### **Draft Progress Wetland Delineation Report**

Updated wetland delineations for the current project layout began in 2015 but are incomplete at this time. The wetland impact calculations in this SDEIS are based on a combination of the 2015 wetland delineation surveys and historical data. Additional delineations will be conducted in 2016. All wetlands will be revisited and delineated for preparation of a revised comprehensive wetland delineation report to supplement the FEIS and to support both federal and state wetland permit applications. Once delineations have been completed for the Project, an agency review will be conducted and a jurisdictional determination (JD) will be sought. Once wetland delineations are complete, the updated information will be used to support micro-siting to avoid and minimize impacts on wetland resources.

The general wetland types and conditions in the Project Site remain the same as those described in the 2008 DEIS, though the limits of individual wetlands have changed. Previous wetland delineation data for the Project Site is only used in this SDEIS where the re-survey of all Project components is incomplete. In areas surveyed in multiple years, only the most recent data have been used. Data presented in the FEIS will be from field surveys conducted in 2015 and 2016.

#### 2015/2016 Wetland Delineation Surveys

Fisher Associates conducted wetland and stream delineations in October and November 2015. The results of those delineations are attached as the Draft Progress Wetland Delineation Report in this appendix. Wetland delineations conducted in 2015 have not yet been reviewed by either agency. The portions of the Project Site delineated by Fisher Associates (Fisher) in 2015 are depicted on Figure C-1. Fisher will continue to delineate wetlands in the Project Site in 2016, revisiting all areas within the Project Site not delineated in 2015, and will prepare a final wetland delineation report that presents the findings of all wetlands delineated in 2015 and 2016. An agency review will be conducted and a JD will be sought. The siting of some Project components remains preliminary and will be adjusted for the FEIS as micro-siting to avoid or minimize impacts on wetland resources is completed. The final wetland delineation report will be included in the FEIS.

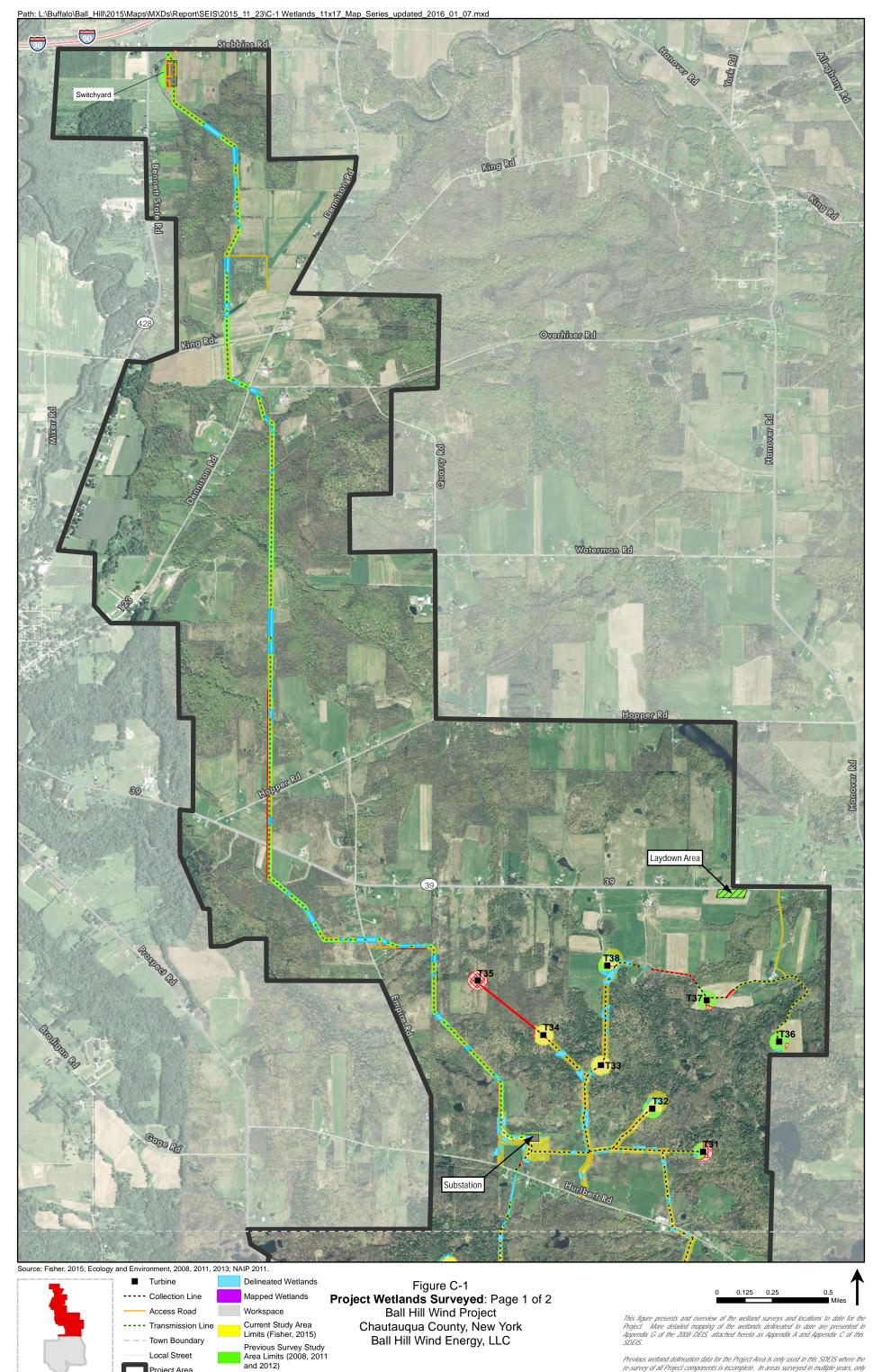
#### **Historical Delineation Data**

Historical data for the Ball Hill project includes wetland delineations conducted in 2008, wetland delineations conducted in 2011/2012, as well as National Wetland Inventory (NWI) data and New York State Department of Environmental Conservation (NYSDEC) mapped wetlands.

Wetland delineations were conducted in 2008, the United States Army Corps of Engineers (USACE) and NYSDEC issued jurisdictional determinations based on those delineations and the Project was microsited to minimize impacts based on those wetland limits. Findings were presented in detail in the 2008 DEIS and the 2008 Wetland and Waterbodies Report, which was included as Appendix G to the 2008 DEIS, attached as Appendix A of this SDEIS. Since the 2008 delineation was completed, the JDs have expired. Wetland delineations were conducted again in 2011/2012. Wetland delineations from 2011/2012 were reviewed by the United States Army Corps of Engineers (USACE) and NYSDEC through a field visit; however, a JD was never issued. Ball Hill has revised the Project layout, reducing the numbers of turbines by utilizing a new turbine model, thereby allowing turbines to be re-sited. The portions of the Project Site delineated in 2008 and 2011/2012 for which data are used to support the analysis in this SDEIS are depicted on Figure C-1.

### **Desktop Data**

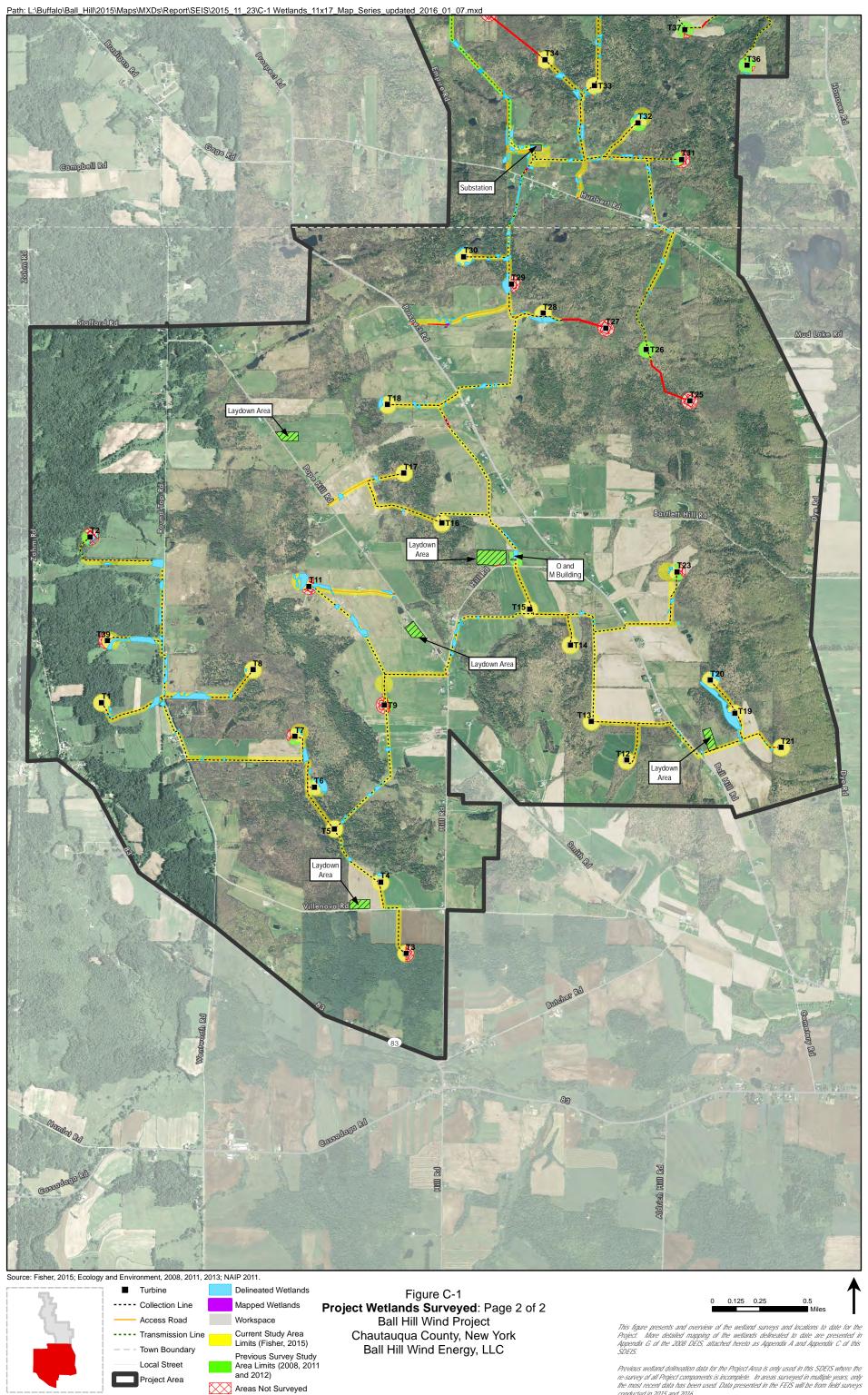
Approximately 33.10 acres of the Project Site have not yet been surveyed as part of the 2015/2016 wetland delineations and were not part of the Project Site when the 2011/2012 wetland delineations were completed. Publicly available NWI data and NYSDEC wetland mapping were used to evaluate potential wetland impacts in these areas. The areas not surveyed are depicted in red on Figure C-1. There are no NYSDEC mapped wetlands in the areas not surveyed. The area not surveyed includes approximately 0.004 acre of NWI mapped wetland.



Project Area

Areas Not Surveyed

Previous welland delineation data for the Project Area is only used in this SDETS where the re-survey of all Project components is incompolete. In areas surveyed in multiple years, only the most recent data has been used. Data presented in the FETS will be from field surveys conducted in 2015 and 2016.



Previous welland delineation data for the Project Area is only used in this SDETS where the re-survey of all Project components is incompete. In areas surveyed in multiple years, only the most recent data has been used. Data presented in the FETS will be from field surveys

#### PREPARED FOR:

BALL HILL WIND ENERGY, LLC 11101 WEST 120<sup>TH</sup> AVENUE, SUITE 400 BROOMFIELD, CO 80021

# BALL HILL WIND PROJECT

## DRAFT PROGRESS WETLAND DELINEATION REPORT

NOVEMBER 2015



#### PREPARED BY:



325 DELAWARE AVENUE, SUITE 200 BUFFALO, NEW YORK 14202 FISHER ASSOCIATES PROJECT NO. 150001

#### **EXECUTIVE SUMMARY**

On behalf of Ball Hill Wind Energy. LLC, Fisher Associates conducted a field delineation between October 26 and November 13, 2015 to identify jurisdictional Waters of the U.S. (WUS) including wetlands and streams within the Project Study Limits defined to support of the Ball Hill Wind Project ("Project"). The Project Study Limits consist of a 644.95-acre area, which encompasses potential construction and limits of disturbance required for the Project. The Project Study Limits are depicted on the attached Wetland Delineation mapping.

The Project Study Limits are located in Chautauqua County and consist of proposed turbine locations in addition to associated infrastructure including access roads, collection lines, transmission line, and a utility-scale substation. The northern portion of the Project is located within the Chautauqua-Conneaut Watershed (HUC 04120101) and the southern portion of the Project is located within the Conewango Watershed (HUC 05010002). The Project is drained by Silver Creek, Tupper Creek, North Branch of Conewango Creek, West Branch of Conewango Creek, and/or contributing tributaries to these streams.

The Project Study Limits were delineated based upon the methodology outlined in the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0). Using these methodologies, preliminary delineation mapping was produced and is included along with the attached investigation description and discussion. During our delineation, approximately 51.94 acres of combined palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands were identified. In addition, 11,320 linear feet of stream channel were identified.

Based on conditions observed, the USACE will likely invoke jurisdiction over a majority of the above noted aquatic resources due to their apparent hydrologic connection to other waters. It is also anticipated that the New York State Department of Environmental Conservation (NYSDEC) will invoke jurisdiction over specific delineated wetlands under Article 24 of the Environmental Conservation Law (ECL) since limited areas within the Project Study Limits are associated with NYSDEC Wetlands SC-12 and SC-13. NYSDEC will also invoke jurisdiction over many of the identified stream resources under Article 15 of the ECL, as they are Class A streams.

# DRAFT PROGRESS WETLAND DELINEATION REPORT BALL HILL WIND PROJECT

### **TABLE OF CONTENTS**

| EXEC | UTIVE  | SUMMARY  | . i |  |  |  |  |  |  |  |  |
|------|--------|--|-----|--|--|--|--|--|--|--|--|
| PROJ | ECT IN | IFORMATION SHEET                                       | 1   |  |  |  |  |  |  |  |  |
| 1.0  | INTRO  | DDUCTION   | 2   |  |  |  |  |  |  |  |  |
| 2.0  | SITE I | NFORMATION   | 2   |  |  |  |  |  |  |  |  |
|      | 2.1    | Site Location  | 2   |  |  |  |  |  |  |  |  |
|      | 2.2    | Site Description                                       | 2   |  |  |  |  |  |  |  |  |
| 3.0  | METH   | METHODS OF DELINEATION2                                |     |  |  |  |  |  |  |  |  |
|      | 3.1    | Preliminary Offsite Investigation/Data Review          | 2   |  |  |  |  |  |  |  |  |
|      | 3.2    | Field Investigation                                    | 3   |  |  |  |  |  |  |  |  |
| 4.0  | DELIN  | NEATION FINDINGS                                       | 3   |  |  |  |  |  |  |  |  |
|      | 4.1    | Preliminary Offsite Investigation/Data Review Findings | 3   |  |  |  |  |  |  |  |  |
|      |        | 4.1.1 NYS Freshwater Wetland Mapping                   | 3   |  |  |  |  |  |  |  |  |
|      |        | 4.1.2 NYS Streams Mapping                              | 4   |  |  |  |  |  |  |  |  |
|      |        | 4.1.3 National Wetlands Inventory Mapping              | 4   |  |  |  |  |  |  |  |  |
|      |        | 4.1.4 Soils Mapping                                    | 4   |  |  |  |  |  |  |  |  |
|      | 4.2    | Onsite Determination/Findings                          |     |  |  |  |  |  |  |  |  |
|      |        | 4.2.1 Wetland Area Summary                             | 4   |  |  |  |  |  |  |  |  |
|      |        | 4.2.1.1 Wetland Vegetation                             | 5   |  |  |  |  |  |  |  |  |
|      |        | 4.2.1.2 Wetland Hydrology                              | 5   |  |  |  |  |  |  |  |  |
|      |        | 4.2.1.3 Wetland Soils                                  | 5   |  |  |  |  |  |  |  |  |
|      |        | 4.2.2 Streams  | 6   |  |  |  |  |  |  |  |  |
|      |        | 4.2.3 Upland Area Summary                              | 6   |  |  |  |  |  |  |  |  |
| 5.0  | SUMN   | MARY AND CONCLUSIONS                                   | 6   |  |  |  |  |  |  |  |  |
| 6.0  | REFE   | RENCES   | 6   |  |  |  |  |  |  |  |  |

## DRAFT PROGRESS WETLAND DELINEATION REPORT BALL HILL WIND PROJECT

#### TABLE OF CONTENTS CONTINUED

#### MAPS

Wetland Delineation Map Index Wetland Delineation Map Tiles 1 through 99

#### **TABLES**

Table 1 Wetland Delineation SummaryTable 2 Stream Delineation Summary

#### **APPENDICES**

Appendix A Wetland Determination Data Forms

Appendix B Stream Data Forms

#### PROJECT INFORMATION SHEET

#### <u>General</u>

Project Name: Ball Hill Wind Project

State: New York

County: Chautauqua County Villenova and Hanover

Latitude: 42.440000 North Longitude: -79.128000 West

Project Study Area Size: 644.95 acres

HUC Code: 04120101 (Chautauqua-Conneaut Watershed) and

05010002 Conewango Watershed

Waterbodies (TNW): Silver Creek, Tupper Creek, North Branch, West Branch, and/or

contributing tributaries to these streams and associated palustrine

emergent, scrub-shrub, and forested wetlands

### **Corresponding Information**

USGS Quad Map: Silver Creek, Forestville, and Perrysburg

USDA Soils Map: Chautauqua County

Owner/Applicant

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#### 1.0 INTRODUCTION

On behalf of Ball Hill Wind Energy, LLC, Fisher Associates conducted a field delineation between October 26 and November 13, 2015 to identify jurisdictional Waters of the U.S. (WUS) including wetlands and streams within the Project Study Limits defined to support of the Ball Hill Wind Project ("Project"). The Project Study Limits consist of a 644.95-acre area, which encompasses potential construction and limits of disturbance required for the Project. The Project Study Limits are depicted on the attached Wetland Delineation mapping.

#### 2.0 SITE INFORMATION

#### 2.1 Site Location

The Project Study Limits are located in the Towns of Villenova and Hanover in Chautauqua County in southwestern New York. The northern portion of the Project is located within the Chautauqua-Conneaut Watershed (HUC 04120101) and the southern portion of the Project is located within the Conewango Watershed (HUC 05010002). The Project is drained by Silver Creek, Tupper Creek, North Branch of Conewango Creek, West Branch Conewango Creek, and/or contributing tributaries to these streams. The Project is located in the Eastern Lake Section of the Central Lowland Physiographic Province and the Southern New York Section of the Appalachian Plateaus Physiographic Province.

#### 2.2 Site Description

The Project Study Limits consist of proposed turbine locations in addition to associated infrastructure including access roads, collection lines, transmission line, and a utility-scale substation. The areas within the Project Study Limits consist of mix of active agricultural lands and mixed deciduous forest within a rural setting (see Wetland Delineation Map Index and Tiles 1 through 99).

#### 3.0 METHODS OF DELINEATION

#### 3.1 Preliminary Offsite Investigation/Data Review

A review of publicly available resources was performed prior to the onsite field investigation in order to determine if there is the potential for jurisdictional areas, and if present, the extent of these areas located within the Project Study Limits. These mapping resources generally include but are not limited to:

- New York State Freshwater Wetlands Mapping (NYSFW);
- New York State Protection of Waters Regulatory Program Streams Mapping (NYSS);
- U.S. Fish & Wildlife Service National Wetlands Inventory (NWI) Database;
- U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) Soils Database; and
- United States Geographical Survey (USGS) Mapping.

#### 3.2 Field Investigation

Wetland boundaries were field delineated according to the routine onsite methodology described in the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0).

Wetlands were identified based on the presence of hydric soils; a vegetative community dominated by hydrophytes, and inundated or saturated conditions, and/or indicators of hydrologic patterns. Fisher Associates delineated and flagged the wetland boundary with consecutively numbered delineation flagging where vegetation and conditions were conducive to the establishment of field flagging. In areas of the Project Study Limits that are maintained through mowing or previously harvested agricultural row crops, field flagging was not established due to a lack of vegetation to hold field marking flags. Similarly, in areas which were actively accessible to livestock, field flagging was not established to protect the wellbeing of the livestock which could potentially consume the field flagging. A project-specific identification number was given to each delineated wetland. Wetland delineation data relative to vegetation, hydrology, soils and general observations was documented on routine wetland data forms consistent with the guidance of the 2012 Regional Supplement.

Wetland field data points were established within close proximity to the flagged wetland boundary in order to document upland and wetland conditions existing along the wetland boundary. The aquatic resource boundaries were flagged in the field and the flagged locations were surveyed to further clarify their locations.

Stream channels, tributaries, and linear conveyance features were identified based on the recognition of field indicators of bed, banks, and an ordinary high water mark coupled with an evaluation of downstream flow. Wetland Delineation Maps depicting the location of the delineated wetlands and any additional jurisdictional features, including streams, identified within the Project Study Limits are provided as an attachment. Supporting wetland determination data forms are provided in Appendix A and supporting stream data forms are provided in Appendix B.

#### 4.0 DELINEATION FINDINGS

4.1 Preliminary Offsite Investigation/Data Review Findings

#### 4.1.1 NYS Freshwater Wetland Mapping

The NYSFW maps were developed by the New York State Department of Environmental Conservation (NYSDEC) pursuant to Article 24 of the Environmental Conservation Law. These maps depict the approximate boundaries of freshwater wetlands regulated by the NYSDEC. In most instances, the State-mapped boundaries are based on aerial photographs and soil survey interpretation and, therefore, require site-specific field verification. Freshwater wetland mapping information identified for the Project Study Limits was obtained from online Geographic Information System (GIS) mapping resources made available by the NYSDEC (NYSDEC 2015). Based on reviewed mapping information, NYSDEC Wetland SC-12 (Class II) and SC-13 (Class III) are mapped within the Project Study Limits.

#### 4.1.2 NYS Streams Mapping

The NYSS maps were developed by the NYSDEC pursuant to Article 15 of the Environmental Conservation Law. These maps depict the approximate locations of streams mapped by NYSDEC and identify their respective state water quality classification and standard designations based on existing or expected best usage of each water segment. In most instances, the mapped stream locations are based on aerial photographs and topographic map interpretation and, therefore, require site-specific field verification. Stream mapping information identified for the Project Study Limits was obtained from online Geographic Information System (GIS) mapping resources made available by the NYSDEC (NYSDEC 2015). Based on reviewed mapping information, NYSS mapped steams are present within the Project Study Limits. There are thirty (30) occurrences of NYSS mapped streams including eleven (11) Class A, Designation A streams and nineteen (19) Class C, Designation C streams.

#### 4.1.3 National Wetlands Inventory Mapping

NWI mapping information for the Project Study Limits was obtained from online GIS mapping resources made available by the USFWS (USFWS 2015). A review of this information was completed which indicated that eight (8) mapped NWI wetlands, including Cowardin Classifications of PFO1E (palustrine forested broad-leaved seasonally flooded/saturated), PFO1/SS1E (palustrine forested/scrub-shrub broad-leaved seasonally flooded/saturated), PEM5E (palustrine emergent seasonally flooded/saturated), and PUBHx (palustrine unconsolidated bottom permanently flooded excavated), are mapped within the Project Study Limits. However, it is understood that this mapping is provided as a reference and is not necessarily indicative of the presence or absence of wetlands in an area.

#### 4.1.4 Soils Mapping

Soil types identified for the Project Study Limits were obtained from online GIS mapping resources made available by the NRCS (USDA-NRCS 2015). A review of this information was completed to evaluate the soil types within the Project Study Limits to determine the possible presence of hydric soils.

The mapped soils at each wetland location, including instances where there may be more than one soil component identified at a given wetland location, are described in Table 1: Wetland Delineation Summary. Areas of predominantly hydric soils were identified within the Project Study Limits. The mapped soils present within the Project Study Limits are depicted in the attached Wetland Delineation Mapping.

#### 4.2 Onsite Determination/Findings

#### 4.2.1 Wetland Area Summary

The onsite delineation did verify the presence of wetlands and confirmed the presence of hydric soils depicted on the NRCS soils mapping. 51.94 acres of combined palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine forested (PFO) wetlands were identified. A summary of the wetlands identified within the Project Study Limits is provided in Table 1:

Wetland Delineation Summary. The location and size of wetlands delineated onsite are shown on the attached Wetland Delineation Mapping.

#### 4.2.1.1 Wetland Vegetation

The criterion for wetland vegetation is a dominance of hydrophytic species. A species is considered hydrophytic per USACE (1987 and 2012) if it is classified either as obligate (OBL), facultative wet (FACW), or facultative (FAC) in *The National Wetland Plant List: 2014 Update of Wetland Ratings* (Lichvar, et.al, 2014). A dominance of hydrophytes requires that more than 50% of the vegetative species in an area are classified as hydrophytic.

Generally, the delineated wetlands consisted of palustrine emergent wetlands within active agriculture fields which are either cultivated or pastured by livestock. Lesser areas of forested and scrub-shrub wetlands were identified in areas that were generally not subject to active agriculture or livestock pasturing. The wetland determination data forms which provide expanded detail of the wetlands identified within the Project Study Limits can be found in Appendix A. Wetland vegetation community cover types observed at each wetland are summarized in Table 1: Wetland Delineation Summary.

#### 4.2.1.2 Wetland Hydrology

The Project Study Limits were examined for field indicators of wetland hydrology. According to USACE (1987 and 2012), wetland hydrology consists of permanent or periodic inundation, or soil saturation to the surface during the growing season. If these indicators were present within the sample plots, the hydrology criterion was met.

Generally, wetlands identified within the Project Study Limits receive hydrologic input from precipitation and retained surface water perched upon poorly drained soils containing fine sediments and shallow restrictive layers. In addition, wetlands within lower elevations of the project watersheds exhibited a direct groundwater connection and often additional shared surface hydrology in association with adjacent and contiguous streams. Hydrologic indicators observed at each delineated wetland were recorded on the wetland determination data forms presented in Appendix A. Table 1: Wetland Delineation Summary provides the location (latitude/longitude) and total wetland area delineated within the Project Study Limits.

#### 4.2.1.3 Wetland Soils

Soil physical characteristics were evaluated during the field delineations by excavating to a depth appropriate to evaluate potential hydric soil indicators below ground surface. Soil color was evaluated using *Munsell Soil Color Charts* (Munsell 2000). Soils that exhibited hydric soil indicators, such as low chroma colors and/or evidence of reducing conditions met the hydric soil criterion per USACE (1987 and 2012).

Wetland soils observed during the excavations within the Project Study Limits generally consisted of silt loam texture mineral soils exhibiting low chroma 2.5Y and 10YR matrices with documented redox depletions and/or concentrations. Soil samples within wetland areas possessed primarily Redox Dark Surface (F6) and/or Depleted Matrix (F3) hydric soil indicator conditions within their profiles. Characteristics observed at each data point are summarized in the wetland determination data forms included in Appendix A.

#### 4.2.2 Streams

Stream channels delineated within the Project Study Limits included 11,320 linear feet of combined perennial and intermittent channel reaches. Observed stream characteristics are summarized in the stream data forms included in Appendix B. A summary of the streams identified within the Project Study Limits is provided in Table 2: Stream Delineation Summary. The location of streams delineated onsite is shown on the attached Wetland Delineation Mapping.

#### 4.2.3 Upland Area Summary

During the field investigation of the Project Study Limits, significant areas of upland or non-jurisdictional areas were identified. The majority of the identified upland areas are characterized by mixed deciduous forest and active agricultural lands, including row crops, forage hay production, and active pasture. Upland soils observed were primarily silt loam texture exhibiting medium to high chroma 2.5Y and 10YR matrices throughout the soil profile to a depth of twenty inches below ground surface. Typically, no indicators of wetland hydrology were observed within the upland areas. The location and size of upland areas in addition to the mapped soils present at these locations are depicted on the attached Wetland Delineation Mapping.

#### 5.0 SUMMARY AND CONCLUSIONS

Fisher Associates conducted a wetland delineation associated with the Project between October 26 and November 13, 2015. 51.94 acres of combined PEM, PSS, and PFO wetlands were identified. In addition, 11,320 linear feet of combined perennial and intermittent stream channel were identified within the Project Study Limits.

Based on conditions observed, the USACE will likely invoke jurisdiction over a majority of the above noted aquatic resources due to their apparent hydrologic connection to other waters. It is also anticipated that the New York State Department of Environmental Conservation (NYSDEC) will invoke jurisdiction over specific delineated wetlands under Article 24 of the Environmental Conservation Law (ECL) since limited areas within the Project Study Limits are associated with NYSDEC Wetlands SC-12 and SC-13. NYSDEC will also invoke jurisdiction over many of the identified stream resources under Article 15 of the ECL, as they are Class A streams.

#### 6.0 REFERENCES

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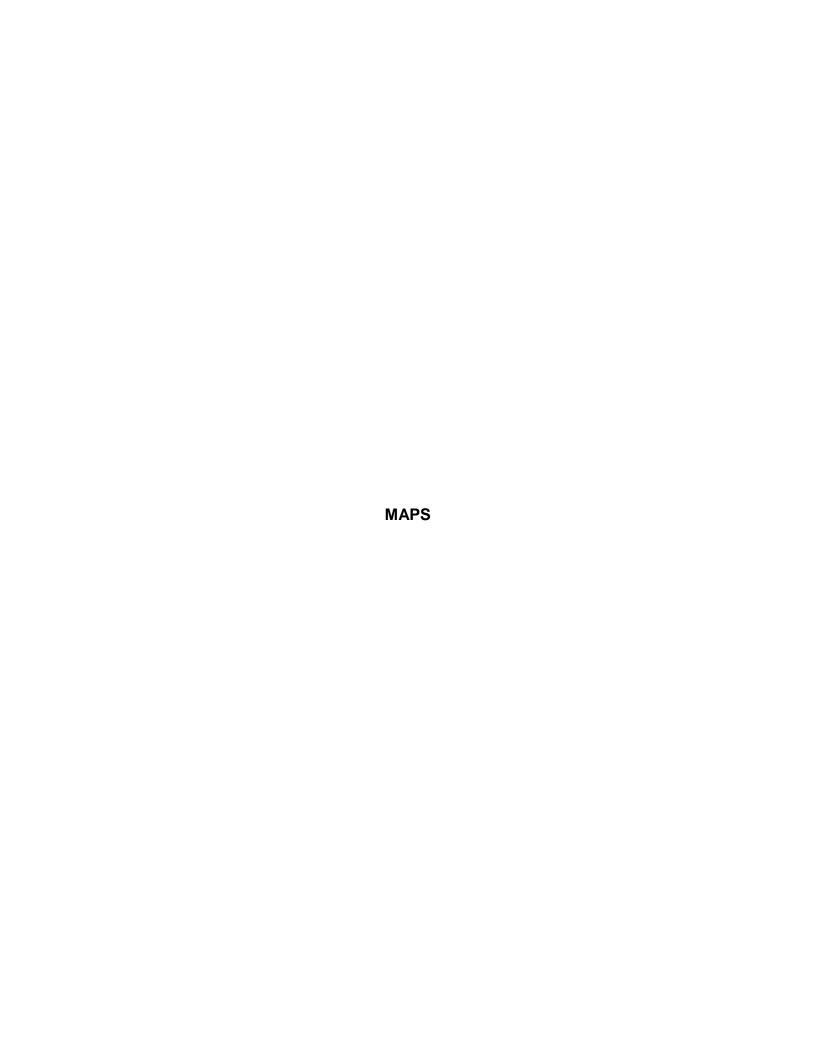




Table 1
Wetland Delineation Summary

|            |             | Coord      | inates    | Cowardin       | Wetland Are<br>Delineation |       |                | Soils                          |
|------------|-------------|------------|-----------|----------------|----------------------------|-------|----------------|--------------------------------|
| Wetland ID | Map Tile #  | Latitude   | Longitude | Classification | Square Feet                | Acres | Soil<br>Symbol | Hydric Component<br>Percentage |
| A3         | 30          | -79.121441 | 42.439185 | PEM            | 3,965                      | 0.09  | Ad             | 95                             |
| A4         | 30          | -79.121623 | 42.438339 | PEM            | 1,591                      | 0.04  | BsB            | 4                              |
| A5         | 22, 29 & 30 | -79.121784 | 42.439126 | PEM            | 10,478                     | 0.24  | Ad             | 95                             |
| A6         | 22          | -79.122461 | 42.440680 | PEM            | 9,807                      | 0.23  | BsB            | 4                              |
| A7         | 22          | -79.126717 | 42.440481 | PEM            | 23,654                     | 0.54  | CkB            | 0                              |
| A8         | 21          | -79.129241 | 42.440666 | PEM            | 16,948                     | 0.39  | CkB            | 0                              |
| A9         | 21          | -79.128053 | 42.441217 | PEM            | 1,295                      | 0.03  | BsB            | 4                              |
| A10        | 21          | -79.128854 | 42.440918 | PEM            | 9,704                      | 0.22  | CkB            | 0                              |
| B1         | 56          | -79.139433 | 42.413922 | PEM            | 4,276                      | 0.10  | ErB            | 5                              |
| C1         | 59          | -79.127850 | 42.410615 | PEM            | 29,517                     | 0.68  | As             | 90                             |
| D1         | 58 & 59     | -79.128640 | 42.411962 | PEM            | 10,741                     | 0.25  | ErB            | 5                              |
| E1         | 50 & 51     | -79.131364 | 42.423426 | PEM            | 30,131                     | 0.69  | BsB            | 4                              |
| F1         | 52          | -79.141834 | 42.422109 | PEM            | 26,868                     | 0.62  | CkB            | 0                              |
| G1         | 52          | -79.138129 | 42.421926 | PEM            | 17.725                     | 0.41  | CkB            | 0                              |
| H1         | 51 & 52     | -79.137262 | 42.422107 | PEM            | 3.167                      | 0.07  | As             | 90                             |
| I1         | 51          | -79.135157 | 42.422036 | PEM            | 2,546                      | 0.06  | VaB            | 0                              |
| 12         | 51          | -79.135154 | 42.422443 | PEM            | 1.452                      | 0.03  | VaB            | 0                              |
| J1         | 78          | -79.143975 | 42.405088 | PEM            | 78,661                     | 1.81  | LnC            | 0                              |
| J2         | 75 & 76     | -79.147755 | 42.408082 | PEM            | 60,613                     | 1.39  | BsB            | 4                              |
| J3         | 75          | -79.149793 | 42.408545 | PEM            | 91,971                     | 2.11  | CkB            | 0                              |
| J4         | 77          | -79.140937 | 42.407685 | PEM            | 17.713                     | 0.41  | LnB            | 0                              |
| K1         | 90          | -79.169445 | 42.398587 | PEM            | 8,950                      | 0.21  | LnC            | 0                              |
| K2         | 90          | -79.169406 | 42.398099 | PEM            | 4,560                      | 0.10  | LnC            | 0                              |
| K3         | 91          | -79.164026 | 42.399071 | PEM            | 14,368                     | 0.33  | ErB            | 5                              |
| L1         | 91          | -79.163835 | 42.399916 | PEM            | 4.100                      | 0.09  | ErB            | 5                              |
| L2         | 87          | -79.163714 | 42.401591 | PEM            | 44,891                     | 1.03  | ErB            | 5                              |
| M1         | 85          | -79.164369 | 42.405752 | PEM            | 29,375                     | 0.67  | ErB            | 5                              |
| N1         | 85          | -79.164242 | 42.408097 | PFO            | 21.998                     | 0.51  | ErB            | 5                              |
| 01         | 84          | -79.164597 | 42.409766 | PEM            | 65,820                     | 1.51  | ErB            | 5                              |
| P1         | 83          | -79.169818 | 42.409697 | PSS            | 9,968                      | 0.23  | BsB            | 4                              |
| Q1         | 89          | -79.155498 | 42.401657 | PSS            | 2.366                      | 0.05  | ErB            | 5                              |
| R1         | 89          | -79.157027 | 42.399723 | PEM            | 11,054                     | 0.25  | ErB            | 5                              |
| S1         | 88 & 91     | -79.160958 | 42.399645 | PEM            | 130.033                    | 2.99  | LnB            | 0                              |
| T1         | 92          | -79.162298 | 42.397051 | PSS            | 2.737                      | 0.06  | ErA            | 4                              |
| U1         | 91          | -79.162791 | 42.396799 | PEM            | 2,031                      | 0.05  | ErA            | 4                              |
| V1         | 48 & 49     | -79.124561 | 42.428488 | PEM            | 74.803                     | 1.72  | BsB            | 4                              |
| V2         | 48          | -79.127893 | 42.427750 | PEM            | 3,614                      | 0.08  | BsB            | 4                              |
| V3         | 48          | -79.127206 | 42.429103 | PEM            | 5,436                      | 0.13  | CkC            | 0                              |
| V4         | 46 & 47     | -79.135044 | 42.428361 | PEM            | 27.427                     | 0.63  | BsB            | 4                              |
| W1         | 43 & 44     | -79.128801 | 42.435092 | PFO            | 23.444                     | 0.54  | As             | 90                             |
| X1         | 44          | -79.132927 | 42.432784 | PEM            | 18,453                     | 0.42  | BsA            | 6                              |

Table 1
Wetland Delineation Summary

|            |            | Coord      | inates    | Cowardin       | Wetland Are<br>Delineation |       |                | Soils                          |
|------------|------------|------------|-----------|----------------|----------------------------|-------|----------------|--------------------------------|
| Wetland ID | Map Tile # | Latitude   | Longitude | Classification | Square Feet                | Acres | Soil<br>Symbol | Hydric Component<br>Percentage |
| Y1         | 43 & 45    | -79.128822 | 42.434229 | PFO            | 6,218                      | 0.14  | VaB            | 0                              |
| Y2         | 44         | -79.128929 | 42.433154 | PFO            | 33,696                     | 0.77  | VaB            | 0                              |
| Z1         | 45         | -79.128941 | 42.431164 | PFO            | 79,525                     | 1.83  | CkB            | 0                              |
| A500       | 80         | -79.134330 | 42.403057 | PEM            | 7,808                      | 0.18  | Fe             | 60                             |
| A501       | 80 & 81    | -79.134115 | 42.403840 | PEM / PSS      | 17,247                     | 0.40  | ChD            | 0                              |
| A502       | 81         | -79.133661 | 42.405061 | PEM            | 22,121                     | 0.51  | ChD            | 0                              |
| A503       | 81         | -79.131665 | 42.405793 | PEM            | 6,043                      | 0.14  | ErB            | 5                              |
| A504       | 61         | -79.121016 | 42.406178 | PEM            | 9,492                      | 0.22  | CkC            | 0                              |
| A505       | 62         | -79.119678 | 42.405377 | PEM            | 1,772                      | 0.04  | CkB            | 0                              |
| A506       | 62         | -79.119872 | 42.405643 | PEM            | 1,020                      | 0.02  | CkB            | 0                              |
| A507       | 66         | -79.112082 | 42.406378 | PEM            | 2,848                      | 0.07  | FmB            | 5                              |
| A508       | 66         | -79.111751 | 42.407160 | PEM            | 8,755                      | 0.20  | FmB            | 5                              |
| A509       | 63         | -79.111930 | 42.409548 | PFO            | 8,104                      | 0.19  | FmA            | 5                              |
| A510       | 66         | -79.111075 | 42.405421 | PEM / PSS      | 4,846                      | 0.11  | FmA            | 5                              |
| A511       | 72         | -79.111035 | 42.397217 | PEM            | 2,488                      | 0.06  | DaA            | 4                              |
| A512       | 82         | -79.140839 | 42.395700 | PEM            | 13,450                     | 0.31  | CkB            | 0                              |
| A513       | 96         | -79.141307 | 42.393078 | PEM            | 400                        | 0.01  | Fe             | 60                             |
| A514       | 96         | -79.141586 | 42.393088 | PEM            | 540                        | 0.01  | Fe             | 60                             |
| A515       | 96         | -79.141906 | 42.392725 | PEM            | 17,871                     | 0.41  | CkC            | 0                              |
| A516       | 71         | -79.115147 | 42.395681 | PEM            | 1,194                      | 0.03  | CkB            | 0                              |
| A517       | 72         | -79.108588 | 42.395626 | PFO            | 6,149                      | 0.14  | DaA            | 4                              |
| A518       | 73         | -79.104721 | 42.396824 | PEM            | 13,428                     | 0.31  | FmA            | 5                              |
| A519       | 74         | -79.101474 | 42.395879 | PEM            | 3,328                      | 0.08  | FmB            | 5                              |
| A520       | 73         | -79.102028 | 42.396366 | PEM            | 1,709                      | 0.04  | FmB            | 5                              |
| A521       | 70 & 73    | -79.106269 | 42.398965 | PEM / PFO      | 231,746                    | 5.32  | Ad             | 95                             |
| A522       | 70         | -79.107270 | 42.401474 | PFO            | 33,507                     | 0.77  | FmB            | 5                              |
| A523       | 98         | -79.141618 | 42.386179 | PEM            | 11,077                     | 0.25  | CkB            | 0                              |
| A524       | 97         | -79.144706 | 42.387295 | PEM            | 10,568                     | 0.24  | BsB            | 4                              |
| A525       | 97         | -79.145502 | 42.388442 | PEM            | 1,346                      | 0.03  | BsB            | 4                              |
| A526       | 95         | -79.145419 | 42.390211 | PFO            | 6,860                      | 0.16  | CkC            | 0                              |
| A527       | 95         | -79.145178 | 42.390570 | PFO            | 3,927                      | 0.09  | CkC            | 0                              |
| A528       | 96         | -79.144447 | 42.391010 | PFO            | 1,165                      | 0.03  | BsB            | 4                              |
| A529       | 96         | -79.142694 | 42.392238 | PEM            | 11,170                     | 0.26  | CkC            | 0                              |
| A530       | 96         | -79.144004 | 42.391127 | PFO            | 652                        | 0.01  | BsB            | 4                              |
| A531       | 94 & 95    | -79.147600 | 42.392973 | PEM            | 83,822                     | 1.92  | As             | 90                             |
| A532       | 92         | -79.157658 | 42.394884 | PEM            | 4,191                      | 0.10  | LnB            | 0                              |
| A533       | 92         | -79.159866 | 42.394980 | PEM            | 6,159                      | 0.14  | ErB            | 5                              |
| A534       | 94         | -79.149341 | 42.395192 | PEM            | 43,244                     | 0.99  | As             | 90                             |
| A535       | 94         | -79.149903 | 42.397056 | PFO            | 6,750                      | 0.15  | BsB            | 4                              |
| A536       | 28         | -79.169082 | 42.403659 | PEM            | 41,380                     | 0.95  | VcC            | 0                              |
| A540       | 86         | -79.119774 | 42.445770 | PEM            | 931                        | 0.02  | LnC            | 0                              |
| A537       | 86 & 87    | -79.166203 | 42.403930 | PSS            | 103,291                    | 2.37  | ErB            | 5                              |

Table 1
Wetland Delineation Summary

|            |            | Coord      | inates    | Cowardin        | Wetland Are<br>Delineation |       |                | Soils                          |
|------------|------------|------------|-----------|-----------------|----------------------------|-------|----------------|--------------------------------|
| Wetland ID | Map Tile # | Latitude   | Longitude | Classification  | Square Feet                | Acres | Soil<br>Symbol | Hydric Component<br>Percentage |
| A538       | 87         | -79.164408 | 42.403825 | PEM             | 464                        | 0.01  | ErB            | 5                              |
| A539       | 87         | -79.164202 | 42.403976 | PSS             | 11,752                     | 0.27  | ErB            | 5                              |
| A541       | 28         | -79.120787 | 42.445671 | PEM             | 3,538                      | 0.08  | VcC            | 0                              |
| A542       | 28         | -79.120975 | 42.445933 | PEM             | 4,952                      | 0.11  | VcC            | 0                              |
| A543       | 26         | -79.118721 | 42.453293 | PEM / PSS       | 30,603                     | 0.70  | FmA            | 8                              |
| A544       | 26         | -79.119108 | 42.452342 | PEM             | 36,601                     | 0.84  | CrB            | 5                              |
| A545       | 26 & 27    | -79.119572 | 42.451778 | PEM             | 16,511                     | 0.38  | FmB            | 5                              |
| A546       | 27         | -79.119665 | 42.449795 | PEM             | 25,226                     | 0.58  | BsB            | 4                              |
| A547       | 27         | -79.119520 | 42.448596 | PFO             | 4,765                      | 0.11  | VcC            | 0                              |
| A548       | 23 & 24    | -79.123569 | 42.447105 | PFO             | 28,621                     | 0.66  | As             | 90                             |
| A549       | 23 & 28    | -79.121847 | 42.445752 | PEM / PFO       | 29,486                     | 0.68  | VcC            | 0                              |
| A550       | 28         | -79.121706 | 42.444925 | PEM             | 381                        | 0.01  | VcC            | 0                              |
| A551       | 28         | -79.121279 | 42.444897 | PEM             | 849                        | 0.02  | VcC            | 0                              |
| A552       | 29         | -79.121279 | 42.442856 | PSS             | 30,618                     | 0.70  | BsB            | 4                              |
| A552       | 28 & 29    | -79.121706 | 42.443467 | PEM             | 6,211                      | 0.14  | CkB            | 0                              |
| A553       | 36         | -79.114906 | 42.444058 | PFO             | 15,958                     | 0.37  | VoC            | 0                              |
| A554       | 36         | -79.115786 | 42.444065 | PEM             | 6,559                      | 0.15  | VcC            | 0                              |
| A555       | 36         | -79.116396 | 42.443366 | PFO             | 1,404                      | 0.03  | BsB            | 4                              |
| A556       | 29         | -79.118302 | 42.441612 | PEM             | 127                        | 0.003 | VaB            | 0                              |
| A557       | 29         | -79.119856 | 42.440754 | PEM             | 12,136                     | 0.28  | BsB            | 4                              |
| A558       | 29         | -79.121676 | 42.442338 | PEM             | 8,229                      | 0.19  | BsB            | 4                              |
| A559       | 29         | -79.121495 | 42.441580 | PEM             | 2,801                      | 0.06  | VaB            | 0                              |
| A560       | 29         | -79.121370 | 42.440882 | PEM             | 4,834                      | 0.11  | BsB            | 4                              |
| A561       | 29         | -79.118313 | 42.440785 | PEM             | 2,689                      | 0.06  | CkB            | 0                              |
| A562       | 29 & 38    | -79.116558 | 42.441032 | PEM / PFO       | 18,230                     | 0.42  | BsA            | 6                              |
| A563       | 38         | -79.115298 | 42.440976 | PEM / PSS / PFO | 6.013                      | 0.14  | CkB            | 0                              |
| A564       | 38         | -79.114438 | 42.440002 | PEM             | 14,541                     | 0.33  | BsA            | 6                              |
| A565       | 38 & 39    | -79.113995 | 42.437605 | PEM             | 9,798                      | 0.22  | BsB            | 4                              |
| A566       | 39         | -79.113656 | 42.435705 | PEM             | 7,179                      | 0.16  | CkC            | 0                              |
| A567       | 39         | -79.112336 | 42.435330 | PSS             | 5,666                      | 0.13  | CoB            | 0                              |
| A568       | 40         | -79.114243 | 42.430641 | PFO             | 3,520                      | 0.08  | CkB            | 0                              |
| A569       | 40         | -79.114392 | 42.431196 | PEM             | 1,468                      | 0.03  | CkB            | 0                              |
| A570       | 39 & 40    | -79.112957 | 42.433045 | PEM             | 10,065                     | 0.23  | CkC            | 0                              |
| A571       | 21         | -79.128478 | 42.441499 | PEM             | 13,155                     | 0.30  | BsB            | 4                              |
| A572       | 21         | -79.127801 | 42.441594 | PEM             | 1,998                      | 0.05  | BsB            | 4                              |
| A573       | 21         | -79.127439 | 42.441665 | PEM             | 5,899                      | 0.14  | BsB            | 4                              |
| A574       | 22         | -79.126414 | 42.441683 | PEM             | 5,344                      | 0.12  | BsB            | 4                              |
| A575       | 22         | -79.125080 | 42.441735 | PEM             | 2,161                      | 0.05  | BsB            | 4                              |
| A576       | 21         | -79.128869 | 42.442058 | PEM             | 6,147                      | 0.14  | CkC            | 0                              |
| A577       | 20 & 21    | -79.128550 | 42.442663 | PEM             | 19,727                     | 0.45  | As             | 90                             |
| A578       | 20 & 21    | -79.129085 | 42.442496 | PSS             | 16,375                     | 0.38  | As             | 90                             |

Table 2 Stream Delineation Summary

| Stream ID | Map Tile # | Stream Name       | Tributary of          | Flow Regime  | Cowardin<br>Classification | NYSDEC<br>Classification<br>Designation | NYSDEC<br>Standard<br>Designation | Latitude   | Longitude | Stream Width<br>(average<br>range, Ft.) | Stream Reach<br>Length within<br>Study Limits<br>(Linear Ft.) |
|-----------|------------|-------------------|-----------------------|--------------|----------------------------|---|-----------------------------------|------------|-----------|---|---|
| 1         | 53         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB3                      | С                                       | С                                 | -79.142023 | 42.416160 | 1                                       | 78  |
| 1         | 56         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB3                      | С                                       | С                                 | -79.140767 | 42.414146 | 1                                       | 101   |
| 1         | 56         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB3                      | С                                       | С                                 | -79.140879 | 42.414442 | 10                                      | 81  |
| 2         | 56         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.139930 | 42.414139 | 1                                       | 88  |
| 2         | 56         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.140043 | 42.414321 | 1                                       | 49  |
| 3         | 56         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.138298 | 42.413920 | 10                                      | 443   |
| 4         | 56         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.137672 | 42.413664 | 5                                       | 254   |
| 5         | 56 & 57    | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.137351 | 42.413463 | 1                                       | 337   |
| 6         | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.125298 | 42.429670 | 5                                       | 163   |
| 7         | 90         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | ND                                      | ND                                | -79.170241 | 42.398806 | 5                                       | 350   |
| 8         | 90         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | ND                                      | ND                                | -79.170528 | 42.398503 | 3                                       | 56  |
| 10        | 89         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/2                    | ND                                      | ND                                | -79.155794 | 42.400438 | 5                                       | 159   |
| 10        | 89         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.155826 | 42.400627 | 5                                       | 295   |
| 11        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/2                    | С                                       | С                                 | -79.124855 | 42.428521 | 2                                       | 271   |
| 11        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/2                    | С                                       | С                                 | -79.125463 | 42.428296 | 2                                       | 94  |
| 11        | 48 & 49    | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/2                    | С                                       | С                                 | -79.123957 | 42.428801 | 2                                       | 413   |
| 12        | 43         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/2                    | Α                                       | A                                 | -79.128829 | 42.435078 | 5                                       | 276   |
| 13        | 44         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | ND                                      | ND                                | -79.131541 | 42.433225 | 5                                       | 242   |
| 14        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.126827 | 42.428921 | 1                                       | 177   |
| 14        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.127209 | 42.429069 | 1                                       | 74  |
| 15        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.127359 | 42.429112 | 3                                       | 58  |
| 15        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.128573 | 42.428729 | 3                                       | 131   |
| 15        | 48         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.128362 | 42.428928 | 3                                       | 92  |
| 16        | 44         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | ND                                      | ND                                | -79.133443 | 42.433988 | 4                                       | 242   |
| 17        | 45         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | С                                       | С                                 | -79.128669 | 42.432094 | 6                                       | 188   |
| 17        | 45         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | C                                       | C                                 | -79.129143 | 42.431569 | 6                                       | 180   |
| 18        | 30         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.121489 | 42.439242 | 2 - 8                                   | 77  |
| 19        | 22         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.123706 | 42.440639 | 3                                       | 238   |
| A500      | 80         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | С                                       | С                                 | -79.134230 | 42.403331 | 10 - 12                                 | 195   |
| A501      | 80 & 81    | Unnamed Tributary | West Branch Conewango | Intermittent | R4SB3                      | С                                       | С                                 | -79.133967 | 42.405100 | 2                                       | 1120  |
| A502      | 65         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | С                                       | С                                 | -79.119736 | 42.402341 | 6 - 8                                   | 227   |
| A503      | 80         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB3                      | С                                       | С                                 | -79.134894 | 42.401261 | 4                                       | 49  |
| A504      | 96         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | С                                       | С                                 | -79.141167 | 42.393152 | 15                                      | 168   |
| A505      | 96         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | С                                       | С                                 | -79.141852 | 42.392928 | 2 - 3                                   | 297   |
| A506      | 96         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | С                                       | С                                 | -79.141618 | 42.392973 | 1 - 2                                   | 49  |
| A507      | 71         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | С                                       | С                                 | -79.115640 | 42.394698 | 3 - 6                                   | 564   |
| A507      | 71         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1                      | ND                                      | ND                                | -79.115108 | 42.395771 | 3 - 6                                   | 270   |
| A508      | 72         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB3                      | С                                       | С                                 | -79.108565 | 42.395550 | 4 - 5                                   | 202   |
| A509      | 97         | Unnamed Tributary | West Branch Conewango | Perennial    | R3RB1/UB1                  | C                                       | C                                 | -79.145592 | 42.388505 | 6 - 8                                   | 130   |
| A510      | 86         | Unnamed Tributary | West Branch Conewango | Perennial    | R3UB1/3                    | ND<br>A                                 | ND A                              | -79.169164 | 42.403834 | 2 - 4                                   | 573   |
| A511      | 28         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.121384 | 42.445182 | 2 - 5                                   | 275   |
| A512      | 28         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.121531 | 42.444814 | 2 - 4                                   | 127   |
| A514      | 28         | Unnamed Tributary | Silver Creek          | Intermittent | R4SB1                      | A                                       | A                                 | -79.121440 | 42.445253 | 5                                       | 59  |
| A515      | 29         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.121371 | 42.442894 | 4                                       | 231   |
| A516      | 36         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1                      | A                                       | A                                 | -79.114549 | 42.443930 | 5                                       | 327   |
| A517      | 36         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.115718 | 42.444146 | 3 - 5                                   | 234   |
| A518      | 29         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB3                      | A                                       | A                                 | -79.118157 | 42.440893 | 2 - 5                                   | 273   |
| A519      | 38         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1/3                    | A                                       | A                                 | -79.114128 | 42.437948 | 2                                       | 108   |
| A520      | 38 & 39    | Unnamed Tributary | Silver Creek          | Perennial    | R3UB3                      | A                                       | A                                 | -79.114061 | 42.437477 | 2 - 8                                   | 208   |
| A521      | 39         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1                      | С                                       | С                                 | -79.112262 | 42.435179 | 8                                       | 128   |
| A521      | 39         | Unnamed Tributary | Silver Creek          | Perennial    | R3UB1                      | С                                       | С                                 | -79.112334 | 42.435025 | 6                                       | 42  |
| A522      | 39         | Unnamed Tributary | Silver Creek          | Intermittent | R4SB3/5                    | С                                       | С                                 | -79.112794 | 42.433657 | 2                                       | 254   |

## Table 2 Stream Delineation Summary

Notes: 11,320

NYSDEC Classification Designations:

AA or A: waters used as a source of drinking water

B: waters with best usage for swimming and other contact recreation, but not for drinking water

C: waters supporting fisheries and suitable for non-contact activities

D: other waters, the lowest classification standard

NYSDEC Standard Designations:

ND: no assigned designation

T: may support a trout population

TS: may support trout spawning

Waters with classifications of A, B, and C may, but will not always have an associated Standard Designation realtive to trout use. Streams with a classification of AA, A, B, or with a classification of C with a standard of "T" or "TS" are referred to a "Protected Streams" and are subject to the stream protection provisions of the New York State Protection of Waters regulations.

# APPENDIX A WETLAND DETERMINATION DATA FORMS

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project \_\_ Sampling Date: /2 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-Investigator(s): DJL, VJM Section, Township, Range: Landform (hillslope, terrace, etc.): Depol 55100 C Local relief (concave, convex, none): \_\_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: A shville Silt NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? No within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID: WL-Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) ✓ Surface Water (A1) \_ Water-Stained Leaves (B9) Drainage Patterns (B10) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) \_\_ Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Soy Bea Algal Mat or Crust (B4) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) \_\_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes \_\_\_ No \_\_\_ Depth (inches): Surface Water Present? Water Table Present? X No \_\_\_\_ Depth (inches): Wetland Hydrology Present? Yes Saturation Present? \_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Some recent precipitation

|    |       | Continue Section 1 |       | and the second second |         | - 2 |         |
|----|-------|--------------------|-------|-----------------------|---------|-----|---------|
| ١. | /ECET | ATION              | 1 lea | scientific            | namae   | Ωf  | nlante  |
|    | LOLI  | ~ 110H -           | CSC   | SCIETILITIC           | Hallics | U   | pianto. |

| Tree Stratum (Plot size:30                            | % Cover | Dominant Indicator Species? Status | Number of Dominant Species  |
|---|---------|------------------------------------|---|
| 2.  |         |                                    | That Are OBL, FACW, or FAC: (A)   |
| 3   |         |                                    | Total Number of Dominant Species Across All Strata:  (B)  |
| 4   |         |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC: 666 (A/B)                                   |
| 5   |         |                                    |   |
| 6   |         |                                    | Prevalence Index worksheet:   |
| 7   |         |                                    | Total % Cover of: Multiply by:  |
| 1-1   | _0_     | = Total Cover                      | OBL species x1 =  |
| Sapling/Shrub Stratum (Plot size: 15 )                |         |                                    | FACW species x 2 =  |
| l   |         |                                    | FAC species x 3 =   |
| 2   |         |                                    | FACU species x 4 =  |
|   |         |                                    | UPL species x 5 =   |
|   |         |                                    | Column Totals: (A) (B)  |
| ·   |         |                                    | Prevalence Index = B/A =  |
| 3   |         |                                    | Hydrophytic Vegetation Indicators:  |
| 7.  |         |                                    | 1 - Rapid Test for Hydrophytic Vegetation   |
| · · · · · · · · · · · · · · · · · · ·                 | 0       | = Total Cover                      | X 2 - Dominance Test is >50%  |
| 51  |         | =   otal Cover                     | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size; 5                            | 30      | 11.00                              | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                      |
| . Phalaris aryondinacoa                               |         | 189 FARIN                          | data in Remarks or on a separate sheet)   |
| Epilobium Ciliatum                                    | 25      |                                    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| Scilpus atroumons                                     | 15      | NO OBL                             | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                   |
| · Panielin Capillane                                  | 10      | NO THE                             | be present, unless disturbed or problematic.  |
| Cuperus 50. (Flat gedge)                              | 5       | NO FAC                             | Definitions of Vegetation Strata:   |
| Eleocharis Sp.  |         | NO FAC                             | Tree Mandy plants 3 in (7.6 cm) or mare in diamete  |
| Junes offices   |         | NO FRA                             | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. |
| 3   |         |                                    | Sapling/shrub - Woody plants less than 3 in. DBH  |
|   |         |                                    | and greater than or equal to 3.28 ft (1 m) tall.  |
| 0   |         |                                    | Herb - All herbaceous (non-woody) plants, regardless of   |
|   | -       |                                    | size, and woody plants less than 3.28 ft tall.  |
| 1   |         |                                    | Woody vines - All woody vines greater than 3.28 ft in   |
| 2   |         |                                    | height.   |
|   | 75      | = Total Cover 47.5                 |   |
| Noody Vine Stratum (Plot size: 30')                   |         | 19                                 |   |
|   |         | 1.6                                |   |
|   |         |                                    | Hydrophytic   |
|   |         |                                    | Vegetation   Present?   Yes No  |
|   |         |                                    | 7   |
|   | 0       | = Total Cover                      |   |
| Remarks: (Include photo numbers here or on a separate | sheet)  | - Total Oover                      |   |
|   |         |                                    |   |
| Photo I DPI to PP                                     | 2       |                                    |   |
|   |         |                                    |   |
|   |         |                                    |   |
|   |         |                                    |   |
|   |         |                                    |   |
|   |         |                                    |   |

Sampling Point: DP- 1

| (inches) Color (moist)  |             |                            | K Feature  |                   |           | the absence of ind   |                             |  |  |  |
|---|-------------|----------------------------|------------|-------------------|-----------|--|-----------------------------|--|--|--|
|   | %           | Color (moist)              | %          | Type <sup>1</sup> | _Loc2     | Texture  | Remarks                     |  |  |  |
| 60-10 1092 3/2  | 95          | 7.5 YR 3/4                 | 5          | C                 | m         | Silt loan  |                             |  |  |  |
| 0-18 10R4/2   | 80          | 7.5415/8                   | 10         | C                 | n         | 5ilt lann  |                             |  |  |  |
|   |             | 2645/                      | 10         | -                 | Ma        | 5111   |                             |  |  |  |
|   |             | 413/19/6                   | 10         |                   | 14        | 11111995   |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             | -90                        |            |                   |           |  |                             |  |  |  |
|   |             | -                          |            |                   |           |  |                             |  |  |  |
|   |             |                            | - 10       | - /0              |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           |  |                             |  |  |  |
| ype: C=Concentration, D=De  | pletion, RM | I=Reduced Matrix, MS       | =Masked    | Sand Gr           | ains.     |  | ore Lining, M=Matrix.       |  |  |  |
| ydric Soil Indicators:  |             | 2070 07 0 2070             |            |                   | 227       |  | oblematic Hydric Soils³: 🚜  |  |  |  |
| _ Histosol (A1)<br>_ Histic Epipedon (A2)   |             | Polyvalue Below MLRA 149B) | Surface    | (S8) (LRF         | ₹R,       |  | 10) (LRR K, L, MLRA 149B)   |  |  |  |
| Black Histic (A3)   |             | Thin Dark Surface          | ce (S9) (L | RR R. MI          | RA 149B)  |  | Redox (A16) (LRR K, L, R)   |  |  |  |
| _ Hydrogen Sulfide (A4)   |             | Loamy Mucky M              |            |                   |           |  | (S7) (LRR K, L, M)          |  |  |  |
| _ Stratified Layers (A5)  |             | Loamy Gleyed M             |            | )                 |           | Polyvalue Bel  | ow Surface (S8) (LRR K, L)  |  |  |  |
| <ul> <li>Depleted Below Dark Surface</li> <li>Thick Dark Surface (A12)</li> </ul> | ce (A11)    | Depleted Matrix            |            |                   |           |  | face (S9) (LRR K, L)        |  |  |  |
| Sandy Mucky Mineral (S1)  |             | Redox Dark Surf            |            | 7)                |           | Iron-Manganese Masses (F12) (LRR K, L,<br>Piedmont Floodplain Soils (F19) (MLRA 14 |                             |  |  |  |
| _ Sandy Gleyed Matrix (S4)  |             | Redox Depression           |            | .,                |           |  | (TA6) (MLRA 144A, 145, 149) |  |  |  |
| _ Sandy Redox (S5)  |             |                            |            |                   |           | Red Parent M   | aterial (F21)               |  |  |  |
| _ Stripped Matrix (S6)  | MI DA 446   | -                          |            |                   |           |  | Dark Surface (TF12)         |  |  |  |
| _ Dark Surface (S7) (LRR R,   | MLRA 149    | В)                         |            |                   |           | Other (Explain   | in Remarks)                 |  |  |  |
| ndicators of hydrophytic vegeta   | ation and w | etland hydrology must      | be prese   | nt, unless        | disturbed | or problematic.  |                             |  |  |  |
|   |             |                            |            | 2.4.300.00        |           |  |                             |  |  |  |
| estrictive Layer (if observed)  |             |                            |            |                   |           |  |                             |  |  |  |
|   |             |                            |            |                   |           | Undela Call Decase   | nt? Yes X No                |  |  |  |
| estrictive Layer (if observed) Type:  |             |                            |            |                   |           | nyuric Son Preser  | 100                         |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyanc son Preser   | 103                         |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyunc son Preser   | 103                         |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  | 103                         |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyunc Son Preser   |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyunc Son Preser   |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyunc Son Preser   |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyunc Son Preser   |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyunc Son Preser   |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |
| estrictive Layer (if observed) Type:  |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |
| estrictive Layer (if observed) Type: Depth (inches):                              |             |                            |            |                   |           | nyuric Son Preser  |                             |  |  |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  | 1                                  | city/County: Chautauqua        | County                          | Sampling Date: 10/25/20                             |
|---|------------------------------------|--------------------------------|---------------------------------|---|
| Applicant/Owner: Ball Hill Wind En  |                                    |                                |                                 | _ Sampling Point: DP- 2                             |
| Investigator(s): DJL, UM  |                                    | Section, Township, Range:_     | 1 /- 1)                         |   |
| Landform (hillslope, terrace, etc.):  | TII Plain Loc<br>Lat: 79.1461      | al relief (concave, convex, n  | one): <u>Con ve</u><br>2. 41468 | Datum: NAD 83                                       |
| Are climatic / hydrologic conditions on t                                   |                                    | Vas V No                       | NWI classific                   |   |
| Are Climatic / hydrologic conditions on t                                   |                                    |                                |                                 | ernarks.)<br>eresent? Yes <u> </u>                  |
|   |                                    |                                |                                 |   |
| Are Vegetation <u>A/O</u> , Soil <u>A/O</u> , or<br>SUMMARY OF FINDINGS – A |                                    |                                | , explain any answe             |   |
|   |                                    | Is the Sampled Area            |                                 | ,             |
| Hydrophytic Vegetation Present?  Hydric Soil Present?                       | Yes No<br>Yes No                   | within a Wetland?              | Yes                             | _ No _X   |
| Wetland Hydrology Present?  | Yes No                             | If yes, optional Wetlan        | nd Site ID:                     | 1   |
|   |                                    |                                |                                 |   |
| HYDROLOGY   |                                    |                                |                                 |   |
| Wetland Hydrology Indicators:   |                                    |                                | Secondary Indica                | tors (minimum of two required)                      |
| Primary Indicators (minimum of one is                                       | required; check all that apply)    |                                | Surface Soil                    | Cracks (B6)   |
| Surface Water (A1)  | Water-Stained L                    |                                | Drainage Pa                     |   |
| High Water Table (A2)   | Aquatic Fauna (                    |                                | Moss Trim Li                    |   |
| Saturation (A3)   | Marl Deposits (E                   |                                |                                 | Water Table (C2)                                    |
| Water Marks (B1)  | Hydrogen Sulfid                    |                                | Crayfish Bur                    |   |
| Sediment Deposits (B2)  |                                    | pheres on Living Roots (C3     |                                 | sible on Aerial Imagery (C9)<br>tressed Plants (D1) |
| Drift Deposits (B3) Algal Mat or Crust (B4)                                 | Presence of Rec                    | luction in Tilled Soils (C6)   |                                 | Position (D2)                                       |
| Iron Deposits (B5)  | Thin Muck Surfa                    |                                | Shallow Aqu                     |   |
| Inundation Visible on Aerial Imag   |                                    |                                |                                 | phic Relief (D4)                                    |
| Sparsely Vegetated Concave Su   |                                    |                                | FAC-Neutral                     |   |
| Field Observations:   |                                    |                                |                                 |   |
| Surface Water Present? Yes _  | No X Depth (inches):               |                                |                                 |   |
| Water Table Present? Yes _  | No X Depth (inches):               |                                |                                 | ~   |
| Saturation Present? Yes _<br>(includes capillary fringe)                    | No Depth (inches):                 | Wetland                        | Hydrology Preser                | t? Yes No   |
| Describe Recorded Data (stream gau  | ge, monitoring well, aerial photos | s, previous inspections), if a | vailable:                       |   |
|   |                                    |                                |                                 |   |
| Remarks: No wetland   | Hydrology is                       | Indicators                     | D-0500                          | +   |
|   |                                    |                                |                                 |   |

|   | Absolute |             | Indicator | Dominance Test worksheet:   |
|---|----------|-------------|-----------|---|
| Tree Stratum (Plot size: 361)                       | % Cover  | Species?    | _Status   | Number of Dominant Species  |
| 1   |          | -           |           | That Are OBL, FACW, or FAC: (A)   |
| 2   |          |             |           | Total Number of Dominant  |
| 3   |          |             |           | Species Across All Strata: (B)  |
| 1   |          |             |           | Percent of Dominant Species   |
|   |          |             |           | That Are OBL, FACW, or FAC: (A/E  |
| 5   |          |             |           | Thought the first the state of |
| 3   |          |             | -         | Prevalence Index worksheet:   |
| 7   |          |             |           | Total % Cover of: Multiply by:  |
| ,   | 0        | = Total Cov | /er       | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: /5/               |          |             |           | FACW species x 2 =  |
|   |          |             |           | FAC species x 3 =   |
|   |          |             |           | FACU species x 4 =  |
| 2   |          |             |           | UPL species x 5 =   |
| ·   |          |             |           | Column Totals: (A) (B   |
| h   |          |             |           |   |
| 5,  |          |             |           | Prevalence Index = B/A =  |
| 5   |          |             |           | Hydrophytic Vegetation Indicators:  |
|   |          |             |           | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 4        |             |           | 2 - Dominance Test is >50%  |
| =1  | 0        | = Total Co  | /er       | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| Herb Stratum (Plot size:                            |          |             |           | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting  |
| 1. Plantano lange ola tra                           |          | 489         | FALL      | data in Remarks or on a separate sheet)   |
| Phleum pratence                                     | 30.      | 469         | FACY      | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Pancus Carola                                    | 10       | NO          | UPL       | <sup>1</sup> Indicators of hydric soil and wetland hydrology must   |
|   |          | NO          |           | be present, unless disturbed or problematic.  |
| 4. Splidare Sp                                      |          |             | FAC       | Definitions of Vegetation Strata:   |
| Aster Sp.   |          | NO.         | FAC       | Definitions of Vegetation Strata.   |
| 3   |          |             |           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7   |          |             |           | at breast height (DBH), regardless of height.   |
| 3   |          |             |           | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 0   |          |             |           | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10  |          |             |           | Herb - All herbaceous (non-woody) plants, regardless of   |
|   | - —      | -           |           | size, and woody plants less than 3.28 ft tall.  |
| 11  |          | -           |           | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  |          |             |           | height.   |
|   | 120      | = Total Co  | ver /20   |   |
| 7   |          |             | 24        |   |
| Noody Vine Stratum (Plot size: 50 )                 |          |             |           |   |
| Noody Vine Stratum (Plot size: 50)                  |          |             | /         |   |
| Noody Vine Stratum (Plot size: 50 )                 |          |             |           | Hydrophytic   |
| Woody Vine Stratum (Plot size:)  1                  |          |             |           | Vegetation  |
| Woody Vine Stratum         (Plot size:              |          |             |           |   |
| Noody Vine Stratum         (Plot size:)           1 |          |             |           | Vegetation  |

| Depth          | Matrix                                   | to the dep  |                      | Features |  | or confirm | the absence of indica                | tors.)        |   |
|----------------|--|-------------|----------------------|----------|--|------------|--------------------------------------|---------------|---|
| (inches)       | Color (moist)                            | %           | Color (moist)        | <u>%</u> | Type <sup>1</sup>  | _Loc2      | Texture                              | Remark        | KS                                      |
| A-0-10         | 107K3/2                                  | 100         |                      |          | -  | -          | 5, 14 loan                           |               |   |
| 10-18          | 1048 4/2                                 | 90          | 7.5784/              | 10       | 0  | 19         | Silt lan                             |               |   |
| 1              |  |             |                      |          |  |            |                                      |               |   |
| -              |  |             |                      |          | -  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
| -              |  |             |                      | -        |  |            |                                      |               | *************************************** |
|                |  |             |                      |          | 14   |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          | -  |            |                                      |               |   |
|                |  | -           |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            | ·                                    |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
| ¹Type: C=Co    | oncentration, D=Dep                      | letion, RM= | Reduced Matrix, MS   | =Masked  | Sand Gra   | ins.       | <sup>2</sup> Location: PL=Por        | e Lining, M=I | Matrix.                                 |
| Hydric Soil I  |  |             | Polyvalue Below      | Curface  | (CO) /I DD   |            | Indicators for Probl                 |               |   |
|                | oipedon (A2)                             |             | MLRA 149B)           |          | (30) (LKN  | · rc,      | Coast Prairie Re                     |               |   |
| Black His      | stic (A3)                                |             | Thin Dark Surfa      |          |  |            | 5 cm Mucky Pea                       | t or Peat (S3 | 3) (LRR K, L, R)                        |
|                | n Sulfide (A4)                           |             | Loamy Mucky M        |          |  | L)         | Dark Surface (S                      |               |   |
|                | l Layers (A5)<br>I Below Dark Surfac     | e (A11)     | Loamy Gleyed Matrix  |          | )  |            | Polyvalue Below<br>Thin Dark Surface |               |   |
|                | ark Surface (A12)                        | - ( /       | Redox Dark Sur       |          |  |            |                                      |               | 2) (LRR K, L, R)                        |
|                | lucky Mineral (S1)                       |             | Depleted Dark S      |          | 7)   |            |                                      |               | 19) (MLRA 149B)                         |
|                | leyed Matrix (S4)<br>ledox (S5)          |             | Redox Depressi       | ons (F8) |  |            | Mesic Spodic (T<br>Red Parent Mate   |               | 144A, 145, 149B)                        |
|                | Matrix (S6)                              |             |                      |          |  |            | Very Shallow Da                      |               | TF12)                                   |
|                | rface (S7) (LRR R, N                     | ILRA 149E   | 3)                   |          |  |            | Other (Explain in                    |               |   |
| 3Indicators of | f bydronbytic yegotat                    | ion and up  | tland hydrology must | he proce | nt unloss  | disturbed  | or problematic                       |               |   |
|                | _ayer (if observed):                     |             |                      | ne brese | int, unless  | disturbed  | or problematic.                      |               |   |
| Type:          |  |             |                      |          |  |            |                                      |               | ~ /                                     |
| Depth (inc     | ches):                                   |             |                      |          |  |            | Hydric Soil Present?                 | Yes           | No X                                    |
| Remarks:       | C. C |             |                      |          | The state of the s |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               |   |
|                |  |             |                      |          |  |            |                                      |               | 34                                      |
|                |  |             |                      |          |  |            |                                      |               | 150                                     |
|                |  |             |                      |          |  |            |                                      |               | 1                                       |
|                |  |             |                      |          |  |            |                                      |               | (Au                                     |

|  | ATA FORM - Northcentral and Northeast Region   |
|--|--|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 10/26/3  |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 3  |
| nvestigator(s): DJL, VJM   | Section, Township, Range: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\   |
| _andform (hillslope, terrace, etc.):   | _ Local relief (concave, convex, none): Slope (%): 3-8   |
| Subregion (LRR or MLRA): LRR-R Lat: 79.  | 142414 Long: 42-416462 Datum: NAD 83   |
| Soil Map Unit Name: Fire Silt logary (E  | NWI classification: FEM  |
| Are climatic / hydrologic conditions on the site typical for this time   | of year? Yes Y No (If no, explain in Remarks.)   |
| Are Vegetation <u>MO</u> , Soil <u>Mo</u> , or Hydrology <u>MO</u> signific  |  |
| Are Vegetation NO, Soil NO, or Hydrology NO natura   | tilly problematic? (If needed, explain any answers in Remarks.)  |
| Are vegetation 700 , Soil 700 , of Flydrology 700 hattira  | (if needed, explain any answers in Nemarks.)   |
| SUMMARY OF FINDINGS - Attach site map sho  | wing sampling point locations, transects, important features, etc  |
|  | Is the Sampled Area  |
| Hydrophytic Vegetation Present? Yes No   | within a Wetland? Yes No   |
| Hydric Soil Present?  Wetland Hydrology Present?  Yes No  No   | 1111 - 13  |
| Remarks: (Explain alternative procedures here or in a separate   |  |
|  |  |
|  |  |
|  |  |
| TO THE RESIDENCE OF THE PARTY O |  |
| HYDROLOGY  |  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all that a   | pply) Surface Soil Cracks (B6)   |
| 게 있는 것이 있는 것이 없는데 보다면 하는데 있다면 하는데 있다면 하는데  | alned Leaves (B9) Drainage Patterns (B10)  |
|  | auna (B13) Moss Trim Lines (B16)   |
| [18] [18] [18] [18] [18] [18] [18] [18]  | osits (B15) Dry-Season Water Table (C2)  |
| 가득하다 하는 것 같아. 이번 100명 보고 있다면 다른 사람들이 있는데 보고 있다면 보고 있다면 보고 있다.  | n Sulfide Odor (C1) Crayfish Burrows (C8)  Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
| 그렇게 하는 사람들이 가는 것이 되었다면 하는 것이 되었다. 그렇게 하는 것이 없는 것이었다면 없는 것이었다면 없는 것이 없는 것이었다면 없었다면 없었다면 없었다면 없었다면 없었다면 없었다면 없었다면 없  | of Reduced Iron (C4) Stunted or Stressed Plants (D1)   |
| # <del></del>  | on Reduction in Tilled Soils (C6)  |
| 이 프랑이어 보기도 이렇게 가입니다. 다리가 이렇게 그렇게 그렇게 되었다.  | k Surface (C7) Shallow Aquitard (D3)   |
| Inundation Visible on Aerial Imagery (B7) Other (Ex  | xplain in Remarks) Microtopographic Relief (D4)  |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)  |
| Field Observations:  | ,  |
| Surface Water Present? Yes No Depth (ii  |  |
| Water Table Present? Yes No Depth (ii  |  |
| Saturation Present? Yes No Depth (Includes capillary fringe)   | nches): Wetland Hydrology Present? Yes No  |
| Describe Recorded Data (stream gauge, monitoring well, aerial  | photos, previous inspections), if available:   |
|  |  |
|  |  |
| Remarks:   |  |
|  |  |
|  |  |
|  | *  |
|  |  |
|  |  |
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|  |  |
|  |  |
|  |  |

| Tree Stratum (Plot size: 30')          | Absolute | Dominant<br>Species? |         | Dominance Test worksheet:   |
|--|----------|----------------------|---------|---|
| 1. Ulmus americana                     |          |                      | FAM     | Number of Dominant Species  |
|  |          |                      |         | That Are OBL, FACW, or FAC: (A)                                     |
| 2                                      |          |                      |         | Total Number of Dominant Species Across All Strata:  (B)            |
| 3                                      |          |                      |         | Species Across All Strata: (B)                                      |
| 4                                      |          |                      |         | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B) |
| 5                                      |          |                      |         | Mat Ale OBL, FACVY, of FAC. 700 00 (A/B)                            |
| 6                                      |          |                      |         | Prevalence index worksheet:   |
| 7                                      |          |                      |         | Total % Cover of: Multiply by:                                      |
| Sapling/Shrub Stratum (Plot size: 15 ) | 5        | = Total Cov          | er 2.5  | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15 ) |          |                      | 1       | FACW species x 2 =  |
| 1                                      |          |                      |         | FAC species x 3 =   |
| 2                                      |          |                      |         | FACU species x 4 =  |
| 3                                      |          |                      |         | UPL species x 5 =   |
| 4                                      |          |                      |         | Column Totals: (A) (B)  |
| 5                                      |          | -                    |         | Prevalence Index = B/A =  |
|  |          | -                    |         | Hydrophytic Vegetation Indicators:                                  |
| 6                                      |          |                      |         | A David Tool for 16 decembed in Managerian                          |
| 7                                      | 4        |                      |         | 2 - Dominance Test is >50%  |
| -1                                     | _0_      | = Total Cov          | er      | 3 - Prevalence Index is ≤3.0 <sup>1</sup>                           |
| Herb Stratum (Plot size:)              | -        | Wer                  | dia.    | 4 Manufalacian) Adaptational /Deside supporting                     |
| 1. Onoclean Sensibiles                 | 20       | 162                  | TACO    |   |
| 2. Enthania graninifolia               | 20       |                      | Fige    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)           |
| 3. Persicaria Sp.                      | 5        | NO                   | FAC     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must   |
| 4. Poa 5pe                             | 5        | NO                   | FAC     | be present, unless disturbed or problematic.                        |
| 5. Fan So France 58.                   | 5        | NO                   | MAC     | Definitions of Vegetation Strata:                                   |
| 6                                      |          |                      |         | Tree - Woody plants 3 in. (7.6 cm) or more in diameter              |
| 7                                      |          |                      |         | at breast height (DBH), regardless of height.                       |
| 8                                      |          |                      |         | Sapling/shrub - Woody plants less than 3 in. DBH                    |
| 9                                      |          |                      |         | and greater than or equal to 3.28 ft (1 m) tall.                    |
| 10                                     |          |                      |         | Herb - All herbaceous (non-woody) plants, regardless of             |
| 11.                                    |          | -                    |         | size, and woody plants less than 3.28 ft tall.                      |
|  |          |                      |         | Woody vines - All woody vines greater than 3.28 ft in               |
| 12                                     | 01       | Tetal Car            |         | height.   |
| 301                                    | _03      | = Total Cov          | er 42.5 |   |
| Woody Vine Stratum (Plot size:)        |          |                      | 17      |   |
| 1-                                     | . —      |                      | . ——    | Hydrophytic   |
| 2                                      |          | -                    |         | Vegetation  |
| 3                                      |          |                      |         | Present? Yes No   |
| 4.                                     |          |                      |         |   |
|  |          | = Total Co           | /er     |   |

| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Coast Prairie Redox (A16) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA  | rofile Description: (Describe to the dep   | oth needed to docume  | ent the in    | dicator (         | or confirm | the absence of  | f indicators.) |  |
|--|--|---|---------------|-------------------|------------|---|----------------|--|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Clay   Gas   Gas   Clay   Gas   Gas   Clay   Gas   G |  |   | Features<br>% | Type <sup>1</sup> | _Loc²      | Texture   | Remarks        |  |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Application   |  | 7.54246   | 1             | 0                 | PL         | Muchelox  | an             |  |
| Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Tydric Soil Indicators:  Histosol (A1)  Histosol (A1)  Histo Eeipedon (A2)  Black Histo (A3)  Histo Eeipedon (A2)  Histo Eelpedon (A2)  Histo Eelpedon (A2)  MLRA 149B)  Black Histo (A3)  Histo Eelpedon (A2)  Histo Eelpedon (A2)  Coast Praire Redox (A16) (LRR K, L, R)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (S7) (LRR K, L)  Thick Dark Surface (A12)  Redox Dark Surface (F7)  Redox Dark Surface (F7)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S8)  Dark Surface (S7) (LRR R, MLRA 149B)  Andicators 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  | 0-18 104/2/1 90  | 7.5114/6  | 10            | -                 | m          | Mayla   | 2.14           |  |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  1   |  |   |               |                   |            | 710   | 7 - 27         |  |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |               |                   |            |   | A 4%           |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Material (F21)  Stripped Matrix (S6) Red Parent Material (F21)  Other (Explain in Remarks)  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  |  |   |               |                   |            |   |                |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solls (F19) (MLRA Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Material (F21)  Stripped Matrix (S6) Red Parent Material (F21) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B)  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  |  |   | 4.            |                   |            |   |                |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Solls (F19) (MLRA Sandy Gleyed Matrix (S4) Redox Depressions (F8) Red Parent Material (F21)  Stripped Matrix (S6) Red Parent Material (F21) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B)  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  |  |   | 1.11          |                   |            |   |                |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L)  Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 28 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  Hydric Soil Present? Yes No   |  |   |               |                   | _          |   | *              |  |
| Histosol (A1)  |  | =Reduced Matrix, MS=  | =Masked       | Sand Gra          | ains.      |   |                |  |
| Remarks:   | Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) Indicators of hydrophytic vegetation and were serviced to the service of the serviced in the serviced | MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8) |               |                   |            | 2 cm Muck (A10) (LRR K, L, MLRA 149B)     Coast Prairie Redox (A16) (LRR K, L, R)     5 cm Mucky Peat or Peat (S3) (LRR K, L, I)     Dark Surface (S7) (LRR K, L, M)     Polyvalue Below Surface (S8) (LRR K, L)     Thin Dark Surface (S9) (LRR K, L)     Iron-Manganese Masses (F12) (LRR K, L, Piedmont Floodplain Solls (F19) (MLRA 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Red Parent Material (F21)     Very Shallow Dark Surface (TF12)     Other (Explain in Remarks) |                |  |
|  | Remarks:   |   |               |                   |            |   |                |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_ City/County: Chautauqua County Applicant/Owner: Ball Hill Wind Energy, LLC NY Sampling Point: DP- 6 Investigator(s): DIL VITM Vi Venara Section, Township, Range:\_\_\_ Local relief (concave, convex, none): Long: 42.416424 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Erie Silt NWI classification:\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_\_\_ Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Yes No Wetland Hydrology Present? Yes \_\_\_\_ No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) \_\_ Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_ Moss Trim Lines (B16) \_\_\_ High Water Table (A2) \_ Aquatic Fauna (B13) \_\_ Dry-Season Water Table (C2) \_\_ Saturation (A3) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) \_\_ Water Marks (B1) \_\_ Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) (ron Deposits (B5) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes\_ Saturation Present? Yes \_\_\_\_ No \_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: wellard hydrony and rantors present

| VEGETATION - 1 | lan aniantifia | namos of | nlanta  |
|----------------|----------------|----------|---------|
| VEGETATION -   | use scientilic | names of | piants. |

Sampling Point: DP-

| Tran Circlism (District)                   | Absolute Dominant Indicator % Cover Species? Status  | Dominance Test worksheet:  |
|--|--|--|
| Tree Stratum (Plot size: 30')  1. Malus 50 |  | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
| 2  |  |  |
| 2  |  | Total Number of Dominant Species Across All Strata: (B)  |
| 3  |  | The state of the s |
| 4  |  | Percent of Dominant Species That Are OBL, FACW, or FAC: O Zo (A/B)   |
| 5  |  | That Ald OBE, TAOVI, OF TAO.   |
| 6  | -  | Prevalence Index worksheet:  |
| 7  |  | Total % Cover of: Multiply by:   |
|  | 40 = Total Cover 30  | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 151 )    | 12   | FACW species x 2 =   |
| 1. Mah 550                                 | 20 Yes face  | FAC species x 3 =  |
| 2  |  | FACU species x 4 =   |
| 3.   |  | UPL species x 5 =  |
| 4  |  | Column Totals: (A) (B)   |
|  |  | Prevalence Index = B/A =   |
| 5  |  | Hydrophytic Vegetation Indicators:   |
| 6  |  | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7  |  | 2 - Dominance Test is >50%   |
| ·/   | 20 = Total Cover   | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:)                  | 70 466 ET  | 4 - Morphological Adaptations (Provide supporting  |
| 1. Solda so con deste                      | 70 YES FACY  | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)   |
| 2. Asher 57                                |  |  |
| 3. Darty his glomerata                     |  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 5  |  | Definitions of Vegetation Strata:  |
|  |  | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 6  |  | at breast height (DBH), regardless of height.  |
| 7  |  | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8  |  | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9,   |  | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10   |  | size, and woody plants less than 3.28 ft tall.   |
| 11   |  | Woody vines - All woody vines greater than 3.28 ft in  |
| 12   |  | height.  |
|  | 90 = Total Cover 45  |  |
| Woody Vine Stratum (Plot size: 30 )        | 18   |  |
| 1  |  |  |
| l.a  |  | Hydrophytic Vegetation   |
| 2.   | the second secon |  |
| 23.  |  | Present? Yes No  |
| 2  |  | Present? Yes No/   |
| 2  |  | Present? Yes No _/   |

| inches (Color (color)  | Rede   | ox Features | - 1       | 2                     |                  |  |                  |
|--|--|-------------|-----------|-----------------------|------------------|--|------------------|
|  | % Color (moist)  | %           | Type'     | Loc                   | Texture          | Remarks  |                  |
|  | 00 -   |             |           |                       | Siltloom         |  | 9                |
| 10-12 104R4/3 /  | 00   | -mate.      | 43000     | Management &          | Silt/cara        |  |                  |
|  |  |             |           |                       |                  |  |                  |
|  |  |             |           |                       |                  |  |                  |
|  |  |             |           |                       |                  |  | 100              |
|  |  |             |           | *                     |                  |  |                  |
|  |  |             |           |                       |                  | A CONTRACTOR OF THE PARTY OF TH | en i monto de la |
|  |  |             |           | -                     | -                | ****   |                  |
|  | 315  |             |           |                       |                  |  |                  |
|  |  |             |           |                       |                  |  |                  |
|  |  |             |           |                       |                  |  |                  |
|  |  |             |           |                       |                  |  |                  |
|  |  | -           |           |                       |                  |  |                  |
| Funci C=Concentration D=Depleties                            | DM-Dadward Matrix M  | C-Marker d  |           |                       | 21               | Dan Halan Make   |                  |
| Type: C=Concentration, D=Depletion<br>ydric Soil Indicators: | i, Rivi=Reduced Iviatrix, Ivi  | S=Wasked    | Sand Gra  | iins.                 |                  | Pore Lining, M=Ma<br>roblematic Hydric   |                  |
| _ Histosol (A1)  | Polyvalue Belo   | w Surface   | (S8) (LRR | R,                    |                  | A10) (LRR K, L, M  |                  |
| _ Histic Epipedon (A2)                                       | MLRA 149B  |             |           |                       | Coast Prairie    | Redox (A16) (LR  | R K, L, R)       |
| Black Histic (A3)<br>Hydrogen Sulfide (A4)                   | Thin Dark Surf   |             |           |                       |                  | Peat or Peat (S3)  |                  |
| Stratified Layers (A5)                                       | Loamy Mucky<br>Loamy Gleyed  |             |           | L)                    |                  | e (S7) (LRR K, L, I<br>elow Surface (S8) (   |                  |
| Depleted Below Dark Surface (A1                              |  |             |           |                       |                  | urface (S9) (LRR K   |                  |
| _ Thick Dark Surface (A12)                                   | Redox Dark Su  |             |           |                       |                  | ese Masses (F12)   |                  |
| Sandy Mucky Mineral (S1)<br>Sandy Gleyed Matrix (S4)         | Depleted Dark Redox Depress  |             | 7)        |                       |                  | oodplain Soils (F19  |                  |
| Sandy Redox (S5)   | Redox Depres   | Sions (Fo)  |           |                       |                  | c (TA6) ( <b>MLRA 14</b><br>Material (F21)   | 4A, 145, 1491    |
| Stripped Matrix (S6)   |  |             |           | dear for the state of |                  | v Dark Surface (TF   | 12)              |
| _ Dark Surface (S7) (LRR R, MLRA                             | (149B)   |             |           |                       | Other (Expla     | in in Remarks)   |                  |
| ndicators of hydrophytic vegetation a                        | nd wetland hydrology mu  | st he prese | nt unless | disturbed             | or problematic   |  |                  |
| estrictive Layer (if observed):                              |  | a, so proce | n, amooc  | diotalbou             |                  | *  |                  |
| Type: gravel   |  |             |           |                       |                  |  | ~                |
| Depth (inches): /2/1   |  |             |           |                       | Hydric Soil Pres | ent? Yes   | _ No <u></u>     |
|  | The said Street Control of the said Street Contr |             |           |                       |                  | 11.  |                  |
| emarks;  |  |             |           |                       |                  |  |                  |
| emarks;  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks;  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |
| emarks:  |  |             |           |                       |                  |  |                  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Sampling Date: 10/27/2015 City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_\_\_ Sampling Point: DP-State: NY VillenaVA Investigator(s): DJC \_\_ Section, Township, Range:\_ Subregion (LRR or MLRA): LRR-R Soll Map Unit Name: File Sit loan 1818 NVII classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_ No \_ (If no, explain in Remarks.) Are Vegetation NO, Soil ND, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation <u>MO</u>, Soil <u>MD</u>, or Hydrology <u>M</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-B 7 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Drainage Patterns (B10) ✓ Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_ Moss Trim Lines (B16) X High Water Table (A2) Aquatic Fauna (B13) ★ Saturation (A3) \_\_ Dry-Season Water Table (C2) Marl Deposits (B15) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) □ Geomorphic Position (D2) \_\_ Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) Thin Muck Surface (C7) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Depth (inches): Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Saturation Present? Depth (Inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Absolute<br>% Cover | Species?        | Indicator<br>Status | Dominance Test worksheet:   |
|---------------------|-----------------|---------------------|---|
|                     |                 |                     | Number of Dominant Species That Are OBL, FACW, or FAC:  |
|                     |                 |                     |   |
|                     |                 |                     | Total Number of Dominant Species Across All Strata: (B)   |
|                     |                 |                     |   |
|                     |                 |                     | Percent of Dominant Species That Are OBL, FACW, or FAC: 106 % (A/B)   |
|                     |                 |                     |   |
| -                   | -               |                     | Prevalence Index worksheet:   |
|                     | -               |                     | Total % Cover of: Multiply by:  |
| 0                   | = Total Co      | /er                 | OBL species x 1 =   |
|                     |                 |                     | FACW species x 2 =  |
|                     |                 |                     | FAC species x 3 =   |
|                     |                 |                     | FACU species x 4 =  |
|                     |                 |                     | UPL species x 5 =   |
|                     |                 |                     | Column Totals: (A) (B)  |
|                     |                 |                     | Prevalence Index = B/A =  |
|                     |                 |                     | Hydrophytic Vegetation Indicators:  |
|                     |                 |                     | 1 - Rapid Test for Hydrophytic Vegetation   |
| 1                   | - Total Cov     | 101                 | X 2 - Dominance Test is >50%  |
|                     | - Total Co      | 701                 | 3 - Prevalence Index is ≤3.01   |
| 3/)                 | WC C            | Frens               | 4 - Morphological Adaptations (Provide supporting   |
|                     | 111.1           | -                   | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)                            |
|                     |                 |                     | Problematic Hydrophytic Vegetation (Explain)  |
|                     |                 |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|                     |                 | TACW                |   |
| 5                   | NO              | DBV                 | Definitions of Vegetation Strata:   |
| -5                  | NO              | facw                | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
|                     |                 |                     | Sapling/shrub – Woody plants less than 3 in. DBH  |
|                     |                 |                     | and greater than or equal to 3.28 ft (1 m) tall.  |
|                     | -               |                     | Herb - All herbaceous (non-woody) plants, regardless of   |
|                     | -               |                     | size, and woody plants less than 3.28 ft tall.  |
|                     |                 |                     | Woody vines – All woody vines greater than 3.28 ft in   |
|                     |                 |                     | height.   |
| 70                  | _ = Total Co    | ver 35              |   |
| 0                   | 0)              |                     | Hydrophytic   |
| ,                   |                 |                     | Vegetation  |
| b:                  | -               |                     | Present? Yes No   |
|                     |                 |                     |   |
|                     | v allelia de la |                     |   |
| 0                   | = Total Co      | ver                 |   |
|                     | 30 30 55 55     | = Total Cov         | = Total Cover  = Total Cover  30 YES FACW  30 YES OBL  5 NO FACW      |

| (inches)   | Matrix   |           | Redox F                              |            |             | 2                | T                      | Remarks   |
|--|--|-----------|--------------------------------------|------------|-------------|------------------|------------------------|---|
|  | Color (moist)  | _%_       | Color (moist)                        | <u>%</u> _ | _Type¹      | Loc <sup>2</sup> |                        |   |
| 0-6  | 10/11/2  | 95        | 7.5 Yn 5/9                           | 2          | 0           | M                | Silt loss              | 2   |
| 6-10   | 2.545/2  | 95        | 7.5415/3                             | 5          | _           | M                | GIA CHAIL              | DA Res  |
|  |  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
| -  | and the second second second second  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
|  | -  |           | -                                    |            |             |                  |                        |   |
|  |  |           | -                                    |            | -           |                  |                        | - Walter  |
|  |  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
|  |  |           |                                      |            |             |                  |                        |   |
| Type: C=C  | oncentration, D=Depl   | etion. RM | =Reduced Matrix, MS=                 | Masked     | Sand Gr     | ains.            | <sup>2</sup> Location: | PL=Pore Lining, M=Matrix.                                       |
|  | Indicators:  |           | ¥1.                                  |            |             |                  |                        | or Problematic Hydric Soils <sup>3</sup> :                      |
| Histoso  |  |           | Polyvalue Below                      | Surface    | (S8) (LRI   | RR,              |                        | ick (A10) (LRR K, L, MLRA 149B)                                 |
|  | pipedon (A2)   |           | MLRA 149B)                           |            |             |                  |                        | rairie Redox (A16) (LRR K, L, R)                                |
|  | istic (A3)   |           | Thin Dark Surface<br>Loamy Mucky Mir |            |             |                  |                        | ucky Peat or Peat (S3) (LRR K, L, R) rface (S7) (LRR K, L, M)   |
|  | en Sulfide (A4)<br>d Layers (A5)   |           | Loamy Gleyed Ma                      |            |             | , -/             |                        | ue Below Surface (S8) (LRR K, L)                                |
|  | d Below Dark Surface   | (A11)     | Z Depleted Matrix (                  |            | ,           |                  |                        | rk Surface (S9) (LRR K, L)                                      |
|  | ark Surface (A12)  |           | Redox Dark Surfa                     |            |             |                  |                        | nganese Masses (F12) (LRR K, L, R)                              |
|  | Mucky Mineral (S1)   |           | Depleted Dark Su                     |            | 7)          |                  |                        | nt Floodplain Soils (F19) (MLRA 149E                            |
| Sandy  | Gleyed Matrix (S4)   |           | Redox Depressio                      | ns (F8)    |             |                  |                        | podic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>ent Material (F21) |
|  |  |           |                                      |            |             |                  |                        | allow Dark Surface (TF12)                                       |
| _ Sandy l  |  |           |                                      |            |             |                  |                        | translation to Disconnection)                                   |
| Sandy l  | d Matrix (S6)<br>urface (S7) (LRR R, N   | ILRA 149  | <b>B</b> )                           |            |             |                  | Other (E               | Explain in Remarks)   |
| Sandy I<br>Stripped<br>Dark Su                                     | d Matrix (S6)<br>urface (S7) (LRR R, N   |           |                                      |            | ut inles    | a diatudas       |                        | explain in Remarks)   |
| Sandy I Stripped Dark Su   | d Matrix (S6)<br>urface (S7) (LRR R, N<br>of hydrophytic vegetat                         | ion and w | B)<br>etland hydrology must l        | be prese   | ent, unles: | s disturbed      |                        | explain in Remarks)   |
| Sandy I Stripped Dark Su Indicators of                             | d Matrix (S6)<br>urface (S7) (LRR R, N<br>of hydrophytic vegetat<br>Layer (if observed): | ion and w | etland hydrology must l              | be prese   | ent, unles: | s disturbed      |                        | explain in Remarks)   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type:           | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles: | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      |                        | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles: | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type:           | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |
| Sandy I Stripped Dark Su Indicators of Restrictive Type: Depth (ir | d Matrix (S6) urface (S7) (LRR R, N of hydrophytic vegetat Layer (if observed):          | ion and w | etland hydrology must l              | be prese   | ent, unles  | s disturbed      | d or problematic.      | <i></i>   |

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: 10/27 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): \_ DJL Section, Township, Range:\_\_\_ Landform (hillslope, terrace, etc.): Till Plain Local relief (concave, convex, none): Convex Subregion (LRR or MLRA): LRR-R Lat: Soil Map Unit Name: Fresit / loga (ErB) NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ \_\_ (If no, explain in Remarks.) Are Vegetation <u>NO</u>, Soil <u>NO</u>, or Hydrology <u>NO</u> significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No., Soil 16, or Hydrology 10 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? Wetland Hydrology Present? Yes\_ No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) \_\_ Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_\_ Moss Trim Lines (B16) \_\_ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_ Saturation (A3) \_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) \_\_\_ Water Marks (B1) \_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Yes \_\_\_\_ No X Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_ Saturation Present? No X Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: to wetland by doology Indicators thesen to Remarks:

| Tree Stratum (Plot size: 30/       | % Cover | Dominant Indicator Species? Status | Dominance Test worksheet: Number of Dominant Species   |
|------------------------------------|---------|------------------------------------|--|
| 1.                                 |         |                                    | That Are OBL, FACW, or FAC: (A)  |
| 2                                  |         |                                    | Total Number of Dominant Species Across All Strata: (B)  |
| 3                                  |         |                                    |  |
| 5                                  |         |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)   |
|                                    |         |                                    |  |
| 6                                  |         |                                    | Prevalence Index worksheet:  |
|                                    | n       | = Total Cover                      |  |
| Sapling/Shrub Stratum (Plot size:  |         | _ = Total Cover                    | FACW species x 2 =   |
| Saping/Shrub Stratum (Plot size.   | 40      | 499 402                            | FAC species x 3 =  |
| 1. Rhue tuthing<br>2. Ruby idaeus  | 35      | YES FOLL                           | FACU species x 4 =   |
| Br. allere read                    | 60      | YES FACU                           | UPL species x 5 =  |
| 3. Rubus allegheniensu             |         |                                    | Column Totals: (A) (B)   |
| 4                                  |         |                                    | Prevalence Index = B/A =   |
| 5                                  |         |                                    |  |
| 6                                  |         |                                    | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                           |
| 7                                  | - 1     |                                    |  |
| <-/r>                              | 135     | = Total Cover 67.5                 | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| Herb Stratum (Plot size:)          |         | 27                                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 1. Clematis                        |         |                                    | data in Remarks or on a separate sheet)  |
| 2                                  |         |                                    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3                                  |         |                                    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 4                                  |         |                                    | be present, unless disturbed or problematic.   |
| 5                                  |         |                                    | Definitions of Vegetation Strata:  |
| 6                                  |         |                                    | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7                                  |         |                                    | at breast height (DBH), regardless of height.  |
| 8                                  |         |                                    | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9                                  |         |                                    | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10                                 |         |                                    | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11.                                |         |                                    |  |
| 12.                                |         |                                    | Woody vines - All woody vines greater than 3.28 ft in height.  |
|                                    | 0       | = Total Cover                      | neight.  |
| Woody Vine Stratum (Plot size: 30) | -       | 10141 00101                        |  |
| 1                                  |         |                                    |  |
| 2                                  | _       |                                    | Hydrophytic  |
| 2                                  |         |                                    | Vegetation Present? Yes No   |
| 3                                  |         |                                    | 11030111   |
|                                    |         |                                    |  |
| 4                                  | 0       | = Total Cover                      | l l  |

| Matrix   |   |  | x Features   | 1  |  |  |  |
|--|---|--|--|--|--|--|--|
| Color (moist)  | _%_   | Color (moist)  | - %  | Type <sup>1</sup>  | Loc <sup>2</sup>   |  | Remarks  |
| 10/R3/2  | 70  | 7.577 3/4  | 10   |  | 9  | 314 Cam  |  |
|  |   |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |
|  |   |  |  |  |  |  |  |
|  | lation DM   | -Dadward Matthy At   | C-Maskad   |  |  | Zi castion. I  | Ol - Dava Lining Maddaly   |
|  | ieuon, RM   | -Reduced Matrix, MS  | o-wasked   | Sand Gra   | 1118.  |  | PL=Pore Lining, M=Matrix. r Problematic Hydric Solls <sup>3</sup> :  |
| (A1) pipedon (A2) stic (A3) on Sulfide (A4) I Layers (A5) Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Beyed Matrix (S4) Redox (S5) Matrix (S6) |   | <ul> <li>Polyvalue Below Surface (S8) (LRR R, MLRA 149B)</li> <li>Thin Dark Surface (S9) (LRR R, MLRA 149B)</li> <li>Loamy Mucky Mineral (F1) (LRR K, L)</li> <li>Loamy Gleyed Matrix (F2)</li> <li>Depleted Matrix (F3)</li> <li>Redox Dark Surface (F6)</li> <li>Depleted Dark Surface (F7)</li> <li>Redox Depressions (F8)</li> </ul> |  |  | RA 149B)   | 2 cm Muc Coast Pro 5 cm Muc Dark Suri Polyvalue Thin Dark Iron-Man Piedmont Mesic Sp Red Pare Very Sha | ck (A10) (LRR K, L, MLRA 149B) airie Redox (A16) (LRR K, L, R) cky Peat or Peat (S3) (LRR K, L, R) face (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) k Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) t Floodplain Soils (F19) (MLRA 149B) bodic (TA6) (MLRA 144A, 145, 149B) ent Material (F21) allow Dark Surface (TF12) kplain in Remarks) |
|  |   | etland hydrology mus   | st be prese  | ent, unless  | disturbed  | or problematic.  |  |
| Layer (if observed):   |   |  |  |  |  |  | 1  |
| ches):   |   |  |  |  |  | Hydric Soil Pr   | resent? Yes No   |
|  |   |  |  | 1-11-00-00   |  |  | <del>- 7</del>   |
|  |   | July Plan  |  |  |  |  |  |
|  | oncentration, D=Dep<br>Indicators: (A1) Dipedon (A2) Stic (A3) En Sulfide (A4) Id Layers (A5) Id Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Beleyed Matrix (S4) Redox (S5) I Matrix (S6) I face (S7) (LRR R, I | oncentration, D=Depletion, RM: Indicators: (A1) Dipedon (A2) Stic (A3) En Sulfide (A4) Id Layers (A5) Id Below Dark Surface (A11) Eark Surface (A12) Mucky Mineral (S1) Eleyed Matrix (S4) Redox (S5) I Matrix (S6) I face (S7) (LRR R, MLRA 1498 If hydrophytic vegetation and we Layer (if observed):                                  | concentration, D=Depletion, RM=Reduced Matrix, Maindicators:  (A1) | Directorization, D=Depletion, RM=Reduced Matrix, MS=Masked Indicators:  (A1) | Dencentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Graindicators:  (A1) | Doncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Indicators:  (A1)               | Directification, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Indicators:  (A1)   |

### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 10/27/201   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP-/2  Section, Township, Range: MICANA   |  |  |  |  |  |
|  |   |  |  |  |  |  |
| Landform (hillslope, terrace, etc.): $Q = 0.55 \text{ loo}$ Subregion (LRR or MLRA): $LRR-R$ Lat: Soil Map Unit Name: $AChvilos bilot band$ Are climatic / hydrologic conditions on the site typical for the Vegetation $N^0$ , Soil $N^0$ , or Hydrology $N^0$ Are Vegetation $N^0$ , Soil $N^0$ , or Hydrology $N^0$ | Local relief (concave, convex, none):   |  |  |  |  |  |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Yes  Yes  Yes   | No Is the Sampled Area within a Wetland? Yes No No If yes, optional Wetland Site ID:  |  |  |  |  |  |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check a  |   |  |  |  |  |  |
| High Water Table (A2) A  | /ater-Stained Leaves (B9) Drainage Patterns (B10) quatic Fauna (B13) Moss Trim Lines (B16) arl Deposits (B15) Dry-Season Water Table (C2) |  |  |  |  |  |
|  | ydrogen Sulfide Odor (C1) Crayfish Burrows (C8)   |  |  |  |  |  |
|  | xidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)   |  |  |  |  |  |
| Drift Deposits (B3) P  | resence of Reduced Iron (C4) Stunted or Stressed Plants (D1)  |  |  |  |  |  |
|  | ecent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  |  |  |  |  |  |
| 기가 가장 가장 하다 이렇게 하다. 이렇게 다른 사람들이 되었다면 그런  | hin Muck Surface (C7) Shallow Aquitard (D3)   |  |  |  |  |  |
| Inundation Visible on Aerial Imagery (B7) O Sparsely Vegetated Concave Surface (B8)  | ther (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)  |  |  |  |  |  |
| Field Observations:  |   |  |  |  |  |  |
| Surface Water Present? Yes No I Water Table Present? Yes No I  | Depth (inches): Wetland Hydrology Present? Yes No   |  |  |  |  |  |
| Remarks:   |   |  |  |  |  |  |
| Tomana.  |   |  |  |  |  |  |

| Absolute<br>% Cover  |             |  | Dominance Test worksheet:  |
|--|-------------|--|--|
| A  | 0.1218.33   |  | Number of Dominant Species That Are ORL FACW or FAC:  (A)  |
|  |             |  | That Are OBL, FACW, or FAC: (A)  |
|  | -           |  | Total Number of Dominant<br>Species Across All Strata: (B)   |
|  |             |  | Species Across All Strata: (B)   |
|  |             |  | Percent of Dominant Species  |
|  |             |  | That Are OBL, FACW, or FAC: 160% (A/B  |
|  |             |  |  |
|  |             |  | Prevalence Index worksheet:  |
|  | 10735783    |  | Total % Cover of: Multiply by:   |
| _0   | = Total Cov | rer  | OBL species x 1 =  |
|  |             |  | FACW species x 2 =   |
|  |             |  | FAC species x 3 =  |
|  |             |  | FACU species x 4 =   |
|  |             |  | UPL species x 5 =  |
|  |             |  | Column Totals: (A) (B  |
|  |             |  | A CONTRACTOR OF THE CONTRACTOR |
|  | MARIN       |  | Prevalence Index = B/A =   |
|  |             |  | Hydrophytic Vegetation Indicators:   |
|  |             |  | 1 - Rapid Test for Hydrophytic Vegetation  |
|  | - Total Car |  | X 2 - Dominance Test is >50%   |
|  | = Total Cov | /er  | 3 - Prevalence Index is ≤3.01  |
| 2.12   |             |  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 40   |             | MAC  | data in Remarks or on a separate sheet)  |
| 20   | 465         | OBL  | Problematic Hydrophytic Vegetation¹ (Explain)  |
|  | NO          | FAL  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| The state of the s |             |  | be present, unless disturbed or problematic.   |
|  |             |  | Definitions of Vegetation Strata:  |
|  | -           |  |  |
|  |             |  | Tree - Woody plants 3 in. (7.6 cm) or more in diamete  |
|  |             |  | at breast height (DBH), regardless of height.  |
|  |             |  | Sapling/shrub - Woody plants less than 3 in. DBH   |
|  |             |  | and greater than or equal to 3.28 ft (1 m) tall.   |
|  |             |  | Herb - All herbaceous (non-woody) plants, regardless of  |
|  |             |  | size, and woody plants less than 3.28 ft tall.   |
|  | -           |  | Woody vines - All woody vines greater than 3.28 ft in  |
|  |             |  | height.  |
| 85   | = Total Co  | ver ,  |  |
|  |             | 42.5   |  |
|  |             | 17   | 1 . 2  |
|  |             |  | Hydrophytic  |
| -  | -           |  | Vegetation   |
|  | -           |  | Present? Yes No  |
|  |             |  |  |
|  |             |  |  |
|  | % Cover     | Cover Species?  Cover Species.  Cover Species. | Cover Species? Status  O = Total Cover  O = Total Cover  40 465 FAC  30 YES OBL  15 NO FAL   |

| Profile Desc   | ription: (Describe t                    | o the dep | th needed to docum   | nent the  | indicator              | or confirm        | the absence of indic           | ators.)  |
|----------------|---|-----------|--|-----------|------------------------|-------------------|--------------------------------|--|
| Depth (inches) | Matrix Color (moist)                    | %         | Color (moist)  | x Feature | s<br>Type <sup>1</sup> | _Loc <sup>2</sup> | Tavelusa                       | Remarks  |
| (inches)       | - 1                                     |           | 4 /  | %         |                        |                   |                                | Remarks  |
| 0-10           | 10423/1                                 | 15        | 7.5 423/4  |           | -                      | m                 | Chy loun                       |  |
| 10-18          | 10/1 5/2                                | 90        | 7.5125/6   | 10        | 6                      | n                 | Charlown                       |  |
|                |   |           |  |           |                        |                   |                                |  |
|                | *************************************** |           |  |           |                        |                   |                                |  |
|                | -                                       |           |  | -         | 1                      |                   |                                |  |
|                | *************************************** |           |  |           |                        |                   |                                |  |
|                | -                                       |           |  | -         | -                      |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           | -                      |                   |                                |  |
|                |   |           |  |           |                        | <del></del>       |                                |  |
|                |   |           |  |           |                        |                   | accommon and accommon accommon |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
| 1Typo: C=C     | noontestion D-D1                        | otion DM  | -Paduood Matrix Add  |           |                        |                   | 21 contient DI -De             | ore Lining, M=Matrix.                          |
| Hydric Soil    |   | edon, KW  | =Reduced Matrix, MS  | -waske    | J Sand Gr              | airis.            |                                | ore Lining, M=Matrix.                          |
| Histosol       |   |           | Polyvalue Belov  | v Surface | (S8) (LR               | RR.               |                                | 0) (LRR K, L, MLRA 149B)                       |
|                | ipedon (A2)                             |           | MLRA 149B)   |           |                        |                   |                                | tedox (A16) (LRR K, L, R)                      |
| Black Hi       |   |           | Thin Dark Surfa  |           |                        |                   |                                | eat or Peat (S3) (LRR K, L, R)                 |
|                | n Sulfide (A4)<br>I Layers (A5)         |           | Loamy Mucky N  |           |                        | , L)              |                                | S7) (LRR K, L, M)<br>w Surface (S8) (LRR K, L) |
|                | l Below Dark Surface                    | (A11)     | Loamy Gleyed I Depleted Matrix   |           | -)                     |                   |                                | ace (S9) (LRR K, L)                            |
|                | rk Surface (A12)                        | (,        | X Redox Dark Sur   |           |                        |                   |                                | e Masses (F12) (LRR K, L, R)                   |
|                | lucky Mineral (S1)                      |           | Depleted Dark  |           | <b>-7)</b>             |                   |                                | dplain Soils (F19) (MLRA 149B)                 |
|                | leyed Matrix (S4)                       |           | Redox Depress  | ions (F8) |                        |                   |                                | TA6) (MLRA 144A, 145, 149B)                    |
|                | edox (S5)<br>Matrix (S6)                |           |  |           |                        |                   | Red Parent Ma                  | nerial (F21)<br>Park Surface (TF12)            |
|                | face (S7) (LRR R, M                     | LRA 1491  | B)   |           |                        |                   | Other (Explain                 |  |
|                |   |           |  |           |                        |                   |                                | 120/10/2014                                    |
|                |   | on and we | etland hydrology mus   | t be pres | ent, unless            | disturbed         | or problematic.                |  |
|                | _ayer (if observed):                    |           |  |           |                        |                   |                                |  |
| Type:          | Jr N                                    |           |  |           |                        |                   | Hadda Oall Dansand             | 10 VII V                                       |
| Depth (in      | cnes):                                  |           | - marinda de la companya de la comp |           |                        | n - 14            | Hydric Soil Present            | ? Yes No                                       |
| Remarks:       |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                | 2  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |
|                |   |           |  |           |                        |                   |                                |  |

| Project/Site: Ball Hill Wind Project   |   | autauqua County Sampl                    | ling Date: 10/27/2      |
|--|---|--|-------------------------|
| Applicant/Owner: Ball Hill Wind Energy, LLC  |   |  | npling Point: DP-/4     |
| nvestigator(s): DJL VJM  | Section, Townshi                              | A 11                                     | ipining i onic.         |
| 1 -1 1   |   |  | Slope (%):              |
|  |   | , convex, none):                         |                         |
| Subregion (LRR or MLRA): LRR-R Lat:  |   | Long: 42.410757                          | Datum: NAD 83           |
| Soil Map Unit Name: Fite 51/+ foge   | n (EIB)                                       | NWI classification:_                     |                         |
| Are climatic / hydrologic conditions on the site typical fo  | r this time of year? Yes                      | No (If no, explain in Remarks            | .)                      |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>X</u> (  | 2_significantly disturbed?                    | Are "Normal Circumstances" present       | ? Yes No                |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>N</u>  | naturally problematic?                        | (If needed, explain any answers in Re    | emarks.)                |
|  |   |  |                         |
| SUMMARY OF FINDINGS – Attach site m  | ap showing sampling po                        | int locations, transects, impo           | ortant reatures, etc.   |
| Hydrophytic Vegetation Present? Yes  | No / Is the San                               | npled Area                               |                         |
| Hydric Soil Present? Yes   | 141.1   | Vetland? Yes No                          | X                       |
| Wetland Hydrology Present? Yes   | . /   | onal Wetland Site ID:                    |                         |
| Remarks: (Explain alternative procedures here or in a  |   |  |                         |
| HYDROLOGY Wetland Hydrology Indicators:  |   | Secondary Indicators (m                  | inimum of two required) |
|  | all that annly                                |  |                         |
| Primary Indicators (minimum of one is required; check  |   | Surface Soil Cracks Drainage Patterns (l |                         |
| - Carrier - Carr | Water-Stained Leaves (B9) Aquatic Fauna (B13) | Moss Trim Lines (B                       |                         |
|  | Marl Deposits (B15)                           | Dry-Season Water                         |                         |
|  | Hydrogen Sulfide Odor (C1)                    | Crayfish Burrows (C                      |                         |
|  | Oxidized Rhizospheres on Living               |  | n Aerial Imagery (C9)   |
| Drift Deposits (B3)  | Presence of Reduced Iron (C4)                 | Stunted or Stressed                      | Plants (D1)             |
| Algal Mat or Crust (B4)  | Recent Iron Reduction in Tilled S             | Soils (C6) Geomorphic Positio            | n (D2)                  |
|  | Thin Muck Surface (C7)                        | Shallow Aquitard (D                      |                         |
| 어제하다 그렇게 그녀를 열었다면 그들을 그렇다 수 있는데 없는데 되는데 이 그렇게 하는데 하나 나를 느꼈다.   | Other (Explain in Remarks)                    | Microtopographic Re                      |                         |
| Sparsely Vegetated Concave Surface (B8)  |   | FAC-Neutral Test (E                      | 05)                     |
| Field Observations: Surface Water Present? Yes NoX   | Depth (inches):                               |  |                         |
|  | Depth (inches):                               |  |                         |
|  | Depth (inches):                               | Wetland Hydrology Present? You           | es No                   |
| Saturation Present? Yes No No  | Deptit (inches).                              | Wettalid Hydrology Fresentr 10           |                         |
| Describe Recorded Data (stream gauge, monitoring v   | vell, aerial photos, previous inspe           | ctions), if available:                   |                         |
|  |   |  |                         |
| Remarks:   |   | ·  |                         |
| No wetland hyo   | lovery indica                                 | tors present                             |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |
|  |   |  |                         |

| 2.1                                      | Absolute | Dominant Indicator | Dominance Test worksheet:                                 |                |       |
|--|----------|--------------------|---|----------------|-------|
| <u>Tree Stratum</u> (Plot size: <u>3</u> | % Cover  | Species? Status    | Number of Dominant Species<br>That Are OBL, FACW, or FAC  | 0              | (A)   |
| 2  |          |                    | Total Number of Dominant<br>Species Across All Strata:    | 5              | (B)   |
| 45.                                      |          |                    | Percent of Dominant Species<br>That Are OBL, FACW, or FAC | 0              | (A/B) |
| 6  |          |                    | Prevalence Index worksheet                                |                |       |
|  | 0        | = Total Cover      | Total % Cover of: OBL species                             |                |       |
| Sapling/Shrub Stratum (Plot size: 15 )   |          | +                  | FACW species  |                |       |
| 2  |          |                    | FACU species  | x 4 =<br>x 5 = |       |
| 3  |          |                    | Column Totals:  |                |       |
| <b>459</b> .                             |          |                    | Prevalence Index = B/A                                    | -              |       |
|  |          |                    | Hydrophytic Vocatation India                              | catore         |       |

| 2.                                     |     |                |           | Example 12 and 1   | -                  |          |
|--|-----|----------------|-----------|--|--------------------|----------|
| 3.                                     |     |                | 7.7       | Total Number of Dominant<br>Species Across All Strata:   | 5                  | (B)      |
| 4.                                     |     |                |           | Percent of Dominant Species  | 0                  |          |
| 5.                                     |     |                |           | That Are OBL, FACW, or FAC:  | 0                  | (A/B)    |
| 5.                                     |     |                |           | Decualance Index weekshoots  |                    |          |
| 7.                                     |     |                |           | Prevalence Index worksheet:  | Maritian ben       |          |
|  | _   | T-1-1 O-       |           | Total % Cover of:  |                    |          |
| Sapling/Shrub Stratum (Plot size: 15)  |     | _ = Total Co   | ver       | OBL species x 1  |                    |          |
| Sapling/Shrub Stratum (Plot size: /> ) |     |                | +         | FACW species x 2   |                    |          |
| 1                                      |     |                |           | FAC species x 3  |                    |          |
| 2.                                     |     |                |           | FACU species x 4   |                    |          |
| 3.                                     |     |                |           | UPL species x 5  |                    |          |
| 4.                                     |     |                |           | Column Totals: (A)   | -                  | — (B)    |
| 5                                      |     |                |           | Prevalence Index = B/A =   |                    |          |
| 6.                                     |     |                |           | Hydrophytic Vegetation Indicate  | ors:               |          |
| 7.                                     |     | -              |           | 1 - Rapid Test for Hydrophytic   |                    |          |
|  |     |                |           | 2 - Dominance Test is >50%   |                    |          |
| < '                                    |     | _ = Total Co   | ver       | 3 - Prevalence Index is ≤3.01  |                    |          |
| Herb Stratum (Plot size: 5)            | 2   | 465            | FACU      | 4 - Morphological Adaptations  |                    |          |
|  |     |                | FACU      | data in Remarks or on a se   |                    |          |
|  | 20  | 466            |           |  |                    |          |
| 3. Dactylis glomesata                  |     | 761            | FACU      | <sup>1</sup> Indicators of hydric soil and wetla<br>be present, unless disturbed or pre  |                    | must     |
| 4. Paricus Capillare                   |     | VES            | FAC       | Definitions of Vegetation Strata:  |                    |          |
| 5. Plantage major                      | 20  | 10)            | Tricy     |  |                    |          |
| 6                                      |     |                |           | Tree – Woody plants 3 in. (7.6 cm at breast height (DBH), regardless   |                    | liameter |
| 7                                      |     |                |           | Sapling/shrub - Woody plants le  |                    | DDLI     |
| 8                                      |     |                |           | and greater than or equal to 3.28  |                    | חסכ      |
| 9                                      |     |                |           | Herb - All herbaceous (non-woody)  | nlants regardl     | ess of   |
| 10                                     |     |                |           | size, and woody plants less than 3.28  |                    | 000 01   |
| 11                                     |     |                |           | Woody vines - All woody vines grea   | ter than 3.28 f    | in       |
| 12                                     | -   |                |           | height.  | 135,110111 ()/47,4 |          |
| 2.1                                    | 100 | _ = Total Co   | ver 50    |  |                    |          |
| Woody Vine Stratum (Plot size: 30)     |     |                | gond (and |  |                    |          |
| 1                                      |     |                |           | Wall of the Control o | 1                  |          |
| 2.                                     |     |                |           | Hydrophytic<br>Vegetation  | 1                  |          |
| 3.                                     |     |                |           | Present? Yes   | No _               |          |
| 4                                      |     |                |           | 2  |                    |          |
|  | 0   | = Total Co     | ver       |  |                    |          |
|  |     | - 00.1625.22.5 | 121       |  |                    |          |

Northcentral and Northeast Region - Version 2.0

|                   |   | o the dep    |                             |            |             | or confirm       | the absence of ind          | cators.)   |
|-------------------|---|--------------|-----------------------------|------------|-------------|------------------|-----------------------------|--|
| Depth<br>(inches) | Matrix Color (moist)                    | %            | Color (moist)               | x Feature: |             | Loc <sup>2</sup> | Texture                     | Remarks  |
| An -9             |   | 100          |                             |            | _           |                  | Silt loan                   |  |
| G-12              | 104041-                                 | /            | 714056                      | -          | -           | no               | rild                        |  |
| 7-18              | 10110113                                | 75           | 7.5412 5/8                  |            |             | 101              | 21//6000                    |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   | *************************************** |              |                             |            |             |                  |                             | The Park Control of the Control of t |
|                   |   |              |                             |            |             |                  |                             | The second distribution and distribution and the second distribution and distribution and distribution and distrib |
|                   |   |              |                             |            |             | -                |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             | With the second  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            | -           |                  |                             | -1000  |
|                   |   |              |                             |            |             |                  |                             |  |
| ¹Type: C=Ce       | oncentration, D=Depl                    | etion RM:    | =Reduced Matrix M           | S=Masked   | Sand G      | ains.            | <sup>2</sup> Location: PL=F | Pore Lining, M=Matrix.   |
| Hydric Soil       |   | - 3011 13111 | Indiana                     |            |             |                  |                             | oblematic Hydric Soils <sup>3</sup> :  |
| Histosol          | (A1)                                    |              | Polyvalue Belo              | w Surface  | (S8) (LR    | RR,              | 2 cm Muck (A                | (10) (LRR K, L, MLRA 149B)   |
|                   | pipedon (A2)                            |              | MLRA 149B                   |            |             |                  |                             | Redox (A16) (LRR K, L, R)  |
| Black Hi          |   |              | Thin Dark Surf              |            |             |                  |                             | Peat or Peat (S3) (LRR K, L, R)  |
|                   | en Sulfide (A4)<br>d Layers (A5)        |              | Loamy Mucky<br>Loamy Gleyed |            |             | , L)             |                             | (S7) (LRR K, L, M)<br>low Surface (S8) (LRR K, L)  |
|                   | d Below Dark Surface                    | (A11)        | Depleted Matri              |            | .,          |                  |                             | rface (S9) (LRR K, L)  |
|                   | ark Surface (A12)                       |              | Redox Dark Su               |            |             |                  |                             | ese Masses (F12) (LRR K, L, R)   |
|                   | lucky Mineral (S1)                      |              | Depleted Dark               |            | <b>-7</b> ) |                  |                             | odplain Soils (F19) (MLRA 149B)  |
|                   | Gleyed Matrix (S4)                      |              | Redox Depres                | sions (F8) |             |                  | Mesic Spedic                | (TA6) (MLRA 144A, 145, 149B)   |
|                   | Redox (S5)<br>I Matrix (S6)             |              |                             |            |             |                  |                             | Dark Surface (TF12)  |
|                   | rface (S7) (LRR R, N                    | ILRA 1491    | 3)                          |            |             |                  |                             | n in Remarks)  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   | f hydrophytic vegetat                   |              | etland hydrology mu         | st be pres | ent, unles  | s disturbed      | d or problematic.           |  |
|                   | Layer (if observed):                    |              |                             |            |             |                  |                             |  |
| Type:             |   |              |                             |            |             |                  | Undete Call Dusca           | was ver No.  |
| Depth (in         | cnes):                                  |              |                             |            |             |                  | Hydric Soil Prese           | nt? Yes No   |
| Remarks:          |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |
|                   |   |              |                             |            |             |                  |                             |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_ City/County: Chautauqua County \_\_\_\_ Sampling Date: 10/3 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-Investigator(s): DJC, VIn Villenava Section, Township, Range:\_\_ Concare Slope (%): Local relief (concave, convex, none): \_\_\_\_ \_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Ecil Silt logar NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? No Wetland Hydrology Present? No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) \_\_ Dry-Season Water Table (C2) Saturation (A3) Marl Deposits (B15) Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) \_\_ Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Shallow Aquitard (D3) Other (Explain in Remarks) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? \_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Saturation Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

The Water

### VEGETATION - Use scientific names of plants.

| Tree Stratum (Plot size: 30)        | Absolute<br>% Cover | Dominant Indicate<br>Species? Status |  |
|-------------------------------------|---------------------|--------------------------------------|--|
|                                     | 77 00101            |                                      | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
|                                     |                     |                                      | Total Number of Dominant   |
|                                     |                     |                                      | Species Across All Strata:   |
|                                     |                     |                                      | Percent of Dominant Species  |
|                                     |                     |                                      | That Are OBL, FACW, or FAC: 100% (A/B  |
|                                     |                     |                                      |  |
|                                     |                     |                                      | Prevalence Index worksheet:  |
|                                     | ~                   | = Total Cover                        |  |
| apling/Shrub Stratum (Plot size: 15 |                     | - Total Cover                        | FACW species x 2 =   |
|                                     |                     |                                      | FAC species x 3 =  |
|                                     |                     |                                      | FACU species x 4 =   |
|                                     |                     |                                      | UPL species x 5 =  |
|                                     |                     | -                                    | Column Totals: (A) (B)   |
|                                     | -                   |                                      | Prevalence Index = B/A =   |
|                                     |                     |                                      |  |
|                                     |                     |                                      | 1 - Rapid Test for Hydrophytic Vegetation  |
|                                     |                     |                                      | 2 - Dominance Test is >50%   |
| r1                                  | _0                  | = Total Cover                        | 3 - Prevalence Index is ≤3.0¹  |
| erb Stratum (Plot size:)            |                     | wer -                                | 4 - Morphological Adaptations (Provide supporting  |
| Junes Offusers                      | 40                  | 465 FACI                             |  |
| Cock To                             | 30                  | YES TAC                              | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| Sciens atomores                     | 20                  | YES OB                               | Indicators of flydric soil and worldrid flydrology must  |
| 4. Junus Canadonsis                 | 20                  | YES OBE                              | be present, unless disturbed or problematic.   |
| 5,                                  |                     |                                      | Definitions of Vegetation Strata:  |
| 5                                   | 4                   |                                      | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7                                   |                     |                                      | at breast height (DBH), regardless of height.  |
| 3.                                  |                     |                                      | Sapling/shrub - Woody plants less than 3 in. DBH   |
| ).                                  |                     |                                      | and greater than or equal to 3.28 ft (1 m) tall.   |
| 0.                                  |                     | 2                                    | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 1.                                  |                     |                                      |  |
| 2.                                  |                     |                                      | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 4.                                  | 110                 | = Total Cover                        | neight.  |
| Voody Vine Stratum (Plot size: 30)  |                     | PURE THE PROPERTY OF THE PROPERTY OF |  |
| voody vine stratum (Plot size)      |                     | 55                                   |  |
| 1000 mm                             |                     |                                      | Hydrophytic  |
|                                     |                     |                                      | Vegetation Present? Yes No   |
|                                     | -                   |                                      | _ FISSEIL! 165 A NO  |
| 3,                                  |                     |                                      |  |
| J                                   |                     | = Total Cover                        | -  |

| inches) (0<br>0 /0 /0<br>0 /8 2                        | Matrix           |            |                            | x Feature  |                   |             |                        |  |
|--|------------------|------------|----------------------------|------------|-------------------|-------------|------------------------|--|
| 0-18 2   | Color (moist)    | %          | Color (moist)              | %          | Type <sup>1</sup> | _Loc2_      | Texture                | Remarks  |
| 078 2  | 0423/1           | 25         | 754R3/4                    | 5          | 0                 | m           | Sitton                 | n  |
|  | 645/2            | 90         | 7.5425/8                   | 10         | C                 | 14          | charles                | M  |
|  |                  |            |                            |            |                   |             | 7                      |  |
|  |                  |            |                            |            | -                 |             |                        |  |
|  |                  |            |                            |            |                   |             |                        | The second secon |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   | _           |                        |  |
|  |                  |            |                            | -          |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            | Ger .      |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  | letion, RM | =Reduced Matrix, MS        | S=Masked   | Sand Gr           | ains.       | <sup>2</sup> Location: | PL=Pore Lining, M=Matrix.  |
| ydric Soil Indic                                       |                  |            | 3.4                        |            |                   |             |                        | or Problematic Hydric Soils <sup>3</sup> :   |
| _ Histosol (A1)  |                  |            | Polyvalue Balov            |            | (S8) (LR          | R,          |                        | ick (A10) (LRR K, L, MLRA 149B)  |
| <ul><li>Histic Epiped</li><li>Black Histic (</li></ul> |                  |            | MLRA 149B) Thin Dark Surfa |            | RRR M             | RA 149B     | martin .               | rairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R)  |
| _ Hydrogen Su  |                  |            | Loamy Mucky M              |            |                   |             |                        | rface (S7) (LRR K, L, M)   |
| _ Stratified Lay                                       |                  |            | Loamy Gleyed N             |            |                   | 1,-,        |                        | ie Below Surface (S8) (LRR K, L)   |
|  | ow Dark Surface  | e (A11)    | Depleted Matrix            |            |                   | 4           |                        | rk Surface (S9) (LRR K, L)   |
| _ Thick Dark S   | Surface (A12)    |            | Redox Dark Sur             | face (F6)  |                   |             |                        | nganese Masses (F12) (LRR K, L, R)   |
|  | y Mineral (S1)   |            | Depleted Dark S            | Surface (F | 7)                |             | Piedmor                | nt Floodplain Soils (F19) (MLRA 1498   |
| Sandy Gleye  |                  |            | Redox Depressi             | ions (F8)  |                   |             |                        | podic (TA6) (MLRA 144A, 145, 149B  |
| _ Sandy Redox  |                  |            |                            |            |                   |             |                        | ent Material (F21)   |
| _ Stripped Mat   |                  |            | <u></u>                    |            |                   |             |                        | allow Dark Surface (TF12)  |
| _ Dark Surface   | (S7) (LRR R, N   | /ILRA 149  | 3)                         |            |                   |             | Other (E               | explain in Remarks)  |
|  |                  |            | etland hydrology mus       | t be prese | ent, unles        | s disturbed | or problematic.        |  |
| estrictive Laye  | r (if observed): |            | 77                         |            |                   |             |                        |  |
| Type:<br>Depth (inches)                                | ١.               |            |                            |            |                   |             | Hydric Soil P          | resent? Yes X No   |
|  | );               |            |                            |            |                   |             | Hydric Soil P          | resent/ fes No   |
| emarks:  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        | 3-4  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            | 4          |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |
|  |                  |            |                            | ie.        |                   |             |                        |  |
|  |                  |            |                            | Ser.       |                   |             |                        |  |
|  |                  |            |                            | le.        |                   |             |                        |  |
|  |                  |            |                            | ie .       |                   |             |                        |  |
|  |                  |            |                            | ir         |                   |             |                        |  |
|  |                  |            |                            |            |                   |             |                        |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-Investigator(s): DJL VJM Section, Township, Range: Plain Local relief (concave, convex, none): Convex Lat: 79.128281 Long: 42.411 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Free 5:1+ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No. Soil NO. or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes \_ Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No within a Wetland? Hydric Soil Present? Yes No Wetland Hydrology Present? No . If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_\_ Surface Water (A1) \_\_ Water-Stained Leaves (B9) Drainage Patterns (B10) \_\_ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_\_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_ Saturation (A3) \_\_ Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) \_\_\_ Sediment Deposits (B2) \_\_ Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Other (Explain in Remarks) \_\_ Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Yes \_\_\_ No \_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_ Yes \_\_\_\_ No \_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No without Hydrology Indicators present Remarks:

|                                       | Absolute Dominant Indicate                         |   |
|---------------------------------------|--|---|
| Tree Stratum (Plot size:)             | Absolute Dominant Indicate % Cover Species? Status | Dominance rest worksneet:   |
|                                       |  | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)   |
|                                       |  | Total Number of Dominant Species Across All Strata: (B)   |
|                                       |  |   |
|                                       |  | <ul> <li>Percent of Dominant Species</li> <li>That Are OBL, FACW, or FAC:</li> </ul>  |
|                                       |  |   |
|                                       |  | Prevalence Index worksheet:   |
| A A SHOULD BE A SHARE OF              | W/N  |   |
| 15.1                                  | = Total Cover                                      | OBL species x1 =  |
| apling/Shrub Stratum (Plot size: 15 ) |  | FACW species x 2 =<br>FAC species x 3 =   |
|                                       |  | FACU species x 4 =  |
|                                       |  | UPL species x 5 =   |
|                                       |  | Column Totals: (A) (B)  |
|                                       |  | +   |
|                                       | <del></del>  | Prevalence Index = B/A =  |
| <u> </u>                              |  | Hydrophytic Vegetation Indicators:  |
|                                       |  | 1 - Rapid Test for Hydrophytic Vegetation   |
| _/                                    | = Total Cover                                      | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹  |
| lerb Stratum (Plot size: 5 )          | no hora  | 4 - Morphological Adaptations <sup>1</sup> (Provide supportin   |
| Trifolium praferse                    | 60 165 FAL   | data in Remarks or on a separate sheet)   |
| Phleum pratence                       | 10 YES FAC   | ∠ Problematic Hydrophytic Vegetation¹ (Explain)   |
| Martano lancelota                     | 10 YES FACE  | Indicators of hydric soil and wetland hydrology must  |
| Tarkage officered                     | 1/1 -  | I the second of |
| Elymus repens                         | -0 -   |   |
| Hesperis Cp.                          |  |   |
| Gallumse.                             |  | at beautiful (DDI)  |
| /                                     |  | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 5                                     |  | and greater than or equal to 3.28 ft (1 m) tall.  |
| ),                                    |  | Herb - All herbaceous (non-woody) plants, regardless of   |
| 0                                     |  | size, and woody plants less than 3.28 ft tall.  |
| 1                                     |  | Woody vines - All woody vines greater than 3.28 ft in   |
| 2                                     |  | height.   |
| Noody Vine Stratum (Plot size: 30 '   | 105 = Total Cover 52                               | 5   |
| <u> </u>                              |  | Hydrophytic   |
|                                       |  | ─ Vegetation ✓  |
| 3                                     |  | Present? Yes No 🕰   |
|                                       |  | _   |
|                                       | O = Total Cover                                    |   |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Thiotals Surface (S8) (LRR R, L)  Polyvalue Below Surface (S8) (LRR R, L)  Dark Surface (S9) (LRR K, L)  Dark Surface (S9) (LRR K, L)  Thiotals Surface (S9) (LRR K, L)  Depleted Below Dark Surface (F9)  Thio Dark Surface (A12)  Redox Dark Surface (F7)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)   | Depth Matrix (inches) Color (moist) %  | Color (moist)  | Features<br>% Ty | ype <sup>1</sup> Loc <sup>2</sup> | Texture  | Remarks   |
|--|--|--|------------------|-----------------------------------|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Concentration   | 6 1 10 11  |  |                  | DO LOS                            | 10   | t.  |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Yedric Soil Indicators:   Indicators:   Indicators for Problematic Hydric Soils*:   Indicators for Problematic Hydric Soil Fresent?   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydric Soil Fresent?   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   Indicators for Hydrophytic vegetation and wetland h | 1012 412 100   | /  |                  |                                   | -511   | Print .   |
| lydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Cast Prairie Redox (A16) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Park Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Depth (inches):  Hydric Soil Present? Yes No   | 1-18 1042 413 95   | 7,5 7/2 9/6  | 5 0              | 1                                 | 2111/0am   |   |
| lydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Cast Prairie Redox (A16) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Sandy Mucky Mineral (S1) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Park Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Depth (inches):  Hydric Soil Present? Yes No   | -  |  |                  |                                   |  |   |
| ydric Soil Indicators:  Histosoi (A1)  | * .  |  |                  | union union                       |  |   |
| ydric Soil Indicators:  Histosoi (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MIRA 149B) Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Sandy Micky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) Mira Mira Mira Mira Mira Mira Mira Mira  |  |  |                  |                                   |  |   |
| lndicators for Problematic Hydric Soils?:  Histosol (A1)   |  |  |                  |                                   |  | *   |
| ydric Soil Indicators:  Histosoi (A1)  |  |  |                  |                                   |  |   |
| ydric Soil Indicators:  Histosol (A1)  |  |  |                  |                                   |  |   |
| lndicators for Problematic Hydric Soils?:  Histosol (A1)   |  |  |                  |                                   |  |   |
| lndicators for Problematic Hydric Soils?:  Histosol (A1)   | Type: C=Concentration, D=Depletion, RN   | M=Reduced Matrix, MS   | =Masked Sa       | nd Grains.                        | <sup>2</sup> Location: PL=F  | Pore Lining, M=Matrix.  |
| Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5)  Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Redox Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  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   |  |  |                  |                                   |  |   |
| Black Histic (A3)  |  |  | Surface (S8      | ) (LRR R,                         |  |   |
| Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149  Mesic Spodic (TA6) (MLRA 144A, 145, 149E)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Other (Explain in Remarks)  Type:  Depth (inches):  Hydric Soil Present? Yes No  |  |  |                  |                                   |  |   |
| Stratified Layers (A5)   |  |  |                  |                                   |  |   |
| Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149E Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  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   |  |  |                  | RR K, L)                          |  |   |
| Thick Dark Surface (A12)   |  |  |                  |                                   |  |   |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1498 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1498 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  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  |  |  |                  |                                   |  | 요 그림 가지 않는 이 경기를 하지 않는데 되었다. 중에 되었다. 이 그리고 있습니다.  |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149E Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.    Restrictive Layer (if observed):  |  |  |                  |                                   | The second secon | 경우 아이들 살아보는 사람들이 살아가 하는 것이 되었다. 그리는 사람들이 되었다. 그리는 그 없는데 그렇게 되었다.                            |
| Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  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  |  |  | Urrace (F/)      |                                   |  |   |
| Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks)  |  | the second secon |                  |                                   |  |   |
| Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  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   | Sandy Gleyed Matrix (S4)   | the second secon |                  |                                   | Mesic Spodio   | (TA6) (MLRA 144A, 145, 149B   |
| Restrictive Layer (if observed):    Type:   Depth (inches):   Hydric Soil Present? Yes No  | Sandy Gleyed Matrix (S4) Sandy Redox (S5)  | the second secon |                  |                                   | Mesic Spodio   | : (TA6) ( <b>MLRA 144A, 145, 149</b> E<br>Material (F21)                                    |
| Type:  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)   | Redox Depressi   |                  |                                   | <ul><li>Mesic Spodio</li><li>Red Parent M</li><li>Very Shallow</li></ul>   | : (TA6) ( <b>MLRA 144A, 145, 149E</b><br>Material (F21)<br><sup>•</sup> Dark Surface (TF12) |
| Depth (inches): Hydric Soil Present? Yes No  | <ul> <li>Sandy Gleyed Matrix (S4)</li> <li>Sandy Redox (S5)</li> <li>Stripped Matrix (S6)</li> <li>Dark Surface (S7) (LRR R, MLRA 145)</li> </ul>  | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explain  | : (TA6) ( <b>MLRA 144A, 145, 149E</b><br>Material (F21)<br><sup>•</sup> Dark Surface (TF12) |
|  | <ul> <li>Sandy Gleyed Matrix (S4)</li> <li>Sandy Redox (S5)</li> <li>Stripped Matrix (S6)</li> <li>Dark Surface (S7) (LRR R, MLRA 145)</li> </ul>  | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explain  | : (TA6) ( <b>MLRA 144A, 145, 149B</b><br>Material (F21)<br><sup>•</sup> Dark Surface (TF12) |
| Remarks:   | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 145) Indicators of hydrophytic vegetation and vegetationed):   | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explain  | : (TA6) ( <b>MLRA 144A, 145, 149B</b><br>Material (F21)<br><sup>•</sup> Dark Surface (TF12) |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vetestrictive Layer (if observed):  Type: Depth (inches):  | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vetestrictive Layer (if observed):  Type: Depth (inches):  | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vetestrictive Layer (if observed):  Type: Depth (inches):  | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vetestrictive Layer (if observed):  Type: Depth (inches):  | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149B<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149E<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149E<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149E<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149E<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |
|  | Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 148) Indicators of hydrophytic vegetation and vege | Redox Depression   | ons (F8)         | unless disturbed                  | Mesic Spodic Red Parent N Very Shallow Other (Explai or problematic.   | c (TA6) (MLRA 144A, 145, 149E<br>Material (F21)<br>Dark Surface (TF12)<br>n in Remarks)     |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project \_ Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC VILLENOVA Section, Township, Range:\_ Investigator(s): Local relief (concave, convex, none): Landform (hillslope, terrace, etc.): Slope (%): 3-8 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soll Map Unit Name: Bust 1 51 H/ 10 am (Bs A PEM NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_ No\_ Are Vegetation <u>NO</u>, Soil <u>NO</u>, or Hydrology <u>NO</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID:\_W/L Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_\_ Water-Stained Leaves (B9) X Drainage Patterns (B10) X Surface Water (A1) \_\_\_ Moss Trim Lines (B16) X High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Dry-Season Water Table (C2) \_\_\_ Mari Deposits (B15) X Saturation (A3) Crayfish Burrows (C8) \_\_ Water Marks (B1) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) \_\_ Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_ Drift Deposits (B3) Geomorphic Position (D2) \_\_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No \_\_\_\_ Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Yes \_\_\_\_ No \_\_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: · 李里 不

| Tree Stratum (Plot size:3 o ' ) 1      |     | Species?   | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A) |
|--|-----|------------|--------|---|
| 2                                      |     |            |        | Total Number of Dominant<br>Species Across All Strata: (B)                            |
| 4                                      |     | -          | -      | Percent of Dominant Species That Are OBL, FACW, or FAC: 166 (A/B)                     |
| 5                                      |     |            |        | THAT AIR OBE, TAOM, STITAO  |
| 6                                      |     |            |        | Prevalence Index worksheet:   |
| 7                                      |     |            |        |   |
| 7.0.16                                 | 0   | = Total Co | ver    | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: /5 ) |     |            |        | FACW species x 2 =  |
| 1                                      |     |            |        | FAC species x 3 =   |
| do .                                   |     |            |        | FACU species x 4 =  |
| 2                                      |     |            |        | UPL species x 5 =   |
| 3                                      |     | -          | -      | Column Totals: (A) (B)  |
| 4                                      |     |            |        |   |
| 5                                      |     |            |        | Prevalence Index = B/A =  |
| 6                                      |     |            |        | Hydrophytic Vegetation Indicators:  |
| 7.                                     |     |            |        | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | -   |            |        | _X2 - Dominance Test is >50%  |
|  |     | = Total Co | ver    | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| Herb Stratum (Plot size:               |     | 10         | _      | 4 - Morphological Adaptations (Provide supporting                                     |
| 1. Phalaris grundmacea                 |     | 165        | FACE   | data in Remarks or on a separate sheet)   |
| 2. Turas Pffesus                       | 20  | YES        | FARW   | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 3. Eleactais op                        |     | 4ES        | FAC    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                     |
| 4. Caret Sp.                           | 20  |            | FAC    | be present, unless disturbed or problematic.  |
| 5. Poa Sp.                             | 10  | ND         | FAC    | Definitions of Vegetation Strata:   |
| 6                                      |     |            |        | Tree - Woody plants 3 in. (7.6 cm) or more in diamete                                 |
| 7                                      |     |            |        | at breast height (DBH), regardless of height.   |
| 8.                                     |     |            |        | Sapling/shrub - Woody plants less than 3 in. DBH                                      |
| 9                                      |     |            |        | and greater than or equal to 3.28 ft (1 m) tall.                                      |
|  |     |            |        | Herb - All herbaceous (non-woody) plants, regardless of                               |
| 10                                     | -   |            |        | size, and woody plants less than 3.28 ft tall.  |
| 11,                                    |     |            |        | Woody vines - All woody vines greater than 3.28 ft in                                 |
| 12                                     |     |            |        | height.   |
|  | 100 | = Total Co | ver 50 |   |
| Woody Vine Stratum (Plot size: 30)     |     |            | 20     |   |
| 1                                      |     |            |        |   |
| 2                                      |     |            |        | Hydrophytic   |
| 2                                      |     |            |        | Vegetation Present? Yes No  |
| 3                                      |     | -          |        | 1 Augus   |
| A .                                    | -   | = Total Co |        |   |
| 4                                      |     |            |        |   |

| Profile Desc   | ription: (Describe to                 | o the dept | h needed to docum                   | ent the ir    | ndicator          | or confirm  | the absence of  | indicators.)   |
|--|---------------------------------------|------------|-------------------------------------|---------------|-------------------|-------------|-----------------|--|
| Depth (inches)   | Matrix Color (moint)                  | %          | Redox<br>Color (moist)              | Features<br>% | Type <sup>1</sup> | 1002        | Texture         | Remarks  |
| (inches)   | (0 4 R 3/2                            | 95         | 7.5425/6                            |               | Туре              | m           | Silt Youn       |  |
| 0-10   | /                                     |            |                                     | -             | -                 | 101         | 0.11            |  |
| 10-18  | 10 4R 4/2                             | 95         | 7.5 4R 5/6                          | 2             |                   | my          | 21 H106 m       |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
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|  |                                       |            | <del></del>                         |               |                   |             |                 | F-11-11-11-11-11-11-11-11-11-11-11-11-11                         |
|  |                                       |            |                                     |               | -                 |             |                 |  |
|  | -                                     |            |                                     |               |                   |             |                 |  |
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|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  | oncentration, D=Depl                  | etion, RM= | Reduced Matrix, MS                  | =Masked       | Sand Gr           | ains.       |                 | PL=Pore Lining, M=Matrix.  |
| Hydric Soil  |                                       |            | 2001 200                            |               |                   |             |                 | r Problematic Hydric Soils <sup>3</sup> :                        |
| Histosol   | (A1)<br>pipedon (A2)                  |            | Polyvalue Below<br>MLRA 149B)       | Surface       | (S8) (LR          | RR,         |                 | k (A10) (LRR K, L, MLRA 149B)<br>airie Redox (A16) (LRR K, L, R) |
| 100000000000000000000000000000000000000  | istic (A3)                            |            | Thin Dark Surface                   | ce (S9) (L    | RR R, M           | LRA 149B)   | 5 cm Mud        | ky Peat or Peat (S3) (LRR K, L, R)                               |
|  | en Sulfide (A4)                       |            | Loamy Mucky M                       |               |                   | (, L)       |                 | ace (S7) (LRR K, L, M)   |
|  | d Layers (A5)<br>d Below Dark Surface | (A11)      | Loamy Gleyed N<br>X Depleted Matrix |               | )                 |             |                 | Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L)            |
|  | ark Surface (A12)                     |            | X Redox Dark Sur                    |               |                   |             |                 | ganese Masses (F12) (LRR K, L, R)                                |
| and the second s | Mucky Mineral (S1)                    |            | Depleted Dark S                     |               | 7)                |             |                 | Floodplain Soils (F19) (MLRA 149B)                               |
|  | Gleyed Matrix (S4)                    |            | Redox Depressi                      | ons (F8)      |                   |             |                 | odic (TA6) ( <b>MLRA 144A, 145, 149B</b> )<br>ent Material (F21) |
|  | Redox (S5)<br>d Matrix (S6)           |            |                                     |               |                   |             |                 | llow Dark Surface (TF12)   |
|  | irface (S7) (LRR R, M                 | ILRA 149E  | 3)                                  |               |                   |             |                 | xplain in Remarks)   |
| 31-41-41-5   | of hydrophytic vegetat                |            | tland budgalagu musi                | ho prope      | ant unloc         | a diaturbad | or problematic  |  |
|  | Layer (if observed):                  | ion and we | mand nydrology musi                 | ne prese      | ent, unles        | s disturbed | or problematic. |  |
| Type:  |                                       |            |                                     |               |                   |             |                 |  |
| Depth (in  | iches):                               | -          |                                     |               |                   |             | Hydric Soil Pr  | resent? Yes No   |
| Remarks:   |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
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|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
|  |                                       |            |                                     |               |                   |             |                 |  |
| 2  |                                       |            |                                     |               |                   |             |                 |  |

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 10/24/2015 State: NY Sampling Point: DP-14 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_\_\_\_ Section, Township, Range: Villenova Investigator(s): DJL, V5M Landform (hillslope, terrace, etc.): Till Plain Local relief (concave, convex, none): Convex Slope (%): 3-8 Subregion (LRR or MLRA): LRR-R Lat: 79, 130 765 Long: 42, 423 529 Datum: NAD 83 Soil Map Unit Name: Busti Silt (van (65A) NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_\_ Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? \_ No If yes, optional Wetland Site ID:\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_ Moss Trim Lines (B16) \_\_\_ Aquatic Fauna (B13) High Water Table (A2) \_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) Saturation (A3) \_\_ Crayfish Burrows (C8) \_\_ Hydrogen Sulfide Odor (C1) \_\_\_ Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) \_ Drift Deposits (B3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) \_\_\_ Geomorphic Position (D2) \_\_\_ Algal Mat or Crust (B4) Shallow Aquitard (D3) \_ Iron Deposits (B5) Thin Muck Surface (C7) Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) \_\_ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Yes No Depth (inches): Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No 🔀 Yes No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetland hydrology Indianos present

| <u>Tree Stratum</u> (Plot size: <u>30</u> ) | % Cover | Dominan<br>Species? | Status        | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                  |
|---|---------|---------------------|---------------|--|
| 2   |         |                     |               | Total Number of Dominant Species Across All Strata: (B)  |
| 4<br>5                                      |         |                     |               | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 6<br>7                                      | -       |                     |               | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |
| Sapling/Shrub Stratum (Plot size: 15 )      |         | = Total Co          |               | OBL species x 1 =<br>FACW species x 2 =  |
| 1<br>2                                      |         |                     |               | FACU species x 3 =<br>FACU species x 4 =   |
| 3   |         |                     | •             | UPL species x 5 =<br>Column Totals: (A) (B)  |
| 4,<br>5                                     |         |                     |               | Prevalence Index = B/A =   |
| 6   |         |                     |               | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                           |
| 7   |         | = Total Co          |               | 2 - Dominance Test is >50%<br>3 - Prevalence Index is ≤3.0¹  |
| 1. Titolym prayinge                         | 40      | 465                 | Frece         | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |
| 2. Plantaco las ce elata                    |         |                     | FACES         | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Pla tura naso                            |         |                     | FALU          | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 4. Symphystrukten Viminess                  |         |                     | UPL           | be present, unless disturbed or problematic.   |
| 5. Dances costa                             | 10      | NO                  | FACY          | Definitions of Vegetation Strata:  |
| 6   |         |                     |               | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 8   |         |                     |               | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| 10  |         |                     |               | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11  |         |                     |               | Woody vines – All woody vines greater than 3.28 ft in height.  |
| Woody Vine Stratum (Plot size: 30')         | 100     | = Total Co          | over 50<br>20 |  |
| 1   | _       | 1                   |               | Hydrophytic  |
| 3.  |         |                     |               | Vegetation Present? Yes No   |
| 4   |         |                     |               |  |
|   | 0       | = Total Co          | over          |  |

| Depth      | Matrix                                       |               | th needed to docum<br>Redox | Features   | 3                 |                 |                 | 15.0 Line 20.0 All Line 20.0               |  |
|------------|--|---------------|-----------------------------|------------|-------------------|-----------------|-----------------|--|--|
| (inches)   | Color (moist)                                | %             | Color (moist)               | %          | Type <sup>1</sup> | _Loc2           | <u>Texture</u>  | Rema                                       | arks   |
| 0-10       | 10 4R3/2                                     | 100           |                             |            |                   | and the same of | Siltiam         |  |  |
| 10-18      | 10423/2                                      | 98            | 7.54R 5/6                   | 2          | <u>C</u>          | 2               | St Hoan         |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            | -  |               |                             |            |                   |                 |                 |  | and the second s |
|            | -  |               |                             |            |                   |                 | -               |  |  |
|            |  | -             | energy and a second         |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            | -  |               |                             |            |                   |                 | -               |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
| vne: C=C   | oncentration D=Der                           | oletion RM    | =Reduced Matrix, MS         | =Masked    | Sand Gr           | alns.           | 2Location:      | PL=Pore Lining, M                          | l=Matrix.  |
|            | Indicators:                                  | DICTION, TYIN | -reduced Watth, We          | Muonou     | ound o            | unio.           |                 | or Problematic Hy                          |  |
| _ Histoso  |  |               | Polyvalue Below             | Surface    | (S8) (LR          | RR,             | 2 cm M          | uck (A10) (LRR K,                          | L, MLRA 149B)  |
|            | pipedon (A2)                                 |               | MLRA 149B)                  |            |                   |                 |                 | Prairie Redox (A16)                        |  |
|            | listic (A3)                                  |               | Thin Dark Surfa             |            |                   |                 |                 | ucky Peat or Peat (                        |  |
|            | en Sulfide (A4)                              |               | Loamy Mucky M               |            |                   | (, L)           |                 | ırface (S7) (LRR K,<br>ue Below Surface (S |  |
|            | d Layers (A5)<br>d Below Dark Surfac         | ο (Δ11)       | Loamy Gleyed Matrix         |            | )                 |                 |                 | rk Surface (S9) (LF                        |  |
|            | ark Surface (A12)                            | o (ATT)       | Redox Dark Sur              |            |                   |                 |                 | nganese Masses (F                          |  |
|            | Mucky Mineral (S1)                           |               | Depleted Dark S             |            |                   |                 |                 | nt Floodplain Soils                        |  |
|            | Gleyed Matrix (S4)                           |               | Redox Depressi              |            | ,                 |                 |                 | podic (TA6) (MLRA                          |  |
|            | Redox (S5)                                   |               |                             | 7.7.6      |                   |                 |                 | rent Material (F21)                        |  |
| _ Stripped | d Matrix (S6)                                |               |                             |            |                   |                 |                 | nallow Dark Surface                        |  |
| _ Dark Su  | urface (S7) (LRR R,                          | MLRA 149      | <b>B</b> )                  |            |                   |                 | Other (E        | Explain in Remarks                         | )  |
|            | of hydrophytic vegeta<br>Layer (if observed) |               | etland hydrology mus        | t be prese | ent, unles        | s disturbed     | or problematic. |  |  |
| Type:      |  |               |                             |            |                   |                 |                 |  |  |
| Depth (in  |  |               |                             |            |                   |                 | Hydric Soil F   | Present? Yes                               | No 🗡   |
| emarks:    |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |
|            |  |               |                             |            |                   |                 |                 |  |  |

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 10/28/2                           |
|--|---|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 19  |
| Investigator(s): DJL VJM   | Section, Township, Range: Milenava  |
| andform (hillstone terrore etc.): Dance Stance   | Local relief (concave, convex, none): Con Cana Slope (%):0 - 2                  |
|  | 9.141.774 Long: 42.422.62 Datum: NAD 83   |
|  |   |
| Soil Map Unit Name: Ash wille Sult form  | (As) NWI classification: PEM  |
| Are climatic / hydrologic conditions on the site typical for this t<br>Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> sig  | nificantly disturbed? Are "Normal Circumstances" present? Yes No                |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>M</u> nat  | urally problematic? (If needed, explain any answers in Remarks.)                |
| SUMMARY OF FINDINGS – Attach site map sl   | nowing sampling point locations, transects, important features, etc.            |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separ | Is the Sampled Area within a Wetland?  If yes, optional Wetland Site ID: WL-FY  |
| HYDROLOGY  |   |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)                                  |
| Primary Indicators (minimum of one is required; check all the  |   |
| ./   | -Stained Leaves (B9)  Z Drainage Patterns (B10)                                 |
| [ [ [  | ic Fauna (B13) Moss Trim Lines (B16)  |
| B. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.  | Deposits (B15) Dry-Season Water Table (C2)                                      |
| - 15-74 N. S.  | gen Sulfide Odor (C1) Crayfish Burrows (C8)                                     |
|  | red Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3) Prese  | nce of Reduced Iron (C4) Stunted or Stressed Plants (D1)                        |
|  | nt Iron Reduction in Tilled Soils (C6) 💢 Geomorphic Position (D2)               |
|  | Muck Surface (C7) Shallow Aquitard (D3)   |
|  | (Explain in Remarks) Microtopographic Relief (D4)                               |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)   |
| Field Observations: Surface Water Present?  Yes No Depti   | h Gashari Z 19  |
| Surface Water Present? Yes X No Depti<br>Water Table Present? Yes X No Depti   |   |
| Saturation Present? Yes No Depti   |   |
| (includes capillary fringe)  | Tellicites).  |
| Describe Recorded Data (stream gauge, monitoring well, ae  | rial photos, previous inspections), if available:                               |
|  |   |
| Remarks:   |   |
|  |   |
|  |   |
|  |   |
|  |   |
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|  |   |
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|  |   |
|  |   |
|  |   |
|  |   |

| Tree Stratum (Plot size:30')                            | Absolute<br>% Cover | Dominant Species? | Indicator<br>Status | Dominance Test worksheet:  |
|---|---------------------|-------------------|---------------------|--|
| 1. Ularus genericans                                    |                     |                   | FACW                | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
| 2. Acer rubrum  |                     | YES               | FAC                 |  |
| 3. Fraxinus pennsulvanica                               |                     |                   | FAW                 | Total Number of Dominant Species Across All Strata: (B)  |
|   |                     |                   |                     | 120  |
| 4,  |                     |                   |                     | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
| 5   |                     |                   |                     | That it is a second of the sec |
| 6,  |                     |                   |                     | Prevalence Index worksheet:  |
| 7   |                     |                   |                     | Total % Cover of: Multiply by:   |
| ()  |                     | = Total Cov       | er 15               | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size:/5)                    |                     | 4.4               | 6                   | FACW species x 2 =   |
| 1. Cornus amonum  | 10                  | YES               | FACUS               | FAC species x 3 =  |
| 2. Vibucaun dentatum                                    | 10                  | 465               | FAC                 | FACU species x 4 =   |
| 3   |                     |                   |                     | UPL species x 5 =  |
|   |                     |                   |                     | Column Totals: (A) (B)   |
| 4   |                     |                   |                     | Prevalence Index = B/A =   |
| 5   |                     |                   |                     | II. January W. A. Alexandra  |
| 6   |                     |                   |                     | Hydrophytic Vegetation Indicators:   |
| 7,  |                     |                   |                     | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%   |
| -1  | 20                  | = Total Cov       | er /0               | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:5)                              |                     |                   | 4                   | 4 - Morphological Adaptations¹ (Provide supportin  |
| 1. Viola 50.  | 40                  | 465               | FAC                 | data in Remarks or on a separate sheet)  |
| 2. Solidago altissima                                   | 30                  | YES               | FAC                 | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Proclea sersibilis                                   | 15                  | 110               | FACW                | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
|   |                     |                   |                     | be present, unless disturbed or problematic.   |
| 4. Equisetum sp.  |                     |                   | FAC                 | Definitions of Vegetation Strata:  |
| 5   |                     |                   |                     |  |
| 6   |                     |                   |                     | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 7   |                     | -                 |                     |  |
| 8   | كسنده               |                   |                     | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9   |                     |                   |                     |  |
| 10,   |                     |                   |                     | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 11  | 100                 |                   |                     | ACTUAL CONTRACTOR STATES   |
|   |                     |                   |                     | Woody vines - All woody vines greater than 3.28 ft in  |
| 12  | 100                 | = Total Cov       |                     | height.  |
| Woody Vine Stratum (Plot size: 30 )                     | 700                 | _ Total Cov       | 20                  |  |
| Woody Vine Stratum (Plot size:)                         |                     |                   |                     |  |
| 1   | -,                  | ,                 |                     | Hydrophytic  |
| 2   |                     |                   |                     | Vegetation   |
|   |                     |                   |                     | Present? Yes No No   |
| 3   |                     |                   |                     |  |
| 4.  | _                   |                   | IOT .               |  |
| 4   | 0                   | = Total Cov       |                     |  |
| Remarks: (Include photo numbers here or on a separate)  | e sheet.)           | _ = Total Cov     |                     |  |
| 34  | te sheet.)          | _ = Total Cov     |                     | V  |
| 4Remarks: (Include photo numbers here or on a separat   | te sheet.)          | = Total Co        | 161                 | V  |
| A  Remarks: (Include photo numbers here or on a separal | 6 te sheet.)        | _ = Total Co      |                     |  |
| 34  | te sheet.)          | _ = Total Co      |                     | I'   |
| 34  | te sheet.)          | _ = Total Co      |                     |  |
| Remarks: (Include photo numbers here or on a separate   | te sheet.)          | _ = Total Co      | GI                  | P.   |

| Matrix   |  | th needed to docum<br>Redox   | Feature  |  |  |   |   |
|--|--|---|--|--|--|---|---|
| Color (moist)  | %  | Color (moist)   | %  | Type <sup>1</sup>  | _Loc2 _  | Texture   | Remarks   |
| 10423/1  | 90   | 7.5403/4  | 10   | 0  | n  | 5/1/1   | oan   |
| 10424/2  | 90   | 7.54R5/6 10 C M   |  | Silt   | 10am   |   |   |
|  |  |   |  |  |  |   |   |
|  |  |   |  |  |  |   |   |
| oncentration, D=Depl   | etion, RM  | =Reduced Matrix, MS   | =Masked  | <br>I Sand Gr  | rains.   | <sup>2</sup> Location   | n: PL=Pore Lining, M=Matrix.  |
|  |  | 3, 1, 2, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,   |  |  |  |   | s for Problematic Hydric Soils <sup>3</sup> :   |
| pipedon (A2) stic (A3) stic (A3) stic (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) ducky Mineral (S1) Sleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R, N  | fiLRA 149  | MLRA 149B)  Thin Dark Surfa Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi  | ce (S9) (I<br>lineral (F<br>Matrix (F2<br>(F3)<br>face (F6)<br>Surface (F<br>ions (F8) | LRR R, M<br>1) (LRR K<br>2)<br>=7)   | LRA 149B)<br>(, L)   | Coast 5 cm Dark: Polyv Thin I Iron-N Piedn Mesic Red F Very: Other                      | Muck (A10) (LRR K, L, MLRA 149B) t Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L) Dark Surface (S9) (LRR K, L) Manganese Masses (F12) (LRR K, L, R) nont Floodplain Soils (F19) (MLRA 149B) E Spodic (TA6) (MLRA 144A, 145, 149B) Parent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks) |
| TOTAL CONTRACTOR AND CONTRACTOR OF THE CONTRACTO |  | etland hydrology mus  | t be pres  | ent, unles   | s disturbed (  | or problemat  | IC.   |
| Layer (ii observeu).   |  |   |  |  |  |   |   |
| ches):   |  |   |  |  |  | Hydric Soi  | il Present? Yes X No  |
|  |  |   |  |  |  |   |   |
|  | oncentration, D=Depl<br>Indicators:<br>(A1)<br>Dipedon (A2)<br>stic (A3)<br>en Sulfide (A4)<br>d Layers (A5)<br>d Below Dark Surface<br>ark Surface (A12)<br>Mucky Mineral (S1)<br>Gleyed Matrix (S4)<br>Redox (S5)<br>I Matrix (S6)<br>rface (S7) (LRR R, M | oncentration, D=Depletion, RM Indicators: (A1) Dipedon (A2) Stic (A3) En Sulfide (A4) Id Layers (A5) Id Below Dark Surface (A11) Bark Surface (A12) Mucky Mineral (S1) Belowd Matrix (S4) Redox (S5) I Matrix (S6) I Matrix (S6) I face (S7) (LRR R, MLRA 149 If hydrophytic vegetation and wall Layer (if observed): | oncentration, D=Depletion, RM=Reduced Matrix, MS Indicators:  (A1)                     | oncentration, D=Depletion, RM=Reduced Matrix, MS=Masked Indicators:  (A1) Polyvalue Below Surface MLRA 149B)  stic (A3) Thin Dark Surface (S9) (Indicators (A1) Polyvalue Below Surface (S9) (Indicators (A2) Polyvalue Below Surface (S9) (Indicators (A3) Polyvalue Polyvalu | concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Gradicators:  (A1) | concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators:  (A1) | Dencentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    A  |

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  | City/County: Cha  | utauqua County                | Sampling Date: 10/28/2                                 |
|---|---|-------------------------------|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC   |   |                               | Sampling Point: DP- 20                                 |
| + -1  | Section, Township   |                               |  |
| Landform (hillslope, terrace, etc.): Till plain   |   |                               | Clara (0/) 3 - 9                                       |
|   |   |                               |  |
| 4.  |   |                               | Datum: NAD 83  |
| Soil Map Unit Name: Chautan qua Sift log  | n ((kB)   | NWI classifi                  | cation:  |
| Are climatic / hydrologic conditions on the site typical for t                            | his time of year? Yes X                                     | No (If no, explain in F       | Remarks.)  |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u>                        | significantly disturbed?                                    | Are "Normal Circumstances"    | present? Yes X No                                      |
| Are Vegetation NO, Soil NO, or Hydrology NO   |   | (If needed, explain any answe |  |
|   |   |                               |  |
| SUMMARY OF FINDINGS – Attach site ma  |   |                               | s, important reatures, etc.                            |
| Hydrophytic Vegetation Present? Yes   |   | pled Area                     | _ No _   |
| Hydric Soil Present? Yes  | NO 3  |                               | _ 140  |
| Wetland Hydrology Present? Yes<br>Remarks: (Explain alternative procedures here or in a s | . J - 21 - 2 - 21   | onal Wetland Site ID:         |  |
| HYDROLOGY   |   |                               |  |
| 73 C 35 TA O CARA-1223 E  |   | Casandan India                | ofore (minimum of hun required)                        |
| Wetland Hydrology Indicators:   | ran and   |                               | ators (minimum of two required)                        |
| Primary Indicators (minimum of one is required; check a                                   |   |                               | Cracks (B6)  |
|   | /ater-Stained Leaves (B9)                                   |                               | atterns (B10)  |
|   | quatic Fauna (B13)  | Moss Trim L                   |  |
|   | arl Deposits (B15)  |                               | Water Table (C2)                                       |
|   | ydrogen Sulfide Odor (C1)                                   | Crayfish But                  |  |
|   | xidized Rhizospheres on Living resence of Reduced Iron (C4) |                               | /isible on Aerial Imagery (C9)<br>Stressed Plants (D1) |
|   | ecent Iron Reduction in Tilled S                            |                               | Position (D2)  |
|   | nin Muck Surface (C7)                                       | Shallow Aqu                   |  |
|   | ther (Explain in Remarks)                                   |                               | aphic Relief (D4)                                      |
| Sparsely Vegetated Concave Surface (B8)   | and (Explain III (dillatite)                                | FAC-Neutra                    |  |
| Field Observations:   |   | _                             |  |
| Surface Water Present? Yes No [   | Depth (inches):   |                               |  |
| [2018년 : 10 No. 18 18 18 18 18 18 18 18 18 18 18 18 18                                    | Depth (inches):   | 4.                            |  |
|   | Depth (inches):   | Wetland Hydrology Prese       | nt? Yes No   |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring we          | Il garial photos, province inepac                           | tions) if available:          |  |
| Describe Necorded Data (stream gauge, monitoring we                                       | ii, aeriai priotos, previous irispec                        | Lions), il avallable.         |  |
|   |   |                               |  |
| Remarks: And the Aller of the Aller   | 10/10/10  |                               |  |
| Remarks: No wetland hydrology   | 1010101012 200  | seri                          |  |
|   | ,   |                               |  |
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|   |   |                               | 1 13   |
|   |   |                               |  |
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|   |   |                               |  |
|   |   |                               |  |
|   |   |                               |  |
|   |   |                               |  |

| Tree Stratum (Plot size: 301)          | % Cover | Species?    |       | Dominance Test worksheet: Number of Dominant Species   |
|--|---------|-------------|-------|--|
| 1                                      |         |             |       | That Are OBL, FACW, or FAC: (A)  |
| 2                                      |         |             |       | Total Number of Dominant Species Across All Strata: (B)  |
| 3                                      |         |             |       | Species Across All Strata(b)   |
| 4                                      |         |             |       | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
| 5,                                     |         | -           |       | Mar Ale Obc, 1 Aovi, of 1 Ao.  |
| 6,                                     |         |             |       | Prevalence Index worksheet:  |
| 7                                      |         |             |       | Total % Cover of:Multiply by:  |
|  | 0       | = Total Cov | /er   | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 151) |         |             |       | FACW species x 2 =   |
| 1,                                     |         |             |       | FAC species x 3 =  |
| 2                                      |         |             |       | FACU species x 4 =   |
|  |         |             |       | UPL species x 5 =  |
| 3                                      |         |             |       | Column Totals: (A) (B)   |
| 4                                      |         |             |       | Prevalence Index = B/A =   |
| 5                                      |         |             |       | Livelen shutin Variation Indicators  |
| 6                                      |         |             |       | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
| 7                                      |         |             |       | 2 - Dominance Test is >50%   |
| -1                                     | _0_     | = Total Co  | ver . | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:5 /            | 4       | 1100        | -     | 4 - Morphological Adaptations (Provide supporting  |
| 1. Dackylis glone and                  | 66      |             |       | data in Remarks or on a separate sheet)  |
| 2. Tritolium pratezel                  |         | YES         | FACU  | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Hesperis Sp.                        | 10      | NO          | FAC   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| 4. balling sp                          | 10      | No          | FAC   | be present, unless disturbed or problematic.   |
| 5. Flagaria Viginiana                  | 5       | NO          | FACY  | Definitions of Vegetation Strata:  |
| 6                                      |         |             |       | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
| 7                                      |         |             |       |  |
| 8                                      |         |             |       | Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                      |         |             |       | The first second of the second |
| 10                                     |         |             |       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 11                                     |         |             |       |  |
| 12                                     |         |             |       | Woody vines – All woody vines greater than 3.28 ft in height.  |
|  | 105     | = Total Co  | ver   |  |
| Woody Vine Stratum (Plot size: 30)     |         |             | 52,5  |  |
| 1                                      |         |             | /1    |  |
| 3                                      |         |             |       | Hydrophytic  |
| 2                                      |         |             |       | Vegetation Present? Yes No   |
| 3                                      |         |             |       | 7,000,000  |
| A                                      | -       | = Total Co  |       |  |
| 4                                      | ()      |             |       |  |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Coation: PL=Pore Lining, M=Matrix.   | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Type: C=Concentration, D=Depletion, RM=Reduced Sand Grains.   Type: Indicators of Mulck Alpha (R1) (LRR K, L, R)   |              |                                | Features  |  |   |   |  |
|--|--|--------------|--------------------------------|---|--|---|---|--|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :  Indicators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R, L, R)  Coast Prairie Redox (A16) (LRR K, L, R, L, R)  Thio Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Polyvalue Below Surface (S8) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  Thic Dark Surface (A12)  Redox Dark Surface (F6)  Tron-Manganese Masses (F12) (LRR K, L, R)  Piedmort Floodplain Soils (F19) (MLRA 149B)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Saridy Redox Re | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   2  | 100 -        |                                |   | Type <sup>1</sup>  | Loc <sup>2</sup>  |   | Remarks  |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :  Indicators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R, L, R)  Coast Prairie Redox (A16) (LRR K, L, R, L, R)  Thio Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Polyvalue Below Surface (S8) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  Polyvalue Below Surface (S9) (LRR K, L, R)  Thic Dark Surface (A12)  Redox Dark Surface (F6)  Tron-Manganese Masses (F12) (LRR K, L, R)  Piedmort Floodplain Soils (F19) (MLRA 149B)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Saridy Redox Re | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   2  | CALIFORNIA   |                                | ser-lumino-   | was the same   | physical participates   | Silt loan   |  |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Histo Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Thin Dark Surface (F6)  Thin Dark Surface (S9) (LRR K, L)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 149f Red Parent Material (F21)  Very Shallow Dark Surface (F12)  Dark Surface (S7) (LRR R, MLRA 149B)  Polyvalue Below Surface (S9)  Iron-Manganese Masses (F12) (LRR K, L)  Red Parent Material (F21)  Very Shallow Dark Surface (F12)  Dark Surface (S7) (LRR R, MLRA 144B, 145, 149f Red Parent Material (F21)  Very Shallow Dark Surface (F12)  Dark Surface (S7) (LRR R, MLRA 149B)  Polyvalue Below Surface (F12)  Nother (Explain in Remarks)  Polyvalue Below Surface (F12)  Other (Explain in Remarks)  | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Apple   | 00 -         |                                | _   | -  |   | -1///   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   | -  |   | 1007 100  |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   |  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   |  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  *Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B)  Juntal Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Almidicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (Inches): Depth (Inches):  Hydric Soil Present? Yes No                               |              |                                |   |  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   |  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   | ***********  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  *Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B)  Juntal Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Almidicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (Inches): Depth (Inches):  Hydric Soil Present? Yes No                               |              |                                |   |  |   |   | and the second s |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  *Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B)  Juntal Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Almidicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (Inches): Depth (Inches):  Hydric Soil Present? Yes No                               |              |                                |   |  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  *Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Pork Surface (S7) (LRR R, MLRA 149B)  Juntal Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Almidicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type: Depth (Inches): Depth (Inches):  Hydric Soil Present? Yes No                               |              |                                |   |  |   |   |  |
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| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   | -  |   |   | <u> </u>   |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   |  |   |   |  |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Peleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed): Type:   | Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Persent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Ployled Dark Surface (S7) (LRR R, MLRA 149B)  Ployled Matrix (S6) Present? Yes No   |              |                                |   |  |   |   | and the second s |
| Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, R) — Black Histic (A3) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) — Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Stratified Layers (A5) — Loamy Gleyed Matrix (F2) — Polyvalue Below Surface (S8) (LRR K, L) — Thick Dark Surface (A11) — Depleted Matrix (F3) — Thin Dark Surface (S9) (LRR K, L) — Thick Dark Surface (A12) — Redox Dark Surface (F6) — Iron-Manganese Masses (F12) (LRR K, L, R) — Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7) — Piedmont Floodplain Soils (F19) (MLRA 149B) — Sandy Redox (S5) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145, 149B) — Sandy Redox (S5) — Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  **Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**  **Restrictive Layer (if observed):**  Type:   | Histosol (A1)  | on, RM=Redu  | ced Matrix, MS                 | =Masked   | Sand Grain   | ns.   |   |  |
| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Loamy Mucky Mineral (F7)  MLRR R, MLRR A 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Fron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 1496)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Thin Dark Surface (F7)  Piedmont Floodplain Soils (F19) (MLRA 1496)  Mesic Spodic (TA6) (MLRA 144A, 145, 1496)  Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Type:  Type:  | Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, L, R)  MLRA 149B)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thick Dark Surface (A12)  Redox Dark Surface (F6)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149E)  Sandy Gleyed Matrix (S4)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Polyvalue Below Surface (S9) (LRR K, L, M)  Thin Dark Surface (S9) (LRR K, L, M)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149E)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B  Mesic Spodic (TA6) (MLRA 144A, 145, 149B  Tepth (Inches):  Type:  Depth (Inches):  Depth (Inches):  Hydric Soil Present? Yes No |              |                                |   |  |   |   |  |
| Black Histic (A3)  | Black Histic (A3)  | P            |                                | Surface (   | S8) (LRR   | R,  |   |  |
| Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A11) Pepleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Pepleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Sandy Redox (S7) (LRR R, MLRA 149B)  | Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 1498)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 1498)  3Indicators 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  | Т            |                                | ce (S9) (LF   | RR R MLF   | RA 149B)  |   |  |
| Stratified Layers (A5)   | Stratified Layers (A5)   |              |                                |   |  |   |   |  |
| Thick Dark Surface (A12)   | Thick Dark Surface (A12)   | Le           | oamy Gleyed M                  | Matrix (F2)   |  |   | Polyvalue B   | elow Surface (S8) (LRR K, L)   |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1498)  Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1498)  Sandy Redox (S5) Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  | Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1498 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1498 Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No   |              |                                |   |  |   |   |  |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 1496) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type:   | Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators 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  |              |                                |   | 7)   |   |   |  |
| Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type:  | Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Surface (S7) (LRR R, MLRA 149B)  Cother (Explain in Remarks)  Surface (S7) (LRR R, MLRA 149B)  Surface (TF12) Other (Explain in Remarks)  Hydric Soil Present? Yes No   |              |                                |   | )  |   |   |  |
| Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  | Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators 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  |              |                                |   |  |   |   |  |
| <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:   | <sup>3</sup> 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  |              |                                |   |  |   |   |  |
| Restrictive Layer (if observed):  Type:  | Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No  | (A 149B)     |                                |   |  |   | Other (Expla  | ain in Remarks)  |
| Restrictive Layer (if observed):  Type:  | Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No  | and wetland  | nydrology mus                  | t be preser   | nt unless  | disturbed   | or problematic.   |  |
| Type:  | Type:  | - una monana | ilyarology mas                 | . по р. осо.  |  |   |   |  |
| Depth (inches): No   |  |              |                                |   |  |   |   | V  |
|  | Remarks:   |              |                                |   |  |   | Hydric Soil Pres  | ent? Yes No  |
| Remarks:   |  |              |                                |   |  |   |   |  |
|  |  |              |                                |   |  |   |   |  |
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|  |  |              |                                |   |  |   |   |  |
|  |  |              |                                |   |  |   |   |  |
| Remarks:   |  |              | — P — TI — Lo — Lo — R — D — R | Polyvalue Below MLRA 149B)  Thin Dark Surfar Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi | Polyvalue Below Surface ( MLRA 149B) Thin Dark Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) | — Polyvalue Below Surface (S8) (LRR MLRA 149B)  — Thin Dark Surface (S9) (LRR R, MLI Loamy Mucky Mineral (F1) (LRR K, Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  — Redox Dark Surface (F6)  — Depleted Dark Surface (F7)  — Redox Depressions (F8) | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)     Thin Dark Surface (S9) (LRR R, MLRA 149B)     Loamy Mucky Mineral (F1) (LRR K, L)     Loamy Gleyed Matrix (F2)     Depleted Matrix (F3)     Redox Dark Surface (F6)     Depleted Dark Surface (F7)     Redox Depressions (F8) | Indicators for P  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck ( MLRA 149B) 2 coast Prairie Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface Loamy Gleyed Matrix (F2) Polyvalue B  11) Depleted Matrix (F3) 1 Thin Dark S Redox Dark Surface (F6) 1 Iron-Mangar Depleted Dark Surface (F7) Piedmont FI Redox Depressions (F8) Mesic Spodi Red Parent Very Shallon Other (Explainance) And wetland hydrology must be present, unless disturbed or problematic.   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 10/27//s Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-2 / Investigator(s): DJL, VJM \_\_ Section, Township, Range:\_\_ Landform (hillslope, terrace, etc.): Depressions Local relief (concave, convex, none): \_\_(oncave, Subregion (LRR or MLRA): LRR-R Datum: NAD 83 loam (As) Soil Map Unit Name: Ashulle NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes \_ Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Yes \_\_\_\_ No If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) L Drainage Patterns (B10) X Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) ✓ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_\_ Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) \_\_ Water Marks (B1) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_ Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) Stunted or Stressed Plants (D1) \_\_ Recent Iron Reduction in Tilled Soils (C6) \_\_\_ Algal Mat or Crust (B4) ✓ Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) \_\_ Iron Deposits (B5) Shallow Aquitard (D3) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: X No \_\_\_\_ Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_\_\_\_ Depth (inches): Water Table Present? X No Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| <b>VEGETATION</b> - Use | scientific names | of plants. |
|-------------------------|------------------|------------|
|-------------------------|------------------|------------|

| Tree Stratum (Plot size: 301)          | -           | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                  |
|--|-------------|----------------------|--------|--|
| 2                                      |             |                      | -      | Total Number of Dominant   |
| 3                                      |             |                      |        | Species Across All Strata: (B)   |
| 4                                      | <del></del> | -                    |        | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
| 5                                      |             |                      |        | That Are OBL, FACW, or FAC:  |
| 6                                      |             |                      |        | Prevalence Index worksheet:  |
| 7                                      |             |                      |        | Total % Cover of: Multiply by:   |
|  | 0           | = Total Cov          | er     | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15') |             |                      |        | FACW species x 2 =   |
| I                                      |             |                      |        | FAC species x 3 =  |
| 2.                                     |             |                      |        | FACU species x 4 =   |
| 3                                      |             |                      |        | UPL species x 5 =  |
|  |             |                      |        | Column Totals: (A) (B)   |
| 5.                                     |             |                      |        | Prevalence Index = B/A =   |
|  |             |                      |        | Hydrophytic Vegetation Indicators:   |
| 5                                      |             |                      |        | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                      |             |                      |        | 2 - Dominance Test is >50%   |
|  | _0_         | = Total Cov          | er     | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| Herb Stratum (Plot size:)              | 23          | 1.84 -               | -      | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| Junus e Husus                          |             | 485                  | FACE   | data in Remarks or on a separate sheet)  |
| Carex tribulordes                      | 4           | 465                  | DBL    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Carex 60.                           |             | NO                   | FIAC   | ¹Indicators of hydric soil and wetland hydrology must  |
| 4. Lycopus americadas                  |             |                      | DBC    | be present, unless disturbed or problematic.   |
| 5. Mesuric Spe                         | 5           | NO                   | TAC    | Definitions of Vegetation Strata:  |
| 6                                      |             |                      |        | Tree - Woody plants 3 in. (7.6 cm) or more in diamete  |
| 7.                                     |             |                      |        | at breast height (DBH), regardless of height.  |
| B                                      |             |                      |        | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9                                      |             |                      |        | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10                                     |             |                      |        | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11.                                    |             |                      |        |  |
| 12.                                    |             |                      |        | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 12                                     | 100         | = Total Cov          | 000    | neight.  |
| Woody Vine Stratum (Plot size: 30')    | 100         | - Total Cov          | er 50  |  |
| Woody Vine Stratum (Plot size:)        |             |                      | -      |  |
| 1                                      | -           | -                    |        | Hydrophytic  |
| 2                                      | ·           |                      |        | Vegetation V   |
| 3                                      |             | -                    |        | Present? Yes No  |
| 4                                      |             |                      |        |  |
|  | 0           | = Total Cov          | rer    |  |

| Depth<br>(inches)  | Matrix<br>Color (moist)                          | %           | Redox<br>Color (moist)          | Features<br>% | Type <sup>1</sup>         | 1.002     | Texture                                 | Remarks  |   |
|--------------------|--|-------------|---------------------------------|---------------|---------------------------|-----------|---|--|---|
|                    | 1  |             |                                 |               | Туре                      | LOC       | 2 1                                     |  |   |
| 0-10               | 104R 3/1   | 95          | 7.5 4R3/4                       | 5             |                           | 19        | daylor                                  | - An   |   |
|                    |  |             |                                 |               |                           |           |   | A. Control of the Con |   |
|                    |  | -           |                                 |               |                           |           |   | <b>1</b>   |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   | 7/10   |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           | *************************************** | F  | *************************************** |
|                    | oncentration, D=Deple                            | etion, RM=F | Reduced Matrix, MS              | ==Masked      | <br>I Sand Gra            | ains.     |   | PL=Pore Lining, M=Matr<br>for Problematic Hydric S   |   |
|                    | Indicators:                                      |             | Debaselus Delev                 | . O f         | (00) (I DE                |           |   | 사람들이 얼마나 되는 사람이 되었다.   |   |
| Histosol           | (A1)<br>pipedon (A2)                             | -           | _ Polyvalue Belov<br>MLRA 149B) |               | (S8) (LRF                 | CR,       |   | luck (A10) (LR <b>R K, L, MLI</b><br>Prairie Redox (A16) (L <b>RR</b>  |   |
|                    | istic (A3)                                       |             | Thin Dark Surfa                 |               | RR R. ML                  | RA 149B)  |   | lucky Peat or Peat (S3) (L   |   |
|                    | en Sulfide (A4)                                  |             | Loamy Mucky M                   |               | The state of the state of |           |   | urface (S7) (LRR K, L, M)  |   |
| _ Stratified       | d Layers (A5)                                    | _           | Loamy Gleyed N                  | Matrix (F2    | )                         |           | Polyval                                 | lue Below Surface (S8) (LI   | RR K, L)                                |
| _ Deplete          | d Below Dark Surface                             | (A11) _     | _ Depleted Matrix               |               |                           |           |   | ark Surface (S9) (LRR K, I   |   |
|                    | ark Surface (A12)                                | 7           | ✓ Redox Dark Sur                |               |                           |           |   | anganese Masses (F12) (L   |   |
|                    | Mucky Mineral (S1)                               | - 1         | _ Depleted Dark S               |               | 7)                        |           |   | ont Floodplain Soils (F19)   |   |
|                    | Gleyed Matrix (S4)                               | -           | _ Redox Depress                 | ions (F8)     |                           |           |   | Spodic (TA6) (MLRA 144A  | A, 145, 149B                            |
|                    | Redox (S5)                                       |             |                                 |               |                           |           |   | arent Material (F21)   |   |
|                    | d Matrix (S6)<br>Irface (S7) ( <b>LRR R, M</b> i | LRA 149B)   |                                 |               |                           |           |   | hallow Dark Surface (TF12<br>Explain in Remarks)   | 2)                                      |
|                    | f hydrophytic vegetation                         | on and wet  | land hydrology mus              | t be prese    | ent, unless               | disturbed | or problematic.                         |  |   |
|                    | Layer (ii observed).                             |             |                                 |               |                           |           |   |  |   |
| Type:<br>Depth (in | ichae).  |             |                                 |               |                           |           | Hydric Soil                             | Present? Yes   | No                                      |
| Remarks;           | cries)   |             |                                 |               |                           |           | nyuric soil                             | rresentr res   | 110                                     |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |
|                    |  |             |                                 |               |                           |           |   |  |   |

|  | I DATA FORM – Northcentral and Northeast Region   |
|--|---|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 10/29/  |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 22  |
| Investigator(s): DJL V5M   | Section, Township, Range: VIRAVA  |
| Landform (hillslope, terrace, etc.): Depne 551 and   | Local relief (concave, convex, none): Slope (%): |
| Subregion (LRR or MLRA): LRR-R Lat: 7  | 9.137276 Long: 42.422204 Datum: NAD 83  |
| Soil Map Unit Name: Ashville Silt los  | an (As) NWI classification: PEM   |
| Are climatic / hydrologic conditions on the site typical for this t  | ,   |
| Are Vegetation $\frac{\mathcal{N}\mathcal{O}}{}$ , Soil $\frac{\mathcal{N}\mathcal{O}}{}$ , or Hydrology $\frac{\mathcal{N}\mathcal{O}}{}$ sig |   |
| Are Vegetation $NO$ , Soil $NV$ , or Hydrology $NV$ national sides $NV$  |   |
| All Vegetation 7 , Soil 7 , or Hydrology 7 ha  | turally problematic? (If needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS - Attach site map s  | howing sampling point locations, transects, important features, etc   |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No  | Is the Sampled Area within a Wetland? Yes No  |
| Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a sepa   | If yes, optional Wetland Site ID: WL TII  |
| HYDROLOGY  |   |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)  |
| Primary Indicators (minimum of one is required; check all the  |   |
|  | -Stained Leaves (B9)  ✓ Drainage Patterns (B10)   |
| Trans. 17. (19. (19. (19. (19. (19. (19. (19. (19  | ic Fauna (B13) Moss Trim Lines (B16)  |
| 게 있으면 있다. 선생님 이 1. (1942 - 1912 - 1912 - 1913 - 1913 - 1913 - 1913 - 1913 - 1913 - 1913 - 1913 - 1913 - 1913 -                                 | Deposits (B15) Dry-Season Water Table (C2)  |
| Water Marks (B1)   Hydro   | gen Sulfide Odor (C1) Crayfish Burrows (C8)   |
| Sediment Deposits (B2) Oxidiz  | ed Rhizospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)  |
|  | nce of Reduced Iron (C4)  Stunted or Stressed Plants (D1)   |
|  | nt Iron Reduction in Tilled Soils (C6)  |
|  | Muck Surface (C7) Shallow Aquitard (D3)   |
|  | (Explain in Remarks) Microtopographic Relief (D4)   |
| Sparsely Vegetated Concave Surface (B8) Field Observations:  | FAC-Neutral Test (D5)   |
|  | h (inches): 4"  |
| [1.75] A. W.C. Baltin, M. W.   | h (inches):   |
| Saturation Present? Yes X No Depti   |   |
| (includes capillary fringe)  | sial shataa assuigus isaagaligaa) If ayallahlay   |
| Describe Recorded Data (stream gauge, monitoring well, ae  | nai priotos, previous inspections), ii available:   |
|  |   |
| Remarks:   |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |

| = Total (     | Cover  OBL  Tree       | Total % Cover of: Multiply by:  OBL species  |
|---------------|------------------------|--|
| = Total (     | Cover  OBL  Then       | That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:  OBL species  FACW species  FACW species  FACU species  FACU species  Wat =  |
| = Total (     | Cover  OBL  Free  Tree | Total % Cover of: Multiply by:  OBL species  |
| = Total       | Cover OBL FREE         | Total % Cover of: Multiply by:  OBL species  |
| = Total - 469 | Cover OBL Free         | FACW species   |
| = Total - 469 | Cover  OBL  Free       | FAC species x 3 =  |
| = Total - 469 | Cover  OBL  Free       | UPL species x 5 =  |
| = Total       | Cover  OBL  Freu       | Column Totals:   |
| = Total       | Cover  OBL  Freu       | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| = Total       | OBL<br>Freu            | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                        |
| _ = Total     | OBL<br>Freu            | 1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
| _ = Total     | OBL<br>Free            | ∠ 2 - Dominance Test is >50%     _ 3 - Prevalence Index is ≤3.0¹     _ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     _ Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
| .4es<br>100   | OBL<br>Freu            | 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
|               |                        | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation¹ (Explain)      ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
|               |                        | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
|               |                        | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
|               | - 4                    | be present, unless disturbed or problematic.   |
|               |                        | Definitions of Vegetation Strata:  |
|               | ,                      | Delinitions of Cogetanon -   |
|               |                        | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
|               |                        | at breast height (DBH), regardless of height.  |
|               |                        | Sapling/shrub - Woody plants less than 3 in. DBH   |
|               |                        | and greater than or equal to 3.28 ft (1 m) tall.   |
|               |                        | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
|               |                        | Woody vines – All woody vines greater than 3.28 ft in  |
|               |                        | height.  |
| = Tota        | Cover 4                | 15   |
|               | 10                     |  |
|               |                        |  |
|               |                        | Hydrophytic Vegetation   |
|               |                        | Present? Yes No  |
|               |                        | _  |
| = Tota        | Cover                  |  |
|               | = Total                |  |

Sampling Poin t: DP

| Depth _   | Matrix   |            | Redo                        | x Features   | 1                 | . 2              |   |   |
|---|--|------------|-----------------------------|--------------|-------------------|------------------|---|---|
| (inches)  | Color (moist)  | %          | Color (moist)               | %            | Type <sup>1</sup> | Loc <sup>2</sup> | Texture   | Remarks   |
| 1-18  | 1041 2/1   | 100        | -                           |              |                   |                  | Muchy loany   |   |
|   |  |            |                             |              |                   |                  |   |   |
| -   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   | 1   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
| -   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              | -                 |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   | ya wa                   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
|   |  |            |                             |              |                   |                  |   |   |
| T C-C   |  | -C DM      | Barbara Market M            | 0            | 0                 |                  | 2) anation, DI –Da  | un I lulian Maddaha   |
| lydric Soil In  | centration, D=Depl   | etion, RM= | Reduced Matrix, M           | S=Masked     | Sand Grain        | 18.              | Indicators for Brok   | ore Lining, M=Matrix.  olematic Hydric Soils <sup>3</sup> : |
|   |  |            | Debereles Dele              | 0            | (00) (I DD I      |                  |   |   |
| _ Histosol (/<br>∠ Histic Epip  |  |            | Polyvalue Belo<br>MLRA 149B |              | (S8) (LKK I       | ۲,               |   | 0) (LRR K, L, MLRA 149B)<br>tedox (A16) (LRR K, L, R)       |
| _ Black Hist  |  |            | Thin Dark Surf              |              | RRR MIR           | A 149R           |   | eat or Peat (S3) (LRR K, L, R)                              |
|   | Sulfide (A4)   | 74         | Loamy Mucky                 |              |                   |                  |   | S7) (LRR K, L, M)   |
| Stratified  |  |            | Loamy Gleyed                |              |                   | -,               |   | w Surface (S8) (LRR K, L)                                   |
|   | Below Dark Surface   | e (A11)    | Depleted Matri              |              | •                 |                  |   | ace (S9) (LRR K, L)   |
|   | k Surface (A12)  |            | Redox Dark Su               |              |                   |                  |   | e Masses (F12) (LRR K, L, R)                                |
| Condes \$4.   | icky Mineral (S1)  |            | Depleted Dark               | Surface (F   | 7)                |                  |   | dplain Soils (F19) (MLRA 149                                |
|   |  |            |                             | eione (FR)   |                   |                  | Mesic Spodic (  | TA6) (MLRA 144A, 145, 149B                                  |
| Sandy Gle   | eyed Matrix (S4)   |            | Redox Depres                | 310113 (1 0) |                   |                  |   |   |
| Sandy Gle<br>Sandy Re   | dox (S5)   |            | Redox Depres                | 310113 (1 0) |                   |                  | Red Parent Ma   | terial (F21)  |
| Sandy Gle Sandy Re Stripped M   | dox (S5)<br>Matrix (S6)  |            |                             | 310113 (1 0) |                   |                  | Red Parent Ma Very Shallow D                                | iterial (F21)<br>Park Surface (TF12)                        |
| Sandy Gle Sandy Re Stripped M   | dox (S5)   | ILRA 149E  |                             | 310113 (1 0) |                   |                  | Red Parent Ma   | iterial (F21)<br>Park Surface (TF12)                        |
| Sandy Gle Sandy Re Stripped M Dark Surfa  | edox (S5)<br>Matrix (S6)<br>ace (S7) (LRR R, N   |            | )                           |              | ant unloss s      | list wheel       | Red Parent Ma Very Shallow D Other (Explain                 | iterial (F21)<br>Park Surface (TF12)                        |
| Sandy Gle Sandy Re Stripped M Dark Surfa  | rdox (S5)<br>Matrix (S6)<br>race (S7) (LRR R, N<br>hydrophytic vegetat                         | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow E Other (Explain                 | iterial (F21)<br>Park Surface (TF12)                        |
| Sandy Gle Sandy Re Stripped M Dark Surfa  | edox (S5)<br>Matrix (S6)<br>Jace (S7) (LRR R, N<br>hydrophytic vegetat<br>Jayer (If observed): | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow E Other (Explain                 | iterial (F21)<br>Park Surface (TF12)                        |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of H Restrictive La                   | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow E Other (Explain                 | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of H Restrictive La                   | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfandicators of M Restrictive La Type: Depth (inch   | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfa Indicators of M Restrictive La Type: Depth (inch | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |
| Sandy Gle Sandy Re Stripped M Dark Surfandicators of M Destrictive La Type: Depth (inch   | edox (S5)<br>Matrix (S6)<br>Mace (S7) (LRR R, N<br>hydrophytic vegetat<br>ayer (if observed):  | ion and we | )                           |              | ent, unless c     | listurbed        | Red Parent Ma Very Shallow D Other (Explain or problematic. | eterial (F21)<br>Dark Surface (TF12)<br>in Remarks)         |

|  | ATA FORM - Northcentral and Northeast Region   |
|--|--|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 10/29/29   |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 23   |
| Investigator(s): DJL V SM  | Section, Township, Range; VIIIOVA  |
| Landform (hillslope, terrace, etc.):   | _ Local relief (concave, convex, none): Slope (%): 3 - 8   |
| Subregion (LRR or MLRA): LRR-R Lat: 79.  | 135864 Long: 42,421974 Datum: NAD 83   |
| Soll Map Unit Name: Valors & cavelly Siltla  | and the state of t |
| Are climatic / hydrologic conditions on the site typical for this time   |  |
| Are Vegetation Mo, Soil Mo, or Hydrology Mo significant  |  |
|  | 들다. 즐거워 하는 하다 되는 그 아이를 보면 하는 것이 되었다면 모든 물로 가입니다면 하는 것이 살다고 하는 것이다.   |
| Are Vegetation AIO, Soil NO, or Hydrology NO nature  | ally problematic? (If needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS - Attach site map sho  | wing sampling point locations, transects, important features, etc.   |
| Hydrophytic Vegetation Present? Yes No   | within a Wetland? Yes No   If yes, optional Wetland Site ID:   |
| HADBOI OCA   |  |
| HYDROLOGY  |  |
| High Water Table (A2)       Aquatic F         Saturation (A3)       Marl Dep         Water Marks (B1)       Hydroger         Sediment Deposits (B2)       Oxidized         Drift Deposits (B3)       Presence         Algal Mat or Crust (B4)       Recent In         Iron Deposits (B5)       Thin Much | ained Leaves (B9) Drainage Patterns (B10) Fauna (B13) Moss Trim Lines (B16)  |
| Surface Water Present? Yes No Depth (i   | nches):  |
| Water Table Present? Yes No Depth (i   |  |
| Saturation Present? Yes NoX Depth (i   | Y  |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aeria  |  |
| Remarks: No wetland tolg divloging   | indiendois precent   |

#### VEGETATION - Use scientific names of plants

|  |         | Dominant Indicator   | Dominance Test worksheet:   |
|--|---------|--|---|
| Tree Stratum (Plot size: 30')          | % Cover | Species? Status  | Number of Dominant Species  |
| f                                      |         |  | That Are OBL, FACW, or FAC:(A)  |
|  |         |  | Total Number of Dominant  |
|  |         |  | Species Across All Strata:(B)   |
|  |         |  |   |
|  |         |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B  |
| i                                      |         |  | marrie obej mori, em me:  |
|  |         |  | Prevalence Index worksheet:   |
|  |         |  | Total % Cover of: Multiply by:  |
|  | 0       | = Total Cover  | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 151) |         | SASSAGE STATE OF THE SASSAGE S | FACW species x 2 =  |
|  |         |  | FAC species x 3 =   |
|  |         |  | FACU species x 4 =  |
|  |         |  | UPL species x 5 =   |
| <u> </u>                               |         |  | Column Totals: (A) (B)  |
|  |         |  | Coldinii Totals.  |
|  |         |  | Prevalence Index = B/A =  |
|  |         |  | Hydrophytic Vegetation Indicators:  |
| <b>-</b>                               |         |  | 1 - Rapid Test for Hydrophytic Vegetation   |
|  |         |  | 2 - Dominance Test is >50%  |
| -1                                     | _0_     | = Total Cover  | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:)              |         |  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting  |
| Dactylia gloresata                     | 40      | 465 Ftul   | data in Remarks or on a separate sheet)   |
| Tritolium praterse                     | 20      | YR STACY   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
|  |         | UES FACU   |   |
| 3. Plantago la colorta                 | - 20    | yes They   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| · Callium Se                           | 10      | NO FALL  |   |
| 5. Naucus carota                       | 10      | NO Fra   | Definitions of Vegetation Strata:   |
| 3                                      |         |  | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7                                      |         |  | at breast height (DBH), regardless of height.   |
| 3                                      |         |  | Sapling/shrub - Woody plants less than 3 in. DBH  |
|  |         |  | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                      |         |  | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10                                     |         |  | size, and woody plants less than 3.28 ft tall.  |
| 11                                     |         |  | Woody vines - All woody vines greater than 3.28 ft in   |
| 12                                     |         |  | height.   |
|  | 100     | = Total Cover  |   |
| Woody Vine Stratum (Plot size:)        | *       | 50   |   |
| YVOODY VINE Stratum (Flot size,)       |         | 20.  | •   |
|  |         |  |   |
| 1                                      |         |  | Hydronhytic   |
| 1                                      |         |  | Hydrophytic<br>Vegetation   |
| 1                                      |         |  |   |
| 1                                      |         |  | Vegetation  |
| 1                                      |         | = Total Cover  | Vegetation  |

|   | cription: (Describe t                   | to the dept |                              |                 | dicator           | or confirm       | the absence of           | indicato   | rs.)         |  |
|---|---|-------------|------------------------------|-----------------|-------------------|------------------|--------------------------|------------|--------------|--|
| Depth<br>(inches)                       | Color (moist)                           | %           | Color (moist)                | x Features<br>% | Type <sup>1</sup> | Loc <sup>2</sup> | Texture                  |            | Remarks      | 3  |
| 7-18                                    | 10423/4                                 | 160         |                              |                 |                   |                  | 5,1 Han                  |            |              |  |
| 10                                      | 1010-11                                 | 700         |                              | -               |                   |                  | 2717 Cel R               |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              | **************************************               |
|   |   |             |                              | *************   | -                 |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              | ***************************************              |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
| (Maga)                                  |   |             |                              |                 |                   |                  |                          |            |              | - CF - CF FAN - CF - F - F - F - F - F - F - F - F - |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   | -           |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          | -971-11-   |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | -                                       |             |                              |                 |                   |                  | -                        |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   | Concentration, D=Depl                   | letion, RM= | Reduced Matrix, M            | S=Masked        | Sand Gr           | ains.            | <sup>2</sup> Location: F |            |              |  |
|   | Indicators:                             |             |                              |                 |                   |                  | Indicators fo            |            |              |  |
| Histoso                                 |   |             | Polyvalue Belov              |                 | S8) (LRI          | R,               |                          |            |              | VILRA 149B)  |
|   | pipedon (A2)                            |             | MLRA 149B                    |                 |                   |                  |                          |            | ox (A16) (LF |  |
|   | Histic (A3)                             |             | Thin Dark Surfa              |                 |                   |                  |                          |            |              | (LRR K, L, R)  |
|   | en Sulfide (A4)                         | 100         | Loamy Mucky N                |                 |                   | , L)             |                          |            | (LRR K, L,   | (LRR K, L)   |
|   | ed Layers (A5)<br>ed Below Dark Surface | (111)       | Loamy Gleyed Depleted Matrix |                 |                   |                  |                          |            | (S9) (LRR    |  |
|   | Dark Surface (A12)                      | (////       | Redox Dark Su                |                 |                   |                  |                          |            |              | ) (LRR K, L, R)                                      |
|   | Mucky Mineral (S1)                      |             | Depleted Dark                |                 | 7)                |                  |                          |            |              | 9) (MLRA 149B)                                       |
|   | Gleyed Matrix (S4)                      |             | Redox Depress                |                 | ,                 |                  |                          |            |              | 44A, 145, 149B)                                      |
|   | Redox (S5)                              |             | - 250 45000                  |                 |                   |                  | Red Pare                 |            |              |  |
| Strippe                                 | d Matrix (S6)                           |             |                              |                 |                   |                  | Very Sha                 | llow Dark  | Surface (T   | F12)   |
| Dark S                                  | urface (S7) (LRR R, N                   | ILRA 149B   | )                            |                 |                   |                  | Other (Ex                | plain in f | Remarks)     |  |
| 3                                       |   |             |                              |                 | 2.574             |                  |                          |            |              |  |
|   | of hydrophytic vegetat                  |             | tland hydrology mus          | st be presei    | nt, unless        | disturbed        | or problematic.          |            |              |  |
|   | Layer (if observed):                    |             |                              |                 |                   |                  |                          |            |              |  |
| Type:                                   |   |             |                              |                 |                   |                  |                          | 200.02     |              | 🗸  |
| Depth (ir                               | nches):                                 |             |                              |                 |                   |                  | Hydric Soil Pr           | esent?     | Yes          | _ No _   |
| Remarks:                                |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          | 4 :        |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   | 1.                                      |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |
|   |   |             |                              |                 |                   |                  |                          |            |              |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: 10/2 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-Investigator(s): DTL, V5m Section, Township, Range:\_ Landform (hillslope, terrace, etc.): Till Plans Local relief (concave, convex, none): \_\_\_\_ \_\_\_\_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R 5,1+10 am Soll Map Unit Name: Busti NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation <u>NO</u>, Soil <u>No</u>, or Hydrology <u>NO</u> significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No Are Vegetation MD, Soil MD, or Hydrology MD naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-II & WL-II Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_ Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) \_\_ High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) \_\_ Saturation (A3) Dry-Season Water Table (C2) \_ Marl Deposits (B15) \_\_\_ Water Marks (B1) \_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) \_\_ Saturation Visible on Aerial Imagery (C9) \_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Drift Deposits (B3) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_ Saturation Present? \_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

|   | = Total Co | /er        | Total Number of Dominant Species Across All Strata:  |
|---|------------|------------|--|
|   | = Total Co | /er        | That Are OBL, FACW, or FAC:  Prevalence Index worksheet:   |
|   | = Total Co | ver        | Total % Cover of:       Multiply by:         OBL species       x 1 =   |
|   | = Total Co | ver        | FACW species x 2 =   |
|   | = Total Co | ver        | UPL species x 5 =<br>Column Totals: (A) (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ |
|   | = Total Co | ver        | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |
| 0 | = Total Co | ver        | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹  |
| 0 | = Total Co | ver        | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |
|   | Vies       | Fac. 1     |  |
|   |            |            | data in Remarks or on a separate sheet)  |
| 1 | Wiec       | FACL       | Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must  |
|   |            |            | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  |
|   |            |            | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
|   |            |            | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
|   |            |            | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| _ |            |            | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 0 | = Total Co | ver 3.5    |  |
|   |            |            | Hydrophytic Vegetation   |
| _ | -          | -          | Present? Yes No  |
| 2 | = Total Co | ver        |  |
|   |            | = Total Co | o = Total Cover  |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   |
|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators:  Histosol (A1)  Histosol (A1)  Histosol (A2)  Biack Histic (A3)  Tinin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (F1)  Depleted Matrix (F3)  Depleted Below Dark Surface (A12)  Depleted Dark Surface (A12)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Dark Surface (S9)  Sandy Redox (S5)  Sandy Redox (S5)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| lydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L MLRA Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| ydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| ydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| lydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L MLRA Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L MLRA Histic Epipedon (A2) MLRA 149B) Som Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, MLRA Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, MLRA Lydrogen Sulfide Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.     |
| lydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L MLRA Histic Epipedon (A2) MLRA 149B) Som Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, MLRA Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, MLRA Lydrogen Sulfide Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.     |
| Histosol (A1)   |
| Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (F3)  Depleted Dark Surface (F6)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR C)  Piedmont Floodplain Soils (F19) (ML C)  Mesic Spodic (TA6) (MLRA 144A, 144A, 144A)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 14 Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (ML Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145  |
| Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  |
| Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   |
|   |
| testrictive Layer (if observed):  |
| Type:   |
| Depth (inches): Hydric Soil Present? Yes X  |
| Remarks:  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County \_ Sampling Date: 10 /30 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-Investigator(s): DTL ITM Villenous Section, Township, Range:\_ Local relief (concave, convex, none): Slope (%): 3 -8 Subregion (LRR or MLRA): LRR-R \_\_ Datum: NAD 83 Long: Soil Map Unit Name: Bust 511+ NWI classification:\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes No\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO, Soil NO, or Hydrology NO 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? If yes, optional Wetland Site ID: WL - J1 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) ∠ Drainage Patterns (B10) High Water Table (A2) \_\_ Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) \_\_ Mari Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) ✓ Geomorphic Position (D2) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No \_ Depth (inches): Water Table Present? Yes X No 10 Depth (inches): Saturation Present? Yes \_\_\_ No \_4 Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| ree Stratum (Plot size: 30 ( )        | Absolute % Cover | Dominant Indicator Species? Status | Dominance Test worksheet:  |
|---------------------------------------|------------------|------------------------------------|--|
|                                       |                  |                                    | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|                                       |                  |                                    | Total Number of Dominant   |
|                                       |                  |                                    | Species Across All Strata: (B)   |
| -                                     |                  |                                    | Percent of Dominant Species / ^ ~ ~  |
|                                       |                  |                                    | That Are OBL, FACW, or FAC:(A/B  |
|                                       |                  |                                    |  |
|                                       |                  |                                    | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |
|                                       |                  | = Total Cover                      | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size: 15 ) |                  | =   otal Cover                     | FACW species x 2 =   |
| apling/Shrub Stratum (Plot size:)     |                  |                                    | FAC species x 3 =  |
| ·                                     |                  |                                    | FACU species x 4 =   |
|                                       |                  |                                    | UPL species x 5 =  |
| <u>(=</u>                             |                  |                                    | Column Totals: (A) (B)   |
| )                                     |                  |                                    | Brand (specification of D/A =  |
|                                       |                  |                                    | Prevalence Index = B/A =   |
| 5                                     |                  |                                    | Hydrophytic Vegetation Indicators:   |
| 7                                     |                  |                                    | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%                               |
|                                       | 0                | = Total Cover                      | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size:)             |                  |                                    | 4 - Morphological Adaptations¹ (Provide supporting   |
| . Silper Cyperintes                   | 25               | VES. OBL                           | data in Remarks or on a separate sheet)  |
| Phalais arndinacea                    | 26               | VES PAYER                          | Problematic Hydrophytic Vegetation¹ (Explain)  |
| Juneas Pffishs                        | 15               | 4662 PALW                          | Indicators of hydric soil and wetland hydrology must   |
|                                       |                  | 465 FNW                            | be present, unless disturbed or problematic.   |
| 4. Tacus and pusis                    |                  | NO FAC                             | Definitions of Vegetation Strata:  |
| 5. Solidayo altisana                  |                  |                                    |  |
| 6. Or ac lear co-sibiles              |                  |                                    | Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. |
| 7                                     |                  |                                    | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8                                     |                  |                                    | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9                                     |                  |                                    | Herb - All herbaccous (non-woody) plants, regardless of  |
| 10                                    |                  |                                    | size, and woody plants less than 3.28 ft tall.   |
| 11                                    |                  |                                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                    | _ `              |                                    | height.  |
|                                       | 100              | _ = Total Cover                    |  |
| Woody Vine Stratum (Plot size:)       |                  | 20                                 |  |
| 1                                     |                  |                                    | - n.   |
| 2                                     |                  |                                    | Hydrophytic Vegetation   |
| 2                                     |                  |                                    | Present? Yes No  |
| 3                                     |                  |                                    |  |
| 4                                     | 0                | = Total Cover                      |  |
|                                       |                  | 10141 00101                        |  |

| Depth   | Matrix  |  |   | x Features                             | T1                | 12   | Touture   | Domaska  |
|---|---|--|---|--|-------------------|--|---|--|
| (inches)  | Color (moist)   | %_   | Color (moist)                             |  | Type <sup>1</sup> | _Loc²  |   | Remarks  |
| 079   | 164x 3/1  | 95   | 7,6 4/2 1/3                               | 5                                      | 0                 | M  | Siltlaca  |  |
| 9-18  | 10485/2   | 00   | 76,415/6                                  | 20                                     | _                 | M  | Chafton   | m  |
|   |   |  |   |  |                   |  |   |  |
|   |   |  |   |  | _                 |  |   | F  |
|   |   |  |   | _                                      | _                 | _  |   | *-   |
| Type: C=Co  |   | oletion, RM  | M=Reduced Matrix, M                       | S=Masked                               | Sand Gr           | rains.   |   | PL=Pore Lining, M=Matrix. r Problematic Hydric Solls <sup>3</sup> :  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) |   | Polyvalue Below MLRA 149B Thin Dark Surfa Loamy Mucky N Loamy Gleyed | )<br>ace (S9) ( <b>L</b><br>Mineral (F1   | RR R, M<br>) (LRR H                    | ILRA 149B)        | <ul> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul> |   |  |
| Thick Da Sandy M Sandy G Sandy R Stripped Dark Su   | ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R, I   | MLRA 149   |   | rface (F6)<br>Surface (F<br>sions (F8) |                   | s disturbed  | Iron-Mang Piedmont Mesic Spo Red Pare Very Shal           | s Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 1498 odic (TA6) (MLRA 144A, 145, 1498 nt Material (F21) llow Dark Surface (TF12)                    |
| Thick Da Sandy M Sandy G Sandy R Stripped Dark Su   | ark Surface (A12)<br>Mucky Mineral (S1)<br>Bleyed Matrix (S4)<br>Redox (S5)<br>I Matrix (S6)<br>Irface (S7) (LRR R, I   | MLRA 149   | Redox Dark Su Depleted Dark Redox Depress | rface (F6)<br>Surface (F<br>sions (F8) |                   | s disturbed  | Iron-Mang Piedmont Mesic Spo Red Pare Very Shal           | s Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 1498 odic (TA6) (MLRA 144A, 145, 1498 nt Material (F21) llow Dark Surface (TF12)                    |
| Thick Da Sandy M Sandy G Sandy R Stripped Dark Su  Blindicators of Restrictive I  | ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I f hydrophytic vegeta Layer (if observed)                           | MLRA 149   | Redox Dark Su Depleted Dark Redox Depress | rface (F6)<br>Surface (F<br>sions (F8) |                   | s disturbed  | Iron-Mang Piedmont Mesic Spo Red Pare Very Shal           | Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R Floodplain Soils (F19) (MLRA 149) odic (TA6) (MLRA 144A, 145, 149E nt Material (F21) llow Dark Surface (TF12) splain in Remarks)    |
| Thick Da Sandy M Sandy R Sandy R Stripped Dark Su Indicators of Restrictive I Type: Depth (inc  | ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I f hydrophytic vegeta Layer (if observed)                           | MLRA 149<br>ation and v  | Redox Dark Su Depleted Dark Redox Depress | rface (F6)<br>Surface (F<br>sions (F8) |                   | is disturbed   | Iron-Mang Piedmont Mesic Spi Red Pare Very Shal Other (Ex | s Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 1498 odic (TA6) (MLRA 144A, 145, 1498 nt Material (F21) llow Dark Surface (TF12) splain in Remarks) |
| Thick Da Sandy M Sandy G Sandy R Stripped Dark Su Indicators of Restrictive I Type: Depth (inc  | ark Surface (A12) Mucky Mineral (S1) Mucky Mineral (S1) Bleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I f hydrophytic vegeta Layer (if observed) ches): | MLRA 149<br>ation and v  | Redox Dark Su Depleted Dark Redox Depress | rface (F6)<br>Surface (F<br>sions (F8) |                   | s disturbed  | Iron-Mang Piedmont Mesic Spi Red Pare Very Shal Other (Ex | s Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 1498 odic (TA6) (MLRA 144A, 145, 1498 nt Material (F21) llow Dark Surface (TF12) splain in Remarks) |
| Thick Da Sandy M Sandy G Sandy R Stripped Dark Su Indicators of Restrictive I Type: Depth (inc  | ark Surface (A12) Mucky Mineral (S1) Mucky Mineral (S1) Bleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I f hydrophytic vegeta Layer (if observed) ches): | MLRA 149<br>ation and v  | Redox Dark Su Depleted Dark Redox Depress | rface (F6)<br>Surface (F<br>sions (F8) |                   | s disturbed  | Iron-Mang Piedmont Mesic Spi Red Pare Very Shal Other (Ex | s Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R Floodplain Soils (F19) (MLRA 149 odic (TA6) (MLRA 144A, 145, 1498 nt Material (F21) llow Dark Surface (TF12) splain in Remarks)   |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 10/30/30/30/5 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP-2 Applicant/Owner: Ball Hill Wind Energy, LLC \_\_ Section, Township, Range: VT IEAOVA Investigator(s): \_ DJL , VJM Landform (hillslope, terrace, etc.): Till Plains Local relief (concave, convex, none): Convex Slope (%): 3-8 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Busti Silt Logar (BSB \_\_\_NWI classification:\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_\_\_ Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are Vegetation M, Soil M, or Hydrology M naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Yes No 🔀 Wetland Hydrology Present? If yes, optional Wetland Site ID:\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) \_\_ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) \_\_ High Water Table (A2) \_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_\_\_ Saturation (A3) \_\_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) \_\_ Saturation Visible on Aerial Imagery (C9) \_\_\_ Sediment Deposits (B2) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Depth (inches): Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No 💹 No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetland Hydrology indicators present

# VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size:) 1                          |     |  | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|--|-----|--|---|
| 3  |     |  | Total Number of Dominant<br>Species Across All Strata: (B)  |
| 4  |     |  | Percent of Dominant Species   |
| 5  |     |  | That Are OBL, FACW, or FAC: (A/B)   |
| 6  | -   |  | Prevalence Index worksheet:   |
| 7  |     |  |   |
| Sapling/Shrub Stratum (Plot size: /5/                |     | = Total Cover  | OBL species x 1 =<br>FACW species x 2 =   |
|  |     |  | FAC species x 3 =   |
| 1  |     |  | FACU species x 4 =  |
| 2  |     |  | UPL species x 5 =   |
| 3  | -   |  | Column Totals: (A) (B)  |
| 4  |     |  | Prevalence Index = B/A =  |
| 5  |     |  | Hydrophytic Vegetation Indicators:  |
| 6<br>7   |     |  | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | 0   | = Total Cover  | 2 - Dominance Test is >50%  |
| 5'   |     | - Total Cover  | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| Herb Stratum (Plot size:)  1. Solida an Carpella 250 | 40  | YES FORM   | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| 2. Mart 1/2 Glores La                                |     |  | 그는 그는 그는 그리고 있다면 하는 그리고 있다면 하는 그리고 있다면 하는 것이 없는 것이 없는 것이 없다면                              |
| 3. Lotus la niculatus                                |     |  |   |
| 4. Fragueria Vivginiana                              |     | and the second second  |   |
| 5  |     |  | Definitions of Vegetation Strata:   |
| 6  |     |  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7  |     |  | at breast height (DBH), regardless of height.   |
| 8  |     |  | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9  |     |  | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10,  |     |  | Herb – All herbaceous (non-woody) plants, regardless of   |
| 11   |     |  | size, and woody plants less than 3.28 ft tall.  |
| 12.  |     |  | Woody vines – All woody vines greater than 3.28 ft in height.   |
|  | 100 | = Total Cover  | IN ISTANT   |
| Woody Vine Stratum (Plot size:)                      |     | 50<br>20   |   |
| 1  |     |  |   |
| 2  |     |  | Hydrophytic   |
|  |     |  | Vegetation Present? Yes No  |
| 3.   |     | The second secon |   |
| 34   |     |  |   |

| Depth<br>(inches) | ription: (Beschibe ti                    | o the dept    | h needed to docun  |   | or confirm            | the absence of maid           | ators.j       |                                     |
|-------------------|--|---------------|--|---|-----------------------|-------------------------------|---------------|-------------------------------------|
|                   | Matrix Color (moist)                     | %             | Redo<br>Color (moist)  | x Features Type <sup>1</sup>              | Loc <sup>2</sup>      | Texture                       | Remark        | <b>18</b>                           |
| 0 - 9             | 104x 3/2                                 |               | Coloi (moist)  |   |                       | Si It/oan                     | Koman         |                                     |
| 0 10              |  | 100           |  |   | - 1/1 April - 1/2 1   | ed 11/                        |               |                                     |
| 9-18              | 10 40 3/4                                | 100           | V <sub>2</sub> _11_1000  | *3 (400)                                  |                       | 21/ Journ                     |               |                                     |
|                   |  |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   | -                     |                               | - Lander      |                                     |
|                   |  |               |  |   |                       | <del></del>                   |               | and the second second second        |
|                   |  |               |  |   |                       |                               |               |                                     |
| -                 |  |               |  |   | and the second second |                               |               |                                     |
|                   |  |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   |                       |                               | West Control  |                                     |
| ¹Type: C=C        | oncentration, D=Deple                    | etion RM=     | Reduced Matrix MS  | S=Masked Sand Gr                          | ains                  | <sup>2</sup> Location: PL=Po  | re Lining M=1 | Matrix.                             |
| Hydric Soil       |  | - awili i MAI |  | And State Of the Of                       |                       | Indicators for Pro            |               |                                     |
| Histosol          |  |               |  | v Surface (S8) (LR                        | RR,                   | 2 cm Muck (A1                 |               |                                     |
|                   | pipedon (A2)                             |               | MLRA 149B)   |   | . DA 440D)            | Coast Prairie R               |               |                                     |
|                   | stic (A3)<br>en Sulfide (A4)             |               |  | ice (S9) (LRR R, M<br>fineral (F1) (LRR K |                       | S cm Mucky Pe                 |               | () (LRR K, L, R)                    |
|                   | d Layers (A5)                            |               | Loamy Gleyed   |   | , -/                  | Polyvalue Belo                |               |                                     |
|                   | d Below Dark Surface                     | (A11)         | Depleted Matrix  |   |                       | Thin Dark Surfa               |               |                                     |
|                   | ark Surface (A12)<br>flucky Mineral (S1) |               | Redox Dark Su Depleted Dark S  |   |                       |                               |               | 2) (LRR K, L, R)<br>19) (MLRA 149B) |
|                   | Gleyed Matrix (S4)                       |               | Redox Depress  |   |                       |                               |               | 44A, 145, 149B)                     |
|                   | Redox (S5)                               |               |  |   |                       | Red Parent Ma                 |               |                                     |
|                   | Matrix (S6) rface (S7) (LRR R, M         | I DA 1/05     | N  |   |                       | Very Shallow D Other (Explain |               | ΓF12)                               |
| Dark ou           | riace (37) (ERR R, W                     | LIVA 1490     | "  |   |                       | Other (Explain                | in Remarks)   |                                     |
|                   | f hydrophytic vegetati                   | on and we     | tland hydrology mus  | t be present, unles                       | s disturbed           | or problematic.               |               |                                     |
| Restrictive       | Layer (if observed):                     |               |  |   |                       |                               |               |                                     |
|                   |  |               |  |   |                       | Hydric Soil Present           |               | w.X                                 |
| Type:             |  |               |  |   |                       | Hydric Soil Present           | ? Yes         | No/                                 |
| Depth (in         | ches):                                   |               |  |   |                       | Tiyano don't resem            | . 100         |                                     |
|                   | ches):                                   |               | and the second second second   |   |                       | Tiyano con i resem            |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  | posterior posterior                       |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               | Control of the Contro |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressent            |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressum             |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       | Tryano com ressent            |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       |                               |               |                                     |
| Depth (in         | ches):                                   |               |  |   |                       |                               |               |                                     |

|   | A FORM – Northcentral and Northeast Region                                 |
|---|--|
|   | City/County: Chautauqua County Sampling Date: 11/02/20                     |
| Applicant/Owner: Ball Hill Wind Energy, LLC   | State: NY Sampling Point: DP-26  |
| Investigator(s): DTL VTM  | Section, Township, Range: Villenava  |
| Landform (hillslope, terrace, etc.): Till Plain L   | ocal relief (concave, convex, none): Slope (%): 3 - 2                      |
| Subregion (LRR or MLRA): LRR-R Lat: 79,146  | 5669 Long: 47.407603 Datum: NAD 83   |
| Soll Map Unit Name: Chataugua Silt Logar  | (CKB) NWI classification: PEM  |
| Are climatic / hydrologic conditions on the site typical for this time of y                           |  |
| Are Vegetation NO, Soil NO, or Hydrology NO significant   |  |
| Are Vegetation No, Soil No, or Hydrology No naturally p   |  |
|   |  |
| SUMMARY OF FINDINGS – Attach site map showin  | ng 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   |  |
| Wetland Hydrology Present? Yes No  Remarks: (Explain alternative procedures here or in a separate rep | If yes, optional Wetland Site ID: WL - ) 2                                 |
|   |  |
| HYDROLOGY   |  |
| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required)                             |
| Primary Indicators (minimum of one is required; check all that apply                                  |  |
|   | d Leaves (B9) Drainage Patterns (B10)                                      |
| High Water Table (A2) Aquatic Faun  |  |
| Saturation (A3) Marl Deposits Water Marks (B1) Hydrogen Su  | s (B15) Dry-Season Water Table (C2) Iffide Odor (C1) Crayfish Burrows (C8) |
| [ [   | zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)   |
|   | Reduced Iron (C4) Stunted or Stressed Plants (D1)                          |
|   | Reduction in Tilled Soils (C6) Geomorphic Position (D2)                    |
| Iron Deposits (B5) Thin Muck St   |  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain  | in in Remarks) Microtopographic Relief (D4)                                |
| Sparsely Vegetated Concave Surface (B8)   | FAC-Neutral Test (D5)  |
| Field Observations:   |  |
| Surface Water Present? Yes No Depth (inche  |  |
| Water Table Present? Yes No Depth (inche  |  |
| Saturation Present? Yes No Depth (inche (includes capillary fringe)                                   | es):   |
| Describe Recorded Data (stream gauge, monitoring well, aerial pho                                     | otos, previous inspections), if available:                                 |
|   |  |
| Remarks:  |  |
| Remarks.  |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |

| Tree Stratum (Plot size:3 0 ')         |     | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                  |
|--|-----|----------------------|--------|--|
| 2,                                     |     |                      |        | Total Number of Dominant Species Across All Strata:  (B)   |
|  |     |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
|  | . — |                      |        | That Ale OBL, FACW, of FAC   |
|  |     |                      |        | Prevalence Index worksheet:  |
| ,                                      |     |                      |        | Total % Cover of:Multiply by:  |
|  | 0   | = Total Cov          | er     | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: /5 ) |     |                      |        | FACW species x 2 =   |
|  |     |                      |        | FAC species x 3 =  |
|  |     |                      |        | FACU species x 4 =<br>UPL species x 5 =  |
|  |     |                      |        | Column Totals: (A) (B)   |
|  |     |                      |        | Column Totals (A) (B)  |
|  |     |                      |        | Prevalence Index = B/A =   |
| 3.                                     |     |                      |        | Hydrophytic Vegetation Indicators:   |
|  |     |                      |        | 1 - Rapid Test for Hydrophytic Vegetation  |
| 1                                      |     | 2428                 |        | ∠ 2 - Dominance Test is >50%   |
| -1                                     |     | = Total Cov          | /er    | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size: 5)            | 70  | 465                  | OBL    | 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)              |
| 2. Junine effes us                     | 20  | 405                  | mw     | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Kailabiceno Ep.                     |     |                      | FIAL   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 4. Werten hacker                       |     |                      | FALW   | be present, unless disturbed or problematic.   |
| 5. Licopic and Canas                   |     |                      | DBL    | Definitions of Vegetation Strata:  |
| 6                                      |     |                      |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 7                                      |     |                      |        | <b>)</b>   |
| 8                                      |     |                      |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| 9                                      |     |                      |        |  |
| 10                                     |     |                      |        | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11.                                    |     |                      |        |  |
| 12.                                    |     |                      |        | Woody vines - All woody vines greater than 3.28 ft in height.  |
| 12.                                    | 110 | = Total Co           | ver // |  |
| Woody Vine Stratum (Plot size: 30 )    |     | 10.0.00              | ver 55 |  |
| 1                                      |     |                      |        |  |
| 2                                      |     |                      |        | Hydrophytic<br>Vegetation  |
| 3                                      |     |                      |        | Present? Yes No  |
|  |     |                      |        |  |
| 4                                      | 0   | = Total Co           |        |  |
|  |     |                      | AGI    |  |

| (imakea)                | Matrix                                  |             |                              | x Feature     |                   |             |                    |   |
|-------------------------|---|-------------|------------------------------|---------------|-------------------|-------------|--------------------|---|
| (inches)                | Color (moist)                           | <u>%</u>    | Color (moist)                | %             | Type <sup>1</sup> | _Loc2       | Texture            | Remarks   |
| 1-10                    | G1 7/104                                | 90          | 7.5 18 /4                    | 10            |                   | 7           | Sity Cky loom      |   |
| 0-20                    | 62 4/10/                                | 95          | 7.51784/8                    | 5             | C                 | 19          | Silty clay be      | n   |
|                         | 華                                       |             |                              |               |                   |             |                    |   |
| 8                       |   |             |                              |               |                   |             |                    |   |
| y y                     |   |             |                              |               |                   |             |                    |   |
|                         | 2 1000000000000000000000000000000000000 |             | 194-00-                      |               |                   |             |                    |   |
|                         | 8/1                                     |             |                              |               |                   |             | V                  |   |
|                         |   |             |                              |               |                   |             |                    |   |
| 0                       |   |             |                              |               |                   | -           |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
| ő                       |   |             |                              |               |                   |             |                    |   |
|                         | -                                       |             |                              |               |                   |             |                    |   |
| 111                     | -                                       |             |                              |               | -                 |             |                    | <u> </u>  |
|                         |   | pletion, RM | I=Reduced Matrix, M          | S=Masked      | Sand G            | ains.       |                    | Pore Lining, M=Matrix.  |
|                         | Indicators:                             |             | Polyvalue Belo               | ψ<br>Curfo oo | (CO) (I D         |             |                    | oblematic Hydric Soils <sup>3</sup> :<br>x10) (LRR K, L, MLRA 149B) |
| _ Histosol<br>Histic Er | pipedon (A2)                            |             | MLRA 149B                    |               | (30) (LR          | K K,        |                    | Redox (A16) (LRR K, L, R)   |
| _ Black Hi              |   |             | Thin Dark Surf               |               | LRR R, M          | LRA 149B    |                    | Peat or Peat (S3) (LRR K, L, R)                                     |
|                         | en Sulfide (A4)                         |             | Loamy Mucky                  |               |                   | (, L)       |                    | (S7) (LRR K, L, M)  |
|                         | d Layers (A5)                           | (844)       | Loamy Gleyed                 |               | 2)                |             |                    | ow Surface (S8) (LRR K, L)  |
|                         | d Below Dark Surfa<br>ark Surface (A12) | ce (A11)    | Depleted Matri Redox Dark St |               |                   |             |                    | rface (S9) (LRR K, L)<br>ese Masses (F12) (LRR K, L, R)             |
|                         | Mucky Mineral (S1)                      |             | Depleted Dark                |               |                   |             |                    | odplain Soils (F19) (MLRA 149B                                      |
|                         | Gleyed Matrix (S4)                      |             | Redox Depres                 |               |                   |             |                    | (TA6) (MLRA 144A, 145, 149B)  |
|                         | Redox (S5)                              |             | _                            |               |                   |             | Red Parent M       |   |
|                         | Matrix (S6)                             |             |                              |               |                   |             |                    | Dark Surface (TF12)   |
| Dark Su                 | rface (S7) (LRR R,                      | MLRA 149    | (B)                          |               |                   |             | Other (Explain     | n in Remarks)   |
|                         |   |             | etland hydrology mu          | st be pres    | ent, unles        | s disturbed | or problematic.    |   |
|                         | Layer (if observed                      | ):          |                              |               |                   |             |                    |   |
| Type:                   | -l                                      |             | -                            |               |                   |             | Ukudaia Sail Danas | -12 Van X   |
| Depth (in               | cnes):                                  |             | -                            |               |                   |             | Hydric Soil Prese  | nt? Yes No  |
| temarks:                |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |
|                         |   |             |                              |               |                   |             |                    |   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Hill Wind Project City/County: Chautauqua County Sampling D

| Project/Site: Ball Hill Wind Project   | City/County: Cha                            | utauqua County                                      | Sampling Date: 1/02 /20        |
|--|---|---|--------------------------------|
| Applicant/Owner: Ball Hill Wind Energy, LLC  |   |   | _ Sampling Point: DP- 🤊 🦻      |
| Investigator(s): DTL, VTM  | Section, Township                           | , Range: Vilenous                                   |                                |
| Landform (hillslope, terrace, etc.):   | Local relief (concave                       | convex, none): Lonve                                | Slope (%): 8 - /s              |
| Subregion (LRR or MLRA): LRR-R Lat:  |   | Long: 42.407621                                     |                                |
| Soil Map Unit Name: Chataugua 5, 1+ 1  | 1 2 29                                      | NWI classific                                       |                                |
| Are climatic / hydrologic conditions on the site typical for thi   |   | No (If no, explain in R                             |                                |
|  |   |   | /                              |
| Are Vegetation $N^{0}$ , Soil $N^{0}$ , or Hydrology $N^{0}$   |   | Are "Normal Circumstances" p                        |                                |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> r   | naturally problematic?                      | (If needed, explain any answe                       | rs in Remarks.)                |
| SUMMARY OF FINDINGS - Attach site map  | showing sampling no                         | int locations transacts                             | important features, etc.       |
| The state of the s | Showing Sumpling po                         | nt loodions, transcots                              | , important routaroo, otor     |
| Hydrophytic Vegetation Present? Yes N  | V . A                                       | pled Area   | \                              |
| Hydric Soil Present? Yes N   |   | etland? Yes   | _ No                           |
| Wetland Hydrology Present? Yes N   |   | onal Wetland Site ID:                               |                                |
| Remarks: (Explain alternative procedures here or in a set  | parate report.)                             |   |                                |
|  |   |   |                                |
|  |   |   |                                |
|  |   |   |                                |
|  |   |   |                                |
| HYDROLOGY  |   |   |                                |
| Wetland Hydrology Indicators:  |   | Cocondany Indian                                    | tors (minimum of two required) |
|  | that analy)                                 |   |                                |
| Primary Indicators (minimum of one is required; check all  |   | Surface Soil  |                                |
|  | ter-Stained Leaves (B9)<br>atic Fauna (B13) | <ul><li>Drainage Pat</li><li>Moss Trim Li</li></ul> |                                |
|  | Deposits (B15)                              |   | Water Table (C2)               |
|  | rogen Sulfide Odor (C1)                     | Crayfish Burn                                       |                                |
|  | dized Rhizospheres on Living                |   | sible on Aerial Imagery (C9)   |
|  | sence of Reduced Iron (C4)                  |   | ressed Plants (D1)             |
|  | ent Iron Reduction in Tilled S              |   |                                |
| Iron Deposits (B5) Thir  | Muck Surface (C7)                           | Shallow Aqui  | tard (D3)                      |
| Inundation Visible on Aerial Imagery (B7) Oth  | er (Explain in Remarks)                     | Microtopogra  | phic Relief (D4)               |
| Sparsely Vegetated Concave Surface (B8)  |   | FAC-Neutral   | Test (D5)                      |
| Field Observations:  | TA TABLE                                    |   | 4)                             |
|  | pth (inches):                               |   |                                |
|  | pth (inches):                               | ji ji   | - V                            |
| Saturation Present? Yes No De (includes capillary fringe)  | pth (inches):                               | Wetland Hydrology Presen                            | t? Yes No                      |
| Describe Recorded Data (stream gauge, monitoring well,   | aerial photos, previous inspe-              | ctions), if available:                              |                                |
|  | 4   |   |                                |
| Demodra:   |   |   |                                |
| Remarks: No Wetland hydrolog   | y Indiators                                 | Present   | Vival                          |
| To provide the control   |   | /   | 717/00                         |
| 8  |   |   |                                |
|  | 70  |   |                                |
| W .  | A.c.  | 34  |                                |
| 47   |   |   | W 1                            |
|  |   |   | W., 1)                         |
|  |   |   |                                |
|  |   |   |                                |
|  |   |   |                                |
|  |   |   |                                |

## VEGETATION - Use scientific names of plants.

| <u>Tree Stratum</u> (Plot size:) 1)    | -    | Species? Status    | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                             |
|--|------|--------------------|---|
| 2,                                     |      |                    | Total Number of Dominant Species Across All Strata: (B)   |
| 4                                      |      |                    | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 6                                      |      |                    | Prevalence Index worksheet:   |
|  | 0    | = Total Cover      |   |
| Sapling/Shrub Stratum (Plot size: 15") |      |                    | FACW species x 2 =  |
| 1                                      |      |                    | FAC species x 3 =   |
|  |      |                    | FACU species x 4 =  |
| 2                                      |      |                    | UPL species x 5 =   |
| 3                                      | -    | <del></del>        | Column Totals: (A) (B)  |
| 4                                      |      |                    | Prevalence Index = B/A =  |
| 5                                      |      |                    | Hydrophytic Vegetation Indicators:  |
| 6                                      |      |                    | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7                                      | 10   | 23.027             | 2 - Dominance Test is >50%  |
| 7                                      |      | = Total Cover      | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size:)              | 70   | VISC FALL          | 4 - Morphological Adaptations (Provide supporting   |
| 1. 301 Idago canadensis                |      | YES FALLY          | data in Remarks or on a separate sheet)   |
| 2. Dactikus glangata                   | 60   |                    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Sunchus artensis                    |      | NO FACY            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4                                      |      |                    | Definitions of Vegetation Strata:   |
|  |      |                    | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 6                                      |      |                    | at breast height (DBH), regardless of height.   |
| 8                                      |      |                    | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9,                                     |      |                    | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10                                     |      |                    | Herb - All herbaceous (non-woody) plants, regardless of   |
|  |      | -                  | size, and woody plants less than 3.28 ft tall.  |
| 11                                     |      |                    | Woody vines - All woody vines greater than 3.28 ft in   |
| 12                                     | 145  | = Total Cover      | height.   |
| Woody Vine Stratum (Plot size:)        | 1-10 | = Total Cover 12.5 |   |
| 1                                      |      |                    |   |
|  |      | <u> </u>           | Hydrophytic<br>Vegetation   |
| 2                                      | _    |                    | Present? Yes No X   |
| 2                                      |      |                    |   |
| 2                                      |      |                    |   |

| - 0                            |                     | % Color (moist)                        | lox Features          |                | Texture                                 | Remarks   |
|--------------------------------|---------------------|--|-----------------------|----------------|---|---|
| 2-20 k                         | SP3/4 /c            | >>                                     |                       |                | ilt learn                               |   |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     | ************************************** |                       |                |   |   |
|                                |                     |  |                       |                | *************************************** | W. C.       |
|                                |                     |  |                       |                |   | - Park Park                                     |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       | -              |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     |  |                       | -              |   |   |
|                                |                     | -                                      |                       |                |   |   |
|                                |                     |  |                       |                |   |   |
|                                |                     | n, RM=Reduced Matrix, N                | MS=Masked Sand G      |                | <sup>2</sup> Location: PL=Pore          |   |
| lydric Soil Indica             |                     |  |                       |                | Indicators for Problem                  |   |
| Histosol (A1) Histic Epipedo   |                     | Polyvalue Bel                          | ow Surface (S8) (LR   | RR,            |   | (LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R) |
| Black Histic (A                |                     |  | face (S9) (LRR R, M   | ILRA 149B)     |   | or Peat (S3) (LRR K, L, R)                      |
| Hydrogen Sul                   |                     |  | Mineral (F1) (LRR I   |                | Dark Surface (S7)                       |   |
| Stratified Laye                |                     | Loamy Gleye                            |                       |                |   | Surface (S8) (LRR K, L)                         |
| Depleted Belo<br>Thick Dark Su | ow Dark Surface (A  | 11) Depleted Mat<br>Redox Dark S       |                       |                | Thin Dark Surface                       | (S9) (LRR K, L)<br>//asses (F12) (LRR K, L, R)  |
| Sandy Mucky                    |                     |  | k Surface (F7)        |                |   | ain Soils (F19) (MLRA 149E                      |
| Sandy Gleyed                   |                     | Redox Depre                            |                       |                |   | 6) (MLRA 144A, 145, 149B                        |
| Sandy Redox                    |                     |  |                       |                | Red Parent Materi                       |   |
| Stripped Matr                  |                     |  |                       |                | Very Shallow Dark                       |   |
| Dark Surface                   | (S7) (LRR R, MLR    | A 149B)                                |                       |                | Other (Explain in F                     | Remarks)  |
| Indicators of hydr             | rophytic vegetation | and wetland hydrology m                | ust be present, unles | s disturbed or | problematic.                            |   |
| Restrictive Layer              |                     |  |                       |                |   |   |
| Type:                          |                     |  |                       | 7 140          |   | Λ.  |
| Depth (inches)                 | C                   |  |                       | F              | lydric Soil Present?                    | Yes No  |
| Remarks:                       |                     |  |                       |                |   |   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: 11/08 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-Investigator(s): DTL Section, Township, Range: Local relief (concave, convex, none): Conca ve Landform (hillslope, terrace, etc.): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Closut qu 946 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation <u>NO</u>, Soil <u>NO</u>, or Hydrology <u>NO</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ✓ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Dry-Season Water Table (C2) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) \_\_ Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) ✓ Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Water Table Present? \_\_\_\_ Depth (inches): Wetland Hydrology Present? Yes Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size:)                             |           | Dominant Indicator Species? Status | Dominance Test worksheet:  |
|---|-----------|------------------------------------|--|
|   | -         |                                    | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|   |           |                                    | Total Number of Dominant Species Across All Strata:  (B)   |
|   |           |                                    | Percent of Dominant Species  |
|   |           |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 6 (A/B)                                  |
|   |           |                                    | Prevalence Index worksheet:  |
| <del>-</del>  |           |                                    | Total % Cover of: Multiply by:   |
| /   | 0         | = Total Cover                      | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size: 15                   |           |                                    | FACW species x 2 =   |
|   |           |                                    | FAC species x 3 =  |
|   |           |                                    | FACU species x 4 =   |
|   |           |                                    | UPL species x 5 =  |
|   |           |                                    | Column Totals: (A) (B)   |
|   |           |                                    | Prevalence Index = B/A =   |
|   |           |                                    | Hydrophytic Vegetation Indicators:   |
|   |           |                                    | 1 - Rapid Test for Hydrophytic Vegetation  |
|   |           | = Total Cover                      | ★ 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size:                              |           |                                    | 3 - Prevalence Index is ≤3.01  |
| · Juneus effected                                     | 60        | YES FACE                           | 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)            |
| Agrostis stolmitera                                   | 30        | YES FACE                           | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| Phalaris annalyacea                                   | 10        | NO FACEL                           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                    |
|   | 10        | NO FALL                            | be present, unless disturbed or problematic.   |
| lotus com in atas                                     | -         | NO FAC                             | Definitions of Vegetation Strata:  |
| Eythanin graninilolia                                 |           |                                    |  |
| teilobrun sp.   |           | NO FAC                             | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 3   |           |                                    | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
| 0   | -         |                                    | Herb – All herbaceous (non-woody) plants, regardless of  |
| 0   |           |                                    | size, and woody plants less than 3.28 ft tall.   |
| 11  |           |                                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 12  |           |                                    | height.  |
| Noody Vine Stratum (Plot size: 30 )                   | 125       | = Total Cover (2.5                 |  |
| A   |           |                                    | 2004-0-0   |
| 2,  |           |                                    | Hydrophytic<br>Vegetation  |
| 3.  |           |                                    | Present? Yes No  |
| 4.  |           |                                    |  |
|   | 0         | = Total Cover                      |  |
| Remarks: (Include photo numbers here or on a separate | e sheet.) | _ = Total Cover                    |  |

| nches)  | Matrix<br>Color (moist)   | %                 | Redox                  | Features  | - 1                 | . 2             | 2.53  |  |
|---|---|-------------------|------------------------|---|---------------------|-----------------|---|--|
|   | ,   |                   | Color (moist)          | <u>%</u>  | Type <sup>1</sup>   | Loc             | Texture   | Remarks  |
| -10   | 10 4R 2/1   |                   | 7.54/2 3/4             | 2   |                     | M               | 5,1110gas   |  |
| 70  | 10425/2   | 90                | 2.54246                | 10  |                     | <u>M</u>        | Sittlean  |  |
|   |   |                   |                        |   |                     |                 |   |  |
|   |   |                   |                        |   |                     |                 |   |  |
| ype: C=C  | oncentration, D=Dep   | letion, RM        | =Reduced Matrix, MS=   | Masked S  | Sand Gra            | ains.           | <sup>2</sup> Location: PL=Pore  | Lining, M=Matrix   |
| dric Soil   | Indicators:   |                   |                        |   |                     |                 | Indicators for Proble   | ematic Hydric Soils³:  |
| Histic Ep<br>Black Hi<br>Hydroge<br>Stratified<br>Depleted<br>Thick Da<br>Sandy M<br>Sandy G<br>Sandy R<br>Stripped<br>Dark Sur | pipedon (A2) stic (A3) In Sulfide (A4) I Layers (A5) I Below Dark Surface In Sulfide (A12) Iucky Mineral (S1) Ideyed Matrix (S4) Iedox (S5) Matrix (S6) Ifface (S7) (LRR R, N | <b>1</b> LRA 1496 |                        | e (S9) (LF<br>neral (F1)<br>atrix (F2)<br>F3)<br>ace (F6)<br>arface (F7)<br>ns (F8) | RR R, ML<br>(LRR K, | .RA 149B)<br>L) | Coast Prairie Rec 5 cm Mucky Peat Dark Surface (S7 Polyvalue Below Thin Dark Surface Iron-Manganese Piedmont Floodpl Mesic Spodic (TA Red Parent Mater Very Shallow Dar Other (Explain in | Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R lain Soils (F19) (MLRA 149 k6) (MLRA 144A, 145, 149E rial (F21) k Surface (TF12) |
| dicators of   | hydrophytic vegetat   | ion and we        | tland hydrology must b | e presen  | t, unless           | disturbed d     | or problematic.   |  |
| Strictive L   | .ayer (if observed):  |                   |                        |   |                     |                 |   |  |
| Depth (inc  | ches):  |                   |                        |   |                     |                 | Hydric Soil Present?  | Yes No   |
| marks:  |   |                   |                        |   |                     |                 |   |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_\_\_ Sampling Point: DP-Investigator(s): DJC VJM VILLENOVA \_\_\_\_ Section, Township, Range:\_ Local relief (concave, convex, none): \_\_\_Con Vex Long: 42, 40798 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Chantavana 5,1+ lagar (CKB NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation  $N\theta$ , Soil  $N\phi$ , or Hydrology  $N\phi$  significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No., Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Yes No -Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) \_\_ Saturation (A3) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) \_ Iron Deposits (B5) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Saturation Present? Wetland Hydrology Present? Yes \_\_ No \_\_\_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetland Mydoology Indicators present

| Fore Otentum (Plot size: 30 )         | Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Dominance Test worksheet:  |
|---------------------------------------|---------------------|---------------------------------------|--|
| ree Stratum (Plot size: 30 / )        | 1.2000000           |                                       | Number of Dominant Species That Are OBL, FACW, or FAC: (A)                     |
|                                       |                     |                                       | That Are OBL, FACW, or FAC: (A)  |
|                                       |                     |                                       | Total Number of Dominant Species Across All Strata: (B)                        |
|                                       |                     |                                       | Species Across All Strata: (B)   |
|                                       |                     |                                       | Percent of Dominant Species That Are OBL FACW or FAC: (A/B)                    |
| j                                     |                     |                                       | That Are OBL, FACW, or FAC: (A/B)  |
| ),                                    |                     |                                       | Prevalence Index worksheet:  |
|                                       |                     |                                       | Total % Cover of: Multiply by:   |
|                                       |                     | = Total Cover                         | OBL species x 1 =  |
| 151                                   |                     | 1014.00101                            | FACW species x 2 =   |
| Sapling/Shrub Stratum (Plot size: 151 |                     |                                       | FAC species x 3 =  |
|                                       |                     |                                       | FACU species x 4 =   |
| 2                                     |                     |                                       | UPL species x 5 =  |
| 3                                     |                     |                                       | Column Totals: (A) (B)   |
|                                       |                     |                                       | Column Fotalo.   |
|                                       |                     |                                       | Prevalence Index = B/A =   |
| 5                                     |                     |                                       | Hydrophytic Vegetation Indicators:   |
| 3                                     |                     |                                       | 1 - Rapid Test for Hydrophytic Vegetation                                      |
| 7                                     | -                   |                                       | 2 - Dominance Test is >50%   |
| /                                     | 0                   | = Total Cover                         | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:)             | 20                  | ure FACU                              | [1] [1] [1] [1] [1] [2] [2] [2] [2] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4 |
| 1 Phloum Pictonse                     | 20                  | YES THEN                              | data in Remarks or on a separate sheet)  |
| 2. Lotus Crinkulatus                  | 20-                 | YES FACE                              | Problematic Hydrophytic Vegetation¹ (Explain)                                  |
| 3. Solidon altisging                  | 15                  | YES FAC                               | Indicators of hydric soil and wetland hydrology must                           |
|                                       | P.                  |                                       | La annual contact disturbed or problematic                                     |
| 4. Trifolium Hetade                   | 10                  |                                       |  |
| 5. Plantap lanceolata                 | 10                  | 100                                   |  |
| 6. Achillea milletolium               | 7                   | NO FACE                               | _ Ties - Videdy plants o in. (1.5 cm) of more in diameter                      |
| 7. Potentila pennagluanica            | S                   | NO FACE                               | at breast height (DBH), regardless of height.                                  |
|                                       |                     | 10                                    | Sapling/shrub - Woody plants less than 3 in. DBH                               |
| 8                                     |                     |                                       | and greater than or equal to 3.28 ft (1 m) tall.                               |
| 9                                     |                     |                                       | Herb - All herbaceous (non-woody) plants, regardless of                        |
| 10                                    |                     |                                       | size, and woody plants less than 3.28 ft tall.                                 |
| 11,                                   |                     |                                       | Woody vines - All woody vines greater than 3.28 ft in                          |
| 12                                    |                     |                                       | _ height.  |
|                                       | 83                  | = Total Cover 42.                     | 5  |
| Woody Vine Stratum (Plot size: 30 )   |                     | 17                                    |  |
| vyoody ville Structurii (1 lot 6/26.  |                     | 11                                    |  |
| 1                                     | -                   |                                       | Hydrophytic  |
| 2                                     | -                   |                                       | - Vegetation   |
| 3                                     |                     |                                       | Present? Yes No  |
| 4.                                    |                     |                                       | -  |
|                                       | 0                   | = Total Cover                         |  |

| Profile Desc   | ription: (Describe t                  | to the dep   | th needed to docun   | nent the ir    | ndicator c        | r confirm                               | the absence of           | indicato   | rs.)                            |             |
|--|---------------------------------------|--------------|--|----------------|-------------------|---|--------------------------|--|---------------------------------|-------------|
| Depth  | Matrix                                | - 04         |  | x Features     |                   | 2                                       | -                        |  |                                 |             |
| (inches)   | Color (moist)                         | %            | Color (moist)  | %              | Type <sup>1</sup> | Loc <sup>2</sup>                        | Texture                  |  | Remarks                         |             |
| 0-9  | 1048 3/3                              | 100          | ,  | Residence Pro- |                   | vicens bloods :                         | 21/1/040                 | )  |                                 |             |
| 9-18   | DTK 4/3                               | 100          |  | _              |                   | _                                       | Silt boom                |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       | -            |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
| ************   |                                       |              |  | -              | -                 | *************************************** |                          | (+ 1 - m)  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  | -                                     |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              | ACCOUNT OF THE PARTY OF THE PAR |                |                   | -                                       |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
| ¹Type: C=Co  | oncentration, D=Dep                   | letion RM=   | Reduced Matrix, MS   | =Masked        | Sand Gra          | ins                                     | <sup>2</sup> Location: F | PL=Pore  | Lining, M=Mat                   | rix         |
| Hydric Soil I  |                                       | 0.011, 7.111 | Trougoda Mania, Me   | muonou         | Ourid Ord         |   |                          |  | natic Hydric                    |             |
| Histosol   | (A1)                                  |              | Polyvalue Belov  | v Surface      | (S8) (LRR         | R,                                      | 2 cm Mud                 | k (A10) (  | LRR K, L, ML                    | RA 149B)    |
|  | oipedon (A2)                          |              | MLRA 149B)   |                |                   |   |                          |  | x (A16) (LRR                    |             |
| Black Hi   |                                       |              | Thin Dark Surfa  |                |                   |   |                          |  | or Peat (S3) (L                 |             |
|  | n Sulfide (A4)                        |              | Loamy Mucky M  |                |                   | L)                                      |                          |  | (LRR K, L, M)                   |             |
|  | d Layers (A5)<br>d Below Dark Surface | - (Δ11)      | Loamy Gleyed Matrix  |                |                   |   |                          |  | surface (S8) (L<br>(S9) (LRR K, |             |
|  | ark Surface (A12)                     | 3 (ATT)      | Redox Dark Sur   |                |                   |   |                          |  | lasses (F12) (                  |             |
| The state of the s | fucky Mineral (S1)                    |              | Depleted Dark S  |                | 7)                |   |                          | 2000 1000 1000   |                                 | (MLRA 149B) |
| A STATE OF THE PARTY OF THE PAR | Gleyed Matrix (S4)                    |              | Redox Depressi   |                | •                 |   |                          |  | 6) (MLRA 144                    |             |
|  | Redox (S5)                            |              |  |                |                   |   | Red Pare                 |  |                                 |             |
|  | Matrix (S6)                           |              |  |                |                   |   |                          |  | Surface (TF1                    | 2)          |
| Dark Su  | rface (S7) (LRR R, N                  | ILRA 149E    | 3)   |                |                   |   | Other (Ex                | plain in F   | Remarks)                        |             |
| 3Indicators of   | f hydrophytic vegetat                 | ion and we   | tland hydrology mus  | t be prese     | nt, unless        | disturbed                               | or problematic.          |  |                                 |             |
|  | Layer (if observed):                  |              |  |                |                   |   |                          | with the same of t |                                 |             |
| Type:  |                                       |              |  |                |                   |   |                          |  |                                 | 1           |
| Depth (inc   | ches):                                |              |  |                |                   |   | Hydric Soil Pr           | esent?   | Yes                             | No          |
| Remarks:   |                                       |              |  | - William III  |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |
|  |                                       |              |  |                |                   |   |                          |  |                                 |             |

| Project/Site: Ball Hill Wind Project                                    | City/County: Chautauqua County Sampling Date:///oz/                            |
|---|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC                             | State: NY Sampling Point: DP- 3 a  |
| nvestigator(s): DJL VIM   | Section, Township, Range: VILL ANA   |
| andform (hillslope, terrace, etc.):                                     | Local relief (concave, convex, none): Concave Slope (%):                       |
| LDD D 70  | 140629 Long: 42.407599 Datum: NAD 83   |
|   |  |
|   | NWI classification: DEM  |
|   | me of year? Yes No (If no, explain in Remarks.)                                |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> signi |  |
| re Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> natu  | urally problematic? (If needed, explain any answers in Remarks.)               |
|   |  |
| SUMMARY OF FINDINGS – Attach site map she                               | owing sampling point locations, transects, important features, e               |
| Hydrophytic Vegetation Present? Yes No                                  | Is the Sampled Area  |
| Hydric Soil Present? Yes No   | within a Wetland? Yes No   |
| Wetland Hydrology Present?  | If yes, optional Wetland Site ID: WL - TY                                      |
| Remarks: (Explain alternative procedures here or in a separa            | ate report )   |
|   |  |
| YDROLOGY Wetland Hydrology Indicators:                                  | Secondary Indicators (minimum of two requires                                  |
| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required                                  |
| Primary Indicators (minimum of one is required; check all that          |  |
|   | Stained Leaves (B9) Drainage Patterns (B10)                                    |
|   | E Fauna (B13) Moss Trim Lines (B16)  |
|   | eposits (B15) Dry-Season Water Table (C2) eposits (B15) Crayfish Burrows (C8)  |
|   | ad Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
| 그 그 가는 그 그 그 그 가는 사람이 가는 것이 되었다. 그 그 그 가는 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 | ice of Reduced Iron (C4)  X Stunted or Stressed Plants (D1)                    |
|   | Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)                   |
|   | uck Surface (C7) Shallow Aquitard (D3)   |
|   | (Explain in Remarks) Microtopographic Relief (D4)                              |
| Sparsely Vegetated Concave Surface (B8)                                 | FAC-Neutral Test (D5)  |
| Field Observations:   |  |
| ~ /   | (inches):  |
| Water Table Present? Yes No Depth                                       | (Inches):  |
| (includes capillary fringe)   | (inches): Wetland Hydrology Present? Yes No                                    |
| Describe Recorded Data (stream gauge, monitoring well, aeri             | ial photos, previous inspections), if available:                               |
|   |  |
| Remarks:  |  |
|   |  |
|   |  |
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|   |  |
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|   |  |
|   |  |
|   |  |

| V | EGET | A | TION - | - Use | scientific  | names    | of | plants. |
|---|------|---|--------|-------|-------------|----------|----|---------|
|   |      | • | 11011  | 000   | 00101111110 | 11011100 | ~, | P       |

| / 0 !  | Absolute |                   |        | Dominance Test worksheet:   |
|--|----------|-------------------|--------|---|
| Tree Stratum (Plot size:30 /)  | % Cover  | Species?          | Status | Number of Dominant Species  |
|  |          |                   |        | That Are OBL, FACW, or FAC: (A)   |
|  |          |                   |        | Total Number of Dominant  |
|  |          |                   |        | Species Across All Strata: (B)  |
|  |          |                   |        | Persont of Deminent Species   |
|  |          |                   |        | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 6 (A/B)                                   |
| •  |          |                   | -      |   |
|  |          |                   |        | Prevalence Index worksheet:   |
|  |          |                   |        | Total % Cover of: Multiply by:  |
|  | 0        | = Total Cove      | er     | OBL species x 1 =   |
| apling/Shrub Stratum (Plot size: 15)   |          |                   |        | FACW species x 2 =  |
| The state of the s |          |                   |        | FAC species x 3 =   |
|  |          |                   |        | FACU species x 4 =  |
| <u> </u>   |          | -                 |        | UPL species x 5 =   |
| <u> </u>   |          |                   |        | Column Totals: (A) (B)  |
|  |          |                   |        |   |
|  |          |                   |        | Prevalence Index = B/A =  |
|  |          |                   |        | Hydrophytic Vegetation Indicators:  |
|  |          | -                 |        | 1 - Rapid Test for Hydrophytic Vegetation   |
|  |          | -                 |        | 2 - Dominance Test is >50%  |
| -1   | 0        | = Total Cov       | ər     | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5/)   |          | 12.50             |        | 4 - Morphological Adaptations¹ (Provide supporting  |
| Months exporter  | 60       | YES               | OBL    | data in Remarks or on a separate sheet)   |
| Acte 50  | 30       | 465               | FAC    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| Lecisia oryzoides  | 30       | 465               | OBL    | 1   |
| Second organist  |          | 100000            |        | ¹Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| Junear oflerence   | 20       | NO                | FIACE  |   |
| j,   |          |                   |        | Definitions of Vegetation Strata:   |
| 5  |          |                   |        | Tree - Woody plants 3 in. (7.6 cm) or more in diamete   |
|  |          |                   |        | at breast height (DBH), regardless of height.   |
|  |          |                   |        | Sapling/shrub - Woody plants less than 3 in. DBH  |
|  |          |                   |        | and greater than or equal to 3.28 ft (1 m) tall.  |
|  |          |                   |        | Herb - All herbaceous (non-woody) plants, regardless of   |
| 0  |          |                   |        | size, and woody plants less than 3.28 ft tall.  |
| 1,   |          |                   |        | Woody vines - All woody vines greater than 3.28 ft in   |
| 2.   |          |                   |        | height.   |
|  | 140      | _ = Total Cov     | er - o |   |
| Voody Vine Stratum (Plot size: 30 / )  |          | . 7. 6 semiCa's v |        |   |
| voody vine Stratum (Plot size  |          |                   | 28     |   |
| •  |          |                   |        | Hydrophytic   |
|  |          |                   |        | Venetation  |
|  |          |                   |        | Present? Yes No   |
| 3,   |          |                   |        |   |
| J  |          |                   |        |   |
|  | 0        | = Total Cov       | er     |   |

| Depth (inches) Color Col | 11   | Redox   Color (moist)  7.54R 4/3  7.54R 5/8 | % Type Loc² 5                | Texture 5/1/10000                                       | Remarks   |
|--|--|---|------------------------------|---|---|
| 1010   | 11   |   | 5 C M                        | Siltlanger<br>Siltlanger                                |   |
|  | 23/1 90  | 7.540.5/8                                   | 10 C M                       | Si /Hoan  |   |
|  |  |   |                              |   |   |
|  |  |   |                              |   |   |
|  | 2617   |   |                              |   |   |
| 0  |  |   |                              |   |   |
| 0  | and the same of th |   |                              |   |   |
| 0  |  |   |                              |   |   |
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|  | BEST TO THE STATE OF THE STATE  |   |                              |   |   |
|  | With the second  |   |                              |   |   |
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|  |  | -   |                              | · ·   |   |
|  |  | -   |                              |   |   |
|  |  |   |                              | 21 - 11 - DI D  | United M. Walde                                     |
| ype: C=Concentrate ydric Soil Indicator  |  | M=Reduced Matrix, MS=                       | Masked Sand Grains.          | <sup>2</sup> Location: PL=Pore<br>Indicators for Proble | Lining, M=Matrix. matic Hydric Soils <sup>3</sup> : |
| _ Histosol (A1)  |  | Polyvalue Below                             | Surface (S8) (LRR R,         |   | (LRR K, L, MLRA 149B)                               |
| Histic Epipedon (  | <b>A2</b> )  | MLRA 149B)                                  |                              | Coast Prairie Red                                       | ox (A16) (LRR K, L, R)                              |
| _ Black Histic (A3)  |  |   | (S9) (LRR R, MLRA 149E       |   | or Peat (S3) (LRR K, L, R)                          |
| _ Hydrogen Sulfide   |  |   | neral (F1) (LRR K, L)        | Dark Surface (S7)                                       | (LRR K, L, M)<br>Surface (S8) (LRR K, L)            |
| Stratified Layers (<br>Depleted Below F  | Park Surface (A11)   | Loamy Gleyed Matrix (                       |                              | Thin Dark Surface                                       |   |
| _ Thick Dark Surface   |  | X Redox Dark Surfa                          |                              |   | Masses (F12) (LRR K, L, R)                          |
| _ Sandy Mucky Min  |  | Depleted Dark Su                            |                              |   | ain Soils (F19) (MLRA 149B                          |
| _ Sandy Gleyed Ma  | itrix (S4)   | Redox Depressio                             |                              |   | 6) (MLRA 144A, 145, 149B)                           |
| _ Sandy Redox (S5  |  |   |                              | Red Parent Mater  |   |
| <ul><li>Stripped Matrix (S</li><li>Dark Surface (S7</li></ul>  | (LRR R, MLRA 14  | 19B)  |                              | Very Shallow Dark Other (Explain in I                   |   |
|  |  |   |                              | d   |   |
| estrictive Layer (if   |  | wetland hydrology must                      | be present, unless disturbed | d or problematic.                                       |   |
| Type:  |  |   |                              |   |   |
| Depth (inches):  |  |   | W.                           | Hydric Soil Present?                                    | Yes No  |
| emarks:  |  |   |                              |   |   |
|  |  |   |                              |   | ME-T-   |
|  |  |   | 3, 8,                        | W.  | , m   |
|  |  |   | 4.4                          |   |   |
|  |  |   |                              |   |   |

A.

