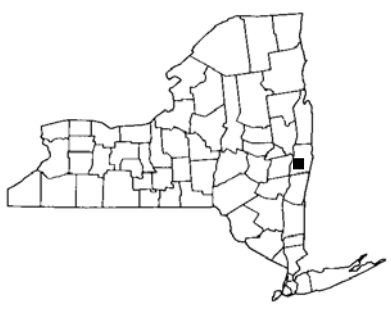
Stream 2 Perennial - RWP - (Stream Order 3)
Head - E 608144 N 4711609
Discharge - E 608069 N 4711582

Wetland A - E 608939 N 4711261

Wetland D - E 608130 N 4711230

Wetland E - E 608104 N 4711149

Wetland F - E 608310 N 4711263



QUADRANGLE LOCATION

NORTH

0' 500' 1000'

APPROXIMATE SCALE IN FEET

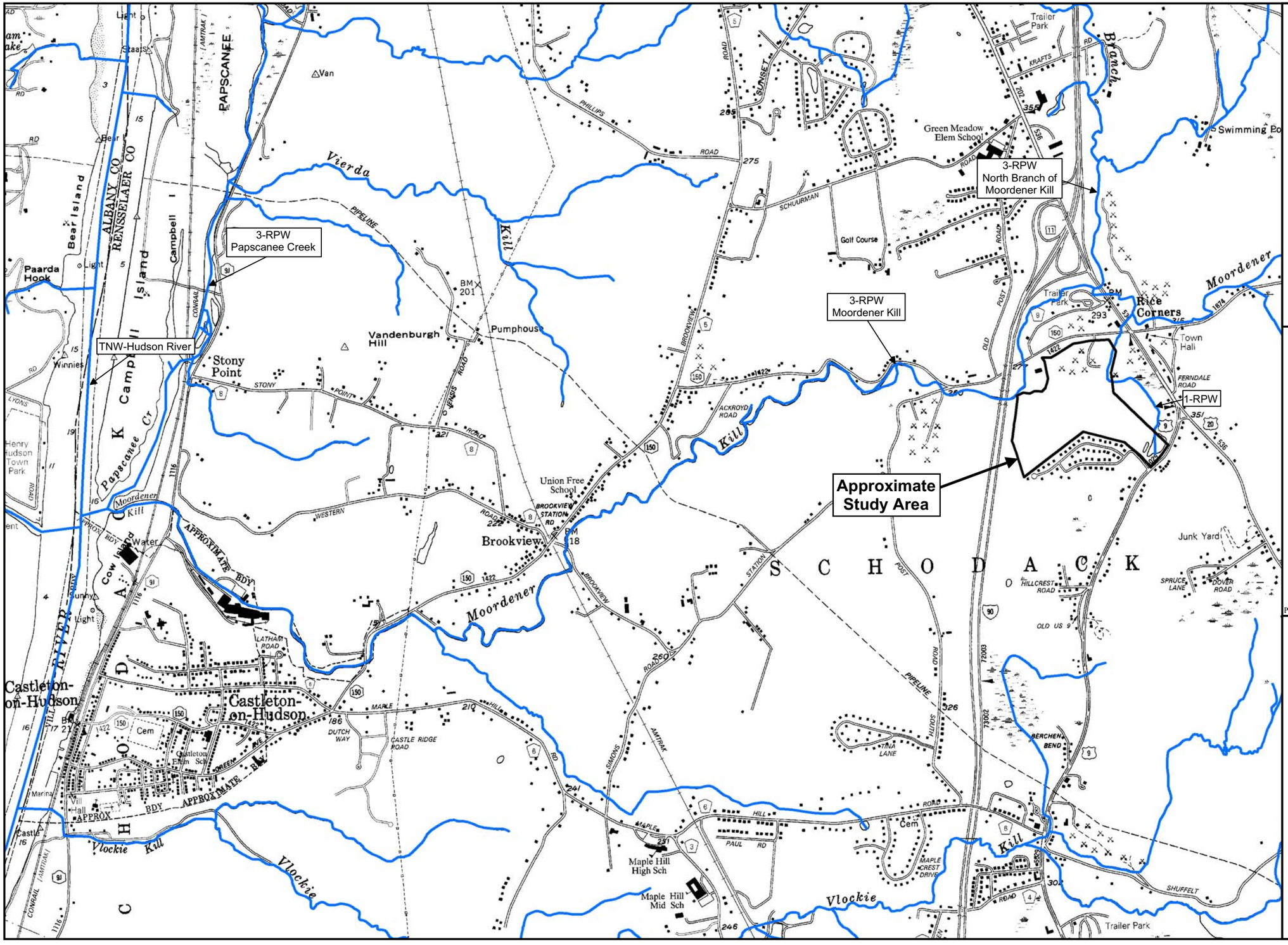
Figure 8. Drainage Map

NYS DOT Topographic Map

East Greenbush Quadrangle
1993

Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

TES file: BGA-3713/3713-Drainage-topo.dsf\12-9-11



Prepared by TERRESTRIAL ENVIRONMENTAL SPECIALISTS, Inc.

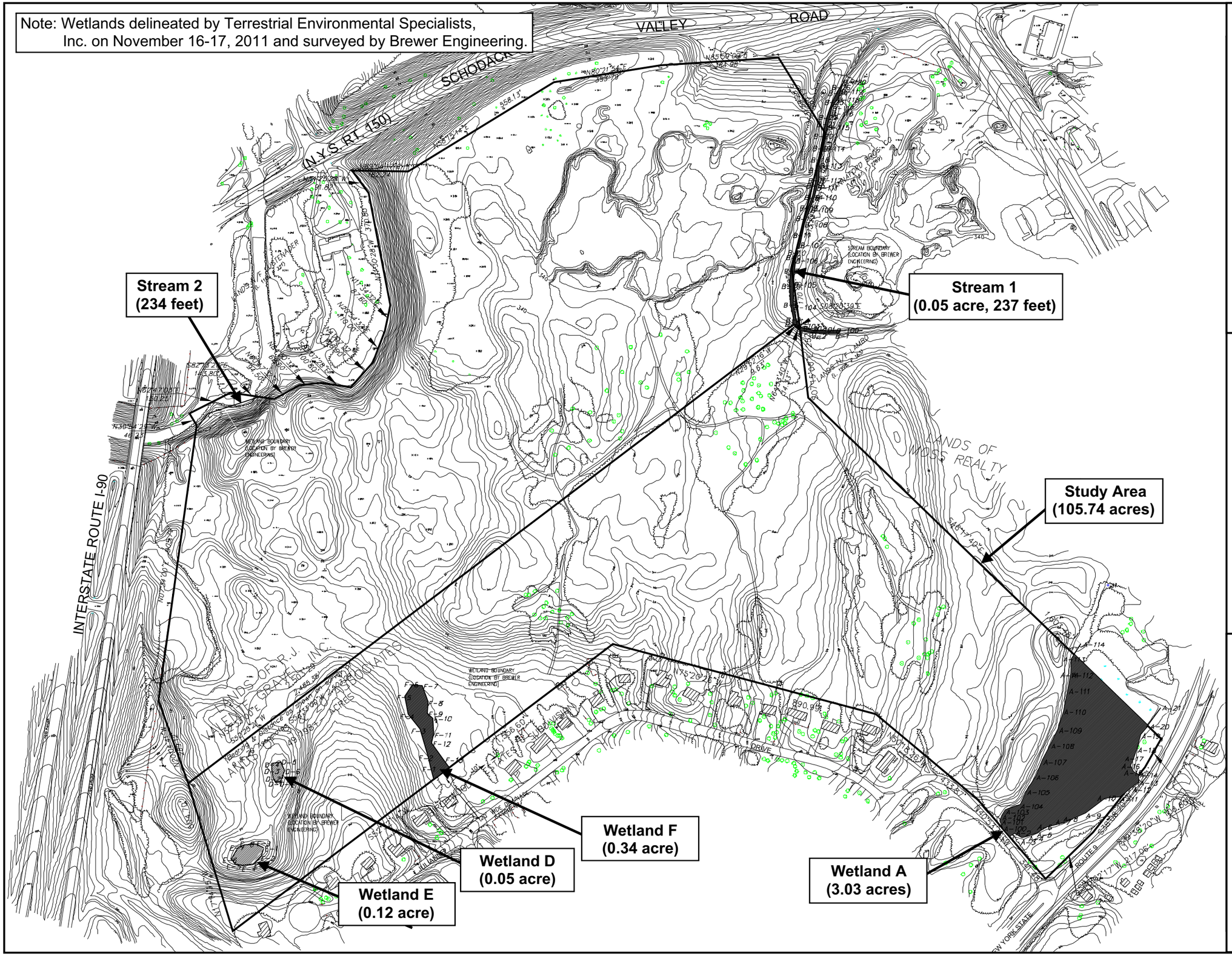
Figure 9. Stream Reach

NYSDEC ArcView GIS

Delmar and East Greenbush Quadrangles 1993 and 1993

TES File: BGA-3713\3713StreamReach-1.dsf\12-8-11

Note: Wetlands delineated by Terrestrial Environmental Specialists, Inc. on November 16-17, 2011 and surveyed by Brewer Engineering.



NORTH

0' 150' 300'

APPROXIMATE SCALE IN FEET

Wetland

Figure Prepared by Terrestrial Environmental Specialists, Inc.