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: /// 6 7 / 2015 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-Investigator(s): DSL, USM Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Subregion (LRR or MLRA): LRR-R Lat: 79, 140899 Long: Soil Map Unit Name: Lan a ford Silt loan NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No, Soil NO, or Hydrology No 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. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) \_\_ Marl Deposits (B15) \_\_\_ Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Water Table Present? \_\_ Depth (inches): Saturation Present? Wetland Hydrology Present? Yes \_\_\_ No X Depth (Inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

### VEGETATION - Use scientific names of plants.

|         | Species?    |           | Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by: |
|---------|-------------|-----------|--|
| 7       |             |           | Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet: Total % Cover of:  Multiply by:   |
| 7       |             |           | Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet: Total % Cover of:  Multiply by:   |
|         |             | $\equiv$  | Prevalence Index worksheet:  |
| <u></u> |             |           | Prevalence Index worksheet:  |
| 2       |             |           | Total % Cover of: Multiply by:   |
|         | = Total Cov |           | Total % Cover of: Multiply by:   |
|         | = Total Cov | er        |  |
|         |             |           | OBL species x 1 =  |
|         |             |           | FACW species x 2 =   |
|         |             |           | FAC species x 3 =  |
|         |             |           | FACU species x 4 =   |
|         |             |           | UPL species x 5 =  |
|         |             |           | Column Totals: (A) (B  |
|         |             |           | Prevalence Index = B/A =   |
|         |             |           |  |
|         |             |           | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
| 1       |             |           | 2 - Dominance Test is >50%   |
| /_      | = Total Cov | er        | 3 - Prevalence Index is ≤3.0¹  |
|         |             |           | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 50      | 465         | UPL       | data in Remarks or on a separate sheet)  |
| 5       | NO          | FACY      | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5       |             |           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
|         |             |           | Definitions of Vegetation Strata:  |
|         |             |           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
|         |             |           | at breast height (DBH), regardless of height.  |
|         |             |           | Sapling/shrub - Woody plants less than 3 in. DBH   |
|         |             |           | and greater than or equal to 3.28 ft (1 m) tall.   |
|         | -           |           | Herb - All herbaceous (non-woody) plants, regardless of  |
|         |             |           | size, and woody plants less than 3.28 ft tall.   |
|         |             |           | Woody vines - All woody vines greater than 3.28 ft in  |
| 16      | -           |           | height.  |
| 20      | = Total Cov | 30        |  |
|         |             |           |  |
|         |             |           | Hydrophytic<br>Vegetation  |
|         |             |           | Present? Yes No  |
|         |             |           | ***************************************  |
| 0       | = Total Cov | /er       |  |
| et.)    | _ Total or  |           |  |
|         | 7 50 5      | Total Cov | Total Cover  Total Cover  Total Cover  Total Cover   |

| Depth       | Matrix                                      |             | Redox                          | Features   | 3                 |           |                           |  |
|-------------|---|-------------|--------------------------------|------------|-------------------|-----------|---------------------------|--|
| (inches)    | Color (moist)                               | %           | Color (moist)                  | %          | Type <sup>1</sup> | _Loc2     | Texture                   | Remarks  |
| ) -7        | POR 3/2                                     | 100         |                                |            |                   |           | Sitt Coom                 |  |
| 9-18        | 101R5/3                                     | 95          | 7.518 5/8                      | 5          |                   |           | Silt Lan                  |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            | -                 |           |                           | Market Annual Control of the Control |
|             | *   |             | -                              |            |                   |           | -                         |  |
|             |   |             |                                |            |                   |           |                           |  |
|             | -   |             |                                |            |                   |           |                           | 1.11 - 1.11  |
| -           | 4-1   |             |                                |            |                   |           | -                         |  |
|             |   |             |                                |            |                   |           |                           | Land of the state  |
| Type: C=C   | oncentration, D=Dep                         | letion, RM= | Reduced Matrix, MS             | S=Masked   | Sand Gra          | ains.     | <sup>2</sup> Location: PL | =Pore Lining, M=Matrix.  |
| Hydric Soil |   |             | A                              |            |                   |           |                           | Problematic Hydric Soils <sup>3</sup> :  |
| Histosol    | (A1)  |             | Polyvalue Belov                | v Surface  | (S8) (LRF         | R,        |                           | (A10) (LRR K, L, MLRA 149B)  |
|             | oipedon (A2)                                |             | MLRA 149B)                     |            |                   |           |                           | ie Redox (A16) (LRR K, L, R)   |
|             | stic (A3)                                   |             | Thin Dark Surfa                |            |                   |           |                           | y Peat or Peat (S3) (LRR K, L, R)  |
|             | en Sulfide (A4)                             |             | Loamy Mucky N                  |            |                   | , L)      |                           | ce (S7) (LRR K, L, M)  |
|             | Layers (A5)                                 | - (844)     | Loamy Gleyed I                 |            | )                 |           |                           | Below Surface (S8) (LRR K, L)  |
|             | d Below Dark Surfac                         | e (A11)     | Depleted Matrix                |            |                   |           |                           | Surface (S9) (LRR K, L)  |
|             | ark Surface (A12)                           |             | Redox Dark Sur                 |            |                   |           |                           | inese Masses (F12) (LRR K, L, R)   |
|             | Mucky Mineral (S1)<br>Bleyed Matrix (S4)    |             | Depleted Dark \$ Redox Depress |            | (1)               |           |                           | ioodplain Soils (F19) ( <b>MLRA 149B</b> )<br>dic (TA6) ( <b>MLRA 144A, 145, 149B</b> )  |
|             | Redox (S5)                                  |             | Redux Depress                  | ions (Fo)  |                   |           |                           | Material (F21)   |
|             | Matrix (S6)                                 |             |                                |            |                   |           |                           | w Dark Surface (TF12)  |
|             | rface (S7) (LRR R, I                        | MLRA 149E   | 3)                             |            |                   |           |                           | ain in Remarks)  |
|             | f hydrophytic vegeta<br>Layer (if observed) |             | etland hydrology mus           | t be prese | ent, unless       | disturbed | d or problematic.         |  |
| Type:       | Layer (ii observed)                         |             |                                |            |                   |           |                           |  |
| Depth (in   | chee).                                      |             |                                |            |                   |           | Hydric Soil Pres          | sent? Yes No   |
|             | cites)                                      |             |                                |            |                   |           | Tryulic Son Fres          | Sellt 163 NO   |
| Remarks:    |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |
|             |   |             |                                |            |                   |           |                           |  |

| Project/Site: Ball Hill Wind Project  Applicant/Owner: Ball Hill Wind Energy, LLC  Investigator(s): DTL, USM Section, Township, Range: VILLA Section, Township, Range: Local relief (concave, convex, none): Lencane |                          |
|--|--------------------------|
| Investigator(s): DJL, V5m Section, Township, Range: VI llenova   |                          |
|  | ampling Point: DP- 36    |
| andform (hillstone terrore etc.): Till Place   |                          |
| Landrotti (minarope, terrace, etc.)  | Slope (%): 93 -/         |
| Subregion (LRR or MLRA): LRR-R Lat: 79. 169235 Long: 42, 39807   | Datum: NAD 83            |
| Soll Map Unit Name: Langford 511t logn (LnC) NWI classification:   | PEM                      |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remark   |                          |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> significantly disturbed? Are "Normal Circumstances" preser  |                          |
|  |                          |
| Are Vegetation $NO$ , Soil $NO$ , or Hydrology $NO$ naturally problematic? (If needed, explain any answers in F  | Remarks.)                |
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, imp   | portant features, etc.   |
|  | portuni routuros, sta    |
| Hydrophytic Vegetation Present?  Yes No Is the Sampled Area within a Wetland?  Yes No Vegetation Present?  | V2.                      |
| riyunc son Flesentr  | No                       |
| Wetland Hydrology Present?  Yes No   | 1 twik2                  |
|  |                          |
| HYDROLOGY  |                          |
| Wetland Hydrology Indicators: Secondary Indicators (   | minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply)  Surface Soll Crack  | (s (B6)                  |
| Surface Water (A1) Water-Stained Leaves (B9)  \( \times \) Drainage Patterns   | (B10)                    |
| ★ High Water Table (A2)     Aquatic Fauna (B13)     Moss Trim Lines (B13)  | 4                        |
| Saturation (A3) Marl Deposits (B15) Dry-Season Water   |                          |
| Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (   | (C8)                     |
| Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible   | on Aerial Imagery (C9)   |
| Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stresse   | ed Plants (D1)           |
| Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Positi   | ion (D2)                 |
| Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (   | (D3)                     |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic  | Relief (D4)              |
| Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test   | (D5)                     |
| Field Observations:  |                          |
| Surface Water Present? Yes No Depth (inches):  |                          |
| Water Table Present? Yes No Depth (inches): O  | *                        |
| Saturation Present? Yes X No Depth (inches): Wetland Hydrology Present? Vincludes capillary fringe)  | Yes No                   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |                          |
|  |                          |
|  |                          |
| Remarks:   |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |
|  |                          |

## VEGETATION - Use scientific names of plants.

| Tree Stratum (Plot size:) 1)          | % Cover | Dominant<br>Species? | Status       | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|---------------------------------------|---------|----------------------|--------------|---|
| 2                                     |         |                      |              | Total Number of Dominant Species Across All Strata: (B)   |
| 4<br>5                                |         |                      |              | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)   |
| 6                                     |         |                      |              | Prevalence Index worksheet:   |
| 7                                     | 2       | = Total Cov          | er           |   |
| Sapling/Shrub Stratum (Plot size:)  1 |         |                      |              | FACV species  |
| 2                                     |         |                      |              | UPL species x 5 =<br>Column Totals: (A) (B)   |
| 4<br>5                                |         |                      |              | Prevalence Index = B/A =  |
| 6                                     |         |                      |              | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation  |
| ·                                     | 7       | = Total Cov          | rer          | 2 - Dominance Test is >50%<br>3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:)  1          | 80      | YES                  | Fran         | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  |
| 2. Poq palustris<br>3.                | 20      | 465                  | FALL         | Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 4                                     |         |                      |              | Definitions of Vegetation Strata:   |
| 6                                     | -       |                      |              | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
| 8                                     |         |                      |              | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 9                                     |         |                      |              | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 11                                    |         |                      |              | Woody vines – All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size:)       | 100     | _ = Total Co         | /er 50<br>20 |   |
| 1<br>2                                |         |                      |              | Hydrophytic Vegetation  |
| 3<br>4.                               |         |                      |              | Present? Yes No   |
|                                       | 0       | = Total Co           | ver .        |   |

| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains,  | Depth<br>(inches)      | Color (moist)   | %          | Red                  | ox Feature                                | <u>s</u> .                |                                      |                              |                       |
|--|------------------------|---|------------|----------------------|---|---------------------------|--------------------------------------|------------------------------|-----------------------|
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators:   | 0-9                    | 101036  |            | Color (moist)        | %   | Type <sup>1</sup>         | _Loc2                                | Texture                      | Remarks               |
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histos Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Hydrogen Sulfide (A4)  Loarny Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  A Redox Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Redox (A15)  Depleted Below Dark Surface (A11)  A Redox Dark Surface (F6)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (A15)  Depleted Dark Surface (F7)  Pedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Hydric Soil Present 2, Vas Moseratics (A11)  A Red Dark Surface (TF12)  Other (Explain in Remarks)  | 0 10                   | 1000  | -          | 457816               |   | <u> </u>                  | 17                                   |                              |                       |
| Histosol (A1)  Histo Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Endown Dark | 7-18                   | 10/1 4/2  | 10         | 25/RY6               | 10  |                           | M                                    | Silicon                      |                       |
| Histosol (A1)  Histo Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Endown Dark |                        | -   |            |                      | *   | -                         | -                                    |                              |                       |
| Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 146, 146, 146, 146, 146, 146, 146, 146  | -                      |   |            |                      |   |                           |                                      |                              |                       |
| Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 146, 146, 146, 146, 146, 146, 146, 146  |                        | -   |            |                      | _   |                           |                                      |                              |                       |
| Histosol (A1)  Histo Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thic Dark Surface (A11)  Thic Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (B1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S9)  Endown Dark Surface (A12)  Sandy Redox (B5)  Sandy Redox (B5)  Sandy Redox (B5)  Sandy Redox (B5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (B6)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 146, 144A, 145, 146 |                        |   | )          |                      |   | -                         |                                      |                              |                       |
| Histosol (A1)  Histo Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thic Dark Surface (A11)  Thic Dark Surface (A11)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (B1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S9)  Endown Dark Surface (A12)  Sandy Redox (B5)  Sandy Redox (B5)  Sandy Redox (B5)  Sandy Redox (B5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (B6)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 146, 144A, 145, 146 | 1                      |   |            |                      |   |                           |                                      |                              |                       |
| Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 146, 146, 146, 146, 146, 146, 146, 146  |                        |   | -          |                      |   |                           |                                      |                              |                       |
| Histosol (A1)  Histo Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Dark Surface (S7)  Endown Dark Surface (F7)  Endown Dark |                        |   |            |                      |   |                           |                                      |                              |                       |
| Histosol (A1)  Histosol (A2)  Black Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Amount of the matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators for Problematic Hydric Solls':  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, L)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S7) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 1.44, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 144, 145, 14 | ype: C=Co              | ncentration, D=Dep  | letion, RM | =Reduced Matrix, MS  | S=Masked                                  | Sand Gra                  | ains.                                | <sup>2</sup> Location: PL=Pe | ore Lining, M=Matrix. |
| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S4)  Dark Surface (S7) (LRR K, L)  Redox Depressions (F8)  MLRA 149B)  MLRA 149B)  Thin Dark Surface (S9) (LRR K, L, R)  Doark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S7) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Fron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 1-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4  | 194                    |   |            | o (S9) /I DD D       |   | Indicators for Pro        | blematic Hydric Solls <sup>3</sup> : |                              |                       |
| Black Histic (A3)  | _ Histic Epipedon (A2) |   | MLRA 149B) | w Surrace (          | S8) (LRR                                  | R,                        | 2 cm Muck (A1                        | 0) (LRR K, L, MLRA 149B)     |                       |
| Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Peledmont Floodplain Soils (F19) (MLRA 145, 14  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 145, 14  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  Depth (inches):  Hydric Soil Present?  Ver  | _ Black His            | ack Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B  drogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  attified Layers (A5)  Loamy Gleyed Matrix (F2) |            | RA 149B)             | 5 cm Mucky Pe                             | Redox (A16) (LRR K, L, R) |                                      |                              |                       |
| Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A12)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Dark Surface (S7) (LRR R, MLRA 149B)  Depth (inches):  Depth (inches):  Hydric Soil Present?  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Head Surface (S9) (LRR K, L)  Thin Dark S | _ Hydroger             |   |            | L)                   | Dark Surface (                            | S7) (LRR K. L. M)         |                                      |                              |                       |
| Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Mesic Spodic (TA6) (MLRA 144A, 145, 146, 146, 146, 146, 146, 146, 146, 146   |                        |   |            |                      | Polyvalue Below Surface (S8) (LRR K, L)   |                           |                                      |                              |                       |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F12) (LRR K, L Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 145, 145, 145, 145, 145, 145, 145  | Thick Dar              | k Surface (A12)   | (AT1)      | Depleted Matrix      | (F3)                                      |                           |                                      | Thin Dark Surfa              | ace (S9) (LRR K, L)   |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type: Depth (inches): Hydric Soil Present? Yes No  | _ Sandy Mu             | ndy Mucky Mineral (S1) Depleted Dark Surface (F7)   |            |                      | Piedmont Floodplain Soils (F19) (MLRA 149 |                           |                                      |                              |                       |
| Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type: Depth (inches):  Hydric Soil Present?  West Spodic (1A6) (MLRA 144A, 145, 14  Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Hydric Soil Present?  Hydric Soil Present?  | Sandy Gl               |   |            |                      |   |                           |                                      |                              |                       |
| Dark Surface (S7) (LRR R, MLRA 149B)  — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  strictive Layer (if observed):  Type: ————————————————————————————————————  |                        |   |            |                      | ()  |                           |                                      | Red Parent Ma                | (MLKA 144A, 145, 149E |
| dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes   | _ Stripped Matrix (S6) |   |            |                      |   |                           | Very Shallow Dark Surface (TF12)     |                              |                       |
| Type: Depth (inches): Hydric Soil Present? Yes   | _ Dark Surf            | ace (S7) (LRR R, M  | LRA 1498   | 3)                   |   |                           |                                      |                              |                       |
| Type: Depth (inches): Hydric Soil Present? Yes No.   | dicators of t          | nydrophytic vegetati  | on and we  | tland hydrology must | be presen                                 | t, unless                 | disturbed o                          | or problematic.              |                       |
| TVUITE SOIL Present / Yes No   | Type:                  | .yo. (ii observeu).   |            |                      |   |                           |                                      |                              | A                     |
| TVUITE SOIL Present / Yes No   | Depth (inch            | ies):   |            |                      |   |                           |                                      | Under Supplied               |                       |
|  | marks:                 |   |            |                      |   |                           |                                      | Hydric Soil Present          | 7 Yes No              |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              | y                     |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |
|  |                        |   |            |                      |   |                           |                                      |                              |                       |

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project \_\_\_ Sampling Date: 11/02 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 3 Villerova Investigator(s): \_ A TL, U J m Section, Township, Range: 2/1/2 Local relief (concave, convex, none): \_\_\_\_\_\_\_\_ Slope (%): 8 Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Lang ford NWI classification:\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes Are Vegetation No, Soll No, or Hydrology No significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? No within a Wetland? Hydric Soil Present? Yes No Wetland Hydrology Present? No Yes \_\_\_\_ If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Aquatic Fauna (B13) Moss Trim Lines (B16) High Water Table (A2) \_\_ Dry-Season Water Table (C2) Saturation (A3) Marl Deposits (B15) Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) \_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) \_ Geomorphic Position (D2) \_\_\_ Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Shallow Aquitard (D3) \_\_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No wetland hydrology indicators present Remarks:

| Tree Stratum (Plot size: 30')          | Absolute<br>% Cover | Species?      |       | Dominance Test worksheet:  Number of Dominant Species   |
|--|---------------------|---------------|-------|---|
| 1                                      |                     |               |       | That Are OBL, FACW, or FAC:(A)  |
| 2                                      |                     |               |       | Total Number of Dominant  |
| 3                                      |                     |               |       | Species Across All Strata: (B)  |
| 4                                      |                     |               |       | Percent of Dominant Species   |
| 5                                      |                     |               |       | That Are OBL, FACW, or FAC:   |
| 6                                      |                     |               |       | Prevalence Index worksheet:   |
| 7                                      |                     |               |       | Total % Cover of: Multiply by:  |
|  | 0                   |               | ver   | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15") |                     | 10.00         | , , , | FACW species x 2 =  |
|  |                     |               |       | FAC species x 3 =   |
| 1                                      |                     |               |       | FACU species x 4 =  |
| 2,                                     |                     |               |       | UPL species x 5 =   |
| 3                                      |                     |               |       | Column Totals: (A) (B)  |
| 4                                      |                     | _             |       |   |
| 5,                                     |                     |               |       | Prevalence Index = B/A =  |
| 6                                      |                     |               |       | Hydrophytic Vegetation Indicators:  |
| 7                                      |                     |               |       | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | - dec               | = Total Co    |       | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size:)              |                     | , , , , , , , |       | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| 1. Pactules Gloroges                   | 70                  | WAG           | FACU  | 4 - Morphological Adaptations <sup>1</sup> (Provide supportine data in Remarks or on a separate sheet)            |
| 2. Phlenn propose                      | 20                  | NO            | FACY  | Problematic Hydrophytic Vegetation¹ (Explain)   |
| Cali pall                              | -                   | NO            | FACE  |   |
| 3. Galium mallugo                      |                     |               |       | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. VICIA americana                     |                     | NO            | FACE  |   |
| 5. Trifolium Pratamea                  |                     | NO            | toru  | Definitions of Vegetation Strata:   |
| 6. Taraxaum officionale                |                     | NO            | FACY  | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.               |
| 7                                      |                     |               |       |   |
| 8                                      |                     |               |       | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 9                                      |                     |               |       |   |
| 10                                     |                     |               |       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11                                     |                     |               |       |   |
| 12                                     |                     |               |       | Woody vines – All woody vines greater than 3.28 ft in height.   |
| · <del>-</del>                         | 106                 | = Total Co    | ver   | neight.   |
| Woody Vine Stratum (Plot size:3 0)     |                     | - Total Oc    |       |   |
| vybody vine Stratum (Plot size:)       |                     |               | 21.2  |   |
| 1                                      | -                   |               |       | Hydrophytic   |
| 2                                      |                     |               |       | Vegetation  |
| 3                                      | -                   |               |       | Present? Yes No   |
|  |                     |               | .,    |   |
| 4                                      |                     | = Total Co    |       |   |

| Type: C=Concentration, I Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark                | 13 100          | Polyvalue Below       | =Masked Sand Grains     |  | tion: PL=Pore Lining, M                                    |                 |
|---|-----------------|-----------------------|-------------------------|--|--|-----------------|
| Type: C=Concentration, Induction Soil Indicators:  Historic Soil Indicators:  Historic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark | 100             | Polyvalue Below       |                         | Sift less  | tion: PL=Pore Lining, M                                    |                 |
| Fype: C=Concentration, I ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark                       |                 | Polyvalue Below       |                         | · · · · · · · · · · · · · · · · · · ·  | tion: PL=Pore Lining, M                                    |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, RI | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, RI | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Rf | Polyvalue Below       |                         |  |  |                 |
| ydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   | D=Depletion, Ki | Polyvalue Below       |                         |  |  |                 |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark   |                 |                       | 0 ( (00) (100.0         |  | ors for Problematic Hy                                     |                 |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratifled Layers (A5) Depleted Below Dark   |                 |                       | Surface (S8) (LRR R.    |  | m Muck (A10) (LRR K, L                                     |                 |
| Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark  |                 | MLRA 149B)            |                         |  | ast Prairie Redox (A16)                                    |                 |
| Stratified Layers (A5) Depleted Below Dark  |                 |                       | ce (S9) (LRR R, MLRA    | The second secon | m Mucky Peat or Peat (S                                    |                 |
| _ Depleted Below Dark   |                 |                       | lineral (F1) (LRR K, L) |  | rk Surface (S7) ( <b>LRR K,</b><br>yvalue Below Surface (S |                 |
|   |                 | Loamy Gleyed Matrix   |                         |  | n Dark Surface (S9) (LR                                    |                 |
| Thick Dark Surface (A   |                 | Redox Dark Sur        |                         |  | n-Manganese Masses (F                                      |                 |
| Sandy Mucky Mineral   |                 | Depleted Dark S       | Surface (F7)            |  | dmont Floodplain Soils (                                   |                 |
| Sandy Gleyed Matrix   | (S4)            | Redox Depressi        | ions (F8)               |  | sic Spodic (TA6) (MLRA                                     | 144A, 145, 149B |
| _ Sandy Redox (S5)  |                 |                       |                         |  | d Parent Material (F21)<br>ry Shallow Dark Surface         | (TF12)          |
| Stripped Matrix (S6) Dark Surface (S7) (LF  | RR R. MLRA 14   | 9B)                   |                         |  | ner (Explain in Remarks)                                   |                 |
|   |                 |                       |                         |  |  |                 |
| ndicators of hydrophytic  |                 | wetland hydrology mus | t be present, unless di | sturbed or problem   | natic.   |                 |
| Restrictive Layer (if obse  | erved):         |                       |                         |  |  |                 |
| Type:   |                 | -                     |                         |  | 2-11 Burnanta Van  | No X            |
| Depth (inches):<br>Remarks:   |                 |                       |                         | Hydric 8   | Soil Present? Yes  | NO              |

| Project/Site: Ball Hill Wind Project   | ON DATA FORM – Northcentra  City/County: Chautauqu: |                        | / /  |
|--|---|------------------------|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | City/County,  | NO.                    | Sampling Date: 11/03/20  |
| Investigator(s):   | Dealler Township B                                  |                        | Sampling Point: DP- 3 8  |
| 10 11 01   | Section, Township, Range:                           |                        |  |
|  | Local relief (concave, convex,                      |                        |  |
| Subregion (LRR or MLRA): LRR-R Lat:  | 79, 64889 Long: _                                   | 42.399245              | 0  |
| Soil Map Unit Name: Levie 3/17 109.  | m (EIB)   | NWI classific          | cation: /fin   |
| Are climatic / hydrologic conditions on the site typical for t   | his time of year? Yes No                            | _ (If no, explain in R | temarks.)  |
| Are Vegetation <u>MO</u> , Soil <u>MO</u> , or Hydrology <u>AO</u>   | significantly disturbed? Are "Norn                  | nal Circumstances" p   | present? Yes X No  |
| Are Vegetation NO, Soil NO, or Hydrology NO  | naturally problematic? (If needed                   | l, explain any answe   | rs in Remarks.)  |
| SUMMARY OF FINDINGS – Attach site map  |   |                        | 13.11.11.11.11.11.11.11.11.11.11.11.11.1   |
| V  | No Is the Sampled Area                              |                        |  |
| 11.43.0.00   | No within a Wetland?                                | Yes                    | _ No   |
| AALD AND AND AND AND AND AND AND AND AND AN  | No If yes, optional Wetla                           | and Site ID: W -       | 4-2  |
| HYDROLOGY  |   |                        |  |
| Wetland Hydrology Indicators:  |   | Secondary Indica       | tors (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all  | I that apply)                                       | Surface Soil           |  |
|  | ater-Stained Leaves (B9)                            | Drainage Pat           |  |
| A MANY Y TAXABLE STORY THAT A S | uatic Fauna (B13)                                   | Moss Trim Li           |  |
| Ma   | url Deposits (B15)                                  |                        | Nater Table (C2)   |
| Water Marks (B1) Hy  | drogen Sulfide Odor (C1)                            | Crayfish Burr          | A STATE OF THE PERSON NAMED IN COLUMN TO STATE OF THE PER |
|  | idized Rhizospheres on Living Roots (C3             | ) Saturation Vis       | sible on Aerial Imagery (C9)   |
|  | esence of Reduced Iron (C4)                         |                        | ressed Plants (D1)   |
|  | cent Iron Reduction in Tilled Soils (C6)            | Geomorphic I           |  |
|  | in Muck Surface (C7)                                | Shallow Aquit          |  |
| Sparsely Vegetated Concave Surface (B8)  | ner (Explain in Remarks)                            |                        | phic Relief (D4)   |
| Field Observations:  |   | FAC-Neutral            | Test (D5)  |
| Surface Water Present? Yes No De   | epth (inches):                                      |                        |  |
| Water Table Present? Yes No De   |   |                        |  |
| Saturation Present? Yes No De (includes capillary fringe)  |   | Hydrology Present      | 17 Yes No  |
| Describe Recorded Data (stream gauge, monitoring well,   | aerial photos, previous inspections), if a          | vailable:              |  |
|  |   | and Dio.               |  |
| Domanica   |   |                        |  |
| Remarks:   |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |
|  |   |                        |  |

VEGETATION - Use scientific names of plants.

Sapling/Shrub Stratum (Plot size: 15

Herb Stratum (Plot size: 5

1. Corne apreno os 2. Viburger dans 5

Tree Stratum (Plot size: 30' ) Absolute Dominant Indicator % Cover Species? Status

\_\_\_\_\_ = Total Cover

\_\_\_\_\_ = Total Cover

|                |                      | 1 - 1 1  |  | pling Point: DP-  |                |
|----------------|----------------------|----------|--|---|----------------|
| Cover          | Dominant<br>Species? |          | Dominance Test worksheet:<br>Number of Dominant Species  | 4   | (A)            |
| _              |                      | _        | That Are OBL, FACW, or FAC   | · —/  | (A)            |
|                |                      |          | Total Number of Dominant<br>Species Across All Strata:   | 4   | (B)            |
|                |                      |          | Percent of Dominant Species<br>That Are OBL, FACW, or FAC  | : 10000   | (A/B)          |
|                |                      |          | Prevalence Index workshee  |   |                |
| _              | -                    |          | Total % Cover of:  |   |                |
| 0              | = Total Cov          | rer      | - 194 C. C. D. A. P. L. C.   | x 1 =   |                |
|                |                      |          | FACW species   |   |                |
| 5              | 466                  | FACW     |  | x 3 =   |                |
| -              | 4/1                  | FAC      | FACU species   | x 4 =   |                |
|                | - 10                 |          | UPL species  |   |                |
|                |                      |          | Column Totals:   | (A)   | _ (B)          |
|                |                      |          | Prevalence Index = B/  | Λ =   |                |
| 10<br>90<br>30 | = Total Co           | FALL     | Hydrophytic Vegetation Inc.  1 - Rapid Test for Hydro  2 - Dominance Test is > 3 - Prevalence Index is second and a second a second and a second a second and a second | phytic Vegetation 50% 53.0¹ ations¹ (Provide sup n a separate sheet) c Vegetation¹ (Explain wetland hydrology or problematic.  56 cm) or more in d rdless of height.  nts less than 3 in. 0 3.28 ft (1 m) tall.  cody) plants, regardle n 3.28 ft tall. | nust<br>iamete |
| 100            | _ = Total Co         | 60<br>24 | Hydrophytic Vegetation Present? Yes  |   |                |

| Remarks: | (Include phot | o numbers | here | or | on | а | separate | sn | eet | .) |
|----------|---------------|-----------|------|----|----|---|----------|----|-----|----|

Woody Vine Stratum (Plot size: 30 )

| (inches)      | Matrix                                  |             | Rec  | dox Features  |                      |          |                     |  |       |
|---------------|---|-------------|--|---------------|----------------------|----------|---------------------|--|-------|
| <u>-9</u>     | Color (moist)                           | %_          | Color (moist)  | - %           | Type¹ L              | oc²      |                     | Remarks  |       |
|               | 1015-11                                 | 90          | 7.5/23/4   | 15%           | <u>L</u> n           |          | Si4 Loam            | The state of the s |       |
|               |   |             | 7.5TR 5/6  | 5             |                      |          |                     |  |       |
| 3-18          | 10/R 5/2                                | 90          | 75124  | 10            | C 7                  | M        | Silt Loan           |  |       |
| 10            | 70/11/2                                 |             | 76   |               |                      |          | 3/11 2000           |  | _     |
|               | ( <del></del>                           |             |  |               |                      |          |                     |  | -     |
|               |   |             |  |               |                      |          |                     |  |       |
|               |   |             |  |               |                      |          |                     |  |       |
|               |   |             |  |               |                      |          |                     |  |       |
|               | -                                       |             |  |               |                      |          |                     |  |       |
|               |   |             |  |               |                      |          |                     |  |       |
|               |   |             |  |               |                      |          |                     |  |       |
|               |   |             |  |               |                      |          |                     |  |       |
|               | *************************************** |             |  | -             |                      |          |                     |  |       |
|               | -                                       |             | - Annual Control of the Control of t |               |                      |          |                     |  |       |
|               |   |             | -  |               |                      |          |                     |  |       |
|               |   | pletion, RM | I=Reduced Matrix, I  | MS=Masked S   | Sand Grains.         |          |                     | re Lining, M=Matrix.   |       |
| ydric Soil Ir |   |             |  |               |                      |          |                     | elematic Hydric Soils <sup>3</sup> :   |       |
| _ Histosol (  | (A1)<br>ipedon (A2)                     |             | Polyvalue Bel  |               | S8) ( <b>LRR R</b> , |          |                     | 0) (LRR K, L, MLRA 149   |       |
| _ Histic Epi  |   |             | MLRA 149  Thin Dark Sur  |               | RR MIRA              | 149R)    |                     | edox (A16) (LRR K, L, R<br>at or Peat (S3) (LRR K, I   |       |
|               | n Sulfide (A4)                          |             | Loamy Mucky  | Mineral (F1)  | (LRR K, L)           | 1430)    |                     | 67) (LRR K, L, M)  | L, N) |
|               | Layers (A5)                             |             | Loamy Gleyed   |               |                      |          |                     | w Surface (S8) (LRR K, L   | _)    |
|               | Below Dark Surface                      | ce (A11)    | Depleted Mate  |               |                      |          |                     | ice (S9) (LRR K, L)  |       |
|               | rk Surface (A12)                        |             | A Redox Dark S   |               |                      |          |                     | e Masses (F12) (LRR K,   |       |
|               | ucky Mineral (S1)<br>leyed Matrix (S4)  |             | Depleted Dark Redox Depres   |               | )                    |          |                     | lplain Soils (F19) ( <b>MLRA</b><br>FA6) ( <b>MLRA 144A, 145</b> ,   |       |
|               | edox (S5)                               |             |  | 00,01,0 (1.0) |                      |          | Red Parent Mar      |  | 1450  |
|               | Matrix (S6)                             |             |  |               |                      |          |                     | ark Surface (TF12)   |       |
| _ Dark Surf   | face (S7) (LRR R,                       | MLRA 149    | B)   |               |                      |          | Other (Explain i    | n Remarks)   |       |
| ndicators of  | hydronhytic vegets                      | ation and w | etland hydrology m   | uet he presen | t unlose die         | turbod a | or problematic      |  |       |
|               | ayer (if observed)                      |             | etiania nyarology mi   | ust be presen | it, unless dis       | turbea c | or problematic.     |  | _     |
| Type:         | .,                                      |             |  |               |                      |          |                     |  |       |
|               | thes):                                  |             |  |               |                      |          | Hydric Soil Present | 7 Yes X No   |       |
| Depth (incl   |   |             | •  |               |                      |          |                     |  |       |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11/03/201 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP- 39 Applicant/Owner: Ball Hill Wind Energy, LLC \_ Section, Township, Range: Menays Investigator(s): DJC, VJM Local relief (concave, convex, none): Contret Slope (%): 3-8 Landform (hillslope, terrace, etc.): \_\_\_ Long: 42.399291 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification:\_\_\_ Soil Map Unit Name: \_ Erse 5) 1 (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ Are "Normal Circumstances" present? Yes X Are Vegetation [NO], Soil [NO], or Hydrology [MO] significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation Mo, Soil Mo, or Hydrology MO naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? No Hydric Soil Present? If yes, optional Wetland Site ID:\_ No Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_ Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) X High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Crayfish Burrows (C8) \_\_ Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) \_\_ Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No wetland by trology indicators present

| Sampling | -      | DP- | 39 |
|----------|--------|-----|----|
| Sampling | Point: | Dr- | 2/ |

|  | Ahenluto | Dominant Indicator | TEA IN STREET, TO AND A STREET   |
|--|----------|--------------------|--|
| Tree Stratum (Plot size: 30)           | % Cover  | Species? Status    | Dominance Test worksheet:  |
| 1                                      |          |                    | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|  |          |                    | That Are OBL, FACW, or FAC: (A)  |
| 2                                      |          |                    | Total Number of Dominant   |
| 3                                      |          |                    | Species Across All Strata; (B)   |
| l                                      |          |                    | Percent of Dominant Species  |
| 5                                      |          |                    | That Are OBL, FACW, or FAC:  |
| 3                                      |          |                    |  |
|  |          |                    | Prevalence Index worksheet:  |
| 1                                      |          |                    | Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: /5 / | _0       | = Total Cover      | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size:      |          |                    | FACW species x 2 =   |
|  |          |                    | FAC species x 3 =  |
|  |          |                    | FACU species x 4 =   |
|  |          |                    | UPL species x 5 =  |
|  | -        |                    | Column Totals: (A) (B)   |
|  |          |                    | (2)  |
|  |          |                    | Prevalence Index = B/A =   |
|  |          |                    | Hydrophytic Vanatation Indicators  |
|  |          | <del></del>        | Hydrophytic Vegetation Indicators:   |
| -                                      |          |                    | 1 - Rapid Test for Hydrophytic Vegetation  |
| _1                                     | 0        | = Total Cover      | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size:               |          |                    | 3 - Prevalence Index is ≤3.0¹  |
| . Meur prosence                        | 37       | YES FACE           | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)   |
| Pilanpone                              | -3       | VICE THE           |  |
| · Dacty lie glamerasa                  | - 30     | 465 FACU           | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| balium mallugo                         |          | NO FACY            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| Plantago lancelodos                    | 10       | NO FACU            | be present, unless disturbed or problematic.   |
| Trifalina propose                      |          |                    | Definitions of Vegetation Strata:  |
| Markerit Grantoraces                   | N. C.    | ALT TALL           |  |
|  | 70 - 10  |                    | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
| r.<br>T                                |          | -                  | at breast fleight (DBH), regardless of fleight.  |
|  | -        |                    | Sapling/shrub - Woody plants less than 3 in. DBH   |
|  |          |                    | and greater than or equal to 3.28 ft (1 m) tall.   |
| 0                                      |          |                    | Herb - All herbaceous (non-woody) plants, regardless of  |
|  | -        |                    | size, and woody plants less than 3.28 ft tall.   |
| 1                                      |          |                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 2                                      |          |                    | height.  |
|  | 1120     | = Total Cover      | 7777   |
| Voody Vine Stratum (Plot size: 30)     | -1-      | 50                 |  |
| youdy ville otratum (Flot size)        |          | 20                 |  |
| •                                      |          |                    | Hydrophytic  |
|  |          |                    | Vegetation \(\lambda\)   |
|  |          |                    | Present? Yes No  |
|  |          |                    |  |
|  | 0        | T-(-) O            |  |
|  |          | = Total Cover      | A Comment of the Comm |

| Depth   | Matrix                |           |  | x Features   | 1                     |  |   |  |   |
|---|-----------------------|-----------|--|--|-----------------------|--|---|--|---|
| (inches)  | Color (moist)         | <u>%</u>  | Color (moist)  | %  | Type <sup>1</sup>     | _Loc2_   | Texture   | Remarks  |   |
| 5-9   | 1042 3/2              | 100       | O-MANUAL PROPERTY AND ADDRESS OF THE PARTY AND | Medigina/Get Vire  | societi-              | CONTRACTOR AND | Sitt for  | Cran a   | /   |
| 9-18  | 10402413              | 95        | 7.5 TR 5/6   | 5  | 0                     | ph 2-7   | Sill lan  |  |   |
| 70  | 70 482 7/3            |           |  |  |                       |  |   |  |   |
|   | ncentration, D=Deple  | tion, RM= | Reduced Matrix, M  | <br>S=Masked   | Sand Gra              | ains.  |   | ore Lining, M=M  |   |
| Black His Hydrogei Stratified Depleted Thick Da Sandy M Sandy G Sandy Re Stripped | (A1)<br>ipedon (A2)   |           | Polyvalue Below MLRA 149B; Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Si Redox Depress   | )<br>ace (S9) (L<br>Mineral (F1<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F | RR R, ML<br>) (LRR K, | .RA 149B)  | Coast Prairie 5 cm Mucky F Dark Surface Polyvalue Bei Thin Dark Sur Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M | (10) (LRR K, L, M<br>Redox (A16) (LR<br>Peat or Peat (S3)<br>(S7) (LRR K, L, I<br>ow Surface (S8)<br>(face (S9) (LRR M<br>See Masses (F12)<br>odplain Soils (F18<br>(TA6) (MLRA 14 | ILRA 149B) R K, L, R) (LRR K, L, R) M) (LRR K, L) (, L) (LRR K, L, R) 0) (MLRA 149B |
|   | hydrophytic vegetatio | n and we  | tland hydrology mus  | st be prese  | nt, unless            | disturbed  | or problematic.   |  |   |
| Type:   | ayer (ii observed).   |           |  |  |                       |  |   |  |   |
| Depth (inc  | hes):                 |           |  |  |                       |  | Hydric Soil Prese   | nt? Yes  | No X  |
| Remarks:  |                       |           |  |  |                       |  |   |  |   |
|   |                       |           |  |  |                       |  |   | See.   |   |

|   | DATA FORM - Northcentral and Northeast Region  |
|---|--|
| Project/Site: Ball Hill Wind Project  | City/County: Chautauqua County Sampling Date: 1/ 03/20/0   |
| Applicant/Owner: Ball Hill Wind Energy, LLC   | State: NY Sampling Point: DP- 40   |
| Investigator(s): DJL VJn  | Section, Township, Range: Villeava   |
| Landform (hillslope, terrace, etc.): Till Plain                                       | Local relief (concave, convex, none): Concave Slope (%): 3 - 8   |
| Subregion (LRR or MLRA): LRR-R Lat: 7   | 9, 163868 Long: 42, 399489 Datum; NAD 83   |
| Soil Map Unit Name: Erie 5:1+ logar   | (E.B) NW classification: PEM   |
| Are climatic / hydrologic conditions on the site typical for this                     |  |
| 이 있는데 그는 이렇게 되어 있었다. 이 무슨 이렇게 되었다고 있다. 그들은 이렇게 이 점에 모든데 힘들어 먹다.                       |  |
| Are Vegetation <u>WO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> sig                |  |
| Are Vegetation <u>ND</u> , Soil <u>ND</u> , or Hydrology <u>ND</u> na                 | turally problematic? (If needed, explain any answers in Remarks.)  |
| SUMMARY OF FINDINGS - Attach site man s   | howing sampling point locations, transects, important features, etc.   |
| Comment of The Inter-Attach site map s  |  |
| Hydrophytic Vegetation Present? Yes No  |  |
| Hydric Soil Present? Yes No   | h  |
| Wetland Hydrology Present? Yes No   |  |
| Remarks: (Explain alternative procedures here or in a sepa                            | rate report.)  |
|   |  |
|   |  |
|   |  |
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|   |  |
|   |  |
| HYDROLOGY   |  |
| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all the                         | at apply) Surface Soil Cracks (B6)   |
| Surface Water (A1) Wate   | r-Stained Leaves (B9)  |
| High Water Table (A2) Aqua  | tic Fauna (B13) Moss Trim Lines (B16)  |
| ✓ Saturation (A3) Mari  | Deposits (B15) Dry-Season Water Table (C2)   |
|   | ogen Sulfide Odor (C1) Crayfish Burrows (C8)   |
| Sediment Deposits (B2) Oxidi  | zed Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)  |
| Drift Deposits (B3) Prese   | ence of Reduced Iron (C4) Stunted or Stressed Plants (D1)  |
|   | nt Iron Reduction in Tilled Soils (C6) (C6) Geomorphic Position (D2)   |
| Iron Deposits (B5) Thin   | Muck Surface (C7) Shallow Aquitard (D3)  |
|   | (Explain in Remarks) Microtopographic Relief (D4)  |
| Sparsely Vegetated Concave Surface (B8)   | FAC-Neutral Test (D5)  |
| Field Observations:   | Carrier Comments and Carrier C |
| Surface Water Present? Yes No Dep   | th (inches):   |
| Water Table Present? Yes No Dep   | th (inches):   |
|   | th (inches): Wetland Hydrology Present? Yes No   |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, a | erial photos, previous inspections), if available:   |
| Describe Recorded Data (stream gauge, monitoring well, a                              | mai priotos, previous inspections), il available.  |
|   |  |
| Remarks:  |  |
|   |  |
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|                                       |           | Dominant Indicator Species? Status | Dominance Test worksheet:   |
|---------------------------------------|-----------|------------------------------------|---|
| <u>Tree Stratum</u> (Plot size:       | 72. 30.00 |                                    | Number of Dominant Species That Are OBL, FACW, or FAC: (A)        |
|                                       |           |                                    |   |
|                                       |           |                                    | Total Number of Dominant Species Across All Strata:  (B)          |
| 3                                     |           |                                    |   |
| 4                                     |           |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC:           |
| 5                                     |           |                                    | marare obe, raov, or rae.   |
| 6                                     |           |                                    | Prevalence Index worksheet:                                       |
| 7                                     |           |                                    | Total % Cover of: Multiply by:                                    |
| in the second second                  | 0         | = Total Cover                      | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: / ) |           |                                    | FACW species x 2 =  |
| 1,                                    |           |                                    | FAC species x 3 =   |
| 2.                                    |           |                                    | FACU species x 4 =  |
| 3,                                    |           |                                    | UPL species x 5 =   |
|                                       |           |                                    | Column Totals: (A) (B)  |
| 4<br>5.                               |           |                                    | Prevalence Index = B/A =  |
|                                       |           | 7                                  | Hydrophytic Vegetation Indicators:                                |
| 6                                     |           |                                    | 1 - Rapid Test for Hydrophytic Vegetation                         |
| 7                                     |           | 47.47                              | ∠2 - Dominance Test is >50%                                       |
| <i>-1</i>                             | _0        | = Total Cover                      | 3 - Prevalence Index is ≤3.01                                     |
| Herb Stratum (Plot size:)             | 70        | 10                                 | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting    |
| 1. Juncus effusus                     | 50        | 4ES FACUS                          | data in Remarks or on a separate sheet)                           |
| 2. Menting piperita                   | 30        | 465 OBL                            | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         |
|                                       | de        | 485 FAC                            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must |
| 4. Agastic Stolanifera                | 20        | 465 FACE                           | be present, unless disturbed or problematic.                      |
| 5                                     |           |                                    | Definitions of Vegetation Strata:                                 |
| 6                                     |           |                                    | Tree - Woody plants 3 in. (7.6 cm) or more in diameter            |
| 7                                     |           |                                    | at breast height (DBH), regardless of height.                     |
| 8                                     |           |                                    | Sapling/shrub - Woody plants less than 3 in. DBH                  |
|                                       |           |                                    | and greater than or equal to 3.28 ft (1 m) tall.                  |
| 9                                     |           |                                    | Herb - All herbaceous (non-woody) plants, regardless of           |
| 10                                    |           |                                    | size, and woody plants less than 3.28 ft tall.                    |
| 11                                    | -         |                                    | Woody vines - All woody vines greater than 3.28 ft in             |
| 12                                    |           |                                    | height.   |
| Woody Vine Stratum (Plot size:        | (00       | = Total Cover 50                   |   |
| YYOUGY VITE ORGANITY (FIOR SIZE.      |           |                                    | 4   |
| 1                                     |           |                                    | Hydrophytic   |
| 1                                     |           |                                    | Hydrophytic Vegetation  |
| 1                                     | =         |                                    |   |
| 1                                     |           |                                    | Vegetation  |

| Profile Desc<br>Depth | cription: (Describe<br>Matrix           | to the de   | pth needed to docum  | ent the i  |                   | or confirm       | n the absence of ind | cators.)   |
|-----------------------|---|-------------|--|------------|-------------------|------------------|----------------------|--|
| (inches)              | Color (moist)                           | %           | Color (moist)  | %          | Type <sup>1</sup> | Loc <sup>2</sup> | Texture              | Remarks  |
| 0-9                   | 1042 3/1                                | 20          | 7.84 e 3/4   | 10         | -                 | 12               | 51 A farm            |  |
| 9-18                  | 104n 5/1                                | 90          | 7.5 425/8  | 11         | pr.               | at y             | Sitt Jana            |  |
| 1                     | 101000/1                                | 16          |  | 1 hall     | - Array           | -                | - Jan                |  |
|                       | No.                                     |             |  |            |                   |                  |                      |  |
|                       |   |             | ( <del></del>  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       | *                                       | -           | -  |            |                   |                  |                      | NIL TITLE OF THE PARTY OF THE P |
|                       | -                                       |             |  |            | -                 |                  |                      |  |
|                       |   |             | -  |            |                   | -                |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   | -                | -                    |  |
|                       |   |             |  |            |                   | -                | -                    |  |
|                       | -                                       | -           |  |            |                   |                  |                      |  |
|                       |   | letion, RM  | M=Reduced Matrix, MS   | =Masked    | Sand Gr           | ains.            |                      | Pore Lining, M=Matrix.   |
| Hydric Soil           |   |             |  |            | (On) (I B         |                  |                      | oblematic Hydric Soils <sup>3</sup> :  |
| Histosol              | i (A1)<br>pipedon (A2)                  |             | Polyvalue Below<br>MLRA 149B)  | Surface    | (S8) (LR          | R R,             |                      | (10) (LRR K, L, MLRA 149B)<br>Redox (A16) (LRR K, L, R)  |
|                       | istic (A3)                              |             | Thin Dark Surfa  | ce (S9) (I | RR R, M           | LRA 149E         | Alla                 | Peat or Peat (S3) (LRR K, L, R)  |
|                       | en Sulfide (A4)                         |             | Loamy Mucky M  | lineral (F | 1) (LRR H         |                  | Dark Surface         | (S7) (LRR K, L, M)   |
|                       | d Layers (A5)                           |             | Loamy Gleyed N   |            | 2)                |                  |                      | low Surface (S8) (LRR K, L)  |
|                       | d Below Dark Surfac                     | e (A11)     | Depleted Matrix Redox Dark Sur   |            |                   |                  |                      | rface (S9) (LRR K, L)<br>ese Masses (F12) (LRR K, L, R)  |
|                       | ark Surface (A12)<br>Mucky Mineral (S1) |             | Depleted Dark S  |            |                   |                  |                      | odplain Soils (F19) (MLRA 149B)  |
|                       | Gleyed Matrix (S4)                      |             | Redox Depressi   |            | .,                |                  |                      | (TA6) (MLRA 144A, 145, 149B)   |
|                       | Redox (S5)                              |             |  |            |                   |                  | Red Parent N         |  |
|                       | Matrix (S6)                             | W DA 444    | <b>10</b>  |            |                   |                  |                      | Dark Surface (TF12)  |
| Dark St               | urface (S7) (LRR R, I                   | WLKA 14     | 3B)  |            |                   |                  | Other (Explai        | n in Remarks)  |
| 3Indicators of        | of hydrophytic vegeta                   | ition and v | vetland hydrology mus  | t be pres  | ent, unles        | s disturbe       | d or problematic.    |  |
| Restrictive           | Layer (if observed)                     | :           | 7.5  |            |                   |                  |                      |  |
| Type:                 |   |             | -  |            |                   |                  |                      |  |
| Depth (in             | iches):                                 |             |  |            |                   |                  | Hydric Soil Prese    | nt? Yes No No  |
| Remarks:              |   |             | Wilder Control of the |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |
|                       |   |             |  |            |                   |                  |                      |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_ Sampling Point: DP-FILEROVA Investigator(s): D51, USM Section, Township, Range: Local relief (concave, convex, none): Con wex Landform (hillslope, terrace, etc.): \_\_\_ Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Erie Si NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation MD\_, Soil NO\_, or Hydrology MD\_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation MD , Soil MD , or Hydrology MD naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID:\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) Surface Water (A1) \_\_ Water-Stained Leaves (B9) High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Moss Trim Lines (B16) \_\_\_ Saturation (A3) \_\_ Marl Deposits (B15) Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Drift Deposits (B3) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) \_\_ Iron Deposits (B5) Shallow Aquitard (D3) \_\_\_ Microtopographic Relief (D4) \_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: No \_\_X Depth (inches): Surface Water Present? Water Table Present? Yes \_\_\_\_ No \_X Depth (inches): Wetland Hydrology Present? Yes Saturation Present? No X Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: we thank hydringy molien fors pre con -

| Tree Stratum (Plot size:3 🍠)          |        | Dominant<br>Species? |        | Dominance Test worksheet:  Number of Dominant Species  |
|---------------------------------------|--------|----------------------|--------|--|
|                                       |        | -                    |        | That Are OBL, FACW, or FAC:(A)   |
|                                       |        |                      |        | Total Number of Dominant Species Across All Strata: (B)  |
|                                       |        |                      |        |  |
| <u> </u>                              |        |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC:  OTO (A/E)                                 |
|                                       |        |                      |        |  |
|                                       | -      | -                    |        | Prevalence Index worksheet:  |
|                                       |        |                      |        | Total % Cover of: Multiply by:   |
| 16                                    | Prince | = Total Cov          | er     | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size: 15") |        |                      |        | FACW species x 2 =   |
| Vituraum dontorman                    | 20     | 455                  | 700 C  | FAC species x 3 =  |
|                                       |        |                      |        | FACU species x 4 =   |
|                                       |        |                      |        | UPL species x 5 =  |
|                                       | -      |                      | -      | Column Totals: (A) (B  |
|                                       |        |                      |        |  |
|                                       |        |                      |        | Prevalence Index = B/A =   |
|                                       |        |                      |        | Hydrophytic Vegetation Indicators:   |
|                                       |        |                      |        | 1 - Rapid Test for Hydrophytic Vegetation  |
| •                                     |        | Takal Car            |        | 2 - Dominance Test is >50%   |
| -                                     | _30_   | = Total Cov          | /er    | 3 - Prevalence Index is ≤3.01  |
| lerb Stratum (Plot size:)             |        | 100                  | -      | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                     |
| Solidatio altissima                   |        | 465                  | Fot C  | data in Remarks or on a separate sheet)  |
| Men portore                           | 5 Card | 465                  | FALLY  | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| Pactiles gloneata                     |        | NO                   | Form   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                  |
|                                       |        |                      |        | be present, unless disturbed or problematic.   |
| <del></del>                           |        |                      |        | Definitions of Vegetation Strata:  |
|                                       |        |                      |        |  |
|                                       |        |                      | -      | Tree – Woody plants 3 in. (7.6 cm) or more in diamet at breast height (DBH), regardless of height. |
| ·                                     |        |                      |        |  |
|                                       |        |                      |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
|                                       |        |                      |        | and greater than or equal to 3.20 it (1 iii) tail.   |
| 0.                                    |        |                      |        | Herb - All herbaceous (non-woody) plants, regardless of  |
|                                       |        |                      |        | size, and woody plants less than 3.28 ft tall.   |
| 1                                     |        |                      |        | Woody vines - All woody vines greater than 3.28 ft in  |
| 2                                     | 1.4.   | -                    |        | height.  |
| 221                                   | 140    | = Total Co           | ver 70 |  |
| Voody Vine Stratum (Plot size:)       |        |                      | 28     |  |
|                                       |        |                      |        |  |
|                                       |        |                      |        | Hydrophytic  |
|                                       |        |                      |        | Vegetation Present? Yes No   |
|                                       |        |                      |        |  |
|                                       | -      |                      | -      |  |
|                                       | 10%    | = Total Co           |        | 1  |

| Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  O 9 / 0 4 / 0 4 / 0 0  | Depth        | Matrix                |            |                    | x Features    |  | firm the absence of      |                                   |
|--|--------------|-----------------------|------------|--------------------|---------------|--|--------------------------|-----------------------------------|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Coastion: PL=Pore Lining, M=Matrix, MS=Masked Sand Grains.  | (inches)     |                       |            |                    |               |  | Texture                  | Remarks                           |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Varic Soil Indicators   | 2-9          | 104n3/4               | 100        |                    | -outsidenset! |  | - 5,1+ 10cm              | ,                                 |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Varic Soil Indicators   | 7-18         | 10484/4               | 100        | (Memple has derive | or published  | NAMES OF THE PARTY | - 23/14/acm              | <sub>CM</sub> M <sub>0</sub>      |
| Histosol (A1)  |              |                       |            |                    |               |  |                          | 4                                 |
| Histosol (A1)  |              | -                     |            |                    |               |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Histosol (A1)  |              | -                     |            |                    | -             |  |                          |                                   |
| Histosol (A1)  |              | •                     |            |                    |               |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Indicators for Problematic Hydric Soil Present   Indicators for Problematic Hydric Soil Present   Indicators for Problematic   Indicators for Problem |              |                       |            |                    |               |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Histosol (A1)  |              |                       |            |                    |               |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Indicators for Problematic Hydric Soil Present   Indicators for Problematic Hydric Soil Present   Indicators for Problematic   Indicators for Problem |              |                       |            |                    |               |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Histosol (A1)  |              |                       |            | 100                | -             |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Histosol (A1)  |              |                       |            |                    | -             |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Histosol (A1)  |              |                       |            |                    | -             |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Indicators for Problematic Hydric Soil Present   Indicators for Problematic Hydric Soil Present   Indicators for Problematic   Indicators for Problem |              |                       |            |                    |               |  |                          |                                   |
| Indicators for Problematic Hydric Soils   Indicators for Problematic Hydric Soil Present   Indicators for Problematic Hydric Soil Present   Indicators for Problematic   Indicators for Problem | 4.           |                       |            |                    |               |  |                          |                                   |
| Histosol (A1)  | Type: C=C    | oncentration, D=Deple | etion, RM= | Reduced Matrix, MS | S=Masked      | Sand Grains.   | <sup>2</sup> Location: P | L=Pore Lining, M=Matrix.          |
| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Hydric Soil Present? Yes No   |              |                       |            |                    |               |  |                          |                                   |
| Black Histic (A3)  |              |                       |            |                    |               | S8) (LRR R,  | 2 cm Mucl                | k (A10) (LRR K, L, MLRA 149B)     |
| Hydrogen Sulfide (A4)  |              |                       |            |                    |               | RR R, MLRA 14  |                          |                                   |
| Depleted Below Dark Surface (A11)  |              |                       | -          | Loamy Mucky N      | Mineral (F1)  | (LRR K, L)   |                          |                                   |
| Thick Dark Surface (A12)   |              |                       | /Δ11\<br>- |                    |               |  |                          |                                   |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2  |              |                       | (//1/) _   |                    |               |  |                          |                                   |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Iterative Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No   | _ Sandy M    | lucky Mineral (S1)    | _          | Depleted Dark S    | Surface (F7   | <b>'</b> )   | Piedmont                 | Floodplain Soils (F19) (MLRA 149) |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Itestrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No  |              |                       | -          | Redox Depress      | ions (F8)     |  | Mesic Spo                | dic (TA6) (MLRA 144A, 145, 149E   |
| Dark Surface (S7) (LRR R, MLRA 149B)  Other (Explain in Remarks)  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  |              |                       |            |                    |               |  |                          |                                   |
| 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  |              |                       | RA 149B)   |                    |               |  |                          |                                   |
| Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No   |              |                       |            |                    |               |  |                          | one and the second                |
| Type:  | estrictive I | aver (if observed):   | n and wet  | and hydrology mus  | t be presen   | nt, unless disturb   | ped or problematic.      |                                   |
| Depth (inches): No  |              | ayor (ii observed).   |            |                    |               |  |                          |                                   |
| Tydio our roothi. Tes No   |              | ches):                |            |                    |               |  | Hydric Soil Pre          | sent? Ves No                      |
| emarks:  | emarks:      |                       |            | 7,411              |               |  | Tryuno don Fre           | sentr resNo                       |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               |  |                          |                                   |
|  |              |                       |            |                    |               | .4.  |                          |                                   |
|  |              |                       |            |                    |               | .5.  |                          |                                   |
|  |              |                       |            |                    |               | 4-   |                          |                                   |

| Applicant/Owner: Ball Hill Wind Energy, LLC  nvestigator(s):   | this time of year? Yes No<br>2 significantly disturbed? Are "No   | State: NY Sampling Point: DP- 43  s: VI CAUL Slope (%): 42,4025/5 Datum: NAD 83  NWI classification: PEM  (If no, explain in Remarks.)  rmal Circumstances" present? Yes No ed, explain any answers in Remarks.) |
|--|---|--|
| SUMMARY OF FINDINGS – Attach site ma  Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a second seco | p showing sampling point loc  No Is the Sampled Ar  within a Wetland?  No If yes, optional We   | ations, transects, important features, et  |
| X       High Water Table (A2)  | all that apply) Vater-Stained Leaves (B9) Aquatic Fauna (B13) Aarl Deposits (B15) Allydrogen Sulfide Odor (C1) Dixidized Rhizospheres on Living Roots (Aresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) | Stunted or Stressed Plants (D1)  |
| Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No [ Water Table Present? Yes No [ ]  | Depth (inches): Depth (inches): Depth (inches): Wetla   | FAC-Neutral Test (D5)  and Hydrology Present? Yes No   |
| Remarks:   |   |  |

| 6) -1                                  | Absolute | Dominant    | Indicator |  | 0.4          |                           | -      |
|--|----------|-------------|-----------|--|--------------|---------------------------|--------|
| Tree Stratum (Plot size: 30/           |          | Species?    |           | Dominance Test worksh                            |              |                           |        |
|  |          |             |           | Number of Dominant Spe<br>That Are OBL, FACW, or |              | 3                         | (A)    |
| Q                                      |          |             |           | Total Number of Dominar                          | nt           | 2                         |        |
| 1                                      |          |             |           | Species Across All Strata                        | -            | 3_                        | (B)    |
|  |          | -           |           | Percent of Dominant Spe                          |              | Insoln                    | 22.0   |
|  |          |             |           | That Are OBL, FACW, or                           | FAC:         | 10000                     | (A/E   |
|  |          |             |           | Prevalence Index works                           | heet:        |                           |        |
|  | 9        |             |           | Total % Cover of:                                |              | fultiply by:              |        |
| 15-1                                   | 0        | = Total Cov | er        | OBL species                                      | x1=          |                           |        |
| Sapling/Shrub Stratum (Plot size: 15 ) |          |             |           | FACW species                                     | x 2 =        |                           |        |
|  |          |             |           | FAC species                                      | x3=          |                           | _      |
|  |          |             |           | FACU species                                     | x4=          |                           |        |
|  |          |             |           | UPL species                                      |              |                           |        |
|  |          |             |           | Column Totals:                                   | (A)          |                           | _ (B   |
| ·                                      |          |             |           | Prevalence Index =                               | B/A =        |                           |        |
|  |          |             | -         | Hudeonhutic Vocatation                           | Indicator    | 01                        |        |
|  |          | -           |           | Hydrophytic Vegetation 1 - Rapid Test for Hy     |              |                           |        |
| 7                                      | - 17     | 70.4.224    |           | Z 2 - Dominance Test i                           |              | vegetation                |        |
| part .                                 | -        | = Total Cov | er        | 3 - Prevalence Index                             |              |                           |        |
| erb Stratum (Plot size:)               | 100      | .1          |           | 4 - Morphological Ad                             |              | (Provide sup              | portir |
| Scirpus cuparinus                      | - 17     | 45          | OBL       | data in Remarks of                               | or on a sep  | parate sheet)             |        |
| Typeus Gains                           | _ 5      | NO          | PACW      | Problematic Hydroph                              | ytic Veget   | ation <sup>1</sup> (Expla | in)    |
| Bancus Carota                          |          | NO          | UPL       | 1Indicators of hydric soil a                     | nd wetlan    | d hydrology i             | must   |
| Phileum prateire                       |          | NO          | FALL      | be present, unless disturb                       | ed or prol   | olematic.                 |        |
| 5. Epilobium so                        | 5        | No          | Fran      | Definitions of Vegetatio                         | n Strata:    |                           |        |
| . Opoclea sensibilis                   | 30       | 465         | FACE      | Tree – Woody plants 3 in                         | . (7.6 cm)   | or more in di             | amete  |
| Hesperis Sa.                           | 5        | No          | FAC       | at breast height (DBH), re                       | gardless     | of height.                |        |
| 3. Vilarnum destatum                   | 10.      | NO          | FAC       | Sapling/shrub - Woody                            | plants less  | s than 3 in. D            | ВН     |
| 15te Su                                | 10       | NO          | FAL       | and greater than or equa                         | to 3.28 ft   | (1 m) tall.               |        |
| 10. Agrostis Stolensten                | 15       | 465         | FACW      | Herb - All herbaceous (nor                       | -woody) pl   | ants, regardle            | ss of  |
|  | - (-     | 1/0         | Sel       | size, and woody plants less                      | than 3.28 ft | tall.                     |        |
|  |          | 100         | OD        | Woody vines - All woody                          | vines greate | er than 3.28 ft           | in     |
| 12                                     | 120      |             |           | height.  |              |                           |        |
| Moody Vine Stratum (Plot size: 30      | 100      | = Total Co  |           |  |              |                           |        |
| Noody Vine Stratum (Plot size:)        |          |             | 20.1      |  |              |                           |        |
| l,                                     | -        | -           |           | Hydrophytic                                      | . 7          |                           |        |
| 2.                                     |          |             |           | Vegetation                                       | V            |                           |        |
| 3.                                     |          |             |           | Present? Yes                                     | A-           | No                        |        |
| 4                                      |          |             |           |  | 1            |                           |        |
|  | 60       | = Total Co  | /er       |  |              |                           |        |

| - | -   |   |  |
|---|-----|---|--|
|   | f 1 | • |  |
|   |     |   |  |

Sampling Point: DP-

| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: Hidsosi (A1) Hidsosi (A1) Biack Histic (A3) Biack Histic (A3) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Loarny Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Redox Dark Surface (R1) Stripped Matrix (S4) Redox Dark Surface (R7) Stripped Matrix (S6) Stripped | (inches)  | Matrix<br>Color (moist)   |                  | Redo  | x Features   | 3                                  | n the absence of indic   |  |
|--|---|---|------------------|---|--|------------------------------------|--|--|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       ²Location: PL=Pore Lining, M=Matrix.         Indicators:       Indicators for Problematic Hydric Solis²:         Histic Epipedon (A2)       MLRA 149B)       2 cm Muck (A10) (LRR K, L, MLRA 149B)         Hydrogen Sulfde (A4)       Loamy Mucky Mineral (F1) (LRR K, L)       5 cm Mucky Peat or Peat (S3) (LRR K, L, R)         Stratified Layers (A5)       Loamy Mucky Mineral (F2)       Depleted Below Dark Surface (A11)       Depleted Matrix (F2)       Drin Dark Surface (S9) (LRR K, L)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F6)       Iron-Manganese Masses (F12) (LRR K, L, K)         Sandy Gleyed Matrix (S4)       Redox Dark Surface (F7)       Pledmont Floodplain Soils (F19) (MLRA 1448         Sandy Gleyed Matrix (S4)       Redox Dark Surface (F7)       Pledmont Floodplain Soils (F19) (MLRA 1448         Sandy Redox (S5)       Red Parent Material (F21)       Very Shallow Dark Surface (TF12)         Stripped Matrix (S6)       Red Parent Material (F21)       Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)       Other (Explain in Remarks)         Stripped Matrix (S6)       Other (Explain in Remarks)         Dark Surface (S7) (LRR R, MLRA 149B)       Hydric Soil Present? Yes No  |   | Color (moist)   | %                | Color (moist)   |  | Type <sup>1</sup> Loc <sup>2</sup> | Texture  | Remarks  |
| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, L)  Redox Depressions (F8)  MERA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, MLRA 149B)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S7) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, F)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Addicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  Depth (inches):  Hydric Soil Present? Yes  No  | yarıc Soli ind  | icators:  | 95<br>etion, RM= | Reduced Matrix, MS  |  | Sand Grains.                       | Silt Lum  2Location: PL=Po   | re Lining, M=Matrix.   |
| Depth (inches): Hydric Soil Present? Yes No  | Histic Epipe Black Histic Hydrogen S Stratified La Depleted B Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma | edon (A2) c (A3) Gulfide (A4) ayers (A5) elow Dark Surface Surface (A12) ky Mineral (S1) red Matrix (S4) ox (S5) atrix (S6) | ,<br>-<br>-      | MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi | ce (S9) ( <b>LI</b><br>fineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F7 | RR R, MLRA 149B<br>(LRR K, L)      | Coast Prairie Ro Coast Prairie Ro Community Pe Dark Surface (S Polyvalue Belov Thin Dark Surfa Iron-Manganese Piedmont Flood Mesic Spodic (T Red Parent Mat Very Shallow Da  | edox (A16) (LRR K, L, R) at or Peat (S3) (LRR K, L, R) by Surface (S8) (LRR K, L) ce (S9) (LRR K, L) by Masses (F12) (LRR K, L, R) plain Soils (F19) (MLRA 1498 by Add (MLRA 144A, 145, 1498 by Surface (TF12) |
| Depth (inches): Hydric Soil Present? Yes No  | ndicators of hy   | drophytic vegetation  | on and wet       | and hydrology must  | be preser  | nt, unless disturbed               | or problematic.  |  |
| Depth (inches): Hydric Soil Present? Yes No  | estrictive I av   | er (if observed):   |                  | 11  |  |                                    | The state of the s |  |
| Tryunc don Fresentr Tes / No   |   |   |                  |   |  |                                    |  |  |
| omarks:  | Type:   |   |                  |   |  |                                    |  |  |
|  | Type:   | s):   |                  |   | Maria Maria  |                                    | Hydric Soil Present?   | Yes No   |
|  | Type:<br>Depth (inche   | s):   |                  |   |  |                                    | Hydric Soil Present?   | Yes No   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-Section, Township, Range:\_ Local relief (concave, convex, none): \_\_\_\_\_\_ Con wex Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Ene 5/17 NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation <u>MO</u>, Soil <u>MO</u>, or Hydrology <u>MO</u> significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation Alo, Soil Alo, or Hydrology Alo naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Yes No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) \_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Shallow Aquitard (D3) Iron Deposits (B5) Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Saturation Present? Wetland Hydrology Present? Yes Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No wetlend by dology Indicators present Remarks:

| <u>Tree Stratum</u> (Plot size:                    | Absolute Dominant Indicator <u>% Cover Species? Status</u> | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)  |
|--|--|--|
| 2<br>3   |  | Total Number of Dominant Species Across All Strata:  (B)   |
| 4<br>5   |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 6  |  |  |
| 7  | = Total Cover  | Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =           FAC species         x 3 =           FACU species         x 4 = |
| 2  |  | UPL species x 5 =  Column Totals: (A) (B)  |
| <b>4</b>   |  | Prevalence Index = B/A =   |
| 6  | · — · — · — · — · — · — · — · — · — · —                    | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
| 7  | = Total Cover  | 2 - Dominance Test is >50%<br>3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size: 5)  1. Pactylis gloneratu | 40 YES FACE  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)   |
| 2. Mein prateure                                   |  |  |
| 3. 50/1 dago x/+155/100 G                          |  | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
| 5. Vibunua de bate on                              |  | Definitions of Vegetation Strata:  |
| 6  |  | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
| 8  |  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |  | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 11   |  | Woody vines – All woody vines greater than 3.28 ft in  |
| 12   | 170  | height.  |
| Woody Vine Stratum (Plot size: 30')                | 120 = Total Cover 60                                       |  |
| 1  |  | Hydrophytic  |
| 2  | · — · — · —  | Vegetation Present? Yes No   |
| 3,   | ·  |  |
|  | = Total Cover  |  |

| Depth   Matrix   Redox Features   Color (moist)   % Type   Loc   Texture   Remarks   |  |   | o the dep   | th needed to docum   |           |            | or confirm | the absence o                           | f indicate | ors.)             |            |       |
|--|--|---|-------------|----------------------|-----------|------------|------------|---|------------|-------------------|------------|-------|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  The standard Sandard Sand | A CAST AND THE STATE OF THE STA |   | 0/.         | Redox                |           |            | 1.002      | Touture                                 |            | Domest            |            |       |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators:  Histosoi (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Straffield Layers (A5)  Depleted Below Dark Surface (A11)  Thin Dark Surface (F8)  Depleted Below Dark Surface (A11)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (A55)  Depleted Dark Surface (A12)  Redox Dark Surface (F7)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (A55)  Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (A55)  Sandy Redox (A55)  Depleted Matrix (S4)  Sandy Redox (A55)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Alexandrate (F7)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Red Parent Material (F21)  Very Shallow Dark Surface (F72)  Other (Explain in Remarks)  Alexandrate (F72)  Type:  Depth (inches):  Depthed force (F8)  Hydric Soil Present? Yes  No  | A 45   |   |             | Color (moist)        |           | Type       | LUC        |   |            | Kernan            | 7.5        |       |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Apple   | 9 10   | 1111111   |             |                      | -         |            |            | 111 10an                                | 7          |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Thick Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Sandy Mucky Mineral (S1) Pepleted Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144B)  Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B)  Jandicators 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  | 10/8   | 109n 3/3  | 75          | 1.571276             | >         | -          | 12         | 20 191000                               | 100 p      |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thic Dark Surface (A12) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  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   |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |             |                      |           |            |            |   |            |                   |            | 0.0   |
| Hydric Soil Indicators:  Histosol (A1)   |  | Personal Property and Property |             | -                    |           | -          | -          |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   | -  |   |             |                      | -         |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |             |                      |           |            | -          | *************************************** |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thic Dark Surface (A12) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  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   |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thic Dark Surface (A12) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  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   |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thic Dark Surface (A12) Redox Dark Surface (F7) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  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   |  | -   |             |                      |           |            | -          |   |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   |  |   |             |                      |           |            |            | -                                       |            |                   |            |       |
| Hydric Soil Indicators:  Histosol (A1)   | ¹Type: C=C   | oncentration. D=Deple   | etion. RM=  | Reduced Matrix, MS=  | -Masked   | Sand Gra   | ains       | <sup>2</sup> Location:                  | PL=Pore    | Lining M=         | Matrix     |       |
| Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L, M)  Mesic Spodic (TA6) (MLRA 149B)  Altoward Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  Mestrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes  No  | Hydric Soil  | Indicators:   |             |                      |           | Jui, 4 OI  |            |   |            |                   |            |       |
| Black Histic (A3)  |  |   |             | Polyvalue Below      | Surface ( | (S8) (LRF  | RR,        | 2 cm Mu                                 | ck (A10)   | (LRR K, L,        | MLRA 14    | 9B)   |
| Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M)  Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  *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  |  | Salar Sa  |             |                      | 22.00     |            |            |   |            |                   |            |       |
| Stratified Layers (A5)   |  |   |             |                      |           |            |            |   |            | the second second |            | L, R) |
| Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  3Indicators 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  |  |   |             |                      |           |            | , L)       |   |            |                   |            | LY    |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B)  Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  **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   | Deplete  | d Below Dark Surface  | (A11)       |                      |           |            |            |   |            |                   |            | _,    |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed): Type:  |  |   |             |                      |           |            |            |   |            |                   |            |       |
| Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  |  |   |             |                      |           | 7)         |            |   |            |                   |            |       |
| Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  3Indicators 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   |  |   |             | Redox Depressio      | ins (F8)  |            |            |   |            |                   | 144A, 145, | 149B) |
| Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  3Indicators 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  |  |   |             |                      |           |            |            |   |            |                   | (F12)      |       |
| Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No   |  |   | LRA 149E    | 3)                   |           |            |            |   |            |                   |            |       |
| Restrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No  | 31   | 6 h   |             |                      |           |            |            |   |            |                   |            |       |
| Type:  | Restrictive I  | nydropnytic vegetati  | on and we   | tland hydrology must | be prese  | nt, unless | disturbed  | or problematic.                         |            |                   |            |       |
| Depth (inches): No No  |  | Layer (ii observeu).  |             |                      |           |            |            |   |            |                   |            | -     |
|  | 911  | ches):  |             |                      |           |            |            | Hydric Soil P                           | recent?    | Vae               | No         | X     |
| Hemarks.   | Remarks:   | 01100)  | - to - to - |                      |           |            |            | Tiyane don Fi                           | esenti     | 103               |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |
|  |  |   |             |                      |           |            |            |   |            |                   |            |       |

| Project/Site: Ball Hill Wind Project   | ATA FORM - Northcentral and Northeast Region  City/County: Chautauqua County Sampling Date: 11/03/201  |
|--|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | 1 . /  |
| National Comments  | 1/101-11   |
| Investigator(s): DJL VJM   | Section, Township, Range: VILLOVA  |
| _andform (hillslope, terrace, etc.):   | _ Local relief (concave, convex, none):(onCake Slope (%):  |
| Subregion (LRR or MLRA): LRR-R Lat: 19.  | 164454 Long: 42, 406188 Datum: NAD 83  |
| Soil Map Unit Name: Fre Sit loan (Fre  | NWI classification: PEM  |
| Are climatic / hydrologic conditions on the site typical for this time   | of year? Yes No (If no, explain in Remarks.)   |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> signific  | cantly disturbed? Are "Normal Circumstances" present? Yes X No   |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> natura  |  |
|  | wing sampling point locations, transects, important features, etc.   |
|  | Is the Sampled Area  |
| Hydrophytic Vegetation Present? Yes No   | within a Wetland? Yes No   |
| Hydric Soil Present?  Yes No Wetland Hydrology Present?  Yes No  | 11 - 11 1  |
| Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate   | If yes, optional Wetland Site ID:  |
| 1. The state of the control of the c | ained Leaves (B9) 🔀 Drainage Patterns (B10)  |
| High Water Table (A2) Aquatic F  | Fauna (B13) Moss Trim Lines (B16)  |
|  | osits (B15) Dry-Season Water Table (C2)  |
| 1777 H. G.   | n Sulfide Odor (C1) Crayfish Burrows (C8)  |
|  | Rhizospheres on Living Roots (C3) X Saturation Visible on Aerial Imagery (C9)  |
|  | e of Reduced Iron (C4)  Stunted or Stressed Plants (D1)  Stunted or Stressed Plants (D2)   |
|  | ron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  |
|  | k Surface (C7) Shallow Aquitard (D3)  xplain in Remarks) Microtopographic Relief (D4)  |
| Inundation Visible on Aerial Imagery (B7) Other (Example 2) Other (Example 3) Other (Example 4)  | xplain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)  |
| Field Observations:  |  |
| Surface Water Present? Yes No Depth (iii   | nches):  |
| Water Table Present? Yes X No Depth (I   | Co Co  |
| Saturation Present? Yes No Depth (i  | A STATE OF THE PARTY OF THE PAR |
| (includes capillary fringe)  | Laborate security is to see the N March Laborate   |
| Describe Recorded Data (stream gauge, monitoring well, aeria   | photos, previous inspections), if available:   |
| Remarks:   |  |
| Remarks.   |  |
|  |  |
|  |  |
|  |  |
|  |  |
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|  |  |
|  |  |
|  |  |

| = Total Cov                         | er  PACUS  FACUS  FACUS | Total Number of Dominant Species Across All Strata:  |
|-------------------------------------|--|--|
| = Total Cov  Total Cov  YES  NO  NO | er  PACU FACU FACU FACU  | Prevalence Index worksheet:  |
| = Total Cov                         | er  FACUS  OBL  FACUS  FACUS  FACUS  | Total % Cover of: Multiply by:  OBL species  |
| = Total Cov                         | er<br>Pacus<br>OBL<br>Facus<br>Facus   | OBL species  |
| = Total Cov                         | PACUS<br>OBL<br>FACU<br>FACU   | FAC species x 3 =  |
| = Total Cov                         | PACUS<br>OBL<br>FACUS<br>FACUS   | UPL species x 5 =  |
| = Total Cov                         | PACUS<br>OBL<br>FACUS<br>FACUS   | Column Totals: (A) (B)  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation  X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must |
| = Total Cov                         | PACUS<br>OBL<br>FACU<br>FACU   | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  X 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must                     |
| = Total Cov<br>YES<br>NO<br>NO      | PACUS<br>OBL<br>FACU<br>FACU   | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must   |
| = Total Cov                         | FACUS<br>OBL<br>FACU<br>FACU   | 1 - Rapid Test for Hydrophytic Vegetation     2 - Dominance Test is >50%     3 - Prevalence Index is ≤3.0¹     4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must   |
| Total Cov                           | FACUS<br>OBL<br>FACU<br>FACU   | <ul> <li>Z - Dominance Test is &gt;50%</li> <li>3 - Prevalence Index is ≤3.0¹</li> <li>4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</li> <li>Problematic Hydrophytic Vegetation¹ (Explain)</li> <li>¹Indicators of hydric soil and wetland hydrology must</li> </ul>   |
| 465<br>NO<br>NO<br>NO               | PACUS<br>OBL<br>FACU<br>FOC  | 3 - Prevalence Index is ≤3.0¹     4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must  |
| NO<br>NO                            | FALL<br>FACE   | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  Indicators of hydric soil and wetland hydrology must   |
| NO<br>NO                            | FALL<br>FACE   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| NO<br>NO                            | FACE   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| NO                                  | Fac  |  |
| NO                                  |  |  |
|                                     | FALL   | Definitions of Vegetation Strata:  |
|                                     |  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
|                                     |  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
|                                     |  |  |
|                                     |  | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
|                                     |  | Woody vines – All woody vines greater than 3.28 ft in  |
|                                     |  | height.  |
| = Total Cov                         | 52.5<br>21   |  |
|                                     |  | Hydrophytic  |
|                                     |  | Vegetation   Present?   Yes   No   |
|                                     |  | 1  |
| = Total Cov                         | er   |  |
|                                     | = Total Cov  | = Total Cover  |

| Depth<br>inches)  | Matrix<br>Color (moist)                        | %         | Color (moist)  | x Feature<br>%   | S<br>Type <sup>1</sup> | Loc²        | Texture   | Remarks  |  |
|---|--|-----------|--|--|------------------------|-------------|---|--|--|
| 1 - 9   | 10 4R 1  | 90        | 7.57R3/4   | 10   | Type                   | M           | Til logar   | I/GIIIqi NS  |  |
| 2 - 1-  |  |           | m - la a mil   | 10   | -                      |             | and the second  | 450 450 450 450  |  |
| 1-18  | 1041 5/2                                       | 90        | 7.5 TM 3/6   | 10   |                        | 11          | 1911 100 00g  |  |  |
| 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -   |  |           | The state of the s |  |                        |             |   | Mark to the state of the state  |  |
|   |  |           |  |  |                        |             | ·   |  |  |
|   |  |           |  |  |                        |             |   | 400  |  |
|   |  |           |  |  |                        | _           |   |  |  |
|   | -  |           |  |  |                        |             |   |  |  |
|   |  |           |  |  |                        |             |   |  |  |
| Type: C=Co  | oncentration, D=Deple                          | etion, RM | =Reduced Matrix, MS  | S=Masked   | Sand Gr                | alns.       |   | Pore Lining, M=Matrix.  Displaying the bloom of the bloom |  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) |  |           | Polyvalue Below MLRA 149B)  Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depress  | ce (S9) (L<br>Mineral (F<br>Matrix (F2<br>(F3)<br>rface (F6)<br>Surface (F | RRR, M<br>I) (LRR K    | LRA 149B)   | <ul> <li>2 cm Muck (A10) (LRR K, L, MLRA 149B)</li> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul> |  |  |
|   | f hydrophytic vegetati<br>_ayer (if observed): | on and w  | etland hydrology mus   | t be prese   | ent, unles             | s disturbed | or problematic.   |  |  |
| Type:   |  |           |  |  |                        |             |   |  |  |
| Depth (inc  | ches):   |           |  |  |                        |             | Hydric Soil Prese   | nt? Yes No No  |  |
| emarks:   |  |           |  |  |                        |             |   |  |  |

| <u>Tree Stratum</u> (Plot size:3   | 0.000 | Dominant<br>Species?                              | Status   | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)      |
|------------------------------------|-------|---|----------|--|
| 2                                  |       |   |          | Total Number of Dominant Species Across All Strata: (B)                                    |
| 4.                                 |       |   |          | Percent of Dominant Species  |
| 5                                  |       |   |          | That Are OBL, FACW, or FAC: (A/B)  |
| 6                                  |       |   |          | Prevalence Index worksheet:  |
| 7                                  |       |   |          | Total % Cover of: Multiply by:   |
| 15-1                               | 0     | = Total Cov                                       | er       | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size:) |       |   |          | FACW species x 2 =   |
| 1                                  |       |   |          | FAC species x 3 =  |
| 2                                  |       |   |          | FACU species x 4 =   |
| 3                                  |       |   |          | UPL species x 5 =<br>Column Totals: (A) (B)  |
| 4.                                 |       |   |          | Column Totals (A) (B)  |
| 5.                                 |       |   |          | Prevalence Index = B/A =   |
| 6.                                 |       |   |          | Hydrophytic Vegetation Indicators:   |
| 7                                  |       |   |          | 1 - Rapid Test for Hydrophytic Vegetation  |
|                                    | 0     | = Total Cov                                       | er       | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 5)        |       | _ 1 - 1 - 1 - 1 - 1                               |          | 3 - Prevalence Index is ≤3.01  |
| 1. Hesperis 20-                    | 10    | NO  | FAC      | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) |
| 2. Plantago Janceolata             |       | No  | FACU     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                  |
| 3. The folian prateine             |       | No  | FACU     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                          |
| 4 Lotus corniculatus               | -     | NO  | FALL     | be present, unless disturbed or problematic.   |
| 5. Frayaria Virgini ana            | 5     | NO  | FALL     | Definitions of Vegetation Strata:  |
| 71.77                              | - A   | 140   | Trans    | Tree – Woody plants 3 in. (7.6 cm) or more in diamete                                      |
| 7. Phlyeum Protence                | 60    | 465   | FACY     | at breast height (DBH), regardless of height.  |
| 8. Dactylis glamerata              |       | 465   |          | Sapling/shrub – Woody plants less than 3 in. DBH   |
|                                    |       |   | 1        | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9                                  |       |   |          | Herb - All herbaceous (non-woody) plants, regardless of                                    |
| 10                                 |       |   |          | size, and woody plants less than 3.28 ft tall.   |
| 11                                 |       |   |          | Woody vines - All woody vines greater than 3.28 ft in                                      |
| 12                                 | 130   |   |          | height.  |
| Woody Vine Stratum (Plot size:)    | 130   | = Total Cov                                       | 26<br>26 |  |
| 1                                  |       | -   |          | Hydrophytic  |
| 2                                  |       |   |          | Vegetation   |
| 3                                  |       | <del>, , , , , , , , , , , , , , , , , , , </del> |          | Present? Yes No  |
| 4                                  |       | -   |          |  |
| 7                                  |       | = Total Cov                                       | 105      |  |

| Depth<br>(inches)  | Matrix Color (moist)   | %                               | Redo<br>Color (moist) | x Feature<br>%  |   | Loc <sup>2</sup>  | Texture   | Remarks  |
|--|--|---------------------------------|-----------------------|---|---|-------------------|---|--|
| 2-9  | 10/R3/3  | 100                             | THE THE PROPERTY OF   |   | _                                       |                   | JH Com  |  |
| 7-15-  | 10 tr 5/3  | 97                              | 7.5TK 5/6             | 10  | C                                       | 1                 | Silt Loam   |  |
|  |  |                                 |                       |   |   |                   |   |  |
|  |  |                                 |                       |   |   |                   |   |  |
|  |  |                                 |                       |   | _                                       |                   |   |  |
| Type: C=C  | oncentration, D=Dep  | letion, RM:                     | =Reduced Matrix, M    | S=Masked  | d Sand Gr                               | rains.            | <sup>2</sup> Location: PL:  | =Pore Lining, M=Matrix.  |
| Histosol Histic E Black H Hydroge Stratifie Deplete Thick D Sandy F Sandy F Stripped Dark St | Indicators:  I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, I | <b>MLRA 1498</b><br>tion and we |                       | ) ace (S9) (I Mineral (F Matrix (F2 c (F3) rface (F6) Surface (I Sions (F8) | LRR R, M<br>1) (LRR K<br>2)<br>)<br>=7) | LRA 149B<br>(, L) | 2 cm Muck Coast Prairi ) 5 cm Mucky Dark Surface Polyvalue B Thin Dark S Iron-Manga Piedmont F Mesic Spool Red Parent Very Shallo Other (Expl | Problematic Hydric Soils <sup>3</sup> :  (A10) (LRR K, L, MLRA 149B)  e Redox (A16) (LRR K, L, R)  Peat or Peat (S3) (LRR K, L, R)  e (S7) (LRR K, L, M)  selow Surface (S8) (LRR K, L)  surface (S9) (LRR K, L)  nese Masses (F12) (LRR K, L, R)  loodplain Soils (F19) (MLRA 149B)  iic (TA6) (MLRA 144A, 145, 149B)  Material (F21)  w Dark Surface (TF12)  ain in Remarks) |
| Туре:  |  |                                 |                       |   |   |                   |   | 1  |
| Depth (in  | iches):  |                                 |                       |   |   |                   | Hydric Soil Pres  | sent? Yes No   |
|  |  |                                 |                       |   |   |                   |   |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_\_\_\_ City/County: Chautauqua County Sampling Date: 11/03/20 Applicant/Owner: Ball Hill Wind Energy, LLC \_\_\_ Sampling Point: DP-Investigator(s): DTC WIM \_\_ Section, Township, Range: Local relief (concave, convex, none): Lon cave Slope (%): Subregion (LRR or MLRA): LRR-R Soll Map Unit Name: Fife 51/4 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID: 1/L Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Drainage Patterns (B10) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) X High Water Table (A2) Moss Trim Lines (B16) Aquatic Fauna (B13) Dry-Season Water Table (C2) Saturation (A3) \_\_ Marl Deposits (B15) \_\_\_ Hydrogen Sulfide Odor (C1) \_\_ Water Marks (B1) Crayfish Burrows (C8) \_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Shallow Aquitard (D3) Other (Explain in Remarks) \_\_\_ Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? No \_\_\_\_\_ Depth (inches): No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Saturation Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30 )        | Absolute Dominant Indice   % Cover Species? Sta | atus Dominance rest worksneet.   |
|--------------------------------------|---|--|
| 1. Salix 50.                         | 10 YES FRE                                      | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
| 2. Fraxions game , Vanica            | 5 465 FA  | Total Number of Dominant Species Across All Strata:  (B)   |
| 3                                    |   |  |
| 4                                    |   | Percent of Dominant Species That Are OBL, FACW, or FAC: 106 % (A/B)                                    |
| 5                                    |   |  |
| 6                                    |   | Prevalence Index worksheet:  |
| 7                                    | 15 = Total Cover                                | Total % Cover of: Multiply by:  OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15 |   | 3 FACW species x 2 =   |
| 1. Colous anamuna                    |   | FAC species x 3 =  |
|                                      |   | FACU species x 4 =   |
| 2.51/jx 5p.                          |   | UPL species x 5 =  |
| 3                                    |   | Column Totals: (A) (B)   |
| 4                                    |   | Prevalence Index = B/A =   |
| 5                                    |   | <del>-</del>   |
| 6                                    |   | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                    |   | Va D   |
| r1                                   | = Total Cover /                                 | 7.5 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size:)            | 70 112  | 4 - Morphological Adaptations (Provide supportin   |
| 1. Typha late tolin                  | 50 4ES 0  |  |
| 2. Dolidago altosima                 | 30 489 F  | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Equiselyon 90.                    | 25 485 9  | 1 Indicators of hydric soil and wetland hydrology must   |
| 4. Aster Sp.                         | 20 NO F   | be present, unless disturbed or problematic.   |
| 5. Agood alba                        | 15 NO FA  | Definitions of Vegetation Strata:  |
| 6                                    |   | Tree – Woody plants 3 in. (7.6 cm) or more in diamete  |
| 7                                    |   | at breast height (DBH), regardless of height.  |
| 8                                    |   | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9                                    |   | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10                                   |   | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11.                                  |   |  |
| 12.                                  |   | Woody vines – All woody vines greater than 3.28 ft in height.  |
|                                      | /Z o = Total Cover                              |  |
| Woody Vine Stratum (Plot size:       |   | 60   |
| 1                                    |   |  |
| 2                                    |   | Hydrophytic Vegetation   |
| 3                                    |   | Present? Yes No  |
| 4                                    |   |  |
|                                      | = Total Cover                                   |  |

| Matrix  |  |   | Features  | 17  |   |   |   |
|---|--|---|---|---|---|---|---|
|   |  | ,   | %   | Type <sup>1</sup>   | _Loc <sup>2</sup> _   | Texture   | Remarks   |
| 10423/1   | 95   | 1,57R3/6  | 5   |   | M   | Si It loss  | 3   |
|   |  |   |   |   |   |   |   |
|   | <u></u>  |   |   |   |   |   |   |
|   |  |   |   |   |   |   |   |
| oncentration, D=Depl<br>Indicators:   | letion, RM=  | Reduced Matrix, MS  | =Masked   | Sand Gra  | ins.  |   | PL=Pore Lining, M=Matrix.<br>for Problematic Hydric Soils <sup>3</sup> :  |
| pipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) d Below Dark Surface rk Surface (A12) lucky Mineral (S1) sileyed Matrix (S4) edox (S5) Matrix (S6) fface (S7) (LRR R, N | ILRA 1498  | MLRA 149B) Thin Dark Surfac Loamy Mucky Mi Loamy Gleyed M Depleted Matrix ( Redox Dark Surf Depleted Dark Si Redox Depression   | e (S9) (Li<br>neral (F1)<br>atrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ons (F8) | RR R, ML<br>(LRR K,   | RA 149B)<br>L)  | 2 cm Mi Coast P 5 cm Mi Dark Su Polyvalu Thin Da Iron-Ma Piedmoi Mesic S Red Par Very Sh Other (E | uck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) ucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L) rk Surface (S9) (LRR K, L) nganese Masses (F12) (LRR K, L, R) nt Floodplain Soils (F19) (MLRA 149B) prodic (TA6) (MLRA 144A, 145, 149B) rent Material (F21) iallow Dark Surface (TF12) Explain in Remarks)  |
| hydrophytic vegetat   | ion and we   | tland hydrology must  | be preser   | nt, unless  | disturbed   | or problematic.   | Complete Service and Complete Service |
| ayer (If observed):   |  |   |   |   |   |   |   |
| ches):  |  |   |   |   |   | Hydric Soil P   | Present? Yes No   |
|   |  |   |   |   |   | riyano com  | 103   |
|   |  |   |   |   |   |   |   |
|   | Indicators:  (A1) Dipedon (A2) Stic (A3) In Sulfide (A4) I Layers (A5) I Below Dark Surface Ink Surface (A12) Sucky Mineral (S1) Eleyed Matrix (S4) Edox (S5) Matrix (S6) Iface (S7) (LRR R, N | oncentration, D=Depletion, RM= Indicators: (A1) Dipedon (A2) Stic (A3) In Sulfide (A4) I Layers (A5) I Below Dark Surface (A11) Ink Surface (A12) Iucky Mineral (S1) Dieyed Matrix (S4) Edox (S5) Matrix (S6) Iface (S7) (LRR R, MLRA 149E Inhydrophytic vegetation and we haver (if observed): | procentration, D=Depletion, RM=Reduced Matrix, MS= Indicators:  (A1)                  | encentration, D=Depletion, RM=Reduced Matrix, MS=Masked Indicators:  (A1) | encentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Graindicators:  (A1) | procentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Indicators:  (A1)           | Dencentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Indicators:  (A1)  |

| Project/Site: Ball Hill Wind Project   | City/County: Chau   |  | Sampling Date: 1//03/2  |
|--|---|--|---|
| Applicant/Owner: Ball Hill Wind Energy, LLC  |   | 12.40.5  | Sampling Point: DP- 47  |
| Investigator(s): DJL, VJM  | Section, Township,  | 311  |   |
|  |   |  |   |
|  | Lat: 79.164.266   | convex, none): Con U   |   |
|  |   |  |   |
| Soil Map Unit Name: Kge 5/11/09  |   | NWI classific  |   |
| Are climatic / hydrologic conditions on the site typic   | 0   | o (If no, explain in F   |   |
| Are Vegetation <u>No</u> , Soil <u>NO</u> , or Hydrology   |   | re "Normal Circumstances"  | present? Yes No   |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology   | naturally problematic? (I   | f needed, explain any answe  | ers in Remarks.)  |
| SUMMARY OF FINDINGS – Attach site  | e map showing sampling poin   | it locations, transects  | important features, etc.  |
| Hydrophytic Vegetation Present? Yes  | 2 - 2   |  | , important routures, etc.  |
| Hydric Soil Present? Yes   | within a Wa   |  | _ No <u></u>  |
| Wetland Hydrology Present? Yes   | - · · · · · · · · · · · · · · · · · · ·   | al Wetland Site ID:  |   |
| Remarks: (Explain alternative procedures here o  | r in a separate report.)  |  |   |
| Drift Deposits (B3)     Algal Mat or Crust (B4)     Iron Deposits (B5)     Inundation Visible on Aerial Imagery (B7)     Sparsely Vegetated Concave Surface (B8) | heck all that apply)  Water-Stained Leaves (B9)  Aquatic Fauna (B13)  Marl Deposits (B15)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Living Represence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils  Thin Muck Surface (C7)  Other (Explain in Remarks) | Surface Soil Drainage Pai Moss Trim Li Dry-Season Crayfish Burn oots (C3) Saturation Vi Stunted or Si s (C6) Geomorphic Shallow Aqui | tterns (B10) ines (B16) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) tressed Plants (D1) Position (D2) ttard (D3) iphic Relief (D4) |
| Field Observations: Surface Water Present?  Yes No   | × But to to   |  |   |
| Water Table Present? Yes No  | Depth (inches):  Depth (inches):  |  |   |
| Saturation Present? Yes No   |   | Motland Urdenham Bassan  | . v.  |
| (includes capillary fringe)  |   | Wetland Hydrology Presen   | tr res No   |
| Describe Recorded Data (stream gauge, monitoring Remarks:  | 1984 in dicator   |  |   |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |

| Tree Stratum (Plot size:3 0)           | Absolute | Dominant Indicator                    | Dominance Test worksheet:  |
|--|----------|---------------------------------------|--|
|  |          | Species? Status                       | Number of Dominant Species   |
| 1. Ace Merun                           |          | YES TAC                               | That Are OBL, FACW, or FAC: (A)  |
| 2. Malore Sp.                          | 10       | YES FACE                              | Total Number of Dominant   |
| 3. Fraxings Pensylvania                | 10       | YES FAIN                              | Species Across All Strata: (B)   |
| 1.                                     |          |                                       | Percent of Dominant Species  |
| 5.                                     |          |                                       | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)                                       |
|  |          |                                       |  |
| 3                                      |          |                                       | Prevalence Index worksheet:  |
| 7                                      | 7.       | OBSTRUCT VIEW                         |  |
| 1,7                                    |          | = Total Cover 15                      | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 13 ) |          | 6                                     | FACW species x 2 =<br>FAC species x 3 =  |
|  |          |                                       |  |
| 2                                      |          |                                       | FACU species x 4 =<br>UPL species x 5 =  |
| 3                                      |          |                                       | Column Totals: (A) (B)   |
| 4                                      |          |                                       | Column Totals (A) (B)  |
|  |          |                                       | Prevalence Index = B/A =   |
| 5                                      |          |                                       | Hydrophytic Vegetation Indicators:   |
| 6                                      |          |                                       | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                      | -        |                                       | 2 - Dominance Test is >50%   |
| -1                                     | _0       | = Total Cover                         | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:)              | 15.27    |                                       | 4 - Morphological Adaptations (Provide supportin   |
| 1. Solidase canadasis                  |          |                                       | data in Remarks or on a separate sheet)  |
| 2. Aster Sy. (6/100)                   | 30       | YES FAL                               | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3                                      |          |                                       | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                    |
| 4.                                     |          |                                       | be present, unless disturbed or problematic.   |
| V                                      |          |                                       | Definitions of Vegetation Strata:  |
| 5                                      |          |                                       |  |
| 6                                      |          |                                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 7                                      |          |                                       |  |
| 8                                      |          |                                       | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
| 9                                      |          |                                       | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10                                     |          |                                       | size, and woody plants less than 3.28 ft tall.   |
| 11                                     |          |                                       | W. Luis - All amonds since greater than 2.28 ft in   |
| 12                                     |          |                                       | Woody vines – All woody vines greater than 3.28 ft in height.  |
|  | 100      | = Total Cover 50                      |  |
| What What States (Olat share 30')      |          | 20                                    |  |
| Woody Vine Stratum (Plot size:)        |          |                                       |  |
| 1,                                     |          |                                       | Hydrophytic  |
|  |          | · · · · · · · · · · · · · · · · · · · | Vegetation ( /   |
| 2                                      |          |                                       | Present? Yes X No  |
| 2                                      | _        | -                                     |  |
| 2                                      |          |                                       |  |

| Depth       | Matrix   |             | Redo                                    | x Features  | - 1        | . ,                                     | 4 10            |  |                              |               |
|-------------|--|-------------|---|-------------|------------|---|-----------------|--|------------------------------|---------------|
| (inches)    | Color (moist)                                  |             | Color (moist)                           |             | Type'      | Loc                                     | Texture         |  | Remarks                      |               |
| 0-18        | 104/23/2                                       | 100         |   |             |            |   | SIF/00          | n  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             | *************************************** | -           | ******     | -                                       | *               |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            | *************************************** |                 |  |                              |               |
|             | tem and the same of the same of the            |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             | · ·  |             |   |             |            |   |                 |  |                              |               |
| Type: C=Co  | oncentration, D=Depl                           | etion, RM=F | Reduced Matrix, M                       | S=Masked    | Sand Gra   | ains.                                   |                 |  | Lining, M=M                  |               |
| Histosol    |  |             | Polynalus Balan                         | w Surface   | (S8) /I DE | D D                                     |                 |  | matic Hydrid                 |               |
|             | pipedon (A2)                                   | -           | Polyvalue Below MLRA 149B               |             | (30) (LRF  | ικ,                                     |                 |  | (LRR K, L, N<br>ox (A16) (LR |               |
| _ Black His |  |             | _ Thin Dark Surfa                       |             | RR R. MI   | RA 149B)                                |                 |  |                              | (LRR K, L, R) |
|             | n Sulfide (A4)                                 | -           | _ Loamy Mucky f                         |             |            |   |                 | Charles and the Charles of the Charl | (LRR K, L,                   |               |
|             | Layers (A5)                                    |             | _ Loamy Gleyed                          |             |            | ,,                                      |                 |  | Surface (S8)                 |               |
|             | Below Dark Surface                             | (A11)       | _ Depleted Matrix                       |             |            |   |                 |  | (S9) (LRR H                  |               |
|             | rk Surface (A12)                               |             | _ Redox Dark Su                         |             |            |   |                 |  |                              | (LRR K, L, R  |
|             | lucky Mineral (S1)                             |             | _ Depleted Dark                         |             | 7)         |   |                 |  |                              | 9) (MLRA 149) |
|             | leyed Matrix (S4)                              |             | _ Redox Depress                         |             | .,         |   |                 |  |                              | 4A, 145, 149E |
|             | edox (S5)                                      | _           |   |             |            |   |                 | rent Mater   |                              |               |
|             | Matrix (S6)                                    |             |   |             |            |   |                 |  | k Surface (TF                | =12)          |
|             | face (S7) (LRR R, M                            | LRA 149B)   |   |             |            |   |                 | Explain in I   |                              |               |
|             | f hydrophytic vegetati<br>_ayer (if observed): | on and wet  | and hydrology mus                       | st be prese | nt, unless | disturbed                               | or problematic. |  | - Marian Marian American     |               |
| Type:       | Layer (ii observed).                           |             |   |             |            |   |                 |  |                              |               |
| Depth (inc  | ches):   |             |   |             |            |   | Hydric Soil I   | Present?   | Yes                          | No X          |
| Remarks:    | ,  |             |   |             |            |   | .,,             |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              |               |
|             |  |             |   |             |            |   |                 |  |                              | + x2,         |

| roject/Site: Ball Hill Wind Project  pplicant/Owner: Ball Hill Wind Energy, LLC  nvestigator(s): DJL, USM  andform (hillslope, terrace, etc.): Till Plain  ubregion (LRR or MLRA): LRR-R Lat:  | Section, Township, Ra<br>Local relief (concave, con<br>79_165017 Lon | State: NY Inge: VIII (2004) vex, none): (2004) rg: 42 409849  | Slope (%): 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3   |
|--|--|---|--|
| oil Map Unit Name: Erit Silt loan  | (E, B)   |   | ation: PEM   |
| re climatic / hydrologic conditions on the site typical for t  |  |   |  |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u>  |  | "Normal Circumstances" p  | resent? Yes No                                     |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u>  | naturally problematic? (If ne  | eeded, explain any answe  | s in Remarks.)                                     |
| SUMMARY OF FINDINGS – Attach site map  | showing sampling point l   | ocations, transects   | , important features, etc                          |
| Hydric Soil Present? Yes   | No Is the Sampled within a Wetlan                                    |   |  |
| Remarks: (Explain alternative procedures here or in a se   | eparate report.)   |   |  |
|  |  |   |  |
| IYDROLOGY  |  |   |  |
| Wetland Hydrology Indicators:  |  | Secondary Indica  | tors (minimum of two required)                     |
| Primary Indicators (minimum of one is required; check a  | I that apply)  | Surface Soil  | Cracks (B6)  |
| ·  | ater-Stained Leaves (B9)   | Drainage Pat  |  |
| A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | uatic Fauna (B13)  | Moss Trim Li  |  |
|  | rl Deposits (B15)  |   | Water Table (C2)                                   |
|  | drogen Sulfide Odor (C1)   | Crayfish Burn   |  |
| Control of the contro | idized Rhizospheres on Living Roo<br>esence of Reduced Iron (C4)     |   | sible on Aerial Imagery (C9)<br>ressed Plants (D1) |
|  | cent Iron Reduction in Tilled Soils (                                | per all and the second of the |  |
|  | in Muck Surface (C7)   | Shallow Aqu   |  |
|  | her (Explain in Remarks)   |   | phic Relief (D4)                                   |
| Sparsely Vegetated Concave Surface (B8)  | ion (Explain III   Ionalito)   | FAC-Neutral   |  |
| Field Observations:  |  |   |  |
| Surface Water Present? Yes No X D  | epth (inches):   |   |  |
| Water Table Present? Yes No D  | epth (inches):   | i.  |  |
| Saturation Present? Yes X No D   | epth (inches):   | etland Hydrology Preser   | t? Yes No  |
| (includes capillary fringe)  |  | -\ if a add to be   |  |
| Describe Recorded Data (stream gauge, monitoring well  | , aeriai priotos, previous irispection                               | is), ii avallable.  |  |
|  |  |   |  |
| Remarks:   |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |
|  |  |   |  |

| Tree Stratum (Plot size: 301)          | % Cover | Dominant<br>Species? | Status  | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                             |
|--|---------|----------------------|---------|---|
| 1,                                     |         |                      |         | That Are OBL, FACW, or FAC: (A)   |
| 2                                      |         | -                    |         | Total Number of Dominant  |
| 3                                      |         |                      |         | Species Across All Strata: (B)  |
|  |         |                      |         | Percent of Dominant Species   |
| 5                                      |         |                      |         | That Are OBL, FACW, or FAC: (A/B  |
| 3                                      |         |                      |         |   |
|  |         |                      |         | Prevalence Index worksheet:   |
| 1                                      |         |                      |         | Total % Cover of: Multiply by:  |
| - /                                    |         | = Total Co           | ver     | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15 ) |         |                      |         | FACW species x 2 =  |
|  |         |                      |         | FAC species x 3 =   |
|  |         |                      |         | FACU species x 4 =  |
|  |         |                      |         | UPL species x 5 =   |
|  |         |                      |         | Column Totals: (A) (B)  |
| ,                                      |         |                      |         | E TOUT OF THE PARTY   |
| i                                      |         |                      |         | Prevalence Index = B/A =  |
| 0,                                     |         |                      |         | Hydrophytic Vegetation Indicators:  |
|  |         |                      |         | 1 - Rapid Test for Hydrophytic Vegetation   |
|  |         |                      |         | × 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size:)              | _0      | = Total Co           | ver     | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:)              |         |                      |         | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting  |
| . Phalaris grundingcon                 | 40      | 485                  | FACE    | data in Remarks or on a separate sheet)   |
| Science Cuaprings                      | 30      | 485                  | OBL     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Fri lakeron 50                      | 26      | WES                  | ree     | 11-41-4   |
|  |         |                      |         | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. Aster 5p                            | 20      | TIND                 | MC      |   |
| 5                                      |         |                      |         | Definitions of Vegetation Strata:   |
| 3                                      |         |                      |         | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7.                                     |         |                      |         | at breast height (DBH), regardless of height.   |
|  |         |                      |         | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 3                                      |         |                      |         | and greater than or equal to 3.28 ft (1 m) tall.  |
| 0,                                     |         |                      |         | Herb – All herbaceous (non-woody) plants, regardless of   |
| 10                                     |         |                      |         | size, and woody plants less than 3.28 ft tall.  |
| 11                                     |         |                      |         |   |
| 12.                                    |         |                      |         | Woody vines – All woody vines greater than 3.28 ft in height.   |
| -                                      | 115     | = Total Co           |         | neight.   |
| Moody Vine Stratum (Plot size: 30)     | 1/2     | = Total Co           | 23      |   |
| Noody Vine Stratum (Plot size:)        |         |                      | 43      |   |
|  |         |                      |         |   |
| 2.                                     |         |                      | التستاد | Hydrophytic<br>Vegetation   |
|  |         |                      |         | Present? Yes No   |
|  |         | -                    | -       |   |
| 3                                      |         |                      |         |   |
| 3<br>4                                 |         | = Total Co           |         |   |

| (inches)   | Matrix<br>Color (moist)   | %             | R   | edox Featur  | es                                       |             | the absence of ind  |  |
|--|---|---------------|---|--|--|-------------|---|--|
| 1 - CT   | 1   |               | Color (moist)   |  | Type <sup>1</sup>                        | _Loc2       | Texture   | Remarks  |
| 2 10   | 104R 3/1  | 90            |   | 4 10   |  | 19          | Siltloam  |  |
| - 18   | 104R4/1   | 90            | 7.5 Ya 5  | 6 10   |  | m           | 51/flagon   |  |
|  |   |               |   |  |  |             |   |  |
|  |   |               |   |  |  |             |   |  |
| voe: C=Cc  | oncentration, D=Depl  | etion DM-     | Poducad Matrix  | MC-Masks   |  |             | 2   |  |
| ydric Soil I   | ndicators:  | SHOTI, INIVI- | reduced Watrix,   | IVIO-IVIASKE   | u Sand Gra                               | uris.       | Indicators for Pro  | ore Lining, M=Matrix.<br>blematic Hydric Solls³:   |
| Black His Hydroger Stratified Depleted Thick Dan Sandy Mo Sandy Gl Sandy Re Stripped I   | ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, Mi |               | Polyvalue Be MLRA 14 Thin Dark So Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre | 9B) urface (S9) ( y Mineral (F2 ed Matrix (F2 trix (F3) Surface (F6) rk Surface (F6) | LRR R, ML<br>1) (LRR K,<br>2)            | .RA 149B)   | Coast Prairie F 5 cm Mucky Po Dark Surface ( Polyvalue Belo Thin Dark Surf Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma | ark Surface (TF12)   |
| ndicators of   | hydrophytic vegetation  | on and wet    | land hydrology m  | ust be prese   | ent, unless                              | disturbed o | or problematic.   |  |
| estrictive La  | ayer (if observed):   |               | PI  |  | 11-411-41-41-41-41-41-41-41-41-41-41-41- |             | ***************************************   | The state of the s |
| Type:  | hoe):   |               |   |  |  |             |   | ~  |
| A STATE OF THE STA |   |               |   |  |  |             | Hydric Soil Present   | ? Yes No   |
| Depth (inchemarks:   | 163)  |               |   |  |  |             |   |  |

| Project/Site: <u>Ball Hill Wind Projec</u><br>Applicant/Owner: <u>Ball Hill Wind Er</u>  |  | ity/County: Chautaugua County Sampling Date: 11/04/s   |
|--|--|--|
| Investigator(s): DTL I/  | JM s   | ection, Township, Range: Villenous   |
| Landform (hillslope, terrace, etc.):  Subregion (LRR or MLRA): LRR-R  Soll Map Unit Name: Cha taugu  Are climatic / hydrologic conditions on the second seco | Lat: 79.165  a 50.11 / Dam  the site typical for this time of year  Hydrology No significantly di  | relief (concave, convex, none):  |
| SUMMARY OF FINDINGS - A  | ttach site map showing s   | sampling point locations, transects, important features, et  |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proced   | Yes No<br>Yes No   | Is the Sampled Area within a Wetland?  If yes, optional Wetland Site ID:   |
| HYDROLOGY  |  |  |
| Wetland Hydrology Indicators:  |  | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is  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 Image  Sparsely Vegetated Concave Sur  | Water-Stained Le Aquatic Fauna (B Marl Deposits (B1 Hydrogen Sulfide Oxidized Rhizosp Presence of Redu Recent Iron Redu Thin Muck Surfac | Moss Trim Lines (B16) Dry-Season Water Table (C2) Codor (C1) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Crayfish Burrows (C8) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Cuced Iron (C4) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Cuced Iron (C4) Cuced Iron (C |
| Field Observations:  |  |  |
| Surface Water Present? Yes   | No Depth (inches): No Depth (inches): No Depth (inches): pe, monitoring well, aerial photos,   | Wetland Hydrology Present? Yes No previous inspections), if available:   |
|  |  |  |
| Remarks:   |  | 100,   |
|  |  |  |

|           | Species?  | Status                           | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)                   |
|-----------|---|----------------------------------|--|
|           |   |                                  | Total Number of Dominant Species Across All Strata: (B)  |
|           |   |                                  | Percent of Dominant Species  |
|           |   |                                  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
|           |   |                                  | Prevalence Index worksheet:  |
|           |   |                                  | Total % Cover of: Multiply by:   |
| 0         | = Total Cover   |                                  | OBL species x 1 =  |
|           |   |                                  | FACW species x 2 =   |
|           | التنظ   |                                  | FAC species x 3 =  |
|           |   |                                  | FACU species x 4 =   |
|           |   |                                  | UPL species x 5 =<br>Column Totals: (A) (B)  |
|           |   |                                  | Column Totals: (A) (b)   |
|           |   |                                  | Prevalence Index = B/A =   |
|           |   |                                  | Hydrophytic Vegetation Indicators:   |
|           |   |                                  | 1 - Rapid Test for Hydrophytic Vegetation  |
|           | = Total Cover   |                                  | 2 - Dominance Test is >50%   |
|           |   |                                  | 3 - Prevalence Index is ≤3.01  |
| 30        | YEG :   | FACU                             | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)             |
| 30        | 485   | TACU                             | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 20        | 465 7   | FAC                              | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
|           |   | TALLY                            | be present, unless disturbed or problematic.   |
|           |   | PALY                             | Definitions of Vegetation Strata:  |
| 5         | NO  | FREG                             | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 5         | No  | FACG                             | at breast height (DBH), regardless of height.  |
|           |   |                                  | Sapling/shrub - Woody plants less than 3 in. DBH   |
|           |   |                                  | and greater than or equal to 3.28 ft (1 m) tall.   |
|           |   |                                  | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
|           |   |                                  |  |
|           |   |                                  | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 115       | = Total Cove  | 1.05                             |  |
|           | 4 - 6 - 100 - | 500                              |  |
|           |   |                                  |  |
|           |   |                                  | Hydrophytic  |
|           |   |                                  | Vegetation Present? Yes No   |
| -         |   |                                  |  |
|           | - Tatal Causa   | -                                |  |
| e sheet.) |   |                                  |  |
|           | 30 30 30 30 30 30 30 30 30 30 30 30 30 3  | = Total Cover  = Total Cover  30 | = Total Cover  30  |

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| Depth .        | iption: (Describe t<br>Matrix |             | Red                                     | ox Features  |                   |           |                 |  |
|----------------|-------------------------------|-------------|---|--------------|-------------------|-----------|-----------------|--|
| (inches)       | Color (moist)                 | %           | Color (moist)                           | %            | Type <sup>1</sup> | _Loc2     | Texture         | Remarks  |
| 0-/2           | 10423/2                       | 100         |   |              | -                 |           | 5) It loan      | tq.  |
|                |                               |             |   |              |                   |           |                 |  |
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|                |                               |             | * |              |                   |           |                 |  |
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|                |                               |             |   |              |                   |           | -               |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
| Type: C=Cor    | ncentration, D=Depl           | etion, RM=  | Reduced Matrix M                        | S=Masked S   | Sand Gra          | ins       | 21 ocation: E   | PL=Pore Lining, M=Matrix.  |
| ydric Soil In  | dicators:                     | 1 1 111     |   |              |                   |           |                 | r Problematic Hydric Soils <sup>3</sup> :  |
| _ Histosol (/  | A1)                           | -           | Polyvalue Belo                          | w Surface (S | 58) (LRR          | R,        |                 | k (A10) (LRR K, L, MLRA 149B)  |
|                | pedon (A2)                    |             | MLRA 149E                               |              |                   |           | Coast Pra       | airie Redox (A16) (LRR K, L, R)  |
| _ Black Hist   |                               | -           | Thin Dark Surf                          |              |                   |           |                 | ky Peat or Peat (S3) (LRR K, L, R)   |
|                | Sulfide (A4)<br>Layers (A5)   | -           | Loamy Mucky<br>Loamy Gleyed             |              | (LRR K,           | L)        |                 | ace (S7) (LRR K, L, M)   |
|                | Below Dark Surface            | (A11)       | Depleted Matri                          |              |                   |           |                 | Below Surface (S8) (LRR K, L)<br>Surface (S9) (LRR K, L)   |
|                | k Surface (A12)               | _           | Redox Dark St                           |              |                   |           |                 | ganese Masses (F12) (LRR K, L, R)  |
|                | icky Mineral (S1)             | _           | Depleted Dark                           |              | )                 |           | Piedmont        | Floodplain Soils (F19) (MLRA 149E  |
|                | eyed Matrix (S4)              | -           | Redox Depres                            | sions (F8)   |                   |           | Mesic Spo       | odic (TA6) (MLRA 144A, 145, 149B)  |
| _ Sandy Re     | dox (S5)<br>Matrix (S6)       |             |   |              |                   |           |                 | nt Material (F21)  |
|                | ace (S7) (LRR R, M            | RA 149B)    |   |              |                   |           |                 | low Dark Surface (TF12)<br>plain in Remarks)   |
| _              | (-// (=/-//, 11               |             |   |              |                   |           | Other (EX       | plain in Remarks)  |
| ndicators of h | nydrophytic vegetation        | on and wetl | and hydrology mu                        | st be presen | t, unless         | disturbed | or problematic. |  |
|                | yer (if observed):            |             | .,                                      |              |                   |           |                 |  |
| Type:          |                               |             |   |              |                   |           | 10000000        | ~  |
| Depth (inch    | ies):                         |             |   |              |                   |           | Hydric Soil Pre | esent? Yes No  |
| emarks:        |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
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|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
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|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |
|                |                               |             |   |              |                   |           |                 |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_\_\_ City/County: Chautauqua County \_ Sampling Date:\_/ Project/Site: Ball Hill Wind Project \_\_\_ Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC Menous Section, Township, Range:\_ Investigator(s): Local relief (concave, convex, none): \_\_\_\_ Landform (hillslope, terrace, etc.): \_\_\_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: Soil Map Unit Name: Bust (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_/ Are "Normal Circumstances" present? Yes Are Vegetation No . Soil No . or Hydrology No significantly disturbed? Are Vegetation M, Soil M, or Hydrology M naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? No Hydric Soil Present? If yes, optional Wetland Site ID: Yes Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) ▲ Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No \_\_ Depth (inches): Surface Water Present? Yes \_X No \_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Yes \_X No \_\_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Sapling/Shrub Stratum (Plot size:  | Multiply by: x 1 = x 2 = x 3 = x 4 =   |
|--|--|
| Herb Stratum (Plot size:   | (A) (B)  |
| 6 Tree – Woody plants 3 in at breast height (DBH), r   | Indicators: drophytic Vegetation s >50% is ≤3.0¹ aptations¹ (Provide supporting or on a separate sheet) sytic Vegetation¹ (Explain) and wetland hydrology must bed or problematic. |
| 9. Herb – All herbaccous (no size, and woody plants less 11. Woody vines – All woody height. | . (7.6 cm) or more in diameter egardless of height.  plants less than 3 in. DBH to 3.28 ft (1 m) tall.  n-woody) plants, regardless of than 3.28 ft tall.                          |
| Woody Vine Stratum (Plot size:)  | No   |

| Profile Description: (Describe to the de          | epth needed to document the indicator or confirm       | the absence of indicators.)  |
|---|--|--|
| Depth Matrix                                      | Redox Features   | Texture Remarks  |
| (inches) Color (moist) %                          | Color (moist) % Type¹ Loc²                             | 1111   |
| 0-9 10423/1 90                                    | 7.5 413/4 10 cm  | 211 /oan   |
| 9-18 1041 5/2 90                                  | 7,5 98 10 CM   | Silfloom   |
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|   | <del></del>  | 2  |
|   | M=Reduced Matrix, MS=Masked Sand Grains.               | <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :  |
| Hydric Soil Indicators:                           | Delivering Delevi Ourfees (CO) (LDD D                  | 2 cm Muck (A10) (LRR K, L, MLRA 149B)  |
| Histosol (A1) Histic Epipedon (A2)                | Polyvalue Below Surface (S8) (LRR R,<br>MLRA 149B)     | Coast Prairie Redox (A16) (LRR K, L, MLRA 1435)  |
| Black Histic (A3)                                 | Thin Dark Surface (S9) (LRR R, MLRA 149B)              |  |
| Hydrogen Sulfide (A4)                             | Loamy Mucky Mineral (F1) (LRR K, L)                    | Dark Surface (S7) (LRR K, L, M)  |
| Stratified Layers (A5)                            | Loamy Gleyed Matrix (F2)                               | Polyvalue Below Surface (S8) (LRR K, L)  |
| Depleted Below Dark Surface (A11)                 | Depleted Matrix (F3)                                   | Thin Dark Surface (S9) (LRR K, L)  |
| Thick Dark Surface (A12)                          | Redox Dark Surface (F6)     Depleted Dark Surface (F7) | Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)  |
| Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) | Depleted Dark Surface (F7) Redox Depressions (F8)      | Mesic Spedic (TA6) (MLRA 144A, 145, 149B)  |
| Sandy Redox (S5)                                  |  | Red Parent Material (F21)  |
| Stripped Matrix (S6)                              |  | Very Shallow Dark Surface (TF12)   |
| Dark Surface (S7) (LRR R, MLRA 14                 | 19B)   | Other (Explain in Remarks)   |
| 31 adiaptors of hydrophydic vegetation and        | wetland hydrology must be present, unless disturbed    | or problematic   |
| Restrictive Layer (if observed):                  | Wettarid flydrology must be present, diffess distanced | The problem and the problem an |
| Type:   |  |  |
| Depth (inches):                                   |  | Hydric Soil Present? Yes No  |
| Remarks:  |  |  |
| Tromano.  |  |  |
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_\_ City/County: Chautauqua County \_ Sampling Date: ///o-Project/Site: Ball Hill Wind Project \_\_ Sampling Point: DP- 5 Applicant/Owner: Ball Hill Wind Energy, LLC VilenoVA Investigator(s): D5L, V5m Section, Township, Range:\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_\_ Slope (%):\_\_\_\_\_ Landform (hillslope, terrace, etc.): Till Plain Lat: 79.169796 Long: 42,409901 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Busty Silt NWI classification: No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_X\_\_ Are "Normal Circumstances" present? Yes \_\_\_\_\_\_ No\_ Are Vegetation No , Soil NO , or Hydrology NO significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation No, Soil No, or Hydrology No naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes \_\_\_\_ No \_\_\_ within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID:\_\_\_\_\_ Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: \_\_ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) \_\_\_ Moss Trim Lines (B16) \_\_ Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) \_\_ Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) \_ Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) \_\_ Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) \_\_ Geomorphic Position (D2) Algal Mat or Crust (B4) \_\_ Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) \_\_ Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No X Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_\_/D Depth (inches): Water Table Present? Wetland Hydrology Present? Yes X No \_ Yes X No B Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30)  1. Francis Rennessor | 80  | Species?    |         | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                             |
|--|-----|-------------|---------|---|
| 2.<br>3.   |     |             |         | Total Number of Dominant Species Across All Strata:  (B)  |
| 4  |     |             |         | Percent of Dominant Species 509   |
| 5  |     |             |         | That Are OBL, FACW, or FAC:   |
| 6  |     |             |         |   |
|  |     |             |         | Prevalence Index worksheet:   |
| 7  | 80  |             |         | Total % Cover of: Multiply by:  |
| Sanling/Shruh Stratum (Plot size: 15               | 80  | = Total Cov | er      | OBL species x 1 =   |
| Sapility Stratuiti (Flot Size)                     |     | 10-         | T.      | FACW species x 2 =  |
| 1. Come angrum                                     | 15  | 485         | FACW    | FACULTURE X 3 =   |
| 2. Loniara fatarica                                | 15  | 465         | FACY    | FACU species x 4 =<br>UPL species x 5 =   |
| 3. Rosa multiflara                                 | 15  | 445         | FALL    |   |
| 4.   |     |             |         | Column Totals: (A) (B)  |
| 5  |     |             |         | Prevalence Index = B/A =  |
| 6  |     |             |         | Hydrophytic Vegetation Indicators:  |
| 7.   |     |             |         | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | 45  | = Total Cov | er os c | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5)                        |     | 10.0100     | 910     | 3 - Prevalence Index is ≤3.0¹   |
|  | 100 | ULC         |         | 4 - Morphological Adaptations¹ (Provide supporting  |
| 70   | 10  | 34          | Hou     | data in Remarks or on a separate sheet)   |
| 2. Hvens sp.                                       | 10  | 48          | FAC     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Solidajo altisina                               | 15  | 465         | TALL    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4  |     |             |         | Definitions of Vegetation Strata:   |
| 5  |     |             |         |   |
| 6  |     |             | _       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7  |     |             |         | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8  |     |             |         | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |     |             |         | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10   |     |             |         | size, and woody plants less than 3.28 ft tall.  |
| 11   |     |             |         | Woody vines - All woody vines greater than 3.28 ft in   |
| 12   |     |             |         | height.   |
|  | 35  | = Total Cov | er 17.5 | 100   |
| Woody Vine Stratum (Plot size: 30')                |     |             | 7       |   |
| 1. Whi Amia  | 50  | 460         | FAC     |   |
| 2  |     |             | -       | Hydrophytic   |
| 2  |     |             |         | Vegetation Present? Yes No  |
|  |     |             |         | 100   |
| 4  | 50  | - 114       |         |   |
|  | 20  | = Total Cov | er      |   |

| Depth (Inches) Color (moist) % Color (moist) % Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LR R Sandy Mucky Mineral (S1) Popleted Dark Surface (F6) Sandy Mucky Mineral (S1) Redox Depressions (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  *Indicators of hydrophytic vegetation and wetland hydrology must be present, under the present the present, under the present the present, under the present the presen | nd Grains. ) (LRR R, R, MLRA 149B) | 2 cm Muck (A10)<br>Coast Prairie Re-<br>5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
|--|------------------------------------|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LR Stratified Layers (A5) Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) Depleted Matrix (F3)  Thick Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)   | nd Grains. ) (LRR R, R, MLRA 149B) | <sup>2</sup> Location: PL=Pore Indicators for Proble  2 cm Muck (A10)  Coast Prairie Rec 5 cm Mucky Pea  | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR Stratified Layers (A5) Loamy Mucky Mineral (F1) (LR Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Matrix (F2)  Depleted Below Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)   | nd Grains. ) (LRR R, R, MLRA 149B) | <sup>2</sup> Location: PL=Pore Indicators for Proble  2 cm Muck (A10)  Coast Prairie Rec 5 cm Mucky Pea  | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (Image) MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR Reduced Matrix) Mineral (F1) (LR)  Stratified Layers (A5) Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) Depleted Matrix (F3)  Thick Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)   | nd Grains. ) (LRR R, R, MLRA 149B) | <sup>2</sup> Location: PL=Pore Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea  | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | Indicators for Proble 2 cm Muck (A10) Coast Prairie Rec 5 cm Mucky Pea   | ematic Hydric Soils³:<br>(LRR K, L, MLRA 149B)              |
| Hydric Soil Indicators:  Histosol (A1) — Polyvalue Below Surface (S8) (MLRA 149B)  Black Histic (A3) — Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR)  Stratified Layers (A5) — Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) — Depleted Matrix (F3)  Thick Dark Surface (A12) — Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) — Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  | ) (LRR R,<br>R, MLRA 149B)         | 2 cm Muck (A10)<br>Coast Prairie Re-<br>5 cm Mucky Pea   | (LRR K, L, MLRA 149B)                                       |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  | R, MLRA 149B)                      | Coast Prairie Re-  |   |
| Black Histic (A3) Thin Dark Surface (S9) (LRR R Loamy Mucky Mineral (F1) (LR Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  |                                    | 5 cm Mucky Pea   | day (A18) (I DD K I D)                                      |
| Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  |                                    | The second secon |   |
| Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)   |                                    |  | 7) (LRR K, L, M)  |
| Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  |                                    | The second of th | Surface (S8) (LRR K, L)                                     |
| Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)   |                                    |  | e (S9) (LRR K, L)   |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)   |                                    |  | Masses (F12) (LRR K, L, R)                                  |
| Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)   |                                    |  | olain Soils (F19) (MLRA 149B)<br>A6) (MLRA 144A, 145, 149B) |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  |                                    | Red Parent Mate  |   |
| Dark Surface (S7) (LRR R, MLRA 149B)   |                                    |  | rk Surface (TF12)   |
| 3 Indicators of hydrophytic vogotation and watland hydrology must be present. In   |                                    | Other (Explain in  |   |
| Indicators of hydrophytic vocatation and wotland hydrology must be present un  |                                    |  |   |
|  | unless disturbed o                 | or problematic.  |   |
| Restrictive Layer (if observed):   |                                    | 11   |   |
| Type:  |                                    | Hydric Soil Present?   | Yes No  |
| Depth (inches):  |                                    | riyane don't resent  | 100   |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: // \_\_\_\_ City/County: Chautauqua County Sampling Point: DP-Project/Site: Ball Hill Wind Project State: Applicant/Owner: Ball Hill Wind Energy, LLC FlenovA Slope (%): 3 - 8 Section, Township, Range: DJL UJM Local relief (concave, convex, none): \_\_\_\_ Datum: NAD 83 Investigator(s): \_\_ Landform (hillslope, terrace, etc.): \_\_\_ 79,155498 Subregion (LRR or MLRA): LRR-R NWI classification: (If no, explain in Remarks.) Soil Map Unit Name: Frie 5, 1 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_ Are "Normal Circumstances" present? Yes Are Vegetation No, Soll No, or Hydrology No significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation No., Soil No., or Hydrology No naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area within a Wetland? Hydrophytic Vegetation Present? If yes, optional Wetland Site ID:\_ Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) Secondary Indicators (minimum of two required) HYDROLOGY Surface Soil Cracks (B6) Wetland Hydrology Indicators: Drainage Patterns (B10) Primary Indicators (minimum of one is required; check all that apply) Water-Stained Leaves (B9) Moss Trim Lines (B16) Dry-Season Water Table (C2) Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Hydrogen Sulfide Odor (C1) ✓ Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Stunted or Stressed Plants (D1) Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) ✓ Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) \_ Drift Deposits (B3) Shallow Aquitard (D3) \_\_\_ Algal Mat or Crust (B4) Microtopographic Relief (D4) Thin Muck Surface (C7) \_\_ Other (Explain in Remarks) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Wetland Hydrology Present? Yes No \_\_\_ Depth (inches): Water Table Present? Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

VEGETATION – Use scientific names of plants. Sampling Point: DP- 52 Absolute Dominant Indicator Tree Stratum (Plot size: \_\_\_ Dominance Test worksheet: % Cover Species? Status 1. Tsuga Canadensis 10 YES FALL Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: \_ = Total Cover **OBL** species x 1 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: FACW species \_\_\_\_ x 2 = \_\_\_ FAC species \_\_\_\_ x3= FACU species \_ UPL species x5=\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_ 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% \_\_ 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 11.\_\_ Woody vines - All woody vines greater than 3.28 ft in 80 = Total Cover 40 Woody Vine Stratum (Plot size: 30 Hydrophytic Vegetation Present? = Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

| incheel   | Matrix                                       |  |                                  | x Features  | ·1                | 1 2         | Tankona             | Remarks  |
|---|--|--|----------------------------------|-------------|-------------------|-------------|---------------------|--|
| (inches)  | Color (moist)                                | <u>%</u>   | Color (moist)                    |             | Type <sup>1</sup> | Loc²        | Texture             | Remarks  |
| - 9   | 164R3/1                                      | 90   | 7.5 4 3/4                        | 10          | -                 | 101         | 11/1 / John         |  |
| 18  | 10 42 4/1                                    | 70   | 7.5425/8                         | 10          | -                 | m           | 5/ 1810 Gay         |  |
|   |  |  |                                  |             |                   |             |                     |  |
|   |  |  | -                                | _           |                   |             |                     |  |
|   |  |  |                                  |             | _                 |             |                     |  |
|   |  | -  |                                  |             |                   |             |                     |  |
|   |  |  |                                  |             | _                 |             |                     | ***  |
|   |  | oletion, RN  | M=Reduced Matrix, M              | S=Masked    | Sand Gr           | ains.       |                     | ore Lining, M=Matrix.  |
|   | Indicators:                                  |  | Daharaka Dalar                   | Cumfo ao    | (CO) (I DI        |             |                     | 0) (LRR K, L, MLRA 149B)   |
|   | pipedon (A2)                                 |  | Polyvalue Below                  | )           |                   |             | Coast Prairie R     | Redox (A16) (LRR K, L, R)  |
|   | istic (A3)<br>en Sulfide (A4)                |  | Thin Dark Surfa<br>Loamy Mucky ! |             |                   |             |                     | eat or Peat (S3) (LRR K, L, R)<br>S7) (LRR K, L, M)  |
|   | d Layers (A5)                                |  | Loamy Gleyed                     |             |                   | , -,        |                     | w Surface (S8) (LRR K, L)  |
|   | d Below Dark Surfac                          | ce (A11)   | Depleted Matrix                  |             |                   |             |                     | ace (S9) (LRR K, L)  |
|   | ark Surface (A12)                            |  | Redox Dark Su                    |             |                   |             |                     | se Masses (F12) (LRR K, L, R)  |
|   | Mucky Mineral (S1)                           |  | Depleted Dark Redox Depress      |             | -7)               |             |                     | dplain Soils (F19) ( <b>MLRA 149</b> 8<br>TA6) ( <b>MLRA 144A, 145, 1498</b> )   |
|   | Gleyed Matrix (S4)<br>Redox (S5)             |  | Redox Depress                    | NOTIS (FO)  |                   |             | Red Parent Ma       |  |
| Stripped  | Matrix (S6)                                  | MI DA 44   | NB)                              |             |                   |             |                     | Dark Surface (TF12)  |
| Dode Cu   | ırface (S7) (LRR R, I                        |  |                                  | st be prese | ent unles         | s disturbed |                     | iii Komarka)   |
|   | f hydronhytic vegeta                         | asioni mila  | Total injuring in in             |             |                   |             |                     | a link state of the state of th |
| Indicators o                                      | of hydrophytic vegeta<br>Layer (if observed) | the state of the s |                                  |             |                   |             |                     | 4  |
| ndicators o                                       |  | the state of the s |                                  |             |                   |             |                     | ~ /  |
| Indicators o                                      | Layer (if observed)                          | the state of the s | _                                |             |                   |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s | =                                |             |                   |             | Hydric Soil Presen  | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             | <del></del>       |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   | ,           | Hydric Soil Present | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s | -                                |             |                   |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>lestrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>lestrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Presen  | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Presen  | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| Indicators o<br>Restrictive<br>Type:<br>Depth (in | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| Indicators o<br>Restrictive                       | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| Indicators o<br>Restrictive<br>Type:<br>Depth (in | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| Indicators o<br>Restrictive<br>Type:<br>Depth (in | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>testrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |
| ndicators o<br>lestrictive<br>Type:<br>Depth (in  | Layer (if observed)                          | the state of the s |                                  |             |                   |             | Hydric Soil Present | t? Yes No  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/04/2015 Applicant/Owner: Ball Hill Wind Energy, LLC NY Sampling Point: DP-5 DJL VJM Investigator(s): Section, Township, Range: Slope (%): 3 -9 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: 79, 165726 Long: 42, 401561 Soll Map Unit Name: Eric Silt 109m /E/B NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no. explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No , Soil NO , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Yes No -If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) \_\_ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_\_ Saturation (A3) \_\_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_ Crayfish Burrows (C8) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Yes \_\_\_\_ No X Depth (Inches): Wetland Hydrology Present? Yes \_\_ Saturation Present? Yes \_\_\_\_ No \_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No welland Hydroson Indicators present Remarks:

| 7 ~ 1                                  | Absolute | Dominant    | Indicator | B. Maria   |
|--|----------|-------------|-----------|--|
| Tree Stratum (Plot size: 30')          |          | Species?    |           | Dominance Test worksheet:  Number of Dominant Species  |
| 1. Tsuga Caradensis                    | 45       | 465         | FACY      | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
| 2. befula all pheniensis               |          | No          | FAC       |  |
| A size C                               | 20       | 465         | FAIL      | Total Number of Dominant Species Across All Strata: (B)  |
| 3. Acres Saubalun                      | 20       |             | 7,101     | Species Across All Strata.   |
| 4                                      |          |             |           | Percent of Dominant Species  |
| 5.                                     |          |             |           | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
| 6                                      |          |             |           | Barrelana Indonesia Indonesia  |
|  |          |             |           | Prevalence Index worksheet:  |
| 7                                      | -        |             |           | Total % Cover of: Multiply by:   |
| 121                                    | -10      | = Total Cov |           | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15 ) |          |             | 15        | FACW species x 2 =   |
| 1. Befula alleghaniensis               | 10       | 4.65        | FAC       | FAC species x 3 =  |
| 2. Tases a land dineis                 |          | 465         | FACU      | FACU species x 4 =   |
|  |          |             |           | UPL species x 5 =  |
| 3. Fugus granditalia                   | 10       | 110         | Phia      | Column Totals: (A) (B)   |
| 4                                      |          |             |           |  |
| 5                                      |          |             |           | Prevalence Index = B/A =   |
| 6                                      |          |             |           | Hydrophytic Vegetation Indicators:   |
|  |          |             |           | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                      |          | -           |           | 2 - Dominance Test is >50%   |
|  | 30       | = Total Cov | er 18     | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:               |          |             | -         | 4 - Morphological Adaptations¹ (Provide supporting   |
| 1. Aubus alleghaniersis                | 30       | 465         | FACG      | data in Remarks or on a separate sheet)  |
|  |          | 110         | FAL       | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 2. Dry optois                          | 10       | 100         | 170       |  |
| 3                                      |          | -           |           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                    |
| 4                                      |          |             |           | be present, unless disturbed or problematic.   |
| 5.                                     |          |             |           | Definitions of Vegetation Strata:  |
|  |          |             |           | Tara Manda alasta 2 ia (7 6 am) as mass in dispostos   |
| 6                                      |          |             |           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 7                                      | 4        |             |           |  |
| 8                                      |          |             |           | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9                                      |          |             |           | and greater than or equal to 3.28 ft (1 m) tall.   |
|  |          |             |           | Herb - All herbaccous (non-woody) plants, regardless of  |
| 10                                     |          |             |           | size, and woody plants less than 3.28 ft tall.   |
| 11                                     |          |             | -         | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                     |          |             |           | height.  |
|  | 40       | = Total Co  | /er 20    |  |
| Woody Vine Stratum (Plot size:         |          |             | 8         |  |
| vvoody viile Stratum (Flot size.       |          |             | 0         |  |
| 1                                      |          |             |           | Hydrophytic  |
|  |          |             |           | Vegetation   |
| 2                                      |          |             |           |  |
| 2                                      |          |             |           | Present? Yes No  |
| 2                                      |          |             | -         |  |
| 2                                      |          | = Total Co  |           |  |

| Depth (inches)            | Matrix                               |             | D-1   |            | indicator or co   | onfirm t  | he absence of indic                | ators.)       |            |          |
|---------------------------|--------------------------------------|-------------|---|------------|-------------------|-----------|------------------------------------|---------------|------------|----------|
| 0-2                       | Color (moist)                        | %           | Color (moist)   | Features % |                   | oc²       | Texture                            | Rem           | arka       |          |
|                           | 104/2/2                              | 100         |   | _          |                   |           | loam                               | Keii          | arks       |          |
| 2-4                       | 10422/1                              | 100         |   |            |                   |           | 1                                  |               |            |          |
| 4-10                      | 10424/4                              | 100         |   | -          |                   | 4         | oun _                              | _             |            |          |
| 10-20                     | 1041 1/3                             | 95          | 7.548   | -          |                   |           | C. Wany                            |               |            |          |
|                           | 10/11/11                             | -1)         | 11) K76.  | 5          | <u>c</u> <u>v</u> | 1         | Silt loan                          |               |            |          |
|                           | •                                    |             |   |            |                   |           |                                    |               |            |          |
|                           |                                      |             |   |            |                   |           |                                    |               |            |          |
|                           |                                      |             |   |            |                   |           |                                    |               |            |          |
|                           |                                      |             |   |            |                   |           | 7                                  |               |            |          |
|                           |                                      |             |   |            |                   |           |                                    |               |            |          |
|                           | _                                    |             |   |            |                   |           |                                    |               | -          |          |
|                           |                                      |             |   |            |                   |           |                                    |               |            |          |
|                           |                                      |             |   |            |                   |           |                                    |               |            |          |
| Type: C=Co                | pontration D. D                      |             |   |            |                   |           |                                    |               |            |          |
| Hydric Soil In            | idicators:                           | etion, RM=F | Reduced Matrix, MS=                                       | Masked S   | Sand Grains,      |           | <sup>2</sup> Location: PL=Por      | e Lining, M   | =Matrix.   |          |
| Histosol (                |                                      |             | _ Polyvalue Below :                                       | Surface (  | S8) (LRR R.       |           | Indicators for Prob                |               |            |          |
| Histic Epip<br>Black Hist | pedon (A2)                           |             | MLRA 149B)  |            |                   |           | 2 cm Muck (A10<br>Coast Prairie Re | dox (A16)     | LRR K. L.  | 49B)     |
|                           | Sulfide (A4)                         | -           | _ Thin Dark Surface                                       | (S9) (LF   | RR R, MLRA 1      | 149B)     | 5 cm Mucky Pea                     | t or Peat (S  | 3) (LRR H  | (, L, R) |
| Stratified I              | Layers (A5)                          |             | <ul><li>Loamy Mucky Mir</li><li>Loamy Gleyed Ma</li></ul> | trix (F2)  | (LRR K, L)        |           | Dark Surface (S'                   | 7) (LRR K,    | L, M)      |          |
| _ Depleted I              | Below Dark Surface                   | (A11)       | _ Depleted Matrix (F                                      |            |                   |           | Polyvalue Below Thin Dark Surface  | Surface (S    | 8) (LRR K  | ., L)    |
| _ Thick Dark              | k Surface (A12)                      | -           | _ Redox Dark Surfa  | ce (F6)    |                   |           | Iron-Manganese                     | Masses (F     | 12) (LRR I | (LR)     |
| _ Sandy Mu<br>Sandy Gle   | cky Mineral (S1)<br>eyed Matrix (S4) | -           | _ Depleted Dark Sur                                       |            |                   |           | Piedmont Floodp                    | lain Soils (I | -19) (MLR  | A 149B)  |
| _ Sandy Red               | dox (S5)                             | _           | _ Redox Depression  | ns (F8)    |                   | -         | Mesic Spodic (T/                   | 46) (MLRA     | 144A, 145  | , 149B)  |
| Stripped N                | Matrix (S6)                          |             |   |            |                   |           | Red Parent Mate Very Shallow Da    | rial (F21)    | TC40\      |          |
| _ Dark Surfa              | ace (S7) (LRR R, ML                  | -RA 149B)   |   |            |                   |           | Other (Explain in                  | Remarks)      | 11-12)     |          |
| ndicators of h            | ydrophytic vegetatio                 | n and wetla | and hydrology must b                                      | a procont  | Luniose district  |           |                                    |               |            |          |
| estrictive La             | yer (if observed):                   |             |   | e present  | i, unless distur  | rbed or p | problematic.                       |               |            |          |
| Type:                     | 16                                   |             |   |            |                   | 11        |                                    |               |            |          |
| Depth (inche              | es):                                 |             |   |            |                   |           |                                    |               |            |          |
| emarks;                   |                                      |             |   |            |                   | Н         | ydric Soil Present?                | Yes           | No         | X        |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_ Sampling Point: DP-State: Alleray Section, Township, Range: Landform (hillslope, terrace, etc.): 7111 Local relief (concave, convex, none): \_Concave Slope (%): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Ecie 5: 14 NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? No within a Wetland? Hydric Soil Present? No Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) \_\_ Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) X Saturation (A3) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Water Marks (B1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) Thin Muck Surface (C7) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? No X Depth (inches): Water Table Present? Depth (inches): Wetland Hydrology Present? Yes Saturation Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| VEGETATION - Use scientific names of plant | V | EGETA | TION - | Use | scientific | names | of | plant | S |
|--|---|-------|--------|-----|------------|-------|----|-------|---|
|--|---|-------|--------|-----|------------|-------|----|-------|---|

| <u>Tree Stratum</u> (Plot size:30 /) 1              | % Cover    | Dominant Indicator Species? Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)                 |
|---|------------|------------------------------------|--|
| 2   |            |                                    | Total Number of Dominant Species Across All Strata:  (B)   |
| <b>4</b>  |            |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
| 6   |            |                                    | Prevalence Index worksheet:  |
| Sapling/Shrub Stratum (Plot size: 15 )              | 0          | = Total Cover                      |  |
| 1   |            |                                    | FAC species x 3 =<br>FACU species x 4 =  |
| 2   |            |                                    | UPL species x 5 = (B)  |
| 4<br>5  |            |                                    | Prevalence Index = B/A =   |
| 6   | -          |                                    | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                           |
| 7   | 0          | = Total Cover                      | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |
| 1. Ayrostic alba                                    |            |                                    | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)             |
| 2. Phleum pratence                                  | 20         | 485 FACUL                          | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. 6/4 ceria Sp.<br>4. Jungue ettusus               | 20         | YES FAL                            | ¹Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 5. 8 (pus cypornic                                  | 10         | NO OBS                             |  |
| 6   |            |                                    | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 8   | -          |                                    | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| 9   |            |                                    | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11<br>12.   |            |                                    | Woody vines - All woody vines greater than 3.28 ft in height.  |
| Woody Vine Stratum (Plot size: 30')                 | 130        | = Total Cover 65                   |  |
| 1   | _          |                                    | Hydrophytic  |
| 2   |            |                                    | Vegetation Present?  Yes No  |
| 4   | 0          | = Total Cover                      |  |
| Remarks: (Include photo numbers here or on a separa | te sheet.) |                                    |  |
|   |            |                                    |  |
|   |            |                                    |  |
|   |            |                                    |  |
|   |            |                                    |  |

| (inches)                        | Color (moist)                        | %         | Redo                               | x Feature  | S                 |          | n the absence of in        |  |
|---------------------------------|--------------------------------------|-----------|------------------------------------|------------|-------------------|----------|----------------------------|--|
| 0/                              | ,                                    |           | Color (moist)                      | %          | Type <sup>1</sup> | Loc2     | Texture                    | Remarks  |
| 0                               | 10 4x 3/2                            | 10        | 7.5 723/4                          |            | -                 | an       | 5/14/09m                   |  |
| 1-18                            | 104/24/2                             | 90        | 7.5 425/6                          | 10         | _                 | ha       | 5/Home                     |  |
|                                 |                                      |           |                                    |            |                   | 101      | -117 ( Derry               |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    | -          |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 | -                                    |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          | -                          |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
|                                 |                                      |           |                                    |            |                   |          |                            |  |
| `uno: C-C                       |                                      |           |                                    |            |                   |          |                            |  |
| ydric Soil In                   | ncentration, D=Deplet                | ion, RM=F | Reduced Matrix, MS=                | Masked S   | Sand Grains       |          | <sup>2</sup> Location: PL= | Pore Lining, M=Matrix.                           |
| _ Histosol (                    |                                      |           |                                    |            |                   |          | Indicators for Pr          | oblematic Hydric Soils <sup>3</sup> :            |
| _ Histic Epi                    | pedon (A2)                           | -         | Polyvalue Below :<br>MLRA 149B)    | Surface (S | 58) (LRR R,       |          | 2 cm Muck (A               | (10) (LRR K, L, MLRA 149B)                       |
| _ Black Hist                    | tic (A3)                             |           | _ Thin Dark Surface                | (S9) (I P  | DD MIDA           | 4400     | Coast Prairie              | Redox (A16) (LRR K. L. R)                        |
| _ Hydrogen                      | Sulfide (A4)                         | _         | Loamy Mucky Min                    | ieral (F1) | (LRR K. L)        | 1498)    | 5 cm Mucky F               | Peat or Peat (S3) (LRR K, L, R)                  |
| Depleted :                      | Layers (A5)<br>Below Dark Surface (A |           | Loamy Gleyed Ma                    | trix (F2)  | ,                 |          | Polyvalue Rei              | (S7) (LRR K, L, M)<br>ow Surface (S8) (LRR K, L) |
| _ Thick Dark                    | Surface (A12)                        |           |                                    | F3)        |                   |          | Thin Dark Sur              | face (S9) (LRR K, L)                             |
| _ Sandy Mu                      | cky Mineral (S1)                     | .2        | Redox Dark Surfa Depleted Dark Sur | ce (F6)    |                   |          | Iron-Mangane               | se Masses (F12) (LRR K I R)                      |
| _ Sandy Gle                     | yed Matrix (S4)                      | _         | Redox Depression                   | mace (F7)  |                   |          | Pledmont Floo              | odplain Soils (F19) (MLRA 149F                   |
| Sandy Red                       |                                      |           |                                    | 10 (1 0)   |                   |          | Mesic Spodic               | (TA6) (MLRA 144A, 145, 149B                      |
| Stripped M                      | latrix (S6)                          |           |                                    |            |                   |          | Red Parent M               | ateriai (F21)<br>Dark Surface (TF12)             |
| _ Durk Ouria                    | ice (S7) (LRR R, MLR                 | (A 149B)  |                                    |            |                   |          | Other (Explain             | in Remarks)                                      |
| dicators of h                   | ydrophytic vegetation                | and wetla | nd hydrology must be               |            |                   |          |                            | ,  |
| strictive La                    | yer (if observed):                   | The House | nd Trydrology must be              | e present, | uniess dist       | urbed or | problematic.               |  |
|                                 |                                      |           |                                    |            |                   | 1        |                            |  |
| Туре:                           |                                      |           |                                    |            |                   |          |                            |  |
| Type:<br>Depth (inche<br>marks: | 98):                                 |           |                                    |            |                   |          | lydric Soil Presen         | ? Yes No   |

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  | City/County: Chautauqua County Sampling Date: 11/04/200                         |
|---|---|
| Applicant/Owner: Ball Hill Wind Energy, LLC   | State: NY Sampling Point: DP- 36  |
| Investigator(s): DJL, VJM   | A dil   |
| Landform (hillslope, terrace, etc.): Till Plain   |   |
|   | Local relief (concave, convex, none): Slope (%):                                |
| Subregion (LRR or MLRA): LRR-R Lat:   | 1. 157362 Long: 4Z. 399638 Datum: NAD 83  |
| Soil Map Unit Name: Ene Silt loan   | (E-B) NWI classification:   |
| Are climatic / hydrologic conditions on the site typical for this ti  | ime of year? Yes No (If no, explain in Remarks.)                                |
| Are Vegetation NO , Soil NO , or Hydrology NO sign  | nificantly disturbed? Are "Normal Circumstances" present? Yes X No              |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> nat  | turally problematic? (If needed, explain any answers in Remarks.)               |
|   | nowing sampling point locations, transects, important features, etc             |
| Hydrophytic Vegetation Present? Yes No  | Is the Sampled Area   |
| Hydric Soil Present? Yes No   | within a Wetland? Yes No  |
| Wetland Hydrology Present? Yes No _   | If yes, optional Wetland Site ID:   |
| HYDROLOGY   |   |
| Wetland Hydrology Indicators:   |   |
| Primary Indicators (minimum of one is required; check all tha   | Secondary Indicators (minimum of two required)                                  |
|   |   |
|   | Stained Leaves (B9) Drainage Patterns (B10) c Fauna (B13) Moss Trim Lines (B16) |
|   | c Fauna (B13) Moss Trim Lines (B16) eposits (B15) Dry-Season Water Table (C2)   |
|   | gen Sulfide Odor (C1) Crayfish Burrows (C8)                                     |
| - The Control of the | ed Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)  |
| Drift Deposits (B3) Presen  | ice of Reduced Iron (C4) Stunted or Stressed Plants (D1)                        |
| Algal Mat or Crust (B4) Recent  | t Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)                  |
|   | uck Surface (C7) Shallow Aquitard (D3)  |
|   | (Explain in Remarks) Microtopographic Relief (D4)                               |
| Sparsely Vegetated Concave Surface (B8) Field Observations:   | FAC-Neutral Test (D5)   |
| Surface Water Present? Yes No _X_ Depth   | (inches):   |
| Water Table Present? Yes No Depth   | (inches):   |
|   | (inches): Wetland Hydrology Present? Yes No X                                   |
| (includes capillary fringe)   |   |
| Describe Recorded Data (stream gauge, monitoring well, aer  | al photos, previous inspections), if available:                                 |
|   |   |
| Remarks: 10 1 Had   | 1.1.1   |
| 10 Weller 4 My dra la   | 84 Indiators present  |
|   |   |
|   |   |
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| <b>VEGETATION</b> - Use | scientific names | of plants |
|-------------------------|------------------|-----------|
|-------------------------|------------------|-----------|

| Tree Stratum (Plot size: 30/)          | % Cover | Dominant<br>Species? | Status   | Dominance Test worksheet:  Number of Dominant Species That are ORL FACW or FAC: (A)  |
|--|---------|----------------------|----------|--|
| ( <del></del>                          |         |                      |          | That Are OBL, FACW, or FAC: (A)  |
|  |         |                      |          | Total Number of Dominant   |
| 3,                                     |         |                      |          | Species Across All Strata: (B)   |
|  | السطاد  |                      |          | Percent of Dominant Species  |
| 5.                                     |         |                      |          | That Are OBL, FACW, or FAC: (A/B   |
|  |         |                      |          | was drawn for the control of the con |
|  |         |                      |          | Prevalence Index worksheet:  |
|  |         |                      |          |  |
|  | 0       | = Total Cov          | er       | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15 ) |         |                      |          | FACW species x 2 =   |
|  |         |                      |          | FAC species x 3 =  |
|  |         |                      |          | FACU species x 4 =   |
|  |         |                      |          | UPL species x 5 =  |
|  |         |                      |          | Column Totals: (A) (B)   |
|  |         |                      |          | Prevalence Index = B/A =   |
|  |         |                      |          |  |
| 3,                                     |         |                      |          | Hydrophytic Vegetation Indicators:   |
|  |         |                      |          | 1 - Rapid Test for Hydrophytic Vegetation  |
| -                                      |         | = Total Cov          | er       | 2 - Dominance Test is >50%   |
| 51                                     |         | - Total Cov          | G)       | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size: 5 )           | 0.0     | Ver                  | 0        | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| Solldage altissing                     | 30.     | 465                  | tou      | data in Remarks or on a separate sheet)  |
| Daucis ra-otos                         | 20.     | YES                  | Frey     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Phleun 10-00 fer 50                 | 20      | 45                   | FACU     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| 4. Dactulie glower to                  |         | NO                   | FALL     | be present, unless disturbed or problematic.   |
| Achilles Mille folyen                  |         | NO                   | FALL     | Definitions of Vegetation Strata:  |
|  |         | NO                   | FAL      | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
| 3. Actor Sp                            |         |                      | -00      | at breast height (DBH), regardless of height.  |
| 1. Gotus Cornicalates                  |         | No                   | FALL     |  |
| Atragaria Virginiana                   | 10      | NO                   | PACU     | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| o. Agostic stoloritera                 | 5       | NO                   | Four     |  |
| 10                                     |         |                      |          | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
|  |         |                      |          | man and district a second second second second   |
| 11,                                    |         |                      |          | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                     |         |                      |          | height.  |
| 30 /                                   | 135     | = Total Co           | ver 67.5 |  |
| Woody Vine Stratum (Plot size:)        |         |                      | 27       |  |
| 1:                                     |         |                      |          |  |
| 2                                      |         |                      |          | Hydrophytic  |
| 2                                      |         |                      |          | Vegetation Present? Yes No   |
| 3                                      |         |                      |          |  |
| 4                                      |         |                      |          |  |
|  | 0       | = Total Co           | ver      |  |

| (inches)                     | Matrix Color (moist) 10912 3/3 10912 4/4 | %          | th needed to document the Redox Featur Color (moist) % | e indicator    |          |                              | 10                            |                           |
|------------------------------|--|------------|--|----------------|----------|------------------------------|-------------------------------|---------------------------|
| 0-3                          | 10410 3/3                                |            |  | res            | , Comm   | in the absence of inc        | dicators.)                    |                           |
| 3-18                         | 1  | 0          |  | Type1          | Loc2     | Texture                      | Rem                           | narks                     |
|                              | 042 414                                  | 95         | 7.5463/4 5   | C              | m        | Silt loans                   |                               |                           |
|                              |  | 100        |  |                | 121      | Siltion                      |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               | -                         |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
|                              |  |            |  |                |          |                              |                               |                           |
| -                            |  |            | -  |                |          |                              |                               |                           |
| vpe: C=Conce                 | entration DeDo-1-                        |            |  |                |          |                              |                               |                           |
| dric Soil India              | cators:                                  | ion, RM=R  | educed Matrix, MS=Masked                               | Sand Grain     | S,       | <sup>2</sup> Location: PL=Po | ore Lining, M=                | =Matrix.                  |
| Histosol (A1)                |  | _          | _ Polyvalue Below Surface                              | (S8) (LRR R    |          | Indicators for Pro           | blematic Hyd                  | fric Soils <sup>3</sup> : |
| Histic Epiped Black Histic ( | ion (A2)<br>(A3)                         |            | MLRA 149B)   |                |          | 2 cm Muck (A1                | 0) (LRR K, L<br>Redox (A16) / | , MLRA 149B)              |
| Hydrogen Su                  | Ilfide (A4)                              |            | Thin Dark Surface (S9) (L<br>Loamy Mucky Mineral (F1   | RR R, MLR      | 149B)    | 5 cm Mucky Pe                | eat or Peat (S                | 3) (LRR K I R             |
| Stratified Lay               | vers (A5)                                | _ =        | <ul> <li>Loamy Gleyed Matrix (F2)</li> </ul>           | ) (LKK K, L)   |          | Dark Surface (\$             | S7) (LRR K. L                 | M)                        |
| Thick Dark S                 | ow Dark Surface (/                       | A11) _     | Depleted Matrix (F3)                                   |                |          | Polyvalue Below              | w Surface (Stace (SE)         | B) (LRR K, L)             |
| Sandy Mucky                  | Mineral (S1)                             | -          | Redox Dark Surface (F6) Depleted Dark Surface (F7)     | 7)             |          | Iron-Manganes                | e Masses (F1                  | 2) (LRR K. I. R           |
| Sandy Gleyer<br>Sandy Redox  | d Matrix (S4)                            |            | Redox Depressions (F8)                                 | ()             |          | Pledmont Flood               | plain Soils (F                | 19) (MLRA 149)            |
| Stripped Matr                |  |            |  |                |          | Mesic Spodic (1              | erial (F21)                   | 144A, 145, 149B           |
| Dark Surface                 | (S7) (LRR R, MLR                         | (A 149B)   |  |                |          | Very Shallow Da              | ark Surface (1                | ΓF12)                     |
| licators of hydr             | Onbytic vegetation                       | and to the |  |                |          | Other (Explain in            | n Remarks)                    |                           |
| trictive Layer               | (if observed):                           | and wetian | nd hydrology must be presen                            | nt, unless dis | urbed or | problematic.                 |                               |                           |
| Гуре:                        |  |            |  |                |          |                              |                               |                           |
| Depth (inches):              |  |            |  |                |          | Hydric Soil Present?         | Van                           |                           |
| narks:                       | hydre                                    | 1.1        | 1  |                |          |                              | Yes                           | _ No _                    |
| 100                          | 11000                                    | 2011       | indice   | whois,         | 2-15     | ent                          |                               |                           |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_\_\_ Sampling Date:\_// \_\_\_\_\_ City/County: Chautauqua County Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-Investigator(s): Section, Township, Range: 7711 Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): \_ Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Eig 5/1+ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation Mo\_, Soil MO\_, or Hydrology MO\_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No., Soil No., 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. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) ✓ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) \_ Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) \_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Saturation Visible on Aerial Imagery (C9) \_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_ Algal Mat or Crust (B4) \_\_\_ Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_ Inundation Visible on Aerial Imagery (B7) \_\_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Water Table Present? Saturation Present? Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| <u>Tree Stratum</u> (Plot size:30 /)   |            | Dominant Species? | Status   | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)                                    |
|--|------------|-------------------|----------|---|
| 2                                      |            |                   |          | Total Number of Dominant Species Across All Strata:  (B)  |
| 1                                      |            |                   |          | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 5<br>5                                 |            |                   |          | Prevalence Index worksheet:   |
|  |            |                   |          | Total % Cover of: Multiply by:  |
| Sapling/Shrub Stratum (Plot size: /5/) |            |                   |          | OBL species       x 1 =         FACW species       x 2 =         FAC species       x 3 =         FACU species       x 4 = |
| 3,                                     |            |                   |          | UPL species x 5 =<br>Column Totals: (A) (B)   |
|  |            | -                 | -        | Prevalence Index = B/A =  |
| 5<br>3                                 |            |                   |          | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                      | 0          | = Total Cov       | er       | <ul> <li>2 - Dominance Test is &gt;50%</li> <li>3 - Prevalence Index is ≤3.0¹</li> </ul>                                  |
| Herb Stratum (Plot size: 5 )           | 30         | 465               | FALLES   | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                                |
| Junus effusus                          | 20         | YES               | FACW     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Scieptic cyporinac                  | 10         | NO                | FAC      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.         |
| 5. Balium mollings                     |            | NO                | PACH     | Definitions of Vegetation Strata:   |
| 3. Tallduga affission                  | 20         | 489               | FACU     | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.                      |
| 3. Fracia Mana                         |            | NO                | FACU     | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 9. Masperis                            | - 5        | NO                | PAC      | and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of                 |
| 10. Lakis cornquelakis                 |            | - NV              | FACU     | size, and woody plants less than 3.28 ft tall.  |
| 12                                     |            |                   |          | Woody vines – All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size:)        | 10-0       | _ = Total Cov     | 74<br>74 |   |
| 1                                      |            | -                 |          | Hydrophytic   |
| 3                                      |            |                   |          | Present? Yes No   |
| 4                                      |            |                   |          |   |
|  | te sheet.) | _ = Total Co      | ver      |   |

| - | -                     | ٠ |  |
|---|-----------------------|---|--|
|   | $\boldsymbol{\Gamma}$ |   |  |
|   |                       |   |  |

Sampling Point: DP-57

| Depth<br>(inches)   | Matrix<br>Color (moist)  | %         | pth needed to docum Redox Color (moist) | Feature<br>%   | S<br>Type <sup>1</sup> | _Loc²          | Texture  |                       |
|---|--|-----------|---|--|------------------------|----------------|--|-----------------------|
| 0-10  | 104R 3/1   | 95        | 7.5713/4                                |  | C                      | m              | Silt laam  | Remarks               |
| 10-18   | 10425/2  | 90        | 7.5 415/6                               | 11   |                        | Ma             | Silt locas   |                       |
|   |  |           | 1.5 /10/12                              | 10   |                        |                | 1/36200  |                       |
|   |  |           |   |  |                        |                |  |                       |
|   |  |           |   |  | _                      |                |  |                       |
|   |  |           |   |  | _                      |                |  |                       |
| Type: C=Co  | ncentration, D=Depl  | etion, RM | =Reduced Matrix, MS=                    | Masked   | Sand Gra               | ins.           | <sup>2</sup> Location: PL=Pe   | ore Lining, M=Matrix. |
| Histosol ( Histic Epi Black His Hydrogen Stratified Depleted Thick Dar Sandy Mu Sandy Gle Stripped M Dark Surfa | A1) pedon (A2) tic (A3) I Sulfide (A4) Layers (A5) Below Dark Surface ik Surface (A12) Icky Mineral (S1) Eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, Mi | LRA 149E  |   | e (S9) (L<br>heral (F1<br>hatrix (F2)<br>F3)<br>ce (F6)<br>rface (F7)<br>ns (F8) | RR R, ML<br>) (LRR K,  | RA 149B)<br>L) | 2 cm Muck (Af Coast Prairie F 5 cm Mucky Pe Dark Surface ( Polyvalue Belo Thin Dark Surf Iron-Manganes Piedmont Floor Mesic Spodic ( Red Parent Ma Very Shallow D Other (Explain | ark Surface (TF12)    |
| ndicators of h  | nydrophytic vegetation   | on and we | tland hydrology must b                  | e preser   | nt, unless o           | disturbed      | or problematic.  |                       |
| Type:   | yer (ii observed).   |           |   |  |                        |                |  |                       |
| Depth (inch   | es):   |           |   |  |                        |                | Hydric Soil Present  | ? Yes No              |
| emarks:   |  |           |   |  |                        |                |  |                       |
|   |  |           |   |  |                        |                |  |                       |
|   |  |           |   |  |                        |                |  |                       |
|   |  |           |   |  |                        |                |  |                       |
|   |  |           |   |  |                        |                |  |                       |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project                            | t City   | County: Chautauqua           | County   | Sampling Date: ///04/20         |
|---|--|------------------------------|--|---------------------------------|
| Applicant/Owner: Ball Hill Wind En                              |  | rodunty.                     | State: NY  | Sampling Point: DP-58           |
|   |  | ction, Township, Range:      | Villen   |                                 |
| 7   |  |                              | 1  |                                 |
| andform (hillslope, terrace, etc.):                             | 70 1100  | relief (concave, convex, no  | ne): <u>CONV</u>   |                                 |
| Subregion (LRR or MLRA): LRR-R                                  | Lat: 79.1629   | 77 Long:                     | 1203771  | 3.5 Datum: NAD 83               |
| Boil Map Unit Name: <u>Fre 5)</u>                               | It loan (Ect   | 3)                           | NWI classifi   | cation:                         |
| Are climatic / hydrologic conditions on t                       | he site typical for this time of year?   | Yes No                       | (If no, explain in I   | Remarks.)                       |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or                  | Hydrology No significantly dis   | urbed? Are "Norma            | l Circumstances"   | present? Yes No                 |
| Are Vegetation 10, Soil 10, or                                  |  |                              | explain any answ   | ers in Remarks.)                |
| SUMMARY OF FINDINGS - A   |  |                              |  |                                 |
| Hydrophytic Vegetation Present?                                 | Yes No X   | Is the Sampled Area          |  |                                 |
| Hydric Soil Present?  | Yes No   | within a Wetland?            | Yes  | No                              |
| Wetland Hydrology Present?                                      | Yes No   | If yes, optional Wetland     | d Site ID:   |                                 |
|   |  |                              |  |                                 |
| HYDROLOGY   |  |                              |  |                                 |
| Wetland Hydrology Indicators:                                   |  |                              | Secondary India  | ators (minimum of two required) |
| Primary Indicators (minimum of one is                           | s required; check all that apply)  |                              | Surface Soi  | l Cracks (B6)                   |
| Surface Water (A1)  | Water-Stained Lea  | ves (B9)                     | Drainage P   | atterns (B10)                   |
| High Water Table (A2)   | Aquatic Fauna (B1  | 3)                           | Moss Trim  | Lines (B16)                     |
| Saturation (A3)   | Marl Deposits (B1  | 5)                           | Dry-Seasor   | Water Table (C2)                |
| Water Marks (B1)  | Hydrogen Sulfide (   |                              | Crayfish Bu  |                                 |
| Sediment Deposits (B2)  |  | eres on Living Roots (C3)    | The second secon | /isible on Aerial Imagery (C9)  |
| Drift Deposits (B3)   | Presence of Reduce   |                              |  | Stressed Plants (D1)            |
| Algal Mat or Crust (B4)   | The state of the s | tion in Tilled Soils (C6)    |  | c Position (D2)                 |
| Iron Deposits (B5) Inundation Visible on Aerial Imag            | Thin Muck Surface pery (B7) Other (Explain in F  |                              | Shallow Aq   | raphic Relief (D4)              |
| Sparsely Vegetated Concave Su                                   |  | terriarks)                   | FAC-Neutra   |                                 |
| Field Observations:   | 1000 (20)  |                              |  |                                 |
| Surface Water Present? Yes                                      | No No Depth (inches):  |                              |  |                                 |
| Water Table Present? Yes _                                      |  |                              |  | 4.7                             |
| Saturation Present? Yes _                                       | No X Depth (inches):   | Wetland                      | Hydrology Prese  | ont? Yes No X                   |
| (includes capillary fringe)  Describe Recorded Data (stream gau | ige, monitoring well, aerial photos,   | previous inspections), if av | ailable:   |                                 |
|   |  |                              |  |                                 |
| Remarks;  |  |                              |  |                                 |
| romano.   |  |                              |  |                                 |
|   |  |                              |  |                                 |
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|   |  |                              |  |                                 |
|   |  |                              |  |                                 |
|   |  |                              |  |                                 |

| ١ | EGETA1 | TION - | Use | scientific  | names  | of | plants. |
|---|--------|--------|-----|-------------|--------|----|---------|
|   | LOLIN  | 1011   | 000 | 00101111110 | IIIIII | ٠. | PIGITO. |

| Tong Otentium (District) 50            | Absolute | A 180 A | Indicator | Dominance Test worksheet:   |
|--|----------|---|-----------|---|
| Tree Stratum (Plot size: 30')          | % Cover  | Species?  | Status    | Number of Deminant Species  |
|  |          | -   |           | That Are OBL, FACW, or FAC: (A)   |
| 2                                      |          |   |           | Total Number of Dominant  |
| J                                      | -        | -   |           | Species Across All Strata: (B)  |
|  |          |   |           | Percent of Dominant Species That Are OBL. FACW. or FAC:  (A/B)          |
| 5                                      |          |   |           | That Are OBL, FACW, or FAC: (A/B  |
| )                                      |          |   |           | Prevalence Index worksheet:   |
|  |          |   |           | Total % Cover of:Multiply by:   |
|  | 0        | = Total Co  | ver       | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15 ) |          |   |           | FACW species x 2 =  |
|  |          |   |           | FAC species x 3 =   |
|  |          |   |           | FACU species x 4 =  |
|  |          | -   |           | UPL species x 5 =   |
|  |          | -   |           | Column Totals: (A) (B)  |
|  |          | -   |           | Prevalence Index = B/A =  |
| 5,                                     |          | ******  | -         |   |
| 5                                      |          |   |           | Hydrophytic Vegetation Indicators:                                      |
| ·                                      |          |   |           | 1 - Rapid Test for Hydrophytic Vegetation<br>2 - Dominance Test is >50% |
| _/                                     | 0        | = Total Co  | ver       | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5 )           | 213      | 1021  |           | 4 - Morphological Adaptations¹ (Provide supporting                      |
| Solidaro anadinas                      | 60.      | 465   | Frey      | data in Remarks or on a separate sheet)                                 |
| VICIA GMEDICATE                        |          | No  | FACY      | Problematic Hydrophytic Vegetation¹ (Explain)                           |
| a phlour pratinge                      | 10.      | NO  | facy      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must       |
| 1. Thuxalin officianale                | 10.      | NO  | FALLA     | be present, unless disturbed or problematic.                            |
| 5. Aster 50.                           | 10.      |   | FAC       | Definitions of Vegetation Strata:                                       |
| 6. Fayaria virginiana                  | 5        | NO  | PACU      | Tree – Woody plants 3 in. (7.6 cm) or more in diameter                  |
| 7.                                     |          | -   |           | at breast height (DBH), regardless of height.                           |
| 3.                                     |          | -   |           | Sapling/shrub - Woody plants less than 3 in. DBH                        |
|  |          |   |           | and greater than or equal to 3.28 ft (1 m) tall.                        |
| )                                      | -        |   |           | Herb - All herbaceous (non-woody) plants, regardless of                 |
| 10                                     |          |   |           | size, and woody plants less than 3.28 ft tall.                          |
| 11                                     |          |   |           | Woody vines - All woody vines greater than 3.28 ft in                   |
| 12                                     |          | -   |           | height.   |
| ,                                      | 105      | = Total Co  | ver 62.5  |   |
| Noody Vine Stratum (Plot size: 30 )    |          |   | 311       |   |
|  |          |   |           |   |
|  |          |   |           | Hydrophytic Vegetation  |
| 2.                                     |          |   |           | Present? Yes No No  |
| 2                                      |          |   |           | Fresentr 165 NO   |
| 2.<br>3.<br>4.                         |          |   |           | FIESERIT TES NO   |

| - | - |  |
|---|---|--|
|   |   |  |
|   |   |  |

Sampling Point: DP-58

| Depth  | Matrix  |          | pth needed to docum<br>Redo           | x Feature               |                   |                  | 22001100 01   | maioators.)  |
|--|---|----------|---------------------------------------|-------------------------|-------------------|------------------|---|--|
| (inches)   | Color (moist)   | %        | Color (moist)                         | %                       | Type <sup>1</sup> | Loc <sup>2</sup> | Texture   | Remarks  |
| 0-9  | 104R 3/3  | 95       | 10413/4                               | 5                       | 0                 | n                | 5/1/6cm   |  |
| 9-20   | 104n 4/3  | 95       | 10412 4/6                             | 5                       | (                 | M                | 5.17/00   |  |
|  | -   |          |                                       |                         |                   |                  |   | -7   |
|  |   |          |                                       |                         |                   |                  |   |  |
|  |   |          |                                       |                         | -                 |                  |   |  |
|  | -   |          |                                       |                         |                   |                  |   |  |
|  |   |          |                                       |                         |                   |                  |   |  |
|  |   |          |                                       |                         |                   |                  |   |  |
|  |   |          |                                       |                         |                   |                  |   |  |
|  |   |          |                                       |                         |                   |                  |   |  |
|  | -   |          |                                       |                         |                   |                  |   |  |
| 194  |   |          |                                       |                         |                   |                  |   |  |
|  |   |          |                                       |                         |                   |                  |   |  |
| ype: C=Cor   | ncentration. D=Deple  | tion RM: | =Reduced Matrix, MS                   | -Mackad                 | Sand Crai         |                  | 2,  |  |
| ydric Soil Ir  | ndicators:  | 2.11     | TOUGOG HILLINA, INO                   | Maskeu                  | Sanu Grai         | 13.              | Indicators for  | L=Pore Lining, M=Matrix.  Problematic Hydric Soils³:   |
| _ Histosol (   |   |          | Polyvalue Below                       | Surface                 | (S8) (LRR         | R,               |   | k (A10) (LRR K, L, MLRA 149B)  |
| _ Histic Epi   | ipedon (A2)<br>tic (A3)   |          | MLRA 149B)                            | - (00) (1               |                   |                  | Coast Prai  | irie Redox (A16) (LRR K, L, R)   |
|  | Sulfide (A4)  |          | Thin Dark Surface Loamy Mucky Mi      | e (S9) (L<br>ineral (E1 | RRR, MLF          | RA 149B)         | 5 cm Muck   | ky Peat or Peat (S3) (LRR K, L, R)   |
| _ Stratified   | Layers (A5)   |          | Loamy Gleyed M                        | latrix (F2)             | / (LICK IX, I     | -)               |   | ace (S7) (LRR K, L, M)<br>Below Surface (S8) (LRR K, L)  |
|  | Below Dark Surface (  | (A11)    | Depleted Matrix                       |                         |                   |                  | Thin Dark   | Surface (S9) (LRR K, L)  |
| Thick Dar  | rk Surface (A12)  |          | Redox Dark Surf                       |                         |                   |                  | Iron-Mang   | anese Masses (F12) (LRR K, L, R  |
|  |   |          |                                       |                         | 71                |                  | Diadmont  | Floodplain Soils (F19) (MLRA 149   |
| _ Sandy Mu   | ucky Mineral (S1)   |          | Depleted Dark St                      |                         | ()                |                  | rieumont  | rioudpialit Solls (F19) (MLKA 149)   |
| _ Sandy Mu<br>_ Sandy Gle  | eyed Matrix (S4)  |          | Depleted Dark St     Redox Depression |                         | O.                |                  | Mesic Spo   | dic (TA6) (MLRA 144A, 145, 149E  |
| Sandy Mu Sandy Gle Sandy Re  | eyed Matrix (S4)<br>edox (S5)   |          |                                       |                         | '                 |                  | Mesic Spo<br>Red Paren                                    | dic (TA6) ( <b>MLRA 144A, 145, 149E</b><br>It Material (F21)   |
| Sandy Mu Sandy Gle Sandy Re Stripped M   | eyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)  | PA 1405  | Redox Depression                      |                         |                   |                  | Mesic Spo<br>Red Paren<br>Very Shall                      | dic (TA6) ( <b>MLRA 144A, 145, 149E</b><br>It Material (F21)<br>ow Dark Surface (TF12)                         |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa  | eyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)<br>ace (S7) (LRR R, ML                                   |          | Redox Depression                      | ons (F8)                |                   |                  | <pre> Mesic Spo Red Paren Very Shall Other (Exp</pre>     | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)   |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa  | eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, ML   |          | Redox Depression                      | ons (F8)                |                   | isturbed c       | <pre> Mesic Spo Red Paren Very Shall Other (Exp</pre>     | dic (TA6) ( <b>MLRA 144A, 145, 149E</b><br>It Material (F21)<br>ow Dark Surface (TF12)                         |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa  | eyed Matrix (S4)<br>edox (S5)<br>Matrix (S6)<br>ace (S7) (LRR R, ML                                   |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | <pre> Mesic Spo Red Paren Very Shall Other (Exp</pre>     | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)<br>ow Dark Surface (TF12)                         |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La                   | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed c       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Iolain in Remarks)   |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed c       | <pre> Mesic Spo Red Paren Very Shall Other (Exp</pre>     | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Iolain in Remarks)   |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa dicators of restrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Italiain in Remarks) |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Italiain in Remarks) |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed c       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Italiain in Remarks) |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa dicators of restrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa dicators of restrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) ( <b>MLRA 144A, 145, 149E</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Italiain in Remarks) |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La                   | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) ( <b>MLRA 144A, 145, 149E</b><br>It Material (F21)<br>ow Dark Surface (TF12)<br>Italiain in Remarks) |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfandicators of hestrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa dicators of restrictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149E<br>It Material (F21)<br>ow Dark Surface (TF12)<br>plain in Remarks)            |
| Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa dicators of r strictive La Type: Depth (inch | eyed Matrix (S4) sdox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetation ayer (if observed): |          | Redox Depression                      | ons (F8)                |                   | isturbed o       | Mesic Spo Red Paren Very Shall Other (Exp or problematic. | dic (TA6) (MLRA 144A, 145, 149) It Material (F21) OW Dark Surface (TF12) Islain in Remarks)                    |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_\_\_ City/County: Chautauqua County Applicant/Owner: Ball Hill Wind Energy, LLC \_\_\_ Sampling Date: 1//04 NY Sampling Point: DP- & Investigator(s): DTL, VTM Section, Township, Range:\_\_\_\_ Landform (hillslope, terrace, etc.): 711 Plain Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Free 5/14 \_\_\_ Datum: NAD 83 Are climatic / hydrologic conditions on the site typical for this time of year? Yes NWI classification: No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes 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? is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: (Explain alternative procedures here or in a separate report.) If yes, optional Wetland Site ID: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) Surface Water (A1) Surface Soil Cracks (B6) \_\_ Water-Stained Leaves (B9) X High Water Table (A2) ∠ Drainage Patterns (B10) \_\_ Aquatic Fauna (B13) X Saturation (A3) \_\_\_ Moss Trim Lines (B16) \_\_ Marl Deposits (B15) \_\_ Water Marks (B1) Dry-Season Water Table (C2) \_\_ Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) \_\_ Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) X Geomorphic Position (D2) \_ Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) \_\_ Shallow Aquitard (D3) \_\_ Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) \_\_\_ Microtopographic Relief (D4) Field Observations: \_\_ FAC-Neutral Test (D5) Surface Water Present? Yes \_\_\_\_ No \_\_\_ Depth (inches): Water Table Present? Yes \_ X No \_ \_ Depth (inches): \_ Saturation Present? Yes \_\_\_\_ No \_\_\_ Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Color (moist)  |   | Redox Featur  |  | or confir  | m the absence of indi  | cators.)  |   |
|--|---|---|--|--|--|---|---|
|  | % Color (m  | oist) %   | es   | _Loc²  |  |   |   |
| 104R3/1  | 90 7,541  | 2/4 10  | C  | m  | 5/11/ban   | Remar   | ks  |
|  |   |   |  |  |  |   |   |
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|  |   |   | _  |  |  |   |   |
| ncentration, D=Depleti   | on, RM=Reduced Mat  | rix, MS=Masked  | Sand Grain   | ıs.  | 2Location: PI =Por   | e Lining M-14   | o fulls   |
| A1) Dedon (A2) Sulfide (A4) Sulfide (A4) Sulfide (A5) Below Dark Surface (A12) Sky Mineral (S1) Syed Matrix (S4) Dox (S5) Batrix (S6) Ce (S7) (LRR R, MLRA | Polyvalue MLRA Thin Dark Loamy Mi Loamy Gi Pepleted I Redox De Redox De   | Below Surface (149B) Surface (S9) (Licky Mineral (F1) Byed Matrix (F2) Matrix (F3) K Surface (F6) Dark Surface (F7) Oressions (F8)  | (S8) (LRR F<br>RR R, MLR<br>) (LRR K, L  | A 149B)  | 2 cm Muck (A10 Coast Prairie Re 5 cm Mucky Pea Dark Surface (S7 Polyvalue Below Thin Dark Surfac Iron-Manganese Piedmont Floodpl Mesic Spodic (TA Red Parent Mater Very Shallow Dark | ematic Hydric ) (LRR K, L, M dox (A16) (LRI t or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) lain Solls (F19) 6) (MLRA 144 rial (F21) k Surface (TF1 | : Soils <sup>3</sup> :<br>LRA 149B)<br>R K, L, R)<br>(LRR K, L, R)<br>(I)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>(MLRA 149B)<br>A, 145, 149B)   |
|  |   |   |  |  |  |   | · · · · · · · · · · · · · · · · · · ·   |
| s):  |   |   |  | 1  | dydric Soil Presents   | va V  |   |
|  |   |   |  |  | y and contribution   | res   | No  |
|  |   |   |  |  |  |   |   |
|  | A1) Dedon (A2) Sulfide (A4) Dayers (A5) Delow Dark Surface (A6) Surface (A12) Deky Mineral (S1) Dyed Matrix (S4) Day (S5) Datrix (S6) Dec (S7) (LRR R, MLR) | A1) Polyvalue  MLRA  Thin Dark  Sulfide (A4) Loamy Mu  ayers (A5) Loamy Gle  Below Dark Surface (A11) Depleted M  Surface (A12) Redox Dar  cky Mineral (S1) Depleted D  yed Matrix (S4) Redox Depleted Sox (S5)  atrix (S6)  Ce (S7) (LRR R, MLRA 149B)  Androphytic vegetation and wetland hydrology  fer (if observed): | Polyvalue Below Surface (MLRA 149B)  Thin Dark Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Below Dark Surface (A11) Surface (A12) Redox Dark Surface (F6) Redox Dark Surface (F6) Redox Dark Surface (F7) Redox Depressions (F8)  Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Redox Depressions (F8)  Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Redox Dark Surface (F8) Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Redox Dark Surface (F8) Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Redox Dark Surface (F6) Redox Dark Surface (F8) Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Redox Dark Surface (F6) Redox Dark Surface (F7) Redox Dark Surface (F8) Polyvalue Below Surface (S9) (LI Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Redox Dark Surface (F6) Redox Dark Surface (F7) | Polyvalue Below Surface (S8) (LRR R MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLR. Loamy Mucky Mineral (F1) (LRR K, L)  Below Dark Surface (A11) Depleted Matrix (F2)  Surface (A12) Redox Dark Surface (F6)  Exy Mineral (S1) Depleted Dark Surface (F7)  yed Matrix (S4) Redox Depressions (F8)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Exy Mineral (S1) Redox Depressions (F8) | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Sulfide (A4)   | Indicators for Problematic.    Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (A2) (A3) (A4) (A4) (A4) (A4) (A4) (A4) (A4) (A4  | Indicators for Problematic Hydric (A2)  Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  Eddon (A2)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  Below Dark Surface (A11)  Depleted Matrix (F2)  Surface (A12)  Redox Dark Surface (F6)  Eddy Mineral (S1)  Depleted Dark Surface (F7)  Peldmont Floodplain Soils (F19)  Edd Matrix (S4)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144B)  Depleted Matrix (S6)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144B)  Edd Parent Material (F21)  Very Shallow Dark Surface (TF1  Other (Explain in Remarks)  Eddrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_\_\_\_ City/County: Chautauqua County Sampling Date: /1/04/2015 Applicant/Owner: Ball Hill Wind Energy, LLC \_\_\_ Sampling Point: DP- 60 Investigator(s): DJL VJM \_\_ Section, Township, Range:\_\_\_\_ Landform (hillslope, terrace, etc.): # Plain Local relief (concave, convex, none): Convex Slope (%):\_ Lat: 79, 162359 Long: 42,396894 Subregion (LRR or MLRA): LRR-R Datum: NAD 83 Soil Map Unit Name: Frie Silt loan (EAA) NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil No, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_\_ Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_\_\_ Saturation (A3) \_\_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_\_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) \_\_ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No \_\_\_ Depth (inches): Yes \_\_\_\_ No \_\_\_ Depth (inches): Water Table Present? Saturation Present? Yes \_\_\_\_ No \_X Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_ No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No wetland hydrology Indicators present. Remarks:

| Tree Stratum (Plot size: 30')  1. frus 1851005a  2. Malus 5p.  3   | 30 465 FMU                                | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  (A)  (B)   |
|--|---|---|
| Sapling/Shrub Stratum (Plot size: 151  1. Locaus amongan 2. Locaus colleans accommendation of the colleans accommendation of | 90 = Total Cover 45<br>18<br>20 465 Facus | Prevalence Index worksheet:           Total % Cover of:   |
| 5  | <u>'40</u> = Total Cover 20 8             | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11   | = Total Cover                             | Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present?  Yes No  |
| Remarks: (Include photo numbers here or on a se  | = Total Cover                             |   |

| epth   | Matrix  |                | Redox   | Features  |                        |                   | the absence of indi   | Dagasaka   |
|--|---|----------------|---|---|------------------------|-------------------|---|--|
| nches)   | Color (moist)   | %              | Color (moist)   | %   | Type <sup>1</sup>      | _Loc <sup>2</sup> | Texture   | Remarks  |
| 1-10   | 104R 3/2  | 100            | er-t-p-ser-   | _attrace  |                        |                   | 50 Hoan   |  |
| 0-20   | 1041 4/3  | 98             | 7.5 YR 3/4  | 2   |                        | M                 | 5,1+10gm  |  |
|  |   |                |   |   |                        |                   |   |  |
|  |   |                |   |   |                        |                   |   |  |
|  |   |                |   |   | _                      |                   |   |  |
| 6-6  | toncontration D=Dor   | olotion PM     | =Reduced Matrix, M  | S=Masked  | Sand Gr                | ains              | ²Location: PL=F   | Pore Lining, M=Matrix.   |
| ydric Soil   | Indicators:   | JIGHOTI, INIVI | TOUGOOG MIGHIA, IM  | - Indonou   | 34.14 31               |                   | Indicators for Pr   | oblematic Hydric Soils <sup>3</sup> :<br>(10) (LRR K, L, MLRA 149B)  |
| Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy N Stripped | pipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) ed Below Dark Surface Park Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, |                | MLRA 149B Thin Dark Surfa Loamy Mucky N Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress B) | ace (S9) (L<br>Mineral (F1<br>Matrix (F2<br>( (F3)<br>Inface (F6)<br>Surface (F | 1) ( <b>LRR K</b><br>) |                   | 5 cm Mucky f Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M | Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, II (S7) (LRR K, L, M) Ilow Surface (S8) (LRR K, L) rface (S9) (LRR K, L) ese Masses (F12) (LRR K, L, rodplain Soils (F19) (MLRA 14 to (TA6) (MLRA 144A, 145, 14 Material (F21) r Dark Surface (TF12) in in Remarks) |
| Indicators of  | of hydrophytic veget  | ation and w    | etland hydrology mu   | st be pres  | ent, unles             | s disturbed       | or problematic.   |  |
| Restrictive  | Layer (if observed  | ):             |   |   |                        |                   |   |  |
| Type:  |   |                | - 1   |   |                        |                   | Hudrio Sail Bross   | ent? Yes No  |
| Depth (ir<br>Remarks:  | nches):   |                |   |   |                        |                   | Hydric Soil Prese   | mt/ 165 10   |
|  |   |                |   |   |                        |                   |   |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   | City/County: Chau  | auqua County   | Sampling Date: 11/04/20/        |
|--|--|--|---------------------------------|
| Applicant/Owner: Ball Hill Wind Energy, LLC  |  | State: NY  | Sampling Point: DP- 6/          |
| Investigator(s): DTL USM   | Section, Township, I   | Range: Willenon  | IA                              |
| Landform (hillslope, terrace, etc.): Till Plain Subregion (LRR or MLRA): LRR-R Lat:  | " (EA)   | ong: <u>42.39678</u><br>NWI classific  | Datum: NAD 83                   |
| Are climatic / hydrologic conditions on the site typical for<br>Are Vegetation, Soil, or Hydrology<br>Are Vegetation, Soil, or Hydrology | _ significantly disturbed? Ar                                | <ul> <li>(if no, explain in Fe</li> <li>"Normal Circumstances"  </li> <li>needed, explain any answer</li> </ul>  | present? Yes No                 |
| SUMMARY OF FINDINGS – Attach site ma   |  | t locations, transects   | s, important features, etc.     |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a |  |  | No<br>41                        |
|  |  |  |                                 |
| HYDROLOGY  |  |  |                                 |
| Wetland Hydrology Indicators:  | 7. v. 14.4.  |  | ators (minimum of two required) |
| Primary Indicators (minimum of one is required; checks   |  | ,  | Cracks (B6)                     |
|  | Vater-Stained Leaves (B9)<br>quatic Fauna (B13)              | ∠ Drainage Pa<br>_ Moss Trim L   |                                 |
|  | lari Deposits (B15)  |  | Water Table (C2)                |
| L  | ydrogen Sulfide Odor (C1)                                    | Crayfish Bur   |                                 |
|  | xidized Rhizospheres on Living Re                            | the state of the s | isible on Aerial Imagery (C9)   |
|  | resence of Reduced Iron (C4)                                 |  | Stressed Plants (D1)            |
| [ [ The Print ] [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [  | ecent Iron Reduction in Tilled Soil<br>hin Muck Surface (C7) | Shallow Aqu  |                                 |
| (1 <del></del>   | ther (Explain in Remarks)                                    |  | aphic Relief (D4)               |
| Sparsely Vegetated Concave Surface (B8)  |  | FAC-Neutra   |                                 |
| Field Observations:  |  |  |                                 |
|  | Depth (inches):  |  |                                 |
|  | Depth (inches): 10   | 20-V2-A C 22-L1 C 1 A O A Z A - A+   | X                               |
| Saturation Present? Yes X No    (includes capillary fringe)  | Depth (inches):  | Wetland Hydrology Prese  | nt? Yes _/_ No                  |
| Describe Recorded Data (stream gauge, monitoring we  | II, aerial photos, previous inspection                       | ons), if available:  |                                 |
| Remarks:   |  |  |                                 |
| A All  | , .F   |  |                                 |
| / 4  |  |  |                                 |
| 4  |  |  |                                 |
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| 72 1   | ¥  |  |                                 |
| in V   |  |  |                                 |
| Ŵ.   |  |  |                                 |
|  |  |  |                                 |
|  |  |  |                                 |

| Tree Stratum (Plot size: 30 )          | % Cover | Dominant II<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species  That Are ORL FACIAL as FAC:                                |
|--|---------|-------------------------|--------|---|
| 1                                      |         |                         |        | That Are OBL, FACW, or FAC: (A)   |
| 3                                      |         |                         |        | Total Number of Dominant<br>Species Across All Strata: (B)  |
|  |         |                         |        | Percent of Dominant Species   |
| 5                                      |         |                         |        | That Are OBL, FACW, or FAC: 100 % (A/B  |
|  |         |                         |        | Prevalence Index worksheet:   |
|  |         |                         |        | Total % Cover of: Multiply by:  |
|  | 0       | = Total Cove            | r      | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: /5') |         |                         |        | FACW species x 2 =  |
| Corners anogum                         | 20      | 465                     | FALW   | FAC species x 3 =   |
|  |         |                         |        | FACU species x 4 =  |
|  |         |                         |        | UPL species x 5 =<br>Column Totals: (A) (B)   |
| ·                                      |         |                         |        | Column Totals (vy (s)   |
|  |         |                         |        | Prevalence Index = B/A =  |
| 3,                                     |         |                         |        | Hydrophytic Vegetation Indicators:  |
| ,                                      |         |                         |        | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | 00      | = Total Cove            | r      | A 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size:)              |         |                         |        | 3 - Prevalence Index is ≤3.0¹<br>4 - Morphological Adaptations¹ (Provide supportin                                |
| · Phalisis amodinacea                  | 75      | 465                     | FALL   | data in Remarks or on a separate sheet)   |
| Aster Sp.                              | 15      | No                      | FAL    | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 3. Solidages (an idas)s                | 5       | No.                     |        | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4                                      |         |                         |        | Definitions of Vegetation Strata:   |
| 5                                      |         |                         |        |   |
| 5,                                     |         |                         |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7                                      |         |                         |        | Sapling/shrub – Woody plants less than 3 in. DBH  |
| B                                      |         |                         |        | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                      |         |                         |        | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10                                     |         |                         |        | size, and woody plants less than 3.28 ft tall.  |
| 11                                     |         | -                       |        | Woody vines - All woody vines greater than 3.28 ft in   |
| 12                                     | 9.      |                         |        | height.   |
| 2-1                                    | 18      | = Total Cove            | 47.5   |   |
| Woody Vine Stratum (Plot size: 30 )    | 1.      | 460                     | _19    |   |
| 1. VITS (SPECSO                        | 10      | 10)                     | 196    | Hydrophytic   |
| 2                                      |         |                         |        | Vegetation  |
| 3                                      |         |                         |        | Present? Yes No   |
| 4.                                     |         |                         |        |   |
|  | (1)     | = Total Cove            | r      |   |

| epth   | ription: (Describe t<br>Matrix | - V:2      |  | Features   |                      |           |  |  |
|--|--------------------------------|------------|--|--|----------------------|-----------|--|--|
| nches)   | Color (moist)                  | %          | Color (moist)  | %  | Type <sup>1</sup>    | _Loc2     | Texture  | Remarks  |
| 1-12   | 104R3/1                        | 95         | 7.54R3/4   | 5  |                      | M         | Siltlogn   |  |
| 7-19   | 10 425/2                       | 90         | 7,542/6  | 10   |                      | m         | 5; 1/1 /og my  | to the second se |
|  |                                |            |  |  | _                    |           |  |  |
|  |                                |            |  |  |                      |           |  |  |
|  |                                |            |  |  |                      |           |  |  |
|  |                                |            |  |  |                      |           |  |  |
| ype: C=Co  |                                | etion, RM= | Reduced Matrix, MS   | =Masked  | Sand Gra             | ains.     |  | Pore Lining, M=Matrix. roblematic Hydric Soils <sup>3</sup> :  |
| Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped   | ipedon (A2)                    |            | Polyvalue Below MLRA 149B) Thin Dark Surfac Loamy Mucky Mi Loamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark S Redox Depression | e (S9) (L<br>neral (F1<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F | RR R, MI<br>) (LRR K | _RA 149B) | Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodie Red Parent N | A10) (LRR K, L, MLRA 149B) PREDOX (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) Post or Peat (S3) (LRR K, L, R) Post or Peat (S8) (LRR K, L) Post of Carrier (S9) (LRR K, L) Post of Carrier (S9) (LRR K, L) Post of Carrier (S9) (MLRA K, L, R) Post of Carrier (S9) (MLRA 149B) Post of Carrier (S9) (MLRA 144A, 145, 149B) Post of Carrier (S9) (MLRA 144A, 145, 149B) Post of Carrier (S9) Post of Carrier (S9 |
|  |                                | on and we  | tland hydrology must   | be prese   | nt, unless           | disturbed | or problematic.  |  |
|  | .ayer (if observed):           |            |  |  |                      |           |  |  |
| Type:  | -h\.                           |            |  |  |                      |           | Undela Call Dage   | Van V  |
| Depth (incention of the contract of the contra | nes):                          |            |  |  |                      |           | Hydric Soil Prese  | ent? Yes No No   |
|  |                                |            |  |  |                      |           |  |  |

|  | IINATION DATA FORM – N   | lorthcentral and Northeas              | t Region                        |
|--|--|--|---------------------------------|
| Project/Site: Ball Hill Wind Project                                       |  | Chautauqua County                      | Sampling Date: 11/04/20         |
| Applicant/Owner: Ball Hill Wind Energy, LL                                 | С  | State: NY                              | Sampling Point: DP-62           |
| nvestigator(s): DJL, UJM   | Section, Tow   | nship, Range: Villenou                 | 4                               |
|  | /  | cave, convex, none): Conum             | Slope (%):                      |
| Subregion (LRR or MLRA): LRR-R   |  | Long: 42,3968                          |                                 |
| ·  | am (EIA)   |  | cation:                         |
|  |  | /                                      |                                 |
| Are climatic / hydrologic conditions on the site typi                      |  |  |                                 |
| Are Vegetation <u>ND</u> , Soll <u>ND</u> , or Hydrology                   | the street of th | Are "Normal Circumstances"             |                                 |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology                   | naturally problematic?   | (If needed, explain any answ           | ers in Remarks.)                |
| SUMMARY OF FINDINGS – Attach sit   | te map showing sampling  | point locations, transect              | s, important features, etc.     |
| Hydrophytic Vegetation Present? Yes  | 1,70   | Sampled Area                           |                                 |
| Hydric Soil Present? Yes   | No within  | a Wetland? Yes                         | No                              |
| Wetland Hydrology Present? Yes   | No If yes,   | optional Wetland Site ID:              |                                 |
| HYDROLOGY Wetland Hydrology Indicators:                                    |  | Secondary Indic                        | ators (minimum of two required) |
| Primary Indicators (minimum of one is required;                            | shook all that analy)  |  | I Cracks (B6)                   |
| Surface Water (A1)   | Water-Stained Leaves (B9)  |  | atterns (B10)                   |
| High Water Table (A2)  | Aquatic Fauna (B13)  | Moss Trim I                            |                                 |
| Saturation (A3)  | Marl Deposits (B15)  |  | Water Table (C2)                |
| Water Marks (B1)   | Hydrogen Sulfide Odor (C1)   | Crayfish Bu                            | rrows (C8)                      |
| Sediment Deposits (B2)   | Oxidized Rhizospheres on L   |  | /isible on Aerial Imagery (C9)  |
| Drift Deposits (B3)  | Presence of Reduced Iron (0  |  | Stressed Plants (D1)            |
| Algal Mat or Crust (B4) Iron Deposits (B5)                                 | Recent Iron Reduction in Till Thin Muck Surface (C7)   | ed Soils (C6) Geomorphic<br>Shallow Aq | Position (D2)                   |
| Inundation Visible on Aerial Imagery (B7)                                  | Other (Explain in Remarks)   |  | aphic Relief (D4)               |
| Sparsely Vegetated Concave Surface (B8)                                    |  | FAC-Neutra                             |                                 |
| Field Observations:  |  | -11                                    |                                 |
| Surface Water Present? Yes No _  | Depth (inches):  |  |                                 |
| Water Table Present? Yes No _  | Depth (inches):  | Large contract of the                  | - 1                             |
|  | Depth (inches):  | Wetland Hydrology Prese                | nt? Yes No                      |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitor | ring well, aerial photos, previous ir  | nspections), if available:             |                                 |
|  |  |  |                                 |
| Remarks: No hater fable  | present a Hhi  | 7 2011                                 |                                 |
| - No Saturation  |  | 2011                                   |                                 |
| NO SARLEMATION   | are sent a 17h   | 7 00                                   |                                 |
| - 501/ noist   | 4 + 22 1   | votal hode                             | la interface                    |
| 140151   | 1147 110   | ey we                                  | 2 / Valer                       |
| observed   |  |  |                                 |
|  |  |  |                                 |
|  |  |  |                                 |
|  |  |  |                                 |

### VEGETATION - Use scientific names of plants.

| Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species x1 = FACW species x2 = FAC species x3 = FACU species x4 = UPL species x4 = UPL species x5 = Column Totals: (A)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  2 - Dominance Test is >50%  3 - Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  2 - Dominance Test is >50%  3 - Prevalence In |  |        | Species?    | Status    | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|--|--|--------|-------------|-----------|--|
| Percent of Dominant Species  |  |        |             |           |  |
| Prevalence Index worksheet:  Total '% Cover of: Multiply by:  OBL species x1 = FACW species x2 = FACW species x3 = FACW species x3 = FACW species x4 = UPL species x5 = Column Totals: (A)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1   |  |        |             |           |  |
| Sapling/Shrub Stratum (Plot size:  |  |        |             |           |  |
| Sapling/Shrub Stratum (Plot size:  |  |        |             |           |  |
| FAC species x 3 = FACU species x 4 = UPL species x 4 = UPL species x 5 = Column Totals: (A)  ### Column Totals: (A)  ### Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  ### Language Index = B/A = Hydrophyti | 1  | 0      | = Total Cov | er        |  |
| FACU species   | ing/Shrub Stratum (Plot size: / )                      |        |             |           |  |
| UPL species x 5 = Column Totals: (A)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation   | 1)-  |        |             |           |  |
| Column Totals:(A)  |  |        |             |           |  |
| Prevalence Index = B/A =  Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is \$3.0'  4 - Morphological Adaptations' (Provide surdata in Remarks or on a separate sheet problematic Hydrophytic Vegetation' (Explosion)  3 - Hesper   Special |  |        |             |           |  |
| Hydrophytic Vegetation Indicators:  1. Rapid Test for Hydrophytic Vegetation 2. Dominance Test is >50% 3. Prevalence Index is 33.0' 4. Morphological Adaptations' (Provide su data in Remarks or on a separate sheet Problematic Hydrophytic Vegetation' (Expl.  3. Hesperia Sq.   |  |        |             |           | Column Totals: (A) (B)   |
| 1 - Rapid Test for Hydrophytic Vegetation   2 - Dominance Test is >50%   3 - Prevalence Index is \$3.0 to   4 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation! (Expl.   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a separate sheet   Problematic Hydrophytic Vegetation   1 - Morphological Adaptations! (Provide surdata in Remarks or on a  |  |        |             |           | Prevalence Index = B/A =   |
| ### Destratum (Plot size:  |  |        |             |           |  |
| Herb Stratum (Plot size: 5)  1. Philip a poolers 2  2. Darty 15 glands 3  3. Hosper 15 50  4. To bline a poolers 2  4. To bline a poolers 2  4. To bline a poolers 2  5. No FALU  5. Tarax and an Celegration 5  6. Plands a celegration 5  7. Pholor a celegration 5  8. Sapling/shrub – Woody plants less than 3 in . [7.6 cm) or more in dath breast height (DBH), regardless of height.  10. Sapling/shrub – Woody plants less than 3.28 ft (1 m) tall.  11. Woody Vine Stratum (Plot size: 30')  1. Supposition 5  1. Supposition 6  1. Suppositi |  |        |             |           |  |
| Herb Stratum (Plot size:)   1.   | 2.5  | 0      | = Total Cov | er        |  |
| 1. Philip a graders of the second of the sec | Stratum (Plot size: 5                                  |        |             |           |  |
| Problematic Hydrophytic Vegetation¹ (Explanation of Hydrophytic Vegetation) of Hydrophytic Vegetation of H | Philey a grafence                                      | 30     | 469         | FALL      | 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet)   |
| 3. Hesperis sp. 5 NO FACU 4. To sire powerse   5 NO FACU 5. Tarax and officiable   5 NO FACU 6. History and the collection   5 NO FACU 8.  |  |        | 486         | FALL      | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 4. To a from product of problematic.  5. Tarax see of officinate 5 NO FACU  6. Flantage and coolage 5 NO FACU  7. Flantage and coolage 5 NO FACU  8. Sapling/shrub – Woody plants less than 3 in. [7.6 cm) or more in data breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. [8] and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft height.  Woody Vine Stratum (Plot size: 30')  1. Sapling/shrub – Woody plants less than 3 in. [8] theight.  Herb – All herbaceous (non-woody) plants, regardle size, and woody vines greater than 3.28 ft height.  Woody vines – All woody vines greater than 3.28 ft height.  Hydrophytic Vegetation Present?  Yes No   |  |        | 1,0         | FIAL      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| Definitions of Vegetation Strata:  5   | To / 14 porters o                                      | 15     | VEG         | FACU      |  |
| Tree - Woody plants 3 in. (7.6 cm) or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  Sapling/shrub - Woody plants less than 3 in. [8.6 cm] or more in data breast height (DBH), regardless of height.  | taraxacum officinale                                   | 5      | 15 T.E.     | -         | Definitions of Vegetation Strata:  |
| at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. If and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardles size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft height.  Woody Vine Stratum (Plot size:  |  |        | NO          |           | Tree – Woody plants 3 in (7.6 cm) or more in diamete   |
| 8  | / / X  | 15     | 169         |           | at breast height (DBH), regardless of height.  |
| 9  | Charles and respect to the second of the second of     | A      |             |           | Sapling/shrub - Woody plants less than 3 in. DBH   |
| size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft height.  Woody Vine Stratum (Plot size:)  Hydrophytic Vegetation Present?  Yes No   |  |        |             |           |  |
| 11   |  |        |             |           | Herb - All herbaceous (non-woody) plants, regardless of  |
| Woody Vines - All woody vines greater than 3.28 ft height.   Woody Vines Stratum (Plot size:)  |  |        |             |           |  |
| Woody Vine Stratum (Plot size:       30'       )       Hydrophytic Vegetation Present?         2.       3.       = Total Cover   |  |        |             |           |  |
| Woody Vine Stratum         (Plot size:   |  | 105    | = Total Cov | er / 2.5. | The state of the s |
| 2  |  |        |             |           |  |
| 2  |  |        |             |           | San  |
| 3  |  |        |             |           |  |
|  |  |        |             | -         |  |
|  |  |        | -4          |           | 1  |
| Remarks: (Include photo numbers here or on a separate sheet.)  |  | 0      | = Total Cov | er        |  |
|  | narks: (Include photo numbers here or on a separate sh | neet.) | ·           |           |  |
| See Mrs  |  | 1      |             |           |  |
| and the same of th |  |        | A Comment   |           |  |
|  |  |        |             |           |  |

| - |   |   |   |
|---|---|---|---|
| c | ٦ | п | 1 |

Sampling Point: DP- 62

| r (moist) 2 3/1 2 5/2                 | 90<br>90<br>90 | Color (moist) 7.5 YR 3/4 1.5 YR 3/9 | 10<br>10   | Type¹ C C                          | M M       | Texture 50/14/0am 50/14/0am  | Remarks  |
|---------------------------------------|----------------|-------------------------------------|--|------------------------------------|-----------|--|--|
| 5/2                                   | 90             | 1                                   | 10   | <u>C</u> <u>C</u>                  | <u>m</u>  | Siltloan<br>Siltloan   |  |
|                                       | 90             | 1.5 TR 3/g                          | 10   |                                    | m         | Siltleson  |  |
| on DeDo                               | 12.5           |                                     |  |                                    |           |  |  |
| on D-D                                |                |                                     |  |                                    | -         |  |  |
| on DeDe                               |                |                                     | -  |                                    |           |  |  |
| on DeDe                               |                |                                     |  |                                    | -         |  |  |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | letion DM      | =Reduced Matrix, MS                 |  |                                    |           | 20   |  |
| s:                                    | JIGHOH, KIM    | -Reduced Matrix, MS                 | o≃iviasked   | Sand Gra                           | iiris.    |  | ore Lining, M=Matrix.  Oblematic Hydric Soils <sup>3</sup> :   |
|                                       | VILRA 1498     |                                     | ce (S9) ( <b>L</b><br>fineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F<br>ons (F8) | .RR R, ML<br>() (LRR K,<br>)<br>7) | RA 149B   | Coast Prairie I  5 cm Mucky P Dark Surface of Polyvalue Beld Thin Dark Surface of Predmont Flood Mesic Spodic of Red Parent March March March March March March March Mesic Spodic of Red Parent March | Dark Surface (TF12)  |
| tic vegeta                            | tion and we    | tland hydrology must                | be prese   | nt, unless                         | disturbed | or problematic.  |  |
| bserved):                             |                | **                                  |  |                                    |           |  | A STATE OF THE STA |
|                                       |                |                                     |  |                                    |           |  | . /  |
|                                       |                |                                     |  |                                    |           | Hydric Soil Presen   | t? Yes No  |
|                                       |                |                                     |  |                                    |           |  |  |
|                                       |                |                                     |  |                                    |           |  |  |

| WETLAND DETERMINATION I  | DATA FORM – Northcentral and Northeast Region                                  |
|--|--|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 11/0 5 / 20                      |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 64   |
| nvestigator(s): DJL, USM   | Section, Township, Range: VILEAOVA   |
| andform (hillslope, terrace, etc.): Till Planes  | Local relief (concave, convex, none):Slope (%):                                |
|  | 1.12453 Long: 42,428515 Datum: NAD 83  |
| Subjection (Critical Micros).  | 1 - Al   |
| Soil Map Unit Name: Misti Sult logar (   |  |
|  | ne of year? Yes No (If no, explain in Remarks.)                                |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> sign                | ificantly disturbed? Are "Normal Circumstances" present? Yes No                |
| Are Vegetation <u>Mo</u> , Soil <u>No</u> , or Hydrology <u>No</u> natu                | rally problematic? (If needed, explain any answers in Remarks.)                |
|  | - I I'm which leastless transacts important features atc                       |
| SUMMARY OF FINDINGS – Attach site map sh   | owing sampling point locations, transects, important features, etc.            |
| Hydrophytic Vegetation Present? Yes X No   | Is the Sampled Area  |
| Hydric Soil Present? Yes No  | within a Wetland? Yes No   |
| Wetland Hydrology Present? Yes No  | If yes, optional Wetland Site ID:  |
| Remarks: (Explain alternative procedures here or in a separa                           | ate report.)   |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| HYDROLOGY  |  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)                                 |
| Primary Indicators (minimum of one is required; check all tha                          | t apply) Surface Soil Cracks (B6)  |
|  | Stained Leaves (B9) Z Drainage Patterns (B10)                                  |
|  | Fauna (B13) Moss Trim Lines (B16)  |
|  | eposits (B15) Dry-Season Water Table (C2)                                      |
|  | en Sulfide Odor (C1) Crayfish Burrows (C8)                                     |
|  | ed Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
|  | ice of Reduced Iron (C4) Stunted or Stressed Plants (D1)                       |
|  | t Iron Reduction in Tilled Soils (C6) (Geomorphic Position (D2)                |
|  | uck Surface (C7) Shallow Aquitard (D3)   |
| Inundation Visible on Aerial Imagery (B7) Other  | (Explain in Remarks) Microtopographic Relief (D4)                              |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)  |
| Field Observations:  |  |
|  | (inches):  |
|  | (inches): /2   |
|  | (inches): 6 Wetland Hydrology Present? Yes No                                  |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, ae | rial photos, previous inspections), if available:                              |
| ,  |  |
|  |  |
| Remarks:   |  |
|  |  |
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|  |  |
|  |  |

| Tree Stratum (Plot size: 30')          |   | Dominant Species?  |           | Dominance Test worksheet:  |
|--|---|--|-----------|--|
| 1                                      |   |  |           | Number of Dominant Species That Are OBL, FACW, or FAC:                       |
| 2                                      |   |  |           | Total Number of Dominant   |
| 3                                      |   |  |           | Species Across All Strata: (B)   |
| 4                                      |   |  |           | Percent of Dominant Species  |
| 5                                      |   |  |           | That Are OBL, FACW, or FAC: 100% (A/B)                                       |
| 6                                      |   |  |           | Prevalence Index worksheet:  |
| 7                                      |   |  |           | Total % Cover of: Multiply by:   |
|  | (2)                                       | = Total Cov  | er        | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: /5') |   |  |           | FACW species x 2 =   |
| 1. Salix Sp                            |   | the  | Fige      | FAC species x 3 =  |
|  |   |  |           | FACU species x 4 =   |
| 2                                      |   |  |           | UPL species x 5 =  |
| 3                                      |   |  | _         | Column Totals: (A) (B)   |
| 4                                      |   | -  |           | Prevalence Index = B/A =   |
| 5                                      |   | Name of the last o |           |  |
| 6                                      |   |  |           | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation |
| 7                                      | - 10                                      |  |           | 2 - Dominance Test is >50%   |
| 1                                      | 16  | = Total Cov  | er        | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:)              | 7.00                                      | 1000   | 16        | 4 - Morphological Adaptations¹ (Provide supporting                           |
| 1. Scilpus experious                   | 40  | 465  | OL        | data in Remarks or on a separate sheet)                                      |
| 2. Carex mulpipor de co                | 30  | yes  | one       | Problematic Hydrophytic Vegetation¹ (Explain)                                |
| 3. Tuncers 8 Husins                    | 10  | Mo   | FALLU     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must            |
| 4. Ornene Carton                       | 10  | NO   | FALL      | be present, unless disturbed or problematic.                                 |
| 5. Ps fer 500                          | E. S. | NO   | FAC       | Definitions of Vegetation Strata:  |
| 6. Hesperis                            |   | NO   | FAC       | Tree - Woody plants 3 in. (7.6 cm) or more in diamete                        |
| 7. Fragacia Virginjana                 |   | ND   | FACH      | at breast height (DBH), regardless of height.                                |
| 8. Carx 50.                            |   | new transfer of the same of th | FAC       | Sapling/shrub - Woody plants less than 3 in. DBH                             |
|  |   |  |           | and greater than or equal to 3.28 ft (1 m) tall.                             |
| 9                                      |   |  |           | Herb - All herbaceous (non-woody) plants, regardless of                      |
|  |   |  |           | size, and woody plants less than 3.28 ft tall.                               |
| 11                                     |   |  |           | Woody vines - All woody vines greater than 3.28 ft in                        |
| 12                                     | LIP                                       |  |           | height.  |
| 2.1                                    | 110                                       | = Total Cov  | 197 er 65 |  |
| Woody Vine Stratum (Plot size:)        |   |  | 00        |  |
| 1                                      |   |  |           | Hydrophytic  |
| 2                                      |   |  |           | Vegetation   |
| 3                                      |   |  |           | Present? Yes No  |
|  |   |  |           |  |
| 4                                      |   |  |           |  |

| Depth                       | Matrix   |            | Redo   | x Features   |                   |           | n the absence of indi   |  |
|-----------------------------|--|------------|--|--------------|-------------------|-----------|---|--|
| (inches)                    | Color (moist)  | <u>%</u>   | Color (moist)                                      | <u>%</u>     | Type <sup>1</sup> | _Loc²     |   | Remarks  |
| 7-8                         | 10413/2  | 90         | 7.5 1/2 3/4  |              |                   | M         | Silt lagor  | and the second of the second o |
| 3-18                        | 13412 5/2  | 80         | 7.54n5/6   | 20           | _                 | its       | 2/ / Jana   |  |
|                             | Page 10 and 10 a | _          |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   | And the second s |
|                             |  | _          |  |              |                   |           |   | 1110   |
|                             |  |            |  |              | _                 |           |   |  |
|                             |  | _          |  |              | _                 |           |   |  |
| Type: C=Co<br>lydric Soil I | oncentration, D=Depl   | etion, RM: | =Reduced Matrix, MS                                | S=Masked     | Sand Gra          | ains.     |   | ore Lining, M=Matrix.  |
| _ Histosol<br>_ Histic Ep   | (A1)<br>pipedon (A2)   |            | Polyvalue Belov                                    |              |                   |           | 2 cm Muck (A  | blematic Hydric Soils <sup>3</sup> :<br>10) (LRR K, L, MLRA 149B)<br>Redox (A16) (LRR K, L, R)   |
|                             | n Sulfide (A4)<br>I Layers (A5)  |            | Thin Dark Surfa<br>Loamy Mucky M<br>Loamy Gleyed I | fineral (F1) | (LRR K            |           | Dark Surface (  | eat or Peat (S3) (LRR K, L, R)<br>(S7) (LRR K, L, M)<br>ow Surface (S8) (LRR K, L)   |
| _ Depleted                  | i Below Dark Surface<br>irk Surface (A12)  | (A11)      | Depleted Matrix     Redox Dark Sur                 | (F3)         |                   |           | Thin Dark Surf  | face (S9) (LRR K, L)<br>se Masses (F12) (LRR K, L, R)  |
| _ Sandy M<br>_ Sandy G      | lucky Mineral (S1)<br>leyed Matrix (S4)  |            | Depleted Dark S<br>Redox Depress                   | Surface (F7  | ")                |           | Piedmont Floo   | dplain Soils (F19) (MLRA 1498<br>(TA6) (MLRA 144A, 145, 1498   |
| Stripped                    | edox (S5)<br>Matrix (S6)<br>face (S7) (LRR R, M  | ILRA 149E  | 3)   |              |                   |           | <ul><li>Red Parent Ma</li><li>Very Shallow I</li><li>Other (Explain</li></ul> | Dark Surface (TF12)  |
| ndicators of                | hydrophytic vegetati   | on and we  | tland hydrology mus                                | t be preser  | nt unless         | disturbed | or problematic  |  |
|                             | ayer (if observed):  |            |  | . Do procen  | n, amood          | diotarboa | Troblematic.  |  |
| Type:                       |  |            |  |              |                   |           |   |  |
| Depth (inc                  | ches):   |            |  |              |                   |           | Hydric Soil Presen  | t? Yes X No  |
| emarks:                     |  |            |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   |  |
|                             |  |            |  |              |                   |           |   |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-Investigator(s): DJC, UJM Section, Township, Range:\_\_ Landform (hillslope, terrace, etc.): 77// Local relief (concave, convex, none): Chinex Subregion (LRR or MLRA): LRR-R Soll Map Unit Name: Busti 5, 11 NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_ (If no, explain in Remarks.) Are Vegetation <u>NO</u>, Soil <u>No</u>, or Hydrology <u>NO</u> significantly disturbed? Are Vegetation No., Soil No., or Hydrology No. 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? Is the Sampled Area within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) Drainage Patterns (B10) \_\_ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_\_ Moss Trim Lines (B16) \_\_ Saturation (A3) \_\_\_ Marl Deposits (B15) Dry-Season Water Table (C2) \_\_\_ Water Marks (B1) \_\_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: No X Depth (inches): Surface Water Present? Water Table Present? Yes \_\_\_\_ No X Depth (inches): Saturation Present? \_\_ No \_\_\_\_ Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: wetland try do logy indy contoce precent

| Tree Stratum (Plot size: 30)           | Absolute<br>% Cover | Dominant<br>Species? |          | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|--|---------------------|----------------------|----------|--|
| 2                                      | _                   |                      |          | Total Number of Dominant Species Across All Strata:  (B)   |
| 3                                      |                     |                      |          | Opposite / Islanda / Islan |
| 4,                                     |                     |                      |          | Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)  |
| 5                                      |                     |                      |          |  |
| S                                      |                     |                      |          | Prevalence Index worksheet:  |
| 7                                      | 90                  | - Tatal Car          |          |  |
| 15'                                    | _10                 | = Total Co           | /er      | FACW species x 2 =   |
| Sapling/Shrub Stratum (Plot size: 15 ) | 60                  | 485                  | FAC      | FAC species x 3 =  |
| Carpinus Caroliniana                   | - BO                | NO                   | FACU     | FACU species x 4 =   |
| Malass SE                              | 10                  | 1/0                  | 100C     | UPL species x 5 =  |
| 3. Anelgocher 50.                      |                     | 10                   | FACLE    | Column Totals: (A) (B)   |
| 4. Freezincis prometalinarion          | 200000              | _                    | France.  | Prevalence Index = B/A =   |
| 5. Cat also Po                         |                     | _AD                  | 7800     | Hydrophytic Vegetation Indicators:   |
| в                                      |                     | -                    |          | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7,                                     | ar                  | 1                    |          | 2 - Dominance Test is >50%   |
| -1                                     | 7.5                 | = Total Co           | ver 47.5 | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size:) 1            |                     |                      | 19       | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)   |
| 2                                      |                     |                      |          | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3.                                     |                     |                      |          | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| 4                                      |                     |                      |          | be present, unless disturbed or problematic.   |
| 5.                                     |                     |                      |          | Definitions of Vegetation Strata:  |
| 6                                      |                     |                      |          | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
| 7                                      |                     |                      | -        | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8                                      |                     |                      |          | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9                                      |                     |                      |          | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10                                     |                     |                      |          | size, and woody plants less than 3.28 ft tall.   |
| 11                                     |                     |                      |          | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                     |                     | -                    |          | height.  |
| Woody Vine Stratum (Plot size: 301)    | _0                  | _ = Total Co         | over     |  |
| 1,                                     |                     |                      |          | Hydrophytic  |
| 2                                      |                     | -                    |          | Vegetation   |
| 3                                      | -0                  |                      |          | Present? Yes No _X   |
| 4                                      |                     |                      |          |  |
|  | 0                   | _ = Total C          | over     |  |

| (A2) (A2) (b) (de (A4) (s (A5) (de CA5) (de CA12) (de CA |               | MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark  | MS=Masked ow Surface B) face (S9) (I Mineral (F- d Matrix (F2 rix (F3) Surface (F6) k Surface (F6) | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | Indicators for the control of the co | PL=Pore L<br>or Problem<br>uck (A10) (I<br>rairie Redo<br>ucky Peat o<br>rface (S7)<br>ue Below Si<br>rk Surface<br>nganese M | Lining, M=Matrix. natic Hydric Soils <sup>3</sup> : LRR K, L, MLRA 149B) ox (A16) (LRR K, L, R) or Peat (S3) (LRR K, L, R) (LRR K, L, M) urface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)    |
|--|---------------|--|--|--|----------------|--|---|--|
| ation, D=Depors:  (A2)  Ide (A4)  Is (A5)  Dark Surface  ace (A12)  Ilineral (S1)  Matrix (S4)  S5)  (S6)  | Poletion, RMs | =Reduced Matrix, N  — Polyvalue Below  MLRA 1499  Thin Dark Sur  Loamy Mucky  Loamy Gleyed  Depleted Matrix  Redox Dark S  Depleted Dark | MS=Masked ow Surface B) face (S9) (I Mineral (F- d Matrix (F2 rix (F3) Surface (F6) k Surface (F6) | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | 2Location: Indicators for the control of the contro | PL=Pore L<br>or Problem<br>uck (A10) (I<br>rairie Redo<br>ucky Peat o<br>rface (S7)<br>ue Below Si<br>rk Surface<br>nganese M | natic Hydric Soils <sup>3</sup> :<br>LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R)<br>or Peat (S3) (LRR K, L, R)<br>(LRR K, L, M)<br>urface (S8) (LRR K, L)<br>(S9) (LRR K, L)<br>asses (F12) (LRR K, L, R) |
| ation, D=Depors:  (A2) ) de (A4) s (A5) Dark Surfactace (A12) lineral (S1) Matrix (S4) S5) (S6)  | pletion, RM   | =Reduced Matrix, N  — Polyvalue Below  MLRA 1499  Thin Dark Sur  Loamy Mucky  Loamy Gleyed  Depleted Matrix  Redox Dark S  Depleted Dark | MS=Masked ow Surface B) face (S9) (I Mineral (F- d Matrix (F2 rix (F3) Surface (F6) k Surface (F6) | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | Indicators for the control of the co | or Problem  Lick (A10) (I  rairie Redo  Licky Peat o  Liface (S7)  Lie Below St  Lick Surface  Inganese M                     | natic Hydric Soils <sup>3</sup> :<br>LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R)<br>or Peat (S3) (LRR K, L, R)<br>(LRR K, L, M)<br>urface (S8) (LRR K, L)<br>(S9) (LRR K, L)<br>asses (F12) (LRR K, L, R) |
| (A2) (A2) (b) (de (A4) (s (A5) (de CA5) (de CA12) (de CA |               | Polyvalue Bele MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark                                 | ow Surface  B)  face (S9) (L  Mineral (F-  Matrix (F2  rix (F3)  Surface (F6)  k Surface (F6)      | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | Indicators for the control of the co | or Problem  Lick (A10) (I  rairie Redo  Licky Peat o  Liface (S7)  Lie Below St  Lick Surface  Inganese M                     | natic Hydric Soils <sup>3</sup> :<br>LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R)<br>or Peat (S3) (LRR K, L, R)<br>(LRR K, L, M)<br>urface (S8) (LRR K, L)<br>(S9) (LRR K, L)<br>asses (F12) (LRR K, L, R) |
| (A2) (A2) (b) (de (A4) (s (A5) (de CA5) (de CA12) (de CA |               | Polyvalue Bele MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark                                 | ow Surface  B)  face (S9) (L  Mineral (F-  Matrix (F2  rix (F3)  Surface (F6)  k Surface (F6)      | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | Indicators for the control of the co | or Problem  Lick (A10) (I  rairie Redo  Licky Peat o  Liface (S7)  Lie Below St  Lick Surface  Inganese M                     | natic Hydric Soils <sup>3</sup> :<br>LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R)<br>or Peat (S3) (LRR K, L, R)<br>(LRR K, L, M)<br>urface (S8) (LRR K, L)<br>(S9) (LRR K, L)<br>asses (F12) (LRR K, L, R) |
| (A2) (A2) (b) (de (A4) (s (A5) (de CA5) (de CA12) (de CA |               | Polyvalue Bele MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark                                 | ow Surface  B)  face (S9) (L  Mineral (F-  Matrix (F2  rix (F3)  Surface (F6)  k Surface (F6)      | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | Indicators for the control of the co | or Problem  Lick (A10) (I  rairie Redo  Licky Peat o  Liface (S7)  Lie Below St  Lick Surface  Inganese M                     | natic Hydric Soils <sup>3</sup> :<br>LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R)<br>or Peat (S3) (LRR K, L, R)<br>(LRR K, L, M)<br>urface (S8) (LRR K, L)<br>(S9) (LRR K, L)<br>asses (F12) (LRR K, L, R) |
| (A2) (A2) (b) (de (A4) (s (A5) (de CA5) (de CA12) (de CA |               | Polyvalue Bele MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark                                 | ow Surface  B)  face (S9) (L  Mineral (F-  Matrix (F2  rix (F3)  Surface (F6)  k Surface (F6)      | (S8) (LRR<br>.RR R, MLI<br>I) (LRR K,<br>) | R,<br>RA 149B) | Indicators for the control of the co | or Problem  Lick (A10) (I  rairie Redo  Licky Peat o  Liface (S7)  Lie Below St  Lick Surface  Inganese M                     | natic Hydric Soils <sup>3</sup> :<br>LRR K, L, MLRA 149B)<br>ox (A16) (LRR K, L, R)<br>or Peat (S3) (LRR K, L, R)<br>(LRR K, L, M)<br>urface (S8) (LRR K, L)<br>(S9) (LRR K, L)<br>asses (F12) (LRR K, L, R) |
| e (A4) s (A5) r Dark Surfac ace (A12) lineral (S1) Matrix (S4) (S6)  | ce (A11)      | MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr Redox Dark S Depleted Dark  | B) face (S9) (I Mineral (F) d Matrix (F2 rix (F3) Surface (F6) k Surface (F                        | RR R, MLI<br>I) (LRR K,                    | RA 149B)       | Coast P 5 cm Mu Dark Su Polyvalu Thin Da   | rairie Redo<br>ucky Peat o<br>urface (S7) (<br>ue Below Si<br>rk Surface (<br>nganese M                                       | ox (A16) (LRR K, L, R) or Peat (S3) (LRR K, L, R) (LRR K, L, M) urface (S8) (LRR K, L) (S9) (LRR K, L) asses (F12) (LRR K, L, R)   |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149)   |               |  |  |  |                |  |   | in Soils (F19) (MLRA 149E<br>i) (MLRA 144A, 145, 149B<br>al (F21)<br>Surface (TF12)<br>temarks)  |
| phytic vegeta  | ation and we  | etland hydrology mu  | ust be prese   | ent, unless                                | disturbed o    | or problematic.  |   |  |
| f observed)  | ):            |  |  |  |                |  |   |  |
|  |               |  |  |  |                |  |   | 1  |
|  |               |  |  |  |                | Hydric Soil P  | resent?   | Yes No   |
|  |               |  |  |  |                |  |   |  |
|  |               |  |  |  |                |  |   |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_ City/County: Chautauqua County Sampling Date: 11/05 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_\_ Sampling Point: DPlenous Investigator(s): DJL VJM Section, Township, Range: Local relief (concave, convex, none): \_\_\_\_ Slope (%): 3 Landform (hillslope, terrace, etc.): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Chautantua 5/1 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ (If no, explain in Remarks.) Are Vegetation MO, Soil MO, or Hydrology MO significantly disturbed? Are "Normal Circumstances" present? Yes\_ Are Vegetation MD, Soil MO, or Hydrology MO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? No Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) X Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) ∠ High Water Table (A2) Moss Trim Lines (B16) \_\_\_ Aquatic Fauna (B13) Dry-Season Water Table (C2) X Saturation (A3) \_\_ Marl Deposits (B15) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_ Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) X Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) Microtopographic Rellef (D4) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? No \_\_\_X Depth (inches): Water Table Present? No Depth (inches): Wetland Hydrology Present? Yes Saturation Present? Depth (inches): (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')          | -         | Dominant<br>Species? | Status | Dominance Test worksheet: Number of Dominant Species   |
|--|-----------|----------------------|--------|--|
| 1. Betala alleghaniensis               | 70        | 765                  | FAC    | That Are OBL, FACW, or FAC: (A)  |
| 2. Tsuga Cana densis                   | 20        |                      | FACU   | Total Number of Dominant Species Across All Strata:  (B)   |
| 4.                                     |           |                      |        | Percent of Dominant Species  |
| 5                                      |           |                      |        | That Are OBL, FACW, or FAC: 66 To (A/B)  |
|  |           |                      |        |  |
| 6                                      | -         |                      |        | Prevalence Index worksheet:  |
| 7                                      |           | -                    |        | Total % Cover of: Multiply by:   |
| 1-1                                    | 60        | = Total Cov          | er 30  | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15 ) |           |                      | 12     | FACW species x 2 =   |
| 1                                      |           |                      |        | FAC species x 3 =  |
|  |           |                      |        | FACU species x 4 =   |
| 2                                      |           |                      |        | UPL species x 5 =  |
| 3                                      | -         | 1                    |        | Column Totals: (A) (B)   |
| 4                                      |           |                      |        |  |
| 5                                      |           |                      |        | Prevalence Index = B/A =   |
| 6                                      |           |                      |        | Hydrophytic Vegetation Indicators:   |
| 7.                                     |           |                      |        | 1 - Rapid Test for Hydrophytic Vegetation  |
|  |           | Tatal Oa             |        | ★ 2 - Dominance Test is >50%   |
| _1                                     | _0        | = Total Cov          | /er    | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:5)             |           | 7.3                  |        | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting                                       |
| 1. Glycpria Gp.                        | 60        | 465                  | FAC    | data in Remarks or on a separate sheet)  |
| 2. Sphagnum sp.                        | 10        | NO                   | OBL    | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Viola SR.                           |           | 1/12                 | FAC    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                    |
|  |           |                      |        | be present, unless disturbed or problematic.   |
| 4. Nasturtium Officinale               | 7,000,000 |                      | OBL    | Definitions of Vegetation Strata:  |
| 5                                      | -         |                      |        | Definitions of Vegetation Strata.  |
| 6                                      |           |                      |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 7                                      | -         | -                    |        |  |
| 8                                      |           |                      |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
| 9,                                     |           |                      |        | and greater than or equal to 5.25 it (1 m) tail.   |
| 10                                     |           |                      |        | Herb - All herbaceous (non-woody) plants, regardless of  |
|  |           |                      |        | size, and woody plants less than 3.28 ft tall.   |
| 11                                     |           | -                    |        | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                     | - 0-      | -                    |        | height.  |
| X-4                                    | 90        | = Total Co           | ver 45 | 0  |
| Woody Vine Stratum (Plot size: 30 )    |           |                      | 18     |  |
| 1.                                     |           |                      | , ,    |  |
| 2                                      |           |                      |        | Hydrophytic  |
| 2.                                     |           |                      |        | Vegetation Present? Yes No No  |
| 3                                      |           |                      | -      | Present? Tes No  |
| 4                                      |           |                      |        |  |
| "                                      |           | = Total Co           | ver    | 1  |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Pear Ly Muche  Clay  2 Location: PL=Pore Lining, M=Matrix.  | 1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  1 Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thin Dark Surface (S9)  Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11)  Peachy Muck  Clexy  2 Location: PL=Pore Lining Indicators for Problematic  2 cm Muck (A10) (LRR R,  Coast Prairie Redox (A'  Dark Surface (S9) (LRR R, MLRA 149B)  5 cm Mucky Peat or Per  Dark Surface (S7) (LRR  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Below Dark Surface (A11)  | THE INC.                    |
|--|--|-----------------------------|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  *Location: PL=Pore Lining, M=Matrix.  Indicators:  Indicators for Problematic Hydric Soils*:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Lose Parier Redox (A16) (LRR K, L., MRA 1498)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 1498)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L.)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Dark Surface (S7) (LRR R, MLRA 1498)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  *Location: PL=Pore Lining, M=Matrix.  *Location: PL=Pore Lining, M=Matrix.  *Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils*:  1  | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Depleted Matrix (F3)  Tinn Dark Surface (S9) Depleted Matrix (F3)  Depleted Matrix (F3)   *Location: PL=Pore Lining Indicators: Indicators for Problematic 2 cm Muck (A10) (LRR R, 2 cm Muck (A10) (LRR R, Cast Prairie Redox (A') 2 cm Muck (A10) (LRR R, Cast Prairie Redox (A') 3 cm Mucky Peat or Per 4 purple (A5) 4 coamy Mucky Mineral (F1) (LRR K, L) 5 cm Mucky Peat or Per 5 cm Mucky Peat or Per 6 polyvalue Below Surface 7 polyvalue Below Surface 7 polyvalue Below Surface 7 cm Mucky Peat or Per 8 polyvalue Below Surface 9 polyvalue Below Surface 1 cm Mucky Peat or Per 9 polyvalue Below Surface 1 cm Mucky Mineral (F1) (LRR K, L) 9 polyvalue Below Surface 1 cm Mucky Peat or Per 9 polyvalue Below Surface 1 cm Mucky Mineral (F1) (LRR K, L) 9 polyvalue Below Surface 1 cm Mucky Peat or Per 9 polyvalue Below Surface 1 cm Mucky Mineral (F1) (LRR K, L) 9 polyvalue Below Surface 9 cm Muck (A10) (LRR K, L) 9 cm Muck (A10) (LRR K, L |                             |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Indicators   Indicators for Problematic Hydric Soils  | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Polyvalue Below Surface (S8) (LRR R,   2 cm Muck (A10) (LRR Histosol (A2)   MLRA 149B)   5 cm Mucky Peat or Pei Hydrogen Sulfide (A4)   Loamy Mucky Mineral (F1) (LRR K, L)   Dark Surface (S7) (LRR Stratified Layers (A5)   Loamy Gleyed Matrix (F2)   Polyvalue Below Surface (S9) (LRR R, MLRA 149B)   Thin Dark Surface (S9) (LRR R, MLRA 149B)   Thin Dark Surface (S7) (LRR R, MLRA 149B)   Dark Surface (S7) (LRR R, MLRA 149B)   Thin Dark Surface (S7) (LRR R, MLRA 149B)   Thin Dark Surface (S7) (LRR R, MLRA 149B)   Thin Dark Surface (S9)   Depleted Below Dark Surface (A11)   Depleted Matrix (F3)   Thin Dark Surface (S9)  |                             |
| Indicators for Problematic Hydric Soils <sup>3</sup> :  Histosol (A1)  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Indicators for Problematic  Cast Problematic  MLRA 149B)  Coast Prairie Redox (A10)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lamp Muck (A10) (LRR R, Depleted Matrix (F3)  Indicators for Problematic  Lamp Muck (A10) (LRR R, Depleted Matrix (F3)  Indicators for Problematic  Lamp Muck (A10) (LRR R, Depleted Matrix (F3)  |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A'  Coast Prairie Redox (A'  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRF  Polyvalue Below Surface  Thin Dark Surface (S9)  |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Lam Muck (A10) (LRR R, MLRA 149B)  Depleted Matrix (F3)  Thin Dark Surface (S9)   |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A'  Coast Prairie Redox (A'  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRF  Polyvalue Below Surface  Thin Dark Surface (S9)  |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A'  Coast Prairie Redox (A'  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRF  Polyvalue Below Surface  Thin Dark Surface (S9)  |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diank Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Histosol (A1)  Polyvalue Below Surface (S9) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic  | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Matrix (F2)  Indicators for Problematic  Coast Prairie Redox (A'  Coast Prairie Redox (A'  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRF  Polyvalue Below Surface  Thin Dark Surface (S9)  |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diangle Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Polyvalue Below Surface (S3) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (A11)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Dought Surface (S7) (LRR R, MLRA 149B)  Depleted Matrix (F2)  Thin Dark Surface (S9)  |                             |
| ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)  Histic Epipedon (A2)  MLRA 149B)  Diangle Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Polyvalue Below Surface (S3) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (A11)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Mesic | ydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Polyvalue Below Surface (S9) (LRR R, MLRA 149B)  Surface (S9) (LRR R, MLRA 149B)  Depleted Matrix (F2)  Depleted Matrix (F3)  Indicators for Problematic  Coast Prairie Redox (A10) (LRR R, MLRA 149B)  Dought Surface (S7) (LRR R, MLRA 149B)  Depleted Matrix (F2)  Thin Dark Surface (S9)  |                             |
| Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B)  Black Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Dark Surface (S9) (LRR K, L, M)  Polyvalue Below Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L)  Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14 Mesic Spodic (TA6) (MLRA 144A, 145, 14 Me | Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A' Discrete Peace (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRF Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9)   |                             |
| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Stripped Matrix (S4)  Stripped Matrix (S6)  Dark Surface (S7)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Matrix (F2)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12)  Redox Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR K, L)  Mesic Spodic (TA6) (MLRA 144A, 145, 14)  Redox Depressions (F8)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  Type:   | Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)  Coast Prairie Redox (A'  5 cm Mucky Peat or Pea | Hydric Soils <sup>3</sup> : |
| Black Histic (A3)  | Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Per Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRF Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9)   |                             |
| Hydrogen Sulfide (A4)  | Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Depleted Matrix (F3)  Depleted Matrix (F3)   |                             |
| Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1  Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14  Sandy Redox (S5) Red Parent Material (F21)  Stripped Matrix (S6) Very Shallow Dark Surface (TF12)  Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:   | Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9)  |                             |
| Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 14 Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:   | Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9)  |                             |
| Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 1 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 145, 145, 145, 145, 145, 145, 145   |  |                             |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 142, 143, 1444).  Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  | Mick Daik Surface (A12) Nedox Daik Surface (10) Morrisaligations Masse   |                             |
| Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  | <del></del>  |                             |
| Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  |  |                             |
| Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:   |  |                             |
| Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  | <del> </del>   |                             |
| Restrictive Layer (if observed):  Type:  | Duit outland (07) Letters, market 1400)  | ,,,,,                       |
| Type:  | Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   |                             |
| V  | Restrictive Layer (if observed):   |                             |
| Depth (inches): Hydric Soil Present? Yes No No   | Type:  | . /                         |
|  | Depth (inches): Hydric Soil Present? Yes   | X No                        |
| Remarks:   | lemarks;   |                             |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11 / 05/20/5 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 6 Investigator(s): DJL, VJW \_\_\_ Section, Township, Range:\_\_\_ Plain Local relief (concave, convex, none): \_\_\_\_\_\_\_ Subregion (LRR or MLRA): LRR-R Lat: 79, 128692 Long: 47.185426 Soil Map Unit Name: Chantangua Silt loon (CKB Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes \_ Are Vegetation No., Soil NO., or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Yes \_\_\_\_ No Wetland Hydrology Present? Yes \_\_\_ No If yes, optional Wetland Site ID:\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) \_ Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) \_ Geomorphic Position (D2) Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_\_ Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? \_ Depth (inches): Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_ No \_\_\_\_ \_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetland hydrology indicators fresent

| Absolute | Dominant I   | ndicator                                 |  |
|----------|--------------|--|--|
| % Cover  | Species?     |  | Dominance Test worksheet:  |
| 80       | 165          | FALL                                     | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
| 10       |              | FAC                                      | Total Number of Dominant   |
|          |              |  | Species Across All Strata: (B)   |
|          | -            |  | Percent of Dominant Species That Are OBL, FACW, or FAC: 35 % (A/B)                                     |
|          |              |  | That Are OBL, FACW, or FAC: 33 40 (A/B   |
|          |              |  | Prevalence Index worksheet:  |
|          |              |  | Total % Cover of: Multiply by:   |
| 000      | = Total Cove | r ///-                                   | OBL species x 1 =  |
|          |              | 15                                       | FACW species x 2 =   |
| 40       | Yer          | Inter                                    | FAC species x 3 =  |
| 10       | 105          | THELI                                    | FACU species x 4 =   |
|          |              |  | UPL species x 5 =  |
|          |              |  | Column Totals: (A) (B)   |
|          |              |  |  |
|          |              |  | Prevalence Index = B/A =   |
|          |              |  | Hydrophytic Vegetation Indicators:   |
|          |              |  | 1 - Rapid Test for Hydrophytic Vegetation  |
| Ul       |              |  | 2 - Dominance Test is >50%   |
| -10      | = Total Cove |  | 3 - Prevalence Index is ≤3.01  |
| -        | 200          |  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 2        | 465          | FAC                                      | data in Remarks or on a separate sheet)  |
|          |              |  | Problematic Hydrophytic Vegetation¹ (Explain)  |
|          |              |  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
|          |              |  | be present, unless disturbed or problematic.   |
|          |              |  | Definitions of Vegetation Strata:  |
|          |              |  |  |
|          |              |  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
|          |              |  |  |
|          |              |  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
|          |              |  |  |
|          |              |  | Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
|          |              |  |  |
|          |              |  | Woody vines - All woody vines greater than 3.28 ft in height.  |
| 5        | - Total Cove |  | neight.  |
|          | - Total Cove | 1 2.8                                    |  |
|          |              | ,  |  |
|          |              |  | Hydrophytic  |
|          |              |  |  |
|          |              |  | Vegetation   |
|          |              |  | Present? Yes No  |
|          |              |  |  |
|          | 40           | #0 = Total Cove  40 Yes  40 = Total Cove | 90 = Total Cover 45 40 YES FRU  40 = Total Cover 30 8 5 YES FRE  |