Wetland Boundary Surveyed by Brewer Engineering

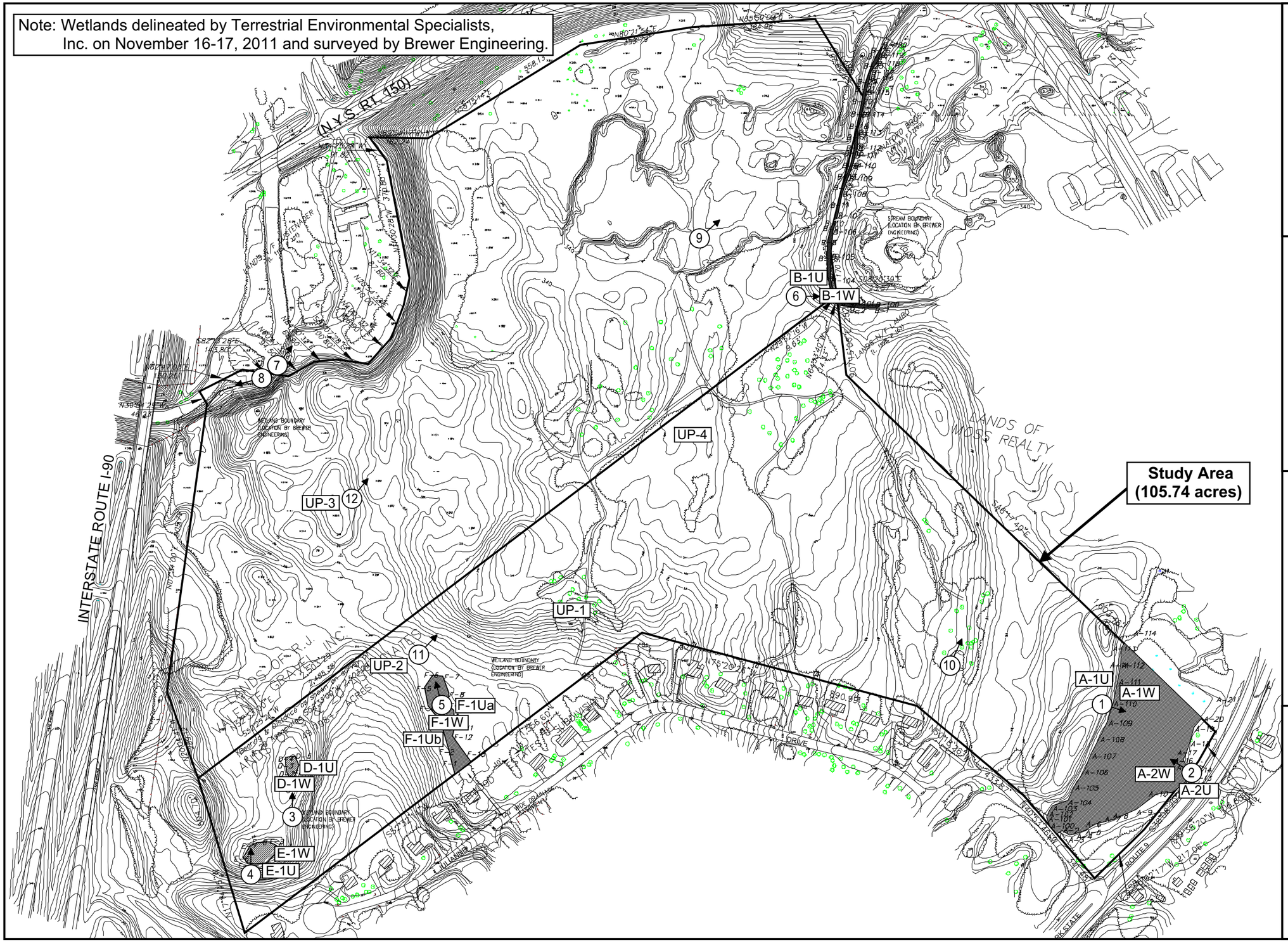
Base Map Provided by Bergmann Associates

Figure 10.

Wetland Locations

TES File: BGA-3713\3713-Wet-Location.dsf\12-5-2011

Note: Wetlands delineated by Terrestrial Environmental Specialists, Inc. on November 16-17, 2011 and surveyed by Brewer Engineering.



LEGEND

- Wetland
- A-1W — Sample Plot Location
- 1 → Photo Location and Direction

NORTH

0' 150' 300'

APPROXIMATE SCALE IN FEET

Figure Prepared by Terrestrial Environmental Specialists, Inc.

Base Map Provided by Bergmann Associates

Figure 11.

Wetland Boundaries with Sample Plot and Photograph Locations

TES File: BGA-3713\3713-Plot-Photo.dsf\12-7-2011

APPENDIX A – Photographs

Photo 1. Wetland A Plot A-1W

Photo 2. Wetland A Plot A-2W

Photo 3. Wetland D Plot D-1W

Photo 4. Wetland E Plot E-1W

Photo 5. Wetland F Plot F-1W

Photo 6. Stream 1 Plot B-1W

Photo 7. Stream 2 Moordener Kill

Photo 8. Stream 2 Moordener Kill

Photo 9. Mined Area

Photo 10. Evergreen Forest Upland

Photo 11. Plot Up-2 Deciduous Forest Upland

Photo 12. Deciduous Forest Upland

APPENDIX B – Field Data Sheets

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

Project/Site: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **A-1U**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Hillside

Soil Map Unit Name: Hoosic gravelly sandy loam, 3 to 8 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Flag A-111, Photo 1

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Prunus serotina	20	☑ 20.0%	FACU
2. Acer rubrum	60	☑ 60.0%	FAC
3. Carya ovata	20	☑ 20.0%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	100	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Fraxinus americana	40	☑ 88.9%	FACU
2. Viburnum lentago	5	☐ 11.1%	FAC
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	45	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Alliaria petiolata	3	☑ 100.0%	FACU
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%	
	3	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 5 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	65	x 3 =	195	
FACU species	83	x 4 =	332	
UPL species	0	x 5 =	0	
Column Totals:	148	(A)	527	(B)

Prevalence Index = B/A = 3.561

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: A-1U

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
0-7	7.5YR	2.5/1	100%						Loam	
7-18+	10YR	4/4	100%						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **A-1W**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Shoreline

Soil Map Unit Name: Saprists and Aquents, ponded **Cover Type:** OW, Shrub Fring

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, etc

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:
Flag A-111, Photo 2

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. Cornus amomum	15	☐ 16.7%	FACW
2. Cephalanthus occidentalis	70	☑ 77.8%	OBL
3. Viburnum dentatum	5	☐ 5.6%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	90	**= 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: 30' Radius)			
1. Vitis riparia	10	☐ 100.0%	FACW
2.	0	☐ 0.0%	
	10	**= Total Cover**	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	70	x 1 =	70
FACW species	25	x 2 =	50
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		135 (B)

Prevalence Index = B/A = 1.350

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: A-1W

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
0-12	7.5YR	2.5/1	100%						Loam	Muck
12-18+	N	4/0	100%						Silt Loam	

[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): 4

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

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **A-2U**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Hoosic gravelly sandy loam, 3 to 8 percent slopes **Cover Type:** OF/Roadside

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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

A-12, Photo 3

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
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. Setaria sp.	15	☐ 13.0%	FAC
2. Dactylis glomerata	35	☑ 30.4%	FACU
3. Festuca sp.	65	☑ 56.5%	FAC
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%	
	115	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 2 (B)

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

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	80	x 3 =	240
FACU species	35	x 4 =	140
UPL species	0	x 5 =	0
Column Totals:	115 (A)		380 (B)

Prevalence Index = B/A = 3.304

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: A-2U

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 4/3	100%					Loam	
3+								Stony Road Fill

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **A-2W**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Shoreline

Soil Map Unit Name: Saprists and Aquents, ponded **Cover Type:** OW, Shrub Fring

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, etc

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:
A-12, Photo 4

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Acer rubrum	30	☑ 75.0%	FAC
2. Ulmus americana	10	☑ 25.0%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	40	**= Total Cover**	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Cephalanthus occidentalis	60	☑ 63.2%	OBL
2. Alnus incana	5	☐ 5.3%	FACW
3. Viburnum dentatum	30	☑ 31.6%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	95	**= Total Cover**	
Herb Stratum (Plot size: 5' Radius)			
1. Iris versicolor	10	☑ 27.0%	OBL
2. Lythrum salicaria	15	☑ 40.5%	FACW
3. Carex stricta	5	☐ 13.5%	OBL
4. Onoclea sensibilis	7	☐ 18.9%	FACW
5.	0	☐ 0.0%	
6.	0	☐ 0.0%	
7.	0	☐ 0.0%	
8.	0	☐ 0.0%	
9.	0	☐ 0.0%	
10.	0	☐ 0.0%	
	37	**= Total Cover**	
Woody Vine Stratum (Plot size: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	**= Total Cover**	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	75	x 1 =	75
FACW species	37	x 2 =	74
FAC species	60	x 3 =	180
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	172 (A)		329 (B)

Prevalence Index = B/A = 1.913

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: A-2W

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	10YR	2/1	100%						Loam	
6-18+	10YR	5/1	95%	10YR	6/6	5%	RM	M	Clay Loam	

[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): 2

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

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 7

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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **B-1U**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Hoosic gravelly sandy loam, 3 to 8 percent slopes **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, etc