Sampling Point: DP-67

|  | epth needed to docum              | x Features                             |                         |  |   |          |
|--|-----------------------------------|--|-------------------------|--|---|----------|
| inches) Color (moist) %                                | Color (moist)                     | %Type                                  | Loc <sup>2</sup>        | Texture  | Remarks   |          |
| 0-2 104R2/1 100  | Newson                            | ************************************** | * Melos.                | Loan   |   |          |
| 2-6 104R 3/3 100                                       | -                                 | administrative acquire                 | adoptions               | 514 locus  |   |          |
| 5-18 104R 4/6 100                                      | - American -                      | Applearer :                            | - Indiana in the second | 5,14 loan  |   |          |
|  | - 1                               |  |                         |  |   |          |
|  |                                   |  |                         |  |   |          |
|  | -                                 |  |                         |  |   |          |
|  |                                   |  |                         |  | - 10 1 - 10 |          |
|  |                                   |  | -                       |  |   |          |
|  | -                                 |  |                         |  |   |          |
| ype: C=Concentration, D=Depletion, RI                  | M=Reduced Matrix, MS              | =Masked Sand C                         | Grains.                 | <sup>2</sup> Location: PL=Po   | ore Lining, M=Matrix.   |          |
| dric Soil Indicators:                                  |                                   |  |                         | Indicators for Pro   | blematic Hydric Soils   | 3;       |
| _ Histosol (A1)<br>_ Histic Epipedon (A2)              | Polyvalue Below                   | Surface (S8) (LI                       | RR R,                   | 2 cm Muck (A1  | 0) (LRR K, L, MLRA 1  | 49B)     |
| Black Histic (A3)                                      | MLRA 149B)                        | oo (CO) (LDD D                         | ALDA 4400               | Coast Prairie R  | ledox (A16) (LRR K, L   | , R)     |
| Hydrogen Sulfide (A4)                                  | Thin Dark Surfac<br>Loamy Mucky M | ineral (E1) (I RR                      | WLRA 149B)              | 5 cm Mucky Pe  | eat or Peat (S3) (LRR I   | K, L, R) |
| Stratified Layers (A5)                                 | Loamy Gleyed M                    |  | κ, Ε)                   |  | S7) (LRR K, L, M)<br>w Surface (S8) (LRR I  |          |
| _ Depleted Below Dark Surface (A11)                    | Depleted Matrix                   |  |                         | Thin Dark Surfa  | ace (S9) (LRR K, L)   | (, L)    |
| _ Thick Dark Surface (A12)                             | Redox Dark Surf                   | ace (F6)                               |                         |  | e Masses (F12) (LRR   | K.L.R    |
| _ Sandy Mucky Mineral (S1)                             | Depleted Dark S                   |  |                         | Piedmont Floor   | plain Soils (F19) (MLI  | RA 149   |
| Sandy Gleyed Matrix (S4)                               | Redox Depression                  | ons (F8)                               |                         | Mesic Spodic (   | TA6) (MLRA 144A, 14   | 5, 149E  |
| _ Sandy Redox (S5)<br>_ Stripped Matrix (S6)           |                                   |  |                         | Red Parent Ma  |   |          |
| Dark Surface (S7) (LRR R, MLRA 148                     | <b>3B</b> )                       |  |                         | Very Shallow D Other (Explain in the content of th | ark Surface (TF12)<br>in Remarks)   |          |
| dicators of hydrophytic vegetation and w               | vetland hydrology must            | be present, unle                       | ss disturbed o          | or problematic.  |   |          |
| etrictive I aver life charmedle                        |                                   |  |                         |  |   |          |
| estrictive Layer (if observed):                        |                                   |  |                         |  | Linear Con-   | X        |
| estrictive Layer (if observed): Type:                  |                                   |  |                         | Hudela Cail Descent  |   | /        |
| estrictive Layer (if observed):                        | -                                 |  |                         | Hydric Soil Present  | ? Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed): Type: Depth (inches):   |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed): Type: Depth (inches):   |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |
| strictive Layer (if observed):  Type:  Depth (inches): |                                   |  |                         | Hydric Soil Present  | 7 Yes No  |          |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: Investigator(s): DJL Section, Township, Range: Local relief (concave, convex, none): Landform (hillslope, terrace, etc.): \_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: Soll Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation M, Soil ND, on Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If ves. optional Wetland Site ID Yes No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) ✓ High Water Table (A2) Aguatic Fauna (B13) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Depth (inches): Water Table Present? Wetland Hydrology Present? Saturation Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 301)            | % Cover | Dominant Indicator Species? Status   | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)  |
|--|---------|--|--|
| 23                                       |         |  | Total Number of Dominant Species Across All Strata: (B)  |
| <b>45</b>                                |         |  | Percent of Dominant Species That Are OBL, FACW, or FAC: 105 - (A/B)  |
| 6  |         |  | Prevalence Index worksheet:  |
| Sapling/Shrub Stratum       (Plot size:  | _       |  | OBL species       x 1 =  |
| 5  |         |  | Prevalence Index = B/A =   |
| 6  |         |  | Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation  |
| _1                                       | 0       | = Total Cover  | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |
| 1. Junes of tusus  2. Como x vulpinordia | 3/1     | JEST FREE  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| 3. Oroclen sensibilis                    |         | NO FACE  | ¹Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 4. Exilobium 3P.<br>5. Aglar 5 2.        |         |  | Definitions of Vegetation Strata:  |
| 6. Pag falasts<br>7. Juneus 20.          | 10      | NO FAC   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 8  |         |  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 10                                       |         | CONT. AND TO SERVICE STATE OF THE PARTY OF T | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 12                                       | 10.5    |  | Woody vines – All woody vines greater than 3.28 ft in height.  |
| Woody Vine Stratum (Plot size:)          | 135     | = Total Cover 67.5   |  |
| 2.                                       |         |  | Hydrophytic<br>Vegetation  |
| 3  | _       |  | Present? Yes No  |
| 4  |         |  |  |

| Depth      | Matrix                                      |             | Redox                           | Features   | - 1               | 1 2         | T                          |          | Remarks     |     |
|------------|---|-------------|---------------------------------|------------|-------------------|-------------|----------------------------|----------|-------------|-----|
| nches)     | Color (moist)                               | %           | Color (moist)                   | %          | Type <sup>1</sup> | _Loc²       | Texture                    |          | Remarks     |     |
| -20        | 1042 3/1                                    | 90          | 7.5 42 3/4                      | 10         |                   | M           | 5, / Joan                  |          |             |     |
|            | <u> </u>                                    |             | -                               |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   | 4           |                            | ą)       |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            | 140      |             |     |
|            | - 5   |             |                                 |            |                   |             | 1                          |          |             |     |
|            |   |             | (                               |            |                   |             |                            |          |             |     |
| TANK       |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
| Гуре: С=С  | oncentration, D=Dep                         | oletion, RM | I=Reduced Matrix, MS            | =Masked    | Sand G            | rains.      | <sup>2</sup> Location; PL= | Pore Lin | ing, M=Matr | ix. |
|            | Indicators:                                 |             |                                 |            |                   |             | Indicators for P           |          |             |     |
| _ Histosol |   |             | Polyvalue Below                 | Surface    | (S8) (LF          | RR,         | 2 cm Muck (                |          |             |     |
|            | olpedon (A2)                                |             | MLRA 149B)                      | · (CO) (I  | DD D 8            | U DA 440D\  | Coast Prairie 5 cm Mucky   |          |             |     |
| _ Black Hi |   |             | Thin Dark Surface Loamy Mucky M |            |                   |             | Dark Surfac                |          |             |     |
|            | en Sulfide (A4)<br>d Layers (A5)            |             | Loamy Gleyed M                  |            |                   | ν, Ε,       | Polyvalue B                |          |             |     |
|            | d Below Dark Surfac                         | ο (Δ11)     | Depleted Matrix                 |            | ,                 |             | Thin Dark S                |          |             |     |
|            | ark Surface (A12)                           | c (ATT)     | Redox Dark Surf                 |            |                   |             | Iron-Mangar                |          |             |     |
|            | Mucky Mineral (S1)                          |             | _ Depleted Dark S               |            |                   |             | Piedmont FI                |          |             |     |
|            | Gleyed Matrix (S4)                          |             | Redox Depression                |            | .,                |             | Mesic Spod                 |          |             |     |
|            | Redox (S5)                                  |             | Nedox Depressi                  | 3113 (1 0) |                   |             | Red Parent                 |          |             |     |
|            | Matrix (S6)                                 |             |                                 |            |                   |             | Very Shallow               |          |             | 2)  |
|            | rface (S7) (LRR R, I                        | MLRA 149    | <b>OB</b> )                     |            |                   |             | Other (Expla               |          |             |     |
|            | f hydrophytic vegeta<br>Layer (if observed) |             | vetland hydrology must          | be prese   | ent, unle         | s disturbed | or problematic.            |          | <u> </u>    |     |
| Type:      |   | •           |                                 |            |                   |             |                            |          |             |     |
| Depth (in  |   |             | -                               |            |                   |             | Hydric Soil Pres           | ent? Y   | es 🖊        | No  |
| Remarks:   | ones).                                      |             |                                 |            |                   |             |                            |          |             |     |
| emarks.    |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             | *   |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |
|            |   |             |                                 |            |                   |             |                            |          |             |     |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_\_\_ City/County: Chautauqua County Sampling Date: 1// 86 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC Section, Township, Range:\_\_\_\_ Investigator(s): Valor Local relief (concave, convex, none): \_\_\_\_ Subregion (LRR or MLRA): LRR-R NWI classification: Soil Map Unit Name: Bust 5 No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes Are Vegetation Mo, Soil MO, or Hydrology MO significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation No . Soil No , or Hydrology No naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: No Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) Surface Water (A1) \_ Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) \_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_ X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No welland hydrology indicates present

| 3-1                                    | Absolute | Dominant Indicator | Dominance Test worksheet:  |                                     |
|--|----------|--------------------|--|-------------------------------------|
| Tree Stratum (Plot size: 30 )          | % Cover  | Species? Status    | Number of Dominant Species   |                                     |
| 1                                      |          |                    | That Are OBL, FACW, or FAC   | : (A)                               |
| 2                                      |          |                    | Total Number of Dominant   | 0                                   |
| 3                                      |          |                    | Species Across All Strata:   |                                     |
| 4                                      |          |                    | Percent of Dominant Species  | 20                                  |
| 5                                      |          |                    | That Are OBL, FACW, or FAC:  | : (A/B                              |
| 3                                      |          |                    | Prevalence Index worksheet:  |                                     |
|  |          |                    | Total % Cover of:  |                                     |
| i ai                                   | 0        | = Total Cover      | OBL species  |                                     |
| Sapling/Shrub Stratum (Plot size: 151) |          |                    | FACW species   |                                     |
|  |          |                    |  | x 3 =                               |
|  |          |                    | FACU species   |                                     |
|  |          |                    |  | x 5 =                               |
|  |          |                    | Column Totals:   |                                     |
|  | -        |                    |  |                                     |
| <u> </u>                               |          |                    | Prevalence Index = B/A   |                                     |
|  |          |                    | Hydrophytic Vegetation Indic   | ators:                              |
|  |          |                    | 1 - Rapid Test for Hydroph   | ytic Vegetation                     |
| -1                                     | 0        | = Total Cover      | 2 - Dominance Test is >50  | %                                   |
| lerb Stratum (Plot size:)              |          |                    | 3 - Prevalence Index is ≤3.  |                                     |
| Pactulis glometata                     | 70       | 4EG FACH           | 4 - Morphological Adaptati<br>data in Remarks or on a                            | ons <sup>1</sup> (Provide supportin |
| Phoun pratonse                         | 25       | UBS FACE           | Problematic Hydrophytic V  |                                     |
| Solidano affissima                     | 25       | 1/8/               |  | Commence of the second              |
| 6                                      | 1/3      | MES FALLY          | <sup>1</sup> Indicators of hydric soil and we<br>be present, unless disturbed or |                                     |
| Transcola wit siniaga                  | 10       | No 1000            |  |                                     |
| Plantage lanceplata                    | 10       | NO FACU            | Definitions of Vegetation Stra   | ıta:                                |
| lotus conjulates                       | 10       | NO FREY            | Tree - Woody plants 3 in. (7.6   |                                     |
| Kubys alleghaniensis                   | _5       | NO FACY            | at breast height (DBH), regardle   | ess of height.                      |
| -                                      |          |                    | Sapling/shrub - Woody plants   | less than 3 in. DBH                 |
|  |          |                    | and greater than or equal to 3.3   | 28 ft (1 m) tall.                   |
| 0                                      |          |                    | Herb - All herbaceous (non-wood  | ly) plants, regardless of           |
| 1.                                     |          |                    | size, and woody plants less than 3.  | 28 ft tall.                         |
| 2.                                     |          |                    | Woody vines - All woody vines g  | reater than 3.28 ft in              |
|  | 155      | = Total Cause      | height.  |                                     |
| Voody Vine Stratum (Plot size: 30/)    | 1111     | = Total Cover 77.5 |  |                                     |
| YOURY VINC STRAIGHT (Flot size.        |          | 31                 |  |                                     |
|  |          |                    | Hydrophytic  |                                     |
|  |          |                    | Vegetation   | ~                                   |
|  |          |                    | Present? Yes   | _ No                                |
| <u> </u>                               |          |                    |  |                                     |
|  | 0        | = Total Cover      |  |                                     |

| epth                                     | Matrix              |             | Color (moist)       | Features %               | Type <sup>1</sup> | _Loc2_      | Texture               | Remarks  |
|--|---------------------|-------------|---------------------|--------------------------|-------------------|-------------|-----------------------|--|
| ches) Colo                               | r (moist)           | %           | Color (moist)       |                          | Турс              |             | 5,1+/an               |  |
| -9 104                                   | 23/1                | 100         |                     |                          |                   | 10          | /                     |  |
| -19 10%                                  | 15/3                | 90          | 7.5 4 5/6           | 10                       | _                 | 101         | 5:11/00               | 7,   |
|  |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     |                          |                   | -           | -                     |  |
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|  |                     |             |                     |                          |                   | -           | )                     |  |
|  |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     | -                        |                   |             |                       | - Walter Company   |
|  |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     |                          |                   | -           |                       |  |
|  |                     |             |                     | -                        |                   | -           |                       |  |
|  |                     |             |                     |                          |                   |             |                       |  |
| vpe: C=Concentra                         | ation, D=Dep        | letion, RM  | =Reduced Matrix, M  | S=Maske                  | d Sand G          | rains.      | <sup>2</sup> Location | : PL=Pore Lining, M=Matrix.<br>for Problematic Hydric Solls <sup>3</sup> : |
| dric Soil Indicate                       |                     |             |                     |                          |                   |             |                       |  |
| _ Histosol (A1)                          |                     |             | Polyvalue Belo      |                          | (S8) (LF          | RR,         | 2 cm N                | fluck (A10) (LRR K, L, MLRA 149B)<br>Prairie Redox (A16) (LRR K, L, R)     |
| _ Histic Epipedon                        |                     |             | MLRA 149E           |                          | 1 DD D 1          | II DA 149F  |                       | Mucky Peat or Peat (S3) (LRR K, L, R)                                      |
| _ Black Histic (A3                       |                     |             | Thin Dark Surf      | ace (59) (<br>Mineral (F | 1) (LRR           | K. L)       | Dark S                | Surface (S7) (LRR K, L, M)   |
| _ Hydrogen Sulfid<br>_ Stratified Layers |                     |             | Loamy Gleyed        |                          |                   | ., -/       | Polyva                | lue Below Surface (S8) (LRR K, L)  |
| _ Stratified Layers                      |                     | ce (A11)    | Depleted Matr       |                          |                   |             | Thin D                | eark Surface (S9) (LRR K, L)   |
| Thick Dark Surf                          |                     |             | Redox Dark S        | urface (F6               |                   |             | Iron-M                | anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 1498  |
| Sandy Mucky M                            |                     |             | Depleted Dark       |                          |                   |             | Pleam                 | Spodic (TA6) (MLRA 144A, 145, 149B   |
| _ Sandy Gleyed I                         |                     |             | Redox Depres        | sions (F8)               | )                 |             | Red P                 | arent Material (F21)   |
| _ Sandy Redox (                          |                     |             |                     |                          |                   |             | Very S                | Shallow Dark Surface (TF12)  |
| Stripped Matrix Dark Surface (\$         | (SO)<br>S7) (LRR R. | MLRA 149    | (B)                 |                          |                   |             | Other                 | (Explain in Remarks)   |
|  |                     |             |                     |                          |                   | odan-a      |                       |  |
| indicators of hydro                      | phytic vegeta       | ation and w | etland hydrology mu | ust be pre               | sent, unle        | ss disturbe | ed or problemati      | C.   |
| Restrictive Layer (                      |                     |             |                     |                          |                   |             |                       | ~  |
| Туре:                                    |                     |             | -                   |                          |                   |             | Hudric Sol            | I Present? Yes No  |
| Depth (inches):_                         |                     |             | -                   |                          |                   |             | Hydric 301            | TPT636HCT 100  |
| Remarks:                                 |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     |                          |                   |             |                       |  |
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|  |                     |             |                     |                          |                   |             |                       |  |
|  |                     |             |                     |                          |                   |             |                       |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date:// Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC NY Sampling Point: DP-State: Investigator(s): DTL, VJM Section, Township, Range: Local relief (concave, convex, none): Landform (hillslope, terrace, etc.): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Long: Soil Map Unit Name: Chantaugua 51/1+ NWI classification: (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_X Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes 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. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID:\_ Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) → Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| % Cover | Species?    | Status                            | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                |
|---------|-------------|-----------------------------------|--|
|         |             |                                   | Total Number of Dominant Species Across All Strata: (B)  |
|         |             |                                   | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B   |
|         |             |                                   | Prevalence Index worksheet:  |
| 0       | = Total Cov | er                                |  |
|         | 1000        | -                                 | FACW species x 2 =   |
| 50      | 1/65        | FAC                               | FAC species x 3 =  |
| , ,     |             |                                   | FACU species x 4 =   |
|         |             |                                   | UPL species x 5 =  |
|         |             |                                   | Column Totals: (A) (B)   |
|         |             |                                   | Prevalence Index = B/A =   |
|         |             |                                   | Hydrophytic Vegetation Indicators:   |
| 12      |             |                                   | 1 - Rapid Test for Hydrophytic Vegetation  Z 2 - Dominance Test is >50%                              |
| 224     | - Total Cov | ei                                | 3 - Prevalence Index is ≤3.01  |
| 7.      | Vic         | +                                 | 4 - Morphological Adaptations¹ (Provide supporting   |
|         | Mos         | 10/1                              | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)               |
| -       | 11/2        | Lor                               |  |
|         |             | VELL                              | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|         |             |                                   | Definitions of Vegetation Strata:  |
|         |             |                                   | Tree – Woody plants 3 in. (7.6 cm) or more in diamete  |
|         |             |                                   | at breast height (DBH), regardless of height.  |
|         |             |                                   | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
|         |             |                                   | Herb – All herbaceous (non-woody) plants, regardless of  |
|         |             |                                   | size, and woody plants less than 3.28 ft tall.   |
|         |             |                                   | Woody vines - All woody vines greater than 3.28 ft in  |
| 35      |             |                                   | height.  |
| 23      | = ⊺otal Cov | er/1.5                            |  |
|         |             |                                   |  |
|         |             |                                   | Hydrophytic  |
|         |             |                                   | Present? Yes No  |
|         |             |                                   |  |
| 0       | = Total Cov | er                                |  |
| sheet.) | - Total Cov | <u> </u>                          |  |
|         | % Cover     | % Cover Species?  = Total Cov  BO |  |

| Profile Description: (Describe to the de   | epth needed to docum                                   | ent the indi      | cator or confirm                  | the absence of in | dicators.)   |
|--|--|-------------------|-----------------------------------|-------------------|--|
| Depth Matrix (inches) Color (moist) %  | Color (moist)  | <u>Features</u> T | ype <sup>1</sup> Loc <sup>2</sup> | Texture           | Remarks  |
| (inches) Color (molst) %   | 7,5413/4   | 10                | C M                               | Silt /oan         | A Local Industrial Advances and |
| D-60 101R2/1 10  | 10 10 4  |                   |                                   | 2111 1000         |  |
| was to be a second of the seco |  |                   |                                   |                   |  |
|  | #0 1 <del>4-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-</del> |                   |                                   |                   |  |
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| ¹Type: C=Concentration, D=Depletion, R   | M=Reduced Matrix, MS                                   | S=Masked Sa       | and Grains.                       |                   | =Pore Lining, M=Matrix.  |
| Hydric Soil Indicators:  |  |                   |                                   |                   | Problematic Hydric Soils <sup>3</sup> :  |
| Histosol (A1)  | Polyvalue Belov  |                   | B) (LRR R,                        |                   | (A10) (LRR K, L, MLRA 149B)  |
| Histic Epipedon (A2)   | MLRA 149B)   |                   |                                   |                   | rie Redox (A16) (LRR K, L, R)  |
| Black Histic (A3) Hydrogen Sulfide (A4)  | Inin Dark Surfa  |                   | RR, MLRA 149E                     | •                 | y Peat or Peat (S3) (LRR K, L, R)<br>ce (S7) (LRR K, L, M)   |
| Stratified Layers (A5)   | Loamy Gleyed   |                   |                                   |                   | Selow Surface (S8) (LRR K, L)  |
| Depleted Below Dark Surface (A11)  | Depleted Matrix  | (F3)              |                                   |                   | Surface (S9) (LRR K, L)  |
| Thick Dark Surface (A12)   | X Redox Dark Su  |                   |                                   |                   | anese Masses (F12) (LRR K, L, R)   |
| Sandy Mucky Mineral (S1)   | Depleted Dark  |                   |                                   |                   | Floodplain Soils (F19) (MLRA 149B)<br>dic (TA6) (MLRA 144A, 145, 149B)   |
| Sandy Gleyed Matrix (S4) Sandy Redox (S5)  | Redux Depress  | ions (Fo)         |                                   |                   | t Material (F21)   |
| Stripped Matrix (S6)   |  |                   |                                   | Very Shallo       | ow Dark Surface (TF12)   |
| Dark Surface (S7) (LRR R, MLRA 14  | 9B)  |                   |                                   | Other (Exp        | lain in Remarks)   |
| <sup>3</sup> Indicators of hydrophytic vegetation and  | wotland bydrology mus                                  | t he present      | unless disturbe                   | d or problematic  |  |
| Restrictive Layer (if observed):   | wettand frydrology mus                                 | t be present      | uniess distarbe                   | T problematic.    | 12 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A   |
| Type:  |  |                   |                                   |                   | . 1  |
| Depth (inches):  | _  |                   |                                   | Hydric Soil Pres  | sent? Yes No   |
| Remarks:   |  |                   |                                   |                   | - A - A - A - A - A - A - A - A - A - A  |
| Normal Roy   |  |                   |                                   |                   |  |
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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County \_\_\_ Sampling Date: 1// 06/ Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC Villenous Section, Township, Range: Investigator(s): DJC UTM Local relief (concave, convex, none): \_\_\_ Landform (hillslope, terrace, etc.): \_\_\_\_\_// Subregion (LRR or MLRA): LRR-R NWI classification: Soil Map Unit Name: \_ Busti 0000 (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation NO, Soil No, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes (If needed, explain any answers in Remarks.) Are Vegetation Mo, Soil Mo, or Hydrology Ma naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area No Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID:\_ No Yes Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) Aquatic Fauna (B13) \_\_ High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: No Depth (inches): Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes No \_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No without hydrology indiani-

| Absolute<br>% Cover | Dominian    |   |   |
|---------------------|-------------|---|---|
|                     | Species?    | Indicator<br>Status   | Dominance Test worksheet:   |
| 30                  | VES         | PACH  | Number of Dominant Species That Are OBL, FACW, or FAC:(A)         |
| 10                  | 10          | FACU.   |   |
| 20                  | 465         | Faces   | Total Number of Dominant Species Across All Strata:  (B)          |
|                     | -11-3       | A CHANGE  | Openies Across Air Strata.  |
|                     |             |   | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)     |
|                     |             |   | That Are OBL, FACW, or FAC: (A/B)                                 |
|                     |             |   | Prevalence Index worksheet:                                       |
|                     |             |   | Total % Cover of: Multiply by:                                    |
| 60                  | = Total Cov | er 30   | OBL species x 1 =   |
|                     |             | 12  | FACW species x 2 =  |
| 30                  | YEC         | Fare  | FAC species x 3 =   |
|                     |             |   | FACU species x 4 =  |
|                     |             |   | UPL species x 5 =   |
|                     |             |   | Column Totals: (A) (B)  |
|                     |             |   | (7)   |
|                     |             |   | Prevalence Index = B/A =  |
|                     |             |   | Hydrophytic Vegetation Indicators:                                |
|                     |             |   | 1 - Rapid Test for Hydrophytic Vegetation                         |
|                     |             |   | 2 - Dominance Test is >50%  |
| 10                  | = Total Cov | er  | 3 - Prevalence Index is ≤3.0¹                                     |
| Sett.               | .0 -0       | -   | 4 - Morphological Adaptations¹ (Provide supporting                |
| 300                 | 165         | FRU   | data in Remarks or on a separate sheet)                           |
| 10                  | 485         | FALG  | Problematic Hydrophytic Vegetation¹ (Explain)                     |
| 10                  | MO          | FALL  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must |
|                     | NO          |   | be present, unless disturbed or problematic.                      |
|                     | ~           | -   |   |
|                     |             |   | Definitions of Vegetation Strata:                                 |
|                     |             |   | Tree - Woody plants 3 in. (7.6 cm) or more in diameter            |
|                     |             |   | at breast height (DBH), regardless of height.                     |
|                     |             |   | Sapling/shrub - Woody plants less than 3 in. DBH                  |
|                     |             |   | and greater than or equal to 3.28 ft (1 m) tall.                  |
|                     |             |   | Herb - All herbaceous (non-woody) plants, regardless of           |
|                     |             |   | size, and woody plants less than 3.28 ft tall.                    |
|                     |             |   | Woody vines - All woody vines greater than 3.28 ft in             |
|                     |             |   | height.   |
| 70 =                | Total Cove  | er 36   | - 81  |
|                     |             | 14  |   |
|                     |             | 1 /   |   |
|                     |             |   | Hydrophytic   |
|                     |             |   | Vegetation Present? Yes No  |
|                     |             |   | Trosonti No A   |
|                     |             |   |   |
| 0 =                 | Total Cove  | er  |   |
|                     | 30          | 30 = Total Cov 30 = Total Cov 30 = Total Cov 30 = Total Cov 40   10   10   10   10   10   10   10 | 30 = Total Cover 30 12 30   |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Thydroson Indicators:  Indicators for Problematic Hydric Soils*  Indicators for Problematic Hydric Soils*  To coast Praine Redox (A16) (LRR K, L, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Piedmont Floodplain Soils (F19) (MLR Sandy Gleven Matrix (F3)  Picture Remarks  Taxture Remarks  To coast Praine Redox (A16) (LRR K, L)  Dark Surface (S9) (LRR K, L)  Dark Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Depleted Dark Surface (F7)  Piedmont Floodplain Soils (F19) (MLR  | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Indicators for Problematic Hydric Solis*:  2 cm Muck (A10) (LRR K, L, MRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  5 cm Muck (A10) | Jeptn  |  | Matrix                         |           | Red   | ox Feature   | S                      |                  | n the absence of ind  | SCHOOL A   |
|--|--|--|--|--------------------------------|-----------|---|--|------------------------|------------------|---|--|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Purice Soil Indicators:  Histosol (A1)  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Mucky Mineral (S1)  Sandy Redox (S5)  Stripped Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145 Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)  midicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Concentration   |  |  | noist)                         | %_        | Color (moist)   |  |                        | Loc <sup>2</sup> | Texture   | Remarks  |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Pl=Pore Lining, M=Matrix, Indicators: Indicators for Problematic Hydric Soils (Sal) (LRR R, Histic Epipedon (A2) MIRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Stratified (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Matrix (F3) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Redox Dark Surface (F6) Thin Dark Surface (F6) Sandy Micky Mineral (S1) Depleted Dark Surface (F6) Thin Dark Surface (F7) Redox Dark Surface (F8) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, Sandy Mucky Mineral (S1) Depleted Dark Surface (F8) (LRR K, L) Redox Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Pledmont Floodplain Soils (F9) (MLR Sandy Redox (S5) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, Sandy Mucky Mineral (S1) Depleted Dark Surface (F8) Redox Depressions (F8) Redox Depressions (F8) Red Parent Material (F21) Very Shallow Dark Surface (F7) Redox Dark Surface (S7) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L) Iron-Manga | Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Concentration   | 1-5  | 1048   | 3/4                            | 100       | 44  | _  | _                      | _                | 5/11/0000   |  |
| Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histosol (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) — Stratified Layers (A3) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, M) — Depleted Below Dark Surface (A11) — Depleted Matrix (F2) — Polyvalue Below Surface (S7) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyv | Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, RL A149B) — Coast Prairie Redox (A16) (LRR K, L, R) — Coast (S7) (LRR K, L) — Coast  | 5-18   | 1042   | 4/4                            | 100       | -   |  |                        |                  | - 11  |  |
| Histosol (A1) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) Charles A (A12) Coast Prairie Redox (A16) (LRR K, L, M) Coast Prairie Redox (A16) (LRR K, L, M) Coast Prairie Redox (A16) (LRR K, L, M) Dark Surface (S7) (LRR K, L, M) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L) Piedmont Floodplain Soils (F19) (MLR K, L) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145 (F2) Mesic Spodic (TA6) (MLRA 144A, 145 (F2) Dark Surface (S7) (LRR R, MLRA 149B)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  | Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, R) — Stratified Layers (A5) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S9) (LRR R, MLRA 149B) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR K, L) — Dark Surface (S9) (LRR K, L) — Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Piedmont Floodplain Soils (F19) (MLRA 14 Sandy Redox (S5) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145, 14 Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Depth (inches): — Hydric Soil Present? Yes No   |  |  |                                |           |   |  | _                      |                  |   |  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Below Dark Surface (A19) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F8) Sandy Redox (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  | Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stratified Layers (A5) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F7) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (S7) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix (S6) Dark Surface (S9) Stripped Matrix |  |  |                                |           |   | _  |                        |                  |   |  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Dark Surface (S7) Chark Redox Depressions (F8) Dark Surface (S7) Chark Redox Depresent, unless disturbed or problematic.  Indicators for Problematic Hydric Soils  — 2 cm Muck (A10) (LRR K, L, MLRA 14 — Coast Prairie Redox (A16) (LRR K, L, L, L) — Coast Prairie Redox (A16) (LRR K, L, L) — Dark Surface (S7) (LRR K, L, M) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Iron-Manganese Masses (F12) (LRR K, L) — Piedmont Floodplain Soils (F19) (MLR R, L) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145 — Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   | Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, R) — Straitifed Layers (A5) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S9) (LRR R, MLRA 149B) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) — Stratified Layers (A5) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR K, L) — Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Piedmont Floodplain Soils (F19) (MLRA 14 Sandy Redox (S5) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145, 14 Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  |  |  |                                |           |   |  | _                      |                  |   | The second secon |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Dark Surface (S7) Chark Redox Depressions (F8) Dark Surface (S7) Chark Redox Depresent, unless disturbed or problematic.  Indicators for Problematic Hydric Soils  — 2 cm Muck (A10) (LRR K, L, MLRA 14 — Coast Prairie Redox (A16) (LRR K, L, L, L) — Coast Prairie Redox (A16) (LRR K, L, L) — Dark Surface (S7) (LRR K, L, M) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Iron-Manganese Masses (F12) (LRR K, L) — Piedmont Floodplain Soils (F19) (MLR R, L) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145 — Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.   | Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, R) — Straitifed Layers (A5) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S9) (LRR R, MLRA 149B) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) — Stratified Layers (A5) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR K, L) — Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Piedmont Floodplain Soils (F19) (MLRA 14 Sandy Redox (S5) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 145, 14 Red Parent Material (F21) — Very Shallow Dark Surface (TF12) — Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  |  |  |                                |           |   |  |                        |                  |   |  |
| Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histosol (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) — Stratified Layers (A3) — Thin Dark Surface (S9) (LRR R, MLRA 149B) — 5 cm Mucky Peat or Peat (S3) (LRR K, L, M) — Depleted Below Dark Surface (A11) — Depleted Matrix (F2) — Polyvalue Below Surface (S7) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S8) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Thin Dark Surface (S9) (LRR K, L) — Polyvalue Below Surface (S9) (LRR K, L) — Polyv | Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) — MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, RL A149B) — Coast Prairie Redox (A16) (LRR K, L, R) — Coast (S7) (LRR K, L) — Coast  |  |  |                                |           | -   |  |                        |                  |   |  |
| Histosof (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thin Dark Surface (F1) (LRR K, L) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Stratified Layers (A5) Depleted Dark Surface (F7) Sandy Redox (A12) Sandy Redox (A13) Sandy Redox (A14) Sandy Redox (A15) Depleted Dark Surface (F7) Sandy Redox (A16) Sandy Redox (A17) Depleted Dark Surface (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Sandy Redox (A18) Depleted Dark Surface (A18) Sandy Redox (A18) Sandy Redox (A18) Sandy Redox (A19) Dark Surface (A18) Sandy Redox (A19) Dark Surface (A19) Sandy Redox (A19) Dark Surface (A19) Depleted Dark Surface (A19) Dark | Histosch (A1) Histoc Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thic Dark Surface (F6) Thic Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Redox (S5) Stripped Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Dark Surface (S7) (LRR K, L) Redox Depressions (F8)  Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Coast Prairie Redox (A16) (LRR K, L, R) Som Mucky Peat or Peat (S3) (LRR K, L, L) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L, M) Polyvalue Below Surface (S9) (LRR K, L) Polyvalue Surface (S9) (LRR K, L) Polyvalue Sur | dric son in  | idicators:   | D=Deple                        | etion, RM | =Reduced Matrix, MS   | S=Masked   | Sand Grai              | ns.              | <sup>2</sup> Location: PL=P   | ore Lining, M=Matrix.  |
| Strictive Layer (if observed):   | Type: Depth (inches): Hydric Soil Present? Yes No  | Histic Epip Black Hist Hydrogen Stratified I Depleted I Thick Dark Sandy Mu Sandy Gle Sandy Rec Stripped M | pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Below Dark k Surface (A icky Mineral eyed Matrix ( dox (S5) Matrix (S6) | Surface<br>12)<br>(S1)<br>(S4) |           | MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi | ce (S9) (LI<br>fineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F7 | RR R, MLF<br>(LRR K, I | RA 149B)         | 2 cm Muck (A Coast Prairie F 5 cm Mucky P Dark Surface ( Polyvalue Belo Thin Dark Surf Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma | IO) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) eat or Peat (S3) (LRR K, L, I) S7) (LRR K, L, M) ew Surface (S8) (LRR K, L) ace (S9) (LRR K, L) se Masses (F12) (LRR K, L, dplain Soils (F19) (MLRA 14 TA6) (MLRA 144A, 145, 148 terial (F21) eark Surface (TF12)  |
|  | Type:  | dicators of h  | ydrophytic v   | rved):                         | n and we  | tland hydrology must  | be presen  | t, unless d            | isturbed o       | or problematic.   |  |
| Depth (inches):  | nydric Soil Present? Yes No  | Туре:  |  |                                |           |   |  |                        |                  |   |  |
| emarks: No_  |  | narks:   |  |                                |           |   |  |                        |                  | nyaric Soil Present   | 7 Yes No   |
|  |  |  |  |                                |           |   |  |                        |                  |   |  |
|  |  |  |  |                                |           |   |  |                        |                  |   |  |
|  |  |  |  |                                |           |   |  |                        |                  |   |  |

|                                       | roject   | City/County: Chaut              |                   | NIV.   | DP. 7                                   |
|---------------------------------------|--|---------------------------------|-------------------|--|---|
| plicant/Owner: Ball Hill Wir          | nd Energy, LLC   |                                 |                   | 1010   | Sampling Point: DP- 77                  |
| restigator(s):                        |  | Section, Township, R            | Range:            | Allerous   |   |
| ndform (hillslope, terrace, etc.)     | Deportssin   | Local relief (concave, co       | onvex, none):     | Colav  |   |
| bregion (LRR or MLRA): LRF            |  | 7. 133863 L                     | ong: 44           | .43370.  | Datum: NAD 83                           |
| I Map Unit Name: Ashui                |  | (AS)                            |                   | NWI classificat  | ion: PFO                                |
| e climatic / hydrologic condition     |  | ime of year? Yes No             | ) (if n           | o, explain in Rer  | marks.)                                 |
|                                       |  |                                 |                   |  | esent? Yes No                           |
| e Vegetation No., Soil                |  |                                 |                   |  |   |
| e Vegetation <u>W</u> , Soil <u>N</u> | national nation of the national nationa | urally problematic? (If         | r needed, expi    | ain any answers  | III Nemarks./                           |
| HAMARY OF EINDING                     | S Attach eite man e  | howing sampling point           | t locations       | transects.   | important features, et                  |
| UMMARY OF FINDING                     | 3 - Allach Sile map s  | Towning sampling point          | 1000110110        | 1 9  | 111100000000000000000000000000000000000 |
| lydrophytic Vegetation Presen         | nt? Yes No   | Is the Sampl                    |                   | 400  | Na                                      |
| lydric Soil Present?                  | Yes No   | within a Wet                    | tland?            | Yes  | . No                                    |
| Vetland Hydrology Present?            | Yes No   | If yes, options                 | nal Wetland Si    | te ID: ML  | Wet                                     |
| Remarks: (Explain alternative         | procedures here or in a sepa   | rate report.)                   |                   |  |   |
|                                       | Ay   |                                 |                   |  |   |
|                                       |  |                                 |                   |  |   |
|                                       |  |                                 |                   |  |   |
|                                       |  |                                 |                   |  |   |
|                                       |  |                                 |                   |  |   |
|                                       |  |                                 |                   |  |   |
|                                       |  |                                 |                   |  |   |
| YDROLOGY                              |  |                                 |                   |  |   |
| Wetland Hydrology Indicator           |  |                                 | Se                |  | ors (minimum of two required            |
| Primary Indicators (minimum o         | of one is required; check all the  | at apply)                       |                   | _ Surface Soil C   |   |
| Surface Water (A1)                    | -  | r-Stained Leaves (B9)           | 9                 | ∠Drainage Patt   |   |
| X High Water Table (A2)               | Aqua   | tic Fauna (B13)                 | -                 | _ Moss Trim Lin  |   |
| ≤ Saturation (A3)                     |  | Deposits (B15)                  | -                 | The second secon | Vater Table (C2)                        |
| Water Marks (B1)                      |  | ogen Sulfide Odor (C1)          |                   | _ Crayfish Burro   |   |
| Sediment Deposits (B2)                |  | zed Rhizospheres on Living R    | Roots (C3) _      |  | sible on Aerial Imagery (C9)            |
| Drift Deposits (B3)                   |  | ence of Reduced Iron (C4)       | all and the       |  | ressed Plants (D1)                      |
| Algal Mat or Crust (B4)               | Rece   | nt Iron Reduction in Tilled Soi | ils (C6)          | Ceomorphic F   |   |
| Iron Deposits (B5)                    | Thin   | Muck Surface (C7)               | _                 | _ Shallow Aquit  |   |
| Inundation Visible on Aeri            | al Imagery (B7) Othe   | r (Explain in Remarks)          |                   |  | phic Relief (D4)                        |
| Sparsely Vegetated Conc               |  |                                 | -                 | _ FAC-Neutral  | Test (D5)                               |
| Field Observations:                   |  |                                 |                   |  |   |
| Surface Water Present?                | Yes X No Dep   | th (inches):                    |                   |  |   |
| Water Table Present?                  | Yes No Dep   | th (inches):                    |                   |  | /                                       |
| Saturation Present?                   | Yes No Dep   | th (inches):                    | Wetland Hy        | drology Presen   | t? Yes No                               |
| (includes capillary fringe)           |  | 10. 1                           | tions) if ougils  | able   |   |
| Describe Recorded Data (stre          | am gauge, monitoring well, a   | erial photos, previous inspect  | tions), ii availa | able.  |   |
|                                       |  |                                 |                   |  |   |
|                                       |  |                                 | -                 |  |   |
| Jamarka:                              |  |                                 |                   |  |   |
| Remarks:                              |  |                                 |                   |  |   |

| Tree Stratum (Plot size:3(0) <sup>1</sup> ) | Absolute                      | Dominant Indicator Species? Status | Dominance Test worksheet:   |
|---|-------------------------------|------------------------------------|---|
| 1. fraxings Jenney wan ica                  |                               | YES FACES                          | Number of Dominant Species  |
| 2. Betula allambenilosis                    | -3                            |                                    | That Are OBL, FACW, or FAC: (A)   |
| 3   |                               |                                    | Total Number of Dominant Species Across All Strata:(B)  |
| 4,  |                               |                                    | Percent of Dominant Species   |
| 5   |                               |                                    | That Are OBL, FACW, or FAC: 100 6 (A/B)   |
| 6   |                               |                                    | Prevalence Index worksheet:   |
| 7   |                               |                                    | Total % Cover of: Multiply by:  |
| Sapling/Shrub Stratum (Plot size: 15)       | 10                            | = Total Cover                      | OBL species x 1 =   |
|   | 9.                            | 2                                  | FACW species x 2 =  |
| 1. Mm Sameri Cara                           | 10                            | MES FACW                           | FAC species x 3 =   |
| 2. petula allegheniensic                    | 10                            | TRS FROM                           | FACU species x 4 =  |
| 3   |                               |                                    | UPL species x 5 =<br>Column Totals: (A) (B)   |
| 4   |                               |                                    | Column Totals: (A) (B)  |
| 5   |                               |                                    | Prevalence Index = B/A =  |
| 6   |                               |                                    | Hydrophytic Vegetation Indicators:  |
| 7   |                               |                                    | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 20                            | = Total Cover 10                   | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5 )                | with the second second second | 4                                  | 3 - Prevalence Index is ≤3.01   |
| 1. Onollea sensibilis                       | 30                            | YES TALL                           | 4 - Morphological Adaptations¹ (Provide supporting  |
| Viola Sa                                    | 20                            | YES FAC                            | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)                            |
| 2.  | 100                           |                                    |   |
| 4. Carex en                                 | 10                            | NO FAC                             | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 5. Carex Sp.                                |                               | NO FAC                             | Definitions of Vegetation Strata:   |
| 6   |                               |                                    | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7   |                               |                                    | at breast height (DBH), regardless of height.   |
| 8.  |                               |                                    | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 9.  |                               |                                    | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10.   |                               |                                    | Herb - All herbaceous (non-woody) plants, regardless of   |
| 11.   |                               |                                    | size, and woody plants less than 3.28 ft tall.  |
|   |                               |                                    | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  | 70                            |                                    | height.   |
| Woody Vine Stratum (Plot size:)             | 10                            | = Total Cover 35                   |   |
| 1   |                               |                                    | to decide   |
| 2.  |                               |                                    | Hydrophytic<br>Vegetation   |
| 3   |                               |                                    | Present? Yes No   |
| 4.  |                               |                                    |   |
|   | 0                             | = Total Cover                      |   |

| (inches)  | Matrix   |            |  | x Feature:  | 3  | . 2       | 2  |   | Remarks   |  |
|---|--|------------|--|---|--|-----------|--|---|---|--|
| inches)   | Color (moist)  | %          | Color (moist)  | %   | Type <sup>1</sup>                          | Loc2      |  | -   | Remarks   | 8  |
| 1-2   | 104/2/1  | 100        |  |   |  |           | 2) 1/ acm  |   |   |  |
| 1-/8  | 10415/2  | 95         | 7,5 411 4/6  | 5   | <u>_</u>                                   | M         | Claylan.   | 4 £   | rap   | Quy.   |
|   |  | _          |  |   | _  |           |  |   |   |  |
|   |  |            |  |   |  |           |  |   |   |  |
|   |  |            | *************  |   |  |           |  |   |   |  |
| - 00  | oncentration, D=Dep  | Lakias (DM | Dadward Matrix M   | C=Masks   | Sand Crai                                  | ine       | <sup>2</sup> Location: F   | DI =Pore I  | ining M=N   |  |
| Histosol Histic E Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy 0 | pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) | e (A11)    | Polyvalue Belor MLRA 149B Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress | )<br>ace (S9) (I<br>Mineral (F<br>Matrix (F2<br>x (F3)<br>urface (F6)<br>Surface (I | LRR R, MLI<br>1) (LRR K,<br>2)<br>-<br>-7) | RA 149B   | Coast Property Services of the control of the contr | ck (A10) ( airie Redo cky Peat o face (S7) e Below S c Surface ganese M t Floodpla odic (TA6 ent Materi | LRR K, L,<br>ox (A16) (L<br>or Peat (S3<br>(LRR K, L,<br>curface (S8<br>(S9) (LRR<br>flasses (F1)<br>ain Soils (F | MLRA 149B) RR K, L, R) ) (LRR K, L, R) , M) ) (LRR K, L) K, L) 2) (LRR K, L, R) 19) (MLRA 1498) 44A, 145, 149B |
| Stripped<br>Dark Su   | d Matrix (S6)<br>urface (S7) (LRR R, I   |            |  | Land Co   | 4.0  |           |  | 5,400   |   |  |
| Stripped Dark Su  | urface (S7) (LRR R, I  | tion and w |  | st be pres  | ent, unless                                | disturbed |  |   |   |  |
| Stripped Dark Su Indicators of Restrictive                                  | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed):   | tion and w |  | st be pres  | ent, unless                                | disturbed |  |   |   |  |
| Stripped Dark Su  | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbed |  |   | Yes   |  |
| Stripped Dark Sulfindicators of Restrictive Type: Depth (in                 | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbed | d or problematic.  |   | Yes   | No   |
| Stripped Dark Su Indicators of Restrictive Type:                            | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbec | d or problematic.  |   | Yes   |  |
| Stripped Dark Sundicators of testrictive Type: Depth (in                    | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbec | d or problematic.  |   | Yes   | No_  |
| Stripped Dark Sundicators of Restrictive Type: Depth (in                    | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbed | d or problematic.  |   | Yes   | No   |
| Stripped Dark Sundicators of Restrictive Type: Depth (in                    | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbed | d or problematic.  |   | Yes   | No   |
| Stripped Dark Sundicators of testrictive Type: Depth (in                    | urface (S7) (LRR R, I<br>of hydrophytic vegeta<br>Layer (if observed)  | tion and w |  | st be pres  | ent, unless                                | disturbed | d or problematic.  |   | Yes   | No_  |

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  | t City  | //County: Chautauqua County  | Sampling Date:   |
|---|---|--|--|
| Applicant/Owner: Ball Hill Wind En  |   | State: N   |  |
| nvestigator(s):   |   | ction, Township, Range:  | enova  |
| _andform (hillslope, terrace, etc.):<br>Subregion (LRR or MLRA): LRR-R<br>Soil Map Unit Name:<br>Are climatic / hydrologic conditions on t  | Lat: 79, 1338   | relief (concave, convex, none):  CS Long: 42, 4335  CBSA NWI cla                                   | Datum: NAD 83  |
| Are Vegetation <u>Mo</u> , Soil <u>Mo</u> , or<br>Are Vegetation <u>Mo</u> , Soil <u>MO</u> , or<br>SUMMARY OF FINDINGS – A   | r Hydrology naturally proble  | turbed? Are "Normal Circumstance matic? (If needed, explain any an ampling point locations, transc | nswers in Remarks.)  |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proces  | Yes No Yes No No  | Is the Sampled Area  | No   |
| HYDROLOGY   | 1916  |  |  |
| Wetland Hydrology Indicators:   |   | Secondary  | ndicators (minimum of two required)  |
| Primary Indicators (minimum of one in 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 Images | Water-Stained Lea Aquatic Fauna (B' Aquatic Fauna (B' Marl Deposits (B1 Hydrogen Sulfide Oxidized Rhizospi Presence of Redu Recent Iron Redu Thin Muck Surfac |  | e Soil Cracks (B6) ge Patterns (B10) frim Lines (B16) ason Water Table (C2) th Burrows (C8) ion Visible on Aerial Imagery (C9) d or Stressed Plants (D1) orphic Position (D2) ov Aquitard (D3) opographic Relief (D4) eutral Test (D5) |
| Water Table Present? Yes Saturation Present? Yes (includes capillary fringe)  | No Depth (inches):  No Depth (inches):  No Depth (inches):  | Wetland Hydrology F  | resent? Yes No   |
| Describe Recorded Data (stream ga   | dulogy TAZILA   |  | >  |

| Tree Stratum (Plot size: 30)   | Absolute % Cover | Dominant Indicator<br>Species? Status | Dominance Test worksheet:  |
|--|------------------|---------------------------------------|--|
| 1. A ser say haven   |                  | MES PACH                              | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
| 2. Praymus printy luance   | 20               | 416 Free                              | (4)  |
| 3 Manus Serotina   | 5                |                                       | Total Number of Dominant Species Across All Strata: (B)  |
| 4. Tshan Consdansis  |                  |                                       | Percent of Dominant Species  |
| 5. litula allection encil  |                  | NO FOR                                | That Are OBL, FACW, or FAC:  |
| 6  |                  |                                       | Prevalence Index worksheet:  |
| 7  |                  |                                       | Total % Cover of: Multiply by:   |
| 0.1  | 9%               | = Total Cover                         | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size:)   |                  | 17                                    | FACW species x 2 =   |
| 1. Arar saccharum  | 30               | MES FALLY                             | FAC species x 3 =  |
| 2  |                  |                                       | FACU species x 4 =   |
|  |                  |                                       | UPL species x 5 =  |
| 3  |                  |                                       | Column Totals: (A) (B)   |
| 5  |                  |                                       | Prevalence Index = B/A =   |
| 6  |                  |                                       | Hydrophytic Vegetation Indicators:   |
| 7  |                  |                                       | 1 - Rapid Test for Hydrophytic Vegetation  |
|  |                  | = Total Cover                         | 2 - Dominance Test is >50%   |
| A Company of the Comp |                  | = Total Cover                         | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size:)  |                  |                                       | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 1  |                  |                                       | data in Remarks or on a separate sheet)  |
| 2  |                  |                                       | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3  |                  | -                                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 4  |                  |                                       | be present, unless disturbed or problematic.   |
| 5  |                  |                                       | Definitions of Vegetation Strata:  |
| 6  |                  |                                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
|  |                  |                                       | at breast height (DBH), regardless of height.  |
| 7  |                  |                                       | Sapling/shrub – Woody plants less than 3 in, DBH   |
| 8  |                  |                                       | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9  |                  |                                       |  |
| 10   |                  |                                       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11   |                  |                                       |  |
| 12.  |                  |                                       | Woody vines – All woody vines greater than 3.28 ft in height.  |
|  | 15               | = Total Cover                         | noight.  |
| 36"  |                  | - Total Cover                         |  |
| Woody Vine Stratum (Plot size:)  |                  |                                       |  |
| 1  |                  |                                       | ALCOHOLD IN  |
|  |                  | -                                     | Hydrophytic<br>Vegetation  |
| 2  |                  |                                       | Present? Yes No  |
| 3  |                  |                                       |  |
| 2  |                  |                                       |  |
| 2  | _                | = Total Cover                         |  |

| Depth Matrix   | depth needed to document the indicator or confirm  Redox Features |   |
|--|---|---|
| (inches) Color (moist) %   |   | Texture Remarks   |
| 0-8 104R 3/3 10  | 0   | 51/1 /oam   |
| 1-10 104R5/1 10  |   | 5ilt loans  |
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|  |   | 41.7  |
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|  |   | 2)ti DID Li-i M. Matelia  |
|  | RM=Reduced Matrix, MS=Masked Sand Grains.                         | <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> : |
| Hydric Soil Indicators:  | Polyvalue Below Surface (S8) (LRR R,                              | 2 cm Muck (A10) (LRR K, L, MLRA 149B)   |
| Histosol (A1) Histic Epipedon (A2)   | MLRA 149B)  | Coast Prairie Redox (A16) (LRR K, L, R)   |
| Black Histic (A3)  | Thin Dark Surface (S9) (LRR R, MLRA 149B)                         |   |
| Hydrogen Sulfide (A4)  | Loamy Mucky Mineral (F1) (LRR K, L)                               | Dark Surface (S7) (LRR K, L, M)   |
| Stratified Layers (A5)   | Loamy Gleyed Matrix (F2) ) Depleted Matrix (F3)                   | Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L)                               |
| <ul> <li>Depleted Below Dark Surface (A11</li> <li>Thick Dark Surface (A12)</li> </ul> | Redox Dark Surface (F6)   | Iron-Manganese Masses (F12) (LRR K, L, R)   |
| Sandy Mucky Mineral (S1)   | Depleted Dark Surface (F7)  | Piedmont Floodplain Soils (F19) (MLRA 149B)   |
| Sandy Gleyed Matrix (S4)   | Redox Depressions (F8)  | Mesic Spodic (TA6) (MLRA 144A, 145, 149B)   |
| Sandy Redox (S5)   |   | Red Parent Material (F21) Very Shallow Dark Surface (TF12)  |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA                                    | 149B)   | Other (Explain in Remarks)  |
|  |   |   |
|  | nd wetland hydrology must be present, unless disturbed            | or problematic.   |
| Restrictive Layer (if observed):   |   |   |
| Type:  |   | Hydric Soil Present? Yes No   |
| Depth (inches):  |   | Hydric Soil Present? Yes No   |
| Remarks:   |   |   |
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC \_\_ Sampling Point: DP-\_\_ Section, Township, Range:\_\_VILENOVA Investigator(s): / Landform (hillslope, terrace, etc.): \_\_\_\_\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_\_ Slope (%):\_\_\_\_ Subregion (LRR or MLRA): LRR-R Lat: 79, 133/01 Long: 42, 4327/69 Datum: NAD 83 Soll Map Unit Name: Cheu toward The NVI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes\_\_ Are Vegetation No, Soil No, 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. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID: WL - X 7 Wetland Hydrology Present? Yes Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) ✓ Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) \_\_ Moss Trim Lines (B16) ✓ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Oxidized Rhizospheres on Living Roots (C3) 

Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) \_\_ Shallow Aquitard (D3) Iron Deposits (B5) \_\_\_ Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: No \_\_\_\_ Depth (Inches): \_/6 Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Former ag ponds that donin to well and a some ated with Stream ST-15

| <u>Tree Stratum</u> (Plot size:        |    | Species?     |     | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:                         |
|--|----|--------------|-----|---|
| 2                                      |    |              |     | Total Number of Dominant Species Across All Strata: (B)   |
| <b>45</b>                              |    |              |     | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 6                                      |    |              |     | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: 15 ) | -0 | _ = Total Co | ver | OBL species x 1 =<br>FACW species x 2 =   |
| 1<br>2.                                |    |              |     | FAC species x 3 =<br>FACU species x 4 =   |
| 3                                      |    |              |     | UPL species x 5 =<br>Column Totals: (A) (B)   |
| 4<br>5                                 |    |              |     | Prevalence Index = B/A =  |
| 6                                      |    |              |     | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                              |
| Herb Stratum (Plot size:5)             | -  | _= Total Co  | ver | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹  |
| 1. Levery a Organists                  | 20 | 415          | OBL | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)    |
| 3. Typia sp.                           |    |              | 081 | Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must       |
| 4. 5par ganium 5%.                     | 10 | N            | OBC | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:                           |
| 5. Lenas 5p.                           |    |              | of  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7<br>8.                                |    |              |     | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH           |
| 9                                      |    |              |     | and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of |
| 11                                     |    |              |     | size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in     |
| 12                                     | 65 | _ = Total Co |     | height.   |
| Woody Vine Stratum (Plot size:         |    | _ 10.01      | 125 |   |
| 2                                      |    |              |     | Hydrophytic Vegetation  |
| 3                                      |    |              |     | Present? Yes No   |
| 4                                      |    |              |     | 1   |

| Depth Matrix   | Redox Features  |  |
|--|---|--|
| (inches) Color (moist) %   |   | Texture Remarks  |
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|  | RM=Reduced Matrix, MS=Masked Sand Grains.                   | <sup>2</sup> Location: PL=Pore Lining, M=Matrix.   |
| lydric Soil Indicators:  |   | Indicators for Problematic Hydric Soils <sup>3</sup> :   |
| _ Histosol (A1)  | Polyvalue Below Surface (S8) (LRR R,<br>MLRA 149B)          | 2 cm Muck (A10) (LRR K, L, MLRA 149B)<br>Coast Prairie Redox (A16) (LRR K, L, R)   |
| Histic Epipedon (A2) Black Histic (A3)   | Thin Dark Surface (S9) (LRR R, MLRA 149B)                   | 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)   |
| Hydrogen Sulfide (A4)  | Loamy Mucky Mineral (F1) (LRR K, L)                         | Dark Surface (S7) (LRR K, L, M)  |
| Stratified Layers (A5)   | Loamy Gleyed Matrix (F2)                                    | Polyvalue Below Surface (S8) (LRR K, L)  |
| Depleted Below Dark Surface (A11   |   | Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R)  |
| Thick Dark Surface (A12) Sandy Mucky Mineral (S1)  | Redox Dark Surface (F6) Depleted Dark Surface (F7)          | Piedmont Floodplain Soils (F19) (MLRA 149B   |
| Sandy Gleyed Matrix (S4)   | Redox Depressions (F8)                                      | Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  |
|  |   | Red Parent Material (F21)  |
| Sandy Redox (S5)   |   |  |
| Stripped Matrix (S6)   | 1400  | Very Shallow Dark Surface (TF12)   |
|  | 149B)   | Very Shallow Dark Surface (TF12)     Other (Explain in Remarks)  |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA  | 149B) d wetland hydrology must be present, unless disturbed | Other (Explain in Remarks)   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA indicators of hydrophytic vegetation an  |   | Other (Explain in Remarks)   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA ndicators of hydrophytic vegetation an   |   | Other (Explain in Remarks) or problematic.   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA indicators of hydrophytic vegetation an Restrictive Layer (if observed):                                     |   | Other (Explain in Remarks)   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) indicators of hydrophytic vegetation an testrictive Layer (if observed):     Type: Depth (inches): temarks: | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) indicators of hydrophytic vegetation an testrictive Layer (if observed):     Type: Depth (inches): temarks: | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) indicators of hydrophytic vegetation an testrictive Layer (if observed):     Type: Depth (inches): temarks: |   | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an testrictive Layer (if observed): Type: Depth (inches): temarks:      | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an testrictive Layer (if observed): Type: Depth (inches): temarks:      | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an testrictive Layer (if observed): Type: Depth (inches): temarks:      | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an testrictive Layer (if observed): Type: Depth (inches): temarks:      | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an testrictive Layer (if observed): Type: Depth (inches): temarks:      | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) indicators of hydrophytic vegetation an testrictive Layer (if observed):     Type: Depth (inches): temarks: | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) Indicators of hydrophytic vegetation an Restrictive Layer (if observed):  Type: Depth (inches): Remarks:    | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic.  Hydric Soil Present? Yes No  |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) Indicators of hydrophytic vegetation an Restrictive Layer (if observed):  Type: Depth (inches): Remarks:    | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) indicators of hydrophytic vegetation an testrictive Layer (if observed):     Type: Depth (inches): temarks: | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) indicators of hydrophytic vegetation an testrictive Layer (if observed):     Type: Depth (inches): temarks: | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an testrictive Layer (if observed): Type: Depth (inches): temarks:      | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches): emarks:        | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic. Hydric Soil Present? Yes No   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) ndicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches): emarks:        | d wetland hydrology must be present, unless disturbed       | Other (Explain in Remarks) or problematic.  Hydric Soil Present? Yes No  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: // // Applicant/Owner: Ball Hill Wind Energy, LLC NY Sampling Point: DP-State: Section, Township, Range:\_\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_\_ Slope (%): \_\_\_\_\_\_ Landform (hillslope, terrace, etc.): \_\_\_\_ 19.1334 Long: 42.432916 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: ( ) han tay and NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation MD\_, Soil MD, or Hydrology MD significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_ No\_\_ Are Vegetation <u>MD</u>, Soil <u>ND</u>, or Hydrology <u>N</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No Yes \_\_\_\_ No \_\_ within a Wetland? Hydric Soil Present? No Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID:\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_ High Water Table (A2) \_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_\_ Saturation (A3) \_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_ Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) \_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) \_\_ Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) \_\_\_ Algal Mat or Crust (B4) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Microtopographic Relief (D4) \_\_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Depth (inches): \_ Depth (inches): Water Table Present? No \_\_\_\_\_ Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_ Saturation Present? (Includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: noticed by daily to here present

VEGETATION – Use scientific names of plants.

Sampling Point: DP- 87

| Tree Stratum (Plot size: 30')          | Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Dominance Test worksheet:   |
|--|---------------------|---------------------------------------|---|
| 1. As or Sechacum                      |                     |                                       | Number of Dominant Species  |
|  |                     |                                       | That Are OBL, FACW, or FAC: (A)   |
| 2. Cruse suro traces                   |                     |                                       | Total Number of Dominant Species Across All Strata: (B)   |
|  |                     |                                       |   |
| 4                                      |                     |                                       | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 5                                      |                     |                                       | (VD)  |
| 6                                      |                     |                                       | Prevalence Index worksheet:   |
| 7                                      |                     |                                       |   |
|  | 90                  | = Total Cover 45                      | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15") |                     | 14                                    | FACW species x 2 =  |
| 1. Apr Bishopm                         | 30                  | 465 500                               | FAC species x 3 =   |
| APa                                    | 16                  | NO FACE                               | FACU species x 4 =  |
| 2. Malus of                            |                     |                                       | UPL species x 5 =   |
| 3                                      |                     |                                       | Column Totals: (A) (B)  |
| 4<br>5                                 |                     |                                       | Prevalence Index = B/A =  |
| 6.                                     |                     |                                       | Hydrophytic Vegetation Indicators:  |
|  |                     |                                       | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7                                      |                     |                                       | 2 - Dominance Test is >50%  |
|  | -70                 | = Total Cover                         | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:               |                     | 8                                     | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
| 1<br>2                                 |                     |                                       | Problematic Hydrophytic Vegetation (Explain)  |
|  |                     |                                       | 11-41-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4   |
| 3<br>4                                 |                     |                                       | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 5                                      |                     |                                       | Definitions of Vegetation Strata:   |
| 6                                      |                     |                                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7                                      |                     |                                       | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8                                      |                     |                                       | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                      |                     |                                       | Herb – All herbaceous (non-woody) plants, regardless of   |
| 10                                     |                     |                                       | size, and woody plants less than 3.28 ft tall.  |
| 11                                     |                     |                                       | Woody vines - All woody vines greater than 3.28 ft in   |
| 12                                     |                     |                                       | height.   |
|  | 10                  | = Total Cover                         |   |
| Woody Vine Stratum (Plot size:)        |                     |                                       |   |
| 1                                      |                     |                                       |   |
| 2                                      |                     |                                       | Hydrophytic   |
| ۷,                                     |                     |                                       | Vegetation Present? Yes No  |
|  | -                   |                                       | 163 163   |
| 3                                      |                     |                                       |   |
| 3<br>4                                 |                     | = Total Cover                         | 3   |

|  | cription: (Describe t                    | o the dept |  | 15 21 1175   | A VIOLET                                | or confirm  | the absence       | of indicato                                       | rs.)                      |                                    |
|--|--|------------|--|--------------|---|-------------|-------------------|---|---------------------------|------------------------------------|
| Depth<br>(inches)  | Matrix Color (moist)                     | %          | Color (moist)  | x Features   | Type¹                                   | _Loc2       | Texture           |   | Remarks                   | S                                  |
| 0-10   | 104 R 3/4                                | 100        | -  |              |   |             | 5:17/0gr          | 4   |                           |                                    |
| 10-19  | 10413/1                                  | 100        |  |              | _                                       | _           | 51/t/san          | 7   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  | -          |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              | *************************************** |             |                   |   |                           |                                    |
|  | -  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   | -           |                   |   |                           | *-                                 |
|  |  |            |  | -            |   |             |                   |   |                           | -                                  |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           | 14                                 |
|  | ***************************************  |            | ***************************************  |              |   |             |                   | <del>1000-00-000000000000000000000000000000</del> |                           |                                    |
|  | -  |            |  |              |   | *****       |                   | -   |                           |                                    |
| Im   |  |            | B. 4 4   | 0-14-1-1     |   | -144        | 21                | DI =Daza  | Links Mark                | l atriu                            |
| 'Type: C=C<br>Hydric Soil  | oncentration, D=Depl                     | etion, RM= | Reduced Matrix, M  | S=Masked     | Sand Gr                                 | ains.       | *Location:        |   | Lining, M=N<br>matic Hydr |                                    |
| Histosol   |  |            | Polyvalue Belo   | w Surface (  | (S8) (LR                                | RR,         |                   |   |                           | MLRA 149B)                         |
| 1  | pipedon (A2)                             |            | MLRA 149B  |              |   |             |                   |   |                           | RR K, L, R)                        |
| The same of the sa | istic (A3)<br>en Sulfide (A4)            | -          | Thin Dark Surf Loamy Mucky   |              |   |             |                   |   | or Peat (S3<br>(LRR K, L, | (LRR K, L, R)                      |
|  | d Layers (A5)                            |            | Loamy Gleyed   |              |   | .,          |                   |   |                           | (LRR K, L)                         |
|  | d Below Dark Surface                     | (A11)      | Depleted Matri   |              |   |             |                   |   | (S9) (LRR                 |                                    |
|  | ark Surface (A12)                        |            | Redox Dark Su  |              | -                                       |             |                   |   |                           | 2) (LRR K, L, R)                   |
|  | Mucky Mineral (S1)<br>Gleyed Matrix (S4) |            | Depleted Dark Redox Depression   |              | ()                                      |             |                   |   |                           | 19) (MLRA 149B)<br>44A, 145, 149B) |
|  | Redox (S5)                               |            | Redox Bepres   | 310110 (1 0) |   |             |                   | arent Mater                                       |                           | ,                                  |
|  | d Matrix (S6)                            |            |  |              |   |             |                   |   | k Surface (T              | F12)                               |
| Dark Su  | ırface (S7) (LRR R, N                    | ILRA 149B  | 9)   |              |   | 270 3       | Other             | Explain in  | Remarks)                  |                                    |
| 3Indicators of   | of hydrophytic vegetat                   | ion and we | tland hydrology mu   | st be prese  | nt, unles                               | s disturbed | d or problemation |   |                           |                                    |
| Restrictive  | Layer (if observed):                     |            | The state of the s |              |   |             |                   |   |                           | 3                                  |
| Type:  |  |            |  | 4            | eu-                                     |             | Undete Call       | D42   | Van                       | N- X                               |
| Depth (in  | ches):                                   |            |  |              |   |             | Hydric Soil       | Present?  | Yes                       | _ No /                             |
| Remarks:   |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           |                                    |
|  |  |            |  |              |   |             |                   |   |                           | ***                                |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region-\_\_\_ City/County: Chautauqua County \_ Sampling Date: 11/12/15 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP- 84 Applicant/Owner: Ball Hill Wind Energy, LLC VILLENOVA Investigator(s): M. BODE ra D. LOCKWOOD Section, Township, Range:\_\_\_\_ Landform (hillslope, terrace, etc.): HIIISIODE \_\_\_\_ Slope (%):\_/ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: upland Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X \_\_ (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No\_ Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-YI Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) X Surface Water (A1) X Water-Stained Leaves (B9) \_\_\_ Moss Trim Lines (B16) X High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) X Saturation (A3) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) X Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): () - W Surface Water Present? Yes X No \_\_\_ Depth (inches): () Water Table Present? Yes X No Depth (inches): D" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| % Cover | Species?                                 | Indicator<br>Status | Dominance Test worksheet:   |
|---------|--|---------------------|---|
|         | У  | FACU                | Number of Dominant Species  |
| 10      | N  | FAC                 | That Are OBL, FACW, or FAC:(A)                                    |
| 10      | -14                                      |                     | Total Number of Dominant  |
|         | -  |                     | Species Across All Strata: (B)                                    |
|         |  |                     | Percent of Dominant Species That Are OBL. FACW. or FAC: 57 (A/B)  |
|         |  |                     | That Are OBL, FACW, or FAC: (A/B)                                 |
|         |  |                     | Prevalence Index worksheet:                                       |
|         |  |                     | Total % Cover of: Multiply by:                                    |
| 90      | = Total Cov                              | er                  | OBL species _ 5 _ x1 = _ 5  |
|         |  |                     | FACW species 15 x 2 = 30  |
| 10      | V  | FACU                | FAC species <u>Z5</u> x3 = <u>75</u>                              |
|         | V  |                     | FACU species 45 x 4 = 380   |
|         | 1  |                     | UPL species 0 x 5 = 0   |
| 2       |  | FACU                | Column Totals: 140 (A) 440 (B)                                    |
|         |  |                     | 35  |
|         |  |                     | Prevalence Index = B/A = 3.5                                      |
|         |  |                     | Hydrophytic Vegetation Indicators:                                |
|         |  |                     | 1 - Rapid Test for Hydrophytic Vegetation                         |
| 75      | = Total Cox                              | er.                 | X 2 - Dominance Test is >50%                                      |
| 4)      | - Total Cov                              | GI                  | 3 - Prevalence Index is ≤3.0 <sup>1</sup>                         |
| . <     | V  |                     | ★ 4 - Morphological Adaptations¹ (Provide supporting)             |
| 1)      | <u> </u>                                 | Water Street        | data in Remarks or on a separate sheet)                           |
| 2       | у  |                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         |
| 5_      | _Y                                       | FAC                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must |
|         |  |                     | be present, unless disturbed or problematic.                      |
|         |  |                     | Definitions of Vegetation Strata:                                 |
|         |  |                     | Tree – Woody plants 3 in. (7.6 cm) or more in diameter            |
|         |  | -                   | at breast height (DBH), regardless of height.                     |
|         |  |                     | Sapling/shrub – Woody plants less than 3 in. DBH                  |
|         |  |                     | and greater than or equal to 3.28 ft (1 m) tall.                  |
|         | -  |                     | Herb - All herbaceous (non-woody) plants, regardless of           |
|         | -  |                     | size, and woody plants less than 3.28 ft tall.                    |
|         |  |                     | Woods since All specific since proster than 2.28 A in             |
|         |  |                     | Woody vines - All woody vines greater than 3.28 ft in height.     |
| 25      | = Total Co                               | /er                 |   |
|         |  |                     |   |
|         |  |                     |   |
|         |  |                     | Hydrophytic   |
| no and  | 3  |                     | Vegetation  |
|         |  |                     | Present? Yes No   |
|         |  |                     |   |
|         |  |                     |   |
|         | 90<br>10<br>10<br>5<br>25<br>5<br>5<br>5 | 90 = Total Cov 10   | 90 = Total Cover  10  |

|   | Matrix<br>Color (moist)  | %           | Color (moist)       | ox Feature<br>% | Type <sup>1</sup> | Loc <sup>2</sup> | Texture               |  | Remarks   |                             |
|---|--|-------------|---------------------|-----------------|-------------------|------------------|-----------------------|--|---|-----------------------------|
| (inches)<br>0-5   | 2.54 25/1  | 85          | 2.54 3/1            | 10              | ^                 | mi               | SIL                   |  |   |                             |
|   | 231 /1   |             | 104R 5/4            | - 10            |                   | 7.7.7            | SIL                   |  |   |                             |
|   | 2011/2   | - 22        |                     |                 | -                 | m                |                       |  |   |                             |
| 5-10  | 2.54 4/3   | 80          | 2.54 712            | 10              | <u> </u>          | m                | SIL                   |  |   |                             |
|   |  |             | 104R514             | 5_              | <u>C</u>          | <u>m</u>         | 51L                   |  |   |                             |
|   |  |             | 2.54 3/1            | 5_              | <u>D</u>          | <u>m</u> _       | SIL                   |  |   |                             |
|   |  |             |                     |                 |                   |                  |                       |  |   |                             |
|   |  |             |                     |                 |                   |                  |                       | ć  |   | J.                          |
|   |  |             |                     | -               |                   |                  |                       |  |   |                             |
|   |  |             |                     |                 |                   |                  |                       | 32   |   |                             |
|   | Concentration, D=De Indicators:  | pletion, RM | M=Reduced Matrix, I | MS=Maske        | d Sand G          | rains.           | <sup>2</sup> Location | PL=Pore l  | _ining, M=Ma<br>natic Hydric                          | trix.                       |
| Deplete   | ed Layers (A5)<br>ed Below Dark Surfac<br>Park Surface (A12)   | ce (A11)    | Depleted Mat        |                 |                   |                  | Iron-M                | anganese M   |   | (LRR K, L, R<br>) (MLRA 149 |
| Sandy Sandy Sandy Sandy Sandy   | Mucky Mineral (S1)<br>Gleyed Matrix (S4)<br>Redox (S5)<br>d Matrix (S6)<br>urface (S7) (LRR R,           | MLRA 14     | Redox Depre         |                 |                   |                  | Red P<br>Very S       | Spodic (TA6<br>arent Materi                                  | 6) (MLRA 144<br>al (F21)<br>c Surface (TF             |                             |
| Sandy   Sandy   Sandy   Sandy   Strippe Dark Si                                   | Gleyed Matrix (S4)<br>Redox (S5)<br>d Matrix (S6)  |             | Redox Depre         | ssions (F8      | )                 | ss disturbe      | Red P Very S Other    | Spodic (TA6<br>arent Materi<br>hallow Dark<br>(Explain in F  | 6) (MLRA 144<br>al (F21)<br>c Surface (TF             |                             |
| Sandy   Sandy   Sandy   Strippe Dark So   | Gleyed Matrix (S4)<br>Redox (S5)<br>d Matrix (S6)<br>urface (S7) (LRR R,                                 | ation and v | Redox Depre         | ssions (F8      | )                 | ss disturbe      | Red P Very S Other    | Spodic (TA6<br>arent Materi<br>hallow Dark<br>(Explain in F  | 6) (MLRA 144<br>al (F21)<br>c Surface (TF             |                             |
| Sandy   Sandy   Sandy   Strippe Dark Sondicators of the strictive Type:           | Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic vegeta Layer (if observed | ation and v | Redox Depre         | ssions (F8      | )                 | ss disturbe      | Red P Very S Other    | Spodic (TA6<br>arent Materi<br>shallow Dark<br>(Explain in F | i) (MLRA 144<br>al (F21)<br>c Surface (TF<br>Remarks) | 12)                         |
| Sandy   Sandy   Sandy   Strippe Dark So Indicators of Restrictive Type: Depth (in | Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic vegeta Layer (if observed | ation and v | Redox Depre         | ssions (F8      | )                 | ss disturbe      | Red P Very S Other    | Spodic (TA6<br>arent Materi<br>hallow Dark<br>(Explain in F  | i) (MLRA 144<br>al (F21)<br>c Surface (TF<br>Remarks) |                             |
| Sandy   Sandy   Sandy   Strippe Dark Sondicators of testrictive Type: Depth (in   | Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic vegeta Layer (if observed | ation and v | Redox Depre         | ssions (F8      | )                 | ss disturbe      | Red P Very S Other    | Spodic (TA6<br>arent Materi<br>shallow Dark<br>(Explain in F | i) (MLRA 144<br>al (F21)<br>c Surface (TF<br>Remarks) | 12)                         |
| Sandy   Sandy   Sandy   Strippe Dark Si Indicators of Restrictive                 | Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic vegeta Layer (if observed | ation and v | Redox Depre         | ssions (F8      | )                 | ss disturbe      | Red P Very S Other    | Spodic (TA6<br>arent Materi<br>shallow Dark<br>(Explain in F | i) (MLRA 144<br>al (F21)<br>c Surface (TF<br>Remarks) | 12)                         |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project \_\_ Sampling Date: 11/12/15 State: NY Sampling Point: DP- 85 Applicant/Owner: Ball Hill Wind Energy, LLC Section, Township, Range: VIII Nova Investigator(s): M. Boberg D. LOW MOOD Local relief (concave, convex, none): CONVEX \_\_\_\_ Slope (%): 3 7 Landform (hillslope, terrace, etc.): Hill510Pe Long: 42.434764 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: 1401010 Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No\_ Are Vegetation NO , Soil NO , or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes \_\_\_\_ No X Yes \_\_\_\_ No X within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? If yes, optional Wetland Site ID:\_ Wetland Hydrology Present? No.X Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) Surface Water (A1) \_\_ Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) \_\_ Saturation (A3) Crayfish Burrows (C8) \_\_ Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_ Algal Mat or Crust (B4) Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Color ( D-12)  2.5 y 4  1220  2.5 y 4  1220  7.5 y 6  2.5 y 7  2.5 y 7 | 13 100<br>4/4 <b>6</b> 0 |                                | 20<br>15<br>5                                 |                            |             | SIL SIL                              | Remarks  |
|---|--------------------------|--------------------------------|---|----------------------------|-------------|--------------------------------------|--|
| Type: C=Concentration   | 6/4 60                   | 2.54413                        | 20<br>15<br>5                                 | <u>c</u> <u>c</u> <u>c</u> | M           | 51                                   |  |
| Type: C=Concentration   |                          | 2.54413                        | 20 15 5                                       | <u>C</u>                   | M           | 51                                   |  |
| lydric Soil Indicators:   | D=Depletion R            |                                | 15<br>5<br>—————————————————————————————————— | <u>C</u>                   | 700         |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                | 5   | <u>c</u>                   | 700         |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                | =   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            | _           |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                | =   |                            | =           |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            | =           |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            | -                              |   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            |             |                                      |  |
| lydric Soil Indicators:   | D=Depletion R            |                                |   |                            |             |                                      |  |
|   | Dopiotion, I             | M=Reduced Matrix, MS           | S=Masked                                      | Sand Grai                  | ns.         | <sup>2</sup> Location: PL=Pore Linir | ng, M=Matrix.                                    |
| HISTOSOI (A1)   |                          | S. C. Start Verille            |   |                            |             | Indicators for Problemati            | c Hydric Solls <sup>3</sup> :                    |
| Histic Epipedon (A2)  |                          | Polyvalue Belov                |   | (S8) (LRR                  | R,          | 2 cm Muck (A10) (LRF                 | R K, L, MLRA 149B)                               |
| Black Histic (A3)   |                          | MLRA 149B) Thin Dark Surfa     |   | RR R. MI F                 | 2A 149R)    | Coast Prairie Redox (A               | A16) (LRR K, L, R)<br>eat (S3) (LRR K, L, R)     |
| _ Hydrogen Sulfide (A   |                          | Loamy Mucky M                  | lineral (F1                                   | (LRR K, I                  | L)          | Dark Surface (S7) (LR                | RK.L.M)  |
| _ Stratified Layers (A5   |                          | Loamy Gleyed N                 | Matrix (F2)                                   |                            |             | Polyvalue Below Surfa                | ce (S8) (LRR K, L)                               |
| <ul> <li>Depleted Below Dark</li> <li>Thick Dark Surface (</li> </ul>   | (Surface (A11)           | Depleted Matrix Redox Dark Sur |   |                            |             | Thin Dark Surface (S9                |  |
| Sandy Mucky Minera  |                          | Depleted Dark S                |   | 7)                         |             | Iron-Manganese Mass                  | es (F12) (LRR K, L, R)<br>ioils (F19) (MLRA 1498 |
| Sandy Gleyed Matrix   | (S4)                     | Redox Depressi                 |   | ,                          |             |                                      | ILRA 144A, 145, 149B                             |
| _ Sandy Redox (S5)  |                          |                                |   |                            |             | Red Parent Material (F               | 21)  |
| <ul><li>Stripped Matrix (S6)</li><li>Dark Surface (S7) (L</li></ul>   | RRR MIRA 14              | 9R)                            |   |                            |             | Very Shallow Dark Sur                |  |
|   |                          |                                |   |                            |             | Other (Explain in Rema               | arks)  |
| ndicators of hydrophytic  | vegetation and           | wetland hydrology must         | be preser                                     | nt, unless d               | listurbed o | or problematic.                      |  |
| estrictive Layer (if obs  | erved):                  |                                |   |                            |             |                                      |  |
| Type:   |                          | -                              |   |                            |             |                                      |  |
| Depth (inches):emarks:  |                          |                                |   |                            |             | Hydric Soil Present? Yes             | s NoX_   |

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/12/15 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP- 86 Investigator(s): M. BODERA D. LOCKWOOD RNOVA Section, Township, Range: Landform (hillslope, terrace, etc.): HILSIOPE Slope (%): D Subregion (LRR or MLRA): LRR-R Datum: NAD 83 Lat: NWI classification: unland Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-Y2 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) X Water-Stained Leaves (B9) X Drainage Patterns (B10) High Water Table (A2) \_ Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) X Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aguitard (D3) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: \_ No \_\_\_\_ Depth (inches): ()-5" Surface Water Present? No Depth (inches): 0" Water Table Present? No \_\_\_\_ Depth (inches): () " Wetland Hydrology Present? Yes X No \_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')  1. TSUGA CANADENSIS  2. BEHLLA AMBHANIENSIS  3  4  5                               | 90              |             |       | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  [A)  (A)  (B)   |
|---|-----------------|-------------|-------|--|
| 3   | 100<br>40<br>30 | = Total Cov | FACU  | Prevalence Index worksheet:           Total % Cover of:         Multiply by:           OBL species         0         x1 = 0           FACW species         5         x2 = 10           FAC species         40         x3 = 120           FACU species         130         x4 = 520           UPL species         0         x5 = 0           Column Totals:         175         (A)         450           UPL species         0         4         4 |
| 5   | 70              | = Total Cov |       | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:                              |
| 5   |                 |             |       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.   |
| <u>Woody Vine Stratum</u> (Plot size: <u>30'</u> )  1. <u>NO+ Apolicable</u> 2  3  4                              | _5              | = Total Co  |       | Hydrophytic Vegetation Present?  Yes X  No   |
| Remarks: (Include photo numbers here or on a separate species have adapted adapted adapted true - Eastern Hemlock | to w            | ot co       | mutic | ons through morphological roots.   |

| Profile Description: (Describe to the de  | Red   | ox Features   |                      |  |  |
|---|---|---|----------------------|--|--|
| (inches) Color (moist) %  | Color (moist)   | % Type  |                      | Texture  | Remarks  |
| D-10 2.5 y 2.5/1 95   | 104R 5/8  |   |                      | SIL  |  |
| <sup>1</sup> Type: C=Concentration, D=Depletion, RN   |   | IS=Masked Sand  | Grains.              |  | Pore Lining, M=Matrix.   |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 145) | MLRA 1498 Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr _X Redox Dark S Depleted Dark Redox Depres | face (S9) (LRR R<br>Mineral (F1) (LRI<br>Matrix (F2)<br>Ix (F3)<br>urface (F6)<br>c Surface (F7)<br>esions (F8) | MLRA 149B<br>R K, L) | 2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Si Iron-Mangar Piedmont FI Mesic Spodi Red Parent Very Shallov Other (Explain | roblematic Hydric Soils <sup>3</sup> : A10) (LRR K, L, MLRA 149B) Pe Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) Pe(S7) (LRR K, L, M) Pelow Surface (S8) (LRR K, L) Pese Masses (F12) (LRR K, L, R) Pese Masses (F12) (LRR K, L, R) Pese Masses (F12) (MLRA 149B) Per (TA6) (MLRA 144A, 145, 149B) Material (F21) Per Mark Surface (TF12) Annin Remarks)   |
| <sup>a</sup> Indicators of hydrophytic vegetation and v<br>Restrictive Layer (if observed):   | vetland hydrology mu  | ist be present, un  | ess disturbed        | l or problematic.  | A STATE OF THE STA |
| Type:   |   |   |                      |  |  |
| Depth (inches):   |   |   |                      | Hydric Soil Pres   | ent? Yes X No  |
| Remarks:  |   |   |                      |  |  |

### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   | t                          | City/County: Ch                             | nautauqua County                                 | Sampling Date: 11/12/13  |
|--|----------------------------|---|--|--|
| Applicant/Owner: Ball Hill Wind En   | ergy, LLC                  | only/obtainly.                              | State;   | NY Sampling Point: DP- 87  |
| Investigator(s): M. BODER  |                            | Section, Townsh                             | - A  | lenova   |
| Landform (hillslope, terrace, etc.): H Subregion (LRR or MLRA): LRR-R  | 111510pe<br>Lat: 79        | Local relief (concav                        | e, convex, none):                                |  |
| Soil Map Unit Name:  |                            |   | NWI  | classification: upland   |
| Are climatic / hydrologic conditions on the Are Vegetation \(\frac{\lambda}{\lambda}\), Soil \(\frac{\lambda}{\lambda}\), or Are Vegetation \(\frac{\lambda}{\lambda}\), Soil \(\frac{\lambda}{\lambda}\), or \(SUMMARY OF FINDINGS - A) | Hydrology NO sign          | ificantly disturbed?<br>urally problematic? | Are "Normal Circumsta<br>(If needed, explain any | lain in Remarks.) ances" present? Yes No y answers in Remarks.) nsects, important features, etc. |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  | Yes No ; Yes No ; Yes No ; | within a                                    | mpled Area Wetland? Yes                          | 3 No X   |
| Remarks: (Explain alternative proced   | lures here or in a separa  | ate report.)                                |  |  |
| HYDROLOGY  |                            |   | Sana-da  | ry Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  | Tennora de Labora de       | ATAK I                                      | -  |  |
| Primary Indicators (minimum of one is  |                            |   |  | ace Soil Cracks (B6)   |
| Surface Water (A1)   |                            | Stained Leaves (B9)                         |  | nage Patterns (B10)  |
| High Water Table (A2)  |                            | Fauna (B13)                                 | Section 1  | s Trim Lines (B16)   |
| Saturation (A3)  |                            | eposits (B15)                               |  | Season Water Table (C2)  |
| Water Marks (B1)   |                            | en Sulfide Odor (C1)                        |  | fish Burrows (C8)  |
| Sediment Deposits (B2)   |                            | ed Rhizospheres on Livin                    |  | ration Visible on Aerial Imagery (C9)  |
| Drift Deposits (B3)  |                            | ce of Reduced Iron (C4)                     |  | ted or Stressed Plants (D1)  |
| Algal Mat or Crust (B4)  | Recent                     | Iron Reduction in Tilled                    |  | morphic Position (D2)  |
| Iron Deposits (B5)   | Thin Me                    | uck Surface (C7)                            |  | low Aquitard (D3)  |
| Inundation Visible on Aerial Imag  | ery (B7) Other (           | Explain in Remarks)                         | Micro  | otopographic Relief (D4)   |
| Sparsely Vegetated Concave Su  | face (B8)                  |   | FAC  | -Neutral Test (D5)   |
| Field Observations:  |                            |   |  |  |
| Surface Water Present? Yes _   | No X Depth                 | (inches):                                   |  |  |
| Water Table Present? Yes _   | No X Depth                 | (inches):                                   |  |  |
|  | 2/                         | (inches):                                   | Wetland Hydrology                                | Present? Yes No _X   |
| Describe Recorded Data (stream gau   | ge, monitoring well, aer   | ial photos, previous insp                   | ections), if available:                          |  |
|  |                            |   |  |  |
| Remarks:   |                            |   |  |  |
|  |                            |   |  |  |
|  |                            |   |  |  |

| Tree Stratum (Plot size: 30') 1:TSUGA CANADENSIS 2. Bettua aughaniensis | 90  | Dominant<br>Species? | Status<br>FACU<br>FAC | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  (B) |
|---|-----|----------------------|-----------------------|---|
| 3   |     |                      |                       | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 7   |     | = Total Co           |                       | Prevalence Index worksheet:   |
| Sapling/Shrub Stratum (Plot size: 15                                    |     |                      |                       | FACW species 0 x 2 = 0  |
| 1. Isuga canadinsis   | 10  | _У                   | FACU                  | FAC species $20$ $x3 = 400$<br>FACU species $100$ $x4 = 400$  |
| 2. Bething alleghaniensis   | 10_ |                      | FAC                   | FACU species $100$ $x4 = 400$<br>UPL species $0$ $x5 = 0$<br>Column Totals: $125$ (A) $405$ (B)   |
| <b>45</b> .   |     |                      |                       | Prevalence Index = B/A = 3.72   |
| 6   |     |                      |                       | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation   |
| 7   | 20  | = Total Co           |                       | X 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5')  |     | - Total Co           | vei                   | 3 - Prevalence Index is ≤3.01   |
| 1. Dryopteris gristata 2.   | 5   |                      | DBL                   | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)   |
| 3   |     |                      |                       | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic,                           |
| 4<br>5  |     |                      |                       | Definitions of Vegetation Strata:   |
| 6   |     |                      |                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
| 7   |     |                      |                       | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 9   |     |                      |                       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.                                      |
| 11  | _   | -                    |                       | Woody vines – All woody vines greater than 3.28 ft in height.   |
|   | _5_ | = Total Co           | ver                   |   |
| Woody Vine Stratum (Plot size: 30')  1. NOT Applicable                  |     |                      |                       |   |
| 2   |     | -                    |                       | Hydrophytic<br>Vegetation   |
| 3   | ,   | -                    |                       | Present? Yes No   |
| 4   |     | -                    |                       |   |
|   | 0   | = Total Co           | ver                   |   |

| Depth  | Matrix                                     | to the de | epth needed to docu  | ox Feature   |                               | or confirm        | the absence o  | indicators.)  |  |
|--|--|-----------|----------------------|--|-------------------------------|-------------------|--|---|--|
| (inches)   | Color (moist)                              | %         | Color (moist)        | %  | Type <sup>1</sup>             | _Loc2             | Texture  | Rema  | rks  |
| 2  |  |           |                      |  |                               |                   |  | leaf litte  | V  |
| 0-1  | 2.54 Z.6/1                                 | 100       |                      |  |                               |                   |  | Tetti Title   |  |
| -2   | 2.54 4/1                                   | 100       |                      |  |                               |                   |  |   |  |
| 2-12   | 2.544/4                                    | 80        | 2.544/1              | 5  | D                             | m                 | SIL  | ***   |  |
|  |  |           | 10112 4/6            | 5  | C                             | m                 | SIL  |   | 100  |
|  |  |           | 2.54 7/3             | 10   | C.                            | m                 | SIL  |   |  |
| 2-20   | 2.545/6                                    | 80        | 2.547/3              | 10   | C.                            | m                 | SIL  |   |  |
|  |  |           | 104RA16              | 10   | C                             | m                 | SIL  |   |  |
|  |  |           |                      |  |                               |                   |  |   |  |
| vne: C=C   | oncentration, D=Depl                       |           |                      |  |                               |                   |  | PL=Pore Lining, M=  |  |
| Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped | oipedon (A2)                               |           |                      | ) ace (S9) (I Mineral (F Matrix (F2 x (F3) urface (F6) Surface (F6) Slons (F8) | LRR R, MI<br>1) (LRR K,<br>1) | .RA 149B)<br>, L) | Coast Pr. 5 cm Muc Dark Sur Polyvalue Thin Dari Iron-Man Pledmoni Mesic Sp Red Pare Very Sha | ck (A10) (LRR K, L, airie Redox (A16) (L cky Peat or Peat (S: face (S7) (LRR K, L a Below Surface (S8) (LRR ganese Masses (F1 t Floodplain Soils (Fodic (TA6) (MLRA fort Material (F21) Ilow Dark Surface (Tplain in Remarks) | .RR K, L, R) (3) (LRR K, L, R) (4) (LRR K, L) (5) (LRR K, L) (5) (LRR K, L) (6) (LRR K, L, R) (7) (MLRA 149) (1444, 145, 1496) |
| ndicators of<br>estrictive L   | hydrophytic vegetation ayer (if observed): | on and we | etland hydrology mus | t be prese   | ing amoud                     |                   |  |   |  |
| ndicators of   | ayer (if observed):                        | on and we | etland hydrology mus | t be prese   | ,                             |                   | Hydric Soll Pr   | esent? Yes  | No <u>X</u>  |

| Applicant/Owner: Ball  | II DALLER PIL  | 7161   | DRM – Northcentral and Northeast Region                  |
|--|--|--|--|
| Investigatoria MA ONLY   | HIII WIM F   | nerou II   | County: Chautauqua Sampling Date: 11/12/                 |
| mivestigator(s): WI- LOW   | DLOCKIN  | 140  | State: NY Sampling Point: 88                             |
| Landform (hillslope, terrac  | a class Hills  |  | tion, Township, Range:                                   |
| Subregion (LRP or MLDA)  | LOOO   | Local re   |  |
| Soil Man Unit Name   | CIUCIC   | Lat: 79/1288   | 53 Long: 12 131532 Datum A/AO                            |
| Soil Map Unit Name:  |  |  | Datum: IVA D   |
| Are climatic / hydrologic co   | nditions on the site   | typical for this time of year? Y   | Yes X No. (If no audition: upland                        |
| , ac regetation 100 , So   | W or Hydrol  | loon MA  | - ( ) - Apart III ( Chiaks.)                             |
| Are Vegetation NO, Soi   | I <u>NO</u> , or Hydrol  | ogy No significantly distur  | No   |
| SUMMARY OF FIND  | INCS A.  |  | atic? (If needed, explain any answers in Remarks.)       |
| The state of the s | ings – Attach  | site map showing sam   | npling point locations, transects, important features, e |
| Hydric Soil Present? Wetland Hydrology Preser  | Yes  | No<br>No   | Is the Sampled Area within a Wetland? Yes X No           |
| Remarks: (Explain alterna  | tive procedures ha   | X No   | If yes, optional Wetland Site ID: WL-Z1                  |
| HYDROLOGY Wetland Hydrology Indica   |  | ed runs down   |  |
| Primary Indicators (minimur  | n of one is required   | h abasir sun   | Secondary Indicators (minimum of two required)           |
| X Surface Water (A1)   | is required  | X Water Otalia (   | Curfora O-1 O  |
| Y High Water Table (A2)  |  | <ul><li>Water-Stained Leaves</li><li>Aquatic Fauna (B13)</li></ul>   | (B9) A Drainage Patterns (B10)                           |
| ✓ Saturation (A3)  |  | Mari Deposits (B15)  | Moss Trim Lines (B16)                                    |
| <ul><li>Water Marks (B1)</li><li>Sediment Deposits (B2)</li></ul>  |  | Hydrogen Sulfide Odor  | Dry-Season Water Table (C2)                              |
| Drift Deposits (B3)  |  | Oxidized Rhizospheres  | on Living Roots (C3) Saturation Visite                   |
| Algai Mat or Crust (B4)  |  | — Presence of Reduced Ir   | ron (C4) Stunted as Ct.                                  |
| _ Iron Deposits (B5)   |  | Recent Iron Reduction is<br>Thin Muck Surface (C7)   | Geomorphic Position (D2)                                 |
| _ non Deposits (B5)  | A STATE OF THE STA | Other (Explain in Remar  | Shallow Aquitard (D3)                                    |
| _ Inundation Visible on Ae   | rial Imagery (B7)  |  |  |
| <ul><li>Inundation Visible on Ae</li><li>Sparsely Vegetated Con</li></ul>  | rial Imagery (B7)<br>cave Surface (B8)   | a de la companya de l | — iniciotopographic Relief (D4)                          |
| _ Inundation Visible on Ae<br>_ Sparsely Vegetated Con<br>leld Observations:   | cave Surface (B8)  |  | Microtopographic Relief (D4) FAC-Neutral Test (D5)       |
| Inundation Visible on Ae<br>Sparsely Vegetated Con<br>ield Observations:<br>urface Water Present?  | Yes X No _   | Depth (inches): 0 - 4 *  | — iniciotopographic Relief (D4)                          |
| Inundation Visible on Ae<br>Sparsely Vegetated Con<br>ield Observations:<br>urface Water Present?<br>/ater Table Present?  | Yes X No Yes X No _  | Depth (inches): 0 - 4 *  | — iniciotopographic Relief (D4)                          |
| Inundation Visible on Ae<br>Sparsely Vegetated Con<br>ield Observations:<br>urface Water Present?<br>/ater Table Present?<br>alturation Present?   | Yes X No Yes X No  | Depth (inches): 0 - 4 * Depth (inches): 0 V Depth (inches): 0 V  | FAC-Neutral Test (D5)                                    |
| Inundation Visible on Ae<br>Sparsely Vegetated Con<br>ield Observations:<br>urface Water Present?<br>/ater Table Present?<br>alturation Present?   | Yes X No Yes X No  | Depth (inches): 0 - 4 * Depth (inches): 0 V Depth (inches): 0 V  | FAC-Neutral Test (D5)                                    |
| Inundation Visible on Ae<br>Sparsely Vegetated Con<br>ield Observations:<br>urface Water Present?<br>/ater Table Present?<br>aturation Present?  | Yes X No Yes X No  | Depth (inches): 0 - 4 *  | FAC-Neutral Test (D5)                                    |
| Inundation Visible on Ae Sparsely Vegetated Con Field Observations: Surface Water Present? Vater Table Present? inturation Present? includes capillary frince)   | Yes X No Yes X No  | Depth (inches): 0 - 4 * Depth (inches): 0 V Depth (inches): 0 V  | FAC-Neutral Test (D5)                                    |

| Tree Stratum (Plot size: 30 )                           | Absolute<br>% Cover | Dominan<br>Species? | t Indicator | Dominance Test worksheet:   |
|---|---------------------|---------------------|-------------|---|
| TSUDA CONODENSIS  | 20                  | V                   | FACU        | Number of Dominant Species  |
| Acer sauharum   | 20                  | ¥                   | EACU        | That Are OBL, FACW, or FAC: (A)   |
| 3. Fraxinus americana                                   | 10                  | ý                   | FACU        | Total Number of Dominant Species Across All Strata:  (B)  |
| 4   |                     |                     | -11104      |   |
| 5.  |                     | -                   |             | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 6.  |                     |                     |             |   |
| 7   | -                   |                     |             | Prevalence Index worksheet:   |
|   | 50                  | = Total Co          | ver         | Total % Cover of: Multiply by:  OBL species \( \hat{\O} \) \( \times 1 = \hat{\O} \)                              |
| Sapling/Shrub Stratum (Plot size: 15'                   |                     | Total Oc            | ,,,,,       | FACW species 40 x 2 = 80  |
| Acer sacharum   | 20                  | y                   | FACU        | FAC species <u>20</u> x3 = <u>40</u>  |
| 2. Fraxinus americana                                   | 10                  | y                   | FACU        | FACU species 100 x 4 = 400  |
| 3. Acer succharum                                       | 10                  | v                   | FAU         | UPL species x 5 =   |
| 4. Fagus grandifolia                                    | 10                  | y                   | FACU        | Column Totals: 170 (A) 550 (B)  |
| 5   |                     |                     | _ 111111    | Prevalence Index = B/A = 3.23   |
| 6   |                     | -                   |             | Hydrophytic Vegetation Indicators:  |
| 7   |                     |                     |             | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 50                  | = Total Co          | wor         | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5 ' )                          |                     | - Total Oc          | , vei       | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| 1. Onoclea sensibilis                                   | 20                  | V                   | FACW        | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
| 2. Osmunda cinnamonea                                   | 20                  | V                   | FACINI      | Problematic Hydrophytic Vegetation (Explain)  |
| 3. Futhamia graminitalia                                | 10                  | N                   | FAC         |   |
| 4. Viola sorovia  | 10                  | N                   | FAC         | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 5 Carex Flava   | 10                  | 14                  | OBL         | Definitions of Vegetation Strata:   |
| 6   |                     | -171                |             |   |
| 7   |                     |                     |             | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 8   |                     |                     | _           | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 9.  |                     | -                   |             | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10  |                     | -                   | -           | Herb - All herbaceous (non-woody) plants, regardless of   |
| 11.   |                     | -                   | -           | size, and woody plants less than 3.28 ft tall.  |
| 12.   | -                   | -                   |             | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  | 70                  | = Total Co          |             | height.   |
| Mondy Vina Stratum (Blat size: 30)                      | 10                  | = Total Co          | over        |   |
| Woody Vine Stratum (Plot size: 30 1 ) 1. NO + Αρρίιαρίο |                     |                     |             |   |
| THE THEORY  |                     | <u> </u>            |             | Hydrophytic   |
| 2   |                     | -                   |             | Vegetation Present? Yes X No  |
| J   |                     |                     |             | 1705 <u>71</u> 110  |
| 4   | 0                   | = Total Co          |             |   |
| Remarks: (Include photo numbers here or on a separate   | sheet)              | = Total Ci          | over        |   |
|   |                     |                     |             | - through marchalanian  |
| -species have adapted to                                |                     |                     |             |   |
| adaptations Trunks were -                               | tiutted             | , root:             | s sha       | llow some trees   |
| were on hummucs hum                                     |                     | 350                 |             | 1 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
|   |                     |                     |             |   |

| Depth  | Matrix   |           |  | x Feature  | es .                     |                   | -04  | Danis and a  |
|--|--|-----------|--|--|--------------------------|-------------------|--|--|
| inches)  | Color (moist)  | %         | Color (moist)  | %  | Type                     | _Loc <sup>2</sup> | Texture  | Remarks  |
| )-6  | 104022/1   | 100       | 754123/4   |  | -                        |                   |  |  |
| 0-12   | 7.54R 3/4  | 95        |  |  | <u>e</u>                 | <u>-M</u>         | -SIL   |  |
|  | 1010 21.   | 00        | = cui 3/a  | _  |                          |                   |  |  |
| 0-6  | 104R 2/1   | 95        | 7.54R 3/4  |  | C                        | W                 | SIL_   |  |
| o-18   | LOVE 5/2   | 40        | 7.54R5/6   | 70   |                          | _m_               | SIL _  | 100  |
|  | -  |           |  | _  | =                        | _                 |  |  |
|  |  | _         | destruction of the second  | -  | -                        |                   |  | and the second s |
|  | Concentration, D=Depl  | etion, RN | M=Reduced Matrix, M  | S=Maske  | d Sand G                 | ains.             |  | Pore Lining, M=Matrix. coblematic Hydric Soils³:   |
| Black F Hydrog Stratific Deplete Thick E Sandy Sandy Sandy Strippe | Epipedon (A2) Histic (A3) Histic (A3) Histic (A3) Histic (A4) Histic (A5) Histic (A5) Histic (A12) Histic (A1 |           | MLRA 149B  Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri X Redox Dark Su Depleted Dark Redox Depres | ace (S9) (<br>Mineral (F<br>Matrix (F<br>x (F3)<br>urface (F6<br>Surface ( | F1) (LRR I<br>2)<br>(F7) |                   | Dark Surface Polyvalue Be Thin Dark St Iron-Mangar Piedmont Ft Mesic Spodi Red Parent Very Shallov | Peat or Peat (S3) (LRR K, L, R)<br>e (S7) (LRR K, L, M)<br>elow Surface (S8) (LRR K, L)<br>urface (S9) (LRR K, L)<br>esse Masses (F12) (LRR K, L, R)<br>podplain Soils (F19) (MLRA 1491<br>c (TA6) (MLRA 144A, 145, 1498<br>Material (F21)<br>v Dark Surface (TF12)<br>in in Remarks)  |
|  | of hydrophytic vegetat   | ion and v | vetland hydrology mu   | st be pres   | sent, unles              | s disturbed       | or problematic.  |  |
| Restrictive<br>Type:   | Layer (if observed):   |           |  |  |                          |                   |  |  |
| Depth (ii  | nches):  |           | -  |  |                          |                   | Hydric Soil Pres   | ent? Yes X No  |
| Remarks:   |  |           |  |  |                          |                   |  |  |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Bay Hill Wind project city/County: Chautallaua Sampling Date: 11/12/15 Applicant/Owner: Rall Hill Wind Energy, UC \_\_ State: NY Sampling Point: 89 Investigator(s): M BODETQ D. LOCY WOOD Section, Township, Range: VILLEWA Landform (hillslope, terrace, etc.): HILSTOPE Local relief (concave, convex, none): CONVEX Subregion (LRR or MLRA): URR-P2 Lat: 79, 128985 Long; 42, 430297 Datum: NAD 83 \_\_ NWI classification: upland Soil Map Unit Name: \_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes X \_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation Ma\_, Soil Np\_, or Hydrology Mo\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes \_\_\_\_ No X within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? Yes \_\_\_\_ No X Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) \_\_\_ Saturation (A3) \_\_ Marl Deposits (B15) Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) \_\_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) \_\_ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes \_\_\_\_\_ No \_y \_ Depth (inches): Surface Water Present? Water Table Present? Yes \_\_\_\_ No \_x Depth (inches): Saturation Present? Yes \_\_\_\_ No \_y Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_\_ No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| - | -   |  |
|---|-----|--|
|   | ( ) |  |

Sampling Point: 89

| Profile Desc   | cription: (Describe  | to the de  | oth needed to docur  |                                       | r or confirm   | the absence of   | indicators.)   |  |
|--|--|------------|--|---------------------------------------|--|--|--|--|
| Depth  | Matrix<br>Color (moist)  | %          | Color (moist)  | x Features<br>% Type <sup>1</sup>     | _Loc <sup>2</sup> _  | Texture  | Rema   | arko                                     |
| (inches)<br>0-5  | 1040 412   | 100        | Color (moist)  |                                       |  |  | Kem  | arks                                     |
| 5-18   | 104R 5/4   | 100        | ***************************************  | · · · · · · · · · · · · · · · · · · · | -  |  |  |  |
| 3 10   | 101K 17  | 100_       |  |                                       |  |  |  |  |
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|  | Market and the state of the sta |            |  |                                       |  |  |  |  |
|  |  |            | -  |                                       |  |  |  |  |
|  |  | letion, RM | 1=Reduced Matrix, M  | S=Masked Sand G                       | Grains.  |  | PL=Pore Lining, N  |  |
| Hydric Soil  |  |            |  |                                       |  |  | r Problematic H  |  |
| Histosol   |  |            |  | w Surface (S8) (LF                    | RR R,  |  | ck (A10) (LRR K,<br>airie Redox (A16)  |  |
|  | pipedon (A2)<br>istic (A3)   |            | MLRA 149B<br>Thin Dark Surf  | )<br>ace (S9) (LRR R, I               | MLRA 149B)   |  |  | (S3) (LRR K, L, R)                       |
| THE REAL PROPERTY AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF THE PERSON ADDRESS OF T | en Sulfide (A4)  |            | - Control of the Cont | Mineral (F1) (LRR                     |  | The second secon | face (S7) (LRR K   |  |
| Stratified   | d Layers (A5)  |            | Loamy Gleyed   | Matrix (F2)                           |  |  | e Below Surface  |  |
|  | d Below Dark Surfac  | e (A11)    | Depleted Matri   |                                       |  |  | k Surface (S9) (L  |  |
| The second secon | ark Surface (A12)<br>Mucky Mineral (S1)  |            | Redox Dark St Depleted Dark  |                                       |  |  |  | (F12) (LRR K, L, R)<br>(F19) (MLRA 149B) |
|  | Gleyed Matrix (S4)   |            | Redox Depres   |                                       |  |  |  | A 144A, 145, 149B)                       |
|  | Redox (S5)   |            |  |                                       |  | Red Pare   | ent Material (F21)   |  |
|  | Matrix (S6)  |            |  |                                       |  |  | llow Dark Surfac   |  |
| Dark Su  | rface (S7) (LRR R, I   | MLRA 149   | OB)  |                                       |  | Other (Ex  | kplain in Remarks  | s)                                       |
| 3Indicators o  | f hydrophytic vegeta   | tion and w | etland hydrology mu  | st be present, unle                   | ss disturbed   | or problematic.  |  |  |
|  | Layer (if observed)  |            | , , , , , , , , , ,  |                                       | in the same and th |  | The state of the s |  |
| Type:  |  |            |  |                                       |  |  |  |  |
| Depth (in  | ches):   |            |  |                                       |  | Hydric Soil P  | resent? Yes_   | No X                                     |
| Remarks:   |  |            |  |                                       |  |  |  |  |
|  |  |            |  |                                       |  |  |  |  |
|  |  |            |  |                                       |  |  |  |  |
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|  |  |            |  |                                       |  |  |  |  |
|  |  |            |  |                                       |  |  |  |  |

### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| roject/Site: Ball Hill Wind Project  | City/County: Chauta  | auqua County                             | Sampling Date: /// 2/30       |
|--|--|--|-------------------------------|
| pplicant/Owner: Ball Hill Wind Energy, LLC   |  |  | _ Sampling Point: DP- 97      |
| vestigator(s): DJL MAE.  | Section, Township, R   | · / II -                                 |                               |
| andform (hillslope, terrace, etc.):  ubregion (LRR or MLRA):  LRR-R  Lat:  79  oil Map Unit Name:  Alder Author State  re climatic / hydrologic conditions on the site typical for this tir  re Vegetation  No., Soil  No., or Hydrology  nature | Local relief (concave, conf. 121921 Local relief (concave, concave, conf. 121921 Local relief (concave, conf. 121921 Local relief (concave | nvex, none):                             | Slope (%):                    |
| SUMMARY OF FINDINGS – Attach site map sh<br>Hydrophytic Vegetation Present? Yes No   | owing sampling point   | LANGUE LA                                | important features, etc.      |
| Hydric Soil Present? Yes No  | within a Wetla   | and? Yes <u>×</u>                        | _ No                          |
| Wetland Hydrology Present? Yes No  | If yes, optional   | Wetland Site ID: WL                      | A5                            |
| YDROLOGY<br>Wetland Hydrology Indicators:  |  | Secondary Indicat                        | ors (minimum of two required) |
| 그렇게 하게 되는 집에 이어 나를 하게 되었다. 그런 이 사이를 모르는 때 그리고 있다고 있다고 있다. 그리고 있다.  | anni d   |  |                               |
| Primary Indicators (minimum of one is required; check all that  Water-S Water (A1)   | Stained Leaves (B9)  | Surface Soil 0  \( \sum \) Drainage Pati |                               |
|  | Fauna (B13)  | Moss Trim Lir                            |                               |
|  | posits (B15)   |  | Vater Table (C2)              |
|  | en Sulfide Odor (C1)   | Crayfish Burre                           |                               |
|  | d Rhizospheres on Living Roo   |  | sible on Aerial Imagery (C9)  |
|  | ce of Reduced Iron (C4)  | /  | ressed Plants (D1)            |
|  | Iron Reduction in Tilled Soils   |  |                               |
|  | ick Surface (C7)   | Shallow Aquit                            |                               |
| Inundation Visible on Aerial Imagery (B7) Other (E Sparsely Vegetated Concave Surface (B8)   | Explain in Remarks)  | Microtopogra                             | ohic Relief (D4)              |
| Field Observations:  |  | FAC-Iveutial                             | Test (D0)                     |
|  | (inches): ∠)   |  |                               |
|  | (inches):  |  | ,                             |
| Saturation Present? Yes No Depth includes capillary fringe)  | (inches): 0 W  | etland Hydrology Present                 | ? Yes No                      |
| Describe Recorded Data (stream gauge, monitoring well, aeri  | al photos, previous inspection   | s), if available:                        |                               |
|  |  |  |                               |
| Remarks:   |  |  |                               |
|  |  |  |                               |

| Tree Stratum (Plot size:)  | % Cover     | Species?   |       | Dominance Test worksheet: Number of Dominant Species   |
|--|-------------|------------|-------|--|
| 1,   |             |            |       | That Are OBL, FACW, or FAC: (A)  |
|  |             |            |       | Total Number of Dominant   |
|  |             |            |       | Species Across All Strata: (B)   |
| <u>.                                    </u>   |             |            | 4     | Percent of Dominant Species  |
|  |             |            |       | That Are OBL, FACW, or FAC: 100% (A/B  |
|  |             | Sec. 1     | 1 m   |  |
|  |             |            |       | Prevalence Index worksheet:  |
| *  |             |            |       | Total % Cover of: Multiply by:   |
|  |             | = Total Co | over  | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size:)  |             |            |       | FACW species x 2 =   |
|  |             |            |       | FAC species x 3 =  |
|  |             |            |       | FACU species x 4 =   |
|  |             |            |       | UPL species x 5 =  |
|  |             |            |       | Column Totals: (A) (B  |
|  |             |            |       |  |
|  |             |            |       | Prevalence Index = B/A =   |
| •  |             |            |       | Hydrophytic Vegetation Indicators:   |
|  |             | -          |       | 1 - Rapid Test for Hydrophytic Vegetation  |
| *  |             |            |       | 2 - Dominance Test is >50%   |
| =1   | 0           | = Total Co | over  | 3 - Prevalence Index is ≤3.0¹  |
| lerb Stratum (Plot size:)  |             |            |       |  |
| Leasin acycricles  | 70          | 466        | 1361  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |
|  |             |            | 100   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| Mehtla sp.   | - 00        | _//        | - FAW |  |
| Juneas offices   |             | NO         | Foli  | Indicators of hydric soil and wetland hydrology must   |
| . Nastur tium officinale   | 10          | NO         | 601   | be present, unless disturbed or problematic.   |
| Kyn lobing 50  |             | NO         | FAC   | Definitions of Vegetation Strata:  |
| ·  |             |            |       | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.    |
| · · · · · · · · · · · · · · · · · · ·  |             |            |       |  |
| •  | -           |            |       | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
|  | Carlon Anna |            |       | and greater than or equal to 5.26 K (1 m) tall.  |
|  |             |            |       | Herb - All herbaceous (non-woody) plants, regardless of  |
| 0  |             | -          |       | size, and woody plants less than 3.28 ft tall.   |
| 1  |             | -          |       | Woody vines - All woody vines greater than 3.28 ft in  |
| 2  |             | - 2        |       | height.  |
| A  | 120         | = Total C  | over  |  |
| Voody Vine Stratum (Plot size: 30 )  |             |            |       |  |
| voody vine oratain (i lot \$20)  |             |            | 24    |  |
| · · · · · · · · · · · · · · · · · · ·  |             |            |       | Hydrophytic  |
| · · · · · · · · · · · · · · · · · · ·  |             |            |       | Vegetation   |
| A STATE OF THE STA |             |            |       | Present? Yes No  |
|  |             |            |       |  |
| ·  | ~           |            |       |  |
|  | 0           | = Total C  | over  | 7.5  |
| emarks: (Include photo numbers here or on a separa   | te sheet.)  |            |       | 110  |
| 4  |             |            |       |  |
|  |             |            |       | - 10 8   |
| Trust f  |             |            |       |  |
| *  |             |            |       | -  |
|  |             |            |       |  |
| 1, 3:  |             |            |       | *  |
| A SA TON   |             |            |       |  |
| No.  |             |            |       |  |

| Depth     | Matrix   |             |                                  | Features  |                   | . 2         | 4.5            |              |  |  |
|-----------|--|-------------|----------------------------------|-----------|-------------------|-------------|----------------|--------------|--|--|
| (inches)  | Color (moist)                                  | %           | Color (moist)                    | %         | Type <sup>1</sup> | _Loc²       | Texture        | V-1-7m       | Remarks  |  |
| 1-1-0     | 104R 2/1                                       | 25          | 54x3/4                           | 5         | _                 | M           | 51/1/0cm       | 7            |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             | -                                |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           | oncentration, D=Deplet                         | ion, RM=Re  | educed Matrix, MS=               | -Masked   | Sand Gr           | ains.       |                |              | Lining, M=Mat  |  |
|           | Indicators:                                    |             | Dala da Dala                     | Curt-     | (CO) // P         |             |                |              | matic Hydric :<br>(LRR K, L, ML  |  |
| Histoso   | l (A1)<br>pipedon (A2)                         | -           | Polyvalue Below<br>MLRA 149B)    | Surface   | (S8) (LR          | KR,         |                |              | ox (A16) (LRR  |  |
|           | istic (A3)                                     | _           | Thin Dark Surfac                 | e (S9) (L | RR R, M           | LRA 149B)   | 5 cm M         | lucky Peat   | or Peat (S3) (L  | RR K, L, R)  |
|           | en Sulfide (A4)                                | -           | Loamy Mucky Mi                   |           |                   | (, L)       |                |              | (LRR K, L, M   |  |
|           | d Layers (A5)                                  | A11\        | Loamy Gleyed M Depleted Matrix ( |           |                   |             |                |              | Surface (S8) (L<br>(S9) (LRR K,  |  |
|           | d Below Dark Surface (<br>ark Surface (A12)    |             | Redox Dark Surf                  |           |                   |             |                |              | Masses (F12) (   |  |
|           | Mucky Mineral (S1)                             | _           | Depleted Dark Si                 |           | 7)                |             | Piedmo         | ont Floodpl  | ain Soils (F19)  | (MLRA 149B   |
|           | Gleyed Matrix (S4)                             |             | Redox Depression                 |           |                   |             |                |              | 6) (MLRA 144   | A, 145, 149B)  |
|           | Redox (S5)                                     |             |                                  |           |                   |             |                | rent Mater   |  | 0)   |
|           | d Matrix (S6)<br>urface (S7) (LRR R, ML        | RA 149B)    |                                  |           |                   |             |                | Explain in I | k Surface (TF1<br>Remarks)   | 2)   |
|           | of hydrophytic vegetation Layer (if observed): | n and wetla | nd hydrology must                | be prese  | nt, unles         | s disturbed | or problematic | •            | and the second s | The state of the s |
| Type:     |  |             |                                  |           |                   |             |                |              | \  |  |
| Depth (in | ches):   |             |                                  |           |                   |             | Hydric Soil    | Present?     | Yes  | No   |
| Remarks:  |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                | - 1 -        |  | 042 A **   |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |
|           |  |             |                                  |           |                   |             |                |              |  |  |

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  | City/County: Chautauqua County Sampling Date: 11/12/20   |
|---|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC   | State: NY Sampling Point: DP- 9/2  |
| nvestigator(s): DJL MHR - M   | Section, Township, Range:  |
|   | ocal relief (concave, convex, none): 67000 Slope (%): 318  |
| Subregion (LRR or MLRA): LRR-R Lat: 79.1  | 21797 Long: 42,439597 Datum: NAD 83  |
| Soil Map Unit Name: hay tough 5/17  | (CKB) NWI classification:  |
| Are climatic / hydrologic conditions on the site typical for this time of y   |  |
| Are Vegetation No., Soil No., or Hydrology No. significantly  |  |
|   |  |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>AO</u> naturally p  |  |
| SUMMARY OF FINDINGS – Attach site map showin  | g sampling point locations, transects, important features, etc.  |
| Hydrophytic Vegetation Present? Yes No  | Is the Sampled Area  |
| Hydric Soil Present? Yes No   | within a Wetland?  |
| Wetland Hydrology Present? Yes No   | If yes, optional Wetland Site ID:  |
| Remarks: (Explain alternative procedures here or in a separate rep  | ort.)  |
|   |  |
| 1   |  |
|   | No.  |
|   |  |
| - vå  |  |
| YDROLOGY  | ( ) Let lead to a facilities and the properties of the properties  |
| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all that apply  | and the second s |
|   | d Leaves (B9) Drainage Patterns (B10)  |
| High Water Table (A2) Aquatic Faun  |  |
| Saturation (A3) Marl Deposits   | Ifide Odor (C1) Crayfish Burrows (C8)  |
|   | zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)   |
|   | Reduced Iron (C4) Stunted or Stressed Plants (D1)  |
|   | Reduction in Tilled Soils (C6) Geomorphic Position (D2)  |
| Iron Deposits (B5) Thin Muck Su   | urface (C7) Shallow Aquitard (D3)  |
|   |  |
| 이 프로그램 가게 되었다. 아이를 내려가면 이렇게 되었다. 그리고 사용하는 사람들은 사람들이 되었다. 그리고 아이들은 사람들이 되었다.   | in in Remarks) Microtopographic Relief (D4)  |
| 네트 <del>로드</del> 경에 가게 하면 이번 시간에 있는데 되었다. 그리는 이번 시간에 되었다. 그리는 그리는 그는 그리는 이번 시간에 그리는데 되는데, 나는 그 모든데 되었다.   | The state of the s |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8) Field Observations:  | in in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Present? Yes No Depth (inches)  | in in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches No Depth No Depth (inches No Depth Depth No Depth   | m in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  ps):  ps):  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inchestation Present) Yes Yes No Depth (inchestation Present) Yes | m in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe))  | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inchest   | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe))  | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)   | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)   | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)   | mir in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe))  Describe Recorded Data (stream gauge, monitoring well, aerial phosphare)  | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)   | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe))  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)  | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe))  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)  | min in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes No Depth (inches water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial phosphore)   | mir in Remarks)  Microtopographic Relief (D4) FAC-Neutral Test (D5)  es):  Wetland Hydrology Present? Yes No   |

| 20 .                                  |   | Dominant Indicator                      | Dominance Test worksheet:  |
|---------------------------------------|---|---|--|
| Tree Stratum (Plot size:30)           |   | Species? Status                         | Number of Dominant Species   |
|                                       |   |   | That Are OBL, FACW, or FAC: (A)  |
|                                       |   |   | Total Number of Dominant   |
|                                       |   |   | Species Across All Strata: (B)   |
|                                       |   |   | December of December 1   |
|                                       |   |   | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/E   |
| •                                     |   |   | THAT YILL OBE, TYOU, OT THE.   |
|                                       |   |   | Prevalence Index worksheet:  |
|                                       |   |   | Total % Cover of: Multiply by:   |
|                                       |   | = Total Cover                           | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size: 15 ) |   | , | FACW species x 2 =   |
| apling/Snrub Stratum (Plot size:)     |   |   | FAC species x3 =   |
|                                       |   |   |  |
| <u> </u>                              |   |   | FACU species x4 =  |
|                                       |   |   | UPL species x 5 =  |
|                                       |   |   | Column Totals: (A) (B  |
| <u> </u>                              |   |   | Prevalence Index = B/A =   |
| <del></del>                           | _                                       |   |  |
|                                       |   |   | Hydrophytic Vegetation Indicators:   |
|                                       |   |   | 1 - Rapid Test for Hydrophytic Vegetation  |
| ,                                     | 1                                       | = Total Cover                           | 2 - Dominance Test is >50%   |
| 4                                     | *************************************** | - 10tal 00VB                            | 3 - Prevalence Index is ≤3.01  |
| erb Stratum (Plot size:)              |   | 10 -                                    | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| Instyla sp.                           | 50                                      | YES FACY                                | data in Remarks or on a separate sheet)  |
| Trifolium frans                       | 40                                      | 465 FACH                                | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| Plantage lance o lata                 | 5                                       | NO FACE                                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| Taraxacum officinale                  |   | NO FACE                                 | be present, unless disturbed or problematic.   |
|                                       |   |   |  |
| •                                     |   |   | Definitions of Vegetation Strata:  |
|                                       | -                                       | -                                       | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
|                                       |   |   | at breast height (DBH), regardless of height.  |
|                                       |   |   | Sapling/shrub - Woody plants less than 3 in. DBH   |
|                                       |   |   | and greater than or equal to 3.28 ft (1 m) tall.   |
|                                       |   |   | West All bedresses (consumated states and the Co   |
| 0                                     |   |   | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 1,                                    |   |   |  |
| 2                                     |   |   | Woody vines - All woody vines greater than 3.28 ft in  |
|                                       | 160                                     |   | height.  |
| 70                                    | 100                                     | = Total Cover 50                        |  |
| loody Vine Stratum (Plot size:30)     |   | 20                                      |  |
|                                       |   |   |  |
|                                       |   |   | Hydrophytic  |
|                                       |   |   | Vegetation Present? Yes No   |
|                                       |   |   | 1000111  |
|                                       |   |   |  |
|                                       | 13                                      |   |  |

| Profile Des | cription: (Describe                   | to the dep  | th needed to docum          | nent the inc | dicator o | r confirm t | the absence of in | dicators.)                                     |                   |
|-------------|---------------------------------------|-------------|-----------------------------|--------------|-----------|-------------|-------------------|--|-------------------|
| Depth       | Matrix                                |             | Redo                        | x Features   |           |             |                   | Remark   | re                |
| (inches)    | Color (moist)                         | %           | Color (moist)               | %            | Type'     | Loc*        | Texture           | Keman  | 79                |
| 0-5         | 10xe 3/3                              | 100         |                             |              |           |             |                   |  |                   |
| 5-110       | 10424/4                               | 100         |                             |              |           |             |                   |  |                   |
| 16-20       | 10YR 4/3                              | 100         |                             |              |           |             |                   |  |                   |
| 10 20       | TOIR 11                               | - 100       |                             |              |           |             |                   |  |                   |
| -           |                                       | -           |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   | .,   |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             | -                                     |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             | -            |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             | -                           |              |           |             |                   |  |                   |
|             |                                       |             | D. J. and Markey M          | C-Maskad     | Cand Cr   | nine        | 2l ocation: PL    | =Pore Lining, M=                               | Matrix.           |
| 'Type: C=C  | Concentration, D=De Indicators:       | pletion, RM | =Reduced Matrix, M          | o=iviasked   | Janu Gr   | uilio.      | Indicators for    | Problematic Hyd                                | lric Soils³:      |
| Histoso     |                                       |             | Polyvalue Belo              | w Surface (  | S8) (LRI  | RR,         | 2 cm Muck         | (A10) (LRR K, L                                | , MLRA 149B)      |
| -           | pipedon (A2)                          |             | MLRA 149B                   | )            |           |             |                   | ie Redox (A16) (                               |                   |
| -           | listic (A3)                           |             | Thin Dark Surf              |              |           |             |                   | y Peat or Peat (S<br>ce (S7) ( <b>LRR K,</b> I | 3) (LRR K, L, R)  |
|             | en Sulfide (A4)                       |             | Loamy Mucky                 |              |           | i, L)       |                   | Below Surface (S                               |                   |
|             | ed Layers (A5)<br>ed Below Dark Surfa | ce (A11)    | Loamy Gleyed Depleted Matri |              |           |             | Thin Dark         | Surface (S9) (LR                               | RK,L)             |
|             | Dark Surface (A12)                    | ce (ATT)    | Redox Dark St               |              |           |             | Iron-Manga        | anese Masses (F                                | 12) (LRR K, L, R) |
|             | Mucky Mineral (S1)                    |             | Depleted Dark               |              | 7)        |             | Piedmont F        | loodplain Soils (                              | F19) (MLRA 149B)  |
|             | Gleyed Matrix (S4)                    |             | Redox Depres                | sions (F8)   |           |             |                   | t Material (F21)                               | 144A, 145, 149B)  |
|             | Redox (S5)                            |             |                             |              |           |             | Very Shall        | ow Dark Surface                                | (TF12)            |
|             | d Matrix (S6)<br>urface (S7) (LRR R,  | MLRA 149    | B)                          |              |           |             | Other (Exp        | lain in Remarks)                               |                   |
| Acres -     |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             | etland hydrology mu         | st be prese  | nt, unles | s disturbed | or problematic.   |  |                   |
| Restrictive | Layer (if observed                    | ):          |                             |              |           |             |                   |  |                   |
| Туре:       |                                       |             | -                           |              |           |             | Undria Sall Bra   | sent? Yes                                      | No_X_             |
| Depth (i    | nches):                               |             |                             |              |           |             | Hydric Soil Fre   | Sentr (es                                      |                   |
| Remarks:    |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   |  |                   |
|             |                                       |             |                             |              |           |             |                   | 2  |                   |
|             |                                       |             |                             |              |           |             |                   | \$1  |                   |
|             |                                       |             |                             |              |           |             |                   | 9/   |                   |
|             |                                       |             |                             |              |           |             |                   | »  |                   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11 /2/ 24/5 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP- 9 Investigator(s): Section, Township, Range: Local relief (concave, convex, none): Landform (hillslope, terrace, etc.): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Such Colle (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation N0, Soil N, or Hydrology N0 significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO , Soil NO , or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID: Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) ✓ Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) Thin Muck Surface (C7) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| /CCETATION   | Llan | coiontific | namaa   | nf. | nlante  |
|--------------|------|------------|---------|-----|---------|
| VEGETATION - | USE  | Scientific | Hallies | U   | piants. |

Sampling Point: DP- 93

| Tree Stratum (Plot size:) 1              | . — | Species?   |      | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:                                 |
|--|-----|------------|------|---|
| 2  |     |            |      | Total Number of Dominant Species Across All Strata: (B)   |
| 4<br>5                                   |     |            |      | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 6  |     |            |      | Prevalence Index worksheet:   |
| Sapling/Shrub Stratum (Plot size: /5 / ) |     | = Total Co | ver  | OBL species x 1 =<br>FACW species x 2 =   |
| I  |     |            |      | FAC species x 3 =   |
|  |     |            |      | FACU species x 4 =<br>UPL species x 5 =   |
|  |     |            |      | Column Totals: (A) (B)  |
|  |     |            |      | Prevalence Index = B/A =  |
|  |     |            |      | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                                      |
| •  | 0   | = Total Co |      | 2 - Dominance Test is >50%  |
| erb Stratum (Plot size:)                 |     |            |      | 3 - Prevalence Index is ≤3.01   |
| . Malaris acundinacea                    | 40  | 465        | FRW  | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)            |
| June Condition                           |     | 485        | OBL  | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| Juneus offersus                          |     | NO         | FACE | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| Trifolium Nepons                         |     | NO         | Fru  | Definitions of Vegetation Strata:   |
|  |     |            |      | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.               |
|  |     |            |      | Sapling/shrub - Woody plants less than 3 in. DBH  |
|  |     |            |      | and greater than or equal to 3.28 ft (1 m) tall.  |
| 0  |     |            |      | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 1<br>2                                   | ,   |            |      | Woody vines – All woody vines greater than 3.28 ft in height.   |
| 201                                      | 105 | = Total Co |      | Torgon.   |
| Voody Vine Stratum (Plot size:)          |     |            | 21   |   |
|  |     | *          |      | Hydrophytic   |
|  |     |            |      | Vegetation Present? Yes No  |
|  |     |            |      |   |
|  | 0   | = Total Co | ver  |   |

| Depth      | ription: (Describe<br>Matrix                 |              |                                      | x Features   |                   |                     |                          |  |                                   |            |
|------------|--|--------------|--------------------------------------|--------------|-------------------|---------------------|--------------------------|--|-----------------------------------|------------|
| (inches)   | Color (moist)                                | %            | Color (moist)                        | %            | Type <sup>1</sup> | _Loc <sup>2</sup> _ | Texture                  |  | Remarks                           |            |
| 2-8        | 104R2/1                                      | 90           | 7.54R3/4                             | 10.          | (                 | M                   | Siltour                  |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      | -            |                   |                     |                          | THE STATE OF THE S |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            | AUG-1  |              |                                      |              |                   |                     |                          |  |                                   |            |
| Type: C=C  | oncentration, D=Dep                          | letion DM    | =Reduced Matrix M                    | S=Masked S   | Sand Gr           | ains.               | <sup>2</sup> Location: F | PL=Pore I  | _ining, M=Matri                   | x.         |
|            | Indicators:                                  | letion, Rivi | -Reduced Matrix, M                   | S-Wasked C   | Janu On           | all 10.             | Indicators fo            | r Problen  | natic Hydric S                    | oils³:     |
| _ Histosol | (A1)<br>pipedon (A2)                         |              | Polyvalue Belo                       |              | 88) (L <b>RI</b>  | R,                  |                          |  | LRR K, L, MLR<br>ox (A16) (LRR I  |            |
| _ Black Hi | stic (A3)                                    |              | Thin Dark Surf                       | ace (S9) (LR |                   |                     | 5 cm Mud                 | ky Peat o  | or Peat (S3) (LF                  |            |
|            | en Sulfide (A4)<br>d Layers (A5)             |              | Loamy Mucky Loamy Gleyed             |              | (LRR K            | , L)                | Polyvalue                | Below S  | (LRR K, L, M)<br>surface (S8) (LF |            |
| Deplete    | d Below Dark Surfac<br>ark Surface (A12)     | e (A11)      | — Depleted Matri     ✓ Redox Dark St |              |                   |                     |                          |  | (S9) (LRR K, L<br>lasses (F12) (L |            |
| _ Sandy N  | lucky Mineral (S1)                           |              | Depleted Dark                        | Surface (F7) | )                 |                     | Piedmon                  | Floodpla   | ain Soils (F19) (                 | MLRA 149B) |
|            | Redox (S5)                                   |              | Redox Depres                         | sions (F8)   |                   |                     | Red Pare                 | nt Materi  |                                   |            |
| _ Stripped | Matrix (S6)                                  | MI DA 440    | D\                                   |              |                   |                     | Very Sha<br>Other (E)    |  | Surface (TF12                     | :)         |
|            | rface (S7) (LRR R, I                         |              |                                      |              |                   | i i i i             |                          |  |                                   |            |
|            | f hydrophytic vegeta<br>Layer (if observed): |              | etland hydrology mu                  | st be presen | it, unles         | s disturbed         | or problematic.          |  |                                   |            |
| Type:      | Rah / boat                                   |              |                                      |              |                   |                     |                          |  | v X                               | No         |
| Depth (in  | ches):                                       |              |                                      |              |                   |                     | Hydric Soil P            | resent?  | Yes                               | NO         |
| Remarks:   |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |
|            |  |              |                                      |              |                   |                     |                          |  |                                   |            |

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project                                  | City/County: Chautauqua County Sampling Date: 1/12/20(5                      |
|---|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC                           | State: NY Sampling Point: DP- 94   |
| nvestigator(s): DFL m4B   | 1 41-  |
| andform (hillslope, terrace, etc.): Till Plans                        |  |
| Subregion (LRR or MLRA): LRR-R Lat: 79                                | 122055 Long: 42, 440708 Datum: NAD 83  |
| Subregion (LRR or MLRA): LINE Lat: 1                                  |  |
| Soil Map Unit Name: Rust, Gilt Is an                                  |  |
| 그렇게 되는 그들은 그들은 그들이 살아가면 되었다. 그들은 사람들은 사람들이 되었다면 하지만 하지만 되었다.          | e of year? Yes No (If no, explain in Remarks.)                               |
| Are Vegetation 👭 , Soil <u>M</u> , or Hydrology <u>Me</u> signif      |  |
| Are Vegetation <u>M</u> , Soil <u>M</u> , or Hydrology <u>M</u> natur | ally problematic? (If needed, explain any answers in Remarks.)               |
| SUMMARY OF FINDINGS – Attach site map sho                             | owing sampling point locations, transects, important features, etc           |
| Hydrophytic Vegetation Present? Yes No                                | Is the Sampled Area  |
| Hydric Soil Present? Yes No   | within a Wetland? Yes No   |
| Wetland Hydrology Present? Yes No                                     | If yes, optional Wetland Site ID:  |
|   | A  |
| TYDROLOGY   | Secondary Indicators (minimum of two required)                               |
| Wetland Hydrology Indicators:   |  |
| Primary Indicators (minimum of one is required; check all that        |  |
|   | tained Leaves (B9) Drainage Patterns (B10) Fauna (B13) Moss Trim Lines (B16) |
|   | Fauna (B13) Moss Trim Lines (B16) posits (B15) Dry-Season Water Table (C2)   |
|   | en Sulfide Odor (C1) Crayfish Burrows (C8)                                   |
|   | Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)  |
| Drift Deposits (B3) Presence  | e of Reduced Iron (C4) Stunted or Stressed Plants (D1)                       |
|   | Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)                 |
|   | ck Surface (C7) Shallow Aquitard (D3)  |
|   | Explain in Remarks) Microtopographic Relief (D4)  FAC-Neutral Test (D5)      |
| Sparsely Vegetated Concave Surface (B8) Field Observations:           | FAC-Neutral Test (D3)  |
|   | (inches):  |
|   | (inches):  |
|   | (inches): Wetland Hydrology Present? Yes No                                  |
| (includes capillary fringe)   |  |
| Describe Recorded Data (stream gauge, monitoring well, aeri           | al photos, previous inspections), if available.                              |
|   |  |
| Remarks;  |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |

| /EGETATION – Use scientific names of plants.            |                     |                      |             | Sampling Point: DP# 94  |
|---|---------------------|----------------------|-------------|---|
| Tree Stratum (Plot size:) 1)                            | Absolute<br>% Cover | Dominant<br>Species? |             | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)                            |
| 2   |                     |                      |             | Total Number of Dominant Species Across All Strata: (B)   |
| 4   |                     |                      |             | Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)   |
| 6   |                     |                      |             | Prevalence Index worksheet:   |
| Sapling/Shrub Stratum (Plot size: / 5 / )               |                     | = Total Cov          | er          | OBL species x 1 =<br>FACW species x 2 =   |
|   |                     |                      |             | FAC species x 3 =<br>FACU species x 4 =<br>UPL species x 5 =  |
| 4   |                     |                      |             | Column Totals: (A) (B)  |
| 5<br>6  |                     |                      |             | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  |
| 7   |                     | = Total Cov          |             | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01              |
| Herb Stratum (Plot size: 5)  1. Trifolium repas         | 60                  | 465                  | FALL        | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                      |
| 2. Plan Lago lancedata                                  |                     | NO                   | FACU        | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  Indicators of hydric soil and wetland hydrology must |
| Solanum (arolinense                                     |                     |                      | FACY        | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:                                 |
|   |                     |                      |             | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.             |
|   |                     |                      |             | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.               |
| 0   |                     |                      |             | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.          |
| 12  | 140                 | = Total Cov          |             | Woody vines - All woody vines greater than 3.28 ft in height.   |
| Moody Vine Stratum (Plot size:)                         |                     | = Total Cov          | er 76<br>28 | **  |
| 2.  |                     |                      |             | Hydrophytic Vegetation Present? Yes No  |
| 4.  | # a                 | = Total Cov          |             | Present 165 160   |
| Remarks: (Include photo numbers here or on a separate s | 14                  | - Total Cov          | 91          |   |
|   |                     |                      |             |   |
|   |                     |                      |             |   |
|   |                     |                      |             |   |

|   | Matrix                                  |              |                          | ox Features Type¹    | _Loc²        | Texture                       | Remark          | e                                       |
|---|---|--------------|--------------------------|----------------------|--------------|-------------------------------|-----------------|---|
| inches)                                 | Color (moist)                           | %            | Color (moist)            |                      | LOC          | 51+lana                       | TOMAIN          |   |
| 2-8                                     | 1048 3/3                                | 100          |                          |                      |              | - Jana                        | the other south |   |
|   |   | 800          |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   | -            |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   | -                                       |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      | -            |                               |                 |   |
|   |   |              | 4000                     |                      |              |                               |                 | 100000000000000000000000000000000000000 |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   | 1 |              |                          |                      | 7            |                               |                 |   |
| Type: C=C                               | oncentration, D=Dep                     | nletion DM   | =Reduced Matrix M        | IS=Masked Sand G     | rains.       | <sup>2</sup> Location: PL=Pc  | ore Linina. M=1 | Matrix.                                 |
|   | Indicators:                             | Jedon, Kivi- | -Reduced Matrix, IV      | O-Wasked Carld C     | ranio.       | Indicators for Pro            | olematic Hyd    | ric Soils³:                             |
| Histoso                                 | 13                                      |              | Polyvalue Beld           | w Surface (S8) (LF   | RR R,        | 2 cm Muck (A1                 | 0) (LRR K, L,   | MLRA 149B)                              |
|   | pipedon (A2)                            |              | MLRA 149E                | 3)                   |              | Coast Prairie F               |                 |   |
|   | listic (A3)                             |              |                          | ace (S9) (LRR R, I   |              |                               |                 | B) (LRR K, L, R)                        |
|   | en Sulfide (A4)                         |              | Loamy Mucky Loamy Gleyed | Mineral (F1) (LRR    | K, L)        | Dark Surface ( Polyvalue Beld |                 |   |
|   | ed Layers (A5)<br>ed Below Dark Surface | ce (A11)     | Depleted Matr            |                      |              | Thin Dark Surf                |                 |   |
| - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | ark Surface (A12)                       |              | Redox Dark S             |                      |              |                               |                 | 2) (LRR K, L, R)                        |
|   | Mucky Mineral (S1)                      |              | Depleted Dark            |                      |              |                               |                 | 19) (MLRA 149E                          |
|   | Gleyed Matrix (S4)                      |              | Redox Depres             | sions (F8)           |              | Mesic Spodic                  |                 | 144A, 145, 149B)                        |
|   | Redox (S5)<br>d Matrix (S6)             |              |                          |                      |              | Very Shallow I                |                 | TF12)                                   |
|   | urface (S7) (LRR R,                     | MLRA 149     | <b>B</b> )               |                      |              | Other (Explain                |                 |   |
|   |   |              |                          | track and a          |              |                               |                 |   |
|   | of hydrophytic vegeta                   |              | etland hydrology mu      | ist be present, unle | ss disturbed | d or problematic.             |                 |   |
|   | Layer (if observed)                     | ):           |                          |                      |              |                               |                 |   |
| Type:                                   | 332                                     | my /         |                          |                      |              | Hydric Soil Presen            | t? Yes          | No X                                    |
| Depth (in                               | ncnes):                                 |              |                          |                      |              | Hydric Son Fresch             |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
| Remarks:                                |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |
|   |   |              |                          |                      |              |                               |                 |   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_\_\_\_ City/County: Chautauqua County \_\_ Sampling Date:\_// Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: Investigator(s): DJL Section, Township, Range: Local relief (concave, convex, none): \_\_\_\_\_\_ Con cave Landform (hillslope, terrace, etc.): \_\_\_ Subregion (LRR or MLRA): LRR-R Lat: Soil Map Unit Name: Mautallylla NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🗘 No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation ND, Soil ND, or Hydrology ND significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) \_\_\_\_\_\_ High Water Table (A2) \_\_\_ Moss Trim Lines (B16) Aquatic Fauna (B13) ✓ Saturation (A3) Dry-Season Water Table (C2) Marl Deposits (B15) Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) X Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) \_\_\_ Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Saturation Present? \_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30 ')                        |          | Dominant<br>Species? |         | Dominance Test worksheet:  Number of Dominant Species   |
|---|----------|----------------------|---------|---|
| 1   |          |                      |         | That Are OBL, FACW, or FAC: (A)   |
| 2   |          | -                    |         | Total Number of Dominant  |
| 3   |          |                      |         | Species Across All Strata: (B)  |
| 4   |          |                      |         | Percent of Dominant Species   |
| 5   |          |                      |         | That Are OBL, FACW, or FAC: 100 (A/B)   |
|   |          |                      |         |   |
| 6   |          | -                    | -       | Prevalence Index worksheet:   |
| 7   |          | -                    |         | Total % Cover of: Multiply by:  |
|   | 0        | = Total Co           | ver     | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 151)                |          |                      |         | FACW species x 2 =  |
| 1,  |          |                      |         | FAC species x 3 =   |
| 2   |          |                      |         | FACU species x 4 =  |
|   |          |                      |         | UPL species x 5 =   |
| 3   |          |                      |         | Column Totals: (A) (B)  |
| 4   |          |                      |         | Prevalence Index = B/A =  |
| 5   |          |                      |         |   |
| 6   |          | -                    |         | Hydrophytic Vegetation Indicators:  |
| 7   |          |                      |         | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 0        | = Total Co           | ver     | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size:                              |          |                      |         | 3 - Prevalence Index is ≤3.0¹   |
| 1. Bullins 50.  | 40       | 465                  | FAC     | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)            |
| 2 person or you des                                   | 20       | 466                  | 100     | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 3. Phaleris and incesa                                |          |                      | FAW     |   |
| 4. LAMOS MAST   |          |                      | 006     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|   |          |                      |         | Definitions of Vegetation Strata:   |
| 5   |          |                      |         |   |
| 6   |          |                      |         | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7   |          |                      |         |   |
| 8   |          |                      |         | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 9,  |          |                      |         |   |
| 10  |          |                      |         | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11.   |          |                      |         |   |
| 12.   |          |                      |         | Woody vines – All woody vines greater than 3.28 ft in height.   |
|   | YK       | = Total Co           | vor 275 | noigh.  |
| Woody Vine Stratum (Plot size: 30 )                   |          | _ = 10tai C0         | 15      |   |
| 1   |          | 0-                   | . ——    | Hydrophytic   |
| 2   |          |                      |         | Vegetation Present? Yes No  |
| 3   |          | -                    |         |   |
| 4   | 0        | = Total Co           | ver     |   |
| Remarks: (Include photo numbers here or on a separate | about \  | _ = Total Co         | VEI     | 1   |
| All and a separate                                    | 311661.) |                      |         |   |
|   |          |                      |         |   |

| Depth  | ption: (Describe t  |            | Rede  | x Features  | 3                     |           |  |   |
|--|---|------------|---|---|-----------------------|-----------|--|---|
| (inches)   | Color (moist)   | %          | Color (moist)   | %   | Type <sup>1</sup>     | _Loc2     | Texture  | Remarks   |
| 0-12   | 104/23/   | 90         | 104234  | 10  |                       | m         | 5, 1 de fas  |   |
|  |   |            |   |   |                       |           |  |   |
|  |   |            |   |   |                       |           |  |   |
|  |   |            |   |   |                       |           |  |   |
| lydric Soil Inc  |   | etion, RM= |   |   |                       |           | Indicators   | : PL=Pore Lining, M=Matrix.<br>for Problematic Hydric Soils³:   |
| Stratified L Depleted B Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped M | edon (A2) c (A3) Sulfide (A4) ayers (A5) Selow Dark Surface Surface (A12) cky Mineral (S1) yed Matrix (S4) lox (S5) | 2          | Polyvalue Belor MLRA 149B Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress | )<br>ace (S9) (Li<br>Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F7 | RR R, ML<br>) (LRR K, | RA 149B)  | Coast I 5 cm M Dark S Polyva Thin Da Iron-Ma Piedmo Mesic S Red Pa | fuck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) fucky Peat or Peat (S3) (LRR K, L, R) fucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M) fue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 1491 Spodic (TA6) (MLRA 144A, 145, 149B arent Material (F21) hallow Dark Surface (TF12) Explain in Remarks) |
| ndicators of hy  | ydrophytic vegetatio  | n and wet  | and hydrology mus   | t be preser   | nt, unless            | disturbed | or problematic   |   |
|  | er (if observed):   |            |   |   |                       |           |  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
| Type:<br>Depth (inche  | is).  |            |   |   |                       |           | Unadala Call   |   |
| emarks:  |   |            |   |   |                       |           | Hydric Soil  | Present? Yes No No  |
|  |   |            |   |   |                       |           |  |   |
|  |   |            |   |   |                       |           |  |   |
|  |   |            |   | Nº  |                       | 1         |  |   |
|  |   |            |   |   |                       |           |  |   |

### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua  | County  | Sampling Date: 11/5/20   |
|--|--|---|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | City/County:   |   | _ Sampling Point: DP- 98   |
|  | ~  | × 1 11  |  |
|  | Section, Township, Range:  |   | 1919   |
| Landform (hillslope, terrace, etc.):   | Local relief (concave, convex, no  | A A MINISTER A                                  | A CONTRACTOR OF THE CONTRACTOR |
| Subregion (LRR or MLRA): LRR-R Lat:  | 7. 126633 Long:  | 42,4400   | 74Z Datum: NAD 83  |
| Soil Map Unit Name: Chantangera 5111   | 20m /(28)  | NWI classific                                   | ation:   |
| Are climatic / hydrologic conditions on the site typical for this tir  | ne of year? Ves V  |   |  |
| 어느 아이들 아이들 아이들 아이들 아이들이 아니는 아이들이 아이들이 아이들이 아니는 아이들이 아니는 것이 없다.   |  |   | /  |
| Are Vegetation Mo, Soil Mo, or Hydrology M sign  |  | l Circumstances" p                              |  |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> natu  | rally problematic? (If needed,   | explain any answer                              | s in Remarks.)   |
| SUMMARY OF FINDINGS – Attach site map sh   | owing sampling point locati  | ons, transects                                  | important features, etc.   |
| Hydrophytic Vegetation Present? Yes No   | Is the Sampled Area  |   |  |
| Hydric Soil Present? Yes No  | 1011-1011-101  | Yes   | _ No 🗶   |
| Wetland Hydrology Present? Yes No _  | The state of the s | d Site ID:                                      | Y  |
| Remarks: (Explain alternative procedures here or in a separa   |  | u one ib.                                       |  |
| 4  | Ü  |   | 9  |
|  |  |   |  |
| HYDROLOGY  | In .   |   |  |
| Wetland Hydrology Indicators:  |  | 5 5 5 7 5 T C T T T T T T T T T T T T T T T T T | tors (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all tha  |  | Surface Soil                                    |  |
|  | Stained Leaves (B9)  | Drainage Par                                    |  |
| 1 THE STATE OF THE | Fauna (B13)  | Moss Trim Li                                    |  |
|  | eposits (B15)  |   | Water Table (C2)   |
|  | en Sulfide Odor (C1)   | Crayfish Burn                                   | sible on Aerial Imagery (C9)   |
|  | d Rhizospheres on Living Roots (C3)<br>ce of Reduced Iron (C4)   |   | ressed Plants (D1)   |
|  | Iron Reduction in Tilled Soils (C6)  |   | Position (D2)  |
|  | uck Surface (C7)   | Shallow Aqu                                     |  |
|  | Explain in Remarks)  |   | phic Relief (D4)   |
| Sparsely Vegetated Concave Surface (B8)  |  | FAC-Neutral                                     |  |
| Field Observations:  |  |   |  |
| Surface Water Present? Yes No Depth  | (inches):  |   |  |
| Water Table Present? Yes No Depth  | (inches):  | 100   |  |
| Saturation Present? Yes No Depth   | (inches): Wetland  | Hydrology Preser                                | t? Yes No X  |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aer  | ial abates, province inspections) if a   | railable:                                       |  |
| Describe Recorded Data (stream gauge, monitoring well, acr   | iai priotos, previous irispections), ir at   | allabic.  |  |
|  |  |   |  |
| Remarks:   |  |   |  |
| 12 welland bydology too  | Compres Marin  |   |  |
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| VEGETATION ~ ( | Jse scientific names | of plants. |
|----------------|----------------------|------------|

Sampling Point: DP- 93

|           |               | Status    | Number of Dominant Species That Are OBL, FACW, or FAC: (A)  |
|-----------|---------------|-----------|---|
|           |               |           | Total Number of Dominant Species Across All Strata:(B)  |
|           |               |           | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
|           |               |           | Prevalence Index worksheet:   |
| 241       |               |           |   |
|           |               | ,         | FAC species x 3 =<br>FACU species x 4 =   |
|           |               |           | UPL species x 5 =   |
|           |               |           | Column Totals: (A) (B)  |
|           |               |           | Prevalence Index = B/A =  |
|           |               |           | Hydrophytic Vegetation Indicators:  |
|           |               |           | 1 - Rapid Test for Hydrophytic Vegetation   |
| 0         | = Total C     | over      | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹  |
| 2         | 1411          |           | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting  |
|           |               |           | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                |
|           |               |           |   |
|           | 4.0           | 1         | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|           |               | FAC       | Definitions of Vegetation Strata:   |
|           |               |           | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.               |
|           |               |           | Sapling/shrub – Woody plants less than 3 in. DBH  |
|           |               |           | and greater than or equal to 3.28 ft (1 m) tall.  |
|           |               |           | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
|           |               |           | Woody vines – All woody vines greater than 3.28 ft in height.   |
| 55        | = Total C     | over 27.5 |   |
|           |               | 11        |   |
|           | _             |           | Hydrophytic   |
|           |               |           | Vegetation Present? Yes No  |
| - 0       |               |           |   |
| e sheet.) | = Total C     | over      |   |
| ,         |               |           |   |
|           |               |           |   |
|           |               |           |   |
|           |               |           |   |
|           | 0 30 10 5 5 5 |           | = Total Cover  30 465 FACU 10 NO FACU 5 NO FACU 5 NO FACU 5 NO FAC  5 Total Cover 27.5                            |

| Depth  | cription: (Describe to<br>Matrix  |            |                    | x Features   |                     |                     |   |   |   |
|--|---|------------|--------------------|--|---------------------|---------------------|---|---|---|
| (inches)   | Color (moist)   | %          | Color (moist)      | %  | Type <sup>1</sup>   | _Loc <sup>2</sup> _ | Texture   | Remar   | ks  |
| 2-4  | 10413/3   | 100        |                    |  |                     | -                   | 5) 1+100  |   |   |
| 1-8  | 1040 4/6  | 100        |                    |  | _                   | 400                 | 5/+ /ca.  | -1-   |   |
|  |   |            |                    |  |                     |                     |   |   |   |
|  |   |            |                    |  |                     |                     |   |   |   |
| ype: C=Co  | ncentration, D=Deple  | tion, RM=I | Reduced Matrix, MS | S=Masked   | Sand Gra            | ins.                | <sup>2</sup> Location:  | : PL=Pore Lining, M=<br>for Problematic Hyd   | Matrix.   |
| Black His Hydroger Stratified Depleted Thick Dan Sandy Mo Sandy Gi Sandy Re Stripped I Dark Surf | pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) | .RA 149B)  |                    | ce (S9) (Li<br>lineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F7<br>ons (F8) | RR R, ML<br>(LRR K, | RA 149B)<br>L)      | 2 cm M Coast F 5 cm M Dark Si Polyval Thin Da Iron-Ma Piedmo Mesic Si Red Pa Very Si Other (i | Juck (A10) (LRR K, L, Prairie Redox (A16) (L<br>Jucky Peat or Peat (St<br>Jurface (S7) (LRR K, L<br>Jue Below Surface (S8<br>Jark Surface (S9) (LRR<br>Janganese Masses (F1<br>John Floodplain Soils (F1<br>Spodic (TA6) (MLRA 1<br>Jarent Material (F21)<br>Hallow Dark Surface (Explain in Remarks) | MLRA 149B) .RR K, L, R) 3) (LRR K, L, R) 4) (LRR K, L) 5) (LRR K, L) 2) (LRR K, L, R) 19) (MLRA 149 |
| strictive La   | ayer (if observed):   |            | and hydrology musi | be preser  | it, unless          | disturbed           | or problematic.   |   |   |
| Type:<br>Depth (inch   | Ruk Gra   | 4/         |                    |  |                     |                     | Hydric Soil I   | Present? Yes  | No No   |
| emarks:  |   |            |                    |  |                     |                     |   |   |   |

| Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind En Applicant/Owner: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind En Applicant/Owner: Ball Hill Wi | rergy, LLC    MA   Sec   Till Plain   Local re   Lat:   79   129   | tion, Township, Range:   | State: NY Sampling Point: DP-/   |
|--|--|--|--|
| Applicant/Owner: Ball Hill Wind Ennvestigator(s):  andform (hillslope, terrace, etc.):  Subregion (LRR or MLRA): LRR-R  Soil Map Unit Name: have face.   | NA Sec<br>11   Plain Local re<br>Lat: 79   29  | tion, Township, Range:   | : Confex Slope (%): 3  |
| andform (hillstope, terrace, etc.):  | 11 Plain Local re Lat: 79 129  | elief (concave, convex, none)  | Conldex Slope (%):3  |
| andform (hillslope, terrace, etc.):<br>Subregion (LRR or MLRA): LRR-R<br>Soil Map Unit Name:   | Till Plain Local re Lat: 79, 129   | elief (concave, convex, none)  | : Slope (%): |
| subregion (LRR or MLRA): LRR-R<br>soil Map Unit Name: Land factor<br>are climatic / hydrologic conditions on t   | Lat: 79, 129   | 1177   | 441146 Datum: NAD 8  |
| oil Map Unit Name: Shaw fale.<br>re climatic / hydrologic conditions on t  |  | Lorig.   |  |
| re climatic / hydrologic conditions on t   |  | 100  |  |
|  | 717  | (heper)  | NWI classification:  |
|  |  |  | 10, explain in Remarks.)   |
| re Vegetation <u>WO</u> , Şoil <u>NO</u> , or  |  |  | ircumstances" present? Yes No_   |
| re Vegetation <u>ND</u> , Soil <u>ND</u> , or  | Hydrology Monaturally probler  | matic? (If needed, exp   | olain any answers in Remarks.)   |
| RUMMARY OF FINDINGS A  | ttach eita man ehowing sa  | moling point locations   | s, transects, important features,  |
| SOMMART OF FINDINGS - A  | ittach site map showing sa   |  | ,  |
| Hydrophytic Vegetation Present?  | Yes No   | Is the Sampled Area within a Wetland?  | Yes No   |
| Hydric Soll Present?   | Yes No -   |  |  |
| Wetland Hydrology Present?<br>Remarks: (Explain alternative proced   | Yes No   | If yes, optional Wetland Si  | te ID:   |
|  |  |  |  |
|  |  |  |  |
|  | ,  |  |  |
| YDROLOGY   | M-   |  |  |
| Wetland Hydrology Indicators:  |  | Se   | econdary Indicators (minimum of two requi  |
| Primary Indicators (minimum of one is  | s required: check all that apply)  |  | _ Surface Soil Cracks (B6)   |
| Surface Water (A1)   | Water-Stained Leav   | ves (B9)   | _ Drainage Patterns (B10)  |
| High Water Table (A2)  | Aquatic Fauna (B1  | 3)   | _ Moss Trim Lines (B16)  |
| Saturation (A3)  | Marl Deposits (B15   | i)   | _ Dry-Season Water Table (C2)  |
| Water Marks (B1)   | Hydrogen Sulfide C   | Odor (C1)  | _ Crayfish Burrows (C8)  |
| Sediment Deposits (B2)   | The state of the s | eres on Living Roots (C3)  | _ Saturation Visible on Aerial Imagery (C9   |
| Drift Deposits (B3)  | Presence of Reduc  |  | _ Stunted or Stressed Plants (D1)  |
| Algal Mat or Crust (B4)  | The second secon | tion in Tilled Soils (C6)  | _ Geomorphic Position (D2)   |
| Iron Deposits (B5)   | Thin Muck Surface  |  | Shallow Aquitard (D3) Microtopographic Relief (D4)   |
| Inundation Visible on Aerial Imag  |  | (emarks)   | FAC-Neutral Test (D5)  |
| Sparsely Vegetated Concave Sur<br>Field Observations:  | nace (Do)  |  | _ (//  |
| Surface Water Present? Yes _   | No Depth (inches):   |  |  |
|  | No Depth (inches):   |  |  |
| Saturation Present? Yes _  |  | Wetland Hyd  | drology Present? Yes No  |
| (includes capillary fringe)  |  | to the state of th | Mai  |
| Describe Recorded Data (stream gau   | ige, monitoring well, aerial photos, p   | revious inspections), it availa  | ible.  |
|  |  |  |  |
| Remarks:   | 1.12.  |  |  |
| TOW MY MANY MANY   | under logic in tempor  | 12 HOUSELL   |  |
| p. p. 1. X   |  |  |  |
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|  | north and a second   |  |  |

Sampling Point: DP-100 VEGETATION - Use scientific names of plants. Absolute Dominant Indicator **Dominance Test worksheet:** % Cover Species? Status Number of Dominant Species Prunus serotina That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species \_\_\_\_\_ x 1 = \_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_ Sapling/Shrub Stratum (Plot size: FAC species \_\_\_\_ x3=\_\_\_ FACU species \_\_\_ x4=\_\_\_ \_ x5=\_ UPL species Column Totals: Prevalence Index = B/A = Hydrophytic Vegetation Indicators: \_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_\_ 2 - Dominance Test is >50% 80 = Total Cover \_\_ 3 - Prevalence Index is ≤3.01 Herb Stratum (Plot size: 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation1 (Explain) Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Vegetation Strata:** Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaccous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in 15 = Total Cover Woody Vine Stratum (Plot size: 30' Hydrophytic Vegetation Present? = Total Cover Remarks: (Include photo numbers here or on a separate sheet.) Photo 131

|                               | Matrix or (moist)  | 100         | Color (moist)                    | x Features % Ty | ype¹ Loc²  | Siltians   | Remarks  |
|-------------------------------|--|-------------|----------------------------------|-----------------|--|--|--|
| Type: C=Concentra             | 24/2   |             | 7-320-1                          | Эммин           | The order  | -11/   |  |
| Type: C=Concentra             | 24/4   | 100         | 1920                             | Charlest and    | The Market of the Control of the Con | 5.11 / cens  |  |
|                               | 12//09   |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 |  |  |  |
|                               |  | •           |                                  |                 |  |  |  |
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|                               |  |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 |  |  |  |
|                               | ~  |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 |  |  |  |
|                               |  |             |                                  |                 | and Combra   | 21 paction: DI -   | Pore Lining, M=Matrix.                                   |
|                               |  | tion, RM=R  | educed Matrix, M                 | S=Masked Sa     | nd Grains.   |  | roblematic Hydric Soils <sup>3</sup> :                   |
|                               | ns.  |             | Polyvalue Belo                   | u Surface (SR   | A A PP P   |  | A10) (LRR K, L, MLRA 49B)                                |
| Histosol (A1) Histic Epipedon | (A2)   | _           | MLRA 149B                        |                 | ) (Linking   |  | Redox (A16) (LRR K, L, R)                                |
| Black Histic (A3              |  |             | And the second second            |                 | R, MLRA 149B   |  | Peat or Peat (S3) (LRR K, L, R)                          |
| Hydrogen Sulfid               |  | -           | Loamy Mucky I                    |                 | .RR K, L)  |  | (S7) (LRR K, L, M)                                       |
| Stratified Layers             |  | 2013        | _ Loamy Gleyed                   |                 |  |  | elow Surface (S8) (LRR K, L)                             |
| Depleted Below                |  | (A11) _     | _ Depleted Matrix                |                 |  |  | urface (S9) (LRR K, L)<br>nese Masses (F12) (LRR K, L, R |
| Thick Dark Surf Sandy Mucky M | the state of the s | -           | _ Redox Dark Su<br>Depleted Dark | CITY THE COLUMN | -7.  | The second secon | oodplain Soils (F19) (MLRA 149                           |
| Sandy Mucky M                 |  | -           | _ Redox Depress                  |                 |  | The state of the s | c (TA6) (MLRA 144A, 145, 149E                            |
| Sandy Redox (S                |  |             |                                  |                 | Ď.   |  | Material (F21)   |
| Stripped Matrix               |  |             |                                  |                 |  |  | v Dark Surface (TF12)                                    |
| Dark Surface (S               | 7) (LRR R, MI  | RA 149B)    |                                  |                 |  | Other (Expla   | in in Remarks)   |
| Indicators of hydrop          |  |             | and budgeleast mus               | ot he present   | unless disturber   | t or problematic   |  |
| Restrictive Layer (i          |  | on and well | and riyarology ma                | st be present,  | uniess distance  | To problemation  |  |
|                               | no/bre   | w/          |                                  |                 |  |  | 41   |
| Depth (inches):_              | 1211   | 7           |                                  |                 |  | Hydric Soil Pres   | ent? Yes No  |
| Remarks:                      |  |             |                                  |                 |  |  |  |

| WEILAND DETERMINATION Project/Site: Ball Hill Wind Project          | I DATA FORM – Northcentral and Northeast Region  City/County: Chautauqua County Sampling Date: 11/13/2-4 |
|---|--|
| Project/Site: Dail Till Wind Floject                                | ANY DD / tro   |
| Applicant/Owner: Ball Hill Wind Energy, LLC                         | 1/1/0- 10  |
| nvestigator(s): D5L, MHB  |  |
| andform (hillslope, terrace, etc.):                                 | Local relief (concave, convex, none): Contave Slope (%): 350   |
| Subregion (LRR or MLRA): LRR-R Lat:                                 | 9.12813 Long: 42.441178 Datum: NAD 83  |
| oll Map Unit Name: Bus to Bitte 10 and                              | NWI classification:  |
| are climatic / hydrologic conditions on the site typical for this t | time of year? Yes No (If no, explain in Remarks.)  |
| re Vegetation 📈 , Soil 🕬 , or Hydrology 🐠 sig                       | inificantly disturbed? Are "Normal Circumstances" present? Yes X No                                      |
| re Vegetation MO, Soil MO, or Hydrology MO na                       |  |
|   |  |
| SUMMARY OF FINDINGS – Attach site map s                             | howing sampling point locations, transects, important features, etc                                      |
| Hydrophytic Vegetation Present? Yes No                              | Is the Sampled Area  |
| Hydric Soil Present? Yes No   | within a Wetland? Yes No   |
| Wetland Hydrology Present? Yes No                                   | If yes, optional Wetland Site ID:  |
| Remarks: (Explain alternative procedures here or in a sepa          | rate report.)  |
|   |  |
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|   |  |
|   |  |
| YDROLOGY  |  |
| Wetland Hydrology Indicators:                                       | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all th        |  |
|   | -Stained Leaves (B9) ——Drainage Patterns (B10)   |
|   | tic Fauna (B13) Moss Trim Lines (B16)  |
|   | Deposits (B15) Dry-Season Water Table (C2)   |
|   | gen Sulfide Odor (C1) Crayfish Burrows (C8)  |
|   | zed Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)                          |
|   | nce of Reduced Iron (C4) Stunted or Stressed Plants (D1)   |
| Algal Mat or Crust (B4) Recei                                       | nt Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  |
|   | Muck Surface (C7) Shallow Aquitard (D3)  |
| Inundation Visible on Aerial Imagery (B7) Other                     | (Explain in Remarks) Microtopographic Relief (D4)  |
| Sparsely Vegetated Concave Surface (B8)                             | FAC-Neutral Test (D5)  |
| Field Observations:   |  |
| No.   | h (inches):  |
|   | th (inches):  Wetland Hydrology Present? Yes No  |
| Saturation Present? Yes No Dept (includes capillary fringe)         | th (inches): Wetland Hydrology Present? Yes No   |
| Describe Recorded Data (stream gauge, monitoring well, a            | erial photos, previous inspections), if available:   |
|   | 0  |
| Remarks:  | ý  |
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### VEGETATION - Use scientific names of plants.

| 2 2   | Absolute | Dominant Indicator | Dominance Test worksheet:  |
|---|----------|--------------------|--|
| Tree Stratum (Plot size: 30)                          | % Cover  | Species? Status    | Number of Dominant Species   |
| 1   |          |                    | That Are OBL, FACW, or FAC: (A)  |
| 2   |          |                    | Total Number of Dominant   |
| 3   |          |                    | Species Across All Strata: (B)   |
| 4   |          |                    | Percent of Dominant Species  |
| 5.  |          |                    | That Are OBL, FACW, or FAC: 100 (A/B)  |
|   |          |                    |  |
| 6   | -        |                    | Prevalence Index worksheet:  |
| 7   |          | Calculation of     | Total % Cover of: Multiply by:   |
| A seed  | Red      | = Total Cover      | OBL species x1 =   |
| Sapling/Shrub Stratum (Plot size:                     |          |                    | FACW species x 2 =   |
| 1   |          |                    | FAC species x 3 =  |
| 2.  |          |                    | FACU species x 4 =   |
| 3.  |          |                    | UPL species x 5 =  |
|   |          |                    | Column Totals: (A) (B)   |
| 4   |          |                    | Prevalence Index = B/A =   |
| 5   |          |                    | Hudenbulle Venetation Indicators   |
| 6   | -        |                    | Hydrophytic Vegetation Indicators:   |
| 7   |          |                    | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%                                   |
|   | 65       | = Total Cover      |  |
| Herb Stratum (Plot size:)                             |          |                    | 3 - Prevalence Index is ≤3.01  |
| 1. Phaloris and macea                                 | 100      | YES FACE           | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) |
| 2. Juneus effasus                                     |          | NO FAIN            | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 2. Ounces + Trasus                                    | 2/1      |                    |  |
| 3. Scripus atorivers                                  | The hade | 10 > 1000          | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
| 4   |          |                    |  |
| 5   |          |                    | Definitions of Vegetation Strata:  |
| 6   |          |                    | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7.  |          |                    | at breast height (DBH), regardless of height.  |
| 8.  |          |                    | Sapling/shrub - Woody plants less than 3 in. DBH   |
|   |          |                    | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9   |          |                    | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10  |          |                    | size, and woody plants less than 3.28 ft tall.   |
| 11  |          |                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 12  |          |                    | height.  |
| - 1   | 90       | = Total Cover      |  |
| Woody Vine Stratum (Plot size:)                       |          | 15                 |  |
| 1   |          |                    |  |
| 2   |          |                    | Hydrophytic  |
| 2   | 1000     |                    | Vegetation Present? Yes No   |
| 3   |          |                    |  |
| 4,  |          |                    |  |
|   | - 1      | = Total Cover      |  |
| Remarks: (Include photo numbers here or on a separate | sheet.)  |                    |  |
| As a contract of the                                  |          |                    |  |
|   |          |                    |  |
|   |          |                    |  |
|   |          |                    |  |
|   |          |                    |  |
|   |          |                    |  |

| Depth  | Matrix  |          |                     | x Features   |                                    | . 2               |   |   | Damada            |
|--|---|----------|---------------------|--|------------------------------------|-------------------|---|---|-------------------|
| inches)  | Color (moist)   | %        | Color (moist)       | %  | Type <sup>1</sup>                  | _Loc²             | Texture   |   | Remarks           |
| 10/2   | 1941241   | 70       | 75/18/14            | 10   | Control                            | MA.               | 5. At least   | W. d.   | 11.1              |
|  |   |          | 400 440             |  |                                    |                   |   |   |                   |
|  |   |          |                     |  |                                    |                   |   |   |                   |
|  |   |          |                     |  |                                    |                   |   |   |                   |
|  |   |          |                     |  |                                    |                   |   |   |                   |
|  |   |          |                     |  |                                    |                   |   |   |                   |
|  | oncentration, D=Deplet  | ion, RM= | Reduced Matrix, MS  | S=Masked   | Sand Gr                            | ains.             |   |   | Lining, M=Matrix. |
| Histosol Histic Er Black Hi Hydroge Stratified Thick Da Sandy M Sandy G Sandy R Stripped Dark Su | olpedon (A2) stic (A3) on Sulfide (A4) d Layers (A5) d Below Dark Surface ( ark Surface (A12) flucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Matrix (S6) rface (S7) (LRR R, ML | RA 149E  |                     | nce (S9) (L<br>dineral (F1<br>Matrix (F2<br>( (F3)<br>rface (F6)<br>Surface (F6) | .RR R, MI<br>() (LRR K<br>)<br>(7) | LRA 149B)<br>, L) | 2 cm N Coast I 5 cm N Dark S Polyva Thin D Iron-Mi Pledmi Mesic Red Pa Very S Other ( | luck (A10) ( Prairie Redo lucky Peat urface (S7) lue Below S ark Surface anganese M ont Floodpla Spodic (TAI arent Materi hallow Dark (Explain in F | Surface (TF12)    |
|  | f hydrophytic vegetatio<br>Layer (if observed):   | n and we | tland hydrology mus | st be prese  | ent, unles                         | s disturbed       | or problematic  |   |                   |
| Type:  |   |          |                     |  |                                    |                   |   |   |                   |
| Depth (in  | ches):  |          |                     |  |                                    |                   | Hydric Soll   | Present?  | Yes No            |
| emarks:  |   |          |                     |  |                                    |                   |   |   |                   |
|  |   |          |                     |  |                                    |                   |   |   |                   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_ City/County: Chautauqua County Sampling Date: 11/13/2015 Project/Site: Ball Hill Wind Project NY \_ Sampling Point: DP- 107 Applicant/Owner: Ball Hill Wind Energy, LLC Section, Township, Range: Villenova Investigator(s): DJL, MAR Landform (hillslope, terrace, etc.): Till flain Local relief (concave, convex, none): Convex Slope (%): 3-9 Lat: 79. 128212 Long: 42. 441126 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Busti Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_\_\_ Are Vegetation M, Soil M, or Hydrology M, significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation M, Soil M, or Hydrology M naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: \_\_ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) Surface Water (A1) \_\_ Moss Trim Lines (B16) \_\_\_ Aquatic Fauna (B13) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) \_\_\_ Marl Deposits (B15) \_ Saturation (A3) \_\_ Crayfish Burrows (C8) \_\_\_ Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) \_\_ Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) \_ Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) \_\_\_ Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: No \_\_\_\_ Depth (inches): Surface Water Present? Yes No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No. Yes No \_\_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: No wetland by diology indicators prosent

| <u>Tree Stratum</u> (Plot size: <u>30</u> )  | % Cover | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:                                 |
|--|---------|----------------------|--------|---|
| 2  |         |                      |        | Total Number of Dominant Species Across All Strata: (B)   |
| 4<br>5.  |         |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)  |
| 6  |         |                      |        | Prevalence Index worksheet:   |
| 7  | 0       | = Total Co           | /er    |   |
| Sapling/Shrub Stratum (Plot size: /5 )   |         |                      |        | FACW species x 2 =<br>FAC species x 3 =   |
| 2  |         |                      |        | FACU species x 4 =<br>UPL species x 5 =   |
| 3  |         |                      |        | Column Totals: (A) (B)  |
| 5  |         |                      |        | Prevalence Index = B/A =  |
| 6  |         |                      |        | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                                      |
| 7  | art.    | = Total Co           | ver    | 2 - Dominance Test is >50%<br>3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5) 1. Proctylis a lower of to   | 3/1     | 466                  | FACCI  | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
| 2. Plleyas framence  | 20      | YEL                  | FACU   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Tolohum and 3   | 20      | MES                  | Fren   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 5. Hesperis ST   |         |                      | FACU   | Definitions of Vegetation Strata:   |
| 6  |         |                      |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7  |         |                      |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 9  |         |                      |        | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11   |         |                      |        | Woody vines - All woody vines greater than 3.28 ft in   |
|  | 90      | = Total Co           | ver UK | height.   |
| Woody Vine Stratum (Plot size: 30 )  |         |                      | 18     |   |
| 2  |         | -                    | ,      | Hydrophytic Vegetation  |
| 3  |         |                      | -      | Present? Yes No   |
| 4  | 0       | = Total Co           | ver    |   |
| Remarks: (Include photo numbers here or on a separate and the separate sepa | sheet.) | 4-                   | Α¥     |   |
|  |         |                      |        | **  |
|  |         |                      |        |   |

| Depth Matrix  |  | k Features   |                |   | Remarks                              |          |
|---|--|--|----------------|---|--------------------------------------|----------|
| inches) Color (moist) %   | Color (moist)  | % Type¹ I  | -              | exture                                    | Remarks                              |          |
| 0-12 10483/4 10   | 2)!!-  | grandest. stati  |                | 11/000                                    | 1                                    |          |
|   |  |  |                |   |                                      |          |
|   |  |  |                |   |                                      |          |
| <u>w.</u>   |  |  |                |   |                                      |          |
| **  | -  |  |                |   |                                      |          |
|   | _  |  |                |   |                                      |          |
|   |  |  |                |   |                                      |          |
|   |  |  |                |   |                                      |          |
|   |  |  |                |   |                                      |          |
|   |  |  |                |   |                                      |          |
| /pe: C=Concentration, D=Depletion,  | DM-Deduced Matrix M  | S=Masked Sand Grain  | is.            | <sup>2</sup> Location: PL=Pore L          | ining, M=Matrix                      |          |
| ype: C=Concentration, D=Depletion, ordric Soil Indicators:  |  |  |                | ndicators for Problem                     | natic Hydric So                      | ils³:    |
| _ Histosol (A1)   | Polyvalue Belov<br>MLRA 149B   | w Surface (S8) (LRR R  | ₹, _           | _ 2 cm Muck (A10) (<br>Coast Prairie Redo |                                      |          |
| _ Histic Epipedon (A2)<br>_ Black Histic (A3)   |  | rice (S9) (LRR R, MLR  | A 149B)        | 5 cm Mucky Peat of                        | or Peat (S3) (LRI                    |          |
| Hydrogen Sulfide (A4)   | The second secon | Mineral (F1) (LRR K, L   | -) -           | Dark Surface (S7) Polyvalue Below S       |                                      | RK.L)    |
| <ul> <li>Stratified Layers (A5)</li> <li>Depleted Below Dark Surface (A11)</li> </ul>   | Loamy Gleyed ) Depleted Matrix   | A CONTRACTOR OF THE PROPERTY O |                | Thin Dark Surface                         | (S9) (LRR K, L)                      |          |
| Thick Dark Surface (A12)  | Redox Dark Su  | rface (F6)   | -              | Iron-Manganese M                          | lasses (F12) (LR                     | RK, L, R |
| _ Sandy Mucky Mineral (S1)  | Depleted Dark  |  |                | Piedmont Floodpla Mesic Spodic (TA6       | IIN SOIIS (F19) (N<br>8) /MI RA 144A | 145 149F |
| _ Sandy Gleyed Matrix (S4)<br>_ Sandy Redox (S5)  | Redox Depress  | ions (ro)  | -              | Red Parent Materi                         |                                      | 110, 110 |
| _ Sandy Redox (SS)  |  |  |                | Very Shallow Dark                         | Surface (TF12)                       |          |
|   |  |  |                | Other (Explain in F                       | Remarks)                             |          |
| Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA  | 149B)  |  |                |   |                                      |          |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA   |  | st be present, unless d  | listurbed or p | roblematic.                               |                                      | -        |
| Stripped Matrix (S6)  |  | st be present, unless d  | listurbed or p | problematic.                              | *                                    |          |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) Indicators of hydrophytic vegetation an estrictive Layer (if observed): Type:                |  | st be present, unless d  |                |   | Yes                                  | No >     |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | st be present, unless d  |                | oroblematic.                              | Yes                                  | No       |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | st be present, unless d  |                |   | Yes                                  | No _>    |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | st be present, unless d  |                |   | Yes                                  | No       |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | st be present, unless d  |                |   | Yes                                  | No _>    |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA didicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches): |  | st be present, unless d  |                |   | Yes                                  | No _>    |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | st be present, unless d  |                |   | Yes                                  | No _>    |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type:                  |  | st be present, unless d  |                |   | Yes                                  | No       |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA didicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches): |  | st be present, unless d  |                |   | Yes                                  | No _>    |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) Indicators of hydrophytic vegetation an estrictive Layer (if observed):  Type:               |  | st be present, unless d  |                |   | Yes                                  | No       |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | t be present, unless d   |                |   | Yes                                  | No       |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA andicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches): |  | st be present, unless d  |                |   | Yes                                  | No       |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) dicators of hydrophytic vegetation an estrictive Layer (if observed): Type: Depth (inches):  |  | t be present, unless d   |                |   | Yes                                  | No       |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_ City/County: Chautauqua County Sampling Date: 1/13/20/5 Project/Site: Ball Hill Wind Project \_ Sampling Point: DP-/03 Applicant/Owner: Ball Hill Wind Energy, LLC Section, Township, Range: VI LLProva Investigator(s): Local relief (concave, convex, none): \_ Landform (hillslope, terrace, etc.): \_\_\_\_ \_ Long: 42.440794 128876 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: \_ (I hay faugues NWI classification: No \_\_\_\_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ Are "Normal Circumstances" present? Yes \_\_\_\_\_\_ Are Vegetation MD, Soil MD, or Hydrology MS significantly disturbed? Are Vegetation MD, Soil MD, or Hydrology MD naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No within a Wetland? No Hydric Soil Present? Yes If yes, optional Wetland Site ID: Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) Marl Deposits (B15) ∠ Saturation (A3) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_ Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) ★ Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) \_ Thin Muck Surface (C7) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Depth (inches): No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes Saturation Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| VEGETATION - Use scientific names of plant   | s.        |  | Sampling Point: DP- 10 3   |
|--|-----------|--|--|
| <u>Tree Stratum</u> (Plot size:  | % Cover   |  | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)   |
| 2  |           |  | Total Number of Dominant Species Across All Strata: (B)  |
| 4  |           |  | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
| Sapling/Shrub Stratum (Plot size: 15")   |           | = Total Cover  | Prevalence Index worksheet:  |
| 1  |           |  | FACU species x 4 =  UPL species x 5 =  Column Totals: (A) (B)  |
| 4<br>5.  |           |  | Prevalence Index = B/A =   |
| 6  | 1         |  | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹ |
| Herb Stratum (Plot size: 5)  1. 5 (Macas PHasus  2. Epilobium Cp.  3. Sciegus attorisens  4. Poa SJ. | 30        | MEG FACE MEG | 4 - Morphological Adaptations1 (Provide supporting   |
| 5. Galium sp.  | 10        | NO Fac   | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.   |
| 7  |           |  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |           |  | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.                                   |
| 11   |           |  | Woody vines - All woody vines greater than 3.28 ft in height.  |
| Woody Vine Stratum (Plot size: 30 / )  | _95_      | = Total Cover 47.5   |  |
| 2  |           |  | Hydrophytic Vegetation Present? Yes No   |
| 4  | 0         | = Total Cover  |  |
| Remarks: (Include photo numbers here or on a separate  | e sheet.) |  |  |
|  |           |  | (A)  |
|  |           |  |  |

| Depth Matrix  |  | x Features    |   | 100              |  |
|---|--|---------------|---|------------------|--|
| (inches) Color (moist) %  |  |               | ype <sup>1</sup> Loc <sup>2</sup>         |                  | Remarks  |
| 5-12 15423/1 90   | 7.5103/4   | 10 1          | no  | 50 man           | <u> </u>   |
|   |  |               |   |                  |  |
|   | -  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
| Type: C=Concentration, D=Depletion,                                     | RM=Reduced Matrix. M   |               | nd Grains.                                | ²Location: PL=   | Pore Lining, M≕Matrix.                                     |
| ydric Soil Indicators:  | The state of the s |               |   | Indicators for P | roblematic Hydric Solls <sup>3</sup> :                     |
| Histosol (A1) Histic Epipedon (A2)                                      | Polyvalue Below  |               |   | Coast Prairie    | (A10) (LRR K, L, MLRA 149B)<br>e Redox (A16) (LRR K, L, R) |
| _ Black Histic (A3)   |  |               | R, MLRA 149B                              |                  | Peat or Peat (S3) (LRR K, L, R)<br>e (S7) (LRR K, L, M)    |
| _ Hydrogen Sulfide (A4)<br>_ Stratified Layers (A5)                     | Loamy Mucky M<br>Loamy Gleyed  |               | KK K, L)                                  | -                | elow Surface (S8) (LRR K, L)                               |
| _ Depleted Below Dark Surface (A11)                                     |  |               |   |                  | urface (S9) (LRR K, L)                                     |
| _ Thick Dark Surface (A12)  | Redox Dark Su  |               |   |                  | nese Masses (F12) (LRR K, L, R)                            |
| Sandy Mucky Mineral (S1)  | Depleted Dark  |               |   | Piedmont FI      | oodplain Soils (F19) (MLRA 149B                            |
| _ Sandy Gleyed Matrix (S4)  | Redox Depress  | ions (F8)     |   | Mesic Spod       | ic (TA6) (MLRA 144A, 145, 149B)                            |
| _ Sandy Redox (S5)  |  |               |   |                  | Material (F21)   |
| Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 1                   | 149B)  |               |   |                  | w Dark Surface (TF12)<br>ain in Remarks)                   |
| ndicators of hydrophytic vegetation and estrictive Layer (if observed): | d wetland hydrology mus  | t be present, | unless disturbed                          | or problematic.  |  |
| Type:   |  |               |   |                  | /  |
| Depth (inches):   |  |               |   | Hydric Soil Pres | ent? Yes No No   |
| emarks:   |  |               | ant described as an entire for the second |                  | 2000   |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  |  |
|   |  |               |   |                  | •  |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: 1/13/2015 \_ Sampling Point: DP- 164 Applicant/Owner: Ball Hill Wind Energy, LLC Villenova \_ Section, Township, Range:\_\_ Investigator(s): DTL, MAB Local relief (concave, convex, none): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: NWI classification:\_ Soil Map Unit Name: Man tan ar 166 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_\_ No\_\_\_\_ Are Vegetation 100, Soil 100, or Hydrology 100 significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation A.A., Soil A.D., or Hydrology A. naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: No Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: \_\_ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_\_ Drainage Patterns (B10) \_\_ Water-Stained Leaves (B9) Surface Water (A1) \_\_ Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) Mart Deposits (B15) Saturation (A3) \_\_ Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) \_\_ Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) \_\_ Iron Deposits (B5) \_ Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) \_\_ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No Depth (inches): Yes No Depth (inches): Yes Depth (inches): Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes \_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: No wattend hydrolyce indicates prises Remarks:

### VEGETATION - Use scientific names of plants.

| Tree Stratum (Plot size:3\omega) 1)   | Absolute<br>% Cover | Dominant<br>Species? |             | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                  |
|---------------------------------------|---------------------|----------------------|-------------|--|
| 2                                     |                     |                      |             | Total Number of Dominant Species Across All Strata: (B)  |
| 4                                     |                     |                      |             | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 5                                     |                     |                      |             | matale obt., Facev, of Face. (Ab)  |
| 6                                     |                     |                      | -           | Prevalence Index worksheet:  |
| 7                                     | 1                   | = Total Co           | (or         |  |
| Sapling/Shrub Stratum (Plot size: /5/ |                     | - Total Co           | 761         | FACW species x 2 =   |
| Sapling/Shrub Stratum (Plot size.     |                     |                      |             | FAC species x 3 =  |
| 1                                     | -                   | 7                    |             | FACU species x 4 =   |
| 2                                     |                     |                      |             | UPL species x 5 =  |
| 3                                     | -                   |                      | -           | Column Totals: (A) (B)   |
| 4                                     |                     |                      |             | Prevalence Index = B/A =   |
| 5<br>6                                |                     | -                    |             | Hydrophytic Vegetation Indicators:   |
| 7.                                    |                     |                      |             | 1 - Rapid Test for Hydrophytic Vegetation  |
| ( <u> </u>                            | 2                   | = Total Co           | 100         | 2 - Dominance Test is >50%   |
| 5 /                                   |                     | = Total Co           | <b>10</b> 1 | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size: 5)           | 20                  | 465                  | FALL        | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)             |
| 2. Phloum De Longo                    |                     | 4/65                 | Force       | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Totolian Cepons                    |                     | YES                  | F114        | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 4. Hospis Sp.                         | 10                  | No                   | FAC4        | be present, unless disturbed or problematic.   |
| TOWAXALLA O Lierale                   | 10                  | NO                   | Figur       | Definitions of Vegetation Strata:  |
| 8. Plantago /anceolata                | 5                   | No                   | FRIM        | Tree - Woody plants 3 in. (7.6 cm) or more in diamete  |
| . Solanum, Parplinence                | _5_                 | No                   | FRIM        | at breast height (DBH), regardless of height.  |
| 8                                     |                     |                      |             | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| 9                                     |                     |                      |             | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11                                    |                     |                      |             | Woody vines – All woody vines greater than 3.28 ft in  |
| 12                                    |                     |                      |             | height.  |
| 201                                   | 20                  | = Total Co           | ver45       |  |
| Woody Vine Stratum (Plot size: 30)    |                     |                      | 100         |  |
| 1                                     |                     |                      |             | Hydrophytic  |
| 2                                     | -                   | -                    |             | Vegetation   |
|                                       |                     |                      |             | Present? Yes No  |
| 3                                     |                     |                      |             | 9  |
| 4                                     |                     | -                    |             |  |

| Type: C=Concentratio hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A)             | 1/3 /95<br>1/3 95<br>n, D=Depletion, R | 7,5 YR 5/6   | 5  |                     |  |
|---|--|--|--|---------------------|--|
| ype: C=Concentratio ydric Soil Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A                | 1/3 /95<br>1/3 95<br>n, D=Depletion, R |  |  | - 51 /t.            |  |
| Type: C=Concentration ydric Soll Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A             | 9/3 95                                 |  |  | - SI /t             |  |
| ype: C=Concentratio<br>ydric Soil Indicators:<br>Histosol (A1)<br>Histic Epipedon (A2<br>Black Histic (A3)<br>Hydrogen Sulfide (A |  |  |  |                     |  |
| ype: C=Concentratio<br>ydric Soil Indicators:<br>Histosol (A1)<br>Histic Epipedon (A2<br>Black Histic (A3)<br>Hydrogen Sulfide (A |  | M=Reduced Matrix, MS   | S=Masked Sand Grain  |                     |  |
| ype: C=Concentratio<br>ydric Soil Indicators:<br>Histosol (A1)<br>Histic Epipedon (A2<br>Black Histic (A3)<br>Hydrogen Sulfide (A |  | M=Reduced Matrix, MS   | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, MS   | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soil Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soll Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A                                    |  | M=Reduced Matrix, M  | S=Masked Sand Grain  |                     |  |
| ydric Soll Indicators: Histosol (A1) Histic Epipedon (A2 Black Histic (A3) _ Hydrogen Sulfide (A                                  |  | M=Reduced Matrix, MS   | S=Masked Sand Grain  |                     |  |
| ydric Soll Indicators: _ Histosol (A1) _ Histic Epipedon (A2 _ Black Histic (A3) _ Hydrogen Sulfide (A                            |  | vi-Reduced Matrix, Mi  | D-Masked Dand Grain  | e 21 acati          | tion: PL=Pore Lining, M=Matrix.  |
| Histosol (A1) Histic Epipedon (A2 Black Histic (A3) Hydrogen Sulfide (A   |  |  |  |                     | ors for Problematic Hydric Solls <sup>3</sup> :                        |
| Histic Epipedon (A2<br>Black Histic (A3)<br>Hydrogen Sulfide (A   |  | Polyvalue Belov  | w Surface (S8) (LRR F  |                     | m Muck (A10) (LRR K, L, MLRA 149B                                      |
| Black Histic (A3) Hydrogen Sulfide (A   | 2)                                     | MLRA 149B  | The Control of the Co | Coa                 | ast Prairie Redox (A16) (LRR K, L, R)                                  |
|   | *                                      | Thin Dark Surfa  | ce (S9) (LRR R, MLR  |                     | m Mucky Peat or Peat (S3) (LRR K, L,                                   |
|   |  | The second secon | Mineral (F1) (LRR K, L   |                     | rk Surface (S7) (LRR K, L, M)  |
| _ Stratified Layers (A  |  | Loamy Gleyed   |  |                     | yvalue Below Surface (S8) (LRR K, L)<br>n Dark Surface (S9) (LRR K, L) |
| _ Depleted Below Da   |  | Depleted Matrix<br>Redox Dark Su   |  |                     | n-Manganese Masses (F12) (LRR K, L                                     |
| <ul> <li>Thick Dark Surface</li> <li>Sandy Mucky Mine</li> </ul>  |  | Depleted Dark  |  |                     | dmont Floodplain Soils (F19) (MLRA 1                                   |
| _ Sandy Gleyed Mate   |  | Redox Depress  |  |                     | sic Spodic (TA6) (MLRA 144A, 145, 14                                   |
| Sandy Redox (S5)  |  |  |  |                     | d Parent Material (F21)  |
| _ Stripped Matrix (S6   |  |  |  |                     | ry Shallow Dark Surface (TF12)   |
| _ Dark Surface (S7)   | LRR R, MLRA 14                         | 9B)  |  | Oth                 | ner (Explain in Remarks)   |
| ndicators of hydronhyl  | ic vegetation and                      | wetland hydrology mus  | st be present, unless d  | isturbed or problem | natic.   |
| estrictive Layer (if of   |  |  |  |                     |  |
|   | •                                      | 2.0  |  |                     |  |
| Depth (inches):   |  | _  |  | Hydric S            | Soil Present? Yes No 💭   |
| emarks:   |  |  |  |                     |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 11) / 26 / 15  |
|--|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP-500   |
| nvestigator(s): M. BOBERG B. VIITS   | Section, Township, Range: VIII COOVQ   |
| andform (hillslope, terrace, etc.): Floodplain   | Local relief (concave, convex, none): CON(QVC Slope (%): O   |
| Subregion (LRR or MLRA): LRR-R Lat:  | 9, 134382 Long: 42, 40325 Datum; NAD 83  |
|  |  |
| Soil Map Unit Name: Fluvoquents - Udifluv  |  |
|  | time of year? Yes X No (If no, explain in Remarks.)  |
| Are Vegetation $\underline{NO}$ , Soil $\underline{NO}$ , or Hydrology $\underline{NO}$ si                     |  |
| Are Vegetation $NO$ , Soil $NO$ , or Hydrology $NO$ na   | aturally problematic? (If needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS – Attach site map s  | showing sampling point locations, transects, important features, etc   |
| Hydrophytic Vegetation Present? Yes X No   | Is the Sampled Area  |
| Hydric Soil Present? Yes No  | within a Wetland? Yes X No   |
| Wetland Hydrology Present?   | 2.50   |
| Remarks: (Explain alternative procedures here or in a sep  |  |
| HYDROLOGY  |  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all the  |  |
| X Surface Water (A1) Water   | er-Stained Leaves (B9) X Drainage Patterns (B10)   |
|  | atic Fauna (B13) Moss Trim Lines (B16)   |
|  | Deposits (B15) Dry-Season Water Table (C2)   |
|  | rogen Sulfide Odor (C1) Crayfish Burrows (C8)  |
| 이 등 그렇게 하지 않는 사이를 내려면 하게 되었다. 이 경기를 받는 사람들이 되었다고 있다. 이 경기를 가져왔다고   | ized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) ence of Reduced Iron (C4) Stunted or Stressed Plants (D1)   |
|  | enter of Reduced from (C4)  — Sturied of Stressed Flains (D1)  ent Iron Reduction in Tilled Soils (C6)  — Geomorphic Position (D2)   |
|  | Muck Surface (C7) Shallow Aquitard (D3)  |
| (1888년) 전 1881년 - 1882년 전 1882년 전 1882년 - 1882 | er (Explain in Remarks) Microtopographic Rellef (D4)   |
| Sparsely Vegetated Concave Surface (B8)  | X FAC-Neutral Test (D5)  |
| Field Observations:  |  |
| Surface Water Present? Yes No Dep  | oth (Inches): 0''-4"   |
| Water Table Present? Yes X No Dep  | oth (inches): $\mathcal{O}''$  |
| Saturation Present? Yes X No Dep   | oth (inches): O" Wetland Hydrology Present? Yes X No   |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, a                          | aerial photos, previous inspections), if available:  |
| Data (Stocking Badge, Mellioning Holl)   | and process, process, and proce |
| Remarks:   |  |
| - iron reduction film on standir   | ig water   |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

| Tree Stratum (Plot size: 30')                     | Absolute % Cover |           | nt Indicator<br>? Status   | Dominance Test workshee  | t:                      |                     |        |
|---|------------------|-----------|--|--|-------------------------|---------------------|--------|
| Not Applicable                                    |                  |           |  | Number of Dominant Specie<br>That Are OBL, FACW, or FA                     |                         | 2                   | (A)    |
|   |                  |           |  | Total Number of Dominant<br>Species Across All Strata:                     | 2                       | ,                   | (B)    |
|   |                  |           |  | Percent of Dominant Specie   | s                       |                     | (-)    |
|   |                  |           |  | That Are OBL, FACW, or FA  |                         | 00                  | (A/B   |
|   |                  |           |  | Prevalence Index workshe   | et:                     |                     |        |
|   |                  |           |  | Total % Cover of:  |                         | iply by:            |        |
| . 1   | 0                | = Total C | over   | OBL species  |                         |                     |        |
| Sapling/Shrub Stratum (Plot size: 15              | _)               |           |  | FACW species   |                         |                     |        |
| Not Applicable                                    |                  |           |  | FAC species  |                         |                     |        |
|   |                  |           |  | FACU species   |                         |                     |        |
|   |                  |           |  | UPL species  |                         |                     |        |
|   |                  |           |  | Column Totals:   | _ (A)                   |                     | _ (B   |
|   |                  |           |  | Prevalence Index = B   | A =                     |                     |        |
| ).  |                  |           |  | Hydrophytic Vegetation In  |                         |                     |        |
| 7.  |                  |           |  | 1 - Rapid Test for Hydro   |                         | etation             |        |
| -   | 0                | = Total C | over   | 2 - Dominance Test is >  |                         |                     |        |
| Herb Stratum (Plot size: 5')                      |                  | 10.01.0   | 0101   | 3 - Prevalence Index is  |                         |                     |        |
| Ranunculus bulbosus                               | 39               | Y         | FACEN  | 4 - Morphological Adapt  | ations <sup>1</sup> (Pr | ovide sup           | porti  |
|   |                  | V         | FACW   | Problematic Hydrophyti   |                         |                     |        |
| Bidens aristasa                                   |                  |           | The state of the s |  |                         |                     |        |
| mentha spicata                                    |                  | -DI       | _ FACW   | <sup>1</sup> Indicators of hydric soil and<br>be present, unless disturbed | wetland hy              | ydrology i<br>natic | must   |
| 4 Juneus effusus                                  |                  | N         | _ OBL  | Definitions of Vegetation  |                         |                     |        |
| 5. Polygonum persicaria                           | _ —              | N         | NI   |  |                         |                     | DTC-A  |
| 5   |                  |           |  | Tree – Woody plants 3 in. (7 at breast height (DBH), rega                  |                         |                     | amet   |
| 7   |                  |           |  | Sapling/shrub - Woody pla  | nte lose th             | an 3 in D           | BH     |
| B   |                  |           |  | and greater than or equal to   |                         |                     |        |
| 9   |                  |           |  | Herb – All herbaceous (non-w   | oody) plant             | e ragardla          | ee of  |
| 10  |                  |           |  | size, and woody plants less that   |                         |                     | 33 (71 |
| 11  |                  |           |  | Woody vines - All woody vin  | ac areater th           | an 3 28 ft          | in     |
| 12  |                  |           |  | height.  | os greater th           | MI 5.20 II          |        |
| - T   | 80               | = Total C | over   |  |                         |                     |        |
| Woody Vine Stratum (Plot size: 30'                |                  |           |  |  |                         |                     |        |
| 1. Not Applicable                                 |                  |           |  |  |                         |                     |        |
| 2   |                  |           |  | Hydrophytic  |                         |                     |        |
| 3.  |                  |           |  | Vegetation<br>Present? Yes   | No                      |                     |        |
| 4   |                  |           |  |  |                         |                     |        |
| 7   | 0                | = Total C | over   |  |                         |                     |        |
| Remarks: (Include photo numbers here or on a sepa | arate sheet.)    | - yaran a |  |  |                         |                     | -      |
| FAC Neutral Test                                  |                  |           |  |  |                         |                     |        |
|   |                  |           |  |  |                         |                     |        |
| 2 FACW + 0 OBL = 2                                |                  | d         |  |  |                         |                     |        |
| O FACU + O UPL = O 1                              | man              |           |  |  |                         |                     |        |
| O HIM TO WILL - O                                 | 1 pini u         |           |  |  |                         |                     |        |
|   |                  |           |  |  |                         |                     |        |

| Depth  | Matrix  |            |                     | x Features  |                          |                   |   |   |
|--|---|------------|---------------------|---|--------------------------|-------------------|---|---|
| (inches)   | Color (moist)   | %          | Color (moist)       | %   | Type <sup>1</sup>        | _Loc2             | Texture   | Remarks   |
| 0-7"   | 2.543/1   | 95         | 104R 316            | 5   |                          | m/pl              | SL  |   |
|  | -   |            |                     |   |                          |                   |   |   |
| Trunci O-O   | oncontroller D-D-   | detice DI  | =Poduced Metric 44  | C=Masks 4   | Cond O                   | nine              | 21 applies  | : PL=Pore Lining, M=Matrix.   |
| Hydric Soil  |   | letion, RM | =Reduced Matrix, M  | S=Masked  | Sand Gr                  | ains.             |   | for Problematic Hydric Soils <sup>3</sup> :   |
| Black Hi Hydroge Stratified Depleted Thick Do Sandy M Sandy F Stripped Dark Su | pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) Irface (S7) (LRR R, I | MLRA 149   |                     | ) ace (S9) (L Mineral (F1 Matrix (F2) x (F3) urface (F6) Surface (F8) | RR R, M<br>) (LRR K<br>) | LRA 149B)<br>, L) | Coast 5 cm M Dark S Polyva Thin D Iron-M Piedme Mesic Red Pe Very S Other ( | Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) silue Below Surface (S8) (LRR K, L) eark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B) Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks) |
|  | f hydrophytic vegeta<br>Layer (if observed)   |            | etland hydrology mu | st be prese   | nt, unles                | s disturbed       | or problematio  | 3.  |
| Type:<br>Depth (in   |   | •          |                     |   |                          |                   | Hydric Soil   | Present? Yes X No   |
| Remarks:   |   |            |                     |   |                          |                   |   |   |
|  |   |            |                     |   |                          |                   |   |   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 10/20/2015 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY \_\_ Sampling Point: DP- 501 Investigator(s): M. Boberg B. vists Section, Township, Range: VINENOVA Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Flat Slope (%): 0 Lat: 79, 134308 Long: 42,403325 \_\_\_\_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Flux aquents - udifluvents complex NW classification: apland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes / No\_\_\_\_\_ No\_\_\_ Are Vegetation  $N_{\ell}$ , Soil  $N_{\ell}$ , or Hydrology  $N_{\ell}$  significantly disturbed? Are Vegetation  $N_0$ , Soil  $N_0$ , or Hydrology  $N_0$  naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? Yes \_\_\_\_ No X Yes \_ No X Wetland Hydrology Present? If yes, optional Wetland Site ID:\_\_\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) \_\_\_ Aquatic Fauna (B13) High Water Table (A2) \_\_ Marl Deposits (B15) Dry-Season Water Table (C2) \_\_ Saturation (A3) \_\_ Crayfish Burrows (C8) \_\_\_ Hydrogen Sulfide Odor (C1) \_\_\_ Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Sediment Deposits (B2) Stunted or Stressed Plants (D1) \_\_ Presence of Reduced Iron (C4) \_\_\_ Drift Deposits (B3) \_\_ Algal Mat or Crust (B4) \_\_ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Iron Deposits (B5) Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No X\_\_ Saturation Present? Yes \_\_\_\_ No X Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| EGETATION - Use scientific flames of plants           |           |                     | W. C. C.                                | Sumpling Found   |
|---|-----------|---------------------|---|--|
| Free Stratum (Plot size: 30')                         | % Cover   | Dominant I Species? | 1 | Dominance Test worksheet:  |
| Not Applicable  |           |                     |   | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
| 2   |           |                     |   | Total Number of Dominant   |
| 3,  |           |                     |   | Species Across All Strata: (B)   |
| 1.  |           |                     |   | Percent of Dominant Species  |
| 5   |           |                     |   | That Are OBL, FACW, or FAC: (A/B   |
| 3   |           |                     |   | Prevalence index worksheet:  |
| 7   |           |                     |   | Total % Cover of: Multiply by:   |
|   | 0         | = Total Cove        | er                                      | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15 <sup>1</sup> )   |           |                     |   | FACW species 10 x 2 = 20   |
| . Not Applicable                                      |           |                     |   | FAC species 15 x3 = 45   |
| 2   |           |                     |   | FACU species   |
| 3   | d h       |                     |   | UPL species  |
| 4   |           |                     |   |  |
| 5   |           |                     |   | Prevalence Index = B/A = 3.65  |
| 6   |           |                     |   | Hydrophytic Vegetation Indicators:   |
| 7   |           |                     |   | 1 - Rapid Test for Hydrophytic Vegetation  |
|   | D         | = Total Cove        |   | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 5 )                          |           |                     |   | 3 - Prevalence Index is ≤3.0¹<br>4 - Morphological Adaptations¹ (Provide supportin   |
| schedonorus arundinaceau                              | 5 105     | <u> </u>            | FACU                                    | data in Remarks or on a separate sheet)  |
| Rumex crispus   |           | N                   | FAC                                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Mentha soicata                                     |           | N                   | FACW                                    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| 4. Solidago canodensis                                | 5         | N                   | FALL                                    | be present, unless disturbed or problematic.   |
| 5. Euthamia graminitolia                              | 5         | N                   | FAC                                     | Definitions of Vegetation Strata:  |
| 6. Ranuncialus bulbosus                               | 5         |                     | FACIN                                   | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| Trifolium repens                                      |           | N                   | FALL                                    | at breast height (DBH), regardless of height.  |
| 8   |           |                     | 300                                     | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9   |           |                     |   | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10  |           |                     |   | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 11  |           |                     |   |  |
| 12  |           |                     |   | Woody vines – All woody vines greater than 3.28 ft in height.  |
|   | 100       | = Total Cove        | er                                      |  |
| Woody Vine Stratum (Plot size: 30')                   |           |                     |   |  |
| 1. Not Applicable                                     |           |                     |   | the control of the co |
| 2.  |           |                     |   | Hydrophytic<br>Vegetation  |
| 3.  |           |                     |   | Present? Yes No _X   |
| 4.  |           |                     |   |  |
|   | 0         | = Total Cov         | ег                                      |  |
| Remarks: (Include photo numbers here or on a separate | e sheet.) |                     |   |  |
| FAC Neutral Test                                      |           |                     |   |  |
| I /II > I II WIII WI I I I I I I                      |           |                     |   |  |
|   |           |                     |   |  |
|   | ettand    |                     |   |  |
|   | uttand    |                     |   |  |
| O FACH + O OBL = O WE<br>I FACH + O UPL = I UPL       | uttand    | )                   |   |  |

| pth  | Matrix   | to the dep  | oth needed to docu<br>Red                                      | lox Features  |                   |                  |                               | A CONTRACTOR OF THE PARTY OF TH |
|--|--|-------------|--|---|-------------------|------------------|-------------------------------|--|
| ches)  | Color (moist)  | %           | Color (moist)  | %   | Type <sup>1</sup> | Loc <sup>2</sup> | Texture                       | Remarks  |
| 6"   | 2543/3   | 100         |  |   |                   |                  | SL                            |  |
|  | 2543/3   | 80          | 109R5/1  | 20  | 0                 | $_{\rm m}$       | LL                            | braxelly   |
|  | 2.5y3/3  | 40          | 10425/1  | 40_   | _0_               | <u>m</u> _       | CL                            | Gravely  |
|  |  |             |  |   | =                 |                  |                               |  |
|  | oncentration, D=De   | plation PA  | A=Padured Matrix   | MS=Masker   |                   | ains             | <sup>2</sup> Locatio          | on: PL=Pore Lining, M=Matrix.  |
| The state of the s | oncentration, D=Dep<br>Indicators:   | pietion, KN | -reduced Matrix, I   | wio-waske   | Salid G           | ullio.           | Indicator                     | rs for Problematic Hydric Soils <sup>3</sup> :  Muck (A10) (LRR K, L, MLRA 149B)   |
| Hydroge<br>Stratified<br>Deplete   | istic (A3)<br>en Sulfide (A4)<br>d Layers (A5)<br>d Below Dark Surfa<br>ark Surface (A12)                | ce (A11)    | Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S | y Mineral (F<br>d Matrix (F2<br>trix (F3)<br>Surface (F6) | 1) (LRR H<br>?)   |                  | Dark<br>Poly<br>Thin<br>Iron- | Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) value Below Surface (S8) (LRR K, L) Dark Surface (S9) (LRR K, L) Manganese Masses (F12) (LRR K, L, R)   |
| Sandy M<br>Sandy G<br>Sandy F<br>Stripped<br>Dark Su   | Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R,                       |             | Redox Depre  |   |                   | s disturbed      | Mes<br>Red<br>Very<br>Othe    | ic Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>Parent Material (F21)<br><sup>o</sup> Shallow Dark Surface (TF12)<br><sup>o</sup> r (Explain in Remarks)  |
| Sandy M<br>Sandy G<br>Sandy F<br>Stripped<br>Dark Su<br>dicators d   | Gleyed Matrix (S4)<br>Redox (S5)<br>d Matrix (S6)<br>urface (S7) (LRR R,                                 | ation and v | Redox Depre  | essions (F8)  |                   | s disturbed      | Mes<br>Red<br>Very<br>Othe    | r Shallow Dark Surface (TF12)<br>er (Explain in Remarks)   |
| Sandy M<br>Sandy G<br>Sandy F<br>Stripped<br>Dark Su<br>dicators of  | Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, of hydrophytic vegeta Layer (if observed | ation and v | Redox Depre  | essions (F8)  |                   | s disturbed      | Mesi<br>Red<br>Very<br>Othe   | ic Spodic (TA6) ( <b>MLRA 144A, 145, 149B</b><br>Parent Material (F21)<br>Shallow Dark Surface (TF12)<br>er (Explain in Remarks)   |

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  Applicant/Owner: Ball Hill Wind Energy, LLC  Investigator(s): M. BOBERS B. VIVTS  Landform (hillslope, terrace, etc.): Floodplain  Subregion (LRR or MLRA): LRR-R Lat: 79.1  Soil Map Unit Name: Fluvagnents - Udifiliven  | City/County: Chautauqua County  State: NY  Sampling Date: 10/211/701  State: NY  Sampling Point: DP-503  Section, Township, Range: VIIICNOVO  Local relief (concave, convex, none): Flat  Slope (%): 0  3418  Long: 42.403564  Datum: NAD 83   |
|--|--|
| Are climatic / hydrologic conditions on the site typical for this time Are Vegetation $\underline{\mathcal{M}\varrho}$ , Soil $\underline{\mathcal{N}\varrho}$ , or Hydrology $\underline{\mathcal{N}\varrho}$ significance Vegetation $\underline{\mathcal{N}\varrho}$ , Soil $\underline{\mathcal{N}\varrho}$ , or Hydrology $\underline{\mathcal{N}\varrho}$ naturally  | of year? Yes X No (If no, explain in Remarks.)  antly disturbed? Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.)   |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate  | Is the Sampled Area within a Wetland?  If yes, optional Wetland Site ID: UL \$50/  |
|  |  |
| High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Aquatic Fa  Aquatic Fa | Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Moss Trim Lines (B10)  Sulfide Odor (C1)  Sulfide Odor (C1)  Rhizospheres on Living Roots (C3)  of Reduced Iron (C4)  In Reduction in Tilled Soils (C6)  Surface (C7)  Plain in Remarks)  Surface Soil Cracks (B6)  Moss Trim Lines (B10)  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 X No Depth (in Water Table Present? Yes X No Depth (in Saturation Present? Yes X No Depth (in (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial   | wetland Hydrology Present? Yes X No  |
| Remarks:   |  |

| ree Stratum (Plot size: 30') Not Applicable |      | Species?    | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  |
|---|------|-------------|--------|--|
|   |      |             |        | Total Number of Dominant Species Across All Strata: (B)  |
|   |      |             |        | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
|   |      |             |        | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |
|   | n.   | = Total Cov |        | OBL species x1 =   |
| Sapling/Shrub Stratum (Plot size: 15 1 )    |      |             | en B   | The state of the s |
| SATTY EPHADAWY PRIAMATANY                   | 40   | *           | PON    | FAC species x 3 =  |
| Solix petiologis                            |      | V           | EACW   | FACU species x 4 =   |
|   | 70   |             | FILL   | UPL species x 5 =  |
|   |      |             |        | Column Totals: (A) (B)   |
| i   |      |             |        | Prevalence Index = B/A =   |
|   |      | -           |        | Hydrophytic Vegetation Indicators:   |
|   |      | -           |        | 1 - Rapid Test for Hydrophytic Vegetation  |
|   |      |             |        | X 2 - Dominance Test is >50%   |
|   | 40_  | = Total Cov | /er    | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size: 51)                |      |             |        | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| Carex flava                                 |      | <u> </u>    | OBL    | data in Remarks or on a separate sheet)  |
| Scirpus cyperinas                           | 30   | _ X         | OBL    | Problematic Hydrophytic Vegetation¹ (Explain)  |
| Junius effusus                              | 15   | N           | OBL    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| mentha spicata                              | 5_   | N           | FACIN  | be present, unless disturbed or problematic.   |
| carex jupilina                              | 5    | N           | OBL    | Definitions of Vegetation Strata:  |
| carex hustricina                            | 4    | N           | OBL    | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
|   | 00 1 | N           | FACIN  | at breast height (DBH), regardless of height.  |
| . Symphytrichum povae-argli                 | uc.  | 14          | TICVV  | Sapling/shrub – Woody plants less than 3 in. DBH   |
|   |      |             | -      | and greater than or equal to 3.28 ft (1 m) tall.   |
| )   | -    |             |        | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10  |      |             |        | size, and woody plants less than 3.28 ft tall.   |
| 11  |      |             |        | Woody vines – All woody vines greater than 3.28 ft in  |
| 12  |      |             |        | height.  |
|   | 100  | = Total Cov | ver    |  |
| Woody Vine Stratum (Plot size: 30')         |      |             |        |  |
| Not Applicable                              |      |             |        |  |
| - Not rippiedice                            |      | -           |        | Hydrophytic  |
| 2   |      | -           |        | Vegetation   |
| 3   | -    | -           |        | Present? Yes No  |
| 4   |      | -           |        |  |
| †·  | 1)   | = Total Co  | ver    |  |
| †·  |      | = Total Co  | ver    |  |

| 10-5" 2.5\(\frac{4\2}{2}\) 83 2.5\(\frac{4\2}{15}\) 25 10" 2.5\(\frac{4\2}{2}\) 15 2.5\(\frac{4\2}{2}\) 20 10\(\frac{1}{2}\) 10\(\frac{1}\) 10\(\frac{1}{2}\) 10\(\frac{1}{2}\) 10\(\frac{1}{2}\) 10\(\frac{1}{2}\) 10\(\frac{1}{2}\) 10\(\frac{1}\) 10\(\frac{1}\) 10\( | D M C M C PL       | Texture  SL  SL  S   | Remarks                           |
|--|--------------------|--|-----------------------------------|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sanydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8)  | D M<br>C M<br>C PL | SL SL  | Remarks                           |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sanydric Soil Indicators:  Histor [An]  Polyvalue Below Surface (S8)  | C M                | SL   |                                   |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sanydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8)  | C PL               |  |                                   |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sandydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8)   | C PL               | S  |                                   |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sandy Sandy Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8)  |                    | <u> </u>   |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | id Grains.         |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | nd Grains.         |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | d Grains.          |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | nd Grains.         |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | d Grains.          |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | nd Grains.         |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | d Grains.          |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | nd Grains.         |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | d Grains.          |  |                                   |
| Histosol (A1) Polyvalue Below Surface (S8)   | d Grains.          |  |                                   |
| Listia Foliation (S8)  |                    | <sup>2</sup> Location: PL=Pore   | Lining, M=Matrix.                 |
| Histic Epinedon (A2)   | /I DD D            | indicators for Proble  | matic Hydric Soils <sup>3</sup> : |
| MLRA 149B)   |                    |  | (LRR K, L, MLRA 149B)             |
| Black Histic (A3) Thin Dark Surface (S9) (LRR R  | R. MLRA 149B       | Coast Prairie Red  | ox (A16) (LRR K, L, R)            |
| Loamy Mucky Mineral (F1) (LR   | RK.L)              |  | or Peat (S3) (LRR K, L, R)        |
| Loamy Gleyed Matrix (F2)   |                    | Dark Surface (S7)  | (LRR K, L, M)                     |
| Thick Date Service (A11) X Depleted Matrix (F3)  |                    | Thin Dark Surface  | Surface (S8) (LRR K, L)           |
| Thick Dark Surface (A12)  Redox Dark Surface (F6)  |                    | Thin Dark Surface  | (S9) (LRR K, L)                   |
| Sandy Cleved Making (S1)  Sandy Cleved Making (S1)  Depleted Dark Surface (F7)   |                    | Piedmont Classics  | Masses (F12) (LRR K, L, R)        |
| Sandy Gleyed Matrix (S4) Sandy Redox (S5)  — Redox Depressions (F8)  |                    | Mesic Spedia (TAG  | in Soils (F19) (MLRA 149B         |
| Stripped Matrix (S6)   |                    | Red Parent Materi  | 6) (MLRA 144A, 145, 149B)         |
| Dark Surface (St) (LDD D as a page 1   |                    | Very Shallow Dark  | ai (F21)                          |
| Dark Surface (S7) (LRR R, MLRA 149B)   |                    | Other (Explain in R  | Surface (TF12)                    |
| dicators of hydrophytic vegetation and wetland hydrology must be present, uni<br>strictive Layer (if observed):  | loce disturbed     |  |                                   |
|  | less disturbed (   | or problematic.  |                                   |
| Type:  |                    |  |                                   |
| Depth (inches):<br>marks:  |                    | Hydric Soil Present?   | Yes X No_                         |
| mulko,   |                    | The state of the s |                                   |
|  | -                  |  |                                   |
|  |                    |  |                                   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_ Sampling Date: 10/26/2015 Project/Site: Ball Hill Wind Project \_\_\_\_\_ City/County: Chautauqua County \_\_ Sampling Point: DP-505 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. Byberg B. VIITS Section, Township, Range: VIIIC NO VO Local relief (concave, convex, none): \_\_CONCAV & Landform (hillslope, terrace, etc.): HILSTOPE Subregion (LRR or MLRA): LRR-R Lat: 79.1387.95 Long: VIII LONG: VIII Datum: NAD 83 Soll Map Unit Name: Chadalon SIIT Loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation  $N_0$ , Soil  $N_0$ , or Hydrology  $N_0$  significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation  $N_0$ , Soil  $N_0$ , or Hydrology  $N_0$  naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes X No Hydrophytic Vegetation Present? within a Wetland? Yes X No Hydric Soil Present? If yes, optional Wetland Site ID: WL - ASOZ Yes X No Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) → Drainage Patterns (B10) Water-Stained Leaves (B9) \_\_ Moss Trim Lines (B16) ★ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_\_ Dry-Season Water Table (C2) X Saturation (A3) \_\_ Marl Deposits (B15) \_\_ Water Marks (B1) \_\_ Crayfish Burrows (C8) \_\_ Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) X Iron Deposits (B5) \_\_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): 0-5" Surface Water Present? Yes X No Depth (inches): () -5 4 Water Table Present? Wetland Hydrology Present? Yes X No \_\_\_\_ Yes X No \_\_\_ Depth (inches): 0-5" Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| ree Stratum (Plot size: 30') NOT Applicable                           |         | Species?     | 2 2000 | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
|---|---------|--------------|--------|---|
|   |         |              |        | Total Number of Dominant Species Across All Strata:  Z (B)  |
|   | _       | -            |        | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B  |
|   |         |              |        | Prevalence Index worksheet:   |
|   | 6       | = Total Cov  | er     | Total % Cover of: Multiply by:  OBL species XO x 1 = XO   |
| apling/Shrub Stratum (Plot size: 15') NOT APPLICABLE                  |         |              |        | FACW species         20         x 2 = 40           FAC species         0         x 3 = 0           FACU species         0         x 4 = 0 |
|   |         |              | _      | UPL species $\bigcirc$ $\times 5 = \bigcirc$ Column Totals: $\boxed{00}$ (A) $\boxed{120}$ (B)  |
|   |         |              |        | Prevalence Index = B/A = 1.2  |
|   |         |              |        | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation   |
| - 1   | 0       | = Total Cov  | er     | X 2 - Dominance Test is >50% X 3 - Prevalence Index is ≤3.0¹  |
| erb Stratum (Plot size: 5')<br>COVEX HOVQ                             | 50      | У            | DBL    | 4 - Morphological Adaptations <sup>1</sup> (Provide supportin<br>data in Remarks or on a separate sheet)                                  |
| Juncus effusus<br>Scirous cuperinas                                   | 20      | N            | OBL    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  Indicators of hydric soil and wetland hydrology must                           |
| mentha spicata  | 10_     | N            | FACILY | be present, unless disturbed or problematic.  |
| Bidens aristosa<br>Eupotorium perfoliatum                             | 5       | N            | FACE   | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete  |
| Symphyotichum vovae-angiliae  | -       | N            | FACW   | at breast height (DBH), regardless of height.   |
|   |         |              |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 0   |         | -            |        | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.                                    |
| 1   |         |              |        | Woody vines - All woody vines greater than 3.28 ft in height.   |
| Voody Vine Stratum (Plot size: 30)                                    | 100     | = Total Cov  | ver .  |   |
| Not Applicable  |         |              |        | Hydrophytic<br>Vegetation   |
|   |         | -            |        | Present? Yes X No   |
| n   | 0       | = Total Co   | ver    |   |
| Remarks: (Include photo numbers here or on a separate FAC NEUTOL TEST | sheet.) |              |        |   |
| O FACN+2 OBL=2 Wet  | tand    | $\checkmark$ |        |   |
| o FACU + O UPL = O upla   |         |              |        |   |

| (inches)  | Matrix  | 0/          |                             | ox Feature   | <u> </u>          | Loc <sup>2</sup> | Timboli           | Remarks   |
|---|---|-------------|-----------------------------|--------------|-------------------|------------------|-------------------|---|
| inches)   | Color (moist)   | 95          | Color (moist)               | %            | Type <sup>1</sup> |                  | Texture           | Remarks   |
| 1-6"  | TOAK OUT  | 43          | 2.5y 3/2                    | 5            |                   | <u>m</u>         | <u>SL</u>         |   |
|   | =   |             |                             |              |                   |                  |                   |   |
|   | -   |             |                             |              |                   |                  |                   |   |
|   | 1   |             |                             |              | _                 |                  |                   |   |
|   |   |             |                             |              |                   |                  | -                 |   |
|   | -   |             |                             |              |                   |                  |                   |   |
|   |   |             |                             |              |                   |                  |                   |   |
|   | ·   |             | -                           |              |                   |                  |                   |   |
| 7   | -   | -           |                             |              |                   |                  |                   |   |
| 4   | 4.0   |             |                             |              |                   |                  |                   | -0  |
|   | -   | -           |                             |              | -11-              |                  |                   |   |
| vne: C=C  | oncentration, D=Dep   | letion RM   | =Reduced Matrix M           | IS=Masker    | Sand Gra          | ains             | 2 ocation: PI =Pi | ore Lining, M=Matrix.                                       |
|   | Indicators:   | ionori, rav | - reduced Matrix, W         | IO WILLDROCK | Ourid Or          | 4110.            |                   | blematic Hydric Soils <sup>3</sup> :                        |
| _ Histosol  |   |             | Polyvalue Belo              |              | (S8) (LRF         | R,               |                   | 10) (LRR K, L, MLRA 149B)                                   |
|   | pipedon (A2)<br>istic (A3)  |             | MLRA 1498<br>Thin Dark Surf | ,            | .RR R, MI         | RA 149B)         |                   | Redox (A16) (LRR K, L, R)<br>eat or Peat (S3) (LRR K, L, R) |
| Hydroge   | en Sulfide (A4)   |             | Loamy Mucky                 | Mineral (F   | ) (LRR K          |                  | Dark Surface (    | (S7) (LRR K, L, M)  |
|   | d Layers (A5)   |             | Loamy Gleyed                |              | )                 |                  |                   | ow Surface (S8) (LRR K, L)                                  |
|   | d Below Dark Surfact<br>ark Surface (A12)   | e (A11) &   | X Redox Dark St             |              |                   |                  |                   | face (S9) (LRR K, L)<br>se Masses (F12) (LRR K, L, R)       |
|   | Mucky Mineral (S1)  |             | Depleted Dark               |              | 7)                |                  |                   | odplain Soils (F19) (MLRA 149E                              |
| _ Januy I   |   |             | Redox Depres                |              |                   |                  | Mesic Spodic      | (TA6) (MLRA 144A, 145, 149B                                 |
| _ Sandy C   | Gleyed Matrix (S4)  |             |                             |              |                   |                  | Red Parent Ma     | aterial (F21)   |
| _ Sandy C<br>_ Sandy F  | Redox (S5)  |             |                             |              |                   |                  | View Oballand     |   |
| Sandy C Sandy F Stripped  | Redox (S5)<br>d Matrix (S6)   | /ILRA 149   | В)                          |              |                   |                  |                   | Dark Surface (TF12)   |
| Sandy ( Sandy F Stripped Dark Su  | Redox (S5)<br>d Matrix (S6)<br>urface (S7) (LRR R, M  |             |                             | All Joseph   |                   | 45.5-5           | Other (Explain    | Dark Surface (TF12)   |
| Sandy C Sandy F Stripped Dark Su  | Redox (S5) d Matrix (S6) urface (S7) (LRR R, M  | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)   |
| Sandy C Sandy F Stripped Dark Su  | Redox (S5)<br>d Matrix (S6)<br>urface (S7) (LRR R, M  | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)   |
| Sandy C Sandy F Stripped Dark Su ndicators o  | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | ist be prese | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | ist be prese | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C<br>Sandy F<br>Stripped<br>Dark Su<br>ndicators o<br>estrictive<br><br>Depth (in | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy ( Sandy F Stripped Dark Su ndicators of testrictive Type: Depth (in               | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy ( Sandy F Stripped Dark Su ndicators of testrictive Type: Depth (in               | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | ist be prese | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of Restrictive Type:                         | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C<br>Sandy F<br>Stripped<br>Dark Su<br>ndicators o<br>estrictive<br><br>Depth (in | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | st be prese  | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Su ndicators of estrictive Type: Depth (in                | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | ist be prese | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |
| Sandy C Sandy F Stripped Dark Sundicators of estrictive Type: Depth (in                 | Redox (S5) If Matrix (S6) Inface (S7) (LRR R, M Inface (S7) (LRR R) Inface (S7) (LRR R) Inface (S7) (LRR R) | tion and w  |                             | ist be prese | ent, unless       | disturbed        | Other (Explain    | Dark Surface (TF12)<br>in Remarks)                          |

#### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 10/24/2015 Applicant/Owner: Ball Hill Wind Energy, LLC \_ Sampling Point: DP-506 Investigator(s): M Boberg B VIIB Section, Township, Range: VIIICNOVA Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): (OYNEX Slope (%):35 Subregion (LRR or MLRA): LRR-R Lat: 79, 18386 Long: 42, 404915 \_\_\_\_ Datum: NAD 83 Soil Map Unit Name: Chada Koin Silt Loam NWI classification: UO/COO Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation Nh., Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes \_\_\_\_ No X Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID:\_\_\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_\_ Drainage Patterns (B10) \_\_ High Water Table (A2) \_\_ Aquatic Fauna (B13) \_\_\_ Moss Trim Lines (B16) \_\_ Saturation (A3) \_\_ Marl Deposits (B15) \_\_\_ Dry-Season Water Table (C2) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) \_\_ Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Drift Deposits (B3) Presence of Reduced Iron (C4) \_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) \_ Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No X Depth (inches): Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Water Table Present? Yes \_\_\_\_ No X Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_\_ No X\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| /EGETATION - Use scientific frames of plants          |                     | Designation to disease             | Sampling Fourt.  |
|---|---------------------|------------------------------------|--|
| Tree Stratum (Plot size: 301 )                        | Absolute<br>% Cover | Dominant Indicator Species? Status | Dominance Test worksheet:  |
| Not Applicable  |                     |                                    | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
| 2   |                     |                                    | Total Number of Dominant   |
| 3   |                     |                                    | Species Across All Strata: (B)   |
| 4   |                     |                                    | Percent of Dominant Species  |
| 5   |                     |                                    | That Are OBL, FACW, or FAC: (A/B)  |
| 6   |                     |                                    | Prevalence Index worksheet:  |
| 7.  |                     |                                    | Total % Cover of: Multiply by:   |
| ·   |                     | = Total Cover                      | OBL species D x1= D  |
| Sapling/Shrub Stratum (Plot size: 15)                 |                     |                                    | FACW species 10 x2 = 20  |
| 1. Not Applicable                                     |                     |                                    | FAC species  |
| 2.  |                     |                                    | FACU species <u>80</u> x 4 = <u>320</u>  |
| 3   |                     |                                    | UPL species O x5 = 10  |
|   |                     |                                    | Column Totals: <u>iD1</u> (A) <u>373</u> (B)   |
| 4<br>5.   |                     |                                    | Prevalence Index = B/A = 3 (4)   |
| 6.  |                     |                                    | Hydrophytic Vegetation Indicators:   |
| 7   |                     |                                    | 1 - Rapid Test for Hydrophytic Vegetation  |
| /·  | 0                   | = Total Cover                      | 2 Dominance Test is >50%   |
| Herb Stratum (Plot size: 5                            |                     | _   Total Cover                    | 3 - Prevalence Index is ≤3.0¹  |
| 1. Schedonorus arundinaceous                          | 104                 | Y FACU                             | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)           |
| 2. Trifolium (epens                                   | 15                  | N FACU                             | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Euthamia aramonifoila                              | 10                  | N FAC                              |  |
| 4. Ranunculus bulbosus                                | 5                   | N FACW                             | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 5. Mentha spicata                                     | -3                  | N FACW                             | Definitions of Vegetation Strata:  |
| 6. Taraxacum officinale                               | 4                   | N FACIL                            |  |
|   | -                   | 14 11CH                            | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 7   |                     |                                    | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8   |                     |                                    | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9,  |                     |                                    | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10  |                     | <del></del>                        | size, and woody plants less than 3.28 ft tall.   |
| 11  |                     |                                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 12  | 100                 |                                    | height.  |
| 21  | 100                 | = Total Cover                      |  |
| Woody Vine Stratum (Plot size: 30')                   |                     |                                    |  |
| 1. Not Applicable                                     | -                   |                                    | Hydrophytic  |
| 2   | -                   | <del></del>                        | Vegetation   |
| 3   |                     |                                    | Present? Yes No  |
| 4   |                     |                                    |  |
|   | _0_                 | = Total Cover                      |  |
| Remarks: (Include photo numbers here or on a separate | sneet.)             |                                    |  |
| FAC Neutral Test                                      |                     |                                    |  |
| 1 FACU + 0 OBL = 0 U                                  | 110 +10             | m                                  |  |
| 1 FACW + 0 OBL =0                                     | NUN                 | u Cl                               |  |
|   | -lan                |                                    |  |
| I FACU + O UOL = 1 U                                  | planc               |                                    |  |
| - FILM 1 0 000 -                                      |                     |                                    |  |
|   |                     |                                    |  |

| Profile Description: (Describe to t<br>Depth Matrix   | Redo   | x Features                                | commin the absent   | e of indicators.)  |
|---|--|---|---|--|
| (inches) Color (moist)  | % Color (moist)  |   | _oc²Texture   | Remarks  |
| 0-10" 2.543/2 C   | 18 IVYR 5/10   |   | M Sc.   | Remarks  |
|   |  |   |   |  |
|   |  |   |   |  |
| Type: C=Concentration, D=Depletion  | n, RM=Reduced Matrix, MS=  | =Masked Sand Grains.                      |   | n: PL=Pore Lining, M=Matrix.   |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A1 Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA | MLRA 149B)  Thin Dark Surface Loamy Mucky Min Loamy Gleyed M.  1) Depleted Matrix ( X Redox Dark Surface Depleted Dark Surface Redox Depression  149B) | F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | 2 cm / Coast 149B) 5 cm / Dark S Polyva Thin D Iron-M Piedm Mesic Red Pa Very S Other ( | For Problematic Hydric Soils <sup>3</sup> : Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L) Park Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 149B Spodic (TA6) (MLRA 144A, 145, 149B arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks)  |
| dicators of hydrophytic vegetation are  | nd wetland hydrology must b  | e present, unless dist                    | urbed or problematic  |  |
| estrictive Layer (if observed):<br>Type:  |  |   |   | The same of the sa |
| Depth (inches):   |  |   |   |  |
| marks:  |  |   | Hydric Soil   | Present? Yes X No X MG   |
| - Augar refus   | al at 6".  | *   |   |  |

| WETLAND D   | DETERMINATION DATA                                    | FORM - Nort         | thcentral and Northeast Region   |
|---|---|---------------------|--|
| Project/Site: Ball Hill Wind  | d Project   | City/County: CV     | autaugua County Sampling Date: DP 507  |
| Applicant/Owner: Ball Hill WIN  | 1   |                     | State: NY Sampling Point: DP 307   |
| nvestigator(s): M. B. Derg B. VIII  |   | Section Townshi     | p, Range: VINCYOVO   |
|   |   |                     | 그 아마 아이는 아이를 하는데 아이는 이 그들은 사람들은 사람들이 아이들이 아이들이 아니는 아이들이 모든데 아이들이 아니는데 아니는데 아니는데 아니는데 아니는데 아니는데 아니는데 아니는데 |
| _andform (hillslope, terrace, etc.): <u>////</u>                                |   | 1 -                 | s, convex, none): <u>CONVEX</u> Slope (%): 3-5   |
| Subregion (LRR or MLRA): LRR-1  | 2 Lat: 79, 1315                                       | 33                  | Long: 42,405829 Datum: NADA3   |
| Soil Map Unit Name: EVIC SI   | it Loam   |                     | NWI classification: uplurd   |
| Are climatic / hydrologic conditions on t                                       | he site typical for this time of year                 | ar? Yes X           | No (If no, explain in Remarks.)  |
| Are Vegetation <u>N</u> t , Soil <u>N</u> 0 , or                                | Hydrology No significantly                            | disturbed?          | Are "Normal Circumstances" present? Yes X No   |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or                                  |   |                     | (If needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS - A   | ttach site map showing                                | sampling po         | int locations, transects, important features, etc.   |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? | Yes <u>X</u> No<br>Yes <u>X</u> No<br>Yes <u>X</u> No | within a V          | npled Area<br>Vetland? Yes <u>メ</u> No<br>ional Wetland Site ID: <u>Wし-A</u> 503   |
|   |   |                     |  |
|   |   |                     |  |
|   |   |                     |  |
| HYDROLOGY   |   |                     |  |
| Wetland Hydrology Indicators:   |   |                     | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is   | required; check all that apply)                       |                     | Surface Soil Cracks (B6)   |
| X_ Surface Water (A1)   |   |                     |  |
| High Water Table (A2)   | Aquatic Fauna (                                       |                     | Moss Trim Lines (B16)  |
| Saturation (A3)   | Mari Deposits (E                                      |                     | Dry-Season Water Table (C2)  |
| Water Marks (B1)  | Hydrogen Sulfid                                       |                     | Crayfish Burrows (C8)  |
| Sediment Deposits (B2)  |   | spheres on Living   |  |
| Drift Deposits (B3)   | Presence of Re  |                     | Stunted or Stressed Plants (D1)  |
| Algal Mat or Crust (B4)   |   | duction in Tilled S |  |
| Iron Deposits (B5)  | Thin Muck Surfa                                       |                     | Shallow Aquitard (D3)  |
| Inundation Visible on Aerial Imag   |   | n Remarks)          | Microtopographic Relief (D4)  FAC-Neutral Test (D5)  |
| Sparsely Vegetated Concave Su Field Observations:                               | race (Bo)   |                     | A PAC-Neutral Test (D5)  |
| 300 500 500 500 500 500 500 500 500 500   | X No Depth (inches):                                  | 0-111               |  |
|   | No X Depth (inches)                                   |                     |  |
|   | No X Depth (inches)                                   |                     | Wetland Hydrology Present? Yes No  |
| (includes capillary fringe)   |   |                     |  |
| Describe Recorded Data (stream gau  | ge, monitoring well, aerial photo                     | s, previous inspe   | ctions), if available:   |
|   |   |                     |  |
| Remarks:  |   |                     |  |
| - surface water in  | Trouter rists   |                     |  |
| - Suitace course  | Treecies 1 deis                                       |                     |  |
|   |   |                     |  |
|   |   |                     |  |
|   |   |                     |  |
|   |   |                     |  |
|   |   |                     | -  |
|   |   |                     |  |
|   |   |                     |  |
|   |   |                     |  |

| EGETATION - Ose scientific flames of plants                           | 3.        | the second second | Sampling Folia: 4.   |
|---|-----------|-------------------|--|
| Tree Stratum (Plot size: 30 )   | Absolute  |                   | Dominance Test worksheet:  |
|   | -         | Species? Status   | Number of Dominant Species   |
| . Not Applicable  |           |                   | That Are OBL, FACW, or FAC: 3 (A)  |
|   |           |                   | Total Number of Dominant   |
| 3,  |           |                   | Species Across All Strata: 8 (B)   |
|   |           |                   | Control of the contro |
| l,  |           |                   | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/E   |
|   |           |                   | That Are OBL, FACW, or FAC:(A/E  |
| J   |           |                   | Prevalence Index worksheet:  |
|   |           |                   | 7.55   |
|   | 7         |                   | Total % Cover of: Multiply by:   |
| iel.  |           | = Total Cover     | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size: 151                                  |           |                   | FACW species x 2 =   |
| Not Applicable  |           |                   | FAC species x 3 =  |
|   |           |                   | FACU species x 4 =   |
|   |           |                   | UPL species x 5 =  |
| <u> </u>  |           |                   | Column Totals: (A) (B  |
|   |           |                   |  |
|   |           |                   | Prevalence Index = B/A =   |
|   |           |                   | Hydrophytic Vegetation Indicators:   |
|   | -         |                   | 1 - Rapid Test for Hydrophytic Vegetation  |
|   |           |                   | X 2 - Dominance Test is >50%   |
| 1   | 0         | = Total Cover     | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| Herb Stratum (Plot size: 5')  |           |                   |  |
| carex flavo   | 20        | Y OBL             | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)   |
|   |           |                   | Problematic Hydrophytic Vegetation¹ (Explain)  |
| Polygonum artifolum   | 20        | y OBL             | Problematic Hydrophytic Vegetation (Explain)   |
| Panunculus bulbosus   | _ TJ      | Y FRUN            | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| Rumex Crispus   | 15        | N FAC             | be present, unless disturbed or problematic.   |
| Solidago canadensis   | 10        | N FACU            | Definitions of Vegetation Strata:  |
|   |           |                   |  |
| Euthamia graminitolia   | 10        | N FAC             | Tree – Woody plants 3 in. (7.6 cm) or more in diametral breast height (DBH), regardless of height.   |
| Symphyotichum voyae-agliae  | 5_        | N FACW            | at breast neight (DBH), regardless of neight.  |
| Junius effusus  | 5         | N DBL             | Sapling/shrub - Woody plants less than 3 in. DBH   |
|   | -         |                   | and greater than or equal to 3.28 ft (1 m) tall.   |
| )   |           |                   | Herb - All herbaceous (non-woody) plants, regardless of  |
| 0   | -         |                   | size, and woody plants less than 3.28 ft tall.   |
| 1   | -         |                   | Woody vines - All woody vines greater than 3.28 ft in  |
| 2.  |           |                   | height.  |
|   | 100       | = Total Cover     |  |
| 301   | 100       | - Total Cover     |  |
| Noody Vine Stratum (Plot size: 30')                                   |           |                   |  |
| Nut Applicable  |           |                   | Business   |
|   |           |                   | Hydrophytic<br>Vegetation  |
|   |           |                   | Present? Yes X No  |
|   |           |                   |  |
| ·   |           |                   |  |
|   | _0_       | = Total Cover     |  |
|   | e sheet.) |                   |  |
| Remarks: (Include photo numbers here or on a separat                  |           |                   |  |
|   |           |                   |  |
| Remarks: (Include photo numbers here or on a separate FAC NEWTOU TLS) |           |                   |  |
|   |           |                   |  |
| FAC Neutral Test  |           | and V             |  |
| FAC Neutral Test  |           | and $\checkmark$  |  |
|   | wet       |                   |  |

|                           |  | to the de   | oth needed to docun              |                |               | or confirm       | the absence of inc  | licators.)  |  |
|---------------------------|--|-------------|----------------------------------|----------------|---------------|------------------|---|---|--|
| Depth<br>(inches)         | Matrix<br>Color (moist)                        | %           | Color (moist)                    | x Feature<br>% | <u>Type</u> 1 | Loc <sup>2</sup> | Texture   | Remarks   |  |
| 0-6"                      | 10YR3/2  | 95          | 7.54R 4/6                        | 5              | C             | m                | 54  |   |  |
| 6-124                     | 10/R 4/2                                       | 90          | 7.54R 4/6                        | 10             | C             | M                | SI-   |   |  |
| <u> </u>                  |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  | -           |                                  |                |               |                  | -   |   |  |
| -                         | ( <del>)</del>                                 |             |                                  |                |               |                  |   |   |  |
| 1                         | _  |             |                                  |                | -             |                  |   |   |  |
|                           |  |             | -                                |                | _             |                  |   |   |  |
|                           |  |             | <del></del>                      |                |               | -                |   |   |  |
|                           |  |             |                                  |                | -             |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
| ¹Type: C=C<br>Hydric Soil |  | oletion, RM | =Reduced Matrix, MS              | S=Maske        | d Sand Gr     | rains.           |   | Pore Lining, M=Matrix. roblematic Hydric Solls <sup>3</sup> : |  |
| Histosol                  |  |             | Polyvalue Belov                  | v Surface      | (S8) (LR      | RR,              |   | A10) (LRR K, L, MLRA 149B)                                    |  |
| Histic E                  | pipedon (A2)                                   |             | MLRA 149B)                       |                |               |                  | Coast Prairie   | Redox (A16) (LRR K, L, R)                                     |  |
|                           | istic (A3)<br>en Sulfide (A4)                  |             | Thin Dark Surfa<br>Loamy Mucky M |                |               |                  |   | Peat or Peat (S3) (LRR K, L, R)<br>e (S7) (LRR K, L, M)       |  |
|                           | d Layers (A5)                                  |             | Loamy Gleyed                     | Matrix (F2     |               | ·, -,            | Polyvalue Be  | elow Surface (S8) (LRR K, L)                                  |  |
|                           | d Below Dark Surfac                            | e (A11)     | Depleted Matrix                  |                |               |                  |   | urface (S9) (LRR K, L)  |  |
|                           | ark Surface (A12)<br>Mucky Mineral (S1)        |             | Redox Dark Sur  Depleted Dark S  |                |               |                  | <pre> Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B)</pre> |   |  |
| Sandy C                   | Gleyed Matrix (S4)                             |             | Redox Depress                    |                |               |                  | Mesic Spodie  | c (TA6) (MLRA 144A, 145, 149B)                                |  |
|                           | Redox (S5)                                     |             |                                  |                |               |                  |   | Material (F21)<br>Dark Surface (TF12)                         |  |
|                           | l Matrix (S6)<br>Irface (S7) ( <b>LRR R, I</b> | MLRA 149    | В)                               |                |               |                  |   | in in Remarks)  |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           | f hydrophytic vegeta<br>Layer (if observed)    |             | etland hydrology mus             | t be pres      | ent, unles    | s disturbed      | or problematic.   |   |  |
| Туре:                     |  |             |                                  |                |               |                  |   |   |  |
| Depth (in                 | ches):   |             |                                  |                |               |                  | Hydric Soil Prese   | ent? Yes <u>X</u> No  |  |
| Remarks:                  |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
| 3                         |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |
|                           |  |             |                                  |                |               |                  |   |   |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| oject/Site: Ball Hill Wind Project oplicant/Owner: Ball Hill Wind En ovestigator(s): M. Boberg B. andform (hillslope, terrace, etc.): H obregion (LRR or MLRA): LRR-R oll Map Unit Name: EYTE ST  | ergy, LLC  VIITS  Lat: 79, 13  The site typical for this time of  | _ Section, Township, Range<br>_ocal relief (concave, convex<br>Long:<br>vear? Yes X No  | State: NY  a: VIII (NOVO)  I, none): (ONVC)  42.405828  NWI classifica  (If no, explain in Re | ation: upland   |
|---|---|---|---|---|
| e Vegetation <u>No</u> , Soil <u>No</u> , or  | Hydrology <u>No</u> naturally   | problematic? (If needing sampling point loc   | ed, explain any answer<br>ations, transects,  | s in Remarks.)  |
| Hydrophytic Vegetation Present?<br>Hydric Soil Present?<br>Wetland Hydrology Present?<br>Remarks: (Explain alternative procec   | Yes No X Yes No X Yes No X  | Is the Sampled A<br>within a Wetland?<br>If yes, optional We  | Yes   | _ No X  |
| YDROLOGY  |   | 11  | Consoder (adjust  | ore (minimum of hun required)   |
| Vetland Hydrology Indicators:<br>Primary Indicators (minimum of one is  | s required; check all that appl   | y)  | Secondary Indicat Surface Soil (  | ors (minimum of two required)<br>Cracks (B6)  |
| 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 Imag | Aquatic Faur Marl Deposit Hydrogen St Oxidized Rh Presence of Recent Iron Thin Muck S ery (B7) Other (Expla | is (B15)<br>ulfide Odor (C1)<br>izospheres on Living Roots (<br>Reduced Iron (C4)<br>Reduction in Tilled Soils (C6<br>urface (C7) | Cayfish Burn C3) Saturation Vis Stunted or Str Geomorphic F Shallow Aquit                     | nes (B16) Vater Table (C2) ows (C8) sible on Aerial Imagery (C9) ressed Plants (D1) Position (D2) ard (D3) ohic Relief (D4) |
| Vater Table Present? Yes _  | No X Depth (inch No X Depth (inch No X Depth (inch  | es):  | and Hydrology Present   | ? Yes No <u>.</u> ∕\  |
| Describe Recorded Data (stream gau  | ge, monitoring well, aerial ph  | otos, previous inspections),  | f available:  |   |
| Remarks:  |   |   |   |   |

| Tree Stratum (Plot size: 30') 1. NOT Applicable     | % Cover    | Dominant Indicator Species? Status | Number of Deminent Species   |  |  |
|---|------------|------------------------------------|--|--|--|
|   |            |                                    | That Are OBL, FACW, or FAC: (A)  |  |  |
| 2   |            |                                    | Total Number of Dominant<br>Species Across All Strata: 2 (B)   |  |  |
| 3   |            |                                    |  |  |  |
| 4   |            |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |  |  |
| i   |            |                                    | - Markie obc, raov, or rao.  |  |  |
| 3   |            |                                    | Prevalence Index worksheet:  |  |  |
| 7   |            |                                    | Total % Cover of: Multiply by:   |  |  |
|   |            | = Total Cover                      | OBL species x 1 =  |  |  |
| Sapling/Shrub Stratum (Plot size: 15)               |            |                                    | FACW species x 2 =   |  |  |
| NOT Applicable                                      |            |                                    | FAC species $10 \times 3 = 30$   |  |  |
| 2.  |            |                                    | FACU species <u>80</u> x 4 = <u>320</u>  |  |  |
|   |            |                                    | UPL species x 5 =  |  |  |
| 3   |            |                                    | Column Totals: <u>90</u> (A) <u>350</u> (B)  |  |  |
| 4   |            |                                    | Prevalence Index = B/A = 5.88  |  |  |
| 5   |            |                                    |  |  |  |
| 6,  |            |                                    | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  |  |  |
| 7   |            |                                    |  |  |  |
| Y   | _0_        | = Total Cover                      | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |  |  |
| Herb Stratum (Plot size: 5)                         |            |                                    | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |  |  |
| Trifolium repens                                    | 40         | Y FACU                             | data in Remarks or on a separate sheet)  |  |  |
| schedonorus arundinaceous                           | 35         | Y FACL                             | Problematic Hydrophytic Vegetation¹ (Explain)  |  |  |
| 3. Day US L.  | 10         | N NI                               | the contract of the contract o |  |  |
|   |            | N FAC                              |  |  |  |
| 4. Euthamia graminifolia                            |            | N FAC                              |  |  |  |
| 5. Rumex Crispus                                    |            |                                    | 기 회사하는 맛있는 밤이 가지만 뭐라는 때가 되었다.  |  |  |
| 6. Pantago larveolata                               | 5          | N FAC                              | Tree – Woody plants 3 in. (7.6 cm) or more in diamete<br>at breast height (DBH), regardless of height.   |  |  |
| 7   |            |                                    |  |  |  |
| 8   |            |                                    | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |  |  |
| 9   |            |                                    |  |  |  |
| 10  |            |                                    | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |  |  |
| 11  |            |                                    |  |  |  |
| 12.   |            |                                    | Woody vines – All woody vines greater than 3.28 ft in height.  |  |  |
| 12  | 100        | = Total Cover                      | neight.  |  |  |
| 201   | 100        | - Total Cover                      |  |  |  |
| Woody Vine Stratum (Plot size: 30')                 |            |                                    |  |  |  |
| 1. Not Applicable                                   |            |                                    | Hydrophytic  |  |  |
| 2   |            |                                    | - Vegetation   |  |  |
| 3   |            |                                    | Present? Yes No _X   |  |  |
| 4   |            |                                    |  |  |  |
|   | 0          | = Total Cover                      |  |  |  |
| Remarks: (Include photo numbers here or on a separa | te sheet.) |                                    |  |  |  |
| FAC Neutral Test                                    |            |                                    |  |  |  |
|   | S 1110-    | hand                               |  |  |  |
| 0 FACW + 0 OBL = 0<br>2 FACM + 0 WPL = 2            | 2 000      | nuid                               |  |  |  |
| 2 FA(1) + 0 UD1 = -                                 | 1 unli     | and                                |  |  |  |
| 2 FACH + 0 WL = 2                                   | = 00011    |                                    |  |  |  |

| Depth  | Matrix                                    | 0/             |   | x Feature  | <u> 1</u>            | 1 2         | Tandora   | Remarks  |  |
|--|---|----------------|---|------------|----------------------|-------------|---|--|--|
| (inches)   | Color (moist)                             | - %            | Color (moist)   |            | _Type <sup>1</sup> _ | _Loc-       | Texture   | Remarks  |  |
| )-12"  | (   | 100            |   |            |                      |             |   | The second secon |  |
| 1-20   | 254 3/2                                   | <u> 95</u><br> | 101R 5/8  |            |                      | _m_         |   |  |  |
|  |   |                |   |            |                      |             |   |  |  |
|  |   |                | -   |            |                      |             |   |  |  |
| Type: C=C  | oncentration. D=De                        | pletion. RM    | M=Reduced Matrix, M   | S=Masked   |                      | ains.       | <sup>2</sup> Location: PL=Pore  | Lining, M=Matrix.  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14) |   |                | Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) |            |                      |             | Indicators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks) |  |  |
|  | f hydrophytic veget<br>Layer (if observed |                | wetland hydrology mu  | st be pres | ent, unles           | s disturbed | or problematic.   | The property of the second sec |  |
| Type:  |   |                | -   |            |                      |             |   | V  |  |
| Depth (in  | ches):                                    |                | week  |            |                      |             | Hydric Soil Present?  | Yes No <u>X</u>  |  |
|  |   |                |   |            |                      |             |   |  |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 10-27-2015 Applicant/Owner: Ball Hill Wind Energy, LLC NY Sampling Point: DP- 509 State: Investigator(s): M. BODC(Q B. VI(T5 Landform (hillslope, terrace, etc.): Mainageman \_\_\_\_ Slope (%):\_\_\_\_\_ Subregion (LRR or MLRA): LRR-R Lat: 79, 121189 Long: 42, 406241 Datum: NAD 83 Soil Map Unit Name: Chautaugua SILt Loam NWI classification: UDIANC Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation ND, Soil ND, or Hydrology ND naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: WL - ASO4 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) Water-Stained Leaves (B9) X Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) \_\_\_ Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) X Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aguitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) ★ FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): 0 4 Ves X No Depth (inches): 0 Ves X No Depth (inc Surface Water Present? Water Table Present? Saturation Present? Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| EGETATION - Use scientific names of pla           | Absolute      | Dominant In   | ndicator   | San Carlotte Company  |                     |
|---|---------------|---------------|------------|---|---------------------|
| Tree Stratum (Plot size: 30')                     |               | Species?      |            | Dominance Test worksheet:   |                     |
| NOT Applicable                                    |               |               |            | Number of Dominant Species That Are OBL, FACW, or FAC:3   | (A)                 |
| 3.  |               |               |            | Total Number of Dominant Species Across All Strata:   | (B)                 |
|   |               |               |            | Percent of Dominant Species   |                     |
|   |               |               |            | That Are OBL, FACW, or FAC:   | (A/B)               |
| 6.  |               |               |            | Prevalence Index worksheet:   |                     |
| 7   |               |               |            | Total % Cover of: Multiply b  | y:                  |
|   | 0             | = Total Cover | r          | OBL species x1 =  |                     |
| Sapling/Shrub Stratum (Plot size: 15'             | _)            |               |            | FACW species x 2 =  | 140                 |
| 1. Cornus racemosa                                | 5_            | 4             | FAC        | FAC species x 3 =   |                     |
| 2.  |               |               |            | FACU species x 4 =  |                     |
| 3   |               |               |            | UPL species x 5 =<br>Column Totals: (A)   |                     |
| 4.  |               |               |            | Column Totals (A)   | (6)                 |
| 5.  |               |               |            | Prevalence Index = B/A =  |                     |
| 6.  |               |               |            | Hydrophytic Vegetation Indicators:  |                     |
| 7   |               |               |            | 1 - Rapid Test for Hydrophytic Vegetation   | on                  |
| <u> </u>  | 5             | = Total Cover | r          | X 2 - Dominance Test is >50%  |                     |
| Herb Stratum (Plot size: 5')                      | -             | - Total Coro  |            | 3 - Prevalence Index is ≤3.01   |                     |
|   | 50            | V             | OBL        | <ul> <li>4 - Morphological Adaptations¹ (Provide data in Remarks or on a separate sh</li> </ul>           | supporting<br>neet) |
| 1. Scirpus cyporinas<br>2. Typha argustitolia     |               |               | OBL        | Problematic Hydrophytic Vegetation¹ (E  |                     |
| 3. Junius effusus                                 | 15            |               | DBL        |   |                     |
| 3. JUNIAS EFTUSIAS                                |               | N             | MACU       | <sup>1</sup> Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic. | ogy must            |
| 4. <u>mentha</u> spicata<br>5. Epilobium ciliatum | _ 5           | - 4           | FACUL      | Definitions of Vegetation Strata:   |                     |
| 6.  |               |               | 1.121,1212 | Tree – Woody plants 3 in. (7.6 cm) or more  | in diameter         |
| 7   |               |               |            | at breast height (DBH), regardless of height  |                     |
| 8.  |               |               |            | Sapling/shrub - Woody plants less than 3  | in. DBH             |
| 9.  |               |               |            | and greater than or equal to 3.28 ft (1 m) ta   | III.                |
| 10.   |               |               |            | Herb - All herbaceous (non-woody) plants, rega  | ardless of          |
|   |               |               |            | size, and woody plants less than 3.28 ft tall.  |                     |
| 11  |               |               |            | Woody vines - All woody vines greater than 3.2  | 28 ft in            |
| 12  | 100           | = Total Cove  | er .       | height.   |                     |
| Woody Vine Stratum (Plot size: 30'                | -             | Otal O040     |            |   |                     |
| 1. NOT Applicable                                 | ,             |               |            |   |                     |
|   |               |               |            | Hydrophytic   |                     |
| 2   |               | -             |            | Vegetation   Present?   Yes X   No  |                     |
| 3   |               |               |            |   |                     |
| 4   | 0             | = Total Cove  | ar.        |   |                     |
| Remarks: (Include photo numbers here or on a sep  | arate sheet.) | _ Total Cove  |            |   |                     |
| FAC NEUTRAL TEST                                  |               |               |            |   |                     |
| D FAILE + 2 OBL = 2                               | uset          | land i        | 1          |   |                     |
| 2 m.c. = 000 =                                    | ,             | /             |            |   |                     |
| Q FACU+ _O UPL = C                                | 2 upla        | nd.           |            |   |                     |
|   |               |               |            |   |                     |

| Depth  | onpuon. (Describe   | to the de  | epth needed to docu   | ment the II  | ndicator            | or confirm       | n the absence   | of indica   | tors.)  |   |
|--|---|------------|---|--|---------------------|------------------|---|---|---|---|
| (inches)   | Color (moist)   | %          | Color (moist)   | ox Features  | - 1                 | 1 - 2            | -   |   |   |   |
| 0-34   | 251312  | 08         | 10424/10  |  | Type <sup>1</sup>   | Loc <sup>2</sup> | Texture   | -   | Remarks   | <u> </u>  |
|  | 2011/   | - 70       |   |  | L                   | M                | _SL   |   |   |   |
| 3-6"   | 2.54-71   | _ 45_      | 2545/6  | 5  | <u>C</u>            | m                | 54  | -   |   |   |
|  |   |            |   | _  |                     |                  |   |   |   |   |
| (3.02 m)   | -   |            |   |  | - 14                |                  |   | 4   |   |   |
| or the same  |   |            |   |  |                     | -                |   |   |   |   |
| *  |   | -          |   | _  | *                   | _                |   | -   |   |   |
|  |   |            |   |  |                     |                  |   |   |   |   |
|  |   |            | -   | _  |                     |                  |   | -   |   |   |
| ype: C=Co  | ncentration, D=Dep  | letion, RM | =Reduced Matrix, MS   | S=Masked   | Sand Gra            | ains.            | <sup>2</sup> Location   | : PL=Pore   | Lining, M=Ma  | atrix.  |
| _ Histosol   |   |            | Polyvalue Belov   | u Curfoso (  | CO) // DD           |                  |   |   | ematic Hydric   |   |
|  | ipedon (A2)   |            | MLRA 149B)  |  | 58) (LRH            | c K,             | 2 cm N  | luck (A10)  | (LRR K, L, M  | LRA 149B)   |
| _ Black His  |   |            |   |  |                     |                  |   | Prairie Rec   | IOV (ATE) (I DI   |   |
| V. A   |   |            | THILL Dark Sulla  | ice (S9) (I F  | RR MI               | RA 149R          | Coast   | I relat Deat  | lox (A16) (LRI  | (IDDK I D   |
|  | n Sulfide (A4)  |            | Loamy Mucky N   | ice (S9) (LF<br>Mineral (F1)                                       | RRR, ML             | RA 149B)         | 5 cm /V   | lucky Peat  | or Peat (S3)  | (LRR K, L, R)   |
| _ Stratified   | Layers (A5)   |            | Loamy Mucky N   | Mineral (F1)   | RR R, ML<br>(LRR K, | RA 149B)<br>L)   | 5 cm lv<br>Dark S   | lucky Peat<br>urface (S7  | or Peat (S3) (<br>) ( <b>LRR K, L, N</b>  | (LRR K, L, R)   |
| _ Stratified<br>_ Depleted   | Layers (A5)<br>Below Dark Surface   | e (A11)    | Loamy Mucky N<br>Loamy Gleyed I   | Mineral (F1)<br>Matrix (F2)  | RR R, ML<br>(LRR K, | .RA 149B)<br>L)  | 5 cm iv<br>Dark S<br>Polyva   | lucky Peat<br>urface (S7<br>lue Below   | or Peat (S3) (<br>) ( <b>LRR K, L, M</b><br>Surface (S8) (  | (LRR K, L, R)<br>M)<br>LRR K, L)  |
| Stratified Depleted Thick Da   | Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)   | e (A11)    | Loamy Mucky N   | Mineral (F1)<br>Matrix (F2)<br>( (F3)                              | RR R, ML<br>(LRR K, | .RA 149B)<br>L)  | 5 cm iv<br>Dark S<br>Polyva<br>Thin Da  | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface  | or Peat (S3) (<br>) ( <b>LRR K, L, N</b><br>Surface (S8) (<br>e (S9) ( <b>LRR K</b>   | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)   |
| Stratified Depleted Thick Da Sandy M   | Layers (A5)  Below Dark Surface rk Surface (A12) ucky Mineral (S1)  | e (A11)    | Loamy Mucky M Loamy Gleyed I X Depleted Matrix  | Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)                | (LRR K,             | .RA 149B)<br>L)  | 5 cm (v<br>Dark S<br>Polyval<br>Thin Da<br>Iron-Ma  | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese l  | or Peat (S3) (<br>) (LRR K, L, M<br>Surface (S8) (<br>e (S9) (LRR K<br>Masses (F12)   | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)  |
| Stratified Depleted Thick Da Sandy M Sandy G   | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4)   | e (A11)    | Loamy Mucky N Loamy Gleyed I Depleted Matrix Redox Dark Su  | Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F7 | (LRR K,             | RA 149B)<br>L)   | 5 cm iv Dark S Polyval Thin Da Iron-Ma Piedmo   | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl   | or Peat (S3) (<br>) (LRR K, L, M<br>Surface (S8) (<br>e (S9) (LRR K<br>Masses (F12)<br>ain Soils (F19)                                | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B                          |
| _ Stratified<br>_ Depleted<br>_ Thick Da<br>_ Sandy M<br>_ Sandy Gi<br>_ Sandy Re                                    | Layers (A5)  Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5)  | e (A11)    | Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Su Depleted Dark S  | Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F7 | (LRR K,             | .RA 149B)<br>L)  | 5 cm lv Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S   | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA   | or Peat (S3) (<br>) (LRR K, L, M<br>Surface (S8) (<br>e (S9) (LRR K<br>Masses (F12)<br>ain Soils (F19<br>6) (MLRA 144                 | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B                          |
| _ Stratified<br>_ Depleted<br>_ Thick Da<br>_ Sandy M<br>_ Sandy G<br>_ Sandy Re<br>_ Stripped                       | Layers (A5)  Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6)  |            | Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress                             | Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F7 | (LRR K,             | .RA 149B)<br>L)  | 5 cm lv Dark S Polyval Thin Date  | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater                              | or Peat (S3) ( ) (LRR K, L, II Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 rial (F21)                       | (LRR K, L, R)<br>(I)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>IA, 145, 149B)       |
| _ Stratified<br>_ Depleted<br>_ Thick Da<br>_ Sandy M<br>_ Sandy G<br>_ Sandy Re<br>_ Stripped                       | Layers (A5)  Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5)  |            | Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress                             | Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F7 | (LRR K,             | RA 149B)<br>L)   | 5 cm iv Dark S Polyva Thin Da Iron-Ma Piedmo Mesic S Red Pa Very Si                           | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater                              | or Peat (S3) ( ) (LRR K, L, II ) Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 fial (F21) k Surface (TF       | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>/A, 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Suri  | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetati                    | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Do Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i                  | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, II ) Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 fial (F21) k Surface (TF       | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>/A, 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sun  ndicators of                               | Layers (A5)  Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M  | ILRA 149   | Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Su Depleted Dark Su Redox Depress                             | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Do Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i                  | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, II ) Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 fial (F21) k Surface (TF       | (LRR K, L, R)<br>//)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>/A, 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sun  ndicators of estrictive L Type:            | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sun ndicators of estrictive L Type: Depth (incl | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Do Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i                  | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(I)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 1498)<br>IA, 145, 1498)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sun ndicators of estrictive L Type:             | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl            | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl            | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl            | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress Redox Depress | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl   | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress               | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl            | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress               | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl            | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress               | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sundicators of estrictive L Type: Depth (incl   | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress               | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 149B)<br>(A) 145, 149B)       |
| Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Re Stripped Dark Sundicators of Strictive L Type: Depth (incl    | Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M hydrophytic vegetat ayer (if observed): | ILRA 149   | Loamy Mucky N Loamy Gleyed I Loamy Gleyed I Loamy Gleyed I Redox Dark Su Depleted Dark Su Redox Depress               | Mineral (F1) Matrix (F2) ( (F3) rface (F6) Surface (F7 ions (F8)   | (LRR K,             | L)               | 5 cm W Dark S Polyval Thin Da Iron-Ma Pledmo Mesic S Red Pa Very Si Other (i) or problematic. | lucky Peat<br>urface (S7<br>lue Below<br>ark Surface<br>anganese I<br>ont Floodpl<br>Spodic (TA<br>urent Mater<br>nallow Dari<br>Explain in | or Peat (S3) ( ) (LRR K, L, M Surface (S8) ( e (S9) (LRR K Masses (F12) ain Soils (F19 6) (MLRA 144 iai (F21) k Surface (TF- Remarks) | (LRR K, L, R)<br>(A)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>) (MLRA 1498<br>(A) 145, 1498<br>(12) |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project \_\_\_\_ Sampling Date: 10-27-2015 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP- 5/0 Investigator(s): M. Boberg B. VIITS Section, Township, Range: VIII(NOVG Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Flat Slope (%): O Lat: 79, 121347 Long: 42, 406253 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: upland Soil Map Unit Name: Chautaugua SIIt Lown Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No\_ Are Vegetation  $N_0$ , Soil  $N_1$ , or Hydrology  $N_0$  naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) upland data point HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) X High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Yes X No 10 Depth (inches): 10 Water Table Present? Yes X No X Depth (inches):(0" Wetland Hydrology Present? Yes X No \_\_\_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| VEGETATION - Ose scientific flatties of plattis.      |         | Danatawat         | Carlington | Cumpung 1 cma  |
|---|---------|-------------------|------------|--|
| Tree Stratum (Plot size: 30')                         |         | Dominant Species? |            | Dominance Test worksheet:  |
|   |         |                   |            | Number of Dominant Species   |
|   |         |                   |            | That Are OBL, FACW, or FAC: (A)  |
| 2   |         |                   |            | Total Number of Dominant   |
| 3   |         |                   |            | Species Across All Strata: (B)   |
| 4.  |         |                   |            | Percent of Dominant Species  |
| 5.  |         |                   |            | That Are OBL, FACW, or FAC: 50 (A/B)   |
|   |         |                   |            |  |
| 6   |         |                   |            | Prevalence Index worksheet:  |
| 7   |         |                   |            | Total % Cover of: Multiply by:   |
|   | _0_     | = Total Co        | /er        | OBL species x1 =   |
| Sapling/Shrub Stratum (Plot size: 151 )               |         |                   |            | FACW species   |
| 1. Cornus racemosa                                    | in      | V                 | EIAN       | FAC species <u>20</u> x3 = <u>00</u>   |
|   |         |                   |            | FACU species 80 x4= 320  |
| 2   |         |                   |            | UPL species O x 5 = O  |
| 3   |         |                   |            | Column Totals: 110 (A) 395 (B)   |
| 4   |         |                   |            |  |
|   |         |                   |            | Prevalence Index = B/A = 3.57  |
| 5   |         |                   |            |  |
| 6   | -       | -                 |            | Hydrophytic Vegetation Indicators:   |
| 7   |         |                   |            | 1 - Rapid Test for Hydrophytic Vegetation  |
|   | 10      | = Total Co        | ver        | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size:)                             |         |                   |            | 3 - Prevalence Index is ≤3.01  |
|   | 68      | V                 | EACH       | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)           |
| 1. Solidago caradensis                                |         | -                 |            |  |
| 2. Euthamia graminifolia                              | 10      | N                 | FAC        | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Carex flava  | 5       | N                 | DBL        | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                    |
| 4 Symphyotichum vovae-angliae                         | 5       | M                 | FACLU      | be present, unless disturbed or problematic.   |
|   |         |                   | 17111      | Definitions of Vegetation Strata:  |
| 5   | -       | -                 |            |  |
| 6   | -       | -                 |            | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 7   |         |                   |            | at breast height (DBH), regardless of height.  |
| 8   |         |                   |            | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9   |         |                   |            | and greater than or equal to 3.28 ft (1 m) tall.   |
|   |         |                   |            | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10  |         |                   |            | size, and woody plants less than 3.28 ft tall.   |
| 11  |         | _                 |            | Woody vines - All woody vines greater than 3.28 ft in  |
| 12.   |         |                   |            | height.  |
|   | 100     | = Total Co        | ver        |  |
| Woody Vine Stratum (Plot size: 30')                   |         |                   | 136        |  |
| vvoody vine Stratum (Plot size:)                      |         |                   |            |  |
| 1. Not Applicable                                     |         |                   |            | Hydrophytic  |
| 2   |         |                   |            | Vegetation   |
| 3.  |         |                   |            | Present? Yes No  |
|   |         |                   |            |  |
| 4   | -       |                   |            |  |
|   | _0_     | _ = Total Co      | ver        |  |
| Remarks: (Include photo numbers here or on a separate | sheet.) |                   |            |  |
| FAC NEUTRAL TES                                       | 1       |                   |            |  |
|   |         |                   |            |  |
| O FACW + D OBL =                                      | 0       | 00+11             | and        |  |
| V FACOUT U OBL  |         | 110               | U LI       |  |
|   |         |                   |            |  |
| I FACY + 0 UPC =_                                     | 1       | alas              | 1          |  |
| - men - upl   | 1 L     | Mian              |            |  |
|   |         | 09-11             |            |  |

| Profile Des   | cription: (Describe                | to the de  | oth needed to document the indic  | -1                 | Sam  | pling Point: DP-3/  |
|---|------------------------------------|------------|---|--------------------|--|---|
|   | Maria                              |            | Redox Features  | ator or confirm t  | ne absence of indicators.)   |   |
| (inches)  | Color (moist)                      | - %        | Color (moist) % Ty  | pe¹ Loc²           | Texture Re   | marks   |
| 3-6"  | 2543/1                             | 98         |   | <u>m</u>           | 5L   |   |
| 10-20"  | 2.540/1                            | 85         | 2.54 4/2 10 C   | mlec               | . 6L   |   |
|   | 2546/3                             | 0.5        | 7.54R3/2 5 C  | mjec_              | SL_  |   |
| 10-20   | 234913                             | 90         | 25 y 5/6 10 C   | m/PL_              | SC   |   |
|   | -                                  |            |   |                    |  |   |
|   |                                    |            |   |                    | *  | 0,4   |
|   |                                    | 501        |   | * ////             |  |   |
|   |                                    | -          |   | W                  |  |   |
|   | A                                  |            |   | 4 1                | and the second s |   |
|   |                                    |            |   | 200 27-1-          | 200 44 1   |   |
| Type: C=Co  | ncentration, D=Depl                | etion, RM= | Reduced Matrix, MS=Masked Sand  | I Grains.          | <sup>2</sup> Location: PL=Pore Lining, N   | M=Matrix  |
| Histosol (  | idicators.                         |            | Polyvalue Below Surface (S8) (  |                    | ndicators for Problematic H  | ydric Soils <sup>3</sup> :  |
| Thick Dar Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa | Matrix (S6)<br>ace (S7) (LRR R, ML | -RA 149B)  | Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) | ess disturbed or p | Polyvalue Below Surface ( Thin Dark Surface (S9) (LF Iron-Manganese Masses (I Piedmont Floodplain Soils Mesic Spodic (TA6) (MLRA Red Parent Material (F21) Very Shallow Dark Surface Other (Explain in Remarks)  | RR K, L)<br>F12) (LRR K, L, R)<br>(F19) (MLRA 149B)<br>A 144A, 145, 149B)<br>(TF12) |
| Type:   | yer (ii observed):                 | Sw.        | seriel  |                    |  |   |
| Depth (inch   | es):                               | 8          |   | 1                  | and the late of the first  |   |
| Remarks:  |                                    |            |   | Пу                 | dric Soil Present? Yes _)  | No  |
|   |                                    |            |   |                    |  | ***·  |
|   |                                    |            | 100   | - 10 N - 11        |  |   |
|   |                                    | 8          |   |                    | TITLE THE STATE OF |   |
|   | 0                                  |            |   |                    |  |   |
|   |                                    |            |   |                    |  |   |
|   |                                    |            |   |                    |  |   |
|   |                                    |            |   |                    |  |   |
|   |                                    |            |   |                    |  |   |
|   |                                    |            | - Ma  |                    |  | 8.8   |
| 2   |                                    |            |   |                    |  |   |

| Project/Site: Ball Hill Wind Project  |  | rokii – Northcentrai   | and Northeast Region  |   |
|---|--|--|---|---|
|   | t  | City/County: Chautauqua  | County Sampling   | Date: 10/27/14                          |
| Applicant/Owner: Ball Hill Wind En  | ergy, LLC  |  | State: NY Samplin   |   |
| Investigator(s): B.V.275, M   | Boherer  | Section Township Range:  | Villa   | ng i onic.                              |
| Landform (hillslope, terrace, etc.):  | 13/13/13/1   | al relief (seeselve, seeview, ne   | THE COLOR   | 01 (0/)                                 |
| Subregion (LRR or MLRA): LRR-R  | 79 119   | / 17   | 2.405393  | _ Slope (%):                            |
|   |  |  |   |   |
| Soil Map Unit Name:   |  |  | NWI classification:   | PLAND                                   |
| Are climatic / hydrologic conditions on t   |  |  | (If no, explain in Remarks.)  |   |
| Are Vegetation YES, Soil YES, or  |  |  | Circumstances" present? Y   | /es _X No                               |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or  | Hydrology NO naturally prob  | olematic? (If needed,  | explain any answers in Rema   | rks.)                                   |
| SUMMARY OF FINDINGS - A   | ttach site man showing   | sampling point location  | one transacte import  | ant features etc                        |
|   |  | THE RESERVE THE TOTAL STREET   | ons, transects, import  | ant reatures, etc.                      |
| Hydrophytic Vegetation Present?   | Yes X No   | Is the Sampled Area within a Wetland?  | Yes X No  |   |
| Hydric Soil Present?  | Yes X No   |  |   |   |
| Wetland Hydrology Present?  Remarks: (Explain alternative proced  | Yes X No   | If yes, optional Wetland   | d Site ID: WL-ASO   | 5                                       |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)    | Water-Stained L.     Aquatic Fauna (I.     Marl Deposits (B.     Hydrogen Sulfide     X Oxidized Rhizos  | B13) 815) e Odor (C1) pheres on Living Roots (C3) duced Iron (C4) luction in Tilled Soils (C6) | <ul> <li>Stunted or Stressed Pla</li> <li>Geomorphic Position (D</li> </ul> | e (C2)<br>rial Imagery (C9)<br>nts (D1) |
| Algal Mat or Crust (B4)     Iron Deposits (B5)     Inundation Visible on Aerial Image     Sparsely Vegetated Concave Surfield Observations:   | face (B8)  | n Remarks)   | Shallow Aquitard (D3) Microtopographic Relief FAC-Neutral Test (D5)         | (D4)                                    |
| Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surficial Observations: Surface Water Present? Yes Water Table Present? Yes  | ery (B7) Other (Explain in face (B8) Depth (Inches):   X   | Remarks)   | Microtopographic Relief  FAC-Neutral Test (D5)                              |   |
| Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surfield Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes                             | ery (B7) Other (Explain in face (B8) No Depth (Inches):  | Remarks)   | Microtopographic Relief   |   |
| Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surfield Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) | rery (B7) Other (Explain in face (B8)  \[ \textstyle \textstyl | O"  Wetland  | Microtopographic Relief  X FAC-Neutral Test (D5)  Hydrology Present? Yes    |   |
| Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surfield Observations: Surface Water Present? Yes Water Table Present? Yes   | rery (B7) Other (Explain in face (B8)  \[ \textstyle \textstyl | O"  Wetland  | Microtopographic Relief  X FAC-Neutral Test (D5)  Hydrology Present? Yes    |   |

| Absolute | Dominant<br>Species 2              |                   | Dominance Test worksheet:  |
|----------|------------------------------------|-------------------|--|
|          | Species?                           |                   | Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)   |
|          |                                    |                   | That Are OBL, FACW, or FAC: (A)  |
| -        |                                    | -                 | Total Number of Dominant Species Across All Strata: 7, (B)   |
|          |                                    |                   | Species Across All Strata:(B)  |
|          |                                    |                   | Percent of Dominant Species  |
|          |                                    |                   | That Are OBL, FACW, or FAC: (A/E   |
|          |                                    |                   | Prevalence Index worksheet:  |
|          |                                    |                   | Total % Cover of: Multiply by:   |
|          | = Total Cov                        | er                | OBL species x 1 =  |
|          |                                    | 21                | FACW species x 2 =   |
|          |                                    |                   | FAC species x 3 =  |
|          |                                    |                   | FACU species x 4 =   |
|          |                                    |                   | UPL species x 5 =  |
|          |                                    |                   | Column Totals: (A) (B  |
|          |                                    |                   |  |
|          |                                    |                   | Prevalence Index = B/A =   |
|          |                                    |                   | Hydrophytic Vegetation Indicators:   |
|          |                                    |                   | 1 - Rapid Test for Hydrophytic Vegetation  |
|          | - Total Cov                        | or                | ★ 2 - Dominance Test is >50%   |
|          | - Total Cov                        | O(                | 3 - Prevalence Index is ≤3.01  |
| 20       | V                                  | nai               | 4 - Morphological Adaptations¹ (Provide supporti   |
|          | -1                                 |                   | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 20       |                                    |                   |  |
| 5        | _N_                                | 7.4               | Indicators of hydric soil and wetland hydrology must   |
|          | _1/                                | FACU              | be present, unless disturbed or problematic.   |
| 5        | N                                  | NI                | Definitions of Vegetation Strata:  |
| 5        | N                                  | FAC               | Tree - Woody plants 3 in. (7.6 cm) or more in diame  |
|          |                                    |                   | at breast height (DBH), regardless of height.  |
|          |                                    |                   | Sapling/shrub - Woody plants less than 3 in. DBH   |
|          |                                    |                   | and greater than or equal to 3.28 ft (1 m) tall.   |
|          |                                    |                   | Herb - All herbaceous (non-woody) plants, regardless of  |
|          | -                                  |                   | size, and woody plants less than 3.28 ft tall.   |
|          |                                    |                   | Woody vines - All woody vines greater than 3.28 ft in  |
| -        |                                    |                   | height.  |
| 10       | = Total Co                         | ver               |  |
|          |                                    |                   |  |
|          |                                    |                   | M. 10.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2  |
|          |                                    |                   | Hydrophytic<br>Vegetation  |
|          |                                    |                   | Present? Yes X No  |
|          |                                    |                   |  |
|          |                                    |                   |  |
| 0        | = Total Co                         | WOT.              |  |
|          | 0<br>30<br>20<br>\$<br>5<br>5<br>5 | O = Total Cov  30 | O = Total Cover  O = Total Cover  O = Total Cover  O = Total Cover  N NT  N FACU  N NT  N FACU  TO = Total Cover |

| Depth<br>(inches)   | Matrix   |                          | epth needed to docu   | x Feature   | 90         | or contiff  | ii iiie absence o   | f Indicators.)  |
|---|--|--------------------------|---|---|------------|-------------|---|---|
|   | Color (moist)  | %                        | Color (moist)   | %   |            | _Loc2       | Texture   | A. D. D. A.   |
| 0-60  | 2.54 412   | 95                       | 2.54516   | 5   | 1          | M           | SI_   | Remarks   |
| 10-12 "   | 2.594/1  | 90                       | 2.59514   | 5   | - C        | m           | 5L  | 6.0   |
|   |  |                          | 7.5 yR416   |   |            |             | _   |   |
|   |  |                          | 0   |   |            | PUP         |   |   |
| 1   |  |                          |   |   | -          |             |   |   |
|   |  |                          |   |   | _          |             |   |   |
|   |  |                          |   |   |            | _           |   |   |
| -   |  |                          | M   |   | _          |             |   |   |
|   |  | (4)                      |   |   |            |             |   |   |
|   |  |                          |   |   |            |             |   |   |
|   |  |                          |   |   | _          |             |   |   |
|   |  |                          |   | _   |            |             |   |   |
| Type: C=Cond  | centration, D=Deple  | etion. RM                | -Reduced Matrix, MS=  |   | _          |             |   |   |
|   | 5.00   | TOTAL TRIVIS             | reduced Matrix, MS=   | Masked  | Sand Gra   | ins.        | <sup>2</sup> Location: PL   | =Pore Lining, M=Matrix.   |
| _ Histosol (A   |  |                          | Polyvalue Below   | Surface /   | S8\ (I BB  | D           | indicators for  | Problematic Hydric Soils <sup>3</sup> :   |
| _ Histic Epipe  | edon (A2)  |                          | MLRA 149B)  |   |            |             | 2 cm Muck   | (A10) (LRR K, L, MLRA 149B)   |
| _ Black Histic  | (A3)   |                          | Thin Dark Surface   | (S9) (LF  | RR MI      | PA 140D)    | Coast Prair   | ie Redox (A16) (LRR K. L. R)  |
| Hydrogen  | Cultida (A 4)  |                          |   |   |            |             |   |   |
| _ Hydrogen S  | bullide (A4)   |                          | Loamy Mucky Mir   | neral (F1)  | (I PP K    | 1400)       | 5 cm Muck   | Peat or Peat (S3) (LRR K, L, F  |
| _ Stratified La   | ayers (A5)   |                          | Loamy Mucky Mir   | neral (F1)  | (LRR K,    | L)          | Dark Surface  | Peat or Peat (S3) (LRR K, L, F<br>ce (S7) (LRR K, L, M)   |
| <ul><li>Stratified La</li><li>Depleted Be</li></ul>   | ayers (A5)<br>elow Dark Surface (  | (A11)                    | Loamy Mucky Mir<br>Loamy Gleyed Ma  | neral (F1)<br>atrix (F2)  | (LRR K,    | L)          | Dark Surfac   | ce (S7) (LRR K, L, M)<br>selow Surface (S8) (LRR K. L)  |
| Stratified La Depleted Be Thick Dark  | ayers (A5)<br>elow Dark Surface (<br>Surface (A12)   | (A11)                    | Loamy Mucky Mir Loamy Gleyed Ma  Depleted Matrix (F   | neral (F1)<br>atrix (F2)<br>F3)                                     | (LRR K,    | L)          | Dark Surface Polyvalue B Thin Dark S  | ce (S7) (LRR K, L, M) selow Surface (S8) (LRR K, L) surface (S9) (LRR K, L)   |
| _ Stratified La _ Depleted Be _ Thick Dark _ Sandy Mucl   | ayers (A5)<br>elow Dark Surface (<br>Surface (A12)<br>ky Mineral (S1)  | (A11)                    | Loamy Mucky Mir Loamy Gleyed Ma Depleted Matrix (F Redox Dark Surfa   | neral (F1)<br>atrix (F2)<br>F3)<br>ce (F6)                          | (LRR K, I  | L)          | Dark Surface Polyvalue B Thin Dark S Iron-Manga   | ce (S7) (LRR K, L, M)  delow Surface (S8) (LRR K, L)  durface (S9) (LRR K, L)  durface Masses (F12) (LRR K, L,  |
| Stratified La<br>Depleted Bo<br>Thick Dark<br>Sandy Mucl<br>Sandy Gley  | ayers (A5) elow Dark Surface ( Surface (A12) ky Mineral (S1) ed Matrix (S4)  | (A11)                    | Loamy Mucky Mir Loamy Gleyed Ma Loamy Gleyed Matrix (F Redox Dark Surfa Depleted Dark Sur   | neral (F1)<br>atrix (F2)<br>F3)<br>ce (F6)<br>rface (F7)            | (LRR K, I  | L)          | Dark Surface Polyvalue B Thin Dark S Iron-Manga Piedmont F  | ce (S7) (LRR K, L, M)  delow Surface (S8) (LRR K, L)  durface (S9) (LRR K, L)  nese Masses (F12) (LRR K, L, I)  dodplain Soils (F19) (MLRA 144  |
| Stratified La Depleted Be Thick Dark Sandy Mucl Sandy Gley Sandy Redo   | ayers (A5) elow Dark Surface ( Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5)  | (A11)                    | Loamy Mucky Mir Loamy Gleyed Ma Depleted Matrix (F Redox Dark Surfa   | neral (F1)<br>atrix (F2)<br>F3)<br>ce (F6)<br>rface (F7)            | (LRR K, I  | L)          | Dark Surface Polyvalue E Thin Dark S Iron-Manga Piedmont F Mesic Spod   | ce (S7) (LRR K, L, M)  delow Surface (S8) (LRR K, L)  durface (S9) (LRR K, L)  dese Masses (F12) (LRR K, L, I)  dodplain Soils (F19) (MLRA 145  dic (TA6) (MLRA 144A, 145, 145  |
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| Stratified La Depleted Be Thick Dark Sandy Mucl Sandy Gley Sandy Rede Stripped Ma   | ayers (A5) elow Dark Surface ( Surface (A12) ky Mineral (S1) ed Matrix (S4) ox (S5)  | Mr. Maria                | Loamy Mucky Mir Loamy Gleyed Ma Loamy Gleyed Ma Depleted Matrix (F Redox Dark Surfa Depleted Dark Sur Redox Depression                              | neral (F1)<br>atrix (F2)<br>F3)<br>ce (F6)<br>rface (F7)            | (LRR K, I  | L)          | Polyvalue E Thin Dark S Iron-Manga Piedmont FI Mesic Spod Red Parent Very Shallov   | ce (S7) (LRR K, L, M)  lelow Surface (S8) (LRR K, L)  lurface (S9) (LRR K, L)  nese Masses (F12) (LRR K, L, I)  loodplain Soils (F19) (MLRA 145, 149)  ic (TA6) (MLRA 144A, 145, 149)  Material (F21)  V Dark Surface (TF12)  |
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WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 10/27/2015 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC NY Sampling Point: DP-5/2 Investigator(s): M. Boberg B. Virts Section, Township, Range: VIIIeno Va Local relief (concave, convex, none): CONCAVE Slope (%): D Landform (hillslope, terrace, etc.): Drainage Subregion (LRR or MLRA): LRR-R Lat: 79.120003 Long: 42.405635 Datum: NAD 83 NWI classification: upland Soil Map Unit Name: Charatanana Silt Loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No\_ Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-506 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1) Water-Stained Leaves (B9) ▲ Drainage Patterns (B10) \_\_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) ★ High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) X Saturation (A3) \_\_ Marl Deposits (B15) \_\_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) \_\_\_ Saturation Visible on Aerial Imagery (C9) X Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) \_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_ Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) \_\_ Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes Y No Depth (inches): 0-3" Surface Water Present? Yes \_ No \_\_\_\_ Depth (inches): 0" Water Table Present? Yes X No \_\_\_ Depth (inches): 0 4 Wetland Hydrology Present? Yes \_ No \_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| 201                                   |       | Dominant Indicator | Dominance Test worksheet:   |
|---------------------------------------|-------|--------------------|---|
| ree Stratum (Plot size: 301).         |       | Species? Status    | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|                                       |       |                    |   |
|                                       |       |                    | Total Number of Dominant Species Across All Strata:(B)  |
|                                       |       |                    | Percent of Dominant Species   |
|                                       |       |                    | That Are OBL, FACW, or FAC: (A/B)   |
|                                       |       |                    |   |
|                                       |       |                    | Prevalence Index worksheet:   |
| ·                                     |       | = Total Cover      |   |
| Sapling/Shrub Stratum (Plot size: 15) |       | - Total Cover      | FACW species x 2 =  |
| Not Applicable                        |       |                    | FAC species x 3 =   |
|                                       |       |                    | FACU species x 4 =  |
|                                       |       |                    | UPL species x 5 =   |
|                                       |       | -                  | Column Totals: (A) (B)  |
|                                       | -     |                    | Prevalence Index = B/A =  |
| 5,                                    |       | -                  | 7 4 9 1 30 34 34 C C C C C C C C C C C C C C C C C  |
| 3                                     |       |                    | Hydrophytic Vegetation Indicators:  |
| 7                                     | 111   |                    | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%  |
| 3.4                                   | D     | = Total Cover      | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5 / )        |       |                    | 4 - Morphological Adaptations (Provide supporting   |
| Sumohuctichum Vovae-andu              | ac 70 | Y FAW              | data in Remarks or on a separate sheet)   |
| Eugotorium pertolliatum               | 5     | N FACIN            | Problematic Hydrophytic Vegetation¹ (Explain)   |
| Euthamia graminitalia                 | 5     | N FAC              | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|                                       |       |                    |   |
| 5                                     | -     |                    | Definitions of Vegetation Strata:   |
| 5                                     |       |                    | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.               |
| ,                                     | -     |                    |   |
| 3                                     |       |                    | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| ),                                    |       | ·                  |   |
| 10                                    |       |                    | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11                                    |       |                    | Woody vines – All woody vines greater than 3.28 ft in   |
| 12                                    |       |                    | height.   |
|                                       | 80    | = Total Cover      |   |
| Noody Vine Stratum (Plot size: 30/)   |       |                    |   |
| NIAL Carlie abla                      |       |                    |   |
| 1. INOT ITWING CHOIP                  |       |                    | Hydrophytic   |
| 1. Not Applicable                     |       |                    |   |
| 1. NOT ETHING (ARDS)                  |       |                    | Vegetation Present? Yes X No  |
| 1. NOT PTWOTH CARRIE                  |       |                    |   |
| 1. NOT PTIMING CARRIE                 |       | = Total Cover      |   |

| Donth   | to the d | epth needed to docu | ment the   | indicator              | or confirm     | n the absence of   | Sampling Point: DP-  |
|---|----------|---------------------|--|------------------------|----------------|--|--|
| Depth Matrix (inches) Color (moist)   | %        | Red                 | ox Feature   | S                      | 300,000,000    | abounce of   | mulcators.)  |
| D-10" - 2 54 3/2  | 80       | 2.5 \ 5/1           | %  | Type <sup>1</sup>      | _Loc2          | Texture  | Remarks  |
| 10 -16  | 20       |                     | 10   | 0                      | m              | _cı  |  |
|   |          | 2.343/6             | 5  | C                      | PL             | _CL  |  |
|   | _        | IDYRSIU             | _5_  | <u>c</u>               | PL             | _cl  | 4st  |
|   |          |                     |  |                        | _              |  |  |
|   |          |                     |  |                        |                | ū.   |  |
|   |          |                     |  |                        |                |  |  |
|   | -        |                     |  | _                      | _              |  |  |
|   |          |                     |  |                        |                |  |  |
|   |          |                     |  |                        |                | _  | - (.   |
|   |          |                     |  |                        |                |  |  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, ML | RA 149B  |                     | e (S9) (LF<br>neral (F1)<br>atrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | RR R, MLF<br>(LRR K, I | RA 149B)<br>-) | 2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Fid Mesic Spodid Red Parent M Very Shallow Other (Explain | roblematic Hydric Soils <sup>3</sup> : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L, M) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) urface (S9) (LRR K, L) codplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B) Material (F21) Dark Surface (TF12) In in Remarks) |
| Гуре:   |          |                     |  |                        |                |  |  |
| Depth (inches):   |          |                     |  |                        |                | Hydric Soil Preser   | 40 V V   |
| marks:  |          |                     |  |                        |                |  | nt? Yes No   |

|   | TERMINATION DATA                 |                              |                      |                                 |
|---|----------------------------------|------------------------------|----------------------|---------------------------------|
| Project/Site: Ball Hill Wind Project                      |                                  | City/County: Chautauqu       | ua County            | _ Sampling Date: 10-27-         |
| Applicant/Owner: Ball Hill Wind Ener                      |                                  |                              | State: NY            | Sampling Point: DP-373          |
| Investigator(s): M. BOBERT B                              | VIRTS                            | Section, Township, Range     | : Villenovo          | 1                               |
| Landform (hillslope, terrace, etc.): Hill                 | 5/0/2e La                        | cal relief (concave, convex  | none): CONCA         | 1/P Slone (%): 2)               |
| Subregion (LRR or MLRA): LRR-R                            | Lat: 79.11                       | 2082 long                    | 42.4063              | 1.4 Datum: NAD 83               |
| Soil Map Unit Name: Fremont                               | 25 . 4 . 1                       |                              |                      |                                 |
| Are climatic / hydrologic conditions on the               | site typical for this time of w  | and You X No.                | NVVI Glassii         | ication: uplanci                |
| Are Vegetation YES, Soil YES, or Hy                       | site typical for this time of ye |                              |                      |                                 |
| Are Vegetation AVO Boll AV                                | drology No significantly         |                              |                      | present? Yes No                 |
| Are Vegetation <u>NO</u> , Soll <u>No</u> , or Hy         | drology IVD naturally pr         | oblematic? (If neede         | ed, explain any answ | ers in Remarks.)                |
| SUMMARY OF FINDINGS - Att                                 | ach site map showing             | sampling point loca          | ations, transect     | s, important features, etc.     |
| Hydrophytic Vegetation Present?                           | Yes X No                         | Is the Sampled Ar            |                      |                                 |
| Hydric Soil Present?                                      | Yes X No                         | within a Wetland?            | V                    | No                              |
| Wetland Hydrology Present?                                | Yes X No                         | If yes, optional Wet         | land Site ID: WL-    |                                 |
| Remarks: (Explain alternative procedure                   |                                  | rt.)                         | and one ib. vv       | 1100 /                          |
| Dem with  | dir a cor                        | C. L. Vera                   |                      | soils on.                       |
|   |                                  |                              | tour or or           | 80113 00                        |
| Significont   | ly disturbed                     | - 0                          |                      |                                 |
| 1   | 9                                |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
| HYDROLOGY   |                                  |                              |                      |                                 |
| Wetland Hydrology Indicators:                             |                                  |                              | Cocondon India       | ofore (minimum of the second of |
| Primary Indicators (minimum of one is re                  | quired: check all that apply)    |                              |                      | ators (minimum of two required) |
| X Surface Water (A1)                                      | Water-Stained                    | Leaves (R0)                  |                      | Cracks (B6)                     |
| ¥ High Water Table (A2)                                   | Aquatic Fauna                    |                              | Moss Trim L          | atterns (B10)                   |
| X Saturation (A3)   | Marl Deposits (                  |                              |                      | Water Table (C2)                |
| Water Marks (B1)  | Hydrogen Sulfic                  |                              | Crayfish Bu          |                                 |
| Sediment Deposits (B2)                                    | X Oxidized Rhizo                 | spheres on Living Roots (C   |                      | isible on Aerial Imagery (C9)   |
| Drift Deposits (B3)                                       |                                  | educed Iron (C4)             |                      | Stressed Plants (D1)            |
| Algal Mat or Crust (B4)                                   |                                  | duction in Tilled Soils (C6) | Geomorphic           | Position (D2)                   |
| Iron Deposits (B5)  | Thin Muck Surf                   |                              | Shallow Aqu          |                                 |
| Inundation Visible on Aerial Imagery                      |                                  | n Remarks)                   | Microtopogr          | aphic Relief (D4)               |
| Sparsely Vegetated Concave Surface<br>Field Observations: | e (B8)                           |                              | X FAC-Neutra         | Test (D5)                       |
| Surface Water Present? Yes X                              | N- 5-11-7-1                      | N-24                         |                      |                                 |
| Water Table Present? Yes X                                | popul (monos)                    |                              |                      |                                 |
|   |                                  | *                            | 242-2-2-3-3-4        |                                 |
| Saturation Present? Yes X (includes capillary fringe)     | No Depth (inches)                | : 0" Wetlan                  | d Hydrology Presei   | nt? Yes X No                    |
| Describe Recorded Data (stream gauge,                     | monitoring well, aerial photo    | s, previous inspections), if | available:           |                                 |
|   | A STATE OF THE PARTY OF          |                              |                      |                                 |
| <b>6</b>  |                                  |                              |                      |                                 |
| Remarks:  |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      | W.4                             |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |
|   |                                  |                              |                      |                                 |

| ree Stratum (Plot size: 30') . Not Applicable  |           | Species? Status | Number of Dominant Species That Are OBL, FACW, or FAC: (A)  |
|--|-----------|-----------------|---|
|  |           |                 | Total Number of Dominant Species Across All Strata:3 (B)  |
|  |           |                 | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)   |
| 5  |           |                 | Prevalence Index worksheet:   |
|  |           |                 |   |
| Sapling/Shrub Stratum (Plot size: 15   |           | = Total Cover   | FAC species x 2 =<br>FAC species x 3 =  |
| Not applicable   |           |                 | FACU species x 4 =  |
|  |           |                 | UPL species x 5 =   |
| 3  |           |                 | Column Totals: (A) (B)  |
|  |           |                 | Prevalence Index = B/A =  |
| 5  |           |                 |   |
| 3  |           |                 | Hydrophytic Vegetation Indicators:  |
| 7  |           |                 | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%  |
|  | D         | = Total Cover   | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size: 51 )  |           |                 | 4 - Morphological Adaptations¹ (Provide supporting  |
| Carex flava  | 10        | Y OBL           | data in Remarks or on a separate sheet)   |
| Juneus effusus   | 5         | Y OBL           | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Ranunculus buibosus   | _5_       |                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4  |           |                 | Definitions of Vegetation Strata:   |
| 5  |           |                 |   |
| 6  |           |                 | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7  |           |                 | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8  |           |                 | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |           |                 | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10   |           |                 | size, and woody plants less than 3.28 ft tall.  |
| 11   |           |                 | Woody vines - All woody vines greater than 3.28 ft in   |
| 12   |           |                 | height.   |
| Woody Vine Stratum (Plot size: 80')  | _20       | _ = Total Cover |   |
| 1. Not Applicable  |           |                 |   |
|  | -         |                 | Hydrophytic   |
| 2  | -         |                 | Vegetation Yes X No   |
| 3  | -         |                 |   |
| 4  | -         | = Total Cover   |   |
| The state of the s | shoot)    | _ = Total Cover | N   |
| Remarks: (Include photo numbers here or on a separate FAC NEWTRAL TEST   | s sneet.) |                 |   |
|  |           |                 |   |
| 1 FALW + 2 OBL = 3   | we        | Hand            |   |
|  |           |                 |   |
| O FACU + O UPL = 0   |           | T               |   |

| Profile Desc  | ription: (Describe   | to the de | epth needed to docum   | nent the   | indicator         | or confirm  | the absence of ind  | Sampling Point: Di   |
|---|--|-----------|------------------------|--|-------------------|-------------|---|----------------------|
| (inches)  | Color (moist)  | %         | Color (moist)          | x Feature  | es                |             |   |                      |
| 0-3"  | 2.543/1  | 95        | 2.54 5/4               | %_   | Type <sup>1</sup> | Loc2        | Texture   | Remarks              |
| 3-6"  | 2.54 3/2   | 90        | 2.542 4/6              | -0   | -                 | m           | _SIL  |                      |
|   |  |           |                        | 8  | <u>C</u> _        | M           | _SIC  |                      |
|   |  |           | TOAK 2/8               | _2_  | <u>C</u>          | PL          | SIC   |                      |
|   |  |           |                        |  |                   |             |   |                      |
| Type: C=Con   | Centration D=Deple   |           |                        |  |                   |             |   |                      |
| lydric Soil Inc<br>Histosol (A                                    |  | tion, RM  | =Reduced Matrix, MS=   | Masked   | Sand Grai         | ns.         | <sup>2</sup> Location: PL=Po  | re Lining, M=Matrix. |
| Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma Dark Surfac | c (A3) Sulfide (A4) ayers (A5) elow Dark Surface Surface (A12) ky Mineral (S1) red Matrix (S4) ox (S5) atrix (S6) te (S7) (LRR R, ML | RA 149B   |                        | neral (F1)<br>htrix (F2)<br>F3)<br>ce (F6)<br>rface (F7<br>is (F8) | (LRR K, I         | <b>L)</b>   | Coast Prairie Ro 5 cm Mucky Pei Dark Surface (S Polyvalue Below Thin Dark Surfac Iron-Manganese Piedmont Flood Mesic Spodic (T. Red Parent Mate Very Shallow Da Other (Explain in | rk Surface (TF12)    |
| estrictive I av   | drophytic vegetation<br>er (if observed):  | and wet   | land hydrology must be | e presen   | , unless di       | isturbed or | problematic.  |                      |
| Туре:   | er (ii observed):  |           |                        |  |                   |             |   |                      |
| Depth (inches   | 3):  |           |                        |  |                   |             |   |                      |
| emarks:   |  |           |                        |  |                   |             | lydric Soil Present?  | Yes No               |
| <u>.</u>  | ield we  | rs Ro     | cently PI              | ow.  | 2.2               |             |   |                      |
|   |  |           |                        |  |                   |             |   |                      |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project , C   | City/County: Chautauqua County Sampling Date: 10 - 13 - 15             |
|--|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP-5/4                                       |
| Investigator(s): M. Bolera B. VIITS s  |  |
| Landform (hillslope, terrace, etc.): HIIS 1000 Local   | al relief (concave, convex, none): <u>(Oncove</u> Slope (%): /         |
| Subregion (LRR or MLRA): LRR-R Lat: 79, 117  | 736 Long: 42, 407242 Datum: NAD 83                                     |
| Soil Map Unit Name: Fremont Sult Loarn   | NWI classification: wpland   |
|  |  |
| Are climatic / hydrologic conditions on the site typical for this time of year                   | r? Yes _X No (If no, explain in Remarks.)                              |
| Are Vegetation No., Soil No., or Hydrology No significantly of                                   | disturbed? Are "Normal Circumstances" present? Yes X No                |
| Are Vegetation No , Soil No , or Hydrology No naturally prot                                     | blematic? (If needed, explain any answers in Remarks.)                 |
| SUMMARY OF FINDINGS – Attach site map showing  | sampling point locations, transects, important features, etc.          |
| Hydrophytic Vegetation Present? Yes X No   | Is the Sampled Area  |
| Hydric Soil Present? Yes X No  | within a Wetland? Yes X No   |
| Wetland Hydrology Present?   | If yes, optional Wetland Site ID: WL-ASO8                              |
| Remarks: (Explain alternative procedures here or in a separate report                            | il yes, optional vvetiand site ib.                                     |
| A portion of this wells<br>prowed field where soils<br>significantly disturbed.                  | and vegetation are   |
| HYDROLOGY  | •  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)                         |
| Primary Indicators (minimum of one is required; check all that apply)                            | Surface Soil Cracks (B6)   |
| Surface Water (A1) Water-Stained L   | .eaves (B9) X Drainage Patterns (B10)                                  |
| ∠ High Water Table (A2)  | B13) Moss Trim Lines (B16)   |
| X Saturation (A3) Marl Deposits (E   | Dry-Season Water Table (C2)  |
| Water Marks (B1) Hydrogen Sulfid   |  |
|  | spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
| Drift Deposits (B3) Presence of Rec  | 사람이 위한 하고 하나가 되었다. 그리고 있는 때 아이들이 가장 그리고 있었다. 그리고 있는데 아이들이 되었다.         |
|  | duction in Tilled Soils (C6) Geomorphic Position (D2)                  |
| Iron Deposits (B5) Thin Muck Surfa   |  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in                                      |  |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)  |
| Field Observations:  |  |
| Surface Water Present? Yes No _X Depth (inches):  Water Table Present? Yes _X No Depth (inches): | inil   |
|  | Wetland Hydrology Present? Yes X No                                    |
| Saturation Present? Yes X No Depth (inches): (includes capillary fringe)                         | " Wetland Hydrology Present? Yes ⚠ No                                  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos                             | s, previous inspections), if available:                                |
|  |  |
| Remarks:   |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Wester   |
|  | 10.50  |
|  |  |
|  |  |
|  |  |

| PEGETATION - Use scientific flames of plant          |                     |                   |   | Cumpung Form  |
|--|---------------------|-------------------|---|---|
| Tree Stratum (Plot size: 30)                         | Absolute<br>% Cover | Dominant Species? |   | Dominance Test worksheet:   |
| 1. Not Applicable                                    | 70 00101            | Option.           |   | Number of Dominant Species That Are OBL, FACW, or FAC:(A)         |
| 2.   |                     |                   |   | Total Number of Dominant  |
| 3.   |                     |                   |   | Species Across All Strata: (B)                                    |
| 4.   |                     |                   |   | Percent of Dominant Species 72                                    |
| 5.   |                     | -                 |   | That Are OBL, FACW, or FAC: 25 (A/B)                              |
|  |                     |                   |   |   |
| 6  |                     | -                 | -                                       | Prevalence Index worksheet:                                       |
| 7  |                     | 7                 |   | Total % Cover of: Multiply by:                                    |
| 101  |                     | = Total Cov       | er                                      | OBL species ZO x1 = ZO x  |
| Sapling/Shrub Stratum (Plot size: 15')               |                     | 1.2               | - Charles                               | FACW species (2) x2 = (3) FAC species (40) x3 = 180               |
| 1. Rhamaus cathartica                                |                     |                   | FACU                                    | FACU species 35 x4= 330 140                                       |
| 2. Rosa multiflorg                                   | 5                   |                   | TACU                                    | UPL species x5=O  |
| 3. Rubus allegheniensis                              | 5_                  | _ Y               | THEU                                    | Column Totals: 1750 (A) 6580 (B)                                  |
| 4.   |                     |                   |   | 115 840   |
| 5  |                     |                   |   | Prevalence Index = B/A = 2.95                                     |
| 6  |                     |                   |   | Hydrophytic Vegetation Indicators:                                |
| 7.   | _                   |                   |   | 1 - Rapid Test for Hydrophytic Vegetation                         |
| 1,   | 15                  | - T-1-1 C-1       |   | 2 - Dominance Test is >50%  |
| -1   | 1-1                 | = Total Cov       | /er                                     | X 3 - Prevalence Index is ≤3.01                                   |
| Herb Stratum (Plot size: 5/                          |                     | 11                | EAR                                     | 4 - Morphological Adaptations¹ (Provide supporting                |
| 1. Euthamia graminifola                              | 60                  | <u>-y</u>         | FAC                                     | data in Remarks or on a separate sheet)                           |
| 2. polygonum artifolium                              | 20                  | N                 | OBL                                     | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)         |
| 3. soudago canadensis                                | 10                  | N                 | FACU                                    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must |
| 4. Rubus auegheniensis                               | 10                  | N                 | BBCI                                    | be present, unless disturbed or problematic.                      |
| 5  |                     |                   |   | Definitions of Vegetation Strata:                                 |
| 6.   |                     |                   |   | Tree - Woody plants 3 in. (7.6 cm) or more in diameter            |
| 7.   |                     |                   |   | at breast height (DBH), regardless of height.                     |
| 8  |                     |                   |   | Sapling/shrub - Woody plants less than 3 in. DBH                  |
| 9  |                     |                   |   | and greater than or equal to 3.28 ft (1 m) tall.                  |
|  |                     | -                 |   | Herb - All herbaccous (non-woody) plants, regardless of           |
| 10   |                     | -                 | . —                                     | size, and woody plants less than 3.28 ft tall.                    |
| 11   |                     |                   |   | Woody vines - All woody vines greater than 3.28 ft in             |
| 12   |                     | -                 |   | height.   |
| acres and acres                                      | 100                 | = Total Co        | ver                                     |   |
| Woody Vine Stratum (Plot size: 30')                  |                     |                   |   |   |
| 1. Not Applicable                                    |                     |                   |   | N. V. T. V. M.  |
| 2,   |                     |                   |   | Hydrophytic<br>Vegetation   |
| 3.   |                     |                   |   | Present? Yes X No   |
| 4  |                     |                   |   |   |
|  | 0                   | = Total Co        | ver                                     |   |
| Remarks: (Include photo numbers here or on a separal |                     | _ Total Ou        | • |   |
| FAC NEUTRAL T  |                     |                   |   |   |
|  |                     |                   |   | 2.  |
| O FACU + O OBL =                                     | =0                  | تعصا              | tian                                    | d   |
| 1  | 1                   |                   | ,                                       |   |
| 9 FACU + U UPL =                                     | 4                   | upla              | end                                     |   |
|  |                     |                   |   |   |

| (inches)   | Matrix   |          | epth needed to docu  | ment the  | nuicator                         | or confirm     | n the absence of inc   | licators.)   |
|--|--|----------|--|---|----------------------------------|----------------|--|--|
|  | Color (moist)  | %        | Color (moist)  | ox Feature<br>%   | S<br>Type <sup>1</sup>           | Loc2           | Texture  | Domestic   |
| 0-6"   | 104R 3/1   |          |  |   |                                  |                | 54   | Remarks  |
| 6-18"  | 10YR 3/1   | 95       | 1048416  | 5   | C                                | m              | SL   |  |
|  |  |          |  |   |                                  |                |  |  |
| Histosol ( Histic Epi Black His Hydrogen Stratified Depleted Thick Dan Sandy Mu Sandy Gle Stripped M | (A1) ipedon (A2) ific (A3) in Sulfide (A4) Layers (A5) Below Dark Surface it Surface (A12) Jicky Mineral (S1) eyed Matrix (S4) | (A11)    | Polyvalue Below MLRA 149B) Thin Dark Surfac Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark Si Redox Depression | v Surface (<br>ce (S9) (LF<br>ineral (F1)<br>fatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7 | S8) (LRR<br>RR R, MLI<br>(LRR K, | R,<br>RA 149B) | Indicators for Pro  2 cm Muck (At Coast Prairie F 5 cm Mucky Pe Dark Surface ( Polyvalue Belo Thin Dark Surf Iron-Manganes Piedmont Flood Mesic Spodic ( Red Parent Ma | ow Surface (S8) (LRR K, I<br>ace (S9) (LRR K, L)<br>se Masses (F12) (LRR K,<br>dplain Soils (F19) (MLRA<br>TA6) (MLRA 144A, 145,<br>terial (F21)<br>lark Surface (TF12)  |
| ndicators of h   | nydrophytic vegetatio  | n and we | tland hydrology must   | be present  | t, unless d                      | isturbed o     |  | ,  |
| Type:  | yer (if observed):   |          | .1   |   |                                  | I              | problematic.   | The second secon |
| Depth (inch  | (00):  |          |  |   |                                  |                |  |  |
| emarks:  | les):  |          |  |   |                                  |                | Hydric Soil Present  | ? Yes X No   |
|  |  |          |  |   |                                  |                |  |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  |   | City/County: Chautauqua County Sampling Date: 10-2.7-2   |
|---|---|--|
| Applicant/Owner: Ball Hill Wind En  |   | State: NY Sampling Point: DP- 5/3  |
|   |   | Section, Township, Range: VIII PNO VG  |
| Landform (hillslope, terrace, etc.): His<br>Subregion (LRR or MLRA): LRR-R<br>Soil Map Unit Name: Fremoi<br>Are climatic / hydrologic conditions on the<br>Are Vegetation No., Soil No., or<br>Are Vegetation No., Soil No., or   | Lat: 79, 11  Lat: | al relief (concave, convex, none):   |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?   | Yes No X Yes No X   | Is the Sampled Area within a Wetland?  If yes, optional Wetland Site ID:   |
| HYDROLOGY   |   |  |
| Wetland Hydrology Indicators:   |   | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is  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 Imag Sparsely Vegetated Concave Sur | Water-Stained L Aquatic Fauna ( Marl Deposits (E Hydrogen Sulfid Oxidized Rhizos Presence of Rei Recent Iron Rec Thin Muck Surfa  | (B13) Moss Trim Lines (B16) B15) Dry-Season Water Table (C2) Ide Odor (C1) Crayfish Burrows (C8) Sepheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Iduced Iron (C4) Stunted or Stressed Plants (D1) Iduction in Tilled Soils (C6) Geomorphic Position (D2) Iduced (C7) Shallow Aquitard (D3) |
| Water Table Present? Yes _  | No X Depth (inches)  No X Depth (inches)  No X Depth (inches)   |  |
| Describe Recorded Data (stream gau  | ge, monitoring well, aerial photo   | s, previous inspections), if available:  |
|   |   |  |
| Remarks:  |   |  |

| 5          | = Total Co             | ver FMU           | Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Total % Cover of:  Multiply by:  OBL species  FACW species  FAC species  FACU species  FACU species  We will be a species or control of the sp |
|------------|------------------------|-------------------|--|
| 5          | = Total Co             | ver FACU          | That Are OBL, FACW, or FAC:  |
| 5          | <u>_</u>               | Freu              | That Are OBL, FACW, or FAC:  |
| 5          | <u>_</u>               | Freu              | Total % Cover of:       Multiply by:         OBL species       ○       x1 = ○         FACW species       ○       x2 = ○         FAC species       ○       x3 = ○         FACU species       25       x4 = 34○         UPL species       5       x5 = 25  |
| 5          | <u>_</u>               | Freu              | Total % Cover of:         Multiply by:           OBL species         ○         x1 = ○           FACW species         ○         x2 = ○           FAC species         ○         x3 = ○           FACU species         ▼5         x4 = ○           UPL species         5         x5 = ○   |
| _5_        | <u>_</u>               | Freu              | OBL species       0       x1 =       0         FACW species       0       x2 =       0         FAC species       0       x3 =       0         FACU species       25       x4 =       340         UPL species       5       x5 =       25   |
| _5_        | <u>_</u>               | Freu              | FACW species   |
|            | -                      |                   | FACU species <u>\$5</u> x4 = <u>340</u> UPL species <u>5</u> x5 = <u>25</u>  |
|            | -                      |                   | UPL species  |
|            |                        |                   |  |
|            |                        |                   |  |
|            |                        |                   | Column Totals: <u>90</u> (A) <u>365</u> (B)  |
|            |                        |                   | Prevalence Index = B/A = 4.05  |
|            |                        |                   | A NORTH THE THE PARTY OF THE PA |
|            | Cur                    |                   | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
|            |                        |                   | 2 - Dominance Test is >50%   |
| 5          | = Total Co             | ver               | 3 - Prevalence Index is ≤3.0¹  |
|            |                        | 23177             | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
| 40         |                        |                   | data in Remarks or on a separate sheet)  |
| 15         | N                      |                   | Problematic Hydrophytic Vegetation¹ (Explain)  |
| _10_       | N                      | NI                | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| 5          | N                      | FACU              | be present, unless disturbed or problematic.   |
| 5          | N                      | UPL               | Definitions of Vegetation Strata:  |
| 5          | N                      | NI                | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
|            |                        |                   | at breast height (DBH), regardless of height.  |
|            |                        |                   | Sapling/shrub - Woody plants less than 3 in. DBH   |
|            |                        |                   | and greater than or equal to 3.28 ft (1 m) tall.   |
|            |                        |                   | Herb - All herbaceous (non-woody) plants, regardless of  |
|            |                        |                   | size, and woody plants less than 3.28 ft tall.   |
| _          |                        |                   | Woody vines - All woody vines greater than 3.28 ft in  |
| 1000       | T-1-10                 |                   | height.  |
| 100        | = Total Co             | over              |  |
|            |                        |                   |  |
| -          |                        | -                 | Hydrophytic  |
| -          |                        |                   | Vegetation   |
|            | -                      |                   | Present? Yes No _X   |
|            |                        |                   |  |
| _D_        | = Total C              | over              |  |
| te sheet.) |                        |                   |  |
|            |                        |                   |  |
|            |                        |                   |  |
|            |                        |                   |  |
|            | 5<br>10<br>5<br>5<br>5 | 5 = Total Co  (CO | 5 = Total Cover  40  |

| Cinchae\   | Matrix                                |           | - PERO                                 | OX FASTIIFOC        |                | rm the absence of i        | naicators.)      |                           |
|--|---------------------------------------|-----------|--|---------------------|----------------|----------------------------|------------------|---------------------------|
| (inches)   | Color (moist)                         | %_        | Color (moist)                          | % Tv                | ne¹ loc²       | Touture                    |                  |                           |
| 0-10"  | 104R3/2                               | 100       |  |                     |                |                            |                  | narks                     |
| 10-18"   | 104R 3/2                              | 95        | IMR 5/8                                | 5 C                 | Z m            |                            |                  |                           |
|  |                                       |           |  |                     |                |                            |                  |                           |
|  |                                       |           |  |                     | -              |                            |                  |                           |
| ,  |                                       |           |  |                     |                |                            |                  |                           |
|  |                                       |           |  |                     |                |                            |                  |                           |
|  |                                       |           |  |                     |                |                            |                  | *                         |
|  |                                       |           |  |                     | -              |                            |                  |                           |
|  |                                       |           |  |                     |                |                            |                  |                           |
| ype: C=Con   | centration D=Denie                    | tion DM-  | Poduna d Maria                         |                     |                |                            |                  |                           |
|  |                                       | HOII, KM= | reduced Matrix, MS                     | =Masked Sand        | Grains.        | <sup>2</sup> Location: PL= | Pore Lining, M=  | Matrix.                   |
| Histosol (A  |                                       |           | Polyvalue Polovi                       | Curfees (Ca)        | DD 6           | Indicators for Pr          | oblematic Hyd    | Iric Soils <sup>3</sup> : |
| _ Histic Epip  | edon (A2)                             |           | Polyvalue Below<br>MLRA 149B)          | Surface (S8) (I     | .RR R,         | 2 cm Muck (A               | 110) (LRR K, L   | MLRA 149B)                |
| Black Histin   | c (A3)                                |           | _ Thin Dark Surfac                     | e (90) (I DD D      |                | Coast Prairie              | Redox (A16) (I   | RR K. L. R)               |
| _ Hydrogen S   | Sulfide (A4)                          |           | Loamy Mucky M                          | ineral (E1) (LRR R, | MLRA 149B)     | 5 cm Mucky                 | Peat or Peat (S  | 3) (LRRKIR)               |
| Stratified La  | ayers (A5)                            |           | _ Loamy Gleyed M                       | latrix (E2)         | K, L)          | Dark Surface               | (S7) (LRR K, L   | M)                        |
| Depleted B   | elow Dark Surface (                   | A11)      | _ Depleted Matrix                      | (F3)                |                | Polyvalue Be               | ow Surface (St   | 3) (LRR K, L)             |
| Thick Dark   | Surface (A12)                         |           | _ Redox Dark Surf                      | are (FR)            |                | Thin Dark Sui              | face (S9) (LRF   | (K. L)                    |
| Sandy Muc  | ky Mineral (S1)                       |           | Depleted Dark St                       | urface (E7)         |                | Iron-Mangane               | se Masses (F1    | 2) (LRR K, L, R)          |
| Sandy Gley   | red Matrix (S4)                       |           | _ Redox Depressio                      | ine (E9)            |                | Pledmont Flor              | odplain Soils (F | 19) (MLRA 149R            |
| Sandy Red  | ox (S5)                               |           | _ ···································· | (10)                |                | Mesic Spodic               | (TA6) (MLRA 1    | 44A, 145, 149B)           |
| Stripped Ma  | atrix (S6)                            |           |  |                     |                | Red Parent M               | aterial (F21)    |                           |
|  | e (S7) (LRR R, MLI                    |           |  |                     |                | Other (Explain             | Dark Surface (1  | F12)                      |
| dicators of hydratical   | drophytic vegetationer (if observed): | and wetla | nd hydrology must b                    | e present, unle     | ss disturbed o | or problematic.            |                  |                           |
| The same of the sa | (                                     |           |  |                     |                |                            |                  |                           |
| ype:   | 3):                                   |           |  |                     |                | Hydric Soil Presen         | 10 V             |                           |
| Type:<br>Depth (inches   | //                                    |           |  |                     |                | riyanic don Fresen         | r yes            | _ No_X_                   |
| Depth (inches  | "                                     |           |  |                     |                |                            |                  |                           |
| Depth (inches  | "                                     |           |  |                     |                |                            |                  |                           |
| Depth (inches  | 7                                     |           |  |                     |                |                            |                  |                           |
| Depth (inches  | 7                                     |           |  |                     |                |                            |                  |                           |
| Depth (inches  | 7                                     |           |  |                     |                |                            |                  |                           |
| Depth (inches  | ny refusa                             | d 0       | 1- 1511                                |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ar refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ur refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |
| Depth (inches  | ur refuse                             | d a       | t 18".                                 |                     |                |                            |                  |                           |

| WETLAND DETERMINATION  | ON DATA FORM – Northcentral and Northeast Region   |
|--|--|
| Tojecusite. — In This Tring Tioject  | Church Chautaugus County   |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | City/County: Chautauqua County Sampling Date: 10 27  |
| Investigator(s): M. Botterg B. Virts   | State: NY Sampling Point: DP- 3  |
| Landform (hillslope, terrace, etc.): Hillslope   | Section, Township, Range: VIIIE/10V0   |
|  | Local relief (concave, convex, none): Concave Slope (%): 1   |
| Soil Man Unit Name - FYO 200 O. C. C.  |  |
| TELLOTTE STIF LOX  | 2/11   |
| Are climatic / hydrologic conditions on the site typical for th  | in time of the O to V  |
| Are vegetation IV Soil No or Hydrology N. IV   | single-out of the state of the  |
| Are Vegetation NO, Soil NO, or Hydrology NO  | No   |
|  |  |
| OSMINIARY OF FINDINGS – Attach site map  | showing sampling point locations, transects, important features, e   |
|  | le the Samuel La   |
| Hydric Soil Present?   |  |
| Wetland Hydrology Present?   |  |
| Remarks: (Explain alternative procedures here or in a sep  | o If yes, optional Wetland Site ID: WUL-14509  |
|  |  |
| Aquat  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Algal Mat or Crust (B4)  Iron Deposits (B5) | r-Stained Leaves (B9)  tic Fauna (B13)  Deposits (B15)  gen Sulfide Odor (C1)  zed Rhizospheres on Living Roots (C3)  nce of Reduced Iron (C4)  tit Iron Reduction in Tilled Soils (C6)  Muck Surface (C7)  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)  |
| Sparsely Vegetated Concave Surface (B8)  | (Explain in Remarks) Microtopographic Relief (D4)  |
| eld Observations:  | FAC-Neutral Test (D5)  |
| urface Water Present? Yes X No Depth   | (inches): () = } ()  |
| ater Table Present? Yes X No Depth   | (inches) O*  |
| aturation Present? Yes X No Depth  | The state of the s |
| escribe Recorded Data (stream gauge, monitoring well, aer  | (inches): 0 Wetland Hydrology Present? Yes X No  |
| augo, monitoring well, aer   | rai priotos, previous inspections), if available:  |
| marks:   |  |
| marks:   |  |
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|                                      | Absolute<br>% Cover                     | Species?   | Indicator<br>Status | Dominance Test worksheet:  |
|--------------------------------------|---|------------|---------------------|--|
| ee Stratum (Plot size: 30')          | 35_                                     | Y          | FACIO               | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
| Fraxinus pennsylvanice               |   | V          | FACUE               |  |
| Acer saccharinum                     | 10                                      | -7         | FAC                 | Total Number of Dominant<br>Species Across All Strata: (B)   |
| Betula aueghaniensis                 | _5_                                     |            | FITC                | The state of the s |
|                                      |   | _          |                     | Percent of Dominant Species That Are OBL, FACW, or FAC:  |
|                                      |   | 1          |                     | That we obe, the things are  |
|                                      |   |            |                     | Prevalence Index worksheet:  |
|                                      |   |            |                     |  |
|                                      | 50                                      | = Total Co | ver                 | OBL species x1 =   |
| 151                                  |   |            |                     | FACW species 100 x 2 = 200   |
| apling/Shrub Stratum (Plot size: 15' | 20                                      | Y-         | PACLO               | FAC species $\frac{20}{40}$ $\times 3 = \frac{100}{100}$   |
| Fraxinus pennsylvanica               | 7.75                                    | y          | FACU                | FACU species X4 =  |
| Accer saccharinum                    | _10_                                    |            | FACU                | UPL species  |
| Lonicera tatorica                    | 10                                      |            |                     | Column Totals.   |
| Betula lenta                         | 2                                       | - N        | _ FACU              | Description on Index = B/A = / 1 8 3   |
| Rosa multiflorg                      | _ 5_                                    | _10_       | EACU                | Hydrophytic Vegetation Indicators:   |
|                                      |   | -          |                     | 1 - Rapid Test for Hydrophytic Vegetation  |
| 3 14                                 |   |            |                     | 1 - Rapid Test to Frydroshytto Vogatation  |
|                                      | 50                                      | = Total C  | over                | X 3 - Prevalence Index is ≤3.01  |
| 51                                   |   |            |                     | A Manual Adaptations (Provide supporting   |
| Herb Stratum (Plot size: 5 )         | line 30                                 | V          | FACUL               | data in Remarks of on a separate silecty   |
| ALDER SUMMONUOTICHUM VOVALE CILLY    | nuc. se                                 |            | FAC                 | - Luciania (Cuplain)   |
| - Folliso turn arvense               | _ 13                                    |            |                     |  |
| annotien sensibilis                  | 10                                      |            | FACU                | be around unless disturbed or problematic.   |
| the trace an oonsis                  | 5                                       | N          | FALL                | be present, amore and  |
| I IMPORTABLE PROPERTY                |   | _          |                     | ALCOHOL MANAGEMENT   |
|                                      |   |            |                     | Definitions of Vegetation Strata:  |
| 5                                    |   |            |                     | Definitions of Vegetation Strata:  |
| 5<br>6                               |   |            |                     | Definitions of Vegetation Strata:  |
| 56                                   |   |            |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Seeling (abrub – Woody plants less than 3 in. DBH   |
| 5678.                                |   |            |                     | Definitions of Vegetation Strata:  |
| 5678.                                |   |            |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Harb – All herbaccous (non-woody) plants, regardless of  |
| 56                                   |   |            |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Seeling (abrub – Woody plants less than 3 in. DBH   |
| 5                                    |   |            |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 5                                    |   |            |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Harb – All herbaccous (non-woody) plants, regardless of  |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in  |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in  |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in  |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in  |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation  |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic   |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation   |
| 5                                    |   |            | Cover               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation  |
| 5                                    | [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ | ) = Total  |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation   |
| 5                                    | [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ | ) = Total  |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation   |
| 5                                    | GOL                                     | ) = Total  |                     | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation   |
| 6                                    | Gallarate sheet.)                       | ) = Total  | l Cover             | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present?  YesX No   |
| 56                                   | Gallarate sheet.)                       | ) = Total  | l Cover             | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present?  YesX No   |
| 56                                   | Gallarate sheet.)                       | ) = Total  | l Cover             | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation Present?  YesX No   |

|   |   |           | pth needed to docur  | x Feature   | indicator o              | r contirr       | n the absence of i   | ndicators.)   | 1000  |
|---|---|-----------|----------------------|---|--------------------------|-----------------|--|---|---|
| (inches)  | Color (moist)   | %         | Color (moist)        | %   | Type <sup>1</sup>        | Loc2            | Texture  |   | Mark I  |
| 0-5"  | $2.5\sqrt{3/2}$   | 90        | 2.54R416             | 10  | <u>c</u>                 | m               | SL_  | Re  | emarks  |
|   |   | _         |                      |   |                          |                 |  | ,   |   |
|   |   | <u> </u>  |                      |   |                          |                 |  |   |   |
|   |   |           |                      |   |                          |                 |  |   |   |
| ype: C=Con<br>ydric Soil Inc<br>_ Histosol (A         | moutors.  | tion, RM= | Reduced Matrix, MS=  |   |                          |                 | <sup>2</sup> Location: PL=<br>Indicators for Pr  | Pore Lining,  | M=Matrix.   |
| Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma | c (A3) Sulfide (A4) ayers (A5) delow Dark Surface ( Surface (A12) dky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) de (S7) (LRR R, MLI | RA 149B)  |                      | e (S9) (LF<br>neral (F1)<br>atrix (F2)<br>F3)<br>ce (F6)<br>rface (F7)<br>ns (F8) | RR R, MLRA<br>(LRR K, L) | ( <b>149B</b> ) | 5 cm Mucky I Dark Surface Polyvalue Bei Thin Dark Sui Iron-Mangane Piedmont Floi Mesic Spodic Red Parent M Very Shallow Other (Explair | Redox (A16) Peat or Peat (S7) (LRR Mow Surface (Feat (S9) (Liese Masses (Feat | ) (LRR K, L, R)<br>(S3) (LRR K, L, R)<br>(, L, M)<br>(S8) (LRR K, L)<br>RR K, L)<br>F12) (LRR K, L, R)<br>(F19) (MLRA 149B)<br>4 144A, 145, 149B) |
| strictive Lay   | er (if observed):   | and wet   | and hydrology must b | e present   | , unless dist            | urbed or        | problematic,   |   |   |
| Туре:   | · · · · · · · · · · · · · · · · · · ·   |           |                      |   |                          |                 |  |   |   |
| Depth (inches   | s):   |           |                      |   |                          |                 | Hydric Soil Presen   | t? Yes  | Y No  |
| marks:  |   |           |                      |   |                          |                 | ,  | 103_Z   | No  |
|   |   |           |                      |   |                          |                 |  |   |   |

| Applicant/Owner; Ball Hill Wind Energy, LLC  | City/County: Chautauqua County Sampling Date: 10-27-13                      |
|--|---|
| O. J. and A. Mich-   | State: NY Sampling Point: DP- 57  |
| nvestigator(s): M. Boberg B. VIITS   | Section, Township, Range: VIIICNOV C  |
| andform (hillslope, terrace, etc.): HIIISTOPE  | Local relief (concave, convex, none): Flat/concave Slope (%): D             |
| Subregion (LRR or MLRA): LRR-R Lat: 79   | 112182 Long: 42.409353 Datum: NAD 83  |
| Soil Map Unit Name: Fremont Silt Loan  |   |
| Are climatic / hydrologic conditions on the site typical for this time                     |   |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> signific                |   |
| Are Vegetation NO, Soil NO, or Hydrology NO natural  |   |
| ne vegetation 100, our 100, or right ology 110 hattinal                                    | in house, explain any another in terms.                                     |
| SUMMARY OF FINDINGS – Attach site map show   | wing sampling point locations, transects, important features, e             |
| Industrial Vision December 1997  | Is the Sampled Area   |
| Hydrophytic Vegetation Present? Yes No X Hydric Soil Present? Yes No X                     | within a Wetland? Yes NoX   |
| Wetland Hydrology Present?   |   |
| Remarks: (Explain alternative procedures here or in a separate                             |   |
|  | ar in it.   |
| upland data point  |   |
|  |   |
|  |   |
|  |   |
|  |   |
| *  |   |
| HYDROLOGY  |   |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two require                                |
| Primary Indicators (minimum of one is required; check all that are                         | pply) Surface Soil Cracks (B6)  |
| Surface Water (A1) Water-Sta   | ained Leaves (B9) Drainage Patterns (B10)                                   |
|  | auna (B13) Moss Trim Lines (B16)  |
| Saturation (A3) Marl Depo  | osits (B15) Dry-Season Water Table (C2)                                     |
| A  | Sulfide Odor (C1) Crayfish Burrows (C8)                                     |
|  | Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
|  | of Reduced Iron (C4) Stunted or Stressed Plants (D1)                        |
|  | on Reduction in Tilled Soils (C6) Geomorphic Position (D2)                  |
|  | k Surface (C7) Shallow Aquitard (D3)  |
| Inundation Visible on Aerial Imagery (B7) Other (Ex  | plain in Remarks) Microtopographic Relief (D4)                              |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)   |
| Field Observations:  |   |
| Surface Water Present? Yes No Depth (in  |   |
| Water Table Present? Yes No Depth (in  | iches): 20  |
|  | nches); 20' Wetland Hydrology Present? Yes X No X                           |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial | photos previous inspections) if available:                                  |
| Describe Nesdided Data (stream gadge, monitoring work, dental                              | protos, protosa inoposiona, il attanzala.                                   |
|  |   |
|  |   |
| Remarks:   |   |

|   | Absolute | Dominar   | t Indicator                               | Dominance Test worksheet:  |                     |       |
|---|----------|-----------|---|--|---------------------|-------|
| Tree Stratum (Plot size: 30')                         | % Cover  | Species'  | T. C. | Number of Dominant Species   | 2                   |       |
| Fagus grandifolia                                     | 40       | <u> </u>  | FACU                                      | That Are OBL, FACW, or FAC:  | 0 (                 | (A)   |
| Acer saecharinum                                      |          |           | FACU                                      | Total Number of Dominant<br>Species Across All Strata:   | 3 (                 | (B)   |
|   |          |           |   | Percent of Dominant Species  | T)                  |       |
|   |          |           | -   | That Are OBL, FACW, or FAC: _  | (                   | (A/B  |
|   |          |           | J   | Prevalence Index worksheet:  |                     |       |
|   |          |           |   |  | Multiply by:        |       |
|   | 50       | = Total C | over                                      | OBL species x 1 =  |                     | 4     |
| Sapling/Shrub Stratum (Plot size: 151                 |          |           |   | FACW species x 2 =   |                     | -0    |
| Fagus grandifolia                                     | 30       | <u> </u>  | FACU                                      | FAC species x 3 :  |                     | -     |
|   |          |           |   | FACU species 80 x 4:   |                     | -     |
|   |          |           |   | UPL species x 5 :  |                     | -01   |
|   |          |           |   | Column Totals: 80 (A)  | 320                 | (B)   |
|   |          |           |   | Prevalence Index = B/A = 4   | 4.0                 |       |
|   |          |           |   | Hydrophytic Vegetation Indicato  | rs:                 |       |
|   |          | -         |   | 1 - Rapid Test for Hydrophytic   |                     |       |
|   |          | Canda     |   | 2 - Dominance Test is >50%   | 100                 |       |
|   | _50      | = Total C | over                                      | 3 - Prevalence Index is ≤3.01  |                     |       |
| Herb Stratum (Plot size: 5')                          |          |           |   | 4 - Morphological Adaptations  | 1 (Provide supp     | ortir |
| NOT Applicable  |          |           |   | data in Remarks or on a se   | parate sheet)       |       |
|   |          |           |   | Problematic Hydrophytic Vege   | tation¹ (Explain    | 1)    |
| 3.  |          |           |   | <sup>1</sup> Indicators of hydric soil and wetlan  | nd hydrology m      | ust   |
|   |          |           |   | be present, unless disturbed or pro  | blematic.           |       |
| 5   |          |           |   | Definitions of Vegetation Strata:  |                     |       |
| 5.  |          |           |   | Tree - Woody plants 3 in. (7.6 cm)   | ) or more in diar   | mete  |
| 7   |          |           |   | at breast height (DBH), regardless   |                     | 10000 |
| B   |          |           |   | Sapling/shrub - Woody plants les   | ss than 3 in. DB    | Н     |
| ***************************************               |          |           | 7   | and greater than or equal to 3.28 t  | ft (1 m) tall.      |       |
| 9,  |          |           |   | Herb - All herbaceous (non-woody) p  | plants, regardless  | of    |
| 10  |          | -         |   | size, and woody plants less than 3.28  | ft tall.            |       |
| 11  |          | -         |   | Woody vines - All woody vines great  | ter than 3.28 ft in | 1     |
| 2   |          | -         |   | height.  |                     |       |
|   | _O_      | = Total C | over                                      | The state of the s |                     |       |
| Woody Vine Stratum (Plot size: 30' )                  |          |           |   |  |                     |       |
| Not applicable  |          |           |   | Le sur la |                     |       |
| 2   |          |           |   | Hydrophytic<br>Vegetation  |                     |       |
| 3.  |          |           |   | Present? Yes 💆   | No X                |       |
| 4   |          |           |   | mg   |                     |       |
| 7)  | 0        | = Total C | over                                      |  |                     |       |
| Remarks: (Include photo numbers here or on a separate |          |           | 7.17                                      | 1  |                     | _     |
| FAC NEUTRAL TEST                                      | anoc.,   |           |   |  |                     |       |
|   | 4.0.0    |           |   |  |                     |       |
| OFALLO + O OBL = OL                                   | vetta    | end       |   |  |                     |       |
|   |          |           |   |  |                     |       |
| 3 FACU + O UPC = 3 4                                  | piano    | 1         |   |  |                     |       |
| 3 FACU + Q UPC = 3 U                                  | piano    | 1         |   |  |                     |       |

|  | Matrix  | divine her | oth needed to docu       |              |            | or confirm  | the absence           | or indicators.)  |
|--|---|------------|--------------------------|--------------|------------|-------------|-----------------------|--|
| Depth<br>(inches)                                    | Color (moist)                                     | %          | Color (moist)            | ox Features  |            | _Loc2       | Texture               | Remarks  |
| 1"   |   |            |                          | -            |            |             |                       |  |
| 0-2"   | 2548/2  | 100        |                          | -            |            | ===         |                       | organic / leafy  |
| 2-10"  | 2.545/3   | 95         | 1042 5/8                 | 5            | C          | m           | SL                    |  |
| 0-20"  | 2.543/2   | 80         | 104R 5/8                 | 10           | C          | PL/m        |                       |  |
|  |   |            | 104R 9/4                 | 10           | C          | PLIM        |                       | 1  |
|  |   |            |                          |              |            |             |                       |  |
|  |   |            |                          | _            | _          | _           |                       |  |
|  |   |            |                          |              | _          | _           |                       |  |
|  |   |            |                          |              |            | 1           |                       |  |
| Type: C=Co   | oncentration, D=Depl                              | letion, RM | =Reduced Matrix, M       | S=Masked     | Sand Gra   | ains.       | <sup>2</sup> Location | : PL=Pore Lining, M=Matrix.  |
| lydric Soil I  | ndicators:  |            |                          |              |            |             | Indicators            | for Problematic Hydric Soils <sup>3</sup> :                        |
| Histosol   | (A1)<br>pipedon (A2)                              |            | Polyvalue Belo           |              | (S8) (LRF  | R,          |                       | Muck (A10) (LRR K, L, MLRA 149B)                                   |
| _ Black His  |   |            | MLRA 149B Thin Dark Surf |              | DD D MI    | DA 440D)    | Coast                 | Prairie Redox (A16) (LRR K, L, R)                                  |
|  | n Sulfide (A4)                                    |            | Loamy Mucky              | Mineral (F1  | /I RR K    | -NA 1430)   |                       | Mucky Peat or Peat (S3) (LRR K, L, R<br>surface (S7) (LRR K, L, M) |
|  | Layers (A5)                                       |            | Loamy Gleyed             |              |            | -/          |                       | lue Below Surface (S8) (LRR K, L)                                  |
|  | Below Dark Surface                                | (A11)      | Depleted Matri           |              |            |             |                       | ark Surface (S9) (LRR K, L)  |
| _ Thick Da   | rk Surface (A12)                                  |            | Redox Dark Su            |              |            |             |                       | anganese Masses (F12) (LRR K, L, F                                 |
|  | ucky Mineral (S1)                                 |            | Depleted Dark            |              | 7)         |             |                       | ont Floodplain Soils (F19) (MLRA 149                               |
| _ Sandy G  | leyed Matrix (S4)                                 |            | Redox Depress            |              |            |             | Mesic                 | Spodic (TA6) (MLRA 144A, 145, 149                                  |
| _ Sandy R  | edox (S5)   |            |                          |              |            |             |                       | arent Material (F21)   |
| _ Stripped   | Matrix (S6)                                       |            |                          |              |            |             |                       | hallow Dark Surface (TF12)   |
| _ Dark Sur   | face (S7) (LRR R, M                               | ILRA 149E  | 3)                       | = -          |            |             |                       | Explain in Remarks)  |
|  | 1 16 T 1 - C+ | ion and we | tland hydrology mus      | st be preser | nt, unless | disturbed o | or problematic        |  |
| ndicators of   | hydrophytic vegetati                              |            |                          |              |            |             |                       |  |
| lestrictive L  | ayer (if observed):                               |            |                          |              |            |             |                       |  |
| ndicators of<br>lestrictive L<br>Type:<br>Depth (inc | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No +  |
| estrictive L<br>Type:<br>Depth (inc                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No  |
| estrictive L<br>Type:<br>Depth (inc                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| Type:<br>Depth (inc                                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| Type:<br>Depth (inc                                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| estrictive L<br>Type:<br>Depth (inc                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| Type:<br>Depth (inc                                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| Type:<br>Depth (inc                                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| Restrictive L<br>Type:                               | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| Type:<br>Depth (inc                                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🖈  |
| Type:<br>Depth (inc                                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| estrictive L<br>Type:<br>Depth (inc                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No 🛨  |
| estrictive L<br>Type:<br>Depth (inc                  | ayer (if observed):                               |            |                          |              |            |             | Hydric Soil           | Present? Yes No  |

| Landform (hillslope, terrace, etc.): HILLSLOPE Local relief (cond Subregion (LRR or MLRA): LRR-R Lat: 79.11007  Soil Map Unit Name: Fremont Sit Warm  Are climatic / hydrologic conditions on the site typical for this time of year? Yes X  Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed?  Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the within Wetland Hydrology Present? Yes X No If yes, Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  A High Water Table (A2) Aquatic Fauna (B13)  X Saturation (A3) Marl Deposits (B15)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Liv Presence of Reduced Iron (C4)  A figal Mat or Crust (B4) Recent Iron Reduction in Tille  | State: NY Sampling Point: DP-518  Inship, Range: VILCONQ  cave, convex, none): Flat Slope (%): O  Long: 42 405306 Datum: NAD 83  NWI classification: VILONO  No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.)  point locations, transects, important features, etc.  Sampled Area a Wetland? Yes No optional Wetland Site ID: UX ASIO  Secondary Indicators (minimum of two required) |
|--|---|
| Landform (hillslope, terrace, etc.): Hillslope Lat: J9.11007  Subregion (LRR or MLRA): LRR-R Lat: J9.11007  Soil Map Unit Name: FYEMONT SIT LOGY  Are climatic / hydrologic conditions on the site typical for this time of year? Yes X  Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed?  Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the within Wetland Hydrology Present? Yes X No If yes,  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required: check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  A High Water Table (A2) Aquatic Fauna (B13)  Water Marks (B1) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Liv Presence of Reduced Iron (C4)  A Igal Mat or Crust (B4) Recent Iron Reduction in Tille  | Cave, convex, none): Flat Slope (%): O  |
| Subregion (LRR or MLRA): LRR-R Lat: 79.11007  Soil Map Unit Name: Fremont Silt Warm  Are climatic / hydrologic conditions on the site typical for this time of year? Yes X  Are Vegetation ND, Soil ND, or Hydrology ND significantly disturbed?  Are Vegetation ND, Soil ND, or Hydrology ND naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the Hydric Soil Present? Yes X No If yes,  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  A High Water Table (A2) Aquatic Fauna (B13)  Water Marks (B1) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Liv  Drift Deposits (B3) Presence of Reduced Iron (C4)  Recent Iron Reduction in Tille  |   |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes X  Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed?  Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the Hydric Soil Present? Yes X No If yes,  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  High Water Table (A2) Aquatic Fauna (B13)  Saturation (A3) Marl Deposits (B15)  Water Marks (B1) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Liv Presence of Reduced Iron (C4)  Afgal Mat or Crust (B4) Recent Iron Reduction in Tille   | NWI classification:   |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes X Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS — Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the Within Wetland Hydrology Present? Yes X No If yes,  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  X High Water Table (A2) Aquatic Fauna (B13)  X Saturation (A3) Marl Deposits (B15)  Water Marks (B1) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Live Presence of Reduced Iron (C4)  Algal Mat or Crust (B4) Recent Iron Reduction in Tille  | NWI classification:   |
| Are Vegetation ND, Soil NO, or Hydrology NO significantly disturbed?  Are Vegetation ND, Soil NO, or Hydrology ND naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the Hydric Soil Present? Yes X No If yes,  Wetland Hydrology Present? Yes X No If yes,  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  X High Water Table (A2) Aquatic Fauna (B13)  X Saturation (A3) Marl Deposits (B15)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Live Presence of Reduced Iron (C4)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tillie   | No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes No (If needed, explain any answers in Remarks.)  point locations, transects, important features, etc.  Sampled Area a Wetland? Yes X No optional Wetland Site ID: UX P \leftilde{\text{Site}}  |
| Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed?  Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the Hydric Soil Present? Yes X No Within Wetland Hydrology Present? Yes X No If yes,  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  X High Water Table (A2) Aquatic Fauna (B13)  X Saturation (A3) Marl Deposits (B15)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Live Presence of Reduced Iron (C4)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tillie   | Are "Normal Circumstances" present? Yes No No (If needed, explain any answers in Remarks.)  point locations, transects, important features, etc  Sampled Area a Wetland? Yes X No optional Wetland Site ID: UX - ASIO   |
| Are Vegetation No., Soil No., or Hydrology No. naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling  Hydrophytic Vegetation Present? Yes X No Is the Within Wetland Hydrology Present? Yes X No If yes, Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1) Water-Stained Leaves (B9)  High Water Table (A2) Aquatic Fauna (B13)  X Saturation (A3) Marl Deposits (B15)  Water Marks (B1) Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Liv Presence of Reduced Iron (C4)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tille  | (If needed, explain any answers in Remarks.)  point locations, transects, important features, etc.  Sampled Area a Wetland?  Yes X No optional Wetland Site ID: UX ASIO   |
| Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes X No Is the within Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Agal Mat or Crust (B4)  Presence of Reduced Iron (C4-  Recent Iron Reduction in Tille  | point locations, transects, important features, etc.  Sampled Area a Wetland?  Yes <u>X</u> No optional Wetland Site ID: <u>UX - AS IO</u>  |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4-  Algal Mat or Crust (B4)  If yes,  No   | Sampled Area  a Wetland?  Yes <u>X</u> No  optional Wetland Site ID: <u>UX - AS IO</u>  |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Presence of Reduced Iron (C4-  Algal Mat or Crust (B4)  Wets No  If yes,  No  Within  If yes,  No  If y | Sampled Area  a Wetland?  Yes <u>X</u> No  optional Wetland Site ID: <u>UX - AS IO</u>  |
| Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Wes No  No  Within  If yes,  No  Within  If yes,  No  If yes, | optional Wetland Site ID: UX - ASIO   |
| Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Wets No  If yes,   | optional Wetland Site ID: UX - ASIO   |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  HYDROLOGY  Wetland Report In a separate report.)  Wetland Hydrology Indicators:  Water All that apply)  Aquatic Fauna (B13)  Aquatic Fauna (B13)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Live Presence of Reduced Iron (C4)  Recent Iron Reduction in Tille   |   |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  | Secondary Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)   | Secondary Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)   | Secondary Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)   | Secondary Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)   | Secondary Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)   | Secondary Indicators (minimum of two required)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)   | Secondary Indicators (minimum of two required)  |
| Primary Indicators (minimum of one is required; check all that apply)  X Surface Water (A1)  | Secondary Indicators (minimum of two required)  |
| X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Agal Mat or Crust (B4)  Water-Stained Leaves (B9)  Aquatic Fauna (B13)  Marl Deposits (B15)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Liv  Presence of Reduced Iron (C4)  |   |
| X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Agal Mat or Crust (B4)  Water-Stained Leaves (B9)  Aquatic Fauna (B13)  Marl Deposits (B15)  Hydrogen Sulfide Odor (C1)  Oxidized Rhizospheres on Liv  Presence of Reduced Iron (C4)  | Surface Soil Cracks (B6)  |
| High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tille   | Z Drainage Patterns (B10)   |
| Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Liv Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tille   | Moss Trim Lines (B16)   |
| Sediment Deposits (B2) Oxidized Rhizospheres on Liv Drift Deposits (B3) Presence of Reduced Iron (C4 Algal Mat or Crust (B4) Recent Iron Reduction in Tille  | Dry-Season Water Table (C2)   |
| Drift Deposits (B3) Presence of Reduced Iron (C4 Algal Mat or Crust (B4) Recent Iron Reduction in Tille  | Crayfish Burrows (C8)   |
| Algal Mat or Crust (B4) Recent Iron Reduction in Tille   | ring Roots (C3) Saturation Visible on Aerial Imagery (C9)   |
|  | 4) Stunted or Stressed Plants (D1)  |
|  | d Soils (C6) Geomorphic Position (D2)   |
| Iron Deposits (B5) Thin Muck Surface (C7)  | Shallow Aquitard (D3)   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)   | Microtopographic Relief (D4)  |
| Sparsely Vegetated Concave Surface (B8)  | X FAC-Neutral Test (D5)   |
| Field Observations:  |   |
| Surface Water Present? Yes X No Depth (inches): 0 34   |   |
| Water Table Present? Yes X No Depth (Inches): 12   |   |
| Saturation Present? Yes No Depth (inches): 0"  (includes capillary fringe)   | Wetland Hydrology Present? Yes X No   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous ins   | nections) if available:   |
| de de la companya de  | positorio), il avallable.   |
|  |   |
| Remarks:   |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  |   |

|          | = Total Cov   |                | That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by: |
|----------|---------------|----------------|---|
| <u> </u> |               | =              | Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  (B)  (A/B)  |
| <u> </u> |               | <u></u>        | That Are OBL, FACW, or FAC:(A/B)  Prevalence Index worksheet:   |
| <u> </u> |               |                | That Are OBL, FACW, or FAC:(A/B)  Prevalence Index worksheet:   |
| 0        |               |                |   |
| 0        |               |                |   |
|          | = Total Cov   | ar.            | 10101 /1 0.5111   |
| 10       | ************* | OI             | OBL species x 1 =   |
| 10       |               |                | FACW species x 2 =  |
| 117      | Y             | FAC.           | FAC species x 3 =   |
|          |               |                | FACU species x 4 =  |
|          |               |                | UPL species x 5 =   |
|          |               |                | Column Totals: (A) (B)  |
|          |               |                | Prevalence Index = B/A =  |
|          |               |                | Hydrophytic Vegetation Indicators:  |
|          |               |                | 1 - Rapid Test for Hydrophytic Vegetation   |
| in       | - Total Cou   |                | 🔀 2 - Dominance Test is >50%  |
| 10       | = Total Co    | Vei            | 3 - Prevalence Index is ≤3.0¹   |
| 55       | v             | NB/            | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supportin<br/>data in Remarks or on a separate sheet)</li> </ul>  |
| -        | -             | -              | Problematic Hydrophytic Vegetation¹ (Explain)   |
| .6       |               |                |   |
| 20       |               |                | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
| 2        | _N            |                | Definitions of Vegetation Strata:   |
|          |               |                |   |
|          | _//_          | 7              | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
|          |               |                | Sapling/shrub – Woody plants less than 3 in. DBH  |
|          | -             |                | and greater than or equal to 3.28 ft (1 m) tall.  |
| _        |               |                | Herb - All herbaceous (non-woody) plants, regardless of   |
|          |               |                | size, and woody plants less than 3.28 ft tall.  |
|          | -             |                | Woody vines - All woody vines greater than 3.28 ft in   |
|          |               | -              | height.   |
| 100      | _ = Total Co  | over           | . 1   |
|          |               |                | 4   |
|          | -             |                | 11. desabutto   |
|          |               |                | Hydrophytic Vegetation  |
|          |               |                | Present? Yes No   |
|          |               |                |   |
| 0        | _ = Total Co  | over           |   |
|          | 100           | ID = Total Cor | 10 = Total Cover  3   |

| Profile Desc   | ription: (Describe  | to the de  | oth needed to docur   | nent the                                | indicator         | or confir     | m the shares  | Sampling Point: DP-5   |
|--|---|------------|---|---|-------------------|---------------|---|--|
| Depth<br>(inches)  | Color (moist)   |            |   | x Feature                               | <u>s</u>          | Or COMM       | iii uie absence   | of indicators.)  |
| 0.00   | 2.5 y 3/1   | 90         | 2.5 y 3/2   | %                                       | Type <sup>1</sup> | _Loc2         | Texture   | Remarks  |
| 10-1211  | 2.54 3/1  | 80         | 2.54312   | 70                                      | <u>C</u>          | m             | - SL  |  |
|  |   |            | 10412 5/8   | 10                                      | C                 | $-\mathbf{m}$ | _5L_  | -  |
|  |   |            |   | - :2                                    | <u>c</u>          | PL            | _51_  |  |
|  | 6.8÷ ×  |            | 54R 416   | 7                                       | <u>C</u>          | PL            | _5L   |  |
|  |   |            |   |   |                   |               |   |  |
|  |   |            | 2 · M. · · · · · ·  |   | _                 |               |   |  |
|  |   |            |   |   |                   |               |   |  |
|  |   |            |   |   |                   |               |   |  |
| ¹Type: C=Con   | centration, D=Deple   | etion, RM= | Reduced Matrix, MS=   | Masked :                                | Sand Gra          | ine           | <sup>2</sup> l continu  | O. 6   |
| Hydric Soil In Histosol (A   | aroutorg.   |            | Polyvalue Below   |   |                   |               | Indicators fo   | PL=Pore Lining, M=Matrix.<br>or Problematic Hydric Soils³:   |
| Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped M Dark Surfac   | telow Dark Surface<br>Surface (A12)<br>sky Mineral (S1)<br>yed Matrix (S4)<br>ox (S5)<br>atrix (S6)<br>ce (S7) (LRR R, ML |            | Loamy Gleyed Ma Depleted Matrix (F Redox Dark Surfa Depleted Dark Sur Redox Depression Redox Depression | F3)<br>ce (F6)<br>rface (F7)<br>ns (F8) |                   |               | Polyvalue Thin Dark Iron-Mang Piedmont Mesic Spo Red Parer Very Shall | face (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) Ganese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) Odic (TA6) (MLRA 144A, 145, 149B) Int Material (F21) Iow Dark Surface (TF12) Iolain in Remarks) |
| The party of the p | er (if observed):   |            |   | e present                               | , uniess d        | isturbed o    | r problematic.  |  |
| Type:<br>Depth (inche  | 8):   |            |   |   |                   |               |   |  |
| Remarks:   | 0):   |            |   |   |                   |               | Hydric Soil Pre   | sent? Yes X No   |
|  | <i>j</i>  |            |   |   |                   |               |   |  |
|  | 1   |            | · ·   |   |                   |               |   | *  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project \_\_\_\_\_ City/County: Chautauqua County \_\_ Sampling Date: 10 - 27 - 2015 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 519 Investigator(s): M. Boberg B. Virts Section, Township, Range: VIIIEVOVQ Landform (hillslope, terrace, etc.): HIIISTOPE Local relief (concave, convex, none): CONCAVE \_\_\_\_ Slope (%): Subregion (LRR or MLRA): LRR-R Lat: 79, 111259 Long: 42, 40532 Datum: NAD 83 Soil Map Unit Name: Fremont 511+ Loam NWI classification: Uniox Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_\_ No Are Vegetation No., Soil No., or Hydrology No 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? Is the Sampled Area Hydric Soil Present? Yes X No X BV within a Wetland? Yes \_\_\_\_\_ No X Wetland Hydrology Present? Yes \_X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) High Water Table (A2) \_ Aquatic Fauna (B13) \_ Moss Trim Lines (B16) X Saturation (A3) Marl Deposits (B15) \_\_\_ Dry-Season Water Table (C2) Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Water Table Present? \_\_ No \_X \_\_ Depth (inches): Saturation Present? No \_\_\_\_ Depth (inches): 1/7 1 Wetland Hydrology Present? Yes X No \_\_\_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| ree Stratum (Plot size: 30') Not Applicable | % Cover  | Species?     | Indicator Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|---|----------|--------------|------------------|---|
|   |          |              |                  | Total Number of Dominant Species Across All Strata: (B)   |
|   |          |              |                  | Species Across Air Clinia.  |
|   |          | -            |                  | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
|   |          |              |                  |   |
|   |          |              |                  | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
|   | 0        | = Total Cov  | (Of              | OBL species x 1 =   |
| 151   |          | TOTAL OUV    |                  | FACW species 5 x 2 = 1D   |
| apling/Shrub Stratum (Plot size: 151)       | 30       | Y            | FAC              | FAC species $30 \times 3 = 90$  |
| Cornus racemosa                             |          |              |                  | FACU species $90 \times 4 = 300$  |
|   |          |              |                  | UPL species   |
|   |          |              |                  | Column Totals (7  |
| 0   |          | -            |                  | Prevalence Index = B/A = 3.08   |
|   |          | -            |                  | Hydrophytic Vegetation Indicators:  |
| 3   | -        | -            |                  | 1 - Rapid Test for Hydrophytic Vegetation   |
| <u> </u>                                    | 20       | Tatal Co     |                  | 2 - Dominance Test is >50%  |
|   | 30       | _ = Total Co | vei              | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size: 51                 | 70       | V            | FACU             | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  |
| solidago ranadensis                         |          | N            | FACU             | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| schedonorus arundinal                       |          | - 1          | me               |   |
| 3. Fra Rubus VIII COS                       | 10       | W            |                  | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| 4. Symphyotichum vovaco                     | ng noc 5 |              | FACU             | Definitions of Vegetation Strata:   |
| 5 Fragaria vesca                            | 2        | - N          | NI               |   |
| During a Hook on Midns                      | 16. 11.  |              |                  |   |
| 6. KHOUS OURGERES                           | 0.10     | _N_          | - fixu           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
| 7   | -        |              | _ IIICU          | at breast height (DBH), regardless of height.   |
| 7   | -        |              | _ IDCU           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 7<br>8                                      |          |              | _ IFCQ           | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of   |
| 7   |          |              | - ITCQ           | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH   |
| 7   |          |              | - ITCQ           | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of   |
| 7   |          |              |                  | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 7   |          |              |                  | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in                                 |
| 7   |          |              |                  | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.                         |
| 7   |          |              |                  | at breast height (DBH), regardless of height.  Sapling/shrub — Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines — All woody vines greater than 3.28 ft in                                 |
| 8   |          |              |                  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  |
| 7   |          |              |                  | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation |
| 7   |          |              | over             | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation |

| Profile Des  | cription: (Describe   | to the de  | pth needed to docur  | nent the   | Indicator            | or confirm       | n the absence of in   | Sampling Point: DP- O              |
|--|---|------------|----------------------|--|----------------------|------------------|---|------------------------------------|
| Depth<br>(inches)  | Color (moist)   | %          | Color (moist)        | x Feature  | S                    |                  |   |                                    |
| 0-1011   | 10YR 4/2  | 100        | Color (moist)        | %  | Type <sup>1</sup>    | Loc <sup>2</sup> | Texture   | Remarks                            |
| 10-12 W  | 10412 4/2   | 90         | 104023/8             | 5  |                      |                  |   |                                    |
|  | 10116 116   |            |                      | 0  | <u>()</u>            | 1/17             | SL_   |                                    |
|  |   |            | 2.54 613             | 0  | <u>C</u>             |                  | 5_  |                                    |
|  |   |            |                      |  | =                    |                  |   |                                    |
|  |   | =          |                      | =  | =                    |                  |   |                                    |
|  |   | Ξ          |                      |  |                      |                  |   |                                    |
| Type: C=Co   | ncentration, D=Deple  | etion, RM= | =Reduced Matrix, MS= | =Masked  | Sand Gra             | ins.             | <sup>2</sup> Location: PL=  | Pore Lining, M=Matrix.             |
| Black His Hydroger Stratified Depleted Thick Dar Sandy Mr Sandy Gr Sandy Re Stripped I Dark Surf | ipedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) ace (S7) (LRR R, ML nydrophytic vegetation eyer (if observed): | -RA 149B   | Polyvalue Below      | e (S9) (Li<br>neral (F1)<br>atrix (F2)<br>F3)<br>ace (F6)<br>urface (F7<br>ns (F8) | RR R, MLI<br>(LRR K, | RA 149B)<br>L)   | 2 cm Muck (# Coast Prairie 5 cm Mucky F Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangane Piedmont Flor Mesic Spodic Red Parent M Very Shallow Other (Explair | Dark Surface (TF12)<br>in Remarks) |
| emarks:  | es):  |            |                      |  |                      |                  | Hydric Soil Presen  | t? Yes X No X3V                    |
| ~ )  | Augar refu  | sol o      | ut 12"               |  |                      |                  |   |                                    |

| WETLAND DETERMINAT   | ION DATA FORM - Nort   | hcentral and Northeast Region                               |
|--|--|---|
| Project/Site: Ball Hill Wind Project   |  | autauqua County Sampling Date: 10/28/1                      |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | Olty/odulity   | State: NY Sampling Point: DP-5Z                             |
| Investigator(s): M. Boberg B. VIITS  | Saction Township   | State. Sampling Point D. 32                                 |
| Landform (hillslone terrace etc.): Prainana  | A VALA Language Collection (company)   | , convex, none): CONCAVE Slope (%):                         |
| Subregion (LRR or MLRA): LRR-R   | 79 110//5  | Long: 42,396908 Datum: NAD 83                               |
| Soil Man Holt Norman Color 11 10 2 511 1 2   |  |   |
| Soil Map Unit Name: Schuyler Silf Lo   |  | NWI classification: Upland                                  |
| Are climatic / hydrologic conditions on the site typical for   |  |   |
| Are Vegetation MO, Soil MO, or Hydrology M   |  | Are "Normal Circumstances" present? Yes X No                |
| Are Vegetation <u>IVO</u> , Soil <u>NO</u> , or Hydrology <u>No</u>  | naturally problematic?   | (If needed, explain any answers in Remarks.)                |
| SUMMARY OF FINDINGS - Attach site ma   | p showing sampling poi   | int locations, transects, important features, etc.          |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X  Yes X  | No Is the Sam within a W   | pled Area   |
| Remarks: (Explain alternative procedures here or in a s  | separate report.)  | onal vvetland Site ID: WV - 71-31                           |
|  | and the same of th | inch i was allow by the                                     |
| This is a linear s   | HOLLMANNER 2111  | atime that has  |
| wetland characteris  | ines agjacent  | to Ball Hill Road.  |
|  |  |   |
|  |  |   |
| HYDROLOGY  |  |   |
| Wetland Hydrology Indicators:  |  | Secondary Indicators (minimum of two required)              |
| Primary Indicators (minimum of one is required; check a  | ill that apply)  | Surface Soil Cracks (B6)                                    |
| X Surface Water (A1) W   | later-Stained Leaves (B9)  | X Drainage Patterns (B10)                                   |
| High Water Table (A2)  | quatic Fauna (B13)   | Moss Trim Lines (B16)                                       |
|  | arl Deposits (B15)   | Dry-Season Water Table (C2)                                 |
|  | ydrogen Sulfide Odor (C1)  | Crayfish Burrows (C8)                                       |
|  | xidized Rhizospheres on Living I   |   |
|  | resence of Reduced Iron (C4)<br>ecent Iron Reduction in Tilled So  | Stunted or Stressed Plants (D1)                             |
|  | nin Muck Surface (C7)  | oils (C6) Geomorphic Position (D2)<br>Shallow Aquitard (D3) |
| 4 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -  | ther (Explain in Remarks)  | Shallow Adultard (D3) Microtopographic Relief (D4)          |
| Sparsely Vegetated Concave Surface (B8)  | (Explain in Romano)  | FAC-Neutral Test (D5)                                       |
| Field Observations:  |  |   |
| Surface Water Present? Yes X No D  | epth (inches): 1-61  |   |
| Water Table Present? Yes X No D  | epth (inches): 0 h   |   |
| Saturation Present? Yes X No D   | epth (inches): 011   | Wetland Hydrology Present? Yes X No                         |
| (includes capillary fringe)<br>Describe Recorded Data (stream gauge, monitoring wel  | Laerial photos, previous inspeci   | ions) if available:   |
| the state of the s | , donar priotos, previous inspect  | ionoj, ii avaliapje.  |
|  |  |   |
| Remarks:   |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |

| ree Stratum (Plot size: 30 <sup>1</sup> ) | % Cover | Dominant<br>Species? | Status                                  | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:                                 |
|---|---------|----------------------|---|---|
|   |         |                      |   | Total Number of Dominant Species Across All Strata:(B)  |
|   |         | -                    |   | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
|   |         |                      |   |   |
|   |         |                      | -                                       | Prevalence Index worksheet:   |
|   | 0       | = Total Co           | uor.                                    |   |
| 151                                       |         | - 10tai Co           | Vei                                     | FACW species x 2 =  |
| Sapling/Shrub Stratum (Plot size: 151 )   | -64-    | V                    | DES MI                                  | FAC species x 3 =   |
|   |         | V                    | FACW                                    | FACU species x 4 =  |
| salix petiolaris                          |         |                      | 050000000000000000000000000000000000000 | UPL species x 5 =   |
|   | ·—      | -                    | -                                       | Column Totals: (A) (B)  |
|   |         |                      |   | Prevalence Index = B/A =  |
|   |         |                      |   |   |
| 3   |         | -                    |   | Hydrophytic Vegetation Indicators:  |
| 7   |         | -                    |   | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%  |
| - 24                                      | 10      | _ = Total Co         | ver                                     | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size: 5')              |         |                      |   | 4 - Morphological Adaptations1 (Provide supporting  |
| . Typha angustifolia                      | uo      | <u> Y</u>            | 081                                     | data in Remarks or on a separate sheet)   |
| Symphyotichum pilosum                     | 5       | N                    | FAC                                     | Problematic Hydrophytic Vegetation¹ (Explain)   |
| Extramia graminitalia                     |         | N                    | FAC                                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4   |         |                      |   | Definitions of Vegetation Strata:   |
| 5   |         |                      |   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 6   |         |                      |   | at breast height (DBH), regardless of height.   |
| 7   |         |                      |   | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 8   |         |                      | -                                       | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9   |         |                      |   | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10,                                       |         |                      |   | size, and woody plants less than 3.28 ft tall.  |
| 11,                                       |         | -                    |   | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  | A       | -                    |   | height.   |
| Woody Vine Stratum (Plot size: 30)        | 70      | _ = Total C          | over                                    |   |
| 1. Not Applicable                         |         |                      |   | All your pro-   |
| 2.  |         |                      |   | Hydrophytic<br>Vegetation   |
| 3.  |         |                      |   | Present? Yes X No   |
|   |         |                      |   |   |
|   | - D     | = Total C            | over                                    |   |
| 4   |         |                      |   |   |

| (inches)   | Cription: (Describe  Matrix  Color (moist)  | %          | Red   | ox Feature   | 18                          |  | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |
|--|---|------------|---|--|-----------------------------|--|---|
| V-511  |   |            | Color (moist)   | %_   | Type¹ Lo                    | c <sup>2</sup> Texture   | Remarks   |
| , 4.10 0011 11   |   | etion, RM= |   |  | Sand Grains.                | 2 SCL  | : PL=Pore Lining, M=Matrix, for Problematic Hydric Soils <sup>3</sup> :   |
| Black His Hydrogen Stratified Depleted Thick Dari Sandy Mu Sandy Gle Sandy Re Stripped M | pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ICKy Mineral (S1) Eyed Matrix (S4) dox (S5) | 84         | Polyvalue Belov MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M X Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi | ce (S9) (Li<br>lineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>turface (F7 | RR R, MLRA 14<br>(LRR K, L) | 2 cm M Coast I 9B) 5 cm M Dark S Polyval Thin Da Iron-Ma Piedmo Mesic S Red Pa Very Sh | fuck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) fucky Peat or Peat (S3) (LRR K, L, R) fucky Peat or Peat (S3) (LRR K, L, R) fucky Peat or Peat (S8) (LRR K, L) fucky Surface (S8) (LRR K, L) fucky Surface (S9) (MLRA 149) fucky Surface (TA6) (MLRA 144A, 145, 1498) fucky Surface (TF12) |
| idicators of h   | vdronhytic vegetatio  | n and unti |   |  |                             |  | Explain in Remarks)   |
| strictive La   | ydrophytic vegetatio  | n and wet  | and nydrology must  | be presen  | t, unless disturb           | ed or problematic.   |   |
| Type:  |   |            |   |  |                             |  |   |
| Depth (inch  | es):  |            |   |  |                             | 10-010-2   | <b>y</b>  |
| marks:   |   |            |   |  |                             | Hydric Soil P  | Present? Yes X No   |
|  |   |            |   |  |                             |  |   |

| roject/Site: Ball Hill Wind  | Project  | City/County: Chau  | tauqua County  | Sampling Date: 10/28/15  |
|--|--|--|--|--|
| pplicant/Owner: Ball Hill W  | Vind Energy, LLC   |  |  | Sampling Point: DP- 523  |
|  | RG B. VIRTS  | Section Township   |  |  |
| andform (hillslope, terrace, et  |  |  |  | V Q Slope (%): 40  |
| subregion (LRR or MLRA): LI  |  |  |  | 2 Datum: NAD 83  |
|  |  |  |  |  |
| oll Map Unit Name:   |  |  |  | cation: uplam  |
| re Vegetation <u>No</u> , Soil <u>No</u> , Soil <u>No</u> , Soil <u>No</u>   | tions on the site typical for this time of the control of the site typical for this time of the control of the  | ntly disturbed? A y problematic? (I  | re "Normal Circumstances"  <br>f needed, explain any answe   | oresent? Yes X No  |
| JOHNMAKT OF FINDIN   | 00 - Attach site map show  |  |  | , important routuros, oto  |
| Hydrophytic Vegetation Pres  | ent? Yes X No  | Is the Samp  |  | No   |
| Hydric Soil Present?   | Yes X No   | within a We  |  |  |
| Wetland Hydrology Present?   | Yes X No Yes procedures here or in a separate r  | If yes, option   | al Wetland Site ID: WL   | - ASIZ   |
| HYDROLOGY Wetland Hydrology Indicat  | O.F.   |  |  |  |
|  | of one is required; check all that ap  Water-Stai  Aquatic Fa  Marl Depos  Hydrogen S  Oxidized R  Presence of  Recent Iron  Thin Muck  Brial Imagery (B7)  Oxider AR  Cother (Exp   | ned Leaves (B9)<br>una (B13)<br>sits (B15)<br>Sulfide Odor (C1)<br>thizospheres on Living R<br>of Reduced Iron (C4)<br>n Reduction in Tilled Soi   | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  coots (C3) Saturation V  Stunted or S  Is (C6) Shallow Aqu                   | Lines (B16) Water Table (C2) Frows (C8) Fisible on Aerial Imagery (C9) Extressed Plants (D1) Frosition (D2) Litard (D3) Litard (C4)  |
| Primary Indicators (minimum  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 Ae  Sparsely Vegetated Cor  Field Observations:   | of one is required; check all that ap  Water-Stain  Aquatic Fa  Hydrogen S  Oxidized R  Presence of  Recent Iron  Thin Muck  erial Imagery (B7)  Conducted R  Other (Exp   | ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) thizospheres on Living R of Reduced Iron (C4) n Reduction in Tilled Soi Surface (C7) slain in Remarks)                                      | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  Saturation V  Stunted or S  Is (C6)  Geomorphic  Shallow Aqu  Microtopogr    | Cracks (B6) Atterns (B10) Lines (B16) Water Table (C2) Arows (C8) Visible on Aerial Imagery (C9) Attended Plants (D1) Attended Plants (D2) Attended (D3) Aphic Relief (D4)       |
| Primary Indicators (minimum  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 Ae  Sparsely Vegetated Cor  Field Observations:  Surface Water Present?   | of one is required; check all that ap  Water-Stai  Aquatic Fa  Marl Depos  Hydrogen S  Oxidized R  Presence of Recent Iron Thin Muck erial Imagery (B7)  Cave Surface (B8)  Yes X No Depth (inc  | ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) thizospheres on Living R of Reduced Iron (C4) n Reduction in Tilled Soi Surface (C7) stain in Remarks)                                      | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  Saturation V  Stunted or S  Is (C6)  Geomorphic  Shallow Aqu  Microtopogr    | Cracks (B6) Atterns (B10) Lines (B16) Water Table (C2) Arows (C8) Visible on Aerial Imagery (C9) Attended Plants (D1) Attended Plants (D2) Attended (D3) Aphic Relief (D4)       |
| Primary Indicators (minimum  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 Ae  Sparsely Vegetated Cor  Field Observations:  Surface Water Present?  Water Table Present?   |  | ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) thizospheres on Living R of Reduced Iron (C4) n Reduction in Tilled Soi Surface (C7) clain in Remarks)  ches): 0 -3 " ches): 0 -3 "         | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  Soots (C3)  Stunted or S  Stunted or S  Shallow Aqu  Microtopogr  FAC-Neutra | Cracks (B6) Atterns (B10) Lines (B16) Water Table (C2) Frows (C8) Fisible on Aerial Imagery (C9) Attended Plants (D1) Frosition (D2) Attended (D3) Aphic Relief (D4) I Test (D5) |
| Primary Indicators (minimum  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 Ae  Sparsely Vegetated Cor  Field Observations:  Surface Water Present?  Water Table Present?  Saturation Present?  (includes capillary fringe) | of one is required; check all that ap  Water-Stai  Aquatic Fa  Marl Depos  Hydrogen S  Oxidized R  Presence of Recent Iron Thin Muck erial Imagery (B7)  Cave Surface (B8)  Yes X No Depth (inc  | ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) thizospheres on Living R of Reduced Iron (C4) n Reduction in Tilled Soi Surface (C7) clain in Remarks)  ches): 0 -3 " ches): 0 4 ches): 0 4 | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  Soots (C3)  Stunted or S  Stunted or S  Shallow Aqu  Microtopogr  FAC-Neutra | Cracks (B6) Atterns (B10) Lines (B16) Water Table (C2) Arows (C8) Visible on Aerial Imagery (C9) Attended Plants (D1) Attended Plants (D2) Attended (D3) Aphic Relief (D4)       |
| Primary Indicators (minimum  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 Ae  Sparsely Vegetated Cor  Field Observations:  Surface Water Present?  Water Table Present?  Saturation Present?  (includes capillary fringe) | water-Stail — Water-Stail — Aquatic Fa — Marl Depos — Hydrogen S — Oxidized R — Presence C — Recent Iron — Thin Muck erial Imagery (B7) — Other (Exponence Surface (B8)  Yes X No Depth (Inc. Yes X Yes X No Depth (Inc. Yes X YE | ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) thizospheres on Living R of Reduced Iron (C4) n Reduction in Tilled Soi Surface (C7) clain in Remarks)  ches): 0 -3 " ches): 0 4 ches): 0 4 | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  Soots (C3)  Stunted or S  Stunted or S  Shallow Aqu  Microtopogr  FAC-Neutra | Cracks (B6) Atterns (B10) Lines (B16) Water Table (C2) Frows (C8) Fisible on Aerial Imagery (C9) Attended Plants (D1) Frosition (D2) Attended (D3) Aphic Relief (D4) I Test (D5) |
| Primary Indicators (minimum  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 Ae  Sparsely Vegetated Cor  Field Observations:  Surface Water Present?  Water Table Present?  Saturation Present?  (includes capillary fringe) | water-Stail — Water-Stail — Aquatic Fa — Marl Depos — Hydrogen S — Oxidized R — Presence C — Recent Iron — Thin Muck erial Imagery (B7) — Other (Exponence Surface (B8)  Yes X No Depth (Inc. Yes X Yes X No Depth (Inc. Yes X YE | ned Leaves (B9) una (B13) sits (B15) Sulfide Odor (C1) thizospheres on Living R of Reduced Iron (C4) n Reduction in Tilled Soi Surface (C7) clain in Remarks)  ches): 0 -3 " ches): 0 4 ches): 0 4 | Surface Soil  Drainage Pa  Moss Trim L  Dry-Season  Crayfish Bur  Soots (C3)  Stunted or S  Stunted or S  Shallow Aqu  Microtopogr  FAC-Neutra | Cracks (B6) Atterns (B10) Lines (B16) Water Table (C2) Frows (C8) Fisible on Aerial Imagery (C9) Attended Plants (D1) Frosition (D2) Attended (D3) Aphic Relief (D4) I Test (D5) |

| Tree Stratum (Plot size: 30' 1. NOT ACOLICADIE        | % Cover | Dominant Indicator Species? Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|---|---------|------------------------------------|---|
| 2   |         |                                    | Total Number of Dominant Species Across All Strata: 2 (B)   |
| 5.  |         |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 3   |         |                                    | Prevalence Index worksheet:   |
| Sapling/Shrub Stratum (Plot size: 15 )                |         | = Total Cover                      | OBL species x 1 =<br>FACW species x 2 =   |
| Not Applicable  |         |                                    | FAC species x 3 =<br>FACU species x 4 =<br>UPL species x 5 =  |
| 3<br>4  |         |                                    | Column Totals: (A) (B)  |
| 5   |         |                                    | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  |
|   | 0       | = Total Cover                      | 1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size: 5')  1. JUNCUS PRUSUS        | 40      | Y OBL                              | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) |
| scirpus cyperinas<br>Euthamia graminifolia            | 10      | N FAC                              | ¹Indicators of hydric soil and wetland hydrology must   |
| 1. Povygonum persicaria                               |         | NE                                 | Definitions of Vegetation Strata:   |
| 5   |         |                                    | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.   |
| 5<br>9.   |         |                                    | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 10  |         |                                    | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 12  | -80     | = Total Cover                      | Woody vines – All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size: 30')                   |         |                                    |   |
| 23  |         |                                    | Hydrophytic Vegetation Present?  Yes No   |
| 4   | 0       | = Total Cover                      |   |
| Remarks: (Include photo numbers here or on a separate | sheet.) |                                    |   |
| 4-  |         |                                    |   |
|   |         |                                    |   |

| DepthMatrix  | Redox Features                   |                                    | the absence of indica   |   |
|--|----------------------------------|------------------------------------|---|---|
| (inches) Color (moist) %   |                                  | Type <sup>1</sup> Loc <sup>2</sup> | Texture   | Remarks   |
| 0-10" 2.54 <sup>3</sup> /1 95%   | 2.5 y 4/6 S                      | <u>c. m</u>                        | <u>CL</u>   |   |
|  |                                  |                                    |   |   |
|  |                                  | ==                                 |   |   |
|  |                                  |                                    |   |   |
| Type: C=Concentration, D=Depletion, RM<br>lydric Soil Indicators:  | =Reduced Matrix, MS=Masked S     | Sand Grains.                       | <sup>2</sup> Location: PL=Por<br>Indicators for Probl   | e Lining, M=Matrix.<br>ematic Hydric Soils³:  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149) |                                  | R R, MLRA 149B)<br>(LRR K, L)      | 2 cm Muck (A10 Coast Prairie Re 5 cm Mucky Pea Dark Surface (S' Polyvalue Below Thin Dark Surfac Iron-Manganese Piedmont Floods Mesic Spodic (T Red Parent Mate Very Shallow Da Other (Explain in | ) (LRR K, L, MLRA 149B) dox (A16) (LRR K, L, R) t or Peat (S3) (LRR K, L, R) 7) (LRR K, L, M) Surface (S8) (LRR K, L) te (S9) (LRR K, L) Masses (F12) (LRR K, L, R) blain Soils (F19) (MLRA 149B) erial (F21) rk Surface (TF12) |
| ndicators of hydrophytic vegetation and we<br>estrictive Layer (if observed):  | etland hydrology must be present | t, unless disturbed                | or problematic.   | (magnetic field)  |
| Type:  | 1                                |                                    | Hydric Soil Present?  | Yes X No  |
| Remarks:   |                                  |                                    |   |   |
|  |                                  |                                    |   |   |
|  |                                  |                                    |   |   |

| Project/Site: Ball Hill Wind F   | roject   | City/Cou  | nty. Chautauqua (   | County   | Sampling Date: 10/20/15  |
|--|--|---|---|--|--|
| Applicant/Owner: Ball Hill Wi  |  |   |   | Sampling Point: DP- 52L  |  |
| Investigator(s): B.V: 275  |  | Section   | Township Range \  |  |  |
| _andform (hillslope, terrace, etc.<br>Subregion (LRR or MLRA): LR<br>Soll Map Unit Name:   | ): H:11510pe<br>R-R Lat: 1<br>LTAULYUU SIIT      | Local relief<br>29-140616<br>LOGIM  | (concave, convex, nor<br>Long:                                    | ne): <u>Conve</u><br>12, 395957<br>NWI classific   |  |
| Are Vegetation <u></u> <u> い</u> の Soll <u> た</u><br>Are Vegetation <u> い</u> の, Soil <u> い</u>  | O, or Hydrology N O                              | significantly disturbe<br>naturally problemation  | d? Are "Normal  | Circumstances"  <br>explain any answe  | present? Yes X No  |
| Hydrophytic Vegetation Present<br>Hydric Soil Present?<br>Wetland Hydrology Present?   | Yes  | No ×  | s the Sampled Area<br>within a Wetland?<br>fyes, optional Wetland |  | _ No X   |
| UVDDOLOOV  |  | 0   |   |  |  |
| HYDROLOGY  |  | Arm Constitution  |   | Sacandani India  | ators (minimum of two required)  |
| Wetland Hydrology Indicato   |  | II II at a walk A   |   |  |  |
| Primary Indicators (minimum of 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 Aeri  Sparsely Vegetated Cond | W<br>A<br>M<br>P<br>R<br>TI<br>al Imagery (B7) O | ater-Stained Leaves (quatic Fauna (B13) arl Deposits (B15) are sence of Reduced lieuent Iron Reduction in Muck Surface (C7) ther (Explain in Remains | (C1)<br>on Living Roots (C3)<br>ron (C4)<br>in Tilled Soils (C6)  | Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Stunted or S Geomorphic Shallow Aqu | Water Table (C2) Frows (C8) Fisible on Aerial Imagery (C9) Stressed Plants (D1) Frosition (D2) Frosition (D3) Frosition (D4) |
| Field Observations:  |  |   |   |  |  |
| Surface Water Present?   | Yes No [   |   |   |  |  |
| Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre  | Yes No [ Yes No [ am gauge, monitoring we        | Depth (inches): 13  |   | Hydrology Prese  | nt? Yes No X   |
|  |  |   |   |  |  |
| Remarks:   |  |   |   |  |  |

| ree Stratum (Plot size: 301)                             |            | Species?    | Status                                  | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)               |
|--|------------|-------------|---|---|
|  |            |             |   | Total Number of Dominant Species Across All Strata: (B)   |
|  |            |             |   | Percent of Dominant Species   |
|  |            | -           |   | That Are OBL, FACW, or FAC: (A/B)   |
|  |            |             |   | Prevalence Index worksheet:   |
|  |            |             |   | Total % Cover of: Multiply by:  |
|  | _D         | = Total Co  | ver                                     | OBL species x1 =  |
| Sapling/Shrub Stratum (Plot size: 151                    |            |             |   | FACW species  |
| NOT APPLICABLE   |            |             |   | FACU species x4= 340  |
|  |            |             |   | UPI species D x5= D   |
|  |            |             |   | Column Totals: 90 (A) 355 (B)   |
|  |            |             |   | Prevalence Index = B/A = 3.94   |
| i  |            |             |   | Hydrophytic Vegetation Indicators:  |
| 3  |            | 1           |   | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7  | - ()       | = Total Co  | over                                    | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 51)                             |            |             |   | 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting                    |
| 1. 30 headn drus arunding crous                          | 45         | Y           | <b>EMOU</b>                             | data in Remarks or on a separate sheet)   |
| 2. SALMAGE CAMADEMSIS                                    |            | Y           | FACU                                    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Trifnillum repens                                     |            | N           | - FACU                                  | Indicators of hydric soil and wetland hydrology must  |
| 4. Daugus ousillus                                       | 19         | N           | NE                                      | be present, unless disturbed or problematic.  |
| 5. Cissium Vulgare                                       | 10         | N           | _ FITCU                                 | Definitions of Vegetation Strata:   |
| 6. Pantago janceolata                                    | 5          | N           | FAC                                     | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. |
| 7. Toraxacum officinale                                  | 5          | _N          | _ FACL                                  | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8  |            |             | _ ===================================== | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |            |             |   | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10   |            | -           |   | size, and woody plants less than 3.28 ft tall.  |
| 11   | -          | -           |   | Woody vines - All woody vines greater than 3.28 ft in height.                                       |
| 12   | 100        | _ = Total C | Cover                                   | neight.   |
| 301  | لهالمهاليا |             | ,0,0                                    |   |
| Woody Vine Stratum (Plot size: 30' )  1. N()t applicable |            |             |   |   |
|  |            |             |   | Hydrophytic<br>Vegetation   |
| 3.   |            |             |   | Present? Yes No X   |
| 4.   |            |             |   |   |
| T-   |            | _ = Total ( | Cover                                   |   |
| Remarks: (Include photo numbers here or on a separate    | sheet.)    |             |   |   |
|  |            |             |   |   |
|  |            |             |   |   |
|  |            |             |   |   |
|  |            |             |   |   |
|  |            |             |   |   |

| (inches)                                    | IVIALUX                                |            | th needed to docu<br>Rede                                 | ox Features            | s                          |            |                                   | 400                              |                           |
|---|--|------------|---|------------------------|----------------------------|------------|-----------------------------------|----------------------------------|---------------------------|
| 0-20"                                       | Color (moist) 2.5y3/3                  | 100        | Color (moist)   | %                      | Type <sup>1</sup> L        | .oc2       |                                   | Remar                            | ks                        |
|   |  |            |   |                        |                            |            | 51                                | -                                |                           |
|   |  |            |   | -                      |                            |            |                                   |                                  |                           |
|   |  |            |   |                        |                            |            |                                   | 1944                             |                           |
|   |  |            |   | *                      |                            |            |                                   |                                  |                           |
|   |  |            |   |                        |                            |            |                                   |                                  | //                        |
|   |  |            |   |                        |                            |            |                                   |                                  |                           |
|   |  |            |   |                        |                            | <u>.</u> , |                                   |                                  |                           |
| and don mu                                  | iicators:                              | tion, RM=f | Reduced Matrix, MS  | =Masked (              | Sand Grains.               |            | <sup>2</sup> Location: PL=Po      | re Lining, M=M                   | atrix.                    |
| Histosol (A<br>Histic Epipe<br>Black Histic | edon (A2)                              | -          | Polyvalue Below<br>MLRA 149B)                             |                        |                            |            | 2 cm Muck (A10                    | ) (LRR K, L, Medox (A16) (LR     | MLRA 149B)<br>RR K, L, R) |
| Hydrogen S<br>Stratified La                 | Sulfide (A4)                           | _          | Thin Dark Surfac  | lineral (F1)           | RR R, MLRA (<br>(LRR K, L) | 149B)      | 5 cm Mucky Per<br>Dark Surface (S | at or Peat (S3)<br>7) (LRR K, L, | (LRR K, L, R)<br>M)       |
| Depleted Be                                 | elow Dark Surface                      | (A11) _    | <ul><li>Loamy Gleyed M</li><li>Depleted Matrix</li></ul>  | (F3)                   |                            |            | Polyvalue Belov Thin Dark Surfa   | Surface (S8)                     | (LRR K, L)                |
| Sandy Much                                  | Surface (A12)<br>ky Mineral (S1)       | - C-       | <ul><li>Redox Dark Surf</li><li>Depleted Dark S</li></ul> | face (F6)              |                            |            | Iron-Manganese                    | Masses (F12)                     | (LRR K. L. R)             |
| Sandy Gley                                  | ed Matrix (S4)                         | _          | _ Redox Depression  | unace (F7)<br>ons (F8) | )                          |            | Piedmont Flood                    | olain Soils (F19                 | ) (MLRA 149E              |
| Sandy Redo<br>Stripped Ma                   | 0x (S5)                                |            |   |                        |                            |            | Red Parent Mate                   | erial (F21)                      | 4A, 145, 149B             |
| Dark Surface                                | e (S7) (LRR R, ML                      |            |   |                        |                            |            | Very Shallow Da Other (Explain in | rk Surface (TF                   | 12)                       |
| dicators of hyd                             | drophytic vegetation er (if observed): | and wetla  | and hydrology must  | be present             | t, unless distu            | rbed or    | problematic.                      |                                  |                           |
| Type:                                       | er (ii observed):                      |            |   |                        |                            |            |                                   | 2131000                          | ****                      |
| Depth (inches                               | s):                                    |            |   |                        |                            | ١.         | lydric Soil Present?              |                                  | No X                      |
| 1   |  |            |   |                        |                            |            |                                   | Yes                              |                           |

| Project/Site: Ball Hill Wind Project   | Ci                                   | ty/County: Chautauqua                    | County                      | Sampling Date: 10 29 15  |  |  |  |
|--|--------------------------------------|--|-----------------------------|--|--|--|--|
| Applicant/Owner: Ball Hill Wind Ene  |                                      |  | _ State: NY                 |  |  |  |  |
|  |                                      | Tomas Para N                             |                             | Camping Form   |  |  |  |
| Investigator(s): B.V.a.s. m.   |                                      |  |                             |  |  |  |  |
| Landform (hillslope, terrace, etc.):   |                                      | I relief (concave, convex, no            |                             |  |  |  |  |
| Subregion (LRR or MLRA): LRR-R   |                                      |  |                             | Datum: NAD 83  |  |  |  |
| Soil Map Unit Name: Chautoun   | ug silt Loam                         |  | NWI classifi                | cation: upland   |  |  |  |
| Are climatic / hydrologic conditions on th   | e site typical for this time of year | ? Yes _ X_ No                            | (If no, explain in F        | Remarks.)  |  |  |  |
| Are Vegetation <u>ro</u> , Soil <u>ro</u> , or F   | lydrology ∾ ≎ significantly di       | sturbed? Are "Norma                      | l Circumstances"            | present? Yes X No  |  |  |  |
| Are Vegetation No., Soil NO., or H   |                                      |  | explain any answe           |  |  |  |  |
| The vegetation 1-0, our, or i  | nydrology <u> o naturally probl</u>  | ioniauo: (ii ricodou,                    | explain any answ            | ora in recinarios.)  |  |  |  |
| SUMMARY OF FINDINGS - At   | tach site map showing s              | sampling point locati                    | ons, transects              | s, important features, etc   |  |  |  |
| Hydrophytic Vegetation Present?  | Yes X No                             | Is the Sampled Area                      |                             |  |  |  |  |
| Hydric Soil Present?   | Yes X No                             | 1, |                             |  |  |  |  |
| Wetland Hydrology Present?   | Yes X No                             | If yes, optional Wetlan                  | d Site ID: WL               | -A513  |  |  |  |
| Remarks: (Explain alternative procedu  | res here or in a separate report.    |  |                             |  |  |  |  |
| HYDROLOGY  |                                      |  |                             |  |  |  |  |
| Wetland Hydrology Indicators:  |                                      |  | Secondary Indic             | ators (minimum of two required)  |  |  |  |
| Primary Indicators (minimum of one is  | required; check all that apply)      |  | Surface Soil                | Cracks (B6)  |  |  |  |
| X Surface Water (A1)   | Water-Stained Le                     | eaves (B9)                               | X Drainage Pa               | atterns (B10)  |  |  |  |
| X High Water Table (A2)  | Aquatic Fauna (B                     | 313)                                     | Moss Trim L                 | ines (B16)   |  |  |  |
| X Saturation (A3)  | Marl Deposits (B                     | 15)                                      | Dry-Season                  | Water Table (C2)   |  |  |  |
| Water Marks (B1)   | Hydrogen Sulfide                     |  | Crayfish Bu                 | rrows (C8)   |  |  |  |
| Sediment Deposits (B2)   |                                      | pheres on Living Roots (C3)              |                             | isible on Aerial Imagery (C9)  |  |  |  |
| Drift Deposits (B3)  | Presence of Redu                     |  |                             | Stressed Plants (D1)   |  |  |  |
| Algal Mat or Crust (B4)  |                                      | uction in Tilled Soils (C6)              |                             | Position (D2)  |  |  |  |
| Iron Deposits (B5)   | Thin Muck Surface                    |  | Shallow Aqu                 |  |  |  |  |
| <ul> <li>Inundation Visible on Aerial Image</li> <li>Sparsely Vegetated Concave Surf.</li> </ul> |                                      | Remarks)                                 |                             | aphic Relief (D4)  |  |  |  |
| Field Observations:  | ice (B0)                             |  | FAC-Neutra                  | rest (US)  |  |  |  |
| Surface Water Present? Yes   | No Depth (inches):                   | 0-111                                    |                             |  |  |  |  |
| Water Table Present? Yes   |                                      |  |                             |  |  |  |  |
| Saturation Present? Yes  | No Depth (inches):(                  |  | Hydrology Present? Yes X No |  |  |  |  |
| (includes capillary fringe)  |                                      |  |                             |  |  |  |  |
| Describe Recorded Data (stream gaug  | e, monitoring well, aerial photos,   | , previous inspections), if av           | ailable:                    |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
| Remarks:   |                                      |  |                             | A CONTRACTOR OF THE CONTRACTOR |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |
|  |                                      |  |                             |  |  |  |  |

| Tree Stratum (Plot size: 30')  1. NOT HAPPICABLE          | % Cover |            | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)                            |
|---|---------|------------|--------|---|
| 2   |         |            |        | Total Number of Dominant Species Across All Strata: (B)   |
| 4   |         |            |        | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 6   |         | 19         |        | Prevalence Index worksheet:   |
| 7   |         | = Total Co |        |   |
| Sapling/Shrub Stratum (Plot size: 15 )  1. Not Applicable |         |            |        | FACV species  |
| 2   |         |            |        | UPL species x 5 = (B)   |
| <b>4</b>  |         |            | _      | Prevalence Index = B/A =  |
| 6,  |         |            |        | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                                    |
| 7   |         | = Total Co | ver    | 2 - Dominance Test is >50%      3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 51 )  1. JUNCUS PAUSUS           | 50      | У.         | OBL    | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)          |
| 2. Carex flava<br>3. Euthamia graminitalia                | 15      | N          | EAC    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  Indicators of hydric soil and wetland hydrology must |
| 4. Scirpus cyperinas<br>5. Mentha spicata                 |         | N          | OBL    | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:                                 |
| 6. Eupotorium perfailiatum                                | 5       | N          | FACW   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.            |
| 7. Ranunculus bulbosus                                    | 5_      | _/\        |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.               |
| 9   |         |            | _      | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.          |
| 11  |         |            |        | Woody vines – All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size: 301)                       | 100     | = Total Co | ver    |   |
| 1. Not Applicable   |         |            |        | Hydrophytic<br>Vegetation   |
| 3   |         |            |        | Present? Yes No   |
|   | 0       | = Total Co | ver    |   |

| (inches)   |   |            | pth needed to docu   | ox Feature  | 19                                 | voimili              | ansence of I   | nuicators.)  |
|--|---|------------|--|---|------------------------------------|----------------------|--|--|
|  | Color (moist)   | %          | Color (moist)  | %   | Type <sup>1</sup>                  | _Loc2                | Texture  | Remarks  |
| 0-10   | 254 4/1   | 90         | 2.54 5/1   | <b>₽</b> 5  | D                                  | M                    |  | rcemarks   |
|  |   |            | 7.548416   | 5   | C                                  |                      | SCL  | 70-100-1   |
|  |   |            |  | _   | _                                  |                      |  |  |
|  |   |            |  |   |                                    |                      |  |  |
| ype: C=Con   | centration, D=Depl  | etion, RM= | =Reduced Matrix, MS  |   | Sand Gra                           | ins.                 | <sup>2</sup> Location: PL=   | Pore Lining, M=Matrix.   |
| Histosol (A Histic Epip Black Histi Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Gle Sandy Red Stripped M. Dark Surface   | chartons.  A1)  pedon (A2)  ic (A3)  Sulfide (A4)  ayers (A5)  Below Dark Surface  Surface (A12)  cky Mineral (S1)  yed Matrix (S4)  lox (S5)  atrix (S6)  ce (S7) (LRR R, ML | (A11)      | Polyvalue Below MLRA 149B) Thin Dark Surfac Loamy Mucky M Loamy Gleyed M X Depleted Matrix ( Redox Dark Surfac Depleted Dark Si Redox Depression | v Surface (<br>ce (S9) (Li<br>lineral (F1)<br>flatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7<br>ons (F8) | S8) (LRR<br>RR R, MLI<br>(LRR K, I | R,<br>RA 149B)<br>L) | Indicators for P  2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodio Red Parent M Very Shallow Other (Explain | roblematic Hydric Soils <sup>3</sup> : A10) (LRR K, L, MLRA 149B) PREDOX (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L, M) Flow Surface (S8) (LRR K, L) Inface (S9) (LRR K, L) Pese Masses (F12) (LRR K, L, R) (TA6) (MLRA 144A, 145, 149B) |
| The state of the s | er (if observed):   | n and weti | land hydrology must I  | be presen   | t, unless d                        | isturbed or          | problematic.   |  |
| Type:  |   |            |  |   |                                    |                      |  |  |
| Depth (inche   | s):   |            |  |   |                                    |                      | Hydric Soil Preser   | nt? Yes X No   |
| emarks:  |   |            |  |   |                                    |                      |  |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 10 -28-15 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP-529 Investigator(s): M.Boberg B. Virts Section, Township, Range: Villenov 9 Landform (hillslope, terrace, etc.): Hills 10 p- Local relief (concave, convex, none): Convex Slope (%): 89 Subregion (LRR or MLRA): LRR-R Lat: 79, 14/439 Long: 42, 392899 Datum: NAD 83 Soil Map Unit Name: Chautaugua Silt Coam NWI classification: ugland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes 😾 No \_\_\_\_ Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No X within a Wetland? Hydric Soil Present? Yes \_\_\_\_ No X Wetland Hydrology Present? No Y If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) \_\_ High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_\_ Moss Trim Lines (B16) \_\_ Saturation (A3) \_\_\_ Marl Deposits (B15) \_\_\_ Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_\_ Crayfish Burrows (C8) \_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) \_\_ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes \_\_\_\_ No \_ X Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_\_ Depth (inches): Water Table Present? Saturation Present? Yes \_\_\_\_ No \_X Depth (inches): Wetland Hydrology Present? Yes No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30 <sup>t</sup> )                    | % Cover | Dominant Indicator Species? Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)                      |
|---|---------|------------------------------------|---|
| 2   |         |                                    | Total Number of Dominant Species Across All Strata: 2 (B)   |
| 4   |         |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 6   | . —     |                                    | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: 15' )  1. NOT APPLICATOR  2 | _0      |                                    | OBL species $\begin{array}{cccccccccccccccccccccccccccccccccccc$  |
| <b>4</b>  |         |                                    | Prevalence Index = B/A = 3.5 Z  |
| 6   |         |                                    | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                              |
|   | _0_     | _ = Total Cover                    | 2 - Dominance Test is >50%<br>3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 0 )  1. SOUNDED COUNTED SIS          | 55      | Y FACE                             |   |
| 2. Euthamia graminitalia<br>3. Rubus auteonaniensis           | 30      | Y FITC<br>N FACE                   |   |
| 4. Juneus effusius  |         | N OBL                              | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:                           |
| 5. Clinopodium vulgare  |         | 70 774                             | Tree - Woody plants 3 in. (7.6 cm) or more in diamete   |
| 7   |         |                                    | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH           |
| 9   |         |                                    | and greater than or equal to 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of |
| 10  |         |                                    | size, and woody plants less than 3.28 ft tall.  |
| 11  |         |                                    | Woody vines – All woody vines greater than 3.28 ft in height.   |
| woody Vine Stratum (Plot size: 30' )                          | _100    | _ = Total Cover                    |   |
| 2   |         |                                    | Hydrophytic Vegetation Present? Yes No  |
| 3   | -       |                                    | Treatile 100 No   |
| 4   | ~       | = Total Cover                      |   |

|   | cription: (Describe   |             | Red   | ox Features  | tor or confir                   | m the absence of in   | dicators.)  |   |
|---|---|-------------|---|--|---------------------------------|---|---|---|
| (inches)  | Color (moist)   | %           | Color (moist)   | %Тур   | e <sup>1</sup> Loc <sup>2</sup> | Texture   | Rema  | arks  |
| ) 14  | 104R4/4   | 100         |   |  |                                 | SL  |   |   |
| 14-20°  | 254413  | 100         |   |  |                                 | 54  |   |   |
|   |   |             |   | ==   |                                 |   |   |   |
|   |   |             |   |  |                                 |   |   |   |
| Type: C=Cor   | ncentration, D=Deple  | etion, RM=F | deduced Matrix, MS  | =Masked Sand (   | Grains.                         | <sup>2</sup> Location: PL=F   | ore Lining, M=  | Matrix.   |
| Histosol (A Histic Epij Black Hist Hydrogen Stratified I Depleted I Thick Dark Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa | A1) pedon (A2) tic (A3) Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML | RA 149B)    | Polyvalue Below MLRA 149B) Thin Dark Surfac Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Surf Depleted Dark S Redox Depression | ce (S9) (LRR R, I<br>ineral (F1) (LRR<br>fatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7)<br>ons (F8) | VILRA 149B)<br>K, L)            | 5 cm Mucky P Dark Surface Polyvalue Beld Thin Dark Surf Iron-Mangane Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow E Other (Explain | 10) (LRR K, L,<br>Redox (A16) (L<br>eat or Peat (S3<br>(S7) (LRR K, L<br>ow Surface (S8<br>face (S9) (LRR<br>se Masses (F1:<br>dplain Soils (F<br>(TA6) (MLRA 1<br>aterial (F21)<br>Oark Surface (T | MLRA 149B) .RR K, L, R) 3) (LRR K, L, R) , M) ) (LRR K, L) K, L) 2) (LRR K, L, R) 19) (MLRA 149B 44A, 145, 149B |
| idicators of h  | ydrophytic vegetatio  | n and wetla | nd hydrology must   | be present, unles  | s disturbed o                   | or problematic.   |   |   |
| Type:   | yer (ii observed):  |             |   |  |                                 |   |   |   |
| Depth (inche  | 96).  |             |   |  |                                 |   |   |   |
| Dopar (mone   | es):  |             |   |  |                                 | <b>Hydric Soil Present</b>  | ? Yes   | No X  |
| emarks:   |   |             |   |  |                                 |   |   |   |

|  | ATA FORM – Northcentral and Northeast Region                                |
|--|---|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 10\30\15                      |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 531   |
| Investigator(s): B. V. 275, m. Bobery  |   |
|  | Local relief (concave, convex, none): Convex Slope (%): 41%                 |
| Subregion (LRR or MLRA): LRR-R Lat: 79   |   |
| Soil Map Unit Name: Fremont Silt Loam  | NWI classification: UPland  |
| Are climatic / hydrologic conditions on the site typical for this time   |   |
| Are Vegetation NO, Soil NO, or Hydrology NO signific   |   |
|  |   |
| Are Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> natural   | lly problematic? (If needed, explain any answers in Remarks.)               |
| SUMMARY OF FINDINGS - Attach site map show   | wing sampling point locations, transects, important features, etc.          |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate  | Section 1   |
| within an ipland for   | clong Stream ASO7. Pem watland rest.  |
| HYDROLOGY  |   |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)                              |
| Primary Indicators (minimum of one is required; check all that a   | pply) Surface Soil Cracks (B6)  |
| Surface Water (A1) Water-Sta   | ained Leaves (B9) Drainage Patterns (B10)                                   |
| B. 프라마스 (스타트) (1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1  | auna (B13) Moss Trim Lines (B16)  |
|  | osits (B15) Dry-Season Water Table (C2)                                     |
|  | Sulfide Odor (C1) Crayfish Burrows (C8)                                     |
|  | Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) |
|  | of Reduced Iron (C4) Stunted or Stressed Plants (D1)                        |
| [1770-1787] [1770- | on Reduction in Tilled Soils (C6)   Geomorphic Position (D2)                |
|  | k Surface (C7) Shallow Aquitard (D3)  |
|  | plain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)        |
| Sparsely Vegetated Concave Surface (B8) Field Observations:  | FAC-Neutral Test (D5)   |
| Surface Water Present? Yes No X Depth (in  | nches):   |
| Water Table Present? Yes No _X Depth (in   |   |
| Saturation Present? Yes X No Depth (in   |   |
| (includes capillary fringe)  |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial  | photos, previous inspections), if available:                                |
|  |   |
| Remarks:   |   |
|  |   |
|  |   |

| Absolute |             |      | Dominance Test worksheet:  |
|----------|-------------|------|--|
|          |             |      | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|          |             |      | Total Number of Dominant   |
|          |             |      | Species Across All Strata: 2 (B)   |
|          |             |      | Percent of Dominant Species  |
|          |             |      | That Are OBL, FACW, or FAC:  |
|          |             |      | Prevalence Index worksheet:  |
|          |             |      | Total % Cover of: Multiply by:   |
| 0        | = Total Cov | er   | OBL species x 1 =  |
|          | 4.9         | 33.2 | FACW species 37 x 2 = 74   |
| 10_      | 7           | FACU | FAC species $\frac{5}{18}$ $\times 3 = \frac{15}{72}$  |
|          |             |      | FACU species   |
|          |             |      | Column Totals: UC (A) /U/ (B)  |
|          |             |      |  |
|          |             |      | Prevalence Index = B/A = Z . 6 &   |
|          |             |      | Hydrophytic Vegetation Indicators:   |
| -        |             |      | 1 - Rapid Test for Hydrophytic Vegetation  |
| 10       | = Total Cov | er   | X 2 - Dominance Test is >50%<br>X 3 - Prevalence Index is ≤3.0 <sup>1</sup>                            |
|          |             |      | 4 - Morphological Adaptations (Provide supporting  |
| 37       | 7           | FACW | data in Remarks or on a separate sheet)  |
| _5_      | N           | FAC  | Problematic Hydrophytic Vegetation¹ (Explain)  |
| _5_      | N           | FACU | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 3_       | N           | FACU | be present, unless disturbed or problematic.   |
|          |             |      | Definitions of Vegetation Strata:  |
|          |             |      | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
|          |             |      | at breast height (DBH), regardless of height.  |
|          |             |      | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
|          |             |      |  |
|          |             |      | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
|          |             |      |  |
|          |             |      | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 50       | = Total Cov | er   |  |
|          |             |      |  |
|          |             |      | Automotive and the second  |
|          |             |      |  |
|          |             |      | Hydrophytic  |
|          | -           |      | Hydrophytic Vegetation Present?  Yes X  No   |
|          |             | _    | Vegetation   |
|          |             |      | O = Total Cover  ID Y FACU  ID = Total Cover  37 Y FACU  5 N FACU  3 N FACU                            |

| Color (moist) Z.53311  | -%<br>-96  | 2.54312<br>2.54312   | ex Feature<br>%<br>5   | D C   | M<br>M  | SCL SCL  | Remari   | ks   |
|--|--|--|--|---|---|--|--|--|
| 2,2% 311   | <u>96</u>  |  |  |   |   | SCL _  |  |  |
|  | _  | 7.54516  | _5   |   | m   |  |  |  |
|  |  |  |  |   |   |  |  |  |
|  |  |  |  | =   |   |  |  |  |
|  |  |  |  |   |   |  |  |  |
|  |  |  | _  | _   |   |  | 1  |  |
|  |  |  |  | _   |   |  |  | - 1.1  |
| entration, D=Deple   | etion, RM=   | Reduced Matrix. MS   | =Masked  | Sand Grai   | ine   | <sup>2</sup> l costion: DI = 5   |  |  |
| cators:  |  |  | mashou   | Curia Gra   |   | Indicators for Pro   | ore Lining, M=M  | atrix.   |
| don (A2) (A3) (A3) (A5) (A5) (A5) (A5) (A7) (A7) (A7) (A7) (A7) (A7) (A7) (A7  | -<br>-<br>RA 149B)   | MLRA 149B)  Thin Dark Surfactory Loamy Mucky M. Loamy Gleyed M. Depleted Matrix  Redox Dark Surfactory Depleted Dark Surfactory Redox Depression   | ce (S9) (Li<br>ineral (F1)<br>fatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7<br>ons (F8)   | RR R, MLI<br>) (LRR K,<br>')  | RA 149B)<br>L)  | <ul> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149E</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul>  |  |  |
| rophytic vegetatio   | n and wet  | and hydrology must   | be preser  | it, unless c  | disturbed o   | or problematic.  |  |  |
| r (if observed):   |  |  |  |   |   | 1000   |  |  |
|  |  |  |  |   |   |  |  |  |
| -  |  |  |  |   |   | Hydric Soil Present  | 7 Yes X  | _ No   |
|  |  |  |  |   |   |  |  |  |
| THE PARTY OF THE P | Idon (A2) (A3) Idifide (A4) Ivers (A5) Iow Dark Surface Iurface (A12) Ivers (A | Ion (A2) (A3) Ilfide (A4) Ivers (A5) Iow Dark Surface (A11) Iurface (A12) Ivers (A5) Idfide (A4) Iurface (A12) Iurface (A12) Iurface (A12) Iurface (A14) Iurface (A15) Iurface (A16) Iurface (A17) Iurface (A18) Iurface (A18) Iurface (A19) Iur | Polyvalue Below MLRA 149B)  (A3) Thin Dark Surfact Infide (A4) Loamy Mucky M Infide (A5) Loamy Gleyed M Information of the month of the | Polyvalue Below Surface (MLRA 149B)  (A3) Thin Dark Surface (S9) (Lilfide (A4) Loamy Mucky Mineral (F1)  (A5) Depleted Matrix (F2)  (A7) Depleted Matrix (F3)  (A7) Mineral (S1) Depleted Dark Surface (F6)  (A8) Momeral (S1) Depleted Dark Surface (F6)  (A8) Momeral (S1) Depleted Dark Surface (F7)  (A8) Momeral (S1) Depleted Dark Surface (F8)  (A8) Momeral (S1) Momeral (S1)  (A8) Momeral (S1) Momeral (S1)  (A8) Momeral (S1)  (A8) Momeral (S1)  (A9) | Polyvalue Below Surface (S8) (LRR MLRA 149B)  (A3) Thin Dark Surface (S9) (LRR R, MLI Loamy Mucky Mineral (F1) (LRR K, Loamy Gleyed Matrix (F2)  OW Dark Surface (A11) Depleted Matrix (F3)  Urface (A12) Redox Dark Surface (F6)  OMINERAL (S4) Depleted Dark Surface (F7)  d Matrix (S4) Redox Depressions (F8)  (S5)  (S7) (LRR R, MLRA 149B)  rophytic vegetation and wetland hydrology must be present, unless or (if observed): | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)  Idfide (A4) Loamy Mucky Mineral (F1) (LRR K, L)  Iders (A5) Depleted Matrix (F2)  Ow Dark Surface (A11) Depleted Matrix (F3)  Indicated (A12) Redox Dark Surface (F6)  Iders (A12) Depleted Dark Surface (F7)  Iders (A13) Redox Depressions (F8)  Iders (S5)  Iders (S6)  Iders (S7) (LRR R, MLRA 149B)  Iders (S7) (LRR R, MLRA 149B)  Iders (S8) (S7) (LRR R, MLRA 149B)  Iders (S8) (S8)  Iders (S8) (S8)  Iders (S8) (LRR R, MLRA 149B)  Iders (S9) (LRR R, MLRA 149B)  Iders (S8) (S8) (LRR R, MLRA 149B)  Iders (S9) (LRR R, MLRA 14 | Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A' Coast Prairie F (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Profess (A5) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S9) ow Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganes (A13) Depleted Dark Surface (F7) Piedmont Flood Matrix (S4) Redox Depressions (F8) Mesic Spodic (S5) Red Parent Matrix (S6) (S7) (LRR R, MLRA 149B) Other (Explain rophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. | Indicators for Problematic Hydrical Control Co |

| Project/Site: Ball Hill Wind Project   |   | Chautauqua County   | _ Sampling Date: 10/30/19  |
|--|---|---|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | i.<br>C   | State: NY   | Sampling Point: DP- 53   |
| nvestigator(s): B.V.zzs, m. Bobon  | Section, Tov  | nship, Range: VIIIONOV (  | <b>\</b>   |
| Landform (hillslope, terrace, etc.): Floodplc Subregion (LRR or MLRA): LRR-R Soll Map Unit Name: DUMD SIT  Are climatic / hydrologic conditions on the site typical Are Vegetation 20, Soil 20, or Hydrology  Are Vegetation 20, Soil 20, or Hydrology       | Lat; 79, 102607  LOUM  al for this time of year? Yes  b o significantly disturbed?  | cave, convex, none): <u>೯ (c. +</u><br>Long: <u>4239576</u><br>NWI classi               | Slope (%): O Datum: NAD 83  fication: UPLNOD  Remarks.)  / present? Yes X No   |
| SUMMARY OF FINDINGS – Attach site  |   |   |  |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks: (Explain alternative procedures here or  | X No within No lifyes   | Sampled Area<br>n a Wetland? Yes<br>, optional Wetland Site ID:                         |  |
| HYDROLOGY  Wetland Hydrology Indicators:   |   |   | cators (minimum of two required)   |
| Primary Indicators (minimum of one is required; cl   |   |   | il Cracks (B6)   |
| X Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8) | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on L Presence of Reduced Iron ( Recent Iron Reduction in Til Thin Muck Surface (C7) Other (Explain in Remarks) | ☐ Dry-Seaso ☐ Crayfish B ☐ Saturation ☐ Stunted or ☐ Geomorph ☐ Shallow Ac ☐ Microtopog | Patterns (B10) Lines (B16) In Water Table (C2) Jurrows (C8) Visible on Aerial Imagery (C9) Stressed Plants (D1) Juriard (D3) Juraphic Relief (D4) Juriart (D5) |
| Field Observations:  |   |   |  |
| Water Table Present? Yes No  | Depth (inches): 0"-4"  Depth (inches): 12"  Depth (inches): 0"  ng well, aerial photos, previous i  |   | ent? Yes X No  |
|  |   |   |  |
| Remarks:   |   |   |  |

| Tree Stratum (Plot size: 30′)                  | Absolute<br>% Cover | Dominant Species? |       | Dominance Test worksheet:  |
|--|---------------------|-------------------|-------|--|
| . salix nigra                                  | 70                  | <del>\</del>      | DBL   | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|  |                     |                   |       | Total Number of Dominant Species Across All Strata:  |
|  |                     |                   |       | Percent of Dominant Species  |
|  |                     | -                 |       | That Are OBL, FACW, or FAC: (A/B   |
|  |                     | -                 |       | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |
|  | 70                  | = Total Cov       | /er   | Total % Cover of: Multiply by:  OBL species 95 x1 = 95   |
| apling/Shrub Stratum (Plot size: 15')          | - 4                 | V                 |       | FACW species 20 x2 = 40  |
| Sally nigra                                    | 20                  |                   | 100L  | FAC species $0 \times 3 = 0$<br>FACU species $45 \times 4 = 180$                                       |
|  | _                   |                   |       | UPL species D x 5 = D  |
|  |                     |                   |       | Column Totals:   |
|  |                     |                   |       | Prevalence Index = B/A = 2-03  |
|  |                     |                   |       | Hydrophytic Vegetation Indicators:   |
|  | -20                 |                   |       | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%                                   |
| lach Stratum (Plot size: 5'                    | 20                  | = Total Co        | /er   | 3 - Prevalence Index is ≤3.0¹  |
| lerb Stratum (Plot size:) EUTTAMUR GYOMUNITOUR | 45                  | y                 | FACU  | 4 - Morphological Adaptations <sup>1</sup> (Provide supportine data in Remarks or on a separate sheet) |
| Eupotorium pertoliatum                         | 10                  | N                 | FACW  | Problematic Hydrophytic Vegetation¹ (Explain)  |
| Epilobium ciliatrum                            | _5_                 | N                 | FACIL | ¹Indicators of hydric soil and wetland hydrology must  |
| impatiens capensis                             | _5_                 | N                 | EACH  | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:                        |
| sulidago patula                                |                     | 1/                | OBL   | Tree – Woody plants 3 in. (7.6 cm) or more in diamete  |
|  |                     |                   |       | at breast height (DBH), regardless of height.  |
| 3  |                     |                   |       | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| )  |                     |                   |       | Herb – All herbaccous (non-woody) plants, regardless of  |
| 0  |                     |                   |       | size, and woody plants less than 3.28 ft tall.   |
| 11   |                     |                   |       | Woody vines – All woody vines greater than 3.28 ft in height.  |
|  | 70                  | = Total Co        | ver   | I O S I S I S I S I S I S I S I S I S I  |
| Noody Vine Stratum (Plot size: 30')            |                     |                   |       |  |
| Not Applicable                                 |                     |                   |       | Hydrophytic  |
| 2,   |                     | -                 |       | Vegetation Present? Yes X No   |
| 4.   |                     |                   |       |  |
|  | 0                   | = Total Co        | ver   |  |
| 4  | 0                   | = Total Co        | ver   |  |

|  | olor (moist)   |           | Radov  | Features  |                            | m the absence of i   | nuicators.)         |
|--|--|-----------|--|---|----------------------------|--|---------------------|
| 0-12 1   | -1 I-  | %         | Color (moist)  | <u>reatures</u> Type  | Loc²                       | Texture  | 20.000              |
|  | 0912 312   | 95        | 2.54416  |   |                            |  |                     |
|  |  |           |  |   |                            |  |                     |
| Histosol (A1) Histic Epipedon (Black Histic (A3) Hydrogen Sulfide Stratified Layers Depleted Below (Thick Dark Surfac Sandy Mucky Mir Sandy Gleyed Ma Sandy Redox (S5 Stripped Matrix (S Dark Surface (S7) | (A2) e (A4) (A5) Dark Surface (A12) neral (S1) atrix (S4) 5) S6) (LRR R, MLF | A11)      | Reduced Matrix, MS=M  Polyvalue Below Si  MLRA 149B)  Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix Depleted Matrix (F3  Redox Dark Surface Depleted Dark Surface Redox Depressions | urface (S8) (LF<br>(S9) (LRR R, M<br>eral (F1) (LRR I<br>rix (F2)<br>3)<br>e (F6)<br>ace (F7) | RR,<br>ILRA 149B)<br>(, L) | Indicators for Pr  2 cm Muck (A  Coast Prairie  5 cm Mucky ii  Dark Surface  Polyvalue Bel  Thin Dark Sur  Iron-Mangane  Piedmont Floo  Mesic Spodic  Red Parent M  Very Shallow  Other (Explain | Dark Surface (TF12) |
| and the second second second   | observed):   | and wetta | and hydrology must be  | present, unless   | disturbed o                | r problematic.   |                     |
| ype:   |  |           |  |   | 1                          |  |                     |
| Depth (inches):  |  |           |  |   |                            | Hydric Soil Presen   | 12 Van V            |
| narks:   |  |           |  |   |                            |  | t? Yes X No         |

| Project/Site: Ball Hill Wind P   | roject   | City                                   | County Chautaugua         | County            | Sampling Date: 10/30/15         |
|--|--|--|---------------------------|-------------------|---------------------------------|
| Applicant/Owner: Dall I IIII VVII  | nd Energy, LLC   | Oity/                                  | County,                   |                   | Sampling Point: DP- 5'3'        |
| Investigator(s): B.V.  |  | Can                                    | dian Taumahin Danasi      |                   |                                 |
| Landform (hillslope, terrace, etc.)  | , 111. 130124 (  | Sec                                    | ction, Township, Range:   | VIIICIOVO         |                                 |
|  |  |  |                           |                   |                                 |
| Subregion (LRR or MLRA): LRF   | and the second s |  | /6Long:                   | L.39081           | Datum: NAD 83                   |
| Soil Map Unit Name: DOUTO  | n silt Loa   | M                                      |                           | NWI classifi      | cation: upland                  |
| Are climatic / hydrologic condition  | ns on the site typical f   | for this time of year?                 | Yes X No                  |                   |                                 |
| Are Vegetation <u>no</u> , Soil <u>n</u>   |  |  |                           |                   | present? Yes 🗶 No               |
|  |  |  |                           |                   |                                 |
| Are Vegetation <u>FO</u> , Soil <u>~</u>   | a, or Hydrology 15   | naturally probler                      | matic? (if needed,        | explain any answe | ers in Remarks.)                |
| SUMMARY OF FINDING   | S – Attach site n  | nap showing sa                         | mpling point location     | ons, transects    | s, important features, etc      |
| Hydrophytic Vegetation Presen  | nt? Yes  | No X                                   | Is the Sampled Area       |                   |                                 |
| Hydric Soil Present?   |  | No X                                   | within a Wetland?         | Yes               | _ No X                          |
| Wetland Hydrology Present?   | Yes  | If yes, optional Wetland               | d Site ID:                |                   |                                 |
|  |  |  |                           |                   |                                 |
| HYDROLOGY  |  |  |                           |                   |                                 |
| Wetland Hydrology Indicators   | s:   |  |                           | Secondary Indica  | ators (minimum of two required) |
| Primary Indicators (minimum of   | f one is required; chec  | ck all that apply)                     |                           | Surface Soil      | Cracks (B6)                     |
| Surface Water (A1)   | _  | Water-Stained Leav                     | ves (B9)                  | Drainage Pa       | tterns (B10)                    |
| High Water Table (A2)  | <u> </u>   | Aquatic Fauna (B13                     | 3)                        | Moss Trim L       | ines (B16)                      |
| Saturation (A3)  | _  | Marl Deposits (B15)                    | )                         | Dry-Season        | Water Table (C2)                |
| Water Marks (B1)   |  | Hydrogen Sulfide O                     | odor (C1)                 | Crayfish Bur      | rows (C8)                       |
| Sediment Deposits (B2)   |  | Oxidized Rhizosphe                     | eres on Living Roots (C3) | Saturation V      | isible on Aerial Imagery (C9)   |
| Drift Deposits (B3)  |  | Presence of Reduce                     | ed Iron (C4)              | Stunted or S      | tressed Plants (D1)             |
| Algal Mat or Crust (B4)  |  | Recent Iron Reduct                     | tion in Tilled Soils (C6) | Geomorphic        | Position (D2)                   |
| Iron Deposits (B5)   | and the second second  | Thin Muck Surface                      | H-, 123,                  | Shallow Aqu       |                                 |
|  | Il Imagery (B7)  | Other (Explain in Re                   | emarks)                   | Microtopogra      | aphic Relief (D4)               |
| Inundation Visible on Aeria  |  |  |                           |                   |                                 |
| <ul><li> Inundation Visible on Aeria</li><li> Sparsely Vegetated Conca</li></ul>   | ive Surface (B8)   |  |                           | FAC-Neutra        | Test (D5)                       |
| Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations:   |  |  |                           |                   | Test (D5)                       |
| Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations: Surface Water Present?  | Yes No _ <del></del>   | _ Depth (inches):                      |                           |                   | Test (D5)                       |
| Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations:   |  | _ Depth (inches):<br>_ Depth (inches): |                           |                   |                                 |
| Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) | Yes No _ <del>X</del><br>Yes No _ <del>X</del><br>Yes No _ <del>X</del>  | Depth (inches): Depth (inches):        |                           | FAC-Neutra        | V                               |
| Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations: Surface Water Present? Water Table Present? Saturation Present?                             | Yes No _ <del>X</del><br>Yes No _ <del>X</del><br>Yes No _ <del>X</del>  | Depth (inches): Depth (inches):        |                           | FAC-Neutra        | V                               |
| Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) | Yes No _ <del>X</del><br>Yes No _ <del>X</del><br>Yes No _ <del>X</del>  | Depth (inches): Depth (inches):        |                           | FAC-Neutra        | V                               |

| Angolisto           |  | 1-1:              |  |
|---------------------|--|-------------------|--|
| Absolute<br>% Cover | Dominant Species?  |                   | Dominance Test worksheet:  |
|                     |  |                   | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
|                     |  |                   | Total Number of Dominant Species Across All Strata:  (B)   |
|                     |  |                   | Species / talests / till estata.   |
|                     | -  |                   | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B  |
|                     |  |                   | word of the control o |
|                     |  |                   | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |
| -                   | = Total Cov  | /er               | OBL species 0 x1= 0  |
|                     |  | 77                | FACW species x 2 =   |
| 85                  | У  | FACU              | FAC species x3 =   |
| HO M                | 13   |                   | FACU species 35 x 4 = 140  |
|                     |  |                   | UPL species $0 \times 5 = 0$<br>Column Totals: $35 \times 6$ (A) $140 \times 6$ (B)  |
|                     |  |                   | 4  |
|                     | 144  |                   | Prevalence Index = B/A = 40 4  |
|                     |  |                   | Hydrophytic Vegetation Indicators:   |
|                     |  |                   | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%   |
| 100                 | = Total Co   | /er               | 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  |
|                     |  |                   | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting   |
|                     |  | 1                 | data in Remarks or on a separate sheet)  |
| 10                  | <u>y</u>   |                   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 2                   | 7_   | FACU              | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
|                     |  |                   |  |
|                     |  |                   | Definitions of Vegetation Strata:  |
|                     |  |                   | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
|                     |  |                   | Sapling/shrub – Woody plants less than 3 in. DBH   |
|                     |  |                   | and greater than or equal to 3.28 ft (1 m) tall.   |
|                     |  |                   | Herb - All herbaceous (non-woody) plants, regardless of  |
|                     |  |                   | size, and woody plants less than 3.28 ft tall.   |
|                     |  |                   | Woody vines - All woody vines greater than 3.28 ft in height.  |
| 25                  | = Total Co   | ver               | Total .  |
|                     |  |                   |  |
| 10                  | Y_   | N                 | A. Carrier and A. Car |
|                     |  |                   | Hydrophytic Vegetation   |
|                     | -  |                   | Present? Yes No  |
|                     |  |                   |  |
|                     |  |                   |  |
|                     | の<br>数<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>(100)<br>( | D = Total Cov  SS | D = Total Cover  SS  |

| Depth   | Matrix   |            |                       | Features  |                       |                     |   |  |
|---|--|------------|-----------------------|---|-----------------------|---------------------|---|--|
| (inches)  | Color (moist)  | %          | Color (moist)         | %   | Type <sup>1</sup>     | _Loc <sup>2</sup> _ | Texture   | Remarks  |
| 0"-10"  | 7,54313  | 95         | 2.5yR416              | 5   |                       | <u>~</u>            |   | Augo- Refusel @ 10"  |
|   |  |            |                       |   |                       |                     |   |  |
|   |  |            |                       |   |                       |                     |   |  |
|   |  |            |                       |   |                       |                     |   |  |
|   |  |            |                       |   |                       |                     |   | Proceedings of the control of the co |
| ype: C=Co   |  | letion, RM | =Reduced Matrix, MS   | =Masked   | Sand Gra              | ains.               |   | n: PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils <sup>3</sup> :  |
| Black His Hydroger Stratified Depleted Thick Da Sandy M Sandy Gi Sandy Ro Stripped Dark Sur | ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, N | fILRA 149  |                       | ce (S9) (L<br>ineral (F1<br>latrix (F2)<br>(F3)<br>face (F6)<br>urface (F<br>ons (F8) | RR R, ML<br>) (LRR K, | .RA 149B)<br>L)     | Coast 5 cm M Dark S Polyva Thin D Iron-M Pledm Mesic Red P Very S | Muck (A10) (LRR K, L, MLRA 149B) Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Mulue Below Surface (S8) (LRR K, L) Mark Surface (S9) (LRR K, L) Mark Surface (F12) (MLRA 149B) Marent Material (F21) Mallow Dark Surface (TF12) (Explain in Remarks)   |
|   | hydrophytic vegetat<br>ayer (if observed):   |            | etland hydrology must | be prese  | nt, unless            | disturbed           | or problematio  | 3.   |
| Туре:   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,  |            |                       |   |                       |                     |   |  |
| Depth (inc  | hes):  |            |                       |   |                       |                     | Hydric Soil   | Present? Yes No  |
| emarks:   |  |            |                       |   |                       |                     |   |  |
|   |  |            |                       |   |                       |                     |   |  |

| Project/Site: Ball Hill Wind Project   | TION DATA FORM - Nor  | thcentral and Northeast  | Region  |
|--|---|--|---|
| Applicant/Owner: Ball Hill Wind Energy, LLC  | City/County: Cr   | autauqua County  | Sampling Date: 10/30/   |
| Investigator(s): M. BOBFRG B. VINCTS   | A. E. San   | State: NY  | _ Sampling Point: DP-53   |
| Landform (hillslope, terrace, etc.): DRANAWA   | , coolon, rownsh  | ip, Range: VIIICOVA  |   |
| Cuberation (I DD I DD D  |   | e, convex, none): _Concav  | O Slope (%):_O  |
|  | 17.107138   | Long: 42.39692   | 9 Datum: NAD 83   |
| Soil Map Unit Name: Fremont Silt   | Loam  | NWI classifica   |   |
| Are climatic / hydrologic conditions on the site typical for   | r this time of year? Yes  | No (If no, explain in Re   |   |
| Are Vegetation NO, Soil NO, or Hydrology   | 9 significantly disturbed?  | Are "Normal Circumstances" pr  |   |
| Are Vegetation $N_D$ , Soil $N_D$ , or Hydrology $N_D$   | O naturally problematic?  | (If needed, explain any answers  |   |
|  |   | (  | s in Remarks.)  |
| SUMMARY OF FINDINGS – Attach site ma   | ap showing sampling po  | int locations, transects,  | important features, etc   |
| Hydrophytic Vegetation Present?  |   | pled Area  | ,   |
| Hydric Soil Present?   | No within a W   |  | No  |
| Wetland Hydrology Present? Yes X   | No le   | onal Wetland Site ID: WLA  |   |
| Remarks: (Explain alternative procedures here or in a  | separate report )   | onal Wetland Site ID: VVC 7  | 10/0  |
|  |   |  |   |
| A High Water Table (A2)  A Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  A Acceptable (A2)  Mi  Hy  Pro  Re  Th | Ill that apply)  fater-Stained Leaves (B9) quatic Fauna (B13) arl Deposits (B15)  forogen Sulfide Odor (C1)  kidized Rhizospheres on Living Faunce of Reduced Iron (C4)  pecent Iron Reduction in Tilled Soi in Muck Surface (C7)  her (Explain in Remarks) | Surface Soil Cr  Z Drainage Patter  Moss Trim Line  Dry-Season Wa  Crayfish Burrow  Soots (C3)  Saturation Visib  Stunted or Stres  Stunded or Stres  Shallow Aquitare | rns (B10) s (B16) ster Table (C2) s (C8) le on Aerial Imagery (C9) ssed Plants (D1) sition (D2) |
| Sparsely Vegetated Concave Surface (B8)  | ior (Explain in Remarks)  | Microtopographi  | c Relief (D4)   |
| ield Observations:   |   | FAC-Neutral Tes  | st (D5)   |
| includes capitaly tritine)   | epth (inches): () "   | Wetland Hydrology Present?   | Yes No  |
| Describe Recorded Data (stream gauge, monitoring well,   | aerial photos, previous inspection  | ons), if available:  |   |
|  |   |  |   |
| emarks:  |   |  |   |
|  |   |  |   |
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|  |   |  |   |
|  |   |  |   |
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|  |   |  |   |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |
|  |   |  |   |

|      |   |  | Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  (A)  (B) |
|------|---|--|--|
|      |   |  | Total Number of Dominant Species Across All Strata:  Percent of Dominant Species  (B)  |
| _    |   |  | Species Across All Strata: (B)  Percent of Dominant Species  |
|      |   |  | Percent of Dominant Species  |
|      |   |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
|      |   |  | That Are OBL, FACTY, of FAC.   |
|      |   |  |  |
|      |   |  | Prevalence Index worksheet:  |
|      |   |  | Total % Cover of: Multiply by:   |
| _    | Sugar.                                  | -  | OBL species x 1 =  |
| _=   | = Total Cove                            | er l   |  |
|      |   | 1  | FACW species x 2 =   |
|      |   |  | FAC species x 3 =  |
|      |   |  | FACU species x 4 =   |
|      |   |  | UPL species x 5 =  |
|      |   | -  | Column Totals: (A) (B)   |
|      |   | (  | Drawlenge Index = R/A =  |
|      |   |  | Prevalence Index = B/A =   |
|      |   |  | Hydrophytic Vegetation Indicators:   |
|      |   |  | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7    | 3.7020                                  |  | X 2 - Dominance Test is >50%   |
| 1    | = Total Cov                             | er   | 3 - Prevalence Index is ≤3.01  |
|      | 4.6                                     |  | 4 - Morphological Adaptations (Provide supporting  |
| 0    | У                                       | 031  | data in Remarks or on a separate sheet)  |
| 5    | N                                       | OBI  | Problematic Hydrophytic Vegetation¹ (Explain)  |
| N    | Al                                      | The same of the sa | Indicators of hydric soil and wetland hydrology must   |
|      | 01                                      |  | i leas disturbed or problematic  |
| 0    | 1                                       |  | 7 10 2 2 3 2 7 2 3 2 7 2 3 2 7 2 3 2 3 2 3 2   |
| 5_   | N                                       | OBL  | Definitions of Vegetation Strata:  |
| 5    | N                                       | FAC  | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| ×    | N                                       | OBI  | at breast height (DBH), regardless of height.  |
|      |   |  | Sapling/shrub - Woody plants less than 3 in. DBH   |
|      |   |  | and greater than or equal to 3.28 ft (1 m) tall.   |
|      |   |  | Herb - All herbaceous (non-woody) plants, regardless of  |
|      |   |  | size, and woody plants less than 3.28 ft tall.   |
|      |   |  |  |
|      |   |  | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 100  |   |  | neight.  |
| 100  | _ = Total Co                            | ver  |  |
|      |   |  |  |
|      |   |  | - Control Charles  |
|      |   |  | Hydrophytic  |
|      | -                                       | -  | Vegetation Present? Yes No   |
| _    | -                                       |  |  |
|      |   |  | -  |
| _0   | _ = Total C                             | over   |  |
| et.) |   |  |  |
|      | 0 | Total Cov  N  N  N  N  N  N  N  N  Total Cov  Total Cov  | N  |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Thin Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or professionic Company | .ocation: PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M)  |
|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  #ydric Soil Indicators: In Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thick Dark Surface (A12) PRE Redox Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F6) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or proceeding the present of the presen | .ocation: PL=Pore Lining, M=Matrix. icators for Problematic Hydric Soils <sup>3</sup> : 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M)  |
| ydric Soil Indicators:  _ Histosol (A1)  | icators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L)  Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F2)  Thick Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present inches:  Type:  Depth (inches):  Hy   | icators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L)  Stratified Layers (A5) Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11) Depleted Matrix (F2)  Thick Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present inches:  Type:  Depth (inches):  Hy   | icators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L)  Stratified Layers (A5) Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) Depleted Matrix (F3)  Thick Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present inches:  Type:  Depth (inches):  Hy   | icators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |
| ydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Miciators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present (inches):  Type: Depth (inches):  Hydrogen Sulfide (A2) MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  All Redox Depressions (F6)  Depth (inches): Hy  | icators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |
| ydric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or processiric tive Layer (if observed):  Type: Depth (inches):  Hydrogen Surface (S8) (LRR R, LORR R, MLRA 149B)  MLRA 149B)  All RRA 149B)  Indicators Surface (S9) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or processiric tive Layer (if observed):  Type: Depth (inches):  Hydrogen Surface (S8) (LRR R, LORR R, LOR | icators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Histic Epipedon (A2) MLRA 149B)  Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)  Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L)  Stratified Layers (A5) Loamy Gleyed Matrix (F2)  Depleted Below Dark Surface (A11) Depleted Matrix (F3)  Thick Dark Surface (A12) Redox Dark Surface (F6)  Sandy Mucky Mineral (S1) Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4) Redox Depressions (F8)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or present citive Layer (if observed):  Type:  Depth (inches):  Hy   | 2 cm Muck (A10) (LRR K, L, MLRA 149B)<br>Coast Prairie Redox (A16) (LRR K, L, R)<br>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)<br>Dark Surface (S7) (LRR K, L, M)   |
| Type:  | Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) |
| Type:  | plematic.   |
| Depth (inches):  |   |
|  | distribution of the second  |
| lemarks:   | ric Soil Present? Yes X No  |
|  |   |

| Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: FYEIY Are climatic / hydrologic conditions on Are Vegetation NO, Soil NO, or Are Vegetation NO, Soil NO, or  | the site typicar Hydrology _ | NO sign                                   | LOQ<br>me of year<br>nificantly di                      | sturbed? A   | o (I               | NWI classif<br>f no, explain in<br>Circumstances'<br>xplain any answ | Remarks.) present? Ye   |                               |
|---|------------------------------|---|---|--|--------------------|--|---|-------------------------------|
| SUMMARY OF FINDINGS – A  Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative process  | Yes<br>Yes                   | No<br>No<br>No                            | ×<br>×  | Is the Samp<br>within a Wet  | led Area<br>tland? | Yes  |   | ,                             |
| HYDROLOGY  Wetland Hydrology Indicators;  Primary Indicators (minimum of one is  Surface Water (A1)  High Water Table (A2)  | s required; ch               | Water-                                    | it apply)<br>Stained Le<br>c Fauna (B                   | and the particular state of the same of th |                    | Surface So<br>Drainage P   | cators (minimu<br>il Cracks (B6)<br>atterns (B10)<br>Lines (B16)  |                               |
| <ul> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imag</li> <li>Sparsely Vegetated Concave Su</li> </ul> |                              | Marl D Hydrog Oxidize Preser Recen Thin M | eposits (B1<br>gen Sulfide<br>ed Rhizosp<br>nce of Redu | Odor (C1)  heres on Living Relaced Iron (C4)  action in Tilled Soile  (C7)   |                    | Dry-Seasor Crayfish Bu Saturation Stunted or Geomorphi Shallow Aq    | n Water Table<br>irrows (C8)<br>Visible on Aer<br>Stressed Plan<br>c Position (D2<br>ultard (D3)<br>raphic Relief ( | rial Imagery (C9)<br>nts (D1) |
|   |                              | ∑ Depth                                   | (inches):   |  |                    | /drology Prese   | ent? Yes  | No <u>X</u>                   |
| Remarks:  |                              |   |   |  |                    |  |   |                               |

| Absolute | Dominant Indicator                    | Devision Test weeksheeti   |
|----------|---------------------------------------|--|
|          |                                       | Dominance Test worksheet:  Number of Dominant Species  |
|          |                                       | That Are OBL, FACW, or FAC:(A)   |
|          |                                       | Total Number of Dominant   |
|          |                                       | Species Across All Strata: (B)   |
|          |                                       | Percent of Dominant Species That Are OBL, FACW, or FAC: 33 (A/B  |
|          | -                                     | That Are OBL, FACW, or FAC: (A/B   |
|          |                                       | Prevalence Index worksheet:  |
|          |                                       | Total % Cover of: Multiply by:   |
| 0        | = Total Cover                         | OBL species  |
|          |                                       | FACW species x 2 =   |
|          |                                       | FAC species x3 =   |
|          |                                       | FACU species _59 x4= _236_   |
|          |                                       | UPL species x 5 = 2.5  |
|          |                                       | Column Totals: $9\omega$ (A) $357$ (B)   |
|          |                                       | Prevalence Index = B/A = 3.71  |
|          |                                       | Hydrophytic Vegetation Indicators:   |
|          |                                       | 1 - Rapid Test for Hydrophytic Vegetation  |
| -0       | - Total Cause                         | 2 - Dominance Test is >50%   |
|          | = Total Cover                         | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| 77       | V FAN                                 | 4 - Morphological Adaptations (Provide supporting  |
|          |                                       |  |
|          |                                       |  |
| 20       |                                       | Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
| _5_      |                                       |  |
| 5        |                                       |  |
| 2        |                                       |  |
| 2        |                                       |  |
| 2        | N FAC                                 | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 2        | NI                                    | =  |
|          |                                       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
|          |                                       |  |
|          |                                       | Woody vines – All woody vines greater than 3.28 ft in height.  |
| 100      | = Total Cover                         | 1000   |
|          | (************************************ |  |
|          |                                       |  |
|          |                                       | Hydrophytic  |
|          |                                       | Present? Yes No  |
|          |                                       | _   Madella   Ma |
|          |                                       |  |
| 0        | = Total Cover                         |  |
|          | 6 Cover                               |  |

| Depth  | Matrix                             | to the de  | pur needed to docu                 | ment the                  | ndicator      | or confir     | m the absence of ind   | icators.)                 | -           |         |
|--|------------------------------------|------------|------------------------------------|---------------------------|---------------|---------------|--|---------------------------|-------------|---------|
| (inches)   | Color (moist)                      | %          | Color (moist)                      | x Feature<br>%            | <u>Type</u> 1 | _Loc²         | Texture  |                           |             |         |
| 0"-12"   | 109R313                            | 95         | 10425/6                            | 5                         | C             | 12            | SIL  | Rer                       | marks       |         |
| 12": 20"   | 104RH12                            | 90         | 104R713                            | 5                         | c             |               |  |                           |             |         |
|  | - J                                |            | -                                  | 5                         |               | m             | SEL _  |                           |             |         |
|  |                                    |            | loge stb                           |                           | <u> </u>      | <u></u>       |  |                           |             | -       |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
| -  |                                    | -          |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             | ,       |
| ype: C=Con   | centration, D=Deple                | etion, RM= | Reduced Matrix, MS                 | =Masked                   | ———           |               |  |                           |             |         |
| yario oon mi   | aicators,                          |            | Hoddood Matrix, MO                 | -Waskeu                   | Sand Gra      | ins.          | <sup>2</sup> Location: PL=Po<br>Indicators for Pro   | ore Lining, M             | I=Matrix.   |         |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R,  MLRA 149B) |                                    |            |                                    |                           |               | 2 cm Muck (A1 |  |                           |             |         |
| _ Black Histin   | c (A3)                             |            | MLRA 149B)                         |                           |               |               | Coast Prairie R  | edox (A16)                | (LRR K. L.  | R)      |
| _ Hydrogen \$  | Sulfide (A4)                       |            | Thin Dark Surfac<br>Loamy Mucky Mi | e (S9) (LF<br>ineral (E1) | RRR, ML       | RA 149B)      | 5 cm Mucky Pe  | at or Peat (              | S3) (LRR K  | , L, R) |
| _ Stratified L   |                                    |            | Loamy Gleyed M                     | latrix (F2)               | (LKK K,       | L)            | Dark Surface (\$   | 67) (LRR K,               | L, M)       |         |
| _ Depleted B   | elow Dark Surface                  | (A11) _    | Depleted Matrix (                  | (F3)                      |               |               | Polyvalue Below Thin Dark Surfa  | W Surface (S              | 8) (LRR K,  | , L)    |
| _ Inick Dark   | Surface (A12)                      | -          | Redox Dark Surfa                   | ace (F6)                  |               |               | Iron-Manganes  | e Masses (F               | 12\ (I DD H | ( I D)  |
| Sandy Glav   | ky Mineral (S1)<br>yed Matrix (S4) | _          | Depleted Dark St                   | urface (F7)               |               |               | Piedmont Flood   | plain Soils               | F19) (MLR.  | Δ 149F  |
| _ Sandy Red  | ox (S5)                            | -          | Redox Depressio                    | ns (F8)                   |               |               | Mesic Spodic (1  | A6) (MLRA                 | 144A, 145   | . 149B  |
| _ Stripped Ma  |                                    |            |                                    |                           |               |               | Red Parent Mai   | erial (F21)               |             | , ,     |
| _ Dark Surfac  | ce (S7) (LRR R, ML                 | RA 149B)   |                                    |                           |               |               | Very Shallow Day Other (Explain in the control of the co | ark Surface<br>n Remarks) | (TF12)      |         |
| ndicators of hy  | drophytic vegetation               | n and wetl | and hydrology must i               | be present                | , unless o    | disturbed of  |  |                           |             |         |
| Type:  | er (if observed):                  |            |                                    |                           |               |               | r problematic.   |                           |             |         |
| Depth (inches  | s):                                |            |                                    |                           |               |               |  |                           |             |         |
| marks:   | 9)-                                |            |                                    |                           |               |               | Hydric Soil Present?   | Yes                       | No          | X       |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |
|  |                                    |            |                                    |                           |               |               |  |                           |             |         |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date:\_ Sampling Point: DP- 537 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Investigator(s): B. V. RTS, M. Boberry Villenava Section, Township, Range: Landform (hillslope, terrace, etc.): H:115100 e Local relief (concave, convex, none): \_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R UPLAND Soil Map Unit Name: Fremont NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_X\_\_ No\_\_ Are Vegetation 90, Soil 90, or Hydrology 90 significantly disturbed? Are Vegetation <a>\(\nabla \circ \)</a>, Soil <a>\(\nabla \circ \)</a>, or Hydrology <a>\(\nabla \circ \)</a> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes X No within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID: WUTLAND ASIG Wetland Hydrology Present? Yes Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) X Saturation (A3) Dry-Season Water Table (C2) Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) \_ Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): Surface Water Present? Water Table Present? X No Depth (inches): Wetland Hydrology Present? Yes Saturation Present? X No \_\_\_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

|           | Dominant<br>Species? |                          | Dominance Test worksheet:   |
|-----------|----------------------|--------------------------|---|
|           |                      |                          | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|           |                      |                          |   |
|           |                      |                          | Total Number of Dominant Species Across All Strata: (B)   |
|           |                      |                          |   |
|           | 1                    | 7                        | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
|           | -                    |                          |   |
|           |                      |                          | Prevalence Index worksheet:   |
|           |                      |                          |   |
|           | = Total Co           | /er                      | OBL species x1 =  |
|           |                      |                          | FACW species x 2 =<br>FAC species x 3 =   |
|           | -                    |                          | FACU species x 4 =  |
|           |                      |                          | UPL species x 5 =   |
|           |                      | -                        | Column Totals: (A) (B)  |
|           |                      |                          | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |
|           |                      |                          | Prevalence Index = B/A =  |
|           |                      |                          | Hydrophytic Vegetation Indicators:  |
|           |                      |                          | 1 - Rapid Test for Hydrophytic Vegetation   |
| 100       | = Total Co           | ver                      | 2 - Dominance Test is >50%  |
|           | 70.4700              |                          | 3 - Prevalence Index is ≤3.0¹   |
| . 4       | V                    | FAU                      | <ul> <li>4 - Morphological Adaptations¹ (Provide supportin<br/>data in Remarks or on a separate sheet)</li> </ul>   |
|           | KI                   | -                        | Problematic Hydrophytic Vegetation¹ (Explain)   |
|           | 01                   |                          |   |
| 10        | 10                   |                          | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
|           | -0                   | - Control of the same of |   |
|           | -17                  | DIOL                     | Definitions of Vegetation Strata:   |
|           |                      |                          | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
|           |                      |                          | at preast neight (DBH), regardless of neight.   |
|           |                      |                          | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
|           |                      |                          |   |
|           |                      |                          | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
|           |                      |                          | Carried and the second |
|           |                      |                          | Woody vines - All woody vines greater than 3.28 ft in height.   |
| 100       | = Total Co           | ver                      | g   |
| A 110 100 | . , , , , , ,        |                          |   |
|           |                      |                          |   |
|           |                      | -                        | Hydrophytic   |
| -         |                      | -                        | Vegetation Present? Yes No  |
|           |                      |                          | Present? fes No   |
|           |                      |                          |   |
| -         |                      |                          |   |
|           |                      |                          | O = Total Cover O = Total Cover O = Total Cover O = Total Cover O   |

| (inches)   | Matrix<br>Color (moist)  | %          | Redo   | ox Feature  | <u>s</u> ,            |              |   |  |
|--|--|------------|--|---|-----------------------|--------------|---|--|
| 0"-14"   |  |            | Color (moist)  | %   | Type <sup>1</sup>     | _Loc2        | Texture   | Remarks  |
| J-14 -   | 2.54312  | 90         | 2.54513  | _5  |                       | m            | SIL_  | the state of the s |
|  |  | -          | 104x 518   | _5_   |                       | m            |   |  |
|  |  |            |  |   |                       |              |   |  |
| ype: C=Cond  | centration, D=Depk   | etion, RM= | =Reduced Matrix, MS  | S=Masked  | Sand Gra              | ains.        | <sup>2</sup> Location: PL=  | Pore Lining, M=Matrix.   |
| Histosol (A Histic Epipe Black Histic Hydrogen S Stratified L Depleted B Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Me | edon (A2) c (A3) Sulfide (A4) ayers (A5) selow Dark Surface Surface (A12) ky Mineral (S1) yed Matrix (S4) lox (S5) |            | Polyvalue Belov MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed Matrix Redox Dark Sur Depleted Dark S Redox Depressi | ice (S9) (L<br>dineral (F1<br>Matrix (F2)<br>(F3)<br>rface (F6)<br>Surface (F | RR R, ML<br>) (LRR K, | RA 149B)     | 2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Surface Iron-Mangan Piedmont Flot Mesic Spodio Red Parent Moderation | roblematic Hydric Solls <sup>3</sup> : A10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) Relow Surface (S8) (LRR K, L) Urface (S9) (LRR K, L) Rese Masses (F12) (LRR K, L, R) CODITION (MLRA 1496) C (TA6) (MLRA 144A, 145, 1496) Material (F21) Dark Surface (TF12) in in Remarks)   |
| dicators of hy   | drophytic vegetation   | on and we  | tland hydrology mus  | t be prese  | nt, unless            | disturbed of | or problematic.   |  |
| estrictive Lay   | er (if observed):  |            |  |   |                       |              |   |  |
|  |  |            |  |   |                       |              |   |  |
|  | 98):   |            |  |   |                       |              | Hydric Soil Prese   | nt? Yes X No   |
| ndicators of hy<br>estrictive Lay<br>Type:<br>Depth (inche<br>emarks:  | /er (if observed):   |            | tland hydrology mus  | t be prese  | nt, unless            | disturbed d  |   | ent? Yes X No  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/2 115 NY Sampling Point: DP- 538 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): B. Viats, M. Bobers Section, Township, Range: \*\* \*\* Slope (%): 2 %

Local relief (concave, convex, none): Convex Slope (%): 2 %

Datum: NAD 83 Lat: 79-10/267 Long: 42.39602 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: UPI and Soil Map Unit Name: Fremont Silt Loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No\_\_\_\_\_ Are Vegetation vo , Soil NO , or Hydrology NO significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation we, Soil wo, or Hydrology wo naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? If yes, optional Wetland Site ID:\_\_\_ Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: \_\_ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) Surface Water (A1) \_\_ Moss Trim Lines (B16) \_\_ Aquatic Fauna (B13) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) \_\_ Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_\_ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_ Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) \_\_ Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_\_ FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No X Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_ No \_\_\_ Yes \_\_\_\_ No \_X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Dominance Test worksheet:  |
|---------------------|---------------------------------------|--|
|                     |                                       | Number of Dominant Species That Are OBL, FACW, or FAC:(A)  |
|                     |                                       | That Are OBL, FACW, or FAC: (A)  |
|                     |                                       | Total Number of Dominant Species Across All Strata:(B)   |
|                     |                                       |  |
|                     |                                       | Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B  |
|                     |                                       | That Are OBL, FACW, of FAC   |
|                     |                                       | Prevalence Index worksheet:  |
|                     |                                       | Total % Cover of: Multiply by:   |
| ٥                   | = Total Cover                         | OBL species x 1 =  |
|                     |                                       | FACW species x 2 =   |
|                     |                                       | FAC species x 3 =  |
|                     |                                       | FACU species x 4 =   |
|                     |                                       | UPL species x 5 =  |
|                     |                                       | Column Totals: (A) (B)   |
|                     |                                       |  |
|                     |                                       | Prevalence Index = B/A =   |
|                     |                                       | Hydrophytic Vegetation Indicators:   |
|                     |                                       | 1 - Rapid Test for Hydrophytic Vegetation  |
|                     | = Total Cover                         | 2 - Dominance Test is >50%   |
|                     | Total Cover                           | 3 - Prevalence Index is ≤3.01  |
| ^                   | \/                                    | 4 - Morphological Adaptations (Provide supporting  |
|                     |                                       | NT ( ) ( ) 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은   |
| 3                   | N 081                                 | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5                   | N DBL                                 | Indicators of hydric soil and wetland hydrology must   |
| 5                   | N FAC                                 | be present, unless disturbed or problematic.   |
| 5                   | N FINU                                | Definitions of Vegetation Strata:  |
| 5                   | N FACU                                | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
| 5                   |                                       | at breast height (DBH), regardless of height.  |
|                     |                                       | Sapling/shrub – Woody plants less than 3 in. DBH   |
|                     |                                       | and greater than or equal to 3.28 ft (1 m) tall.   |
|                     |                                       | Herb – All herbaceous (non-woody) plants, regardless of  |
|                     |                                       | size, and woody plants less than 3.28 ft tall.   |
|                     |                                       | Woody vines - All woody vines greater than 3.28 ft in  |
|                     |                                       | height.  |
| 100                 | = Total Cover                         |  |
|                     | - Mariana                             |  |
|                     |                                       |  |
|                     |                                       | Hydrophytic  |
|                     |                                       | - Vegetation   |
|                     |                                       | D  |
|                     |                                       | Present? Yes No  |
|                     |                                       | Present? Yes No  |
|                     | 70<br>5<br>5<br>5<br>5                | C = Total Cover  O = Total Cover  O = Total Cover  N DAL  N FAC  N FAC |

| inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks  D'-iz" 2.59414 98 1042618 2 C  SIL  | Depth   | Matrix  |            | th needed to docum<br>Redox  | Feature                              |                                       |           |  |  |   |
|---|---|---|------------|--|--------------------------------------|---------------------------------------|-----------|--|--|---|
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Black Histic (A3)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRR K, L, M)  | (inches)  | Color (moist)   | %          | Color (moist)  |                                      | Type <sup>1</sup>                     | _Loc2     | Texture  | Rema   | arks  |
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  NHRA 149B)  Loamy Mucky Mineral (F1) (LRR K, L)  Polyxlaue Below Surface (S9) (LRR R, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)   | 0"-12"  | 2.59414   | 98         | 104R618  | 2                                    |                                       | 3         | SIL  |  |   |
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Hydrogen Sulfide (A4)  N=Reduced Matrix, MS=Masked Sand Grains.  Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRR K, L, M) | 7"- 70"   | 2.59612   | 90         | 104R618  | 5                                    | c                                     | ~         | SIL  |  |   |
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils³:  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  |   | U   |            | 7.54512  | 5                                    | 0                                     | m         |  |  |   |
| Loanly Oleyed Matrix (12)   | ydric Soil In<br>_ Histosol (/<br>_ Histic Epir<br>_ Black Hist<br>_ Hydrogen | dicators:<br>A1)<br>pedon (A2)<br>ic (A3)<br>Sulfide (A4) | etion, RM= | Reduced Matrix, MS  Polyvalue Below MLRA 149B) Thin Dark Surfac Loamy Mucky Mi | =Masked Surface se (S9) (Lineral (F1 | Sand Gra (S8) (LRR RR R, ML ) (LRR K, | ins.      | Indicators for P 2 cm Muck Coast Prairi 5 cm Mucky Dark Surfac | roblematic Hy<br>(A10) (LRR K, L<br>e Redox (A16) (<br>Peat or Peat (S<br>e (S7) (LRR K, | dric Soils <sup>3</sup> :<br>., MLRA 149B)<br>(LRR K, L, R)<br>63) (LRR K, L, R)<br>L, M) |
|   | estrictive La   | ydrophytic vegetatii<br>ver (if observed):                | on and we  | land hydrology must  | be prese                             | nt, unless                            | disturbed | or problematic.  |  |   |
| dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  | Туре:   | , (,  |            |  |                                      |                                       |           |  |  |   |
| strictive Layer (if observed):  |   | es):  |            |  |                                      |                                       |           | Hydric Soil Pres   | ent? Yes   | No X  |
| strictive Layer (if observed):  | arriar NS.  |   |            |  |                                      |                                       |           |  |  |   |

|  |                   |  | an - North Contrar a                           |   | ساعات                   |  |  |
|--|-------------------|--|--|---|-------------------------|--|--|
| Project/Site: Ball Hill Wind P   | Project           |  | County: Chautauqua C                           | County Sampli                           |                         |  |  |
| Applicant/Owner: Ball Hill Wi  |                   |  |  |   | pling Point: DP- 539    |  |  |
| nvestigator(s): B. Y. 21   | s, M. Bob         | Secti  | on, Township, Range:                           | villenova                               |                         |  |  |
| andform (hillslope, terrace, etc.  | 1: TOE OF SI      | Local rel  | lief (concave, convex, nor                     | 10): Concare                            | Slope (%):              |  |  |
| Subregion (LRR or MLRA): LR  |                   | at: 79.10550   | 5 Long: 47                                     | 2398518                                 | Datum: NAD 83           |  |  |
| Soil Map Unit Name: Free   |                   |  |  | NWI classification:                     | 0-10-                   |  |  |
| Are climatic / hydrologic condition  |                   |  | Ves × No                                       |   |                         |  |  |
| Are Vegetation <u>~ </u> Soil <u>~</u>   |                   |  |  | Circumstances" present?                 |                         |  |  |
| Are Vegetation $\frac{ OO }{ OO }$ , Soil $\frac{ OO }{ OO }$                      |                   |  |  | explain any answers in Re               |                         |  |  |
| SUMMARY OF FINDING   | SS – Attach site  | map showing san  | npling point location                          | ons, transects, impo                    | rtant features, etc.    |  |  |
| Hydrophytic Vegetation Preser  | nt? Yes_          | × No   | Is the Sampled Area                            | 4                                       |                         |  |  |
| Hydric Soil Present?   | Yes _×            |  | within a Wetland? Yes No                       |   |                         |  |  |
| Wetland Hydrology Present?   | Yes _>            | C No   | If yes, optional Wetland Site ID: Wetland A521 |   |                         |  |  |
|  |                   |  |  |   |                         |  |  |
| HYDROLOGY  |                   |  |  | Secondary Indicators (m                 | nimum of hara required) |  |  |
| Wetland Hydrology Indicator  |                   | and interest and   |  |   |                         |  |  |
| Primary Indicators (minimum o  |                   |  | (DO)   | Surface Soil Cracks                     |                         |  |  |
| X Surface Water (A1) High Water Table (A2)   | -                 | <ul> <li>Water-Stained Leave</li> <li>Aquatic Fauna (B13)</li> </ul> |  |   |                         |  |  |
| Saturation (A3)  | 1                 | Marl Deposits (B15)  |  |   |                         |  |  |
| Water Marks (B1)   | 1.5               | Hydrogen Sulfide Od  |  | Crayfish Burrows (C                     |                         |  |  |
| Sediment Deposits (B2)   |                   |  | res on Living Roots (C3)                       |   | Aerial Imagery (C9)     |  |  |
| Drift Deposits (B3)  |                   | Presence of Reduce   |  | Stunted or Stressed                     | Plants (D1)             |  |  |
| Algal Mat or Crust (B4)  |                   | Recent Iron Reduction  | on in Tilled Soils (C6)                        | Geomorphic Position                     | 1 (D2)                  |  |  |
| Iron Deposits (B5)   |                   | Thin Muck Surface (  |  | Shallow Aquitard (D                     |                         |  |  |
| Inundation Visible on Aeri   | al Imagery (B7)   | Other (Explain in Re   | emarks)  | X Microtopographic Re                   |                         |  |  |
| Sparsely Vegetated Conc  | ave Surface (B8)  |  |  | FAC-Neutral Test (D                     | 5)                      |  |  |
| Field Observations:  |                   |  | 11 1 11  |   |                         |  |  |
| Surface Water Present?   | Yes X No _        | Depth (inches): O  | 1  |   |                         |  |  |
| Water Table Present?   | Yes _ No _        | Depth (inches): C  | //   | t 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | s X No                  |  |  |
| Saturation Present?<br>(includes capillary fringe)<br>Describe Recorded Data (stre |                   | Depth (inches): O  |  | Hydrology Present? Yeallable:           | s No                    |  |  |
| A Marian Marian San Carrier Charles  | The second second |  |  |   |                         |  |  |
| Remarks:   |                   |  |  |   |                         |  |  |
|  | m moss            | present  |  |   |                         |  |  |
|  |                   |  |  |   |                         |  |  |

| ~ /                                    | Absolute             | Dominant   | Indicator  | Danisana Testuralishadi  |                                |           |
|--|----------------------|------------|--|--|--------------------------------|-----------|
| Tree Stratum (Plot size: 30′)          | a series as a series | Species?   | and the state of t | Dominance Test worksheet:  |                                |           |
| . Tsuga canadensis                     | 50                   | À          | THU  | Number of Dominant Species That Are OBL, FACW, or FAC  | 5                              | (A)       |
| 2. ALER THORIUM                        | 40                   | Y          | FIX  |  |                                |           |
| 3. Betula alleghaniensis               | 10                   | N          | FIX  | Total Number of Dominant<br>Species Across All Strata:   | 10                             | (B)       |
| 4                                      |                      |            |  | Percent of Dominant Species  | 00                             |           |
| 5                                      |                      |            |  | That Are OBL, FACW, or FAC:  | _83_                           | (A/B      |
| 6                                      |                      |            |  | Barriera tratago de la compansión de la  |                                |           |
| 7                                      |                      |            |  | Prevalence Index worksheet Total % Cover of:   |                                |           |
|  | 100                  | = Total Co | /er  | OBL species  | x 1 =                          |           |
| Sapling/Shrub Stratum (Plot size: 15') |                      |            |  | FACW species   |                                |           |
| 1. Acer rubining                       | 40                   | V .        | FAC  | FAC species  |                                |           |
|  | 20                   | V          | FAC  | FACU species   | x 4 =                          |           |
|  |                      | -/         |  | UPL species  | x 5 =                          |           |
| Tsuga caradensis                       | 10                   |            | FACU   | Column Totals:   | (A)                            | (B)       |
|  | _                    |            |  | Prevalence Index = B/A   |                                |           |
| 5                                      |                      |            |  |  |                                |           |
| 3                                      |                      |            |  | Hydrophytic Vegetation India   |                                |           |
| 7                                      |                      |            |  | 1 - Rapid Test for Hydroph   |                                | n         |
|  | 70                   | = Total Co | /er  | ∠ 2 - Dominance Test is >50  | 100                            |           |
| Herb Stratum (Plot size:5')            |                      |            |  | 3 - Prevalence Index is ≤3   |                                | James I   |
| .Thelyoteris noveloprocensis           | in                   | Y          | FAC  | 4 - Morphological Adaptati<br>data in Remarks or on  | ons' (Provide<br>a separate sh | supportin |
| 2 Oroclea sensibilis                   |                      | V          | FROW   | Problematic Hydrophytic V  |                                |           |
|  |                      | -1         | THUN   |  |                                |           |
| 3                                      |                      |            |  | <sup>1</sup> Indicators of hydric soil and w<br>be present, unless disturbed or  | etland hydrolo                 | gy must   |
| 4                                      |                      | -          |  |  |                                |           |
| 5                                      |                      |            |  | Definitions of Vegetation Str  | ata:                           |           |
| 6                                      |                      |            |  | Tree - Woody plants 3 in. (7.6   |                                | n diamete |
| 7                                      |                      |            |  | at breast height (DBH), regard   | ess of height.                 |           |
| 8                                      |                      |            |  | Sapling/shrub - Woody plants   | s less than 3 ir               | . DBH     |
| 9                                      |                      |            |  | and greater than or equal to 3.  | 28 ft (1 m) tall               |           |
| 10.                                    |                      | -          |  | Herb - All herbaceous (non-wood  |                                | dless of  |
|  | -                    | -          |  | size, and woody plants less than 3   | .28 ft tall.                   |           |
| 11                                     |                      | •          |  | Woody vines - All woody vines  | greater than 3.2               | R in      |
| 12                                     | • 00                 | -          |  | height.  |                                |           |
|  | <u>i5</u>            | = Total Co | ver  |  |                                |           |
| Woody Vine Stratum (Plot size: 30')    |                      |            |  |  |                                |           |
| 1. noTApplicable                       |                      |            |  | ALSON AND DESCRIPTION OF THE PARTY OF THE PA |                                |           |
| 2.                                     |                      |            |  | Hydrophytic<br>Vegetation  |                                |           |
| 3                                      |                      |            |  | Present? Yes X   | No                             | _         |
| A.                                     |                      | -          |  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |                                |           |
| 4                                      |                      | T-1-10-    |  | 200  |                                |           |
|  |                      | = Total Co | ver  |  |                                |           |

| 0  |  |           | Redox   | nent the<br>x Feature   |                              | or confirm  | the absence of ind  | of Indicators.)   |   |
|--|--|-----------|---|---|------------------------------|-------------|---|-------------------|---|
| O'-4"  |  | %         | Color (moist)                                   | %_  | Type <sup>1</sup>            |             | Texture   | Remarks           |   |
| 4"9"   | 754261   |           | incley Peat                                     | ma  | total                        |             |   |                   |   |
| 9  | 2.592.5/1  | 95        | 2.54411   | 3_  | 0                            | m           | <u>SIL</u>  |                   |   |
| alt i  |  |           | 2.59516   | 2   | 4                            | m           |   |                   |   |
| 9"-12"   | 2.5 42.5/1   | 80        | 2.543/1   | 5   | _Q_                          | m           | SIL   |                   |   |
|  |  |           | 7.545/1   | 10  | 0                            | $\sim$      |   |                   |   |
|  |  |           | 7.54516   | 5   |                              | m           |   |                   |   |
|  |  |           |   |   |                              |             |   |                   |   |
| ype: C=Con<br>ydric Soil Inc<br>Histosol (A<br>Histic Epip                   | dicators:<br>(1)   | tion, RM= | =Reduced Matrix, MS= Polyvalue Below MLRA 149B) |   |                              |             | Indicators for Pro<br>2 cm Muck (A1   | 0) (LRR K, L, MLI | Soils³:<br>RA 149B)   |
| Stratified L Depleted B Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped M | Sulfide (A4) ayers (A5) selow Dark Surface ( Surface (A12) sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) ce (S7) (LRR R, ML) | RA 149B   |   | neral (F1<br>atrix (F2)<br>(F3)<br>ace (F6)<br>urface (F)<br>ins (F8) | ) ( <b>LRR K,</b><br>)<br>7) | L)          | 5 cm Mucky Po<br>Dark Surface (<br>Polyvalue Belo<br>Thin Dark Surf.<br>Iron-Manganes<br>Piedmont Floo<br>Mesic Spodic (<br>Red Parent Ma<br>Very Shallow D | ark Surface (TF12 | RR K, L, R<br>RR K, L)<br>L)<br>.RR K, L, R<br>(MLRA 149<br>1, 145, 149 |
|  | drophytic vegetation   | and wet   | tland hydrology must b                          | oe preser   | nt, unless o                 | disturbed o | or problematic.   |                   |   |
| dicators of hy   |  |           |   |   |                              |             |   |                   |   |
| strictive Lay  | er (ii observed):  |           |   |   |                              |             |   |                   |   |
| ndicators of hy<br>estrictive Lay<br>Type:<br>Depth (inche<br>emarks:        | TOTAL STREET   |           | -   |   |                              |             | Hydric Soil Present   | ? Yes _X_         | No  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County \_\_ Sampling Date:\_ \\\Z\\5 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-540 Investigator(s): B. Viers, M. Boberg Section, Township, Range: VIIIE NOVA Local relief (concave, convex, none): \_\_\_\_\_\_ Slope (%): \_\_\_\_\_ Landform (hillslope, terrace, etc.): H. 115100e Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: 79 - 105384 Long: 42. PFOIE Soil Map Unit Name: Fremont Silt Cour NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_ No Are Vegetation No, Soil NO, or Hydrology NO significantly disturbed? Are Vegetation ~0, Soil ~0, or Hydrology ~0 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes No X within a Wetland? Yes \_\_\_\_\_ No X Hydric Soil Present? Yes \_ Y No X BV Wetland Hydrology Present? If yes, optional Wetland Site ID:\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) \_\_\_ Aquatic Fauna (B13) Moss Trim Lines (B16) High Water Table (A2) \_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) ★ Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) Thin Muck Surface (C7) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) **Field Observations:** Yes \_\_\_\_ No \_X Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes X No X Yes X No X3 Depth (inches): 5 Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30'                          | Absolute  |              | Indicator | Dominance Test worksheet:   |
|---|-----------|--------------|-----------|---|
| TICO CHARAITI (I TOT SIZO,                            | -         | Species?     |           | Number of Dominant Species  |
| 1. Acer rubrum  | 75        | -\frac{1}{V} | FAC       | That Are OBL, FACW, or FAC: (A)   |
| 2. Betwo allignaniens is                              | 25        |              | FAC       | Total Number of Dominant  |
| 3   |           | -            |           | Species Across All Strata: (B)  |
| 4   |           |              |           | Percent of Dominant Species   |
| 5   |           |              |           | That Are OBL, FACW, or FAC: (A/B)   |
| 6,  |           |              |           | Prevalence Index worksheet:   |
| 7   |           |              |           | Total % Cover of: Multiply by:  |
| Y   | 100       | = Total Co   |           | OBL species x1 =  |
| 100   |           | - Iblai Co   | vei       | FACW species x 2 =  |
| Sapling/Shrub Stratum (Plot size: 15')                |           | 11           | = 1/1 A   | FAC species x 3 =   |
| 1. ACEY YUDYUYYI                                      | 50        | <u></u>      | FAC       | FACU species x 4 =  |
| 2. Betula allegnaniensis                              | 25        |              | FAC       | UPL species x 5 =   |
| 3. TSUGA CAMADASIS                                    | 10        | N            | FALLA     | Column Totals: (A) (B)  |
| 4. Fagus grandifolia                                  | 10        | N            | FARU      | Column Totals(A)(B)   |
| 5   |           |              |           | Prevalence Index = B/A =  |
| 0   |           |              |           | Hydrophytic Vegetation Indicators:  |
| 6   |           |              |           | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7   | - Or      |              |           |   |
| -1  | 95        | = Total Co   | ver       | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5')                          |           |              |           | 4 - Morphological Adaptations¹ (Provide supporting  |
| 1. Thelyoteris novelourorensis                        | 5         | ¥            | FAC       | data in Remarks or on a separate sheet)   |
| 2   |           |              |           | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
|   |           |              |           | Nadantan of budalans and and and and budalans   |
| 3   |           |              |           | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 4   |           |              |           | 7. a 12. c = 7. c = 12. d = 1.  |
| 5   | -         | _            |           | Definitions of Vegetation Strata:   |
| 6   |           |              |           | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7   |           |              |           | at breast height (DBH), regardless of height.   |
| 8   |           |              |           | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9   |           |              |           | and greater than or equal to 3.28 ft (1 m) tall.  |
|   |           |              |           | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10  |           | -            |           | size, and woody plants less than 3.28 ft tall.  |
| 11,   |           | -            | <b></b>   | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  |           |              |           | height.   |
| Carry and the second second                           | _5_       | = Total Co   | ver       |   |
| Woody Vine Stratum (Plot size: '30')                  |           |              |           |   |
| 1. DOT Applicable                                     |           |              |           | AV. T. A. T. A.   |
| 2   |           |              |           | Hydrophytic   |
| 2   |           |              |           | Vegetation Present? Yes X No  |
| 3,  |           | -            |           | 1000111   |
| 4   |           | -            |           |   |
|   | 0         | = Total Co   | ver       |   |
| Remarks: (Include photo numbers here or on a separate | e sheet.) |              |           |   |
|   |           |              |           |   |
|   |           |              |           |   |
|   |           |              |           |   |
|   |           |              |           |   |
|   |           |              |           |   |
|   |           |              |           |   |
|   |           |              |           |   |

| Depth   | Matrix  | to the de  | pth needed to docur  | ment the  | indicator               | or confirm | the absence of indic  | ators.)  |
|---|---|------------|--|---|-------------------------|------------|---|--|
| (inches)  | Color (moist)   | %          | Color (moist)  | x Feature<br>%  | Type <sup>1</sup>       | _Loc²      | Texture   | Remarks  |
| 0"-4"   | organic   | -mu        | icky Peat r  | notes   |                         |            | - Majo  | Kerriarks  |
| 4"-6"   | 109R413   | 85         | 7.542313   |   | 0                       | 5          | SIL   |  |
| By  |   |            | 7.5yRull   | 5   | C                       | m          |   |  |
| 6-1820"   | 104R 518  | 40         | 10yr 5/4   | 30  | <i>c.</i>               | m          | SIL   |  |
|   |   |            | 104R413  | 30  | <u> </u>                |            |   |  |
|   |   | =          |  |   |                         | $\equiv$   |   |  |
| ype: C=Con  | centration, D=Deple   | etion RMs  | =Reduced Matrix, MS  |   |                         |            | 2   |  |
| ydric Soil Inc  | licators:   | MOH, PUVI- | -reduced Matrix, MS  | =Masked   | Sand Gra                | ins.       | <sup>2</sup> Location: PL=Por   | e Lining, M=Matrix.<br>ematic Hydric Soils <sup>3</sup> :  |
| Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma | Sulfide (A4) ayers (A5) elow Dark Surface (Surface (A12) ky Mineral (S1) red Matrix (S4) ox (S5) atrix (S6) ce (S7) (LRR R, ML drophytic vegetation | RA 149B    | MLRA 149B)  Thin Dark Surfactory Loamy Mucky Michael Matrix of Redox Dark Surfactory Redox Depleted Dark Surfactory Redox Depression Redox Depression  Itland hydrology must | ineral (F1<br>fatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7)<br>ons (F8) | ) ( <b>LRR K,</b><br>7) | L)         | 5 cm Mucky Pea<br>Dark Surface (S)<br>Polyvalue Below<br>Thin Dark Surface<br>Iron-Manganese<br>Piedmont Floodp<br>Mesic Spodic (TA<br>Red Parent Mate<br>Very Shallow Dai<br>Other (Explain in | Surface (S8) (LRR K, L) te (S9) (LRR K, L) Masses (F12) (LRR K, L, I) dain Soils (F19) (MLRA 145 A6) (MLRA 144A, 145, 149 rial (F21) rk Surface (TF12) |
| estrictive Lay  |   |            |  |   |                         | 1          |   |  |
| Type:   |   | _          |  |   |                         |            | American and the A  |  |
| Cottlictive Lay                                       |   | _          |  |   |                         |            | Hydric Soil Present?  | Yes No _X  |

| WE<br>Ball Lill Ma   | TLAND DETERMINATION                      |                                     |  |                                 |                     |             |
|--|--|-------------------------------------|--|---------------------------------|---------------------|-------------|
| Project/Site: Ball Hill Wir  |  | City/County: _                      | Chautauqua Cou   | unty                            | Sampling Date:      | 11/2/15     |
| Applicant/Owner: Ball Hill   |  |                                     |  |                                 | Sampling Point      |             |
| Investigator(s): B. Vin  | TS, M. Bobers                            | Section, Town                       | nship, Range: 🔰  | 11Phova                         | 7                   |             |
| Landform (hillslope, terrace,  | etc.): To-e of Slope                     |                                     | cave, convex, none):   |                                 |                     | e (%):O     |
| Subregion (LRR or MLRA):   |  | 107076                              | Long: 47   | .4013                           | 43                  | NAD 83      |
| Soil Map Unit Name: TY   |  | oam                                 |  |                                 |                     |             |
|  | ditions on the site typical for this tim |                                     | <u> </u>   | NVVI classific                  | ation: uplar        | -d          |
| Are Venetation along Soil  | NO, or Hydrology NO signi                | le or year? Yes                     |  |                                 |                     |             |
|  |  |                                     |  |                                 | resent? Yes         | No          |
| Are vegetation 100, 501  | No_, or Hydrology No_ natur              | ally problematic?                   | (If needed, expla  | ain any answer                  | rs in Remarks.)     |             |
| SUMMARY OF FINDI   | NGS – Attach site map sho                | wing sampling                       | point locations  | transacte                       | important for       |             |
| Hydrophytic Vegetation Pre<br>Hydric Soil Present?<br>Wetland Hydrology Presen | esent? Yes Y No                          | Is the swithin                      | Sampled Area a Wetland? optional Wetland Site  | Yes X                           | _ No                |             |
| HYDROLOGY  |  |                                     |  |                                 |                     |             |
| Wetland Hydrology Indica   | tors:                                    |                                     | One  |                                 |                     |             |
|  | n of one is required; check all that a   | innly)                              |  |                                 | ors (minimum of tw  | o required) |
| X Surface Water (A1)   |  | ained Leaves (B9)                   |  | Surface Soil C<br>Drainage Patt |                     |             |
| High Water Table (A2)  |  | auna (B13)                          |  | Moss Trim Lin                   |                     |             |
| X Saturation (A3)  |  | osits (B15)                         |  |                                 | Vater Table (C2)    |             |
| Water Marks (B1)   |  | Sulfide Odor (C1)                   |  | Crayfish Burro                  |                     |             |
| Sediment Deposits (B2)   |  | Rhizospheres on Livi                | ng Roots (C3)  |                                 | ible on Aerial Imag | ery (C9)    |
| Drift Deposits (B3) Algal Mat or Crust (B4)                                    |  | of Reduced Iron (C4                 | Standard Committee of the Committee of t |                                 | essed Plants (D1)   |             |
| Iron Deposits (B5)   |  | on Reduction in Tilled              |  | Geomorphic P                    |                     |             |
| Inundation Visible on A  |  | k Surface (C7)<br>plain in Remarks) |  | Shallow Aquita                  |                     |             |
| Sparsely Vegetated Cor   |  | piam in Remarks)                    |  | Microtopograp<br>FAC-Neutral T  | hic Relief (D4)     |             |
| Field Observations:  |  |                                     |  | AC-Neutral 1                    | est (D5)            |             |
| Surface Water Present?   | Yes _ X No Depth (in                     | iches): 0"-1"                       |  |                                 |                     |             |
| Water Table Present?   | Yes _x No Depth (in                      |                                     |  |                                 |                     |             |
| Saturation Present?<br>(includes capillary fringe)                             | Yes _ X No Depth (in                     | ches): O''                          | Wetland Hydrol   | logy Present?                   | Yes X               | lo          |
| Describe Recorded Data (str  | eam gauge, monitoring well, aerial       | photos, previous insp               | pections), if available:   |                                 |                     |             |
|  |  | ,                                   | , , , , , , , , , , , , , , , , , , ,  |                                 |                     |             |
| Remarks:   |  |                                     |  |                                 |                     |             |
| , tornario,  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |
|  |  |                                     |  |                                 |                     |             |

|     |  | Status               | Dominance Test worksheet:  Number of Dominant Species  |
|-----|--|----------------------|--|
|     | _ Y  | FHLU                 | That Are OBL, FACW, or FAC:(A)   |
| 25_ |  | FAL                  | Total Number of Dominant Species Across All Strata:  (B)   |
|     |  |                      | Percent of Dominant Species  |
|     |  |                      | That Are OBL, FACW, or FAC: 67.5 (A/B)   |
|     |  |                      | Prevalence Index worksheet:  |
|     |  |                      | Total % Cover of: Multiply by:   |
| 50  | = Total Co   | ver                  | OBL species x 1 =  |
|     | - 10tai 00   | VOI                  | FACW species x 2 =   |
| 20  | V  | TACLI                | FAC species x 3 =  |
|     |  |                      | FACU species x 4 =   |
| 10_ | -  |                      | UPL species x 5 =  |
|     |  |                      | Column Totals: (A) (B)   |
|     |  |                      | Prevalence Index = B/A =   |
|     | -  |                      | Hydrophytic Vegetation Indicators:   |
| -   |  |                      | 1 - Rapid Test for Hydrophytic Vegetation  |
| 75  | 27.02  |                      | 2 - Dominance Test is >50%   |
| 20  | _ = Total Co   | over                 | 3 - Prevalence Index is ≤3.0 <sup>1</sup>  |
| 15  | V  | =13-11               | 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)  |
|     |  |                      | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 10  |  |                      |  |
| 10  |  |                      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
|     | - <u>N</u>   |                      |  |
| 5   | 17   |                      | Definitions of Vegetation Strata:  |
| 5_  | -  | FAL                  | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
|     |  |                      | Sapling/shrub - Woody plants less than 3 in. DBH   |
|     |  |                      | and greater than or equal to 3.28 ft (1 m) tall.   |
|     | -  |                      | Herb - All herbaceous (non-woody) plants, regardless of  |
|     | -  |                      | size, and woody plants less than 3.28 ft tall.   |
|     |  |                      | Woody vines - All woody vines greater than 3.28 ft in  |
| EN  | -  |                      | height.  |
| 00  | _ = Total C  | over                 |  |
|     |  |                      |  |
|     |  |                      | Hydrophytic  |
|     |  |                      | - Vegetation   |
| . , |  |                      | Present? Yes No  |
|     |  |                      |  |
|     | 25.00  |                      |  |
| 0   | _ = Total C  | over                 |  |
|     | 25<br>25<br>25<br>25<br>25<br>10<br>10<br>5<br>10<br>10<br>5<br>5<br>5<br>5<br>5 | % Cover Species?  Z5 | SO = Total Cover  So = Total Cover |

| Depth  | Matrix   |                  |   | x Features   |                               |                            |   | 2.20 (4.37)   |
|--|--|------------------|---|--|-------------------------------|----------------------------|---|---|
| nches)   | Color (moist)  | %                | Color (moist)   |  | Type <sup>1</sup>             | _Loc <sup>2</sup>          | Texture   | Remarks   |
| יי-ניי   | Organic -  |                  | ky Pent   |  | ich                           |                            |   |   |
| -"-5"  | 2.542.5/1  | 95               | 10R4/4  | _5_  |                               | PL                         | SIL.  |   |
| 5"7"   | 2.54412  | 85               | 2.542.51  | _5_  | D                             | m                          | SIL   |   |
| <del></del>  |  |                  | 7.5yz416  | 10_  | <u></u>                       | <u>m</u>                   |   |   |
|  |  | <u> </u>         |   |  |                               |                            |   |   |
|  |  |                  |   |  |                               |                            |   |   |
| rdric Soil Ir Histosol ( Histic Epi Black His Hydroger Stratified Depleted Thick Dar Sandy Mi Sandy Gl Sandy Re Stripped I | ndicators: A1) pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M | (A11)<br>LRA 149 | =Reduced Matrix, MS  Polyvalue Below MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Redox Depress  Redox Depress  B) | v Surface (<br>lice (S9) (LF<br>flineral (F1)<br>Matrix (F2)<br>(F3)<br>rface (F6)<br>Surface (F7<br>ions (F8) | S8) (LRI<br>RR R, M<br>(LRR K | R R,<br>LRA 149B)<br>,, L) | Indicators for Pr  2 cm Muck (A Coast Prairie 5 cm Mucky (A Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent (A Very Shallow Other (Explain | Pore Lining, M=Matrix.  oblematic Hydric Soils <sup>3</sup> :  A10) (LRR K, L, MLRA 149B)  Redox (A16) (LRR K, L, R)  Peat or Peat (S3) (LRR K, L, R)  (S7) (LRR K, L, M)  low Surface (S8) (LRR K, L)  rface (S9) (LRR K, L)  ese Masses (F12) (LRR K, L, R)  odplain Soils (F19) (MLRA 149B  Material (F21)  Dark Surface (TF12)  n in Remarks) |
|  | ayer (if observed):  | on and w         | elianu nydrology mus  | t be preser  | it, unles                     | s disturbed C              | Hydric Soil Prese   | nt? Yes × No  |
| emarks:  |  |                  |   |  |                               |                            |   |   |