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:
Flag B-102, Photo 10. Wetland B is referred to has Stream 1.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1. Prunus serotina	30	☑ 27.3%	FACU
2. Acer saccharum	55	☑ 50.0%	FACU
3. Quercus alba	25	☑ 22.7%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	110	**= Total Cover**	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Acer saccharum	20	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	**= Total Cover**	
Herb Stratum (Plot size: 5' Radius)			
1. Lonicera tatarica	10	☑ 33.3%	FACU
2. Alliaria petiolata	20	☑ 66.7%	FACU
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%	
	30	**= Total Cover**	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 6 (B)

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

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species	0	x 2 =	0	
FAC species	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: B-1U

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
0-8	7.5YR	2.5/1	100%						Silt Loam	
8-18+	10YR	4/4	100%						Clay Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **B-1W**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Shoreline

Soil Map Unit Name: Pits, gravel **Cover Type:** Ditch/Stream

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, etc

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:
Flag B-102, Photo 9. Wetland B is referred to as Stream 1.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1. Acer rubrum	55	☑ 73.3%	FAC
2. Ulmus americana	20	☑ 26.7%	FACW
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	75	**= 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. Tussilago farfara	15	☑ 88.2%	FACU
2. Berberis sp.	2	☐ 11.8%	FACU
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%	
	17	**= Total Cover**	
Woody Vine Stratum (Plot size: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	**= Total Cover**	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 66.7% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	55	x 3 =	165
FACU species	17	x 4 =	68
UPL species	0	x 5 =	0
Column Totals:	92 (A)		273 (B)

Prevalence Index = B/A = 2.967

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: B-1W

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
0-5	10YR	3/2	100%						Silt Loam	Small Rocks
5-18+	7.5YR	5/1	98	5YR	3/4	2	D	PL	Silt Loam	Small Rocks

[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:

Soil of bed of flowing stream (channel).

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): 5

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

Saturation Present? (includes capillary fringe) Yes ◉ No ○ Depth (inches): 0

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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **D-1U**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Castile gravelly silt loam, 0 to 5 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Flag D-3, Photo 21

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Acer rubrum	15	☐ 15.0%	FAC
2. Quercus rubra	40	☑ 40.0%	FACU
3. Prunus serotina	20	☑ 20.0%	FACU
4. Quercus velutina	20	☑ 20.0%	UPL
5. Pinus strobus	5	☐ 5.0%	FACU
	100	= 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. Polystichum acrostichoides	20	☑ 57.1%	FACU
2. Dryopteris intermedia	15	☑ 42.9%	FACU
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%	
	35	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 5 (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	15	x 3 =	45	
FACU species	100	x 4 =	400	
UPL species	20	x 5 =	100	
Column Totals:	135	(A)	545	(B)

Prevalence Index = B/A = 4.037

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: D-1U

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 2/2						Loam	
3-20+	10YR 4/4						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** D-1W

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Castile gravelly silt loam, 0 to 5 percent slopes **Cover Type:** Vernal Pool

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, etc

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

If yes, optional Wetland Site ID:

Remarks:

Flag D-3, Photo 20

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. Cornus amomum	10	☑ 100.0%	FACW
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	10	**= Total Cover**	
Herb Stratum (Plot size: 5' Radius)			
1. Carex sp.	2	☑ 50.0%	FACW
2. Symplocarpus foetidus	2	☑ 50.0%	OBL
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%	
	4	**= Total Cover**	
Woody Vine Stratum (Plot size: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	**= Total Cover**	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	2	x 1 =	2
FACW species	12	x 2 =	24
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	14 (A)		26 (B)

Prevalence Index = B/A = 1.857

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: D-1W

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	4/1	100%						Loam	
3-18+	10YR	4/1	95%	7.5YR	5/8	5%	RM	M	Silt Loam	

[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): 3

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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **E-1U**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Hillside

Soil Map Unit Name: Hoosic gravelly sandy loam, steep **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Flag E-9, Photo 23

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Quercus rubra	20	☐ 16.7%	FACU
2. Pinus strobus	10	☐ 8.3%	FACU
3. Acer rubrum	60	☑ 50.0%	FAC
4. Betula lenta	30	☑ 25.0%	FACU
5.	0	☐ 0.0%	
	120	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Carya ovata	30	☑ 50.0%	FACU
2. Fraxinus americana	20	☑ 33.3%	FACU
3. Prunus virginiana	10	☐ 16.7%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	60	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Polystichum acrostichoides	5	☑ 71.4%	FACU
2. Pinus strobus	2	☑ 28.6%	FACU
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%	
	7	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 6 (B)

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

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	127	x 4 =	508
UPL species	0	x 5 =	0
Column Totals:	187 (A)		688 (B)

Prevalence Index = B/A = 3.679

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: E-1U

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	2/2	100%						Loam	
3-20+	10YR	3/4	100%						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 15-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **E-1W**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Hoosic gravelly sandy loam, steep **Cover Type:** Vernal Pool

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, etc

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:
Flag E-9, Photo 22

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. Osmunda regalis	5	☑ 62.5%	OBL
2. Carex sp.	3	☑ 37.5%	FACW
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%	
	8	**= Total Cover**	
Woody Vine Stratum (Plot size: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	**= Total Cover**	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	5	x 1 =	5
FACW species	3	x 2 =	6
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	8 (A)		11 (B)

Prevalence Index = B/A = 1.375

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: E-1W

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	5/3	100%						Loam	
3-20+	10YR	4/1	100%						Clay Loam	

[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): 5

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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** F-1Ua

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Castile gravelly silt loam, 0 to 5 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Flag F-10, Photo 27. Pinus strobus also in herbaceous layer.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species?	Rel.Strat. Cover	Indicator Status
1. Fraxinus pennsylvanica	30	☑	28.0%	FACW
2. Acer rubrum	50	☑	46.7%	FAC
3. Populus tremuloides	20	☐	18.7%	FACU
4. Quercus rubra	7	☐	6.5%	FACU
5.	0	☐	0.0%	
	107	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15' Radius)				
1. Ulmus americana	5	☐	18.5%	FACW
2. Prunus serotina	2	☐	7.4%	FACU
3. Lonicera tatarica	15	☑	55.6%	FACU
4. Ostrya virginiana	5	☐	18.5%	FACU
5.	0	☐	0.0%	
	27	= Total Cover		
Herb Stratum (Plot size: 5' Radius)				
1. Alliaria petiolata	5	☐	18.5%	FACU
2. Dryopteris intermedia	20	☑	74.1%	FACU
3. Solidago altissima	2	☐	7.4%	FACU
4.		☐	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%	
	27	= Total Cover		
Woody Vine Stratum (Plot size: 5' Radius)				
1. Vitis sp.	5	☐	100.0%	FAC
2.	0	☐	0.0%	
	5	= Total Cover		

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	35	x 2 =	70
FAC species	55	x 3 =	165
FACU species	76	x 4 =	304
UPL species	0	x 5 =	0
Column Totals:	166 (A)		539 (B)

Prevalence Index = B/A = 3.247

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: F-1Ua

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
0-7	10YR	4/3	100%						Clay Loam	
7-18+	10YR	6/6	100%						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** F-1Ub

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Castile gravelly silt loam, 0 to 5 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Flag F-4, Photo 28

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Pinus strobus	60	☑ 66.7%	FACU
2. Acer rubrum	10	☐ 11.1%	FAC
3. Populus tremuloides	10	☐ 11.1%	FACU
4. Pinus rigida	5	☐ 5.6%	FACU
5. Fraxinus americana	5	☐ 5.6%	FACU
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Lonicera tatarica	7	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	7	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Dryopteris intermedia	30	☑ 88.2%	FACU
2. Vaccinium corymbosum	2	☐ 5.9%	FACW
3. Alliaria petiolata	2	☐ 5.9%	FACU
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%	
	34	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
1. Toxicodendron radicans	5	☐ 100.0%	FAC
2.	0	☐ 0.0%	
	5	= 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: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	2	x 2 =	4
FAC species	15	x 3 =	45
FACU species	119	x 4 =	476
UPL species	0	x 5 =	0
Column Totals:	136 (A)		525 (B)

Prevalence Index = B/A = 3.860

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: F-1Ub

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%						Loam	
2-18	10YR	4/3	100%						Silt Loam	
18+	10YR	6/6	100%						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

Applicant/Owner: Clancy & Theys **State:** NY **Sampling Point:** **F-1W**

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Toeslope

Soil Map Unit Name: Castile gravelly silt loam, 0 to 5 percent slopes **Cover Type:** DFW

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, etc

Hydrophytic Vegetation Present? Yes ◉ No ○

Hydric Soil Present? Yes ◉ No ○

Wetland Hydrology Present? Yes ◉ No ○

Is the Sampled Area within a Wetland? Yes ◉ No ○

If yes, optional Wetland Site ID:

Remarks:

Flag F-3, Photo 25 and 26. Wetland is located in a depressional (low) area associated with a saddle landform feature.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Fraxinus pennsylvanica	30	☑ 30.0%	FACW
2. Acer rubrum	60	☑ 60.0%	FAC
3. Ulmus americana	10	☐ 10.0%	FACW
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	100	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Ulmus americana	15	☑ 100.0%	FACW
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.	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: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	55	x 2 =	110
FAC species	60	x 3 =	180
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	115 (A)		290 (B)

Prevalence Index = B/A = 2.522

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: F-1W

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%						Silt Loam	
2-18+	10YR	3/2	98	7.5YR	4/4	2	C	PL	Silt Loam	

[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): 12

Wetland Hydrology Present? Yes ◉ No ○

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

Remarks:

Area recieves storm water/upland draingage via a constructed swale to the south.