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project  |   | City/County: Chautauqua  | County   | Sampling Date: 1112115  |
|---|---|--|--|---|
| Applicant/Owner: Ball Hill Wind En  |   |  | State: NY  | _ Sampling Point: DP- 542   |
| Investigator(s): B. VizTS, M.   |   | Section, Township, Range:  |  |   |
| Landform (hillslope, terrace, etc.): 19 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: (CONT)  Are climatic / hydrologic conditions on t  | 1:11510pe Loc<br>Lat: 79.10   | ral relief (concave, convex, no 7 3 (8 Long: 4   | ne):<br>2, 40112<br>NWI classific  | Slope (%): 3 % Datum: NAD 83 Dation: UPland   |
| Are Vegetation NO, Soil NO, or  | HydrologyNO significantly   | disturbed? Are "Norma  | I Circumstances"   | present? Yes X No   |
| Are Vegetation NO, Soil NO, or  |   |  | explain any answe  |   |
| SUMMARY OF FINDINGS - A   |   |  |  |   |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?   | Yes No X<br>Yes No X<br>Yes No X  | Is the Sampled Area<br>within a Wetland?<br>If yes, optional Wetlan  |  | _ No ×  |
| HYDROLOGY   |   |  |  |   |
| Wetland Hydrology Indicators:   |   |  |  | ators (minimum of two required)   |
| Primary Indicators (minimum of one is  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 Image | Water-Stained Aquatic Fauna Aquatic Fauna Marl Deposits ( Hydrogen Sulfic Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Surf | (B13) B15) de Odor (C1) spheres on Living Roots (C3) sduced Iron (C4) duction in Tilled Soils (C6) face (C7) | Drainage Pa Moss Trim L Dry-Season Crayfish Bui Saturation V Stunted or S Geomorphic Shallow Aqu | Lines (B16) Water Table (C2) Frows (C8) Fisible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2) |
| Sparsely Vegetated Concave Su   | rface (B8)  |  | FAC-Neutra   | I Test (D5)   |
| Field Observations:   |   |  |  |   |
| Water Table Present? Yes  | No X Depth (inches) No X Depth (inches) No X Depth (inches)   | ):   | Hydrology Prese  | nt? Yes No X  |
| (includes capillary fringe) Describe Recorded Data (stream gate   |   |  |  |   |
|   |   |  |  | 0.04  |
| Remarks:  |   |  |  |   |

| Tree Stratum (Plot size: 30')  | Absolute | Dominan<br>Species? | t Indicator | Dominance Test worksheet:   |
|--|----------|---------------------|-------------|---|
| 1. Prunus serotina   | 50       | Species             | FACU        | Number of Dominant Species That Are OBL FACW or FAC: 2 (A)  |
|  |          | <del>-</del>        |             | That Are OBL, FACW, or FAC: (A)   |
| 2. Betula aughaniensis   |          | -/-                 | TAC         | Total Number of Dominant  |
| 3. Buga canadunsis   |          | 1                   | FACUL       | Species Across All Strata: (B)  |
| 4. ALEY MUDIUM   | 10       | N                   | FAC         | Percent of Dominant Species   |
| 5  |          |                     |             | That Are OBL, FACW, or FAC: 28% (A/B)   |
| 6  |          |                     |             | Prevalence Index worksheet:   |
| 7  |          |                     |             | Total % Cover of: Multiply by:  |
|  | 100      | = Total Co          | ver         | OBL species   |
| Sapling/Shrub Stratum (Plot size: 15')   | -        |                     |             | FACW species 0 x 2 = 0  |
| 1 Fagus grandifoira  | 50       | Y                   | FALL        | FAC species x3 = 145  |
| 2 ACEN OFTENOIDES  | 10       | N                   | WPL         | FACU species 135 x4= 540  |
| in the state of th | 10       | 100                 |             | UPL species   |
| 3. After rubrum  | 11)      | 101                 | FAC         | Column Totals: 200 (A) 755 (B)  |
| 4. Tsuga canodensis  | 5_       | 11                  | FALL        | Prevalence Index = B/A = 3.77   |
| 5  |          |                     |             |   |
| 6  |          |                     |             | Hydrophytic Vegetation Indicators:  |
| 7  | -        | _                   |             | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | 15       | = Total Co          | ver         | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5)  |          |                     |             | 3 - Prevalence Index is ≤3.01   |
| 1. Foous aranditalia   | 16       | M                   | FACU        | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
| TSIM ANYMONSIS   |          | V                   | FALU        | Problematic Hydrophytic Vegetation¹ (Explain)   |
| - Outous allegiancis   |          | -                   |             |   |
| 3 Kubus allegneniensis   | -2-      |                     | FACU        | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. VIDUCOUM dentatum   | -5       |                     | FAL         |   |
| 5  |          |                     |             | Definitions of Vegetation Strata:   |
| 6  |          |                     |             | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7  |          |                     |             | at breast height (DBH), regardless of height.   |
| 8  |          |                     |             | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 9  |          |                     |             | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10   |          |                     |             | Herb - All herbaceous (non-woody) plants, regardless of   |
|  |          | -                   |             | size, and woody plants less than 3.28 ft tall.  |
| 11   | -        | -                   |             | Woody vines - All woody vines greater than 3.28 ft in   |
| 12   | 75       |                     |             | height.   |
| 2.1  | 63       | = Total Co          | over        |   |
| Woody Vine Stratum (Plot size: 30')  |          |                     |             |   |
|  |          |                     |             | A.A. A.A.   |
| 1. not Applicable  |          |                     |             | Hydrophytic<br>Vegetation   |
| 1  |          |                     |             |   |
|  |          |                     |             | Present? Yes No _X  |
|  | _        |                     |             | Present? Yes No   |
|  |          | = Total Co          | nver -      | Present? Yes No   |

| (inches)                    | Matrix<br>Color (moist)              | %          | Color (moist)                  | x Features<br>% | 3                 |                 | n the absence of ind        |  |
|-----------------------------|--------------------------------------|------------|--------------------------------|-----------------|-------------------|-----------------|-----------------------------|--|
| 0-2"                        |                                      | -          | 1 1: Her laye                  |                 | Type <sup>1</sup> | _Loc-           | Texture                     | Remarks  |
| 0"-3"                       | IOYRULY                              |            | 11.110 10ge                    |                 |                   | -               | SIL                         |  |
| 3"-6"                       | logrably                             |            |                                | F 6.            |                   |                 | SIL                         | 9 9 mm   |
| 50                          | - rogic and                          |            | 10yrslu                        |                 | 4.1               | m               | 27.C                        |  |
| 112 1                       |                                      |            | 1040311                        | 5%              | 0                 | m               |                             |  |
| 5-20"                       | 10gRH14                              | 100        |                                | -               |                   |                 | SIL                         |  |
| <u> </u>                    |                                      |            |                                |                 |                   |                 |                             |  |
|                             |                                      | -          |                                |                 |                   |                 | -                           |  |
|                             |                                      |            |                                |                 |                   |                 |                             |  |
|                             |                                      |            |                                |                 |                   |                 |                             |  |
|                             |                                      |            |                                |                 | _                 | -               |                             |  |
|                             |                                      |            |                                |                 |                   |                 |                             |  |
|                             |                                      |            |                                | -               |                   |                 |                             |  |
|                             |                                      |            |                                |                 |                   |                 |                             |  |
| ype: C=Cor<br>ydric Soll In | ncentration, D=Deple                 | etion, RM= | Reduced Matrix, MS             | =Masked S       | Sand Gra          | ins.            | <sup>2</sup> Location: PL=P | ore Lining, M=Matrix.                                  |
| _ Histosol (/               |                                      |            | Polyvalue Below                | (Surface (      | 20\ /I DD         |                 |                             | blematic Hydric Soils <sup>3</sup> :                   |
| _ Histic Epip               | pedon (A2)                           |            | MLRA 149B)                     | Surface (S      | 50) (LKR          | rc,             | 2 cm Muck (A1               | (0) (LRR K, L, MLRA 149B)<br>Redox (A16) (LRR K, L, R) |
| _ Black Hist                |                                      |            | Thin Dark Surface              | e (S9) (LR      | RR, ML            | RA 149B)        | 5 cm Mucky Pe               | eat or Peat (S3) (LRR K, L, R)                         |
|                             | Sulfide (A4)<br>Layers (A5)          |            | Loamy Mucky Mi                 | ineral (F1)     | (LRR K,           | L)              | Dark Surface (              | S7) (LRR K, L, M)                                      |
| _ Depleted I                | Below Dark Surface                   | (A11)      | Loamy Gleyed M Depleted Matrix | (F3)            |                   |                 | Polyvalue Belo              | w Surface (S8) (LRR K, L)<br>ace (S9) (LRR K, L)       |
| _ Thick Dark                | k Surface (A12)                      |            | Redox Dark Surf                | face (F6)       |                   |                 | Iron-Manganes               | ace (59) (LRR K, L)<br>se Masses (F12) (LRR K, L, R    |
|                             | cky Mineral (S1)<br>eyed Matrix (S4) |            | Depleted Dark Si               |                 |                   |                 | Piedmont Floor              | dplain Soils (F19) (MLRA 149                           |
| _ Sandy Red                 |                                      | -          | Redox Depression               | ons (F8)        |                   |                 | Mesic Spodic (              | TA6) (MLRA 144A, 145, 149E                             |
| _ Stripped N                | Matrix (S6)                          |            |                                |                 |                   |                 | Red Parent Ma               | iterial (F21)<br>Park Surface (TF12)                   |
| _ Dark Surfa                | ace (S7) (LRR R, ML                  | RA 149B    | 1                              |                 |                   |                 | Other (Explain              |  |
| dicators of h               | ydrophytic vegetatio                 | n and wet  | land hydrology must            | he procent      | unlana            | المساملة المالم |                             |  |
| strictive La                | yer (if observed):                   | Traile Wot | and nydrology must             | be present      | , unless          | aisturpea d     | or problematic.             |  |
| -                           |                                      |            |                                |                 |                   |                 |                             |  |
| Туре:                       |                                      |            |                                |                 |                   |                 |                             |  |
| Type:<br>Depth (inche       | es):                                 |            |                                |                 |                   |                 | Hydric Soil Present         | ? Yes No X   |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County \_\_ Sampling Date: 11 2 15 Project/Site: Ball Hill Wind Project \_\_ Sampling Point: DP- 543 Applicant/Owner: Ball Hill Wind Energy, LLC Section, Township, Range: WILLPHOV Q Investigator(s): B. Virts, M. Bohery Local relief (concave, convex, none): \_\_\_\_\_\_\_ Landform (hillslope, terrace, etc.): H:11stope \_\_ Datum: NAD 83 19.14188 Long: 42.385995 Subregion (LRR or MLRA): LRR-R NWI classification: LPLAND Soil Map Unit Name: (MI HT UMI) Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No\_ Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes \_\_\_\_ No X Hydrophytic Vegetation Present? Yes \_\_\_\_ No X within a Wetland? Yes \_\_\_\_ No \* Hydric Soll Present? If yes, optional Wetland Site ID:\_ Yes \_\_\_\_ No \* Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) \_\_\_ Aquatic Fauna (B13) Moss Trim Lines (B16) \_\_\_ High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) \_\_\_ Saturation (A3) \_ Marl Deposits (B15) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) \_\_ Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Iron Deposits (B5) \_\_\_ Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No \_X Depth (inches): Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes \_\_\_ No \_X No ¥\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')  1. Drunus Seroting | Absolute<br>% Cover | Dominant<br>Species? |      | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                              |
|---|---------------------|----------------------|------|--|
| 2. Acer soccharinary                              | Z0121               | ) A                  | FALU | Total Number of Dominant Species Across All Strata:  (B)   |
| 4<br>5  |                     |                      |      | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 6<br>7  |                     |                      |      | Prevalence Index worksheet:  |
|   | 50                  | = Total Co           | ver  | OBL species x1 = 0   |
| Sapling/Shrub Stratum (Plot size: 15')            |                     | × 1                  |      | FACW species x 2 = 0   |
| 1. Accer saccharinum                              | 40                  |                      | FACU | FAC species D x3 = 0<br>FACU species 180 x4 = 120  |
| 2. Prunus scroting                                | _30_                |                      | FINI | FACU species 160 x 4 = 126  UPL species x 5 = 0  |
| 3. Faqus grandifolia                              | _5_                 | N                    | FALU | Column Totals: 180 (A) 720 (B)   |
| 5   |                     |                      |      | Prevalence Index = B/A =   |
| 6   |                     |                      | _    | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation                                      |
| 7   | 75                  | = Total Co           | ver  | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 5')                      |                     |                      |      | 3 - Prevalence Index is ≤3.0¹  |
| 1. ACCEY SOLCHOWIND                               | 10                  | Y                    | FALL | <ul> <li>4 - Morphological Adaptations¹ (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| 2. Prunos serotina                                | 5                   | X                    | FALL | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Fagus granditolia                              | 5                   | V                    | EALL |  |
| 4. RUOUS INQUES                                   | 5                   | y                    | FAW  | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                  |
| 5   |                     |                      |      | Definitions of Vegetation Strata:  |
| 6   |                     |                      |      | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.               |
| 78  |                     |                      |      | Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.                  |
| 9   | -                   | -                    |      |  |
| 10  |                     |                      |      | Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.               |
| 11  |                     |                      |      |  |
| 12  |                     | _                    | . —  | Woody vines - All woody vines greater than 3.28 ft in height.  |
| 2.51  | _2.5_               | = Total Co           | ver  |  |
| Woody Vine Stratum (Plot size: 30')               |                     |                      |      |  |
| 1. OUT APPLICABLE                                 | -                   | -                    |      | Hydrophytic  |
| 2,  |                     | -                    |      | Vegetation   |
| 3   |                     | -                    |      | Present? Yes No  |
| 4   | -                   | -                    |      |  |
|   | 1                   | = Total Co           | ver  |  |

| epth   | Matrix               |              |   | x Features  | Timel                    | Loc <sup>2</sup>   | Texture  | Remarks  |
|--|----------------------|--------------|---|---|--------------------------|--------------------|--|--|
| nches)   | Color (moist)        | %            | Color (moist)   | %   | Type                     | _Loc _             | rexture  | Nemarks  |
| >"- <b>18'</b>   | 10y12314             | 80           | 10yr3 3   | 20  | 0                        |                    | SIL  | Auger Refusel  |
|  |                      |              |   |   |                          |                    |  |  |
| Type: C=Cc   | oncentration, D=Depl | etion. RM    | =Reduced Matrix. M  |   | Sand Gr                  |                    | <sup>2</sup> Location  | n: PL=Pore Lining, M=Matrix.   |
| ydric Soil   | Indicators:          | Chort, IXIVI | Polyvalue Belo  |   |                          |                    | Indicators   | s for Problematic Hydric Soils <sup>3</sup> :<br>Muck (A10) (LRR K, L, MLRA 149B)  |
| Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy F Stripped Dark Su | pipedon (A2)         | ILRA 149     | MLRA 149B  Thin Dark Surfa Loamy Mucky I Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress Redox Depress | ) ace (S9) (L Mineral (F1 Matrix (F2 < (F3) rface (F6) Surface (F6) | RR R, M<br>) (LRR F<br>) | LRA 149B)<br>(, L) | Coast 5 cm Dark 5 Polyw Thin I Iron-M Piedn Mesic Red F Very 5 | Prairie Redox (A16) (LRR K, L, R) Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) alue Below Surface (S8) (LRR K, L) Dark Surface (S9) (LRR K, L) Manganese Masses (F12) (LRR K, L, R) nont Floodplain Soils (F19) (MLRA 1498) Parent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks) |
| testrictive  | Layer (if observed): |              |   |   |                          |                    |  |  |
| Type:<br>Depth (in   | ches):               |              |   |   |                          |                    | Hydric Soi   | il Present? Yes NoX  |
|  |                      |              |   |   |                          |                    |  |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Project   |  | City/County; Chautauqu        | a County Sampl               |  |
|--|--|-------------------------------|------------------------------|--|
| Applicant/Owner: Ball Hill Wind Er   |  |                               |                              | npling Point: DP-544   |
| Investigator(s): S.V.RTS,  |  | Section, Township, Range:     |                              |  |
| Landform (hillslope, terrace, etc.):   | Hillslope Loc  | cal relief (concave, convex,  | none): Convey                | Slope (%):   |
| Subregion (LRR or MLRA): LRR-R   |  |                               | 42.386133                    | Datum: NAD 83  |
| Soil Map Unit Name:  | 61 11  | um                            | NVII classification:         | HPLAND   |
| and the second s | and the second s | - /                           | (If no, explain in Remarks   |  |
| Are climatic / hydrologic conditions on  |  |                               |                              | The state of the s |
| Are Vegetation <u> </u>  |  |                               | mal Circumstances" present   |  |
| Are Vegetation <u>NU</u> , Soil <u>NU</u> , o  | · Hydrology <u>~ · · · · · </u> naturally pro  | blematic? (If neede           | d, explain any answers in Re | emarks.)   |
| SUMMARY OF FINDINGS - A  | Attach site map showing  | sampling point loca           | itions, transects, impo      | ortant features, etc.  |
| Hydrophytic Vegetation Present?  | Yes X No   | Is the Sampled Are            | ea L                         |  |
| Hydric Soil Present?   | Yes × No   | within a Wetland?             | Yes K                        | •  |
| Wetland Hydrology Present?   | Yes × No   | If yes, optional Wet          | and Site ID: Wetler          | LL A523  |
|  |  |                               |                              |  |
| HYDROLOGY  |  |                               |                              |  |
| Wetland Hydrology Indicators:  |  |                               | Secondary Indicators (m      |  |
| Primary Indicators (minimum of one   | s required; check all that apply)  |                               | Surface Soil Cracks          |  |
| Surface Water (A1)   | Water-Stained  | Leaves (B9)                   | Drainage Patterns (          |  |
| High Water Table (A2)  | Aquatic Fauna  | (B13)                         | Moss Trim Lines (B           |  |
| X Saturation (A3)  | Marl Deposits  | (B15)                         | Dry-Season Water             |  |
| Water Marks (B1)   | Hydrogen Sulfi   |                               | Crayfish Burrows (C          |  |
| Sediment Deposits (B2)   |  | ospheres on Living Roots (C   |                              | n Aerial Imagery (C9)  |
| Drift Deposits (B3)  | The state of the s | educed Iron (C4)              | Stunted or Stressed          |  |
| Algal Mat or Crust (B4)  |  | eduction in Tilled Soils (C6) |                              |  |
| Iron Deposits (B5)   | Thin Muck Sun  |                               | Shallow Aquitard (D          |  |
| Inundation Visible on Aerial Ima   |  | in Remarks)                   | Microtopographic R           |  |
| Sparsely Vegetated Concave S   | ırface (B8)  |                               | FAC-Neutral Test (I          | J5)  |
| Field Observations:  | V  | Ç                             |                              |  |
| Surface Water Present? Yes   |  |                               |                              |  |
|  | No _× Depth (inches  |                               |                              | es X No  |
| (includes capillary fringe)  | No Depth (inches   |                               | nd Hydrology Present? Y      | es No  |
| Describe Recorded Data (stream ga  | uge, monitoring well, aerial phot  | os, previous inspections), it | favailable:                  |  |
|  |  |                               |                              |  |
| Remarks:   |  |                               |                              |  |
| Remarks.   |  |                               |                              |  |
|  |  |                               |                              |  |
| li de la companya de  |  |                               |                              |  |
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| Y .  |  |                               |                              |  |
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|  |  |                               |                              |  |
|  |  |                               |                              |  |
|  |  |                               |                              |  |
|  |  |                               |                              |  |

### VEGETATION - Use scientific names of plants.

| Tree Stratum (Plot size: 30')  1. not Applicable                                    | % Cover | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)  |
|---|---------|----------------------|--------|--|
| 2   |         |                      |        | Total Number of Dominant Species Across All Strata: (B)  |
| 4   |         |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 6.<br>7.  |         |                      |        | Prevalence Index worksheet:  |
|   |         | = Total Co           | ver    |  |
| Sapling/Shrub Stratum (Plot size: 15')  1. 007 APPL: ccble  2. 3.                   |         |                      |        | FACW species       x 2 =         FAC species       x 3 =         FACU species       x 4 =         UPL species       x 5 =         Column Totals:       (A)   |
| <b>4</b>  |         |                      |        | Prevalence Index = B/A =   |
| 6   | -       |                      |        | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
| -/  | _ 0     | = Total Co           | ver    | X 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5)  1. Euthamia granninifolio  2. Symphytrichum phosum  3. |         |                      |        | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)     Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 5   |         |                      |        | Definitions of Vegetation Strata:  |
| 6   |         |                      |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 7   |         | -                    |        | Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9   |         |                      |        | Herb - All herbaceous (non-woody) plants, regardless of  |
| 11  |         |                      |        | size, and woody plants less than 3.28 ft tall.   |
| 12  |         |                      |        | Woody vines - All woody vines greater than 3.28 ft in height.  |
| Woody Vine Stratum (Plot size: 30')  1. DOT APP): Cuble                             | 100     | = Total Co           | ver    |  |
| 2.  | -       |                      |        | Hydrophytic  |
| 3.  |         |                      |        | Vegetation Present? Yes X No   |
| 4   |         |                      |        |  |
|   | 0       | = Total Co           | ver    |  |

| epth Matrix  | Redox Features   |   |
|--|--|---|
| nches) Color (moist) %   |  | Texture Remarks   |
| "-8" 2.54311 9   | 5 logeste 5 c m  | STL   |
|  |  |   |
|  |  |   |
| ype: C=Concentration, D=Depletion  | RM=Reduced Matrix, MS=Masked Sand Grains.              | <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :   |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A1 Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA) | <ul><li></li></ul>                                     | <ul> <li>2 cm Muck (A10) (LRR K, L, MLRA 149B)</li> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L, R)</li> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 149B)</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 149B)</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul> |
|  | nd wetland hydrology must be present, unless disturbed | or problematic.   |
| estrictive Layer (if observed):  Type:  Depth (inches):  |  | Hydric Soil Present? Yes No   |
| emarks:  |  |   |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 11/03/15   |
|--|--|
| Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC                               | City/County: Chautauqua County Sampling Date: 170-71   |
|  |  |
| nvestigator(s): M BOBERG S. BUCKENMEYE   |  |
| 그리고 없는 그 그 집에 하는 사람들이 어떻게 되었다. 나는 사람들이 없는 사람들이 얼마나 아니라 나를 보고 있다. 그는 그리고 있다.                                    | ocal relief (concave, convex, none): CONCAVE Slope (%): Z  |
| subregion (LRR or MLRA): LRR-R Lat: 79.14  | 4888 Long: 42. 387294 Datum: NAD 83  |
| oil Map Unit Name: <u>BUSTI SILT LOAM</u>  | NWI classification: LLQ1000  |
| re climatic / hydrologic conditions on the site typical for this time of y                                     | year? Yes No (If no, explain in Remarks.)  |
| re Vegetation <u>Mo</u> , Soil <u>Mo</u> , or Hydrology <u>Mo</u> significantl                                 |  |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydrology <u>NO</u> naturally p                                  | . 6이 교육으로 하다 하면 그 이번 그를 사용하면 열심하게 되었다면 되었다면 되었다면 모든 것이 되었다면 하는 것이 되었다면 하는데 하는데 하는데 되었다면 하는데 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면  |
|  |  |
| SUMMARY OF FINDINGS – Attach site map showin   | ng sampling point locations, transects, important features, etc  |
| Hydrophytic Vegetation Present? Yes No   | Is the Sampled Area  |
| Hydric Soil Present? Yes No  | within a Wetland? Yes X No   |
| Wetland Hydrology Present? Yes X No  | If yes, optional Wetland Site ID: WV - ASCA  |
| Remarks: (Explain alternative procedures here or in a separate rep   | port.)   |
|  |  |
|  |  |
|  |  |
| IYDROLOGY  |  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all that apply   |  |
|  | d Leaves (B9) X Drainage Patterns (B10)  |
| High Water Table (A2) Aquatic Faun   |  |
| X Saturation (A3) Mari Deposits  | 10000 D.11000 D.2000 P.2000 P. |
|  | ulfide Odor (C1) Crayfish Burrows (C8)   |
|  | zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)   |
|  | Reduced Iron (C4) Stunted or Stressed Plants (D1)  |
|  | Reduction in Tilled Soils (C6) Geomorphic Position (D2)  |
| Iron Deposits (B5) Thin Muck St  | 등 이 등 전에 이번 보고 있는 것이 되었다. 그 전에 가는 그리고 있다면 보고 있다. 그리고 있다. 그리고 있다면 보고 있다면  |
| <ul> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> </ul> | in in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)  |
| Field Observations:  |  |
| Surface Water Present? Yes No _X Depth (inche  | es):   |
| Water Table Present? Yes No _X Depth (inche  |  |
| Saturation Present? Yes X No Depth (inche  |  |
| (includes capillary fringe)  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial pho  | otos, previous inspections), if available:   |
|  |  |
| Remarks:   |  |
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| Tree Stratum (Plot size: 30')  1. NOT ADDICABLE               | % Cover                | Dominant In Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:   |
|---|------------------------|----------------------|--------|---|
| 2   |                        |                      |        | Total Number of Dominant Species Across All Strata: 2 (B)   |
| 4   |                        |                      | =      | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 6. <u> </u>   |                        |                      |        | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: 151)  1. NOT Appli(aple) 2. | _\delta_               |                      |        | OBL species   |
| 3   |                        |                      |        | Column Totals: (A) (B)  |
| 5   |                        | = Total Cover        |        | Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50% |
| Herb Stratum (Plot size: 51)                                  | 15                     |                      |        | 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting  |
| 2. Onoclea sensibilis   | <u>45</u><br><u>30</u> | 11                   | FACW   | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Agrostis stolonitera<br>4. Scirpus cyperinas               | 5                      |                      | DBL    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.                   |
| 5. Carex flava<br>6. Juncus effusus                           | 5                      | -                    | OBL    | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7. Epilobium ciliatum<br>8.                                   | _5_                    | N_t                  | FACW   | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH                                     |
| 9   |                        |                      |        | and greater than or equal to 3.28 ft (1 m) tall.  Herb - All herbaceous (non-woody) plants, regardless of                           |
| 11  |                        |                      |        | size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height.                       |
| Woody Vine Stratum (Plot size: 30 / )  1. NOT ADDICABLE       | _100                   | = Total Cover        |        |   |
| 23  |                        | -                    |        | Hydrophytic Vegetation Present? Yes No  |
| 4   |                        | = Total Cove         |        |   |
| Remarks: (Include photo numbers here or on a separate         | sheet.)                |                      |        |   |
|   |                        |                      |        |   |
|   |                        |                      |        |   |
|   |                        |                      |        |   |

| Depth  | Matrix Color (majet)   | 0/         | Color (moist)                                   | Feature:   | Type <sup>1</sup>           | Loc <sup>2</sup> | Texture   | Remarks   |
|--|--|------------|---|--|-----------------------------|------------------|---|---|
| inches)  | 3.5 y 3/1  | 95         | 104R 5/4  |  | Туре                        | M                | SiL   | Nomarko   |
| 7-5  |  |            | 10/10/6   | -  | -                           | 1                | SiL   |   |
| 1-8  | 2.5 y 3//  | 85         | 101K2/8   | 5  | -                           | 14               |   |   |
|  | _  |            | 2.5y 4/1  | 5  | -                           | <u>M</u>         | SiL _   |   |
|  |  |            | 2.54B 3/4                                       | 5  |                             | _M_              | <u>Sil</u> _  |   |
|  |  |            |   |  |                             |                  |   |   |
| ydric Soil<br>Histoso  | Indicators:  | pletion, R | M=Reduced Matrix, MS Polyvalue Belov MLRA 149B) | v Surface  |                             |                  | Indicators for F  | Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R)  |
| Black H Hydrog Stratifie Deplete Thick D Sandy I Sandy I Strippe Dark St | listic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa eark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, | MLRA 14    |   | Mineral (F<br>Matrix (F2<br>(F3)<br>face (F6)<br>Surface (I<br>ions (F8) | 1) (LRR P<br>2)<br>)<br>=7) | <b>(, L</b> )    | Dark Surface Polyvalue E Thin Dark S Iron-Manga Piedmont F Mesic Spool Red Parent Very Shallo Other (Expl | Peat or Peat (S3) (LRR K, L, R) Pe (S7) (LRR K, L, M) Pe (S7) (LRR K, L, M) Pe (S9) (LRR K, L) Perface (S9) (LRR K, L, R) Perface (S9) (MLRA 149B) Perface (TA6) (MLRA 144A, 145, 149B) Perface (TA6) (MLRA 144A, 145, 149B) Perface (TF12) Perface (TF12) Perface (TF12) |
|  | of hydrophytic veget<br>Layer (if observed   |            | wetland hydrology mus                           | t be pres  | ent, unles                  | s disturbed      | or problematic.   |   |
| Type:<br>Depth (ir   |  | ,          | -   |  |                             |                  | Hydric Soil Pres  | sent? Yes X No  |
|  |  |            |   |  |                             |                  |   |   |

|  | RMINATION DATA FOR                |                             |   |                           |  |
|--|-----------------------------------|-----------------------------|---|---------------------------|--|
| Project/Site: Ball Hill Wind Project   |                                   | County: Chautauqua          |   | pling Date: 11/03/15      |  |
| Applicant/Owner: Ball Hill Wind Energy,  |                                   |                             |   | ampling Point: DP- 54-0   |  |
| nvestigator(s): M. Boberg , S. Bu  | ickenmeyer sect                   | ion, Township, Range:       | VILLEROIA   | 1.5                       |  |
| andform (hillslope, terrace, etc.): Hills  | Local re                          | elief (concave, convex, no  | ne): Con cave                                     | Slope (%): 1-3            |  |
| Subregion (LRR or MLRA): LRR-R   | Lat: 79, 14509                    |                             |   | Datum: NAD 83             |  |
|  | silt Loam                         |                             | NWI classification:                               | upland                    |  |
| Are climatic / hydrologic conditions on the site   |                                   | Van X Na                    |   |                           |  |
|  | V                                 |                             | Circumstances" preser                             |                           |  |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydro   |                                   |                             |   |                           |  |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydro   | logy <u>N</u> O naturally problem | natic? (If needed,          | explain any answers in f                          | Remarks.)                 |  |
| SUMMARY OF FINDINGS - Attack   | h site man showing sar            | mpling point location       | ons, transects, im                                | portant features, etc.    |  |
| COMMAN OF THE MOST ALLOW   | i one map eneming our             |                             |   |                           |  |
| Hydrophytic Vegetation Present?  | es No X                           | Is the Sampled Area         | Yes   | No X                      |  |
| Try and delice to the control  | es No XBV                         | within a Wetland?           | res   | 10 2                      |  |
|  | es No X                           | If yes, optional Wetlan     | d Site ID:  |                           |  |
| Remarks: (Explain alternative procedures h   | nere or in a separate report.)    |                             |   |                           |  |
| HYDROLOGY<br>Wetland Hydrology Indicators:   |                                   |                             |   | (minimum of two required) |  |
| Primary Indicators (minimum of one is requ   | ired; check all that apply)       |                             | Surface Soil Crack                                |                           |  |
| Surface Water (A1)   | Water-Stained Leav                | Drainage Patterns (B10)     |   |                           |  |
| High Water Table (A2)  | Aquatic Fauna (B13                |                             | Moss Trim Lines (B16) Dry-Season Water Table (C2) |                           |  |
| Saturation (A3)  | Mari Deposits (B15)               |                             | Dry-season wate                                   |                           |  |
| Water Marks (B1) Sediment Deposits (B2)  | Hydrogen Sulfide O                | eres on Living Roots (C3)   |   | on Aerial Imagery (C9)    |  |
| Drift Deposits (B3)  | Presence of Reduce                |                             | Stunted or Stress                                 |                           |  |
| Algal Mat or Crust (B4)  |                                   | tion in Tilled Soils (C6)   | Geomorphic Posit                                  | ion (D2)                  |  |
| Iron Deposits (B5)   | Thin Muck Surface                 | (C7)                        | Shallow Aquitard                                  |                           |  |
| Inundation Visible on Aerial Imagery (E  | 37) Other (Explain in Re          | emarks)                     | Microtopographic                                  |                           |  |
| Sparsely Vegetated Concave Surface   | (B8)                              |                             | FAC-Neutral Test                                  | (D5)                      |  |
| Field Observations:  |                                   |                             |   |                           |  |
| Land and the state of the state | No Depth (inches):                |                             |   |                           |  |
| Water Table Present? Yes   |                                   | January V                   | adament at  | Yes No X                  |  |
| Saturation Present? Yes<br>(includes capillary fringe)   | No Depth (inches):                | Wetland                     | Hydrology Present?                                | YesNo                     |  |
| Describe Recorded Data (stream gauge, m  | nonitoring well, aerial photos, p | revious inspections), if av | /ailable:   |                           |  |
|  |                                   |                             |   |                           |  |
| 8  |                                   |                             | 0   |                           |  |
| Remarks:   |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |
|  |                                   |                             |   |                           |  |

| Absolute % Cover 50 20 10 10 5 |            | FACU FACU FACU FACU FACU | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata:  (A) |
|--------------------------------|------------|--------------------------|---|
| 20                             | -          | FACU<br>FACU             | That Are OBL, FACW, or FAC: (A)  Total Number of Dominant   |
| 10                             | -          | FACU<br>FACU             | Total Number of Dominant  |
| 10                             | -          | FACU                     |   |
|                                | -          |                          |   |
| 5                              | N          |                          |   |
|                                |            |                          | Percent of Dominant Species That Are OBL, FACW, or FAC: 20 (A/B   |
|                                | -10        | _ FACUL                  | That All Obe, 17(0), 517(0).  |
|                                |            |                          | Prevalence Index worksheet:   |
| -                              | -          |                          | Total % Cover of: Multiply by:  |
| 95                             | = Total Co | over                     | OBL species x 1 =   |
|                                | 102        |                          | FACW species x 2 =  |
| 10                             | X          | FALL                     | FAC species 15 x 3 = 45   |
| 5                              | Y          | FACU                     | FACU species 100 x 4 = 400  |
|                                | -          |                          | UPL species x 5 =   |
|                                | -          |                          | Column Totals: 115 (A) 445 (B)  |
|                                |            |                          | Prevalence Index = B/A = 3.8(p)   |
|                                | -          | -                        |   |
|                                | <u> </u>   |                          | Hydrophytic Vegetation Indicators:  |
|                                |            |                          | 1 - Rapid Test for Hydrophytic Vegetation   |
| 15                             | = Total C  | over                     | 2 - Dominance Test is >50%  |
|                                |            |                          | 3 - Prevalence Index is ≤3.01   |
| .5                             | У          | FAC                      | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)                                      |
|                                |            |                          | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
|                                |            |                          |   |
|                                |            |                          | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
|                                | -          |                          | 5-1-1-1   |
|                                |            |                          | Definitions of Vegetation Strata:   |
|                                |            |                          | Tree - Woody plants 3 in. (7.6 cm) or more in diamete   |
|                                |            |                          | at breast height (DBH), regardless of height.   |
|                                |            |                          | Sapling/shrub – Woody plants less than 3 in. DBH  |
|                                |            |                          | and greater than or equal to 3.28 ft (1 m) tall.  |
|                                |            |                          | Herb - All herbaceous (non-woody) plants, regardless of   |
|                                |            |                          | size, and woody plants less than 3.28 ft tall.  |
|                                | -          | 7                        | Woody vines - All woody vines greater than 3.28 ft in   |
| -                              | - Jacobs   |                          | height.   |
|                                | = Total C  | over                     |   |
|                                |            |                          |   |
|                                |            |                          | 0.00.4.0.0  |
|                                |            |                          | Hydrophytic Vegetation  |
|                                |            |                          | Present? Yes No   |
|                                |            |                          |   |
| 0                              | = Total C  | over                     |   |
|                                | - Total C  | OVOI                     |   |
| ,,,,                           |            |                          |   |
|                                |            |                          |   |
|                                |            |                          |   |
|                                |            |                          |   |
|                                |            |                          |   |
|                                |            |                          |   |
|                                |            |                          | 5 Y FACU  IS = Total Cover  5 Y FAC  ———————————————————————————————————  |

| Depth (inches) Color (mois Col | st) % /3 100 /4 90       | Color (moist)  IOVR 5 H  M=Reduced Matrix, M |                                       | <u>M</u>      | SIL.  | Remarks  |
|--|--------------------------|--|---------------------------------------|---------------|---|--|
| 1Type: C=Concentration, D: Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3)  | 1/2 90                   | M=Reduced Matrix, M                          |                                       |               | SiL   |  |
| ¹Type: C=Concentration, D: Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3  |                          | M=Reduced Matrix, M                          |                                       |               |   |  |
| Type: C=Concentration, D: Hydric Soil Indicators: Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3  |                          | M=Reduced Matrix, M                          |                                       |               |   |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 2)  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 21  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1  | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 2)  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1  | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 21  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 2)  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains,       | 2)  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 2)  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 2) Di _Dozalia  |  |
| Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark S  Thick Dark Surface (A1)  Sandy Mucky Mineral (3)  | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 21  |  |
| Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark S  Thick Dark Surface (A1)  Sandy Mucky Mineral (3)  | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 21 ti Di Dana Li  |  |
| Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark S  Thick Dark Surface (A1)  Sandy Mucky Mineral (3)  | D=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | Grains.       | 21 1 D1 - D2 1 ii                                       |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3   | J=Depletion, RI          | Polyvalue Belov                              | S=Masked Sand (                       | orains.       |   | ning M-Matrix  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3  |                          |  |                                       |               | <sup>2</sup> Location: PL=Pore Lindicators for Problems |  |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (3  |                          |  | w Surface (S8) (L                     | RR R,         |   | RR K, L, MLRA 149B)                                    |
| Hydrogen Sulfide (A4)     Stratified Layers (A5)     Depleted Below Dark S     Thick Dark Surface (A1     Sandy Mucky Mineral (S   |                          | MLRA 149B                                    | )                                     |               |   | (A16) (LRR K, L, R)                                    |
| Stratified Layers (A5) Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (  |                          |  | ace (S9) (LRR R,<br>Mineral (F1) (LRR |               | 5 cm Mucky Peat or<br>Dark Surface (S7) (I              | Peat (S3) (LRR K, L, R)                                |
| Depleted Below Dark S Thick Dark Surface (A1 Sandy Mucky Mineral (   |                          | Loamy Gleyed                                 |                                       | . K, L)       |   | rface (S8) (LRR K, L)                                  |
| Sandy Mucky Mineral (  | Surface (A11)            | Depleted Matrix                              | x (F3)                                |               | Thin Dark Surface (                                     |  |
|  |                          | Redox Dark Su                                |                                       |               |   | isses (F12) (LRR K, L, R)<br>n Soils (F19) (MLRA 149B) |
|  |                          | Depleted Dark Redox Depress                  |                                       |               |   | (MLRA 144A, 145, 149B)                                 |
| Sandy Redox (S5)   | (0.1)                    |  | (1 -)                                 |               | Red Parent Material                                     | l (F21)  |
| Stripped Matrix (S6)   | 33/21/21/3               |  |                                       |               | Very Shallow Dark S                                     |  |
| Dark Surface (S7) (LRF   | RR R, MLRA 14            | 9B)  |                                       |               | Other (Explain in Re                                    | emarks)  |
| 3Indicators of hydrophytic ve  | egetation and            | wetland hydrology mus                        | st be present, unl                    | ess disturbed | or problematic.   |  |
| Restrictive Layer (if obser  | erved):                  |  |                                       |               |   | 2  |
| Type:  |                          | _  |                                       |               | 11 11 0 11 0  | Yes No X   |
| Depth (inches):Remarks:  | Automotive to the second | -  |                                       |               | Hydric Soil Present?                                    | Yes No No No   |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. Boberg S. Buckenmetier Section, Township, Range: VILLEROUP Landform (hillslope, terrace, etc.): DXDDV /+10010/a(n) Local relief (concave, convex, none): CONPOVE Slope (%): Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: 79.145543 Long: 42.3884 \_\_\_\_ NWI classification: UDICITY Soil Map Unit Name: Chautaugua Silt Loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_ Y No\_ Are Vegetation Mh., Soil Mu, or Hydrology Mh. significantly disturbed? Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) X Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) \_\_ Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) \_\_ Mari Deposits (B15) X Saturation (A3) \_\_ Crayfish Burrows (C8) \_ Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): D'- I'' Surface Water Present? Yes X No \_\_\_\_ Depth (inches): () 1 Water Table Present? Wetland Hydrology Present? Yes \_ Yes X No Depth (inches): ()1 Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| over                 | Dominant    | Indiantas  |   |
|----------------------|-------------|--|---|
|                      | Consise?    | Status   | Dominance Test worksheet:   |
|                      |             |  | Number of Dominant Species  |
|                      |             |  | That Are OBL, FACW, or FAC: (A)   |
|                      | -           |  | Total Number of Dominant  |
|                      |             |  | Species Across All Strata: 3 (B)  |
|                      |             |  |   |
|                      |             |  | Percent of Dominant Species That Are OBL FACW or FAC: (A/B)   |
|                      |             |  | That Are OBL, FACW, or FAC: (A/B)   |
|                      |             |  | Business forest and the base  |
|                      |             |  | Prevalence Index worksheet:   |
| $\overline{\Lambda}$ | -           |  | Total % Cover of: Multiply by:  |
| <u></u>              | = Total Cov | er   | OBL species x 1 =   |
|                      |             |  | FACW species x 2 =  |
| 0                    | Y           | FACU   | FAC species x 3 =   |
| 5                    | -           |  | FACU species x 4 =  |
|                      | 1           |  | UPL species x 5 =   |
|                      | N           | FACU   |   |
|                      |             |  | Column Totals: (A) (B)  |
|                      |             |  | Prevalence Index = B/A =  |
| _                    |             |  | 1 I O A SI DILI -   |
|                      |             |  | Hydrophytic Vegetation Indicators:  |
|                      |             | -  | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7                    | 120000      |  | ✓ 2 - Dominance Test is >50%  |
| 0                    | = Total Cov | er   | 3 - Prevalence Index is ≤3.0¹   |
|                      |             | 100  |   |
| )                    | У           | FACW   | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| _                    | V           |  | Problematic Hydrophytic Vegetation¹ (Explain)   |
| _                    | -/-         |  | Problematic Hydrophytic Vegetation (Explain)  |
|                      | N           |  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must   |
|                      | N           | FACW   | be present, unless disturbed or problematic.  |
|                      | N           | the state of the s | Definitions of Vegetation Strata:   |
| _                    | 10          | DOL  | Dominion of Togotation of atta.   |
|                      |             |  | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
|                      |             |  | at breast height (DBH), regardless of height.   |
|                      |             |  | Sapling/shrub - Woody plants less than 3 in, DBH  |
|                      |             |  | and greater than or equal to 3.28 ft (1 m) tall.  |
|                      |             |  |   |
|                      |             |  | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.                        |
|                      |             |  | size, and woody plants less than 3.28 it tall.  |
| _                    |             |  | Woody vines - All woody vines greater than 3.28 ft in   |
| _                    |             |  | height.   |
| 0                    | = Total Cov | er   |   |
|                      |             |  |   |
|                      |             |  |   |
|                      |             |  | Landar Control  |
|                      |             |  | Hydrophytic<br>Vegetation   |
|                      |             |  | Present? Yes X No   |
|                      |             |  |   |
| _                    |             | -  |   |
| 1                    | = Total Cov | er   |   |
|                      |             | O = Total Cov  | N FACU N FACU N FACU N OBL N OBL  |

| Depth  |  | o the de  | oth needed to docu   | x Feature   |                                    | or commit         | ino apponio  |  |
|--|--|-----------|--|---|------------------------------------|-------------------|--|--|
| (inches)   | Matrix<br>Color (moist)  | %         | Color (moist)  | %   | Type <sup>1</sup>                  | _Loc <sup>2</sup> | Texture  | Remarks  |
| 0-6  | 2.542.5/1  | 95        | 104R5/8  | 5   | C                                  | M                 | SIL  | gravely  |
| <sup>1</sup> Type: C=Co<br>Hydric Soil I<br>— Histosol<br>— Histic Ep<br>— Black Hi<br>— Hydroge<br>— Stratified<br>— Depleted   | oncentration, D=Deplindicators: (A1) olipedon (A2) stic (A3) in Sulfide (A4) I Layers (A5) I Below Dark Surface                            | etion, RM | 1=Reduced Matrix, M  — Polyvalue Belo  MLRA 149E  — Thin Dark Surf  — Loamy Mucky  — Loamy Gleyed  — Depleted Matrix | S=Masked  w Surface  s) ace (S9) (I Mineral (F2 Matrix (F3) | (S8) (LRI<br>LRR R, M<br>1) (LRR K | R R,<br>LRA 149B) | <sup>2</sup> Location Indicators 2 cm Coast 5 cm Dark 5 Polyv Thin D | n: PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils³:  Muck (A10) (LRR K, L, MLRA 149B)  Prairie Redox (A16) (LRR K, L, R)  Mucky Peat or Peat (S3) (LRR K, L, R)  Surface (S7) (LRR K, L, M)  alue Below Surface (S8) (LRR K, L)  Dark Surface (S9) (LRR K, L)  Manganese Masses (F12) (LRR K, L, R) |
| _ Thick Da<br>_ Sandy M<br>_ Sandy G<br>_ Sandy R<br>_ Stripped  | d Below Dark Surface<br>ark Surface (A12)<br>lucky Mineral (S1)<br>Bleyed Matrix (S4)<br>dedox (S5)<br>Matrix (S6)<br>rface (S7) (LRR R, N |           | Redox Dark Some Depleted Dark Redox Depres   | urface (F6)<br>Surface (I                                   |                                    |                   | Iron-N<br>Piedm<br>Mesic<br>Red F<br>Very S                          |  |
| CONTRACTOR AND ADDRESS OF THE PARTY OF THE P |  |           | etland hydrology mu  | st be pres  | ent, unles                         | s disturbed       | or problemati  | C.   |
|  | _ayer (if observed):   |           |  |   |                                    |                   |  |  |
| Type:<br>Depth (inc  | ches):   |           | -  |   |                                    |                   | Hydric Soi   | I Present? Yes X No  |
| Remarks:   | refusal at   | 6         | inches.  |   |                                    |                   |  |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region \_\_\_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: 11/D4 \_ Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. BODETG S. BUCKERMEURL Section, Township, Range:\_ Landform (hillslope, terrace, etc.): Hills1002 Local relief (concave, convex, none): \_ Datum: NAD 83 9.145482 \_\_ Long:\_ Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: Chautaunua SIIT Loam NWI classification:\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes X (If no, explain in Remarks.) Are Vegetation No. Soil No. or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No., Soil No., or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? No USA within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Drainage Patterns (B10) Water-Stained Leaves (B9) X Surface Water (A1) Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) Saturation (A3) Marl Deposits (B15) Crayfish Burrows (C8) Water Marks (B1) Hydrogen Sulfide Odor (C1) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Depth (inches): ()-7" Surface Water Present? \_\_\_\_ Depth (inches):()\(\frac{1}{2}\) Water Table Present? Wetland Hydrology Present? Yes Saturation Present? Depth (inches): 1 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| VEGETATION - Ose scientific harries of plants.   |                     | Dominant          | Indicator         | Ownpany Come  |
|--|---------------------|-------------------|-------------------|---|
| Tree Stratum (Plot size: 30')  | Absolute<br>% Cover | Dominant Species? |                   | Dominance Test worksheet:   |
| 1 TSUGA canadonsis   | 40                  | V                 | FACU              | Number of Dominant Species 3  |
|  |                     | 1                 | TO THE VEHICLE OF | That Are OBL, FACW, or FAC: (A)   |
| 2. Acers saccharum   | 20                  | 1                 | FALL              | Total Number of Dominant  |
| 3. Betula aughaniensis   | 10                  | N                 | FAC               | Species Across All Strata: (B)  |
| 4. Fraxinus amoricana  | 10                  | N                 | FALU              | Percent of Dominant Species   |
| 5  |                     |                   |                   | That Are OBL, FACW, or FAC: 37.5 (A/B)  |
| 5  | · · · · ·           | Ÿ                 |                   |   |
| 6  |                     |                   |                   | Prevalence Index worksheet:   |
| 7  |                     |                   |                   | Total % Cover of: Multiply by:  |
|  | 80                  | = Total Cov       | er                | OBL species5 x1 =5  |
| Sapling/Shrub Stratum (Plot size: 5/   |                     |                   |                   | FACW species 10 x2 = ZD   |
| 1. Tsuna conadensis  | 5                   | V                 | FACU              | FAC species 15 x3 = 45  |
|  | =                   | <del>\</del>      | -                 | FACU species 05 x4= 340   |
| 2. Acer saccharum  | 7                   |                   | FACU              | UPL species O x 5 = O   |
| 3. Fraxinus americana  | 5_                  | У                 | FACU              |   |
| 4  | -0-                 |                   |                   |   |
| 7  |                     |                   |                   | Prevalence Index = B/A = 3.56   |
| 5  |                     |                   |                   |   |
| 6  |                     |                   |                   | Hydrophytic Vegetation Indicators:  |
| 7.   |                     |                   |                   | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | 15                  | = Total Cov       | OF.               | 2 - Dominance Test is >50%  |
| CI.  |                     | - Total Oov       | i Gi              | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size:)  | 17                  | 1                 | a-4. 1            | X 4 - Morphological Adaptations (Provide supporting   |
| 1. Onocleg sensibilis  | _/0_                | <u>y</u>          | FA(W)             | data in Remarks or on a separate sheet)   |
| 2. The Lypteris nove baracensas  | 5                   | У                 | FAC               | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 3. Carex flava   | 5                   | V                 | OBI               | Itadicators of hydric cell and westland bydeslany must  |
| s. Curen violed  |                     | -                 | -000              | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4  |                     |                   |                   |   |
| 5  |                     |                   |                   | Definitions of Vegetation Strata:   |
| 6  |                     |                   |                   | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7.   |                     |                   |                   | at breast height (DBH), regardless of height.   |
|  |                     |                   | -                 | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8  |                     |                   |                   | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |                     |                   |                   |   |
| 10   |                     |                   |                   | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11.  |                     |                   |                   | sizo, and woody plans loss than 5,20 it tall.   |
| · · · · · · · · · · · · · · · · · · ·  |                     |                   |                   | Woody vines - All woody vines greater than 3.28 ft in   |
| 12   | 71                  | 4.5               |                   | height.   |
| 201  | _20_                | = Total Cov       | /er               |   |
| Woody Vine Stratum (Plot size: 30')  |                     |                   |                   |   |
| 1. NOT ADDUCABLE   |                     |                   | 0                 |   |
| 2  |                     |                   |                   | Hydrophytic   |
| 2  |                     |                   |                   | Present? Yes X No X MB  |
| 3  |                     |                   | -                 | Present? Yes No   |
| 4  |                     |                   |                   |   |
|  | 0                   | = Total Cov       | ver               |   |
| Remarks: (Include photo numbers here or on a separate  | sheet.)             |                   |                   |   |
| Commence Com |                     |                   |                   |   |
| Trans + Continue   |                     | - 4               |                   |   |
| Trees + Saplings ha  | we a                | doct              | ed to             | living on a   |
| 1 12 11  |                     |                   |                   | - rig   |
| like flutted trients +   | rpho                | 100100            | 1 00              | danta tions   |
| like Author trients  | -1                  | 1.                |                   | -4p (2017)  |
| THE CHILD T  | sha                 | Mous              | 1007              | *C  |
| - Eastern Hemlock "SI  |                     |                   |                   |   |

| Depth   | cription: (Describe to<br>Matrix  | o the depth in |  | x Features  |                       | or commi         | the absence of in  | dicators.)   |
|---|---|----------------|--|---|-----------------------|------------------|--|--|
| (inches)  | Color (moist)   | <u>%</u> C     | olor (moist)   | %   | Type <sup>1</sup>     | _Loc2            | Texture  | Remarks  |
| <u>O-8</u>  | <u>3.57 2.5/1</u>   | 95 <u>a.</u>   | 5YR3/4   | <u>5</u>  | <u></u>               | <u>M</u>         | <u>SIL</u> _   |  |
|   |   |                |  |   |                       |                  |  |  |
|   |   |                |  |   |                       |                  |  |  |
| ¹Type: C=C  | oncentration, D=Deple   | etion, RM=Red  | uced Matrix, M   | S=Masked  | Sand Gra              | ains.            | <sup>2</sup> Location: PL=   | Pore Lining, M=Matrix.   |
| Histosol Histic Ep Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy F Stripped Dark Su | (A1) pipedon (A2) istic (A3) d Layers (A5) d Below Dark Surface ark Surface (A12) flucky Mineral (S1) Bleyed Matrix (S4) Redox (S5) Matrix (S6) rface (S7) (LRR R, ML | (A11) X        | Polyvalue Belon MLRA 149B; Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depress | ) ace (S9) (L dineral (F1 Matrix (F2) ( (F3) rface (F6) Surface (F7 | RR R, ML<br>) (LRR K, | .RA 149B)<br>,L) | 2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Br Thin Dark Sr Iron-Mangar Piedmont Fl Mesic Spodi Red Parent Very Shallov Other (Explain | A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L, M) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) oodplain Soils (F19) (MLRA 149B) c (TA6) (MLRA 144A, 145, 149B) Material (F21) v Dark Surface (TF12) ein in Remarks) |
|   | f hydrophytic vegetatio<br>Layer (if observed):   | on and wetland | hydrology mus  | t be preser   | nt, unless            | disturbed        | or problematic.  |  |
| Type:<br>Depth (inc   |   |                |  |   |                       |                  | Hydric Soil Pres   | ent? Yes X No  |
| Remarks:  |   |                |  |   |                       |                  |  |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_\_ City/County: Chautauqua County Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP-550 Investigator(s): M. Bohero, S. Buckenmuly Section, Township, Range: VILLERUM Landform (hillslope, terrace, etc.): HIII510PE 45244 Long: 42,390496 Subregion (LRR or MLRA): LRR-R \_\_\_ NWI classification: <u>"WIGNO</u> Soil Map Unit Name: Chautagua SIIt Lam Are climatic / hydrologic conditions on the site typical for this time of year? Yes No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil No, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation ND, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? WL-A527 Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) X Drainage Patterns (B10) X Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) \_\_ Aquatic Fauna (B13) Dry-Season Water Table (C2) X Saturation (A3) \_\_ Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) **Field Observations:** Yes X No \_\_\_\_ Depth (inches): 0-1 11 Surface Water Present? Yes X No \_\_\_ Depth (inches): 011 Water Table Present? Yes X No \_\_\_ Depth (inches): O' Wetland Hydrology Present? Yes X No \_\_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| VEGETATION - Use scientific flames of plants   | 4         |             |  | Sampling Cont.   |
|--|-----------|-------------|--|--|
| 201  | Absolute  | Dominant    |  | Dominance Test worksheet:  |
| Tree Stratum (Plot size: 301)  | % Cover   | Species?    | Status   | Number of Dominant Species 2   |
| 1. TSUGO canadensis  | 100       | Y           | FACU   | That Are OBL, FACW, or FAC:  |
|  |           | 61          | and the same of th | That Ale OBL, FACTY, of FAC (A)  |
| 2. Bettola alleghaniensis  | 15_       | 111         | FAC  | Total Number of Dominant   |
| 3. Acer rubrum   | 5         | 11          | FAC  | Species Across All Strata: (B)   |
| 3. Mari Identiti   |           |             |  | Openico / No coo / No con ata.   |
| 4  |           |             |  | Percent of Dominant Species  |
| 6  |           |             |  | That Are OBL, FACW, or FAC: 42 (A/B)   |
| 3  |           |             |  |  |
| 6  |           |             |  | Prevalence Index worksheet:  |
| 4  |           |             |  |  |
| ſ  | DA        |             |  | Total % Cover of; Multiply by:   |
|  | 80        | = Total Cov | /er  | OBL species x1 =   |
| 151  |           |             |  | FACW species x 2 =   |
| Sapling/Shrub Stratum (Plot size: 151  |           |             |  |  |
| 1. Betula alliahaniensis   | 20        | Y           | FAC  | FAC species  |
|  | 10        | V           | 100 To 100 L   | FACU species 80 x4 = 320   |
| 2. TSUGA CANOCIENSIS   | 10        |             | FACU   | Contract to the contract of th |
| 3. Aler rubrum   | 10        | V           | FAC  |  |
|  |           | -1          |  | Column Totals: 130 (A) 495 (B)   |
| 4. Fraxinus americana  | 10        |             | FACU   | 2  |
|  |           |             |  | Prevalence Index = B/A = 3.53  |
| 5  |           |             |  |  |
| 6.   |           |             |  | Hydrophytic Vegetation Indicators:   |
|  |           |             |  | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7  |           |             |  |  |
|  | 50        | = Total Cov | /er  | 2 - Dominance Test is >50%   |
| E1   |           | 1,5300,50   |  | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size:)  |           |             | - 17.0   | 🗴 4 - Morphological Adaptations (Provide supporting  |
| 1. The voter is novelocal ensus  | 5         | У           | FAC  | data in Remarks or on a separate sheet)  |
|  | =         | 1           |  |  |
| 2. Onoclea sensibilis  |           |             | FACW   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
|  |           |             |  | 11-41-4  |
| 3  |           | -           |  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 4  |           |             |  | be present, unless disturbed or problematic.   |
|  |           |             |  | Definitions of Vegetation Strata:  |
| 5  | -         |             | -  |  |
| 6  |           |             |  | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
|  |           |             |  | at breast height (DBH), regardless of height.  |
| 7  |           |             |  |  |
| 8  |           |             |  | Sapling/shrub - Woody plants less than 3 in. DBH   |
| ·-   | . —       | -           |  | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9  |           | -           |  |  |
| 10.  |           |             |  | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10   |           | -           |  | size, and woody plants less than 3.28 ft tall.   |
| 11   |           |             |  |  |
| 42   |           |             |  | Woody vines - All woody vines greater than 3,28 ft in  |
| 12   | · ——      | -           |  | height.  |
| Avea.  | 10        | = Total Co  | ver  |  |
| Woody Vine Stratum (Plot size: 30')  |           |             |  |  |
| vvoody vine Stratum (Plot size:)   |           |             |  |  |
| 1. NOT ADDICADE  |           |             |  |  |
| 1100   |           |             | -  | Hydrophytic  |
| 2  |           |             |  | 11 045500 0 2010 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0   |
| 3.   |           |             |  | Present? Yes X No 3 MB   |
| No.  |           |             |  |  |
| 4  |           |             |  |  |
|  | 0         | = Total Co  | ver  |  |
|  | 1 11      | - Total Co  | 101  |  |
| Remarks: (Include photo numbers here or on a separate  | e sheet.) |             |  |  |
|  |           |             |  |  |
| The state of the s |           |             |  |  |
| TREES + SAPLINGS   | LIAU      | F ADA       | ADTER  | 7. T   |
| 5000   |           | 1101        | IFICL  | 10 LIVING IN A   |
| WETCHNO BY DEVIE   | noin//~   | man         | PHALM  | (1/0) 000  |
| WETCHNO BY DEVEL   | 01-1100   | we          | 710000   | SILAL MUMPIATIONS  |
| LIKE FLUTED TRUNK  | 2         |             |  |  |
|  |           |             |  |  |
| - Eastern Hemlocy  |           |             |  |  |
| - white Ash  |           |             |  |  |
| LOILLY TOY   |           |             |  |  |

| D-8 2.5°   | Matrix or (moist)  A.5/1 | <u>%</u> 90 | Color (moist) 2.5 / 3/2 10 / R 5/8      | 5<br>5     | Type' C C  |              | Texture R   | Remarks  |  |  |
|--|--------------------------|-------------|---|------------|------------|--------------|---|--|--|--|
|  | Y 2.5/I                  | 90          | 25/3/2                                  | 5          |            | M<br>M       |   |  |  |  |
|  |                          |             |   |            | <u>-</u> - | M            | SiL   |  |  |  |
|  |                          |             | 107K b/s                                |            |            |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  |                          |             |   |            | <u></u>    |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  | - 2                      |             |   |            |            |              |   |  |  |  |
|  |                          |             |   | -          |            |              |   |  |  |  |
|  |                          |             |   |            | -          | ************ |   |  |  |  |
|  |                          |             |   | -          |            |              |   |  |  |  |
|  |                          |             |   |            |            |              |   |  |  |  |
|  | -                        |             | *************************************** |            |            |              |   | A  |  |  |
| Type: C=Concentra                                    | tion, D=Dep              | letion, RM  | =Reduced Matrix, M                      | S=Masked   | Sand Gra   | ains.        | <sup>2</sup> Location: PL=Pore Lining   |  |  |  |
| lydric Soil Indicate                                 | rs:                      |             |   |            |            |              | Indicators for Problematic Hydric Soils <sup>3</sup> :                          |  |  |  |
| _ Histosol (A1)                                      |                          |             | Polyvalue Belov                         |            | (S8) (LRF  | R,           | 2 cm Muck (A10) (LRR K, L, MLRA 149B<br>Coast Prairie Redox (A16) (LRR K, L, R) |  |  |  |
| Histic Epipedon (A2)<br>Black Histic (A3)            |                          |             | MLRA 149B;<br>Thin Dark Surfa           |            | RR R MI    | RA 149R)     | 5 cm Mucky Peat or Pe   |  |  |  |
| _ Hydrogen Sulfid                                    |                          |             | Loamy Mucky N                           |            |            |              | Dark Surface (S7) (LRF  |  |  |  |
| _ Stratified Layers                                  |                          |             | Loamy Gleyed                            | Matrix (F2 |            |              | Polyvalue Below Surface   |  |  |  |
| Depleted Below Dark Surface (A11)                    |                          | (A11)       | Depleted Matrix                         |            |            |              | Thin Dark Surface (S9)  |  |  |  |
| Thick Dark Surface (A12)<br>Sandy Mucky Mineral (S1) |                          |             | Redox Dark Su Depleted Dark             |            | 71         |              | Iron-Manganese Masse  |  |  |  |
| Sandy Mucky Milleral (S1) Sandy Gleyed Matrix (S4)   |                          |             | Redox Depress                           |            | 1)         |              | Piedmont Floodplain Some Mesic Spodic (TA6) (MI)                                |  |  |  |
| _ Sandy Redox (S5)                                   |                          |             |   |            |            |              | Red Parent Material (F2   |  |  |  |
| _ Stripped Matrix (S6)                               |                          |             |   |            |            |              | Very Shallow Dark Surface (TF12)  |  |  |  |
| _ Dark Surface (S                                    | 7) (LRR R, N             | ILRA 149    | B)                                      |            |            |              | Other (Explain in Rema  | rks)   |  |  |
| ndicators of hydrop                                  | nytic vegetat            | ion and w   | etland hydrology mus                    | t be prese | nt, unless | disturbed o  | or problematic.   |  |  |  |
| estrictive Layer (if                                 | observed):               |             |   |            |            |              |   | Angeles and Angeles Angeles and Angeles an |  |  |
| Type:  |                          |             |   |            |            |              |   | 1.   |  |  |
| Depth (inches):                                      |                          |             |   |            |            |              | Hydric Soil Present? Yes  | No   |  |  |
| emarks:  |                          |             |   |            |            |              |   | · · · · · · · · · · · · · · · · · · ·  |  |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 1-03-15 State: NY Sampling Point: DP- 551 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. Bobera, S. Buckenmeyer Section, Township, Range: VILLERENTE Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 0-Subregion (LRR or MLRA): LRR-R Lat: 79, 145285 Long: 42,395438 Datum: NAD 83 Soil Map Unit Name: Chautaugua S'11+ Cam NWI classification: Woland Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No\_ Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes \_\_\_\_ No X Hydrophytic Vegetation Present? within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? Yes \_\_\_\_ No X Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Surface Water (A1) \_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) \_\_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) Saturation (A3) \_\_\_ Marl Deposits (B15) \_\_ Crayfish Burrows (C8) \_\_ Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Algal Mat or Crust (B4) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes No X Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_ Yes \_\_\_\_ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 301)                         | Absolute<br>% Cover | Dominant<br>Species? | t Indicator<br>Status | Dominance Test worksheet:   |
|---|---------------------|----------------------|-----------------------|---|
| 1. TSuga canadensis                                   | 50                  | Y                    | FACU                  | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
| 2. Frathus amuricana                                  | 30                  | V                    | FACU                  |   |
| 3. Aler Saccharmaum                                   | 10                  | N                    | FACU                  | Total Number of Dominant Species Across All Strata:  5 (B)  |
|   |                     |                      | TILA                  |   |
| 4   |                     | -                    |                       | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 5   |                     |                      |                       |   |
| 6   |                     | -                    |                       | Prevalence Index worksheet:   |
| 7   | -0-                 | -                    |                       | Total % Cover of: Multiply by:  |
| 101   | 90                  | = Total Co           | ver                   | OBL species   |
| Sapling/Shrub Stratum (Plot size: 151                 |                     |                      |                       | FACW species x 2 =  |
| 1 Fagus grandifolia                                   | 70                  | <u> Y</u>            | FACU                  | FAC species $ZO \times 3 = 100$   |
| 2   |                     | _                    |                       | FACU species 110 x4 = 440   |
| 3   |                     |                      |                       | UPL species $0 \times 5 = 0$<br>Column Totals: $130 \times 6 = 500$ (B)   |
| 4   |                     | -                    |                       | Column Totals: 130 (A) 500 (B)  |
| 5   |                     |                      |                       | Prevalence Index = B/A = 3,84   |
| 6   |                     | -                    |                       | Hydrophytic Vegetation Indicators:  |
|   |                     | -                    |                       | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7   | 20                  |                      |                       | 2 - Dominance Test is >50%  |
| 51  | 20                  | = Total Co           | ver                   | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:)                             |                     | 11                   | ~17                   | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting  |
| 1. Dryopteris   | _30_                | <u> </u>             | NI                    | data in Remarks or on a separate sheet)   |
| 2. Thelypteris noveboracensas                         | 20                  | У                    | FAC                   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3   |                     |                      |                       | <sup>1</sup> Indicators of hydric soil and wetland hydrology must   |
| 4   |                     |                      |                       | be present, unless disturbed or problematic.  |
| 5   |                     |                      |                       | Definitions of Vegetation Strata:   |
| 6   |                     |                      |                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7   |                     |                      |                       | at breast height (DBH), regardless of height.   |
| 8   |                     |                      |                       | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9   |                     |                      |                       | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10  |                     |                      |                       | Herb - All herbaceous (non-woody) plants, regardless of   |
| 11  |                     |                      |                       | size, and woody plants less than 3.28 ft tall.  |
|   |                     | -                    |                       | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  | = 1                 | 1500.                |                       | height.   |
| 201   | _00                 | = Total Co           | over                  |   |
| Woody Vine Stratum (Plot size: 30')                   |                     |                      |                       |   |
| 1. Not Applicable                                     |                     |                      | -                     | The description of the second |
| 2   |                     |                      |                       | Hydrophytic Vegetation  |
| 3   |                     |                      |                       | Present? Yes No   |
| 4   |                     |                      |                       |   |
|   | 0                   | = Total Co           | over                  |   |
| Remarks: (Include photo numbers here or on a separate | e sheet.)           |                      |                       |   |
|   |                     |                      |                       |   |
|   |                     |                      |                       |   |
|   |                     |                      |                       |   |
|   |                     |                      |                       |   |
|   |                     |                      |                       |   |
|   |                     |                      |                       |   |
|   |                     |                      |                       |   |

|                 | Color (moist) OVR 3/3            | %           |                     |                 |                       | firm the absence of i     |                                   |                                    |
|-----------------|----------------------------------|-------------|---------------------|-----------------|-----------------------|---------------------------|-----------------------------------|------------------------------------|
|                 |                                  | 10          | Color (moist)       | x Features<br>% | Type <sup>1</sup> Loc | Texture                   |                                   |                                    |
| <u> </u>        |                                  | 100         |                     |                 |                       | SiL                       | Ken                               | narks                              |
|                 | 10YR 4/2                         | 100         |                     |                 |                       | SL                        |                                   |                                    |
|                 |                                  |             |                     |                 |                       |                           |                                   |                                    |
|                 |                                  |             |                     |                 |                       |                           |                                   |                                    |
|                 |                                  |             |                     |                 |                       |                           |                                   |                                    |
|                 |                                  |             |                     |                 |                       |                           |                                   |                                    |
|                 |                                  |             |                     |                 |                       |                           |                                   |                                    |
|                 |                                  |             |                     |                 |                       | · ·                       |                                   |                                    |
|                 |                                  |             | -                   |                 |                       |                           |                                   |                                    |
|                 |                                  |             |                     |                 |                       |                           |                                   |                                    |
| ydric Soil Ind  | centration, D=Deple              | etion, RM=  | Reduced Matrix, MS  | =Masked S       | Sand Grains.          | <sup>2</sup> Location: PL | =Pore Lining, M                   | I=Matrix.                          |
| _ Histosol (A   | .1)                              |             | Polyvalue Below     | Surface (S      | 28) (I BB B           | Indicators for F          |                                   |                                    |
| _ Histic Epipe  |                                  | -           | MLRA 149B)          | Surface (S      | oo) (LKK K,           | 2 cm Muck                 | (A10) (LRR K,                     | L, MLRA 149B)                      |
| Black Histic    |                                  | _           | _ Thin Dark Surface | ce (S9) (LR     | R R. MLRA 149         | B) 5 cm Mucky             | e Redox (A16)                     | (LRR K, L, R)<br>S3) (LRR K, L, R) |
| _ Hydrogen S    |                                  | _           | Loamy Mucky M       | ineral (F1)     | (LRR K, L)            |                           | e (S7) (LRR K,                    | L. M)                              |
| _ Stratified La |                                  |             | _ Loamy Gleyed M    | fatrix (F2)     |                       | Polyvalue B               | elow Surface (S                   | 88) (LRR K. L)                     |
| _ Depleted Be   | elow Dark Surface                | (A11) _     | _ Depleted Matrix   |                 |                       | Thin Dark S               | urface (S9) (LR                   | RK, L)                             |
| _ Inick Dark    | Surface (A12)<br>ky Mineral (S1) | -           | _ Redox Dark Surf   |                 |                       | Iron-Mangai               | nese Masses (F                    | 12) (LRR K, L, R)                  |
|                 | red Matrix (S4)                  | _           | _ Depleted Dark S   |                 |                       | Piedmont FI               | oodplain Soils                    | (F19) (MLRA 149B                   |
| _ Sandy Redo    |                                  | -           | _ Redox Depression  | ons (F8)        |                       | Mesic Spod                | ic (TA6) (MLRA                    | 144A, 145, 149B)                   |
| _ Stripped Ma   |                                  |             |                     |                 |                       |                           | Material (F21)                    |                                    |
|                 | ce (S7) (LRR R, ML               | .RA 149B)   |                     |                 |                       | Other (Expla              | w Dark Surface<br>ain in Remarks) | (TF12)                             |
| idicators of hy | drophytic vegetatio              | n and wetla | and hydrology must  | be present      | , unless disturbe     | ed or problematic.        |                                   |                                    |
| Type:           | er (if observed):                |             |                     |                 |                       |                           |                                   |                                    |
| Depth (inches   | s):                              |             |                     |                 |                       | Hydric Soil Pres          | ent? Yes                          | No X                               |
| emarks:         |                                  |             |                     |                 |                       |                           |                                   |                                    |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County; Chautauqua County Sampling Date: 11/03/15 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY \_\_ Sampling Point: DP- 552 Investigator(s): M. BODERQ S. BUCKER MEYER Section, Township, Range: VILLEROVA Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): CONCOVC Slope (%): O 79.144458 Long: 42.391067 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Lat: NWI classification: upland Soil Map Unit Name: Chautaugua Sitt Lam Are climatic / hydrologic conditions on the site typical for this time of year? Yes Y No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No\_\_\_\_ Are Vegetation No, Soil No, or Hydrology No significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation NO, Soil NO, or Hydrology N∆ naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WIL-A528 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) vernal pool HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) X Water-Stained Leaves (B9) X Surface Water (A1) Moss Trim Lines (B16) \_\_\_ Aquatic Fauna (B13) X High Water Table (A2) \_\_\_ Dry-Season Water Table (C2) X Saturation (A3) \_\_\_ Marl Deposits (B15) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) \_\_ Water Marks (B1) \_\_\_ Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) \_\_ Sediment Deposits (B2) \_\_\_ Stunted or Stressed Plants (D1) \_\_ Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) \_\_ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) \_\_ Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) \_\_ Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) X Sparsely Vegetated Concave Surface (B8) Field Observations: Yes Y No \_\_\_\_ Depth (Inches): 0-5" Surface Water Present? Yes X No \_\_\_\_ Depth (inches): () Water Table Present? Yes X No Depth (inches): ()" Wetland Hydrology Present? Yes X No \_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| 30           |               | <br>That Are OBL, FACW, or FAC:3(A)  |
|--------------|---------------|--|
|              |               | <br>Total Number of Dominant Species Across All Strata:  |
|              |               | Percent of Dominant Species That Are OBL, FACW, or FAC: \(\big  \bigcup \bigcu |
|              |               | Prevalence Index worksheet:  |
|              |               |  |
|              |               | FACW species       x 2 =         FAC species       x 3 =         FACU species       x 4 =  |
|              |               | UPL species x 5 =<br>Column Totals: (A) (B)  |
|              |               | Prevalence Index = B/A =   |
|              |               | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
|              |               |  |
| 5            |               | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)      Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
|              |               | <br><sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
|              |               | Definitions of Vegetation Strata:  |
|              |               | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
|              |               | <br>Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.  |
|              |               | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
|              | -             | Woody vines - All woody vines greater than 3.28 ft in height.  |
| <del>`</del> | = Total Cover | no.giv.  |
|              |               | <br>Hydrophytic  |
|              |               | Vegetation Present?  YesY No   |
|              | = Total Cover |  |
| sheet.)      |               |  |
|              |               | <br>   |

| Depth  | cription: (Describe to |           | Redo   | ox Feature  | S                       |             |  |  |  |
|--|------------------------|-----------|--|---|-------------------------|-------------|--|--|--|
| (inches)   | Color (moist)          | %         | Color (moist)  | %   | Type <sup>1</sup>       | Loc2        | Texture  | Remarks                                |  |
| 0-10   | 2.54 2.5/1             | 98        | 104R3/8  | 2   |                         | <u>m</u> _  | 516  |  |  |
|  |                        |           |  |   |                         |             |  |  |  |
|  |                        |           |  |   |                         |             |  |  |  |
|  |                        |           |  |   |                         |             |  |  |  |
| ype: C=C   | oncentration, D=Deple  | tion, RM= | Reduced Matrix, M  | S=Masked  | Sand Grai               | ins.        | <sup>2</sup> Location: PL=   | =Pore Lining, M=Matrix.                |  |
| ydric Soil   | Indicators:            |           |  |   |                         |             | Indicators for P   | roblematic Hydric Soils <sup>3</sup> : |  |
| Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  MLRA  Loamy M  Loamy M  Redox D  Depleted |                        |           | Polyvalue Belov MLRA 149B; Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix X Redox Dark Sur Depleted Dark S Redox Depress | )<br>ace (S9) (L<br>Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F | .RR R, MLI<br>) (LRR K, | RA 149B)    | 2 cm Muck (A10) (LRR K, L, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Piedmont Floodplain Soils (F19) (MLRA 149B) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) |  |  |
| ndicators of   | hydrophytic vegetation | n and wet | land hydrology mus   | t be prese  | nt, unless o            | disturbed o |  |  |  |
| Туре:  | ayer (ii observed).    |           |  |   |                         |             |  |  |  |
| Depth (inc   | ches):                 |           |  |   |                         |             | Hydric Soil Prese  | ent? Yes <u>*</u> No                   |  |
| emarks:  |                        |           |  |   |                         |             |  |  |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11/03/13 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 55 Investigator(s): M. GODETG S. BUKENWYEY Section, Township, Range: VILLEROVE Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): CONCOV-L Slope (%):5 142878 Long: 42,392211 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: Uplan Soil Map Unit Name: Bust 511+ Loam Are climatic / hydrologic conditions on the site typical for this time of year? Yes XNo \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation Mo, Soil Mo, or Hydrology Mo significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No. Soil No. or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes X No
If yes, optional Wetland Site ID: WL A529 Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) X Surface Water (A1) \_\_\_ Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) X Saturation (A3) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No \_\_\_\_ Depth (inches):0~1" Surface Water Present? Yes X No Depth (inches): 0" Water Table Present? Wetland Hydrology Present? No \_\_\_\_ Depth (inches): 04/ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

|                                       | Abelia | Danis      | 4 1                  |   |
|---------------------------------------|--------|------------|----------------------|---|
| Tree Stratum (Plot size:3)            |        |            | nt Indicator  Status | Dominance Test worksheet:   |
| 1. Not Applicable                     |        |            | 1000000              | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|                                       |        |            |                      | MacAle OBL, FACVY, of FAC (A)   |
| 2                                     |        |            |                      | Total Number of Dominant Species Across All Strata:  (B)  |
| 3                                     |        |            |                      | Species Across All Strata: (B)  |
| 4                                     |        |            |                      | Percent of Dominant Species   |
| 5                                     |        |            |                      | That Are OBL, FACW, or FAC: (A/B)   |
| 6                                     |        |            |                      | Prevalence Index worksheet:   |
| 7.                                    |        |            |                      | Total % Cover of: Multiply by:  |
|                                       | 0      | = Total Co | over                 | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 151 |        | - Total O  | 3461                 | FACW species x 2 =  |
| Sapinorshrub stratum (Piot size: 10   |        |            |                      | FAC species x 3 =   |
| 1. NOT Applicable                     |        |            |                      | FACU species x4 =   |
| 2                                     |        |            |                      | UPL species x 5 =   |
| 3                                     |        |            |                      |   |
| 4                                     |        |            |                      | Column Totals: (A) (B)  |
|                                       |        |            |                      | Prevalence Index = B/A =  |
| 5                                     |        |            |                      |   |
| 6                                     |        | -          |                      | Hydrophytic Vegetation Indicators:  |
| 7                                     |        | -          |                      | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%  |
|                                       | _0_    | = Total Co | over                 |   |
| Herb Stratum (Plot size: 5 )          |        |            |                      | 3 - Prevalence Index is ≤3.0¹   |
| 1. Euthamia graminitolia              | 30     | Y          | FAC.                 | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| 2. Juncus Pffusus                     | 20     | V          | OBL                  | Problematic Hydrophytic Vegetation¹ (Explain)   |
|                                       | 15     | 10         | 081                  |   |
| 3. Scirpus cyperinas                  | 10_    | 1          |                      | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.                             |
| 4 unoclea sensibilis                  | 70_    | 10         | FACIN                | be present, unless disturbed or problematic.  |
| 5. Carex flava                        | _5_    | N          | OBL                  | Definitions of Vegetation Strata:   |
| 6. Carex intumescens                  | _5_    | N          | FACW                 | Tree - Woody plants 3 in. (7.6 cm) or more in diamete   |
| 7. Mentha spicata                     | 3      | N          | FACIN                | at breast height (DBH), regardless of height.   |
| 8 Ranunculus bulbasus                 | 5      | N          | FACIN                | Sapling/shrub – Woody plants less than 3 in. DBH  |
|                                       | 5      | N          |                      | and greater than or equal to 3.28 ft (1 m) tall.  |
| . Epilobium ciliatum                  |        | _11        | _ facw               | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10,                                   |        |            |                      | size, and woody plants less than 3.28 ft tall.  |
| 11                                    |        | -          |                      | W-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1   |
| 12                                    |        |            |                      | Woody vines – All woody vines greater than 3.28 ft in height.   |
|                                       | 100    | = Total Co | over                 |   |
| Woody Vine Stratum (Plot size: 30)    | 100    | - Total O  | ,,,,,                |   |
| NOT A COLL (Ab) 2                     |        |            |                      |   |
| 1. NOT APPROUNT                       |        | -          |                      | Hydrophytic   |
| 2                                     |        |            |                      | Vegetation  |
| 3                                     |        |            |                      | Present? Yes No   |
|                                       |        |            |                      |   |
| 4.                                    |        |            | Sales and the        |   |
| 4                                     | ()     | = Total Co |                      |   |

| Type: C=Concentrelydric Soil Indicate Histosol (A1) Histic Epipedon Black Histic (A3 Hydrogen Sulfic                         | ors:<br>(A2)   | %<br>GO            | loyR !  | <b>6/</b> 8   | - %<br>- G<br>- Q<br>- Q<br>   |                            | Loc²  Mi  Mi  ————————————————————————————— | SIL<br>SIL  | Remarks   |
|--|--|--------------------|---|---|--|----------------------------|---|---|---|
| ype: C=Concentrydric Soil Indicat Histosol (A1) Histic Epipedon Black Histic (A3 Hydrogen Sulfic                             | ation, D=Depletors:  |                    | loyR !  | 5/8   |  |                            |   |   |   |
| ydric Soil Indicat<br>_ Histosol (A1)<br>_ Histic Epipedon<br>_ Black Histic (A3<br>_ Hydrogen Sulfic                        | ors:<br>(A2)   | tion, RM=          |   |   |  |                            |   | 516   |   |
| ydric Soil Indicat<br>_ Histosol (A1)<br>_ Histic Epipedon<br>_ Black Histic (A3<br>_ Hydrogen Sulfic                        | ors:<br>(A2)   | tion, RM=          | Reduced M   | Aatriy M  |  |                            |   |   |   |
| dric Soil Indicat Histosol (A1) Histic Epipedon Black Histic (A3 Hydrogen Sulfic   | ors:<br>(A2)   | tion, RM=          | Reduced M   | fatriy M  |  |                            |   |   |   |
| dric Soil Indicat Histosol (A1) Histic Epipedon Black Histic (A3 Hydrogen Sulfic   | ors:<br>(A2)   | tion, RM=          | Reduced M   | Aatriy M  |  |                            |   |   | NO. 00. 10. 10. 10. 10. 10. 10. 10. 10. 10  |
| ydric Soil Indicat<br>_ Histosol (A1)<br>_ Histic Epipedon<br>_ Black Histic (A3<br>_ Hydrogen Sulfic                        | ors:<br>(A2)   | tion, RM=          | Reduced M   | Aatriy M  |  |                            |   |   |   |
| Histic Epipedon Black Histic (A3 Hydrogen Sulfic   |  |                    |   | MACIA, IVI  | S=Masked   | Sand Gra                   | ains.                                       | <sup>2</sup> Location: PL=  | Pore Lining, M=Matrix. roblematic Hydric Soils³:  |
| Stratified Layers Depleted Below Thick Dark Surf Sandy Mucky M Sandy Gleyed M Sandy Redox (S Stripped Matrix Dark Surface (S | de (A4) s (A5) r Dark Surface ( ace (A12) lineral (S1) Matrix (S4) (S5) (S6) | -<br>-<br>RA 149B) | MLR Thin Da Loamy Loamy Deplete Redox Deplete Redox | RA 149B;<br>ark Surfa<br>Mucky M<br>Gleyed I<br>ed Matrix<br>Dark Sul<br>ed Dark S<br>Depress | ice (S9) (L<br>Mineral (F1<br>Matrix (F2)<br>(F3)<br>rface (F6)<br>Surface (F3)<br>ions (F8) | RR R, ML<br>) (LRR K,<br>) | .RA 149B)<br>.L)                            | Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Pledmont Flo Mesic Spodic Red Parent M Very Shallow Other (Explai | A10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L, M) Relow Surface (S8) (LRR K, L) Inface (S9) (LRR K, L) Rese Masses (F12) (LRR K, L, F) Rodplain Soils (F19) (MLRA 145 (TA6) (MLRA 144A, 145, 149) Material (F21) Dark Surface (TF12) In in Remarks) |
| dicators of hydrop<br>estrictive Layer (i  | hytic vegetation   | n and wetl         | and hydrol  | ogy mus   | t be preser  | nt, unless                 | disturbed                                   | or problematic.   |   |
| Type:  | i observeu).   |                    |   |   |  |                            |   |   |   |
| Depth (inches):  |  |                    |   |   |  |                            |   | Hydric Soil Prese   | nt? Yes 🔀 No  |
| emarks:  |  |                    |   |   |  |                            |   | nyuric Soil Prese   | nt? Yes No No   |
| STIME NO.  |  |                    |   |   |  |                            |   |   |   |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region \_ City/County: Chautauqua County Sampling Date: 10-03 Project/Site: Ball Hill Wind Project Sampling Point: DP- 5 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M CODEIG 5 BULKENMEYED Section, Township, Range: Local relief (concave, convex, none): (CNC) Landform (hillslope, terrace, etc.): HILLSIODE Datum: NAD 83 79.144006 Long: 42,39 Subregion (LRR or MLRA): LRR-R NWI classification: Rusti Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ \_\_ (If no, explain in Remarks.) Are Vegetation MD, Soil MD, or Hydrology MD significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation ND, Soil ND, or Hydrology ND naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soll Present? No If yes, optional Wetland Site ID Wetland Hydrology Present? No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) X High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) Marl Deposits (B15) X Saturation (A3) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) X Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

|  | Absolute |            | t Indicator | Dominance Test worksheet:  |
|--|----------|------------|-------------|--|
| Tree Stratum (Plot size: 30')                          | 30       | Species    |             | Number of Dominant Species 5   |
| 1. TSUGA ranadensis                                    |          |            | FACU        | That Are OBL, FACW, or FAC: (A)  |
| 2. Betala aughaniensis                                 | 20       |            | FIAC        | Total Number of Dominant   |
| 3  |          |            |             | Species Across All Strata:(B)  |
| 4  |          |            |             | Percent of Dominant Species  |
| 5  |          |            |             | That Are OBL, FACW, or FAC: (A/B)  |
|  |          |            |             |  |
| 6  |          |            |             | Prevalence Index worksheet:  |
| 7  |          |            |             | Total % Cover of: Multiply by:   |
|  | 50       | = Total Co | over        | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 15')                 |          |            |             | FACW species x 2 =   |
| 1. Betula alleghaniensis                               | 20       | V          | FAC.        | FAC species x 3 =  |
| . Total and and an |          |            |             | FACU species x 4 =   |
| 2  | e ———    |            |             | UPL species x 5 =  |
| 3,   | -        |            |             | Column Totals: (A) (B)   |
| 4  |          |            |             |  |
| 5  |          |            |             | Prevalence Index = B/A =   |
| 6  |          |            |             | Hydrophytic Vegetation Indicators:   |
|  | -        |            |             | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7  |          | _          |             | 2 - Dominance Test is >50%   |
|  | 20       | = Total Co | over        |  |
| Herb Stratum (Plot size: 5')                           |          |            |             | 3 - Prevalence Index is ≤3.0¹  |
| 1. Agrostis stolonifera                                | 15       | Y          | FACIN       | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)             |
| 2. Carex intumescens                                   | 6        | V          | FACIN       | Problematic Hydrophytic Vegetation¹ (Explain)  |
|  | 5        | V          |             |  |
| 3. Carex flava   |          |            | OBL         | ¹Indicators of hydric soil and wetland hydrology must  |
| 4. The Lypteris noveboracensus                         |          | N          | FAC.        | be present, unless disturbed or problematic.   |
| 5. Euthamia graminifolia                               | 2        | N          | FAC         | Definitions of Vegetation Strata:  |
| 6  |          |            |             | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
| -  |          |            | -           | at breast height (DBH), regardless of height.  |
| 7  |          | -          | -           |  |
| 8  |          |            |             | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| 9  |          |            |             |  |
| 10   |          |            |             | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 11.  |          |            |             | size, and woody plants less than 3.28 it tall.   |
| No.  | . —      |            |             | Woody vines - All woody vines greater than 3.28 ft in  |
| 12   | 20       |            |             | height.  |
|  | 25       | = Total Co | over        | 0  |
| Woody Vine Stratum (Plot size:)                        |          |            |             |  |
| 1  |          |            |             |  |
|  |          |            |             | Hydrophytic  |
| 2  |          |            |             | Vegetation Present? Yes No   |
| 2  |          |            |             |  |
| 2<br>3   | . —      |            |             | Present? Yes No  |
| 2  |          |            |             | Present? Yes No  |

| Profile Des         | scription: (Describe                     | to the de | pth needed to docu               | ment the     | indicator  | or confirm       | the absence of indica                                   | ators.)                            | Point: DF=                   |
|---------------------|--|-----------|----------------------------------|--------------|------------|------------------|---|------------------------------------|------------------------------|
| Depth<br>(inches)   | Matrix<br>Color (moist)                  | %         | Color (moist)                    | ox Feature   | <u>s</u>   |                  |   |                                    |                              |
| 0-8                 | 85V25/1                                  | 90        | 25V /1/9                         | - %          | Type¹      | Loc <sup>2</sup> | Texture   | Remarks                            |                              |
| 2-8                 | 25V3/2                                   | at        | 2.5/ 7/0                         | 10           | -          | 11               |   |                                    |                              |
| 8                   | 21.3/ J/X                                | 12        | 2.57 3/3                         | - P          | 1          | At               | <u> </u>  | -                                  |                              |
| 7 10                | 2=1/7/0                                  | 00        | TOAK 2/8                         | -5           | 0          | M                |   |                                    |                              |
| 5-10                | X.57 1/X                                 | 70        | TOYR 5/8                         | 10           | <u>C</u>   | M                |   |                                    |                              |
| -                   | ·  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  | -            |            | -                | 1   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
| Type: C=C           | oncentration, D=Deple                    | etion, RM | =Reduced Matrix MS               | =Mackad      | Sand Co-   |                  | 21 - 2-1/   | State of the state of              |                              |
| nyuric Soil         | indicators:                              |           | MIGHTA, IVIC                     | PHENNEU      | Janu Gra   | an is,           | <sup>2</sup> Location: PL=Pore<br>Indicators for Proble | ELining, M=Matematic Hvdric        | rix.<br>Soils <sup>3</sup> : |
| Histosol            | (A1)<br>pipedon (A2)                     |           | Polyvalue Below                  | v Surface    | (S8) (LRR  | R,               | 2 cm Muck (A10)   | (LRR K, L, ML                      | RA 149B)                     |
| _ Black H           | istic (A3)                               |           | MLRA 149B)  Thin Dark Surface    |              | RRR MI     | PA 149B)         | Coast Prairie Rec                                       | dox (A16) (LRR                     | K, L, R)                     |
|                     | en Sulfide (A4)                          |           | Loamy Mucky M                    | lineral (F1) | (LRR K,    | L)               | 5 cm Mucky Pear<br>Dark Surface (S7                     | or Peat (S3) (L<br>') (LRR K, L. M | -RR K, L, R)                 |
|                     | d Layers (A5)<br>d Below Dark Surface    | (A11)     | Loamy Gleyed N _ Depleted Matrix | Matrix (F2)  |            |                  | Polyvalue Below   | Surface (S8) (L                    | RR K, L)                     |
| Thick Da            | ark Surface (A12)                        | V 11.17   | A Redox Dark Sur                 |              |            |                  | Thin Dark Surface Iron-Manganese                        | e (S9) (LRR K,<br>Massas (E12) (   | L)                           |
| Sandy M             | lucky Mineral (S1)<br>Bleyed Matrix (S4) |           | Depleted Dark S                  | urface (F7   | ")         |                  | Piedmont Floodp   | lain Soils (F19)                   | (MLRA 149B                   |
| _ Sandy R           | edox (S5)                                |           | Redox Depression                 | ons (F8)     |            |                  | Mesic Spodic (TA  | 6) (MLRA 144A                      | A, 145, 149B)                |
|                     | Matrix (S6)                              | Libraria  |                                  |              |            |                  | Red Parent Mater Very Shallow Dar                       | nai (F21)<br>k Surface (TF12       | 2)                           |
| _ Dark Sui          | rface (S7) (LRR R, ML                    | -RA 149E  | 3)                               |              |            |                  | Other (Explain in                                       | Remarks)                           | ,                            |
| ndicators of        | hydrophytic vegetatio                    | n and we  | tland hydrology must             | be preser    | it, unless | disturbed o      | r problematic.  |                                    |                              |
| CSUICTIVE L         | ayer (if observed):                      |           |                                  |              |            |                  | Promise   |                                    | 1                            |
| Type:<br>Depth (inc | thes).                                   |           |                                  |              |            |                  |   |                                    |                              |
| emarks:             |  |           |                                  |              |            |                  | Hydric Soil Present?                                    | Yes X                              | No                           |
|                     | 2001                                     | 0         | 1                                | 1            |            |                  |   |                                    |                              |
| Tug er              | refusal                                  | TION      | n dense (                        | lay.         |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     | ,  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  | 41  |                                    |                              |
|                     |  |           |                                  |              |            |                  | 4   | Y                                  |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |
|                     |  |           |                                  |              |            |                  |   |                                    |                              |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11/24 Project/Site: Ball Hill Wind Project Sampling Point: DP-55 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): 11 BOBERG B VIRTS Section, Township, Range:\_\_ Local relief (concave, convex, none): \_\_\_\_\_\_ Landform (hillslope, terrace, etc.): \_\_i-/11/5/0/20 \_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: (LD/G/IC) Soil Map Unit Name: Etile SII+ LOOM Are climatic / hydrologic conditions on the site typical for this time of year? Yes X \_\_ (If no, explain in Remarks.) Are Vegetation  $\underline{\sqrt{\xi}}$ , Soil  $\underline{\sqrt{\xi}}$ , or Hydrology  $\underline{\sqrt{\xi}}$  significantly disturbed? Are "Normal Circumstances" present? Yes X No\_ Are Vegetation N.C. Soil N.C. or Hydrology N.O. naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WI A Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) ACTIVE CORN FIELD HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) X Surface Water (A1) Moss Trim Lines (B16) Aquatic Fauna (B13) X High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) X Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): 0 - 1 Surface Water Present? Yes X No \_\_\_\_ Depth (inches): () Water Table Present? Wetland Hydrology Present? Yes X Yes X No Depth (inches): () !! Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

## VEGETATION - Use scientific names of plants.

|   |                  | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|---|------------------|--|
| 2   |                  | Total Number of Dominant Species Across All Strata: (B)  |
| 4<br>5  |                  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 6   |                  | Prevalence Index worksheet:  |
| Sapling/Shrub Stratum (Plot size: 15                | = Total Cover    | OBL species x 1 =<br>FACW species x 2 =  |
| 100   | <u> </u>         | FAC species x 3 =  |
|   |                  | FACU species x 4 =   |
| 2   |                  | UPL species x 5 =  |
| 3   |                  | Column Totals: (A) (B)   |
| 4   |                  | Prevalence Index = B/A =   |
| 6   |                  | Hydrophytic Vegetation Indicators:   |
| 7   |                  | 1 - Rapid Test for Hydrophytic Vegetation  |
|   | = Total Cover    | X 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size:                            |                  | 3 - Prevalence Index is ≤3.01  |
| Agrostis Stolonifera                                | 32 Y FACIN       | <ul> <li>4 - Morphological Adaptations¹ (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| Eleocharis acicularis                               |                  |  |
|   | 6 N OBL          | 하게 되는 사람이 하다 되는 요즘 이번 점에 이렇게 그래요? 그런 사람이 하는 그들은 이번 없는데 하다 하나 되었다.  |
| Bidens aristosa                                     | 5 N FAQ          |  |
| zea mays  | 2 N NI           | be present, unless disturbed or problematic.   |
| 5 Galium Poreale                                    | Z N FAC          | Definitions of Vegetation Strata:  |
| Pantago lanceolata                                  | 2 N FACU         |  |
| 7   |                  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.               |
| 3   |                  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                  |
| 10  |                  | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.             |
| 11  |                  |  |
| 12.   |                  | Woody vines - All woody vines greater than 3.28 ft in  |
|   | 50 = Total Cover | height.  |
| Noody Vine Stratum (Plot size: 30)                  |                  |  |
| NOT PHICHDLE  |                  | Landa Carlo  |
| 2.  |                  | Hydrophytic Vegetation   |
| 3.  |                  | Present? Yes X No  |
|   |                  |  |
|   | = Total Cover    |  |
| Remarks: (Include photo numbers here or on a separa | ate sheet.)      | · !  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |
|   |                  |  |

| Depth  | Matrix   |            | pth needed to docui  | x Feature   | s                  |                  |  |  |
|--|--|------------|----------------------|---|--------------------|------------------|--|--|
| (inches)   | Color (moist)  | 06         | Color (moist)        | %   | _Type <sup>1</sup> | Loc <sup>2</sup> | Texture  | Remarks  |
| 0-6  | 2.54-17  | 10         | 104125/8             | 5   | <u>c</u>           | m                | SIL _  |  |
| 2-10   | 254 3/2  | 90         | 1042518              | 8   | 0                  | 111              | SIL  |  |
|  |  |            | 2.54 5/2             | 2   | C                  | <u>M</u>         | SIL  |  |
|  |  |            |                      |   | =                  |                  |  |  |
|  |  |            |                      |   |                    |                  |  |  |
| Type: C=Co   | ncentration, D=Dep   | letion, RM | =Reduced Matrix, MS  | ======================================  | Sand Gra           | ains.            | <sup>2</sup> Location: PL=   | Pore Lining, M=Matrix.   |
| ydric Soil I   | ndicators:   |            | Polyvalue Below      |   |                    |                  | Indicators for Pr  | oblematic Hydric Solls <sup>3</sup> :  |
| Black His Hydroger Stratified Depleted Thick Dan Sandy Mo Sandy Gl Sandy Re Stripped Dark Suri | n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, N | ILRA 149   |                      | ce (S9) (I<br>fineral (F<br>Matrix (F2<br>(F3)<br>face (F6)<br>Surface (F<br>ons (F8) | () (LRR K,         | , <b>ι</b> )     | 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodio Red Parent N Very Shallow Other (Explain | Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L, M) Ilow Surface (S8) (LRR K, L) Irface (S9) (LRR K, L) Irface (TA6) (MLRA 144A, 145, 149B Irface (TF12) In In Remarks) |
| ndicators of   | hydrophytic vegetat<br>ayer (if observed):   | ion and w  | etland hydrology mus | t be prese  | nt, unless         | disturbed        | or problematic.  |  |
| Type:  | ayer (ii observed):  |            |                      |   |                    |                  |  |  |
| Depth (incl  | nes):  |            |                      |   |                    |                  | Hydric Soil Prese  | nt? Yes X No   |
| emarks:  |  |            | 11-11-11             |   |                    |                  | Thyunic contribute   | NO   |
|  |  |            | 4.6                  |   |                    |                  |  |  |
|  |  |            |                      |   |                    |                  |  |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/04/ State: NY \_ Sampling Point: DP- 550 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. BOBFRG B. VIRTS VILLEROVA Section, Township, Range: Landform (hillslope, terrace, etc.): HIIIS/OPC Local relief (concave, convex, none): \_\_\_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: \_\_ Lanah NWI classification: uplana \_\_ (If no, explain in Remarks.) Are Vegetation VES, or Hydrology VES significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_ No\_\_ Are Vegetation MU, Soil MU, or Hydrology MU naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. No X Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes X No Hydric Soil Present? Wetland Hydrology Present? Yes \_\_\_\_ No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) ACTIVE CORN FIELD HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) X Saturation (A3) Marl Deposits (B15) BY Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes \_\_\_\_ No X Depth (inches): Surface Water Present? Water Table Present? No X Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_\_ No X Saturation Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| 1. NOT Applicable  | Absolute Dominant Indicator <u>% Cover Species? Status</u> | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
|--|--|---|
| 2  |  | Total Number of Dominant Species Across All Strata: (B)   |
| <b>45</b>  |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 6  |  | Prevalence Index worksheet:   |
| 7  | = Total Cover  |   |
| Sapling/Shrub Stratum (Plot size: 15'  1. NOT Applicable |  | FACW species         O         x 2 =         O           FAC species         O         x 3 =         O           FACU species         ZO         x 4 =         DO |
| 2  |  | UPL species x 5 =   |
| <b>459</b> .   |  | Column Totals: 20 (A) 80 (B)  Prevalence Index = B/A = 4  |
| 6  |  | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation  |
| 7  | = Total Cover  | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size: 5 )  1. Trifulium repens        | 15 Y FAW   | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  |
| 2. Zea mays<br>3. Pantogo iancelota                      | S N FACU   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                       |
|  |  | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| 6  |  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
| 7  |  | Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 9  |  | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 11   |  | Woody vines – All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size: 30 )                      | 30 = Total Cover   |   |
| 1 NOT Applicable   |  | Hydrophytic   |
| 3  |  | Vegetation Present?  Yes NoX  |
| 4  | = Total Cover  |   |
| Remarks: (Include photo numbers here or on a separate    | ate sheet.)  |   |
|  |  |   |
|  |  |   |
|  |  |   |

BV

| 0"-16" 2  | Color (moist)<br>59412<br>59514   | -4121C            | Color (moist)  | x Feature                                    | S                 |             |   |   |
|---|---|-------------------|--|--|-------------------|-------------|---|---|
| 10"10" 1  | 10 chr  | 1412              |  | %  | Type <sup>1</sup> | _Loc2       | Texture   | Remarks   |
| 16".76" 7   | 1.54514   |                   | 1042518  | 10   |                   | רכן         | 51L   |   |
|   |   | 80                | 2.54412  | 10   | D                 | m           | SIL   |   |
|   |   |                   | 10172518   |  | C                 | 2           |   |   |
|   |   |                   |  |  | _                 |             |   |   |
|   |   |                   |  |  | _                 |             |   | \   |
|   |   |                   |  | _  |                   |             |   |   |
|   |   |                   |  |  |                   |             |   |   |
|   |   |                   |  |  |                   |             |   |   |
| Type: C=Concent<br>ydric Soil Indica<br>_ Histosol (A1)   | tration, D=Deple<br>tors:   | ∍tion, RM=F       | Reduced Matrix, MS   |  |                   |             | <sup>2</sup> Location: PL=Pon<br>Indicators for Probl   | e Lining, M=Matrix.<br>ematic Hydric Soils <sup>3</sup> : |
| Stratified Layer Depleted Belov Thick Dark Sur Sandy Mucky N Sandy Gleyed Sandy Redox ( Stripped Matrix Dark Surface (Stripped Matrix Dark Surface (Stripped Matrix | w Dark Surface face (A12) Mineral (S1) Matrix (S4) (S5) ( (S6) S7) (LRR R, MI | <br><br>LRA 149B) | Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depression | (F3)<br>face (F6)<br>Surface (F7<br>ons (F8) | 'n                | disturbed o | Thin Dark Surfactors Iron-Manganese Piedmont Floodp Mesic Spodic (TA Red Parent Mate Very Shallow Dai Other (Explain in | rk Surface (TF12)   |
| Type:   | 25.00   |                   |  |  |                   |             |   |   |
|   |   |                   |  |  |                   |             | Hydric Soil Present?  |   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 1 Project/Site: Ball Hill Wind Project \_ Sampling Point: DP-Applicant/Owner: Ball Hill Wind Energy, LLC VILLENOVA Investigator(s): M. BODETA B. VIRTS Section, Township, Range: Local relief (concave, convex, none): CONCAVE Landform (hillslope, terrace, etc.): HIIS/OPE Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: UDIGNO Soil Map Unit Name: \_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation Mb, Soil Mb, or Hydrology Mb significantly disturbed? Are "Normal Circumstances" present? Yes\_ Are Vegetation MD, Soil Mb, or Hydrology Mb naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? No within a Wetland? Hydric Soil Present? No If yes, optional Wetland Site ID: Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Surface Water (A1) X Water-Stained Leaves (B9) Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) X Saturation (A3) Dry-Season Water Table (C2) Marl Deposits (B15) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No \_\_\_ Depth (inches): Surface Water Present? Yes X No Depth (inches): Water Table Present? Yes X No \_\_\_ Depth (inches): ( Wetland Hydrology Present? Yes X Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')  |            | Species?                                 | Indicator<br>Status | Dominance Test worksheet:  |   |         |
|--|------------|--|---------------------|--|---|---------|
|  |            |  |                     | Number of Dominant Species That Are OBL, FACW, or FAC:                                 | _1  | _ (A)   |
| 3  |            |  |                     | Total Number of Dominant<br>Species Across All Strata:                                 | 1   | (B)     |
|  |            |  |                     | Percent of Dominant Species  |   | - (-)   |
| 5  |            |  |                     | That Are OBL, FACW, or FAC:  | 100   | _ (A/B  |
| 3  |            |  |                     | Prevalence Index worksheet:  |   |         |
| 7  |            | -  | -                   | Total % Cover of:  |   |         |
| 1  |            | = Total Co                               | ver                 | OBL species x 1  |   |         |
| Sapling/Shrub Stratum (Plot size: 15   |            |  |                     | FACW species x 2   |   |         |
| Not Applicable   |            |  |                     | FAC species x 3  |   |         |
|  |            |  |                     | FACU species x 4   |   |         |
|  |            |  |                     | UPL species x 5  |   |         |
|  |            |  |                     | Column Totals: (A)   | -   | (B      |
| i <u> </u>   |            |  |                     | Prevalence Index = B/A =   |   |         |
|  |            |  |                     | Hydrophytic Vegetation Indicat   | ors:  |         |
| 1.   |            |  |                     | 1 - Rapid Test for Hydrophyti  | c Vegetation                                |         |
|  | Λ.         | = Total Co                               | ver                 | 2 - Dominance Test is >50%   |   |         |
| Herb Stratum (Plot size: 5   |            | - Total Co                               | ,,,                 | 3 - Prevalence Index is ≤3.01  |   |         |
| Euthamia araminifolia  | 55         | Y  | FAC                 | 4 - Morphological Adaptations data in Remarks or on a s                                | s <sup>1</sup> (Provide su<br>eparate sheet | pportir |
| Scirpus cuperinas  | 10         | N  | OBL.                | Problematic Hydrophytic Veg  |   |         |
| carex Floria   | 10         | 11                                       | OBL                 |  |   |         |
|  |            | 10                                       |                     | <sup>1</sup> Indicators of hydric soil and wetla<br>be present, unless disturbed or pr | and hydrology<br>oblematic                  | must    |
| enoclea sensibilis   | 10         | TA                                       | FACW                |  |   |         |
| Eupotorium perfoliatu  | m_5_       | N  | EACM                | Definitions of Vegetation Strata   | :   |         |
| Junus effusus  | 5_         | N  | OBL                 | Tree - Woody plants 3 in. (7.6 cm  |   | liamete |
| Equisetum arvense  |            | N  | FAC                 | at breast height (DBH), regardless   | s of neight.                                |         |
| 3  |            |  |                     | Sapling/shrub – Woody plants le<br>and greater than or equal to 3.28                   | ss than 3 in. [                             | DBH     |
| )  |            |  |                     | and greater than or equal to 3.26  | n (1 m) tall.                               |         |
| 0  |            |  |                     | Herb – All herbaceous (non-woody)<br>size, and woody plants less than 3.28             |   | ess of  |
| 11.  |            |  |                     |  |   |         |
| 2.   |            |  |                     | Woody vines - All woody vines great<br>height.   | ater than 3.28 ft                           | in      |
|  | 100        | = Total Co                               | ver                 | neight.  |   |         |
| 30'  | 100        | - Total Co                               | 401                 |  |   |         |
| Noody Vine Stratum (Plot size: 30')  |            |  |                     |  |   |         |
| THOI Applicable  |            | -  |                     | Hydrophytic  |   |         |
| 2-   |            |  |                     | Vegetation   |   |         |
| 3  |            |  |                     | Present? Yes   | No  |         |
| 4  |            |  |                     |  |   |         |
|  | O          | = Total Co                               | ver                 |  |   |         |
| Remarks: (Include photo numbers here or on a separa  | te sheet.) | 9 - 20 - 20 - 20 - 20 - 20 - 20 - 20 - 2 |                     |  |   |         |
| - Constant Prints Harris 1 and |            |  |                     |  |   |         |
|  |            |  |                     |  |   |         |
|  |            |  |                     |  |   |         |
|  |            |  |                     |  |   |         |
|  |            |  |                     |  |   |         |
|  |            |  |                     |  |   |         |

| Type: C=Concentration, D= Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Stratified Layers (A1)  Sandy Mucky Mineral (S Sandy Gleyed Matrix (S Sandy Redox (S5)  Stripped Matrix (S6) | =Depletion, R | Color (moist)  2 5 y 4 / 1  10 x 2 5/8  M=Reduced Matrix, Ms  Polyvalue Below MLRA 1498  Thin Dark Surfa | w Surface   | Sand Grains    |           | Texture  Sit  Sit  2Location: PL=P | Remarks  |                       |
|--|---------------|--|-------------|----------------|-----------|------------------------------------|--|-----------------------|
| Type: C=Concentration, D= Hydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Stratified Layers (A1:  Sandy Mucky Mineral (Sendy Mucky Mineral (Sendy Gleyed Matrix (Sendy Redox (S5))     | =Depletion, R | M=Reduced Matrix, M:  Polyvalue Below MLRA 1498  | w Surface   | Sand Grains    | M .       | 2Location: PL=P                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= Iydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Strain Thick Dark Surface (A12)  Sandy Mucky Mineral (Second Sandy Gleyed Matrix (Second Sandy Redox (S5)    |               | Polyvalue Belov  | w Surface   | Sand Grains    |           | ²Location: PL=P                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark So  Thick Dark Surface (A12  Sandy Mucky Mineral (S  Sandy Gleyed Matrix (S  Sandy Redox (S5)                |               | Polyvalue Belov  | w Surface   |                | 3.        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark So  Thick Dark Surface (A12  Sandy Mucky Mineral (S  Sandy Gleyed Matrix (S  Sandy Redox (S5)                |               | Polyvalue Belov  | w Surface   |                |           |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark So  Thick Dark Surface (A12  Sandy Mucky Mineral (S  Sandy Gleyed Matrix (S  Sandy Redox (S5)                |               | Polyvalue Belov  | w Surface   |                | 3.        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark So  Thick Dark Surface (A12  Sandy Mucky Mineral (S  Sandy Gleyed Matrix (S  Sandy Redox (S5)                |               | Polyvalue Belov  | w Surface   |                | 3.        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D=  lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark So  Thick Dark Surface (A12  Sandy Mucky Mineral (S  Sandy Gleyed Matrix (S  Sandy Redox (S5)               |               | Polyvalue Belov  | w Surface   |                |           |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Strain Thick Dark Surface (A12)  Sandy Mucky Mineral (Second Sandy Gleyed Matrix (Second Sandy Redox (S5)    |               | Polyvalue Belov  | w Surface   |                | 3,        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= Iydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Stratic Dark Surface (A12)  Sandy Mucky Mineral (Second Sandy Gleyed Matrix (Second Sandy Redox (S5)         |               | Polyvalue Belov  | w Surface   |                | 3.        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Strain Thick Dark Surface (A12)  Sandy Mucky Mineral (Second Sandy Gleyed Matrix (Second Sandy Redox (S5)    |               | Polyvalue Belov  | w Surface   |                | 3,        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D= lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Strain Thick Dark Surface (A12)  Sandy Mucky Mineral (Second Sandy Gleyed Matrix (Second Sandy Redox (S5)    |               | Polyvalue Belov  | w Surface   |                | 3,        |                                    | ore Lining, M=Ma                               |                       |
| Type: C=Concentration, D=  lydric Soil Indicators:  Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark So  Thick Dark Surface (A12  Sandy Mucky Mineral (S  Sandy Gleyed Matrix (S  Sandy Redox (S5)               |               | Polyvalue Belov  | w Surface   |                | 3,        |                                    | ore Lining. M=Ma                               |                       |
| lydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Strick Dark Surface (A1: Sandy Mucky Mineral (Sandy Gleyed Matrix (Sandy Redox (S5)   |               | Polyvalue Belov  | w Surface   |                | 3.        |                                    | ore Lining, M=Ma                               |                       |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Strick Dark Surface (A1) Sandy Mucky Mineral (Sandy Gleyed Matrix (Sandy Redox (S5)   |               | Polyvalue Belov  | w Surface   |                | 3.        |                                    | ore Lining, M=Ma                               |                       |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Strick Dark Surface (A1) Sandy Mucky Mineral (Sandy Gleyed Matrix (Sandy Redox (S5)   |               | Polyvalue Belov  | w Surface   |                | 3,        |                                    | ore Lining, M=Ma                               |                       |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Strick Dark Surface (A1) Sandy Mucky Mineral (Strick Sandy Gleyed Matrix (Strick Sandy Redox (S5)  | Surface (A11) | MLRA 149B  |             | (S8) (LRR R    |           | Indicators for Pro                 | blematic Hydric                                |                       |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Startick Dark Surface (A12) Sandy Mucky Mineral (Sandy Gleyed Matrix (Sandy Redox (S5)   | Surface (A11) | MLRA 149B  |             |                |           |                                    | 10) (LRR K, L, M                               |                       |
| Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Stratifick Dark Surface (A1) Sandy Mucky Mineral (S Sandy Gleyed Matrix (S Sandy Redox (S5)   | Surface (A11) | Thin Dark Surfa  | )           | (00) (=:::::   |           |                                    | Redox (A16) (LRI                               |                       |
| Stratified Layers (A5) Depleted Below Dark St Thick Dark Surface (A1) Sandy Mucky Mineral (S Sandy Gleyed Matrix (S Sandy Redox (S5)   | Surface (A11) |  |             |                |           |                                    | eat or Peat (S3)                               |                       |
| Depleted Below Dark St. Thick Dark Surface (A1: Sandy Mucky Mineral (S Sandy Gleyed Matrix (S Sandy Redox (S5)   | Surface (A11) | Loamy Mucky M  |             |                |           |                                    | (S7) ( <b>LRR K, L, N</b><br>ow Surface (S8) ( |                       |
| Thick Dark Surface (A1: Sandy Mucky Mineral (S Sandy Gleyed Matrix (S Sandy Redox (S5)   | unace (ATT)   | Depleted Matrix  |             | ,              |           |                                    | face (S9) (LRR K                               |                       |
| Sandy Gleyed Matrix (S Sandy Redox (S5)  | 12)           | X Redox Dark Su  |             |                |           |                                    | se Masses (F12)                                |                       |
| Sandy Redox (S5)   |               | Depleted Dark  |             | 7)             |           |                                    | odplain Soils (F19<br>(TA6) ( <b>MLRA 14</b>   |                       |
|  | 54)           | Redox Depress  | sions (Fo)  |                |           | Red Parent M                       |  | , 140, 140 <i>b</i> , |
|  |               |  |             |                |           | Very Shallow                       | Dark Surface (TF                               | 12)                   |
| Dark Surface (S7) (LRR   | R R, MLRA 14  | 19B)   |             |                |           | Other (Explain                     | in Remarks)                                    |                       |
| Indicators of hydrophytic ve   | egetation and | wetland hydrology mus  | st be prese | ent, unless di | sturbed o | or problematic.                    |  |                       |
| Restrictive Layer (if obser  |               |  |             |                |           |                                    | - I I I I I I I I I I I I I I I I I I I        |                       |
| Type:  | www.          | _  |             |                | - 11      | La Alla Parella                    |  |                       |
| Depth (inches):  |               | _  |             |                |           | Hydric Soil Presei                 | nt? Yes 📈                                      | _ No                  |
| Remarks:   |               |  |             |                |           |                                    |  |                       |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ball Hill Wind Pro     | ject             | City/0                      | County: Chautauqua                      | County   | Sampling Date: 11/04/1          |
|--------------------------------------|------------------|-----------------------------|---|--|---------------------------------|
| Applicant/Owner: Ball Hill Wind      |                  |                             |   |  | _ Sampling Point: DP- 558       |
| Investigator(s): M. BYDECG           |                  |                             | on, Township, Range:_                   |  |                                 |
| Landform (hillslope, terrace, etc.): |                  |                             | lief (concave, convex, n                |  |                                 |
|                                      |                  |                             | 178 Long: 4                             |  | 7 Datum: NAD 83                 |
| Subregion (LRR or MLRA): LRR-        |                  |                             | Long:                                   | 12.01000   |                                 |
| Soil Map Unit Name:                  | augua            | Silt Loam                   |   | NWI classific  | cation: upland                  |
| Are climatic / hydrologic conditions | on the site typi | cal for this time of year?  | Yes <u>X</u> No                         | (If no, explain in F   | Remarks.)                       |
| Are Vegetation NS, Soil NO           |                  |                             |   |  | present? Yes X No               |
| Are Vegetation No, Soil No           |                  |                             |   | explain any answe  |                                 |
| SUMMARY OF FINDINGS                  |                  |                             |   |  |                                 |
| Hydrophytic Vegetation Present?      |                  | No 🗸                        | Is the Sampled Area                     |  |                                 |
| Hydric Soil Present?                 |                  | No X                        | within a Wetland?                       | Yes  | _ No X                          |
| Wetland Hydrology Present?           | 44               | No X                        | If yes, optional Wetlan                 | nd Site ID   |                                 |
| Remarks: (Explain alternative pr     |                  |                             | 1 Non-1 - Emerican Program              |  |                                 |
| HYDROLOGY                            |                  |                             |   |  |                                 |
| Wetland Hydrology Indicators:        |                  |                             |   | Secondary Indic  | ators (minimum of two required) |
| Primary Indicators (minimum of       | -                | check all that apply)       |   |  | Cracks (B6)                     |
| Surface Water (A1)                   | mo to rodanou,   | Water-Stained Leav          | res (B9)                                |  | atterns (B10)                   |
| High Water Table (A2)                |                  | Aquatic Fauna (B13          |   | Moss Trim L  |                                 |
| Saturation (A3)                      |                  | Marl Deposits (B15)         |   |  | Water Table (C2)                |
| Water Marks (B1)                     |                  | Hydrogen Sulfide O          |   | Crayfish Bu  |                                 |
| Sediment Deposits (B2)               |                  |                             | res on Living Roots (C3                 |  | /isible on Aerial Imagery (C9)  |
| Drift Deposits (B3)                  |                  | Presence of Reduce          |   | the second secon | Stressed Plants (D1)            |
| Algal Mat or Crust (B4)              |                  |                             | ion in Tilled Soils (C6)                |  | Position (D2)                   |
| Iron Deposits (B5)                   |                  | Thin Muck Surface           |   | Shallow Aqu  | uitard (D3)                     |
| Inundation Visible on Aerial         | Imagery (B7)     | Other (Explain in Re        |   | Microtopogr  | aphic Relief (D4)               |
| Sparsely Vegetated Concav            |                  |                             |   | FAC-Neutra   | l Test (D5)                     |
| Field Observations:                  |                  |                             |   |  |                                 |
| Surface Water Present?               | Yes No_          | X Depth (inches):           |   |  |                                 |
| Water Table Present?                 | Yes No _         | X Depth (inches):           |   |  | 3.5                             |
| Saturation Present?                  | Yes No_          | X Depth (inches):           | Wetland                                 | Hydrology Prese  | nt? Yes No X                    |
| (includes capillary fringe)          | 100              |                             | 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | uallable:  |                                 |
| Describe Recorded Data (stream       | n gauge, monito  | inng well, aerial photos, p | revious inspections), if a              | valiable;  |                                 |
|                                      |                  |                             |   |  |                                 |
| Remarks:                             |                  |                             |   | *  |                                 |
|                                      |                  |                             |   |  |                                 |
|                                      |                  |                             |   |  |                                 |
|                                      |                  |                             |   |  |                                 |
|                                      |                  |                             |   |  |                                 |
| w !                                  | 1.0              |                             |   |  |                                 |
| * .                                  |                  |                             |   |  |                                 |
|                                      |                  |                             |   |  |                                 |
|                                      |                  |                             |   |  |                                 |
|                                      |                  |                             |   |  |                                 |
|                                      | 8                |                             |   |  |                                 |



| Absolute | Dominant  | Indicator | nacionalizata dispersionalizata   |
|----------|---|-----------|---|
|          | Species?  |           | Dominance Test worksheet:   |
| 30       | _Y  | FACY      | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)   |
| 20       | Y   | FACU      | Total Number of Dominant  |
| 20       | _ y   | FAC       | Species Across All Strata: (B)  |
| 10       | N   | FACU      | Percent of Dominant Species   |
|          |   |           | That Are OBL, FACW, or FAC: 28 (A/B)  |
|          |   |           |   |
|          | _   |           | Prevalence Index worksheet:   |
| 00       | 2000  |           | Total % Cover of: Multiply by:  |
| 0        | = Total Cov   | /er       | OBL species   |
|          |   | -0-11     | FACW species  |
|          | <del>-y</del> -   | 100       | FACU species 105 x 4 = 420  |
| 10       |   |           | UPL species x 5 =   |
| _5_      | N   |           | Column Totals: 135 (A) 510 (B)  |
| _5_      | N   | FAC       |   |
| 5        | MB  |           | Prevalence Index = B/A = 3.77   |
| 5        | N   | FACU      | Hydrophytic Vegetation Indicators:  |
|          |   |           | 1 - Rapid Test for Hydrophytic Vegetation   |
| 35       | = Total Cov   | /er       | 2 - Dominance Test is >50%  |
|          | 0.01.1111/1221  | .57       | 3 - Prevalence Index is ≤3.01   |
| 15       | V   | FACIL     | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)            |
| 5        | 1   |           | Problematic Hydrophytic Vegetation¹ (Explain)   |
|          | 1   | 1/1       |   |
|          |   |           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|          |   | -         |   |
|          |   |           | Definitions of Vegetation Strata:   |
|          |   |           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
|          |   | -         | at breast height (DBH), regardless of height.   |
|          |   |           | Sapling/shrub – Woody plants less than 3 in, DBH and greater than or equal to 3,28 ft (1 m) tall.                 |
|          |   |           |   |
|          |   |           | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
|          |   |           |   |
|          |   |           | Woody vines – All woody vines greater than 3.28 ft in height.   |
| 20       | = Total Co  | ver       |   |
|          |   |           |   |
|          |   |           |   |
|          |   |           |   |
| _        |   |           | Hydrophytic   |
|          |   |           | Vegetation  |
| =        |   | =         |   |
|          | = Total Co  |           | Vegetation  |
|          | 30<br>20<br>20<br>10<br>10<br>10<br>5<br>5<br>5<br>5<br>5<br> | 30        | 30  |

| Depth               | Matrix                |           | pth needed to doc        | lox Feature  | s                 | or commit   | i the absence of t        | ndicators.)                        |                   |
|---------------------|-----------------------|-----------|--------------------------|--------------|-------------------|-------------|---------------------------|------------------------------------|-------------------|
| (inches)            | Color (moist)         | %         | Color (moist)            | %            | Type <sup>1</sup> | _Loc2       | Texture                   | Rem                                | arks              |
| 0"- 12"             | 10y R3 3              | 80        | 10yR413                  | 20           | _ c               | m           | STL                       |                                    |                   |
| 12"-20"             | 10y2413               | 85        | 104125 /4                | 10           | C                 | ~           | SIL                       |                                    |                   |
|                     | •                     |           | 104R 5 18                | 5            | -                 | m           |                           |                                    |                   |
|                     |                       |           | 7                        |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          | -            |                   |             |                           |                                    | -                 |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
| ype: C=Con          | ncentration, D=Depl   | etion, RM | -Reduced Matrix, M       | S=Masked     | Sand Grai         | ins.        | <sup>2</sup> Location: PL | =Pore Lining, M:                   | =Matrix           |
| aric Soil in        | dicators:             |           |                          |              |                   |             | Indicators for F          | roblematic Hy                      | dric Soils³:      |
| _ Histosol (A       | A1)<br>pedon (A2)     |           | Polyvalue Belo           |              | (S8) (LRR         | R,          | 2 cm Muck                 | (A10) (LRR K, L                    | , MLRA 149B)      |
| _ Black Hist        |                       |           | MLRA 1498 Thin Dark Surf |              | DD D MI           | DA 4400\    | Coast Prairi              | e Redox (A16) (                    | LRR K, L, R)      |
|                     | Sulfide (A4)          |           | Loamy Mucky              | Mineral (F1  | IRRK              | (A 149B)    |                           | Peat or Peat (See (S7) (LRR K,     | 3) (LRR K, L, R)  |
| _ Stratified L      | _ayers (A5)           |           | Loamy Gleyed             | Matrix (F2)  | , (=1111,14)      | ,           | Polyvalue B               | elow Surface (S                    | L, M)             |
| _ Depleted B        | Below Dark Surface    | (A11)     | Depleted Matri           | x (F3)       |                   |             | Thin Dark S               | urface (S9) (LRI                   | RK.L)             |
|                     | Surface (A12)         |           | Redox Dark Su            |              |                   |             | Iron-Mangar               | nese Masses (F                     | 12) (LRR K, L, R) |
|                     | cky Mineral (S1)      |           | Depleted Dark            |              | 7)                |             | Piedmont FI               | oodplain Soils (I                  | F19) (MLRA 149E   |
| Sandy Gle Sandy Red | eyed Matrix (S4)      |           | Redox Depress            | sions (F8)   |                   |             | Mesic Spodi               | c (TA6) (MLRA                      | 144A, 145, 149B   |
| _ Stripped M        |                       |           |                          |              |                   |             | Red Parent                | Material (F21)                     |                   |
|                     | ace (S7) (LRR R, M    | LRA 149E  | )                        |              |                   |             |                           | v Dark Surface (<br>in in Remarks) | (TF12)            |
| dicators of h       | ydrophytic vegetation | on and we | tland hydrology mus      | st be preser | nt, unless o      | disturbed o | or problematic.           |                                    |                   |
| Type:               | yor (ii observeu).    |           |                          |              |                   |             |                           |                                    |                   |
| Depth (inche        | es):                  |           |                          |              |                   | _ 1         | Hydric Soil Prese         | m42 V                              | _ No X            |
| marks:              |                       |           |                          | -            |                   |             | nyuric Soil Prese         | ent? Yes                           | No_/              |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |
|                     |                       |           |                          |              |                   |             |                           |                                    |                   |

| Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed?  Are "Nor Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If neede SUMMARY OF FINDINGS – Attach site map showing sampling point local Hydrophytic Vegetation Present?  Yes No Is the Sampled Are within a Wetland?   | State: NY Sampling Point: DP-350  NULLE Slope (%): O HZ 39568 Datum: NAD 83  NWI classification: LL JA DA  |
|---|--|
| Applicant/Owner: Ball Hill Wind Energy, LLC  Investigator(s): M. COROLO B. J. L. Section, Township, Range:  Landform (hillslope, terrace, etc.): HILLSLOP Local relief (concave, convex, Subregion (LRR or MLRA): LRR-R Lat: 79,17533 Long:  Soil Map Unit Name: ASNVINC SIT LOOM  Are climatic / hydrologic conditions on the site typical for this time of year? Yes No  Are Vegetation NO, Soil NO, or Hydrology NO, significantly disturbed? Are "Nor Vegetation NO, Soil NO, or Hydrology NO, naturally problematic? (If needestand the substitution of the site of year? Yes No Summary OF FINDINGS – Attach site map showing sampling point local Hydrophytic Vegetation Present? Yes No Is the Sampled Are within a Wetland?  Wetland Hydrology Present? Yes X No If yes, optional Wetland? | State: NY Sampling Point: DP-350  NULLER Slope (%): O  HZ 39568 Datum: NAD 83  NWI classification: LL JA D  (If no, explain in Remarks.)  rmal Circumstances" present? Yes X No  ad, explain any answers in Remarks.)  ations, transects, important features, etc.   |
| Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling point local Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydrology Present?  Yes X No  Is the Sampled Are within a Wetland?  Wetland Hydrology Present?  Yes X No  If yes, optional Wetland?  | none): CONCAND Slope (%): O HZ 39568 Datum: NAD 83  NWI classification: LONG MAD (If no, explain in Remarks.)  rmal Circumstances" present? Yes X No ed, explain any answers in Remarks.)  ations, transects, important features, etc.   |
| Local relief (concave, convex, Subregion (LRR or MLRA): LRR-R Lat: 79,14833 Long: Soil Map Unit Name: ASNVINC STIT LOCAT  Are climatic / hydrologic conditions on the site typical for this time of year? Yes No Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Nor Vegetation NO, Soil NO or Hydrology NO naturally problematic? (If needes SUMMARY OF FINDINGS – Attach site map showing sampling point located Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present? Yes X No Is the Sampled Are within a Wetland? Wetland Hydrology Present? Yes X No If yes, optional Wetland Wetland Hydrology Present?   | none):   |
| Subregion (LRR or MLRA): LRR-R  Soil Map Unit Name: ASNVIIIC SITT LOOM  Are climatic / hydrologic conditions on the site typical for this time of year? Yes X  Are "Nor Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling point located thydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes X  No  Is the Sampled Are within a Wetland?  Wetland Hydrology Present?  Yes X  No  If yes, optional Wetland  | Datum: NAD 83 NWI classification:NO  |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes No  | NWI classification: LANGE NWI classification |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes No  | (If no, explain in Remarks.)  rmal Circumstances" present? Yes No ed, explain any answers in Remarks.)  ations, transects, important features, etc.  ea  Yes No  |
| Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic?  Are "Non Are Vegetation NO, Soil NO or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling point local Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No   | mal Circumstances" present? Yes X No   |
| Are Vegetation NO, Soil NO or Hydrology NO naturally problematic? (If needed SUMMARY OF FINDINGS – Attach site map showing sampling point local Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No Is the Sampled Are within a Wetland?  Wetland Hydrology Present?  Yes X No If yes, optional Wetland  | ed, explain any answers in Remarks.)  ations, transects, important features, etc.  ea  Yes X No  |
| SUMMARY OF FINDINGS – Attach site map showing sampling point local Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No Is the Sampled Are within a Wetland?  Wetland Hydrology Present?  Yes X No If yes, optional Wetland   | ations, transects, important features, etc.  |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X No Is the Sampled Are within a Wetland?  Wetland Hydrology Present?  Yes X No If yes, optional Wetland   | ea<br>Yes X No   |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X No Is the Sampled Are within a Wetland?  Wetland Hydrology Present?  Yes X No If yes, optional Wetland   | ea<br>Yes X No   |
| Wetland Hydrology Present?  Yes X No If yes, optional Wetlernarks: (Explain alternative procedures here or in a separate report.)   | land Site ID: WUTT 3 34.   |
| Remarks: (Explain alternative procedures here or in a separate report.)   |  |
|   |  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  | Stunted or Stressed Plants (D1)  |
| Surface Water Present? Yes X No Depth (inches): 0 1 1   |  |
| Water Table Present? Yes X No Depth (inches): 0"  | and Hydrology Present? Yes X No  |
| Saturation Present? Yes X No Depth (Inches): 01/ Wetlan (Includes capillary fringe)   | ind Hydrology Present? Yes 3 No  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if   | f available:   |
|   |  |
| Remarks:  |  |
|   |  |

Sampling Point: DP- 559 VEGETATION - Use scientific names of plants. Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30 ) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: Multiply by: = Total Cover OBL species \_\_\_\_\_ x 1 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 15 FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_ 1. Not Modicable FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% = Total Cover \_\_ 3 - Prevalence Index is ≤3.0¹ Herb Stratum (Plot size: 4 - Morphological Adaptations (Provide supporting gamia araminifilia data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 5. Scirpus cyperinas **Definitions of Vegetation Strata:** Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 100 = Total Cover Woody Vine Stratum (Plot size: 30 Hydrophytic Vegetation Yes X No \_\_\_\_ Present? Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

| - | - |  |  |
|---|---|--|--|
|   |   |  |  |

| Depth Matrix  |  | x Features                                  | AND AND AND AND AND AND AND AND  |  |
|---|--|---|--|--|
| (inches) Color (moist)  | % Color (moist)  | % Type <sup>1</sup> Loc                     | Texture  | Remarks  |
| 0-5" Z.5Y <sup>25</sup> /1  | 95 10 VR 5/8   | 5 C m                                       | SIL  |  |
|   |  |   |  |  |
|   |  |   |  |  |
|   |  |   |  |  |
| ype: C=Concentration, D=Deplet  | ion, RM=Reduced Matrix, MS   | =Masked Sand Grains                         | <sup>2</sup> Location: PL=Pore   | ining M=Matrix   |
| ydric Soil Indicators: _ Histosol (A1)  |  |   | Indicators for Problem   | natic Hydric Soils <sup>3</sup> :  |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLR | MLRA 149B)  Thin Dark Surfact Loamy Mucky M Loamy Gleyed M A11) Depleted Matrix Redox Dark Surf Depleted Dark S Redox Depression | (F3)<br>ace (F6)<br>urface (F7)<br>ons (F8) | Coast Prairie Redo  5 cm Mucky Peat o  Dark Surface (S7)  Polyvalue Below S  Thin Dark Surface  Iron-Manganese M  Piedmont Floodpla  Mesic Spodic (TA6  Red Parent Materia  Very Shallow Dark  Other (Explain in R | urface (S8) (LRR K, L) (S9) (LRR K, L) lasses (F12) (LRR K, L, R) in Soils (F19) (MLRA 149E a) (MLRA 144A, 145, 149B al (F21) Surface (TF12) |
| dicators of hydrophytic vegetation<br>estrictive Layer (if observed):   | and wettand hydrology must   | be present, unless disturb                  | ed or problematic.   |  |
| Type:   |  |   | Hydric Soil Present?   | Yes X No   |
| marks:  |  |   |  |  |

| WETLAND DETERMINA   |  |  |   |  |
|---|--|--|---|--|
| Project/Site: Ball Hill Wind Project  | City/Cou   | inty: Chautauqua (   |   | Sampling Date: 1/104/15  |
| Applicant/Owner: Ball Hill Wind Energy, LLC   |  |  | _ State: NY   | Sampling Point: DP-5(ac  |
| nvestigator(s): M. Bolerg BVIIT.  | Section,   | Township, Range:   | VILLeron  | MA   |
| andform (hillslope, terrace, etc.): Hills1000   |  | (concave, convex, nor  | ne): ('On(0   | WL Slope (%): 0  |
|   | 70 149/4/  |  | 2.39566   | Datum: NAD 83  |
|   | - Landa  | cong   |   | cation: upland   |
| Soil Map Unit Name: ASDVILL SUF L   | <i>oam</i>   | V  |   |  |
| Are climatic / hydrologic conditions on the site typical  |  |  | (If no, explain in R  | to the same of the |
| re Vegetation $\overline{ \bigcirc }$ , Soil $\overline{ \bigcirc }$ , or Hydrology $\overline{ \bigcirc }$   | significantly disturbe   | d? Are "Normal   | Circumstances"  | present? Yes 🔏 No  |
| are Vegetation $\overline{MQ}$ , Soil $\overline{MQ}$ , or Hydrology $\overline{\Delta}$  | 10 naturally problemation  | ? (If needed, e  | explain any answe   | ers in Remarks.)   |
| SUMMARY OF FINDINGS – Attach site i   | map showing samp   | ling point location  | ons, transects  | s, important features, etc.  |
| Hydrophytic Vegetation Present? Yes   | No X   | s the Sampled Area   |   |  |
| Hydric Soil Present? Yes  |  | vithin a Wetland?  | Yes   | _ No X   |
| Wetland Hydrology Present? Yes  |  | f yes, optional Wetland  | Site ID:  |  |
| Remarks: (Explain alternative procedures here or in   |  |  |   |  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; che  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) | Water-Stained Leaves Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor Oxidized Rhizospheres Presence of Reduced I Recent Iron Reduction Thin Muck Surface (C7 | (C1)<br>on Living Roots (C3)<br>ron (C4)<br>in Tilled Soils (C6) | Surface Soil Drainage Pa Moss Trim L Dry-Season Crayfish Bui Saturation V Stunted or S Geomorphic | Water Table (C2) rrows (C8) /isible on Aerial Imagery (C9) Stressed Plants (D1) Position (D2)  |
| Inundation Visible on Aerial Imagery (B7)   | _ Other (Explain in Rema   | arks)  | FAC-Neutra  |  |
| Sparsely Vegetated Concave Surface (B8) Field Observations:   |  |  | i Ao-Neulla   |  |
| Surface Water Present? Yes No _X  | Depth (inches):  |  |   |  |
| Water Table Present? Yes No _X  |  |  |   |  |
| Saturation Present? Yes No _X   |  | Wetland  | Hydrology Prese   | nt? Yes No 🗶   |
| (includes capillary fringe)   |  |  |   |  |
| Describe Recorded Data (stream gauge, monitoring  | well, aerial photos, prev  | ious inspections), if av   | ailable:  |  |
|   |  |  |   |  |
| Remarks:  |  |  |   |  |
|   |  |  |   |  |
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|   |  |  |   |  |

| 1.Not Applicable   |    |                       | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
|--|----|-----------------------|---|
| 3  |    |                       | Total Number of Dominant Species Across All Strata: (B)   |
| <b>4</b>   |    |                       | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 6  | 0  | = Total Cover         | Prevalence Index worksheet:   |
| 5  |    |                       | Prevalence Index = B/A = 4  |
| 6  | 0  | = Total Cover  Y FACU | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) |
| 2. Tritolium repens  | 15 | N FACU                | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  Indicators of hydric soil and wetland hydrology must   |
| <b>45</b>  |    |                       | be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| 6<br>7   |    |                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
| 8  |    |                       | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 9  |    |                       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 12   |    |                       | Woody vines - All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size: 30')  1.NOT PPPICABLE  2  3 |    | = Total Cover         | Hydrophytic Vegetation Present? Yes No  |
| a.   |    | = Total Cover         |   |

| Depth  | Matrix  |             | pth needed to docum<br>Redox | Feature   | s                 |                     | i the absence of in | idicators.)            |
|--|---|-------------|------------------------------|---|-------------------|---------------------|---------------------|------------------------|
| (inches)   | Color (moist)   | %           | Color (moist)                | _%_   | Type <sup>1</sup> | _Loc <sup>2</sup> _ | Texture             | Remarks                |
| 2420   |   | 45          | 75423/4                      | 2   | C                 | m                   | -SIL _              |                        |
| 2"20"  | 254 5/4   | 08          | 2.5y 412                     | 15  | D                 | m                   | _SL                 |                        |
|  | -   |             | LOVE 416                     | 5   | C                 | m                   | -SL_                |                        |
|  |   |             |                              |   | _                 |                     |                     |                        |
|  |   |             |                              |   | =                 |                     |                     |                        |
| Type: C=Co   | ncentration, D=Dep  | eletion. RM | =Reduced Matrix, MS          | =Masked   | Sand Gra          |                     | 2) continue Dis-    | Describing M. Mari     |
| lydric Soil II   | ndicators:  |             | CM , Allania Document        | Masked  | Janu Gra          | ailio.              | Indicators for P    | Pore Lining, M=Matrix. |
| Black His Hydroger Stratified Depleted Thick Dar Sandy Mu Sandy Gl Sandy Re Stripped I Dark Surf | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)     Idack Histic (A3) |             | L)                           | Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L, R) Pledmont Floodplain Soils (F19) (MLRA 1498 Mesic Spodic (TA6) (MLRA 144A, 145, 1498 Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) |                   |                     |                     |                        |
| ndicators of I   | nydrophytic vegetati<br>ayer (if observed):                           | ion and we  | etland hydrology must        | be preser   | nt, unless        | disturbed           | or problematic.     |                        |
| Type:  | tyer (ii observeu).   |             |                              |   |                   |                     |                     |                        |
| Depth (inch  | nes):   |             |                              |   |                   |                     | Hydric Soil Prese   | ent? Yes No _          |
|  |   |             |                              |   |                   |                     |                     |                        |
|  |   |             |                              |   | Ť                 |                     |                     |                        |

| WETLAND DETERMINATION DA   | ATA FORM – Northcentral and Northeast Region   |
|--|--|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 11/04/1  |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- 50/  |
| Investigator(s): M. BOBFRO B. VIRTS  | Section, Township, Range:VIULENOVE   |
| Landform (hillslope, terrace, etc.): HILLSIOPE   | Local relief (concave, convex, none): Slope (%): Slope (%):  |
|  | 149841 Long: 42, 397662 Datum: NAD 83  |
| Soil Map Unit Name: BUSTI SIIT LOAM  | NWI classification: WAGNO  |
| Are climatic / hydrologic conditions on the site typical for this time   |  |
| Are Vegetation $N_0^{\circ}$ , Soil $N_0^{\circ}$ , or Hydrology $N_0^{\circ}$ signification   |  |
|  |  |
| Are Vegetation $\mathcal{N}_{\mathcal{O}}$ , Soil $\mathcal{N}_{\mathcal{O}}$ , or Hydrology $\mathcal{N}_{\mathcal{O}}$ naturall  | ly problematic? (If needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS – Attach site map show   | ving sampling point locations, transects, important features, etc.   |
| Hydrophytic Vegetation Present? Yes X No   | Is the Sampled Area  |
| Hydric Soil Present? Yes X No  | within a Wetland? Yes X No   |
| Wetland Hydrology Present? Yes X No  | If yes, optional Wetland Site ID: WL-ASS   |
| Remarks: (Explain alternative procedures here or in a separate   | report.)   |
| 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) Aquatic Fa Marl Deposit Hydrogen Oxidized R Presence of Recent Iron Thin Muck | Ined Leaves (B9) Inuna (B13) Inuna (B15) Inuna (B15) Inuna (B15) Inuna (B15) Inuna (B16) Inuna (B17) Inuna (B18) Inuna (B19) Inuna (B19) Inuna (B19) Inuna (B10) I |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)  |
| Field Observations:  Surface Water Present? Yes X No Depth (inc  | shoots 6 - 1 II  |
| Water Table Present? Yes X No Depth (inc   |  |
| Saturation Present? Yes X No Depth (inc  |  |
| (includes capillary fringe)  |  |
| Describe Recorded Data (stream gauge, monitoring well, aerial p  | photos, previous inspections), if available:   |
|  |  |
| Remarks:   |  |
|  |  |
|  |  |
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|  |  |
|  |  |

| VEGETATION - Ose scientific flatties of platfo       | Absolute  | Dominant     | Indicator |  |
|--|-----------|--------------|-----------|--|
| Tree Stratum (Plot size: 301)                        |           | Species?     |           | Dominance Test worksheet:  |
| 1. Acer sarcharum                                    | 25        | У            | FAW       | Number of Dominant Species That Are OBL, FACW, or FAC:   |
| 2. Fraxinus americana                                | 25        | y .          | FACU      |  |
| 3. Betwa nigra                                       | 10        | N            | FACW      | Total Number of Dominant Species Across All Strata:(B)   |
| 4  |           |              |           | Percent of Dominant Species  |
| 5  |           |              |           | That Are OBL, FACW, or FAC: 42 (A/B)   |
| 6.   |           |              |           | B. C.  |
| 7  |           |              |           | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |
| -  | (00)      | = Total Co   | ver       | OBL species O x1 = O   |
| Sapling/Shrub Stratum (Plot size: 151 )              |           | - Total oo   |           | FACW species 20 x2 = 40  |
| 1. Fraxinus americana                                | 40        | V            | FACU      | FAC species 15 x3 = 45   |
| 2. Acer saccharum                                    | 25        | ~            | FACU      | FACU species 115 x4= 4LD   |
|  |           | -1           |           | UPL species O x 5 = O  |
| 3. Betwa nigra                                       | 10        | N            | FACW      | Column Totals: 150 (A) 545 (B)   |
| 4  |           | -            |           | Prevalence Index = B/A = 3. 43   |
| 5  |           | -            |           |  |
| 6  |           |              |           | Hydrophytic Vegetation Indicators:   |
| 7  |           |              |           | 1 - Rapid Test for Hydrophytic Vegetation  |
|  | 75        | = Total Co   | ver       | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 15')                        |           |              |           | 3 - Prevalence Index is ≤3.0¹  |
| 1. Dryopteris intermedia                             | 5         | Y            | FAC       | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)           |
| 2. Equisetum arvense                                 | 3         | Y            | FAC       | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Euthamia graminifolia                             | 5         | Y            | FAC       | ¹Indicators of hydric soil and wetland hydrology must  |
|  |           | -            |           | be present, unless disturbed or problematic.   |
| 4  |           | -            |           | Definitions of Vegetation Strata:  |
| 5  |           | -            | -         |  |
| 6  |           |              |           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 7  |           | -            |           |  |
| 8  |           |              |           | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
| 9  |           |              |           | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10   | -         | 7            |           | size, and woody plants less than 3.28 ft tall.   |
| 11   |           |              |           | Woody vines - All woody vines greater than 3.28 ft in  |
| 12   |           |              |           | height.  |
| Y  | 15        | = Total Co   | ver       |  |
| Woody Vine Stratum (Plot size: 30 )                  |           |              |           |  |
| 1. NOT Applicable                                    |           |              |           |  |
| 2  |           |              |           | Hydrophytic  |
| 3  |           |              |           | Vegetation Present? Yes X No   |
|  |           |              |           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 7-   | 0         | = Total Co   |           |  |
| Remarks: (Include photo numbers here or on a separat | e sheet ) | _ = 10tar 00 | Yel       |  |
| remarks. (mergus prote manuscra nere er en a separar |           |              |           |  |
| Trons and using                                      | ala ata   | ition        | 5 110     | 1110 tioned  |
| Trees are using a                                    | dapro     | (1101)       | S 111     | Willianci.   |
|  |           |              |           | White Ash  |
| - Flutting   |           |              |           | -white Ash   |
| - Flutting<br>- Shallow room                         | tina      |              |           | -sugar maple   |
| - 5/1000 / 60  | to one    | ve dal       | rra       |  |
| - utilizing micro                                    | IDDAG     | april        | 18        | UVI.   |

| Depth   | Matrix            |             |   | Feature   | 8                           |             |   |                   |  |  |
|---|-------------------|-------------|---|---|-----------------------------|-------------|---|-------------------|--|--|
| (inches)  | Color (moist)     | %           | Color (moist)   | %   | Type'                       | Loc2        | Texture   | Remark            | 8  |  |
| 0-10 2  | 5425/1            | 98          | 75425/8   | 2   |                             | <u>m</u>    |   | A                 |  |  |
|   |                   |             |   |   | <u> </u>                    |             |   |                   |  |  |
|   |                   |             |   |   |                             |             |   |                   |  |  |
|   |                   |             |   |   |                             |             |   |                   |  |  |
|   |                   | letion, RM: | =Reduced Matrix, MS   | =Masked   | Sand Gr                     | ains.       |   | =Pore Lining, M=N |  |  |
| Hydric Soil Indicators:  Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 14 |                   |             | Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark S Redox Depressi | ce (S9) (I<br>lineral (F<br>Matrix (F2<br>(F3)<br>face (F6)<br>Surface (F | LRR R, M<br>1) (LRR K<br>2) | LRA 149B)   | Indicators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks) |                   |  |  |
|   |                   |             | etland hydrology mus  | t be pres   | ent, unles                  | s disturbed | or problematic.   |                   | Company of the Compan |  |
| Restrictive Lay   | er (if observed): |             |   |   |                             |             |   |                   |  |  |
| Туре:   |                   |             |   |   |                             |             | 100000000000000000000000000000000000000   |                   |  |  |
| Depth (inche<br>Remarks:  | s):               |             |   |   |                             |             | Hydric Soil Pre   | sent? Yes X       | No   |  |
|   |                   |             |   |   |                             |             |   |                   |  |  |
|   |                   |             |   |   |                             |             |   |                   |  |  |

## 

| Applicant/Owner: Ball Hill Wind En  | ergy, LLC  |  | _ State: NY Sam  | pling Point: DP-562        |  |  |
|---|--|--|--|----------------------------|--|--|
| Investigator(s): M. BODETA  | BVIRTS   | Section, Township, Range:                    | VILLErova  |                            |  |  |
| Landform (hillslope, terrace, etc.):  | illslope Lo  | cal relief (concave, convex, no              | ne): CONVEX  | Slope (%):                 |  |  |
| Subregion (LRR or MLRA): LRR-R  | Lat: 79.1500   | 022 Long: 4                                  | 2,397041   | Datum: NAD 83              |  |  |
| Soil Map Unit Name: BUST S  | IIt wam  |  | NWI classification:                                      | upland                     |  |  |
| Are climatic / hydrologic conditions on the Are Vegetation NO, Soil NO, or Are Vegetation NO, Soil NO, or SUMMARY OF FINDINGS — A | Hydrology <u>NO</u> significantly<br>Hydrology <u>NO</u> naturally pro   | disturbed? Are "Norma oblematic? (If needed, | al Circumstances" present?<br>explain any answers in Rer | Yes <u>X</u> No<br>marks.) |  |  |
| Hydrophytic Vegetation Present?   | Yes No.X<br>Yes No.X   | Is the Sampled Area within a Wetland?        | Yes No   | ×                          |  |  |
| Hydric Soil Present?  |  |  | noneta vo.   |                            |  |  |
| Wetland Hydrology Present?  Remarks: (Explain alternative proces  | Yes No X   | If yes, optional Wetlan                      | d Site ID:   |                            |  |  |
| HYDROLOGY   |  |  | Casandan Indicators (mi                                  | ninum of two required)     |  |  |
| Wetland Hydrology Indicators:   |  |  | Secondary Indicators (mi                                 |                            |  |  |
| Primary Indicators (minimum of one i  |  |  | Surface Soil Cracks                                      |                            |  |  |
| Surface Water (A1)  | Water-Stained  |  | Drainage Patterns (B                                     |                            |  |  |
| High Water Table (A2)   | Aquatic Fauna  |  | Moss Trim Lines (B16) Dry-Season Water Table (C2)        |                            |  |  |
| Saturation (A3)   | Marl Deposits Hydrogen Sulfi   |  | Crayfish Burrows (Ca                                     |                            |  |  |
| Water Marks (B1) Sediment Deposits (B2)   |  | ospheres on Living Roots (C3)                |  |                            |  |  |
| Drift Deposits (B3)   |  | educed Iron (C4)                             | Stunted or Stressed                                      |                            |  |  |
| Algal Mat or Crust (B4)   |  | eduction in Tilled Soils (C6)                | Geomorphic Position                                      |                            |  |  |
| Iron Deposits (B5)  | Thin Muck Sur  | face (C7)                                    | Shallow Aquitard (D3                                     | 3)                         |  |  |
| Inundation Visible on Aerial Imag   | gery (B7) Other (Explain   | in Remarks)                                  | Microtopographic Re                                      | lief (D4)                  |  |  |
| Sparsely Vegetated Concave Su   | ırface (B8)  |  | FAC-Neutral Test (D                                      | 5)                         |  |  |
| Field Observations:   |  |  |  |                            |  |  |
| Surface Water Present? Yes  | No X Depth (inches   |  |  |                            |  |  |
|   | No X Depth (inches   |  |  | s No X                     |  |  |
| Saturation Present? Yes_<br>(includes capillary fringe)<br>Describe Recorded Data (stream ga                                      | No X Depth (inches<br>uge, monitoring well, aerial phot  | 1  | Hydrology Present? Ye vallable:                          | s No <u>Z1</u>             |  |  |
|   |  |  |  |                            |  |  |
| Remarks:  |  |  |  |                            |  |  |
|   |  |  |  |                            |  |  |
|   |  |  |  |                            |  |  |
|   |  |  |  |                            |  |  |
|   |  |  |  |                            |  |  |
|   |  |  |  |                            |  |  |
|   |  |  |  |                            |  |  |
|   | and the same of th | of the Paris                                 |  |                            |  |  |
|   |  |  |  |                            |  |  |
| -6  | Esia de  |  |  |                            |  |  |

|   | Absolute<br>% Cover | Dominant Species? | The state of the s | Dominance Test worksheet:   |
|---|---------------------|-------------------|--|---|
| Tree Stratum (Plot size: 301)  1. ACCY SACCHARWYY           | 50                  | y                 | FACU   | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
| 2. Populus tremuloides                                      | 15                  | У.                | FACU   |   |
|   | 10                  | N                 | FACU   | Total Number of Dominant Species Across All Strata; (B)   |
| 4   |                     |                   | 3742   |   |
| 5.  |                     | -                 |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
|   |                     |                   |  |   |
| 6   | -                   | •                 |  | Prevalence Index worksheet:   |
| ſ- <u> </u>   | 75                  | T-1-10            |  | Total % Cover of: Multiply by:  |
| 121   | _10_                | = Total Cov       | er   | OBL species   |
| Sapling/Shrub Stratum (Plot size: 15')                      | 20                  | V                 | FALL   | FAC species   |
| 1. Acer saccharum   | 30                  | <del>y</del>      | FALL   | FACU species 105 x4 = UUO   |
| 2. Populus tremuloides                                      |                     | X                 | EACU   | UPL species O x 5 = O   |
| 3. Fagus granditolia  | 10                  | N                 | FACU   | Column Totals: 170 (A) 615 (B)  |
| 4   |                     |                   |  |   |
| 5   |                     | _                 |  | Prevalence Index = B/A = 3.97   |
| 6   |                     |                   |  | Hydrophytic Vegetation Indicators:  |
| 7   |                     |                   |  | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | Leo                 | = Total Cov       | ver .  | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5 )                                |                     |                   |  | 3 - Prevalence Index is ≤3.0¹   |
| 1. Rubus idaeus   | 20                  | Y                 | FACU   | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| 2. Divopteris intermedia                                    | 5                   | N                 | FAC  | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Fragaria Vesca   | 5                   | N                 | NI   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must   |
| 4. Fagus grandifolia  | 5                   | N                 | FACU   | be present, unless disturbed or problematic.  |
| 5. ALEY SACCHARUM   | 5                   | 1                 | FALL   | Definitions of Vegetation Strata:   |
|   |                     |                   | 1/14   |   |
| 6   |                     |                   |  | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.                           |
| 7   |                     |                   |  | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 8   | -                   | -                 |  | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9   |                     |                   |  | Herb – All herbaceous (non-woody) plants, regardless of   |
| 10  |                     |                   | -  | size, and woody plants less than 3.28 ft tall.  |
| 11  |                     |                   |  | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  |                     | -                 |  | height.   |
| -40   | 40                  | = Total Co        | /er  |   |
| 7/1   |                     |                   |  |   |
| Woody Vine Stratum (Plot size: 50)                          |                     |                   |  | 2.0.05  |
| Woody Vine Stratum (Plot size: 30 )  1. NOT APPLICARE       |                     |                   |  | Unidam handle   |
|   |                     |                   |  | Hydrophytic   |
| Woody Vine Stratum (Plot size: 30')  1. NOT APPLICATE  2  3 |                     |                   |  | Vegetation Present? Yes No  |
|   |                     |                   |  | Vegetation  |
|   |                     | = Total Co        | /er  | Vegetation  |

| Depth                        | cription: (Describe         | to the depi | n needed to docum                    | nent the indicator or  | confirm  | the absence o            | of indicators.)  |
|------------------------------|-----------------------------|-------------|--------------------------------------|------------------------|----------|--------------------------|--|
| (inches)                     | Matrix<br>Color (moist)     | %           | Redo                                 | x Features             |          |                          |  |
| 0-1"                         | 75VZ5/                      | 100         | Goldi (moist)                        |                        | roc.     | Texture                  | Remarks  |
| 1-110"                       | 104R 3/3                    | 100         |                                      |                        |          | SIL                      |  |
| 110-70                       | 1000 2/1                    | -           |                                      |                        |          | SIL                      |  |
| 10 0                         | TOXIC -/                    | 100         |                                      |                        |          | SL_                      |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             | -                                    |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              | -                           |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
| Type: C=Co<br>Hydric Soil Ir | ncentration, D=Deple        | etion, RM=R | educed Matrix, MS=                   | -Masked Sand Grains    |          | <sup>2</sup> Location: P | PL=Pore Lining, M=Matrix.  |
| Histosol (                   |                             |             | Polyvalue Below                      | Surface (S8) (LRR R,   |          |                          | Problematic Hydric Soils <sup>3</sup> :                                |
| Histic Epi                   | ipedon (A2)                 | -           | MLRA 149B)                           | Surface (So) (LRR R,   |          | 2 cm Muc                 | k (A10) (LRR K, L, MLRA 149B)<br>ilrie Redox (A16) (LRR K, L, R)       |
| Black His                    | itic (A3)<br>n Sulfide (A4) | _           | _ Thin Dark Surface                  | e (S9) (LRR R, MLRA    | 149B)    | 5 cm Mucl                | ky Peat or Peat (S3) (LRR K, L, R)                                     |
| Stratified                   | Layers (A5)                 | -           | _ Loamy Mucky Mil                    | neral (F1) (LRR K, L)  |          | Dark Surfa               | ace (S7) (LRR K, L, M)   |
| Depleted                     | Below Dark Surface (        | (A11)       | Loamy Gleyed Ma<br>Depleted Matrix ( | atrix (F2)             |          | Polyvalue                | Below Surface (S8) (LRR K, L)  |
| Thick Dar                    | k Surface (A12)             | _           | _ Redox Dark Surfa                   |                        |          | Thin Dark                | Surface (S9) (LRR K, L)  |
| Sandy Mu                     | ucky Mineral (S1)           |             | _ Depleted Dark Su                   | rface (F7)             |          | Piedmont                 | anese Masses (F12) (LRR K, L, R)<br>Floodplain Soils (F19) (MLRA 149B) |
| Sandy Gle<br>Sandy Re        | eyed Matrix (S4)            | -           | Redox Depression                     | ns (F8)                |          | Mesic Spo                | edic (TA6) (MLRA 144A, 145, 149B)                                      |
| _ Stripped N                 | Matrix (S6)                 |             |                                      |                        |          | Red Paren                | nt Material (F21)  |
| _ Dark Surfa                 | ace (S7) (LRR R, ML         | RA 149B)    |                                      |                        |          | Very Shalle              | ow Dark Surface (TF12)<br>plain in Remarks)                            |
| ndicators of h               | nydrophytic vegetation      | n and wetla | nd hydrology must h                  | e present, unless dist |          |                          | rain in Komarksy   |
| - California Ed              | yer (if observed):          |             | na nyarology mast b                  | e present, unless dist | urbed or | problematic,             | 23.55  |
| Type:<br>Depth (inch         |                             |             |                                      |                        |          |                          |  |
| emarks:                      | es)                         |             |                                      |                        | ŀ        | lydric Soil Pres         | sent? Yes No X   |
| omanto.                      |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |
|                              |                             |             |                                      |                        |          |                          |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11/05/ Project/Site: Ball Hill Wind Project \_\_ Sampling Point: DP-504 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. PODERG S. PUCKENTILLEY Section, Township, Range: VILLEROVE Local relief (concave, convex, none): \_\_\_\_\_\_\_\_ Landform (hillslope, terrace, etc.): HIIS10Pe Datum: NAD 83 ,169726 Long: 42.403284 Subregion (LRR or MLRA): LRR-R NWI classification: UnionC Soil Map Unit Name: Langiord \_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WLAS36 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) X Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) Aquatic Fauna (B13) X High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) X Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Shallow Aquitard (D3) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No \_\_\_\_ Depth (inches): 0-1" Surface Water Present? Yes X No Depth (inches): O'Yes X No Depth (inches): O'Yes Water Table Present? Wetland Hydrology Present? Yes X No \_\_\_\_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Absolute<br>% Cover | Dominant<br>Species?                      |                         | Dominance Test worksheet:   |
|---------------------|---|-------------------------|---|
|                     |   |                         | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)   |
|                     |   |                         |   |
|                     |   |                         | Total Number of Dominant Species Across All Strata:  (B)  |
|                     |   |                         | Percent of Dominant Species   |
|                     |   |                         | That Are OBL, FACW, or FAC:(A/B)  |
|                     |   |                         |   |
|                     |   |                         | Prevalence Index worksheet:   |
| Term.               |   |                         | Total % Cover of:Multiply by:   |
|                     | -   Otal CO                               | vei                     | OBL species x 1 =<br>FACW species x 2 =   |
| 15                  | V   | Encie!                  | FAC species x3 =  |
| -                   |   | A STATE OF THE STATE OF | FACU species x 4 =  |
|                     | <u>y</u>                                  | A Marie Land            | UPL species x 5 =   |
|                     |   | FAC                     | Column Totals: (A) (B)  |
|                     |   |                         |   |
|                     |   |                         | Prevalence Index = B/A =  |
|                     |   |                         | Hydrophytic Vegetation Indicators:  |
|                     |   |                         | 1 - Rapid Test for Hydrophytic Vegetation   |
|                     | = Total Co                                | ver                     | X 2 - Dominance Test is >50%  |
|                     | 1000                                      |                         | 3 - Prevalence Index is ≤3.01   |
| 20                  | V   | OBI                     | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
|                     | 1   | -                       | Problematic Hydrophytic Vegetation¹ (Explain)   |
|                     |   |                         |   |
|                     | N   |                         | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
|                     | N   |                         |   |
|                     | N   | FACU                    | Definitions of Vegetation Strata:   |
| _5_                 | N   | OBL                     | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 5                   | N   | FACU                    | at breast height (DBH), regardless of height.   |
| 5                   | N   | OBL                     | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 5                   | N   |                         | and greater than or equal to 3.28 ft (1 m) tall.  |
| -                   |   |                         | Herb - All herbaceous (non-woody) plants, regardless of   |
|                     | _   |                         | size, and woody plants less than 3.28 ft tall.  |
|                     | •   |                         | Woody vines - All woody vines greater than 3.28 ft in   |
| 100                 | 23  |                         | height.   |
| 100                 | = Total Co                                | ver                     |   |
|                     |   |                         |   |
|                     |   |                         | 11.00001000   |
|                     |   |                         | Hydrophytic<br>Vegetation   |
|                     |   |                         | Present? Yes No   |
|                     | _   |                         |   |
|                     |   |                         |   |
|                     | = Total Co                                | ver                     |   |
|                     | 25<br>30<br>20<br>10<br>10<br>5<br>5<br>5 | Cover   Species?        | Cover   Species?   Status   |

| g, M=Matrix.                               |
|--|
|  |
|  |
| HVORIC Soile"                              |
|  |
| K, L, MLRA 149B)<br>16) (LRR K, L, R)      |
| at (S3) (LRR K, L, R                       |
| R K, L, M)                                 |
| ce (S8) (LRR K, L)                         |
| (LRR K, L)                                 |
| es (F12) (LRR K, L, F                      |
| oils (F19) (MLRA 149<br>LRA 144A, 145, 149 |
| 21)  |
| ace (TF12)                                 |
| rks)                                       |
|  |
| AND    |
|  |
| X No                                       |
|  |
| >_   |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP Investigator(s): M. Bobera, S. Buckenmeyer Section, Township, Range: Local relief (concave, convex, none): CONVEX Landform (hillslope, terrace, etc.): \_\_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: BUST SIIT NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation No . Soil No . or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Yes \_\_\_\_ No X Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) Aquatic Fauna (B13) High Water Table (A2) Dry-Season Water Table (C2) Marl Deposits (B15) Saturation (A3) Crayfish Burrows (C8) Hydrogen Sulfide Odor (C1) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) **Field Observations:** Yes \_\_\_\_ No X \_ Depth (inches): Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No \_\_\_\_ Yes \_\_\_\_ No X Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

|   |             |   | That Are OBL, FACW, or FAC: (A)   |
|---|-------------|---|---|
|   |             |   | Total Number of Dominant Species Across All Strata: (B)   |
|   | _           |   | Percent of Dominant Species That Are OBL, FACW, or FAC: 25 (A/B)  |
|   |             |   | Prevalence Index worksheet:   |
| _ |             |   |   |
| _ | = Total Cov | ег  | OBL species   |
|   | V           | FAC   | FAC species 15 x3 = 45  |
| _ | <del></del> |   | FACU species 105 x4 = 420   |
| - |             |   | UPL species   |
| _ | 14          |   | Column Totals: 125 (A) 490 (B)  |
|   | N           | FAC   | Prevalence Index = B/A = 3.92   |
|   |             |   | Hydrophytic Vegetation Indicators:  |
|   |             |   | 1 - Rapid Test for Hydrophytic Vegetation   |
| ) | = Total Cov | er  | 2 - Dominance Test is >50%  |
|   | - 1- m-1    |   | 3 - Prevalence Index is ≤3.01   |
|   | V           | FALL  | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| _ | 1           |   | Problematic Hydrophytic Vegetation (Explain)  |
|   | N           |   |   |
|   | 11          |   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.             |
|   | 10          |   |   |
|   | N           |   | Definitions of Vegetation Strata:   |
|   | 10          | 101   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.                          |
|   |             |   | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                             |
| _ |             |   |   |
| _ |             | -   | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.                        |
|   |             |   | Woody vines - All woody vines greater than 3.28 ft in height.   |
| 2 | = Total Cov | er  |   |
|   |             |   |   |
|   |             |   |   |
|   |             |   | Hydrophytic   |
|   |             |   | Vegetation Present? Yes No  |
|   |             |   |   |
| 5 | - Total Cov | or.   |   |
| _ | - Total Cov | GI .  |   |
|   |             | Total Cov  Y  X  N  Total Cov  Y  N  N  N  N  Total Cov | Y FACU Y FACU N UPL N NI                                       |

| 00 |    |  |
|----|----|--|
|    | 11 |  |

|   | ription: (Describe<br>Matrix   |           | Rede                 | x Feature  | s                 |                |   |   |   |
|---|--|-----------|----------------------|--|-------------------|----------------|---|---|---|
| (inches)  | Color (moist)  | %         | Color (moist)        | %  | Type <sup>1</sup> | _Loc2          | Texture   | Ren   | narks   |
| 2-10  | 104R 4/3   | 100       |                      |  |                   |                | SIL   |   |   |
| 0-20  | 104R4/3  | 98        | 10YR 5/6             | 2  | <u>C</u>          | <u>M</u>       | SIL   |   | *****   |
|   |  |           |                      |  |                   |                |   |   |   |
|   |  |           |                      |  |                   |                |   |   |   |
| ype: C=Coi<br>ydric Soil Ir   | ncentration, D=Deple   | etion, RM | =Reduced Matrix, MS  | S=Masked   | Sand Gra          | ins.           | <sup>2</sup> Location: PL=<br>Indicators for Pi   | Pore Lining, M  | I=Matrix.   |
| Black Hisi Hydrogen Stratified Depleted Thick Dan Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa | pedon (A2) tic (A3) I Sulfide (A4) Layers (A5) Below Dark Surface tk Surface (A12) Icky Mineral (S1) Eyed Matrix (S4) dox (S5) Matrix (S6) Idece (S7) (LRR R, ML | .RA 149B  |                      | ce (S9) (LI<br>lineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F7<br>ons (F8) | RRR, ML<br>(LRRK, | RA 149B)<br>L) | 2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodic Red Parent M Very Shallow | A10) (LRR K, I<br>Redox (A16)<br>Peat or Peat (3<br>(S7) (LRR K,<br>Ilow Surface (S<br>rface (S9) (LR<br>ese Masses (F<br>odplain Soils (6<br>(TA6) (MLRA | L, MLRA 149B) (LRR K, L, R) S3) (LRR K, L, R) L, M) S8) (LRR K, L) SR K, L) F12) (LRR K, L, R) F19) (MLRA 149B) |
| ndicators of h  | nydrophytic vegetation   | n and we  | tland hydrology must | be presen  | t, unless         | disturbed o    | or problematic.   |   |   |
| Type:   | iyer (ii observed):  |           |                      |  |                   |                |   |   |   |
| Depth (inch   | Φe).   |           |                      |  |                   | 1              |   |   | V   |
| emarks:   | es)  |           |                      |  |                   |                | Hydric Soil Prese   | nt? Yes   | No <u> </u>   |
|   |  |           |                      |  |                   |                |   |   |   |

|  | TION DATA FORM - Northcentral and Northeast Region   |
|--|--|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 11/05//  |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP- SUL  |
| Investigator(s): M. BORFRG S PUCK  | FINMEUR Section, Township, Range: VIU erovys   |
| Landform (hillslope, terrace, etc.): HIIISIOD &  | Local relief (concave, convex, none): CONCOV C Slope (%):  |
| Subregion (LRR or MLRA): LRR-R Lat:  | 70 11-3-0 U7 UAZ 747 - NAD 83  |
| Soil Map Unit Name: ETTE SIIT LOAM   | NWI classification: WOIAhd   |
| Are climatic / hydrologic conditions on the site typical fo  |  |
| Are Vegetation   |  |
|  |  |
| Are Vegetation <u>N ()</u> , Soil <u>N()</u> , or Hydrology <u>N</u>   | onaturally problematic? (If needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS - Attach site m  | ap showing sampling point locations, transects, important features, etc.   |
|  |  |
| Hydrophytic Vegetation Present? Yes  | No Is the Sampled Area within a Wetland? Yes X No  |
| Hydric Soll Present? Yes X   | _ No   |
| Wetland Hydrology Present? Yes _X  | No If yes, optional Wetland Site ID: W/ (A) /  |
| Remarks: (Explain alternative procedures here or in a  | a separate report.)  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| HYDROLOGY  |  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; chec   | k all that apply) Surface Soil Cracks (B6)   |
| X Surface Water (A1)   | Water-Stained Leaves (B9)  |
| X High Water Table (A2)  | Aquatic Fauna (B13) Moss Trim Lines (B16)  |
| X Saturation (A3)  | Marl Deposits (B15) Dry-Season Water Table (C2)  |
| Water Marks (B1)   | Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)   |
| Sediment Deposits (B2)   | Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)   |
| Drift Deposits (B3)  | Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)  |
| Algal Mat or Crust (B4)  | Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  |
| Iron Deposits (B5)   | Thin Muck Surface (C7) Shallow Aquitard (D3) Other (Explain in Remarks) Microtopographic Relief (D4)   |
| Inundation Visible on Aerial Imagery (B7)  | Other (Explain in Remarks) Microtopographic Relief (D4)  FAC-Neutral Test (D5)   |
| Sparsely Vegetated Concave Surface (B8)  | PAC-Neglial Test (D3)  |
| Field Observations: Surface Water Present?  Yes   No   | Depth (inches): 0-11   |
| Water Table Present? Yes X No  |  |
| Saturation Present? Yes X No   | The state of the s |
| (includes capillary fringe)  | , 0  |
| Describe Recorded Data (stream gauge, monitoring   | well, aerial photos, previous inspections), if available:  |
|  |  |
| Remarks:   |  |
| To the state of th |  |
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|    | Dominan                                 |                      | Dominance Test worksheet:   |
|----|---|----------------------|---|
|    | Species?                                |                      | Number of Dominant Species  |
|    |   |                      | That Are OBL, FACW, or FAC:(A)  |
|    |   |                      | Total Number of Dominant  |
|    |   | . —                  | Species Across All Strata: (B)  |
|    |   | -                    | Percent of Dominant Species   |
|    | -                                       |                      | That Are OBL, FACW, or FAC: 100 (A/B)   |
|    |   |                      | Prevalence Index worksheet:   |
|    |   |                      | Total % Cover of:Multiply by:   |
| 0  | = Total Co                              | ver                  | OBL species x 1 =   |
|    |   |                      | FACW species x 2 =  |
| 40 | Y                                       | FACILL               | FAC species x 3 =   |
|    | V                                       |                      | FACU species x 4 =  |
|    | N.                                      |                      | UPL species x 5 =   |
| =  | -                                       | 2 2 2 2 2 2 2        | Column Totals: (A) (B)  |
|    | 10                                      | FIC                  | Building Calcar Bia   |
|    |   |                      | Prevalence Index = B/A =  |
|    |   |                      | Hydrophytic Vegetation Indicators:  |
|    |   |                      | 1 - Rapid Test for Hydrophytic Vegetation   |
| 03 | = Total Co                              | ver                  | Z 2 - Dominance Test is >50%  |
|    |   |                      | 3 - Prevalence Index is ≤3.01   |
| 10 | У                                       | FAC                  | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
|    | V                                       |                      | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
|    | ~/                                      |                      |   |
| 7  | _/                                      |                      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 3_ |   |                      |   |
| 2  | $\sim$                                  | FHW                  | Definitions of Vegetation Strata:   |
|    |   |                      | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
|    |   |                      | at breast height (DBH), regardless of height.   |
|    |   |                      | Sapling/shrub - Woody plants less than 3 in. DBH  |
|    |   |                      | and greater than or equal to 3.28 ft (1 m) tall.  |
|    |   |                      | Herb - All herbaceous (non-woody) plants, regardless of   |
|    |   |                      | size, and woody plants less than 3.28 ft tall.  |
|    | -                                       |                      | Woody vines - All woody vines greater than 3.28 ft in   |
| 20 | Table Seption                           |                      | height.   |
| 20 | = Total Co                              | ver                  |   |
|    |   |                      |   |
|    |   |                      |   |
|    |   |                      | Hydrophytic<br>Vegetation   |
|    |   |                      |   |
|    |   |                      | Present? Yes No   |
|    |   |                      | Present? Yes No   |
|    | = Total Co                              |                      | Present? Yes _1_ No   |
|    | 40<br>30<br>5<br>5<br>10<br>5<br>3<br>2 | D = Total Co<br>  40 | D = Total Cover   |

Sampling Point: DP- Stele

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Total Content  | document the indicator or confirm the absence of indicators.)  Redox Features  | Redox  | %           | Matrix<br>Color (moist)   | Depth<br>(inches)  |
|---|--|--|-------------|---|--|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    A  | TOTAL  | Color (moist)  | 0 K         | 2 (1/2/1  | Charles Comment  |
| Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histosol (A2) — Polyvalue Below Surface (S8) (LRR R, Locast Prairie Redox (A16) (LRR K, L, MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) — S cm Mucky Peat or Peat (S3) (LRR R, Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Depleted Below Dark Surface (A11) — Depleted Matrix (F3) — Thin Dark Surface (A12) — Depleted Matrix (F3) — Thin Dark Surface (S9) (LRR K, L) — Iron-Manganese Masses (F12) (LRR K, L) — Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7) — Piedmont Floodplain Soils (F19) (MLR Sandy Redox (S5) — Redox Depressions (F8) — Mesic Spodic (TA6) (MLRA 144A, 144 — Redox Dark Surface (S7) (LRR R, MLRA 149B) — Other (Explain in Remarks) — Other (Explain in Remarks) — Strictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No   | <u> </u>   | 109 K 5/8  |             | <u> </u>  | ) 5  |
| Histosol (A1) — Polyvalue Below Surface (S8) (LRR R, Histosol (A2) — Polyvalue Below Surface (S8) (LRR R, Locast Prairie Redox (A16) (LRR K, L, MLRA 149B) — Coast Prairie Redox (A16) (LRR K, L, MLRA 149B) — S cm Mucky Peat or Peat (S3) (LRR R, Hydrogen Sulfide (A4) — Loamy Mucky Mineral (F1) (LRR K, L) — Dark Surface (S7) (LRR K, L, M) — Polyvalue Below Surface (S8) (LRR R, MLRA 149B) — Depleted Below Dark Surface (A11) — Depleted Matrix (F3) — Thin Dark Surface (A12) — Depleted Matrix (F3) — Thin Dark Surface (S9) (LRR K, L) — Iron-Manganese Masses (F12) (LRR K, L) — Sandy Mucky Mineral (S1) — Depleted Dark Surface (F7) — Piedmont Floodplain Soils (F19) (MLR A 144A, 144 Sandy Redox (S5) — Redox Depressions (F8) — Redox Depressions (F8) — Redox Dark Surface (TF12) — Other (Explain in Remarks) — Other (Explain in Remarks) — Strictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes No  |  |  |             |   |  |
| Histosol (A1)   |  |  |             |   |  |
| Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, MLRA 1 Layr (Balax Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Sc m Mucky Peat or Peat (S3) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S9) (LRR R, MLRA 149B) Sc m Mucky Peat or Peat (S3) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thinck Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLR Sandy Redox (S5) Stripped Matrix (S6) Park Surface (S7) (LRR R, MLRA 149B) Redox CS7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators for Problematic Hydric Soils (H30) (LRR K, L, MRA 149B) Sc m Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Thin Dark Surface (S9) (LRR K, L) Polyvalue Below Surface (S9) (LRR K, L, M) Polyvalue Below |  |  |             |   |  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Medox (S5) Sandy Redox (S5) Sardy Redox (S5) Sardy Redox (S5) Dark Surface (S7) Sandy Redox (S5) Dark Surface (S7) Sandy Redox (S5) Dark Surface (S7) CIRR R, MLRA 149B)  Depleted Dark Surface (F7) Sandy Redox (S5) Sardy Redox | trix, MS=Masked Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.  Indicators for Problematic Hydric Soils <sup>3</sup> :  | =Reduced Matrix, MS  | pletion, RM | ndicators:  | yarıc Son i  |
| Depth (inches): Hydric Soil Present? Yes No   | Coast Prairie Redox (A16) (LRR K, L, R) k Surface (S9) (LRR R, MLRA 149B) k Surface (S9) (LRR R, MLRA 149B)  Jucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, R)  Piedmont Floodplain Soils (F19) (MLRA 149B  Mesic Spodic (TA6) (MLRA 144A, 145, 149B  Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks) | MLRA 149B)  Thin Dark Surfac  Loamy Mucky Mi  Loamy Gleyed M  Depleted Matrix (  Redox Dark Surfa  Depleted Dark Surfac  Redox Depressio | MLRA 149E   | pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) ace (S7) (LRR R, M | Histic Ep Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Stripped Dark Sur |
| Type:   | y must be present, unless disturbed or problematic.  | etland hydrology must i  | tion and we | hydrophytic vegetat   | ndicators of   |
| Depth (inches): No  |  |  |             | iyer (ii observed):   |  |
| nydric son Fresent Tes / No   | H-4-1-0-110  |  |             | nes):   |  |
|   | Hydric Soil Present? Yes No  |  |             | 7   |  |
|   |  |  |             |   |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11 105 Project/Site: Ball Hill Wind Project \_ Sampling Point: DP- 50 Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Investigator(s): M.BODERG S.BUCKENWEVEV VIlleroVA Section, Township, Range: Landform (hillslope, terrace, etc.): HIIISINDE Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: EYIC SIT Warm NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation ND, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes \_ Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WLA53 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Water-Stained Leaves (B9) Surface Water (A1) Moss Trim Lines (B16) High Water Table (A2) \_\_\_ Aquatic Fauna (B13) Dry-Season Water Table (C2) X Saturation (A3) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) \_\_ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) \_\_ Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: No X Depth (inches): Surface Water Present? No \_\_\_\_ Depth (inches): 5" Water Table Present? Wetland Hydrology Present? Yes X No \_ No \_\_\_\_ Depth (inches): 7.14 Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| % Cover |                                      | _Status            | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:        |
|---------|--------------------------------------|--------------------|--|
|         |                                      |                    | Total Number of Dominant   |
|         |                                      |                    | Species Across All Strata: (B)   |
|         | -                                    |                    | Percent of Dominant Species  |
|         |                                      |                    | That Are OBL, FACW, or FAC: 10() (A/B)   |
|         |                                      |                    | Prevalence Index worksheet:  |
|         |                                      |                    | Total % Cover of: Multiply by:   |
| _0_     | = Total Cov                          | /er                | OBL species x 1 =  |
|         | 1.4                                  |                    | FACW species x 2 =   |
| 12      |                                      | FALLU              | FAC species x 3 =<br>FACU species x 4 =  |
|         |                                      |                    | UPL species x 5 =  |
|         |                                      |                    | Column Totals: (A) (B)   |
|         |                                      |                    |  |
|         | -                                    |                    | Prevalence Index = B/A =   |
|         |                                      |                    | Hydrophytic Vegetation Indicators:   |
|         |                                      |                    | 1 - Rapid Test for Hydrophytic Vegetation  |
| 15      | = Total Cov                          | /er                | <ul> <li>2 - Dominance Test is &gt;50%</li> <li>3 - Prevalence Index is ≤3.0¹</li> </ul> |
|         |                                      |                    | 4 - Morphological Adaptations¹ (Provide supporting                                       |
| 50      | <u> </u>                             |                    | data in Remarks or on a separate sheet)  |
| 25      | У                                    | UBL                | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                                |
| 10      | N                                    | OBL                | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                        |
| 5_      | N                                    | FALLY              | be present, unless disturbed or problematic.   |
| 5       | N                                    | FACW               | Definitions of Vegetation Strata:  |
| 13      | N                                    | DBL                | Tree - Woody plants 3 in. (7.6 cm) or more in diameter                                   |
| 2       | N                                    | FACW               | at breast height (DBH), regardless of height.  |
|         |                                      |                    | Sapling/shrub – Woody plants less than 3 in. DBH   |
|         |                                      | 1                  | and greater than or equal to 3.28 ft (1 m) tall.   |
|         |                                      |                    | Herb – All herbaceous (non-woody) plants, regardless of                                  |
|         |                                      |                    | size, and woody plants less than 3.28 ft tall.   |
|         |                                      |                    | Woody vines - All woody vines greater than 3.28 ft in height.                            |
| 100     | = Total Cov                          | ver                | Torgin.  |
|         |                                      |                    |  |
|         |                                      | 1                  | Hydrophytic  |
|         |                                      | , 11               | Vegetation Present? Yes X No   |
|         |                                      |                    |  |
|         |                                      |                    |  |
|         | 15<br>50<br>25<br>10<br>55<br>3<br>7 | O_ = Total Cov<br> | O = Total Cover  |

| Profile Description: (Describe to the<br>Depth Matrix   | Red                          | ox Feature:  |                       |              | 20001100 01 11  | idioutoro.,   |
|---|------------------------------|--|-----------------------|--------------|---|---|
| (inches) Color (moist) %  | Color (moist)                | %  | Type <sup>1</sup>     | _Loc2        | Texture   | Remarks   |
| 0-0" 254 3/1 95   | 104R6/16                     | 5_   |                       | <u>m</u>     | 516   |   |
|   |                              |  | _                     |              |   |   |
|   |                              | _  |                       |              |   |   |
|   |                              |  |                       |              |   |   |
| Type: C-Consentration D-Dayletin  |                              |  |                       |              |   |   |
| Type: C=Concentration, D=Depletion, ydric Soil Indicators:  | RIM=Reduced Matrix, M        | 5=Masked   | Sand Gra              | ins.         | *Location: PL:  | Pore Lining, M=Matrix.  |
| Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11 Thick Dark Surface (A12) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) | Redox Dark Su  Depleted Dark | )<br>ace (S9) (L<br>Mineral (F1)<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F7 | RR R, ML<br>) (LRR K, | RA 149B)     | 2 cm Muck   Coast Prairi 5 cm Mucky Dark Surfac Polyvalue B Thin Dark S Iron-Mangar Piedmont Fi | roblematic Hydric Soils <sup>3</sup> : (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L, M) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) oodplain Soils (F19) (MLRA 149B |
| Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA  |                              |  |                       |              | <ul><li>Red Parent</li><li>Very Shallov</li><li>Other (Expla</li></ul>                          | ic (TA6) ( <b>MLRA 144A, 145, 149B</b> )<br>Material (F21)<br>v Dark Surface (TF12)<br>sin in Remarks)  |
| ndicators of hydrophytic vegetation an  | d wetland hydrology mus      | t be preser  | nt, unless            | disturbed of | or problematic.   |   |
| estrictive Layer (if observed):   |                              |  |                       |              |   |   |
| Depth (inches):   |                              |  |                       |              | Uhadala Oali Daasa  |   |
| emarks:   |                              |  |                       |              | Hydric Soil Prese   | ent? Yes / No   |
|   |                              |  |                       |              |   |   |
|   |                              |  |                       |              |   |   |
|   |                              |  |                       |              |   |   |
|   |                              |  |                       |              |   |   |

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Project/Site: Ball Hill Wind Project Sampling Date: 11/05 Applicant/Owner: Ball Hill Wind Energy, LLC Sampling Point: DP- 50 Investigator(s): M. Bohera S. Buckennewer Section, Township, Range:\_ Landform (hillslope, terrace, etc.): H111516DC Local relief (concave, convex, none): \_ Datum: NAD 83 Subregion (LRR or MLRA): LRR-R Soil Map Unit Name: EVIE SIT LOAM NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes $oldsymbol{\mathcal{X}}$ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: UU 19539 Wetland Hydrology Present? No Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Drainage Patterns (B10) Surface Water (A1) Water-Stained Leaves (B9) Moss Trim Lines (B16) X High Water Table (A2) Aquatic Fauna (B13) X Saturation (A3) Dry-Season Water Table (C2) Marl Deposits (B15) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) \_\_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: \_\_ No \_\_\_\_\_ Depth (inches): 0-3" \_\_ No \_\_\_\_ Depth (inches): 0" Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes X No\_ No \_\_\_\_ Depth (inches): / )# Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30'  1. NOT Applicable            |           | Dominant<br>Species? | Status        | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                |
|--|-----------|----------------------|---------------|--|
| 2  |           |                      |               | Total Number of Dominant Species Across All Strata: (B)  |
| 4  |           |                      |               | Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)   |
| 6  |           |                      |               | Prevalence Index worksheet:  |
| ·  | 0         | = Total Cov          | /er           |  |
| Sapling/Shrub Stratum (Plot size: 15')                     |           |                      |               | FACW species x 2 =   |
| 1. Cornus alba   | 50        | X                    | FACW          | FAC species x 3 =  |
| 2. Salix petiolaris  | 10        | N                    | EACU          | FACU species x 4 =   |
| 3. Cornus racemosa   | 10        | N                    | FAC           | UPL species x 5 =  |
| 4  |           |                      |               | Column Totals: (A) (B)   |
| 5  |           |                      |               | Prevalence Index = B/A =   |
| 6  |           |                      |               | Hydrophytic Vegetation Indicators:   |
| 7.   |           |                      |               | 1 - Rapid Test for Hydrophytic Vegetation  |
|  | 70        | = Total Cov          | (Or           | ★ 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 5 )                               |           | - Total Cov          | 761           | 3 - Prevalence Index is ≤3.0¹  |
| 1. Equiestum arvense                                       | 5         | V                    | FAC           | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)           |
| 2. Eppotorium perfoliatum                                  | 5         | V                    | FACW          | Problematic Hydrophytic Vegetation (Explain)   |
| 3. Typha angustifolia                                      | 5         | 7                    |               |  |
| U. A   | 3         | 7                    | OBL           | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.    |
| 4. Junites effusus   |           | 14                   | DBL           |  |
| 5. Phalaris avundinacea                                    |           | -4                   | FACIN         | Definitions of Vegetation Strata:  |
| 6. Euthamia graminifolia                                   |           | _N_                  | FAC           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
| 8,   |           |                      |               | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
| 9  |           |                      |               | Herb All herbaceous (non-woody) plants, regardless of  |
| 10   |           |                      |               | size, and woody plants less than 3.28 ft tall.   |
| 11,  |           | -                    |               | Woody vines - All woody vines greater than 3.28 ft in  |
| 12   |           |                      |               | height.  |
| Woody Vine Stratum (Plot size: 30')  1. NOT Applicable  2. | <u>30</u> | = Total Cov          | /er<br>       | Hydrophytic Vegetation Present? Yes No   |
| 3  |           |                      | , <del></del> | Present? Yes No  |
|  |           | -                    |               |  |
| 4  |           | = Total Co           | 144           |  |

| Depth   | Matrix  |             |                     | ox Feature   |   | . 2                | 4000   | Damasaka  |
|---|---|-------------|---------------------|--|---|--------------------|--|---|
| (inches)  | Color (moist)   | - %         | Color (moist)       | %  | Type <sup>1</sup>                       | Loc <sup>2</sup>   | Texture  | Remarks   |
| )-10"   | 25/3/1  | 90          | 104R5/8             | 10_  |   | <u>m</u>           | SIL _  |   |
|   |   |             |                     |  |   |                    |  |   |
|   |   |             |                     |  | <u> </u>                                |                    |  |   |
|   |   |             |                     |  |   |                    | 21   | Page Links Manager  |
|   | Concentration, D=De Indicators:   | epletion, R | M=Reduced Matrix, N | nS=Masked  | d Sand Gr                               | ains.              |  | _=Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :  |
| Black H Hydrog Stratific Deplete Thick D Sandy Sandy Sandy Strippe Dark S | Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) ed Below Dark Surfa Dark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R | , MLRA 14   |                     | B) face (S9) (I Mineral (F Mineral (F Mineral (F) Mine | LRR R, M<br>1) (LRR K<br>2)<br>)<br>F7) | LRA 149B)<br>(, L) | Coast Prai  5 cm Muck Dark Surfa Polyvalue Thin Dark Iron-Mang Piedmont I Mesic Spo Red Paren Very Shall | (A10) (LRR K, L, MLRA 149B) rie Redox (A16) (LRR K, L, R) ry Peat or Peat (S3) (LRR K, L, R) rice (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) rich (TA6) (MLRA 144A, 145, 149B) rich Material (F21) ow Dark Surface (TF12) olain in Remarks) |
|   |   |             | wetland hydrology m | ust be pres  | ent, unles                              | s disturbed        | or problematic.  |   |
| Restrictive<br>Type:<br>Depth (ii   | Layer (if observed  | i):         | _                   |  |   |                    | Hydric Soil Pre  | esent? Yes X No   |
| Remarks:  |   |             |                     |  |   |                    |  |   |

| WEILAND DETERMINATION DA   | TA FORM – Northcentral and Northeast Region                                       |
|--|---|
| Project/Site: Ball Hill Wind Project   | City/County: Chautauqua County Sampling Date: 1/06/15                             |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | State: NY Sampling Point: DP-569  |
| Investigator(s): M. Boberg, S. Buckenmeyer   | Section, Township, Range: VILVerova   |
| Landform (hillslope, terrace, etc.): Hills ope   | Local relief (concave, convex, none): Concave Slope (%):3-5                       |
| Subregion (LRR or MLRA): LRR-R Lat: 79.  | 119752 Long: 42.445767 Datum: NAD 83  |
| Soil Map Unit Name: ETIL SIIF LOOM   | NW classification: Petitod  |
|  |   |
| Are climatic / hydrologic conditions on the site typical for this time of  |   |
| Are Vegetation No., Soil No., or Hydrology No. significa   |   |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> naturally   | y problematic? (If needed, explain any answers in Remarks.)                       |
| SUMMARY OF FINDINGS – Attach site map show   | ing sampling point locations, transects, important features, etc.                 |
| Hydrophytic Vegetation Present? Yes _X_ No   | Is the Sampled Area   |
| Hydric Soil Present? Yes No  | within a Wetland? Yes No  |
| Wetland Hydrology Present? Yes X No  | If yes, optional Wetland Site ID: WL- H540  |
| Remarks: (Explain alternative procedures here or in a separate r   | eport.)   |
| HYDROLOGY  Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required)                                    |
| Primary Indicators (minimum of one is required; check all that app   |   |
|  | ned Leaves (B9) Drainage Patterns (B10)   |
| High Water Table (A2)  Aquatic Fac   | [148] - 141, 142, 143, 144, 144, 144, 144, 144, 144, 144                          |
| ∑ Saturation (A3) Marl Depos   |   |
|  | Sulfide Odor (C1) Crayfish Burrows (C8)   |
|  | hizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)        |
|  | of Reduced Iron (C4) Stunted or Stressed Plants (D1)                              |
|  | n Reduction in Tilled Soils (C6) Geomorphic Position (D2)                         |
| 시 그들은 사람들은 가는 것이 되었다면 그 아이들은 그 사람들이 되었다면 하고 그렇게 되었다면 다른데 그렇게 되었다면 다른데 그렇게 되었다면 하는데 되었다면 하는데 그렇게 되었다면 하는데 되었다면 되었다면 하는데 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 되었다면 | Surface (C7) Shallow Aquitard (D3)  lain in Remarks) Microtopographic Relief (D4) |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)   |
| Field Observations:  |   |
| Surface Water Present? Yes X No Depth (inc   | hes): O - 1 14  |
| Water Table Present? Yes X No Depth (inc   | hes): O"  |
| Saturation Present? Yes X No Depth (inc  | thes): 🔿" Wetland Hydrology Present? Yes 🔀 No                                     |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial p   | hotos, previous inspections), if available:                                       |
|  |   |
| Remarks:   |   |
|  |   |
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| Tree Stratum (Plot size: 30') 1. Not Applicable | % Cover |              | Status | Dominance Test worksheet:  Number of Dominant Species   |
|---|---------|--------------|--------|---|
| 2   |         |              |        | That Are OBL, FACW, or FAC: (A)  Total Number of Dominant   |
| 3   |         |              |        | Species Across All Strata: (B)  |
| 4   |         | _            | -      | Percent of Dominant Species That Are OBL. FACW. or FAC: (A/B  |
| 5   |         |              |        | That Are OBL, FACW, or FAC: (A/B  |
| 3   | -       |              |        | Prevalence Index worksheet:   |
| 7   |         |              |        | Total % Cover of: Multiply by:  |
| Sapling/Shrub Stratum (Plot size: 15')          | 0       | = Total Co   | ver    | OBL species x 1 =   |
|   |         |              |        | FAC species x 2 =   |
| Not Applicable                                  |         |              |        | FAC species x 3 =<br>FACU species x 4 =   |
|   |         |              |        | UPL species x 5 =   |
| 3   |         | _            |        | Column Totals: (A) (B)  |
|   |         |              |        | Prevalence Index = B/A =  |
|   |         | -            |        |   |
| ),  |         |              |        | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                                      |
| 1   | 0       |              |        | 2 - Dominance Test is >50%  |
| 5'  | _0_     | _ = Total Co | ver    | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:)                       | 1.4     | Vac          | 001    | 4 - Morphological Adaptations (Provide supportin  |
| . Carex flava                                   | 10      | Yes          | OBL    | data in Remarks or on a separate sheet)   |
| 2. Onodea sensibilis                            | 10      | yes          | FACH   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| . Thelypten's noveboracensus                    |         | No           | FAC    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| Symphytrichum pibsum                            |         | No           | FAC    |   |
| . Hoer sacharum                                 | +       | No           | FACU   | Definitions of Vegetation Strata:   |
| Fraxinus americana<br>7. Rubus idaeus           | +       | No           | FACU   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 3   |         |              |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 0   |         |              |        | Herb – All herbaceous (non-woody) plants, regardless of   |
| 10  |         |              |        | size, and woody plants less than 3.28 ft tall.  |
| 11,   |         |              |        | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  | 30      | T.1.10       |        | height.   |
| Woody Vine Stratum (Plot size: 30')             | 20      | _ = Total Co | over   |   |
| . Not Applicable                                | -       |              |        | Hydrophytic   |
| 2   |         | -            |        | Vegetation Present? Yes No  |
| 3   | -       |              |        | Present/ Tes No   |
| 4   | -       |              | -,     |   |
|   | 0       | _ = Total Co | over   |   |

| Profile Des  | cription: (Describe                      | to the de   | oth needed   | to docur   | nent the i   | ndicator               | or confirm | n the absence  | of indicators.)  |
|--|--|-------------|--|------------|--------------|------------------------|------------|--|--|
| Depth  | Matrix Color (maint)                     | 0/          | Calas f  |            | x Feature    | s<br>Type <sup>1</sup> | Loc²       | Texture  | Remarks  |
| (inches)   | Color (moist)                            | 00          | LOYR   | /          |              | Туре                   | M          | SIL  | Kelifalko  |
| 0-8  | a.5471                                   | 90          | 1  | 0/6        | =            |                        |            |  |  |
|  |  |             | JOYR !   | 63         | 5            | <u>C</u>               | M          | SIL  |  |
|  |  |             | -  |            |              |                        |            |  |  |
|  |  |             |  |            |              |                        |            |  |  |
|  |  | -           |  |            | -            | -                      | -          |  |  |
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|  |  |             | -  |            | -            |                        | -          |  |  |
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|  |  |             |  |            |              |                        |            |  |  |
|  |  |             |  |            |              |                        |            |  |  |
|  | -  | -           | -  |            |              |                        |            |  |  |
| -  |  |             |  |            |              |                        | -          |  | -  |
|  |  |             |  |            |              |                        |            |  |  |
|  |  |             |  |            |              |                        |            |  | Name of the last o |
|  | Concentration, D=De                      | pletion, RN | 1=Reduced  | Matrix, M  | S=Masked     | d Sand G               | rains.     |  | n: PL=Pore Lining, M=Matrix.   |
| Hydric Soil  | Indicators:                              |             |  |            |              |                        |            |  | s for Problematic Hydric Soils <sup>3</sup> :  |
| Histoso  |  |             | to and the same of |            | w Surface    | (S8) (LR               | RR,        |  | Muck (A10) (LRR K, L, MLRA 149B)   |
| A STATE OF THE PARTY OF THE PAR | Epipedon (A2)<br>Histic (A3)             |             |  | RA 149B    |              | I RR R N               | ILRA 149B  |  | Prairie Redox (A16) (LRR K, L, R)  Mucky Peat or Peat (S3) (LRR K, L, R)   |
|  | en Sulfide (A4)                          |             |  |            | Mineral (F   |                        |            |  | Surface (S7) (LRR K, L, M)   |
| Stratifie  | ed Layers (A5)                           |             | Loam   | y Gleyed   | Matrix (F2   |                        |            | Committee of the same of the s | alue Below Surface (S8) (LRR K, L)   |
|  | ed Below Dark Surface                    | ce (A11)    |  | eted Matri |              |                        |            |  | Dark Surface (S9) (LRR K, L)<br>Manganese Masses (F12) (LRR K, L, R)   |
|  | Dark Surface (A12)<br>Mucky Mineral (S1) |             | X Redo   |            | Surface (F6) |                        |            |  | nont Floodplain Soils (F19) (MLRA 149B)  |
|  | Gleyed Matrix (S4)                       |             |  |            | sions (F8)   |                        |            |  | Spodic (TA6) (MLRA 144A, 145, 149B)  |
|  | Redox (S5)                               |             |  |            |              |                        |            |  | Parent Material (F21)  |
|  | d Matrix (S6)                            |             |  |            |              |                        |            |  | Shallow Dark Surface (TF12)  |
| Dark S   | urface (S7) (LRR R,                      | MLRA 14     | 3B)  |            |              |                        |            | Other  | (Explain in Remarks)   |
| 3Indicators  | of hydrophytic vegeta                    | ation and v | vetland hydr   | rology mu  | st be pres   | ent, unles             | s disturbe | d or problemati  | ic.  |
|  | Layer (if observed                       |             | in particular  |            |              |                        |            |  |  |
| Туре:  |  |             | 4  |            |              |                        |            |  | ~  |
| Depth (ii  | nches):                                  |             | _  |            |              |                        |            | Hydric Soi   | I Present? Yes 🔀 No  |
| Remarks:   |  |             |  |            |              |                        |            |  |  |
|  |  |             |  |            |              |                        |            |  |  |
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| 1  |  |             |  |            |              |                        |            |  |  |

| WETLAND DETERM   |   |  |  | relation to  |
|--|---|--|--|--|
| Project/Site: Ball Hill Wind Project   | City/C  | ounty: Chautauqu   | ia County                                | Sampling Date: 1/06/15   |
| Applicant/Owner: Ball Hill Wind Energy, LLC  | 3   |  | State: NY                                | Sampling Point: DP- 570  |
| nvestigator(s): S. Buckenneyer, M  |   | n, Township, Range   | VILLE                                    | rove   |
| andform (hillslope, terrace, etc.): Hill Slope   |   |  |  | ve Slope (%):3-5   |
| Subregion (LRR or MLRA): LRR-R   | Lat: 79-11969   | 9 1000   | 42,44585                                 | 7 Datum: NAD 83  |
|  | Lat   |  |  | ication: upland  |
| oil Map Unit Name:   |   |  |  |  |
| re climatic / hydrologic conditions on the site typic  |   |  |  |  |
| re Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology  |   |  |  | present? Yes X No  |
| re Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology  | No naturally problema   | atic? (If need   | ed, explain any answe                    | ers in Remarks.)   |
| SUMMARY OF FINDINGS - Attach sit   | te map showing sam  | pling point loc  | ations, transect                         | s, important features, etc.  |
| Hydrophytic Vegetation Present? Yes  | No X  | Is the Sampled Ar  | ea                                       | V  |
| Hydric Soil Present? Yes   | No X  | within a Wetland?  | Yes                                      | _ No X   |
|  | No X  | If yes, optional We  | land Site ID:                            |  |
| Remarks: (Explain alternative procedures here of   | or in a separate report.)   |  |  |  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  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) | check all that apply)  Water-Stained Leave Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Od Oxidized Rhizospheri Presence of Reduced Recent Iron Reductio Thin Muck Surface (C | ior (C1)<br>res on Living Roots (<br>d Iron (C4)<br>on in Tilled Solls (C6)<br>C7) | Surface Soi Drainage Points Moss Trim In | n Water Table (C2)<br>Irrows (C8)<br>Visible on Aerial Imagery (C9)<br>Stressed Plants (D1)<br>c Position (D2) |
| Field Observations: Surface Water Present? Yes No _  | X Depth (inches):   |  |  |  |
| Water Table Present? Yes No _  |   |  |  |  |
| Saturation Present? Yes No   | Depth (inches):   | Wetla  | and Hydrology Prese                      | ent? Yes No X  |
| (includes capillary fringe)  |   |  | moor can be did not                      |  |
| Describe Recorded Data (stream gauge, monito   | ring well, aerial photos, pre   | evious inspections), i   | f available;                             |  |
|  |   |  |  |  |
| Remarks:   |   |  |  |  |
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| 301   | Absolute |                 | Dominance Test worksheet:   |
|---|----------|-----------------|---|
| Tree Stratum (Plot size:                              |          | Species? Status | Number of Deminant Species  |
| 1. Fagus granditolia                                  | 45       | Yes FACU        | That Are OBL, FACW, or FAC: (A)   |
| 2. Acer saccharum                                     | 25       | Yes FACH        | Total Musebas of Dominant   |
| 3. Tsuga ranadensis                                   | 5        | NO FACU         | Total Number of Dominant Species Across All Strata:  (B)  |
| 13 Mg Chings 1313                                     |          | 140 11104       | CPOSICO / III CHILLIA.  |
| 4,  |          |                 | Percent of Dominant Species That Are OBL FACW or FAC: 30 (A/B)  |
| 5   |          |                 | That Are OBL, FACW, or FAC: (A/B)   |
| 6   |          |                 | Booklean  |
|   |          |                 | Prevalence Index worksheet:   |
| (   | - F      |                 | Total % Cover of: Multiply by:  |
| -/  | 10       | _ = Total Cover | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15)                 |          |                 | FACW species  |
| Fagus grandifolia                                     | 5        | Yes FACU        |   |
|   |          |                 | FACU species 82 x4= 328   |
|   |          |                 | UPL species x 5 =   |
| 3   |          |                 | Column Totals: 90 (A) 352 (B)   |
| 1,  |          |                 | Column Totals, 10 (A) (B)   |
|   |          |                 | Prevalence Index = B/A = 3.9 (  |
| 5   | -        |                 | 1,  |
| 3   |          |                 | Hydrophytic Vegetation Indicators:  |
| 7   |          |                 | 1 - Rapid Test for Hydrophytic Vegetation   |
| ,   | 5        | = Total Cover   | 2 - Dominance Test is >50%  |
| 5   |          | Total Cover     | 3 - Prevalence Index is ≤3.01   |
| Herb Stratum (Plot size:                              | ,        | 11              | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting  |
| Dryopteris intermedia                                 | 6        | Yes FAC         | data in Remarks or on a separate sheet)   |
| Thelypter's noveboracerisus                           | 2        | Vos FAC         | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
|   | 7        | Yes FACU        |   |
| 3. Rubus idaens                                       | 0        | JES FILM        | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4   |          |                 | be present, unless disturbed or problematic.  |
| 5   |          |                 | Definitions of Vegetation Strata:   |
|   |          |                 |   |
| 5,  |          | <del></del>     | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7   |          |                 | at breast height (DBH), regardless of height.   |
| 3   |          |                 | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9.  |          |                 | and greater than or equal to 3.28 ft (1 m) tall.  |
|   | -        |                 | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10  | -        |                 | size, and woody plants less than 3.28 ft tall.  |
| 11  |          |                 |   |
| 2.  |          |                 | Woody vines – All woody vines greater than 3.28 ft in height.   |
| \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\                | 10       | T.1.10          | neight.   |
| 201   | 10       | _ = Total Cover |   |
| Noody Vine Stratum (Plot size: 30 )                   |          |                 |   |
| Not Applicable  |          |                 |   |
|   |          |                 | Hydrophytic   |
| ),  |          |                 | Vegetation  |
| 3   |          |                 | Present? Yes No   |
| 1.  |          |                 |   |
| 9   | 0        | - Total Cover   |   |
|   |          | _ = Total Cover |   |
| Remarks: (Include photo numbers here or on a separate | sheet.)  |                 | Present? Yes No   |

| nches)   | Matrix  |           |   |   | x Features  | 3                         |                     | the absence of i   |  |
|--|---|-----------|---|---|---|---------------------------|---------------------|--|--|
|  | Color (moist)   | %         | Color (                                     |   | %   | Type <sup>1</sup>         | _Loc <sup>2</sup> _ | Texture  | Remarks  |
| ンー   | 104R 4/2  | 100       |   |   |   |                           |                     | <u>SIL</u>   |  |
| -20  | 2.54 5/4  | 80        | JOYR  | 4/2   | 20  | D                         | M                   | SIL  |  |
|  |   |           |   |   |   |                           |                     |  |  |
|  |   |           |   |   |   |                           |                     |  |  |
|  |   |           |   |   |   |                           |                     |  |  |
| ype: C=C   | oncentration, D=Depl<br>Indicators:   | etion, RM | =Reduced                                    | Matrix, MS  | S=Masked  | Sand Gr                   | ains.               |  | L=Pore Lining, M=Matrix.  Problematic Hydric Soils <sup>3</sup> :  |
| Black H Hydroge Stratifie Deplete Thick D Sandy M Sandy G Sandy F Stripped Dark Su | pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, M | ILRA 149  | ML Thin I Loam Loam Deple Redox Deple Redox | RA 149B;<br>Dark Surfa<br>y Mucky M<br>y Gleyed I<br>ted Matrix<br>c Dark Su<br>ted Dark S<br>c Depress | ace (S9) (L<br>Mineral (F1<br>Matrix (F2)<br>( (F3)<br>rface (F6)<br>Surface (F<br>dions (F8) | RR R, MI<br>) (LRR K<br>) | _RA 149B)<br>, L)   | Coast Prai  5 cm Muck Dark Surfa Polyvalue Thin Dark Iron-Mang Piedmont I Mesic Spo Red Paren Very Shall | (A10) (LRR K, L, MLRA 149B) irie Redox (A16) (LRR K, L, R) ty Peat or Peat (S3) (LRR K, L, R) toe (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B) at Material (F21) ow Dark Surface (TF12) blain in Remarks) |
|  | f hydrophytic vegetati  | on and w  | etland hydro                                | ology mus   | t be prese  | nt, unless                | disturbed           | or problematic.  |  |
| Type:  | Layer (if observed):  |           |   |   |   |                           |                     |  |  |
| Depth (in  | ches):  |           |   |   |   |                           |                     | Hydric Soil Pre  | sent? Yes No X   |
| emarks:  |   |           |   |   |   |                           |                     |  | 30111 100  |
|  |   |           |   |   |   |                           |                     |  |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11 061 Project/Site: Ball Hill Wind Project State: NY Sampling Point: DP- 57 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. Boberg S. Bulkenmeyer Section, Township, Range:\_ Local relief (concave, convex, none): \_\_\_\_\_\_\_ Slope (%):\_\_\_\_\_\_ Slope (%):\_\_\_\_\_\_ Landform (hillslope, terrace, etc.): HILLSlope 42. 445692 Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: uplano Soil Map Unit Name: Lambard Silt Loam \_\_ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X Are Vegetation NO, Soil NO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soll Present? If yes, optional Wetland Site ID: WLA54 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) X Water-Stained Leaves (B9) Drainage Patterns (B10) Surface Water (A1) Moss Trim Lines (B16) X High Water Table (A2) Aquatic Fauna (B13) Dry-Season Water Table (C2) Marl Deposits (B15) X Saturation (A3) ★ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Water Marks (B1) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Sediment Deposits (B2) Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aquitard (D3) Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No Depth (inches): 0-4 Surface Water Present? Yes X No Depth (inches):()" Water Table Present? No \_\_\_\_ Depth (inches): 0" Wetland Hydrology Present? Yes X Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

|   | Species?                 | Status   | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:   (A) |
|---|--------------------------|--|---|
|   |                          |  | Total Number of Dominant Species Across All Strata: 3 (B)                               |
|   |                          |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B                            |
|   |                          |  | Prevalence Index worksheet:   |
| _0_                                     | = Total Cov              | er   | OBL species x 1 =<br>FACW species x 2 =   |
|   |                          |  | FAC species x 3 =   |
|   |                          |  | FACU species x 4 =  |
|   |                          |  | UPL species x 5 =   |
|   |                          |  | Column Totals: (A) (B)  |
|   |                          |  | Prevalence Index = B/A =  |
|   |                          |  | Hydrophytic Vegetation Indicators:  |
|   |                          |  | 1 - Rapid Test for Hydrophytic Vegetation   |
| 0                                       | = Total Cov              | er   | 🔏 2 - Dominance Test is >50%  |
|   |                          |  | 3 - Prevalence Index is ≤3.01   |
| 70                                      | V                        | 001  | 4 - Morphological Adaptations¹ (Provide supportin                                       |
|   | 1                        |  | data in Remarks or on a separate sheet)   |
|   | <u> </u>                 | -  | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                               |
| 10                                      | 7_                       | FAC  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                       |
| 10                                      | (1)                      | FAIN   | be present, unless disturbed or problematic.  |
| 10                                      | 1/1                      | The state of the s | Definitions of Vegetation Strata:   |
| 10                                      | 1                        |  |   |
| -5                                      | 171                      |  | Tree – Woody plants 3 in. (7.6 cm) or more in diameter                                  |
| 2                                       | 10                       | FAW  | at breast height (DBH), regardless of height.   |
|   |                          |  | Sapling/shrub – Woody plants less than 3 in. DBH  |
|   |                          |  | and greater than or equal to 3.28 ft (1 m) tall.  |
|   |                          |  | Herb - All herbaceous (non-woody) plants, regardless of                                 |
|   |                          |  | size, and woody plants less than 3.28 ft tall.  |
|   |                          |  | Woody vines - All woody vines greater than 3.28 ft in                                   |
| *************************************** |                          |  | height.   |
| 80                                      | = Total Cov              | er   |   |
|   |                          |  | Hydrophytic   |
|   |                          |  | Vegetation Present? Yes X No  |
|   |                          |  | 1002  |
| 0                                       |                          |  |   |
|   | = Total Cov              |  |   |
|   | O   ZO   IO   IO   S   S |  |   |

| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Tipe: C=Concentration, D=Depletion, RM=Reduced Matrix, RM=Reduced Matrix (Fig. 2)   Tipe: C=Concentration, D=Depletion, RM=Reduced Matrix, RM=Reduc   | Depth   | cription: (Describe<br>Matrix  |             |   | ox Feature  | <u>s</u> .                              |             |  |   |
|--|---|--|-------------|---|---|---|-------------|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Additional Concentration  | (inches)  | 2 8  |             | Color (moist)   | %   | Type <sup>1</sup>                       | _Loc2       | Texture  | Remarks   |
| Hydric Soil Indicators:  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R,  Histosol (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Personal Matrix (S6)  Dark Surface (S7)  Stripped Matrix (S6)  Dark Surface (S7)  Coast Prairie Redox (A16) (LRR K, L, R)  Coast Prairie Redox (A16) (LRR K, L, R)  Loamy Mucky Mineral (F1) (LRR K, L)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S3) (LRR K, L, M)  Polyvalue Below Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LR | 0-8"  | 2.54 20/1  | 90          | 1042 3/8  | 10_   |   | <u>M</u>    | SIC  |   |
| Hydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Histic Epipedon (A2)  MIRA 149B)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  MIRA 149B)  Indicators for Problematic Hydric Soils <sup>3</sup> :  Indicators for Problematic Hydric Soils (A10) (LRR K, L, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Restrictive Layer (if observed):  Type:  Depth (inches):  Depth (inches):  Hydric Soil Present? Yes No  |   |  |             |   |   |   |             |  |   |
| Hydric Soil Indicators:  Histosol (A1)  Histosol (A2)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A11)  Thick Dark Surface (A11)  Depleted Matrix (F3)  Thin Dark Surface (F7)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Stripped Matrix (S6)  Dark Surface (S7)  Stripped Matrix (S6)  Dark Surface (S7)  Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F3)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L, M)  Polyvalue Below Surface (S9) (LRR K, L, M)  Find Dark Surface (A11)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L)  Find Dark Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L, M)  Find Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Find Cateron Froblematic  Find Cateron Froblematic  Hydric Soil Present? Yes No  Hydric Soil Present? Yes No  |   |  |             |   |   | _                                       |             |  |   |
| Histosol (A1)  |   |  | pletion, RM | =Reduced Matrix, N  | IS=Maske  | d Sand Gr                               | ains.       |  |   |
| Restrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes Y No   | Histoso Histic E Black H Hydroge Stratifie Deplete Thick D Sandy f Sandy f Stripped Dark St | I (A1) Epipedon (A2) Ilistic (A3) En Sulfide (A4) Ed Layers (A5) Ed Below Dark Surface Park Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) Ed Matrix (S6) Elistic (S7) (LRR R, | MLRA 149    | MLRA 149i  Thin Dark Sur Loamy Mucky Loamy Gleyed Depleted Matr X Redox Dark S Depleted Dark Redox Depres | 3) face (S9) ( Mineral (F I Matrix (F) ix (F3) urface (F6 c Surface ( ssions (F8) | LRR R, M<br>1) (LRR M<br>2)<br>)<br>F7) | LRA 149B    | 2 cm Muci Coast Pra 5 cm Muci Dark Surfa Polyvalue Thin Dark Iron-Mang Piedmont Mesic Spri Red Parei Very Shal Other (Ex | k (A10) (LRR K, L, MLRA 149B) irie Redox (A16) (LRR K, L, R) ky Peat or Peat (S3) (LRR K, L, R) ace (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) odic (TA6) (MLRA 144A, 145, 149B) int Material (F21) llow Dark Surface (TF12) |
| Type:  |   |  |             | etland hydrology m  | ust be pres   | ent, unles                              | s disturbed | or problematic.  |   |
|  | Type:   |  | ,.          | -   |   |   |             | Hydric Soil Pro  | esent? YesX No  |
|  | Remarks:  |  |             |   |   |   |             |  |   |

| roject/Site: Ball Hill Wind Project   |   | al and Northeast Region  |
|---|---|--|
|   | City/County: Chautauqu                            | ua County Sampling Date: 11/05/  |
| pplicant/Owner: Ball Hill Wind Energy, LLC  |   | NV DP <7   |
| vestigator(s): M. Boberg S. Buckenm   | NULY Section, Township, Range                     | VILLEROVA  |
| andform (hillslope, terrace, etc.): Hills lope  | Local relief (concave, convex                     | , none): CONCOVE Slope (%): D-   |
| ubregion (LRR or MLRA): LRR-R Lat:  | 70 120012   | 42.445855 Datum: NAD 83  |
| oil Map Unit Name: Langford SIIT La   | MM  | NWI classification: upland   |
| re climatic / hydrologic conditions on the site typical for the   | this time of year? Yes X No                       | (If no, explain in Remarks.)   |
| 그의 이 하는 일일 마네 아름다면 하는 이 하다면 보이 얼마를 들었다면 하다면 하다면 하다 하셨다니까?   |   | rmal Circumstances" present? Yes No  |
| re Vegetation $N_{\mathcal{O}}$ , Soil $N_{\mathcal{O}}$ , or Hydrology $N_{\mathcal{O}}$   |   | ed, explain any answers in Remarks.)   |
| re Vegetation $N_D$ , Soll $N_D$ , or Hydrology $N_D$   | _ naturally problematic? (If fleed                | eu, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS – Attach site ma  | p showing sampling point loc                      | ations, transects, important features, et  |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X  Yes X  Wetland Hydrology Present?  Yes X  | No is the Sampled Al within a Wetland?            | rea  |
|   |   |  |
|   |   |  |
|   |   |  |
|   |   |  |
| YDROLOGY  |   |  |
| Wetland Hydrology Indicators:   | 0.917 - 0.34                                      | Secondary Indicators (minimum of two required  |
| Primary Indicators (minimum of one is required; check a   |   | Surface Soil Cracks (B6)   |
|   | Vater-Stained Leaves (B9)                         | <ul><li>X Drainage Patterns (B10)</li><li>Moss Trim Lines (B16)</li></ul>  |
|   | Aquatic Fauna (B13)                               | Noss Triff Ellies (B16) Dry-Season Water Table (C2)  |
|   | Marl Deposits (B15)<br>Hydrogen Sulfide Odor (C1) | Crayfish Burrows (C8)  |
|   | Dxidized Rhizospheres on Living Roots (           | [18] [18] [18] [18] [18] [18] [18] [18]  |
|   | Presence of Reduced Iron (C4)                     | Stunted or Stressed Plants (D1)  |
|   | Recent Iron Reduction in Tilled Soils (C6         |  |
|   | Thin Muck Surface (C7)                            | Shallow Aquitard (D3)  |
| (   | Other (Explain in Remarks)                        | Microtopographic Relief (D4)   |
| Sparsely Vegetated Concave Surface (B8)   | ,   | FAC-Neutral Test (D5)  |
| Field Observations:   |   |  |
| Tions of the control | Depth (inches): 0-111                             |  |
| Surface Water Present? Yes X No   |   |  |
| Surface Water Present? Yes X No   | Depth (inches): 0"                                | The second secon |
| Surface Water Present?  Water Table Present?  Saturation Present?  Yes X No  Yes X No  Yes X No   | Depth (Inches): 0 <sup>(1)</sup> Wetla            | and Hydrology Present? Yes _X No   |
| Surface Water Present? Yes X No Water Table Present? Yes X No   | Depth (Inches): 0 <sup>(1)</sup> Wetla            |  |
| Surface Water Present?  Water Table Present?  Saturation Present?  Yes X No  Yes X No  Yes X No   | Depth (Inches): 0 <sup>(1)</sup> Wetla            |  |

| 1 (W)   | Absolute | Dominant   | Contract of the second | Dominance Test worksheet:  |  |
|---|----------|------------|------------------------|--|--|
| Tree Stratum (Plot size: 50 / )                     |          | Species?   |                        | Number of Dominant Species 3   |  |
| 1. Aler saleharum                                   | 5_       | _у         | EACH                   | That Are OBL, FACW, or FAC: (A)  |  |
| 2,  |          |            |                        | Total Number of Dominant   |  |
| 3   |          |            |                        | Species Across All Strata: (B)   |  |
| 4   |          |            |                        | Percent of Dominant Species That Are OBL. FACW. or FAC: 50 (A/B  |  |
| 5,  |          | -          |                        | That Are OBL, FACW, or FAC: (A/B   |  |
| 3   |          |            |                        | Prevalence Index worksheet:  |  |
| 7.  |          |            |                        | Total % Cover of: Multiply by:   |  |
|   | 5        | = Total Co | ver                    | OBL species 30 x1= 30  |  |
| Sapling/Shrub Stratum (Plot size: 15 <sup>1</sup> ) |          |            |                        | FACW species 25 x2= 50   |  |
| Acer saccharum                                      | 1        | У          | FACU                   | FAC species 15 x3 = 45   |  |
| Lonicera tatarica                                   |          | V          | FACU                   | FACU species   |  |
|   | -6-      |            | TALLA                  | UPL species O x 5 = O  |  |
| 3   |          | -          | . —                    | Column Totals: <u>17</u> (A) <u>153</u> (B)  |  |
| 1,  |          | -          | -                      | Prevalence Index = B/A = 1.98  |  |
| 5   |          |            |                        |  |  |
| 3   |          |            |                        | Hydrophytic Vegetation Indicators:   |  |
| 7   |          |            |                        | 1 - Rapid Test for Hydrophytic Vegetation  |  |
|   | 2        | = Total Co | ver                    | ★ 2 - Dominance Test is >50%   |  |
| Herb Stratum (Plot size: 5')                        |          |            |                        | 3 - Prevalence Index is ≤3.0¹     4 - Morphological Adaptations¹ (Provide supporting)                  |  |
| 1. carex flava                                      | 15       | y          | DBL                    | data in Remarks or on a separate sheet)  |  |
| e proclea sensibilis                                | 15       | Ý          | FACW                   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |  |
| Euthamia graminifolia                               | 15       | ×          | FAC                    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |  |
| 4. Junius effusus                                   | 10       | 11         | OBL                    | be present, unless disturbed or problematic.   |  |
| 5 Eupotorium pertoliatum                            |          | N          | FACW                   | Definitions of Vegetation Strata:  |  |
| 6. Polygonum artifolium                             | 5        | N          | OBL                    |  |  |
|   |          | 10         |                        | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.    |  |
| r. carex intumescens                                | 5        | 10         | FACW                   |  |  |
| 8   |          |            |                        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |  |
| 9   |          | -          |                        |  |  |
| 10  |          |            |                        | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |  |
| 11  |          | -          |                        | Woody vines - All woody vines greater than 3.28 ft in  |  |
| 12  |          |            |                        | height.  |  |
|   | 70       | = Total Co | ver                    |  |  |
| Woody Vine Stratum (Plot size: 30')                 |          |            |                        |  |  |
| 1. Not Applicable                                   |          |            |                        |  |  |
|   |          |            |                        | Hydrophytic  |  |
|   |          | -          |                        | Vegetation Present? Yes X No   |  |
| 3   |          |            |                        | V  |  |
| 4   | •        | -          | -                      |  |  |
|   |          | = Total Co | ver                    |  |  |

| Depth  | Matrix  |             |                     | x Features   | _ ,                      | . 2                 | -  | D  |
|--|---|-------------|---------------------|--|--------------------------|---------------------|--|--|
| inches)  | Color (moist)   | - %         | Color (moist)       | _%   | Type <sup>1</sup>        | Loc²                | Texture  | Remarks  |
| 0-10"  | 2.543/1   | 95_         | 1046 2/8            | 5_   | <u></u>                  | <u>m</u> _          | SIL  |  |
|  | -   |             |                     |  |                          |                     |  |  |
|  |   |             |                     |  |                          | -                   |  |  |
|  | · ·   |             |                     |  | _                        |                     |  |  |
|  | oncentration, D=De  | pletion, RM | =Reduced Matrix, M  | S=Masked   | Sand Gr                  | ains.               |  | _=Pore Lining, M=Matrix.<br>Problematic Hydric Soils³:   |
| Black H Hydroge Stratifie Deplete Thick D Sandy N Sandy S Stripped Dark Su | pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfa ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, | MLRA 149    |                     | ) ace (S9) (L Mineral (F1 Matrix (F2 x (F3) urface (F6) Surface (F8) | RR R, M<br>) (LRR F<br>) | ILRA 149B)<br>(, L) | Coast Prai  5 cm Muck Dark Surfa Polyvalue Thin Dark Iron-Mang Piedmont I Mesic Spo Red Paren Very Shall | k (A10) (LRR K, L, MLRA 149B) rie Redox (A16) (LRR K, L, R) rie Peat or Peat (S3) (LRR K, L, R) rice (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B) dic (TA6) (MLRA 144A, 145, 149B) at Material (F21) ow Dark Surface (TF12) clain in Remarks)  |
|  |   |             | etland hydrology mu | st be prese  | ent, unles               | s disturbed         | or problematic.  | The second secon |
|  | Layer (if observed  | <i>j</i> .  |                     |  |                          |                     |  |  |
| Type:<br>Depth (in   | iches).   |             | •                   |  |                          |                     | Hydric Soil Pre  | sent? Yes X No   |
| Remarks:   |   |             |                     |  |                          |                     |  |  |

|   | Project City/County: CHO  | LTRUCKE CTY Sampling Date: 114/15   |
|---|---|---|
| Applicant/Owner: BAII Hill Wind   | Energy, LLC   | State: <u>ny</u> Sampling Point: <u>DPA575</u>  |
| Investigator(s): B. Viras, S. Buck  |   | Range: VILLENOVA  |
| Landform (hillslope, terrace, etc.): Dance  | 1   | convex, none): Concour Slope (%): O   |
| Subregion (LRR or MLRA): LRR-R  | 1 1 - 1 11 - 11 - 1   | ong: 42.453273 Datum: nao 83  |
|   |   |   |
| Soil Map Unit Name: Frence  | the second of the last of the second of the | 78 - G Zitti diddomodilotti   |
| Are climatic / hydrologic conditions on the site typ  | pical for this time of year? Yes No   | o (If no, explain in Remarks.)  |
| Are Vegetation <u>no</u> , Soil <u>no</u> , or Hydrolog   | y <u>no</u> significantly disturbed? A  | re "Normal Circumstances" present? Yes X No   |
| Are Vegetation <u>no</u> , Soil <u>no</u> , or Hydrolog   | y no naturally problematic? (If   | f needed, explain any answers in Remarks.)  |
| SUMMARY OF FINDINGS – Attach s  | ite map showing sampling poin   | t locations, transects, important features, etc   |
| Hydrophytic Vegetation Present? Yes _   | within a Wa   | V   |
| Hydric Soil Present? Yes _<br>Wetland Hydrology Present? Yes _  | A 140   |   |
| Remarks: (Explain alternative procedures here   |   | nal Wetland Site ID: WeTland A543   |
|   |   |   |
| HYDROLOGY Wetland Hydrology Indicators:   |   | Secondary Indicators (minimum of two required)  |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;   | check all that apply)   | Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)   |
| Wetland Hydrology Indicators:   |   | Surface Soil Cracks (B6)  |
| Wetland Hydrology Indicators: Primary Indicators (minimum of one is required;   | check all that apply)  Water-Stained Leaves (B9) Aquatic Fauna (B13)  |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required:  X Surface Water (A1)  | Water-Stained Leaves (B9)   | Surface Soil Cracks (B6)  X Drainage Patterns (B10)   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)   | <ul><li>Water-Stained Leaves (B9)</li><li>Aquatic Fauna (B13)</li></ul>   | Surface Soil Cracks (B6)  X Drainage Patterns (B10)  Moss Trim Lines (B16)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  | <ul> <li>Water-Stained Leaves (B9)</li> <li>Aquatic Fauna (B13)</li> <li>Marl Deposits (B15)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres on Living R</li> </ul>  | Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)   | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4)  | Surface Soil Cracks (B6)  X Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  oots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil   | Surface Soil Cracks (B6)  X Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  cots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Is (C6)  Geomorphic Position (D2)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  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)  | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7)  | Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  oots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Is (C6)  Seomorphic Position (D2)  Shallow Aquitard (D3)                               |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)   | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil   | Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  oots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Is (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)                           |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7)  | Surface Soil Cracks (B6)  X Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  oots (C3) Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Is (C6) Geomorphic Position (D2)  Shallow Aquitard (D3)   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:   | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks)   | Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  oots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Is (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4) |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Yes X No   | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks)   | Surface Soil Cracks (B6)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  oots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Is (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4) |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Yes X No Water Table Present?  | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks)  Depth (inches): O"   |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Water Table Present?  Yes X No  Saturation Present?  Yes X No  Saturation Present?  Yes X No  (includes capillary fringe)                            | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): ○ " " Depth (inches): ○ " Depth (inches): ○ " Depth (inches): ○ "   |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Yes X No  Water Table Present?  Yes X No  Saturation Present?  Yes X No  | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): ○ " " Depth (inches): ○ " Depth (inches): ○ " Depth (inches): ○ "   |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Water Table Present?  Yes X No  Saturation Present?  Yes X No  Saturation Present?  Yes X No  (includes capillary fringe)                            | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): ○ " " Depth (inches): ○ " Depth (inches): ○ " Depth (inches): ○ "   |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Water Table Present?  Yes X No  Saturation Present?  Yes X No  Saturation Present?  Yes X No  (includes capillary fringe)                            | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): ○ " " Depth (inches): ○ " Depth (inches): ○ " Depth (inches): ○ "   |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Yes X No  Water Table Present?  Yes X No  Saturation Present?  Yes X No  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitor) | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): ○ " " Depth (inches): ○ " Depth (inches): ○ " Depth (inches): ○ "   |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required;  X Surface Water (A1)  X High Water Table (A2)  X 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)  Field Observations:  Surface Water Present?  Yes X No  Water Table Present?  Yes X No  Saturation Present?  Yes X No  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitor) | Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Other (Explain in Remarks) Depth (inches): ○ " " Depth (inches): ○ " Depth (inches): ○ " Depth (inches): ○ "   |   |

| ree Stratum (Plot size: 30')         | % Cover |            | Indicator<br>Status | Dominance Test worksheet:   |
|--------------------------------------|---------|------------|---------------------|---|
| nor pepticuble                       |         |            |                     | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|                                      |         |            |                     | Total Number of Dominant  |
|                                      |         |            |                     | Species Across All Strata: 2 (B)  |
|                                      |         |            |                     | Percent of Dominant Species   |
|                                      |         |            |                     | That Are OBL, FACW, or FAC: 100 (A/B)   |
|                                      |         |            |                     |   |
|                                      |         |            |                     | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
| ` <u> </u>                           | 0       |            |                     | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15 |         | - 10tal C0 | vei                 | FACW species x 2 =  |
|                                      |         |            |                     | FAC species x 3 =   |
| OOT Applicable                       |         | -          |                     | FACU species x4 =   |
| * <u>1</u>                           |         |            |                     | UPL species x 5 =   |
| · <u>·</u>                           |         | ů.         |                     | Column Totals: (A) (B)  |
| V                                    | . /     |            |                     |   |
| )                                    |         | -          |                     | Prevalence Index = B/A =  |
| 3.                                   |         |            |                     | Hydrophytic Vegetation Indicators:  |
| 7.                                   |         |            |                     | 1 - Rapid Test for Hydrophytic Vegetation   |
|                                      |         | = Total Co | wer                 | 💢 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5')         |         | - Total Co | ,                   | 3 - Prevalence Index is ≤3.0¹   |
| Accept Company                       | 40      | V          | ENIN                | 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)                         |
| Agrostis stolonifera                 |         | -3-        | FACW                | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| Bidens aristosa                      | 20      | <u>y</u>   | _ FACW              |   |
| 3                                    | -10-    | N          |                     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. Eupotorium perfoliatum            | 15      | N          | EACW                | be present, unless disturbed or problematic.  |
| 5                                    |         |            |                     | Definitions of Vegetation Strata:   |
| 6.                                   |         |            |                     | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7                                    |         |            |                     | at breast height (DBH), regardless of height.   |
|                                      |         |            |                     | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 8                                    |         |            |                     | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                    |         |            |                     | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10                                   |         |            |                     | size, and woody plants less than 3.28 ft tall.  |
| 11                                   | -       |            |                     | Woody vines - All woody vines greater than 3.28 ft in   |
| 12                                   |         |            |                     | height.   |
|                                      | 75      | = Total Co | over                |   |
| Woody Vine Stratum (Plot size: 30 )  |         |            |                     |   |
| 1. not Applicable                    |         |            |                     |   |
| 2.                                   |         |            |                     | Hydrophytic   |
|                                      |         |            |                     | Vegetation<br>Present? Yes ★ No   |
| 3                                    | -       |            |                     |   |
|                                      |         |            |                     |   |
| 4                                    | 0       | = Total C  | over                |   |

|  | Matrix  |            | pth needed to docum  | Features   | or connir         | in the absence of i   | nuicators.)  |
|--|---|------------|--|--|-------------------|---|--|
| (inches)   | Color (moist)   | %          | Color (moist)  |  | _Loc <sup>2</sup> | Texture   | Domester   |
| 0"-10"   | 2.5Y3 z   | 95         | 7.5gz 416  |  | <u>~</u>          | <u>5</u>  | Remarks  |
|  |   |            |  |  |                   |   |  |
| ype: C=Con   | centration, D=Deple   | etion, RM= | Reduced Matrix, MS=N   | Marked Sand Out  |                   |   |  |
| Histosol (A Histic Epip Black Histi Hydrogen S Stratifled L Depleted B Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma | A1) pedon (A2) c (A3) Sulfide (A4) ayers (A5) pelow Dark Surface Surface (A12) sky Mineral (S1) yed Matrix (S4) ox (S5) patrix (S6) | (A11)      | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mati Depleted Matrix (F3 K Redox Dark Surface Depleted Dark Surface Redox Depressions | (S9) (LRR R, MLF<br>(S9) (LRR R, MLF<br>eral (F1) (LRR K, I<br>rix (F2)<br>3)<br>e (F6)<br>face (F7) | R,                | Indicators for P  2 cm Muck ( Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodic | Pore Lining, M=Matrix.  roblematic Hydric Soils <sup>3</sup> :  A10) (LRR K, L, MLRA 149B)  Redox (A16) (LRR K, L, R)  Peat or Peat (S3) (LRR K, L, R)  Iow Surface (S8) (LRR K, L)  rface (S9) (LRR K, L)  ese Masses (F12) (LRR K, L, R)  odplain Soils (F19) (MLRA 149B)  (TA6) (MLRA 144A, 145, 149B)  laterial (F21)  Dark Surface (TF12) |
| dicators of hy   | ce (S7) (LRR R, ML<br>drophytic vegetation<br>er (if observed):   |            | and hydrology must be  | present, unless d  | sturbed o         | Other (Explain  | n in Remarks)  |
| Depth (inches  | s):   |            |  |  |                   | Hydric Soil Preser  | nt? Yes 😕 No   |
|  |   |            |  |  |                   |   |  |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: BAII WIND Project City/County: CHAMBUGLACTY Sampling Date: 11/9/15 Applicant/Owner: BAII HII WIND energy, LLC State: 07 Sampling Point: 0P-576 Investigator(s): B.V.255, S. Budenneyer Section, Township, Range: VILLENOVA Landform (hillslope, terrace, etc.): H: 1151 ope Local relief (concave, convex, none): Convex Slope (%): 2% 9.118439 Long: 42.453234 Datum: nao 83 Subregion (LRR or MLRA): LRR-R Lat: Soil Map Unit Name: \_\_ Tremont 5. It lam Oto 3% Slopes NWI classification: MPLAND Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_\_ No Are Vegetation <u>ro</u>, Soil <u>ro</u>, or Hydrology <u>ro</u> significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation o, Soil o, or Hydrology o naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Yes \_\_\_\_ No X Hydrophytic Vegetation Present? Yes \_\_\_\_ No X within a Wetland? Hydric Soil Present? Yes \_\_\_\_ No X No X Wetland Hydrology Present? If yes, optional Wetland Site ID:\_\_\_\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_ Surface Water (A1) Water-Stained Leaves (B9) \_\_\_ Moss Trim Lines (B16) \_\_\_ Aquatic Fauna (B13) \_\_\_ High Water Table (A2) \_\_ Marl Deposits (B15) \_\_\_ Dry-Season Water Table (C2) \_\_ Saturation (A3) \_\_ Crayfish Burrows (C8) \_\_ Water Marks (B1) \_\_\_ Hydrogen Sulfide Odor (C1) \_\_ Saturation Visible on Aerial Imagery (C9) Oxidized Rhizospheres on Living Roots (C3) Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) Geomorphic Position (D2) \_\_\_ Recent Iron Reduction in Tilled Soils (C6) \_ Algal Mat or Crust (B4) \_\_ Thin Muck Surface (C7) \_\_\_ Iron Deposits (B5) Shallow Aquitard (D3) \_\_\_ Microtopographic Relief (D4) Other (Explain in Remarks) \_\_\_ Inundation Visible on Aerial Imagery (B7) \_ Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes \_\_\_\_ No \_\_\_ Depth (inches): Surface Water Present? Yes \_\_\_\_ No \_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes \_\_\_\_\_ No 🗡 Yes \_\_\_\_ No \_\_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')                                 | Absolute<br>% Cover | Species?   | 7.7 - 7.0 | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)   |
|---|---------------------|------------|-----------|--|
| 1. POT Applicable   |                     |            |           | That Are OBL, FACW, or FAC: (A)  Total Number of Dominant  |
| 3   |                     |            |           | Species Across All Strata: (B)   |
| 4   |                     |            |           | Percent of Dominant Species That Are OBL FACW or FAC:  (A/B)   |
| 5   |                     | -          |           | That Are OBL, FACW, or FAC: (A/B)  |
| 6   |                     |            |           | Prevalence Index worksheet:  |
| 7   |                     |            |           | Total % Cover of: Multiply by:   |
| Sapling/Shrub Stratum (Plot size: 15')  1. DOT APPLICABLE  2. |                     |            |           | OBL species       5       x1 = 5         FACW species       5       x2 = 10         FAC species       5       x3 = 15         FACU species       80       x4 = 320         UPL species       5       x5 = 25   |
| 3   |                     |            |           | UPL species $5$ $x = 25$<br>Column Totals: $100$ (A) $375$ (B)   |
| 4<br>5  |                     |            |           | Prevalence Index = B/A = 3.75  |
| 6   |                     |            |           | Hydrophytic Vegetation Indicators:   |
| 7   |                     |            |           | 1 - Rapid Test for Hydrophytic Vegetation  |
|   |                     | = Total Co | over      | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 5')                                  |                     |            | 7.0       | 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting   |
| 1. Schedonarus arundinaceous                                  | 65                  | <u>y</u>   | FACU      | data in Remarks or on a separate sheet)  |
| 2. Trifolium repens   | 10                  | N          | _ FACU    | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 3. Euthamia graminitalia                                      | 5_                  | N          | _ FAC     | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 4 Ranunculus bulbosus   | 5                   | N          | _FACW     |  |
| 5. Dacicus carota   | - 5                 | H          | _ upl     | Definitions of Vegetation Strata:  |
| 6. Solanum carolinense  | - 5                 | 7          | _ EMU     | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 7. Juneus effusus   | _0_                 | 10         | _OBL      | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8   |                     |            |           | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9   |                     |            |           | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10  | -                   | -          |           | size, and woody plants less than 3.28 ft tall.   |
| 11  |                     |            | 7 =       | Woody vines - All woody vines greater than 3.28 ft in  |
| 12  | 100                 | = Total C  | over      | height.  |
| Woody Vine Stratum (Plot size:3 る')                           | 100                 |            |           |  |
| 1. NOT Applicable   |                     |            |           |  |
|   |                     |            |           | Hydrophytic<br>Vegetation  |
| 2   | _                   |            |           | Present? Yes No X  |
| 2   |                     |            |           | The state of the s |
| 2   | -                   |            |           |  |
| 2   | 6                   | = Total C  | Cover     |  |

Sampling Point: DP 576

| (inches)  | IVIATIIX  |           | pth needed to docum  | x Features   | ·                                 | or comm              | in the absence of thu  | icators.)  |   |
|---|---|-----------|--|--|-----------------------------------|----------------------|--|--|---|
| 0'-9"   | Color (moist)   | %         | Color (moist)  | %  | Type <sup>1</sup>                 | _Loc2                | Texture  | Ren  | narks   |
| -   | 2,5 4312  | 100       |  |  |                                   |                      | SIL  |  |   |
| 9"-20"  | 7.54312   | 85        | Z.54412  | 10%  | 0                                 | m                    | STL  |  | -   |
|   |   |           | 7.592116   |  | 2                                 | m                    |  |  |   |
|   |   |           |  |  |                                   |                      |  |  |   |
|   |   |           |  |  |                                   |                      |  |  |   |
| ype: C=Conc   | centration, D=Deple   | tion, RM= | Reduced Matrix, MS=  | =Masked S  | Sand Grai                         | ne                   | 21   |  |   |
| Histosol (A: Histic Epipe Black Histic Hydrogen S Stratified La Depleted Be Thick Dark S Sandy Muck Sandy Gleye Sandy Redo Stripped Ma Dark Surface | 1) edon (A2) c (A3) Sulfide (A4) ayers (A5) elow Dark Surface ( Surface (A12) ky Mineral (S1) ed Matrix (S4) bx (S5) atrix (S6) ee (S7) (LRR R, ML) | (A11)     | Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky Mit Loamy Gleyed Mt Depleted Matrix ( Redox Dark Surfact Depleted Dark Surfact Redox Depression | Surface (S<br>e (S9) (LR<br>neral (F1)<br>atrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | 68) (LRR<br>R R, MLF<br>(LRR K, I | R,<br>RA 149B)<br>-) | Coast Prairie R 5 cm Mucky Pe Dark Surface (S Polyvalue Belo Thin Dark Surfa Iron-Manganes Piedmont Flood Mesic Spodic (S Red Parent Mat Very Shallow D Other (Explain i | blematic Hy 0) (LRR K, I dedox (A16) eat or Peat (S 67) (LRR K, w Surface (S ace (S9) (LR e Masses (F fplain Solls ( FA6) (MLRA derial (F21) ark Surface | dric Soils <sup>3</sup> :<br>L, MLRA 149B)<br>(LRR K, L, R)<br>63) (LRR K, L, R)<br>L, M)<br>68) (LRR K, L)<br>R K, L)<br>12) (LRR K, L, R)<br>F19) (MLRA 149B<br>144A, 145, 149B |
|   |   |           |  |  |                                   |                      |  |  |   |
| Туре:   |   |           |  |  |                                   | 1                    | Hydric Soil Present  | Vac  | _ No_X  |
|   | 3):   |           |  |  |                                   |                      | Try and contribution   | Yes  | No_t <  |

| Project/Site: Ball Hill Wind Project City/County: CHRITIPLEQUAY CTY Sampling Date: III 15  Applicant/Owner: Ball Hill Wind Profity LLC State: DY Sampling Point: DP 577  Investigator(s): B. Vi 275 , S. Buckenneyer Section, Township, Range: VILLENOVY  Landform (hillslope, terrace, etc.): Province Lat: Tq, IIII Long: VILLENOVY  Long: WI - 452567 Datum: Pao 83  Soil Map Unit Name: DP Park S. H. Local Stipe of year? Yes X. No (If no, explain in Remarks.)  Are climatic / hydrologic conditions on the site typical for this time of year? Yes X. No (If no, explain in Remarks.)  Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X. No.  Hydrophytic Vegetation Present? Yes X. No (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes X. No (If yes, optional Wetland? Yes X. No)  Welland Hydrology Present? Yes X. No (If yes, optional Wetland Site ID: Not 1944)  Remarks: (Explain alternative procedures here or in a separate report.)  | WETLAND   | DETERMINATION DATA FO   | RM - Northcentral   | and Northeast Region  |
|--|---|---|---|---|
| Sampling Point   DP 577   Investigator(s):   S. V. 12.5   S. B. C. L. Section, Township, Range;   VILLEROVY   Subregion (LRR or MLRA):   LR. R R.   Lat:   T.  | ~   |   |   |   |
| Signer (initial pope, terrace, etc.): Decirios (Concave, convex, none): Concave, Slope (%): Ostubregion (LRR or MLRA): LRC-R Lat: 79, 11911 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 1 Long: 12, 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: nap 83. Soil Map Unit Name: Or Port S. 145256 Datum: | Applicant/Owner BOLL Hill I   | 0.5   | rooding. Of the total   | Court DY County But DD 577  |
| Siburgoin (Rillslope, terrace, etc.)   Concaver   Conca | Invostigator(s): R VIATS S  | Bullingy, LCC   | Harry Taylor Barrier  | State: 77 Sampling Point: Dr 3 1 7  |
| Subregion (LRR or MLRA): LRR-R Lat: 79, 1996 Long: 472, 452,562 Datum no 8:3 Soil May Unit Name: 07, 2015 1 2000 Stole of this time of year? Yes X No (If no, explain in Remarks.) Are elimatic? hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation no 50, 501 no 0, or Hydrology no significantly disturbed? Are "Normal Circumstances" present? Yes X No (If no explain in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes X No (If needed, explain any any swers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes X No (If yes, optional Wetland Robert No. (If needed, explain any any swers in Remarks.)  Hydrophytic Vegetation Present? Yes X No (If yes, optional Wetland Robert No. (If needed, explain any any swers in Remarks.)  Sufface Water Any (If no explain in Remarks.)  Hydrophytic Vegetation Present? Yes X No (If yes, optional Wetland Robert No. (If needed, explain any any swers in Remarks.)  Secondary Indicators (minimum of two required)  Wetland Hydrology Indicators:  No. (If no, explain in Remarks.)  Is the Sampled Area within a Wetland? Yes X No (If yes, optional Wetland Robert No. (If needed, explain no yes x No. (If needed, explain no yes x No. (If yes, optional Wetland? Yes X No. (If yes, optiona | Investigator(s). 13. 1. 1. 1  | Section Sec   | uon, Township, Range:_  | VICCENOVIT  |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)  Are Vegetation No. Soil No. or Hydrology Soil Indicators: (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes X No If yes No If yes, optional Wetland Area Within a Wetland?  Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: No If yes, optional Wetland |   |   | elief (concave, convex, n   | one): Slope (%):O   |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)  Are Vegetation No. Soil No. or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes No If yes, optional Wetland Site ID: No. 1541 Yes, No If yes, optional Wetland Site ID: No. 1541 Yes, No If yes, optional Wetland Site ID: No. 1541 Yes, No If yes, optional Wetland Site ID: No. 1541 Yes, No If yes, optional Wetland Site ID: No. 1541 Yes, No. If yes, optional Wetland Site I |   |   |   | 12.452562 Datum: nan 83   |
| Are Vegetation No. Soil No. or Hydrology No. significantly disturbed? (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. Hydrology Present? Yes No. Depth (inches): O" Wetland Hydrology Present? Yes No.  | Soil Map Unit Name: OFPA  | 16 S. It loom   | 308% 5100   | 202_NWI classification: LPLAND  |
| Are Vegetation No. Soil No. or Hydrology No. significantly disturbed? (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. Hydrology Present? Yes No. Depth (inches): O" Wetland Hydrology Present? Yes No.  | Are climatic / hydrologic conditions or   | the site typical for this time of year?   | Yes X No  | (If no, explain in Remarks.)  |
| Are Vegetation Park Vegetation Park Of FINDINGS — Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No If yes, optional Wetland Site ID: Wetland Hydrology Present? Yes X No If yes, optional Wetland Site ID: Wetland Hydrology Indicators (minimum of one is required; check all that apply)  Your Surface Water (A1) X Water-Stained Leaves (B9) X Drainage Patterns (B10)  High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16)  Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2)  Water Marks (B1) Q Addized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)  Drift Deposits (B3) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9)  Inflid Deposits (B3) Thin Muck Surface (C7) Shallow Aquatar (D3)  Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)  Saturation Present? Yes X No Depth (inches): O" Wetland Hydrology Present? Yes X No Inchedes (C4)       |   |   |   |   |
| Summary OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.  |   |   |   |   |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No Welland Hydrology Present?  Welland Hydrology Present?  Welland Hydrology Present?  Welland Hydrology Indicators:  Remarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Welland Hydrolog | Are vegetation jee, soil to b,  | Trydrology (3 2 Haturally problem   | nauc? (If needed,   | , explain any answers in Remarks.)  |
| Hydric Soil Present?  Welland Hydrology Present?  Yes X No  Welland Hydrology Present?  Remarks: (Explain alternative procedures here or in a separate report.)  Hydrology  Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (86)  Surface Soil Cracks (86)  Surface Soil Cracks (86)  Surface Soil Cracks (86)  Moss Trim Lines (816)  Dry-Season Water (816)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Shallow Aquitard (D3)  Indicators:  Micrologographic Position (D2)  Indicators:  Wetland Hydrology Present? Yes X No Depth (inches): O' Hari'  Wetland Hydrology Present? Yes X No Depth (inches): O' Wetland Hydrology Present? Yes X No Concludes capillary fringe)   | SUMMARY OF FINDINGS -   | Attach site map showing sa  | mpling point locat  | ions, transects, important features, etc.   |
| Hydric Soil Present?  Welland Hydrology Present?  Yes X No If yes, optional Welland Site ID: Loc+1cock No In Imperiod Not No If yes, optional Welland Site ID: Loc+1cock No In Imperiod Not No If yes, optional Welland Site ID: Loc+1cock No In Imperiod Not No If yes, optional Welland Site ID: Loc+1cock No In Imperiod Not No If yes, optional Welland Site ID: Loc+1cock No In Imperiod Not No If yes, option Not No In Imperiod Not No If yes, optional N | Hydrophytic Vegetation Present?   | Yes X No  | Is the Sampled Area   | fra de la companya d  |
| Wetland Hydrology Present?   Yes x No  |   |   |   |   |
| AyDROLOGY   Wetland Hydrology Indicators:   Secondary Indicators (minimum of two required)   Surface Soil Cracks (B6)   Surface Water (A1)   Mart Deposits (B15)   Dry-Season Water Table (A2)   Aquatic Fauna (B13)   Moss Trim Lines (B16)   Dry-Season Water Table (A2)   Advatic Fauna (B13)   Dry-Season Water Table (C2)   Crayfish Burrows (C8)   Saturation (A3)   Hydrogen Sulfide Odor (C1)   Crayfish Burrows (C8)   Saturation Visible on Aerial Imagery (B7)   Geomorphic Position (D2)   Iron Deposits (B5)   Recent Iron Reduction in Tilled Soils (C6)   Shallow Aquitard (D3)   Inundation Visible on Aerial Imagery (B7)   Other (Explain in Remarks)   FAC-Neutral Test (D5)   FAC-Neutral Test (D5)   Saturation Present?   Yes  No  Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No  No   Depth (inches): O'   Wetland Hydrology Present? Yes  No  No  No  No  No  No  No  No  No  N  |   |   | If was ontional Wetlan  | ad Site ID: Lactional 19544   |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Surface Water (A1)  High Water Table (A2)  Aquatic Fauna (B13)  Man Deposits (B15)  Presence of Reduced Iron (C1)  Aigal Mat or Crust (B4)  Iron Deposits (B5)  Iron De | Remarks: (Explain alternative proce   |   | ii yee, optional vvelial  | id dite ib.   |
| Water Table Present? Yes No Depth (inches): O'  Saturation Present? Yes Y No Depth (inches): O'  (includes capillary fringe)  Wetland Hydrology Present? Yes X No  | Primary Indicators (minimum of one  X Surface Water (A1)  X High Water Table (A2)  X Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Images | ✓ Water-Stained Leav Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide O Oxidized Rhizosphe Presence of Reduce Recent Iron Reducti Thin Muck Surface ( gery (B7)  Water-Stained Leav | dor (C1)<br>eres on Living Roots (C3)<br>ed Iron (C4)<br>ion in Tilled Soils (C6)<br>(C7) | <ul> <li>Surface Soil Cracks (B6)</li> <li>✓ Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> <li>✓ Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>Microtopographic Relief (D4)</li> </ul> |
| Water Table Present? Yes No Depth (inches): O'  Saturation Present? Yes Y No Depth (inches): O'  (includes capillary fringe)  Wetland Hydrology Present? Yes X No  |   | X No Denth (inches): C  | "- H"   |   |
| Saturation Present? Yes Y No Depth (inches): O"  Wetland Hydrology Present? Yes X No   |   |   |   |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   | Saturation Present? Yes   |   |   | Hydrology Present? Yes X No   |
|  | Describe Recorded Data (stream gar  | uge, monitoring well, aerial photos, pr   | evious inspections), if av  | railable:   |
|  |   |   |   |   |
|  | Remarks.  |   |   |   |
| Remarks:   |   |   |   |   |

| ree Stratum (Plot size: 30')           | Absolute<br>% Cover | Species?     | Indicator<br>Status | Dominance Test worksheet:  Number of Dominant Species  |
|--|---------------------|--------------|---------------------|--|
| not applicable                         |                     |              |                     | That Are OBL, FACW, or FAC: 2 (A)  |
|  |                     |              |                     | Total Number of Dominant Species Across All Strata: (B)  |
|  |                     |              |                     | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
|  |                     |              | 1                   | Prevalence Index worksheet:  |
|  |                     | -            |                     | Total % Cover of: Multiply by:   |
|  |                     | = Total Cov  | ver                 | OBL species x 1 =<br>FACW species x 2 =  |
| Sapling/Shrub Stratum (Plot size: 15') |                     |              |                     | FAC species x 3 =  |
| DOT Applicable                         |                     |              |                     | FACU species x 4 =   |
|  |                     |              |                     | UPL species x 5 =  |
| 3                                      |                     |              |                     | Column Totals: (A) (B)   |
|  |                     |              |                     |  |
|  | -                   | -            |                     | Prevalence Index = B/A =   |
| 5                                      |                     |              | -                   | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation                           |
| 7                                      |                     |              |                     | 2 - Dominance Test is >50%   |
|  | _0_                 | _ = Total Co | ver                 | 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size: 5')           |                     |              |                     | 4 - Morphological Adaptations (Provide supporting  |
| Juneus effusus                         | 55                  |              | DBL                 | data in Remarks or on a separate sneet)  |
| 2. Phalaris arundinacea                | 20                  | <u>y</u>     | FALW                | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Eleocharis acicularis               |                     | N            | OBL                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                      |
| 4. carex intumescens                   | _5_                 | N            | FACU                |  |
| 5.                                     |                     |              |                     | Definitions of Vegetation Strata:  |
| 6.                                     |                     |              |                     | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7                                      |                     |              |                     | at breast height (DBH), regardless of height.  |
| 8                                      |                     |              |                     | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 9                                      |                     |              |                     | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10.                                    |                     |              |                     | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
|  | -                   |              |                     |  |
| 11                                     |                     |              |                     | Woody vines - All woody vines greater than 3.28 ft in height.  |
| 12                                     | 60                  | = Total Co   | over                | noight.  |
| Woody Vine Stratum (Plot size:)        |                     |              |                     |  |
| 1. put applicable                      |                     |              |                     |  |
|  |                     |              |                     | Hydrophytic  |
| 2                                      |                     | -            | <del></del>         | Vegetation Present? Yes X No   |
| 3                                      | -                   | - 1          |                     |  |
|  |                     | = Total Co   | over                |  |
| 4                                      | 0                   |              |                     |  |

| (inches)   | cription: (Describe  Matrix  Color (moist) | 24            | Red                                       | ox Feature                             | 1010000     | or conn   | rm the absence of i                    | ndicators.)                    |
|--|--|---------------|---|--|-------------|-----------|--|--------------------------------|
| 0"-8"  | Color (moist)                              | %             | Color (moist)                             | %                                      | 20          | _Loc2     |  |                                |
| 8-0  | TOURHIL                                    | 70            | 54R 3/4                                   | 25                                     | C-          |           |  | Remarks                        |
|  |  |               | 2.54716                                   | -                                      |             | PL        | SIL                                    |                                |
|  |  |               | -116                                      | _5_                                    |             | m         |  |                                |
|  |  |               | -   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  | -  |               |   |  |             |           |  |                                |
|  | -  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   | -                                      |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
| Type: C=Con  | centration, D=Depleti                      | on, RM=       | Reduced Matrix                            |  |             |           |  | ****                           |
| lydric Soil Inc                                    | dicators:                                  | , , , , , , , |   | Masked S                               | and Grain   | is.       | <sup>2</sup> Location: PL=             | Pore Lining, M=Matrix.         |
| _ Histosol (A                                      | (1)  | _             | Polyvalue Below S                         | Surface (9                             | (8) (I PP = | ,         | indicators for Pr                      | oblematic Hydric Soils3.       |
| <ul><li>Histic Epip</li><li>Black Histic</li></ul> | edon (A2)                                  |               | WLKA 149B)                                |  |             |           | 2 cm Muck (A10) (LRR K, L, MLRA 149B)  |                                |
| _ Hydrogen 8                                       | C (A3)                                     | -             | Thin Dark Surface (S9) (LRR P. MI PA 440) |  |             | A 1400V   | — Codst Frame Redox (A16) (I RP K I P) |                                |
| _ Stratified La                                    | overs (AE)                                 | -             | - Louiny Wideky Will                      | - Louiny Mucky Mineral (F1) (I DD V I) |             |           | S CITI WILLCRY F                       | eat or Peat (S3) (I pp k I p)  |
| Depleted B   | elow Dark Surface (A                       |               | - Loanly Gleved Ma                        | trix (F2)                              |             | ,         | Daik Surface                           | (S/) (LRR K. I. M)             |
| Thick Dark   | Surface (A12)                              | 11) &         | Depleted Matrix (F                        | 3)                                     |             |           | Polyvalue Bel                          | OW Surface (S8) (LDD V L)      |
| Sandy Music  | ky Mineral (S1)                            | -             | _ Redox Dark Surfac                       | e (F6)                                 |             |           | Inin Dark Sur                          | face (S9) /LRP K L)            |
| Sandy Muci   | ky Mineral (S1)                            | -             | _ Depleted Dark Sur                       | face (F7)                              |             |           | Iron-Mangane                           | se Masses (F12) (LDD K LD)     |
| Sandy Redo   | ed Matrix (S4)                             | -             | _ Redox Depressions                       | (F8)                                   |             |           | i icumont Floc                         | opiain Soils (F10) (MI DA 4400 |
| Stripped Ma  | OX (S5)                                    |               |   | (1 0)                                  |             |           | wesic spould                           | (IAG) (MLRA 144A 145 140D)     |
| Stripped Ma  | trix (S6)                                  |               |   |  |             |           | red raient Ma                          | aterial (F21)                  |
| Dark Surface                                       | e (S7) (LRR R, MLRA                        | 149B)         |   |  |             |           | Very Shallow [                         | Dark Surface (TF12)            |
| dicators of hyd                                    | frontie vocatati                           |               |   |  |             |           |  | in Remarks)                    |
| strictive Laye                                     | drophytic vegetation a                     | nd wetlar     | nd hydrology must be                      | present, i                             | unless dis  | turbed or | problematic.                           |                                |
| Type:  |  |               |   |  |             |           |  |                                |
| Depth (inches                                      | ):   |               |   |  |             |           |  |                                |
| marks:   |  |               |   |  |             | F         | Hydric Soil Present                    | ? Yes X No                     |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
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|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |
|  |  |               |   |  |             |           |  |                                |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Are climatic / hydrologic conditions or<br>Are Vegetation <u> </u>   | n the site typical for this time of yor Hydrology <u>r→ o</u> significantler Hydrology <u>r→ c</u> naturally p   | year? Yes X No Are "Norm roblematic? (If needed   | none): Convex Slope (%): 15  HZ-182602 Datum: Dag 8:  NWI classification: LOIANG  (If no, explain in Remarks.)  nal Circumstances" present? Yes K No  d, explain any answers in Remarks.)  tions, transects, important features, et                                    |  |  |
|--|--|---|--|--|--|
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proce  | Yes No X<br>Yes No X   | Is the Sampled Area within a Wetland?   | Yes No X   |  |  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is  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) | <ul> <li>Water-Stained L</li> <li>Aquatic Fauna (</li> <li>Marl Deposits (E</li> <li>Hydrogen Sulfid</li> <li>Oxidized Rhizos</li> <li>Presence of Rec</li> <li>Recent Iron Red</li> </ul> | (B13) B15) le Odor (C1) spheres on Living Roots (C3) duced Iron (C4) duction in Tilled Soils (C6) | Moss Trim Lines (B16)  — Moss Trim Lines (B16)  — Dry-Season Water Table (C2)  (C1) — Crayfish Burrows (C8)  on Living Roots (C3) — Saturation Visible on Aerial Imagery (C9)  on (C4) — Stunted or Stressed Plants (D1)  Tilled Soils (C6) — Geomorphic Position (D2) |  |  |
| Inundation Visible on Aerial Image<br>Sparsely Vegetated Concave Surfield Observations:  | Thin Muck Surfa ry (B7) Other (Explain in ace (B8)   |   | <ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li><li>FAC-Neutral Test (D5)</li></ul>   |  |  |
| Surface Water Present? Yes   | No X Depth (inches): No X Depth (inches): No E Depth (inches): e, monitoring well, aerial photos.  | Wetland H   | Vdrology Present? Yes N. Y.  |  |  |
| emarks:  |  |   |  |  |  |

Sampling Point: 09-578 VEGETATION - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30 % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: 1. COT PAPICABLE Total Number of Dominant Species Across All Strata: Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: Prevalence Index worksheet: Multiply by: Total % Cover of: OBL species \_\_\_\_ x1=\_\_\_\_ C = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 15 O x3= O FAC species \_ 1. POT PAPICALOLE FACU species  $100 \times 4 = 400$ O x5= O UPL species Column Totals: 100 (A) 400 Prevalence Index = B/A = 4.0 Hydrophytic Vegetation Indicators: \_\_ 1 - Rapid Test for Hydrophytic Vegetation \_\_\_ 2 - Dominance Test is >50% = Total Cover \_\_ 3 - Prevalence Index is ≤3.01 4 - Morphological Adaptations (Provide supporting Herb Stratum, (Plot size: data in Remarks or on a separate sheet) nedonorus arundinaceous 60 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) <sup>1</sup>Indicators of hydric soil and wetland hydrology must santago lanceolata be present, unless disturbed or problematic. taraxacum officinale\_\_\_\_ FACU Definitions of Vegetation Strata: 5. Solanum carolines \_\_\_\_ FAIQU N Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in 100 = Total Cover Woody Vine Stratum (Plot size: 30'\_\_\_) 1. not Applicable Hydrophytic Vegetation Yes \_\_\_\_ No X Present? O = Total Cover Remarks: (Include photo numbers here or on a separate sheet.)

| Color (moist) %   | epth needed to document the indicator or cont  Redox Features Color (moist) % Tyne <sup>1</sup> Los <sup>2</sup>   |   |              |
|---|--|---|--------------|
| 0"-20" logr314 100  | Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>   | Remarks   |              |
|   |  | Z.L.T   |              |
|   |  |   |              |
|   |  |   |              |
| Type: C=Concentration, D=Depletion, RM= ydric Soil Indicators:  | Reduced Matrix, MS=Masked Sand Grains.   | 21  |              |
| Historial (Ad)  |  | <sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :   |              |
| Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) | <ul> <li>2 cm Muck (A10) (LRR K, L, MLRA 149I</li> <li>Coast Prairie Redox (A16) (LRR K, L, R)</li> <li>5 cm Mucky Peat or Peat (S3) (LRR K, L</li> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L</li> <li>Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 14</li> <li>Red Parent Material (F21)</li> </ul> | , R)<br>, R) |
|   |  | Very Shallow Dark Surface (TF12)     Other (Explain in Remarks)   |              |
| licators of hydrophytic vegetation and wetla  | and hydrology must be present, unless disturbed o  | or problem 4  |              |
| Type:   | present, difficult disturbed C   | problematic.  |              |
| Depth (inches):   |  |   |              |
| narks:  |  | Hydric Soil Present? Yes No   |              |
|   |  |   |              |
|   |  |   |              |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: BAII 4:11 wind crosset City/County: CHANTIANGHACTY Applicant/Owner: BAII Hill wind energy, LLC State: NY Sampling Point: DP 579 Investigator(s): R. V. RTS, S. Buckenmayer VILLENOVA Section, Township, Range: Landform (hillslope, terrace, etc.): 0 - concest Subregion (LRR or MLRA): LRR-R Datum: nag 83 Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No\_\_\_ Are Vegetation 20, Soil 20, or Hydrology 20 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No within a Wetland? Hydric Soil Present? Wetland Hydrology Present? If yes, optional Wetland Site ID: Wetterd ASHLO Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) ✓ Drainage Patterns (B10) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) X High Water Table (A2) \_\_\_ Moss Trim Lines (B16) Aquatic Fauna (B13) X Saturation (A3) \_\_\_ Dry-Season Water Table (C2) \_\_ Marl Deposits (B15) \_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) \_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Stunted or Stressed Plants (D1) \_\_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) ✓ Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) \_\_\_ Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: No X Depth (inches): Surface Water Present? Yes X No \_\_\_ Depth (inches): 6" Water Table Present? Wetland Hydrology Present? Yes X No Saturation Present? Yes X No \_\_\_ Depth (inches): 0" (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Absolute<br>% Cover | Dominant Species?                                      | Control Market Control | Dominance Test worksheet:  |
|---------------------|--|------------------------|--|
|                     | V  |                        | Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)   |
|                     | V  |                        | That Are OBL, FACW, or FAC:(A)   |
|                     |  |                        | Total Number of Dominant Species Across All Strata:  (B)   |
| -                   |  | _                      | Species Across All Strata: (B)   |
| -                   |  |                        | Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B                                      |
|                     |  |                        | That Are OBL, FACW, or FAC: _SO (A/B   |
|                     |  |                        | Prevalence Index worksheet:  |
|                     |  |                        | Total % Cover of: Multiply by:   |
|                     | = Total Cos  | ıor                    | OBL species15 x1 =15   |
| _00                 | - 10(01 00   | ,01                    | FACW species 30 x 2 = 60   |
| 15                  | V  | FACIAL                 | FAC species 25 x3 = 75   |
|                     | <del>-</del>   |                        | FACU species 30 x4= 120  |
| _5_                 | 7  | TACU                   | UPL species x 5 =  |
|                     |  |                        | Column Totals: 100 (A) 270 (B)   |
|                     |  |                        |  |
|                     |  |                        | Prevalence Index = B/A = 2.70  |
|                     |  |                        | Hydrophytic Vegetation Indicators:   |
| -                   |  |                        | 1 - Rapid Test for Hydrophytic Vegetation  |
| 70                  | -  |                        | 2 - Dominance Test is >50%   |
| _20                 | = Total Co   | ver                    | X 3 - Prevalence Index is ≤3.0¹  |
|                     |  |                        | 4 - Morphological Adaptations (Provide supporting  |
| 25                  | У_   | FAC                    | data in Remarks or on a separate sheet)  |
| 15                  | У  | OBL                    | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 10                  | N  | FAGIN                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                    |
| 1                   | N  |                        | be present, unless disturbed or problematic.   |
| 3                   | N  |                        | Definitions of Vegetation Strata:  |
|                     | 1/1  | PALIN                  |  |
|                     |  |                        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. |
|                     |  |                        |  |
|                     |  |                        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.    |
|                     |  |                        | and greater than of equal to 3.26 it (1 iii) tall.   |
|                     |  |                        | Herb - All herbaceous (non-woody) plants, regardless of  |
|                     |  | - (                    | size, and woody plants less than 3.28 ft tall.   |
| _                   |  |                        | Woody vines - All woody vines greater than 3.28 ft in  |
|                     |  |                        | height.  |
| 00                  | = Total Co   | ver                    |  |
|                     |  |                        |  |
| - (                 |  |                        |  |
|                     |  |                        | Hydrophytic  |
|                     |  |                        | Vegetation Present? Yes X No   |
|                     |  |                        |  |
|                     |  | -                      | .4   |
| 0                   | = Total Co   |                        |  |
|                     | 10<br>10<br>20<br>15<br>5<br>20<br>25<br>15<br>10<br>5 | 10                     | 10   |

| epth                                  | ription: (Describe t<br>Matrix   | o trie de |   | ox Features                           |  | or commi      | the absence of h   | ndicators.)   |
|---------------------------------------|--|-----------|---|---------------------------------------|--|---------------|--|---|
| nches)                                | Color (moist)  | %         | Color (moist)   | %                                     | Type <sup>1</sup>  | Loc2          | Texture  | Remarks   |
| 0"-10"                                | 7.54312  | 58        | 7.544/3   | 40%                                   | -  | m             | SI   | a de travalla a constant de travala de constant de constant de constant de constant de constant de constant de  |
|                                       |  |           | 10yrs/6   | 298%                                  |  | m             | and the second   |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       | ***********  | •             |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
| ype: C=Co                             | ncentration, D=Depl  | etion, RM | =Reduced Matrix, N  | -<br>1S=Masked                        | Sand Gr  | ains.         |  | =Pore Lining, M=Matrix.   |
| _ Histosol (<br>_ Histic Epi          | ric Soil Indicators:  Histosol (A1) Polyvalue Below Surface (S8) (LRR R,  Histic Epipedon (A2) |           |   |                                       | Indicators for Problematic Hydric Soils <sup>3</sup> :  2 cm Muck (A10) (LRR K, L, MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R) |               |  |   |
| _ Stratified<br>_ Depleted            | Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface  | (A11)     | <ul><li>Loamy Mucky</li><li>Loamy Gleyed</li><li>Depleted Matr</li></ul>    | Mineral (F1<br>Matrix (F2)<br>ix (F3) | (LRR K   |               | Dark Surfa<br>Polyvalue  <br>Thin Dark   | ce (S7) (LRR K, L, M)<br>Below Surface (S8) (LRR K, L)<br>Surface (S9) (LRR K, L)   |
| Sandy Mu Sandy Gl Sandy Re Stripped I | Matrix (S6)  | U DA 440  | X Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) |                                       |  |               | <ul><li>Piedmont f</li><li>Mesic Spo</li><li>Red Paren</li><li>Very Shallo</li></ul> | anese Masses (F12) (LRR K, L, R)<br>Floodplain Soils (F19) (MLRA 1498<br>dic (TA6) (MLRA 144A, 145, 1498)<br>t Material (F21)<br>ow Dark Surface (TF12) |
| ndicators of                          | face (S7) (LRR R, M<br>hydrophytic vegetati  |           |   | ıst be prese                          | nt, unless   | s disturbed o |  | lain in Remarks)  |
|                                       | ayer (if observed):  |           |   |                                       |  |               |  |   |
| Type:<br>Depth (incl                  | hes):  |           |   |                                       |  |               | Hydric Soil Pre  | sent? Yes X No  |
| emarks:                               |  |           |   |                                       |  |               | Hydric 30ii Fre  | Selit: 165 NO   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |
|                                       |  |           |   |                                       |  |               |  |   |

| andform (hillslope, terrace, etc.): HITS subregion (LRR or MLRA): LRR - R. Soil Map Unit Name:   | Lat: 79.196  typical for this time of year slogy 12.0 significantly of     | al relief (concave, convex, n                   | State: NY Sampling Date: 11915  State: NY Sampling Point: NP-580  VILLE OVA  JONE): CONVEY Slope (%): 2%  47. 449912 Datum: NO 8'  NWI classification: LPI and |
|--|--|---|--|
| andform (hillslope, terrace, etc.): HITS subregion (LRR or MLRA): LRR - R. Soil Map Unit Name:   | Lat: 79.196  typical for this time of year slogy 12.0 significantly of     | al relief (concave, convex, n                   | NWI classification: LPLand   |
| Subregion (LRR or MLRA): LRR - Resoil Map Unit Name:   | Lat: 79.1196  typical for this time of yeallogy <u>PO</u> significantly of | Long:   | 47 449912 Datum: nan 8.  NWI classification: uPland  |
| soil Map Unit Name:<br>we climatic / hydrologic conditions on the site<br>we Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro<br>we Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro | typical for this time of yea   | ar? Yes X No                                    | NWI classification: uPland   |
| re climatic / hydrologic conditions on the site<br>re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro<br>re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro                        | typical for this time of yea<br>logy <u>ゃ</u> significantly o              |   |  |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro<br>re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro   | logy <u>೧೦</u> significantly o   |   | (If no, explain in Remarks.)   |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro  |  | disturbed? Are "Norm                            | A ALL PROPERTY OF A PROPERTY   |
| re Vegetation <u>NO</u> , Soil <u>NO</u> , or Hydro  |  |   | nal Circumstances" present? Yes X No   |
| SUMMARY OF FINDINGS – Attacl   | nogy naturally pro-  | olematic? (If needed                            | , explain any answers in Remarks.)   |
| Hudronbutin Variation Dragant?   | site map showing   |   | ions, transects, important features, etc   |
| Hydrophytic Vegetation Present? Ye   | es No X  | Is the Sampled Area                             |  |
| [2] 하나 마리 전하면 한 때 가게 하는 사람이 가입니다. 하나 에 다른 사람이 되었다.   | es No x  | within a Wetland?                               | Yes No X   |
|  | es No X  | If yes, optional Wetlar                         | nd Site ID:  |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required)  Surface Water (A1)  | red; check all that apply) Water-Stained L                                 | eaves (B9)                                      | Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  |
| High Water Table (A2)  | Aquatic Fauna (  |   | Moss Trim Lines (B16)  |
| Saturation (A3)  | Marl Deposits (E   |   | Dry-Season Water Table (C2)  |
| Water Marks (B1)   | Hydrogen Sulfid  |   | Crayfish Burrows (C8)  |
| Sediment Deposits (B2)   |  | pheres on Living Roots (C3)                     |  |
| Drift Deposits (B3) Algal Mat or Crust (B4)  | Presence of Rec  | fuced fron (C4)<br>fuction in Tilled Soils (C6) | Stunted or Stressed Plants (D1)  |
| Iron Deposits (B5)   | Recent from Red  |   | Geomorphic Position (D2)   |
| Inundation Visible on Aerial Imagery (B'   |  |   | <ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>   |
| Sparsely Vegetated Concave Surface (I  |  | r (Citiants)                                    | FAC-Neutral Test (D5)  |
| Field Observations:  | /  |   |  |
| Surface Water Present? Yes   | No X Depth (inches):   |   |  |
|  | No Depth (inches):   |   |  |
| Saturation Present? Yes (includes capillary fringe)  | No X Depth (inches):   | Wetland   | Hydrology Present? Yes No 🗴  |
| Describe Recorded Data (stream gauge, mo   | onitoring well, aerial photos  | s, previous inspections), if a                  | vailable:  |
| Remarks:   |  |   |  |

| Tree Stratum (Plot size: 3())          | Absolute<br>% Cover | Dominant Species? |             | Dominance Test worksheet:  |
|--|---------------------|-------------------|-------------|--|
| 1 Tsuga canadensis                     | 80                  | γ                 | FACU        | Number of Dominant Species That Are OBL, FACW, or FAC: (A)   |
| Betula alleganiensis                   | 20                  | y                 | FAC         | The state of the s |
|  |                     |                   |             | Total Number of Dominant Species Across All Strata:  (B)   |
| 3                                      |                     |                   |             |  |
| 1                                      |                     |                   |             | Percent of Dominant Species That Are OBL, FACW, or FAC: 37 (A/B)   |
|  |                     |                   |             |  |
| 3                                      |                     |                   |             | Prevalence Index worksheet:  |
| ·                                      |                     |                   |             |  |
|  | 100                 | = Total Co        | ver         |  |
| Sapling/Shrub Stratum (Plot size: 15') | 5.5                 | 21                |             | FACW species $0 \times 2 = 0$<br>FAC species $30 \times 3 = 90$  |
| Tsuga canadensis                       | _30_                | _У                | <b>Encu</b> | FACU species 130 x4 = 520  |
| Fagus grandifolia                      | 10_                 | <u> </u>          | FACU        | UPL species O x 5 = O  |
| carpinus carolina                      | 10                  | Y                 | FAC         | Column Totals: 165 (A) 6B)   |
| 4                                      |                     |                   |             | AND THE RESERVE OF THE PROPERTY OF THE PROPERT |
| 5                                      |                     |                   |             | Prevalence Index = B/A = 3.72  |
| 6.                                     |                     |                   |             | Hydrophytic Vegetation Indicators:   |
| 7                                      |                     |                   |             | 1 - Rapid Test for Hydrophytic Vegetation  |
| \ <u>-</u>                             | 50                  | = Total Co        | ver         | 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size: 5')           |                     |                   |             | 3 - Prevalence Index is ≤3.01  |
| 1. Fagus granditona                    | 5                   | V                 | FACU        | <ul> <li>4 - Morphological Adaptations¹ (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul>   |
| z Tsuga canadensis                     | 5                   | V                 | FACU        | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
|  |                     | v                 |             |  |
| 3. Dryopteris cristata                 | 5_                  |                   | OBL         | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 4                                      |                     |                   |             |  |
| 5                                      |                     |                   |             | Definitions of Vegetation Strata:  |
| 6                                      | -                   |                   |             | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
| 7                                      |                     |                   |             |  |
| 8                                      |                     |                   |             | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                      |                     |                   |             |  |
| 10                                     |                     |                   |             | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 11                                     |                     |                   |             |  |
| 12.                                    |                     |                   |             | Woody vines – All woody vines greater than 3.28 ft in height.  |
|  | 15                  | = Total Co        | ver         |  |
| Woody Vine Stratum (Plot size: 30')    |                     |                   |             |  |
| 1. Not Applicable                      |                     |                   |             |  |
|  | -                   |                   |             | Hydrophytic  |
| 2                                      | -                   |                   |             | Vegetation Present? Yes No X   |
| 3                                      |                     | -                 | -           |  |
| 4                                      | _                   | -                 |             |  |
|  | 0                   | _ = Total Co      | over        |  |

| Depth  | ription: (Describe<br>Matrix  | to the dep  |  | x Features  |                       | or confirm                              | the absence  | of indicators.   |  |
|--|---|-------------|--|---|-----------------------|---|--|--|--|
| (inches)   | Color (moist)   | %           | Color (moist)  | %   | Type <sup>1</sup>     | _Loc <sup>2</sup> _                     | Texture  | Remarks  |  |
| 0"2"   | 7.5422.5/1  | -           |  | -   | -                     | *************************************** | NA   | organ: c luger   |  |
| Z-14"  |   |             | 7.5427.511   | 10%   | -                     |   | STL  | organic layer  | 501  |
| 14"20"   | 2,5414  | 100%        |  |   | Name and the same and |   | <u> </u>   |  |  |
|  |   |             |  |   |                       |   |  |  |  |
|  |   |             |  |   |                       |   |  |  |  |
| Type: C=Co   | ncentration, D=Depl   | letion, RM: | =Reduced Matrix, MS  | S=Masked  | Sand Gra              | nins.                                   |  | : PL=Pore Lining, M=Matrix.<br>for Problematic Hydric Soils <sup>3</sup>   |  |
| Black His Hydroger Stratified Depleted Thick Dan Sandy Mi Sandy Gl Sandy Re Stripped Dark Surf | pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface rk Surface (A12) ucky Mineral (S1) eyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M | ILRA 1498   | Polyvalue Belov MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depress Redox Depress | ice (S9) (LI<br>Mineral (F1)<br>Matrix (F2)<br>(F3)<br>rface (F6)<br>Surface (F7<br>ions (F8) | RR R, ML<br>) (LRR K, | .RA 149B)<br>L)                         | Coast 5 cm M Dark S Polyva Thin D Iron-Ma Piedma Mesic a Red Pa Very S Other ( | Muck (A10) (LRR K, L, MLRA 14 Prairie Redox (A16) (LRR K, L, Mucky Peat or Peat (S3) (LRR K Surface (S7) (LRR K, L, M) Ilue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K ont Floodplain Soils (F19) (MLR Spodic (TA6) (MLRA 144A, 145 arent Material (F21) hallow Dark Surface (TF12) (Explain in Remarks) | R)<br>(, L, R)<br>, L)<br>(, L, R)<br>(A 149B) |
| Type:<br>Depth (incl   |   |             |  |   |                       |   | Hydric Soil  | Present? Yes No  | X  |
| Remarks:   |   |             |  |   |                       |   |  |  |  |

|  | RMINATION DATA FORM - No   | thcentral and Northeast Region                                  |
|--|--|---|
| Project/Site: Ball Hill WinDPo   |  | hautungua Cty Sampling Date: 11/09/15                           |
|  | General Ban M. D. Wind   | Energy State: NY Sampling Point: DP 581                         |
| nvestigator(s): B. Virzis, S. Bud  |  |   |
| andform (hillslope, terrace, etc.): hills  |  | re, convex, none): Con Cave Slope (%):                          |
| Subregion (LRR or MLRA): LRR-R   | Lat: 79, 119414  | Long: 42,448,568 Datum: Nad \$3                                 |
|  |  |   |
| Soil Map Unit Name: Valors graves  | elly 2: 10 100m 16011.   | NVVI classification: WY 17 14 30 VIPTU                          |
| Are climatic / hydrologic conditions on the site   | typical for this time of year? YesX  |   |
| Are Vegetation No , Soil No , or Hydro   |  | Are "Normal Circumstances" present? Yes X No                    |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydro   | ology No naturally problematic?  | (If needed, explain any answers in Remarks.)                    |
| SLIMMARY OF FINDINGS - Attack  | h site man showing sampling n  | oint locations, transects, important features, etc.             |
| ODIMINATE OF THE MEDICAL PROPERTY.   |  |   |
| Tijdiopiljao tegetanen teaant  | - 110  | Impled Area   |
| Try and Committee and  | 63 - 140   | Wetland? Yes No   |
| .,,,   |  | tional Wetland Site ID: H54 /                                   |
| Remarks: (Explain alternative procedures h   | iere or in a separate report.)   |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
|  |  |   |
| WEDGI GOV  |  | · · · · · · · · · · · · · · · · · · ·                           |
| HYDROLOGY  | 100  | Secondary Indicators (minimum of two required)                  |
| Wetland Hydrology Indicators:  | tands also also all theat awals A  |   |
| Primary Indicators (minimum of one is requi  |  | Surface Soil Cracks (B6)  |
| Surface Water (A1)   | ✓ Water-Stained Leaves (B9)  | ✓ Drainage Patterns (B10) ✓ Moss Trim Lines (B16)               |
| <ul><li>✓ High Water Table (A2)</li><li>✓ Saturation (A3)</li></ul>                                | Aquatic Fauna (B13) Marl Deposits (B15)  | Dry-Season Water Table (C2)                                     |
| Water Marks (B1)   | Hydrogen Sulfide Odor (C1)   | Crayfish Burrows (C8)   |
| Sediment Deposits (B2)   | Oxidized Rhizospheres on Livir   | 그는 그 이 이 이 이 이 아이들 요즘 이 아니는 |
| Drift Deposits (B3)  | Presence of Reduced Iron (C4)  |   |
| Algal Mat or Crust (B4)  | Recent Iron Reduction in Tilled  |   |
| Iron Deposits (B5)   | Thin Muck Surface (C7)   | Shallow Aquitard (D3)   |
| Inundation Visible on Aerial Imagery (B  |  | Microtopographic Relief (D4)                                    |
| Sparsely Vegetated Concave Surface (   |  | FAC-Neutral Test (D5)   |
| Field Observations:  |  |   |
| Surface Water Present? Yes X   | No Depth (inches): $O - \lambda''$   |   |
| Water Table Present? Yes X   | No Depth (inches): O"  |   |
| Vyalei Table Flescitti Tes   | And the second s | Wetland Hydrology Present? Yes No                               |
| Saturation Present? Yes X  | No Depth (inches): O   | Trottand Tryanology Trooping 100 Tro                            |
| Saturation Present? Yes X  | A Committee of the Comm |   |
| Saturation Present? Yes X  | A Committee of the Comm |   |
| Saturation Present? Yes X  | A Committee of the Comm |   |
| Saturation Present? Yes X  | A Committee of the Comm |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |
| Saturation Present? Yes X (includes capillary fringe)  Describe Recorded Data (stream gauge, more) | A CONTRACTOR OF THE PROPERTY O |   |

| Dominance Test worksheet:   Status  |
|---|
| That Are OBL, FACW, or FAC:  FAC  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:  OBL species x1 =  |
| Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:  OBL species x1 =   |
| Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:  OBL species  |
| Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of:  Multiply by:  OBL species  |
| That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:   |
| Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species  |
| Total % Cover of: Multiply by:  OBL species   |
| OBL species   |
| FACU FACU FACU FACU FACU FACU FACU FACU   |
| FACU FACU FACU FACU FACU FACU FACU FACU   |
| FACU species x 4 =  |
| FACU species x 4 =  |
| TACU  FACU  FACU  Column Totals:  |
| Column Totals:  |
| Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide suppodata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  Indicators of hydric soil and wetland hydrology must |
| Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide suppodata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology mu                            |
|   |
|   |
| Cover  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide suppodata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology mu  |
| Cover  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide suppodata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  FACW  ¹Indicators of hydric soil and wetland hydrology mu  |
| 4 - Morphological Adaptations¹ (Provide suppodata in Remarks or on a separate sheet)  DBL Problematic Hydrophytic Vegetation¹ (Explain)  FACW ¹Indicators of hydric soil and wetland hydrology mu   |
| data in Remarks or on a separate sheet)  DBL Problematic Hydrophytic Vegetation¹ (Explain)  FACW Indicators of hydric soil and wetland hydrology mu   |
| Problematic Hydrophytic Vegetation¹ (Explain)  FACW ¹Indicators of hydric soil and wetland hydrology mu   |
| FACW Indicators of hydric soil and wetland hydrology mu   |
|   |
| be present, divises distance of problematic.  |
|   |
| Definitions of Vegetation Strata:   |
| Tree – Woody plants 3 in. (7.6 cm) or more in diam  |
| at breast height (DBH), regardless of height.   |
| Sapling/shrub - Woody plants less than 3 in. DBI  |
| and greater than or equal to 3.28 ft (1 m) tall.  |
| Trute All hanks agong (you arroady) plants, cargardland   |
| Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
|   |
| Woody vines – All woody vines greater than 3.28 ft in height.   |
| Cover   |
| Cover   |
|   |
|   |
| Hydrophytic Vegetation  |
| Present? Yes No   |
|   |
|   |
| Cover   |
| ıl  |

Sampling Point: P-58

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)  Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type! Loc² Texture Remarks  O I O J J J J O J J J O J O J J J J O J O  |   |
|--|---|
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L, INR A149B)  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L, INR A149B)  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L, INR A149B)  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L, INR A149B)  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L, INR A149B)  Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L)  This cancel of the surface (S8) (LRR R, Indicators for Problematic Hydric Solis 2 cm Muck (A10) (LRR K, L)  This cancel of the surface (S8) (LRR R, R, LRR L, L)  This cancel of the surface (S8) (LRR R, L, L)  This cancel of the surface (S8) (LRR R, L, L)  This cancel of the surface (S8) (LRR R, L, L)  This cancel o |   |
| Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  2 Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solls Indicators for Problematic Hydric Solls Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Hydrogen Sulfide (A4) Stratified Layers (A5) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1)  Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Depleted Below Dark Surface (A12) Seed on Mucky Mineral (S1)  Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A16) (LRR K, L, M) Dark Surface (S7) (LRR K, L, M) Polyvalue Below Surface (S8) (LRR R, Loamy Mucky Mineral (S1)  Polyvalue Below Surface (S9) (LRR K, L) Stratified Layers (A5) Depleted Below Surface (F5) Thick Dark Surface (S9) (LRR K, L) Iron-Manganese Masses (F12) (LRR K, L) Iron-Manganese Masses (F12) (LRR K)   |   |
| Histosol (A1)  Histosol (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Histosol (A1)  Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Indicators for Problematic Hydric Soils  2 cm Muck (A10) (LRR K, L, MLRA 1  Coast Prairie Redox (A16) (LRR K, L, L)  5 cm Mucky Peat or Peat (S3) (LRR K, L, M)  Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K)  |   |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Piedmont Floodplain Soils (F19) (MLR Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  | 149B)<br>., R)<br>K, L, R)<br>K, L)<br>K, L, R) |
| Type   |   |
| Depth (inches):  |   |
| emarks: Hydric Soil Present? Yes No  |   |

|  | ty/County: Chantaugua CTY Sampling Date: 11/9/15  |
|--|---|
| Applicant/Owner: BAIL HILL WIND ENERGY LLC   | State: Ny Sampling Point: DP 587  |
| Investigator(s): B. V. 25, S. Buckernger Se  | ection, Township, Range: VILLENOVI  |
| Landform (hillslope, terrace, etc.): Hills.cle Local                                 | relief (concave, convex, none): Slope (%): |
|  | 308 Long: 42.44868 Datum: nad 83  |
| Soil Map Unit Name:  | NWI classification: LPICAL  |
|  |   |
| Are climatic / hydrologic conditions on the site typical for this time of year       |   |
| Are Vegetation <u>ro</u> , Soil <u>ro</u> , or Hydrology <u>ro</u> significantly dis |   |
| Are Vegetation <u>no</u> , Soil <u>no</u> , or Hydrology <u>no</u> naturally proble  | ematic? (If needed, explain any answers in Remarks.)  |
| SUMMARY OF FINDINGS – Attach site map showing s                                      | ampling point locations, transects, important features, etc.  |
| Hydrophytic Vegetation Present? Yes No X   | Is the Sampled Area   |
| Hydric Soil Present? Yes No X  | within a Wetland? Yes No X  |
| Wetland Hydrology Present? Yes <u>X</u> No ★ MO                                      | If yes, optional Wetland Site ID:   |
| HYDROLOGY  |   |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)  |
| Primary Indicators (minimum of one is required; check all that apply)                | Surface Soil Cracks (B6)  |
|  |   |
| Surface Water (A1) Water-Stained Le High Water Table (A2) Aquatic Fauna (B           |   |
| X Saturation (A3) Marl Deposits (B1  |   |
| Water Marks (B1) Hydrogen Sulfide  |   |
| [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [  | oheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)   |
| Drift Deposits (B3) Presence of Redu   | 이렇게 이렇게 되었다. 그리고 바로 내내 이 이 아름이 되었다면 하는데 이 그리고 있다면 하는데 하는데 하는데 이번 없었다. 네티  |
| Algal Mat or Crust (B4) Recent Iron Redu   | uction in Tilled Soils (C6) Geomorphic Position (D2)  |
| Iron Deposits (B5) Thin Muck Surfac  |   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in                          |   |
| Sparsely Vegetated Concave Surface (B8)  | FAC-Neutral Test (D5)   |
| Field Observations:  |   |
| Surface Water Present? Yes No Depth (inches):  |   |
| Water Table Present? Yes NoX Depth (inches):   | Wetland Hydrology Present? Yes No K   |
| Saturation Present? Yes No Depth (inches): (includes capillary fringe)               | Wetland Hydrology Present? Yes No X   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos,                | , previous inspections), if available:  |
|  |   |
| Remarks:   |   |
| Remarks:   |   |
|  |   |
|  |   |
|  |   |
|  |   |
|  | 4   |
|  |   |

| Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:  FACU  FACU  FACU  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Dominance Test worksheet:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Dominance Test:  Total % Cover of:  Multiply by:  OBL species S x1 = 5  FACU  FACU Species O x2 = O  FACU species IS x4 = YUO  UPL species O x5 = O  Column Totals: IZO (A) YUOS (B)  Prevalence Index = B/A = 3 87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  |
|---|
| That Are OBL, FACW, or FAC:   |
| FACU  FACU  Percent of Dominant Species That Are OBL, FACW, or FAC:  Total % Cover of:  OBL species FACU  FACU  FACU  PACU  FACU  F |
| FACU  FACU  Percent of Dominant Species That Are OBL, FACW, or FAC:  Total % Cover of:  OBL species FACU  FACU  FACU  PACU  FACU  F |
| Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:     OBL species   5   |
| That Are OBL, FACW, or FAC:   |
| Total % Cover of: Multiply by:  OBL species 5 x 1 = 5  FACW species 0 x 2 = 0  FACW species 0 x 3 = 0  FACW species 115 x 4 = 400  UPL species 0 x 5 = 0  Column Totals: 120 (A) 405 (B)  Prevalence Index = B/A = 3 87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
| Total % Cover of: Multiply by:  OBL species 5 x 1 = 5  FACW species 0 x 2 = 0  FACW species 0 x 3 = 0  FACW species 115 x 4 = 400  UPL species 0 x 5 = 0  Column Totals: 120 (A) 405 (B)  Prevalence Index = B/A = 3 87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
| OBL species 5 x1 = 5 FACW species 0 x2 = 0 FACU FACU Species 0 x3 = 0 FACU FACU Species 115 x4 = 400 UPL species 0 x5 = 0 Column Totals: 120 (A) 405 (B)  Prevalence Index = B/A = 3 87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| FACU species O x 2 = O  FACU Species O x 3 = O  FACU Species 115 x 4 = YUO  UPL species O x 5 = O  Column Totals: 12O (A) YU05 (B)  Prevalence Index = B/A = 3 87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
| FACU FACU species O x 3 = O FACU Species 115 x 4 = UUO UPL species O x 5 = O Column Totals: 12O (A) Ut05 (B)  Prevalence Index = B/A = 3 .87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| FACU species 115 x 4 = YUO  UPL species O x 5 = O  Column Totals: 12O (A) YUO5 (B)  Prevalence Index = B/A = 3.87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| Prevalence Index = B/A = 3 87    Hydrophytic Vegetation Indicators:   1 - Rapid Test for Hydrophytic Vegetation   2 - Dominance Test is >50%   3 - Prevalence Index is ≤3.0¹   4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)   Problematic Hydrophytic Vegetation¹ (Explain)   1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| Column Totals: 120 (A) 405 (B)  Prevalence Index = B/A = 387  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| Prevalence Index = B/A = 3 87  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
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| 1 - Rapid Test for Hydrophytic Vegetation2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide supportindata in Remarks or on a separate sheet)Problematic Hydrophytic Vegetation¹ (Explain)¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| 3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)B   |
| data in Remarks or on a separate sheet)  — Problematic Hydrophytic Vegetation¹ (Explain)  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| ¹Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
| ¹Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.   |
| be present, unless disturbed or problematic.  |
| Definitions of Vegetation Strata:   |
| Definitions of vegetation offata.   |
|   |
| Tree – Woody plants 3 in. (7.6 cm) or more in diameter<br>at breast height (DBH), regardless of height.   |
|   |
| Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
|   |
| Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
|   |
| Woody vines - All woody vines greater than 3.28 ft in   |
| height.   |
| er en   |
|   |
| Hydrophytic   |
| Vegetation  |
| Present? Yes No \   |
|   |
| er  |
|   |
|   |

| (inches)   | Color (moist)  | 0/        | oth needed to doc                    | dox Features     | j                 |           |                                      | e of indicators.)  | 1010   |
|--|--|-----------|--------------------------------------|------------------|-------------------|-----------|--------------------------------------|--|--|
| 7."  |  | %         | Color (moist)                        | %                | Type <sup>1</sup> | Loc2      | Texture                              | P  | emarks   |
| 0"-7"  | led 1: Ho  | - 100ger  |                                      |                  |                   |           |                                      | - 10   | emarks   |
|  | 7.54R25/1  | 100%      |                                      |                  |                   |           | 51                                   | -  |  |
| 2"-70"   | 2,54414  | 80        | 1042518                              | 70               | -                 | -         |                                      |  |  |
|  |  |           | 4                                    |                  |                   | <u>m</u>  | SIL                                  |  |  |
|  |  |           |                                      |                  | -                 |           |                                      |  |  |
|  |  |           |                                      |                  |                   |           |                                      |  |  |
|  |  |           |                                      |                  |                   |           |                                      |  |  |
|  |  |           |                                      |                  |                   |           |                                      |  |  |
|  |  |           |                                      | -                |                   |           |                                      |  |  |
|  |  |           |                                      |                  |                   |           |                                      |  |  |
|  |  | _         |                                      |                  |                   |           |                                      |  |  |
|  |  |           |                                      |                  |                   |           |                                      |  | The second secon |
| ***  | _  |           |                                      |                  |                   |           |                                      |  |  |
|  |  |           |                                      |                  |                   |           |                                      |  |  |
| ype: C=Con   | ncentration, D=Deplet<br>dicators:   | ion, RM=R | educed Matrix, MS                    | =Masked Sa       | and Grain         |           | 21                                   |  |  |
| _ Histosol (A  | \1\  |           |                                      |                  |                   |           | Indicators f                         | PL=Pore Lining, I<br>or Problematic H  | M=Matrix.  |
| _ Histic Epip  | edon (A2)  | -         | Polyvalue Below                      | Surface (S8      | B) (LRR R         | ₹,        | 2 cm Mi                              | ick (A10) (LRR K,  | yaric Soils':  |
| Black Histi  | c (A3)   |           | MLRA 149B) Thin Dark Surface         | 00 (00) (1 00    |                   |           | Coast P                              | rairie Redox (A16)   | (IRRKID)   |
| . Hydrogen :   | Sulfide (A4)   |           | _ Thin Dark Surfac                   | ineral (F1) (LRR | R, MLR            | A 149B)   | o cm Mu                              | icky Peat or Peat (  | S3) (I PP K I P)   |
| Stratified L. Depleted B   | ayers (A5)<br>Below Dark Surface (A  | -         | _ Loamy Gleyed M                     | atrix (F2)       | -KK K, L)         |           | Dark Su                              | face (S7) (LRR K   | I MI)  |
| I nick Dark  | Surface (A12)  | (11)      | Depleted Matrix (                    | (F3)             |                   |           | Thin Dar                             | e Below Surface (<br>k Surface (S9) (LF  | S8) (LRR K, L)   |
| Sandy Muc  | ky Mineral (S1)  | -         | Redox Dark Surfa<br>Depleted Dark Su | ace (F6)         |                   |           | Iron-Man                             | ganese Masses (F   | 12) (I RR K I D)   |
| and the second s |  | -         | Debicted Dark of                     | лтасе (F7)       |                   |           | Diades                               |  | 12) (LINK N, L, K)   |
| Sandy Gley   | /ed Matrix (S4)  |           | Redox Depressio                      | ns (F8)          |                   |           | riedition                            | t Floodplain Soils   | (F19) (MI PA 140P)   |
| Sandy Gley<br>Sandy Red  | ox (S5)  | _         | Redox Depressio                      | ns (F8)          |                   |           | Mesic Sp                             | t Floodplain Soils (<br>odic (TA6) ( <b>MLRA</b>   | (F19) (MLRA 149B)<br>144A, 145, 149B)  |
| Sandy Gley<br>Sandy Redo<br>Stripped Ma  | ox (S5)<br>atrix (S6)  | A 149R\   | Redox Depressio                      | ns (F8)          |                   |           | Mesic Sp<br>Red Pare                 | t Floodplain Soils (<br>podic (TA6) ( <b>MLRA</b><br>ent Material (F21)                        | (F19) (MLRA 149B)<br>144A, 145, 149B)  |
| Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>Dark Surfac   | ox (S5)<br>atrix (S6)<br>ce (S7) (LRR R, MLR.                                    |           | Redox Depressio                      |                  |                   |           | Mesic Sp<br>Red Pare<br>Very Sha     | t Floodplain Soils (<br>podic (TA6) ( <b>MLRA</b><br>ent Material (F21)<br>llow Dark Surface   | (F19) (MLRA 149B)<br>(144A, 145, 149B)   |
| Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>Dark Surfac   | ox (S5)<br>atrix (S6)<br>ce (S7) (LRR R, MLR.                                    |           | Redox Depressio                      |                  | inless diet       | hurbad a  | Mesic Sp<br>Red Pare<br>Very Sha     | t Floodplain Soils (<br>podic (TA6) ( <b>MLRA</b><br>ent Material (F21)                        | (F19) (MLRA 149B)<br>(144A, 145, 149B)   |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hydrictive Laye   | ox (S5)<br>atrix (S6)  |           | Redox Depressio                      |                  | nless dist        | turbed or | Mesic Sp<br>Red Pare<br>Very Sha     | t Floodplain Soils (<br>podic (TA6) ( <b>MLRA</b><br>ent Material (F21)<br>llow Dark Surface   | (F19) (MLRA 149B)<br>(144A, 145, 149B)   |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        | turbed or | Mesic Sp<br>Red Pare<br>Very Sha     | t Floodplain Soils (<br>podic (TA6) ( <b>MLRA</b><br>ent Material (F21)<br>llow Dark Surface   | (F19) (MLRA 149B)<br>(144A, 145, 149B)   |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: Depth (inches  | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils (<br>podic (TA6) ( <b>MLRA</b><br>ent Material (F21)<br>llow Dark Surface   | (F19) (MLRA 149B)<br>(144A, 145, 149B)   |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
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| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
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| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: epth (inches   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: Depth (inches  | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: Depth (inches  | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley Sandy Redo Stripped Ma Dark Surfac icators of hyd trictive Laye ype: Depth (inches  | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |
| Sandy Gley<br>Sandy Redo<br>Stripped Ma<br>Dark Surfac   | ox (S5) atrix (S6) be (S7) (LRR R, MLR. drophytic vegetation a er (if observed): |           | Redox Depressio                      |                  | nless dist        |           | Mesic Sp Red Pare Very Sha Other (Ex | t Floodplain Soils ( podic (TA6) (MLRA ent Material (F21) Illow Dark Surface plain in Remarks) | (F19) (MLRA 149B)<br>144A, 145, 149B)<br>(TF12)  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: BAIL H. II WIND PROJECT City/County: CHATALOUA CTY Sampling Date: 11/10/15 Applicant/Owner: BAIN Hill wind Energy, LLC State: NY Sampling Point: DP-54 Investigator(s): B. V.たち Section, Township, Range: VILLENOVA Landform (hillslope, terrace, etc.): Hilslope Local relief (concave, convex, none): Co Necure Slope (%): 41 Subregion (LRR or MLRA): LRR-R Lat: 79,123487 Long: 42,447216 Datum: CAO 83 uriand Soil Map Unit Name: AST-VILLS: 1+ Lour NWI classification:\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_, Soil \_ ~ or Hydrology \_ c significantly disturbed? Are "Normal Circumstances" present? Yes X No\_\_\_\_ Are Vegetation <u>NO</u>, Soil <u>NO</u>, or Hydrology <u>NO</u> naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? Yes X Wetland Hydrology Present? If yes, optional Wetland Site ID: WETTGOD 19548 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) High Water Table (A2)
Saturation (A3) \_\_\_ Aquatic Fauna (B13) Moss Trim Lines (B16) \_\_\_ Dry-Season Water Table (C2) \_\_\_ Marl Deposits (B15) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No \_ \times Depth (inches): Yes \_ X No \_\_\_\_ Depth (inches): Water Table Present? Wetland Hydrology Present? Yes X No Saturation Present? Yes \_ X No \_ \_\_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')                         | Absolute<br>% Cover | Dominan<br>Species? | t Indicator<br>Status | Dominance Test worksheet:  |
|---|---------------------|---------------------|-----------------------|--|
| 1: Tsuga canadensis                                   | 50_                 | Y                   | FACU                  | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
| 2. Frakinus americana                                 | 10                  | У                   | FACU                  | Total Number of Dominant Species Across All Strata:(B)   |
| 3   |                     |                     | -                     |  |
| 4   |                     | -                   | -                     | Percent of Dominant Species That Are OBL, FACW, or FAC: 42 (A/B)   |
| 5   |                     |                     |                       | The control of the co |
| 6   |                     | _                   |                       | Prevalence Index worksheet:  |
| 7   |                     | -                   |                       | Total % Cover of: Multiply by:   |
|   | 100                 | = Total Co          | over                  | OBL species 10 x1 = 10   |
| Sapling/Shrub Stratum (Plot size: \(\sigma'\)         |                     |                     | 100                   | FACW species x 2 =   |
| 1 Tsuga canodensis                                    | 30_                 | y_                  | FACU                  | FAC species $10 \times 3 = 30$   |
| 2. Fraxinus americana                                 | _10_                | y                   | FACU                  | FACU species $105$ $\times 4 = 420$  |
| 3 Acer rubrum   | 10                  | У                   | FAC                   | 1100   |
| 4.  |                     | -                   |                       | Column Totals: 140 (A) 440 (B)   |
| 5.  |                     |                     |                       | Prevalence Index = B/A = 3-00  |
| 6   |                     |                     |                       | Hydrophytic Vegetation Indicators:   |
| 7   |                     | -                   | 7                     | 1 - Rapid Test for Hydrophytic Vegetation  |
| 1.  | 50                  | = Total Co          |                       | 2 - Dominance Test is >50%   |
| ر ہے  | _00                 | = Total Co          | over                  | X 3 - Prevalence Index is ≤3.01  |
| Herb Stratum (Plot size: 5')  1. OCUPOTE RIS CRISTATA | iA                  | V                   | OBL                   | 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)  |
|   |                     | V                   |                       | / Problematic Hydrophytic Vegetation¹ (Explain)  |
| 2. Onocleu sensibilis                                 | - 10_               | <del></del>         | - FACU                |  |
| 3. Tsuga canddens ; 5                                 | -5-                 | N                   | FACU                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 4. Agrostis stolonifera                               | 2                   | N                   | _ FACW                |  |
| 5   |                     |                     |                       | Definitions of Vegetation Strata:  |
| 6   |                     |                     |                       | Tree - Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7   |                     |                     |                       | at breast height (DBH), regardless of height.  |
| 8   |                     |                     |                       | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9   |                     |                     |                       | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10  |                     |                     |                       | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
| 11  |                     |                     |                       |  |
| 12.   |                     |                     |                       | Woody vines - All woody vines greater than 3.28 ft in  |
| 12.   | 30                  | = Total C           | 01105                 | height.  |
| 20'   | 00                  | _= Total C          | over                  |  |
| Woody Vine Stratum (Plot size: 30')                   |                     |                     |                       |  |
| 1. not Applicable                                     |                     |                     |                       | Hydrophytic  |
| 2   |                     |                     |                       | Vegetation   |
| 3   |                     |                     |                       | Present? Yes X No  |
| 4   |                     |                     |                       |  |
|   | O                   | = Total C           | over                  |  |
| Remarks: (Include photo numbers here or on a separate | e sheet.)           |                     |                       |  |
|   | , ,                 | . 1                 |                       |  |
| -species have adapted                                 | d to                | eiv.                | ing it                | 1 wet conditions   |
| through marcha and                                    | 1 01                | atot                | 40-0                  | Charles I at   |
| and all marphologicas                                 | ucea                | piul                | 1005                  | - Thuned trunks  |
| and shallow roots                                     |                     |                     |                       |  |
|   |                     |                     |                       |  |
| - Eastern Hemlock + 4                                 | MITE                | 1                   | h.                    |  |

| Depth _  | Matrix                 |             | h needed to docum<br>Redox  | Features  | 3                 |           |  |   |
|--|------------------------|-------------|---|---|-------------------|-----------|--|---|
| inches)  | Color (moist)          | %           | Color (moist)   | %   | Type <sup>1</sup> | _Loc*     | Texture                                | Remarks   |
| <u> </u>   | 1092211                | 98          | 10y2316   |   |                   | <u>m</u>  | SIL                                    | Marie Control of the |
|  |                        |             |   |   |                   |           |  |   |
|  |                        |             |   |   |                   |           |  |   |
|  |                        |             |   |   |                   |           |  |   |
|  | antuali C C            | lette- Dic  | Dadward Mark 1996   |   | Cond O            |           | 21 000110-                             | DI - Dora Lining M-Matrix   |
| Type: C=Cond<br>Hydric Soil Ind<br>Histosol (A<br>Histic Epipe       | licators:<br>1)        | letion, RM= | Reduced Matrix, MS  Polyvalue Belov  MLRA 149B)   | v Surface   |                   |           | Indicators f                           | PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils <sup>3</sup> :  uck (A10) (LRR K, L, MLRA 149B)  Prairie Redox (A16) (LRR K, L, R)  |
| Black Histic Hydrogen S Stratified L Depleted B Thick Dark Sandy Muc | c (A3)<br>Sulfide (A4) | e (A11)     | Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix  Redox Dark Su Depleted Dark S Redox Depress | ce (S9) (L<br>dineral (F<br>Matrix (F2<br>(F3)<br>face (F6)<br>Surface (F | i) (LRR K<br>)    |           | 5 cm M Dark St Polyval Thin Da Iron-Ma | ucky Peat or Peat (S3) (LRR K, L, R) urface (S7) (LRR K, L, M) ue Below Surface (S8) (LRR K, L) ark Surface (S9) (LRR K, L) anganese Masses (F12) (LRR K, L, R) ont Floodplain Soils (F19) (MLRA 1498 Spodic (TA6) (MLRA 144A, 145, 1498  |
| _ Sandy Red<br>_ Stripped M  | lox (S5)               | /ILRA 149E  |   | (i o)   |                   |           | Red Pa<br>Very Sh                      | rrent Material (F21)<br>nallow Dark Surface (TF12)<br>Explain in Remarks)   |
|  |                        |             | tland hydrology mus   | t be prese  | ent, unless       | disturbed | or problematic                         |   |
|  | yer (if observed):     |             |   |   |                   |           |  |   |
| Type:<br>Depth (inche  | 26).                   |             |   |   |                   |           | Hydric Soil                            | Present? Yes 🗶 No   |
| Remarks:   | 55)                    |             |   |   |                   |           | Tiyuno don                             |   |
|  |                        |             |   |   |                   |           |  |   |
|  |                        |             |   |   |                   |           |  |   |

| Investigator(s):   | La L | t: 79, 72, 172, 171, 172, 173, 174, 175, 175, 175, 175, 175, 175, 175, 175                          | r? Yes X Nisturbed?  | convex, none):   |
|--|--|---|--|--|
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proces   | Yes<br>Yes                               | No X<br>No X<br>No X  | Is the Samp<br>within a We   |  |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is 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 Image |  | Water-Stained Le Aquatic Fauna (E Marl Deposits (B Hydrogen Sulfide Oxidized Rhizos Presence of Red | 313) 15) 2 Odor (C1) 2 Odor (C1) 2 Odor (C4) 3 Uction in Tilled Soice (C7) | Stunted or Stressed Plants (D1)                            |
| Sparsely Vegetated Concave Su<br>Field Observations:<br>Surface Water Present? Yes _<br>Water Table Present? Yes _   | No X No X No X                           | _ Depth (inches): _ Depth (inches): _ Depth (inches):   |  | FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No 💢 |
| Remarks:   |  |   |  |  |

|  | Absolute  | Dominant     | Indicator | Dominance Test worksheet:  |
|--|---|--------------|-----------|--|
| Tree Stratum (Plot size: 30/           |   | Species?     | Status    | Number of Dominant Species   |
|  | 25  | 7_           | FACY      | That Are OBL, FACW, or FAC:(A)   |
| 2. Tsuga canadensis                    | 10  |              | FACLI     | Total Number of Dominant   |
| 3. Fraxinus americana                  | 10  |              | EACY.     | Species Across All Strata: (B)   |
| 4. Betula allgeneiensis                |   | N            | FAC       | Percent of Dominant Species  |
| 5.                                     |   |              |           | That Are OBL, FACW, or FAC: 12-5 (A/B)   |
| 6.                                     |   |              |           | Prevalence Index worksheet:  |
| 7                                      |   |              |           | Total % Cover of: Multiply by:   |
|  | 50  | = Total Co   | er er     | OBL species 10 x1= 10  |
| Sapling/Shrub Stratum (Plot size: 15 ' |   |              | 2         | FACW species x 2 =   |
| 1. ACEY Saccharum                      | 20  | V            | FACU      | FAC species x3 = 15  |
|  | 14  | V            | FACU      | FACU species 150 x4 = 400  |
| 2. Fraxinus americana                  | - Contract of the Contract of | 1/4          |           | UPL speciesO x5 =O   |
| 3. Fagus grandifolicy                  |   | N            | . EACL    | Column Totals: 115 (A) 425 (B)   |
| 4. Lonice ra tatarica                  |   | 17           | EACL      | Prevalence Index = B/A = 3. 69   |
| 5                                      | 1   | -            |           |  |
| 6                                      | 1   | -            |           | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                      |   | -            |           | 2 - Dominance Test is >50%   |
|  | 40  | = Total Co   | ver       | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:5)             |   |              |           | 4 - Morphological Adaptations¹ (Provide supporting   |
| 1. Dryopteris cristata                 | 10  | У            | OBL       | data in Remarks or on a separate sheet)  |
| 2. Polystichum acrostichoides          | 10  |              | FACH      | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Fagus americana                     | 5   | y            | Thou      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  |
| 4.                                     |   |              |           | be present, unless disturbed or problematic.   |
| 5.                                     |   |              |           | Definitions of Vegetation Strata:  |
| 6                                      |   |              |           | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
|  |   | -            |           | at breast height (DBH), regardless of height.  |
| 7                                      |   |              |           | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8                                      |   |              |           | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9                                      |   |              |           | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10                                     |   |              |           | size, and woody plants less than 3.28 ft tall.   |
| 11,                                    |   |              |           | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                     |   |              |           | height.  |
|  | 25  | _ = Total Co | over      |  |
| Woody Vine Stratum (Plot size: 30')    |   |              |           |  |
| 1. not applicable                      |   |              |           | and the second s |
| 2.                                     |   |              |           | Hydrophytic<br>Vegetation  |
| 3.                                     |   |              |           | Present? Yes No X  |
| 4                                      |   |              |           |  |
| 77                                     | 0   | = Total C    | over      |  |
|  |   |              |           |  |

| h <u>Matrix</u>   |                   |                    | x Feature   | S                                       |                   |  |  |
|---|-------------------|--------------------|---|---|-------------------|--|--|
| es) Color (moist)   | %                 | Color (moist)      | %   | Type <sup>1</sup>                       | _Loc <sup>2</sup> | Texture  | Remarks  |
| -1" 2.542,51  | 1 95              | 2.54416            | _5_   |   |                   | SI   | 16 (Alba Edwards) with the William Wil |
| 20" 2.54413   | 95                | 2.5731             | _5  | <u>o</u>                                | <u>~</u>          | STL  |  |
|   |                   |                    |   |   |                   |  |  |
|   |                   |                    |   | _                                       |                   |  |  |
| c: C=Concentration, D=D   | epletion, RM=     | Reduced Matrix, M  | S=Masked  | d Sand Gr                               | ains.             |  | =Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :  |
| distosol (A1) distic Epipedon (A2) Black Histic (A3) dydrogen Sulfide (A4) Bratified Layers (A5) Depleted Below Dark Surfick Dark Surface (A12) Bandy Mucky Mineral (S1) Bandy Gleyed Matrix (S4) Bandy Redox (S5) Dark Surface (S7) (LRR Reseators of hydrophytic yene | )<br>., MLRA 149B |                    | ace (S9) (I<br>Mineral (F<br>Matrix (F2<br>x (F3)<br>Jurface (F6)<br>Surface (I<br>sions (F8) | LRR R, M<br>1) (LRR K<br>2)<br>)<br>F7) | LRA 149B)<br>, L) | Coast Prair 5 cm Muck Dark Surfa Polyvalue I Thin Dark Iron-Manga Piedmont I Mesic Spo Red Paren Very Shalla | (A10) (LRR K, L, MLRA 149B) rie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R) ce (S7) (LRR K, L, M) Below Surface (S8) (LRR K, L) Surface (S9) (LRR K, L) anese Masses (F12) (LRR K, L, R) Floodplain Soils (F19) (MLRA 149B dic (TA6) (MLRA 144A, 145, 149B t Material (F21) bw Dark Surface (TF12) lain in Remarks)  |
| rictive Layer (if observe   |                   | dana nyarology ma  | at be pies  | ent, unico                              | distarbed         | or problematic.  | the state of the s |
| /pe:  |                   |                    |   |   |                   |  | v  |
|   |                   | t desired.         |   |   |                   | Hydric Soil Pre  | sent? Yes No _^_   |
|   |                   | tland hydrology mu | st be pres  | ent, unles:                             | s disturbed o     |  | sent? Yes No_  |

| Projectisite: Orall Bill Color 10 65   | City/County: CHA   | いて内にないる Co. Sampling Date: 11 10 15  |
|--|--|--|
| Applicant/Owner: BAH HILL Wind Energy  | 4,111C   | State; NY Sampling Point: DP 585   |
| Investigator(s): B. Vints  | Section, Township, R   | Range: VI llenous  |
| Landform (hillslope, terrace, etc.):   |  |  |
| Subregion (LRR or MLRA): Lex-12 Lat:   |  |  |
|  |  | NWI classification: upland   |
| Are climatic / hydrologic conditions on the site typical for th  |  |  |
|  |  |  |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u>   |  | e "Normal Circumstances" present? Yes No   |
| Are Vegetation <u>いひ</u> , Soil <u>い</u> 。, or Hydrology <u></u> へ ゥ   | naturally problematic? (If r   | needed, explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS - Attach site map  | showing sampling point   | locations, transects, important features, etc  |
|  | No Is the Sample   | ·  |
|  | No within a Wetla  |  |
|  |  | I Wetland Site ID: WETICAN 19549   |
| Remarks: (Explain alternative procedures here or in a se   | eparate report.)   |  |
|  |  | - Some mirror crecs of Pem   |
| HYDROLOGY  |  |  |
| HYDROLOGY  Wetland Hydrology Indicators:   |  | Secondary Indicators (minimum of two required)   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all   | that apply)  | Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all   | that apply)<br>iter-Stained Leaves (B9)  | Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all            ✓ Surface Water (A1)           ✓ Wa             ✓ High Water Table (A2)           △ Aqu   | that apply)<br>ter-Stained Leaves (B9)<br>uatic Fauna (B13)  | Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)   |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all            \( \times \)         Surface Water (A1)         \( \times \)         High Water Table (A2)         \( \times \)         Saturation (A3)         \( \times \)         Main transfer of the decision of the content of t | that apply)<br>ter-Stained Leaves (B9)<br>uatic Fauna (B13)<br>rl Deposits (B15)   | Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all  | that apply) ter-Stained Leaves (B9) uatic Fauna (B13) rl Deposits (B15) drogen Sulfide Odor (C1)   | 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)   |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all            ★ Surface Water (A1)           ★ Wa            ★ High Water Table (A2)           ▲ Aqu            ★ Saturation (A3)           ▲ Marks (B1)             ▲ Water Marks (B1)           ▲ Hydon            ■ Sediment Deposits (B2)           ○ Oxidade   | that apply)<br>ter-Stained Leaves (B9)<br>uatic Fauna (B13)<br>rl Deposits (B15)   | 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)   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  X High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)   | that apply)  Iter-Stained Leaves (B9)  Juatic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idized Rhizospheres on Living Rocester (C4)  Juant Control (C4)   | 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)   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  X High Water Table (A2)  Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)   | that apply)  Iter-Stained Leaves (B9)  Justic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idized Rhizospheres on Living Rocestate of Reduced Iron (C4)  Identification in Tilled Soils  In Muck Surface (C7)  | 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)  ots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all   | that apply)  Iter-Stained Leaves (B9)  Juatic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idized Rhizospheres on Living Rocester (C4)  Juant Control (C4)   | 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)  ots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)              |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  Y 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)   | that apply)  Iter-Stained Leaves (B9)  Justic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idized Rhizospheres on Living Rocestate of Reduced Iron (C4)  Identification in Tilled Soils  In Muck Surface (C7)  | 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)  ots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  Y 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)   | that apply)  Iter-Stained Leaves (B9)  Justic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idized Rhizospheres on Living Rocesence of Reduced Iron (C4)  Ident Iron Reduction in Tilled Soils  In Muck Surface (C7)  Iter (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)  ots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)              |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  X High Water Table (A2)  Y 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)  Field Observations:  Surface Water Present?  Yes X No De   | that apply)  Iter-Stained Leaves (B9)  Justic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idized Rhizospheres on Living Rocesence of Reduced Iron (C4)  Ident Iron Reduction in Tilled Soils  In Muck Surface (C7)  Iter (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)  ots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)              |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  X 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)  Field Observations:  Surface Water Present?  Water Table Present?  Yes X No Descriptions:  Saturation Present?  Yes X No Descriptions  | that apply)  Iter-Stained Leaves (B9)  Justic Fauna (B13)  If Deposits (B15)  Idrogen Sulfide Odor (C1)  Idriced Rhizospheres on Living Roce  Justic Fauna (B13)  In Deposits (B15)  Idrogen Sulfide Odor (C1)  Idrogen Sulfide Odor (C1)  Idrogen Sulfide Odor (C2)  Idrogen Sulfide Odor (C2)  Idrogen Sulfide Odor (C3)  Idrogen Sulfide Odor (C4)  Idrogen Sulfide Odor (C1)  Id | 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)  ots (C3)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)              |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all         X Surface Water (A1)       X Wa         Y High Water Table (A2)       Aqu         Y Saturation (A3)       Ma         Water Marks (B1)       X Hyd         Sediment Deposits (B2)       Oxi         Drift Deposits (B3)       Presonant         Algal Mat or Crust (B4)       Reconstruction Deposits (B5)         Inundation Visible on Aerial Imagery (B7)       Oth         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes       No       Description Deposits         Saturation Present?       Yes       No       Description Deposits         Saturation Present?       Yes       No       Description Deposits   | that apply)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained (B13)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B16)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B16)  I | 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)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5) |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all  X Surface Water (A1)  X 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)  Field Observations:  Surface Water Present?  Water Table Present?  Yes X No Descriptions:  Saturation Present?  Yes X No Descriptions  | that apply)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained (B13)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B16)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B16)  I | 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)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5) |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all         X Surface Water (A1)       X Wa         Y High Water Table (A2)       Aqu         Y Saturation (A3)       Ma         Water Marks (B1)       X Hyd         Sediment Deposits (B2)       Oxi         Drift Deposits (B3)       Pre         Iron Deposits (B5)       Thin         Inundation Visible on Aerial Imagery (B7)       Oth         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes       No       De         Water Table Present?       Yes       No       De         Saturation Present?       Yes       No       De         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well,  | that apply)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained (B13)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B16)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B16)  I | 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)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5) |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all         X Surface Water (A1)       X Wa         Y High Water Table (A2)       Aqu         Y Saturation (A3)       Ma         Water Marks (B1)       X Hyd         Sediment Deposits (B2)       Oxi         Drift Deposits (B3)       Presonant         Algal Mat or Crust (B4)       Reconstruction Deposits (B5)         Inundation Visible on Aerial Imagery (B7)       Oth         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes       No       Description Deposits         Saturation Present?       Yes       No       Description Deposits         Saturation Present?       Yes       No       Description Deposits   | that apply)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained (B13)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B16)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B16)  I | 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)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5) |
| Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all         X Surface Water (A1)       X Wa         Y High Water Table (A2)       Aqu         Y Saturation (A3)       Ma         Water Marks (B1)       X Hyd         Sediment Deposits (B2)       Oxi         Drift Deposits (B3)       Pre         Iron Deposits (B5)       Thin         Inundation Visible on Aerial Imagery (B7)       Oth         Sparsely Vegetated Concave Surface (B8)         Field Observations:         Surface Water Present?       Yes       No       De         Water Table Present?       Yes       No       De         Saturation Present?       Yes       No       De         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well,  | that apply)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B9)  Inter-Stained (B13)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B15)  Inter-Stained (B16)  Inter-Stained Leaves (B9)  Inter-Stained Leaves (B16)  I | 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)  (C6)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5) |

|          |   | Indicator<br>Status                     | Dominance Test worksheet:  |
|----------|---|---|--|
|          | Species?  | - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
| 58       |   | FACU                                    | That Are OBL, FACW, or FAC:(A)   |
| 20       | ->  | FAC                                     | Total Number of Dominant Species Across All Strata:  5 (B)   |
| 5_       | _1/   | FAC                                     | Species Across All Strata:(B)  |
|          | _   |   | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
|          |   |   | That Are OBL, FACW, or FAC:(A/B)   |
|          |   |   | Prevalence Index worksheet:  |
|          |   |   | Total % Cover of: Multiply by:   |
| 80       | = Total Co  | ver                                     | OBL species $18 \times 1 = 18$   |
|          |   | - 1                                     | FACW species x 2 =   |
| 20       | y   | FACU                                    | FAC species <u>40</u> ×3 = 120   |
|          | 1   |   | FACU species <u>95</u> x4 = <u>380</u>   |
| <u> </u> | NI  | 7 (24.11.02                             | UPL species x5 =   |
| 2        | 10  | D                                       | Column Totals: 1(0() (A) 532 (B)   |
| 2        | 10  | FAC                                     | Prevalence Index = B/A = 3.32  |
|          |   |   |  |
|          | -   |   | Hydrophytic Vegetation Indicators:   |
|          |   |   | 1 - Rapid Test for Hydrophytic Vegetation  |
| 50       | = Total Co  | over                                    | ★ 2 - Dominance Test is >50%   |
| -        |   |   | 3 - Prevalence Index is ≤3.0¹  |
| 18       | У   | OBI                                     | <ul> <li>4 - Morphological Adaptations¹ (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| 5        | IT  |   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| 5        | 1   | ,                                       | Indicators of hydric soil and wetland hydrology must   |
|          | -17   |   | be present, unless disturbed or problematic.   |
| 2_       | -N-   | _ FROW                                  |  |
|          | -   |   | Definitions of Vegetation Strata:  |
|          |   |   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.               |
|          |   |   |  |
|          |   |   | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                  |
|          |   |   |  |
|          |   |   | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.             |
|          |   |   |  |
|          |   |   | Woody vines - All woody vines greater than 3.28 ft in  |
| 34       |   |   | height.  |
| 30       | _ = Total C                                       | over                                    |  |
|          |   |   |  |
|          |   |   | Hydrophytic  |
|          |   |   | Vegetation   |
|          |   |   | Present? Yes _X No   |
|          |   |   |  |
|          |   |   |  |
|          | 80<br>30<br>5<br>5<br>5<br>5<br>18<br>5<br>5<br>2 | 80 = Total Co 30                        | 80 = Total Cover  30   |

| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ype: C=Concentration, D=Depletion, Shutrate (Si) (LRR R, L)  | Color (moist) % Color (moist) % Type' Loc' Texture Remarks    Color (moist) % Color (moist) % Type' Loc' Texture Remarks   Color (moist) % Color (moist) % Type' Loc' Texture Remarks   Color (moist) % Color  |                  | ription: (Describe t<br>Matrix        |             |                      | x Features | 9                 |                   |                 |             |                        |      |
|--|--|------------------|---------------------------------------|-------------|----------------------|------------|-------------------|-------------------|-----------------|-------------|------------------------|------|
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    2 construction   2 construction   3 construct | 7,57 Li 8 5 C C Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  7 Location: PL=Pore Lining, M=Matrix.  1 Indicators for Problematic Hydric Soils:  2 Indicators for Problematic Hydric Soils:  2 Indicators for Problematic Hydric Soils:  2 Indicators for Problematic Hydric Soils:  3 Indicators for Problematic Hydric Soils:  4 Indicators for Problematic Hydric Soils:  4 Indicators for Problematic Hydric Soils:  5 Indicators for Problematic Hydric Soils:  5 Indicators for Problematic Hydric Soils:  6 Indicators for Problematic Hydric Soil Fresent?  7 Yes \( \) No  | Depth<br>inches) |                                       | %           | Color (moist)        |            | Type <sup>1</sup> | _Loc <sup>2</sup> | Texture         |             | Remarks                |      |
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Apple  | // Location: PL=Pore Lining, M=Matrix.  // Indicators for Problematic Hydric Soils:  // Location: PL=Pore Lining, M=Matrix.  // Indicators for Problematic Hydric Soils:  // Location: PL=Pore Lining, M=Matrix.  // Indicators for Problematic Hydric Soils:  // Coast Prairie Redox (A16) (LRR K, L, M)  // Coast Prairie Redox (A16) (LRR K, L, R)  // Dark Surface (S3) (LRR K, L, M)  // Dark Surface (S4) (LRR K, L, M)  // Depleted Below Dark Surface (A11)  // Depleted Below Dark Surface (A12)  // Sandy Gleyed Matrix (S4)  // Sandy Gleyed Matrix (S4)  // Sandy Gleyed Matrix (S4)  // Sandy Redox (S5)  // Sandy Redox (S5)  // Sandy Redox (S5)  // Sandy Redox (S7) (LRR R, MLRA 149B)  // Dark Surface (S7)  | 0"-10"           | 7.5 7312                              | 40          | 7.54 316             | 5          | C                 | <u>m</u>          | SIL             | ,           |                        |      |
| ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    A  | ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  **Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils*: Indicators for Problematic Hydric Soils* |                  |                                       |             | 7,54 618             | 5          | c                 | ~                 |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       | -           |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             |                      |            | -                 | -                 | -               |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       | -           |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  | - District of the section with a line |             |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             | 4-                   |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             | <u> </u>             |            | -                 | -                 |                 |             | - in the second second |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  | -                                     | -           | -                    |            | -                 |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       | -           |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils³:  Histosol (A1)   | Indicators for Problematic Hydric Soils*:  Histosol (A1)   |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Indicators for Problematic Hydric Soils <sup>3</sup> :  Histosol (A1)  | Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Coast Prairie Redox (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L, M) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149 Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Wery Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  Depth (inches):  Depth (inches):  Hydric Soil Present? Yes No   | ype: C=Co        | ncentration, D=Depl                   | etion, RM   | =Reduced Matrix, MS  | S=Masked   | d Sand Gr         | ains.             |                 |             |                        |      |
| Histic Epipedon (A2)  MLRA 149B)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7)  Stripped Matrix (S6)  Dark Surface (S7)  Depleted Dark Surface (S8)  Endox Depressions (F8)  Mesic Spodic (TA6) (MLRA 149B)  Mesic Spodic (TF12)  Other (Explain in Remarks)  MIRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  5 cm Mucky Peat or Peat (S3) (LRR K, L, R)  Dark Surface (S7) (LRR K, L, M)  Dark Surface (S7) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, Indicators of Matrix (S4)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 149)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Addicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Petrictive Layer (if observed):  Type:  Depth (inches):  Type:  Depth (inches):  Mesic Spodic (TA6) (MLRA 144B)  Hydric Soil Present? Yes   No  Hydric Soil Present? Yes   No   | Histic Epipedon (A2)  MLRA 149B)  Coast Prairie Redox (A16) (LRR K, L, R)  Black Histic (A3)  Thin Dark Surface (S9) (LRR R, MLRA 149B)  Stratified Layers (A5)  Loamy Mucky Mineral (F1) (LRR K, L)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Depleted Below Dark Surface (A12)  Sandy Mucky Mineral (S1)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S9) (LRR K, L)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 149)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Mesic Spodic (TA6) (MLRA 144A, 145, 149)  Mesic Spodic (TA6) (MLRA 144B)  Mesic Spodic (TA6) (MLRA 144 |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Black Histic (A3)  | Black Histic (A3)  |                  |                                       |             |                      |            | (S8) (LR          | R,                |                 |             |                        |      |
| Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F3)  Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F6)  Sandy Mucky Mineral (S1)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Mesic Spodic (TA6) (MLRA 144A, 145, 149B)  Adicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Hydric Soil Present?  Hydric Soil Present?  Yes   No   Dark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Polyvalue Below Surface (S8) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Polyvalue Below Surface (S9) (LRR K, L)  Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, L, I)  Piedmont Floodplain Soils (F19) (MLRA 144  Mesic Spodic (TA6) (MLRA 144A, 145, 149  Mesic Spodic  | Hydrogen Sulfide (A4)  Loamy Mucky Mineral (F1) (LRR K, L)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Depleted Matrix (F2)  Thin Dark Surface (S9) (LRR K, L)  Thick Dark Surface (A12)  Redox Dark Surface (F6)  Sandy Mucky Mineral (S1)  Depleted Dark Surface (F7)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Dark Surface (S7) (LRR R, MLRA 149B)  Adicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Type:  Depth (inches):  Derivative Layer (If observed):  Type:  Depth (inches):  Depth (in |                  |                                       |             |                      |            | LRR R. M          | LRA 149B)         |                 |             |                        |      |
| Stratified Layers (A5)   | Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L) Thick Dark Surface (A12) X Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, F   |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Thick Dark Surface (A12)   | Thick Dark Surface (A12)   | Stratified       | Layers (A5)                           |             | Loamy Gleyed         | Matrix (F2 |                   |                   |                 |             |                        |      |
| Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144 Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149 Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  Depth (inches): Hydric Soil Present? Yes X No  | Sandy Mucky Mineral (S1)   |                  |                                       | e (A11)     |                      |            |                   |                   |                 |             |                        |      |
| Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Depth (inches): Hydric Soil Present? Yes No   | Sandy Gleyed Matrix (S4) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149 Sandy Redox (S5) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No   |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
| Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Sestrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No   | Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  estrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes  No   |                  |                                       |             |                      |            | 1)                |                   |                 |             |                        |      |
| Dark Surface (S7) (LRR R, MLRA 149B)  Other (Explain in Remarks)  addicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  estrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No  | Dark Surface (S7) (LRR R, MLRA 149B)  Other (Explain in Remarks)  dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  estrictive Layer (if observed):  Type:  Depth (inches): Hydric Soil Present? Yes No  |                  |                                       |             | .,                   |            |                   |                   | Red Par         | ent Materi  | ial (F21)              |      |
| ndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  estrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes No  | dicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.    Strictive Layer (if observed):   |                  |                                       | 120 01      | <u>.</u>             |            |                   |                   |                 |             |                        | 12)  |
| Depth (inches):   Hydric Soil Present?   Yes   X   No  | Depth (inches):   Hydric Soil Present?   Yes No  | _ Dark Sur       | face (S7) (LRR R, N                   | ILRA 149    | B)                   |            |                   |                   | Other (E        | xplain in F | Remarks)               |      |
| Type:  | Type:  | ndicators of     | hydrophytic vegetat                   | ion and w   | etland hydrology mus | st be pres | ent, unles        | s disturbed       | or problematic. |             |                        |      |
| Depth (inches): Hydric Soil Present? Yes 😾 No  | Depth (inches): Hydric Soil Present? Yes 😾 No  | estrictive L     | ayer (if observed):                   |             |                      |            |                   |                   |                 |             |                        |      |
|  |  | Туре:            |                                       |             |                      |            |                   |                   | L. Soluti       |             |                        |      |
|  | emarks:  | Depth (inc       | :hes):                                |             |                      |            |                   |                   | Hydric Soil F   | resent?     | Yes X                  | _ No |
| emarks:  |  |                  |                                       | - I we shad |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  |                  |                                       |             |                      |            |                   |                   |                 |             |                        |      |
|  |  | Remarks:         |                                       |             |                      |            |                   |                   |                 |             |                        |      |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautanaua Sampling Date: 11/10/15 Applicant/Owner: Ball Hill Wind Chergy 1 State: NY Sampling Point: DPSS6 VILLENOVA Investigator(s): B VICTS Section, Township, Range: Landform (hillslope, terrace, etc.): Hill Slope Local relief (concave, convex, none): Convey Subregion (LRR or MLRA): <u>URQ-R</u> Lat: 79, 12,2298 \_\_ Long: 42, 4461 Soil Map Unit Name: Valois accordly Silt loam NWI classification: 110000 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are Vegetation NO , Soil NO , or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation M0, Soil M0, or Hydrology M0 naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. is the Sampled Area Hydrophytic Vegetation Present? Yes \_\_\_\_ NoX within a Wetland? Hydric Soil Present? No X Wetland Hydrology Present? Yes \_\_\_\_ No X If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: No X Depth (inches): Surface Water Present? Yes \_\_\_\_ No X Depth (inches): Water Table Present? Saturation Present? No X Depth (inches): Wetland Hydrology Present? Yes\_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| ree Stratum (Plot size: 30')            | % Cover | Dominant<br>Species? |        | Dominance Test worksheet:  Number of Dominant Species   |
|---|---------|----------------------|--------|---|
| Tsuga canadensis                        | 35_     | <u>Y</u>             | FACU   | That Are OBL, FACW, or FAC:(A)  |
| Acer saccharum                          | 10      | y                    | FACU   | Total Number of Dominant G  |
| Betula alleghenunsis                    | 5       | N                    | FAC    | Species Across All Strata:(B)   |
| 1.                                      |         |                      |        | Percent of Dominant Species   |
|   |         | -                    |        | That Are OBL, FACW, or FAC: 12.5 (A/B)  |
| 5                                       |         |                      |        | 100 \$  |
| 3                                       |         | -                    |        | Prevalence Index worksheet:   |
| 7                                       | -5      | -                    |        | Total % Cover of: Multiply by:  |
|   | 50      | = Total Co           | /er    | OBL species O x1= O   |
| Sapling/Shrub Stratum (Plot size: 151 ) |         |                      |        | FACW species x 2 =  |
| Tsuga canadensis                        | 15_     |                      | FACU   | FAC species $15 \times 3 = 45$  |
| 2. Fagus grandifoliq                    | 15      | Y                    | FACU   | FACU species 125 x4= 500  |
| 3. Acer saccharum                       | 10      | V                    | FACU   | UPL species x5 =  |
|   |         |                      | LIII   | Column Totals: 140 (A) 545 (B)  |
| 4                                       |         | -                    |        | Prevalence Index = B/A = 3.89   |
| 5                                       |         | -                    |        |   |
| 6                                       |         |                      |        | Hydrophytic Vegetation Indicators:  |
| 7                                       |         |                      | 1      | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 40      | = Total Co           | ver    | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5')            |         |                      |        | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| 1. Rubus idapous                        | 36      | Y                    | FACU   | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
|   |         | V                    | FAC    | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 2. Oryopteris intermedida               | - 10    | -\sqrt               |        |   |
| 3. Fogus granaitolia                    | 10      |                      | - EACH | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4                                       |         | -                    |        |   |
| 5.                                      |         |                      |        | Definitions of Vegetation Strata:   |
| 6.                                      |         |                      |        | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
|   |         |                      |        | at breast height (DBH), regardless of height.   |
| 7                                       |         |                      | -      | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 8                                       |         |                      |        | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9                                       |         | -                    |        | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10                                      |         |                      | -      | size, and woody plants less than 3.28 ft tall.  |
| 11,                                     |         |                      |        | Woody vines – All woody vines greater than 3.28 ft in   |
| 12.                                     |         |                      |        | height.   |
|   | 50      | = Total Co           | over   |   |
| 3A1                                     |         | - John Ot            | 9.471  |   |
| Woody Vine Stratum (Plot size: 301)     |         |                      |        |   |
| 1. Not Applicable                       | )       |                      |        | Hydrophytic   |
| 2                                       | -       | -                    |        | Vegetation  |
|   |         | -                    |        | Present? Yes No X   |
| 3                                       |         |                      |        |   |
| 3                                       |         | -                    |        |   |
| 3                                       | 0       | = Total C            | over   |   |

| Depth  | Matrix   |              | Redox F                | eatures   |                   |  |  |
|--|--|--------------|------------------------|---|-------------------|--|--|
| inches)  | Color (moist)  | %            | Color (moist)          | % Type <sup>1</sup>   | _Loc <sup>2</sup> | Texture  | Remarks  |
| 0"-1"  | 1042312  | 100          |                        |   |                   | SI   | ARTOR SERVE CONTRACTOR OF THE PROPERTY OF THE  |
| 1"-20"   | loyr518  | 100          | -                      |   |                   | SIL  |  |
|  |  |              |                        |   |                   |  |  |
| Type: C=Cc   | ncentration D=Debl   | etion RM=    | Reduced Matrix, MS=N   | Masked Sand Gra   | ains              | <sup>2</sup> Location: PI:   | =Pore Lining, M=Matrix.  |
| lydric Soil I  |  | OUGH, IXIVI- | Reduced Watrix, WS=N   | nanca balla Gla   | an IO.            |  | Problematic Hydric Soils <sup>3</sup> :  |
| Black His Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped Dark Sur | ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) I Below Dark Surface rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M | ILRA 149B    |                        | (S9) (LRR R, ML<br>eral (F1) (LRR K,<br>trix (F2)<br>3)<br>ce (F6)<br>face (F7)<br>s (F8) | LRA 149B)<br>, L) | Coast Prairi 5 cm Mucky Dark Surface Polyvalue B Thin Dark S Iron-Manga Piedmont F Mesic Spod Red Parent Very Shallo Other (Expl | (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) r Peat or Peat (S3) (LRR K, L, R) r Peat or Peat (S3) (LRR K, L, R) r Peat or Peat (S3) (LRR K, L, R) r Peat or Peat (S3) (LRR K, L, R) r Peat or Peat (S8) (LRR K, L) r Peat or Peat (S8) (LRR K, L) r Peat or Peat (S8) (LRR K, L) r Peat or Peat (S8) (LRR K, L, R) r Peat or Peat (S8) (MLRA 149B) r Peat or Peat (S8) r Peat or Peat  |
|  |  | on and we    | tland hydrology must b | e present, unless   | disturbed         | or problematic.  | and the advanced principles of the second prin |
|  | .ayer (if observed):   |              |                        |   |                   |  |  |
| Type:  | li a a N   |              |                        |   |                   | Undete Call Buse   | www. No. No. #   |
| Depth (included)   | :nes):   |              |                        |   |                   | Hydric Soil Pres   | ent? Yes No  |
| * (1)  |  |              |                        |   |                   |  |  |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua County Sampling Date: 11/11/15 State: NY Sampling Point: DP- 589 Applicant/Owner: Ball Hill Wind Energy, LLC Investigator(s): M. Boberg B. virts Section, Township, Range: VILLEROVA Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): \_\_\_\_\_\_CON VOX \_\_\_\_ Slope (%): / 44403Z Datum: NAD 83 Subregion (LRR or MLRA): LRR-R NWI classification: upland Soil Map Unit Name: \_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No\_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation 16, Soil 16, or Hydrology 10 significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_ No\_\_ Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: Wil-455 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) X Drainage Patterns (B10) ★ Water-Stained Leaves (B9) X High Water Table (A2) Aquatic Fauna (B13) \_\_\_ Moss Trim Lines (B16) X Saturation (A3) Dry-Season Water Table (C2) \_\_\_ Marl Deposits (B15) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Water Marks (B1) Crayfish Burrows (C8) \_\_ Sediment Deposits (B2) \_\_\_ Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Stunted or Stressed Plants (D1) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) \_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Iron Deposits (B5) Microtopographic Relief (D4) \_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes \_ No \_\_\_\_ Depth (inches): 0-1" Surface Water Present? Yes X No \_\_\_\_ Depth (inches): 0" Water Table Present? Yes X No Depth (inches): 0 Saturation Present? Wetland Hydrology Present? Yes X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| 201                                    | Absolute | Dominant       | The state of the s | Dominance Test worksheet:   |
|--|----------|----------------|--|---|
| Tree Stratum (Plot size: 301 )         |          | Species?       | 1  | Number of Dominant Species 2  |
| 1. Tsuga canadinsis                    | 10       | У              | FACL   | That Are OBL, FACW, or FAC: (A)   |
| 2. Betilla aughaniensis                | -8       | 科人             | FAC  | Total Number of Dominant  |
| 3. Fraxinus amiricana                  | _ Z      | N              | FACU   | Species Across All Strata: (B)  |
| 4                                      |          |                |  | Percent of Dominant Species   |
| 5                                      |          |                |  | That Are OBL, FACW, or FAC:   |
| 6.                                     |          |                |  | Book and the land of the land   |
| 7                                      |          |                |  | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
|  | 20       | = Total Cov    |  | OBL species <u>25</u> x1 = <u>25</u>  |
| 161                                    | 20       | - Total Con    | V 61   | FACW species 35 x2 = 70   |
| Sapling/Shrub Stratum (Plot size: 15 / |          |                |  | FAC species 48 x3 = 144   |
| 1. Not Applicable                      |          |                | -  | FACU species 12 x4= 48  |
| 2                                      |          |                |  | UPL species O x 5 = O   |
| 3                                      |          |                |  | Column Totals: 120 (A) 287 (B)  |
| 4                                      |          |                |  |   |
| 5                                      |          |                |  | Prevalence Index = B/A = 2-39   |
| 6                                      |          |                |  | Hydrophytic Vegetation Indicators:  |
| 7.                                     |          |                |  | 1 - Rapid Test for Hydrophytic Vegetation   |
|  | 0        | = Total Co     | ver  | X 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 51 )          |          | , Join Do      |  | X 3 - Prevalence Index is ≤3.01   |
|  | 40       | V              | FAC  | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
|  |          | - <del>y</del> |  | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 2. Osmunda Cinnamonea                  |          |                | FACW   | Problematic Hydrophytic Vegetation (Explain)  |
| 3. Dryopteris cristata                 |          | N              | OBL  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. Carex Hara                          | 10       | N              | OBL  |   |
| 5.0NOCLEA sensibilis                   | 5        | N              | FACW   | Definitions of Vegetation Strata:   |
| 6                                      |          |                |  | Tree - Woody plants 3 in. (7.6 cm) or more in diamete   |
| 7                                      |          |                |  | at breast height (DBH), regardless of height.   |
| 8                                      |          |                |  | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9                                      |          |                |  | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10.                                    |          |                |  | Herb - All herbaceous (non-woody) plants, regardless of   |
| 11.                                    |          |                |  | size, and woody plants less than 3.28 ft tall.  |
|  | -        | -              |  | Woody vines - All woody vines greater than 3.28 ft in   |
| 12                                     | TOO      |                |  | height.   |
|  | 100      | = Total Co     | ver  |   |
| Woody Vine Stratum (Plot size: 301 )   |          |                |  |   |
| 1. Not Applicable                      |          | 1              | -  | Hydrophytic   |
| 2                                      |          |                |  | Vegetation  |
| 3                                      |          |                |  | Present? Yes X No   |
| 4                                      |          | -              |  |   |
|  | 0        | = Total Co     | ver  |   |
|  | 0        | = Total Co     | ver  |   |

| (inches)  | Matrix  |                  | oth needed to docur   | -  | dicator or cont           | irm the absence   | e of indicators.)   |  |
|---|---|------------------|---|--|---------------------------|---|---|--|
| 0-29"   | Color (moist)   | %                | Color (moist)   | X Features   |                           |   |   |  |
|   | 104R2/1   | 100              |   |  | Type                      |   | Rem   |  |
|   |   |                  |   |  |                           |   | MULKY 1   | EAT  |
|   |   | _                |   |  |                           |   |   | Market Market Control of the Control |
|   |   |                  |   |  |                           |   |   |  |
|   |   | =                |   |  |                           |   |   |  |
|   |   |                  |   |  |                           |   |   |  |
|   |   |                  |   |  |                           |   |   |  |
| Type: C=Conce   | entration, D=Deple  | etion, RM=       | Reduced Matrix, MS=   | -Masked Sa   | ind Grains.               | <sup>2</sup> Location:  | PL=Pore Lining, M=  | Matrix   |
| Thick Dark S Sandy Mucky Sandy Gleye Sandy Redox Stripped Matr Dark Surface | don (A2) (A3)  ulfide (A4)  vers (A5)  low Dark Surface  furface (A12)  Mineral (S1)  d Matrix (S4)  (S5)  rix (S6)  (S7) (LRR R, ML  rophytic vegetation | <br><br>RA 149B) | Polyvalue Below MLRA 149B) Thin Dark Surface Loamy Mucky Mir Loamy Gleyed Ma Depleted Matrix (I Redox Dark Surfa Depleted Dark Surfa Depleted Dark Surfa Redox Depression | e (S9) (LRR<br>neral (F1) (L<br>atrix (F2)<br>F3)<br>ice (F6)<br>rface (F7)<br>ns (F8) | R, MLRA 149E<br>.RR K, L) | 2 cm Mi Coast P 5 cm Mi Polyvalu Thin Dai Iron-Mar Piedmon Mesic Sp Red Pare Very Sha Other (Ex | for Problematic Hyduck (A10) (LRR K, L, trairie Redox (A16) (Lucky Peat or Peat (Sinface (S7) (LRR K, L) de Below Surface (S8 rk Surface (S9) (LRR mganese Masses (F1 at Floodplain Soils (Foodic (TA6) (MLRA 1 dent Material (F21) allow Dark Surface (Txplain in Remarks) | MLRA 149B) LRR K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) (MLRA 149B)   |
| Type:   | (II observed):  |                  |   |  |                           |   |   |  |
| Depth (inches):   |   |                  |   |  |                           | doct a solo   |   |  |
| emarks:   |   |                  |   |  |                           | Hydric Soil Pr  | esent? Yes X  | _ No   |

| Project/Site: Ball Hill Wind Project                     | t c  | ity/County: Chautaugu         | a County               | Sampling Date: 11/1/15          |
|--|--|-------------------------------|------------------------|---------------------------------|
| Applicant/Owner: Ball Hill Wind Er                       |  | ntyroddiny.                   |                        | Sampling Point: DP- 390         |
| Investigator(s): M-Boberg                                |  | ection, Township, Range:      |                        |                                 |
| investigator(s). 117-1302-19                             | Helone   |                               |                        |                                 |
| Landform (hillslope, terrace, etc.): <u>Hi</u>           | Loca   | l relief (concave, convex,    | none): Convex          | Slope (%): 1-3                  |
| Subregion (LRR or MLRA): LRR-R                           | Lat: 17, 110   | 237 Long:_                    | 42.443                 |                                 |
| Soil Map Unit Name:                                      |  |                               | NWI classifi           | cation: upland                  |
| Are climatic / hydrologic conditions on                  | the site typical for this time of year   | r? Yes No                     | _ (If no, explain in F | Remarks.)                       |
| Are Vegetation No., Soil No., or                         | Hydrology No significantly d   | isturbed? Are "Norr           | nal Circumstances"     | present? Yes 🗶 No               |
| Are Vegetation $N_0$ , Soil $N_0$ , or                   | and the first of the second se |                               | d, explain any answe   |                                 |
| Are vegetation 700, Son 700, Or                          | Hydrology TWD Haturally prob   | emader (in needed             | 1, explain any answe   | ors in Normana.                 |
| SUMMARY OF FINDINGS - A                                  | Attach site map showing s  | sampling point loca           | tions, transects       | s, important features, etc.     |
| Hydrophytic Vegetation Present?                          | Yes No ¥   | Is the Sampled Are            |                        |                                 |
| Hydric Soil Present?                                     | Yes No X   | within a Wetland?             | Yes                    | No X                            |
| Wetland Hydrology Present?                               | Yes No Y   | If yes, optional Wetla        | and Site ID:           |                                 |
|  |  |                               |                        |                                 |
| HYDROLOGY  | af-u   |                               |                        |                                 |
| Wetland Hydrology Indicators:                            |  |                               | Secondary Indic        | ators (minimum of two required) |
| Primary Indicators (minimum of one is                    | s required; check all that apply)  |                               | Surface Soil           | Cracks (B6)                     |
| Surface Water (A1)                                       | Water-Stained Le   | eaves (B9)                    | Drainage Pa            | atterns (B10)                   |
| High Water Table (A2)                                    | Aquatic Fauna (E   | 313)                          | Moss Trim L            | ines (B16)                      |
| Saturation (A3)  | Marl Deposits (B   | 15)                           | Dry-Season             | Water Table (C2)                |
| Water Marks (B1)   | Hydrogen Sulfide   | Odor (C1)                     | Crayfish Bu            | rrows (C8)                      |
| Sediment Deposits (B2)                                   |  | oheres on Living Roots (C     |                        | isible on Aerial Imagery (C9)   |
| Drift Deposits (B3)                                      | Presence of Red  | uced Iron (C4)                |                        | Stressed Plants (D1)            |
| Algal Mat or Crust (B4)                                  |  | uction in Tilled Soils (C6)   |                        | Position (D2)                   |
| Iron Deposits (B5)                                       | Thin Muck Surface  |                               | Shallow Aqu            |                                 |
| Inundation Visible on Aerial Imag                        |  | Remarks)                      |                        | aphic Relief (D4)               |
| Sparsely Vegetated Concave Su                            | rface (B8)   |                               | FAC-Neutra             | l Test (D5)                     |
| Field Observations:                                      |  |                               |                        |                                 |
|  | No Depth (inches):   |                               |                        |                                 |
| Water Table Present? Yes _                               |  | The second                    | Service and an all     |                                 |
| Saturation Present? Yes _<br>(includes capillary fringe) | No Depth (inches);   | Wetlan                        | d Hydrology Prese      | nt? Yes No 🗶                    |
| Describe Recorded Data (stream gau                       | ige, monitoring well, aerial photos  | , previous inspections), if a | available:             |                                 |
|  |  |                               |                        |                                 |
| Description  |  |                               |                        |                                 |
| Remarks:   |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |
|  |  |                               |                        |                                 |

| Tree Stratum (Plot size: 30')         | Absolute<br>% Cover | Dominant Species?  |             | Dominance Test worksheet:   |
|---------------------------------------|---------------------|--|-------------|---|
| 1. Acer saccharum                     | 75                  |  | FACU        | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)                         |
| Betula alleghanionsis                 |                     |  | FAC         | marrie estimation — ty  |
| S                                     |                     |  |             | Total Number of Dominant Species Across All Strata:  5 (B)                          |
|                                       |                     |  |             | Percent of Dominant Species   |
| 24                                    |                     |  |             | That Are OBL, FACW, or FAC: (A/E  |
|                                       |                     |  |             |   |
| )                                     |                     | -  | -           | Prevalence Index worksheet:   |
| ·                                     | 85                  | T-1-10-  |             | Total % Cover of: Multiply by:  OBL species 5 x 1 = 5                               |
| 151                                   | _6_                 | = Total Cov  | /er         | OBL species   |
| Sapling/Shrub Stratum (Plot size: 15/ | 26                  | V  | - I ALL     | FAC   |
| Prunos serotina                       | 22                  | <u></u>  | <b>FACU</b> | FACU species 2.10 x4= 840   |
| Fagus grantitolia                     | 30                  | <u> </u>   | FACLA       | UPL species   |
| . Acer saccharum                      | _5_                 | _7/  | FACU        | Column Totals: 225 (A) 875 (B   |
| <u> </u>                              |                     |  |             | Prevalence Index = B/A = 3 88   |
| 5,                                    |                     |  |             | Trotal file mask birt   |
| 3                                     |                     |  | . —         | Hydrophytic Vegetation Indicators:  |
| 1                                     |                     |  |             | 1 - Rapid Test for Hydrophytic Vegetation   |
|                                       | 70                  | = Total Co   | ver         | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5')          |                     |  |             | 3 - Prevalence Index is ≤3.0¹<br>4 - Morphological Adaptations¹ (Provide supporting |
| . Rubus ideous                        | 35                  | У  | FACU        | data in Remarks or on a separate sheet)   |
| 2. Fagus granditolla                  |                     | Y  | FACU        | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                           |
| Tsuga canadinsis                      | 5                   | N  | FACU        | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                   |
| 4. Acer saccharum                     | 5                   | N  | FACU        | be present, unless disturbed or problematic.  |
| Dryopteris Cristata                   | 5                   | N  | OBL         | Definitions of Vegetation Strata:   |
| 6                                     |                     | -  |             | Tree – Woody plants 3 in. (7.6 cm) or more in diamete                               |
| 7                                     |                     |  |             | at breast height (DBH), regardless of height.                                       |
|                                       |                     |  |             | Sapling/shrub - Woody plants less than 3 in. DBH                                    |
| 3                                     |                     |  |             | and greater than or equal to 3.28 ft (1 m) tall.                                    |
| J                                     |                     |  | -           | Herb - All herbaceous (non-woody) plants, regardless of                             |
| 10                                    |                     | to the control of the |             | size, and woody plants less than 3.28 ft tall.                                      |
| 11                                    |                     |  |             | Woody vines - All woody vines greater than 3.28 ft in                               |
| 12                                    | 70                  |  |             | height.   |
| 201                                   | 10                  | = Total Co   | ver         |   |
| Noody Vine Stratum (Plot size: 30')   |                     |  |             |   |
| NOT Applicable                        |                     |  |             | Hydrophytic   |
| 2                                     |                     |  |             | Vegetation  |
| 3                                     | ·                   |  | -,          | Present? Yes No   |
| V                                     |                     |  |             |   |
| 4                                     |                     | = Total Co   | vor         |   |

| Depth   | , and (Descrip   | e to the d         | epth needed to do   | cument the  | indicator              | or confin | m 46  |  | Samp  | ling Point; DP-   |
|---|--|--------------------|---|---|------------------------|-----------|---|--|---|---|
| (inches)  | scription: (Describ<br>Matrix<br>Color (moist)   | %                  | - Re  | dox Feature   | 98                     | or conne  | in the absence  | of indica  | tors.)  |   |
|   | (Moist)  |                    | Color (moist)   | %   | Type <sup>1</sup>      | _Loc2     | Texture   |  | 25.5  |   |
| 0-2   | 2 = 412  |                    |   | -   |                        |           |   | 111 10   | Rem   |   |
| F + 13 75   | 2.5 y 4/3  | 100                |   |   |                        |           |   | 1 166  | 1 litter  |   |
| 2-10  | 2.5y 5/6   | 40                 | 2.5y 4/3  | 40  | 0                      | -         | 514   |  |   |   |
| 10-18   | 2.548/6  | 100                |   |   |                        | 111       | 514   |  |   |   |
| 18-20   | 2.548/6  | 80                 | 1048 3/1  | -   | -                      |           | 514   |  |   |   |
|   |  |                    | 10 VR 5/P   | 10  | -                      |           | 514   |  |   |   |
|   |  | _                  | 10416 0/8   | _/0   |                        |           | 516   |  |   |   |
|   |  |                    |   |   |                        |           |   |  |   |   |
|   | -  |                    |   |   |                        |           |   |  |   |   |
|   |  |                    |   |   |                        |           |   |  |   |   |
|   |  | -                  |   |   |                        |           |   | -  |   |   |
|   |  |                    |   | 7   |                        |           |   | × _5   | 1   |   |
|   |  |                    |   |   |                        |           |   |  |   |   |
| Type: C=Cor   | ncentration DaDonte  |                    |   |   |                        |           |   |  |   |   |
| lydric Soil In  | ncentration, D=Deple   | tion, RM=          | Reduced Matrix, MS  | S=Masked S  | and Grain              | s. –      | 21 ocation: 5   | 1 5  |   |   |
| _ Histosol (  | A1)  |                    |   |   |                        |           | <sup>2</sup> Location: F  | L=Pore Li  | ning, M=M   | latrix.   |
| Hintin F 1  |  |                    |   |   |                        |           | indicators for  | Problem  | atio I leaded   | 1   |
| - Listic Ebit   | pedon (A2)   |                    | Polyvalue Below   | Surface (S  | 8) (LRR R              |           | mulcators for   | Problem  | atic Hydri  | c Solls <sup>3</sup> ;  |
| <ul> <li>Black Hist</li> </ul>  | ic (A3)  |                    | MILICA 149B)  |   |                        |           | 2 cm Muc  | k (A10) (Li  | atic Hydri  | II DA Atom  |
| Black Hist Hydrogen   | ic (A3)<br>Sulfide (A4)  | -                  | Thin Dark Surface   | ce (S9) (I PE   | 2 D W D                | 1100      | 2 cm Muc.<br>Coast Pra  | r Problem:<br>k (A10) (Li<br>irie Redox  | atic Hydri<br>RR K, L, N<br>(A16) (LD   | ALRA 149B)  |
| <ul> <li>Black Hist</li> <li>Hydrogen</li> <li>Stratified L</li> </ul>  | ic (A3)<br>Sulfide (A4)<br>Avers (A5)  | -                  | Thin Dark Surface Loamy Mucky M   | ce (S9) (LRF  | 2 D W D                | 1100      | 2 cm Muc.<br>Coast Pra<br>5 cm Mucl.<br>Dark Surfa  | k (A10) (LI<br>k (A10) (LI<br>irie Redox<br>ky Peat or<br>ice (S7) (L  | atic Hydri<br>RR K, L, M<br>(A16) (LR<br>Peat (S3)<br>RR K  | MLRA 149B)<br>R K, L, R)<br>(LRR K, L, R)   |
| <ul> <li>Black Hist</li> <li>Hydrogen</li> <li>Stratified L</li> <li>Depleted B</li> </ul>  | ic (A3)<br>Sulfide (A4)<br>ayers (A5)<br>Below Dark Surface (  | -<br>-<br>A11) _   | Thin Dark Surface Loamy Mucky M Loamy Gleyed M  | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)   | 2 D W D                | ( 149B)   | 2 cm Muc<br>Coast Pra<br>5 cm Mucl<br>Dark Surfa<br>Polyvalue   | r Problem<br>k (A10) (Li<br>irie Redox<br>ky Peat or<br>ice (S7) (L<br>Below Sur   | atic Hydri<br>RR K, L, M<br>(A16) (LR<br>Peat (S3)<br>RR K, L, M  | MLRA 149B)<br>R K, L, R)<br>(LRR K, L, R)<br>W)   |
| <ul> <li>Black Hist</li> <li>Hydrogen</li> <li>Stratified L</li> <li>Depleted E</li> <li>Thick Dark</li> </ul>                                | ic (A3)<br>Sulfide (A4)<br>.ayers (A5)<br>Below Dark Surface (.<br>Surface (A12)   | A11)               | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix  | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)                                       | 2 D W D                | A 149B)   | 2 cm Muc Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark s   | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ice (S7) (L<br>Below Sur<br>Surface (S  | atic Hydri<br>RR K, L, M<br>(A16) (LR<br>Peat (S3)<br>RR K, L, I<br>face (S8) (   | MLRA 149B)<br>R K, L, R)<br>(LRR K, L, R)<br>W)<br>(LRR K, L)   |
| <ul> <li>Black Hist</li> <li>Hydrogen</li> <li>Stratified L</li> <li>Depleted E</li> <li>Thick Dark</li> <li>Sandy Muc</li> </ul>             | ic (A3)<br>Sulfide (A4)<br>.ayers (A5)<br>Below Dark Surface (.<br>: Surface (A12)<br>:ky Mineral (S1)   |                    | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface) Depleted Dark Surface                | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)                           | 2 D W D                | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark S  | r Problema<br>k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas   | atic Hydri<br>RR K, L, M<br>(A16) (LR<br>Peat (S3)<br>RR K, L, M<br>face (S8) (<br>9) (LRR K  | ALRA 149B) R K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L)  |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc  | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Cky Mineral (S1) Wed Matrix (S4)   |                    | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface) Depleted Dark Surface                | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)                           | 2 D W D                | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga   | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ice (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas   | atic Hydric<br>RR K, L, M<br>(A16) (LR<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>ses (F12)                              | ALRA 149B) R K, L, R) (LRR K, L, R) W) (LRR K, L) (LRR K, L) (LRR K, L, R)  |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Gley Sandy Red   | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Cky Mineral (S1) Lyed Matrix (S4) Ox (S5)  |                    | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surf.   | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)                           | 2 D W D                | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc   | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I   | atic Hydri<br>RR K, L, N<br>(A16) (LR<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>ses (F12)<br>Soils (F19)                | ALRA 149B) R K, L, R) (LRR K, L, R) W) (LRR K, L) (LRR K, L) (LRR K, L, R)  |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma   | ic (A3) Sulfide (A4) Layers (A5) Selow Dark Surface (A12) Cky Mineral (S1) Lyed Matrix (S4) Ox (S5) Atrix (S6)   | 2                  | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface) Depleted Dark Surface                | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)                           | 2 D W D                | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc   | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I   | atic Hydrick L, M (A16) (LR Peat (S3) RR K, L, I face (S8) ( 9) (LRR K ses (F12) Soils (F19) MLRA 144                                   | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) JA, 145, 149B) |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma   | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Cky Mineral (S1) Lyed Matrix (S4) OX (S5) Determinent (S6) OX (S6) Determinent (S7)                            | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo                    | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su               | atic Hydrick, L, M<br>(A16) (LR)<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>Ses (F12)<br>Soils (F19)<br>WLRA 144<br>F21) | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) JA, 145, 149B) |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma   | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Cky Mineral (S1) Lyed Matrix (S4) OX (S5) Determinent (S6) OX (S6) Determinent (S7)                            | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo                    | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su               | atic Hydrick, L, M<br>(A16) (LR)<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>Ses (F12)<br>Soils (F19)<br>WLRA 144<br>F21) | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) JA, 145, 149B) |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac  | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Cky Mineral (S1) Lyed Matrix (S4) OX (S5) Determinent (S6) OX (S6) Determinent (S7)                            | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo                    | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (I<br>w Dark Su               | atic Hydrick, L, M<br>(A16) (LR)<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>Ses (F12)<br>Soils (F19)<br>WLRA 144<br>F21) | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) JA, 145, 149B) |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hydrogen Type:                 | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | A 149B)   | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo                    | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (I<br>w Dark Su               | atic Hydrick, L, M<br>(A16) (LR)<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>Ses (F12)<br>Soils (F19)<br>WLRA 144<br>F21) | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) JA, 145, 149B) |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hydrictive Layd Depth (inches | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydrick, L, M<br>(A16) (LR)<br>Peat (S3)<br>RR K, L, I<br>face (S8) (<br>9) (LRR K<br>Ses (F12)<br>Soils (F19)<br>WLRA 144<br>F21) | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) JA, 145, 149B) |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfac dicators of hydrictive Layd Depth (inches  | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo                    | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) ER K, L, R) (LRR K, L, R) M) (LRR K, L) (LRR K, L) (LRR K, L) (LRR K, L, R) (MLRA 149B) MA, 145, 149B)               |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Gley Sandy Red Stripped Ma   | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) A, 145, 149B)                 |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hydrictive Layd Depth (inches | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) A, 145, 149B)                 |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hydrictive Layd Depth (inches | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) A, 145, 149B)                 |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hydrictive Layd Depth (inches | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) A, 145, 149B)                 |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hydrictive Layd Depth (inches | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) A, 145, 149B)                 |
| Black Hist Hydrogen Stratified L Depleted E Thick Dark Sandy Muc Sandy Red Stripped Ma Dark Surfact dicators of hydrictive Layd Depth (inches | ic (A3) Sulfide (A4) Layers (A5) Below Dark Surface (A12) Sky Mineral (S1) yed Matrix (S4) ox (S5) atrix (S6) De (S7) (LRR R, MLR drophytic vegetation er (if observed): | -<br>-<br>RA 149B) | Thin Dark Surface Loamy Mucky M Loamy Gleyed M Depleted Matrix ( Redox Dark Surface Depleted Dark Surface Redox Depressio | ce (S9) (LRF<br>ineral (F1) (I<br>latrix (F2)<br>(F3)<br>ace (F6)<br>urface (F7)<br>ns (F8) | R R, MLRA<br>LRR K, L) | 149B)     | 2 cm Muc. Coast Pra 5 cm Mucl Dark Surfa Polyvalue Thin Dark Surfa Iron-Manga Piedmont F Mesic Spoc Red Parent Very Shallo Other (Expla | k (A10) (Li<br>irie Redox<br>ky Peat or<br>ace (S7) (L<br>Below Sur<br>Surface (S<br>anese Mas<br>Floodplain<br>dic (TA6) (I<br>Material (i<br>w Dark Su<br>ain in Rem | atic Hydric RR K, L, N (A16) (LR Peat (S3) RR K, L, N face (S8) (9) (LRR K Ses (F12) Soils (F19) MLRA 144 F21) face (TF1 arks)          | ALRA 149B) R K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L) (LRR K, L, R) (LRR K, L, R) (MLRA 149B) A, 145, 149B)                 |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region City/County: Chautauqua County Sampling Date: 11/11/15 Project/Site: Ball Hill Wind Project Applicant/Owner: Ball Hill Wind Energy, LLC State: NY Sampling Point: DP- 592 Investigator(s): M- Biberg B Virts Section, Township, Range: VILLEROVA Landform (hillslope, terrace, etc.): Hills/apa Local relief (concave, convex, none): CONVEX Slope (%): 1 Subregion (LRR or MLRA): LRR-R Lat: 79.115803 Long: 42.444062 Datum: NAD 83 NWI classification: unatound Soil Map Unit Name: \_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes \_\_\_\_\_ No\_\_ Are Vegetation ND , Soil ND , or Hydrology ND significantly disturbed? Are Vegetation No., Soil No., or Hydrology No. naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes \_ X No within a Wetland? Hydric Soil Present? If yes, optional Wetland Site ID: WL-4554 Wetland Hydrology Present? Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) \_\_ Drainage Patterns (B10) \_\_\_ Water-Stained Leaves (B9) Y Surface Water (A1) \_\_ Moss Trim Lines (B16) High Water Table (A2) Aquatic Fauna (B13) \_\_ Dry-Season Water Table (C2) Marl Deposits (B15) ¥ Saturation (A3) \_\_ Crayfish Burrows (C8) \_\_ Water Marks (B1) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Sediment Deposits (B2) \_\_ Stunted or Stressed Plants (D1) Presence of Reduced Iron (C4) \_\_ Drift Deposits (B3) Geomorphic Position (D2) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) \_\_ Shallow Aquitard (D3) \_ Thin Muck Surface (C7) Iron Deposits (B5) Microtopographic Relief (D4) \_\_ Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sparsely Vegetated Concave Surface (B8) Field Observations: Yes X No \_\_\_\_ Depth (inches): 0-1" Surface Water Present? Yes X No \_\_\_\_ Depth (inches): 0" Water Table Present? Wetland Hydrology Present? Yes X No. Yes No \_\_\_\_ Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30' )  1. NOT Applicable |      | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)                           |
|---|------|----------------------|--------|---|
| 23  |      |                      |        | Total Number of Dominant Species Across All Strata:   |
|   |      |                      |        |   |
| 4   |      |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)  |
| 5   |      |                      |        | (13)  |
| 6   |      |                      |        | Prevalence Index worksheet:   |
| 7   | -    |                      |        | Total % Cover of: Multiply by:  |
| 161   |      | = Total Co           | /er    | OBL species 20 x1 = 20  |
| Sapling/Shrub Stratum (Plot size: 15)             | in   | V                    | 150700 | FACW species 15 x2 = 30 FAC species 10 x3 = 30  |
| 1. Fagus grandifolia                              | - 10 | <u> </u>             | FACIA  | FAC species 10 x3 = 30<br>FACU species 25 x4 = 100  |
| 2. Rubus Ideous                                   | _5_  | У                    | FACU   | UPL species   |
| 3   |      |                      |        | Column Totals: 70 (A) 180 (B)   |
| 4,  |      |                      |        |   |
| 5   |      |                      |        | Prevalence Index = B/A = 2.57   |
| 6   |      |                      |        | Hydrophytic Vegetation Indicators:  |
| 7   |      |                      |        | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 15   | = Total Co           |        | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5/ )                     |      |                      | 30     | X 3 - Prevalence Index is ≤3.0¹   |
| 1. SCIPPUS CUPERIDAS                              | 15   | Y                    | OBL    | 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)                        |
| 2. Carex intumescens                              |      | y                    | FAUN   | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 3. Rubys Idlans                                   |      | V                    | FACU   |   |
|   |      | N                    | (      | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4 Euthamia graminitalia                           | 5    | N                    | FAC    | Definitions of Vegetation Strata:   |
| 5. VIOIA SOVOTIA                                  |      |                      | FAC    |   |
| 6. Dryopteris cristata                            | 5    | N                    | OBL    | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 7. Epiloblum ciliatum                             |      | N                    | EAUN   |   |
| 8   |      |                      |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 9   |      |                      |        |   |
| 10  |      |                      |        | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11  |      |                      |        |   |
| 12  |      |                      |        | Woody vines – All woody vines greater than 3.28 ft in height.   |
|   | 55   | = Total Co           | /er    |   |
| Woody Vine Stratum (Plot size: 301)               |      |                      |        |   |
| 1. Not Apolicable                                 |      |                      |        |   |
| 2.  |      |                      |        | Hydrophytic   |
| 3   |      | -                    |        | Vegetation Present? Yes X No  |
| 4   |      |                      |        | 7   |
|   | _    | = Total Co           |        |   |
|   |      | = Total Co           | ver    |   |

|  | Matrix   | 0/          |  | x Feature                | S<br>Type <sup>1</sup> | Loc2        | Texture                        | Remarks   |
|--|--|-------------|--|--------------------------|------------------------|-------------|--------------------------------|---|
| inches)  | Color (moist)  | %           | Color (moist)  |                          | Type                   |             |                                | Organic mucky peat  |
| 0-3  |  | 76          |  | -                        |                        |             | C 31                           | Diguite Hintery Peter   |
| 3-101  | 2.543/2  | 15          | 10 YR 3/4  | 5                        | -                      | <u>m</u>    | -51L                           |   |
|  |  |             | 10/12 3/10   | 10                       | C                      | <u>m</u>    | SIL                            |   |
|  |  |             |  |                          | -                      | ne - V-     |                                |   |
|  |  |             |  | - 3                      | W = 4                  |             |                                |   |
|  |  |             | A  | 6                        | "                      | i ( a way   |                                |   |
|  |  |             |  |                          | . 65                   | 4 / -       |                                | *   |
|  |  |             |  |                          | N 100,0                |             | Wy.                            | And Harrist -   |
|  | -  | -           |  |                          |                        | - as 1      | )-y                            |   |
| _  | -  |             | - A - 14   |                          | -                      | - W. W.     | -                              |   |
|  | -  |             |  | 14.                      |                        | -11         | A- ×                           |   |
|  |  |             |  | · 4. 1.                  |                        |             |                                |   |
|  |  |             | 100  | 1                        | 6.5                    | 1           |                                |   |
| Type: C=C  | oncentration, D=Dep  | oletion, RI | M=Reduced Matrix, M  | S=Masker                 | Sand Gr                | ains.       |                                | n: PL=Pore Lining, M=Matrix.  |
|  | Indicators:  |             | Polyvalue Belo   |                          |                        |             |                                | for Problematic Hydric Soils <sup>3</sup> :<br>Muck (A10) (LRR K, L, MLRA 149B)   |
| Sandy I  | ark Surface (A12)<br>Mucky Mineral (S1)  |             | <ul> <li>Redox Dark St</li> <li>Depleted Dark</li> <li>Redox Depres</li> </ul> | Surface (                | F7)                    |             | Piedm                          | nont Floodplain Soils (F19) (MLRA 149E  |
| Sandy ( Sandy ( Sandy ( Sandy ( Stripped Dark Stripped | Mucky Mineral (S1)<br>Gleyed Matrix (S4)<br>Redox (S5)<br>d Matrix (S6)<br>urface (S7) (LRR R,                               | ation and   | Depleted Dark<br>Redox Depres  | Surface (I<br>sions (F8) | F7)                    | s disturbed | Pledm Mesic Red F Very S       | Manganese Masses (F12) (LRR K, L, R) nont Floodplain Soils (F19) (MLRA 149E) Spodic (TA6) (MLRA 144A, 145, 149B) Parent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks)   |
| Sandy ( Sandy ( Sandy ( Sandy ( Stripped Dark Stripped | Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R,   | ation and   | Depleted Dark Redox Depres   | Surface (I<br>sions (F8) | F7)                    | s disturbed | Piedm Mesic Red F Very S Other | Manganese Masses (F12) (LRR K, L, R) nont Floodplain Soils (F19) (MLRA 1498) E Spodic (TA6) (MLRA 144A, 145, 1498) Parent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks) |
| Sandy ( Sandy ( Sandy ( Sandy F Stripped Dark Su       | Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Inface (S7) (LRR R, of hydrophytic vegeta Layer (if observed) | ation and   | Depleted Dark Redox Depres   | Surface (I<br>sions (F8) | F7)                    | s disturbed | Piedm Mesic Red F Very S Other | Manganese Masses (F12) (LRR K, L, R) nont Floodplain Soils (F19) (MLRA 149E) Spodic (TA6) (MLRA 144A, 145, 149B) Parent Material (F21) Shallow Dark Surface (TF12) (Explain in Remarks)   |

| Project/Site; Ball Hill Wind P                             | Project                       |   |                                 | Sampling Date: 11/1115   |
|--|-------------------------------|---|---------------------------------|--|
| Applicant/Owner: Ball Hill Wi                              | nd Energy, LLC                |   | State: NY                       | Sampling Point: DP- 593  |
| nvestigator(s): M. BADOR                                   |                               | Section Township                        | , Range: VIllerov               |  |
| _andform (hillslope, terrace, etc.                         |                               |   | convex, none): CONVEX           |  |
|  |                               | 9-116371                                | Long: 42, 44336                 | Datum: NAD 83  |
| Subregion (LRR or MLRA): LRI                               | Lat;                          | 1-116311                                |                                 | A STATE OF THE PARTY OF THE PAR |
| Soil Map Unit Name:  |                               | Section 201                             |                                 | ition: Upland  |
| Are climatic / hydrologic conditio                         |                               |   |                                 |  |
| Are Vegetation <u>N</u> D, Soil <u>N</u>                   |                               |   | Are "Normal Circumstances" pr   |  |
| Are Vegetation $NO$ , Soil $N$                             | O, or Hydrology NO nat        | urally problematic?                     | (If needed, explain any answers | s in Remarks.)   |
| SUMMARY OF FINDING   | iS – Attach site map sl       | nowing sampling poi                     | nt locations, transects,        | important features, etc.   |
| Hydrophytic Vegetation Preser                              | nt? Yes \ No                  | Is the Sam                              | Y                               |  |
| Hydric Soil Present?                                       | Yes X No                      | within a W                              |                                 |  |
| Wetland Hydrology Present?                                 | Yes X No                      | If yes, option                          | onal Wetland Site ID: WU- K     | 5555   |
|  |                               |   |                                 |  |
| HYDROLOGY  |                               |   |                                 | ,  |
| Wetland Hydrology Indicator                                |                               |   |                                 | ors (minimum of two required)  |
| Primary Indicators (minimum o                              |                               |   | Surface Soil (                  |  |
| Surface Water (A1)   |                               | -Stained Leaves (B9)                    |                                 |  |
| High Water Table (A2)                                      |                               | ic Fauna (B13)                          | Moss Trim Lin                   | Vater Table (C2)   |
| <ul><li>Saturation (A3)</li><li>Water Marks (B1)</li></ul> |                               | Deposits (B15)<br>gen Sulfide Odor (C1) | Crayfish Burn                   |  |
| Sediment Deposits (B2)                                     |                               | ed Rhizospheres on Living               |                                 | sible on Aerial Imagery (C9)   |
| Drift Deposits (B3)  |                               | nce of Reduced Iron (C4)                |                                 | ressed Plants (D1)   |
| Algal Mat or Crust (B4)                                    | Recer                         | nt Iron Reduction in Tilled S           | olls (C6) Geomorphic            | Position (D2)  |
| Iron Deposits (B5)   |                               | Muck Surface (C7)                       | Shallow Aquit                   |  |
| Inundation Visible on Aeri                                 |                               | (Explain in Remarks)                    |                                 | phic Relief (D4)   |
| Sparsely Vegetated Conc                                    | ave Surface (B8)              |   | FAC-Neutral                     | lest (D5)  |
| Field Observations:  | No. 9 Oc. David               | h (Inchas) A.19                         |                                 |  |
| Surface Water Present?                                     |                               | h (inches): 0~1° h (inches): 0°         |                                 |  |
| Water Table Present? Saturation Present?                   |                               | h (inches): /) <sup>M</sup>             | Wetland Hydrology Presen        | t? Yes 🗴 No  |
| (includes capillary fringe)                                |                               |   |                                 | THE REPORT OF THE PARTY OF THE  |
| Describe Recorded Data (stre                               | am gauge, monitoring well, as | erial photos, previous inspe            | ctions), if available:          |  |
|  |                               |   |                                 |  |
| Remarks:   |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |
|  |                               |   |                                 |  |

| Tree Stratum (Plot size: 30')                     | Absolute % Cover | Dominant<br>Species? |       | Dominance Test worksheet:   |
|---|------------------|----------------------|-------|---|
| 1. Aler saccharum                                 | 40               | Y                    | FACU  | Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
| 2. Fraxinus americana                             | 10               | N                    | FACLL | Total Number of Dominant  |
| 3   |                  |                      |       | Species Across All Strata: (B)  |
| 4   |                  | -                    |       | Percent of Dominant Species 25  |
| 5   |                  |                      |       | That Are OBL, FACW, or FAC: (A/B)   |
| 6   |                  |                      |       | Prevalence Index worksheet:   |
| 7   |                  |                      |       | Total % Cover of: Multiply by:  |
| 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -           |                  | = Total Co           | /er   | OBL species x1 =  |
| Sapling/Shrub Stratum (Plot size: 15              |                  | 4.                   |       | FACW species x 2 =<br>FAC species x 3 = O   |
| 1. Aler saucharum                                 |                  | <u>y</u>             | FACU  | FAC species x3 =<br>FACU species x4 = 300   |
| 2. Fraxinus americana                             |                  |                      | FACU  | UPL species 0 x5= 0   |
| 3   |                  |                      |       | Column Totals: 100 (A) 325 (B)  |
| 4   |                  |                      |       |   |
| 5   |                  | ,                    |       | Prevalence Index = B/A = 3 25   |
| 6   |                  |                      |       | Hydrophytic Vegetation Indicators:  |
| 7   |                  |                      |       | 1 - Rapid Test for Hydrophytic Vegetation   |
|   | 20               | = Total Co           | /er   | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size: 5')                      |                  |                      |       | X 4 - Morphological Adaptations (Provide supporting   |
| 1. blyceria acutitora                             | 20_              | <u>y</u>             | OBL   | data in Remarks or on a separate sheet)   |
| 2. Dryopteris Woodfern                            | 5                | N                    | OBL   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Fraxinus americana                             |                  |                      | FALU  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 5   |                  |                      |       | Definitions of Vegetation Strata:   |
| 6   |                  |                      |       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7   |                  |                      |       | at breast height (DBH), regardless of height.   |
| 8   |                  |                      |       | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9   |                  |                      |       | and greater than or equal to 3.28 ft (1 m) tall.  |
| 10  |                  |                      |       | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.            |
| 11.   |                  |                      |       |   |
| 12.   |                  |                      |       | Woody vines - All woody vines greater than 3.28 ft in height.   |
|   | 30               | = Total Co           | ver   |   |
| Woody Vine Stratum (Plot size: 30')               |                  |                      |       |   |
| 1. Not Applicable                                 |                  |                      |       |   |
| 2.  |                  |                      |       | Hydrophytic   |
| 3.  |                  |                      |       | Vegetation   Present?   Yes X No  |
| 4   |                  |                      |       |   |
|   |                  | = Total Co           | ver   |   |
| Remarks: (Include photo numbers here or on a sepa | rate sheet.)     | 10141 00             |       |   |
| -species have adapted to                          |                  | in W                 | et co | mitions through   |
| - Species more wants at o                         | 70               | 15                   | Saan  | France the Sustant  |
| morphological adaptation                          | ns. Inis         | ,,,                  | seen  | more the Finance  |
| trunks, shallow roots                             | and t            | rees                 | Sur   | viving on humics  |
| species include:                                  |                  |                      |       |   |
| species mornine.                                  |                  |                      |       |   |
| -white Ash, Sugar maple                           | 0                |                      |       |   |

| ~7"       | Color (moist)                               | _%          | Color (moist)               | %          | Type <sup>1</sup> | _Loc2_      | Texture  | Remarks  |  |  |
|-----------|---|-------------|-----------------------------|------------|-------------------|-------------|--|--|--|--|
|           | 2.5425/                                     | 95          | 1NR3/6                      | 3          | AAC.              | m           | SIL  |  |  |  |
| - 14      | 2.54 6/4                                    | 20          | 2.59 2.5/1                  | 5          | מ                 | m           | Sundy leans  |  |  |  |
|           | 6.01 14                                     | - 140       | 2.54 5/6                    | 5          | A.C               | m           | Jensey 200 May   |  |  |  |
|           | -   | -           | 2.09                        |            | - 46-C            | **/         |  |  |  |  |
|           |   | -           | -                           | -          |                   |             |  |  |  |  |
|           |   | -           |                             |            |                   |             |  |  |  |  |
|           | 4   |             |                             |            |                   |             |  |  |  |  |
|           |   |             |                             |            |                   |             |  |  |  |  |
|           |   |             |                             |            |                   |             |  |  |  |  |
|           |   |             |                             |            |                   |             |  |  |  |  |
|           |   | -           |                             |            | -                 |             |  |  |  |  |
| -         | 0   | -           |                             | _          |                   |             |  |  |  |  |
|           | -   |             | -                           | -          | -                 |             |  |  |  |  |
|           |   |             |                             | 14 70 11   | . = = =           | -           | 21   | ar I Julius Maddalate  |  |  |
|           | oncentration, D=De Indicators:              | pletion, RN | #=Reduced Matrix, N         | /IS=Maske  | d Sand Gr         | ains.       | Indicators for Prot  | re Lining, M=Matrix.<br>Diematic Hydric Soils <sup>3</sup> : |  |  |
| Histosol  |   |             | Polyvalue Bel               | ow Surfac  | e (S8) (LR        | RR,         |  | 0) (LRR K, L, MLRA 149B)                                     |  |  |
|           | pipedon (A2)                                |             | MLRA 149                    | B)         |                   |             |  | edox (A16) (LRR K, L, R)                                     |  |  |
|           | listic (A3)                                 |             | Thin Dark Sur               |            |                   |             | <ul> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L, R)</li> </ul>   |  |  |  |
|           | en Sulfide (A4)                             |             | Loamy Mucky<br>Loamy Gleyer |            |                   | (, L)       |  |  |  |  |
|           | d Layers (A5)<br>d Below Dark Surfa         | ce (A11)    | Depleted Mat                |            | 2)                |             |  |  |  |  |
|           | ark Surface (A12)                           | V           | X Redox Dark S              |            | 3)                |             |  |  |  |  |
|           | Mucky Mineral (S1)                          |             | Depleted Dark               |            |                   |             | Piedmont Floodplain Soils (F19) (MLRA 149<br>Mesic Spodic (TA6) (MLRA 144A, 145, 149E  |  |  |  |
|           | Gleyed Matrix (S4)                          |             | Redox Depre                 | ssions (F8 | )                 |             | Mesic Spodic (   |  |  |  |
|           | Redox (S5)<br>d Matrix (S6)                 |             |                             |            |                   |             |  | park Surface (TF12)  |  |  |
|           | urface (S7) (LRR R,                         | MLRA 14     | 9B)                         |            |                   |             | Other (Explain   | in Remarks)  |  |  |
|           |   |             |                             |            |                   | a diaturbad | l or problematic   |  |  |  |
|           | of hydrophytic vegeta<br>Layer (if observed |             | vetland hydrology m         | ust be pre | sent, unies       | s disturbed | of problematic.  |  |  |  |
| Type:     | Layer (II observed                          | ,.          |                             |            |                   |             |  |  |  |  |
|           | iches):                                     |             |                             |            |                   |             | Hydric Soil Present  | 7 Yes * No   |  |  |
| Depth (in |   |             | -                           |            |                   |             | The state of the s |  |  |  |

| Applicant/Owner: Ball Hill Wind Energy I Investigator(s): M. BODERG B. VITTS  Landform (hillslope, terrace, etc.): Hillslope  Subregion (LRR or MLRA): LRQ-R Lat: Soil Map Unit Name:  Are climatic / hydrologic conditions on the site typical for the Are Vegetation No., Soil No., or Hydrology No. Are Vegetation No., Soil No., or Hydrology No.  | Section, T Local relief (c 79. 116796  his time of year? Yes significantly disturbed? naturally problematic? showing samplin  show Is the  | NWI classification: upland  No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes No No  |
|--|--|---|
| Applicant/Owner: Ball Hill Wind Energy L Investigator(s): M. BODERG B. VITTS  Landform (hillslope, terrace, etc.): Hillslope Subregion (LRR or MLRA): LRC-R Lat: Soil Map Unit Name:  Are olimatic / hydrologic conditions on the site typical for the Are Vegetation No., Soil No., or Hydrology No.  Are Vegetation No., Soil No., or Hydrology No.  SUMMARY OF FINDINGS - Attach site map  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  Wetland Hydrology Present?   | Section, T Local relief (c 79. 116796  his time of year? Yes significantly disturbed? naturally problematic? showing samplin  show Is the  | ty:   |
| Landform (hillslope, terrace, etc.): Hillslope Subregion (LRR or MLRA): LRQ-R Lat: Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for the vegetation NO, Soil NO, or Hydrology NO Are Vegetation NO, Soil NO, or Hydrology NO SUMMARY OF FINDINGS – Attach site map Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  | Local relief (company)  Local relief (company)  And And And Andrews  Local relief (company)  And Andrews  Local relief (company)  Andrews  Local relief (company)  Andrews  Local relief (company)  Lo | oncave, convex, none):  |
| Landform (hillslope, terrace, etc.): Hillslope Subregion (LRR or MLRA): LRPR Lat: Soil Map Unit Name: Are olimatic / hydrologic conditions on the site typical for the vegetation No., Soil No., or Hydrology No. Are Vegetation No., Soil No., or Hydrology No.  SUMMARY OF FINDINGS – Attach site map Hydrophytic Vegetation Present? Hydric Soil Present?  Yes Hydric Soil Present?   | Local relief (company)  Local relief (company)  And And And Andrews  Local relief (company)  And Andrews  Local relief (company)  Andrews  Local relief (company)  Andrews  Local relief (company)  Lo | oncave, convex, none):  |
| Subregion (LRR or MLRA): LRL-R Lat:  Soil Map Unit Name:  Are olimatic / hydrologic conditions on the site typical for the vegetation No., Soil No., or Hydrology No.  Are Vegetation No., Soil No., or Hydrology No.  SUMMARY OF FINDINGS – Attach site map Hydrophytic Vegetation Present?  Hydrophytic Vegetation Present?  Yes Yes Wetland Hydrology Present?  | his time of year? Yes. significantly disturbed? naturally problematic? showing samplin   | oncave, convex, none):  |
| Are olimatic / hydrologic conditions on the site typical for the Are Vegetation \( \frac{\lambda}{\lambda} \), Soil \( \frac{\lambda}{\lambda} \), or Hydrology \( \frac{\lambda}{\lambda} \).  Are Vegetation \( \frac{\lambda}{\lambda} \), Soil \( \frac{\lambda}{\lambda} \), or Hydrology \( \frac{\lambda}{\lambda} \).  SUMMARY OF FINDINGS — Attach site map  Hydrophytic Vegetation Present?  Yes \( \frac{\lambda}{\lambda} \)  Hydric Soil Present?  Yes \( \frac{\lambda}{\lambda} \)  Wetland Hydrology Present?  | his time of year? Yes significantly disturbed? naturally problematic? showing sampling ls the within   | NWI classification: wpland  No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.)  g point locations, transects, important features, e Sampled Area in a Wetland? Yes No X |
| Are olimatic / hydrologic conditions on the site typical for the Are Vegetation \( \overline{\bar{N}} \overl | significantly disturbed? naturally problematic? showing samplin low ls the   | No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.)  g point locations, transects, important features, e Sampled Area in a Wetland? Yes No Y                             |
| Are Vegetation Mo, Soil Mo, or Hydrology Mo  SUMMARY OF FINDINGS – Attach site map  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  Yes  Wetland Hydrology Present?  | significantly disturbed? naturally problematic? showing samplin low ls the   | No (If no, explain in Remarks.)  Are "Normal Circumstances" present? Yes X No (If needed, explain any answers in Remarks.)  g point locations, transects, important features, e Sampled Area in a Wetland? Yes No Y                             |
| Are Vegetation Mo, Soil Mo, or Hydrology Mo  SUMMARY OF FINDINGS – Attach site map  Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes  Yes  Wetland Hydrology Present?  | significantly disturbed? naturally problematic? showing samplin lo   | Are "Normal Circumstances" present? Yes — No_ (If needed, explain any answers in Remarks.)  g point locations, transects, important features, e Sampled Area in a Wetland? Yes No **  |
| SUMMARY OF FINDINGS – Attach site map  Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?   | showing sampling samp | (If needed, explain any answers in Remarks.)  g point locations, transects, important features, e Sampled Area in a Wetland?  Yes No  |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  | showing sampling sampling show is the within   | g point locations, transects, important features, e Sampled Area in a Wetland?  Yes No **   |
| Hydric Soil Present?  Wetland Hydrology Present?   | No X withi   | g point locations, transects, important features, e Sampled Area in a Wetland? Yes No **  |
| Hydric Soil Present?  Wetland Hydrology Present?   | No X withi   | in a Wetland? Yes No **   |
| Hydric Soil Present?  Wetland Hydrology Present?   | No X withi   | in a Wetland? Yes No **   |
|  |  | NO A  |
| Remarks: (Explain alternative procedures here or in a se   | parate report.)  | s, optional Wetland Site ID:  |
|  | parate report.)  |   |
| Primary Indicators (minimum of one is required; about all u  | nat apply)   | Secondary Indicators (minimum of two considerations)  |
| Wetland Hydrology Indicators:  |  |   |
| Surface Water (A1)   | nat apply)   | Secondary Indicators (minimum of two required   |
| High Water Table (Ac)  | r-Stained Leaves (B9)  | Surface Soil Cracks (B6)  |
| Saturation (A3) Aqua   | tic Fauna (B13)  | <ul><li>Drainage Patterns (B10)</li><li>Moss Trim Lines (B16)</li></ul>   |
| Water Marks (B1)   | Deposits (B15)   | Dry-Season Water Table (C2)   |
| Sediment Deposits (B2)  Hydro  | gen Sulfide Odor (C1)  |   |
| Oxidiz   | ed Rhizospheres on Livince of Reduced Iron (C4   | Ing Roots (C3) Saturation Visible on Aerial Imageny (Co)  |
| _ Algal Mat or Crust (B4) Prese<br>_ Iron Deposits (B5) Recer  | t Iron Reduction in Tilled   | Stunted or Stressed Plants (D1)   |
| Inundation Visible on Aerial Imagery (B7) Other  | luck Surface (C7)  | Geomorphic Position (D2)  |
| Sparsely Vegetated Concave Surface (B8)  Other   | (Explain in Remarks)   | Shallow Aquitard (D3)   |
| eld Observations:  |  | Microtopographic Relief (D4) FAC-Neutral Test (D5)  |
| rface Water Present? Yes No. 1   |  | TAC-Neutral Test (D5)   |
| ter Table Present?   |  |   |
| uration Present?   | (inches):  |   |
| dudes capillary fringe)  cribe Recorded Data (chrosses   | (inches):  | Wetland Hydrology Present? Yes No X   |
| cribe Recorded Data (stream gauge, monitoring well, aeri   | al photos, previous inspe  | ections), if available  |
|  |  | A STANDOC.  |
| narks;   |  |   |

| GETATION – Use scientific names of plants.  Be Stratum (Plot size: 30' ) | % Cover                  |            | nt Indicator<br>Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
|--|--------------------------|------------|------------------------|---|
| Acer saccharum Fraxinus americana  | <u> 70</u><br><u> 10</u> | N          | FACIL                  | Total Number of Dominant Species Across All Strata:  (B)  |
| 1 1000   |                          |            |                        | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)  |
|  | 1/2                      | _          |                        | Prevalence Index worksheet:   |
|  |                          | _ = Total  | Cover                  | Total % Cover of:         Multiply by:           OBL species         0         x 1 =         0           FACW species         0         x 2 =         0 |
| apling/Shrub Stratum (Plot size: 15")  RUBUS IDALUS                      | -                        | -          |                        | FAC enecies 0 x3=   |
| 3  |                          |            |                        | Prevalence Index = B/A = 4  |
| 6  |                          |            |                        | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation   |
| 7  | 15                       | = Tota     | al Cover               | 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting   |
| Herb Stratum (Plot size: 5' )  1. A(er saccharum                         | 15                       | - <u>X</u> | FAC                    | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 2. Fraxinus americana<br>3. Rubus Ideaus                                 | 5                        |            |                        | ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  |
| 4. Schedonorus arundinacious   | _                        |            |                        | Definitions of Vegetation Strata:   |
| 6  |                          | _          |                        | at breast height (DBH), regardless of height.  Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.        |
| 8<br>9   | _                        |            |                        | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 10   |                          |            |                        | Woody vines – All woody vines greater than 3.28 ft in height.   |
| 12   | 3                        | <u></u> =T | otal Cover             | Thought.  |
| Woody Vine Stratum (Plot size: 30'  1. NOT Applicable                    |                          |            |                        | Hydrophytic Vegetation Yes No X   |
| 2  |                          | ==         |                        | Present? Yes No X   |
| A  |                          |            | Total Cover            |   |
| Remarks: (Include photo numbers here of off a se                         |                          |            |                        |   |
|  |                          |            |                        |   |

|   | Matrix Color (moist)   |          |  | - dament the  | indicate                | or or conf | irm the absence   | Sampling Point:         |
|---|--|----------|--|---|-------------------------|------------|---|-------------------------|
| 0-1   | 2.54 2.5/  | 100      | (IIIOISI)  | edox Featur   | es<br>Type <sup>1</sup> | _Loc²      | Texture   |                         |
| 2-12  | 2.845/3  | -        | 2.5 y 2.5/   | -   |                         |            | SIL   | Remarks                 |
| -   |  |          | 2.54 3/6   | _ 10  | D                       | m          | 516   |                         |
| 12-20   | 2.54 5/3   | 90       | 2.54 5/6   | 10  | G                       | m          | 814   |                         |
|   |  |          |  |   |                         | <u>m</u>   | SIL   |                         |
|   |  |          |  |   |                         |            |   |                         |
| Type: C=Con Hydric Soil Inc  Histosol (A                    | ncentration, D=Depletion   | on, RM=R | educed Matrix, MS  | =Masked S   | and O                   |            |   | =Pore Lining, M=Matrix. |
| Sandy Muck Sandy Gleye Sandy Redo Stripped Mat Dark Surface | c (A3) Sulfide (A4) Sulfide (A4) Sulfide (A5) Sulface (A5) Surface (A12) Sy Mineral (S1) Sy Mineral (S4) X (S5) Strix (S6) Strix (S6) C (S7) (LRR R, MLRA) Tophytic vegetation and | 1)       | Polyvalue Below MLRA 149B) Thin Dark Surfact Loarny Mucky Mit Loarny Gleyed Ma Depleted Matrix (F Redox Dark Surfa Depleted Dark Surfa Depleted Dark Surfa Redox Depression Redox Depression | e (S9) (LRR<br>neral (F1) (L<br>atrix (F2)<br>F3)<br>ce (F6)<br>rface (F7)<br>Is (F8) | R, MLRA                 | A 149B)    | Coast Prairie Coast Prairie 5 cm Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M | Dark Curfors (Tra       |
| arks:   |  |          |  |   |                         | Ну         | dric Soil Present   | ? Yes No                |
|   |  |          |  |   |                         |            |   |                         |

| Project/Site: Ball Hill WING Applicant/Owner: Ball Hill W   | ind Energy, U.C.   |   | State: Ny Sampling Point: 595   |
|---|--|---|---|
| Investigator(s): M. Boblerg R. Landform (hillslope, terrace, etc.): Hi Subregion (LRR or MLRA): LIZZ-IZ Soil Map Unit Name:   | US love Lo   | Section, Township, Range:<br>cal relief (concave, convex, non-<br>4248 Long:                    | e): <u>CONV.PY</u> Slope (%): 3-5   |
| Are climatic / hydrologic conditions on the Are Vegetation \( \bar{N} \bar{0} \), Soil \( \bar{N} \bar{0} \), or Are Vegetation \( \bar{N} \bar{0} \), Soil \( \bar{N} \bar{0} \), or | Hydrology No significantly Hydrology No naturally pro                      | disturbed? Are "Normal oblematic? (If needed, ex  | If no, explain in Remarks.)  Circumstances" present? YesX No  xplain any answers in Remarks.)  ns, transects, important features, etc.  |
| Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proces  | Yes X No Yes X No Yes Y No   | Is the Sampled Area within a Wetland? If yes, optional Wetland                                  | Yes <u>V</u> No<br>Site ID: <u>WL-<i>R</i>552</u>   |
| HYDROLOGY   |  |   |   |
| Wetland Hydrology Indicators:   | - Priorite   |   | Secondary Indicators (minimum of two required)  |
| Primary Indicators (minimum of one is  L Surface Water (A1)  High Water Table (A2)  Saturation (A3)   | required; check all that apply)  Water-Stained Aquatic Fauna Marl Deposits | Leaves (B9)<br>(B13)  | Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)  |
| Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imag  | Presence of Re Recent Iron Re Thin Muck Sur ery (B7) Other (Explain        | ospheres on Living Roots (C3)<br>educed Iron (C4)<br>eduction in Tilled Soils (C6)<br>face (C7) | 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? Water Table Present? Saturation Present? (includes capillary fringe)   | No Depth (inches X No Depth (inches X No Depth (inches                     | ): 0 <sup>#</sup> Wetland H   | ydrology Present? Yes <u>X</u> No   |
| Describe Recorded Data (stream gau  | ge, monitoring well, aerial photo  | os, previous inspections), if avai  | lable:  |
| Remarks:  |  |   |   |
|   |  |   |   |

| Tree Stratum (Plot size: 30')           | % Cover | Dominant I<br>Species? | Status            | Dominance Test worksheet:  Number of Dominant Species  |
|---|---------|------------------------|-------------------|--|
| 1. Not Applicable                       |         |                        |                   | That Are OBL, FACW, or FAC: (A)  |
| 2                                       |         |                        |                   | Total Number of Dominant   |
| 3                                       |         |                        |                   | Species Across All Strata: (B)   |
| 4                                       |         |                        |                   | Percent of Dominant Species  |
| 5                                       |         |                        |                   | That Are OBL, FACW, or FAC: LOS (A/B)  |
| 6,                                      |         |                        |                   | Prevalence Index worksheet:  |
| 7                                       |         |                        |                   | Total % Cover of: Multiply by:   |
|   |         | = Total Cove           |                   | OBL species x 1 =  |
| Sapling/Shrub Stratum (Plot size: 151 ) |         | Caral Cara             |                   | FACW species x 2 =   |
| 1. Not Applicable                       |         |                        |                   | FAC species x 3 =  |
|   |         |                        |                   | FACU species x 4 =   |
| 2                                       |         |                        |                   | UPL species x 5 =  |
| 3                                       |         |                        |                   | Column Totals: (A) (B)   |
| 4                                       |         |                        |                   | ( )  |
| 5                                       |         |                        |                   | Prevalence Index = B/A =   |
| 6                                       |         |                        |                   | Hydrophytic Vegetation Indicators:   |
|   |         |                        |                   | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                       |         |                        |                   | X 2 - Dominance Test is >50%   |
| e1                                      | 0       | = Total Cove           | er                | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size: 51)            |         | 1.51                   |                   | 4 - Morphological Adaptations¹ (Provide supporting   |
| 1. Carex flava DW Juneus effusus        | 70_     | <u>x</u>               | OBL               | data in Remarks or on a separate sheet)  |
| 2. Carex flava                          | 10      | N                      | OBL               | Problematic Hydrophytic Vegetation¹ (Explain)  |
| 3. Ranunculus bulbosus                  |         |                        | FACW              | Indicators of hydric soil and wetland hydrology must   |
| 4. mentha spicata                       |         | Annah Armania          |                   | be present, unless disturbed or problematic.   |
|   |         |                        |                   | Definitions of Vegetation Strata:  |
| 5                                       |         |                        |                   |  |
| 6                                       |         |                        |                   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter   |
| 7                                       |         |                        |                   | at breast height (DBH), regardless of height.  |
| 8                                       |         |                        |                   | Sapling/shrub - Woody plants less than 3 in. DBH   |
| 9                                       |         |                        |                   | and greater than or equal to 3.28 ft (1 m) tall.   |
| 10                                      |         |                        |                   | Herb - All herbaceous (non-woody) plants, regardless of  |
|   |         |                        |                   | size, and woody plants less than 3.28 ft tall.   |
| 11                                      |         | -                      |                   | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                      |         |                        |                   | height.  |
|   | 95      | = Total Cove           | er                | The state of the s |
| Woody Vine Stratum (Plot size: 30')     |         |                        |                   |  |
|   |         |                        |                   |  |
| 1. NA+ Applicable                       |         |                        |                   |  |
| 1. Not Applicable                       |         |                        |                   | Hydrophytic  |
| 1. Not Applicable                       |         |                        |                   | Vegetation   |
| 1. Not Applicable 2. 3.                 |         |                        | -                 |  |
| 1. Not Applicable 2                     |         |                        | Section Section 1 | Vegetation   |

| Depth   | Matrix   |            |   | x Feature  |                              |                   |  | 200 Mark 1987  |
|---|--|------------|---|--|------------------------------|-------------------|--|--|
| (inches)  | Color (moist)  | %          | Color (moist)   | %  | Type <sup>1</sup>            | _Loc <sup>2</sup> | Texture  | Remarks  |
| 0-10A   | 2.54 3/1   | 90         | 1046 2/8  | 5  | C                            | <u>m</u>          | SIL  |  |
|   |  | -          | 104E 6/4  | 5  | <u>C</u>                     | <u></u>           | 6IL  |  |
|   |  |            |   |  |                              |                   |  |  |
|   |  |            |   | <u> </u>   |                              |                   |  |  |
|   | Mark to the second seco |            |   | *  |                              |                   |  |  |
| Type: C=C   | oncentration, D=Dep  | letion, RM | =Reduced Matrix, M  | S=Masked   | Sand Gr                      | ains.             | <sup>2</sup> Location: PL:   | =Pore Lining, M=Matrix.  |
| Histosol Histic Er Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy R Stripped |  |            | Polyvalue Belo MLRA 149B Thin Dark Surfa Loamy Mucky! Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress B) | )<br>ace (S9) (I<br>Mineral (F<br>Matrix (F2<br>( (F3)<br>rface (F6)<br>Surface (F | LRR R, MI<br>1) (LRR K<br>2) | LRA 149B)         | 2 cm Muck Coast Prairi 5 cm Mucky Dark Surfac Polyvalue B Thin Dark S Iron-Mangal Piedmont FI Mesic Spod Red Parent Very Shallon   | (A10) (LRR K, L, MLRA 149B) e Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) e (S7) (LRR K, L, M) elow Surface (S8) (LRR K, L) urface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) loodplain Soils (F19) (MLRA 149B) ic (TA6) (MLRA 144A, 145, 149B) Material (F21) w Dark Surface (TF12) ain in Remarks)  |
|   |  |            | etland hydrology mus  | st be prese  | ent, unless                  | disturbed         | or problematic.  |  |
|   | Layer (if observed):   |            |   |  |                              |                   |  | The second secon |
| Type:   | - K X  |            | •   |  |                              |                   | Carlot Ca | and the Property   |
| Depth (inc<br>Remarks:  | cnes):   |            |   |  |                              |                   | Hydric Soil Pres   | ent? Yes No No   |
|   |  |            |   | /  |                              |                   |  |  |
|   |  |            |   |  |                              |                   |  |  |
|   |  |            |   |  |                              |                   |  |  |
|   |  |            | ga en e   |  |                              |                   |  |  |

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: Ban Hill wind Project (  | City/County: chantangua cty Sampling Date: 11/11/15  |
|--|--|
| Applicant/Owner: Bon Hill Wind Energy, LL  | State: NY Sampling Point: 590  |
| Investigator(s): B. V: PTS, m. Bobery  | Section, Township, Range: YILENOVA   |
|  | ral relief (concave, convex, none): Slope (%): 3-5   |
|  | 197 Long: 42.442227 Datum: PAD 83  |
| Soil Map Unit Name:  | NWI classification: upland   |
| Are climatic / hydrologic conditions on the site typical for this time of year                   |  |
| Are Vegetation Nb , Soil Nb , or Hydrology Nb significantly                                      |  |
| Are Vegetation No , Soil No , or Hydrology No naturally pro                                      |  |
| The vegetation 140 , con 140 , or tryanology 140 internally pro                                  | timesed, explain any another in remaining  |
| SUMMARY OF FINDINGS – Attach site map showing  | sampling point locations, transects, important features, etc.                              |
| Hydrophytic Vegetation Present? Yes No 🔀   | Is the Sampled Area  |
| Hydric Soil Present? Yes No >  | within a Wetland? Yes No X   |
| Wetland Hydrology Present? Yes No ★  | If yes, optional Wetland Site ID:  |
| Remarks: (Explain alternative procedures here or in a separate repor                             |  |
| HYDROLOGY  |  |
| Wetland Hydrology Indicators:  | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all that apply)                            | Surface Soil Cracks (B6)   |
| Surface Water (A1) Water-Stained I   |  |
| High Water Table (A2) Aquatic Fauna  |  |
| Saturation (A3) Marl Deposits (I   |  |
| Water Marks (B1) Hydrogen Sulfic   | de Odor (C1) Crayfish Burrows (C8)   |
| Sediment Deposits (B2) Oxidized Rhizos   | spheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)                     |
| Drift Deposits (B3) Presence of Re   | 이 그리고 그렇게 살아보다 하다 그녀는 그녀는 그 그는 그들은 그들은 그리고 나를 하면서 다른 그리고 있다. 그리고 있는 것이 없는 것이 없는 것이 없다고 있다. |
| - BOND   | duction in Tilled Soils (C6) Geomorphic Position (D2)                                      |
| Iron Deposits (B5) Thin Muck Surfa   |  |
| Inundation Visible on Aerial Imagery (B7) Other (Explain i                                       |  |
| Sparsely Vegetated Concave Surface (B8) Field Observations:                                      | FAC-Neutral Test (D5)  |
| Surface Water Present? Yes No Depth (inches)   | e l  |
| Water Table Present? Yes No Depth (inches)   |  |
| Saturation Present? Yes No Depth (inches)  |  |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photo |  |
| Describe Recorded Data (stream gauge, monitoring well, aeriai photo                              | s, previous inspections), ii available.  |
| Remarks:   |  |
| Remarks.   |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

| Tree Stratum (Plot size: 30')  1. OOT Applicable |     |             | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)                            |
|--|-----|-------------|--------|---|
| 3  |     |             |        | Total Number of Dominant Species Across All Strata: (B)   |
| <b>4</b>   |     |             |        | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
| 6  |     |             |        | Prevalence Index worksheet:   |
| 7  |     |             |        | Total % Cover of:Multiply by:   |
| I - a - Lo land Localita                         | 0   | = Total Co  | /er    | OBL species 10 x1=10  |
| Sapling/Shrub Stratum (Plot size: 15'            |     |             |        | FACW species x 2 =  |
| 1. not Applicable                                |     |             | -      | FAC species 0 x 3 = 0  FACU species 85 x 4 = 345  |
| 2  |     |             |        | UPL species   |
| 3  |     |             |        | Column Totals: 100 (A) 375 (B)  |
| 4  |     |             |        |   |
| 5  |     |             |        | Prevalence Index = B/A = 3, 15  |
| 6  |     |             |        | Hydrophytic Vegetation Indicators:  |
| 7  |     |             |        | 1 - Rapid Test for Hydrophytic Vegetation   |
|  |     | = Total Cov | /or    | 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size:5')                      |     | - Total Co  | 701    | 3 - Prevalence Index is ≤3.0¹   |
| 1. schedonorus arundinaceous                     | 50  | V           | FACIL  | 4 - Morphological Adaptations¹ (Provide supporting  |
|  |     | Ý           | FACU   | data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)                |
| 2. Trifolium repens                              | 20  | -           | FACU   |   |
| 3. Junius effusus                                |     | N           | DBL    | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. Rusa multiflora                               |     | N           | FACUL  |   |
| 5. Pacicus carota                                | _5  | N           | UPL    | Definitions of Vegetation Strata:   |
| 6. Pantago Ionceolata<br>7.                      |     | N           | FACU   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.              |
| 8  |     |             |        | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 9  |     |             |        | Herb – All herbaceous (non-woody) plants, regardless of   |
| 10   |     | -           |        | size, and woody plants less than 3.28 ft tall.  |
| 11   |     | 1-          |        | Woody vines - All woody vines greater than 3.28 ft in   |
| 12   |     |             |        | height.   |
| Woody Vine Stratum (Plot size: 35')              | 100 | = Total Cov | er/    |   |
| 1. not Applicable                                | -   |             |        | A 4. A4.  |
| 2  |     |             |        | Hydrophytic Vegetation  |
| 3.   |     |             |        | Present? Yes No   |
|  |     |             |        |   |
| 4.   |     |             |        |   |
| 4  | 0   | = Total Cov | or     |   |

| Depth<br>(inches)  | ription: (Describe t  Matrix  Color (moist)   |                 | Red   | ox Feature                                | S                 |                   |   | ioutois.,   |  |
|--|---|-----------------|---|---|-------------------|-------------------|---|---|--|
| 0"-2"  | Z.57313   | 95              | Color (moist)   | %   | Type <sup>1</sup> | _Loc <sup>2</sup> | Texture   | Rema  | arks   |
| 2"-16"   |   |                 | 1042318   | _5  |                   |                   | STL   |   |  |
|  | 2.54313   | 100             |   |   |                   | -                 | SIL   |   |  |
| 16"-20"  | 1042516   | 100             | 1042518   | 55  |                   | m                 | SIL   |   |  |
|  |   |                 |   |   |                   |                   |   |   |  |
|  |   |                 |   |   |                   |                   |   |   |  |
| Type: C=Cor<br>ydric Soil In   | ncentration, D=Deple  | tion, RM=       | Reduced Matrix, M   | S=Masked                                  | Sand Grai         | ins.              | <sup>2</sup> Location: PL=F   | ore Lining, M   | =Matrix.   |
| <ul><li>Histosol (A</li><li>Histic Epil</li><li>Black Hist</li><li>Hydrogen</li><li>Stratified</li></ul> | A1)<br>pedon (A2)<br>tic (A3)<br>Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface                | -<br>-<br>(A11) | Polyvalue Belov MLRA 149B; Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix | ice (S9) (L<br>dineral (F1<br>Matrix (F2) | RR R, MLI         | RA 149B)          | Coast Prairie 5 cm Mucky F Dark Surface Polyvalue Bel                                 | 10) (LRR K, L<br>Redox (A16) (<br>eat or Peat (S<br>S7) (LRR K,<br>ow Surface (S                        | ., MLRA 149B)<br>LRR K, L, R)<br>33) (LRR K, L, R)<br>L, M)<br>8) (LRR K, L) |
| Thick Dari Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa   | Matrix (S6)<br>ace (S7) (LRR R, ML<br>nydrophylic vegetatio                                       |                 | Redox Dark Sui Depleted Dark S Redox Depress  | rface (F6)<br>Surface (F7<br>ions (F8)    |                   | disturbed o       | Piedmont Floo     Mesic Spodic     Red Parent M     Very Shallow I     Other (Explain | se Masses (F<br>dplain Soils (I<br>TA6) ( <b>MLRA</b><br>aterial (F21)<br>Dark Surface (                | 12) (LRR K, L, R)<br><sup>-</sup> 19) (MLRA 149B)<br>144A, 145, 149B)        |
| Thick Dari Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa   | icky Mineral (S1)<br>eyed Matrix (S4)<br>dox (S5)<br>Matrix (S6)<br>ace (S7) (LRR R, ML           |                 | Redox Dark Sui Depleted Dark S Redox Depress  | rface (F6)<br>Surface (F7<br>ions (F8)    |                   | disturbed o       | Iron-Mangane Piedmont Floo Mesic Spodic Red Parent M Very Shallow I Other (Explain    | se Masses (F<br>dplain Soils (I<br>TA6) ( <b>MLRA</b><br>aterial (F21)<br>Dark Surface (                | 12) (LRR K, L, R)<br><sup>-</sup> 19) (MLRA 149B)<br>144A, 145, 149B)        |
| Thick Dari Sandy Mu Sandy Gle Sandy Re Stripped M Dark Surfa   | icky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, ML hydrophytic vegetatio |                 | Redox Dark Sui Depleted Dark S Redox Depress  | rface (F6)<br>Surface (F7<br>ions (F8)    |                   | disturbed o       | Iron-Mangane Piedmont Floo Mesic Spodic Red Parent M Very Shallow I Other (Explain    | se Masses (F<br>dplain Soils (I<br>TA6) ( <b>MLRA</b><br>aterial (F21)<br>Dark Surface (<br>in Remarks) | 12) (LRR K, L, R)<br><sup>-</sup> 19) (MLRA 149B<br>144A, 145, 149B)         |

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautauqua Sampling Date: 11/11/2015 Applicant/Owner: Ball HIII Wind Energy, UC State: NY Sampling Point: 00 - 597 Investigator(s): M. Roberg B. Vivts Section, Township, Range: VILLEROVIX Landform (hillslope, terrace, etc.): HILSTOPC Local relief (concave, convex, none): Concave Slope (%): 2 Subregion (LRR or MLRA): <u>LRD-P</u> Lat: 79-121464 Long: <u>47-44157</u> Datum: NAD-83 Soil Map Unit Name: NWI classification: upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No\_, Soil No\_, or Hydrology No\_ significantly disturbed? Are "Normal Circumstances" present? Yes 🗶 No\_\_\_\_ Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area Yes X No Hydric Soil Present? within a Wetland? Yes W No Wetland Hydrology Present? If yes, optional Wetland Site ID: WL- A359 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) X High Water Table (A2) \_\_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) X Saturation (A3) \_\_\_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_\_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_ Sediment Deposits (B2) \_\_ Oxidized Rhizospheres on Living Roots (C3) \_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) \_\_ Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) \_\_ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) \_ FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): 0-1" Surface Water Present? Water Table Present? Yes X No \_\_\_\_ Depth (inches): 0" Yes X No \_\_\_\_ Depth (inches): 0\* Saturation Present? Wetland Hydrology Present? Yes 1 No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| ree Stratum (Plot size: 30 )                       | Absolute<br>% Cover | Dominant I Species? | Status | Dominance Test worksheet:  Number of Dominant Species         |
|--|---------------------|---------------------|--------|---|
| Not Applicable                                     |                     |                     |        | That Are OBL, FACW, or FAC: (A)                               |
| The April 1900                                     |                     |                     |        | Total Number of Dominant                                      |
|  |                     |                     |        | Species Across All Strata: (B)                                |
|  | -                   |                     |        | Percent of Dominant Species                                   |
|  |                     |                     |        | That Are OBL, FACW, or FAC:(A/B)                              |
|  |                     |                     |        |   |
|  |                     |                     |        | Prevalence Index worksheet:                                   |
| •  |                     | -                   |        | Total % Cover of: Multiply by:                                |
| 48   | 0                   | = Total Cov         | er     | OBL species x 1 =   |
| apling/Shrub Stratum (Plot size: 15')              |                     |                     |        | FACW species x 2 =<br>FAC species x 3 =                       |
| Not Applicable                                     |                     |                     |        | FAC species x 4 =   |
|  |                     |                     |        | UPL species x 5 =   |
|  |                     |                     |        | Column Totals: (A) (B)  |
| 3  |                     |                     |        | Column Totals.  |
| ***  |                     |                     |        | Prevalence Index = B/A =                                      |
| 5  |                     |                     |        | Hydrophytic Vegetation Indicators:                            |
| 3  |                     |                     |        | 1 - Rapid Test for Hydrophytic Vegetation                     |
| 7  |                     |                     | -      | X 2 - Dominance Test is >50%                                  |
|  | _D_                 | _ = Total Co        |        | 3 - Prevalence Index is ≤3.01                                 |
| Herb Stratum (Plot size: 5')                       |                     |                     |        | 4 - Morphological Adaptations (Provide supporting             |
| 1. Carex intumescens                               | 60                  | У                   | FACH   | data in Remarks of on a separate arresty                      |
| 2. Juneus effusus                                  |                     | N                   | OBL    | Problematic Hydrophytic Vegetation¹ (Explain)                 |
| 3. Typha latifolia                                 |                     | N                   | 084    | Indicators of hydric soil and wetland hydrology must          |
| 3. Nyria lamona                                    | - 5                 | N                   | OBL    | be present, unless disturbed or problematic.                  |
| 4 <u>Carex Hava</u>                                |                     | _                   | OBL    | Definitions of Vegetation Strata:                             |
| 5 Lythrum Salicaria                                |                     | _ 11/               |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter        |
| 6  |                     |                     |        | at breast height (DBH), regardless of height.                 |
| 7  |                     |                     |        | Sapling/shrub - Woody plants less than 3 in. DBH              |
| 8  |                     |                     |        | and greater than or equal to 3.28 ft (1 m) tall.              |
| 9  |                     |                     |        | Herb - All herbaceous (non-woody) plants, regardless of       |
| 10   |                     |                     |        | size, and woody plants less than 3.28 ft tall.                |
|  |                     |                     |        | Woody vines - All woody vines greater than 3.28 ft in         |
| 11   |                     |                     |        | Woody vines - All woody vines gleater than 3.26 it in height. |
| 12   | 100                 | = Total C           | OVE    | _ notion  |
| au au  | _100                | 101410              | OVCI   |   |
| Woody Vine Stratum (Plot size: 301 )               |                     |                     |        |   |
| 1. Nut Applicable                                  |                     |                     |        | Hydrophytic   |
| 2  |                     | _                   |        | - Vegetation  |
| 3.   |                     |                     |        | Present? Yes X No   |
| 4  |                     |                     |        | _   |
|  | 0                   | = Total C           | over   |   |
| Remarks: (Include photo numbers here or on a separ |                     | = Total C           | cover  |   |

| Profile Description: (Describe to Depth Matrix (inches) Color (moist)                | % Cole           | Redox Featur          | res          | or confirm | m the absence of   | of indicators.)     | npling Point: 5  |
|--|------------------|-----------------------|--------------|------------|--|---------------------|--|
| 1/10 0 - 3/  |                  | 1110131) %            | Type1        | _Loc2      |  |                     |  |
| 4  | 5 5YK 8          | 5                     | _ c          |            | - Trical C   | Re                  | marks  |
|  |                  |                       |              | WIPL       | 511  |                     |  |
|  |                  |                       |              | -          |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            | Marie Control of the  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  | , Mary - 5          |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  | 100                 |  |
|  |                  |                       | -            |            |  |                     |  |
|  |                  |                       |              |            | -1 - V   | # ¥                 | 7  |
|  |                  |                       |              |            |  |                     |  |
| Type: C=Concentration 5  |                  |                       |              |            | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |                     | 11.  |
| <sup>1</sup> Type: C=Concentration, D=Depletion, F<br>Hydric Soil Indicators:        | RM=Reduced Ma    | atrix MS=Most         | -            |            |  |                     |  |
| — Histosol (A1)  |                  | - Mo-Wasked S         | and Grains   | ),         | <sup>2</sup> Location: PI =  | Pore Lining, M=     |  |
| Histic Epipedon (A2)   | Polyvalu         | le Below Surface (S   |              |            | Indicators for P   | roblematic Unit     | Matrix.  |
| — Black Histic (A3)  | MLRA             | 149B)                 | 8) (LRR R,   |            | 2 CITI WILLOW (  | A10) /I DD IZ .     | # E40  |
| - Hydrogen Sulfide (AA)  | Thin Dark        | k Surface (SO) (1     | D            |            | Coast Prairie  | Redox (A1e)         | MLRA 149B)   |
| _ Stratified Layers (AF)   | Loamy M          | Nucky Mineral (F1) (I | R WLRA       |            |  |                     |  |
| _ Depleted Below Dork O.   |                  |                       | LKK K, L)    | _          |  |                     |  |
| - Mon Dark Surface (A12)   | - Depleted       | Matrix /E31           |              | -          | - i olyvalue Bel   | OW Surface (CO)     |  |
| - Sandy Mucky Mineral (C1)   | A Redox Da       | ark Surface (Ec)      |              | -          |  |                     |  |
| - Sandy Gleved Matrix (CA)   | Depleted         | Dark Surface (F7)     |              | -          | - "Oli-Mailuane  | SA MARAGE ITTE      | The Control of the Co |
| - Sandy Redox (S5)   | Redox De         | pressions (F8)        |              | -          | _ Piedmont Floo  | odplain Soils (F19) | 9) (MI RA 140D   |
| Stripped Matrix (S6)   |                  |                       |              |            | _ Mesic Spodic<br>_ Red Parent Ma  | (TA6) (MLRA 14      | 4A. 145 149B   |
| Dark Surface (S7) (LRR R, MLRA 149   | B)               |                       |              |            | Man Ot "   |                     |  |
| dicators of hydraulau  |                  |                       |              | -          | Very Shallow D   | Dark Surface (TF    | 12)  |
| strictive Lavor (%)  | etland hydrology | munt ha               |              | _          | Other (Explain   | in Remarks)         |  |
| dicators of hydrophytic vegetation and we<br>strictive Layer (if observed):<br>Type: | y a crogy        | must be present, ur   | nless distur | bed or pro | blematic   |                     |  |
| Denth (in-t  |                  |                       |              |            | The state of the s |                     |  |
| Depth (inches):  |                  |                       |              |            |  |                     |  |
| narks:   |                  |                       |              | Hydi       | ric Soil D   |                     |  |
|  |                  |                       |              | ,          | ric Soil Present?  | Yes X               | No   |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     | 1  |
|  |                  |                       |              |            |  |                     | 1  |
|  |                  |                       |              |            |  |                     | 1  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     | 1  |
|  |                  |                       |              |            |  |                     |  |
|  |                  |                       |              |            |  |                     |  |
|  |                  | A.                    |              |            |  |                     |  |
|  |                  | £                     |              |            |  |                     |  |
|  |                  | #                     |              |            |  |                     |  |

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: <u>Saul HIII Wind Project</u> city/county: <u>Chautauqua</u> Applicant/Owner: Ball HIII WING Energy, UC Sampling Date: 11/11/15 State: NY Sampling Point: 398 Investigator(s): M. BOOPR B. VITTS Section, Township, Range: Landform (hillslope, terrace, etc.): Hillstope Local relief (concave, convex, none): | Flat | Slope (%): D Subregion (LRR or MLRA): L128-12 Lat: 79.12/374 Long: 42.44/687 Datum: NAD 83 Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) NWI classification: upland Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_X No\_\_\_ Are Vegetation No., Soil No., or Hydrology No. 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? Is the Sampled Area Hydric Soil Present? Yes \_\_\_\_ No X within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_ No X Yes\_\_\_\_Nox Remarks: (Explain alternative procedures here or in a separate report.) If yes, optional Wetland Site ID:\_\_\_ HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two required) \_\_ Surface Water (A1) Surface Soil Cracks (B6) \_\_ Water-Stained Leaves (B9) \_\_ High Water Table (A2) \_\_\_ Drainage Patterns (B10) \_\_\_ Aquatic Fauna (B13) \_\_ Saturation (A3) \_\_ Moss Trim Lines (B16) \_\_ Marl Deposits (B15) Water Marks (B1) \_\_\_ Dry-Season Water Table (C2) Hydrogen Sulfide Odor (C1) \_\_\_ Sediment Deposits (B2) \_\_ Crayfish Burrows (C8) \_\_\_ Oxidized Rhizospheres on Living Roots (C3) \_\_\_ \_\_ Drift Deposits (B3) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) \_\_\_ Algal Mat or Crust (B4) \_\_ Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) \_\_ Iron Deposits (B5) Geomorphic Position (D2) \_\_ Thin Muck Surface (C7) Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3) Other (Explain in Remarks) \_ Sparsely Vegetated Concave Surface (B8) \_\_\_ Microtopographic Relief (D4) Field Observations: FAC-Neutral Test (D5) Surface Water Present? Yes \_\_\_\_ No \_X \_\_ Depth (inches): Water Table Present? Yes \_\_\_\_ No X Depth (inches): Saturation Present? Yes \_\_\_\_ No \_k \_\_ Depth (inches): (includes capillary fringe) Wetland Hydrology Present? Yes \_\_\_\_\_ No.\* Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30)            | Absolute<br>% Cover |   | t Indicator    | Dominance Test worksheet:   |
|---|---------------------|---|----------------|---|
| 1. Prunus serotina                      | ZO ZO               | V                                       | Status<br>FACU | Number of Dominant Species  |
| 2. Populus tremulaides                  | 15                  | ~                                       | FACU           | That Are OBL, FACW, or FAC:(A)                                    |
| 3. Acer sarcharum                       | 5                   | N                                       |                | Total Number of Dominant Species Across All Strata:  5 (B)        |
|   |                     | _IV                                     | FACU           | openios / in out and in (=/                                       |
| 4                                       |                     |   |                | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)    |
| 5                                       | -                   |   |                | mat Ale OBL, FACW, 01 FAC (A/B)                                   |
| 6                                       |                     |   |                | Prevalence Index worksheet:                                       |
| 7                                       |                     |   |                | Total % Cover of: Multiply by:                                    |
|   | 40                  | = Total C                               | over           | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 151 ) |                     |   |                | FACW species x 2 =  |
| 1. Phamnus cathartica                   | _5_                 | У                                       | FACU           | FAC species x3 = 15   |
| 2                                       |                     | *************************************** |                | FACU species 125 x 4 = 500  |
| 3                                       |                     |   |                | UPL species $5$ $x = 25$<br>Column Totals: $135$ (A) $540$ (B)    |
| 4                                       |                     |   |                | Column Totals: 135 (A) 540 (B)                                    |
| 5                                       |                     |   |                | Prevalence Index = B/A = 4  |
| 6.                                      |                     |   |                | Hydrophytic Vegetation Indicators:                                |
|   | -                   |   | -              | 1 - Rapid Test for Hydrophytic Vegetation                         |
| 7                                       | 5                   | T.1.10                                  |                | 2 - Dominance Test is >50%  |
| 51                                      | -                   | = Total C                               | over           | 3 - Prevalence Index is ≤3.01                                     |
| Herb Stratum (Plot size: 51 )           | 3.6                 |   | AW . 257       | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting    |
| 1. Trifolium repens                     | 30                  | <u> </u>                                | FACU           | data in Remarks or on a separate sheet)                           |
| 2. Schedonorus arundinaceous            | 38                  | _ <u>x</u>                              | FACU           | Problematic Hydrophytic Vegetation¹ (Explain)                     |
| 3. Pantago lanceolata                   | 10                  | N                                       | FACU           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must |
| 4. Dacicus pusitius                     | 5                   | N                                       | NI             | be present, unless disturbed or problematic.                      |
| 5. Fragaria vesca                       | 5                   | N                                       | NI             | Definitions of Vegetation Strata:                                 |
| 6. Taraxacum officinale                 | 5                   | N                                       | FACU           | Tree - Woody plants 3 in. (7.6 cm) or more in diameter            |
| 7. Euthama Graminifolia                 | 5                   | N                                       | FAC            | at breast height (DBH), regardless of height.                     |
| 8. Daucus carota                        | 5                   | N                                       | UPL            | Sapling/shrub - Woody plants less than 3 in. DBH                  |
| 9. Rosa multiflora                      | 5                   | N                                       | FACU           | and greater than or equal to 3.28 ft (1 m) tall.                  |
| 10                                      | -                   |   |                | Herb - All herbaceous (non-woody) plants, regardless of           |
| 11                                      |                     |   |                | size, and woody plants less than 3.28 ft tall.                    |
|   |                     | -                                       |                | Woody vines - All woody vines greater than 3.28 ft in             |
| 12                                      | 100                 |   |                | height.   |
| 201                                     | 100                 | = Total C                               | over           |   |
| Woody Vine Stratum (Plot size: 30')     |                     |   |                |   |
| 1. Not applicable                       |                     |   |                | Hydrophytic   |
| 2                                       |                     | -                                       |                | Vegetation  |
| 2,                                      |                     |   |                | Present? Yes No X   |
| 3                                       |                     |   |                |   |
| 3                                       |                     |   |                |   |
| 3                                       |                     | = Total C                               | over           |   |

| nches)  | Matrix Color (moist)   | %          | Color (moist)  | ox Features  |                                    | Loc <sup>2</sup> | Texture Remarks  |
|---|--|------------|--|--|------------------------------------|------------------|--|
| -6  | 2.54 3/3   | 100        |  |  |                                    |                  | 5  |
| 0-9   | 2.54 6/8   | 80         | 2.543/3  | 15   | 0                                  | m                | SIL  |
|   | 6.01.10  |            | 104R 518   | 5  | c                                  | m                | SIL  |
| 7-20  | 10VR 3/4   | 100        |  |  |                                    |                  | SIL  |
|   |  | -          |  |  |                                    |                  |  |
|   |  |            |  |  |                                    |                  |  |
| Type: C=C   | oncentration D=De  | nletion RM | =Reduced Matrix, M   | IS=Masker  | Sand Gr                            | ains             | <sup>2</sup> Location: PL=Pore Lining, M=Matrix.   |
| Histosol Histic E Black Hi Hydroge Stratified Deplete Thick D: Sandy M Sandy F Stripped Dark Su | pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surfac ark Surface (A12) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR R, | MLRA 149   | — Polyvalue Belo  MLRA 149E  Thin Dark Suri  Loamy Mucky  Loamy Gleyed  Depleted Matr  Redox Dark S  Depleted Dark  Redox Depres | 3) face (S9) (I Mineral (F I Matrix (F2 ix (F3) urface (F6) c Surface (F8) | LRR R, M<br>1) (LRR k<br>2)<br>77) | LRA 149B         | <ul> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 1</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 1</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul> |
|   | Layer (if observed   |            | etiana nyarology me  | ot be pred   | orit, driido                       | o diotal bed     |  |
| Type:   |  |            |  |  |                                    |                  |  |
| Depth (in   | ches):   |            |  |  |                                    |                  | Hydric Soil Present? Yes No  |
|   |  |            |  |  |                                    |                  |  |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Investigator(s): M. Bolberg B. VITES  Landform (hillslope, terrace, etc.): Hillslope  Subregion (LRR or MLRA): LRZ-IZ Lat: 79.  Soil Map Unit Name:  Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation No., Soil No., or Hydrology No. significant Are Vegetation No., Soil No., or Hydrology No. naturally | Section, Township, Range:_<br>Local relief (concave, convex, n<br> 21369 Long: |   |
|--|--|---|
| Subregion (LRR or MLRA): LRZ-IZ Lat: 79.  Soil Map Unit Name:  Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation 16. Soil 16. Or Hydrology 16. Significan   | 121369 Long: _   |   |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or Hydrology <u>No</u> significan  | Want Van V   | NWI classification: upland  |
| SUMMARY OF FINDINGS – Attach site map showing  | htty disturbed? Are "Norm problematic? (If needed                              | (If no, explain in Remarks.)  al Circumstances" present? Yes No , explain any answers in Remarks.)  ions, transects, important features, etc. |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X  No  Yes X  No  Wetland Hydrology Present?  Yes X  No  Remarks: (Explain alternative procedures here or in a separate re  | Is the Sampled Area<br>within a Wetland?<br>If yes, optional Wetla             |   |
| HYDROLOGY  |  |   |
| Wetland Hydrology Indicators:  |  | Secondary Indicators (minimum of two required)  |
| Primary Indicators (minimum of one is required; check all that appl  | ed Leaves (B9)   | Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16)  |
| X         Saturation (A3)         Marl Deposit           Water Marks (B1)         Hydrogen St  |  | <ul><li>Dry-Season Water Table (C2)</li><li>Crayfish Burrows (C8)</li></ul>   |
| Drift Deposits (B3) Presence of Algal Mat or Crust (B4) Recent Iron  | Reduced Iron (C4)<br>Reduction in Tilled Soils (C6)                            | <ul><li>Stunted or Stressed Plants (D1)</li><li>Geomorphic Position (D2)</li></ul>  |
|  | Surface (C7)<br>ain in Remarks)  | <ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>  |
| Sparsely Vegetated Concave Surface (B8) Field Observations:  |  | FAC-Neutral Test (D5)   |
| Surface Water Present? Yes X No Depth (inch Water Table Present? Yes X No Depth (inch Saturation Present? Yes X No Depth (inch (includes capillary fringe)   | es): 0" Wetland  | Hydrology Present? Yes X No   |
| Describe Recorded Data (stream gauge, monitoring well, aerial ph   | lotos, previous inspections), it a   | vallable:   |
| Remarks:   |  |   |
|  |  |   |

VEGETATION - Use scientific names of plants. Sampling Point: \_599 Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 30') % Cover Species? Status Number of Dominant Species 1. Not Applicable That Are OBL, FACW, or FAC: \_ (A) Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_55\_\_\_ x 1 = \_\_55\_ \_\_\_ = Total Cover Sapling/Shrub Stratum (Plot size: 151 ) FACW species 15 x 2 = 30 FAC species  $10 \times 3 = 30$ 1. Not Applicable FACU species 0 x4= 0 UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ Column Totals: <u>80</u> (A) <u>115</u> (B) Prevalence Index = B/A = 1.43 Hydrophytic Vegetation Indicators: \_ 1 - Rapid Test for Hydrophytic Vegetation X 2 - Dominance Test is >50% O = Total Cover X 3 - Prevalence Index is ≤3.0¹ Herb Stratum (Plot size: 5) 4 - Morphological Adaptations (Provide supporting 1. Juneus effusus OBL data in Remarks or on a separate sheet) 2. Polygonum persicaria 20 Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) NI 3. Eupotorium perfoliatum 15 N FACIN <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 4. Carex flava 10 N OBL 5. Eleocharis aelcularis 5 N **Definitions of Vegetation Strata:** OBL 6. Euthamia graminifolia 5 N FAC Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 7. Pumex crispus 5 FAC Sapling/shrub - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height. 100 = Total Cover Woody Vine Stratum (Plot size: 30') 1. Not Applicable

O = Total Cover

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

Yes X No

Hydrophytic Vegetation Present?

| Depth<br>(inches)  | Color (moist)   |           | Red   | ox Feature   | es                        |                  | i the absence of h  | idicators.)  |
|--|---|-----------|---|--|---------------------------|------------------|---|--|
|  |   | _%_       | Color (moist)   | %  | _Type <sup>1</sup>        | Loc <sup>2</sup> | Texture   | Remarks  |
| 0-(ø"  | 2.5y 3/1  | 95        | 10423/8   | 5  |                           | m                | 814   |  |
|  |   |           |   |  |                           |                  |   |  |
|  |   |           |   |  |                           | - Total Salar    |   |  |
| ype: C=C ydric Soil Histosol   | oncentration, D=Deple<br>Indicators:<br>(A1)  | etion, RM | =Reduced Matrix, MS   |  |                           |                  | Indicators for P  | Pore Lining, M=Matrix. roblematic Hydric Soils <sup>3</sup> :  |
| Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped | pipedon (A2) stic (A3) In Sulfide (A4) I Layers (A5) I Below Dark Surface ark Surface (A12) lucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, ML |           | MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M Depleted Matrix X Redox Dark Sur Depleted Dark S Redox Depressi | ce (S9) (L<br>fineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F | .RR R, MLR<br>) (LRR K, L | A 149B)          | Coast Prairie Coast Prairie Som Mucky Dark Surface Polyvalue Be Thin Dark Su Iron-Mangan Piedmont Flo Mesic Spodie Red Parent N | A10) (LRR K, L, MLRA 149B) Re Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) Re (S7) (LRR K, L, M) Relow Surface (S8) (LRR K, L) Rurface (S9) (LRR K, L) Rese Masses (F12) (LRR K, L, R) Rodoplain Soils (F19) (MLRA 149B) Material (F21) Material (F21) In In Remarks) |
| dicators of  | hydrophytic vegetatio   | n and we  | tland hydrology must  | be presei  | nt, unless di             | sturbed o        | r problematic   |  |
| other L  | ayer (if observed):   |           |   |  |                           |                  | - p. salemano.  |  |
| Type:  | haa).   |           |   |  |                           |                  |   |  |
| Depth (inc   | nes):   |           |   |  |                           |                  | Hydric Soil Prese   | nt? Yes X No   |
| ,  |   |           |   |  |                           |                  |   |  |

# WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

|   | ty/County: Chautauqua Sampling Date: 11/11/15                                      |
|---|--|
| Applicant/Owner: Ball HIII WIND Energy, U.C.  | State: NY Sampling Point: (LCC)  |
| Investigator(s): M. Briberg B. Virts Se   | ection, Township, Range: VIUL - VM   |
| Landform (hillslope, terrace, etc.): HIIISIOPE Local                                      | relief (concave, convex, none): F104 Slope (%): 0                                  |
| Subregion (LRR or MLRA): LRQ R Lat: 79, 1213  | 339 Long: 42, 440976 Datum: Upland   |
| Soil Map Unit Name:   | NWI classification: upland   |
| Are climatic / hydrologic conditions on the site typical for this time of year            | ? Yes X No (If no, explain in Remarks.)  |
| Are Vegetation <u>N.b.</u> , Soil <u>N.b.</u> , or Hydrology <u>N.D</u> significantly dis | sturbed? Are "Normal Circumstances" present? Yes X No                              |
| Are Vegetation $N_0$ , Soil $N_0$ , or Hydrology $N_0$ naturally problem                  | ematic? (If needed, explain any answers in Remarks.)                               |
| SUMMARY OF FINDINGS – Attach site map showing s   | campling point locations, transects, important features, etc.                      |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No X  Yes _X No                | Is the Sampled Area within a Wetland? Yes No X                                     |
| Wetland Hydrology Present? Yes X No   | If yes, optional Wetland Site ID:  |
| HYDROLOGY   |  |
| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required)                                     |
| Primary Indicators (minimum of one is required; check all that apply)                     | Surface Soil Cracks (B6)   |
| Surface Water (A1) Water-Stained Le   |  |
| Aquatic Fauna (B  |  |
| X Saturation (A3) Marl Deposits (B1   |  |
| Water Marks (B1) Hydrogen Sulfide   | [2] 사용하게 살아내면 하는 데 얼마는 그렇게 되었다. 그렇게 되었다. 그는 그리는 그리는 그리는 그리는 그리는 그리는 그리는 그리는 그리는    |
|   | theres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)              |
| Drift Deposits (B3) Presence of Redu<br>Algal Mat or Crust (B4) Recent Iron Redu          |  |
| Iron Deposits (B5) Thin Muck Surface  | uction in Tilled Soils (C6) Geomorphic Position (D2) te (C7) Shallow Aquitard (D3) |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in                               |  |
| Sparsely Vegetated Concave Surface (B8)   | FAC-Neutral Test (D5)  |
| Field Observations:   |  |
| Surface Water Present? Yes No _X Depth (inches):  |  |
| Water Table Present? Yes X No Depth (inches): (   |  |
| Saturation Present? Yes X No Depth (inches): 0 (includes capillary fringe)                | Wetland Hydrology Present? Yes X No  |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos,                     | previous inspections), if available:   |
|   |  |
| Remarks:  |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |
|   |  |

| Tree Stratum (Plot size: 30' )  1. NOT Applicable  | % Cover |             | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)              |
|--|---------|-------------|--------|---|
| 2  |         |             |        | Total Number of Dominant Species Across All Strata: (B)   |
| 3  |         |             |        |   |
| 4  |         |             |        | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)                                      |
| 5  |         |             |        |   |
| 6  |         |             |        | Prevalence Index worksheet:   |
| 7  |         |             |        | Total % Cover of: Multiply by:  |
|  | 0       | = Total Cov | er     | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 15')   |         |             |        | FACW species x 2 =  |
| 1. Not Applicable  |         | -           |        | FAC species 1 x3 = 3  |
| 2  |         |             |        | FACU species <u>98</u> x4 = <u>392</u>  |
| 3  |         |             |        | UPL species   |
|  |         |             |        | Column Totals: 100 (A) 396 (B)  |
| 4.   |         |             |        | Prevalence Index = B/A = 3.96   |
| 5  |         |             |        | Hydrophytic Vegetation Indicators:  |
| 6  |         |             |        | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7  |         |             |        | 2 - Dominance Test is >50%  |
|  | _0_     | = Total Co  | ver    | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 5')   |         |             |        | 4 - Morphological Adaptations¹ (Provide supporting  |
| 1. Schedonorus arundinaceous   | 60      | Y           | FACU   | data in Remarks or on a separate sheet)   |
| 2 trifollum repens   | 30      | У           | FACU   | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| 3. Pantago lanceolata  |         | N           | FACU   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must                                   |
| 4. Juncus effusus  |         |             | OBL    | be present, unless disturbed or problematic.  |
| 5. Junius tenius   |         |             | FAC    | Definitions of Vegetation Strata:   |
| A Language of the Control of the Con |         |             |        | The Manager to 2 in (7.6 cm) or more in diameter  |
| 6  |         |             |        | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. |
| 7  |         |             |        | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8  |         |             |        | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |         |             |        | Herb – All herbaceous (non-woody) plants, regardless of   |
| 10   |         |             |        | size, and woody plants less than 3.28 ft tall.  |
| 11   |         |             |        |   |
| 12.  |         |             |        | Woody vines – All woody vines greater than 3.28 ft in height.                                       |
|  | 100     | = Total Co  | ver    |   |
| Woody Vine Stratum (Plot size:30')   |         |             |        |   |
| 1. NOT Applicable  |         |             |        |   |
|  | -       | -           |        | Hydrophytic   |
| 2  |         | -           | ·      | Vegetation Present? Yes No X  |
| 3  |         | -           | -      | Present? res No A   |
|  | -       |             |        |   |
| 4  |         |             |        |   |

| - | - | ٠ |  |
|---|---|---|--|
|   |   |   |  |
|   |   |   |  |

Sampling Point: LOCG

|                       |                                  | to the de   | pth needed to docu          |                 |                        | or confirm       | the absence o   | f indicators.)   |
|-----------------------|----------------------------------|-------------|-----------------------------|-----------------|------------------------|------------------|-----------------|--|
| Depth<br>(inches)     | Color (moist)                    | %           | Color (moist)               | ox Feature<br>% | s<br>Type <sup>1</sup> | Loc <sup>2</sup> | Texture         | Remarks  |
| Ú-13                  | 2.54 3/2                         | 95          | 10/R 3/6                    | 5               | rype                   |                  | SIL             | Lenging  |
| 13-20                 | 2.54 3/2                         | 85          | 2.54 3/1                    | 5               | D                      | m                | 516             |  |
| 100                   | 231 12                           | - 0.5       | 1042 3/6                    | 10              | 0                      | m                | SIL             | and the second s |
|                       |                                  |             | 10412 -10                   | 10              |                        | 111              | OIL             |  |
|                       | ****                             | -           |                             |                 |                        |                  |                 |  |
|                       | - <del> </del>                   |             |                             |                 |                        |                  |                 |  |
|                       | /                                | -           |                             | -               |                        | <del></del>      |                 |  |
|                       | Name and the second              |             |                             |                 | -                      |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       | A                                |             |                             |                 |                        |                  | -               |  |
| -                     |                                  |             |                             |                 |                        |                  |                 |  |
|                       | · ·                              |             | -                           |                 | -                      |                  |                 |  |
| 1                     |                                  | -           |                             |                 | -                      | -                | -               |  |
| Type: C=C Hydric Soil |                                  | pletion, RN | M=Reduced Matrix, M         | IS=Maske        | d Sand Gr              | ains.            |                 | PL=Pore Lining, M=Matrix. or Problematic Hydric Soils³:  |
| Histosol              |                                  |             | Polyvalue Beld              | ow Surface      | (S8) (LP               | RR.              |                 | uck (A10) (LRR K, L, MLRA 149B)  |
| Histic E              | pipedon (A2)                     |             | MLRA 149E                   |                 | (00) (210              | ,                |                 | rairie Redox (A16) (LRR K, L, R)   |
|                       | istic (A3)                       |             | Thin Dark Sur               |                 |                        |                  |                 | ucky Peat or Peat (S3) (LRR K, L, R)   |
|                       | en Sulfide (A4)<br>d Layers (A5) |             | Loamy Mucky<br>Loamy Gleyed |                 |                        | (, L)            |                 | rface (S7) (LRR K, L, M)<br>ue Below Surface (S8) (LRR K, L)   |
|                       | d Below Dark Surfa               | ce (A11)    | Depleted Matr               |                 | -)                     |                  |                 | rk Surface (S9) (LRR K, L)   |
| Thick D               | ark Surface (A12)                |             | X Redox Dark S              | urface (F6      |                        |                  | Iron-Ma         | nganese Masses (F12) (LRR K, L, R)   |
|                       | Mucky Mineral (S1)               |             | Depleted Dark               |                 | =7)                    |                  |                 | nt Floodplain Soils (F19) (MLRA 149B)  |
|                       | Gleyed Matrix (S4)<br>Redox (S5) |             | Redox Depres                | sions (F8)      |                        |                  |                 | podic (TA6) ( <b>MLRA 144A, 145, 149B</b> )<br>rent Material (F21)   |
|                       | Matrix (S6)                      |             |                             |                 |                        |                  |                 | allow Dark Surface (TF12)  |
|                       | ırface (S7) (LRR R,              | MLRA 149    | 9B)                         |                 |                        |                  |                 | Explain in Remarks)  |
| ³Indicators o         | of hydrophytic veget             | ation and v | vetland hydrology mu        | ist be pres     | ent. unles             | s disturbed      | or problematic. |  |
|                       | Layer (if observed               |             | Turing try are or ogy tries |                 | orn, arrioo            | o diotarboa      | T problemation  |  |
| Type:                 |                                  |             | -                           |                 |                        |                  |                 |  |
| Depth (in             | iches):                          |             | -                           |                 |                        |                  | Hydric Soil F   | Present? Yes X No  |
| Remarks:              | Co. Col. College                 |             |                             |                 |                        |                  |                 | 19   |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |
|                       |                                  |             |                             |                 |                        |                  |                 |  |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind City/County: Chautangua Sampling Date: 11/11/15 Applicant/Owner: Ball HIII Wind Energy, UC State: NY Sampling Point: LOOL Villenova Investigator(s): M. BODERQ B. VIVTS Section, Township, Range:\_ Landform (hillslope, terrace, etc.): HIIISIODE Local relief (concave, convex, none): (1) (2) (2) (5) Slope (%): 119456 Long: 42,440737 Datum: NAD-8 Subregion (LRR or MLRA): LRR-P Lat: NWI classification:\_upland Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.) Are Vegetation No , Soil No , or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation No., Soil No., or Hydrology No. naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Is the Sampled Area Hydrophytic Vegetation Present? Yes X No Yes X No within a Wetland? Hydric Soil Present? Yes X Yes\_X Wetland Hydrology Present? If yes, optional Wetland Site ID: WL-A5UL Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) X Drainage Patterns (B10) X High Water Table (A2) \_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) X Saturation (A3) \_\_\_ Marl Deposits (B15) Dry-Season Water Table (C2) Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) \_\_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) \_\_ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_\_ Thin Muck Surface (C7) \_\_ Iron Deposits (B5) Shallow Aguitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): ()-\" Surface Water Present? Yes X No Depth (inches): 2" Water Table Present? Yes X No Depth (inches): ()" Saturation Present? Wetland Hydrology Present? Yes X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| VEGETATION – Use scientific names of |
|--------------------------------------|
|--------------------------------------|

|                 | 40.00 |  |
|-----------------|-------|--|
| Sampling Point: | 1001  |  |

| Tree Stratum (Plot size: 301 )  1. Not Applicable | % Cover    | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)                             |
|---|------------|----------------------|--------|---|
| 23  |            |                      |        | Total Number of Dominant Species Across All Strata: (B)   |
| 4   |            |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)   |
| 6   | -          |                      |        | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
|   |            | = Total Cove         | er     | OBL species x 1 =   |
| Sapling/Shrub Stratum (Plot size: 151             |            |                      |        | FACW species x 2 =  |
|   |            |                      |        | FAC species x 3 =   |
| 1. NOT Applicable                                 |            |                      |        | FACU species x 4 =  |
| 2   |            |                      |        | UPL species x 5 =   |
| 3   | ,          | -                    |        | Column Totals: (A) (B)  |
| 4   | -          |                      |        | Descriptions Index = D/A =  |
| 5,  |            |                      |        | Prevalence Index = B/A =  |
| 6   |            |                      |        | Hydrophytic Vegetation Indicators:  |
| 7   |            |                      |        | 1 - Rapid Test for Hydrophytic Vegetation   |
|   |            | = Total Cov          | er     | ★ 2 - Dominance Test is >50%  |
| Herb Stratum (Plot size: 5')                      |            | - 11 5 111 ( 2 2 )   | 7      | 3 - Prevalence Index is ≤3.01   |
| 1. JUNCUS effusus                                 | 40         | V                    | DBL    | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)            |
|   |            |                      |        | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 2 Eleocharis aeicularis                           |            |                      | OBL    |   |
| 3. Eupotorium perfoliatum                         |            |                      | FACIN  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. Scirpus cyperinas                              | _ 5_       | N                    | OBL    |   |
| 5   |            |                      |        | Definitions of Vegetation Strata:   |
| 6   |            |                      |        | Tree - Woody plants 3 in. (7.6 cm) or more in diameter  |
| 7   |            |                      |        | at breast height (DBH), regardless of height.   |
| 8   |            |                      |        | Sapling/shrub - Woody plants less than 3 in. DBH  |
| 9   |            |                      |        | and greater than or equal to 3.28 ft (1 m) tall.  |
|   |            |                      |        | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10  |            |                      |        | size, and woody plants less than 3.28 ft tall.  |
| 11  |            |                      |        | Woody vines - All woody vines greater than 3.28 ft in   |
| 12  | -          |                      |        | height.   |
|   | 100        | _ = Total Cov        | /er    |   |
| Woody Vine Stratum (Plot size: 30')               |            |                      |        |   |
| 1. Not Applicable                                 |            |                      |        |   |
| 2   |            |                      |        | Hydrophytic   |
| 3   |            |                      |        | Vegetation Present? Yes X No  |
| 4   |            | -                    |        |   |
| 4   |            | T-1-10-              |        | •   |
| 4   | te sheet.) | _ = Total Co         | ver    |   |

| nches)   | Color (moist)  | %          | Color (moist)       | %T   | ype <sup>1</sup> | Loc <sup>2</sup>  | Texture   | Remarks  |
|--|--|------------|---------------------|--|------------------|-------------------|---|--|
| 5-8  | Z.5Y 8/1   | 95         | 1042518             | 5  | <u></u>          | _m                | 510   |  |
|  |  |            |                     |  |                  |                   |   |  |
|  |  |            |                     |  |                  |                   |   |  |
|  | All and a second a |            |                     |  |                  |                   |   |  |
|  | oncentration, D=Dep  | letion, RM | 1=Reduced Matrix, M | S=Masked Sa  | and Gra          | ains.             |   | PL=Pore Lining, M=Matrix. r Problematic Hydric Soils³:   |
| Black Hi Hydroge Stratified Depleted Thick Da Sandy M Sandy F Stripped Dark Su | bipedon (A2) stic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R, I  | VILRA 149  |                     | ) ace (S9) (LRF Mineral (F1) (I Matrix (F2) x (F3) urface (F6) Surface (F7) sions (F8) | RR, ML           | .RA 149B)<br>, L) | Coast Pra 5 cm Muc Dark Surf Polyvalue Thin Dark Iron-Mang Piedmont Mesic Sp Red Pare Very Shal | ck (A10) (LRR K, L, MLRA 149B)  nirie Redox (A16) (LRR K, L, R)  cky Peat or Peat (S3) (LRR K, L, R)  ace (S7) (LRR K, L, M)  Below Surface (S8) (LRR K, L)  Surface (S9) (LRR K, L)  ganese Masses (F12) (LRR K, L, R)  Floodplain Soils (F19) (MLRA 149B  odic (TA6) (MLRA 144A, 145, 149B  nt Material (F21)  Illow Dark Surface (TF12)  splain in Remarks)   |
|  | f hydrophytic vegeta<br>Layer (if observed)  |            | etland hydrology mu | st be present,   | unless           | disturbed         | or problematic.   | A section of the sect |
| Type:<br>Depth (in   | ches):   |            |                     |  |                  |                   | Hydric Soil Pr  | esent? Yes X No  |
| emarks:  |  |            |                     |  |                  |                   |   |  |

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: BALL HILL WIND PROJECT City/County: Chaufaugua Sampling Date: 11/11/15 Applicant/Owner: Ball Hill Wind Energy, U.C. \_\_ State: NY Sampling Point: L002 Investigator(s): m Boberg B. YITTS Section, Township, Range: V(CUpove Landform (hillslope, terrace, etc.): HILS 100C Local relief (concave, convex, none): F10+ Slope (%): O Subregion (LRR or MLRA): LIZIZ-IZ Lat: 9,119253 Long: 42,440761 Datum: NAD83 Soil Map Unit Name: \_ NWI classification: upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No., Soil No., or Hydrology No. significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation No , Soil No , or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No X Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes \_\_\_\_ No X If yes, optional Wetland Site ID:\_\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_ Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) \_\_ High Water Table (A2) Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_\_ Saturation (A3) \_\_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_ Water Marks (B1) \_\_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) \_\_\_ Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) \_\_ Microtopographic Relief (D4) \_ Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_\_ No X Depth (inches): Water Table Present? Yes \_\_\_\_ No \_ Depth (inches): Saturation Present? Yes \_\_\_\_ No X Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_ No X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| ree Stratum (Plot size: 30 '                       | Absolute<br>% Cover | Dominant<br>Species? | Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL FACW or FAC:  (A)  |
|--|---------------------|----------------------|--------|---|
| Not Applicable                                     |                     |                      |        | macAle OBL, I AOVI, OTTAGE  |
|  |                     |                      |        | Total Number of Dominant Species Across All Strata: (B)   |
|  |                     |                      |        | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)   |
|  |                     |                      |        | Prevalence Index worksheet:   |
| S  |                     |                      |        | Total % Cover of: Multiply by:  |
|  |                     | = Total Co           | ver    | OBL species <u>5</u> x1= <u>5</u>   |
| Sapling/Shrub Stratum (Plot size: 15               |                     |                      |        | FACW species x 2 = D  |
| Not Applicable                                     |                     |                      |        | FAC species   |
| 2.   |                     |                      |        | FACU species <u>85</u> x4 = <u>340</u> UPL species <u>5</u> x5 = <u>25</u>  |
| 3  |                     |                      |        | UPL species $\underline{5}$ $\times 5 = \underline{25}$ Column Totals: $\underline{95}$ (A) $\underline{370}$ (B)             |
| 3<br>4   |                     |                      |        |   |
|  |                     |                      |        | Prevalence Index = B/A = 3.89   |
| 5  |                     |                      |        | Hydrophytic Vegetation Indicators:  |
| 6  |                     |                      |        | 1 - Rapid Test for Hydrophytic Vegetation   |
| 7  |                     | = Total Co           |        | 2 - Dominance Test is >50%  |
| 51   |                     | _= 10tal Of          | JVEI   | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size: 51)                       |                     | V                    | FACU   | <ul> <li>4 - Morphological Adaptations<sup>1</sup> (Provide supporting<br/>data in Remarks or on a separate sheet)</li> </ul> |
| 1. Schedonorus arundinaceous                       |                     | y                    |        | Problematic Hydrophytic Vegetation¹ (Explain)   |
| 2. Trifolium repens                                | 45                  |                      | FACU   |   |
| 3. Dancys carota                                   |                     | <u>N</u>             | UPL    | be present, unless disturbed or problematic.  |
| 4. Daucus pusitius                                 |                     | N                    | NI     | Definitions of Vegetation Strata:   |
| 5. Junius Ettusus                                  |                     |                      | OBL    |   |
| 6  |                     |                      |        | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.                          |
| 7  |                     |                      |        | Sapling/shrub – Woody plants less than 3 in. DBH  |
| 8  | -                   |                      |        | and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |                     |                      | _      | Herb - All herbaceous (non-woody) plants, regardless of   |
| 10   | -                   |                      | -      | size, and woody plants less than 3.28 ft tall.  |
| 11   |                     | _                    |        | Woody vines - All woody vines greater than 3.28 ft in   |
| 12   |                     |                      |        | height.   |
|  | 100                 | = Total (            | Cover  |   |
| Woody Vine Stratum (Plot size: 30')                |                     |                      |        |   |
| 1. Not Applicable                                  | -                   |                      |        | - In districts  |
| 2  |                     |                      |        | Hydrophytic Vegetation  |
| 3.   |                     | -                    |        | Present? Yes No X   |
| 4.   |                     |                      |        | <u> </u>  |
| -  | C                   | ) = Total            | Cover  |   |
| Remarks: (Include photo numbers here or on a separ | ate sheet.)         |                      |        |   |
| Transfer (means pro-                               |                     |                      |        |   |
|  |                     |                      |        |   |
|  |                     |                      |        |   |
|  |                     |                      |        |   |
|  |                     |                      |        |   |

Sampling Point: 1007

| Depth<br>(inches)                                      | ription: (Describe  Matrix  Color (moist)   | %          | Redo  | ox Feature  | S                    |            |  | or maroutors.,   |
|--|---|------------|---|---|----------------------|------------|--|--|
| 0-6  | 2.54 3/2  |            | Color (moist)   | %   | Type <sup>1</sup>    |            |  | Remarks  |
|  | 254.972   | <u> 98</u> | 10712 3/8   | 2   | <u></u>              | _m         | _5IL   |  |
|  |   |            |   |   |                      |            |  |  |
|  |   |            |   |   |                      |            |  |  |
|  |   | tion, RM=F | Reduced Matrix, MS  | =Masked   | Sand Grain           | is.        | <sup>2</sup> Location:   | PL=Pore Lining, M=Matrix.  or Problematic Hydric Soils <sup>3</sup> :  |
| Thick Dark Sandy Muc Sandy Gley Sandy Redd Stripped Ma | edon (A2) c (A3) Sulfide (A4) ayers (A5) elow Dark Surface ( Surface (A12) ky Mineral (S1) red Matrix (S4) px (S5) atrix (S6) re (S7) (LRR R, ML) | RA 149B)   | Polyvalue Below MLRA 149B) Thin Dark Surfact Loamy Mucky Mit Loamy Gleyed M Depleted Matrix ( Redox Dark Surfact Depleted Dark Surfact Redox Depression | e (S9) (LF<br>neral (F1)<br>atrix (F2)<br>F3)<br>ace (F6)<br>ırface (F7)<br>ns (F8) | RRR, MLR<br>(LRRK, L | A 149B)    | 2 cm Mu<br>Coast Pr<br>5 cm Mu<br>Dark Sur<br>Polyvalue<br>Thin Dark<br>Iron-Man<br>Piedmont<br>Mesic Sp<br>Red Pare<br>Very Shal<br>Other (Ex | ck (A10) (LRR K, L, MLRA 149B) airie Redox (A16) (LRR K, L, R) cky Peat or Peat (S3) (LRR K, L, R) face (S7) (LRR K, L, M) e Below Surface (S8) (LRR K, L) k Surface (S9) (LRR K, L) ganese Masses (F12) (LRR K, L, R) t Floodplain Soils (F19) (MLRA 149B odic (TA6) (MLRA 144A, 145, 149B ont Material (F21) llow Dark Surface (TF12) eplain in Remarks) |
| dicators of hys  | drophytic vegetation<br>er (if observed):   | and wetla  | nd hydrology must b   | e present   | , unless dis         | sturbed or | problematic.   |  |
| Type:  |   |            |   |   |                      |            |  |  |
| Depth (inches  | 3):   |            |   |   |                      |            | Uvdala Call Da   |  |
| marks:   |   |            |   |   |                      |            | Hydric Soil Pre  | esent? Yes X No  |
|  |   |            |   |   |                      |            |  |  |

| WETLAND DETE   | RMINATION DATA FOR                  | M – Northcentral a                    | and Northeast Region   |
|--|-------------------------------------|---------------------------------------|--|
| Project/Site: BAILHIII Wind  | Project City/Co                     | ounty: Chantia                        | COLA CT Y Sampling Date: 11 12 2015  |
| Applicant/Owner: BAIL HILL WE  |                                     |                                       |  |
| nvestigator(s): B.Victs, S. Bucl   | Canmerrer Section                   |                                       | VILLEROVA  |
| andform (hillslope, terrace, etc.): hills  | ,                                   | ef (concave, convex, no               | 0.0  |
| Subregion (LRR or MLRA): LRR-R-  | Lat: 79, 16115                      |                                       | 2.440785 , Datum: Nap 83   |
| Soil Map Unit Name: CHIAN TANDUA   |                                     |                                       | NWI classification: 40 GW  |
|  |                                     |                                       |  |
| Are climatic / hydrologic conditions on the site   | A /                                 |                                       |  |
| Are Vegetation No., Soil No., or Hydro   |                                     |                                       | I Circumstances" present? Yes X No   |
| Are Vegetation <u>N o</u> , Soil <u>No</u> , or Hydro  | ology <u>NO</u> naturally problema  | tic? (If needed,                      | explain any answers in Remarks.)   |
| SUMMARY OF FINDINGS - Attac  | h site map showing sam              | pling point location                  | ons, transects, important features, etc.   |
|  |                                     |                                       | , , ,  |
| ,  | es No                               | Is the Sampled Area within a Wetland? | Yes X No   |
|  | es X No                             |                                       | Aria   |
|  | es _X No                            | If yes, optional Wetland              | d Site ID: <u>A 56 2</u>   |
| Remarks: (Explain alternative procedures h   | nere or in a separate report.)      |                                       |  |
|  |                                     |                                       |  |
|  |                                     |                                       |  |
|  |                                     |                                       |  |
|  |                                     |                                       |  |
|  |                                     |                                       |  |
|  |                                     |                                       |  |
| IYDROLOGY  |                                     |                                       |  |
| Wetland Hydrology Indicators:  |                                     |                                       | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is requ   | ired; check all that apply)         |                                       | Surface Soil Cracks (B6)   |
| Surface Water (A1)   | Water-Stained Leaves                | s (B9)                                | X Drainage Patterns (B10)  |
| High Water Table (A2)  | Aquatic Fauna (B13)                 |                                       | Moss Trim Lines (B16)  |
| Saturation (A3)  | Marl Deposits (B15)                 | 1144                                  | Dry-Season Water Table (C2)  |
| Water Marks (B1)   | Hydrogen Sulfide Odd                |                                       | Crayfish Burrows (C8)  |
| <ul><li>Sediment Deposits (B2)</li><li>Drift Deposits (B3)</li></ul>   | Oxidized Rhizosphere                | es on Living Roots (C3)               | <ul> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Stunted or Stressed Plants (D1)</li> </ul> |
| Algal Mat or Crust (B4)  | Recent Iron Reduction               |                                       | Geomorphic Position (D2)   |
| Iron Deposits (B5)   | Thin Muck Surface (C                |                                       | Shallow Aquitard (D3)  |
| Inundation Visible on Aerial Imagery (B  |                                     |                                       | Microtopographic Relief (D4)   |
| Sparsely Vegetated Concave Surface   |                                     | idiks)                                | FAC-Neutral Test (D5)  |
| Field Observations:  | (50)                                |                                       | ///o reduct rest (20)  |
| A COLUMN TO THE PARTY OF THE PA | No Depth (inches):                  | ,"                                    |  |
|  | No Depth (inches): ()               | ii .                                  | i.   |
|  | No Depth (inches): ()               | A TOTAL CONTRACTOR                    | Hydrology Present? Yes No  |
| (includes capillary fringe)  | 0                                   |                                       |  |
| Describe Recorded Data (stream gauge, m  | onitoring well, aerial photos, pre- | vious inspections), if av             | ailable:   |
|  |                                     |                                       |  |
| Remarks:   |                                     |                                       |  |
| Remarks.   |                                     |                                       |  |
|  |                                     |                                       |  |
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|  |                                     |                                       |  |
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|  |                                     |                                       |  |

| Tree Stratum (Plot size: 30' )  1. Not Applicable           | -        | Species? Status | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)  |
|---|----------|-----------------|---|
| 23  |          |                 | Total Number of Dominant Species Across All Strata:  (B)  |
| 4   |          |                 | Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| 6   |          |                 |   |
| Sapling/Shrub Stratum (Plot size: 15') 1. Not Applicable 2. | <u> </u> | = Total Cover   | OBL species       x 1 =         FACW species       x 2 =         FAC species       x 3 =         FACU species       x 4 =         UPL species       x 5 = |
| 3<br>4  |          |                 | Column Totals: (A) (B)  Prevalence Index = B/A =  |
| 5   |          |                 | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation   |
| Herb Stratum (Plot size: 5')                                | 0        | = Total Cover   |   |
| 1. Threes effuses   | 20       | Ves ORL         | 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  |
| 2. CAREX Flava  |          |                 |   |
| 3. Schedonorus arundiraceas                                 |          |                 |   |
| 4. Trifolium Repens   | 5        | NO FACE         |   |
| 5. Toraxacum officinale                                     | 5        | NO FACE         |   |
| 6. Rammentus balbosus                                       |          | NO FACE         |   |
| 7<br>8  |          |                 | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| 9   |          |                 | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| 11  |          |                 | Woody vines – All woody vines greater than 3.28 ft in height.   |
| Woody Vine Stratum (Plot size: 30')                         | 85       | _= Total Cover  |   |
| 1. Not Applicable   |          | C               | Hydrophytic   |
| 2   |          |                 | Vegetation Present? Yes No  |
| 3   | ,        |                 |   |
| 4   | 0        | = Total Cover   |   |
| Remarks: (Include photo numbers here or on a separate       | sheet.)  | _= Total Cover  |   |