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

Project/Site: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

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

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Flat

Soil Map Unit Name: Hoosic gravelly sandy loam, rolling **Cover Type:** EFU

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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Photo 24

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1. Pinus strobus	30	☑ 30.0%	FACU
2. Pinus rigida	70	☑ 70.0%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	100	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Pinus strobus	10	☑ 33.3%	FACU
2. Ostrya virginiana	10	☑ 33.3%	FACU
3. Acer rubrum	10	☑ 33.3%	FAC
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	30	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Vaccinium corymbosum	2	☑ 100.0%	FACW
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%	
	2	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
1.	0	☐ 0.0%	
2.	0	☐ 0.0%	
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (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	2	x 2 =	4
FAC species	10	x 3 =	30
FACU species	120	x 4 =	480
UPL species	0	x 5 =	0
Column Totals:	132 (A)		514 (B)

Prevalence Index = B/A = 3.894

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)		%	Redox Features Color (moist)		%	Type [1]	Loc[2]	Texture	Remarks
0-3	10YR	3/3	100%						Loam	
3-7	10YR	4/4	100%						Loam	some silt
7-18+	10YR	5/6	100%						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

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

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Flat

Soil Map Unit Name: Castile gravelly silt loam, 0 to 5 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Photo 29. Carpinus caroliniana also in tree stratum.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1. Acer rubrum	60	☑ 46.2%	FAC
2. Populus grandidentata	40	☑ 30.8%	FACU
3. Prunus serotina	15	☐ 11.5%	FACU
4. Pinus strobus	5	☐ 3.8%	FACU
5. Fraxinus americana	10	☐ 7.7%	FACU
	130	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Ostrya virginiana	5	☑ 100.0%	FACU
2.	0	☐ 0.0%	
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	5	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Dryopteris intermedia	10	☑ 83.3%	FACU
2. Alliaria petiolata	2	☐ 16.7%	FACU
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%	
	12	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 25.0% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	60	x 3 =	180
FACU species	87	x 4 =	348
UPL species	0	x 5 =	0
Column Totals:	147 (A)		528 (B)

Prevalence Index = B/A = 3.592

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
0-3	10YR	3/2	100%						Loam	
3-18+	10YR	4/3	100%						Silt Loam	

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

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

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Hillside

Soil Map Unit Name: Hoosic gravelly sandy loam, 3 to 8 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Photo 30. Acer rubrum, Betula populifolia, and Quercus velutina also in tree stratum.

VEGETATION - Use scientific names of plants.

	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
Tree Stratum (Plot size: 30' Radius)			
1. Betula lenta	10	☐ 15.4%	FACU
2. Prunus serotina	5	☐ 7.7%	FACU
3. Quercus alba	10	☐ 15.4%	FACU
4. Quercus rubra	20	☑ 30.8%	FACU
5. Pinus strobus	20	☑ 30.8%	FACU
	65	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Pinus strobus	20	☑ 66.7%	FACU
2. Carpinus caroliniana	5	☐ 16.7%	FAC
3. Ostrya virginiana	5	☐ 16.7%	FACU
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	30	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Pinus strobus	5	☐ 16.7%	FACU
2. Dryopteris intermedia	10	☑ 33.3%	FACU
3. Alliaria petiolata	15	☑ 50.0%	FACU
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%	
	30	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 5 (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	5	x 3 =	15	
FACU species	120	x 4 =	480	
UPL species	0	x 5 =	0	
Column Totals:	125	(A)	495	(B)

Prevalence Index = B/A = 3.960

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	4/3	100%						Loam	
3-18+	10YR	5/4	100%						Sandy Loam	Fine sand

[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: BGA-3713 **City/County:** Schodack/Renselaer **Sampling Date:** 16-Nov-11

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

Investigator(s): BPC, BSW, AJR **Landform (hillslope, terrace, etc.):** Flat

Soil Map Unit Name: Hoosic gravelly sandy loam, 3 to 8 percent slopes **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, etc

Hydrophytic Vegetation Present? Yes ○ No ◉

Hydric Soil Present? Yes ○ No ◉

Wetland Hydrology Present? Yes ○ No ◉

Is the Sampled Area within a Wetland? Yes ○ No ◉

If yes, optional Wetland Site ID:

Remarks:

Photo 31. Pupulus tremuloides and Quercus velutina also in tree stratum.