SOIL Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Sampling Point: DY -604 Redox Features (inches) Color (moist) Color (moist) Texture <sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: <sup>2</sup>Location: PL=Pore Lining, M=Matrix, Indicators for Problematic Hydric Soils<sup>3</sup>: \_ Histosol (A1) Polyvalue Below Surface (S8) (LRR R, — Histic Epipedon (A2) \_\_\_ 2 cm Muck (A10) (LRR K, L, MLRA 149B) MLRA 149B) \_\_ Black Histic (A3) Coast Prairie Redox (A16) (LRR K, L, R) Thin Dark Surface (S9) (LRR R, MLRA 149B) \_\_ Hydrogen Sulfide (A4) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) Loamy Mucky Mineral (F1) (LRR K, L) \_\_ Stratified Layers (A5) \_\_\_ Dark Surface (S7) (LRR K, L, M) Loamy Gleyed Matrix (F2) \_\_ Depleted Below Dark Surface (A11) Polyvalue Below Surface (S8) (LRR K, L) Depleted Matrix (F3) \_\_ Thick Dark Surface (A12) Thin Dark Surface (S9) (LRR K, L) X Redox Dark Surface (F6) \_\_ Sandy Mucky Mineral (S1) Iron-Manganese Masses (F12) (LRR K, L, R) \_\_\_ Depleted Dark Surface (F7) \_\_ Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149B) Redox Depressions (F8) \_\_ Sandy Redox (S5) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) \_\_ Stripped Matrix (S6) Red Parent Material (F21) \_\_\_ Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Remarks:

| WETLAND DETERMINATION DATA FORM - North  | ncentral and Northeast Region   |
|--|---|
| Project/Site: BION HILL WIND Project City/County: CH   | MINTONOLO CTY Sampling Date: 11/12/20   |
| Applicant/Owner: BRILL HILL WIND Energy, LLC   | State: NY Sampling Point: DP-60   |
| Investigator(s): B. Victs, S. Buckenmeyer Section, Township  | 1 24 6  |
|  | convex, none): Convex Slope (%): 2-3  |
|  |   |
|  |   |
| Soil Map Unit Name: CHANTALOUR SILK John 3-80% Slop  |   |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes1                                     |   |
| Are Vegetation No., Soil No., or Hydrology No. significantly disturbed?  | Are "Normal Circumstances" present? Yes 🙏 No  |
| Are Vegetation No , Soil No , or Hydrology No naturally problematic?   | (If needed, explain any answers in Remarks.)  |
|  | and Kontribution and the state of the state |
| SUMMARY OF FINDINGS – Attach site map showing sampling poi   | int locations, transects, important features, etc.  |
| Hydrophytic Vegetation Present? Yes No X Is the Sam  | npled Area  |
| Hydric Soil Present? Yes No X within a W   | /etland? Yes No X   |
|  | onal Wetland Site ID:   |
| Remarks: (Explain alternative procedures here or in a separate report.)  | Stat World of the ID.   |
|  |   |
| Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) | 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)  |
| Sediment Deposits (B2) Oxidized Rhizospheres on Living Orift Deposits (B3) Presence of Reduced Iron (C4)                 | Stunted or Stressed Plants (D1)   |
| Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Sc   |   |
| Iron Deposits (B5) Thin Muck Surface (C7)  | Shallow Aquitard (D3)   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)   | Microtopographic Relief (D4)  |
| Sparsely Vegetated Concave Surface (B8) Field Observations:  | FAC-Neutral Test (D5)   |
| Surface Water Present? Yes No Depth (inches):  |   |
| Water Table Present? Yes No Depth (inches):  |   |
| Saturation Present? Yes No _X _ Depth (inches):  | Wetland Hydrology Present? Yes No X   |
| (includes capillary fringe)  |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec                                    | ctions), if available:  |
|  |   |
| Remarks:   |   |
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| VEGETATION – Use scientific names of plan | V | EGETA | TION | - Use | scientific | names | of | plant | S |
|---|---|-------|------|-------|------------|-------|----|-------|---|
|---|---|-------|------|-------|------------|-------|----|-------|---|

| Tree Stratum (Plot size: 30')       | Absolute<br>% Cover | Dominant<br>Species? | The Property of Section 1991 | Dominance Test worksheet:   |
|-------------------------------------|---------------------|----------------------|------------------------------|---|
| Not Applicable                      |                     |                      |                              | Number of Dominant Species That Are OBL, FACW, or FAC:  (A)   |
|                                     |                     |                      |                              | Total Number of Dominant Species Across All Strata: 2 (B)   |
|                                     |                     |                      |                              |   |
|                                     |                     | -                    |                              | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B  |
|                                     |                     |                      |                              |   |
|                                     |                     |                      |                              | Prevalence Index worksheet:  Total % Cover of: Multiply by:   |
|                                     | 0                   | = Total Cov          | er                           | OBL species x1 =O   |
| apling/Shrub Stratum (Plot size: 15 | -                   |                      |                              | FACW species  |
| Not Applicable                      |                     |                      |                              | FAC species $O \times 3 = O$  |
| 1 X                                 |                     |                      |                              | FACU species <u>95</u> x4 = <u>380</u><br>UPL species <u>5</u> x5 = <u>25</u>                       |
|                                     |                     |                      |                              | Column Totals: 100 (A) 405 (B)  |
|                                     |                     |                      |                              |   |
|                                     |                     |                      |                              | Prevalence Index = B/A = U. os  |
|                                     |                     | 1                    |                              | Hydrophytic Vegetation Indicators:  |
|                                     |                     |                      |                              | 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%                                |
| -1                                  | _0_                 | = Total Cov          | rer                          | 3 - Prevalence Index is ≤3.0 <sup>4</sup>   |
| lerb Stratum (Plot size: 5          |                     |                      |                              | 4 - Morphological Adaptations (Provide supporting   |
| Trifolium Repeas                    | 50                  |                      | FACH                         | data in Remarks or on a separate sheet)   |
| · Toraxacum Officinale              |                     | 405                  | FACH                         | Problematic Hydrophytic Vegetation¹ (Explain)   |
| Schedonarus arindiracea             | -01                 | No                   | Frach                        | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.   |
| Payens carota                       |                     | 20                   | MPL                          |   |
| Rosh multiflora                     |                     | NO                   | FACU                         |   |
| Solanum Carolinense                 |                     |                      | FACH                         | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height. |
| ·                                   |                     |                      |                              | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
|                                     |                     |                      |                              | Herb – All herbaceous (non-woody) plants, regardless of   |
| 0                                   |                     |                      |                              | size, and woody plants less than 3.28 ft tall.  |
| 1                                   |                     |                      |                              | Woody vines - All woody vines greater than 3,28 ft in   |
| 2                                   |                     |                      |                              | height.   |
| 25'                                 | 100                 | _ = Total Cov        | ver                          |   |
| Voody Vine Stratum (Plot size: 35)  |                     |                      |                              |   |
|                                     | -                   |                      | . —                          | Hydrophytic   |
| ·                                   | ,                   | -                    |                              | Vegetation Present? Yes No  |
|                                     |                     | -                    | -                            |   |
| Tr.                                 | 0                   | = Total Co           | ver                          |   |
|                                     |                     | 10101 00             |                              |   |

| Profile Desc | cription: (Describe  | to the dep | oth needed to docu   | ment the i  | ndicator                                | or confirm                              | n the absence                           | of indicators.)  |
|--------------|--|------------|--|-------------|---|---|---|--|
| Depth        | Matrix   |            | Redo   | x Feature   | S                                       |   |   |  |
| (inches)     | Color (moist)  | %_         | Color (moist)  | %           | Type <sup>1</sup>                       | Loc <sup>2</sup>                        | Texture                                 | Remarks  |
| 0-11         | JOYR 3/4   | 100        |  |             |   |   | SIL                                     |  |
| 11-30        | 2.545/6  | 90         | 10 yr 3/4  | 10          | C                                       | M                                       | SIL                                     |  |
|              |  |            |  |             |   |   |   |  |
|              | 10,000   |            |  | -           |   |   |   | ·  |
|              |  | -          |  |             |   |   |   |  |
|              | Tarapana da cara da ca |            | - Control of the cont |             |   |   | - Paris                                 | 1  |
|              |  |            |  |             |   |   |   |  |
|              |  | -          |  |             | -                                       | -                                       | -                                       |  |
|              | ***  |            |  |             | *************                           | *************************************** | -                                       |  |
|              |  |            | -  | -           |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  | -          |  |             | -                                       |   | -                                       | ) <del></del>  |
|              |  |            |  | -           | *************************************** |   | *************************************** |  |
|              | oncentration, D=Dep  | letion, RM | =Reduced Matrix, M   | S=Masked    | Sand Gra                                | ins.                                    | <sup>2</sup> Location                   | : PL=Pore Lining, M=Matrix.                                      |
| Hydric Soil  |  |            |  |             |   |   | Indicators                              | for Problematic Hydric Soils <sup>3</sup> :                      |
| Histosol     |  |            | Polyvalue Belo   |             | (S8) (LRR                               | R,                                      |   | Muck (A10) (LRR K, L, MLRA 149B)                                 |
|              | pipedon (A2)<br>istic (A3)   |            | MLRA 149B<br>Thin Dark Surfa   |             | DD D MI                                 | DA 440D                                 |   | Prairie Redox (A16) (LRR K, L, R)                                |
|              | en Sulfide (A4)  |            | Loamy Mucky !  |             |   |   |   | Mucky Peat or Peat (S3) (LRR K, L, R) Surface (S7) (LRR K, L, M) |
|              | d Layers (A5)  |            | Loamy Gleyed   |             |   | _,                                      |   | llue Below Surface (S8) (LRR K, L)                               |
|              | d Below Dark Surface   | e (A11)    | Depleted Matrix  |             |   |   |   | ark Surface (S9) (LRR K, L)                                      |
|              | ark Surface (A12)  |            | Redox Dark Su  |             |   |   |   | anganese Masses (F12) (LRR K, L, R)                              |
|              | Mucky Mineral (S1)   |            | Depleted Dark  |             | 7)                                      |   |   | ont Floodplain Soils (F19) (MLRA 149B)                           |
|              | Gleyed Matrix (S4)<br>Redox (S5)   |            | Redox Depress  | sions (F8)  |   |   |   | Spodic (TA6) (MLRA 144A, 145, 149B) arent Material (F21)         |
|              | Matrix (S6)  |            |  |             |   |   |   | thallow Dark Surface (TF12)                                      |
|              | rface (S7) (LRR R, M   | ILRA 149   | B)   |             |   |   |   | (Explain in Remarks)   |
| 3            |  |            |  |             |   |   |   | 200  |
| Indicators o | f hydrophytic vegetat<br>Layer (if observed):  | ion and we | etland hydrology mus   | st be prese | ent, unless                             | disturbed                               | or problemation                         | S  |
| Type:        | Layer (ii observeu).   |            |  |             |   |   |   |  |
| Depth (in    | chael:   |            |  |             |   |   | Hydric Soil                             | December Voc. No. X  |
|              | Ciles)   |            |  |             |   |   | Hydric Soil                             | Present? Yes No  |
| Remarks:     |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   | 1 10   |
|              |  |            |  |             |   |   |   | 1.0  |
|              |  |            |  |             |   |   |   |  |
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|              |  |            |  |             |   |   |   | P 1  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   | 17   |
|              |  |            |  |             |   |   |   |  |
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|              |  |            |  |             |   |   |   |  |
|              |  |            |  |             |   |   |   |  |

| VVE  | TLAND DETERMINATION DATA                           | FORM – Northcentral and Northeast Region   |
|--|--|--|
| Project/Site: 15 VAII 1-                           | III LHAD DALL                                      | City/County: CHALTALOLO CTY Sampling Date: 11/12/201   |
| Applicant/Owner: R. I                              | 1 Hill Wind energy ucc                             | Sampling Date: 112/201   |
| Investigator(s) B. Vict                            | 5 S. Buck social series                            | State: NY Sampling Point: 0P-60 Section, Township, Range: VILLE-OVA  |
| l andform /hillelong torrang                       | e, etc.): hillstope Loca                           | Section, Township, Range: VILLEROVA  |
| ( Figure 1 ionidae                                 | Local Local  | al relief (concave, convex, none): CONCAVE Slone (%): A - 2  |
| Subregion (LRR or MLRA):                           | 1 nt /9 / 1 / 6                                    | 157/   |
| Soil Map Unit Name:                                | X15+; 5: 1+10cm 3-8-159                            | Taskman Lloland  |
| Are climatic / hydrologic cor                      | nditions on the site typical for this time of year | r2 Vac X   |
| Alle Vegetation _ (50), Soil                       | 100, or Hydrology Nr) significantly d              | listurbod?   |
| Are Vegetation <u>No</u> , Soil                    | No, or Hydrology No naturally prob                 | Produkt 163 <u>- 1</u> 110   |
|  |  | and the second s |
| COMMAN OF FIND                                     | NGS – Attach site map showing s                    | sampling point locations, transects, important features, etc   |
| Hydrophytic Vegetation Pro                         | esent? Yes X No                                    | Is the Sampled Area  |
| Hydric Soil Present?                               | Yes X No   | within a Wetland? Yes No   |
| Wetland Hydrology Presen                           | t? Yes X No  | A = (1)  |
| Remarks: (Explain alterna                          | tive procedures here or in a separate report.)     | If yes, optional Wetland Site ID: 4564   |
| HYDROLOGY Wetland Hydrology Indica                 | itors:   |  |
|  | n of one is required; check all that apply)        | Secondary Indicators (minimum of two required)   |
| ✓ Surface Water (A1)                               |  | Surface Soil Cracks (B6)   |
| X High Water Table (A2)                            | Water-Stained Lea                                  | aves (B9) X Drainage Patterns (B10)  |
| ∑ Saturation (A3)                                  | Aquatic Fauna (B1                                  | Moss Trim Lines (B16)  |
| Water Marks (B1)                                   | Marl Deposits (B15                                 | = 21) occasin vvater rable (C2)  |
| Sediment Deposits (B2)                             | Hydrogen Sulfide (     Vidized Phizopph            | = orayilari barrows (Co)   |
| Drift Deposits (B3)                                | Presence of Reduc                                  | inagely (00)   |
| Algal Mat or Crust (B4)                            | Recent Iron Reduc                                  | = = = = = = = = = = = = = = = = = = =  |
| Iron Deposits (B5)                                 | Thin Muck Surface                                  |  |
| Inundation Visible on Ae                           | erial Imagery (B7) Other (Explain in R             | ondirent riquitard (DS)  |
| Sparsely Vegetated Cor                             | cave Surface (B8)                                  | emarks) Microtopographic Relief (D4) FAC-Neutral Test (D5)   |
| Field Observations:                                |  |  |
| Surface Water Present?                             | Yes No Depth (inches): <                           | $\mathcal{O}_{\mathfrak{m}}$   |
| Water Table Present?                               | Yes No Depth (inches): (                           | )"   |
| Saturation Present?<br>(includes capillary fringe) | Yes No Depth (inches):                             | Wetland Hydrology Present? Yes No  |
| Describe Recorded Data (stre                       | eam gauge, monitoring well, aerial photos, pr      | No   |
|  | begg, memoring well, aerial photos, pi             | revious inspections), if available:  |
|  |  |  |
| Remarks:   |  |  |
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| Absolute | Dominant I                    | ndicator            | Dominance Test worksheet:  |  |   |
|----------|-------------------------------|---------------------|--|--|---|
| % Cover  | Species?                      | Status              | Number of Dominant Species That Are OBL, FACW, or FAC:   | 2  | (A)   |
|          |                               |                     | Total Number of Dominant<br>Species Across All Strata:   | 2  | (B)   |
|          |                               |                     | Percent of Dominant Species  | 100  | (A/B)   |
|          | -                             |                     | That Are OBL, FACW, 011 Ac.  |  | (~0)  |
|          |                               |                     |  | ultiply by:  |   |
| 0        | = Total Cove                  | er                  | OBL species x 1 = .  |  | _   |
|          |                               |                     | FACW species x 2 = .   |  | -   |
|          |                               |                     | FAC species x 3 =  |  | -   |
|          |                               |                     |  |  |   |
|          |                               |                     | UPL species x 5 =  |  |   |
|          |                               |                     |  |  |   |
|          |                               |                     | Prevalence Index = B/A =   |  |   |
|          |                               |                     |  |  |   |
|          |                               |                     |  | egetation/   |   |
| 7        |                               | -                   |  |  |   |
|          | _ = Total Cov                 | er                  | 3 - Prevalence Index is ≤3.01  |  |   |
| 30       | Vec                           | ası                 | 4 - Morphological Adaptations  | (Provide su<br>arate shee  | ipporting<br>t)   |
|          | -                             |                     |  |  |   |
| -        | -                             |                     |  |  |   |
| _        | 7.57                          |                     | be present, unless disturbed or prob   | ematic.  | ,,,,,,,   |
| 10       |                               |                     |  |  |   |
| 3        |                               |                     | All the second of the second o |  | and delice  |
|          |                               |                     | Tree – Woody plants 3 in. (7.6 cm) at breast height (DBH), regardless of   | or more in<br>of height.   | diamete   |
|          | -                             |                     | Sapling/shrub - Woody plants less  | than 3 in.   | DBH   |
|          |                               |                     |  |  | less of   |
|          |                               |                     | size, and woody plants less than 3.28 ft   | t tall.  |   |
|          |                               | -                   |  | er than 3.28   | ft in   |
| 90       | = Total Co                    | over                |  |  |   |
|          |                               |                     |  |  |   |
|          |                               | ů i <del>–</del>    | Hydrophytic  |  |   |
| _        |                               | -                   | - Vegetation Present? Yes  | No   |   |
|          |                               |                     | Present? Yes   |  |   |
|          |                               |                     |  |  |   |
|          |                               |                     |  |  |   |
|          | 0<br>30<br>20<br>15<br>5<br>5 | 0 = Total Covers 30 | (1) = Total Cover  30  | Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of: Mt.  OBL species x1 = FACW species x2 = FAC species x3 = FACU species x4 = UPL species x5 = Column Totals: (A)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators 1 - Rapid Test for Hydrophytic V 2 - Dominance Test is >50%  3 - Prevalence Index is 30¹  4 - Morphological Adaptations¹ data in Remarks or on a sep Problematic Hydrophytic Vegetation Indicators of hydric soil and wetland be present, unless disturbed or prot Definitions of Vegetation Strata:  Tree - Woody plants 3 in. (7.6 cm) at breast height (DBH), regardless and greater than or equal to 3.28 ft Herb - All herbaceous (non-woody) p size, and woody plants less than 3.28 ft Woody vines - All woody vines greats height. | That Are OBL, FACW, OF FAC:  Total Number of Dominant Species Across All Strata:  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:  Total % Cover of Multiply by:  OBL species x1 = FACW species x2 = FACW species x3 = FACU species x4 = UPL species x5 = Column Totals: (A)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation |

| (inches)  | cription: (Describe<br>Matrix   |            | Rad                | ox Features  | ulcator             | or confir | ii the absence of in   | dicators.)  |  |
|---|---|------------|--------------------|--|---------------------|-----------|--|---|--|
| ^   | Color (moist)   | %          | Color (moist)      | %  | Type <sup>1</sup>   | _Loc2     | Texture  | Dame  | 40   |
| )-8   | 2.5y 3/1  | 80         | 10YR.5/8           | 20   | C                   | M         | SIL  | Rema  | rks  |
|   |   |            |                    |  |                     |           |  |   |  |
| Type: C=Cor<br>ydric Soil In<br>_ Histosol (A   |   | etion, RM= |                    |  |                     |           | <sup>2</sup> Location: PL=F  | oblematic Hydr  | ric Solls³:  |
| Histic Epij Black Hist Hydrogen Stratified I Depleted I Thick Dark Sandy Mu Sandy Gle Sandy Rec Stripped M Dark Surfa | pedon (A2) tic (A3) I Sulfide (A4) Layers (A5) Below Dark Surface k Surface (A12) Icky Mineral (S1) Eyed Matrix (S4) dox (S5) Matrix (S6) Index (S7) (LRR R, ML | (A11) -    |                    | ce (S9) (LR<br>ineral (F1)<br>flatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7)<br>ons (F8)   | RR, MLF<br>(LRRK, L | RA 149B)  | 5 cm Mucky F Dark Surface Polyvalue Bel Thin Dark Sur Iron-Mangane Piedmont Floc Mesic Spodic Red Parent Ma Very Shallow I | Redox (A16) (Li<br>leat or Peat (S3,<br>(S7) (LRR K, L,<br>ow Surface (S8)<br>face (S9) (LRR<br>se Masses (F12<br>dplain Soils (F1<br>(TA6) (MLRA 14<br>aterial (F21)<br>Dark Surface (Ti | RR K, L, R) ) (LRR K, L, R) M) (LRR K, L) K, L) K, L) (LRR K, L, R) (J (LRR K, L, R) 9) (MLRA 1491 |
| strictive La  | ydrophytic vegetation   | n and wetl | and hydrology must | be present,  | unless di           | sturbed o | r problematic.   |   |  |
| Type:   | , ( 0.0001100).   |            |                    |  |                     |           |  |   |  |
| Depth (inche  | 98):  |            |                    |  |                     |           | 0.44 - 0.4   |   |  |
| - shar furnit   |   |            |                    |  |                     |           | Hydric Soil Present  | ? Yes X   | _ No   |
|   | es):  |            |                    | The second secon |                     |           | Hydric Soil Present  | ? Yes X   | _ No _   |

| Hydrophytic Vegetation Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  High Water Table (A2)  Water Marks (B1)  Sediment Deposits (B2)  Diring Position (B2)  Algal Mat or Crust (B4)  Algal Mat or Crust (B4) | Soil Map Unit Name: Bush  Are climatic / hydrologic conditions on Are Vegetation No, Soil No, or Are Vegetation No, Soil No, or   | Lat: 17-1195  S. 1+1ecm. 3-8%  the site typical for this time of year:  Hydrology No significantly dis  Hydrology No naturally problem.  | ? Yes No (If no, explain in Remarks.) sturbed? Are "Normal Circumstances" present? Yes X No.   |
|--|---|--|--|
| 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)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Drift Deposits (B3)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Present?  Yes  No  Depth (inches):  Surface Water (A1)  Water Stained Leaves (B9)  Aquatic Fauna (B13)  Moss Trim Lines (B10)  Moss Trim Lines (B10)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  FAC-Neutral Test (D5)  Sturation Present?  Yes  No  Depth (inches):  Buddes capillary fringe)  Wetland Hydrology Present? Yes  No  Wetland Hydrology Present? Yes  No  Wetland Hydrology Present? Yes  No  Scribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   | Wetland Hydrology Presenta  | Yes No X   | Is the Sampled Area within a Wetland?  |
| Sparsely Vegetated Concave Surface (B8)  eld Observations:  Inface Water Present?  Yes NoX Depth (inches):  turation Present?  Yes NoX Depth (inches):  cludes capillary fringe)  Soribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No _X Depth (inches):   | Wetland Hydrology Indicators:  Primary Indicators (minimum of one is re 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) | <ul> <li>Water-Stained Leaves</li> <li>Aquatic Fauna (B13)</li> <li>Marl Deposits (B15)</li> <li>Hydrogen Sulfide Odol</li> <li>Oxidized Rhizospheres</li> <li>Presence of Reduced I</li> <li>Recent Iron Reduction</li> </ul> | S (B9)  Drainage Patterns (B10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Son Living Roots (C3)  Ton (C4)  Stunted or Stressed Plants (C4) |
| No X lateral gauge, monitoring well, aerial photos, previous inspections), if available:   | eld Observations:  rface Water Present? Yes ater Table Present? Yes turation Present? Yes   | (B8)  Other (Explain in Rema (B8)  NoX Depth (inches):  NoX Depth (inches):  | rks) — Shallow Aquitard (D3) — Microtopographic Relief (D4) — FAC-Neutral Test (D5)  |
| narks;   | narks:  | nitoring well, aerial photos, previoι  | is inspections), if available:   |

| SETATION - Use scientific names of plants.             | Absolute   | Domi     | nant Indicate<br>es? Status | <u>s</u> | ominance Test worksheet: umber of Dominant Species (A)   |
|--|------------|----------|-----------------------------|----------|--|
| e Stratum (Plot size: 30')                             | % Cover    | Open     | 00.                         | N<br>T   | umber of Dominant Species hat Are OBL, FACW, or FAC:  (A)  |
| Jot Applicable   | _          |          |                             | -        | tetal Number of Dominant   |
|  |            |          |                             | _   8    | Species Across All Strata:   |
|  | -          | 75.      |                             | _   F    | Percent of Dominant Species O (A/B)  |
|  | -          |          |                             | _   1    | That Are OBL, FACW, or FAC: (A/B)  |
|  |            |          |                             |          | Prevalence Index worksheet:  |
|  | -          | _        |                             |          | Total % Cover of: Multiply by.   |
|  | 0          | - To     | tal Cover                   |          | OBL species  |
|  |            |          |                             |          | FACVV species O  |
| Sapling/Shrub Stratum (Plot size: 15                   |            |          |                             |          | FAC species 380  |
| Not Applicable   |            |          |                             |          | FACU species   |
|  |            |          |                             |          | Column Totals: 100 (A) 395 (B)   |
| 3  | -          |          |                             |          | 0.00   |
| 4.   |            |          |                             |          | Prevalence index = Bit   |
| 5.   |            | ·        |                             |          | Hydrophytic Vegetation Indicators:   |
| 6  |            |          |                             |          | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7  |            |          | Total Cover                 |          | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹   |
| ,  |            |          | Total outer                 |          | - (Provide Supporting  |
| Herb Stratum (Plot size:)                              | 3          | 5        | Yes &                       | Acu      |  |
| 1 Shedonorus arundinace                                | 2          |          |                             | Dell     | Problematic Hydrophytic Vegetation (Explain)   |
| 2 Trifolium repers                                     |            |          |                             | FOX      | I durational hydrology must  |
| 3 Toraxayın officinale                                 |            | 5        |                             | FACU     | be present, unless distarbes of p  |
| 1 Solidage caradensis                                  |            | <u>.</u> |                             | her      | Definitions of Vegetation Strata.  |
| 5. Dances consta                                       |            | 5        | 100                         | 111      | 2 = (7.6 cm) or more in diameter   |
| 6.   |            |          |                             |          | at breast height (DDIT), rogular   |
| 7.   |            |          |                             |          | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.      |
| 8  |            | _        |                             |          | - I and greater than of equal to old   |
| 9  |            |          |                             |          | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. |
| 10   |            |          |                             | -        | Woody vines – All woody vines greater than 3.28 ft in  |
| 11,  |            |          |                             |          | Woody vines – All woody vines greater than height.   |
| 12   |            |          |                             |          | neight.  |
|  | 1          | 100      | = Total Cov                 | /er      |  |
| Woody Vine Stratum (Plot size: 30'  1. Not Applicable. | _)         |          |                             |          |  |
| Woody vine Stratum                                     |            |          |                             |          | Hydrophytic  |
| 1. <u>7001_74</u> <u>WITCSCOTO</u>                     |            |          |                             | -        | Vegetation Yes No X  |
| 3  |            |          |                             |          |  |
| 3  |            |          |                             |          | -  |
| 4  |            | 0        | _ = Total Co                | over     |  |
| Remarks: (Include photo numbers here or on a s         | eparate sh | neet.)   |                             |          |  |
| Remarks. (Include priorie                              |            |          |                             |          |  |
|  |            |          |                             |          |  |
| 1  |            |          |                             |          |  |
| 1  |            |          |                             |          |  |

| Profile Description: (Describe of Depth (inches) Color (moist)   | 0/                       | Redox Feature                         | indicator o   | or confirm the     | absence of in     | Sampling Point:   |
|--|--------------------------|---------------------------------------|---------------|--------------------|-------------------|---|
| 0-15 2.544/4   | 1                        | oist)%                                | <u>Type</u> 1 |                    |                   |   |
|  | 100                      |                                       | - TYPE        | Loc <sup>2</sup> T | exture            | Remarks   |
| 15-20 25/6/2   | 88 LOYR =                | 1/1 10                                |               | 51                 |                   | TOTALINA  |
|  | INIO                     | AT 10                                 | C             | M SI               |                   |   |
|  | 10YR 5                   | 18 2                                  | C             | 1                  | _                 |   |
|  |                          |                                       |               | M SI               | <u></u>           |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
| -  |                          |                                       |               |                    |                   |   |
|  | 14                       |                                       |               |                    |                   |   |
|  | 17.                      |                                       |               |                    |                   |   |
|  | +                        |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          | -                                     |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  | mil .                    |                                       |               |                    |                   |   |
| Type: C=Concentration, D=Depletion Hydric Soil Indicators:  Histosoi (A1)  |                          |                                       |               | -                  |                   | -11   |
| tydric Soil Indicators:  | i, RM=Reduced Matrix     | , MS=Masked C-                        |               |                    |                   | -   |
|  |                          | uskeu Sa                              | nd Grains.    | <sup>2</sup> Loc   | ation: PL=Pore    | Lining, M=Matrix.   |
| Histic Epipedon (A2)   | — Polyvalue Be           | elow Surface (Se                      | // DD D       |                    |                   |   |
| _ Black Histic (A3)  | MLRA 149                 | 9B)                                   | (LKK K,       | 2                  |                   |   |
| Hydrogen Sulfide (A4)  | Inin Dark Su             | urface (S9) (LRR<br>V Mineral (E1) (L | R, MLRA 1     | - Co               | ast Prairie Rec   | (LRR K, L, MLRA 149B)<br>lox (A16) (LRR K, L, R)                            |
| Stratified Layers (A5)   | Loamy Muck               | y Mineral (F1) (LR                    | RR K, L)      | _ 50               | m Mucky Peat      | or Peat (S3) (LRR K, L, R)  |
| Depleted Below Dark Surface (A11) Thick Dark Surface (A12)   | Loamy Gleye Depleted Mat |                                       |               | Da                 | rk Surface (S7)   | (LRR K, L, M)   |
| Sandy Mucky Mineral (S1)   | - Redox Dark S           | Surface (For                          |               |                    | reduce Below s    | N reference to a  |
| - Sandy Gleved Matrix (CA)   | - Depleted Dark          | Surface (FT                           |               | Iron               | -Manganese M      | (S9) (LRR K, L)   |
| . Sandy Redox (S5)   | Redox Depres             | Sions (FR)                            |               | Pie                | mont Floodola     | (S9) (LRR K, L)<br>lasses (F12) (LRR K, L, R)<br>in Soils (F19) (MLRA 149B) |
| Stripped Matrix (Se)   |                          | (, 0)                                 |               | Mes                | ic Spodic (TAR    | MLRA 149B)  |
| Dark Surface (S7) (LRR R, MLRA 14  | 49R)                     |                                       |               | Red                | Parent Materia    | (F21)   |
| icators of built   | 100)                     |                                       |               | Very               | Shallow Dark      | Surface (TEAC)  |
| trictive I aver (%)  | wetland hydrology mu     | A fine of the second                  |               | Othe               | r (Explain, in Re | emarks)   |
| icators of hydrophytic vegetation and trictive Layer (if observed):  Type:   | mus                      | st be present, unle                   | ess disturbe  | ed or problema     | ilo               |   |
| enth (in the internal in the i |                          |                                       |               | Problema           | iiC.              |   |
| epth (inches):arks:  |                          |                                       |               |                    |                   |   |
| arks:  |                          |                                       |               | Hydric Sol         | (Day)             |   |
|  |                          |                                       |               | 1.74110 301        | Present? Y        | 'es NoX   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   | 1.00  |
|  |                          |                                       |               |                    |                   | 11/2  |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |
|  |                          |                                       |               |                    |                   |   |

| WETLAND DETERMINA   | TION DATA FORM - Nort                | hcentral and Northeast Region  |           |
|---|--------------------------------------|--|-----------|
| Project/Site: Ball Hill Wind Pro  |                                      |  | lizlie    |
| Applicant/Owner: Ball Hill Wind End   | Onyroduny. CF                        | Sampling Date: 1   | 10 (1     |
| Investigator(e): 3 V etc 5 8  | 39× , ccc                            | State: Sampling Point:   | 115-61    |
| Investigator(s): B.V. ets, S. Buchen  | Section, Township                    | p, Range: VILLENOVA  |           |
| andform (hillslope, terrace, etc.): Floodplata                                | Local relief (concave                | , convex, none): Flat Slope  | (%):      |
| Subregion (LRR or MLRA): LTZZ - R Lat   | :_(7.11018                           | Long: 12-43/55 Datum:  | 100 83    |
| Soil Map Unit Name: Bust. 5: 1+ ldar  |                                      |  | 1         |
| Are climatic / hydrologic conditions on the site typical for                  | or this time of year? YesX           | No (If no, explain in Remarks.)  |           |
| Are Vegetation <u>no</u> , Soil <u>no</u> , or Hydrology <u>N</u>             | significantly disturbed?             | Are "Normal Circumstances" present? YesX   | No        |
| Are Vegetation <u>r&gt;0</u> , Soil <u>r&gt;0</u> , or Hydrology <u>r&gt;</u> |                                      | (If needed, explain any answers in Remarks.)   | 200       |
| 014444  |                                      |  |           |
| SUMMARY OF FINDINGS – Attach site m   | nap showing sampling po              | int locations, transects, important feat   | ures, etc |
| Hydrophytic Vegetation Present? Yes X   | No Is the Sam                        | ppled Area   | 0         |
| Hydric Soil Present? Yes 🗸  |                                      | The state of the s |           |
| Wetland Hydrology Present? Yes  |                                      | onal Wetland Site ID: Wetland A 565  |           |
| Remarks: (Explain alternative procedures here or in                           | a separate report.)                  | Situl Victidate Oile ID.   |           |
|   |                                      |  |           |
| wetland is a post   | rmed PEM                             |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
| YDROLOGY  |                                      |  |           |
| Wetland Hydrology Indicators:   |                                      | Secondary Indicators (minimum of two   | required) |
| Primary Indicators (minimum of one is required; check                         | k all that apply)                    | Surface Soil Cracks (B6)   | required  |
| V 0   | Water-Stained Leaves (B9)            | Drainage Patterns (B10)  |           |
|   | Aquatic Fauna (B13)                  | Moss Trim Lines (B16)  |           |
| V -   | Marl Deposits (B15)                  | Dry-Season Water Table (C2)  |           |
| Water Marks (B1)  | Hydrogen Sulfide Odor (C1)           | Crayfish Burrows (C8)  |           |
|   | Oxidized Rhizospheres on Living      | Roots (C3) Saturation Visible on Aerial Image  | ry (C9)   |
| Drift Deposits (B3)   | Presence of Reduced Iron (C4)        | Stunted or Stressed Plants (D1)  |           |
|   | Recent Iron Reduction in Tilled Sc   | oils (C6) Y Geomorphic Position (D2)   |           |
|   | Thin Muck Surface (C7)               | Shallow Aquitard (D3)  |           |
|   | Other (Explain in Remarks)           | Microtopographic Relief (D4)   |           |
| Sparsely Vegetated Concave Surface (B8)                                       |                                      | FAC-Neutral Test (D5)  |           |
| Field Observations:   |                                      |  |           |
| Surface Water Present? Yes X No   | Depth (inches): 0"-2"                |  |           |
| Water Table Present? Yes X No   | Depth (inches): 6"                   |  |           |
| Saturation Present? Yes Yes No  | Depth (inches): 6"                   | Wetland Hydrology Present? Yes X N   | 0         |
| Describe Recorded Data (stream gauge, monitoring w                            | vell, aerial photos, previous inspec | tions) if available:   |           |
|   | process, provided mopes              | nonsy, ii avallable.   |           |
|   |                                      |  |           |
| Remarks:  |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
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|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |
|   |                                      |  |           |

|   | A1 1 1              | Demineral            | Indicator | The Control of the Co |                                      |                   |
|---|---------------------|----------------------|-----------|--|--------------------------------------|-------------------|
| ree Stratum (Plot size: 38')                        | Absolute<br>% Cover | Dominant<br>Species? |           | Dominance Test worksheet:  |                                      |                   |
| DOT PROJECTIVE                                      |                     |                      |           | Number of Dominant Species<br>That Are OBL, FACW, or FAC   | - 4                                  | _ (A)             |
|   |                     | 1                    |           | Total Number of Dominant<br>Species Across All Strata:   | 4                                    | (B)               |
|   |                     |                      |           | Percent of Dominant Species<br>That Are OBL, FACW, or FAC  | 100                                  | (A/B              |
|   |                     |                      |           |  |                                      |                   |
|   |                     |                      |           | Prevalence Index workshee Total % Cover of:  |                                      |                   |
|   |                     | = Total Cov          | er        | OBL species  | x 1 =                                |                   |
| apling/Shrub Stratum (Plot size: 15')               |                     |                      | 7         | FACW species   |                                      |                   |
|   |                     |                      |           | FAC species  |                                      |                   |
| - not applicable                                    |                     | -                    |           | FACU species   |                                      |                   |
|   |                     | 1                    |           | UPL species  |                                      |                   |
|   |                     |                      | -         | Column Totals:   |                                      |                   |
|   |                     |                      |           |  |                                      |                   |
|   |                     |                      |           | Prevalence Index = B/A   |                                      |                   |
| 6   |                     |                      |           | Hydrophytic Vegetation Ind  X 1 - Rapid Test for Hydrop  |                                      | 2                 |
| 7   |                     |                      |           |  |                                      |                   |
|   | 0                   | = Total Co           | ver       | 2 - Dominance Test is >5   |                                      |                   |
| Herb Stratum (Plot size: 5')                        |                     |                      |           | 3 - Prevalence Index is ≤  | 3.0                                  |                   |
| 1. Thous efficies                                   | 25                  | 405                  | OBL       | 4 - Morphological Adapta data in Remarks or or   | itions' (Provide<br>n a separate she | supportir<br>eet) |
| 2. CAREX Flavor                                     | 12                  | 405                  | OBL       | Problematic Hydrophytic  | Vegetation1 (Ex                      | (plain)           |
| mentha Spicata                                      |                     |                      | FACW      | Indicators of hydric soil and  | wetland hydrolo                      |                   |
|   |                     |                      | FACIN     | he present unless disturbed  | or problematic.                      |                   |
| 4. Eupotorium perfoliatum<br>5. Ranunculus bulbosus | 5                   | NO                   | FACU      |  | trata:                               |                   |
| 6   |                     |                      |           | Tree – Woody plants 3 in. (7 at breast height (DBH), regar   | 6 cm) or more i                      | n diamet          |
| 7   |                     |                      |           |  |                                      |                   |
| 8   |                     | -                    | -         | Sapling/shrub - Woody plan<br>and greater than or equal to   | 3.28 ft (1 m) tall                   | i, DBN            |
| 9   |                     | -                    |           | Herb - All herbaceous (non-wo  | ody) plants, rega                    | rdless of         |
| 10  | -                   |                      | _         | size, and woody plants less than   | 3.28 ft tall.                        |                   |
| 11  |                     | -                    |           | Woody vines - All woody vine   | s greater than 3.2                   | 8 ft in           |
| 12  | Lass                |                      |           | height.  |                                      |                   |
| Woody Vine Stratum (Plot size:3o)                   | 100                 | _ = Total Co         | over      |  |                                      |                   |
| 1. pot Applicable                                   | -                   | -                    |           | 136.5.5.5  |                                      |                   |
| 2   |                     |                      |           | Hydrophytic Vegetation   | ,                                    |                   |
| L.  |                     |                      |           | Present? Yes   | No No                                |                   |
| 3   | _                   |                      |           |  |                                      |                   |
|   |                     |                      |           | • 1  |                                      |                   |

| Matrix Color (moist)  7.57 7.51  7.57 411   | 100   | Color (moist)  | % Features   | Type <sup>1</sup>                 | _Loc <sup>2</sup> | Texture Remarks   |                         |
|---|---|--|--|-----------------------------------|-------------------|---|-------------------------|
|   | -   | 1092516  |  |                                   |                   |   |                         |
| 2.57411   | 98  | 1092516  |  |                                   |                   | SI  |                         |
|   | -   |  |  |                                   | <u>m</u>          | SI  |                         |
|   |   |  |  |                                   |                   |   |                         |
|   |   |  |  |                                   |                   |   |                         |
| ncentration, D=Dep  | letion, RM  | -Reduced Matrix, MS  | =Masked  | Sand Gr                           | ains.             | <sup>2</sup> Location: PL=Pore Lining, M=Matrix.  |                         |
| ndicators:  |   |  |  |                                   |                   | Indicators for Problematic Hydric Soils <sup>3</sup> :  |                         |
| ipedon (A2) stic (A3) n Sulfide (A4) Layers (A5) I Below Dark Surfac rk Surface (A12) ucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, M | VILRA 149   | MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi  | ce (S9) (L<br>dineral (F'<br>Matrix (F2<br>(F3)<br>face (F6)<br>Surface (F6)<br>ons (F8) | .RR R, M<br>I) (LRR K<br>)<br>(7) | LRA 149B)         | Coast Prairie Redox (A16) (LRR K, L, F, 5 cm Mucky Peat or Peat (S3) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, Thin Dark Surface (S9) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K, Piedmont Floodplain Soils (F19) (MLRA Mesic Spodic (TA6) (MLRA 144A, 145, Red Parent Material (F21)  Very Shallow Dark Surface (TF12)  Other (Explain in Remarks)   | L, R)<br>L, R)<br>L, R) |
|   |   | etland hydrology mus   | t be prese   | ent, unles                        | s disturbed o     | or problematic.   |                         |
| .ayer (if observed):  |   |  |  |                                   |                   |   |                         |
| hoo);   |   |  |  |                                   |                   | Under Seil Bernand 2 Ven V No   |                         |
| nes)  |   |  |  |                                   |                   | Hydric Soil Present? Yes No _   |                         |
|   |   |  |  |                                   |                   |   |                         |
| 1 1 1 1 1 1   | ndicators: (A1) ippedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface irk Surface (A12) lucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, I | ndicators: (A1) pipedon (A2) stic (A3) n Sulfide (A4) I Layers (A5) I Below Dark Surface (A11) urk Surface (A12) lucky Mineral (S1) leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR R, MLRA 149) hydrophytic vegetation and weaper (if observed): | ndicators:  (A1)   | ndicators:  (A1)                  | ndicators:  (A1)  | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  Stic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B)  Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Below Dark Surface (A11) Depleted Matrix (F3)  Ink Surface (A12) Redox Dark Surface (F6)  Lucky Mineral (S1) Depleted Dark Surface (F7)  Redox Depressions (F8)  Matrix (S6)  Matrix (S6)  Fface (S7) (LRR R, MLRA 149B)  Shydrophytic vegetation and wetland hydrology must be present, unless disturbed cayer (if observed): | Indicators:  (A1)       |

| WETLAND DETERMINATION DATA FOR  | M – Northcentral and Northeast Region  |
|---|--|
| Project/Site: BAN HIN Wind Project City/Co  | punty: CHANTAN OLOG CTU Sampling Date: 11/12/15  |
| Applicant/Owner: Ball Hill Wind Energy Let  | State: NY Sampling Point: DC -61   |
| Investigator(s): B. VIRTS, S. Brokenneger Section   | n Township Pange: VIII Page 19   |
| Landform (hillslone terrace etc.): Hill Slope   | of concess control control of  |
| Landform (hillslope, terrace, etc.): H: 1151age Local relie Subregion (LRR or MLRA): LRZ-R Lat: 79.114195 |  |
| Sublegion (LRR of MLRA): CHE Lat: / 17   170  | Long: 92, 93/199 Datum: 000 83   |
| Soil Map Unit Name: BUST 5: 1+ 19mm 3-80  | Slepen NWI classification: WPLAND  |
| Are climatic / hydrologic conditions on the site typical for this time of year? Ye                        | es No (If no, explain in Remarks.)   |
| Are Vegetation <u>N ぃ</u> , Soil <u>心 0</u> , or Hydrology <u>い ೦</u> significantly disturb               |  |
| Are Vegetation <u>ivo</u> , Soil <u>rシン</u> , or Hydrology <u>ゃぃ</u> naturally problema                   | tic? (If needed, explain any answers in Remarks.)  |
| SLIMMARY OF FINDINGS Attack site was about  |  |
| SUMMARY OF FINDINGS – Attach site map showing sam   | pling point locations, transects, important features, etc.   |
| Hydrophytic Vegetation Present? Yes No X  | Is the Sampled Area  |
| Hydric Soil Present? Yes X No   | within a Wetland? Yes No X   |
| Wetland Hydrology Present? Yes No Remarks: (Explain alternative procedures here or in a separate report.) | If yes, optional Wetland Site ID:  |
|   |  |
|   |  |
|   |  |
|   |  |
| J. San  |  |
| HYDROLOGY   |  |
| Wetland Hydrology Indicators:   | Secondary Indicators (minimum of two required)   |
| Primary Indicators (minimum of one is required; check all that apply)                                     | Surface Soil Cracks (B6)   |
| Surface Water (A1) Water-Stained Leaves   | (B9) Drainage Patterns (B10)   |
| High Water Table (A2) Aquatic Fauna (B13)   | Moss Trim Lines (B16)  |
| Saturation (A3) Marl Deposits (B15)   | Dry-Season Water Table (C2)  |
| Water Marks (B1) Hydrogen Sulfide Odol Sediment Deposits (B2) Oxidized Rhizospheres                       |  |
|   | [25] 10 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 15 [15] 1 |
| Drift Deposits (B3) Presence of Reduced Algal Mat or Crust (B4) Recent Iron Reduction                     |  |
|   | 7) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Rema  |  |
| Sparsely Vegetated Concave Surface (B8)   | FAC-Neutral Test (D5)  |
| Field Observations:   |  |
| Surface Water Present? Yes No Depth (inches):   |  |
| Water Table Present? Yes No Depth (inches):   |  |
| Saturation Present? Yes No _X Depth (inches):   | Wetland Hydrology Present? Yes No X  |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ  |  |
| Second recorded bata (stream gauge, monitoring well, aerial priotos, previ                                | ous inspections), if available:  |
|   |  |
| Remarks:  |  |
|   |  |
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|   |  |

| Tree Stratum (Plot size:)            | Absolute<br>% Cover | Dominant Indicat<br>Species? Statu |  |
|--------------------------------------|---------------------|------------------------------------|--|
| 1. NOT PROSCEDIE                     |                     |                                    | Number of Dominant Species   |
| 2                                    |                     | -                                  | Total Number of Dominant Species Across All Strata: 2 (B)  |
| 3                                    |                     |                                    |  |
| 4                                    |                     |                                    | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 5                                    |                     |                                    |  |
| 6                                    |                     |                                    | Prevalence Index worksheet:  |
| 7                                    |                     |                                    |  |
| Sapling/Shrub Stratum (Plot size: 15 | _0_                 | = Total Cover                      | FACW species 10 x2= 70   |
|                                      |                     |                                    | FAC species  |
| 1. Not Applicable                    |                     |                                    | FACU species 90 x4= 360  |
| 2                                    | -                   |                                    | UPL species x 5 =  |
| 3                                    |                     |                                    | Column Totals: 100 (A) 380 (B)   |
| 4                                    |                     |                                    | Prevalence Index = B/A = 3.50  |
| 5                                    |                     |                                    | Hydrophytic Vegetation Indicators:   |
| 6                                    |                     |                                    | 1 - Rapid Test for Hydrophytic Vegetation  |
| 7                                    |                     |                                    | 2 - Dominance Test is >50%   |
| 61                                   | _0                  | _ = Total Cover                    | 3 - Prevalence Index is ≤3.0¹  |
| Herb Stratum (Plot size:5 /)         | F                   |                                    | 4 - Morphological Adaptations (Provide supporting  |
| 1. Tr. Folium Ripens                 | 50                  |                                    |  |
| 2. Schedonorns arundinaceou          |                     | Yes FA                             |  |
| 3 TARAXUCUM Officinale               |                     | NO FAC                             | he prepare unless disturbed or problematic   |
| 4. Pantago larceolata                | _>_                 | NO FAX                             | .N   |
| 5. Ranimentus bulbosus               | 10                  | NO FRO                             |  |
| 6,                                   |                     |                                    | Tree – Woody plants 3 in. (7.6 cm) or more in diamete<br>at breast height (DBH), regardless of height. |
| 7                                    |                     |                                    | Sapling/shrub – Woody plants less than 3 in. DBH   |
| 8                                    |                     |                                    | and greater than or equal to 3.28 ft (1 m) tall.   |
| 9                                    |                     |                                    | Herb - All herbaceous (non-woody) plants, regardless of  |
| 10                                   |                     |                                    | size, and woody plants less than 3.28 ft tall.   |
| 11                                   | . ——                |                                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 12                                   |                     |                                    | height.  |
|                                      | 100                 | _ = Total Cover                    |  |
| Woody Vine Stratum (Plot size: 30')  |                     |                                    |  |
| 1. roi Applicable                    |                     |                                    | Hydrophytic  |
| 2                                    |                     |                                    | - Vegetation   |
| 3                                    | -                   |                                    | Present? Yes No ^  |
| 4                                    |                     |                                    | _  |
|                                      |                     | = Total Cover                      |  |

| 154411<br>154411<br>154412   | 55<br>60<br>51<br>60<br>11) X | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix (F3 Redox Depleted Dark Surface Redox Depressions                                  | Masked Sa  Surface (S8) (S9) (LRR eral (F1) (Ll trix (F2) 3) e (F6)                 | Type¹ C C C C C C C C C C C C C C C C C C C             | Loc²  M  M  S  S  S  S  S  S  S  S  S  S  S                      | 2Location: Pt Indicators for 2 cm Muck Coast Prair 5 cm Mucky                         | _=Pore Lining, M=M<br>Problematic Hydric<br>(A10) (LRR K, L, M<br>ie Redox (A16) (LR  | latrix.<br>c Soils <sup>3</sup> :<br>ILRA 149B)                           |
|--|-------------------------------|--|---|---|--|---|---|---|
| ation, D=Depletions:  (A2)  (A4) (A5)  Oark Surface (A ise (A12) eral (S1) trix (S4)               | 55<br>60<br>ion, RM=Re        | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix (F3 Redox Dark Surface Depleted Dark Surface Depleted Dark Surface                 | Masked Sa  Surface (S8) (S9) (LRR eral (F1) (LI trix (F2) 3) e (F6)                 | C<br>C<br>C<br>C  | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$         | 2Location: Pt Indicators for 2 cm Muck Coast Prair 5 cm Mucky                         | _=Pore Lining, M=M<br>Problematic Hydric<br>(A10) (LRR K, L, M<br>ie Redox (A16) (LR  | latrix.<br>c Soils³:<br>lLRA 149B)  |
| ation, D=Depleti<br>irs:<br>(A2)<br>(A5)<br>Oark Surface (A<br>ie (A12)<br>eral (S1)<br>trix (S4)  | 55<br>60<br>ion, RM=Re        | educed Matrix, MS=  Polyvalue Below S  MLRA 149B)  Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix Depleted Matrix (F3 Redox Dark Surface Depleted Dark Surface | Masked Sa  Gurface (S8) (S9) (LRR eral (F1) (Ll trix (F2) 3) e (F6)                 | C C Ind Grains  | \$\frac{\x}{\x}\$  | <sup>2</sup> Location: Pt<br>Indicators for<br>2 cm Muck<br>Coast Prair<br>5 cm Mucky | _=Pore Lining, M=M<br>Problematic Hydric<br>(A10) (LRR K, L, M<br>ie Redox (A16) (LR  | latrix.<br>c Soils³:<br>!LRA 149B)  |
| ation, D=Depleti<br>irs:<br>(A2)<br>(A5)<br>Oark Surface (A<br>ie (A12)<br>eral (S1)<br>trix (S4)  | ion, RM=Re                    | educed Matrix, MS=  Polyvalue Below S  MLRA 149B)  Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix (F3 Redox Dark Surface Depleted Dark Surface                 | ZS Ze Ho  Masked Sa  Surface (S8) (S9) (LRR eral (F1) (Ll trix (F2) 3) e (F6)       | C C Ind Grains  | £ 5.   | <sup>2</sup> Location: Pt<br>Indicators for<br>2 cm Muck<br>Coast Prair<br>5 cm Mucky | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³:<br>ILRA 149B)   |
| ation, D=Depleti<br>irs:<br>(A2)<br>(A5)<br>Oark Surface (A<br>ie (A12)<br>eral (S1)<br>trix (S4)  | ion, RM=Re                    | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix Depleted Matrix (F3 Redox Dark Surface Depleted Dark Surface                       | Masked Sa Surface (S8) (S9) (LRR eral (F1) (Ll trix (F2) 3) e (F6)                  | und Grains  | S  | <sup>2</sup> Location: Pt<br>Indicators for<br>2 cm Muck<br>Coast Prair<br>5 cm Mucky | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³:<br>ILRA 149B)   |
| ation, D=Depleti<br>rrs:<br>(A2)<br>(A5)<br>Park Surface (A<br>per (A12)<br>eral (S1)<br>trix (S4) | ion, RM=Re                    | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mati Depleted Matrix (F3 Redox Dark Surface Depleted Dark Surface                         | Masked Sa<br>Surface (S8<br>(S9) (LRR<br>eral (F1) (Ll<br>lrix (F2)<br>3)<br>e (F6) | und Grains  | S.   | <sup>2</sup> Location: Pt<br>Indicators for<br>2 cm Muck<br>Coast Prair<br>5 cm Mucky | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³:<br>ILRA 149B)   |
| ation, D=Depleti<br>rrs:<br>(A2)<br>(A5)<br>Park Surface (A<br>per (A12)<br>eral (S1)<br>trix (S4) | ion, RM=Re                    | educed Matrix, MS=  Polyvalue Below S  MLRA 149B)  Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Matrix Depleted Matrix (F3 Redox Dark Surface                       | Masked Sa Surface (S8) (S9) (LRR eral (F1) (LI trix (F2) e (F6)                     | ) (LRR R  | S.   | <sup>2</sup> Location: Pt<br>Indicators for<br>2 cm Muck<br>Coast Prair<br>5 cm Mucky | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³:<br>ILRA 149B)   |
| (A2) (A4) (A5) Dark Surface (Ace (A12) eral (S1) trix (S4)   | 11) 🐰                         | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mati Depleted Matrix (F3 Redox Dark Surface   | (S9) (LRR eral (F1) (Ll trix (F2) (F3) e (F6)                                       | ) (LRR R  | r  | 2 cm Muck<br>Coast Prair<br>5 cm Mucky  | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³:<br>ILRA 149B)   |
| (A2) (A4) (A5) Dark Surface (Ace (A12) eral (S1) trix (S4)   | 11) 🐰                         | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mati Depleted Matrix (F3 Redox Dark Surface   | (S9) (LRR eral (F1) (Ll trix (F2) (F3) e (F6)                                       | ) (LRR R  | r  | 2 cm Muck<br>Coast Prair<br>5 cm Mucky  | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³:<br>ILRA 149B)   |
| (A2) (A4) (A5) Dark Surface (Ace (A12) eral (S1) trix (S4)   | 11) 🐰                         | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mati Depleted Matrix (F3 Redox Dark Surface   | (S9) (LRR eral (F1) (Ll trix (F2) (F3) e (F6)                                       | ) (LRR R  | r  | 2 cm Muck<br>Coast Prair<br>5 cm Mucky  | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³;<br>ILRA 149B)   |
| (A4)<br>(A5)<br>Dark Surface (A<br>Der (A12)<br>eral (S1)<br>trix (S4)                             | 11) <u>X</u>                  | Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mate Depleted Matrix (F3 Redox Dark Surface Depleted Dark Surface  | (S9) (LRR<br>eral (F1) (LI<br>trix (F2)<br>3)<br>e (F6)                             |   |  | 2 cm Muck<br>Coast Prair<br>5 cm Mucky  | (A10) (LRR K, L, Mile Redox (A16) (LR   | c Soils³;<br>ILRA 149B)   |
| ic vegetation a  | 149B)                         |  | (F8)  |   | 9  | Polyvalue B Thin Dark S Iron-Mangar Piedmont Fk Mesic Spodid Red Parent M             | velow Surface (S8) (i<br>urface (S9) (LRR K,<br>nese Masses (F12) (oodplain Soils (F19)<br>c (TA6) (MLRA 144,<br>Material (F21) | /I)<br>LRR K, L)<br>, L)<br>(LRR K, L, R)<br>(MLRA 149B)<br>A, 145, 149B) |
| oserved);  | ild wetland                   | hydrology must be p  | present, uni  | less distu  | irbed or no  | Ohlamatia   | ,   |   |
|  |                               |  |   |   |  | obicinatic.   |   |   |
|  |                               |  |   |   |  |   |   |   |
|  |                               |  |   |   | Нус  | Iric Soil Presen  | t? Yes X  | No  |
|  |                               |  |   |   |  |   |   |   |
|  | c vegetation a                | c vegetation and wetland served):  | c vegetation and wetland hydrology must be perved):                                 | c vegetation and wetland hydrology must be present, uni | c vegetation and wetland hydrology must be present, unless distu |   | served):  | Hydric Soil Presenta X X  |

| WETLAND DETERMINATION DATA FO   | ORM - Northcentral a  | and Northeast Region                                  |
|---|---|---|
| Project/Site: Ball Hill Wind Project Cit  | ty/County: Character  | Maca Clar Sampling Date: 11/12/13                     |
| Applicant/Oumor R // H'II I I'm A A - Ass // //   | yrounity  | State: NY Sampling Point: DS-613                      |
| Applicant/Owner: Rull Hill Wind anergy, LLC   |   |   |
| Investigator(s): B. V. I.S. S. Buckenneyer Se   | ection, Township, Range:  | VIIIEMOVIA  |
| Landform (hillslope, terrace, etc.): Floodpland Local   |   |   |
| Subregion (LRR or MLRA): LRP-R Lat; 79. [17]  | Long: _ 4   | 2,435276 Datum: NAO 83                                |
| Soil Map Unit Name: Cherry Chanery Loan   | , for, 3-840sbr   | NWI classification: UPIC.nd                           |
| Are climatic / hydrologic conditions on the site typical for this time of year?                       | ? Yes _ + No  | (If no, explain in Remarks.)                          |
| Are Vegetation <u>ᠬ᠔</u> , Soil <u>᠘᠔</u> , or Hydrology <u>ᠬ᠈</u> significantly dis                  | sturbed? Are "Norma   | Circumstances" present? Yes No                        |
| Are Vegetation <u>NOO</u> , Soil <u>NOO</u> , or Hydrology <u>NOO</u> naturally proble                |   | explain any answers in Remarks.)                      |
| SUMMARY OF FINDINGS – Attach site map showing s   | ampling point location  | ons, transects, important features, etc.              |
| Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No No No       | Is the Sampled Area within a Wetland?  If yes, optional Wetland | Yes X No  Site ID: Wetland AS67                       |
|   |   |   |
| HYDROLOGY   |   |   |
| Wetland Hydrology Indicators:   |   | Secondary Indicators (minimum of two required)        |
| Primary Indicators (minimum of one is required; check all that apply)                                 |   | Surface Soil Cracks (B6)                              |
| Surface Water (A1) Water-Stained Le   | aves (B9)   | Drainage Patterns (B10)                               |
| ∠ High Water Table (A2)   | 13)   | Moss Trim Lines (B16)                                 |
| ∑ Saturation (A3) Marl Deposits (B1   |   | Dry-Season Water Table (C2)                           |
| Water Marks (B1) Hydrogen Sulfide   |   | Crayfish Burrows (C8)                                 |
|   | heres on Living Roots (C3)                                      | Saturation Visible on Aerial Imagery (C9)             |
| Drift Deposits (B3) Presence of Redu  |   | Stunted or Stressed Plants (D1)                       |
|   | oction in Tilled Soils (C6)                                     | Geomorphic Position (D2)                              |
| Iron Deposits (B5) Thin Muck Surface  |   | Shallow Aquitard (D3)                                 |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in   Sparsely Vegetated Concave Surface (B8) | Remarks)  | Microtopographic Relief (D4)  X FAC-Neutral Test (D5) |
| Field Observations:   |   | A TAO-Neutral Test (BO)                               |
| Surface Water Present? Yes No Depth (inches):   |   |   |
| Water Table Present? Yes X No Depth (inches):   | 3"  |   |
| Saturation Present? Yes X No Depth (inches): (includes capillary fringe)                              | O Wetland I   | Hydrology Present? Yes X No                           |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos,                                 | previous inspections), if ava                                   | ailable:  |
| Remarks:  |   |   |
| Tremains.   |   |   |
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| Dominance Test worksheet:   Number of Dominant Species That Are OBL, FACW, or FAC:  |
|---|
| Total Number of Dominant Species Across All Strata:    Percent of Dominant Species That Are OBL, FACW, or FAC: 63.6 (A/B)   Prevalence Index worksheet:   |
| Species Across All Strata:    Percent of Dominant Species That Are OBL, FACW, or FAC:   |
| Percent of Dominant Species That Are OBL, FACW, or FAC:    Prevalence Index worksheet:   Total % Cover of:   Multiply by:   |
| That Are OBL, FACW, or FAC: (A/B)  Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species x 1 = FACW species x 2 = FACW species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A) (B)  Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation x 2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  FACU  Problematic Hydrophytic Vegetation¹ (Explain)  FACU  Definitions of Vegetation Strata: |
| Prevalence Index worksheet:   |
| Prevalence Index worksheet:  Total % Cover of: Multiply by:  OBL species  |
| Total % Cover of: Multiply by:  OBL species   |
| FACW species  |
| FACW species  |
| FACU species x 3 =  |
| FACU species x 4 =  |
| Column Totals:  |
| Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)  HACLL  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  |
| Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation  |
| 1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  FOCU  Problematic Hydrophytic Vegetation¹ (Explain)  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| 1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  FOCU  Problematic Hydrophytic Vegetation¹ (Explain)  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
|   |
|   |
| data in Remarks or on a separate sheet)  FOCIA  Problematic Hydrophytic Vegetation¹ (Explain)  Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| Problematic Hydrophytic Vegetation¹ (Explain)  1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Vegetation Strata:  |
| be present, unless disturbed or problematic.  Definitions of Vegetation Strata:   |
| Definitions of Vegetation Strata:   |
|   |
|   |
| Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
| at breast height (DBH), regardless of height.   |
| Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.   |
| and greater than or equal to 3.20 it (1 m) tall.  |
| Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  |
| Sizo, and woody plants loss than 3.20 k land  |
| Woody vines - All woody vines greater than 3.28 ft in   |
| over height.  |
| over  |
|   |
| Hydrophytic   |
| - Vegetation  |
| Present? Yes No   |
|   |
| over  |
|   |

Sampling Point DP-613

| Matrix   |  | Dan.   | lov Cart  | mulcator o   | confin   | m the absence of i  | ndicators.)   |
|--|--|--|---|--|--|---|---|
| Color (moist)  | %  | LIEU   | ox Feature  | S  |  |   |   |
| 10YR 3/2   | 90   | 10YR 3/6   | 10  | <u>C</u>   | M  | SIL   | Remarks   |
|  |  |  |   |  |  |   |   |
|  | etion, RM=I  |  |   |  |  | <sup>2</sup> Location: PL=  | Pore Lining, M=Matrix.<br>roblematic Hydric Soils³:   |
| ipedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark Surface ( k Surface (A12) ticky Mineral (S1) eyed Matrix (S4) dox (S5) Matrix (S6) ace (S7) (LRR R, MLI | (A11)  | MLRA 149B)  Thin Dark Surfact Loamy Mucky M Loamy Gleyed M Depleted Matrix Redox Dark Surfact Depleted Dark S Redox Depression | ce (S9) (LR<br>ineral (F1)<br>flatrix (F2)<br>(F3)<br>face (F6)<br>urface (F7)<br>ons (F8)  | RR, MLRA<br>(LRRK, L)  | 149B)  | 2 cm Muck (// Coast Prairie 5 cm Mucky   Dark Surface Polyvalue Be Thin Dark Su Iron-Mangane Piedmont Flo Mesic Spodic Red Parent M Very Shallow Other (Explair | A10) (LRR K, L, MLRA 149B) Redox (A16) (LRR K, L, R) Peat or Peat (S3) (LRR K, L, R) (S7) (LRR K, L, M) low Surface (S8) (LRR K, L) rface (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B) laterial (F21) Dark Surface (TF12)  |
| ydrophytic vegetation  | n and wetla  | nd hydrology must  | be present,   | unless dist  | urbed or   | problematic.  |   |
| yo. (ii observed).   |  |  |   |  |  |   |   |
| es):   |  |  |   |  |  |   | 12  |
|  |  |  |   |  | 1  | Hydric Soil Presen  | t? Yes No   |
|  |  |  |   |  |  |   |   |
|  | Color (moist)  OYR 3/2  IOYR 3/2  Incentration, D=Depler dicators:  (A1)  pedon (A2)  tic (A3)  solfide (A4)  Layers (A5)  Below Dark Surface k Surface (A12)  ticky Mineral (S1)  eyed Matrix (S4)  dox (S5)  Matrix (S6)  ace (S7) (LRR R, ML  ydrophytic vegetation  yer (If observed): | Color (moist)  | Color (moist)  OYR 3/2 40  IOYR 3/6  IOYR 3/6 | Color (moist) % Color (moist) % OVR 3/6 DOVR 3/6 | Color (moist)  % Type¹   OYR 3/2 40   OYR 3/6    OYR 3/6   OYR 3/6    OYR 3/6   OYR 3/6    OYR 3/6   OYR 3/6   OYR 3/6    OYR | Color (moist) % Color (moist) % Type¹ Loc²    OYR 3/2   O   | Color (moist) % Color (moist) % Type¹ Loc² Texture    OYR 3/2   O   OYR 3/6   O   M   S L      OYR 3/2   O   OYR 3/6   O   M   S L      OYR 4/7   O   M   S L      OYR 5/6   O   M   S L      OYR 6/7   O   M   S |

| Datum: PAB 85  NWI classification: WP and explain in Remarks.) mstances" present? Yes No n any answers in Remarks.) transects, important features, etc.  Yes No 'X  D:  Vel AS67  |
|---|
| Slope (%): 1%  Convex Slope (%): 1%  3534 Datum: 1045 85  NWI classification: WO and explain in Remarks.) matances" present? Yes X No an any answers in Remarks.)  transects, important features, etc.  Yes No X  D:  |
| Slope (%): 1%    3534   |
| Datum: Doto 85  NWI classification: WO and explain in Remarks.)  mstances" present? Yes X No any answers in Remarks.)  transects, important features, etc.  Yes No X  D: A567   |
| explain in Remarks.) mstances" present? Yes No n any answers in Remarks.) transects, important features, etc.  Yes No X  D:   |
| explain in Remarks.) mstances" present? Yes X No nany answers in Remarks.) transects, important features, etc. Yes No X D: AS67   |
| explain in Remarks.) mstances" present? Yes X No nany answers in Remarks.) transects, important features, etc. Yes No X D: AS67   |
| mstances" present? Yes X No nany answers in Remarks.)  transects, important features, etc.  Yes No X  D: AS67   |
| ransects, important features, etc.  Yes No X  D:  AS67  |
| ransects, important features, etc.  Yes No X  D:  v.l AS67  |
| Yes No X D:   |
| D:  |
| D:  |
| vel AS67  |
| vel AS67  |
|   |
| ndary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Drayfish 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)   |
|   |
|   |
|   |
| logy Present? Yes No X  |
|   |

| % Cover   | Species?     | Status   | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC: (A)  |
|-----------|--------------|--|--|
|           |              |  | Total Number of Dominant Species Across All Strata: (B)  |
|           |              |  | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
|           |              |  | Prevalence Index worksheet:  |
|           |              |  |  |
|           |              |  | FAC species $5$ $\times 3 = 15$ FACU species $80$ $\times 4 = 370$ UPL species $15$ $\times 5 = 7575$ Column Totals: $100$ (A) $910$ (B)             |
|           |              |  | Prevalence Index = B/A = 4, 10   |
|           |              |  | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |
| _ 0       | _ = Total Co | ver  | <ul> <li>2 - Dominance Test is &gt;50%</li> <li>3 - Prevalence Index is ≤3.0¹</li> <li>4 - Morphological Adaptations¹ (Provide supporting</li> </ul> |
|           |              | FACH   | data in Remarks or on a separate sheet)  |
|           |              | 10.15.1  | Problematic Hydrophytic Vegetation¹ (Explain)  |
|           |              |  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.                                    |
| 5         | 1-6          |  | Definitions of Vegetation Strata:  |
| 5         | - 00         |  |  |
|           |              |  | Tree – Woody plants 3 in. (7.6 cm) or more in diamete at breast height (DBH), regardless of height.  |
|           | -            |  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
|           |              |  | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.   |
|           |              |  | Woody vines - All woody vines greater than 3.28 ft in height.  |
| 100       | _ = Total Co | ver  |  |
|           |              |  |  |
|           |              |  | Hydrophytic Vegetation   |
|           |              |  | Present? Yes No X  |
|           |              |  |  |
| e sheet.) | _= Total Co  | ver  |  |
|           | 6 Cover      | Cover Species?  Cover Species.  Cover Species. | O = Total Cover  O = Total Cover  O Yes Fach  No Fach  No Fach  No Fach  No Fach  No Fach  No Fach  Total Cover                                      |

|  | Redox Features Color (moist) % Type¹ Loc²   | SL TREMAINS  |  |
|--|---|--|--|
| D=Depletion, RM=                                       | Reduced Matrix, MS=Masked Sand Grains.  |  |  |
|  | Reduced Matrix, MS=Masked Sand Grains.  |  |  |
|  | Reduced Matrix, MS=Masked Sand Grains.  | 2.   |  |
|  |   | <sup>2</sup> Location: PL=Pore Lining, M=Matrix.   |  |
| Surface (A11)<br>12)<br>(S1)<br>S4)<br>R R, MLRA 149B) | Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8)  | <ul> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K</li> <li>Piedmont Floodplain Soils (F19) (MLR, Mesic Spodic (TA6) (MLRA 144A, 145, Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul>   | 49B)<br>R)<br>I, L, R)<br>, L)<br>(, L, R)<br>A 149B   |
| egetation and wetl                                     | and hydrology must be present, unless disturbed   | or problematic.  |  |
|  |   |  |  |
|  | ) and the same of | Hydric Soil Present? Yes No _  | <u>×</u> _   |
|  |   |  |  |
|  | Surface (A11)   | Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2)  Surface (A11) Depleted Matrix (F3) Redox Dark Surface (F6) (S1) Depleted Dark Surface (F7) Redox Depressions (F8)  R R, MLRA 149B)  Regetation and wetland bydrology much be seed as the company of the | Loamy Mucky Mineral (F1) (LRR K, L) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) 12) Redox Dark Surface (F6) S4) Redox Depressions (F8)  Chark K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K  Piedmont Floodplain Soils (F19) (MLR  Redox Depressions (F8)  Chark Surface (S7) (LRR K, L, M)  Polyvalue Below Surface (S8) (LRR K, L)  Iron-Manganese Masses (F12) (LRR K  Piedmont Floodplain Soils (F19) (MLR  Mesic Spodic (TA6) (MLRA 144A, 145, Mesic Spodic (TA6) (MLRA 144A, 1 |

### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Project/Site: <u>Bis II H: II L</u><br>Applicant/Owner: <u>Ball H: II</u>                  | Wind energy, LLC                        |                               | State: NY Sampli  |  |
|--|---|-------------------------------|---|--|
| Investigator(s): R. V.R. S. Landform (hillslope, terrace, etc.): L                         | Local r                                 | relief (concave, convex, nor  | ne): Corcare  |  |
| Subregion (LRR or MLRA): LRR-R   | Lat: 79, 11426                          | 51 Long:                      | 2.430647  | Datum: 09683   |
| Soil Map Unit Name: CHACITY  | mana Siltlann 3                         | 890510000                     | NWI classification:   | Mound  |
| Are climatic / hydrologic conditions on  | the site typical for this time of year? | Yes V No                      |   |  |
| Are Vegetation o, Soil vo, or  |   | /-                            | Circumstances" present?   | Yes X No   |
|  |   |                               |   |  |
| Are Vegetation <u>No</u> , Soil <u>No</u> , or   | Hydrology naturally proble              | matic? (If needed, 6          | explain any answers in Rema   | Irks.)   |
| SUMMARY OF FINDINGS - A  | ttach site map showing sa               | ampling point location        | ons, transects, import  | ant features, etc.   |
| Hydrophytic Vegetation Present?  | Yes X No                                | Is the Sampled Area           |   |  |
| Hydric Soil Present?   | Yes X No                                | within a Wetland?             | Yes X No  |  |
| Wetland Hydrology Present?   | Yes No                                  | If yes, optional Wetland      | Site ID: Werland  | A568   |
| HYDROLOGY  |   |                               |   |  |
| Wetland Hydrology Indicators:  |   |                               | Casandan/Indianters (minir  | num of two required)   |
| [ [ [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | a specifically about all that amply     |                               | Secondary Indicators (minir   |  |
| Primary Indicators (minimum of one is  |   | (DO)                          | Surface Soil Cracks (B  |  |
| Surface Water (A1)   | Water-Stained Lea                       |                               | ∠ Drainage Patterns (B10  |  |
| High Water Table (A2)  | Aquatic Fauna (B1                       | 1.5                           | Moss Trim Lines (B16)   |  |
| → Saturation (A3)  Water Marks (B4)  | Marl Deposits (B15                      |                               | Dry-Season Water Tab  | ie (C2)  |
| Water Marks (B1) Sediment Deposits (B2)  | Hydrogen Sulfide (                      | neres on Living Roots (C3)    | <ul><li>Crayfish Burrows (C8)</li><li>Saturation Visible on A</li></ul> | orial Imagen, (CO)   |
| Drift Deposits (B3)  | Presence of Reduc                       |                               | Stunted or Stressed Pla   | the second secon |
| Algal Mat or Crust (B4)  |   | ction in Tilled Soils (C6)    | Geomorphic Position (I  |  |
| Iron Deposits (B5)   | Thin Muck Surface                       |                               | Shallow Aquitard (D3)   |  |
| Inundation Visible on Aerial Imag  |   |                               | Microtopographic Relie  | f (D4)   |
| Sparsely Vegetated Concave Su  |   |                               | FAC-Neutral Test (D5)   |  |
| Field Observations:  |   |                               |   |  |
| Surface Water Present? Yes _   | No X Depth (inches):                    |                               |   |  |
| Water Table Present? Yes _   | X No Depth (inches): 7                  | Z"                            |   | N.   |
| Saturation Present? Yes_<br>(includes capillary fringe) Describe Recorded Data (stream gau | X No Depth (inches): (                  |                               | Hydrology Present? Yes  | X No   |
| Describe Necolded Bala (Stream gat   | ige, mornoring wen, aenar priotos, p    | previous inspections), ii ave | madic.  |  |
| Remarks:   | ne and a section of                     |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |
|  |   |                               |   |  |

|  | Abastula            | Deminant Indicator                 |  |
|--|---------------------|------------------------------------|--|
| Tree Stratum (Plot size: 30′)  | Absolute<br>% Cover | Dominant Indicator Species? Status | Dominance Test worksheet:  |
| not applicable   |                     |                                    | Number of Dominant Species That Are OBL, FACW, or FAC:   |
|  |                     |                                    | That are OBL, FACW, or FAC.  |
|  |                     |                                    | Total Number of Dominant   |
|  |                     | <del></del>                        | Species Across All Strata:   |
|  |                     |                                    | Percent of Dominant Species 100  |
| -  |                     |                                    | That Are OBL, FACW, or FAC: (A   |
|  |                     |                                    | S  |
|  |                     |                                    | Prevalence Index worksheet:  |
| •  |                     |                                    | Total % Cover of: Multiply by:   |
|  |                     | = Total Cover                      | OBL species x 1 =  |
| apling/Shrub Stratum (Plot size: 15')  |                     |                                    | FACW species x 2 =   |
| . not Applicable   |                     |                                    | FAC species x 3 =  |
|  |                     |                                    | FACU species x 4 =   |
|  |                     |                                    | UPL species x 5 =  |
|  |                     |                                    | Column Totals: (A)   |
|  |                     |                                    | Prevalence Index = B/A =   |
| ·  |                     |                                    | and the second s |
| 5  |                     |                                    | Hydrophytic Vegetation Indicators:   |
|  | -                   |                                    | 1 - Rapid Test for Hydrophytic Vegetation  |
|  |                     | = Total Cover                      | ∠ 2 - Dominance Test is >50%   |
| Herb Stratum (Plot size:5')  |                     | Total coro                         | 3 - Prevalence Index is ≤3.0¹  |
|  | 2                   | Mac cons                           | 4 - Morphological Adaptations <sup>1</sup> (Provide suppo  |
| Onoclea sensibilis   | _ >0                | Des Herr                           | data in Remarks or on a separate sneet)  |
| 2 Iris pseudo corus  | -5                  | NO OBL                             | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |
| Arisaerra trabullum  | 5                   | NO FAC                             | <sup>1</sup> Indicators of hydric soil and wetland hydrology mu  |
| Arisaerra triphyllum<br>Fraxious penosylvanica   | 5                   | NO FACE                            | be present, unless disturbed or problematic.   |
| Drypters intermedia  | 5                   | NO FOL                             | Definitions of Vegetation Strata:  |
|  |                     |                                    |  |
|  |                     |                                    | Tree – Woody plants 3 in. (7.6 cm) or more in diam at breast height (DBH), regardless of height.   |
| 7  |                     |                                    |  |
| 3  |                     |                                    | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 9  |                     |                                    | and greater than or equal to 3.20 it (1 iii) tail.   |
| 10   |                     |                                    | Herb - All herbaceous (non-woody) plants, regardless of  |
|  |                     |                                    | size, and woody plants less than 3.28 ft tall.   |
| 11   | -                   |                                    | Woody vines - All woody vines greater than 3.28 ft in  |
| 12,  | -                   |                                    | height.  |
| the state of the s | 20                  | = Total Cover                      |  |
| Woody Vine Stratum (Plot size: 30 )  |                     |                                    |  |
| notrappicable  |                     |                                    | Assert Control   |
| 2.   |                     |                                    | Hydrophytic  |
|  |                     |                                    | Vegetation Present? Yes X No   |
| 3  | -                   |                                    | 100  |
| 1  | -                   |                                    |  |
| *  | 0                   | = Total Cover                      |  |

| Depth<br>(inches)  | ption: (Describe  Matrix  Color (moist)  |            | Re  | dox Feature  | <u>s</u>                 |                  |   | maioators.)  |
|--|--|------------|---|--|--------------------------|------------------|---|--|
|  | 2,542,5/1  | %          | Color (moist)   | %  | Type <sup>1</sup>        | Loc <sup>2</sup> | Texture   | Remarks  |
|  | 0,39 0,311   | 70_        | 7,54613   | 30   | <u>-c</u>                | m                | SIL   |  |
|  |  |            |   |  |                          |                  |   |  |
|  |  |            |   |  |                          |                  |   |  |
|  |  |            |   |  |                          |                  |   |  |
|  |  |            |   |  |                          |                  |   |  |
| and don mu   | icators.   | etion, RM= | Reduced Matrix, M   |  |                          |                  | <sup>2</sup> Location: PL<br>Indicators for I                                       | =Pore Lining, M=Matrix. Problematic Hydric Solls³:   |
| _ Thick Dark 8   | don (A2)<br>(A3)<br>ulfide (A4)<br>yers (A5)<br>elow Dark Surface<br>Surface (A12) | (A11)      | Polyvalue Belo MLRA 149E Thin Dark Surf Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark Su | i)<br>ace (S9) (LI<br>Mineral (F1)<br>Matrix (F2)<br>x (F3)<br>Irface (F6) | RR R, MLRA<br>(LRR K, L) | ( 149B)          | 2 cm Muck<br>Coast Prair<br>5 cm Mucky<br>Dark Surfac<br>Polyvalue B<br>Thin Dark S | (A10) (LRR K, L, MLRA 149B) ie Redox (A16) (LRR K, L, R) y Peat or Peat (S3) (LRR K, L, R) te (S7) (LRR K, L, M) ielow Surface (S8) (LRR K, L) surface (S9) (LRR K, L) nese Masses (F12) (LRR K, L, R) |
| Sandy Gleye<br>Sandy Redo<br>Stripped Ma<br>Dark Surface | trix (S6)<br>e (S7) ( <b>LRR R, M</b> L  |            | Depleted Dark<br>Redox Depress  | Surface (F7<br>sions (F8)  |                          |                  | Piedmont F Mesic Spod Red Parent Very Shallor Other (Expla                          | loodplain Soils (F12) (LRR R, L, R<br>loodplain Soils (F19) (MLRA 149<br>ic (TA6) (MLRA 144A, 145, 149E<br>Material (F21)<br>w Dark Surface (TF12)<br>ain in Remarks)                                  |
| dicators of hyd  | r (if observed):   | n and wetl | and hydrology mus   | t be presen  | t, unless dis            | turbed o         | r problematic.  |  |
| Type:  | er (if observed):  |            |   |  |                          |                  |   |  |
| Depth (inches  | ):   |            |   |  |                          |                  |   |  |
| marks:   | /  | -          | 11-06   |  |                          |                  | Hydric Soil Prese   | ent? Yes X No  |
| ina na   |  |            |   |  |                          |                  |   |  |
|  |  |            |   |  |                          |                  |   |  |
|  |  |            |   |  |                          |                  |   |  |
|  |  |            |   |  |                          |                  |   |  |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: Chautougue CTY Sampling Date: 11)12/15 Applicant/Owner: Ball Hill Ward Energy LC State: NY Sampling Point: DR-616 Investigator(s): B. V. 175 S. Bheleyneyer Section, Township, Range: Villenux Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 1% Subregion (LRR or MLRA): LPR - 12 Lat: 79, 11434 Long: 430681 Datum: nan 83 Soil Map Unit Name: CHANTALONG SILTLAM 3-8905 Lopes NWI classification: MPI and Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No\_\_\_\_ Are Vegetation PO, Soil PO, or Hydrology NO naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Yes \_\_\_\_ No X Is the Sampled Area Hydrophytic Vegetation Present? Yes \_\_\_\_ No X within a Wetland? Hydric Soil Present? Wetland Hydrology Present? Yes No X If yes, optional Wetland Site ID:\_\_\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) \_\_ Drainage Patterns (B10) \_\_ Surface Water (A1) Water-Stained Leaves (B9) \_\_\_ Moss Trim Lines (B16) High Water Table (A2) \_\_ Aquatic Fauna (B13) Saturation (A3) \_\_\_ Marl Deposits (B15) Dry-Season Water Table (C2) \_\_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Water Marks (B1) \_\_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) \_\_ Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) \_\_ Algal Mat or Crust (B4) \_\_\_ Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_\_\_ Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Yes \_\_\_\_ No X Depth (inches): Surface Water Present? Yes No X Depth (inches): Water Table Present? Yes \_\_\_\_ No X Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_\_ No X Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| Tree Stratum (Plot size: 30')         | Absolute<br>% Cover | Dominant Species? | Indicator<br>Status | Dominance Test worksheet:   |
|---------------------------------------|---------------------|-------------------|---------------------|---|
| 1. Acer Succhacioum                   |                     | Yes               | FACU                | Number of Dominant Species That Are OBL. FACW, or FAC:  (A)       |
| FAGUS Grand Folia                     | 30                  | Yes               |                     |   |
|                                       | -                   |                   | 1,720               | Total Number of Dominant Species Across All Strata:  (B)          |
|                                       |                     | -                 |                     |   |
| -                                     |                     |                   |                     | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)     |
| •                                     |                     | -                 | /                   | That is obtained by   |
| -                                     |                     | -                 |                     | Prevalence Index worksheet:                                       |
|                                       |                     | -                 |                     | Total % Cover of:Multiply by:                                     |
|                                       | +6                  | = Total Co        | ver .               | OBL species x 1 =   |
| apling/Shrub Stratum (Plot size: 15') |                     |                   |                     | FACW species x 2 =O   |
| FAGUS Grandifolia                     |                     | Yes               | Fren                | FAC species 5 x3 = 15   |
| Acer Scacharinum                      | 20                  | Yes               | FACU                | FACU species 170 x4= 680  UPL species 0 x5= 0                     |
|                                       |                     |                   |                     | Column Totals: 175 (A) 695 (B)                                    |
|                                       |                     |                   |                     | Column Totals: 113 (A) (B)  |
|                                       |                     |                   |                     | Prevalence Index = B/A = 3 97                                     |
|                                       |                     |                   |                     | Hydrophytic Vegetation Indicators:                                |
|                                       |                     | -                 |                     | 1 - Rapid Test for Hydrophytic Vegetation                         |
| :                                     |                     |                   |                     | 2 - Dominance Test is >50%  |
| -1                                    | _66                 | = Total Co        | ver                 | 3 - Prevalence Index is ≤3.0¹                                     |
| lerb Stratum (Plot size:)             |                     | .,                | -                   | 4 - Morphological Adaptations (Provide supporting                 |
| - FACILIS Grandifolia                 |                     |                   |                     | data in Remarks or on a separate sheet)                           |
| Acer Succharionm                      |                     |                   |                     | Problematic Hydrophytic Vegetation¹ (Explain)                     |
| Dryopteris intermedia                 | 5                   | 00                | FAC                 | <sup>1</sup> Indicators of hydric soil and wetland hydrology must |
| (                                     |                     |                   |                     | be present, unless disturbed or problematic.                      |
|                                       |                     |                   |                     | Definitions of Vegetation Strata:                                 |
|                                       |                     |                   |                     | Tree - Woody plants 3 in. (7.6 cm) or more in diameter            |
| \                                     |                     |                   |                     | at breast height (DBH), regardless of height.                     |
|                                       |                     |                   |                     | Sapling/shrub - Woody plants less than 3 in. DBH                  |
| ·                                     |                     |                   |                     | and greater than or equal to 3.28 ft (1 m) tall.                  |
| 0.                                    |                     |                   | -                   | Herb - All herbaceous (non-woody) plants, regardless of           |
| 1.                                    |                     |                   |                     | size, and woody plants less than 3.28 ft tall.                    |
| 2.                                    |                     |                   | • •                 | Woody vines - All woody vines greater than 3.28 ft in             |
| L                                     | 45                  | = Total Co        |                     | height.   |
| 3.1                                   | _1/                 | _= Total Co       | ver                 |   |
| Noody Vine Stratum (Plot size: 35')   |                     |                   |                     |   |
| not Applicable                        | -                   | -                 |                     | Hydrophytic   |
| 2.                                    |                     |                   |                     | Vegetation  |
| 3                                     |                     |                   |                     | Present? Yes No ^   |
|                                       |                     |                   |                     |   |
| 4                                     | 0                   | = Total Co        | vor                 |   |

| Profile Descr   | ription: (Describe to                      | the dep   | th needed to document the  | indicator o   | r confirm      | the absence of indic  | ators.)  |  |
|---|--|-----------|--|---------------|----------------|---|--|--|
| Depth<br>(inches)   | Matrix Color (moist)                       | %         | Redox Feature  | 28 _ 1        | . 2            | 200.00  |  |  |
| 0-12  | 2.5y3)2                                    | 100       | Color (moist) %  |               | Loc            | SIL   | Rema   | rks  |
|   |  |           |  | -             |                |   |  |  |
| 1Type: C=Col Hydric Soil Ir Histosol ( Histic Epi Black His Hydrogen Stratified Depleted Thick Dar Sandy Mu | ncentration, D=Depleridicators: A1)        | tion, RM= | Reduced Matrix, MS=Maske  Polyvalue Below Surface MLRA 149B) Thin Dark Surface (S9) ( Loamy Mucky Mineral (F Loamy Gleyed Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F8) Redox Depressions (F8)  | d Sand Grai   | R,<br>RA 149B) | <sup>2</sup> Location: PL=Pol<br>Indicators for Prol<br>2 cm Muck (A1<br>Coast Prairie R<br>5 cm Mucky Pe<br>Dark Surface (\$<br>Polyvalue Belo<br>Thin Dark Surfa<br>Iron-Manganes<br>Piedmont Flood | olematic Hyd<br>0) (LRR K, L,<br>ledox (A16) (I<br>leat or Peat (S<br>S7) (LRR K, L<br>w Surface (S8<br>ace (S9) (LRF<br>e Masses (F1<br>dplain Soils (F | dric Soils <sup>3</sup> :<br>, MLRA 149B)<br>LRR K, L, R)<br>(3) (LRR K, L, R)<br>L, M)<br>8) (LRR K, L) |
| Sandy Re  |  |           |  |               |                | Red Parent Ma   | terial (F21)   |  |
|   | Matrix (S6)<br>ace (S7) ( <b>LRR R, ML</b> | RA 149B   | )  |               |                | Very Shallow D Other (Explain)  |  | TF12)  |
| <sup>3</sup> Indicators of h  | nydrophytic vegetation                     | n and we  | tland hydrology must be presi  | ent, unless o | disturbed o    | or problematic.   |  |  |
| Restrictive La  | yer (if observed):                         |           | Annual Control of the |               |                |   |  |  |
| Type:   |  |           |  |               |                |   |  |  |
| Depth (inch   | nes):                                      |           |  |               |                | Hydric Soil Present   | ? Yes  | No X   |
|   |  |           |  |               |                |   |  |  |
|   |  |           |  |               |                |   |  |  |

| WETLAND DETERMINATION DATA  | A FORM – Northce            | ntral and Northeast          | Region                        |
|---|-----------------------------|------------------------------|-------------------------------|
| Project/Site: BAH HIH Wind Project  |                             |                              |                               |
|   |                             |                              |                               |
| Applicant/Owner: BAN HIN WIND Energy, LLC                                   |                             |                              |                               |
| Investigator(s): B. Viris   |                             |                              |                               |
| Landform (hillslope, terrace, etc.): H: \\\s\cup_e \\                       | ocal relief (concave, con-  | vex, none): Convey           | Slope (%):_3                  |
| Subregion (LRR or MLRA): L122-R Lat: 79.112                                 | .856 Lon                    | g: 42.432927                 | Datum: nan B3                 |
| Soil Map Unit Name: CHAUTIANOUA S. 1+1                                      | lam 3-8405                  | NWI classific                | ation: upland                 |
| Are climatic / hydrologic conditions on the site typical for this time of y |                             |                              |                               |
| Are Vegetation No. Soil No. or Hydrology No significantl                    |                             |                              | resent? Yes X No              |
| Are Vegetation $\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$     |                             | eeded, explain any answer    |                               |
| SUMMARY OF FINDINGS – Attach site map showin                                | g sampling point l          | ocations, transects          | important features, etc.      |
| Hydrophytic Vegetation Present? Yes X No                                    | Is the Sampled              | Area                         |                               |
| Hydric Soil Present? Yes X No   | within a Wetlar             |                              | No                            |
| Wetland Hydrology Present? Yes X No   | If you optional \           | Wetland Site ID: WET         |                               |
| Remarks: (Explain alternative procedures here or in a separate rep          | ort )                       | Wetland Site ID: VOCI        | 10.10                         |
| HYDROLOGY Wetland Hydrology Indicators:                                     |                             | Secondary Indicat            | ors (minimum of two required) |
| Primary Indicators (minimum of one is required; check all that apply)       | )                           | Surface Soil (               | Cracks (B6)                   |
| ✓ Surface Water (A1)       Water-Stained                                    |                             | _X Drainage Pat              | terns (B10)                   |
| X High Water Table (A2) Aquatic Fauna                                       |                             | Moss Trim Lir                |                               |
| X Saturation (A3) Marl Deposits   |                             |                              | Vater Table (C2)              |
| Water Marks (B1) Hydrogen Sulf  |                             | Crayfish Burn                |                               |
|   | ospheres on Living Root     |                              | sible on Aerial Imagery (C9)  |
|   |                             |                              | ressed Plants (D1)            |
| Iron Deposits (B5)  Recent Iron R  Recent Iron R  Thin Muck Sui             | eduction in Tilled Soils (0 |                              |                               |
| Inundation Visible on Aerial Imagery (B7) Other (Explain                    |                             | Shallow Aquit  Microtopograp | aid (D3)                      |
| Sparsely Vegetated Concave Surface (B8)                                     | illi Kelliaks)              | ✓ FAC-Neutral                |                               |
| Field Observations:   |                             |                              | Test (D3)                     |
| Surface Water Present? YesX_ No Depth (inches                               | s): "2"                     |                              |                               |
| Water Table Present? Yes X No Depth (inches                                 |                             |                              |                               |
| Saturation Present? Yes _x_ No Depth (inches                                | s): <i>O</i> We             | tland Hydrology Present      | ? Yes X No                    |
| Describe Recorded Data (stream gauge, monitoring well, aerial phot          | tos, previous inspections   | ), if available:             |                               |
|   |                             |                              |                               |
| Remarks:  |                             |                              |                               |
| Tremaine,   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |
|   |                             |                              |                               |

| Tree Stratum (Plot size: 30 <sup>2</sup> )            | % Cover          |               | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  | (A)    |
|---|------------------|---------------|--|--------|
| 23  |                  |               | Total Number of Dominant   | (B)    |
| <b>4</b>  |                  |               | Percent of Dominant Species That Are OBL, FACW, or FAC:  | (A/B)  |
| 6   |                  |               | Prevalence Index worksheet:  Total % Cover of: Multiply by:  |        |
| Sapling/Shrub Stratum (Plot size:\)5')                | _6_=             | Total Cover   | OBL species x 1 =<br>FACW species x 2 =  | _      |
| 1. Por Applicable                                     |                  |               | FAC species x 3 =<br>FACU species x 4 =<br>UPL species x 5 =   | -      |
| 3<br>4  |                  |               | Column Totals: (A)<br>Prevalence Index = B/A =   | (B)    |
| 5   | w/ Massaccompany |               | Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation   |        |
| 7   |                  | = Total Cover | 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supp                              | orting |
| 1   | . —              |               | data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain   |        |
| 3<br>4  | -                |               | <sup>1</sup> Indicators of hydric soil and wetland hydrology m<br>be present, unless disturbed or problematic.                     | ust    |
| 56  |                  |               | Definitions of Vegetation Strata:  Tree – Woody plants 3 in. (7.6 cm) or more in dia at breast height (DBH), regardless of height. | meter  |
| 7<br>8  |                  |               | Sapling/shrub – Woody plants less than 3 in. DB and greater than or equal to 3.28 ft (1 m) tall.                                   | н      |
| 9   |                  |               | Herb – All herbaceous (non-woody) plants, regardless size, and woody plants less than 3.28 ft tall.                                | of     |
| 11  |                  | = Total Cover | Woody vines – All woody vines greater than 3.28 ft in height.  | r      |
| Woody Vine Stratum (Plot size: 3c )                   | -                | = Total Covel |  |        |
| 1. POT Applicable                                     |                  |               | Hydrophytic Vegetation Present? Yes X No   |        |
| 3<br>4  |                  |               | Present? res_/\(\frac{7}{2}\) NO   |        |
| Remarks: (Include photo numbers here or on a separate |                  | = Total Cover |  |        |
|   |                  |               |  |        |
|   |                  |               |  |        |
|   |                  |               |  |        |

| 0"-9"  | 1092411   | Color (moist) % Type  TS 1042316 5 C  | _Loc2          | Texture  |   |
|--|---|---|----------------|--|---|
|  | 711   | 12 1040 314 5   |                | - Dividiro   | Remarks   |
|  |   |   | <u>m</u>       | SIL  |   |
|  |   |   |                |  |   |
| Type: C=Concer<br>Hydric Soil Indic<br>Histosol (A1)   | ntration, D=Depletio  | en, RM=Reduced Matrix, MS=Masked Sand Gra                                   |                | <sup>2</sup> Location: PL=Pore Lining  | , M=Matrix.   |
| Histic Epipeda Black Histic (A Hydrogen Sul Stratified Laye Depleted Belo Thick Dark Su Sandy Mucky Sandy Gleyed Sandy Redox ( Stripped Matrix Dark Surface (S | on (A2) A3) fide (A4) ers (A5) w Dark Surface (A1 rface (A12) Mineral (S1) Matrix (S4) (S5) ( (S6) S7) (LRR R, MLRA | Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8) | RA 149B)<br>L) | 2 cm Muck (A10) (LRR M<br>Coast Prairie Redox (A10)<br>5 cm Mucky Peat or Peat<br>Dark Surface (S7) (LRR Polyvalue Below Surface<br>Thin Dark Surface (S9) (LI Iron-Manganese Masses<br>Piedmont Floodplain Soils<br>Mesic Spodic (TA6) (MLR Red Parent Material (F21) | Hydric Solls <sup>3</sup> :  K, L, MLRA 149B)  (CRR K, L, R)  (S3) (LRR K, L, R)  K, L, M)  (S8) (LRR K, L)  LRR K, L)  (F12) (LRR K, L, R)  (F19) (MLRA 149B)  (A 144A, 145, 149B) |
| strictive Layer (i   | f observed):  | riyarology must be present, unless di                                       | sturbed or     | problematic.   |   |
| Depth (inches):_   |   | _   |                |  |   |
| marks:   |   |   | н              | lydric Soil Present? Yes   | × No_   |
|  |   |   |                |  |   |

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

| Investigator(s):   Not   | Applicant/Owner: BAIL Hill Wing         | wind energy, uc                         |   | State: NY Sam               | ng Date: 11   13   15<br>pling Point: 0P - 61 F |
|--|---|---|---|-----------------------------|---|
| Soli Map Unit Name: Little Lat: PLATE Lat: PLATE Long: 97 93 98 100 May Unit Name: Little Name: No  | investigator(s). 13. V.(213             | Se                                      | ection, Township, Range:  | VILLENGUA                   |   |
| Soli Map Unit Name: Literate Lat: PLATE Lat: PLATE Long: 97 93 76 Not Indicated in the Company of the Company o | Landform (hillslope, terrace, etc.):    | H. VSIEDE Local                         | relief (concave, convex, n  | ione): Comen                | Slope (%): 3 %                                  |
| Sol Map Unit Name: CHENA THANDERS III (M. 3-5% SLOVE) NWI classification: UPICACI Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)  Are Vegetation NO Soil NO or Hydrology NO naturally problematic? ((if needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes No within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)  Surface Vater (A1) Water-Stained Leaves (B9) Drainage Patterns (B10)  High Water Table (A2) Aquatic Fauna (B13) Mair Deposits (B15) Dry-Season Water Table (C2)  Water Marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation (C8) Saturation (C9)  To Deposits (B3) Presence of Reduced from (C4) Sturted or Stressed Plants (D1)  Final Architectures of Reduced Iron (C4) Sturted or Stressed Plants (D1)  Final Architectures on Living Roots (C3) Shallow Aquation (D2)  In Indiation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Vater Present? Yes No Depth (inches):  Sutraction Present? Yes No Depth (inches):  Surface Soil Cracks (B6) Inches):  Wetland Hydrology Present? Yes No X Depth (inches):  Wetland Hydrology Present? Yes No X Depth (inches):  Wetland Hydrology Present? Yes No X Depth (inches):  | Subregion (LRR or MLRA); LRK-1          | Lat: 19 11 2 19                         | 4 Long:   | 47 437 766                  | 5   |
| Are Cegetation DD Soil ND or Hydrology ND asignificantly disturbed?  Are Vegetation DD Soil ND or Hydrology ND asignificantly disturbed?  Are Vegetation ND Soil ND or Hydrology ND naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Indicators:  Femarks: (Explain alternative procedures here or in a separate report.)  HYDROLOGY  Wetland Hydrology Indicators:  Femary Indicators (minimum of noe is required; check all that apply) Surface Soil Cracks (86)  Surface Water (A1) Water Table (A2) Aquatic Fauna (813) Moss Trim Lines (816)  Saturation (A3) Mari Deposits (815) Dry-Season Water Table (C2)  Water Marks (B1) Hydrology Sufface Odor (C1)  Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3)  Diff Deposits (B3) Presence of Reduced fron (C4) Stunted or Stressed Plants (D1)  Aligal Mat or Crust (B4) Recent Iron Reduction in Titled Soils (C6)  Iron Deposits (B5) Thin Muck Surface (C7) Spation Against on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Vegetation (Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Marrial Imagery (B7)  No X   | Soil Map Unit Name: CHIENTS             | shown SILT lan                          | 3-340 Slapa   | → NWI classification:       | UPLICATI  |
| Are Vegetation NO Soil NO or Hydrology NO naturally problematic?  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophylic Vegetation Present? Yes No Weltand Hydrology Present? Yes No Within a Wetland? Yes No Weltand Hydrology Present? Yes No Weltand Hydrology Present? Yes No Weltand Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1) Water-Stained Leaves (B9) Drint Deposits (B1) Aquello Fauna (B15)  Surface Water (A2) Aquello Fauna (B15)  Water Marks (B1) Hydrogen Sulfide Codor (C1) Crysesson (Veges Composits (B2) Drysesson (Veges Composits (B3) Presence or feduced from (C4) Surface Sultration (Veges Composits (B3) Presence or Reduced from (C4) Surface (B6) Surface (C7) Surface (B6) Surface (C7) Sparsely Vegetated Concave Surface (B8)  Field Observations:  Wettland Hydrology Indicators:  Moss Trim Lines (B16) Drys-Season Water Table (C2) Crysfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Inform Deposits (B2) Drys-Season Water Table (C2) Shallow Aquitard (D3) Incurdation Visible on Aerial Imagery (B7) Other (Explain in Remarks)  Depth (Deposits (B3) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8)  Field Observations:  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No Depth (inches):  Wetland Hydrology Present? Yes No X Depth (inches):                          | Are climatic / hydrologic conditions on | the site typical for this time of year? | Yes X No  | (If no explain in Remarks ) |   |
| Are Vegetation ND Soil ND or Hydrology ND 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 within a Wottand? Yes No Within a Wott | Are Vegetation No , Soil No , o         | r Hydrology NO significantly dis-       |   |                             |   |
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.  Hydrophytic Vegetation Present? Yes No  | Are Vegetation NO Soil NO               | r Hydrology ND naturally proble         |   |                             |   |
| Hydrophytic Vegetation Present? Yes No Within a Wetland? Yes No X No Wetland Hard Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  |   |   |   |                             |   |
| Hydric Soil Present?  Wetland Hydrology Present?  Wetland Hydrology Present?  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)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Alad or Crust (B4)  Recent Iron Reduction in Tilled Soils (C6)  Iron Deposits (B6)  Thin Muck Surface (C7)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Metand Rydrology Indicators:  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)  Drainage Patterns (B10)  Moss Trim Lines (B18)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Stunted or Stressed Plants (D1)  Algal Mat or Crust (B4)  Recent Iron Reduction in Tillied Soils (C6)  Geomorphic Position (D2)  Inon Deposits (B5)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No Lepth (inches):  Wetland Hydrology Present? Yes No No X  Depth (inches):  Wetland Hydrology Present? Yes No X  Depth (inches):   |   |   | Name of the state |                             | - mire router oo, etc.                          |
| Wetland Hydrology Present? Yes No With If yes, optional Wetland Site ID:    Remarks: (Explain alternative procedures here or in a separate report.)    Wetland Hydrology Indicators:   |   |   |   |                             | Q.  |
| HYDROLOGY   Wetland Hydrology Indicators:   Secondary Indicators (minimum of two required)   Surface Soil Cracks (B6)   Surface Soil Cracks (B6)   Drainage Patterns (B10)   Moss Trim Lines (B16)   Dry-Season Water (A1)   High Water Table (A2)   Aquatic Fauna (B13)   Moss Trim Lines (B16)   Dry-Season Water (B1)   Hydrogen Sulfide Odor (C1)   Crayfish Burrows (C8)   Sediment Deposits (B2)   Oxidized Rhizospheres on Living Roots (C3)   Saturation Visible on Aerial Imagery (C9)   Iron Deposits (B5)   Thin Muck Surface (C7)   Shallow Aquatiad (D3)   Microtopographic Relief (D4)   Sparsely Vegetated Concave Surface (B8)   Thin Muck Surface (C7)   Shallow Aquitand (D3)   Microtopographic Relief (D4)   FAC-Neutral Test (D5)   Saturation Present? Yes No X Depth (inches):   Wetland Hydrology Present? Yes No X Depth (inches):   Wetland Hydrology Present? Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |   |   |   |                             |   |
| HYDROLOGY  Wettand Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  High Water Table (A2)  Saturation (A3)  Water Mari Deposits (B15)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Inundation Visible on Aerial imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Marks (B8)  Water Marks (B1)  Presence of Reduced Iron (C4)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Pasent?  Yes No X Depth (inches):  Wetland Hydrology Present? Yes No X   |   | res No 'X                               | If yes, optional Wetlan   | nd Site ID:                 |   |
| 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)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes No X  Depth (inches):  Saturation high water Indicators (minimum of two required)  Surface Soil Cracks (B6)  Dry-Season Water RB10)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No X  Depth (inches):  Saturation Present?  Yes No X  Depth (inches):  Wetland Hydrology Present? Yes No X  Okelland Hydrology Present? Yes No X  Depth (inches):  Wetland Hydrology Present? Yes No X  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |   |   |   | 4                           |   |
| Surface Water (A1)   |   | alla Ara, Aran antieste ett             |   | Secondary Indicators (mini  | imum of two required)                           |
| High Water Table (A2) Saturation (A3) Water Marks (B1) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Find Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)  Field Observations: Surface Water Table (A2)  Aquatic Fauna (B13) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Saturation Visible on Aerial Imagery (C9) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Thin Muck Surface (C7) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)  Field Observations: Surface Water Present? Yes No X Depth (inches): Saturation Present? Yes No Ex Depth (inches): Wetland Hydrology Present? Yes No X Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |   |   |   |                             |   |
| Saturation (A3)  Water Marks (B1)  Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Table (C2)  Mari Deposits (B15)  Dry-Season Water Table (C2)  Crayfish Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Presence of Reduced Iron (C4)  Recent Iron Reduction in Tilled Soils (C6)  Geomorphic Position (D2)  Thin Muck Surface (C7)  Shallow Aquitard (D3)  Other (Explain in Remarks)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Field Observations:  Surface Water Present?  Yes No X Depth (inches):  Saturation Present?  Yes No X Depth (inches):  Saturation Present?  Yes No X Depth (inches):  Wetland Hydrology Present? Yes No X  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  |   |   |   | Drainage Patterns (B1       | 0)  |
| Water Marks (B1)   |   |   |   | Moss Trim Lines (B16)       | )   |
| Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Water Table Present?  Yes No _K Depth (inches):  Saturation Present?  Yes No _K Depth (inches):  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available:  Crayins Burrows (C8)  Saturation Visible on Aerial Imagery (C9)  Presence of Reduced Iron (C4)  Stunted or Stressed Plants (D1)  Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No _K  No _K  Depth (inches):  Wetland Hydrology Present? Yes No _K  Includes Capillary fringe)   |   |   |   |                             |   |
| Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Surface Water Present? Yes No Depth (inches):  |   |   |   |                             |   |
| Algal Mat or Crust (B4)  Iron Deposits (B5)  Inundation Visible on Aerial Imagery (B7)  Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present?  Yes NoX Depth (inches):  Saturation Present?  Yes NoX Depth (inches):  Saturation Present?  Yes NoX Depth (inches):  Saturation Present?  Yes NoX Depth (inches):  Second Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2)  Shallow Aquitard (D3)  Microtopographic Relief (D4)  FAC-Neutral Test (D5)  Wetland Hydrology Present? Yes No _X  Depth (inches):  Wetland Hydrology Present? Yes No _X  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available:  |   |   |   |                             |   |
| Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Surface Water Present? Yes No Depth (inches):  | Algal Mat or Crust (B4)                 |   |   |                             |   |
| Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) FAC-Neutral Test (D5) Surface Water Present? Yes No Depth (inches):  |   | Thin Muck Surface (                     | (C7)  |                             | 52)   |
| FAC-Neutral Test (D5)  Field Observations:  Surface Water Present? Yes No _X Depth (inches):  Water Table Present? Yes No _X Depth (inches):  Saturation Present? Yes No _X Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |   | ery (B7) Other (Explain in Re           |   |                             | ef (D4)   |
| Surface Water Present? Yes No _X Depth (inches):  Water Table Present? Yes No _X Depth (inches):  Saturation Present? Yes No _X Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |   | ace (B8)                                |   |                             |   |
| Water Table Present? Yes No _X Depth (inches):  Saturation Present? Yes No _X Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   |   | ¥                                       |   |                             |   |
| Saturation Present? Yes No Depth (inches):  (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  |   |   |   |                             | 1   |
| (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  | [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [   |   |   |                             |   |
| Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:   | (includes capillary fringe)             |   |   |                             | No X  |
| Remarks:   | Describe Recorded Data (stream gaug     | e, monitoring well, aerial photos, pre  | evious inspections), if ava   | ilable:                     |   |
| · containe.  | Remarks                                 |   | -   |                             |   |
|  | , tomano.                               |   |   |                             |   |
|  |   |   |   |                             |   |
|  |   |   |   |                             |   |
| · · · · · · · · · · · · · · · · · · ·  | 2 - P                                   |   |   |                             |   |
|  |   |   |   |                             |   |
|  |   |   |   |                             |   |
|  |   |   |   |                             |   |
|  |   |   |   |                             |   |
|  |   |   |   |                             |   |
|  |   |   |   |                             |   |

| Tree Stratum (Plot size: 30')                         | % Cover    |                 | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:             | (A)            |
|---|------------|-----------------|---|----------------|
| 3.  |            |                 | Total Number of Dominant<br>Species Across All Strata:  | (B)            |
| 4   |            |                 | Percent of Dominant Species   |                |
|   |            |                 | That Are OBL, FACW, or FAC:   | (A/B)          |
| )   |            |                 |   | -0,            |
|   |            |                 | Prevalence Index worksheet:   |                |
|   |            |                 | Total % Cover of: Multiply by   |                |
| 141   |            | = Total Cover   | OBL species x 1 =<br>FACW species x 2 =   |                |
| Sapling/Shrub Stratum (Plot size: 15')                |            |                 | FAC species x 3 =   |                |
| NOT Applicable  |            |                 | FACU species x 4 =  |                |
|   |            |                 | UPL species x 5 =   |                |
| 3   |            |                 | Column Totals:(A)   |                |
|   |            |                 | Coldini Totals.   | , , ,          |
| 5   |            |                 | Prevalence Index = B/A =  |                |
|   |            |                 | Hydrophytic Vegetation Indicators:  |                |
| 3   |            |                 | 1 - Rapid Test for Hydrophytic Vegetation   | on             |
| 7   | 1.2        |                 | 2 - Dominance Test is >50%  |                |
|   |            | _ = Total Cover | 3 - Prevalence Index is ≤3.01   |                |
| Herb Stratum         (Plot size:                      |            |                 | 4 - Morphological Adaptations (Provide data in Remarks or on a separate sh                    | supportin      |
|   |            |                 | Problematic Hydrophytic Vegetation <sup>1</sup> (E  | xplain)        |
| 2   |            |                 | Indicators of hydric soil and wetland hydrolo   | nav must       |
| 3   |            |                 | be present, unless disturbed or problematic.  | ogy maor       |
| 4   |            |                 | Definitions of Vegetation Strata:   |                |
| 5,  |            |                 |   | a was a        |
| 6   |            |                 | Tree – Woody plants 3 in. (7.6 cm) or more at breast height (DBH), regardless of height       | in diamete     |
| 7   |            |                 |   |                |
| 8   |            |                 | Sapling/shrub – Woody plants less than 3 and greater than or equal to 3.28 ft (1 m) ta        | in. DBH<br>II. |
| 9   |            |                 |   |                |
| 10.   |            |                 | Herb – All herbaceous (non-woody) plants, regardize, and woody plants less than 3.28 ft tall. | ardless of     |
|   |            |                 |   |                |
| 11  | -          |                 | Woody vines - All woody vines greater than 3.3  | 28 ft in       |
| 12  | -          |                 | height.   |                |
|   |            | _ = Total Cover |   |                |
| Woody Vine Stratum (Plot size:)                       |            |                 |   |                |
| 1. NOT Applicable                                     |            |                 | - Under which is  |                |
| 2   | _          |                 | Hydrophytic Vegetation  | ,              |
| 3.  |            |                 | Present? Yes No >   | _              |
| 4   |            |                 |   |                |
|   |            | = Total Cover   |   |                |
| Remarks: (Include photo numbers here or on a separate | te sheet.) | _ = Total Cover |   |                |

|   | Color (moist)  |         | Red   | x Feature  | indicator           | or conf | irm the absence of i   | ndicators  | Sampling Point: 01  |
|---|--|---------|---|--|---------------------|---------|--|--|---|
| 0" 14"  |  |         | Color (moist)   | %  | <u>Type</u> 1       | _Loc2   |  |  | ,   |
| 11 11 = 11  | 1042313  | 95      | 1040316   |  | C-                  |         |  |  | Remarks   |
| 14"-70"   | 1042512  | 70      | 2.54 313  | 7  |                     | m       | 514  |  |   |
|   |  |         | logasio   |  |                     | m       | _ <u>_ SIL</u> _   |  |   |
|   |  |         | 9 316   | 165  |                     | <u></u> | -\   |  |   |
|   |  |         |   |  |                     |         |  |  |   |
|   |  |         |   |  |                     |         |  |  |   |
|   |  | _       |   |  |                     |         |  |  |   |
| 17.   |  |         |   |  |                     |         |  |  |   |
| Hydric Soil India   | ntration, D=Depletio   | n, RM=R | educed Matrix, MS=N   | lasked o-  | nd C-               |         |  |  | \(\tag{\tag{\tag{\tag{\tag{\tag{\tag{   |
| I IISLUSOI (A1)   |  |         |   |  |                     |         | 2Location: PL=Po   | ore Lining   | M=Matrix  |
| Sandy Mucky Sandy Gleyed Sandy Redox ( Stripped Matrix Dark Surface (S          | A3) fide (A4) ers (A5) ew Dark Surface (A1 rface (A12) Mineral (S1) Matrix (S4) (S5) (S6) S7) (LRR R, MLRA | 1)      | MLRA 149B) Thin Dark Surface ( Loamy Mucky Minet Loamy Gleyed Matr. Depleted Matrix (F3) Redox Dark Surface Depleted Dark Surfa Redox Depressions | S9) (LRR<br>ral (F1) (L<br>x (F2)<br>(F6)<br>ce (F7)<br>(F8) | R, MLRA<br>RR K, L) | 149B)   | 2 cm Muck (A1<br>Coast Prairie R<br>5 cm Mucky Pe<br>Dark Surface (S<br>Polyvalue Belov<br>Thin Dark Surfa<br>Iron-Manganese<br>Piedmont Flood;<br>Mesic Spodic (T,<br>Red Parent Mate | 0) (LRR K, edox (A16; at or Peat of Pe | , L, MLRA 149B) ) (LRR K, L, R) (S3) (LRR K, L, R) , L, M) S8) (LRR K, L) RR K, L) F12) (LRR K, L, R) (F19) (MLRA 149B) |
| dicators of hydrop<br><b>strictive Layer (i</b><br>Type:                        | robserved):  |         |   |  |                     |         |  |  |   |
|   | r observed):   | -       |   |  |                     | - 1     |  |  |   |
| dicators of hydrop<br>strictive Layer (i<br>Type:<br>Depth (inches):_<br>marks: | robserved):  |         |   | *  |                     | н       | ydric Soil Present?  | Yes  | ٧   |
| Depth (inches):   | r observed):   |         | Ŷ   |  | 42                  | Н       | ydric Soil Present?  | Yes  | _ No <u>}</u> _   |
| Depth (inches):   | robserved):  | =       | Ý   |  | San                 | Ну      | ydric Soil Present?  | Yes  | No. <u>Y</u>  |
| Depth (inches):   | robserved):  | =       | *   |  |                     | H       | ydric Soil Present?  | Yes  | No <u>}</u>   |
| Depth (inches):   | robserved):  |         | *   |  |                     | Н       | ydric Soil Present?  | Yes  | No <u>}</u>   |
| Depth (inches):   | robserved):  |         |   |  |                     | Н       | ydric Soil Present?  | Yes  | No <del>Y</del>   |

#### WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region Project/Site: Rall Hill Wind Project City/County: CHANTON OLLY Sampling Date: 11/13/15 Applicant/Owner: Ball Hill wind Energy, HC State: Ny Sampling Point: 00-620 B.V. RIS , M. Boberry Section, Township, Range: YILLENOVA Investigator(s): Landform (hillslope, terrace, etc.): H. 11stope Local relief (concave, convex, none): Concave Slope (%): 2 (4) 79.127316 Long: 42.441699 Datum: 000 63 Subregion (LRR or MLRA): LRR-R Lat: 5. 1+ 10am 0 to 3% Slopes NWI classification: UPI and Soil Map Unit Name: Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation No , Soil No , or Hydrology O significantly disturbed? Are "Normal Circumstances" present? Yes No No Are Vegetation NO, Soil NO, or Hydrology NO 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? Is the Sampled Area Yes X No Yes X No within a Wetland? Hydric Soil Present? Yes X No Wetland Hydrology Present? If yes, optional Wetland Site ID: WL-A573 Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) X Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) X Drainage Patterns (B10) X High Water Table (A2) Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) Saturation (A3) \_\_ Marl Deposits (B15) \_\_\_ Dry-Season Water Table (C2) Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) \_\_\_ Stunted or Stressed Plants (D1) \_\_\_ Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) \_ Iron Deposits (B5) \_\_\_ Thin Muck Surface (C7) \_\_ Shallow Aquitard (D3) \_\_ Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) \_\_\_ Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) X FAC-Neutral Test (D5) Field Observations: Yes X No Depth (inches): N-7 1 Surface Water Present? Yes X No Depth (inches): 04 Water Table Present? Yes \_ Y No \_\_\_ Depth (inches): 0" Saturation Present? Wetland Hydrology Present? Yes X (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| = Total Cov  | er          | Total Number of Dominant Species Across All Strata:         2         (B)           Percent of Dominant Species That Are OBL, FACW, or FAC:         100         (A/B)           Prevalence Index worksheet: |
|--------------|-------------|---|
| = Total Cov  | er          | That Are OBL, FACW, or FAC:   |
| = Total Cov  | er          | Total % Cover of:         Multiply by:           OBL species         x 1 =           FACW species         x 2 =   |
| = Total Cov  |             | OBL species x 1 =<br>FACW species x 2 =   |
|              |             | FACW species x 2 =  |
| -            |             |   |
| -            | -           | FAC species x 3 =   |
|              |             | FACU species x 4 =  |
|              |             | UPL species x 5 =   |
|              |             | Column Totals: (A) (B)  |
|              | _           | Prevalence Index = B/A =  |
|              |             | Hydrophytic Vegetation Indicators:  |
|              |             | 1 - Rapid Test for Hydrophytic Vegetation   |
| 17.7.5       | _           | × 2 - Dominance Test is >50%  |
| _ = Total Co | ver         | 3 - Prevalence Index is ≤3.0 <sup>1</sup>   |
| 2.0          | 0.000       | 4 - Morphological Adaptations (Provide supporting   |
|              | OBL         | data in Remarks or on a separate sneet)   |
| У            | OBL         | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)   |
| N            | NI          | <sup>1</sup> Indicators of hydric soil and wetland hydrology must   |
| N            | FACW        | be present, unless disturbed or problematic.  |
| N            | OBL         | Definitions of Vegetation Strata:   |
|              |             | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  |
|              |             | Sapling/shrub - Woody plants less than 3 in. DBH  |
|              |             | and greater than or equal to 3.28 ft (1 m) tall.  |
|              |             | Herb - All herbaceous (non-woody) plants, regardless of   |
|              |             | size, and woody plants less than 3.28 ft tall.  |
|              |             | Woody vines - All woody vines greater than 3.28 ft in   |
|              |             | height.   |
| = Total Co   | over        |   |
| _ rotal o    | ,,,,,       |   |
|              |             |   |
| -            |             | Hydrophytic   |
|              |             | - Vegetation  |
|              |             | Present? Yes X No   |
|              |             |   |
| = Total C    | over        |   |
|              | = Total Cov | N NI<br>N FACU<br>N OBL   |

| Depth   | Matrix  |           | Redo   | ox Feature  | S                 |                     |  |  |  |
|---|---|-----------|--|-------------|-------------------|---------------------|--|--|--|
| (inches)  | Color (moist)   | %         | Color (moist)  | %           | Type <sup>1</sup> | _Loc <sup>2</sup> _ | Texture  | Remarks  |  |
| 0-8   | 10463/1   | 93        | 104R 4/8   | 5           | <u>C</u>          | M                   | 51L_   | The second secon |  |
|   | -   |           | 1042316  | 2           | <u> </u>          | <u>M</u>            | 516_   |  |  |
|   |   |           | 10112010   |             |                   |                     | 516  |  |  |
| ydric Soil<br>Histosol<br>Histic Ep                                   | pipedon (A2)  | etion, RM | Polyvalue Belo<br>MLRA 149B  | w Surface   | (S8) (LRI         | R,                  | Indicators for F   | =Pore Lining, M=Matrix.  Problematic Hydric Soils <sup>3</sup> : (A10) (LRR K, L, MLRA 149B) ie Redox (A16) (LRR K, L, R)  |  |
| Hydroge Stratified Depleted Thick Da Sandy M Sandy G Sandy R Stripped | istic (A3) en Sulfide (A4) d Layers (A5) d Below Dark Surface ark Surface (A12) Aucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR R, M |           | <ul> <li>Thin Dark Surface (S9) (LRR R, MLRA 149B)</li> <li>Loamy Mucky Mineral (F1) (LRR K, L)</li> <li>Loamy Gleyed Matrix (F2)</li> <li>Depleted Matrix (F3)</li> <li>X Redox Dark Surface (F6)</li> <li>Depleted Dark Surface (F7)</li> <li>Redox Depressions (F8)</li> </ul>  |             |                   |                     | <ul> <li>Dark Surface (S7) (LRR K, L, M)</li> <li>Polyvalue Below Surface (S8) (LRR K, L)</li> <li>Thin Dark Surface (S9) (LRR K, L)</li> <li>Iron-Manganese Masses (F12) (LRR K, L)</li> <li>Piedmont Floodplain Soils (F19) (MLRA 1</li> <li>Mesic Spodic (TA6) (MLRA 144A, 145, 1</li> <li>Red Parent Material (F21)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul> |  |  |
| ndicators of  | f hydrophytic vegetati  | on and w  | etland hydrology mus   | st be prese | ent, unless       | disturbed of        | or problematic.  |  |  |
| estrictive l  | Layer (if observed):  |           | A CONTRACTOR OF THE PARTY OF TH |             |                   |                     |  |  |  |
| Type:   |   |           |  |             |                   |                     |  | 4.4  |  |
| Depth (inc  | ches):  |           |  |             |                   |                     | Hydric Soil Pres   | sent? Yes 🗶 No   |  |
| Depth (ind<br>emarks:   | ches):  |           |  |             |                   |                     | Hydric Soil Pres   | sent? Yes 🚣 No   |  |

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Are climatic / hydrologic condi<br>Are Vegetation <u>Nで</u> , Soil <u>(</u><br>Are Vegetation <u>へ</u> 。  | tions on the site typical or Hydrology | at: 79, 1291  Toca 6+  I for this time of year?  So significantly distu  | Long: 4  Sign Sign Sign  Yes No Are "Normal atic? (If needed, or sign sign)    | NWI classification: upland   |
|---|--|--|--|--|
| Hydrophytic Vegetation Pres<br>Hydric Soil Present?<br>Wetland Hydrology Present?<br>Remarks: (Explain alternativ   | ent? Yes<br>Yes<br>Yes                 | No <b>X</b><br>No <b>X</b><br>No <b>X</b>  | Is the Sampled Area within a Wetland?  If yes, optional Wetland                | YesNo X  |
| HYDROLOGY  Wetland Hydrology Indicat  Primary Indicators (minimum  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) |  | Water-Stained Leave Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Oc Oxidized Rhizosphel Presence of Reduce Recent Iron Reduction | lor (C1)<br>res on Living Roots (C3)<br>d Iron (C4)<br>on in Tilled Soils (C6) | 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) |
| Inundation Visible on Ae  |  | <ul><li>Thin Muck Surface (</li><li>Other (Explain in Re</li></ul>   |  | <ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>   |
| Sparsely Vegetated Con  | cave Surface (B8)                      |  |  | FAC-Neutral Test (D5)  |
| Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (str   | Yes No X Yes No X Yes No No            | Depth (inches): 18   | Wetland H  | lydrology Present? Yes No X  |
| Remarks:  |  |  |  |  |

|  | Absolute<br>% Cover | Dominant<br>Species? | THE RESIDENCE OF THE PARTY OF T | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)                            |
|--|---------------------|----------------------|--|---|
| 2                                      |                     |                      |  | Total Number of Dominant Species Across All Strata: 2 (B)   |
| 4                                      |                     |                      |  | Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)  |
| 6,                                     |                     | -                    |  | Prevalence Index worksheet:   |
| 7                                      | 0                   | = Total Co           | ver  | Total % Cover of: Multiply by:  OBL species   |
| Sapling/Shrub Stratum (Plot size: 15') |                     |                      |  | FACW species 0 x2 = 0   |
| 1. POT Applicable                      |                     |                      |  | FAC species $\frac{5}{90}$ $\times 3 = \frac{15}{300}$  |
| 2                                      |                     | 1000                 |  | FACU species  |
| 3                                      |                     |                      |  | Column Totals: 100 (A) 400 (B)  |
| 4                                      |                     |                      |  | Prevalence Index = B/A = 4.00   |
| 5                                      |                     | -                    |  |   |
| 6                                      |                     |                      |  | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation                                     |
| 7                                      |                     | -                    |  | 2 - Dominance Test is >50%  |
| a k                                    | _0_                 | _ = Total Co         | over   | 3 - Prevalence Index is ≤3.0¹   |
| Herb Stratum (Plot size:               | 110                 | V                    | Tuci   | 4 - Morphological Adaptations (Provide supporting   |
| 1. Schedonorus arundinaceous           | 40                  | 4                    | - FACY   | data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain)                             |
| 2. Trifolium repens                    | 30                  | _ <del>y</del>       | FACU   |   |
|  | _ 5_                | N                    | FAC  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic. |
| 4. Taraxacum offcinale                 | _2_                 | N                    | FACY   |   |
| 5. Pantago lanceolata                  |                     | N                    | FACU   | Definitions of Vegetation Strata:   |
| 6. Rosa multifora                      | _ 5                 | _N                   | FACY   | at breast boight (DRH) regardless of height   |
| 7. Solanum carolinense                 | _5_                 | N                    | _ FACU   |   |
| 8. Dancus carota                       | 5                   | _ N_                 | upl  | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.                 |
| 9                                      |                     |                      |  | Herb - All herbaceous (non-woody) plants, regardless of   |
|  |                     | -                    |  | size, and woody plants less than 3.28 ft tall.  |
| 11                                     |                     |                      |  | Woody vines – All woody vines greater than 3.28 ft in height.   |
|  | 100                 | _ = Total C          | over   |   |
| Woody Vine Stratum (Plot size: 30')    |                     |                      |  |   |
| 1. not Applicable                      |                     |                      |  | NO ACCUSAGE   |
| 2.                                     |                     |                      |  | Hydrophytic Vegetation  |
| 3                                      |                     |                      |  | Present? Yes No X   |
| 4                                      |                     | _                    |  |   |
|  | 0                   | = Total C            | over   |   |

| Depth<br>(inches)  | Color (moist)  |            | Red   | ox Feature  | <u>s</u>            |                     | the abounce of t   | naicators.,  |  |
|--|--|------------|---|---|---------------------|---------------------|--|--|--|
| 0-10   | 104/2 3/2  | _%         | Color (moist)   | %   | Type <sup>1</sup>   | _Loc <sup>2</sup> _ | Texture  | Rema   | ırks   |
|  |  | 100        | 1001  |   |                     |                     | _ SIL _  | *****  |  |
| 10-20  | 10412 414  | 85         | 104R3/2   | 15  | <u>m</u>            | PL                  | 51L _  |  |  |
|  |  |            |   |   |                     |                     |  |  |  |
| _ Histosol   | (A1)   | etion, RM= | Reduced Matrix, MS  |   |                     |                     | Indicators for F   | =Pore Lining, M=<br>Problematic Hyd<br>(A10) (LRR K, L,  | ric Solls <sup>3</sup> :   |
| Black His Hydroger Stratified Depleted Thick Dan Sandy Mi Sandy Gi Sandy Re Stripped I | n Sulfide (A4)<br>Layers (A5)<br>Below Dark Surface<br>rk Surface (A12)<br>ucky Mineral (S1)<br>eyed Matrix (S4) |            | MLRA 149B) Thin Dark Surfa Loamy Mucky M Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depressi | dce (S9) (Li<br>Mineral (F1)<br>Matrix (F2)<br>(F3)<br>face (F6)<br>Surface (F7 | RR R, ML<br>(LRR K, | RA 149B)            | Coast Prairi 5 cm Mucky Dark Surfac Polyvalue B Thin Dark S Iron-Mangar Piedmont FI Mesic Spod Red Parent Very Shallon | ie Redox (A16) (I Peat or Peat (Si Peat or Peat or Peat or Peat (Si Peat or Peat or Peat or Peat or Peat (Si Peat or Peat or Peat or Peat or Peat or Peat (Si Peat or Pe | LRR K, L, R) (3) (LRR K, L, R) (4) (5) (LRR K, L) (6) (LRR K, L) (7) (LRR K, L, R) (19) (MLRA 1498) (1444, 145, 1498)  |
| dicators of  | hydrophytic vegetatio  | n and wet  | land hydrology must   | be preser   | it, unless          | disturbed o         | r problematic.   |  |  |
| OCHIOLIVO L  | ayer (if observed):  | 70.0       |   |   |                     |                     | problematio.   |  | - The state of the |
| Type:  | 2001   |            |   |   |                     |                     |  |  |  |
| Depth (inch  | ies):  |            |   |   |                     |                     | Hydric Soil Prese  | ent? Yes   | No_X   |
| - Joils  | satuvatec  | 1 at       | - 18"   |   |                     |                     |  |  |  |
|  |  |            |   |   |                     |                     |  |  |  |

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

| Applicant/Owner: BAIL H. IL L. Investigator(s): B. V. 2.75  Landform (hillslope, terrace, etc.): L. Subregion (LRR or MLRA): L. R. Soil Map Unit Name: B.5+  Are climatic / hydrologic conditions on the Vegetation No., Soil No., or Are Vegetation No., Soil No., or No., Soil No., Soil No., or No., Soil No., or No., Soil No., or No., Soil No., So | Section Sectin Section Section Section Section Section Section Section Section | elief (concave, convex, nor  Solopes  Yes X No Are "Normal                         |  | Datum:_NAO 63) 2 Yes _ X No  |
|--|--|--|--|--|
| SUMMARY OF FINDINGS – A  Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: (Explain alternative proces  | Yes X No Yes X No  | Is the Sampled Area within a Wetland?  | Yes X No   |  |
| HYDROLOGY  Wetland Hydrology Indicators:  Primary Indicators (minimum of one is  Surface Water (A1)  | required; check all that apply)  Y Water-Stained Leav  | ves (B9)   | Secondary Indicators (m Surface Soil Cracks Drainage Patterns (I   | (B6)   |
| <ul> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imag</li> <li>Sparsely Vegetated Concave Su</li> </ul>   | Presence of Reduct Recent Iron Reduct Thin Muck Surface ery (B7) Other (Explain in Re  | ) Odor (C1) Peres on Living Roots (C3) ed Iron (C4) tion in Tilled Soils (C6) (C7) | Moss Trim Lines (B'     Dry-Season Water Telephone     Crayfish Burrows (Celephone     Saturation Visible or     Stunted or Stressed     Geomorphic Position     Shallow Aquitard (Delephone     Microtopographic Reference     FAC-Neutral Test (Delephone) | Fable (C2) 18) In Aerial Imagery (C9) I Plants (D1) In (D2) 3) I Plants (D4) |
| Field Observations:  Surface Water Present? Yes _ Water Table Present? Yes _ Saturation Present? Yes _ (includes capillary fringe)  Describe Recorded Data (stream gau   | X No Depth (inches): 7   X No Depth (inches): 0   Y No Depth (inches): 0   Depth (inches): 0 Depth (inches): 0   | Wetland h  | Hydrology Present? Ye  | es 🗶 No  |
| Remarks:   |  |  |  |  |

| Absolute<br>% Cover | Dominant Indicator<br>Species? Status | Dominance rest worksneet.   |
|---------------------|---------------------------------------|---|
|                     |                                       | Number of Dominant Species That Are OBL, FACW, or FAC: (A)  |
|                     |                                       | That Are OBL, FACVV, of FAC(A)  |
|                     |                                       | Total Number of Dominant Species Across All Strata: (B)   |
|                     |                                       |   |
|                     |                                       | Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)  |
| - (                 | ,                                     | - Markie Obt., FAOV, OFFAO.   |
|                     |                                       | Prevalence Index worksheet:   |
|                     |                                       | Total % Cover of: Multiply by:  |
| 0                   | = Total Cover                         | OBL species x 1 =   |
|                     |                                       | FACW species x 2 =  |
|                     |                                       | FAC species x 3 =   |
|                     |                                       | FACU species x 4 =  |
|                     |                                       | UPL species x 5 =   |
|                     |                                       | Column Totals: (A) (B)  |
|                     |                                       | Prevalence Index = B/A =  |
|                     |                                       | Prevalence Index = B/A =  |
|                     |                                       | _ Hydrophytic Vegetation Indicators:  |
|                     |                                       | 1 - Rapid Test for Hydrophytic Vegetation   |
|                     |                                       | 2 - Dominance Test is >50%  |
|                     | - (                                   | 3 - Prevalence Index is ≤3.0¹   |
|                     |                                       | <ul> <li>4 - Morphological Adaptations¹ (Provide supportin<br/>data in Remarks or on a separate sheet)</li> </ul> |
|                     |                                       | Deskiewatia Lindranbutia Vanatatian (Evalain)   |
|                     |                                       | _ Problematic Hydrophytic Vegetation (Explain)  |
|                     |                                       | Indicators of hydric soil and wetland hydrology must  |
|                     |                                       | be present, unless disturbed or problematic.  |
|                     |                                       | Definitions of Vegetation Strata:   |
|                     |                                       | Tree – Woody plants 3 in. (7.6 cm) or more in diameter  |
|                     |                                       | at breast height (DBH), regardless of height.   |
|                     |                                       | Sapling/shrub – Woody plants less than 3 in. DBH  |
|                     |                                       | and greater than or equal to 3.28 ft (1 m) tall.  |
| -                   |                                       | Herb - All herbaceous (non-woody) plants, regardless of   |
|                     |                                       | size, and woody plants less than 3.28 ft tall.  |
|                     |                                       | Woody vines – All woody vines greater than 3.28 ft in   |
|                     |                                       | height.   |
|                     | = Total Cover                         |   |
|                     |                                       |   |
|                     |                                       |   |
|                     |                                       | Hydrophytic   |
|                     |                                       |   |
|                     |                                       | - Vegetation  |
|                     |                                       |   |
|                     |                                       | - Vegetation  |
|                     |                                       | = Total Cover   |

| - | - |  |
|---|---|--|
|   |   |  |
|   |   |  |

| (moist)       | 95  | Color (moist)  | x Features %  | Type¹ Loc²  | Texture SIL  | Remarks  |
|---------------|---|--|---|---|--|--|
|               | 95  | logPull6   |   |   |  |  |
|               |   |  |   |   |  |  |
|               |   |  |   |   |  |  |
|               |   |  |   |   |  |  |
|               |   |  |   |   |  |  |
|               |   | -  |   |   |  |  |
|               |   | -  |   |   |  |  |
|               |   |  |   |   |  |  |
|               |   |  |   |   |  |  |
|               |   |  |   |   |  |  |
| n, D=Depletic | on, RM=Re                                       | duced Matrix, MS=  | Masked San  | od Creine   | 2.   |  |
|               |   |  |   |   | Indicators for Prob  | re Lining, M=Matrix.<br>Iematic Hydric Soils³:   |
| )             | _   | MLRA 149B)   |   |   | 2 cm Muck (A10   | ) (LRR K, L, MLRA 149B)  |
| .4)           |   | Thin Dark Surface  | (S9) (LRR I   | R, MLRA 149B)   | ) 5 cm Mucky Pea   | edox (A16) (LRR K, L, R)<br>at or Peat (S3) (LRR K, L, R)  |
| 5)            |   | Loamy Gleved Ma  | eral (F1) (LF<br>trix (F2)  | RR K, L)  | Dark Surface (S  | 7) (LRR K. L. M)   |
| k Surface (A  | 11)   | Depleted Matrix (F   | 3)  |   | Polyvalue Below Thin Dark Surface  | Surface (S8) (LRR K, L)  |
| al (S1)       | X   | Redox Dark Surface   | ce (F6)   |   | Iron-Manganese   | Masses (F12) (LRR K. I. R)   |
| (S4)          |   | Redox Depression   | тасе (F7)<br>s (F8)   |   | Pleamont Floodp  | lain Soils (F19) (MI RA 149R)  |
|               |   |  | ( -/  |   | Red Parent Mate  | A6) (MLRA 144A, 145, 149B)   |
| RR R, MLRA    | (149B)  |  |   |   | Very Shallow Dar   | rk Surface (TF12)  |
| vegetation a  | nd wetland                                      | hydrology must be  | present, un   | less disturbed o  | or problematic   | · (oritana)  |
| ervea):       |   |  |   |   | - p. oblematic.  |  |
|               |   |  |   |   |  | a di   |
|               |   |  |   |   | Hydric Soil Present?   | Yes X No   |
|               | )<br>k Surface (A<br>(A12)<br>al (S1)<br>k (S4) | A4)  K Surface (A11)  (A12)  Sal (S1)  C (S4)   RR R, MLRA 149B) | Polyvalue Below S MLRA 149B)  Thin Dark Surface Loamy Mucky Min Loamy Gleyed Ma k Surface (A11)  (A12) Al (S1) C (S4)  Polyvalue Below S MLRA 149B)  Polyvalue Below S MLRA 149B) | Polyvalue Below Surface (S8)  MLRA 149B)  Thin Dark Surface (S9) (LRR Loamy Mucky Mineral (F1) (LF Loamy Gleyed Matrix (F2)  Loamy Gleyed Matrix (F3)  K Surface (A11)  (A12)  Example Surface (A15)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  RRRR, MLRA 149B) | Polyvalue Below Surface (S8) (LRR R, MLRA 149B)  Thin Dark Surface (S9) (LRR R, MLRA 149B Loamy Mucky Mineral (F1) (LRR K, L)  Loamy Gleyed Matrix (F2)  Loamy Gleyed Matrix (F3)  K Surface (A11)  (A12)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  RR R, MLRA 149B) | Polyvalue Below Surface (S8) (LRR R,   2 cm Muck (A10 Coast Prairie Re Nuck)   Thin Dark Surface (S9) (LRR R, MLRA 149B)   5 cm Mucky Pearl (S0)   Loamy Mucky Mineral (F1) (LRR K, L)   Dark Surface (S Dark Surface (S S) Coast Prairie Re Nucky Pearl (S0)   Dark Surface (S Coast Prairie Re Nucky Pearl (S0)   Dark Surface (S Coast Prairie Re Nucky Pearl (S0)   Dark Surface (S Coast Prairie Re Nucky Pearl (S0)   Dark Surface (S0)   Dark Surface (S0)   Polyvalue Below Thin Dark Surface (S1)   Thin Dark Surface (S1)   Thin Dark Surface (S1)   Thin Dark Surface (S1)   Depleted Dark Surface (F7)   Piedmont Flooder (S2)   Redox Depressions (F8)   Mesic Spodic (TARE Parent Mate Very Shallow Dark (S2)   Very Shallow Dark (S2)   Depleted Dark Dark (S3)   Depleted Dark Dark (S4)   Depleted Dark Surface (F7)   Ned Parent Mate Very Shallow Dark (S4)   Depleted Dark Surface (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Depleted Dark Surface (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TARE Parent Mate Very Shallow Dark (S4)   Nesic Spodic (TAR |

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Project/Site: Ball Hill Wind Project City/County: CHALTISHOUR CTY Sampling Date: 11/3/15 Applicant/Owner: Ball Hill Wind energy LLC State: NY Sampling Point: 0P-623 Investigator(s): B. Vinis, M. Bobery Section, Township, Range: Villenova Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): H
Subregion (LRR or MLRA): LR2-R Lat: 79, 127223 Long: 42, 44,704 Datum: nab83 Soil Map Unit Name: Broti 5: It loom 0 to 3% Slopes NWI classification: Upland Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_\_ No \_\_\_\_\_ (If no, explain in Remarks.) Are Vegetation NO, Soil NO, or Hydrology NO significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation <u>NO</u>, Soil <u>NO</u>, or Hydrology <u>NO</u> 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Yes\_\_\_\_ No X Wetland Hydrology Present? Yes \_\_\_\_ No X If yes, optional Wetland Site ID:\_\_\_\_\_ Remarks: (Explain alternative procedures here or in a separate report.) HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) \_\_ Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Water-Stained Leaves (B9) \_\_ Drainage Patterns (B10) \_\_\_ High Water Table (A2) \_\_ Aquatic Fauna (B13) \_\_ Moss Trim Lines (B16) \_ Saturation (A3) \_\_ Marl Deposits (B15) \_\_ Dry-Season Water Table (C2) \_\_\_ Water Marks (B1) \_\_ Hydrogen Sulfide Odor (C1) \_\_ Crayfish Burrows (C8) \_\_\_ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) \_\_\_ Saturation Visible on Aerial Imagery (C9) \_\_ Drift Deposits (B3) Presence of Reduced Iron (C4) \_\_ Stunted or Stressed Plants (D1) \_\_ Algal Mat or Crust (B4) \_\_\_ Recent Iron Reduction in Tilled Soils (C6) \_\_ Geomorphic Position (D2) \_\_ Iron Deposits (B5) \_\_ Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) \_\_ Other (Explain in Remarks) \_\_\_ Microtopographic Relief (D4) \_ Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) Field Observations: Surface Water Present? Yes \_\_\_\_ No No Depth (inches): Yes \_\_\_\_ No X Depth (inches): Water Table Present? Saturation Present? Yes \_\_\_\_ No \_\_\_ Depth (inches): Wetland Hydrology Present? Yes \_\_\_\_\_ No У (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

| <u>Tree Stratum</u> (Plot size:3 o ') 1         |                   | Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:(A)   |
|---|-------------------|--|
| 2   |                   | Total Number of Dominant Species Across All Strata: (B)  |
| <b>4</b>  |                   | Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)  |
| 6   |                   | Prevalence Index worksheet:  |
| Sapling/Shrub Stratum (Plot size: 15' ) 1 2 3 4 | 100 = Total Cover | Total % Cover of.       Multiply by.         OBL species       x 1 =   |
| 5   |                   | Prevalence Index = B/A =   |
| 6   | 35 = Total Cover  | Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain) |
| 3   |                   | <sup>1</sup> Indicators of hydric soil and wetland hydrology must<br>be present, unless disturbed or problematic.  |
| 5   |                   | Definitions of Vegetation Strata:  |
| 6   |                   | Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.   |
| 8   |                   | Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  |
| 10<br>11<br>12.                                 |                   | Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vines – All woody vines greater than 3.28 ft in height   |
|   | = Total Cover     | height.  |
| Woody Vine Stratum (Plot size: 30/)  1.         |                   | Hydrophytic Vegetation Present?  Yes No  |
|   | = Total Cover     |  |

|   | Color (moist)   | %           | - Redo  | A I Calure  | S                  |                  | and divide of the  |   |  |
|---|---|-------------|---|---|--------------------|------------------|--|---|--|
| 0-10  | 1042313   | 100         | Color (moist)   | %   | _Type <sup>1</sup> | Loc <sup>2</sup> | Texture  | Re  | emarks   |
| 10-20   | -   | -           | 10000110  | 10  |                    |                  | SIL  |   |  |
|   |   |             | 10412412  |   | <u>D</u>           | m                | <u> </u>   |   |  |
|   |   |             |   |   |                    |                  |  |   |  |
|   |   | on, RM=R    | educed Matrix, MS=  | Masked S  | and Grain          | 3.               | <sup>2</sup> Location: PL=F  | ore Lining, N   | ∕l=Matrix,   |
| Sandy Muci<br>Sandy Gley<br>Sandy Redo<br>Stripped Ma | edon (A2)<br>c (A3)<br>Sulfide (A4)<br>Ayers (A5)<br>elow Dark Surface (A<br>Surface (A12)<br>ky Mineral (S1)<br>ed Matrix (S4) | 11)         | Polyvalue Below S MLRA 149B) Thin Dark Surface Loamy Mucky Mine Loamy Gleyed Mat Depleted Matrix (F: Redox Dark Surfac Depleted Dark Surfac Redox Depressions | (S9) (LRF<br>eral (F1) (<br>trix (F2)<br>3)<br>ee (F6)<br>face (F7) | P D MID            | 4400             | 2 cm Muck (A Coast Prairie 5 cm Mucky P Dark Surface ( Polyvalue Beld Thin Dark Surf Iron-Manganes Piedmont Floo Mesic Spodic ( Red Parent Ma Very Shallow D | bblematic Hy 10) (LRR K, Redox (A16) eat or Peat ( S7) (LRR K, bw Surface (S ace (S9) (LR de Masses (F dplain Soils ( TA6) (MLRA terial (F21) ark Surface | /dric Soils <sup>3</sup> :<br>L, MLRA 149B)<br>(LRR K, L, R)<br>S3) (LRR K, L, R)<br>L, M)<br>S8) (LRR K, L)<br>R K, L)<br>12) (LRR K, L, R)<br>F19) (MLRA 149B)<br>144A, 145, 149B) |
| licators of hyd                                       | rophytic vegetation a   | and wotten  | a 1   |   |                    |                  |  | n Remarks)  |  |
| strictive Laye  | drophytic vegetation a  | ind wettani | a nydrology must be   | present, u  | unless dist        | urbed or         | problematic.   |   |  |
| уре:  |   |             |   |   |                    |                  | -  |   |  |
| Depth (inches   | ):  |             |   |   |                    | +                | lydric Soil Present?   | Voc   | _ No >   |
| narks:  |   |             |   |   |                    |                  |  |   |  |

APPENDIX B STREAM DATA FORMS

STREAM FIELD ID: ST-I (flass 1-4)



| Stream Name: 5      | 7-1   | ,                                    | Date: 26 October 201   | 5  |
|---------------------|---|--------------------------------------|--|--|
| County: Chautauc    | qua   |                                      | State: New York  |  |
| Evaluator(s):       | Evaluator(s): DJL, VJM  |                                      | Data Point ID: DP-5  |  |
|                     | Stream Characteristics  | T-                                   | Bottom Characteristics   |  |
| Perceptible Flow    | [ yes [ ] no  |                                      | Substrate Type: Probed Stre  |  |
| Flow Regime: [X     | Perennial [ ] Intermittent [ ]  | Ephemeral                            | (if water pr   | 6"   |
| G. FI D             | ction North to Sount  | Н                                    | [ ] Cobble [ ] 7-<br>[ ] Gravel [X] 13-  | - 24"  |
|                     |   | Long                                 | [ ] Silt/Clay [ ] 37"  |  |
|                     | s edge to water's edge) $\frac{12^{11}}{2^{11}}$  |                                      | Other Silt [] No   | Perceptible Depth  |
| Width (ft) (bank to | o bank)/ d  |                                      |  |  |
|                     | Bank Height and Slope   |                                      | Associated Habitat   | Size Class   |
| Left Bank*          | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ] | Riparian Vegetation [ ] yes [ ] no If yes, list: Solidage Ash Elm Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID: Ward Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [ ] no If yes, list: Ward Acces [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] yes [ ] no If yes, list: [ ] yes [ ] yes [ ] no If yes, list: [ ] yes [ ] yes [ ] no If yes, list: [ ] yes [ ] yes [ ] no If yes, list: [ ] yes [ ] y | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
|                     | 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  of any Evidence of Erosion:   | []<br>[]<br>[]<br>                   | Photo # 3 Right to  Photo # 4 4 upstran  Photo # 3 dun stran   | lott across Essi   |

### STREAM FIELD ID: 57-1



| Project Name: Ball   | Hill Wind Project  |  |  |            |
|--|--|--|--|------------|
| Stream Name:   |  |  | Date: 27 October 3   | 2015       |
| County: Chautauq   | County: Chautauqua   |  | State: New York  |            |
| Evaluator(s):  | JL VJM   |  | Data Point ID: DP-6  |            |
|  | Stream Characteristics   |  | Bottom Characteristics   |            |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |  | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [ ] 0 - 6"         [ ] Cobble       [ ] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |  |            |
|  | Bank Height and Slope  |  | Associated Habitat   | Size Class |
|  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ]   | Riparian Vegetation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID:  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [ ] no If yes, list:  T&E Species [ ] yes [ ] no If yes, list: |            |
| 1  | 51 - 100% (38-45°) 100% (46°+)  of any Evidence of Erosion:  | Bank   | Photo #9 downso  |            |

STREAM FIELD ID: 57-2



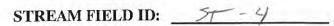
| Project Name: Ball Hill Wind Project  |                                      |  |  |
|---|--------------------------------------|--|--|
| Stream Name:  |                                      | Date: 27 October 201   | 5  |
| County: Chautauqua  |                                      | State: New York  |  |
| Evaluator(s): DSL, VTM  |                                      | Data Point ID: PP-7  |  |
| Stream Characteristics  |                                      | Bottom Characteristics   |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction Month to South  Width (ft) (water's edge to water's edge) 12"  Width (ft) (bank to bank) 2"        |                                      | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock [ ] 0 - 6"         [ ] Cobble [ ] 7 - 12"         [ ] Gravel [ ] 13 - 24"         [ ] Sand [ ] 25 - 36"         [ ] Silt/Clay [ ] 37" +         [ ] Other [ ] No Perceptible Depth   |  |
| Bank Height and Slope   |                                      | Associated Habitat   | Size Class   |
| Left Bank*  0-3' High  0-20% (0-11°)  21-50% (12-27°)  51-100% + (38-45°)  100% + (46° +)  3-6' High  0-20% (0-11°)  21-50% (12-27°)  51-100% (38-45°)  100% (46° +)  6' + High  1 0-20% (0-11°)  21-50% (12-27°) | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ] | Riparian Vegetation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID:  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [ ] no If yes, list:  T&E Species [ ] yes [ ] no If yes, list:  Stream Photos Collected ID, Direct | [ ] Major >100 ft  [ ] Intermediate >10 ft, <100ft  Minor <10 ft |
| [] 51 - 100% (38-45°) [] 100% (46°+)  Provide Detail of any Evidence of Erosion:  |                                      | 1/6/2 4/2<br>1/10/6 4/3  |  |

Erre Sitt loan fragipan Seep origin of but dischare.

|   | 57 | - 5 |  |
|---|----|-----|--|
| _ |    |     |  |

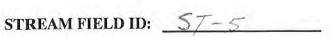


| Project Name: Ball Hill Wind Project   |  |  |   |
|--|--|--|---|
| Stream Name:   |  | Date: 27 October 20  | 2/5"  |
| County: Chautauqua   |  | State: New York  |   |
| Evaluator(s): DJL, VJM   |  | Data Point ID: DP -10  |   |
| Stream Characteristics   |  | Bottom Characteristics   | 1   |
| Perceptible Flow [X yes [] no  Flow Regime: [X Perennial [] Intermittent [] Ephemeral  Stream Flow Direction North to South  Width (ft) (water's edge to water's edge) / feet  Width (ft) (bank to bank) 20 feet   |  | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       ∅ - 6"         [ ] Cobble       [ ] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |   |
| Bank Height and Slope  |  | Associated Habitat   | Size Class  |
| Company   Comp |  | Chop 17 Upstr.   | [] Major >100 ft  [Intermediate >10 ft, <100ft  [] Minor <10 ft |





| Stream Name:                                 |  |                          | Date: 27 October 7   | 2015   |
|--|--|--------------------------|--|--|
| County: Chautauqua                           | a  |                          | State: New York  |  |
| Evaluator(s):                                | Evaluator(s): DSL, VJM   |                          | Data Point ID: DP - 11   |  |
|  | Stream Characteristics   |                          | Bottom Characteristics   |  |
| Perceptible Flow [                           | ] yes [X] no   |                          | Substrate Type: Probed Stre  |  |
| Flow Regime: [>] Pe                          | erennial [ ] Intermittent [ ]  | Ephemeral                | (if water pre  | "  |
| Stream Flow Directi<br>Width (ft) (water's e | Stream Flow Direction <u>Fast to trest</u> Width (ft) (water's edge to water's edge) <u>5 fcof</u> Width (ft) (bank to bank) <u>15 (eef</u>  |                          | Cobble       [ ] 7 - 12"         Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth  |  |
|  | Bank Height and Slope  | 1                        | Associated Habitat   | Size Class   |
| Left Bank*  [ ] [ ] [ ] [ ]                  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  | Right Bank*  [ ] [ ] [ ] | Riparian Vegetation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID:  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [ ] no If yes, list:  T&E Species [ ] yes [ ] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
| 1  | 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  of any Evidence of Erosion:  1 5 4 6 6 6 6 7 5 8 6 6 7 5 8 6 6 7 5 8 6 6 6 7 5 8 7 5 |                          | Stream Photos Collected ID, Direct  Photo 19 Right  Photo 20 upstm  Abob 21 dwn 51   | to let Bank The  |





| tream Name:   |  |   | Date: 27 october 2   | 015  |
|---|--|---|--|--|
| County: Chautauqua  |  | State: New York   |  |  |
| valuator(s):  |  |   | Data Point ID: DP -/2  |  |
|   | Stream Characteristics   | 1   | <b>Bottom Characteristics</b>  |  |
| Perceptible Flow   yes   no  Flow Regime:   Perennial   Intermittent   Ephemeral  Stream Flow Direction                        Width (ft) (water's edge to water's edge)                Width (ft) (bank to bank) |  | Substrate Type:       Probed Stream Depth (if water present):         [] Bedrock       ∅ 0 - 6"         [] Cobble       [] 7 - 12"         [] Gravel       [] 13 - 24"         [] Sand       [] 25 - 36"         [] Silt/Clay       [] 37" +         [] Other       [] No Perceptible Depth |  |  |
|   | Bank Height and Slope  |   | Associated Habitat   | Size Class   |
| Left Bank*  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High  0 - 20% (0-11°) | Right Bank*  [ ] [ ] [ ] [ ]  | Riparian Vegetation [] yes [] no If yes, list:  Aquatic Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID:  Aquatic Organisms [] yes [] no If yes, list:  Riparian/Terrestrial Organisms [] yes [] no If yes, list:  T&E Species [] yes [] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
| [] 21 - 50% (12-27°) [] [] 51 - 100% (38-45°) [] [] 100% (46°+) []  Provide Detail of any Evidence of Erosion:  No notes the prosion  Observed  |  |   | tion, and Description:  is left South  y past  tran west   |  |





| ream Name:  |   |  | Date: 29 October 20  | 155  |
|---|---|--|--|--|
| ounty: Chautauqua   |   |  | State: New York  |  |
| valuator(s): DJL, VJM   |   | Data Point ID: DP-25   |  |  |
|   | Stream Characteristics  |  | Bottom Characteristics   |  |
| Perceptible Flow yes [ ] no  Flow Regime: [X] Perennial [ ] Intermittent [ ] Ephemeral  Stream Flow Direction Ess +  Width (ft) (water's edge to water's edge) G  Width (ft) (bank to bank) / 5 |   | Substrate Type:       Probed Stream Depth (if water present):         [] Bedrock       [] 0 - 6"         [] Cobble       [] 7 - 12"         [] Gravel       [] 13 - 24"         [] Sand       [] 25 - 36"         [] Silt/Clay       [] 37" +         [] Other       [] No Perceptible Depth |  |  |
|   | Bank Height and Slope   | The last of the second   | Associated Habitat   | Size Class   |
| Left Bank*  [ ] [ ] [ ] [ ] [ ]   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [ ] [ ] [ ] [ ] [ ]   | Riparian Vegetation [ ] yes [ ] no If yes, list: Breach proch, Maple Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID:  Aquatic Organisms [ X yes [ ] no If yes, list: Marchaeles Riparian/Terrestrial Organisms [ X] yes [ ] no If yes, list: Der Sparish T&E Species [ ] yes [ X] no If yes, list: | [ ] Major >100 ft  [ ] Intermediate >10 ft, <100ft  [ ] Minor <10 ft |
| [ ] [ ] [ ] Provide Detail of   | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)<br>If any Evidence of Erosion:  |  | Stream Photos Collected ID, Direct   | ion, and Description:  |

# STREAM FIELD ID: ST-7



| Stream Name:  |   | Date: 11/02/2015   |  |  |
|---|---|--|--|--|
| ounty: Chautauqua   |   | State: New York  | State: New York  |  |
| Evaluator(s):   | JL, VJM   | Data Point ID: DP-34   | 200  |  |
|   | Stream Characteristics  | Bottom Characteristics   | 14.00  |  |
| Perceptible Flow yes [] no Flow Regime: [A Perennial [] Intermittent [] Ephemeral Stream Flow Direction <u>East to Wast</u> Width (ft) (water's edge to water's edge) |   | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [ ] 0 - 6"         [ ] Cobble       [ ] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |  |  |
|   | Bank Height and Slope   | Associated Habitat   | Size Class   |  |
| [ ] [ ] [ ] [ ] [ ]   | Right Bar<br>  0-3' High  <br>  0 - 20% (0-11°)   | Aquatic Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID:  Aquatic Organisms [] yes [] no If yes, list:  Riparian/Terrestrial Organisms [] yes [] no If yes, list:  T&E Species [] yes [] no If yes, list:   | [ ] Major >100 ft  [ ] Intermediate >10 ft, <100ft  Minor <10 ft |  |
| [] [] Provide Detail (  | 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  of any Evidence of Erosion:  Lewoth, 205 10 Observe | Stream Photos Collected ID, Direct   |  |  |

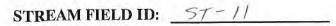




| Stream Name:   |  | Date: 11/02/2015  |            |
|--|--|---|------------|
| County: Chautauqua   |  | State: New York   |            |
| Evaluator(s): DTL, VIM   |  | Data Point ID: DP - 35  |            |
| Stream Characteristics   |  | Bottom Characteristics  |            |
| Perceptible Flow N yes [] no  Flow Regime: Perennial [] Intermittent [] Ephemeral  Stream Flow Direction Fast to has t  Width (ft) (water's edge to water's edge) 3  Width (ft) (bank to bank) 8 |  | Substrate Type:       Probed Stream Depth (if water present):         [] Bedrock       [] 0 - 6"         [] Cobble       [] 7 - 12"         [] Gravel       [] 13 - 24"         [] Sand       [] 25 - 36"         [] Silt/Clay       [] 37" +         [] Other       [] No Perceptible Depth  |            |
| Bank Height and Slope  | A  | Associated Habitat  | Size Class |
| D-3' High  | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ | Riparian Vegetation[] yes [] no If yes, list:  Aquatic Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID:  Aquatic Organisms [] yes [] no If yes, list:  Riparian/Terrestrial Organisms [] yes [] no If yes, list:  T&E Species [] yes [] no If yes, list:  Stream Photos Collected ID, Direct  Modo # 50 dm |            |



| Stream Name:  |   |   | Date: 11/04/2015  |  |
|---|---|---|---|--|
| County: Chautauqua  |   |   | State: New York   |  |
| Evaluator(s): D5  | C, VSM  |   | Data Point ID: DR-54  | <u> </u>   |
|   | Stream Characteristics  |   | Bottom Characteristics  |  |
| Perceptible Flow [ yes [ ] no  Flow Regime: Perennial [ ] Intermittent [ ] Ephemeral  Stream Flow Direction |   | Substrate Type:    Probed Stream Depth (if water present):   Gravel   7 - 12"   13 - 24"   25 - 36"   37" +     Other   No Perceptible Depth   No Perceptible Depth   Probed Stream Depth (if water present):   1 |   |  |
|   | Bank Height and Slope   |   | Associated Habitat  | Size Class   |
| Left Bank*  [ ] [ ] [ ] [ ] [ ] [ ]   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [ ] [ ] [ ] [ ]  | Riparian Vegetation[X] yes [] no If yes, list: Hemloch Forth  Aquatic Vegetation [] yes [X no If yes, list:  Associated Wetland [] yes [X no If yes, list ID:  Aquatic Organisms [X] yes [] no If yes, list: Macro Invertebrates  Riparian/Terrestrial Organisms [X] yes [] no If yes, list: T&E Species [] yes [] no If yes, list: | [] Major >100 ft  Intermediate >10 ft, <100ft  [] Minor <10 ft |
|   | 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  f any Evidence of Erosion:  dence of Lossion  | []<br>[]<br>[]<br>obsered   | Stream Photos Collected ID, Direct  Moto# 76 Right-  Photo# 71 upstra  Photo# 72 dwnstra  | to left north  |





| tream Name:  |   |  | Date: 11/05/2015  |  |
|--|---|--|---|--|
| County: Chautauqu  | a   |  | State: New York   |  |
| Evaluator(s): DJL, VJM   |   | Data Point ID: DP-63   |   |  |
|  | Stream Characteristics  |  | <b>Bottom Characteristics</b>   |  |
| Perceptible Flow [M] yes [] no Flow Regime: [] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |   | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [ ] 0 - 6"         [ ] Cobble       [ ] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |   |  |
|  | Bank Height and Slope   |  | Associated Habitat  | Size Class   |
| Left Bank*   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High | Right Bank*  | Riparian Vegetation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: [ ] yes [ ] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
|  | 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) of any Evidence of Erosion:  | []<br>[]<br>[]<br>[]   | Photo 82 upstra   | to lead hesi   |





| Stream Name:  |   | Date: 11/05/2015   |   |  |
|---|---|--|---|--|
| County: Chautauqua  |   |  | State: New York   | 33   |
| Evaluator(s):   | 154 V5M   |  | Data Point ID: DP-68  |  |
|   | Stream Characteristics  |  | Bottom Characteristics  |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |   | Substrate Type:  Probed Stream Depth (if water present):  Octoble  Sand Silt/Clay  Other  Probed Stream Depth (if water present):  Octoble  Octoble |   |  |
|   | Bank Height and Slope   |  | Associated Habitat  | Size Class   |
| Left Bank*  [ ] [ ] [ ] [ ] [ ]   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High | Right Bank*  | Riparian Vegetation [7] yes [ ] no If yes, list:  Associated Wetland [7] yes [ ] no If yes, list ID:  Aquatic Organisms [8] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms [4] yes [ ] no If yes, list:  T&E Species [ ] yes [ ] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
|   | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)<br>of any Evidence of Erosion:  |  | Stream Photos Collected ID, Direction  Photo 91 Right to  Photo 93 Myston  Photos 93 Myston   | on, and Description:  Leff North  Wost  Eggt                   |

## STREAM FIELD ID: 57/3



| Stream Name:  |   | Date: 11/05/2015   |  |                        |
|---|---|--|--|------------------------|
| County: Chautauqua  |   | State: New York  |  |                        |
| Evaluator(s):   | TL. VSV   |  | Data Point ID: 69  | 105                    |
|   | Stream Characteristics  |  | Bottom Characteristics   |                        |
| Perceptible Flow [] yes [] no  Flow Regime: Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |   | Substrate Type:  Probed Stream Depth (if water present):  Second Stream St |  |                        |
|   | Bank Height and Slope   |  | Associated Habitat   | Size Class             |
| [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) | [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | Riparian Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID:  Aquatic Organisms [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list:  Aquatic Organisms [] yes [] no If yes, list:  Aquatic Organisms [] yes [] no If yes, list:  T&E Species [] yes [] no If yes, list:  Stream Photos Collected ID, Direct Advances of the graph of | tion, and Description: |
|   | il of any Evidence of Erosion:  |  | Photo 39 upstran   | n north                |

## STREAM FIELD ID: 57-14



| Stream Name:                                |                      | Date: 11/06/2015                               | A.  |
|---|----------------------|--|---|
|   |                      | State: New York                                | , in the second |
| nty: Chautauqua                             |                      |  | * 1   |
| luator(s): DJC, VJM                         |                      | Data Point ID: DP - 72                         | A. S. Sanato  |
| Stream Characteristics                      |                      | Bottom Characteristics                         | 2420  |
| ceptible Flow [X yes [ ] no                 |                      | Substrate Type: Probed Stre                    |   |
| v Regime: [ XPerennial [ ] Intermittent [ ] | Ephemeral            | (if water pre                                  | 11  |
|   |                      | Cobble [] 7-1   Gravel [] 13-                  |   |
| am Flow Direction South to Moth             |                      | [ ] Sand [ ] 25 -                              | 36"   |
| th (ft) (water's edge to water's edge)      |                      |  | Perceptible Depth   |
| Ith (ft) (bank to bank)                     |                      |  |   |
| tar (tr) (outlit to outlit)                 |                      |  |   |
| Bank Height and Slope                       |                      | Associated Habitat                             | Size Class  |
| Left Bank*                                  | Right Bank*          | Riparian Vegetation[ yes [ ] no If yes, list:  | [ ] Major<br>>100 ft  |
| <u>0-3' High</u>                            |                      | 70/1dago                                       |   |
| [A] 0 - 20% (0-11°)                         | N                    | Aquatic Vegetation [] yes [] no If yes, list:  | [ ] Intermediate >10 ft, <100ft   |
| 21 - 50% (12-27°)                           | []                   |  | Minor Minor   |
| 51 - 100% + (38-45°)<br>100%+(46°+)         | []                   | Associated Wetland [X] yes [] no               | <10 ft  |
|   |                      | If yes, list ID: WL - V 3                      |   |
| 3-6' High                                   |                      | Aquatic Organisms [] yes [X] no If yes, list:  |   |
| [ ] 0 - 20% (0-11°)                         | []                   |  |   |
| [ ] 21 - 50% (12-27°)<br>51 - 100% (38-45°) | []                   | Riparian/Terrestrial Organisms  [ ] yes [ ] no |   |
| [] 100% (46°+)                              | ן ז                  | If yes, list: Birds deer                       |   |
|   |                      | T&E Species [] yes [≼] no                      |   |
| <u>6' + High</u>                            |                      | If yes, list:                                  |   |
| [ ] 0 - 20% (0-11°)                         | [ ]                  | Stream Photos Collected ID, Direc              | tion, and Description:  |
| [ ] 21 - 50% (12-27°)<br>51 - 100% (38-45°) | []                   | Stream Photos Conected 1D, Direc               | non, and Description.   |
| [] 100% (46°+)                              | ìi                   | Photo 96 Right                                 | le Ce of from   |
| Provide Detail of any Evidence of Erosion:  |                      | Photo 97 4058                                  | in south  |
| No ression observe                          | ea (                 | 11010 11 4/15/1                                | 2011  |
| 16  | 510-11 - 478-981 - 5 | theto 10 dunet                                 | m north   |
|   |                      | 1 100 10 100 11                                | F 20  |

STREAM FIELD ID: DP-73/51-15

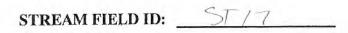


| tream Name:  |  | Date: 11/6/15  |            |
|--|--|--|------------|
| County: Chautauqua   |  | State: New York  |            |
| Evaluator(s): D5L, V5H   |  | Data Point ID: DP_73   |            |
| Stream Characteristics   |  | Bottom Characteristics   |            |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |  | Substrate Type:   Probed Stream Depth (if water present):   [ ] Bedrock  |            |
| Bank Height and Slope  |  | Associated Habitat   | Size Class |
| D-3' High  | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] | Riparian Vegetation [1] yes [] no If yes, list: Regarded Westland [1] yes [] no If yes, list: Associated Wetland [1] yes [] no If yes, list ID: [1] yes [] no If yes, list:  Riparian/Terrestrial Organisms [1] yes [] no If yes, list: [1] yes [] no If yes, list:  Stream Photos Collected ID, Direct PH - 99 Right beat [1] PH, 100 Upsneam (1)  Whe Sheet say. | Bonk (W)   |

| <- | // |
|----|----|
| 21 | 16 |



| Stream Name:  |   | Date: /////2015  |  |  |
|---|---|--|--|--|
| County: Chautauqua  |   |  | State: New York  |  |
| Evaluator(s):   | ) ブレ  |  | Data Point ID: DP-76   |  |
| 6   | Stream Characteristics  |  | Bottom Characteristics   |  |
| Perceptible Flow  yes [] no  Flow Regime: Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |   | Substrate Type:       Probed Stream Depth (if water present):         [] Bedrock       [] 0 - 6"         [] Cobble       [] 7 - 12"         [] Gravel       [] 13 - 24"         [] Sand       [] 25 - 36"         [] Silt/Clay       [] 37" +         [] Other       [] No Perceptible Depth |  |  |
|   | Bank Height and Slope   |  | Associated Habitat   | Size Class   |
| Left Bank*  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ]   | Riparian Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID:  Aquatic Organisms [] yes [] no If yes, list:  Riparian/Terrestrial Organisms  [] yes [] no If yes, list:  T&E Species [] yes [] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft   |
|   | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)<br>of any Evidence of Erosion:  |  | Stream Photos Collected ID, Direct   | A STATE OF THE PARTY OF THE PAR |





| Stream Name:                            |   | Date: 11/11/2015                 | The second secon |  |
|---|---|----------------------------------|--|--|
| County: Chautauqua                      |   | State: New York                  |  |  |
| Evaluator(s):                           | DJL   |                                  | Data Point ID: DP-53   |  |
| 11 - 10 - 10 - 10 - 10 - 10 - 10 - 10 - | Stream Characteristics  |                                  | Bottom Characteristics   | Apolythan  |
| erceptible Flow [                       | yes [] no   |                                  | Substrate Type: Probed Stream  |  |
| Flow Regime: 🔀 P                        | erennial [ ]Intermittent [ ]  | Ephemeral                        | (if water pre  [ ] Bedrock [ ] 0 - 6'  | 2"   |
|   | edge to water's edge) 6.  |                                  | [X] Gravel       [ ] 13 - 2         [X] Sand       [ ] 25 - 3         [X] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No P   | 36"  |
|   | bank)   |                                  |  | R  |
|   | Bank Height and Slope   |                                  | Associated Habitat   | Size Class   |
| Left Bank*  [M [ ] [ ] [ ] [ ] [ ]      | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [*] [ ] [ ] [ ] [ ] | Riparian Vegetation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list ID:  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms  [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms  [ ] yes [ ] no If yes, list:   | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
| 4                                       | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)<br>of any Evidence of Erosion:  |                                  | Stream Photos Collected ID, Direction  Photo 109 Right to  Photo 110 Upstern  Photo 111 Aur 520  |  |

STREAM FIELD ID: ST-18



| Stream Name: UY  | inamed Tributary  |  | Date: 11/12/15   |  |
|--|---|--|--|--|
| County: Chautauqua   |   | State: New York  |  |  |
|  | soberg O. LOCKWOOD  |  | Data Point ID: QD  |  |
|  | Stream Characteristics  |  | Bottom Characteristics   |  |
| Perceptible Flow [x] yes [] no  Flow Regime: [x] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |   | Substrate Type:         Probed Stream Depth (if water present):           [ ] Bedrock         [ M 0 - 6"           [ ] Cobble         [ ] 7 - 12"           [ X] Gravel         [ ] 13 - 24"           [ ] Sand         [ ] 25 - 36"           [ X] Silt/Clay         [ ] 37" +           [ ] Other         [ ] No Perceptible Depth |  |  |
|  | Bank Height and Slope   |  | Associated Habitat   | Size Class   |
| Left Bank*   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [X] [ ] [ ] [ ] [ ] [ ] [ ]   | Riparian Vegetation [] yes [] no If yes, list:  Aquatic Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID: WL-A3  Aquatic Organisms [] yes [] no If yes, list:  Riparian/Terrestrial Organisms [] yes [] no If yes, list:  T&E Species [] yes [] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
| minor  | 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  of any Evidence of Erosion:   |  | Stream Photos Collected ID, Direct  PHOTO BY 119 U.S.  PHOTO 120 DS/  PHOTO 118 BTL  | /W   |

STREAM FIELD ID: 5T-19



| Stream Name:            |   | Date: 11/12/2015         |  |  |
|-------------------------|---|--------------------------|--|--|
| County: Chautauqua      |   | State: New York          |  |  |
| Evaluator(s):           | ATL, MAS  |                          | Data Point ID: 7) P - 95   |  |
|                         | Stream Characteristics  |                          | Bottom Characteristics   |  |
| erceptible Flow         | yes [] no   |                          | Substrate Type: Probed Stre  |  |
| low Regime: [6]         | Perennial [ ] Intermittent [ ]  | Ephemeral                | (if water pro  | "  |
|                         | 21/   |                          | [✓] Cobble [ ] 7-1 [ ] Gravel [ ] 13-  |  |
| tream Flow Direc        | tion fast to bus  | 1                        | [ ] Sand [ ] 25 - [ ] Silt/Clay [ ] 37"  |  |
| /idth (ft) (water's     | edge to water's edge)3  |                          |  | Perceptible Depth  |
| Vidth (ft) (bank to     | bank)5  |                          |  |  |
|                         | Bank Height and Slope   |                          | Associated Habitat   | Size Class   |
| Left Bank*  [ ] [ ] [ ] | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) | Right Bank*  [ ] [ ] [ ] | Riparian Vegetation[] yes [] no If yes, list:  Aquatic Vegetation [] yes [] no If yes, list:  Associated Wetland [] yes [] no If yes, list ID:  Aquatic Organisms [] yes [] no If yes, list: | [ ] Major >100 ft  [ ] Intermediate >10 ft, <100ft  Minor <10 ft |
|                         | 21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)  |                          | Riparian/Terrestrial Organisms  [7] yes [] no  If yes, list:  T&E Species  If yes, list:   | , i  |
|                         |   |                          | - ) + 0, 100   |  |
| []                      | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)                                 | []<br>[]<br>[]<br>[]     | Stream Photos Collected ID, Directi  |  |
| Provide Detail          | of any Evidence of Erosion:   |                          | that 1)  | 1. 22.1  |
| No 4                    | Cosion obsourch   | Aurora                   | 11000 1760 01/27/201   | wes !  |
| 4.444                   |   |                          | Photo 127 Dun Ston   | East   |



| Project Name: Ball l   | Hill Wind Project   |                     |  |  |
|--|---|---------------------|--|--|
| Stream Name:   |   |                     | Date: 10   26   15   | -  |
| County: Chautauqu  | a   |                     | State: New York  |  |
| Evaluator(s): B  | Viris, m. Bobery  |                     | Data Point ID: DP-507-   |  |
|  | Stream Characteristics  |                     | Bottom Characteristics   |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |   | Platey Substite 4"- | esent): " 12" 24" 36"  |  |
|  | Bank Height and Slope   |                     | Associated Habitat   | Size Class   |
|  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)   |                     | Riparian Vegetation[X] yes [] no If yes, list:  Aquatic Vegetation [] yes [X] no If yes, list:  Associated Wetland [X] yes [] no If yes, list ID: well-and Photo Aquatic Organisms [X] yes [] no If yes, list: Fish (1994)  Riparian/Terrestrial Organisms [] yes [X] no If yes, list:  T&E Species [] yes [X] no If yes, list:  Stream Photos Collected ID, Direct Solution of the property o | [ ] Major >100 ft  [ Intermediate >10 ft, <100ft  [ ] Minor <10 ft |
| Left Bend<br>OF Stall<br>Vent.co   | of any Evidence of Erosion: Resolution of the property of the | banks               | 503 DS E   |  |



| Stream Name: Unnamed Tributary   |  | Date: 10/20/2015  |   |  |
|--|--|---|---|--|
| County: Chautauqua   |  | State: New York   |   |  |
| Evaluator(s): M  | Boberg B. Virts  |   | Data Point ID: DO-504   |  |
|  | Stream Characteristics   |   | Bottom Characteristics  |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [] Perennial [X] Intermittent [] Ephemeral  Stream Flow Direction |  | Substrate Type:   Probed Stream Depth (if water present):   [ ] Bedrock   [x] 0 - 6"   [ ] 7 - 12"   [x] Gravel   [ ] 13 - 24"   [ ] Sand   [ ] 25 - 36"   [ ] 37" + [ ] Other   [ ] No Perceptible Depth   [ ] |   |  |
|  | Bank Height and Slope  |   | Associated Habitat  | Size Class   |
| [ ] [ ] [ ] [ ] [ ]  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  0 - 20% (0-11°) | Right Bank*  [ ] [ ] [ ] [ ] [ ]  | Riparian Vegetation [X] yes [X] no If yes, list:  Associated Wetland [M] yes [X] no If yes, list ID: Letter A501  Aquatic Organisms [ ] yes [X] no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [X] no If yes, list:  T&E Species [ ] yes [X] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
| [] [] [] Provide Detail of   | 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  Tany Evidence of Erosion:  banks with mind  Orasion present  | []<br>[]<br>[]<br>[]<br>/   | Stream Photos Collected ID, Direction $Photo 500 US (N)$ Photo $B07 DS (S)$ Photo $S08 PTL (E)$   | ion, and Description:  |

STREAM FIELD ID: \_ST-A502



| Date: 10/28/2015  State: New York  |  |  |
|--|--|--|
| State: New York  |  |  |
| Data Point ID: DP=520  |  |  |
| Bottom Characteristics   |  |  |
| (if water [ ] Bedrock [ X ] 0 [ X ] Cobble [ ] 7 [ X ] Gravel [ ] 1 [ ] Sand [ ] 2 [ ] Silt/Clay [ ] 3   | Substrate Type:    Probed Stream Depth (if water present):   W   0 - 6"     X   Cobble   7 - 12"     X   Gravel   13 - 24"     Sand   25 - 36"     Silt/Clay   37" + |  |
| Associated Habitat   | Size Class   |  |
| If yes, list:  Mixed Hardwoods  Aquatic Vegetation [] yes [N] no If yes, list:  Associated Wetland [] yes [N] no If yes, list ID:  Aquatic Organisms [] yes [N] no If yes, list:  Riparian/Terrestrial Organisms [] yes [N] no If yes, list:  T&E Species [] yes [N] no If yes, list:  Stream Photos Collected ID, Direct Photo 525 (US) & |  |  |
|  | Substrate Type: Probed S (if water  [] Bedrock   |  |

STREAM FIELD ID: \_STREAM ASO3



| Stream Name:   | Date: 10/29/15  |               |
|--|---|---------------|
| County: Chautauqua   | - 1   | _             |
| Evaluator(s): B. VizTS, M. Boberry   | Data Point ID: DP - 527   |               |
| Stream Characteristics   | Bottom Character Lit  |               |
| Perceptible Flow [ yes [ ] no  Flow Regime: [X] Perennial [ ] Intermittent [ ] Epheme  Stream Flow Direction | Substrate Type:   Probed Stream Depth (if water present):   | o             |
| Bank Height and Slope  | Associated Habitat Size Cla   |               |
| O-3' High  | Riparian Vegetation [ ] yes [ ] no If yes, list: Facultation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID:  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [ ] no If yes, list:  T&E Species [ ] yes [ ] no If yes, list:  Size Cla  [ ] Major >100 ft    Minor <10 ft    Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor <10 ft   Minor | iate<br>100ft |
| [] 100% (46°+) [] Provide Detail of any Evidence of Erosion: STREP   | Photo 539 uslu  |               |
| evidence of erosion  | 540 OSTE<br>541 RTL/N   |               |



| stream Name: unnamed Tributary  |   |  | Date: 10 29 15  |  |
|---|---|--|---|--|
| County: Chautauqua  |   | State: New York  |   |  |
| 3 1 ( ) ( )   | 3. Viets, M. Bobery   |  | Data Point ID: 0P-525   |  |
|   | Stream Characteristics  |  | Bottom Characteristics  |  |
| Stream Characteristics  Perceptible Flow   yes [ ] no  Flow Regime:   Perennial [ ] Intermittent [ ] Ephemeral  Stream Flow Direction   South  Width (ft) (water's edge to water's edge)   15'  Width (ft) (bank to bank)   20' |   | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [ ] 0 - 6"         [ ] Cobble       [ ] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |   |  |
|   | Bank Height and Slope   | -0   | Associated Habitat  | Size Class   |
| Left Bank*  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ]   | Riparian Vegetation [ ] yes [ ] no If yes, list: Fraction [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID: WETLAND RENS  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms | [] Major >100 ft  [Major 100 ft  [Major 100 ft  [Minor 100 ft  [Minor 100 ft  [Minor 100 ft] |
| <u>eros; o</u>  | 0-20% (0-11°) 21-50% (12-27°) 51-100% (38-45°) 100% (46°+)  of any Evidence of Erosion: Y.  | -drenting  | 545 US / W 546 05/E 547 LTR/5   | )  |



| Stream Name: Urramed TR. Burnary   |   | Date: 10 79 15   |  |                   |
|--|---|--|--|-------------------|
| County: Chautauqua   |   | State: New York  |  |                   |
| Evaluator(s):  | 3. Vizis, M. Bobe   | -g   | Data Point ID: DO-526  |                   |
|  | Stream Characteristics  | 0  | Bottom Characteristics   |                   |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction   |   | Substrate Type:    Probed Stream Depth (if water present):   Gravel   0 - 6"   7 - 12"   13 - 24"   13 - 24"   13 - 24"   1   25 - 36"   1   37" +   1   1   1   1   1   1   1   1   1   |  |                   |
| And the second s | Bank Height and Slope   | A CONTRACTOR OF THE CONTRACTOR | Associated Habitat   | Size Class        |
| [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100%+(46°+)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+) | Right Bank*  [ ]   | Riparian Vegetation[X] yes [] no If yes, list: FACULTATION Aquatic Vegetation [] yes [A no If yes, list:  Associated Wetland [X] yes [] no If yes, list ID: Wetland [A] yes [] no If yes, list ID: Wetland [A] yes [X] no If yes, list:  Riparian/Terrestrial Organisms [] yes [X] no If yes, list:  T&E Species [] yes [X] no If yes, list:  Stream Photos Collected ID, Direction  Suppose [] yes [X] no If yes, list: | The second second |
|  | fany Evidence of Erosion: St  |  |  |                   |



| Project Name: Ball Hill Wind Project   |  |  |   |
|--|--|--|---|
| Stream Name: Unnumed Tabu  | ton  | Date: 10   29   15   |   |
| County: Chautauqua   |  | State: New York  |   |
| Evaluator(s): B. V1,275, M. Bob  | pener  | Data Point ID: DP-527  |   |
| Stream Characteristics   |  | Bottom Characteristics   |   |
| Perceptible Flow [X] yes [] no  Flow Regime: [] Perennial [X] Intermittent [] Ephemeral  Stream Flow Direction North  Width (ft) (water's edge to water's edge) 1'-2'  Width (ft) (bank to bank) 2'-4'   |  | Substrate Type:   Probed Stream Depth (if water present):  |   |
| Bank Height and Slope  |  | Associated Habitat   | Size Class  |
| Left Bank*  0-3' High  0-20% (0-11°)  21-50% (12-27°)  51-100% + (38-45°)  100%+(46°+)  3-6' High  0-20% (0-11°)  21-50% (12-27°)  51-100% (38-45°)  100% (46°+)  6' + High  1-21-50% (12-27°)  1-21-50% (12-27°)  1-21-50% (12-27°)  1-21-50% (12-27°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°)  1-21-50% (38-45°) | Right Bank*  [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] | Riparian Vegetation[x] yes [] no If yes, list: hamlock and Facultatu helper. Aquatic Vegetation [] yes [x] no If yes, list:  Associated Wetland [k] yes [] no If yes, list ID: WETLAND A515 Aquatic Organisms [] yes [x] no If yes, list:  Riparian/Terrestrial Organisms [] yes [k] no If yes, list:  T&E Species [] yes [x] no If yes, list:  Stream Photos Collected ID, Directions  551 5 65 | [] Major > 100 ft  [] Intermediate > 10 ft, < 100 ft  Minor < 10 ft |
| gradient channel with  |  | 552 N/OS<br>553 W/RTL  |   |

TISHER (D)
ASSOCIATES

| Project Name: Ball Hill Wind Project   |  |  |
|--|--|--|
| Stream Name: unnamed Tributory   | Date: 10/30/15   |  |
| County: Chautauqua   | State: New York  |  |
| Evaluator(s): B. V. DTS, M. Bobery   | Data Point ID: DP 530  |  |
| Stream Characteristics   | Bottom Characteristics   |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [ ⋈ 0 - 6"         [ ⋈ Cobble       [ ] 7 - 12"         [ ⋈ Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [ ] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |  |
| Bank Height and Slope  | Associated Habitat Size Class  |  |
| 1  | Riparian Vegetation [X] yes [] no If yes, list:  |  |



| Stream Name: unraned Tr. butay  |  | Date: 10/30/15   |   |   |
|---|--|--|---|---|
| County: Chautauqua  |  | State: New York  |   |   |
| Evaluator(s): B   | VIRTS, M. Boberg   |  | Data Point ID: DO537  |   |
| · · · · · · · · · · · · · · · · · · ·   | Stream Characteristics   |  | Bottom Characteristics  |   |
| Perceptible Flow [ ] yes [ ] no  Flow Regime: [ ] Perennial [ ] Intermittent [ ] Ephemeral  Stream Flow Direction |  | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [ ] 0 - 6"         [ ] Cobble       [X] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [X] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |   |   |
| ,   | Bank Height and Slope  | Margania A   | Associated Habitat  | Size Class  |
| [ ] [ ] [ ] [ ] [ ]   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  0 - 20% (0-11°) | Right Bank*  [ ] [ ] [ ] [ ]   | Riparian Vegetation [ ] yes [ ] no If yes, list:  Aquatic Vegetation [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID:  Wetland ASIT  Aquatic Organisms [ ] yes [ ] no If yes, list:  Riparian/Terrestrial Organisms  [ ] yes [ ] no If yes, list:  T&E Species [ ] yes [ ] no If yes, list: | [] Major > 100 ft  [] Intermediate > 10 ft, < 100ft  [] Minor < 10 ft |
| [] [] Provide Detail  | 0-20% (0-11°) 21-50% (12-27°) 51-100% (38-45°) 100% (46°+)  of any Evidence of Erosion:  Change has lift   | []<br>[]<br>[]<br>   | Stream Photos Collected ID, Direction  561 US / N  562 DS / S  563 RTL E  | on, and Description:  |

STREAM FIELD ID: 5T - ASO?



| tream Name: Uniquited Tributtery   |   | Date: 11/03/2015  |   |  |
|--|---|---|---|--|
| County: Chautauqua   |   | State: New York   |   |  |
| Evaluator(s):  | S. Buckenmayer  |   | Data Point ID:  |  |
| ,  | Stream Characteristics  |   | Bottom Characteristics  |  |
| Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction   |   | Substrate Type:   Probed Stream Depth (if water present):   [X] Bedrock   [X] 0 - 6"   [X] Cobble   [ ] 7 - 12"   [ ] 13 - 24"   [ ] Sand   [ ] 25 - 36"   [ ] 37" + [ ] Other   [ ] No Perceptible Depth   [ ] |   |  |
|  | Bank Height and Slope   |   | Associated Habitat  | Size Class   |
|  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High | Right Bank*  [ ] [ ] [ ] [ ] [ ]  | Riparian Vegetation[y] yes [] no If yes, list:  Aquatic Vegetation [] yes [x] no If yes, list:  Associated Wetland [] yes [x] no If yes, list ID:  Aquatic Organisms [] yes [x] no If yes, list:  Riparian/Terrestrial Organisms [] yes [x] no If yes, list:  T&E Species [] yes [x] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  [Minor <10 ft] |
| [] 0-20% (0-11°) [] [] 21-50% (12-27°) [] [] 51-100% (38-45°) [] [] 100% (46°+) []  Provide Detail of any Evidence of Erosion:  MINON CUTTING UNDER LEFT  EXAMPLE. |   | Stream Photos Collected ID, Direct Photo 579 US/W Photo 580 DS/E Photo 581 RTL  | tion, and Description:  |  |



| Stream Name: Unnamed Tributary   |  |   | Date: 11/05/2013  |  |
|--|--|---|---|--|
| County: Chautauqua   |  |   | State: New York   |  |
| Evaluator(s): M  | BOBERLY S. BUCKE   | NMEYER  | Data Point ID: 563  |  |
|  | Stream Characteristics   |   | Bottom Characteristics  |  |
| Perceptible Flow [x] yes [] no  Flow Regime: [x] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction |  | Substrate Type:   Probed Str. (if water probed Str.   X   0 - | - 6"<br>- 12"<br>- 24"<br>- 36"   |  |
|  | Bank Height and Slope  |   | Associated Habitat  | Size Class   |
| Left Bank*   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) | Right Bank*   | Riparian Vegetation [N yes [N no If yes, list: Willow, degwoods  Aquatic Vegetation [] yes [N] no If yes, list:  Associated Wetland [N yes [] no If yes, list ID: WLASSU  Aquatic Organisms [] yes [N no If yes, list:  Riparian/Terrestrial Organisms [] yes [N no If yes, list:  T&E Species [] yes [N no If yes, list: | [ ] Major >100 ft  [ ] Intermediate >10 ft, <100ft  Minor <10 ft |
| The second   | 51 - 100% (38-45°)<br>100% (46°+)  any Evidence of Erosion:  | ) <u>(</u> )  | Photo 598 US/N Photo 599 DS/S Photo 600 RTUE  | on, and Description:   |



| Project Name: Ball Hill Wind Project                   | ASSO  |
|--|---|
| Stream Name: Unnamed Tributary County: Chautauqua      |   |
| County: Chautauqua                                     | Date: 10 11/05/2015                                     |
| Evaluator(s): M. Boberg & Buekenmiyer                  | State: New York   |
| J saletenmiger   | Data Point ID: 573                                      |
| Stream Characteristics                                 | 3/3   |
| Ves 1 1  | Bottom Characteristics                                  |
| Flow Regime: [X] Perennial [ ] Intermittent [ ] Epheme | Substrate Type:   |
|  | 1 1 Dealthe   |
|  | [X] Cobble [X] 0-6" [ ] Gravel [ ] 7-12"                |
| idth (ft) (water's edge to water's edge) 2-5           | [ ] Sand [ ] 13 - 24"                                   |
| idth (ft) (bank to bank) U-8'                          | Silt/Clay [ ] 25 - 36" [ ] 37" +                        |
|  | [ ] No Perceptible Depth                                |
| Bank Height and Slope Left Bank*                       |   |
| Strik.   | Associated Habitat                                      |
| Right B  | Size Class  |
| 0 - 20% (0-11°)  |   |
| 21 - 50% (12 270)                                      | If yes liet.   Yes W no                                 |
| 100%+(46°+)  | >10 ft, <100ft  |
| [1]  | Associated World  |
| <u>3-6' High</u>                                       | 1   |
| 0 - 20% (0-11°)  | Aquatic Organisms [ ] yes [ no                          |
| 21 - 50% (12-27°) [ ]<br>51 - 100% (38-45°) [ ]        |   |
| 100% (46°+)  | Riparian/Terrestrial Organisms                          |
|  | If yes, list: [] yes [] no                              |
| <u>6' + High</u>                                       | T&E Species If yes, list:  [ ] yes Mono                 |
| 0 - 20% (0-11°)<br>21 - 50% (12-27°)                   |   |
| 51 - 100% (38-45°) [ ]<br>100% (46°+) [ ]              | Stream Photos College                                   |
| Detail of any Evidence of Erosion:                     | Stream Photos Collected ID, Direction, and Description: |
|  | all US/N  |
| or erosion on banks                                    | Photo 612 DS/S  |
|  | Photo 613 RTUW  |
|  | Photo 613 RTU/W   |
|  | W VV  |



| ream Name: UNDOY   | ned Tributary   |  | Date: 11/05/2015   |  |
|--|---|--|--|--|
| County: Chautauqua   |   |  | State: New York  | *11**  |
| valuator(s):<br>1-BODERG 5-B   | uckenmeyer  |  | Data Point ID: 574   |  |
| Str  | ream Characteristics  | , W.W.   | Bottom Characteristics   |  |
| Perceptible Flow [X] yes [] no Flow Regime: [X] Perennial [] Intermittent [] Ephemeral Stream Flow Direction |   | Substrate Type:    Probed Stream Depth (if water present): |  |  |
| Ba   | nk Height and Slope   |  | Associated Habitat   | Size Class   |
|  | 0-3' High  0-20% (0-11°) 21-50% (12-27°) 51-100% + (38-45°) 100%+(46°+)  3-6' High  0-20% (0-11°) 21-50% (12-27°) 51-100% (38-45°) 100% (46°+)  6' + High | Right Bank*  [X] [] [] [] [] []                            | Riparian Vegetation [X] yes [] no If yes, list:  Aquatic Vegetation [] yes [X] no If yes, list:  Associated Wetland [X] yes [] no If yes, list ID:  Aquatic Organisms [] yes [X] no If yes, list:  Riparian/Terrestrial Organisms [] yes [X] no If yes, list:  T&E Species [] yes [X] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft |
| [ ] [ ] [ ] Provide Detail of any l  | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)<br>Evidence of Erosion:   |  | Photo UIS DIS  | us/N   |

STREAM FIELD ID: ST-1516



| tream Name: un named Tributary  |  | Date: 11/11/2015   |   |  |
|---|--|--|---|--|
| County: Chautauqua  |  | State: New York  |   |  |
| Evaluator(s): M. Boberg R. VIITS  |  | Data Point ID: DP-588  |   |  |
|   | Stream Characteristics   |  | Bottom Characteristics  |  |
| Perceptible Flow [x] yes [] no  Flow Regime: [y] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction  |  | Substrate Type:   Probed Stream Depth (if water present):   [   Bedrock   [ x ] 0 - 6"   [ ] 7 - 12"   [ ] 13 - 24"   [ ] 25 - 36"   [ ] 5ilt/Clay   [ ] 37" +   [ x ] Other   [ ] No Perceptible Depth   Boulders   [ ] No Perceptible Depth   [ ] No Perceptible Dep |   |  |
| -   | Bank Height and Slope  |  | Associated Habitat  | Size Class   |
| Left Bank*  [ ] [ ] [ ] [ ]   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  0 - 20% (0-11°) | Right Bank*  [ ] [ ] [ ] [ ] [ ]   | Riparian Vegetation[x] yes [] no If yes, list:  **mi Yed Hardwoods**  Aquatic Vegetation [] yes [x] no If yes, list:  Associated Wetland [] yes [x] no If yes, list ID:  Aquatic Organisms [] yes [x] no If yes, list:  Riparian/Terrestrial Organisms [] yes [x] no If yes, list:  T&E Species [] yes [x] no If yes, list: | [ ] Major > 100 ft  [ ] Intermediate > 10 ft, < 100ft  [ ] Minor < 10 ft |
| [] 0-20% (0-11°) [] [] 21-50% (12-27°) [] [] 51-100% (38-45°) [] [] 100% (46°+) []  Provide Detail of any Evidence of Erosion:  minor areas of erosion  on banks. |  | Photo 642 RTZ/U  |   |  |

STREAM FIELD ID: ST- 4517



| Stream Name: unnumed Tributary   |   | Date: 11/11/15                          |   |  |
|--|---|---|---|--|
| County: Chautauqu  | a   |   | State: New York   |  |
| Evaluator(s):  1. Boberg B.  | Virts   |   | Data Point ID: 591  |  |
|  | Stream Characteristics  |   | Bottom Characteristics  | The state of the s |
| Perceptible Flow [*] yes [ ] no  Flow Regime: [**] Perennial [ ] Intermittent [ ] Ephemeral  Stream Flow Direction |   | [ ] Sand [ ] 25 - [ ] Silt/Clay [ ] 37" | resent):<br>6"<br>12"<br>- 24"<br>- 36"   |  |
|  | Bank Height and Slope   |   | Associated Habitat  | Size Class   |
| [M] [ ] [ ] [ ] [ ]  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High | Right Bank*                             | Riparian Vegetation[X] yes [] no If yes, list:  Associated Wetland [X] yes [] no If yes, list ID:  WL-A54  Aquatic Organisms [] yes [X] no If yes, list:  Riparian/Terrestrial Organisms [] yes [Y] no If yes, list:  T&E Species [] yes [X] no If yes, list: | [] Major >100 ft  [] Intermediate >10 ft, <100ft  Minor <10 ft   |
|  | 0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  f any Evidence of Erosion:  OSTON ON Stream   | banks.                                  | Stream Photos Collected ID, Direct  Photo 645 WW  Photo 646 DS/E  Photo 647 ETL/N   | ion, and Description:  |

STREAM FIELD ID: ST- ASI8



|   | Hill Wind Project   |                          |   |  |
|---|---|--------------------------|---|--|
| Stream Name: unnamed Tributary  |   | Date: 11/11/15           |   |  |
| County: Chautauqua  |   |                          | State: New York   |  |
| Evaluator(s):  M. Boberg B. Virts   |   |                          | Data Point ID: 603  |  |
| Stream Characteristics  |   |                          | Bottom Characteristics  |  |
| Perceptible Flow [1] yes [ ] no  Flow Regime: [X] Perennial [ ] Intermittent [ ] Ephemeral  Stream Flow Direction |   |                          | Substrate Type:   Probed Stream Depth (if water present):   [ ] Bedrock   [ ] 0 - 6"   [ ] 7 - 12"   [ ] Gravel   [ ] 13 - 24"   [ ] Sand   [ ] 25 - 36"   [ ] 37" + [ ] Other   [ ] No Perceptible Depth   [ ] |  |
| Vidth (ft) (bank to b   | Bank Height and Slope   |                          | Associated Habitat  | Size Class                                       |
| Left Bank*  | <u>0-3' High</u>  | Right Bank*              | Riparian Vegetation[] yes [X] no If yes, list:  | [ ] Major<br>>100 ft                             |
| [x]<br>[]<br>[]   | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% + (38-45°)<br>100%+(46°+)                                 | [41<br>[ ]<br>[ ]<br>[ ] | Aquatic Vegetation [ ] yes [y] no If yes, list:  Associated Wetland [x] yes [3] no If yes, list ID: wins 2  | [] Intermediate >10 ft, <100ft  [x] Minor <10 ft |
| [ ]<br>[ ]<br>[ ]   | 3-6' High<br>0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)                      |                          | Aquatic Organisms [ ] yes [ no If yes, list:  Riparian/Terrestrial Organisms [ ] yes [ x ] no If yes, list:  T&E Species [ ] yes [ x ] no   |  |
|   | 6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46°+)  any Evidence of Erosion:  (100 |                          | Stream Photos Collected ID, Direction, and Description:  Photo 662 US/S  Photo 663 DS/N  Photo 664 PTL/U  |  |



| Stream Name:                           |   | Date: 11/12/2015 |   |                              |
|--|---|------------------|---|------------------------------|
|  |   | State: New York  |   |                              |
| County: Chautauqua                     |   |                  | Data Point ID:  |                              |
| Evaluator(s): B. Victs, S. Buckenmeyer |   |                  | 608   |                              |
| Stream Characteristics                 |   |                  | Bottom Characteristics  |                              |
| ream Flow Direct                       | Perennial [ ] Intermittent [ ]  |                  | Substrate Type:   |                              |
| Width (ft) (bank to bank) 3 - 4 feet   |   |                  | Associated Habitat  | Size Class                   |
| Left Bank*                             | 0-3' High   | Right Bank*      | Riparian Vegetation[X] yes [] no If yes, list: FACH LATIVE FORE GET HER LECCOLS SPECIES. Aquatic Vegetation [] yes [X] no | [ ] Major >100 ft            |
|  | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% + (38-45°)<br>100%+(46°+) | [X]<br>[]<br>[]  | If yes, list:  Associated Wetland [ ] yes [X] no If yes, list ID:   | >10 ft, <100ft  Minor <10 ft |
|  | <u>3-6' High</u>  |                  | Aquatic Organisms [] yes [X] no If yes, list: Not observed.   |                              |
|  | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)   |                  | Riparian/Terrestrial Organisms  [X] yes [] no  If yes, list: Cathle   |                              |
|  | <u>6' + High</u>  |                  | T&E Species [] yes [X] no If yes, list: None observed   |                              |
|  | 0 - 20% (0-11°)<br>21 - 50% (12-27°)<br>51 - 100% (38-45°)<br>100% (46°+)   |                  | Stream Photos Collected ID, Direction, and Description:   |                              |
|  | of any Evidence of Erosion: Min   | nor erosion      |   |                              |

STREAM FIELD ID: 4500



| Stream Name:  |  | Date: 11/12/2015  |  |
|---|--|---|--|
| County: Chautauqua  |  | State: New York   |  |
| Evaluator(s): B. Victs, S. Buckenneyer  |  | Data Point ID: 609  |  |
| Stream Characteristics  |  | Bottom Characteristics  |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent []  Stream Flow Direction $\frac{No+NSB}{East}$ Width (ft) (water's edge to water's edge) $\frac{2-8+6}{2}$ Width (ft) (bank to bank) $\frac{4-10}{2}$ |  | Substrate Type:       Probed Stree (if water product of water produ | esent): 12"<br>24"<br>36"  |
| Bank Height and Slope   |  | Associated Habitat  | Size Class   |
| Description   Description   Description   |  | Riparian Vegetation [X] yes [] no If yes, list: Fac what we emand with Pley backows Aquatic Vegetation [] yes [X] no If yes, list:  Associated Wetland [X] yes [] no If yes, list ID: A565  Aquatic Organisms [] yes [X] no If yes, list: None observed  Riparian/Terrestrial Organisms [X] yes [] no If yes, list: Cattle  T&E Species [] yes [X] no If yes, list: None observed  Stream Photos Collected ID, Direction 673 W/US, 674 E/DS,  | The second secon |

STREAM FIELD ID: A521



| Stream Name: NORTH Branch   |  | Date: 11 1 - 1 -   |  |  |
|---|--|--|--|--|
| County: Chautauqua  |  | Date: 11 ) 17 15   |  |  |
| Evaluator(s): B. VIRTS, S. Buckermeyer  |  | Data Point ID: DD 67 3V DD 600   |  |  |
|   | Stream Characteristics   | 3  |  | (3V)   |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction North  Width (ft) (water's edge to water's edge) 10 = 81, 70 = 62  Width (ft) (bank to bank) 10 = 101.121, 70 81.101 |  | Substrate Type:   Probed Stream Depth (if water present):     0 - 6"     7 - 12" |  |  |
|   | Bank Height and Slope  |  | Associated Habitat   | Size Class   |
| Left Bank*  [ ]  [ ]  [ ]  [ ]  | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) | Right Bank*  | Riparian Vegetation [ ] yes [] no If yes, list: Fraction [ ] yes [ ] no If yes, list:  Associated Wetland [ ] yes [ ] no If yes, list ID: Internal Act 7  Aquatic Organisms [ ] yes [ ] no If yes, list: Fore observed  Riparian/Terrestrial Organisms | [] Major >100 ft  [] Intermediate >10 ft, <100ft  [M] Minor <10 ft |
|   | 51 - 100% (38-45°)<br>100% (46°+)  |  | Stream Photos Collected ID, Direction  | on, and Description:   |
| Both Po   | any Evidence of Erosion:  Doted in local red  and Secondo  s have head cutting   | 2  | - 682 RTL/N  |  |

STREAM FIELD ID: A522

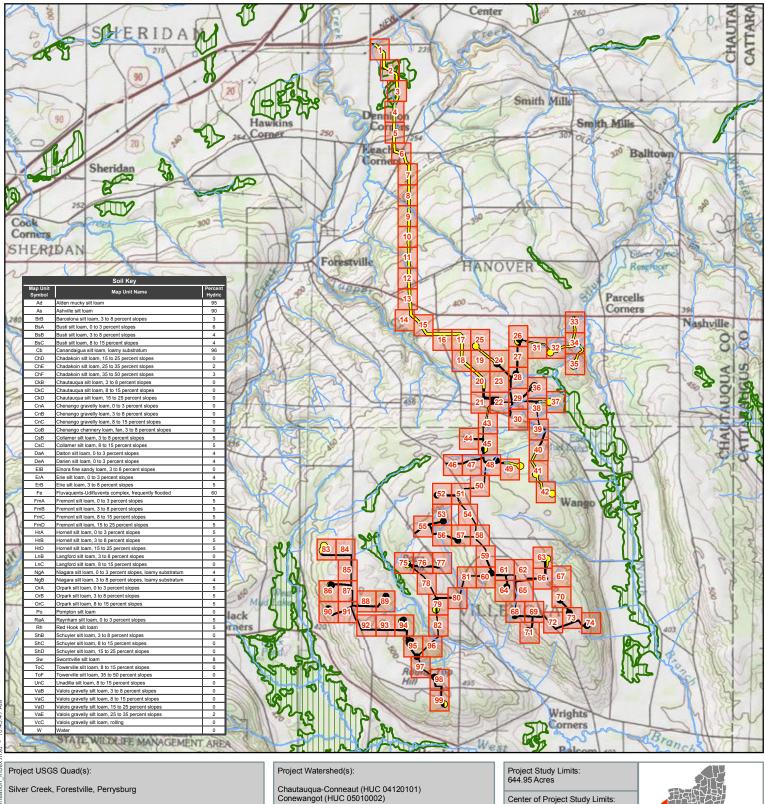


| Stream Name: Linearies TriButisky  County: Chautauqua  Evaluator(s): B. V.215 |  |   |  |
|---|--|---|--|
| Evaluator(s): B V == 5  | State: New York  | Date: 11) 13/15   |  |
| S. V.213  | Data Point ID: DP-619  |   |  |
| Stream Characteristics  | Bottom Characteristics   |   |  |
| Perceptible Flow [X] yes [] no  | Substrate Type: Probed S.  | Substrate Type:  Probed Stream Depth (if water present):  [ ] Bedrock  [ 🗷 0 - 6" |  |
| Flow Regime: [ ] Perennial [★] Intermittent [ ] Ephemera                      | [7] 0.   |   |  |
| fream Flow Direction North  | [X] Gravel [] 13   | 3 - 24"   |  |
| Vidth (ft) (water's edge to water's edge) 2 '                                 | [x] Silt/Clay [] 37  | [×] Silt/Clay [ ] 37" +   |  |
| /idth (ft) (bank to bank) 6 -8 '  |  | o Perceptible Depth   |  |
| Bank Height and Slope   | Associated Habitat   | C: CI   |  |
| Left Bank* Right B  | Bank* Riparian Vegetation [X] yes [] no If yes, list: RT Box + Posture | Size Class  [ ] Major >100 ft   |  |
| [] 0 - 20% (0-11°) [] [] 21 - 50% (12-27°) [] [] 51 - 100% + (38-45°) [5-1]   | Aquatic Vegetation [ ] yes [x] no If yes, list:                        | [] Intermediate >10 ft, <100ft  |  |
| 51 - 100% + (38-45°)<br>[] 100% + (46° +) []                                  | Associated Wetland [x] yes [] no If yes, list ID:                      | Minor<br><10 ft   |  |
| <u>3-6' High</u>  | Aquatic Organisms [] yes [X] no  |   |  |
| [ ] 0 - 20% (0-11°) [ ]<br>[ ] 21 - 50% (12-27°) [ ]                          | If yes, list: none observed  |   |  |
| [] 51 - 100% (38-45°) [] 100% (46°+) []                                       | Riparian/Terrestrial Organisms [] yes [*] no                           |   |  |
| <u>6' + High</u>  | T&E Species [] yes [s] no If yes, list:                                |   |  |
| [ ] 0 - 20% (0-11°) [ ] [ ] 21 - 50% (12-27°) [ ] [ ] 51 - 100% (38-45°) [ ]  | Stream Photos Collected ID, Direction                                  | on, and Description:  |  |
| 100% (46°+)   | _ 690-5/48   |   |  |
| Provide Detail of any Evidence of Erosion:                                    | EFI- N/05  |   |  |
| Channel , s a high gradient   |  |   |  |
| Stream that is impacted by  | 692 - WIRTL  |   |  |
| unstable trongtont the Recorn   |  |   |  |

STREAM FIELD ID: 5T-A523

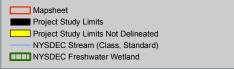


| Project Name: Ball H   | Iill Wind Project  |  | <b>Y</b>   |  |
|--|--|--|--|--|
| Stream Name: unnamed Tributary   |  | Date: 11/10/2015   |  |  |
| County: Chautauqua   |  | State: New York  |  |  |
| Evaluator(s): M-130berg<br>5. Buckenmeyer  |  | Data Point ID: DP 1024   |  |  |
|  | Stream Characteristics   |  | Bottom Characteristics   |  |
| Perceptible Flow [X] yes [] no  Flow Regime: [X] Perennial [] Intermittent [] Ephemeral  Stream Flow Direction North  Width (ft) (water's edge to water's edge) 2 to 3 feet  Width (ft) (bank to bank) 2 to 4 feet |  | Substrate Type:       Probed Stream Depth (if water present):         [ ] Bedrock       [X] 0 - 6"         [ ] Cobble       [ ] 7 - 12"         [ ] Gravel       [ ] 13 - 24"         [ ] Sand       [ ] 25 - 36"         [X] Silt/Clay       [ ] 37" +         [ ] Other       [ ] No Perceptible Depth |  |  |
| 11   | Bank Height and Slope  |  | Associated Habitat   | Size Class   |
| Left Bank*   | 0-3' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% + (38-45°) 100% + (46° +)  3-6' High  0 - 20% (0-11°) 21 - 50% (12-27°) 51 - 100% (38-45°) 100% (46° +)  6' + High  0 - 20% (0-11°) 21 - 50% (12-27°) | Right Bank*  [V] [] [] [] []   | Riparian Vegetation[X] yes [] no If yes, list: Scrub Shrub  Aquatic Vegetation [] yes [y] no If yes, list:  Associated Wetland [X] yes [] no If yes, list ID:  With A578  Aquatic Organisms [] yes [x] no If yes, list:  Riparian/Terrestrial Organisms [] yes [y] no If yes, list:  T&E Species [] yes [x] no If yes, list: | [ ] Major >100 ft  [ ] Intermediate >10 ft, <100ft  [/] Minor <10 ft |
| [] 21 - 50% (12-27°) [] [] 51 - 100% (38-45°) [] [] 100% (46°+) []  Provide Detail of any Evidence of Erosion:  MINOY LYOSION  |  | Stream Photos Collected ID, Direct Photo U97 US/S  Photo 1898 DS/N  Photo 1899 RTUE  |  |  |



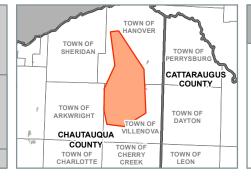
42.440 N, -79.128 W North American Datum 1983

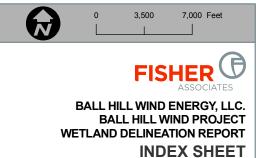


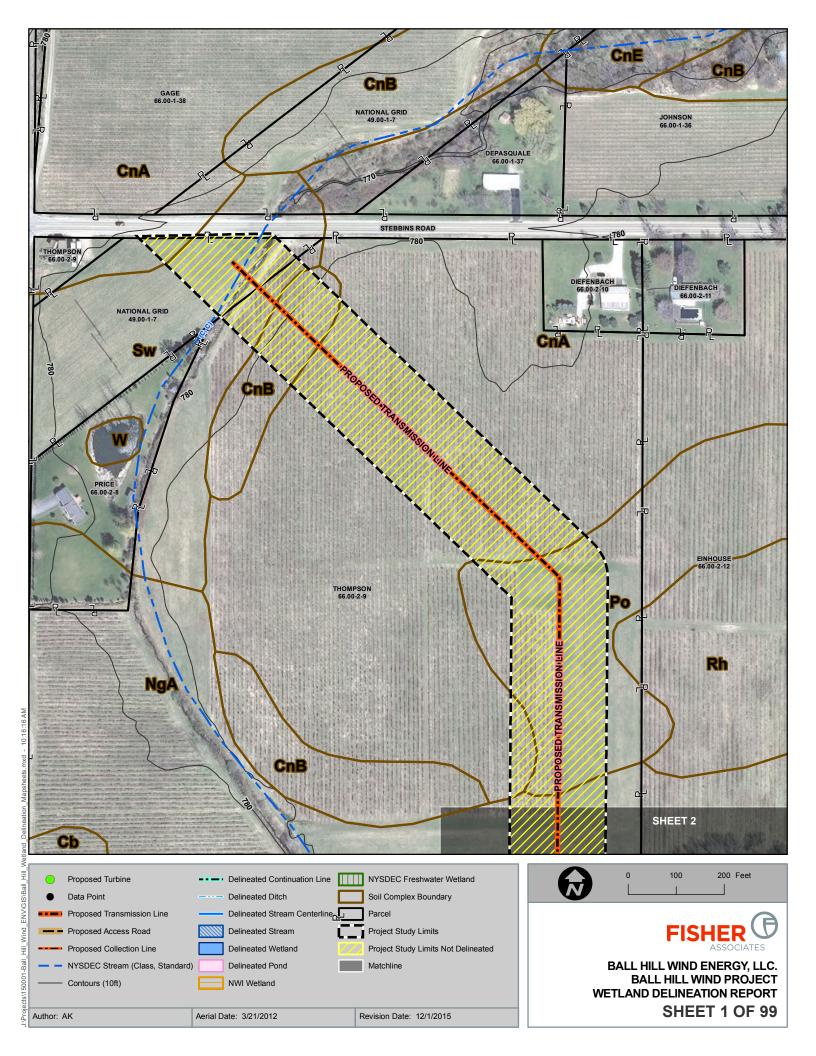


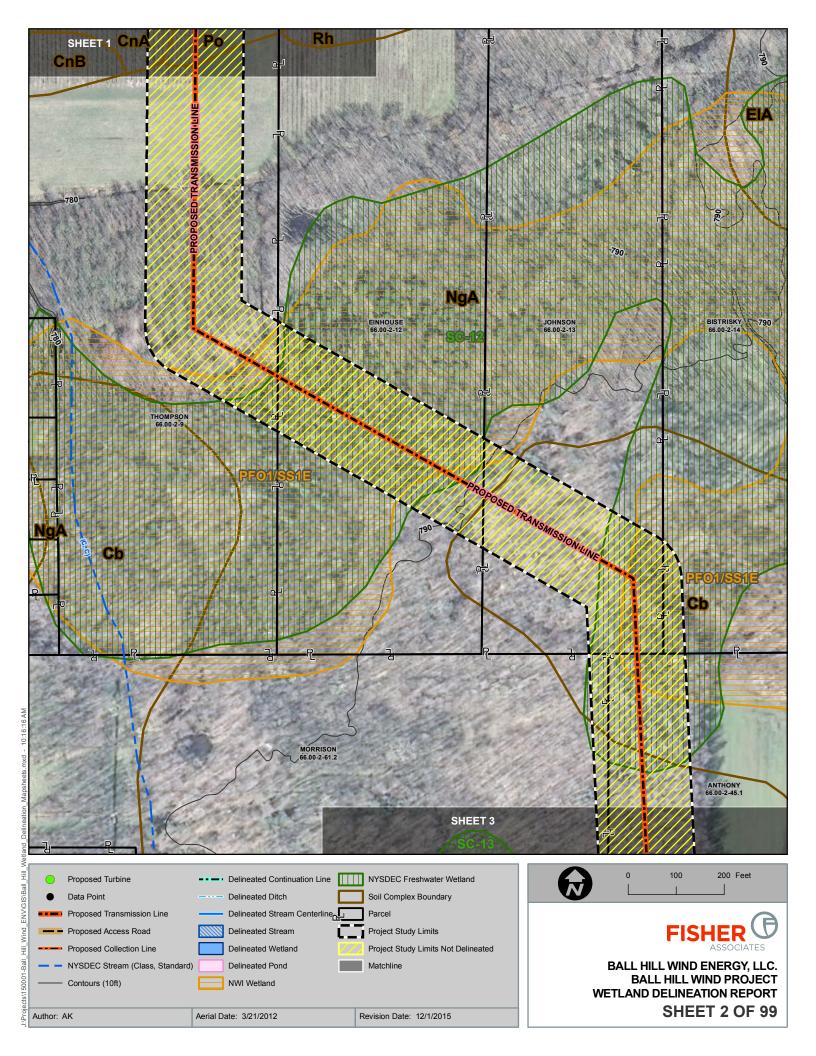
United States Geological Survey 24k Topo Quad Map - usgs.gov Aerial Photography: NYS GIS Clearinghouse (2012): nysgis.state.ny.us Roads: NYS GIS Clearinghouse (9/30/2015): nysgis.state.ny.us Streams: NYSDEC (10/19/2015) - dec.ny.gov Wetlands: NYSDEC (8/18/2014) - dec.ny.gov Wetlands: National Wetland Inventory (6/1/2014) - fws.gov/wetlands/ Soils: NRCS Soil Survey (10/7/2015) - gdg.sc.egov.usda.gov

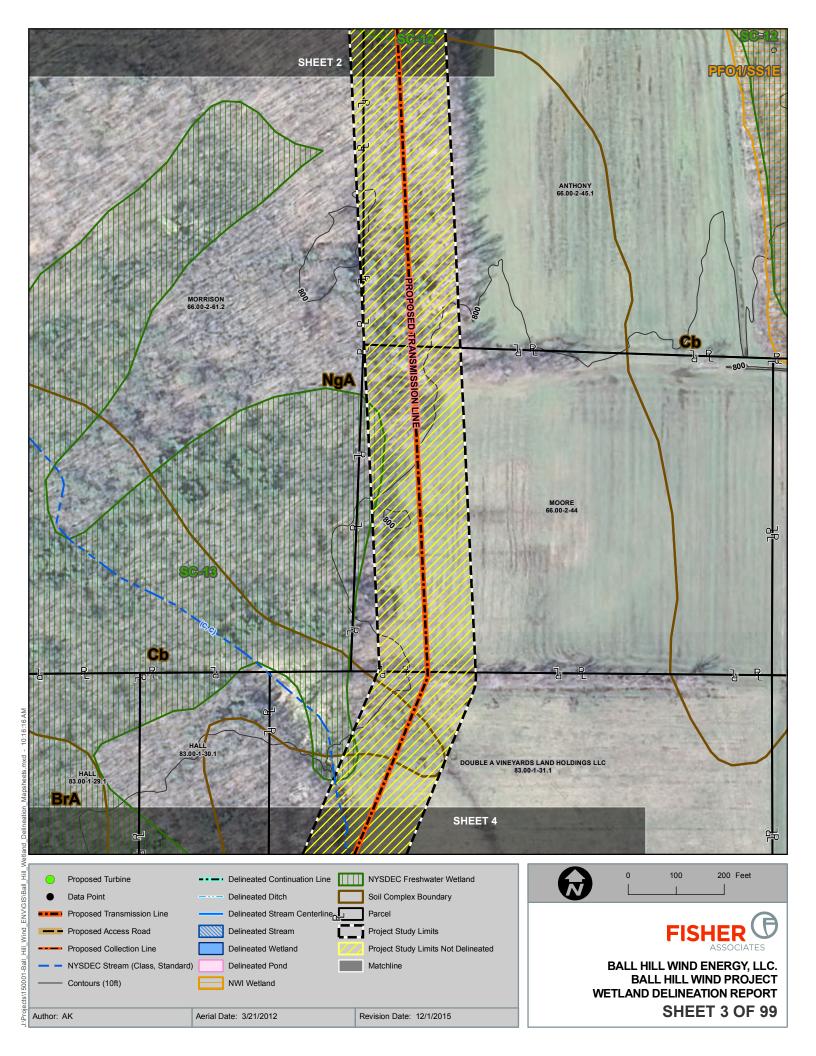
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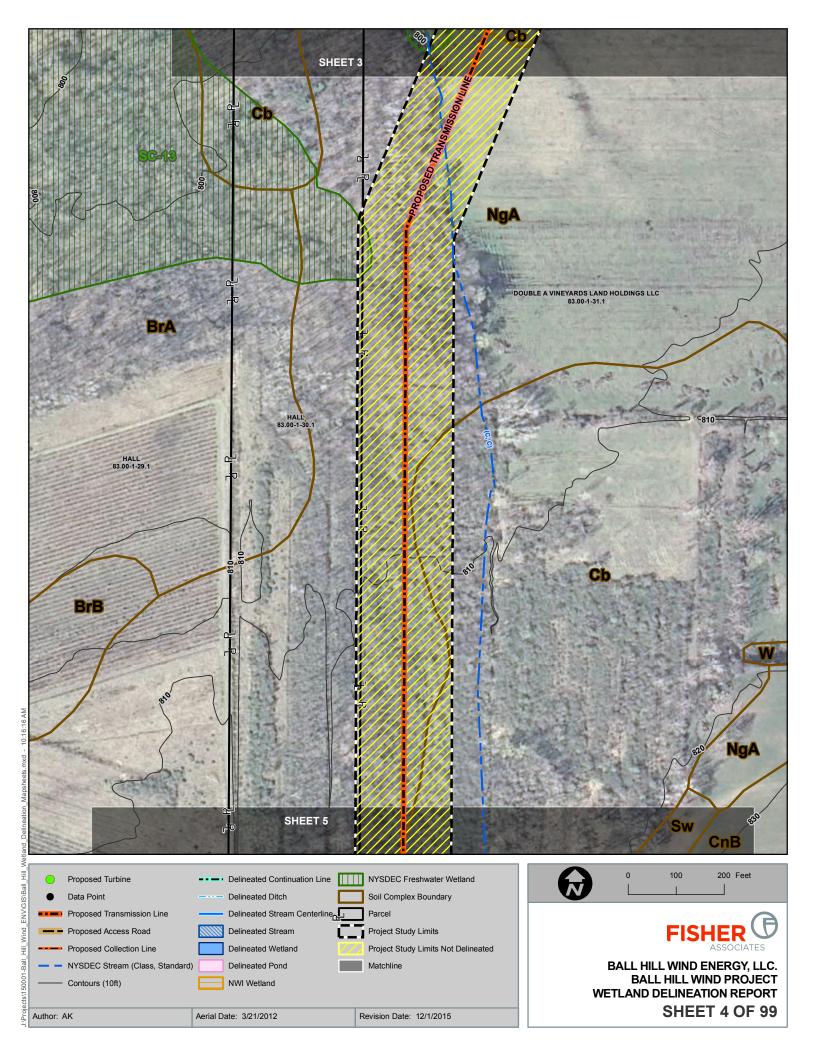