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30' Radius)	Absolute % Cover	Dominant Species? Rel.Strat. Cover	Indicator Status
1. Acer rubrum	20	☑ 33.3%	FAC
2. Quercus rubra	15	☑ 25.0%	FACU
3. Prunus serotina	10	☐ 16.7%	FACU
4. Quercus alba	10	☐ 16.7%	FACU
5. Betula populifolia	5	☐ 8.3%	FAC
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15' Radius)			
1. Lonicera tatarica	10	☑ 50.0%	FACU
2. Pinus strobus	10	☑ 50.0%	FACU
3.	0	☐ 0.0%	
4.	0	☐ 0.0%	
5.	0	☐ 0.0%	
	20	= Total Cover	
Herb Stratum (Plot size: 5' Radius)			
1. Lonicera tatarica	3	☑ 37.5%	FACU
2. Solidago canadensis	2	☑ 25.0%	FACU
3. Pinus strobus	3	☑ 37.5%	FACU
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%	
	8	= Total Cover	
Woody Vine Stratum (Plot size: 30' Radius)			
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: 7 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 14.3% (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	63	x 4 =	252
UPL species	0	x 5 =	0
Column Totals:	88 (A)		327 (B)

Prevalence Index = B/A = 3.716

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
0-4	10YR	3/2	100%						Loam	
4-18+	10YR	4/4	100%						Silt Loam	Small pebbles

[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:

APPENDIX C – JD Information

CHECKLIST OF INFORMATION INCLUDED WITH REQUESTS FOR JURISDICTIONAL DETERMINATIONS (JD)

1. Name (including POC if a corporation or other entity), complete mailing addresses and phone numbers of the following:

Current Property Owner:

Name:	Parcel 1: RJ Valente Gravel, Inc. Parcel 2: 9 & 20 Associates
Address:	(Parcels under option)
Phone Number:	(Parcels under option)

Applicant (Project Sponsor):

Name:	William J. Goggins
Address:	11830 Fishing Point Drive, Suite 201, Newport News, Virginia 23606
Phone Number:	757-873-6869

Wetland Consultant:

Name:	Terrestrial Environmental Specialists, Inc..
Address:	23 County Route 6, Suite A, Phoenix, New York 13135
Phone Number:	315-695-7228

2. 8½ x 11 Location Map **(see Figure 8)** showing:
   - UTM Grid Coordinates
   - Stream order and location
   - Head and discharge coordinates of each stream
   - Stream identification (TNWs, perennial RPWs, seasonal RPWs, or non-RPWs)

3. Cover letter **(included in report or to be provided)** describing the purpose of the request, a general description of the proposed project, the size (acres) of the parcel, and the size of the limits of the project site or review area (if smaller than the parcel).

4. Delineation report, including the following supporting information:

   - Description of any current and/or historic land uses on the site **(see Section 4.1 Site Description)**

   - DEC Wetlands Maps, NWI Maps, Soil Survey Maps **(see Figures 2, 3, and 4, respectively)**

   - Watershed size, drainage area size **(see Figure 8)**

   - Discussion of whether tributaries (streams) on the site are TNWs, perennial RPWs, seasonal RPWs, or non-RPWs **(see Figure 9)**

   - Waters of the U.S. – indicate presence of waters of U.S. in review area (check all that apply):
     - ☐ TNWs, including territorial seas
     - ☐ Wetlands adjacent to TNWs
     - ☒ Relatively permanent waters (RPWs) that flow directly or indirectly into TNWs
     - ☐ Non-RPWs that flow directly or indirectly into TNWs
     - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
     - ☒ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

CHECKLIST OF INFORMATION INCLUDED WITH REQUESTS FOR JURISDICTIONAL DETERMINATIONS (JD)

☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☒ Isolated (interstate or intrastate) waters, including isolated wetlands

- If wetland on the site either abuts or is adjacent to a tributary, identify which tributary and discuss below:

Explanation: Wetland A has a surface water connection to an unnamed tributary of the Moordener Kill.

- If connection to a TNW, explain connection below:

Explanation: The Moordener Kill is an RPW which flows into the Hudson River, a TNW.

- Project wetlands are **2-5** aerial (straight) miles and **5-10** river miles from TNW.
- Project waters are **2-5** aerial (straight) miles and **5-10** river miles from TNW.

- Description of tributary substrate composition (e.g. silts, sands, gravel, etc.) **(see Appendix B, Field Data Sheets)**

- Justification for proposed "isolated" (SWANCC) or non-jurisdictional determinations on any wetlands or streams **(see Section 4.3 Wetlands Descriptions)**

- Description of vegetative cover types on the site **(see Section 4.2 Site Ecology and Section 4.3 Wetlands Descriptions)**

- Wetland Delineation Forms for each cover type **(see Appendix B, Field Data Sheets)**

- Color photographs of all representative areas of the site **(see Appendix A, Photographs)**