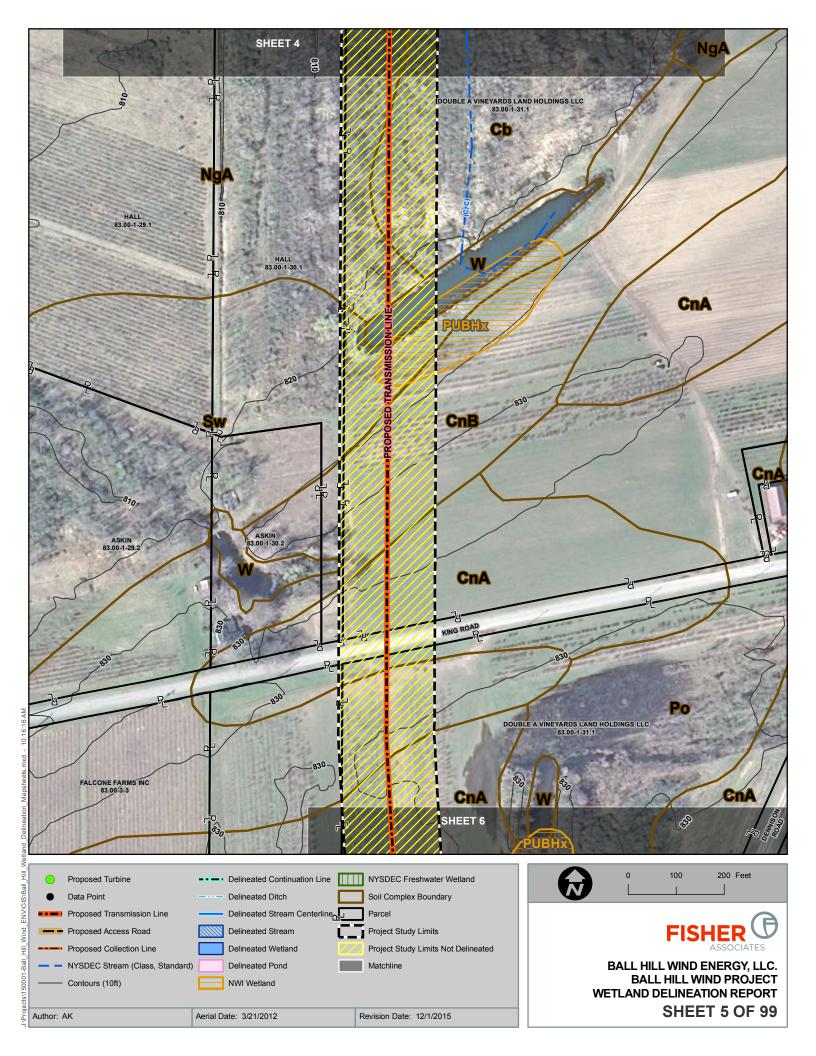


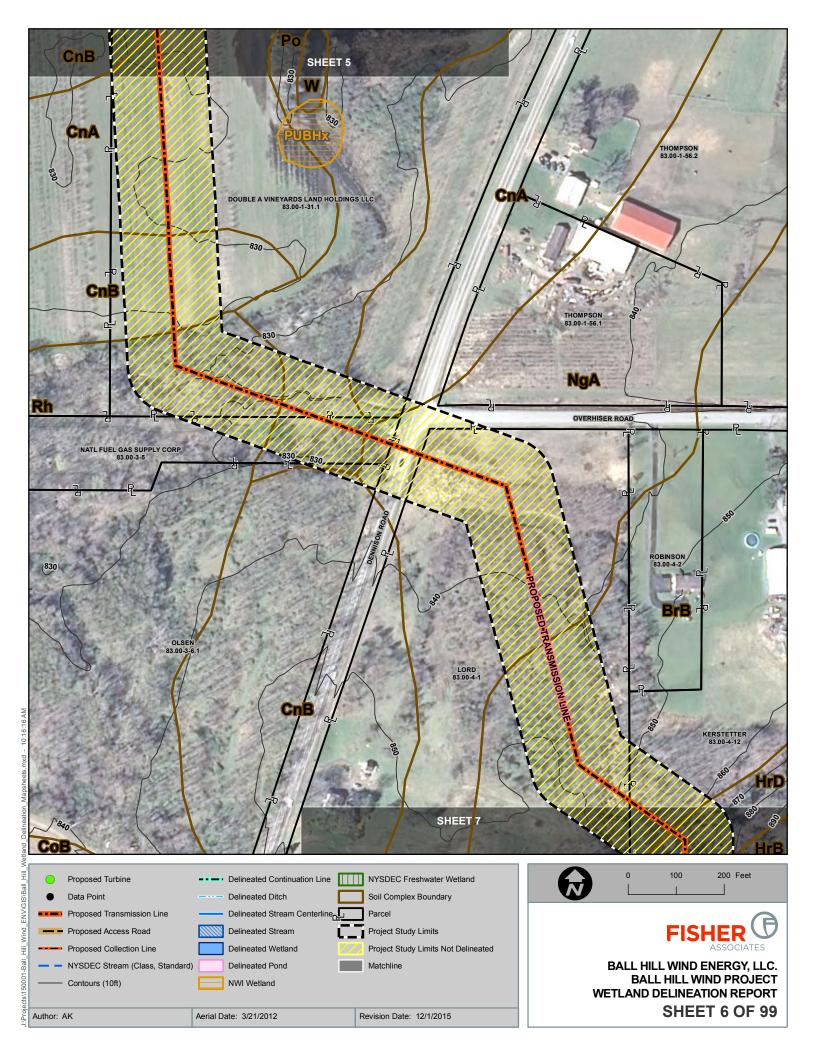


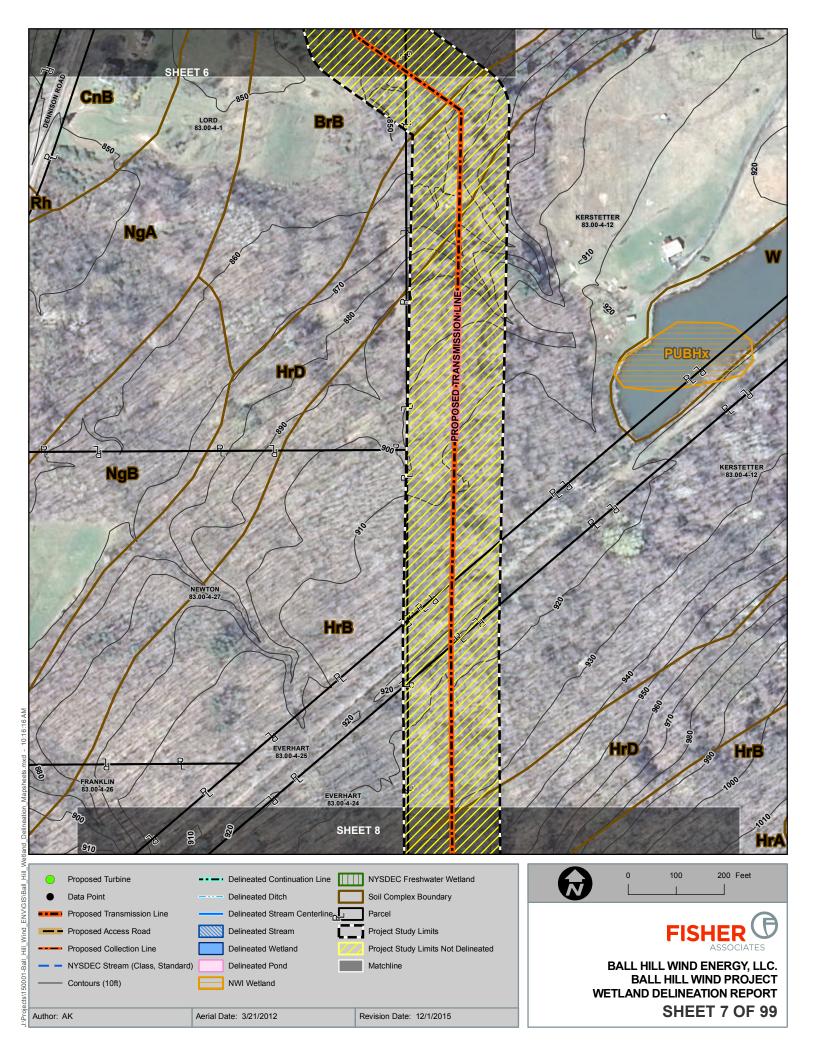


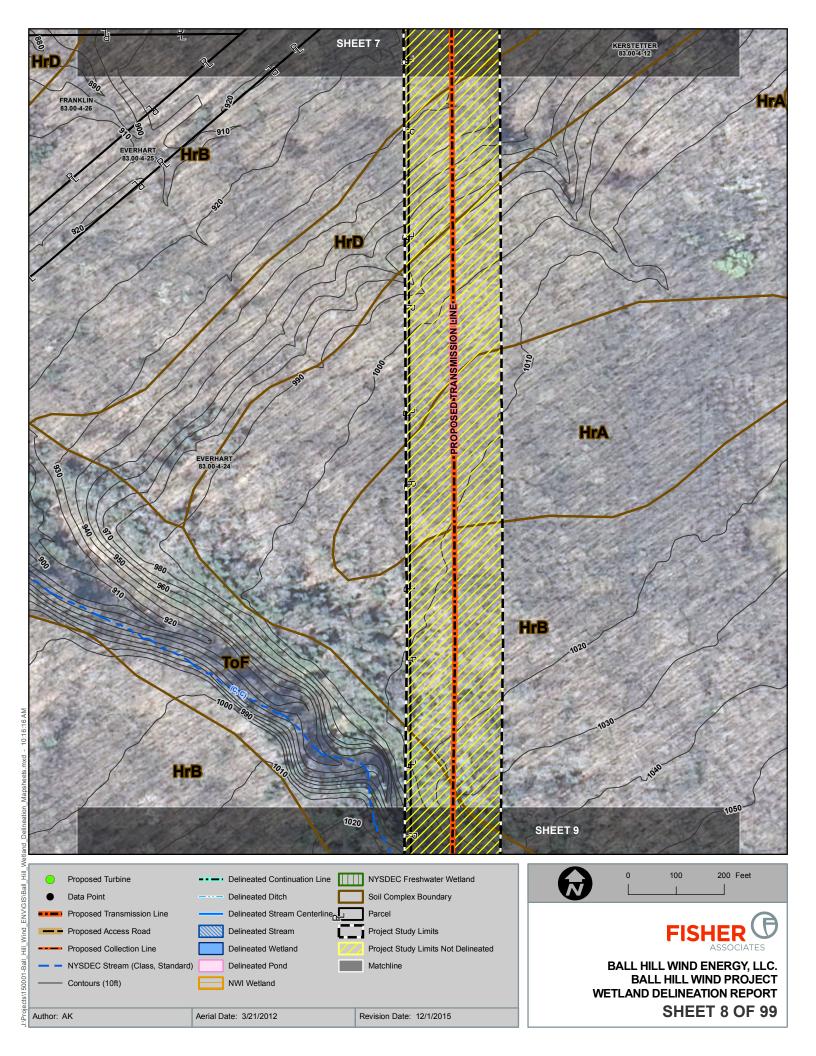


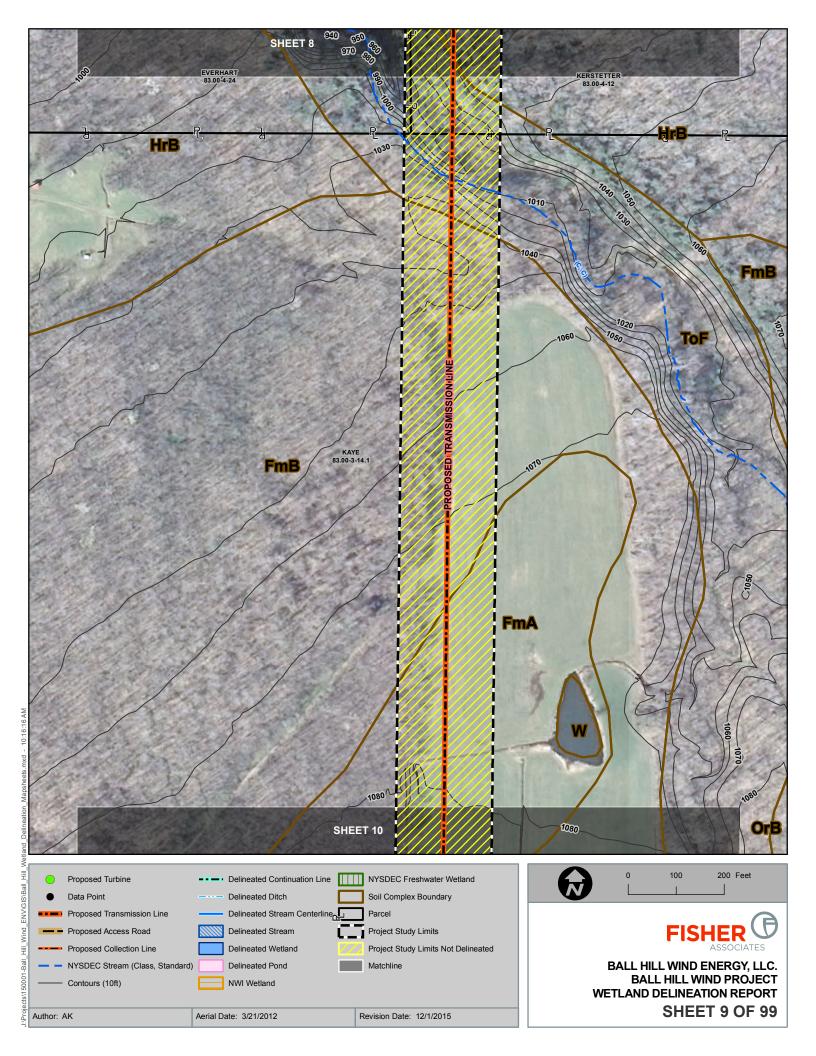


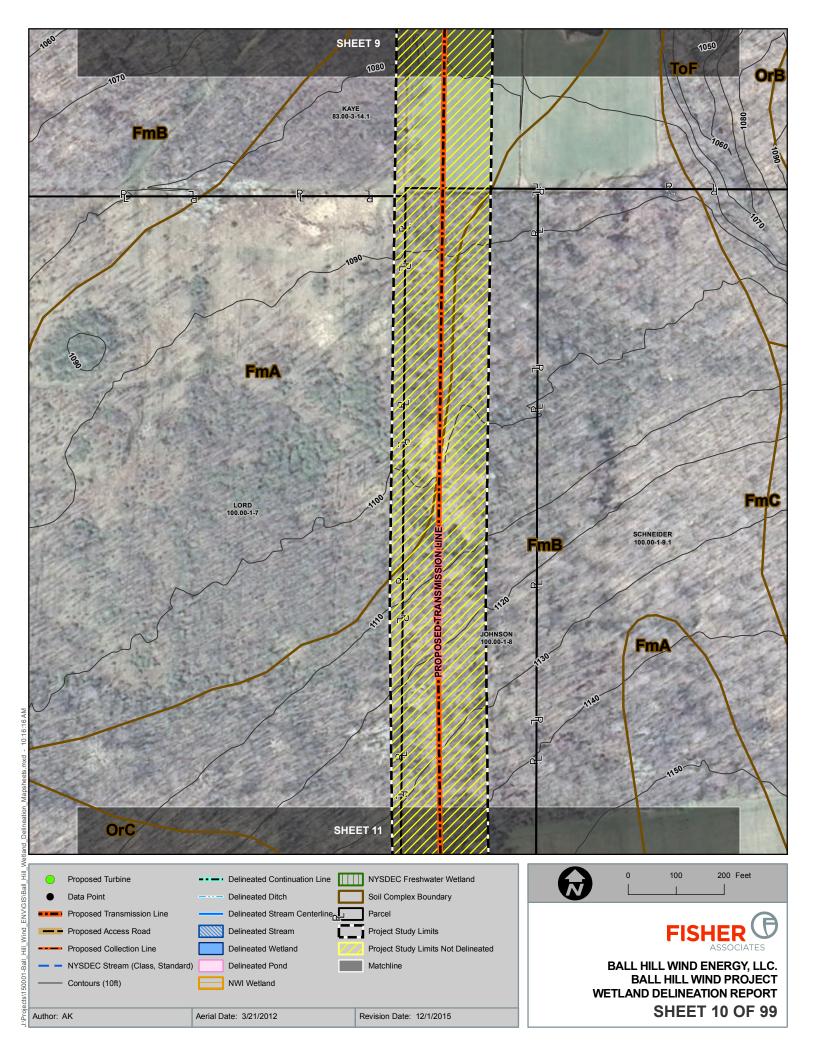


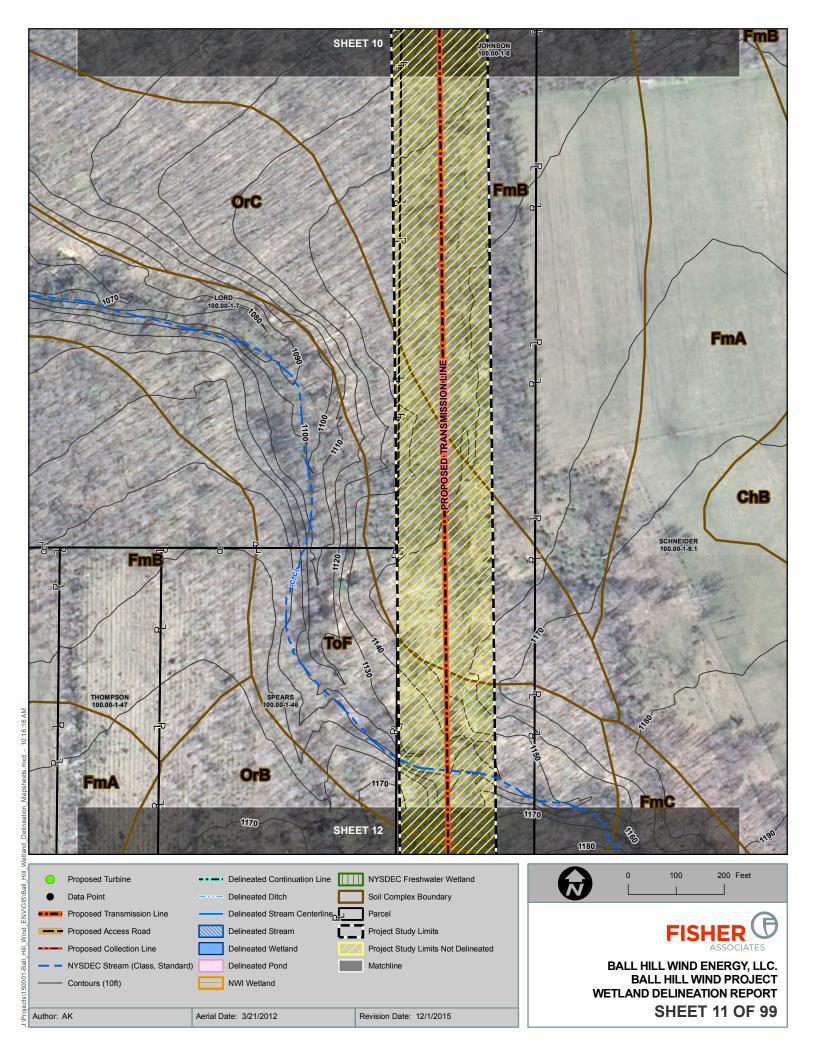


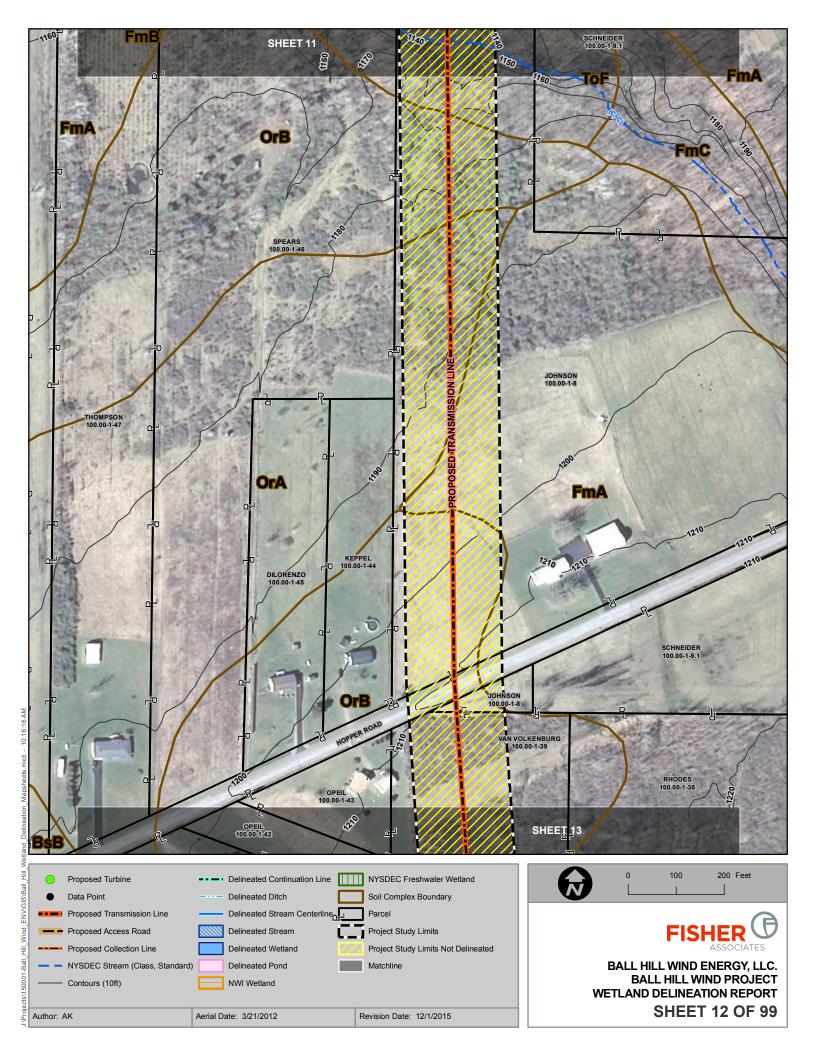


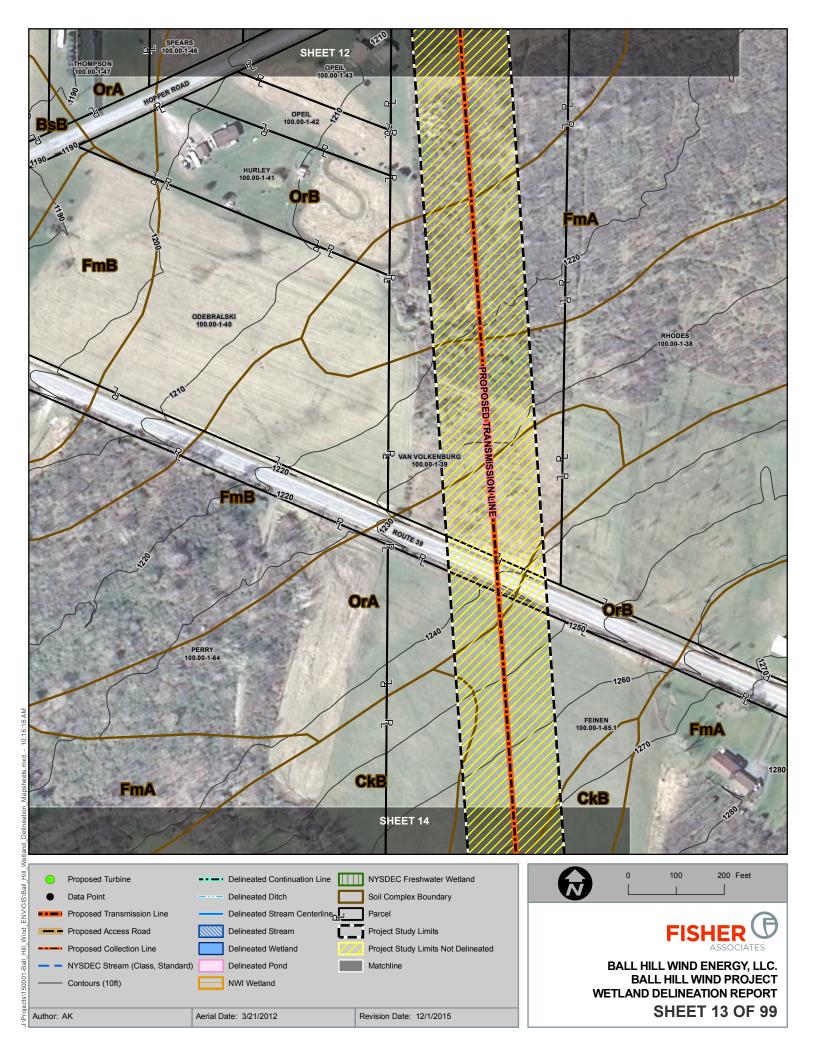


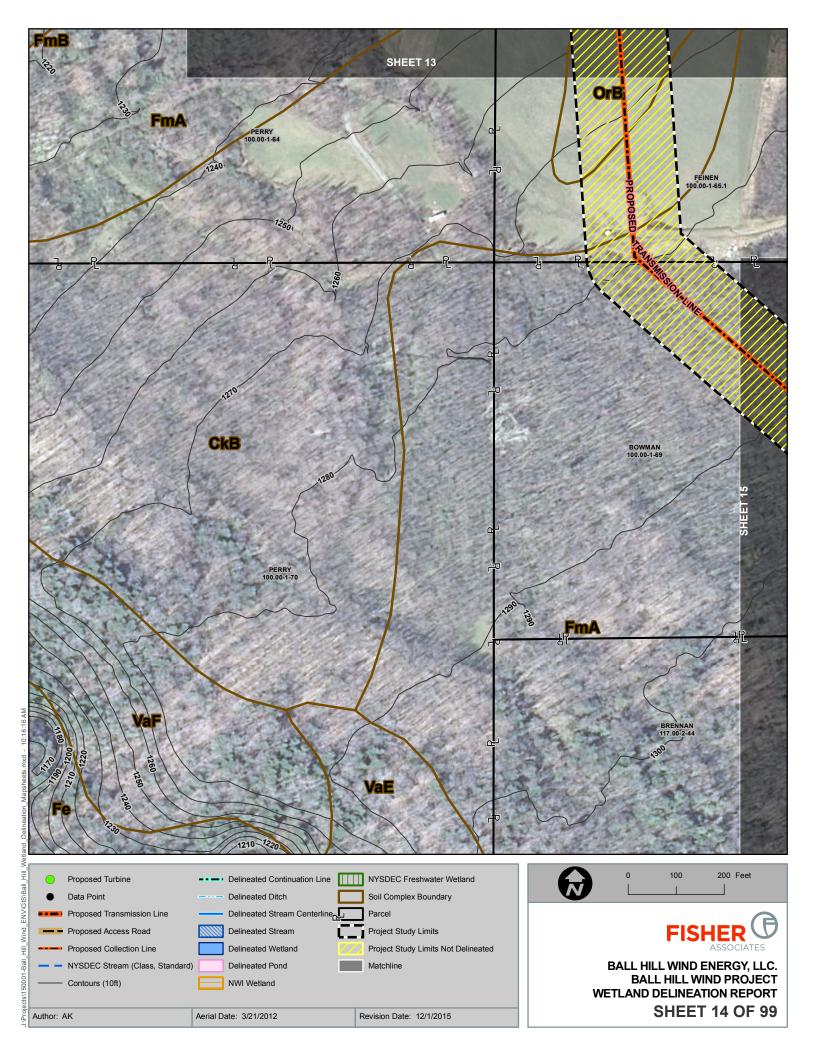


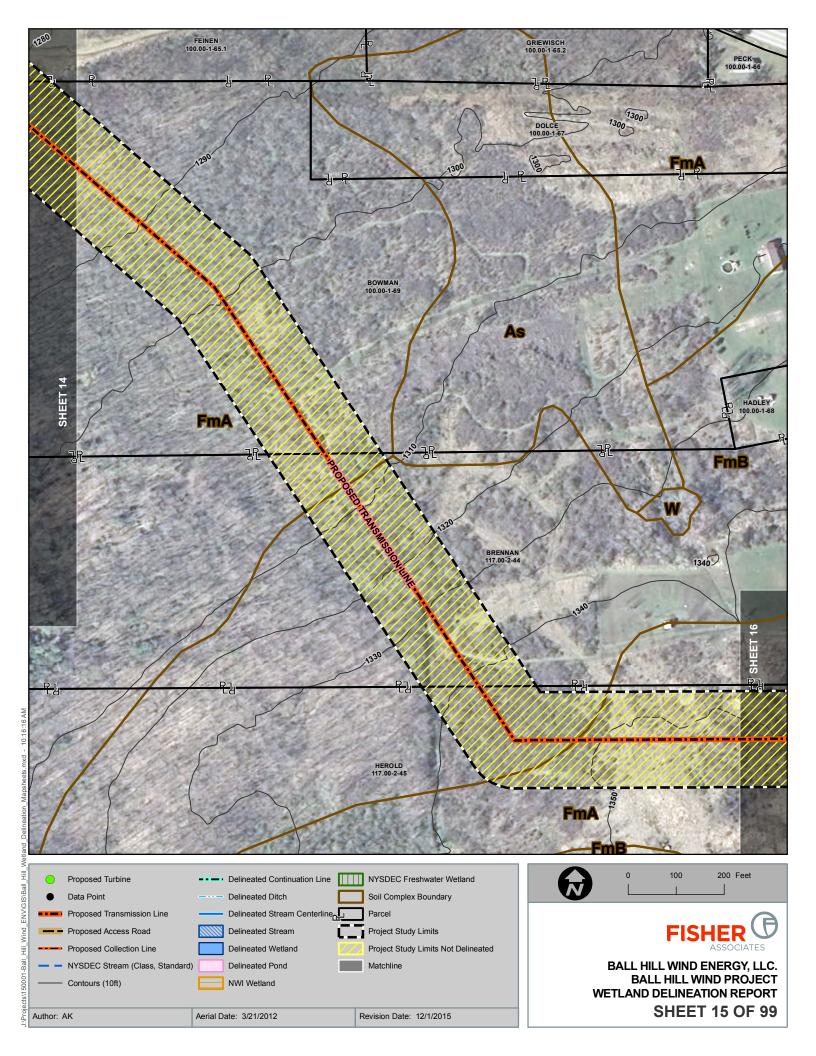


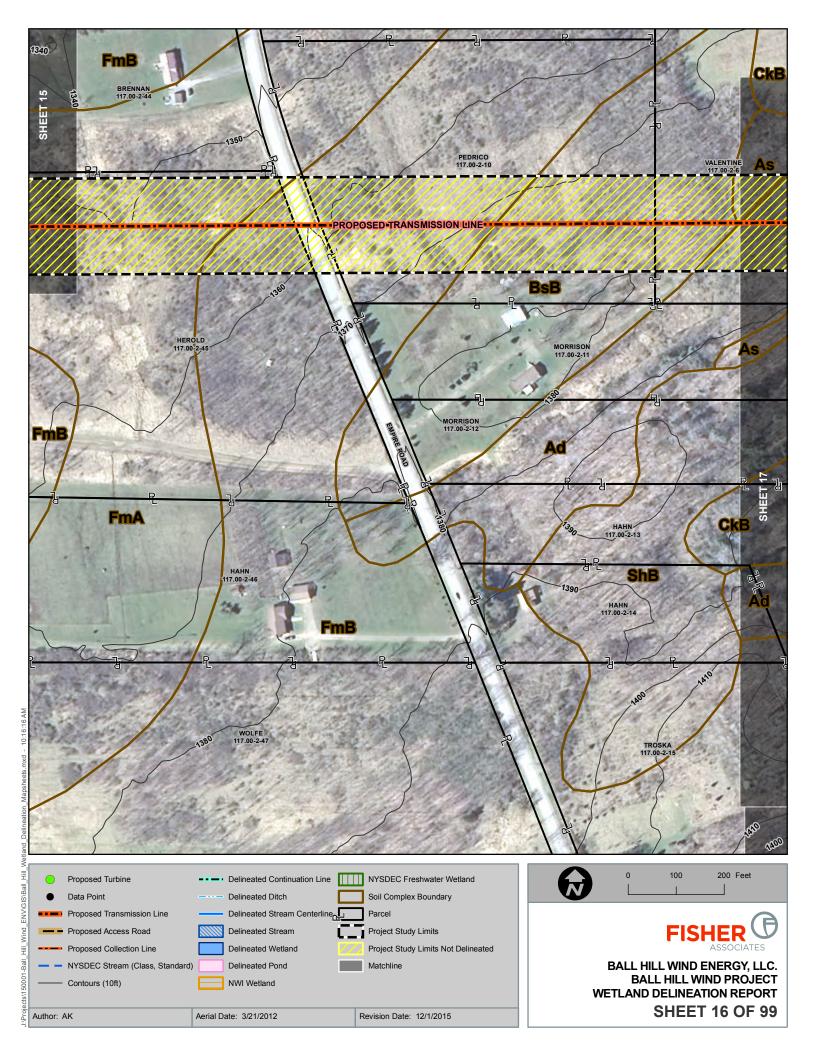


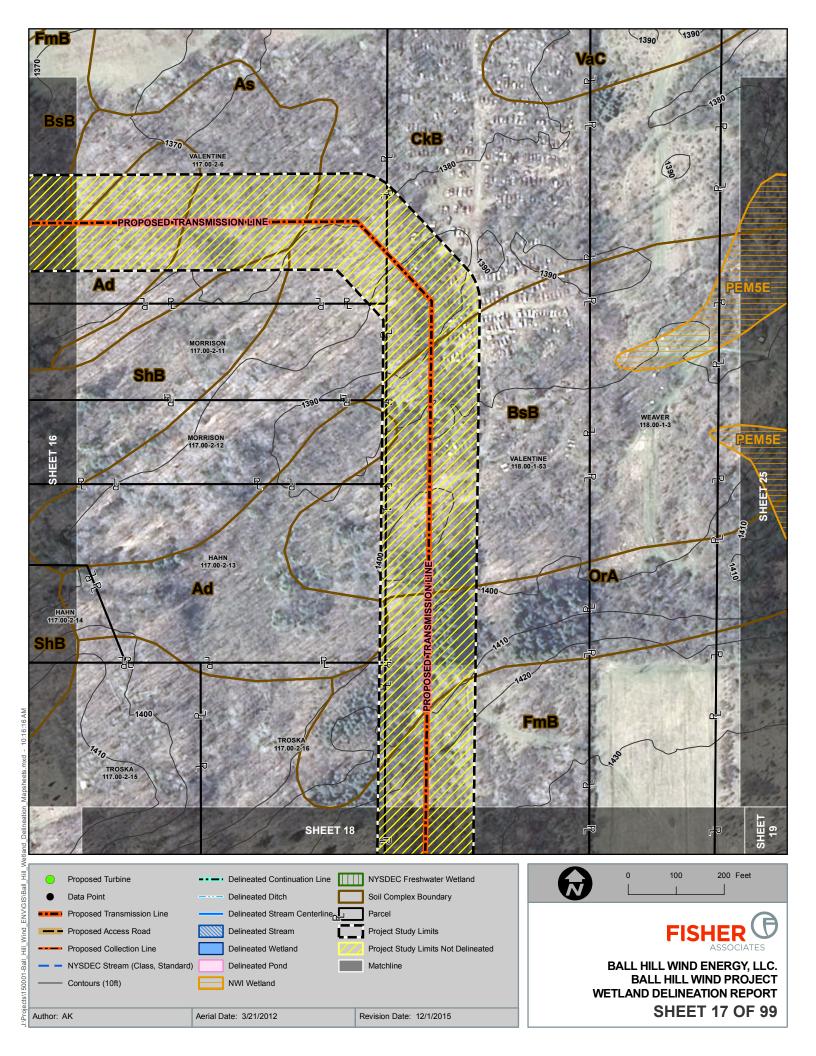


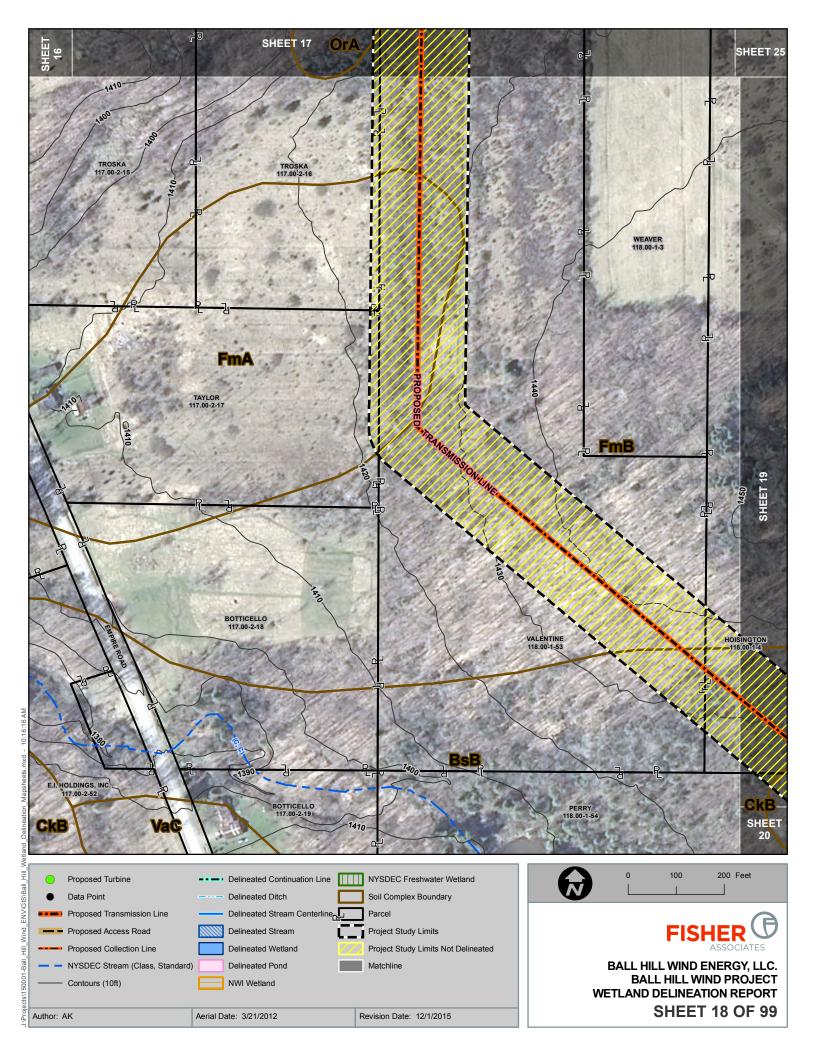


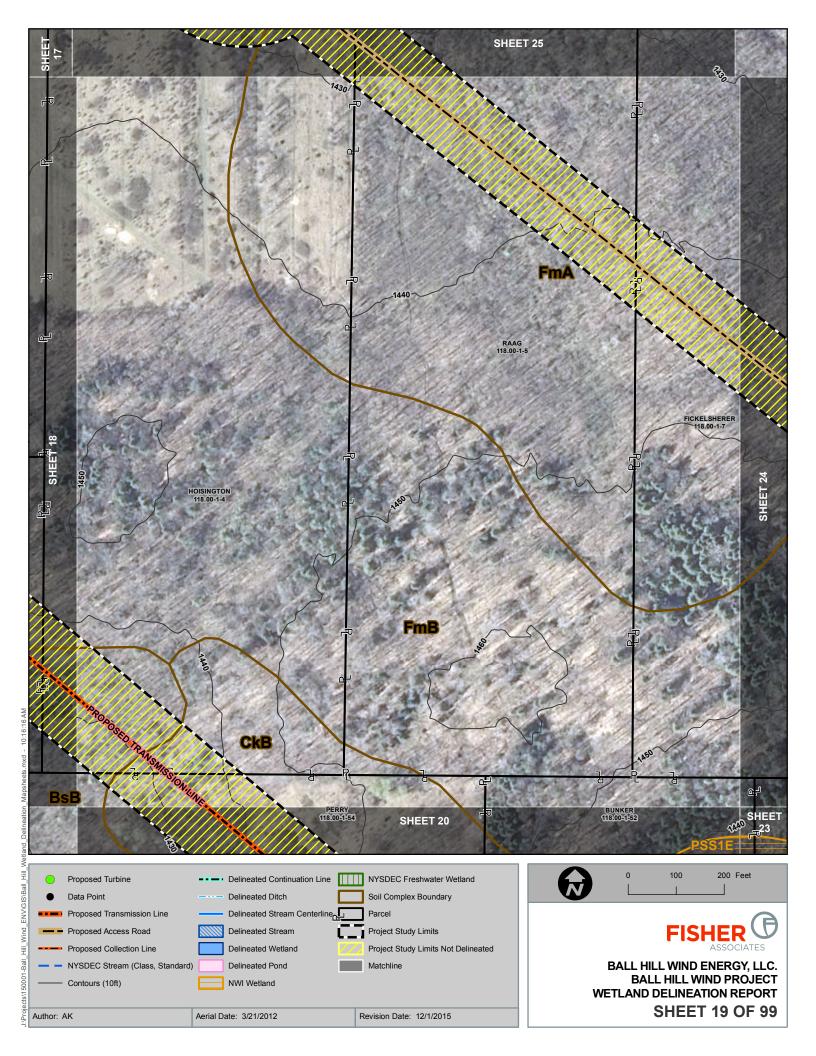


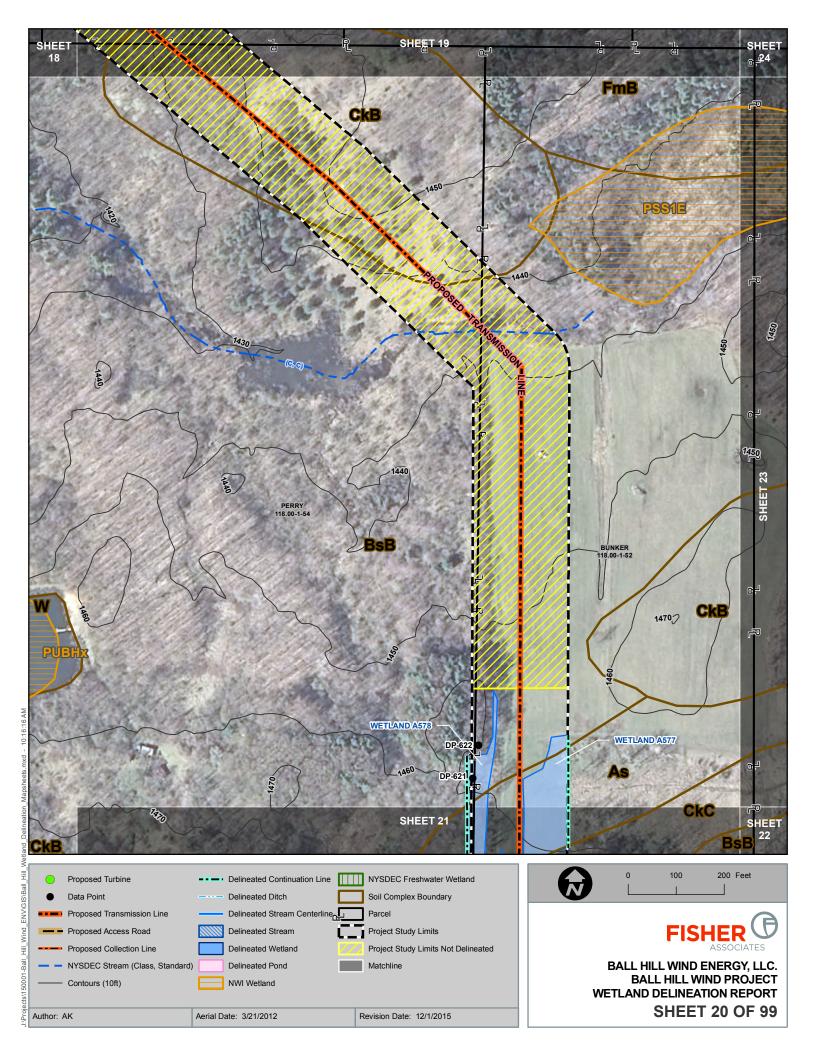


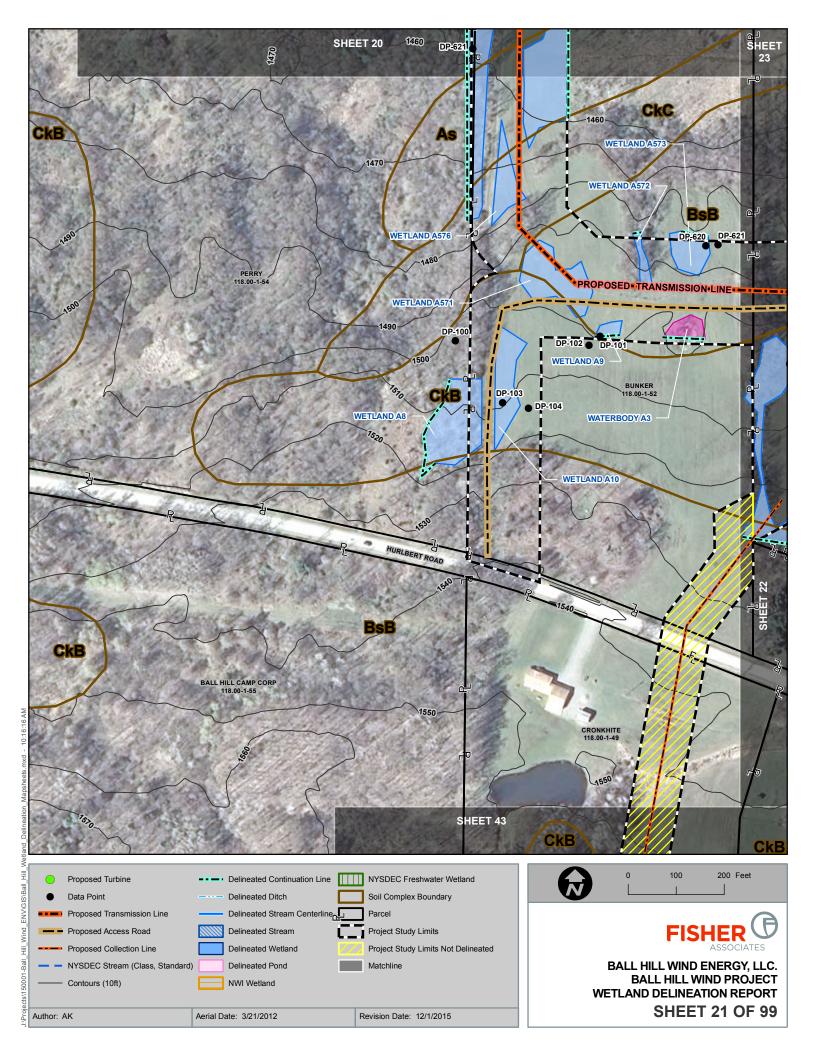


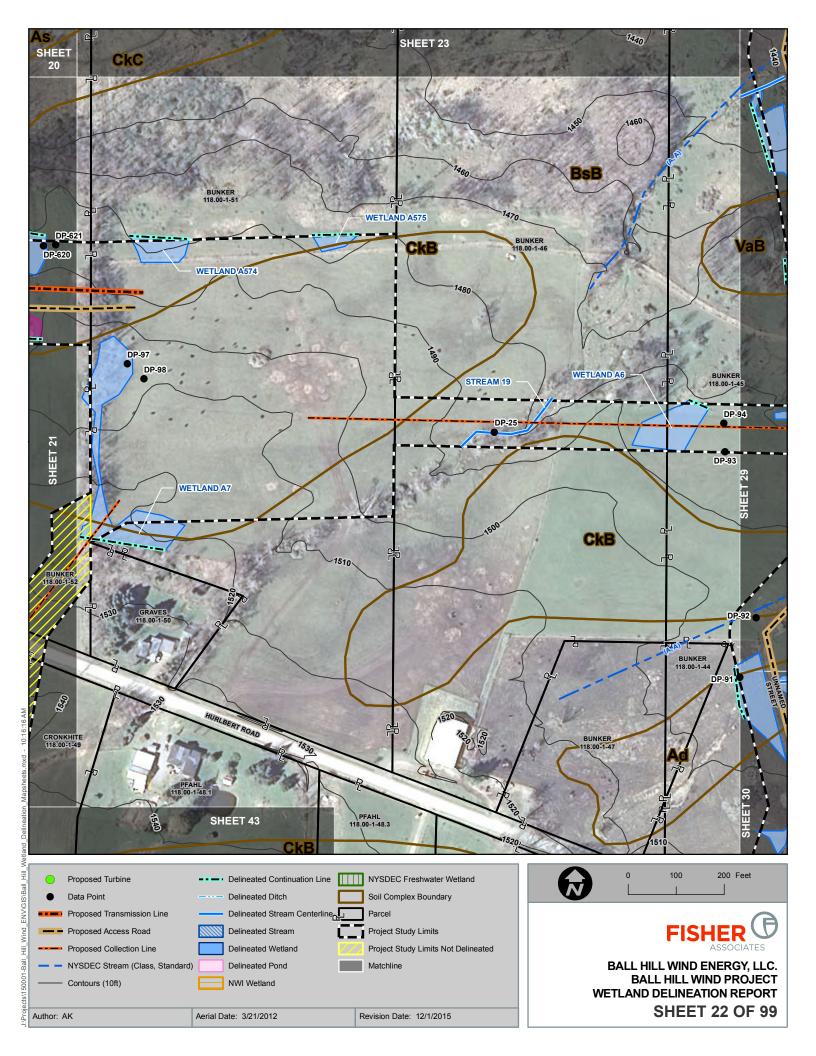


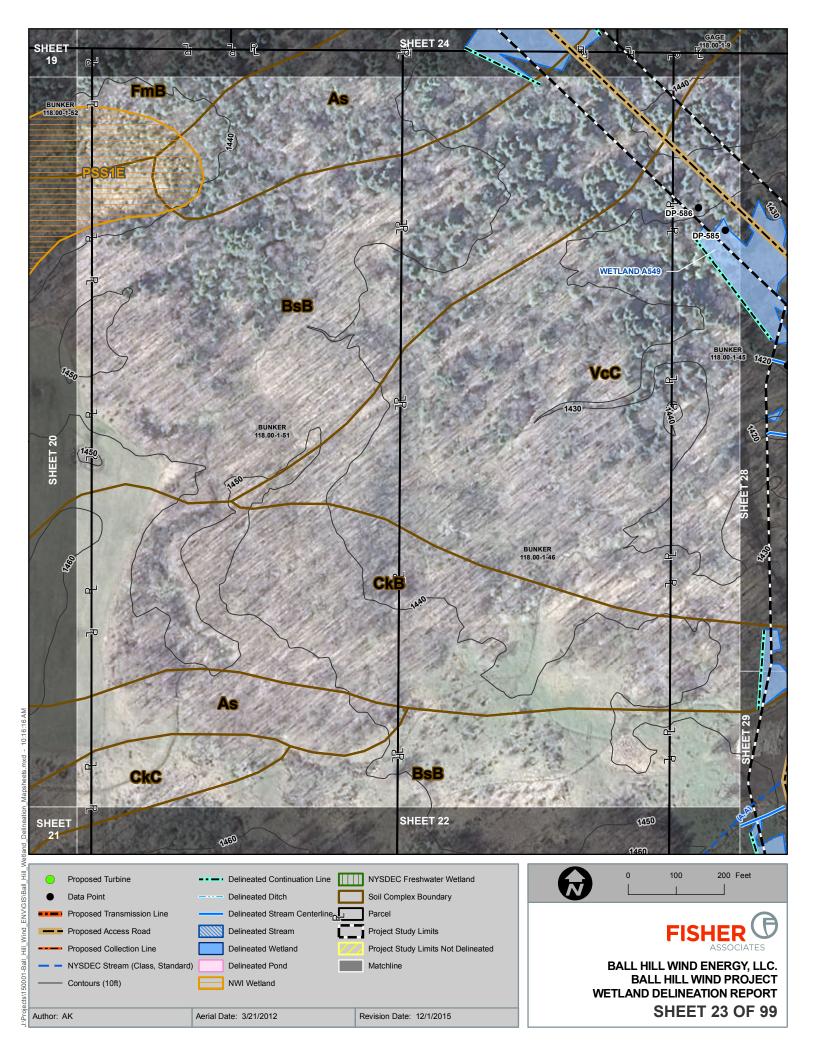


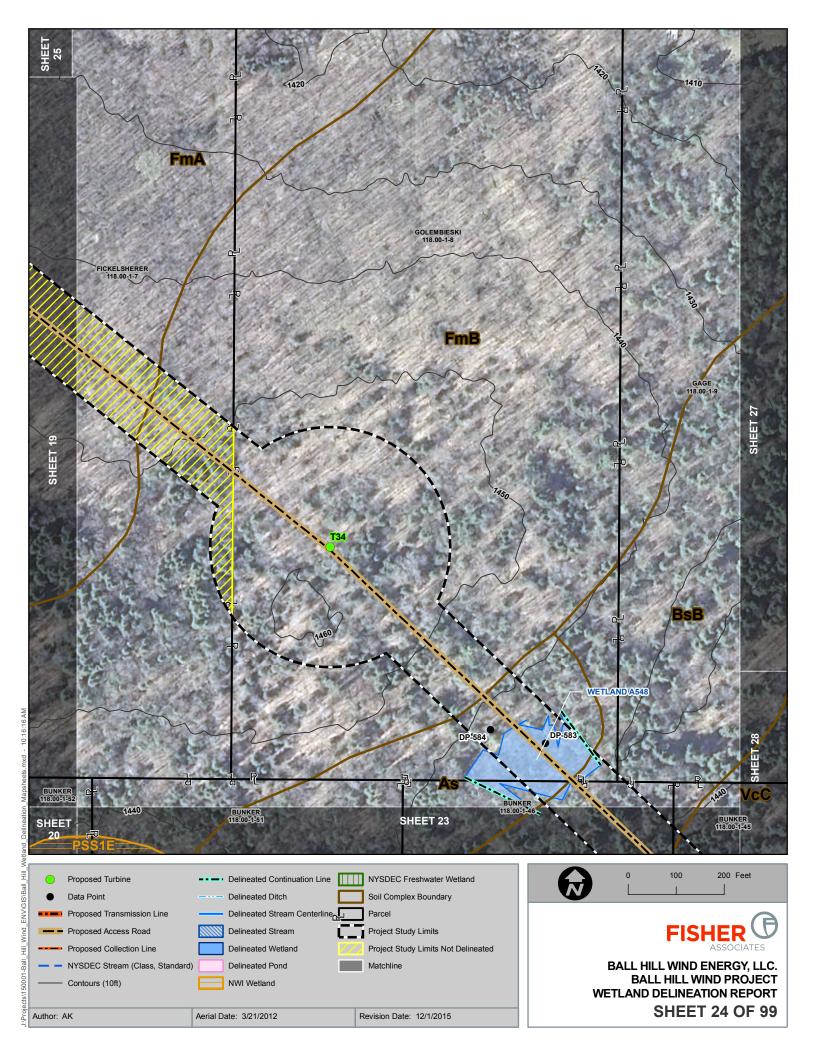


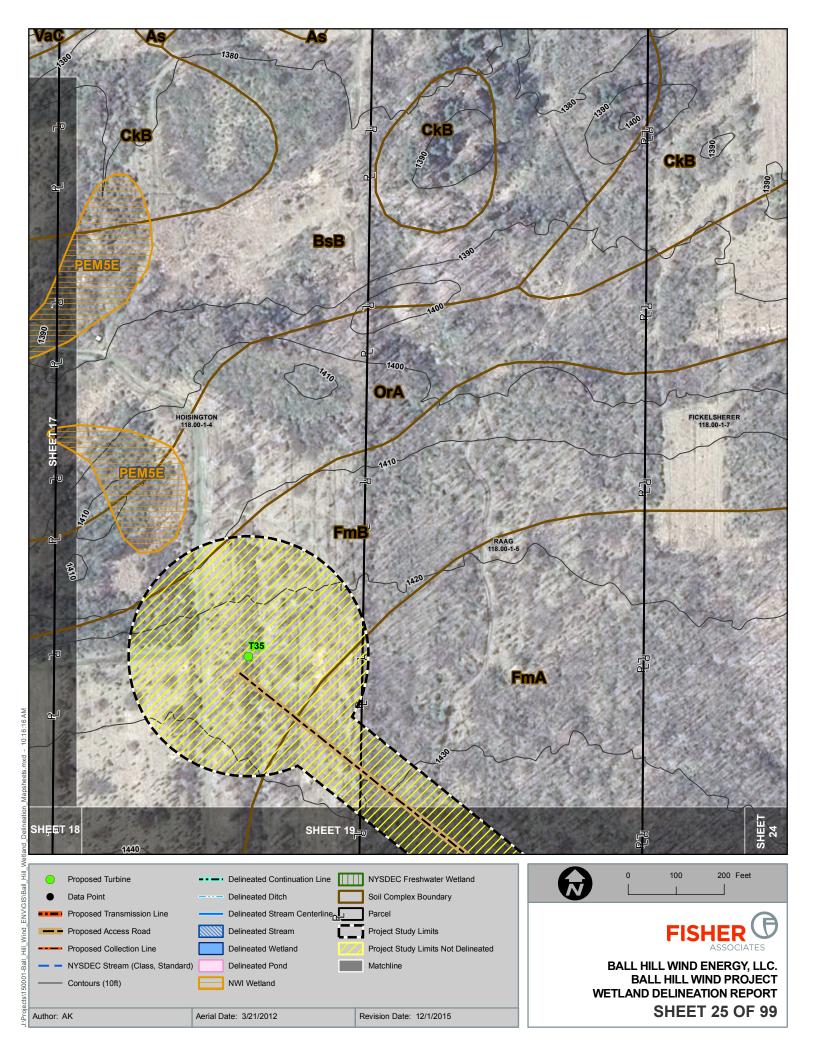


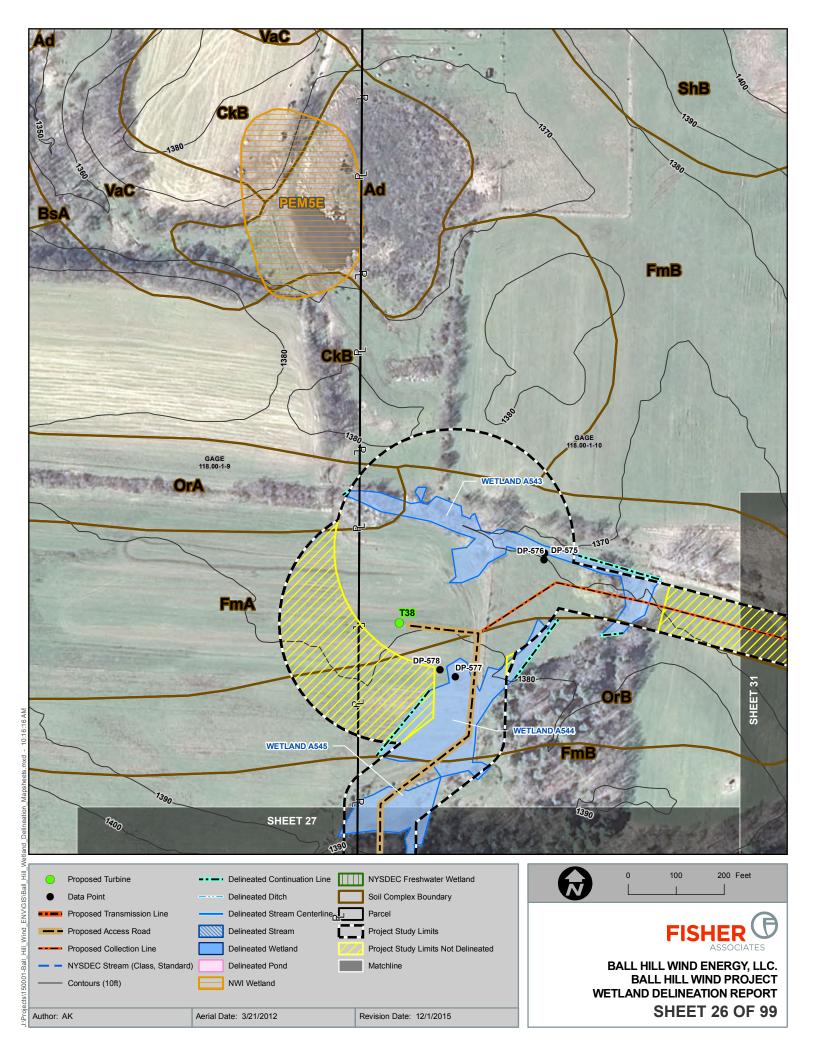


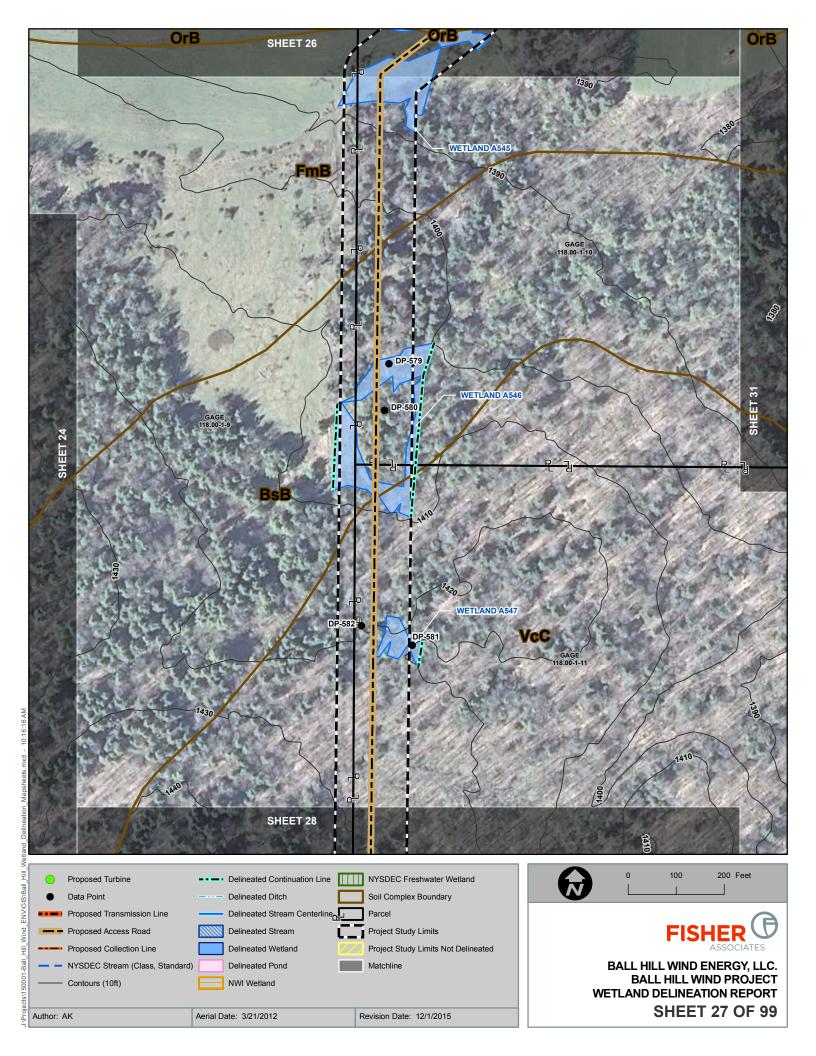


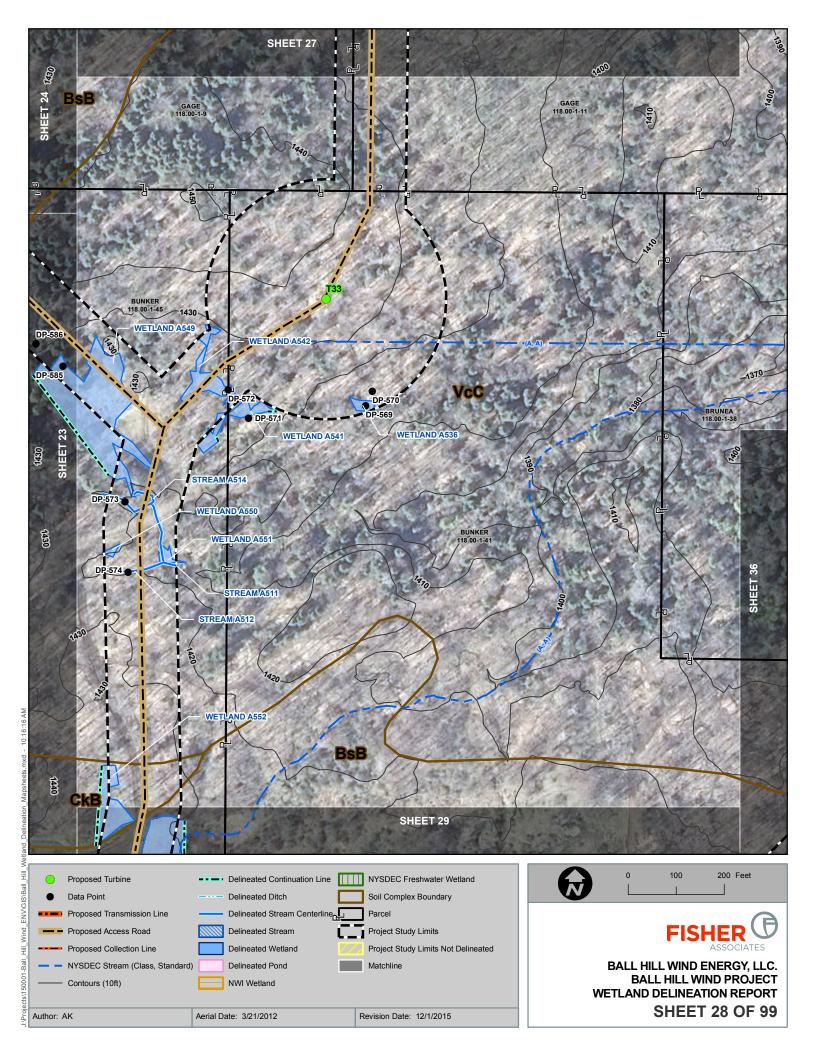


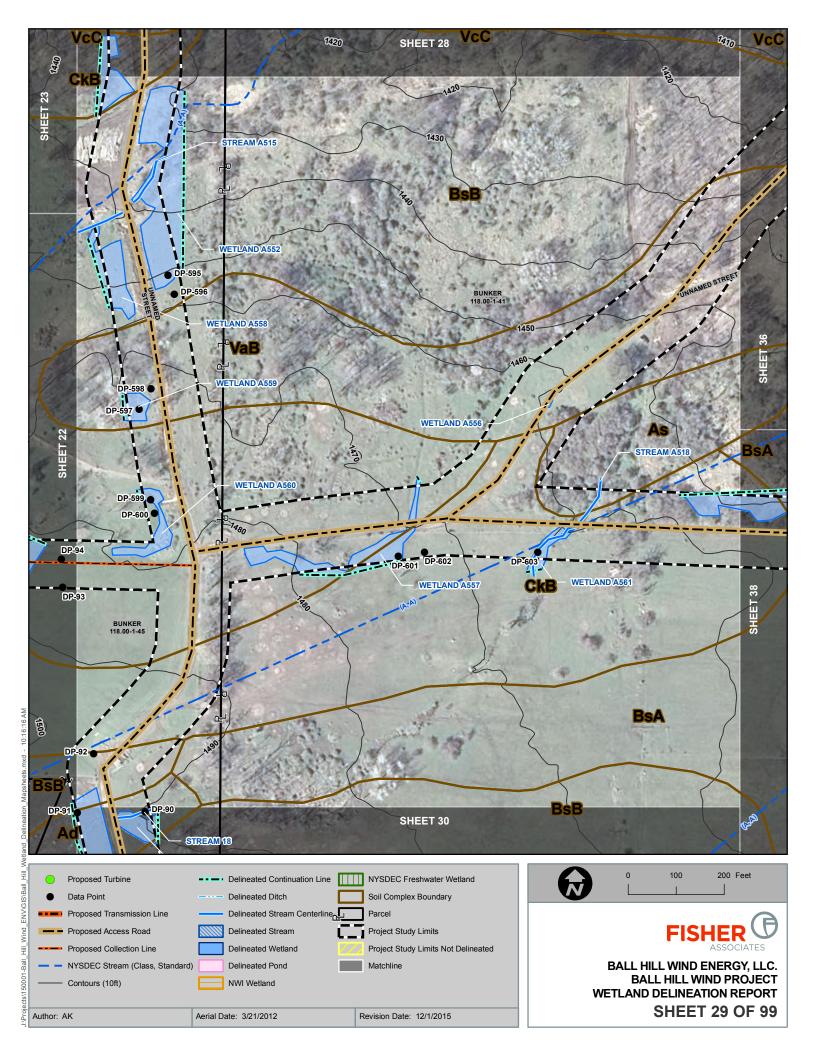


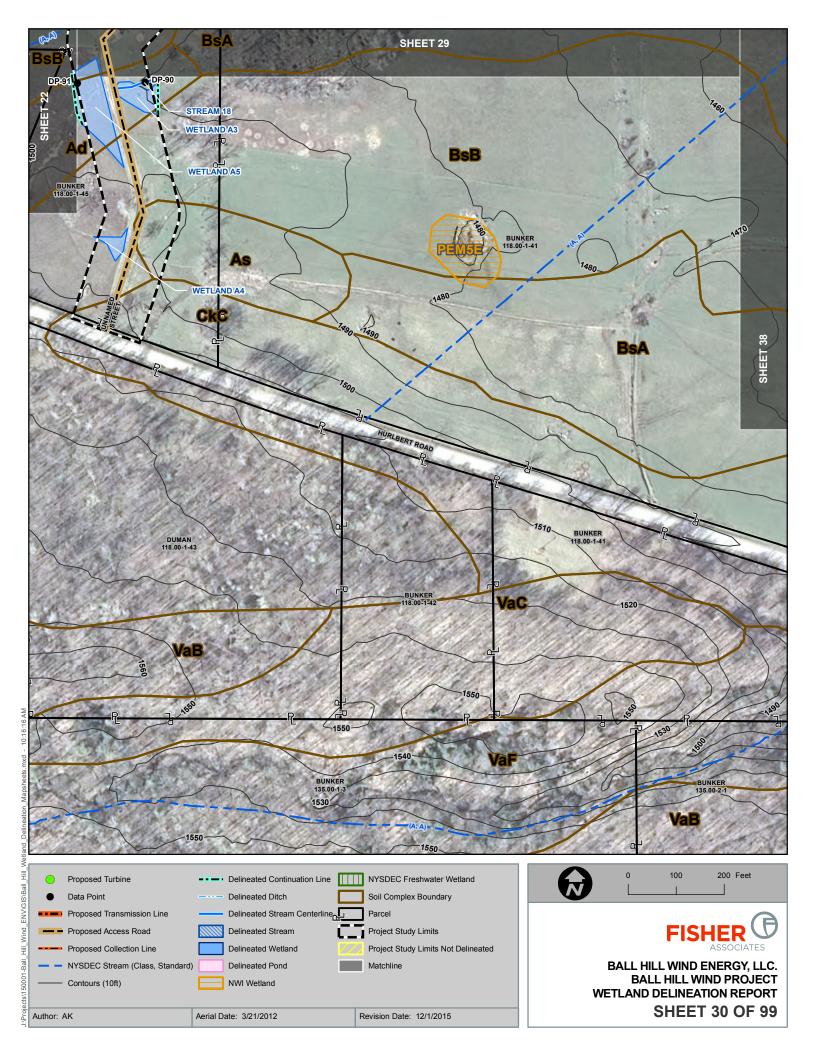


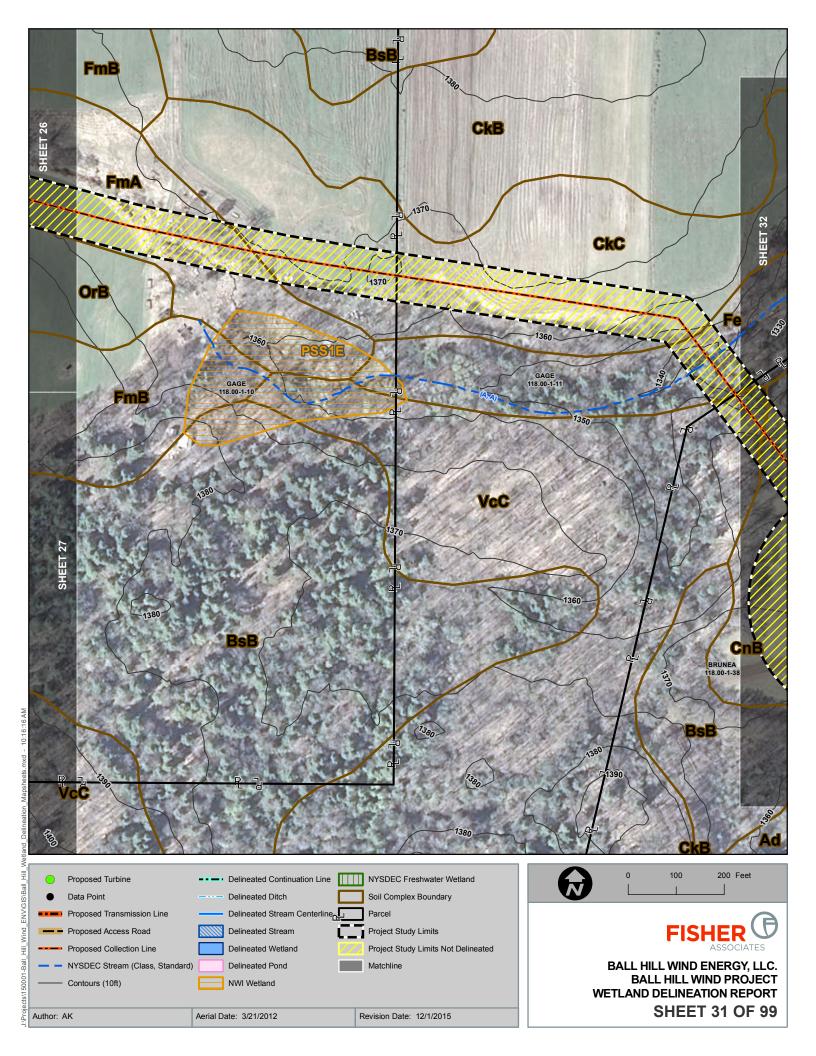


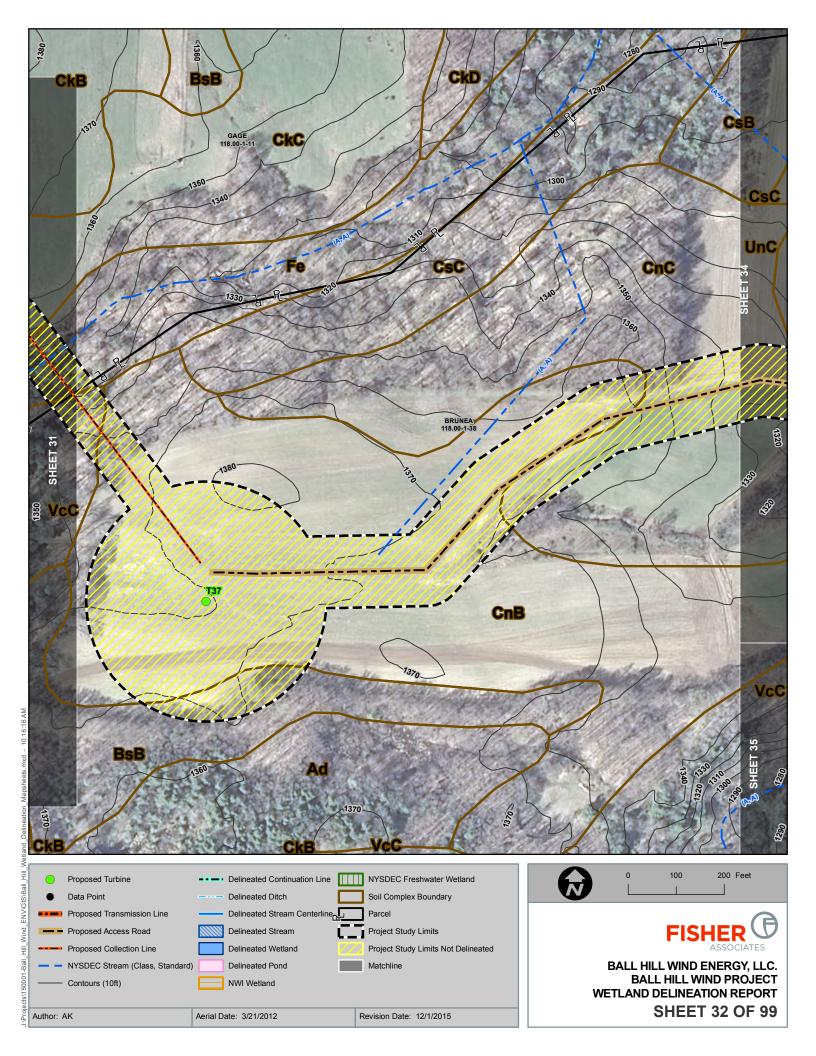


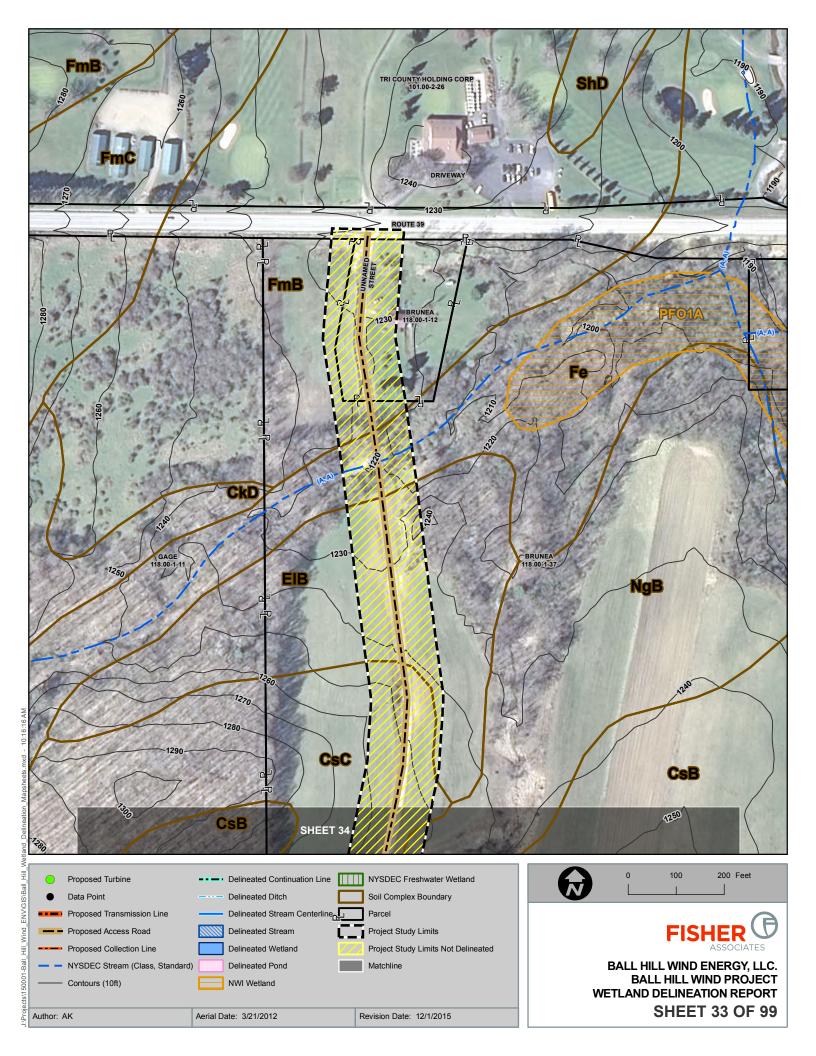


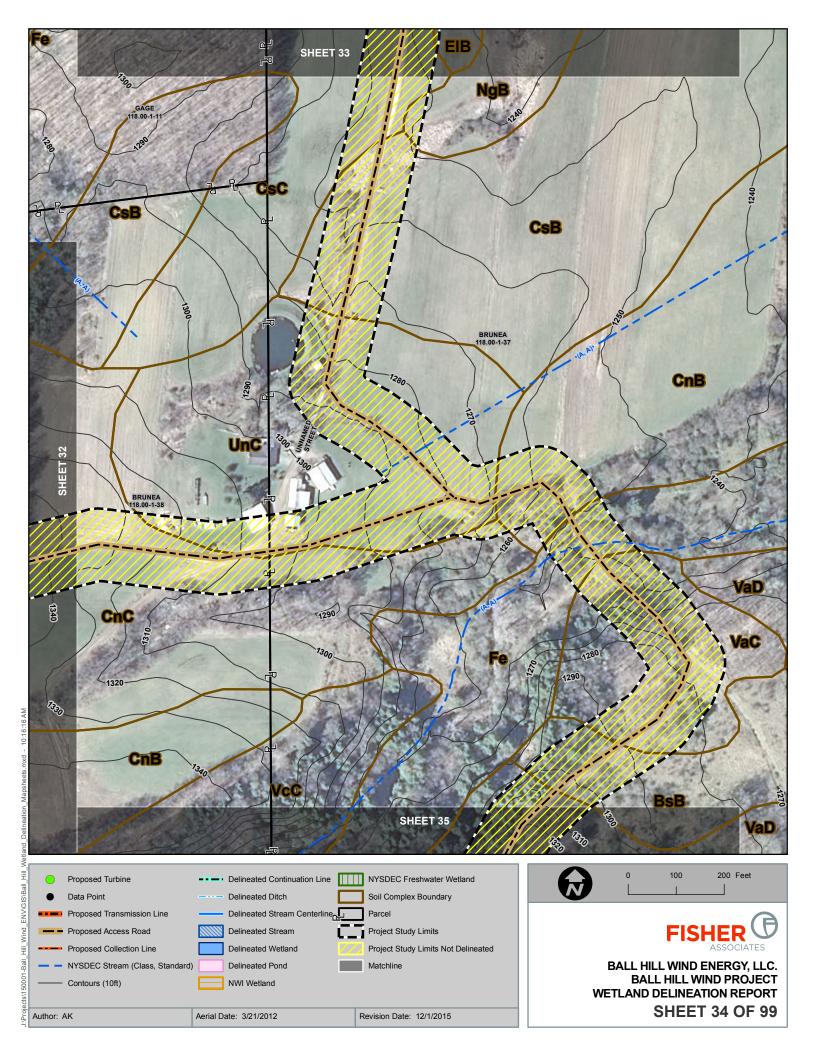


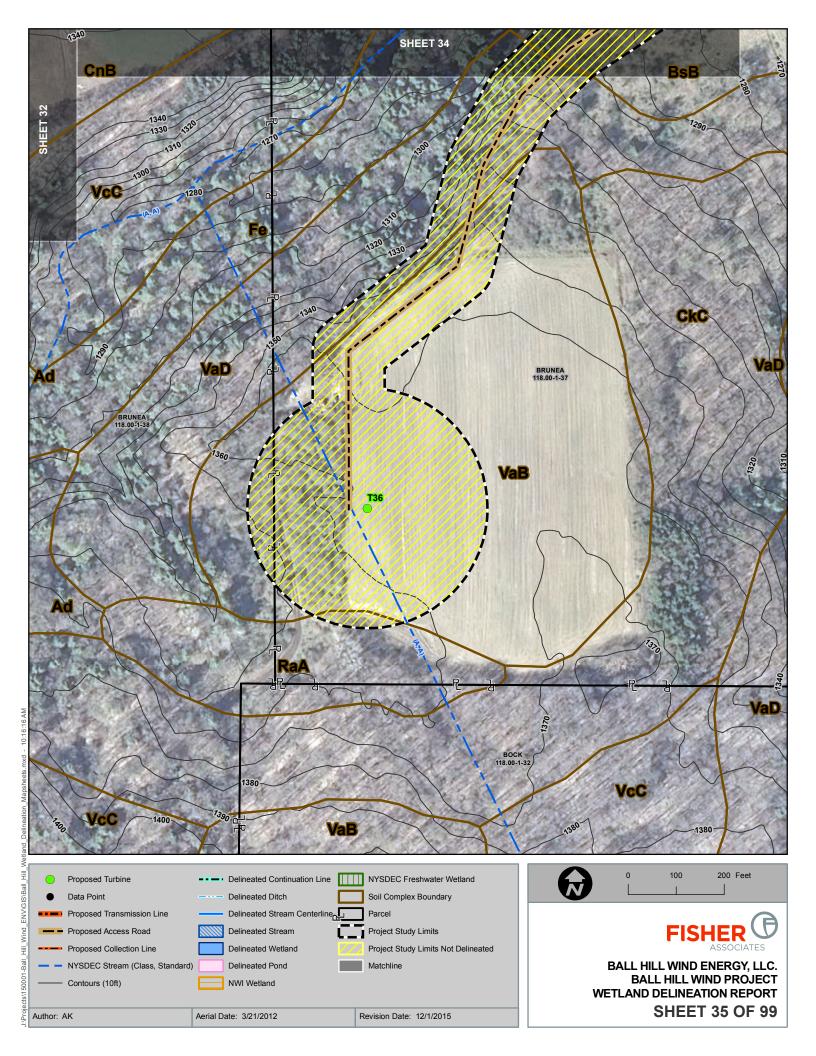


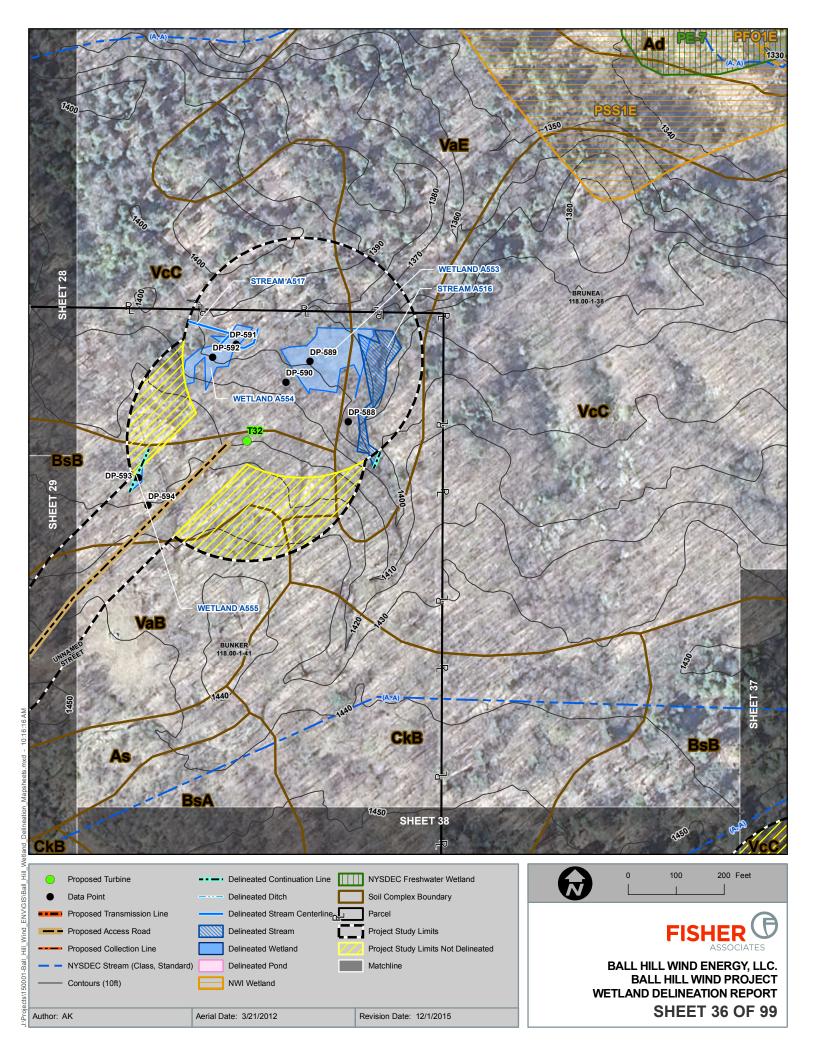


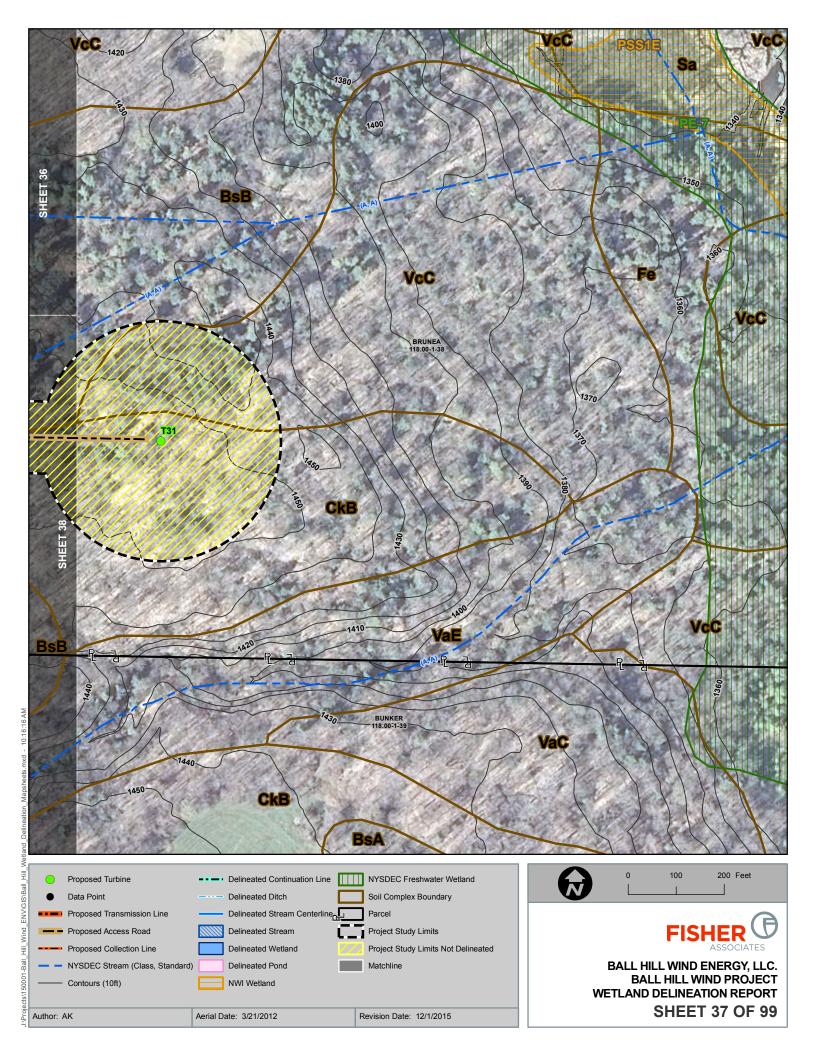


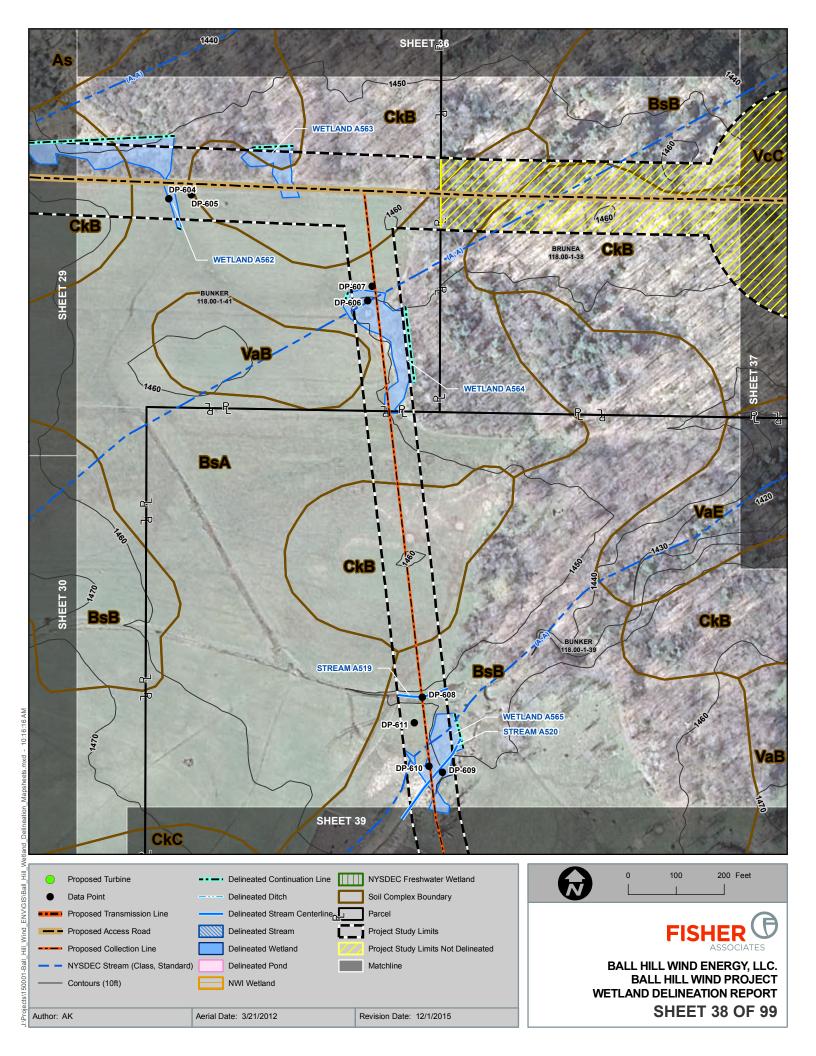


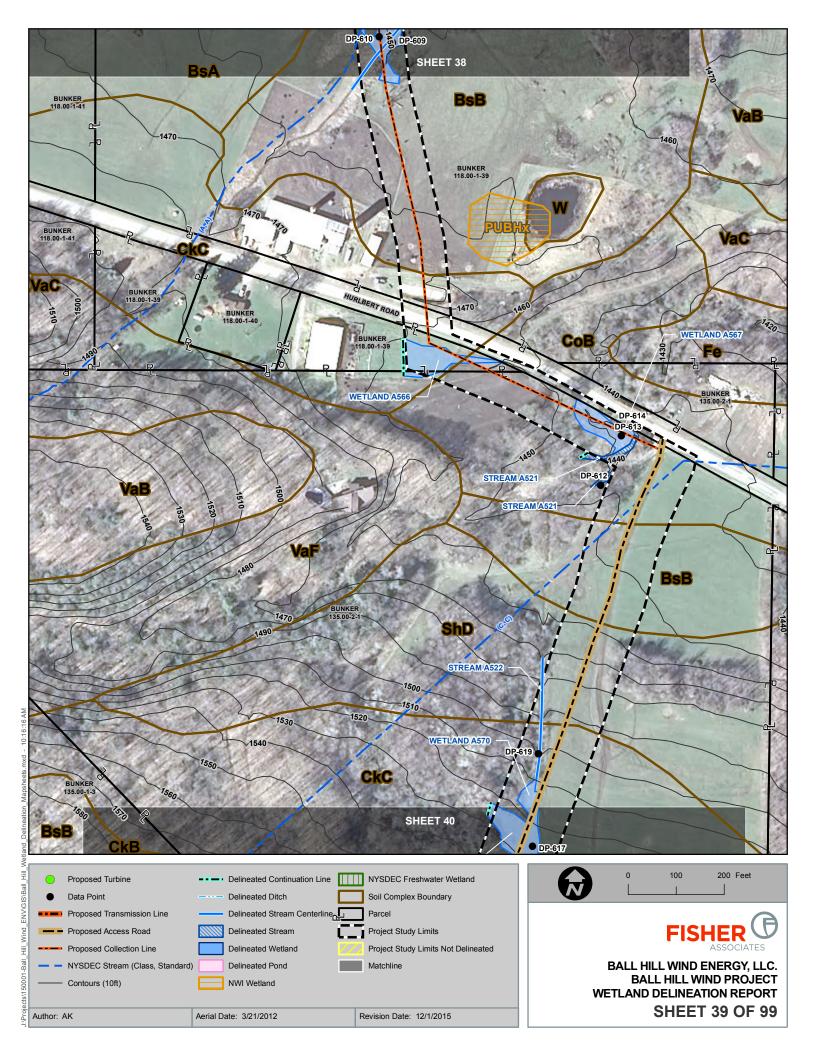


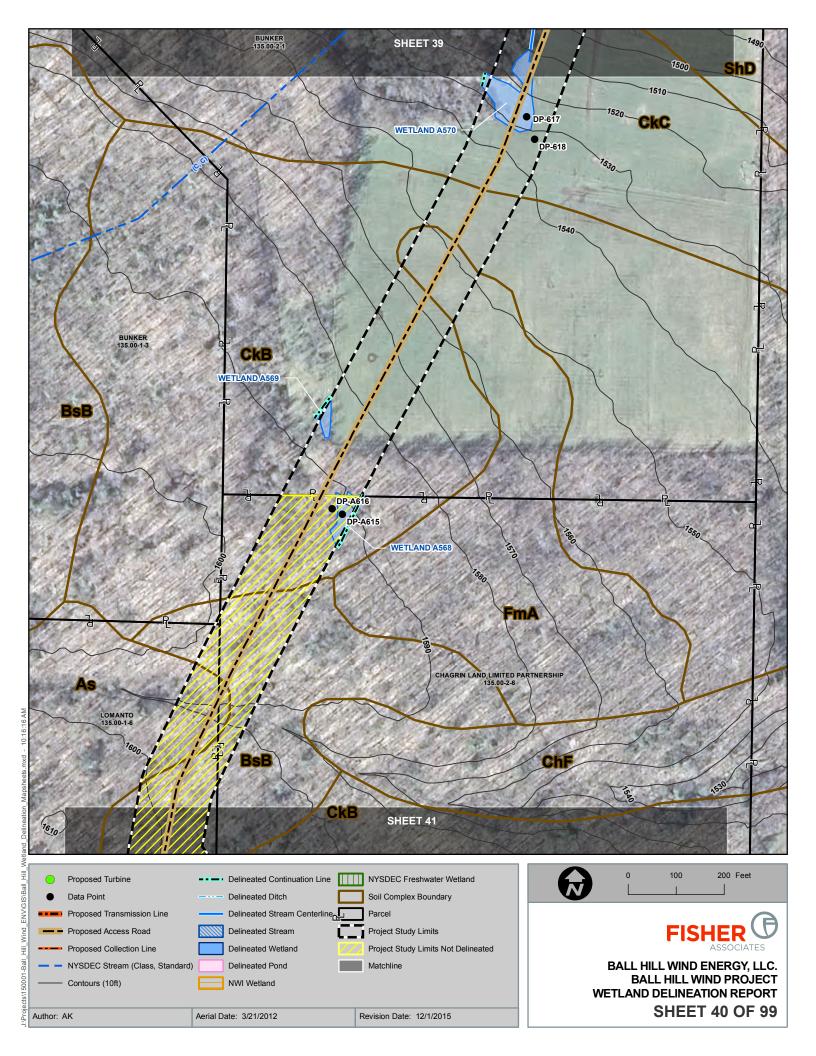


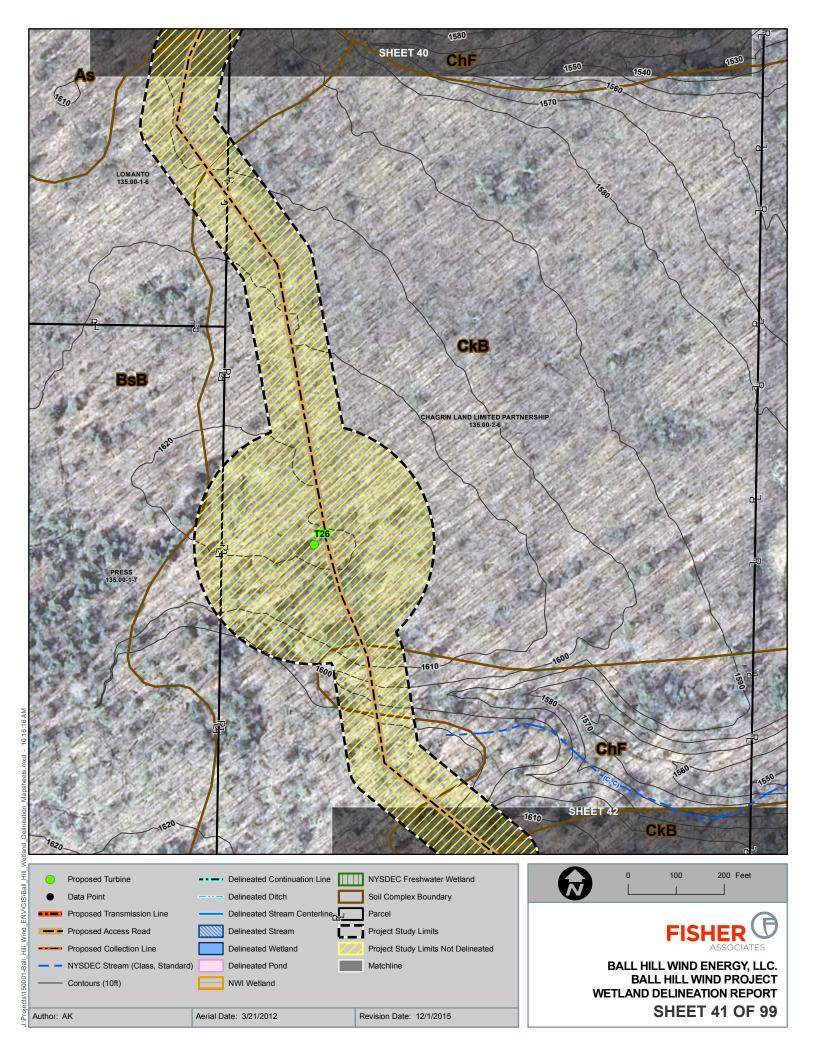


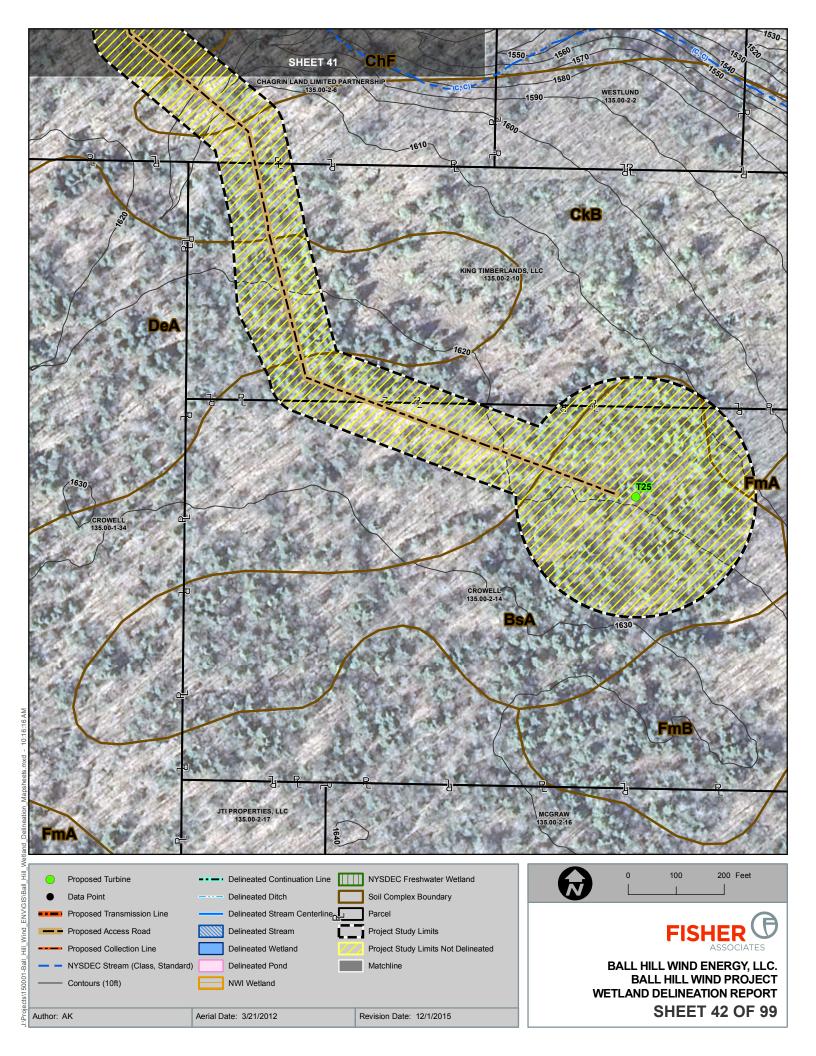


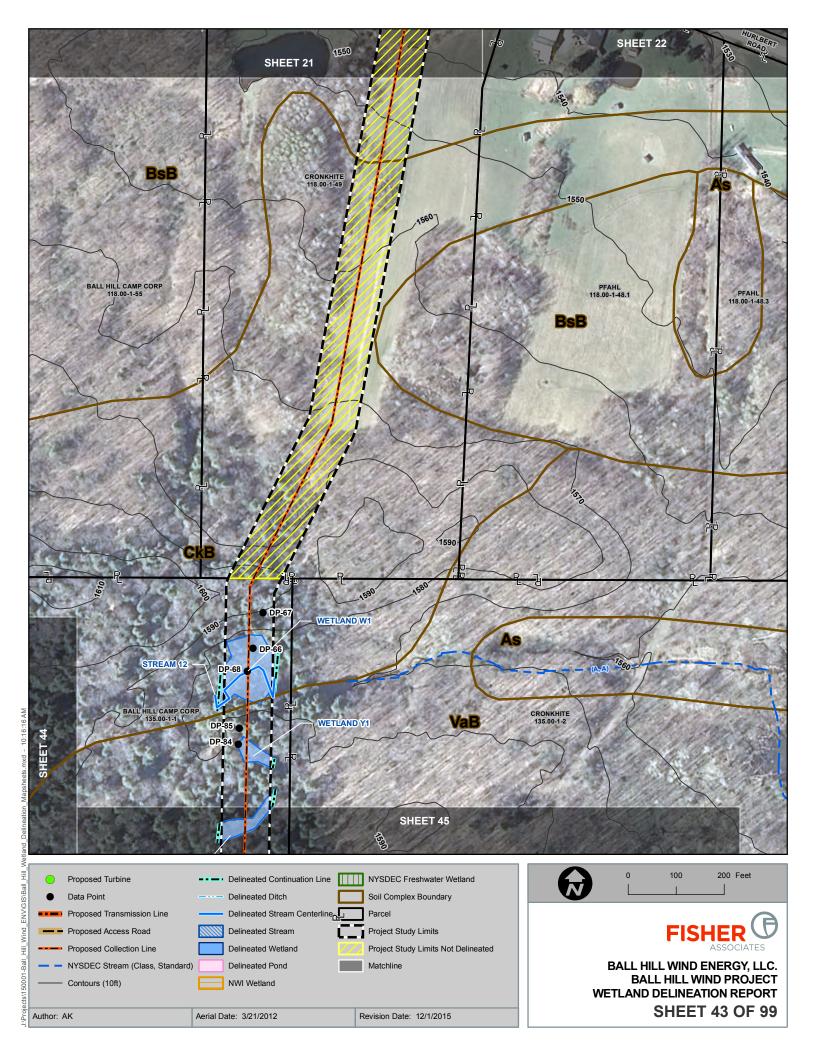


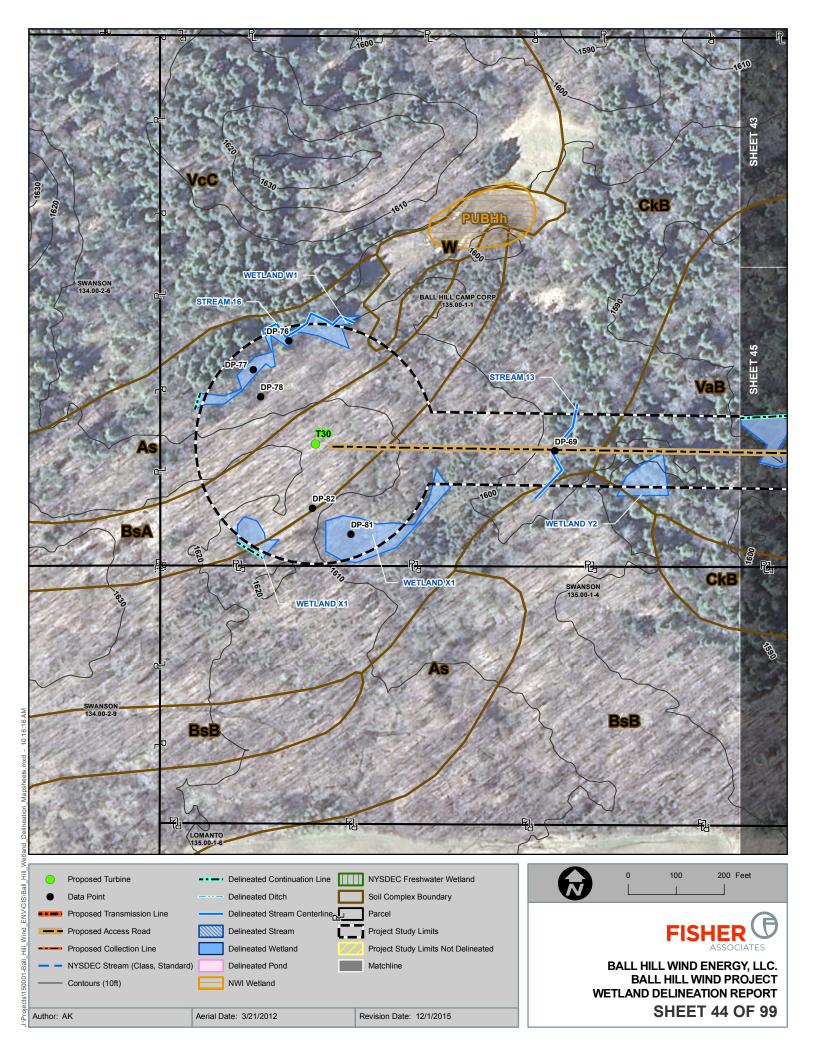


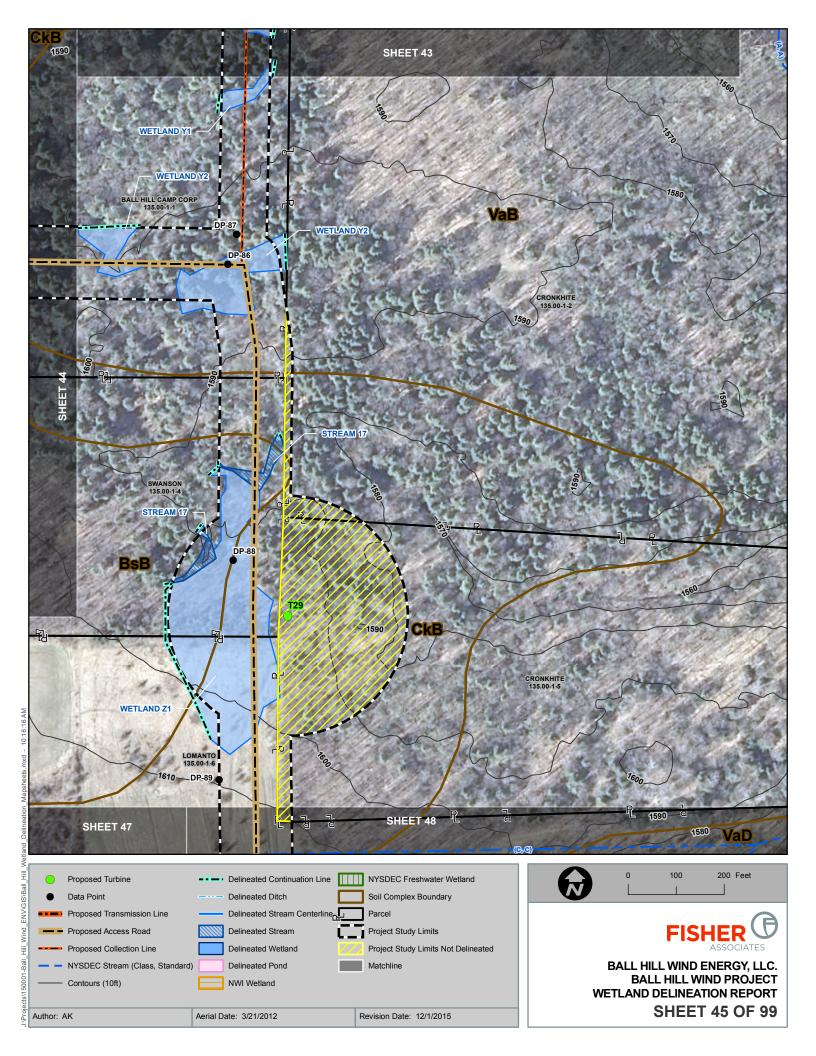


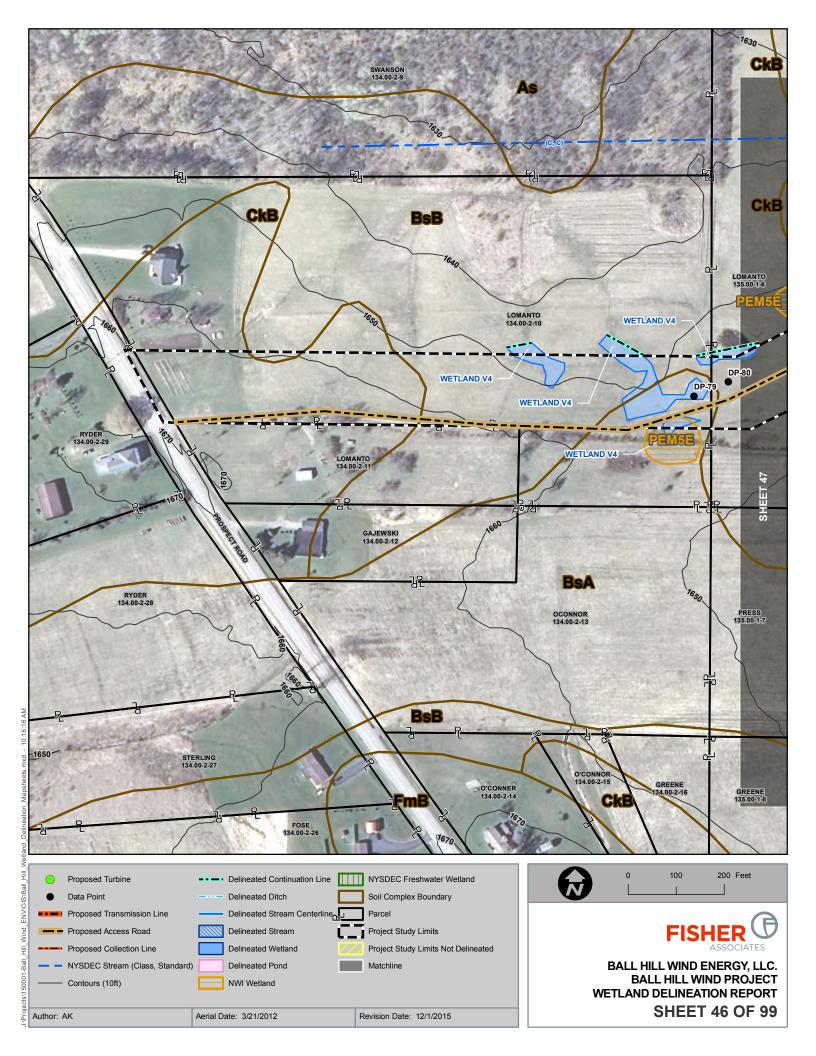


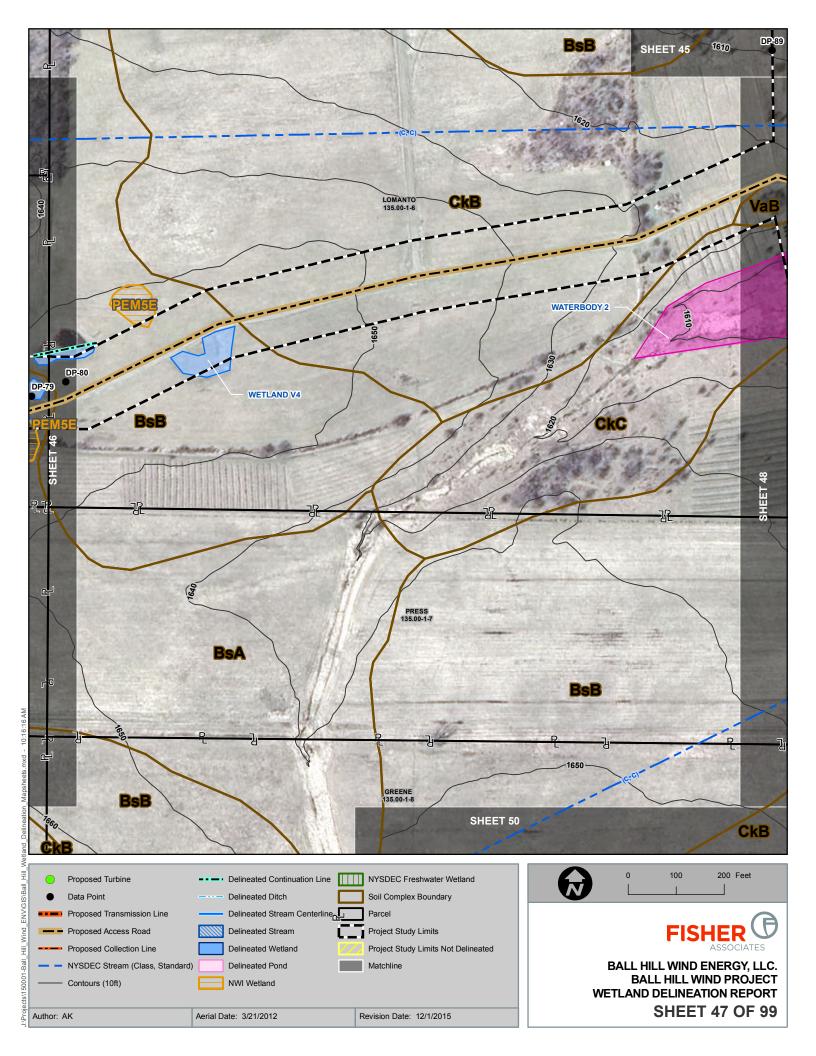


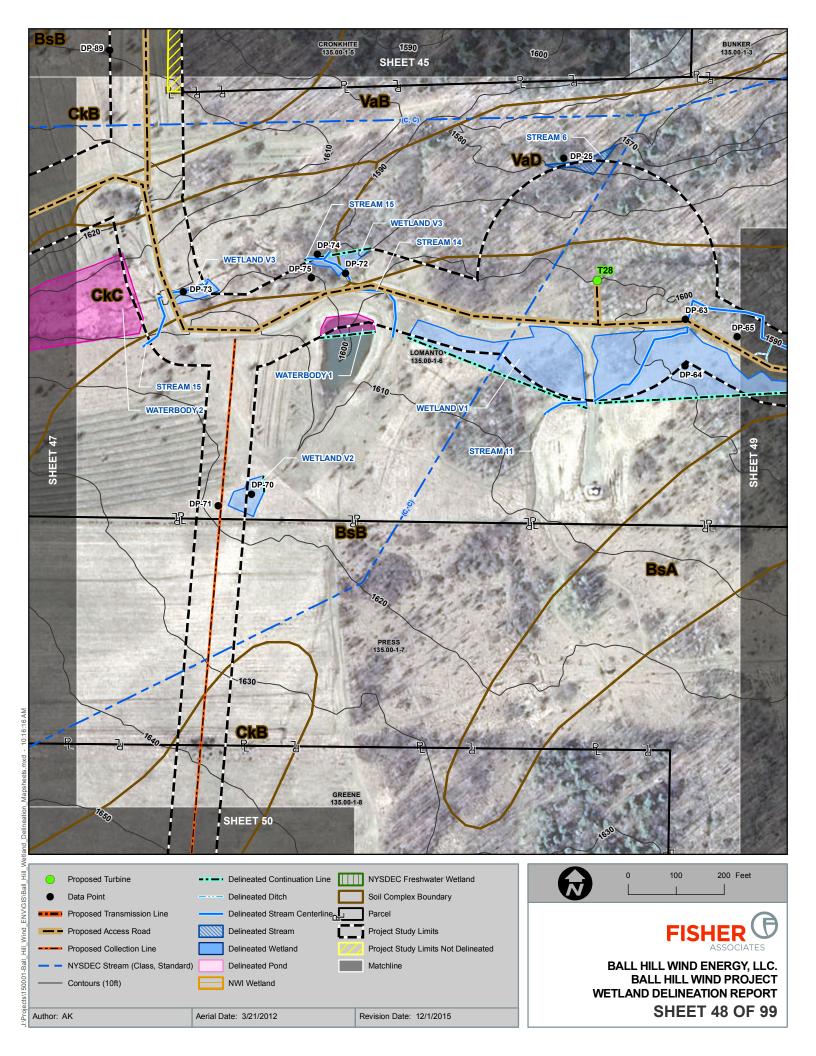


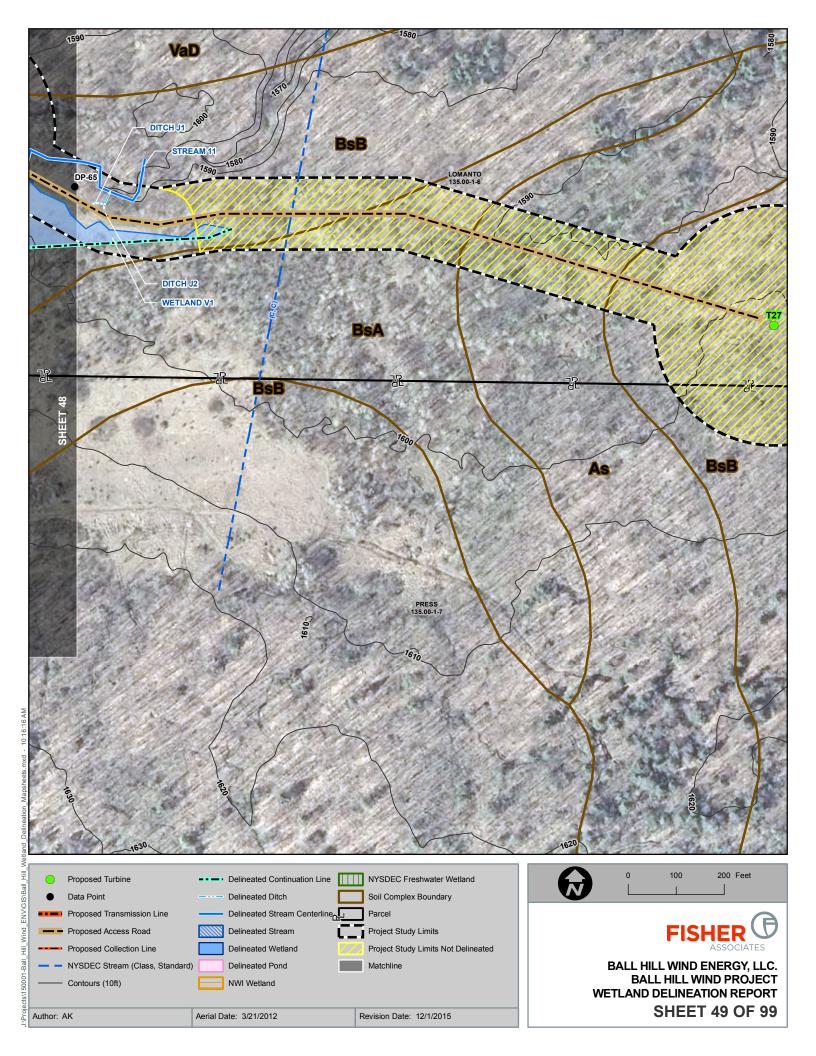


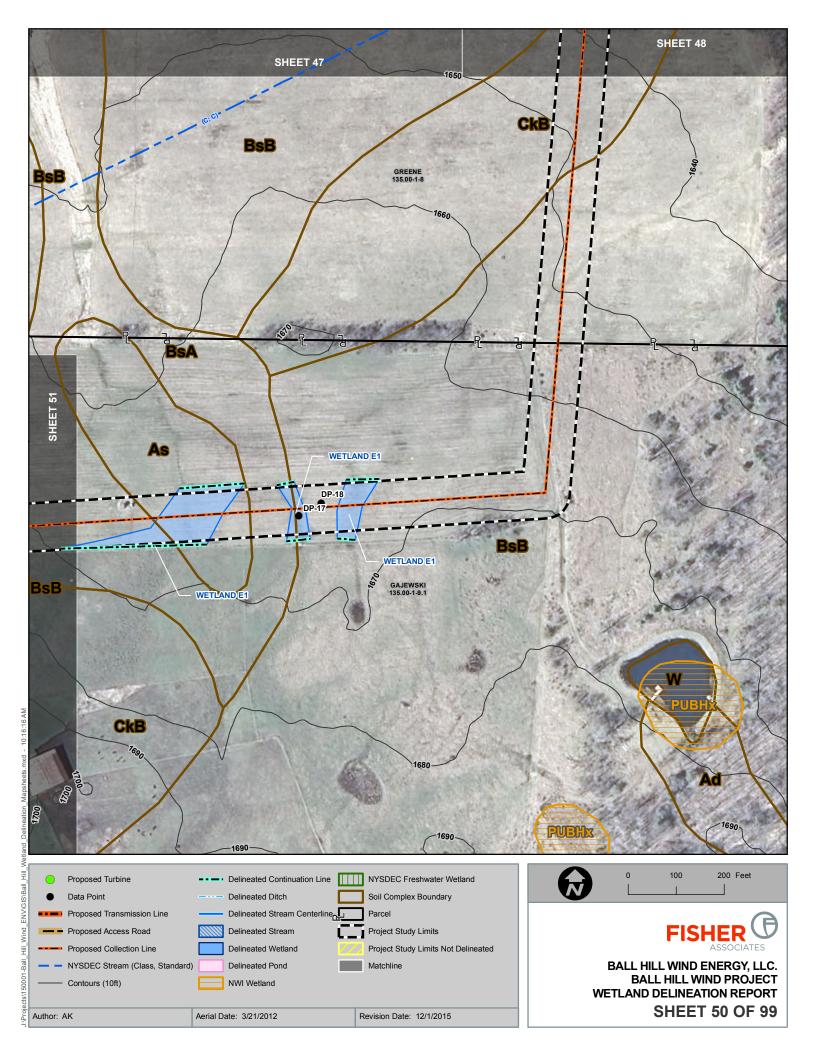


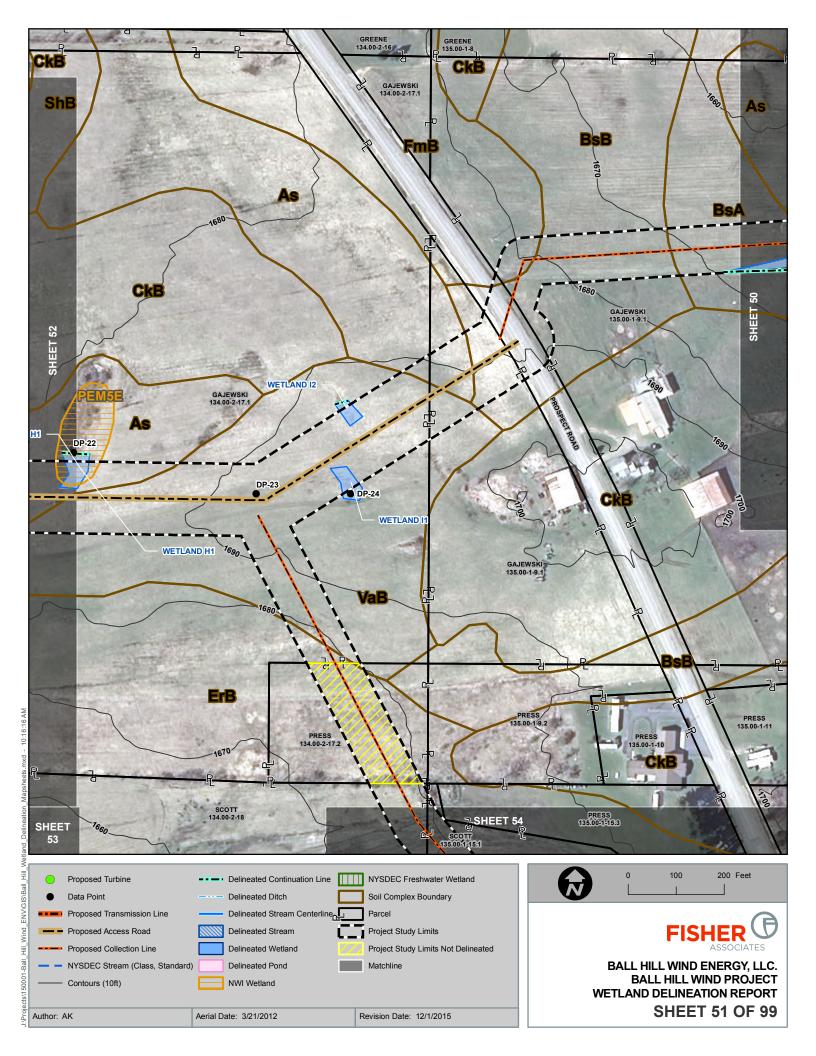


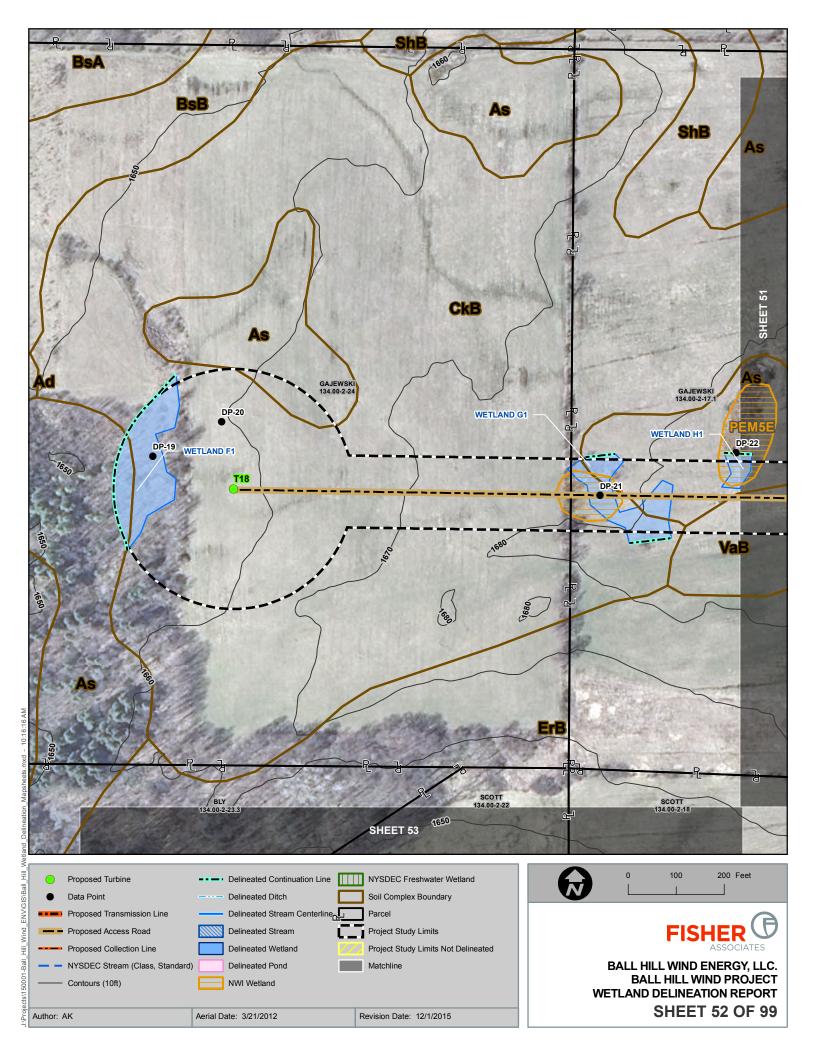


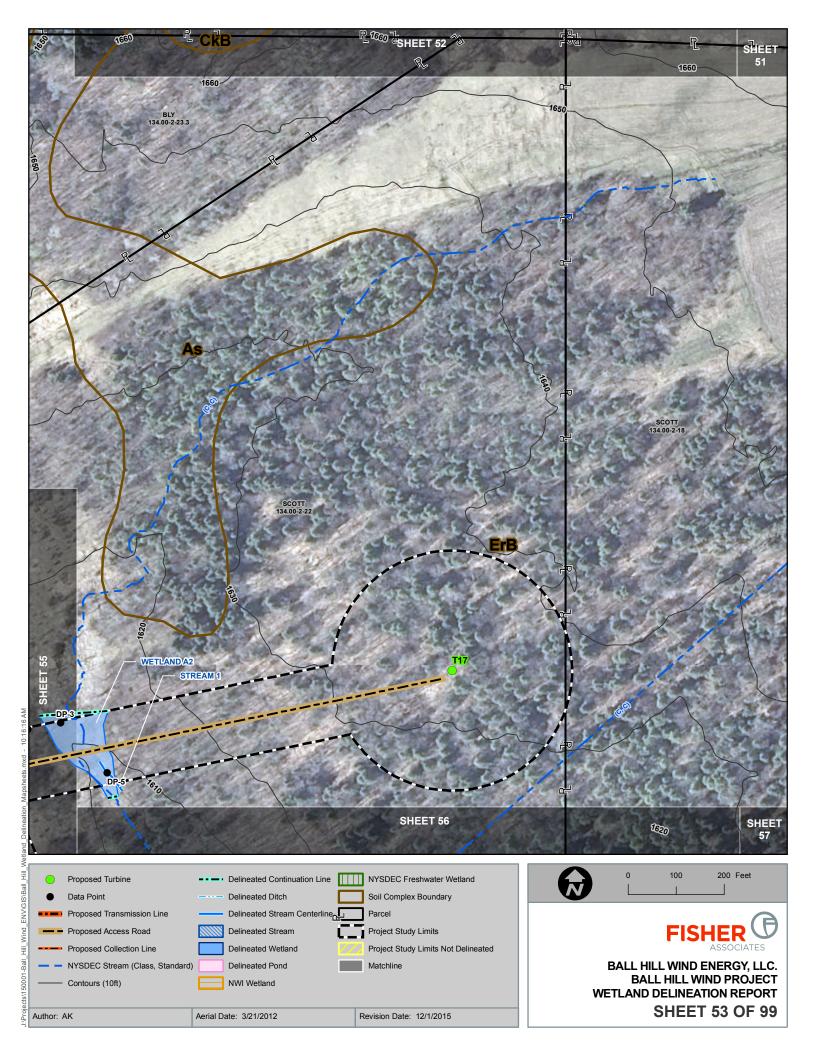


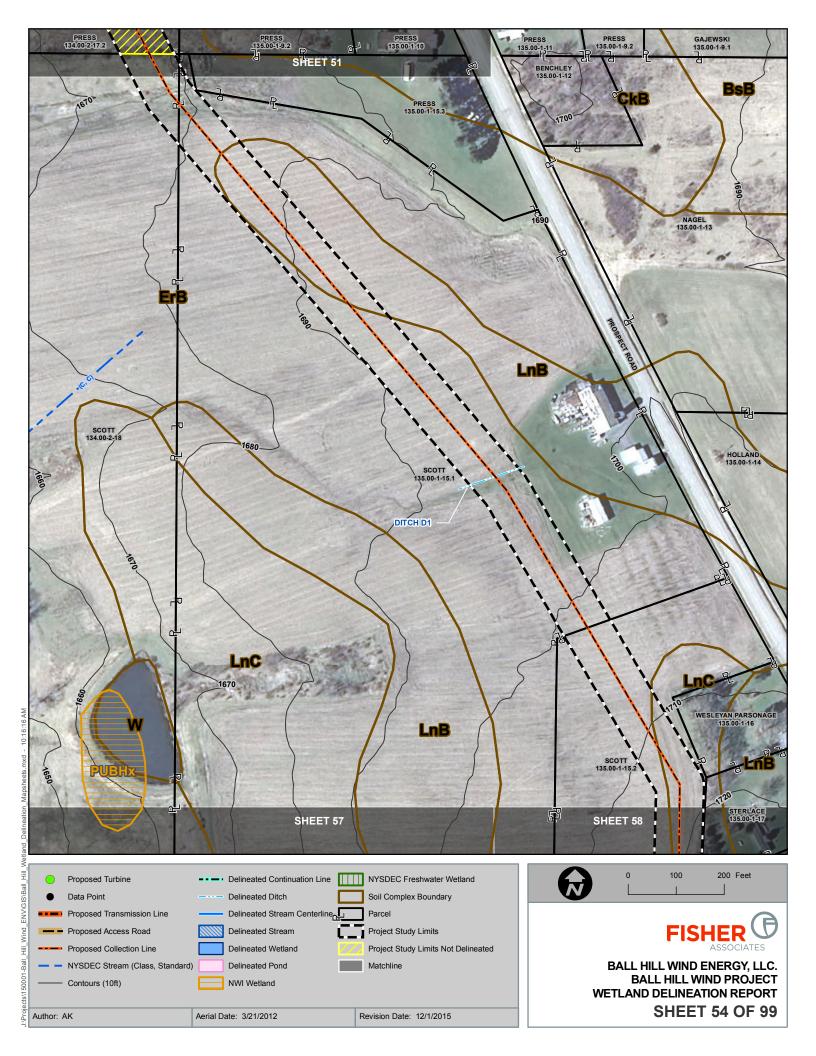


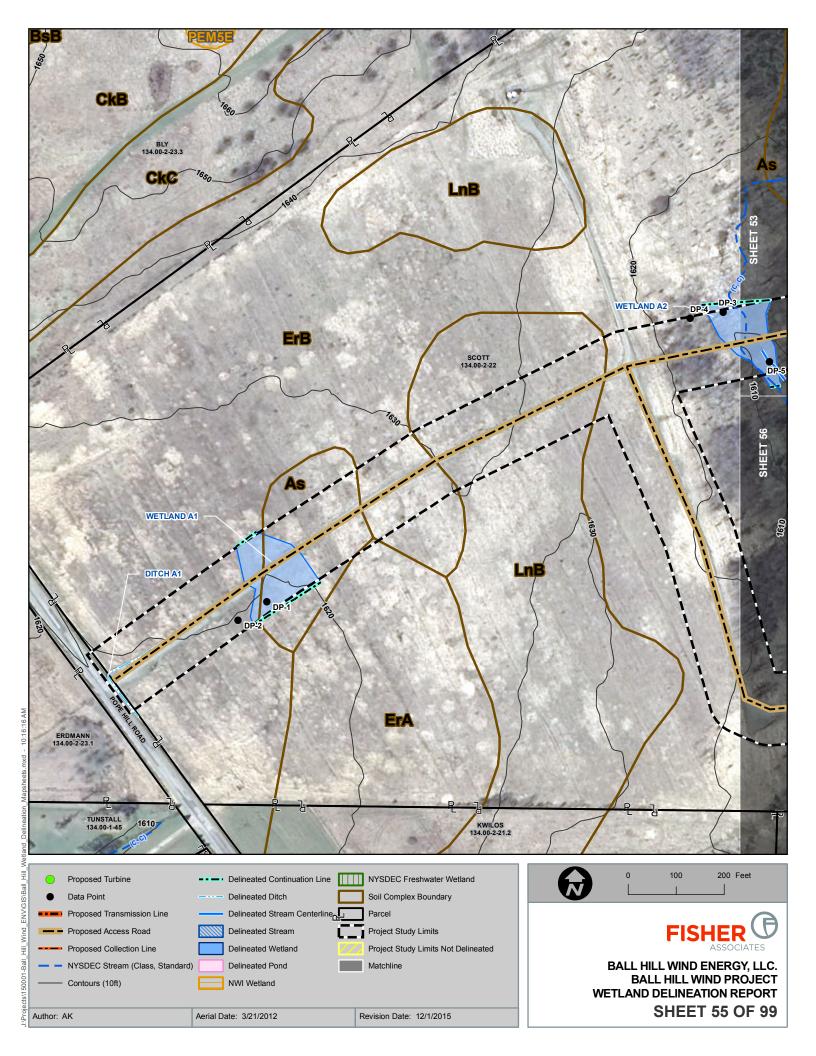


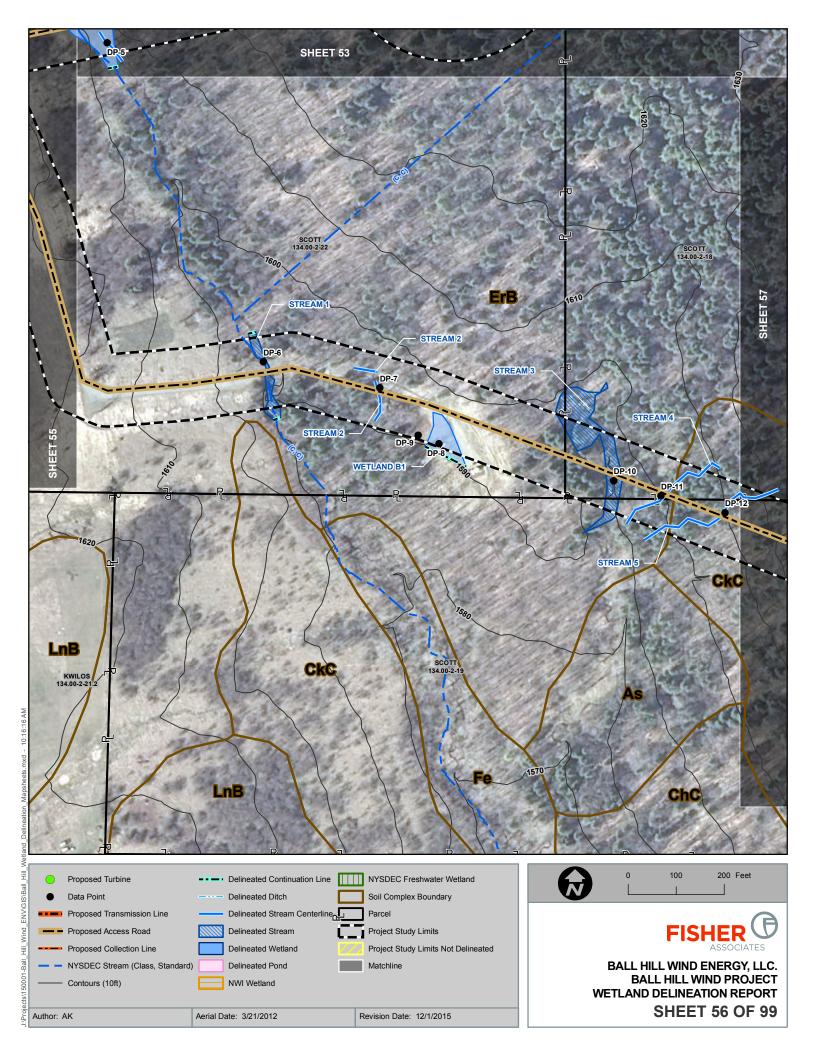


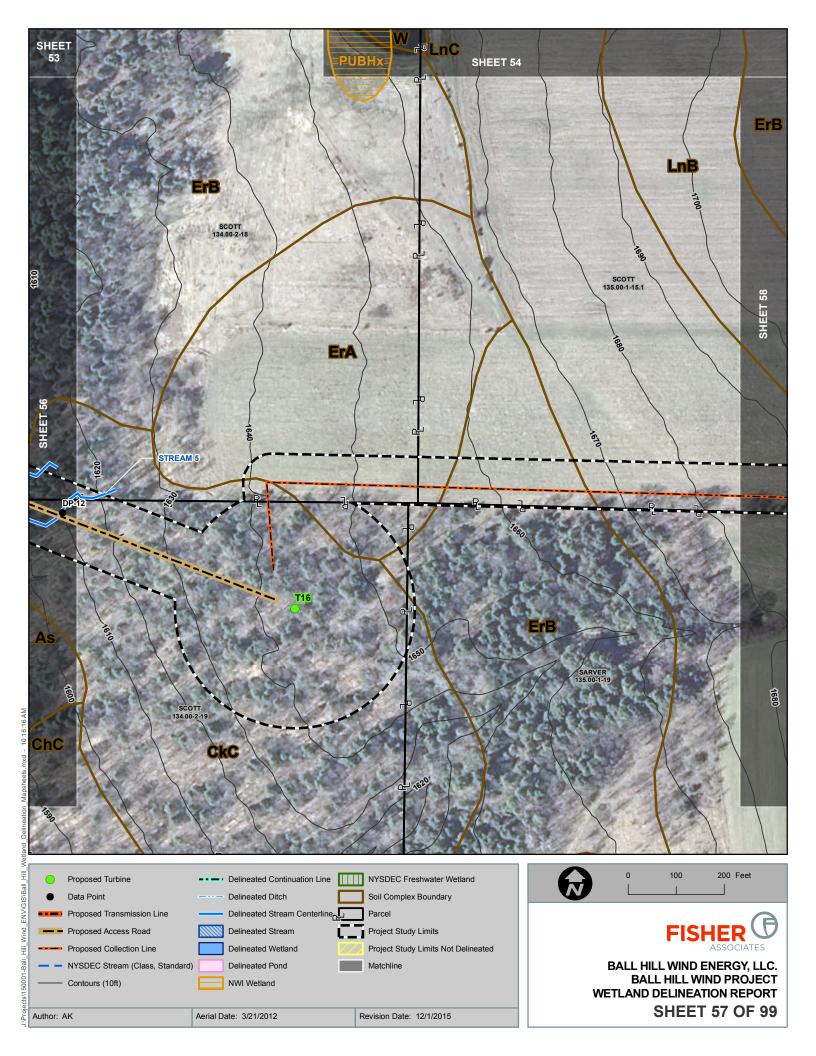


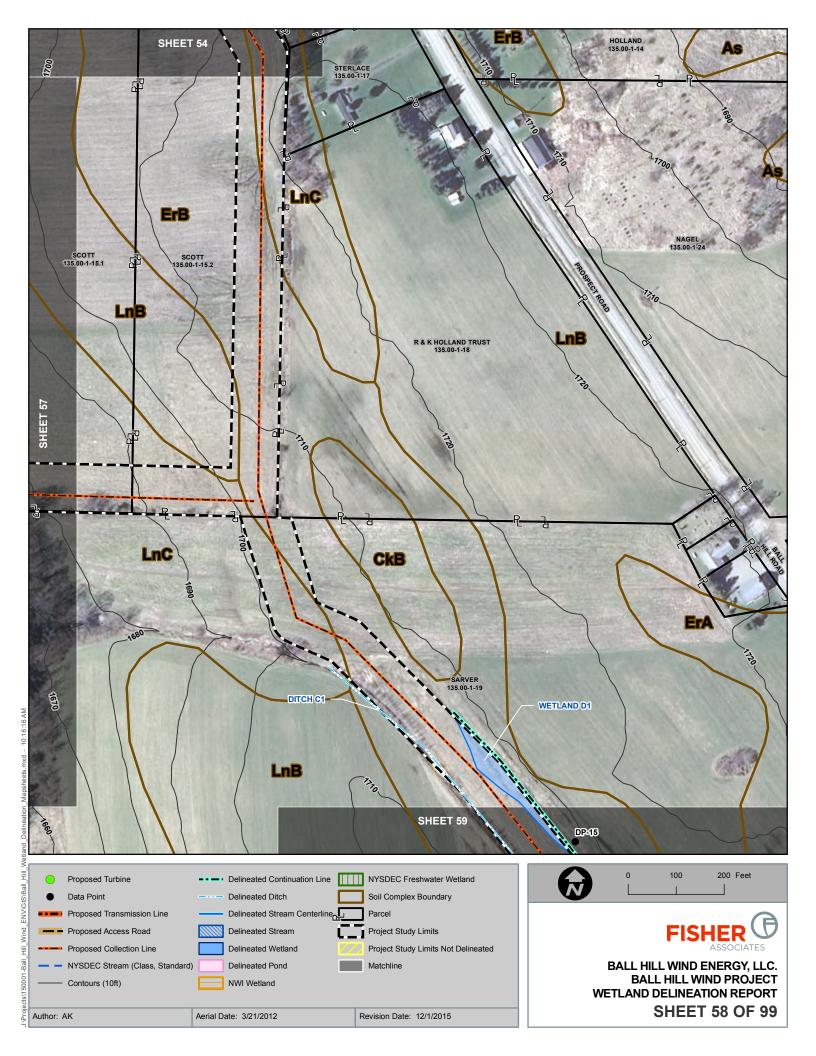


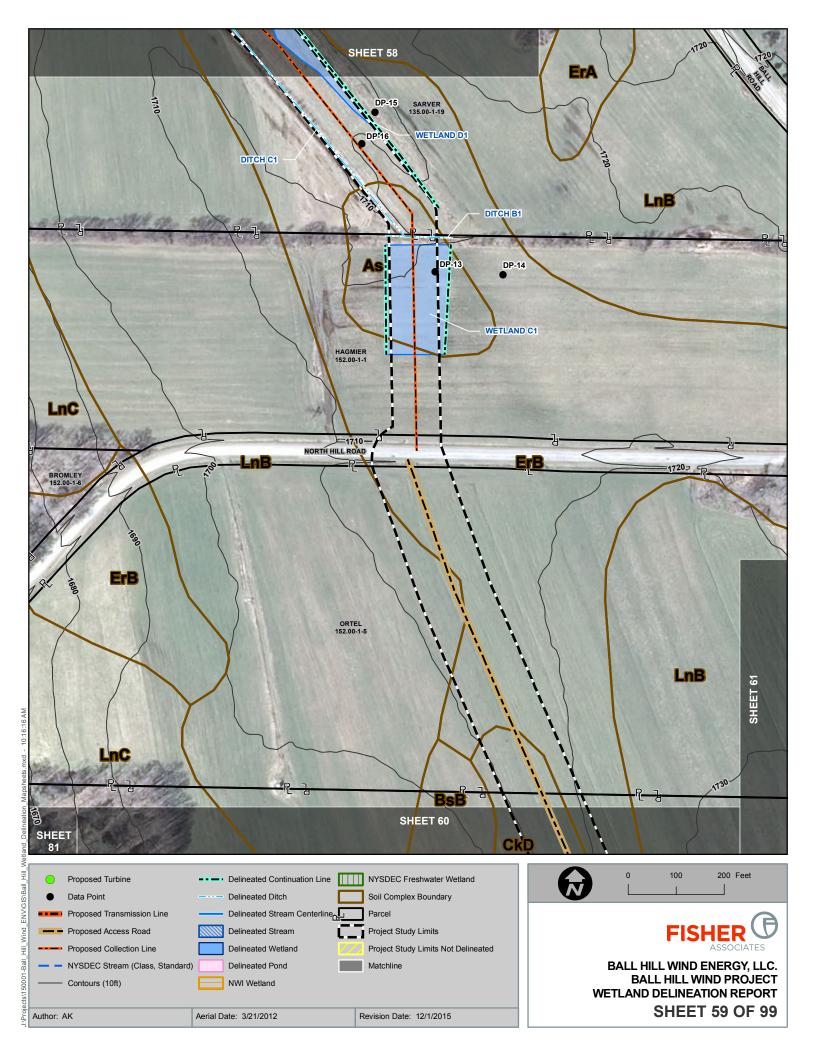


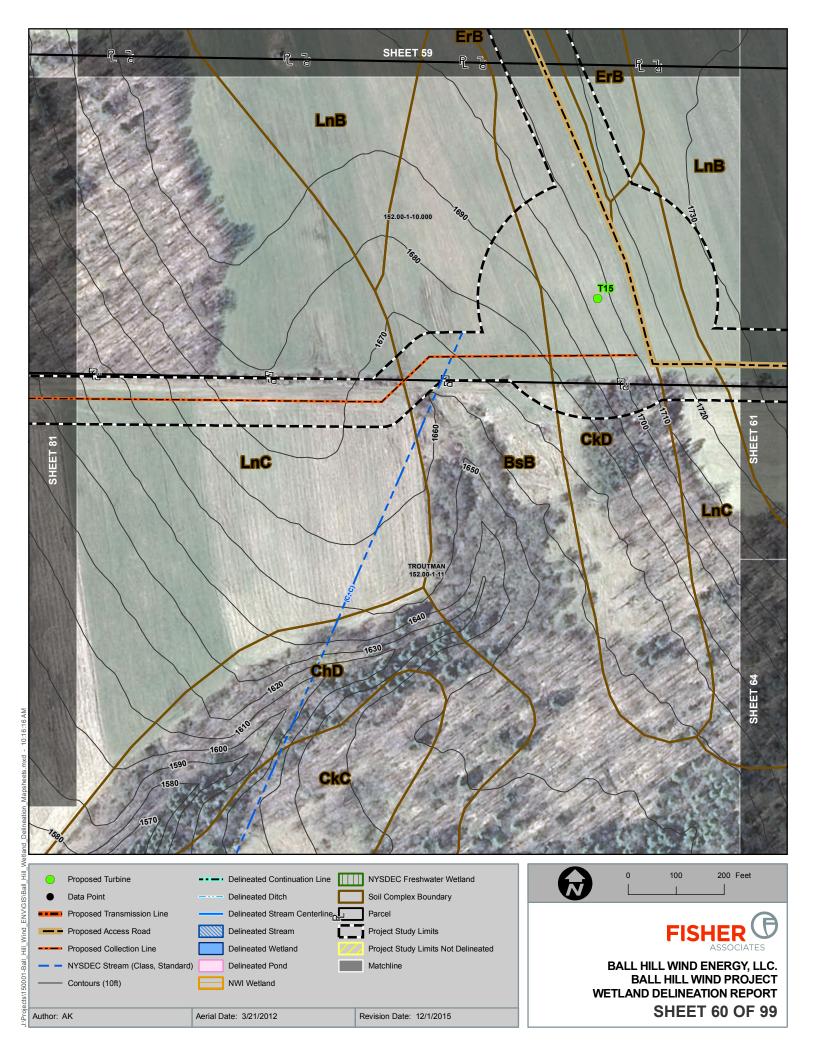


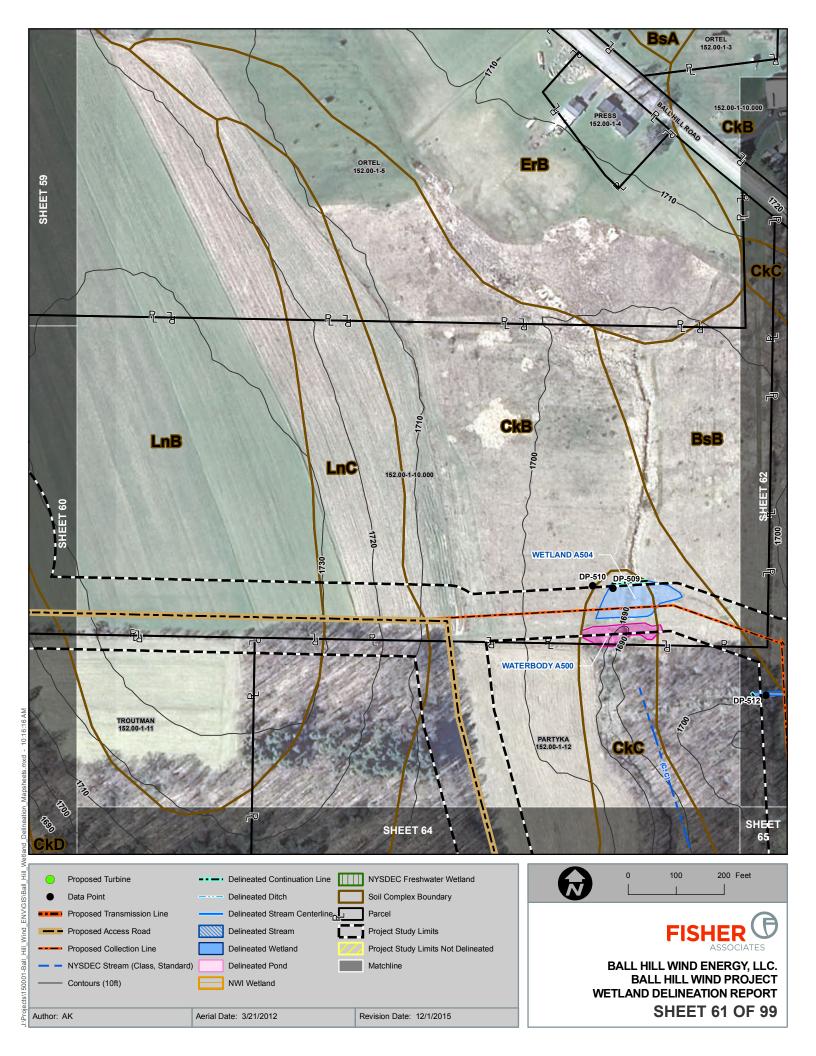


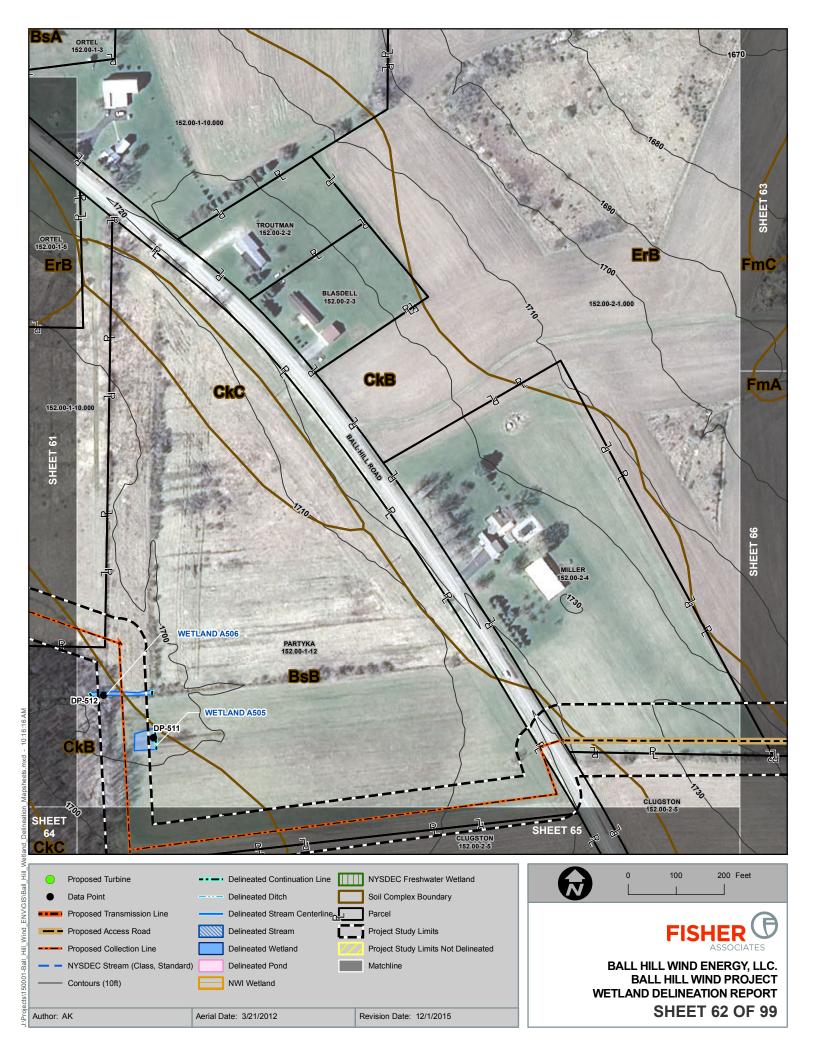


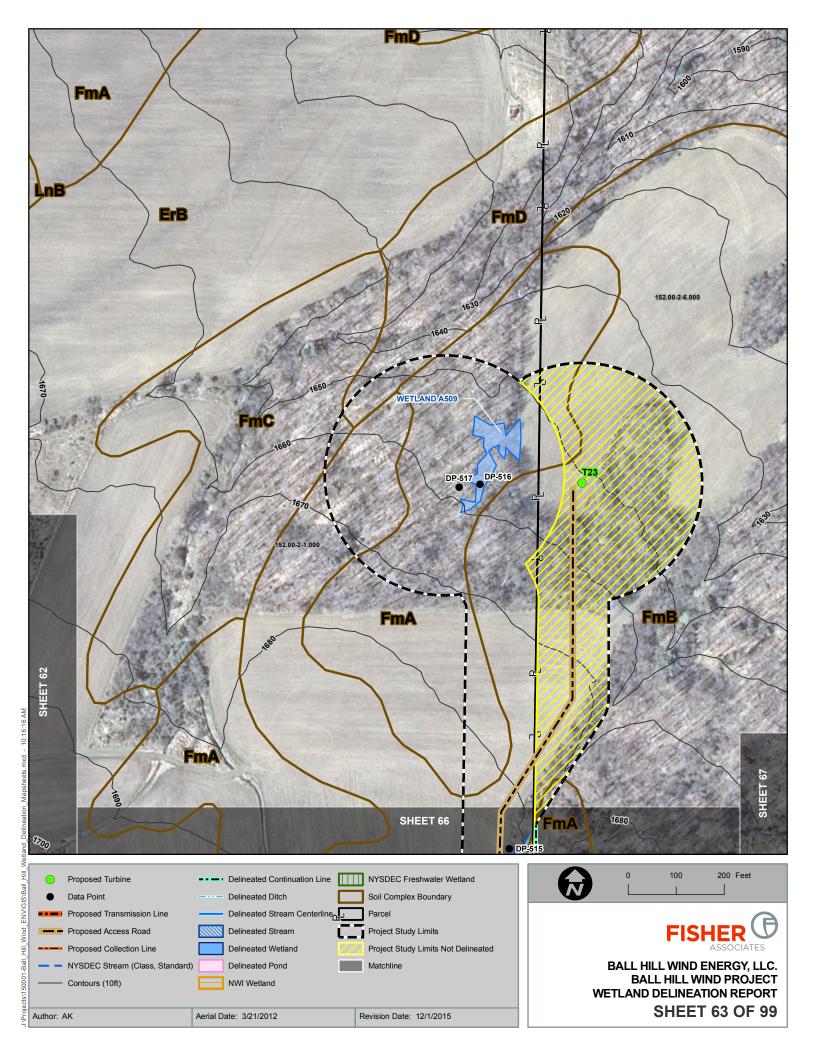


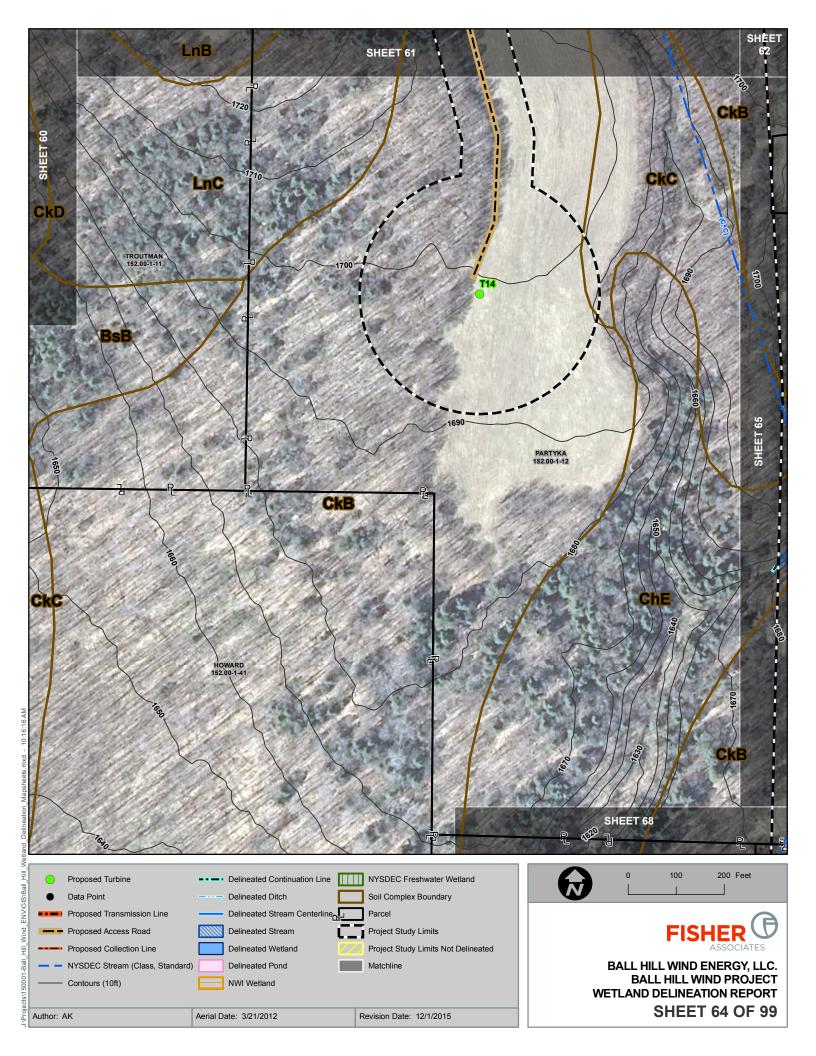


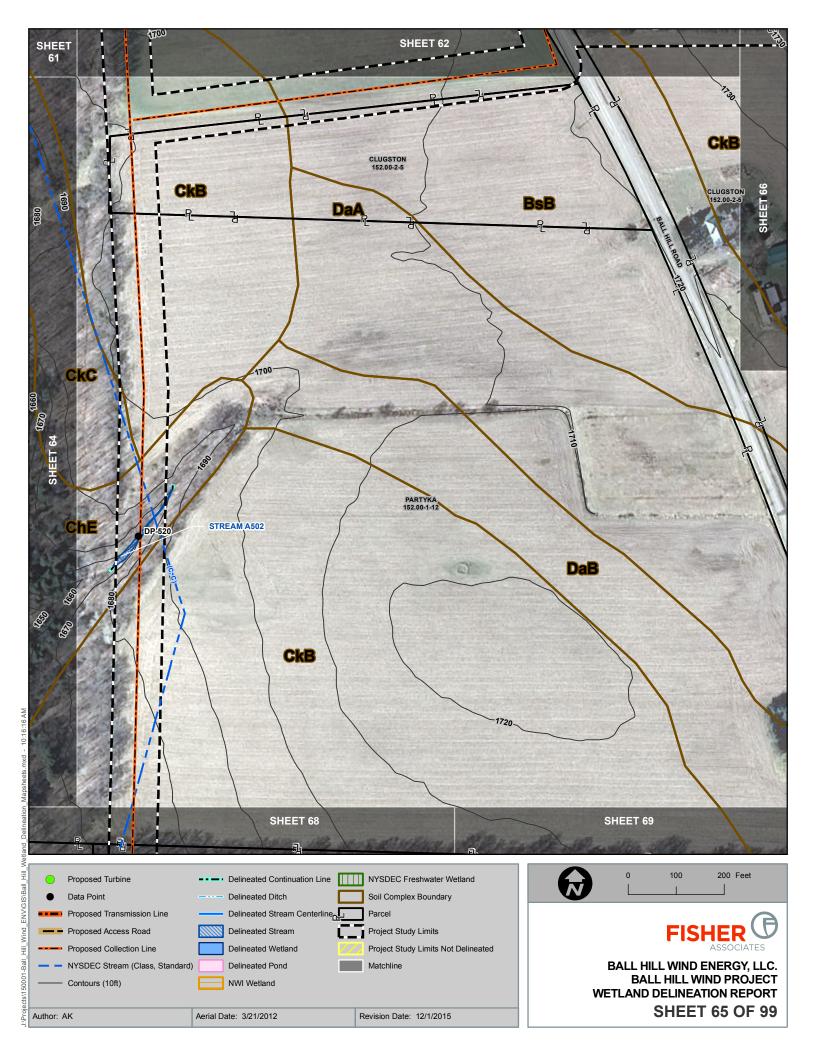


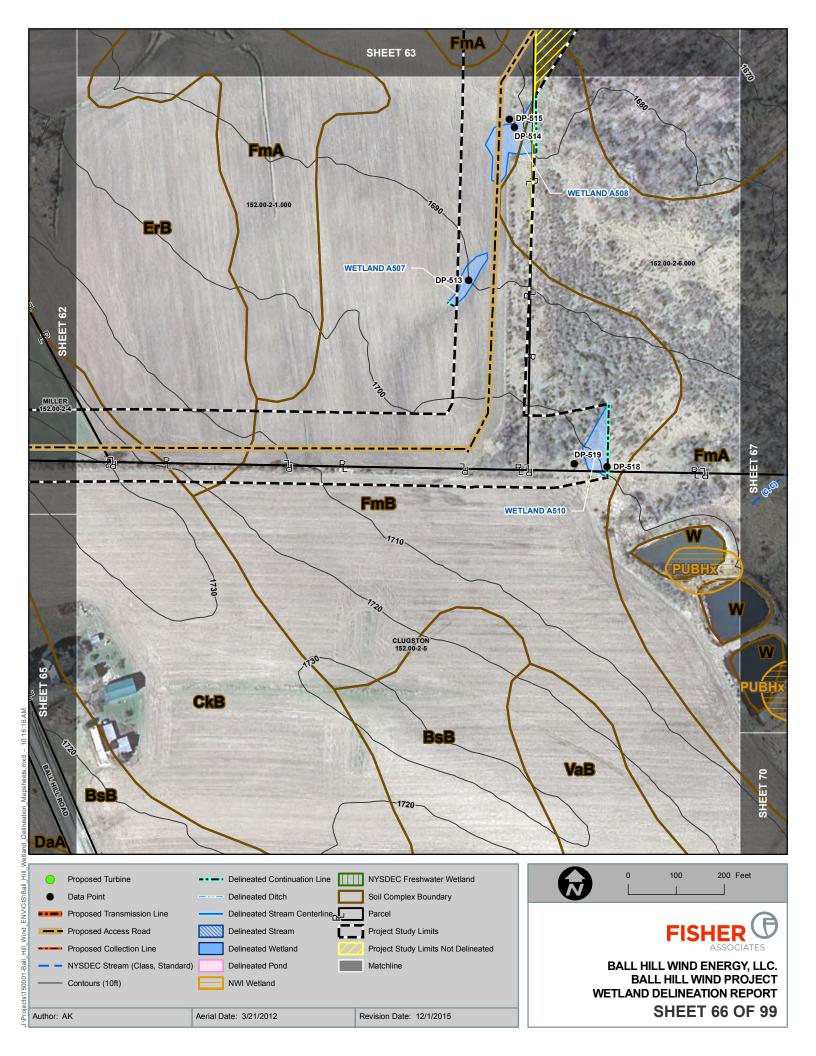


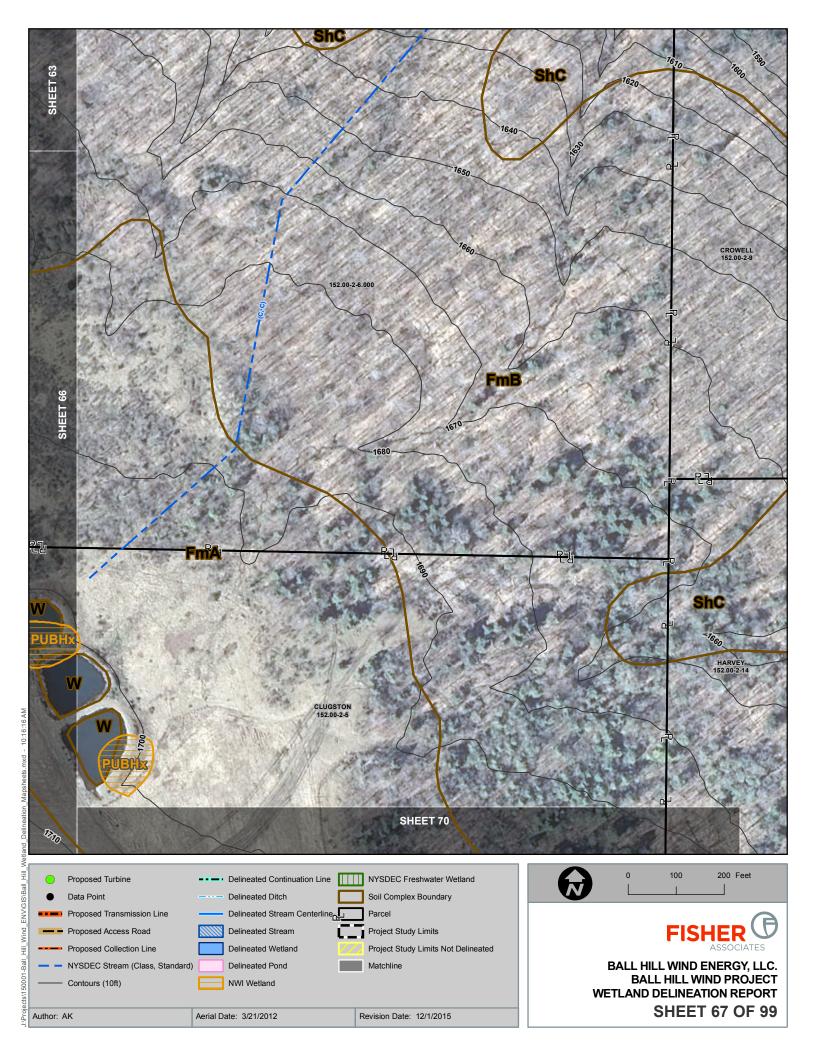


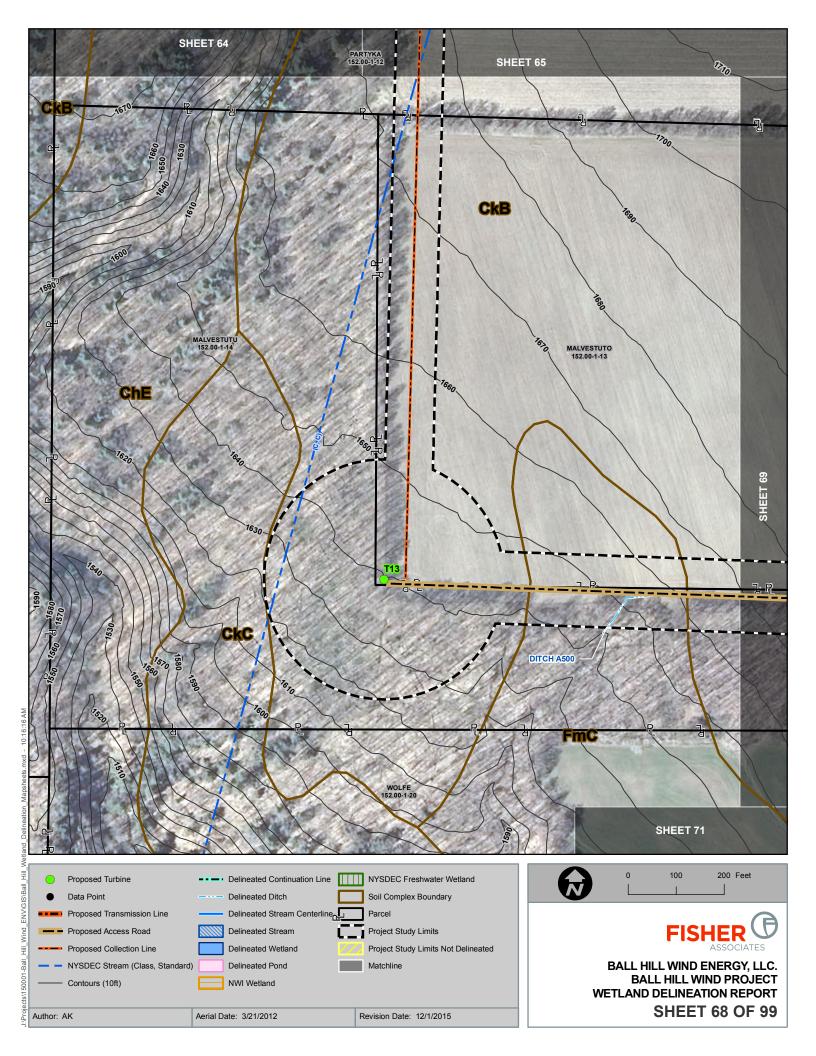


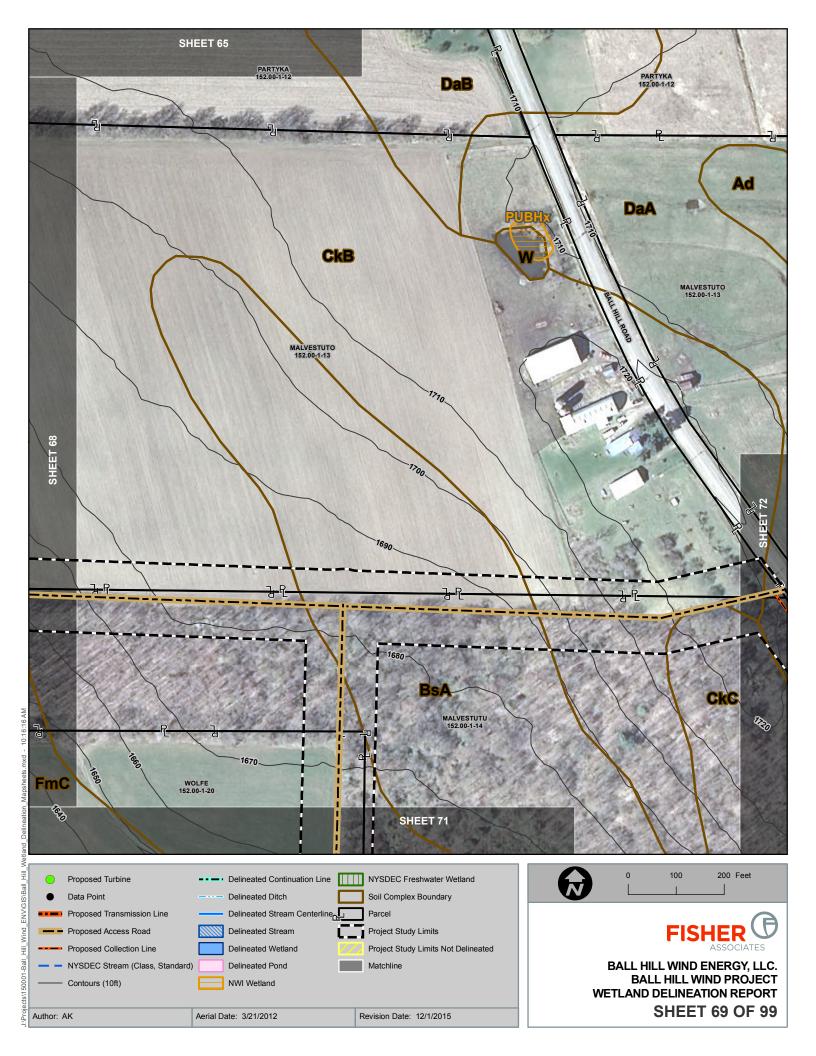


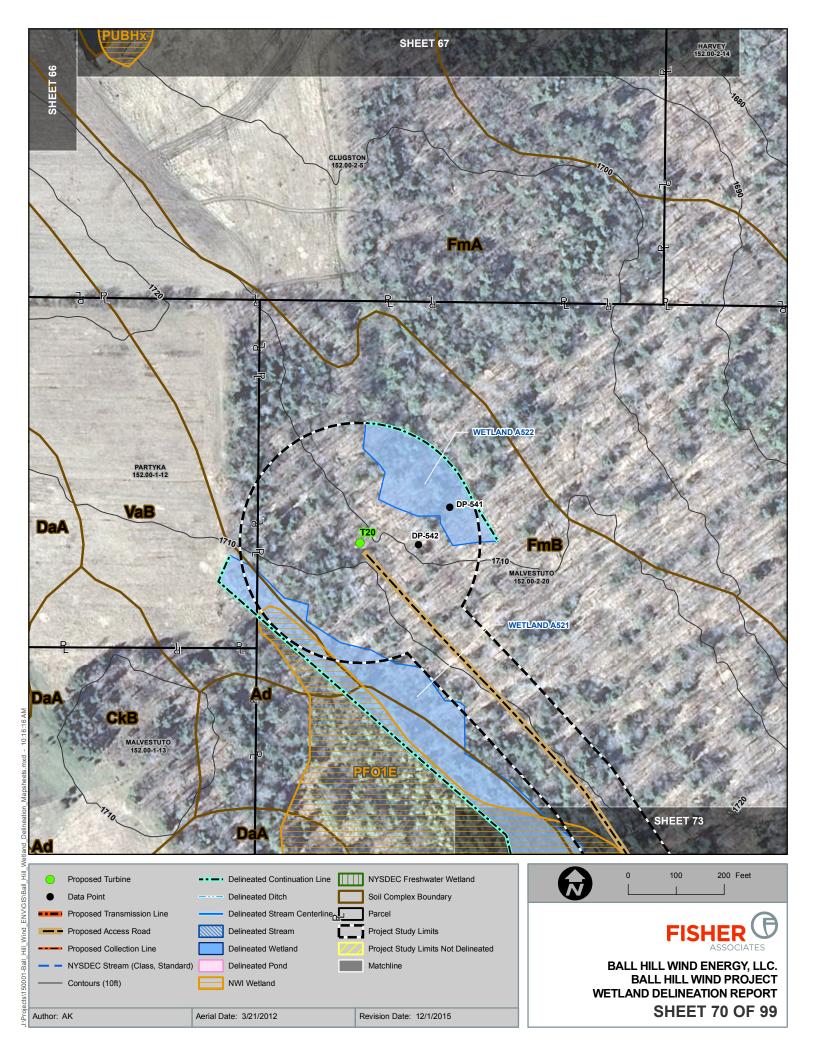


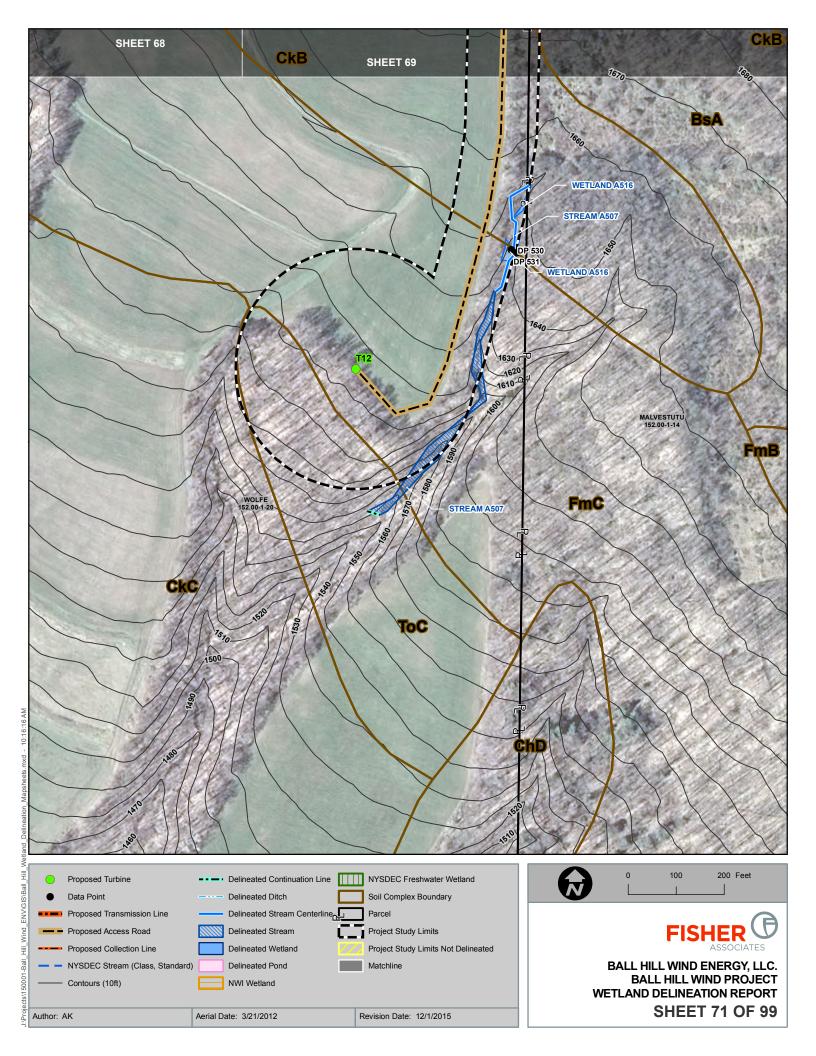


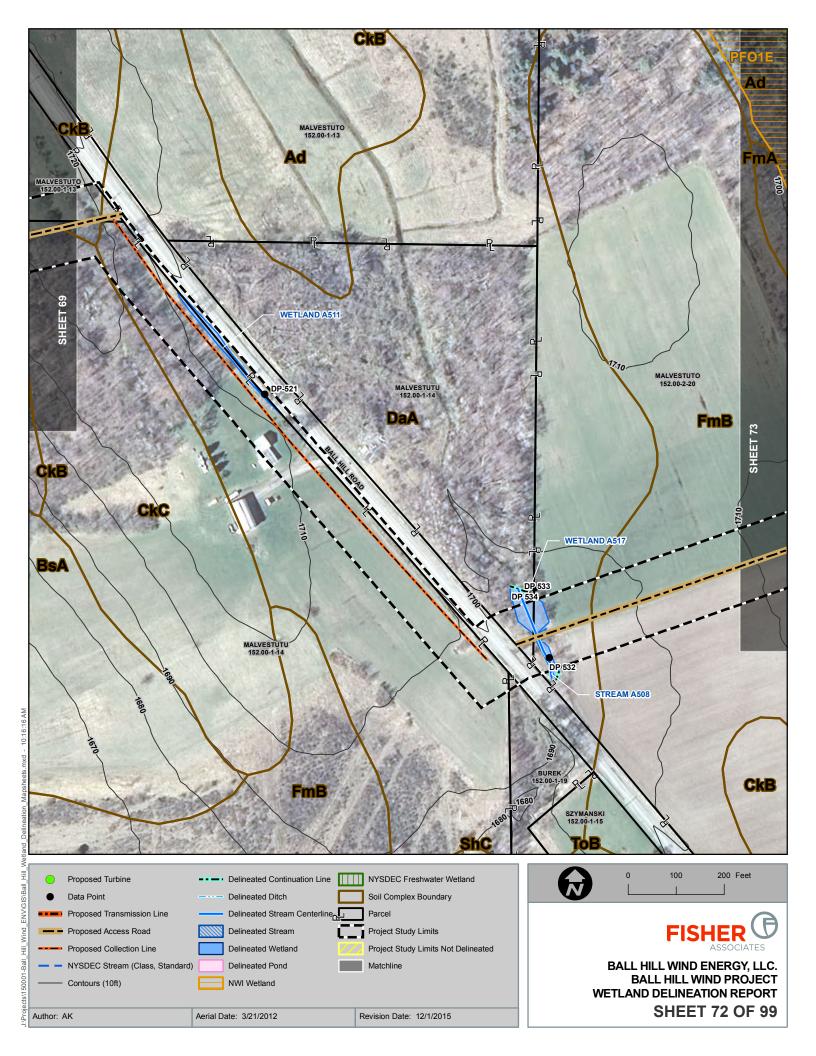


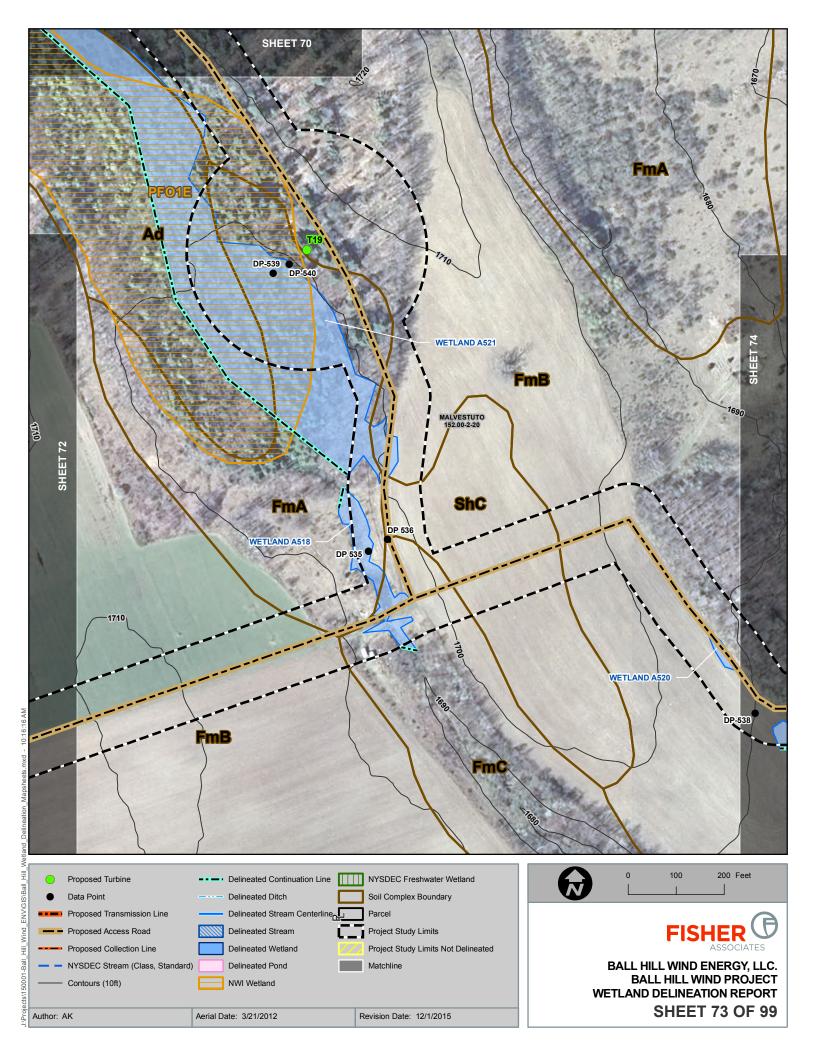


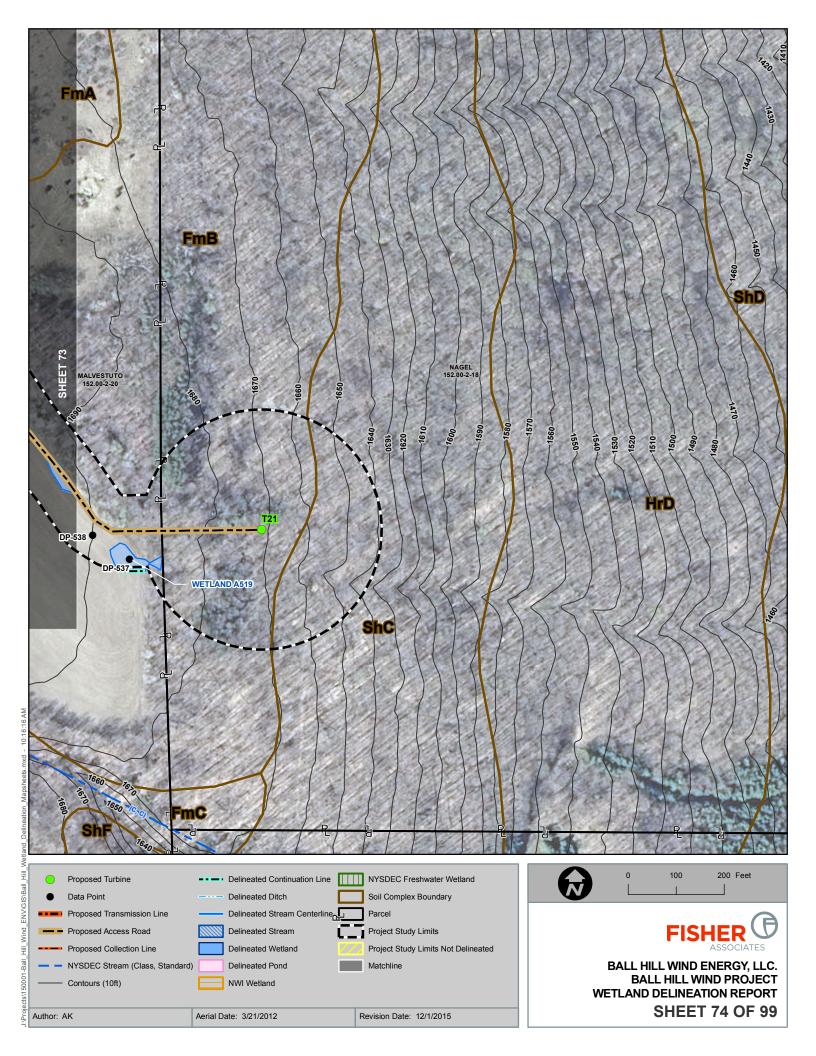


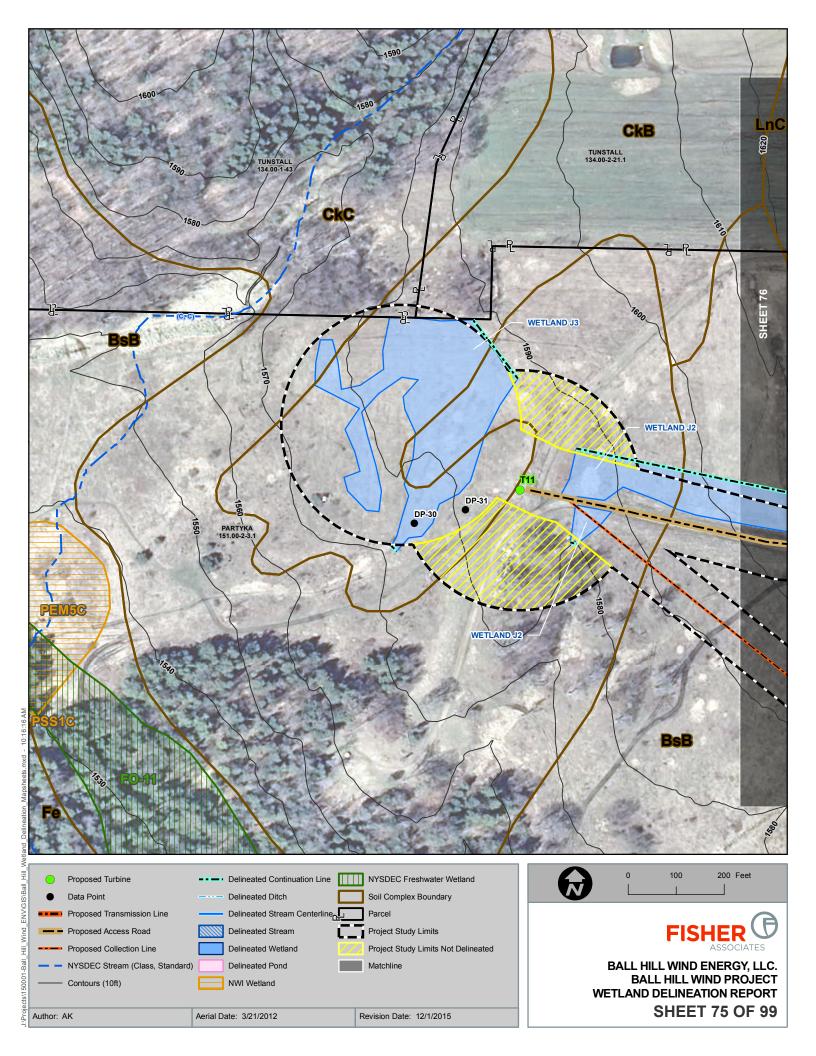


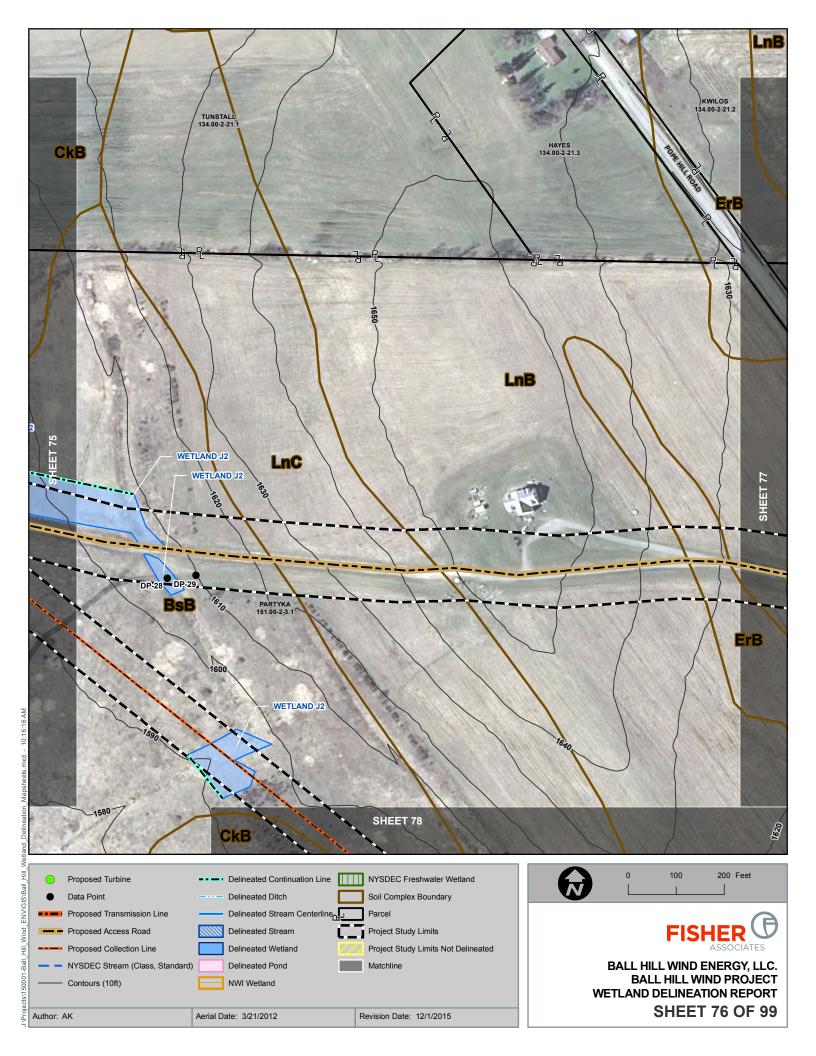


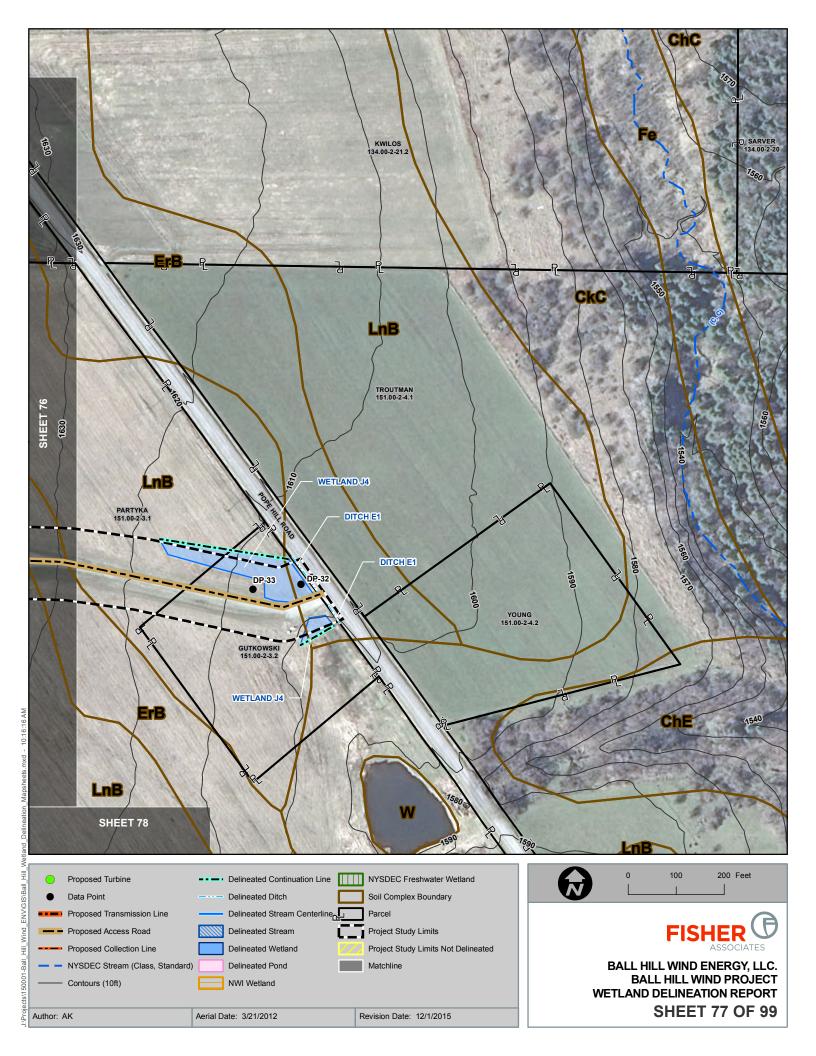


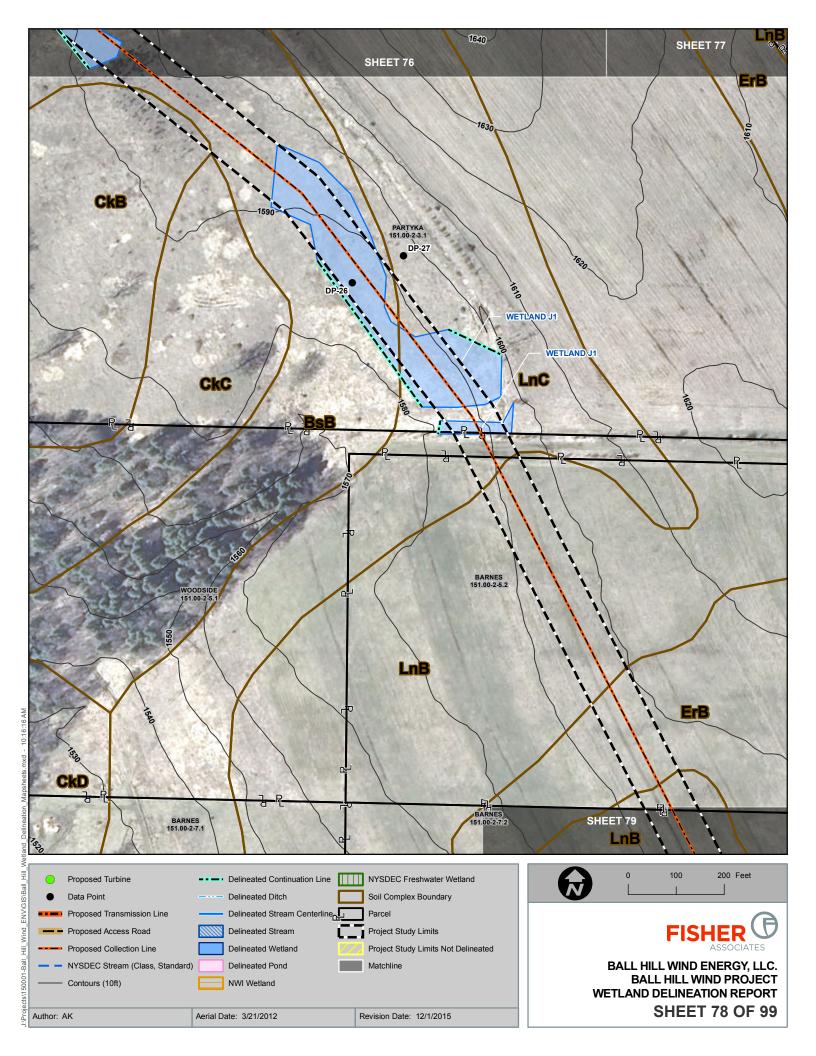


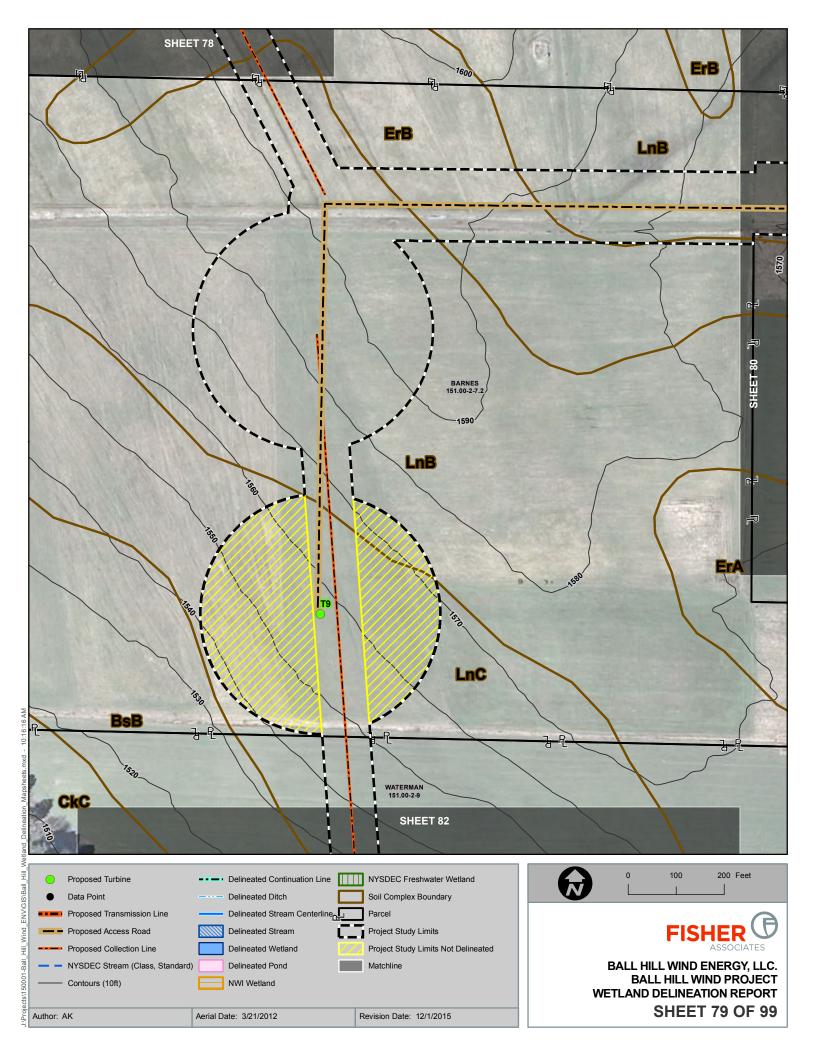


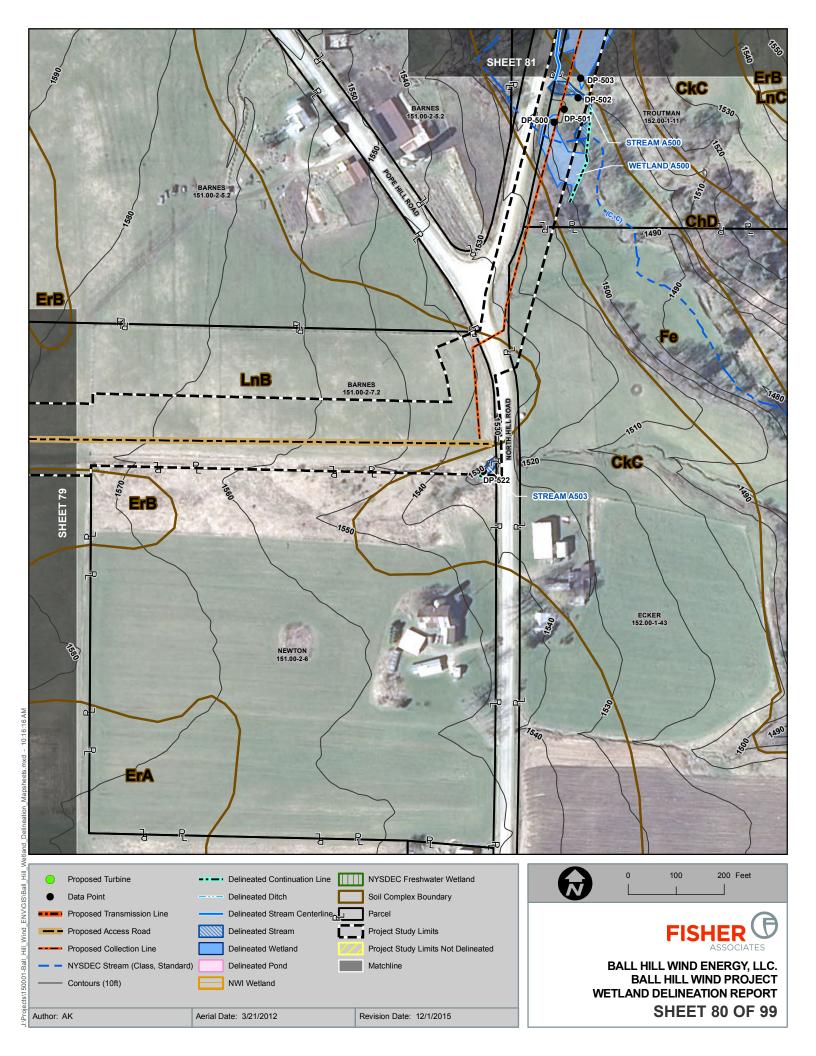


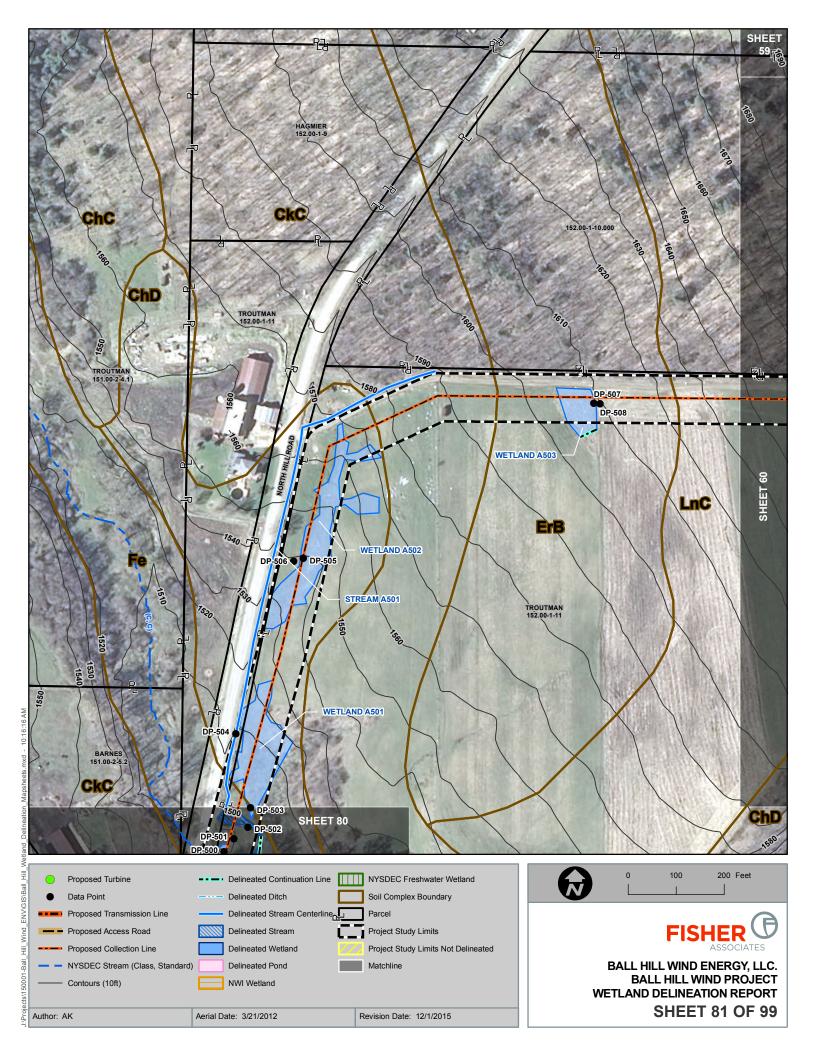


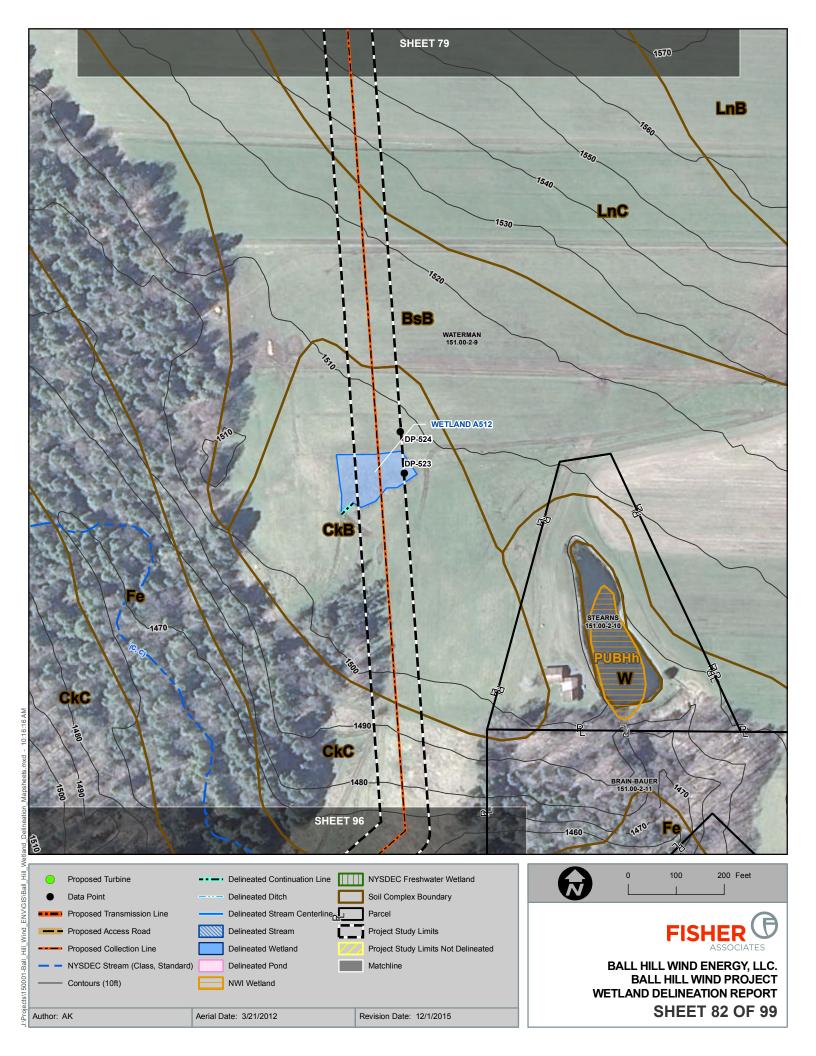


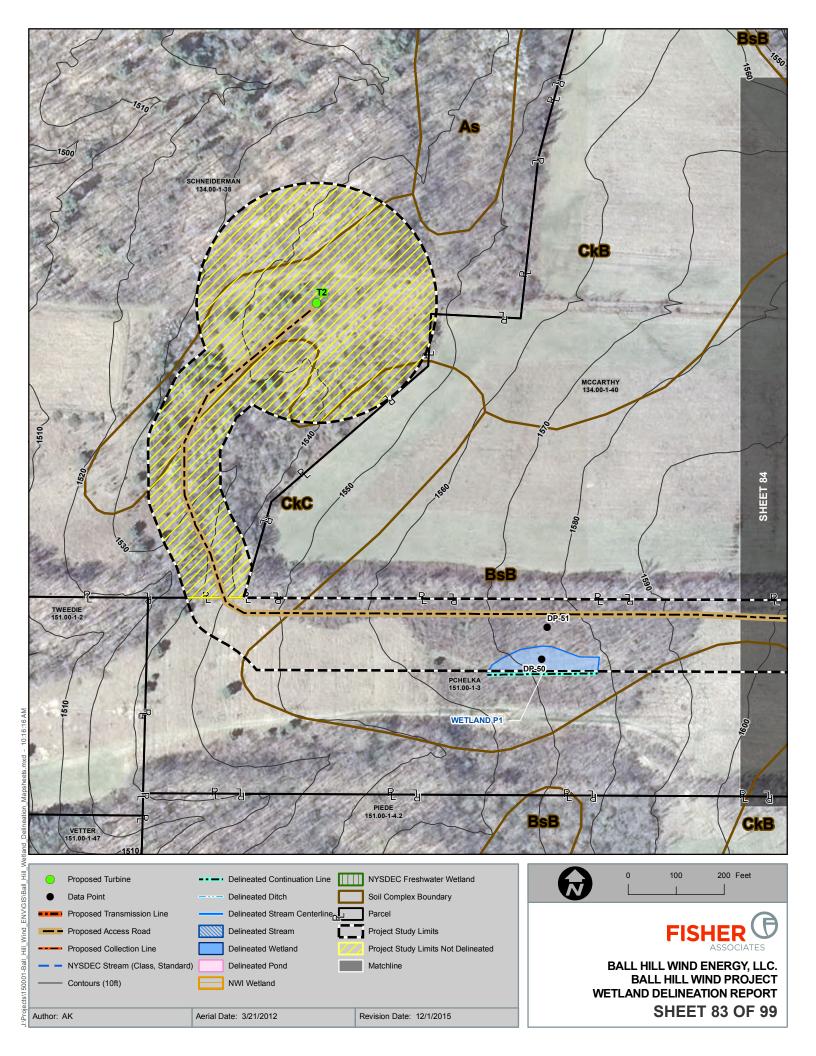


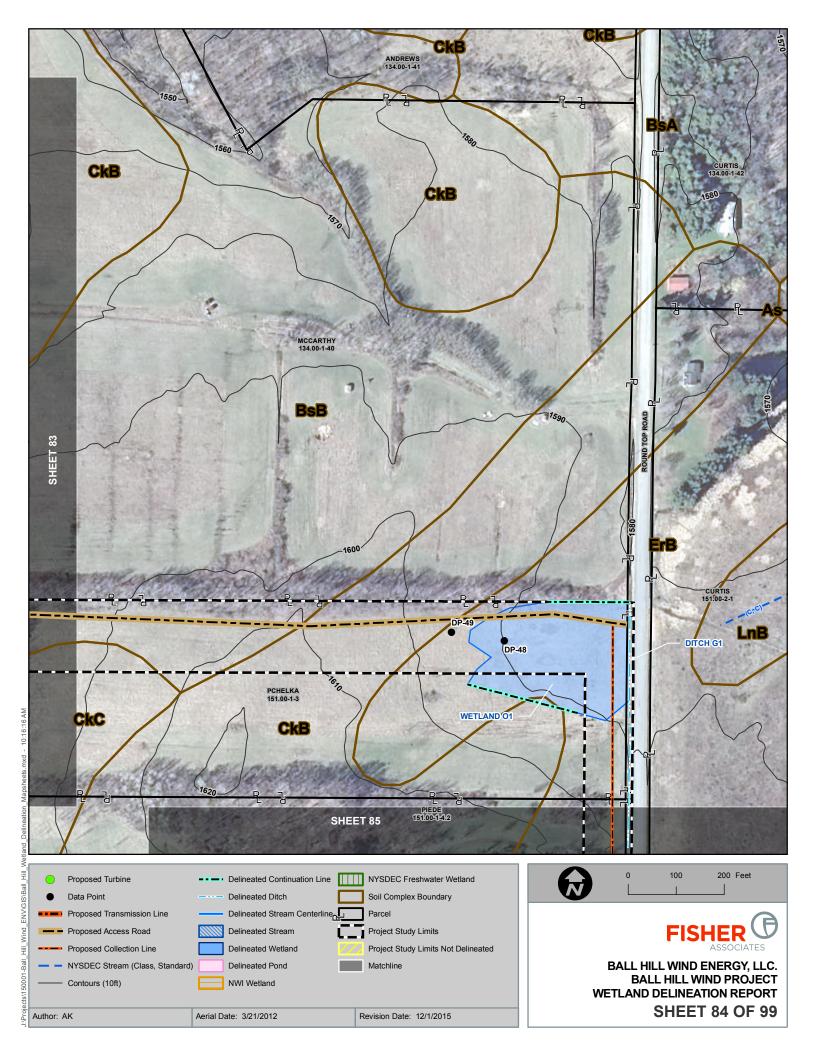


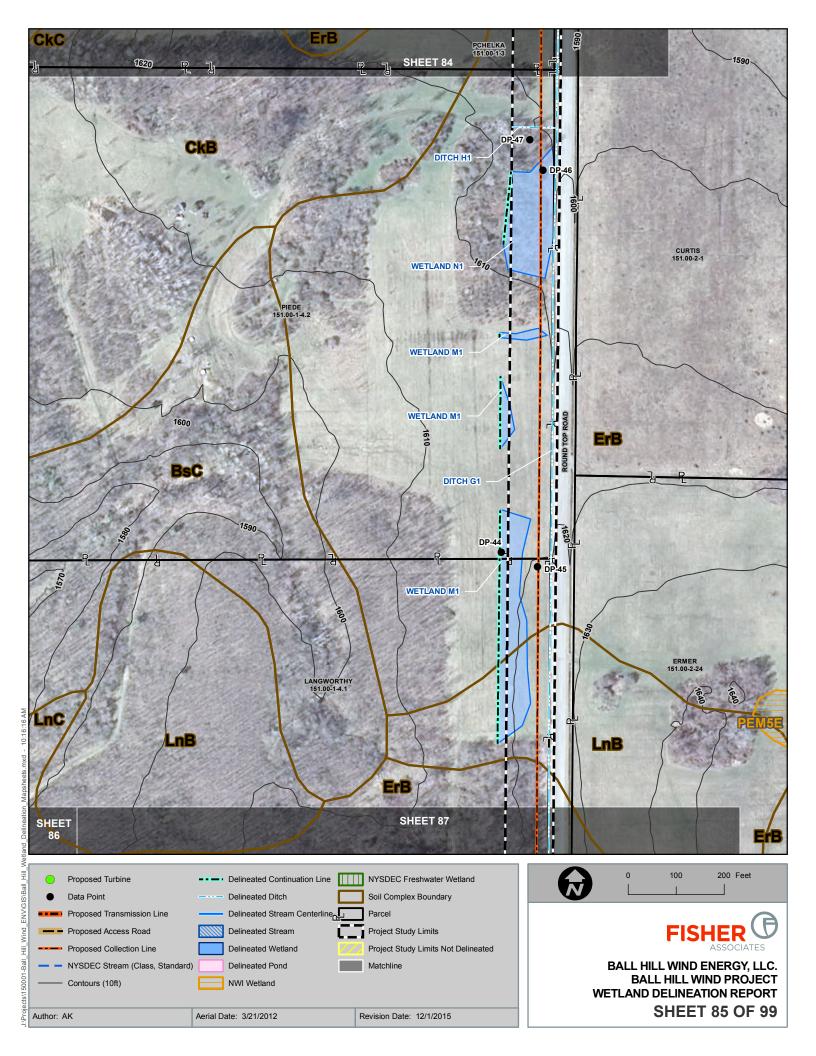


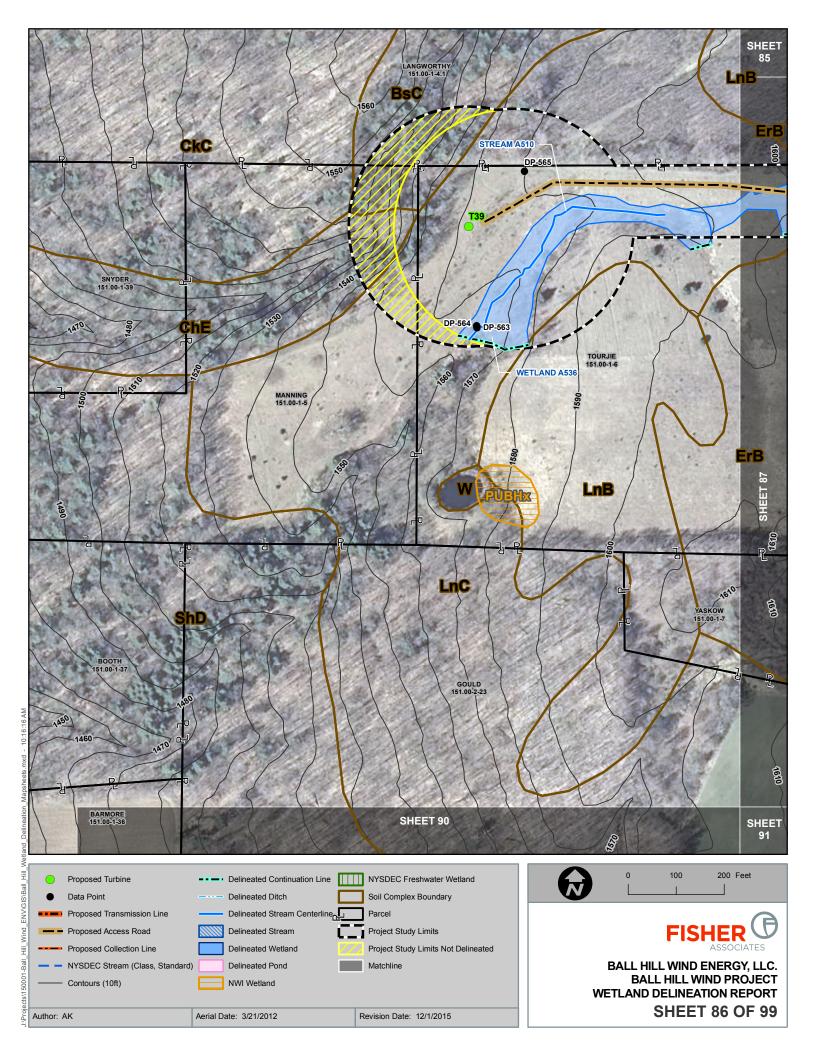


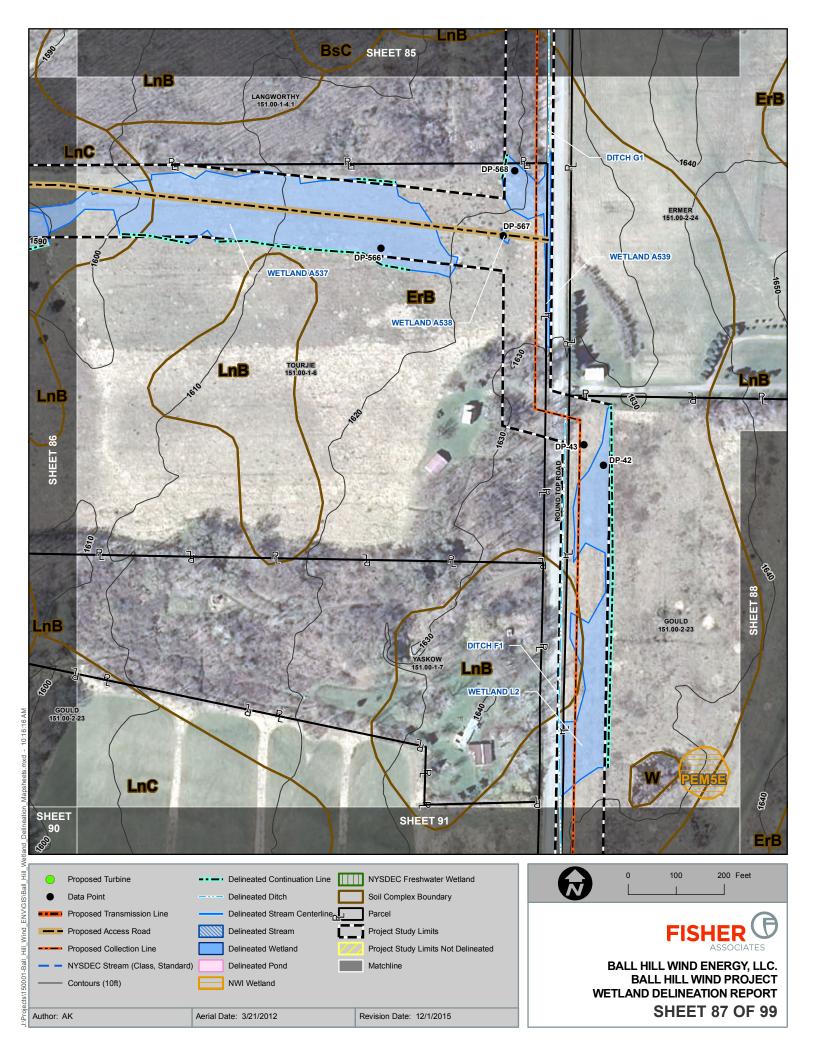


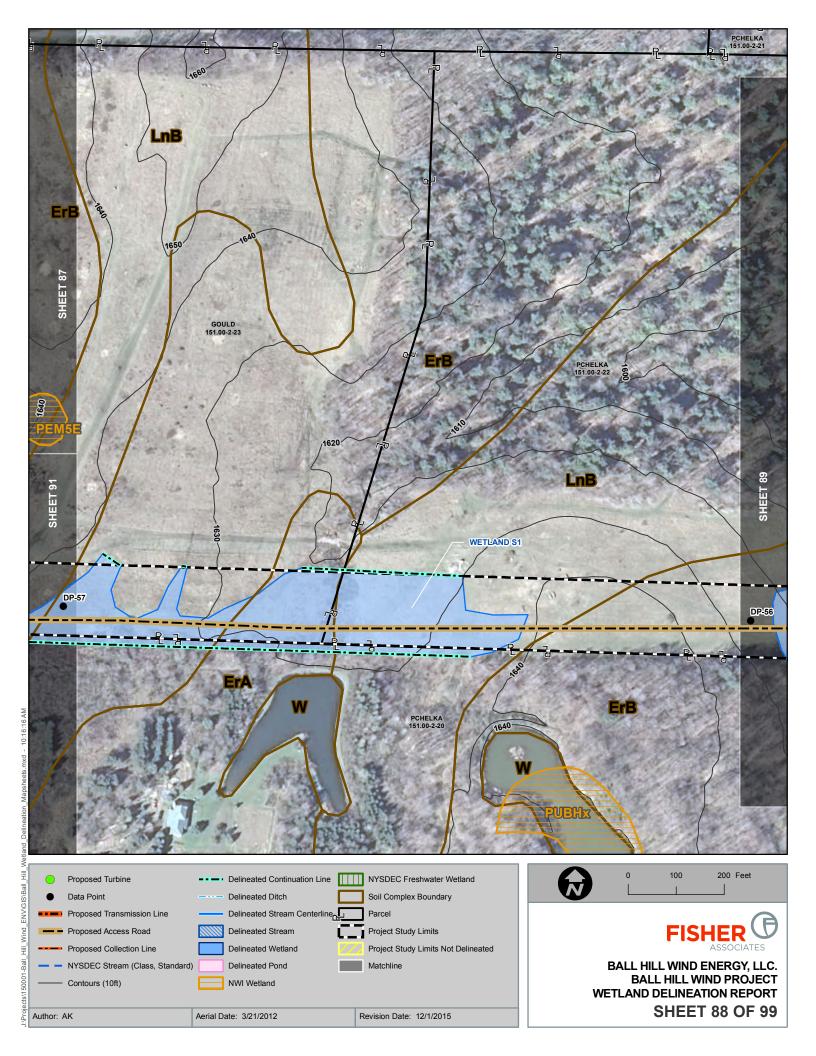


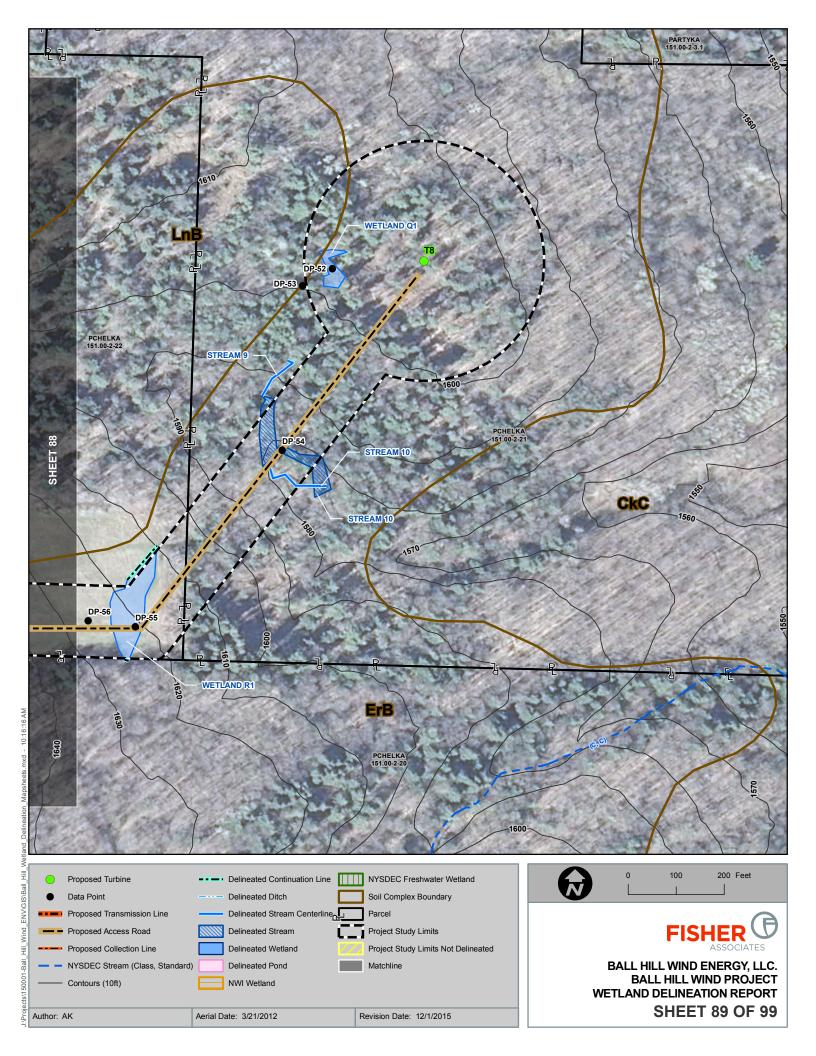


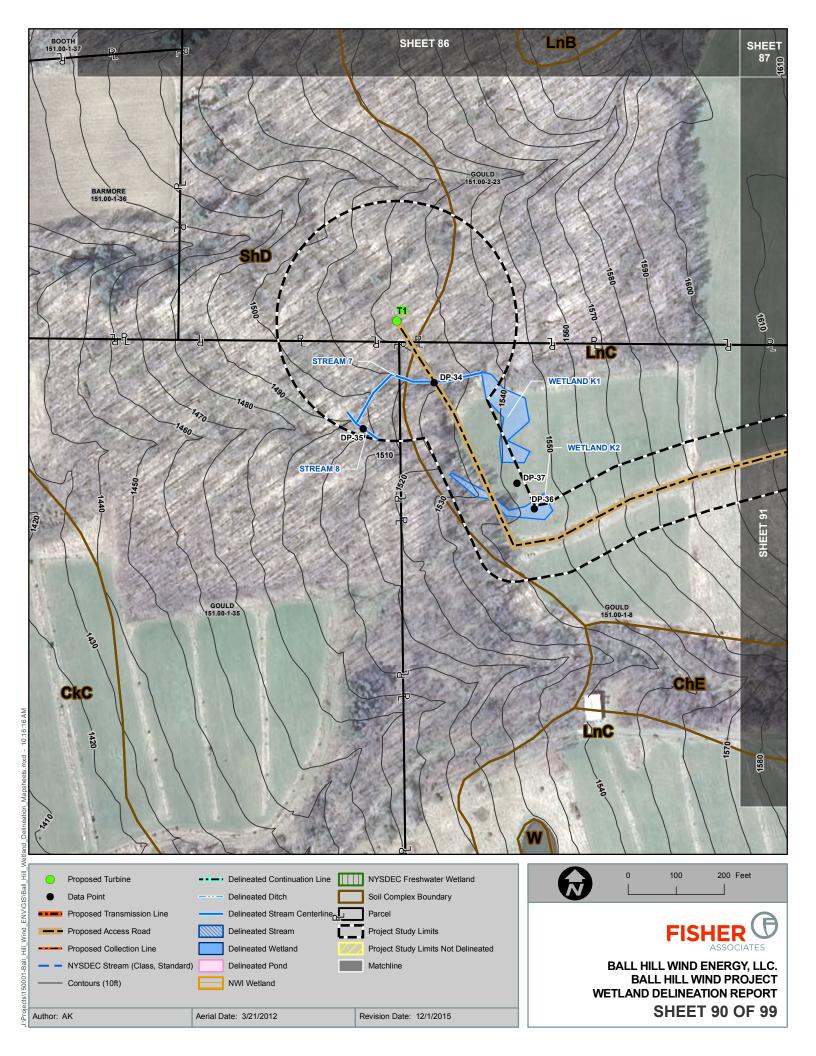


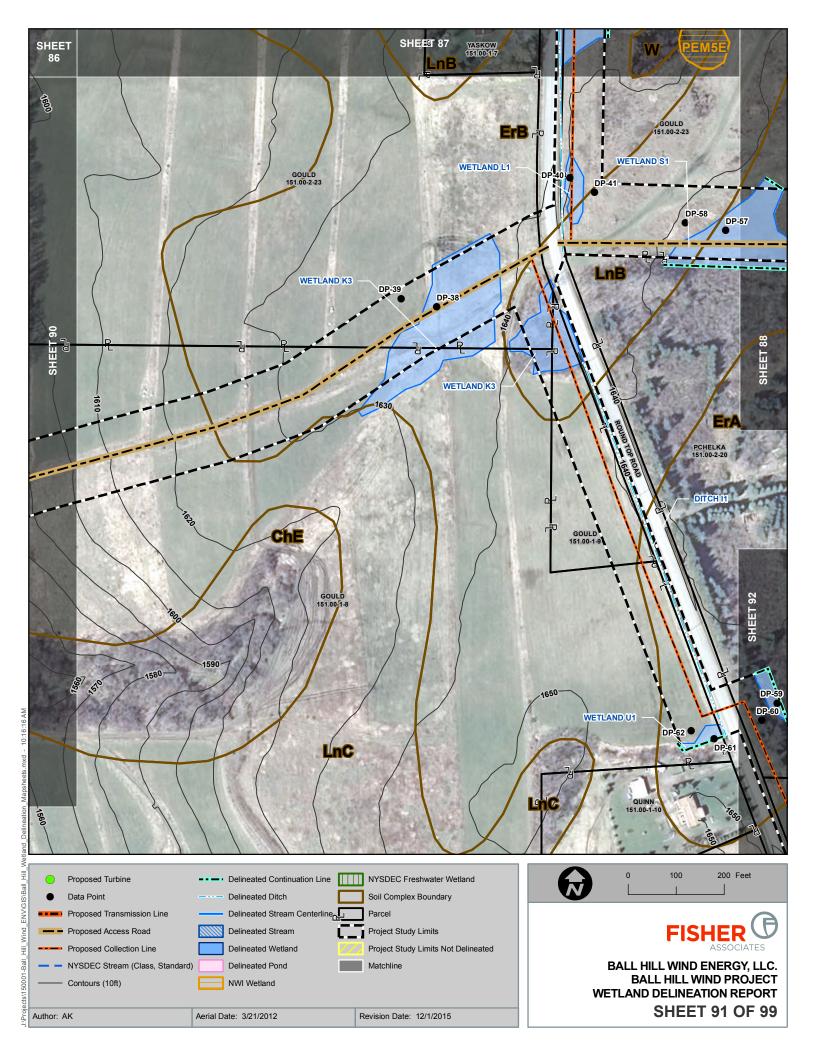


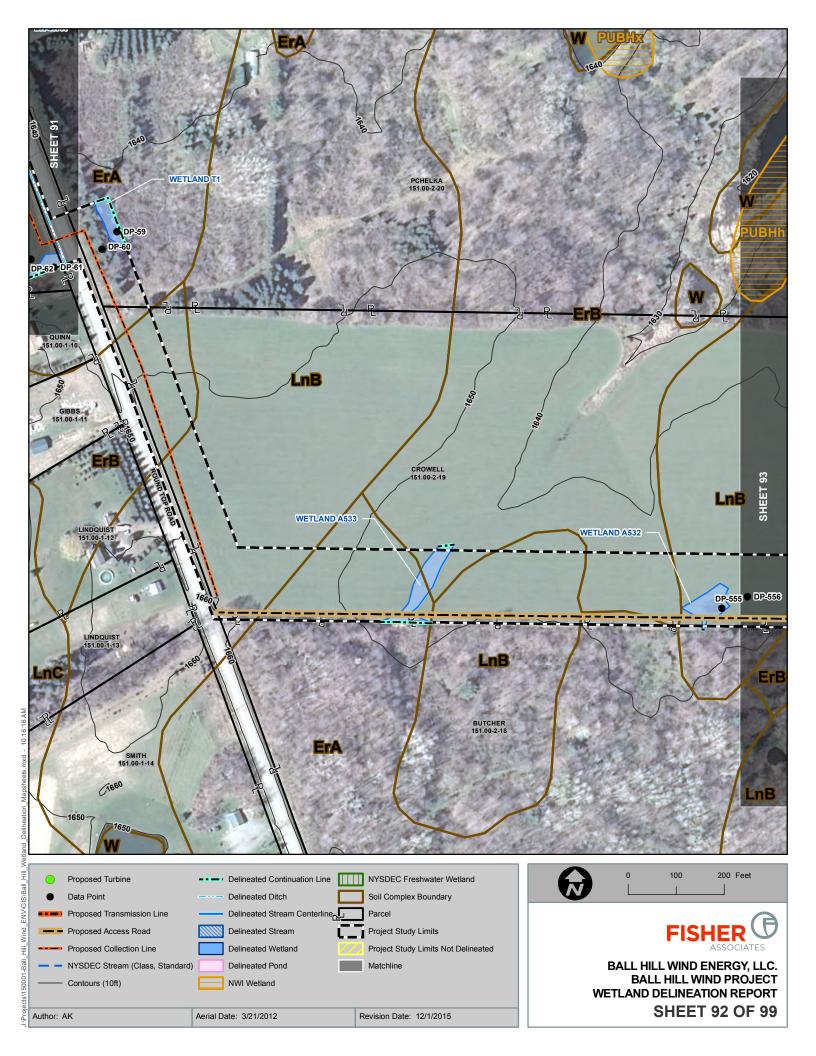


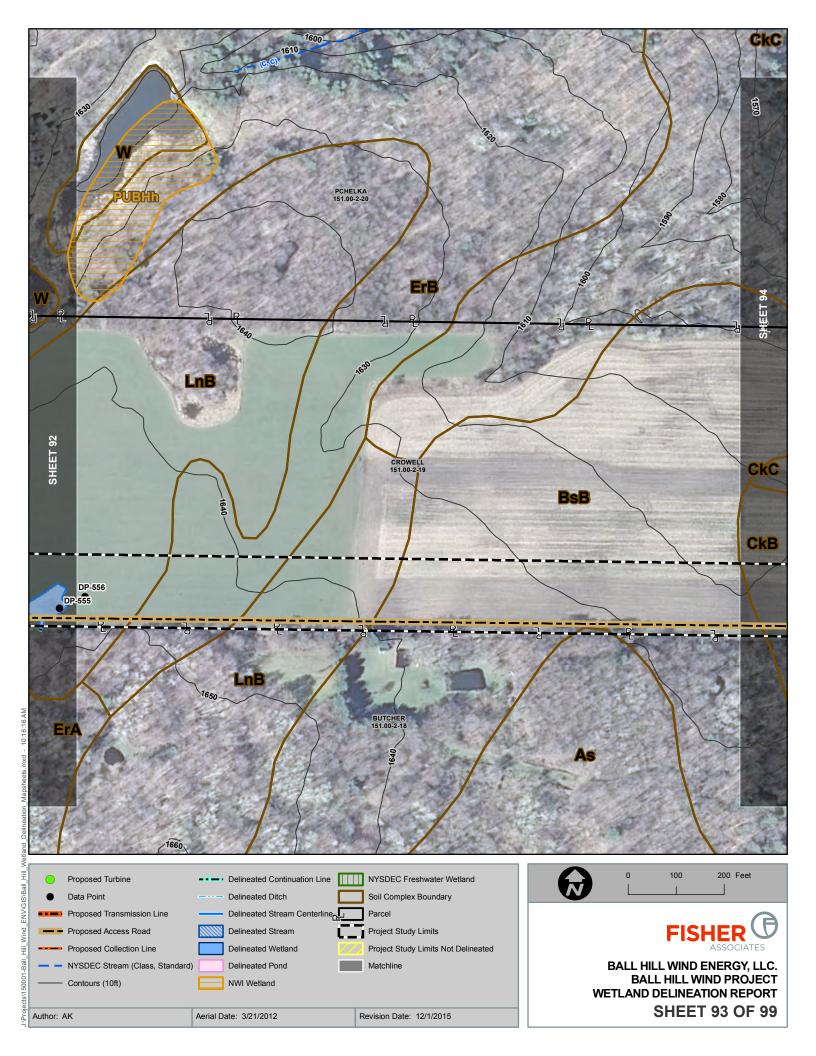


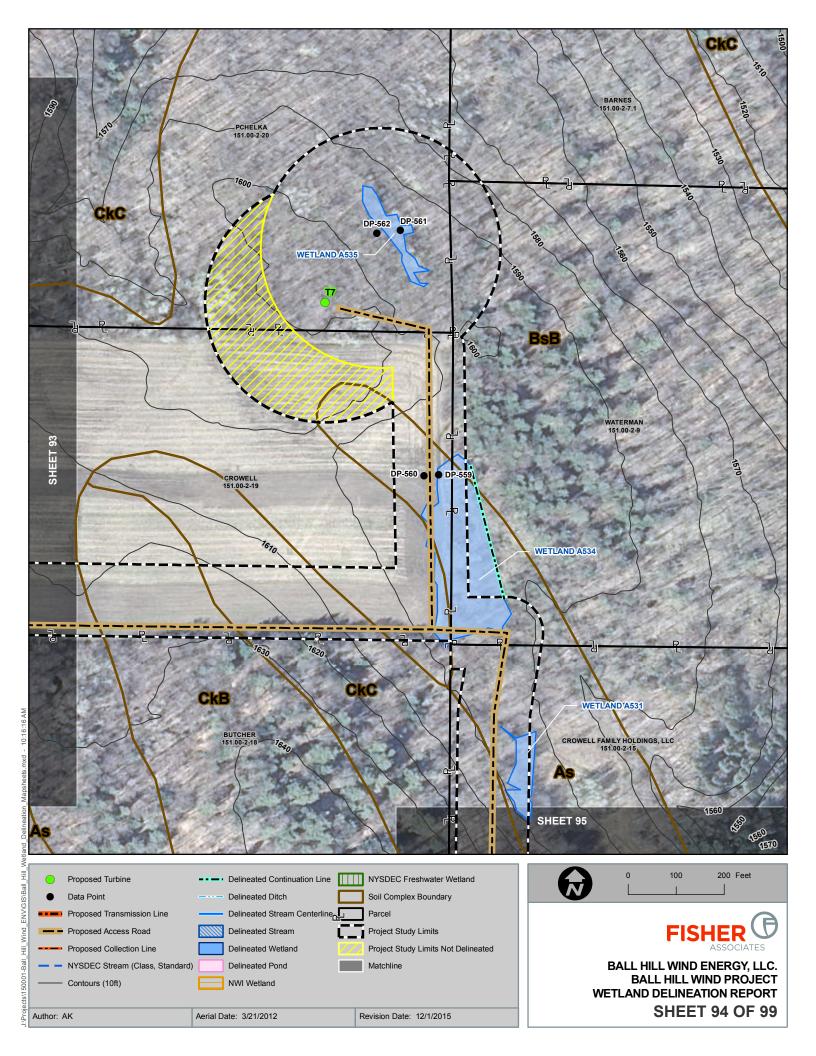


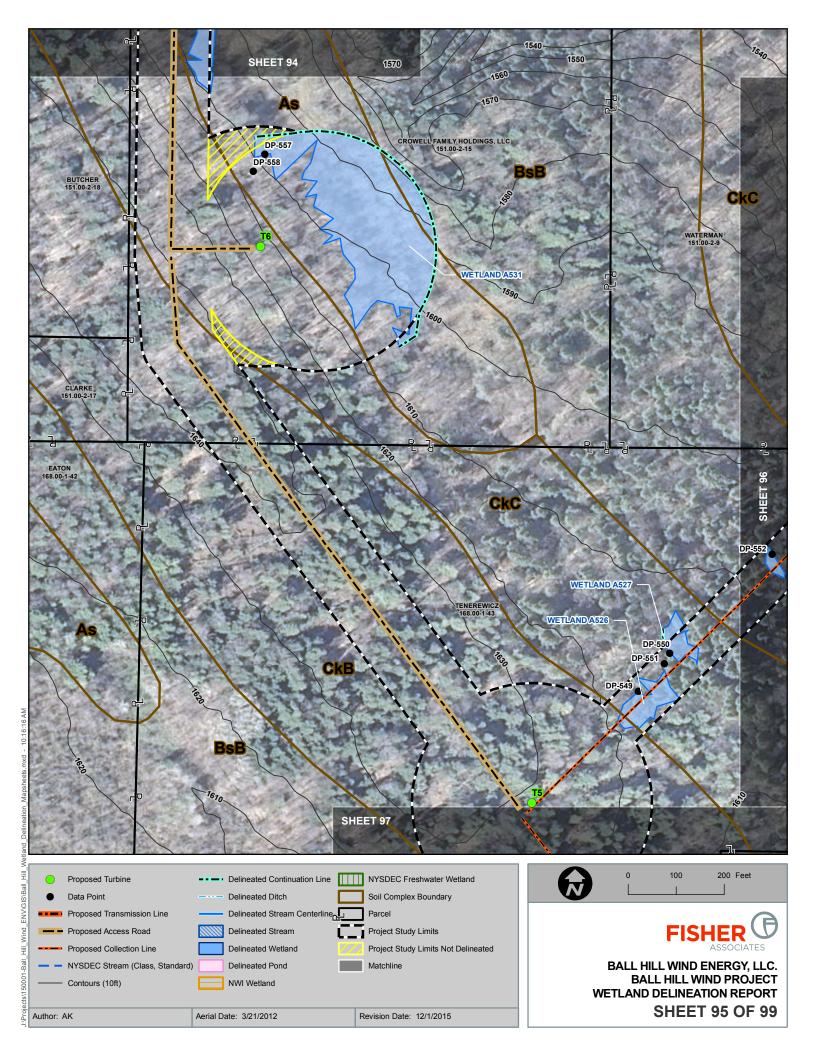


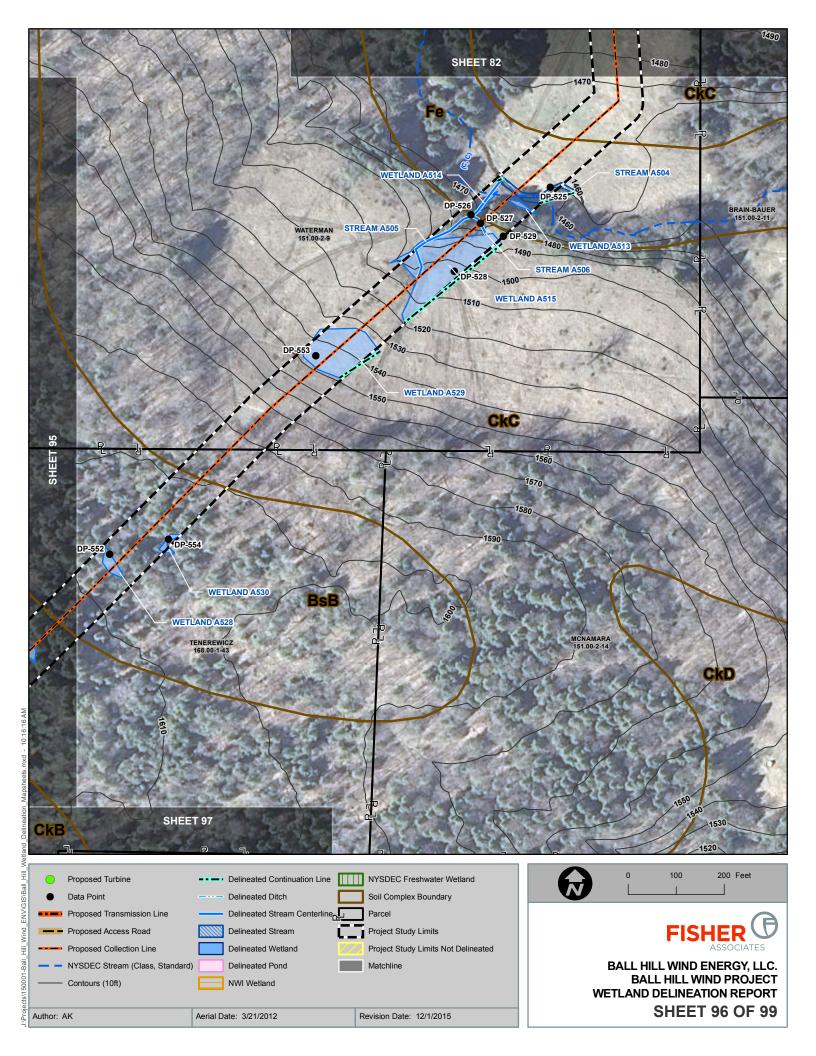


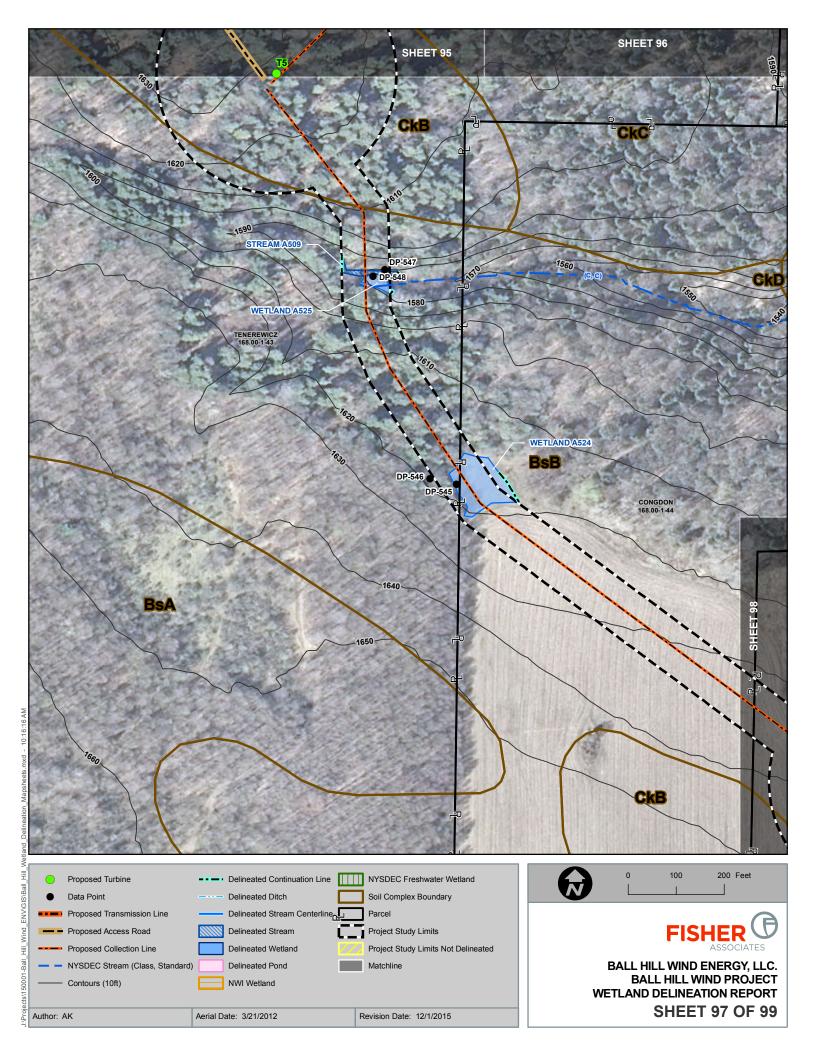


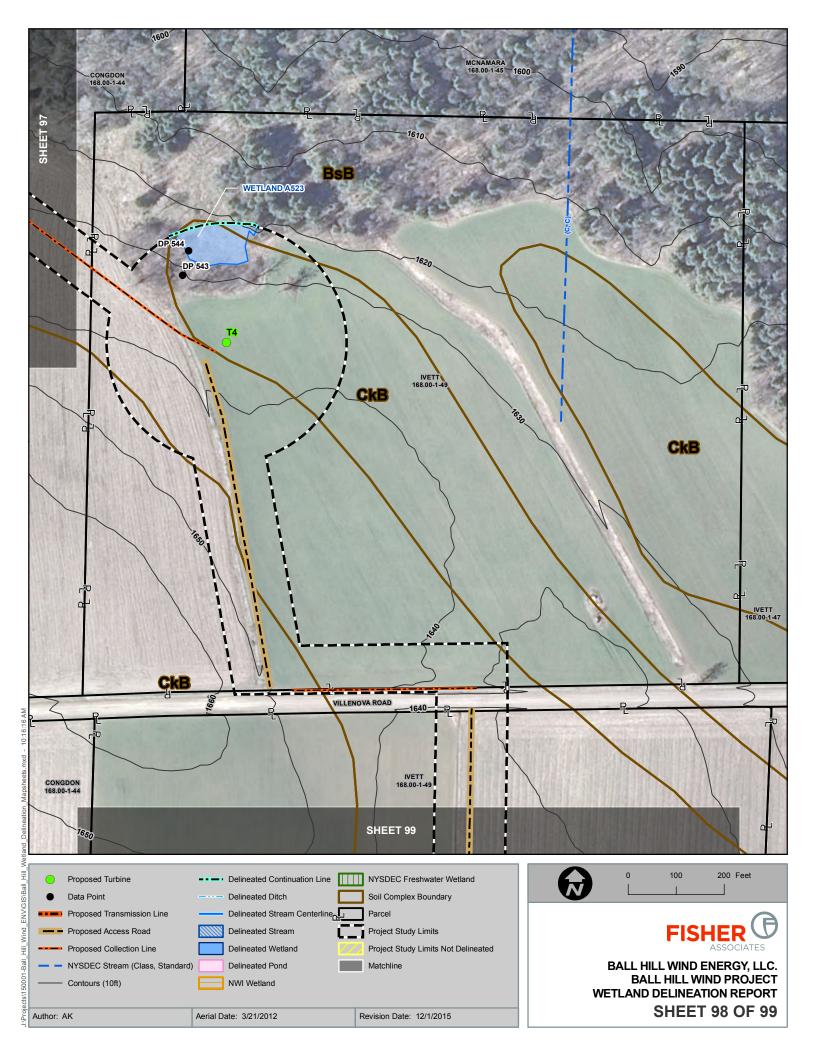


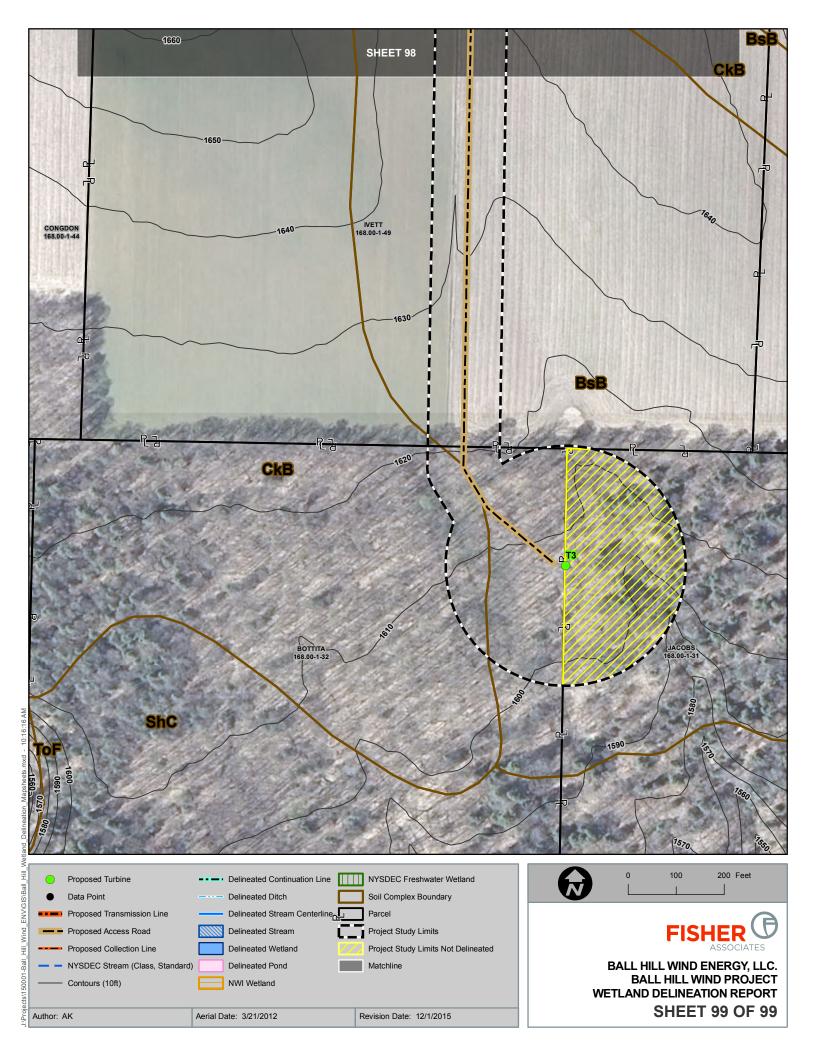














Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

Project No.

150001

#### Photo No. 1

Facing West

# Description:

Data Point 1 PEM wetland data point For Wetland A1



#### Photo No. 2

Facing East

### Description:

Data Point 2 Upland data point for Wetland A1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 3

Facing East/Right to Left

# Description:

Data Point 5 Stream data point for Stream 1



#### Photo No. 4

Facing South/Upstream

### Description:

Data Point 5 Stream data point for Stream 1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

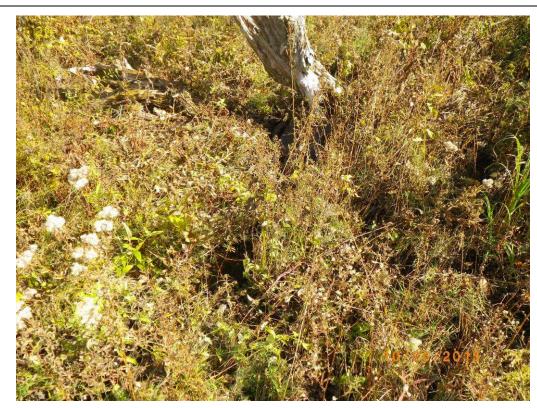
150001

#### Photo No. 5

Facing North/Downstream

### Description:

Data Point 5 Stream data point for Stream 1



#### Photo No. 6

Facing West

# Description:

Data Point 3 PEM wetland data point for Wetland A2





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 7

Facing East

# Description:

Data Point 4 Upland data point for Wetland A2



#### Photo No. 8

Facing East/Right to Left

### Description:

Data Point 6 Stream data point for Stream 1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 9

Facing South/Downstream

## Description:

Data Point 6 Stream data point for Stream 1



#### Photo No. 10

Facing North/Upstream

# Description:

Data Point 6 Stream data point for Stream 1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 11

Facing East/Right to

## Description:

Data Point 7 Stream data point for Stream 2



#### Photo No. 12

Facing North/Upstream

# Description:

Data Point 7 Stream data point for Stream 2





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 13

Facing South/Downstream

## Description:

Data Point 7 Stream data point for Stream 2



#### Photo No. 14

Facing East

# Description:

Data Point 8 PEM wetland data point for Wetland B1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

150001

Project No.

### Photo No. 15

Facing South

## Description:

Data Point 9 Upland data point for Wetland B1



#### Photo No. 16

Facing East/Right to Left

# Description:

Data Point 10 Stream data point for Stream 3





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 17

Facing North/Upstream

## Description:

Data Point 10 Stream data point for Stream 3



#### Photo No. 18

Facing South/Downstream

# Description:

Data Point 10 Stream data point for Stream 3





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 19

Facing North/Right to

## Description:

Data Point 11 Stream data point for Stream 4



#### Photo No. 20

Facing East/Upstream

# Description:

Data Point 11 Stream data point for Stream 4





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 21

Facing West/Downstream

## Description:

Data Point 11 Stream data point for Stream 4



#### Photo No. 22

Facing North/Right to Left

# Description:

Data Point 12 Stream data point for Stream 5





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 23

Facing East/Upstream

## Description:

Data Point 12 Stream data point for Stream 5



#### Photo No. 24

Facing West/Downstream

# Description:

Data Point 12 Stream data point for Stream 5





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 25

Facing West

## Description:

Ditch B1 Ditch between two agricultural fields



#### Photo No. 26

Facing East

# Description:

Ditch B1 Ditch between two agricultural fields





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 27

Facing East

## Description:

Data Point 13 PEM wetland data point for Wetland C1



#### Photo No. 28

Facing West

# Description:

Data Point 14 Upland data point for Wetland C1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 29

Facing North

## Description:

Ditch C1 Ditch between two agricultural fields



#### Photo No. 30

Facing East

# Description:

Data Point 16 Upland data point for Wetland D1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 31

Facing West

## Description:

Data Point 15 PEM wetland data point for Wetland D1



#### Photo No. 32

acing North

# Description:

DT-D1 Ditch between two agricultural fields





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

150001

Project No.

#### Photo No. 33

Facing East

## Description:

Data Point 17 PEM wetland data point for Wetland E1



#### Photo No. 34

Facing West

# Description:

Data Point 18 Upland data point for Wetland E1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 35

Facing West

## Description:

Data Point 20 Upland data point for Wetland F1



#### Photo No. 36

Facing East

# Description:

Data Point 19 PEM wetland data point for Wetland F1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 37

Facing West

## Description:

Data Point 21 PEM wetland data point for Wetland G1



#### Photo No. 38

Facing East

# Description:

Data Point 22 PEM wetland data point for Wetland H1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 39

Facing West

### Description:

Data Point 23 Upland data point for Wetland G1, Wetland H1, Wetland I1, and Wetland I2



#### Photo No. 40

Facing North

## Description:

Data Point 24 PEM wetland data point for Wetland I1 and Wetland I2





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 41

Facing East

## Description:

Data Point 25 Stream data point for Stream 6



#### Photo No. 42

Facing West

# Description:

Data Point 27 Upland data point for Wetland J1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 43

Facing East

## Description:

Data Point 26 PEM wetland data point for Wetland J1



#### Photo No. 44

Facing North

## Description:

Data Point 28 PEM wetland data point for Wetland J2





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 45

Facing South

## Description:

Data Point 29 Upland data point for Wetland J2



#### Photo No. 46

Facing East

# Description:

Data Point 30 PEM wetland data point for Wetland J3





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 47

Facing West

## Description:

Data Point 31 Upland data point for Wetland J3



#### Photo No. 48

Facing East

# Description:

Data Point 33 Upland data point for Wetland J4





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 49

Facing West

## Description:

Data Point 32 PEM wetland data point for Wetland J4



#### Photo No. 51

Facing West/Downstream

# Description:

Data Point 34 Stream data point for Stream 7





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 52

Facing South

## Description:

Data Point 37 Upland data point for Wetland K1



#### Photo No. 53

Facing North

### Description:

Data Point 36 PEM wetland data point for Wetland K1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 54

Facing West

### Description:

Data Point 38 PEM wetland data point for Wetland K3



#### Photo No. 55

Facing East

#### **Description:**

Data Point 39 Upland data point for Wetland K3





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 56

Facing South

## Description:

Data Point 40 PEM wetland data point for Wetland L1



#### Photo No. 57

Facing West

### Description:

Data Point 41 Upland data point for Wetland L1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 58

Facing North

### Description:

Data Point 42 PEM wetland data point for Wetland L2



#### Photo No. 59

Facing South

### Description:

Data Point 43 Upland data point for Wetland L2





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 60

Facing East

# Description:

Data Point 44 PEM wetland data point for Wetland M1



#### Photo No. 61

Facing West

# Description:

Data Point 45 Upland data point for Wetland M1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

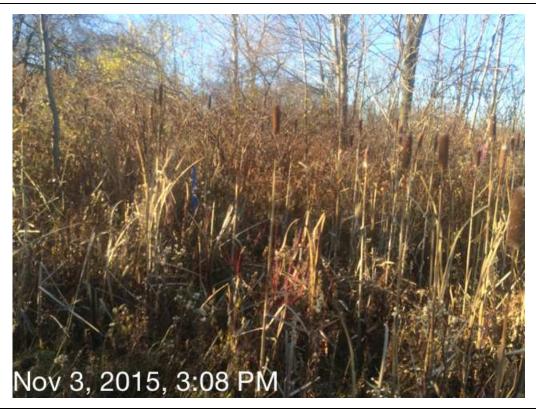
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#### Photo No. 62

Facing North

### Description:

Data Point 46 PEM wetland data point for Wetland N1



#### Photo No. 63

Facing South

#### Description:

Data Point 47 Upland data point for Wetland N1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 64

Facing East

### Description:

Data Point 49 Upland data point for Wetland O1



#### Photo No. 65

Facing West

### Description:

Data Point 48 PEM wetland data point for Wetland O1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 66

Facing South

### Description:

Data Point 51 Upland data point for Wetland P1



#### Photo No. 67

Facing North

#### Description:

Data Point 50 PSS wetland data point for Wetland P1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 68

Facing West

# Description:

Data Point 52 PSS/PEM wetland data point for Wetland Q1



### Photo No. 69

Facing East

## Description:

Data Point 53 Upland data point for Wetland Q1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 70

Facing North/Right to Left

# Description:

Data Point 54 Stream data point for Stream 10



#### Photo No. 71

Facing West/Upstream

## Description:

Data Point 54 Stream data point for Stream 10





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 72

Facing East/Downstream

# Description:

Data Point 54 Stream data point for Stream 10



#### Photo No. 73

Facing West

## Description:

Data Point 55 PEM wetland data point for Wetland R1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 74

Facing East

# Description:

Data Point 56 Upland data point for Wetland R1



#### Photo No. 75

acing West

## Description:

Data Point 57 PEM wetland data point for S1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 76

Facing East

# Description:

Data Point 58 Upland data point for Wetland S1



#### Photo No. 77

Facing West

## Description:

Data Point 59 PEM wetland data point for Wetland T1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 78

Facing North

# Description:

Data Point 60 Upland data point for Wetland T1



#### Photo No. 79

Facing East

# Description:

Data point 62 Upland data point for Wetland U1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 80

Facing West

## Description:

Data Point 61 PEM wetland data point for Wetland U1



#### Photo No. 81

Facing West/Right to Left

### Description:

Data Point 63 Stream data point for Stream 11





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 82

Facing South/Upstream

# Description:

Data Point 63 Stream data point for Stream 11



### Photo No. 83

Facing North/Downstream

## Description:

Data Point 63 Stream data point for Stream 11





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 84

Facing East

# Description:

Data Point 64 Wetland data point for Wetland V1



### Photo No. 85

Facing West

## Description:

Data Point 65 Upland data point for Wetland V1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 86

Facing South

# Description:

Data Point 67 Upland data point for Wetland W1



### Photo No. 87

Facing North

## Description:

Data Point 66 Wetland data point for Wetland W1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 88

Facing East/Right to Left

# Description:

Data Point 69 Stream data point for Stream 13



### Photo No. 89

Facing South/Upstream

# Description:

Data Point 69 Stream data point for Stream 13





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 90

Facing North/Downstream

# Description:

Data Point 69 Stream data point for Stream 13



#### Photo No. 91

Facing North/Right to Left

## Description:

Data Point 68 Stream data point for Stream 12





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 92

Facing West/Upstream

# Description:

Data Point 68 Stream data point for Stream 12



### Photo No. 93

Facing East/Downstream

## Description:

Data Point 68 Stream data point for Stream 12





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 94

Facing West

# Description:

Data Point 70 Wetland data point for Wetland V2



### Photo No. 95

Facing East

## Description:

Data Point 71 Upland data point for Wetland V2





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 96

Facing South/Right to Left

# Description:

Data Point 72 Stream data point for Stream 14



### Photo No. 97

Facing South/Upstream

## Description:

Data Point 72 Stream data point for Stream 14





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

Project No.

150001

#### Photo No. 98

Facing North/Downstream

## Description:

Data Point 72 Stream data point for Stream 14



#### Photo No. 99

Facing North/Right to Left

### Description:

Data Point 73 Stream data point for Stream 15





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 100

Facing West

# Description:

Data Point 73 Stream data point for Stream 15



### Photo No. 101

Facing East/Downstream

## Description:

Data Point 73 Stream data point for Stream 15





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 102

Facing North

# Description:

Data Point 74 PSS wetland data point for Wetland V3



### Photo No. 104

Facing East/Downstream

## Description:

Data Point 76 Stream data point for Stream 16





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 105

Facing South

## Description:

Data Point 77 PFO wetland data point for Wetland W1



#### Photo No. 106

Facing North

# Description:

Data Point 78 Upland data point for Wetland W1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 107

Facing Northwest

# Description:

Data Point 81 PEM wetland data point for Wetland X1



### Photo No. 108

Facing Southeast

## Description:

Data Point 82 Upland data point for Wetland X1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 109

Facing North/Right to Left

# Description:

Data Point 83 Stream data point for Stream 17



### Photo No. 110

Facing West/Upstream

## Description:

Data Point 83 Stream data point for Stream 17





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 111

Facing East/Downstream

## Description:

Data Point 83 Stream data point for Stream 17



### Photo No. 112

Facing North

# Description:

Data Point 84 Wetland data point for Wetland Y1





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

150001

Project No.

### Photo No. 113

Facing South

## Description:

Data Point 85 Upland data point for Wetland Y1



### Photo No. 114

Facing North

# Description:

Data Point 86 PFO wetland data point for Wetland Y2





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 115

Facing South

## Description:

Data Point 87 Upland data point for Wetland Y2



### Photo No. 116

Facing South

# Description:

Data Point 88 PEM wetland data point for Wetland Z1





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 117

Facing North

## Description:

Data Point 89 Upland data point for Wetland Z1



#### Photo No. 118

Facing North/Right to Left

## Description:

Data Point 90 Stream data point for Stream 18





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

150001

Project No.

### Photo No. 119

Facing West/Upstream

## Description:

Data Point 90 Stream data point for Stream 18



### Photo No. 120

Facing East/Downstream

# Description:

Data Point 90 Stream data point for Stream 18





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 121

Facing North

## Description:

Data Point 91 PEM wetland data point for Wetland A5



#### Photo No. 122

Facing South

# Description:

Data Point 92 Upland data point for Wetland A5





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 123

Facing North

## Description:

Data Point 93 PEM wetland data point for Wetland A6



#### Photo No. 124

Facing South

## Description:

Data Point 94 Upland data point for Wetland A6





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 125

Facing North/Right to

## Description:

Data Point 95 Stream data point for Stream 19



#### Photo No. 126

Facing West/Upstream

## Description:

Data Point 95 Stream data point for Stream 19





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

150001

Project No.

### Photo No. 127

Facing East/Downstream

### Description:

Data Point 95 Stream data point for Stream 19



#### Photo No. 128

Facing Southeast

## Description:

Data Point 97 PEM wetland data point for Wetland A7





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 129

Facing Northwest

## Description:

Data Point 98 Upland data point for Wetland A7



#### Photo No. 130

Facing Southeast

# Description:

Data Point 99 PEM wetland data point for Wetland A8





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 131

Facing South

## Description:

Data Point 100 Upland data point for Wetland A8



#### Photo No. 132

Facing Southwest

# Description:

Data Point 101 PEM wetland data point for Wetland A9





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 133

Facing Northeast

## Description:

Data Point 102 Upland data point for Wetland A9



#### Photo No. 134

Facing East

## Description:

Data Point 103 PEM wetland data point for Wetland A10





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 135

Facing West

## Description:

Data Point 104 Upland data point for Wetland A10





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 500

Facing South

# Description:

Data Point 500 PEM wetland data point for Wetland A500



### Photo No. 501

Facing North

## Description:

Data Point 501 Upland data point for Wetland A500





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

150001

Project No.

#### Photo No. 502

Facing East/Upstream

## Description:

Data Point 502 Stream data point for Stream A500

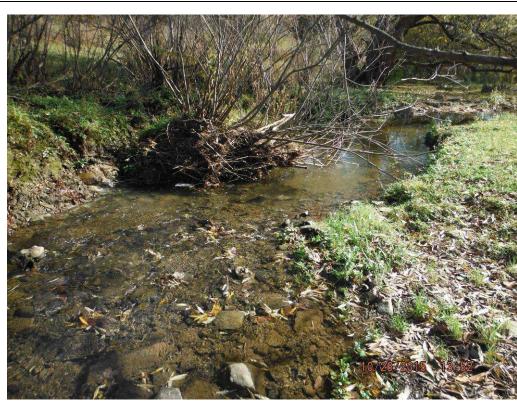


### Photo No. 503

Facing West/Downstream

## Description:

Data Point 502 Stream data point for Stream A500





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 504

Facing North/Right to Left

### **Description:**

Data Point 502 Stream data point for Stream A500



#### Photo No. 505

Facing North

## Description:

Data Point 503 PSS/PEM wetland data point for Wetland A501





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 506

Facing North/Upstream

# Description:

Data Point 504 Stream data point for Stream A501



### Photo No. 507

Facing South/Downstream

## Description:

Data Point 504 Stream data point for Stream A501





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 508

Facing East/Right to

### Description:

Data Point Stream data point for Stream A501



#### Photo No. 509

Facing North

## Description:

Data Point 505 PEM wetland data point for Wetland A502





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 510

Facing West

## Description:

Data Point 506 Upland data point for Wetland A503



#### Photo No. 511

Facing West

## Description:

Data Point 507 PEM wetland data point for wetland A503





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 512

Facing West

## Description:

Data Point 508 Upland data point for Wetland A503



#### Photo No. 513

Facing East

# Description:

Data Point 509 PEM wetland data point for Wetland A504





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 514

Facing West

## Description:

Data Point 510 Upland data point for Wetland A504



#### Photo No. 515

Facing West

### Description:

Overview of Pond A500





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 516

Facing West

## Description:

Data Point 511 PEM wetland data point for Wetland A505



#### Photo No. 517

Facing West

# Description:

Data Point 512 PEM wetland data point for Wetland A506





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 518

Facing North

### Description:

Data Point 513 PEM wetland data point for Wetland A507



#### Photo No. 519

Facing North

### Description:

Data Point 514 PEM wetland data point for Wetland A508





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 521

Facing South

### Description:

Data Point 516 PFO wetland data point for Wetland A509



#### Photo No. 522

Facing West

## Description:

Data Point 517 Upland data point for Wetland A509





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 523

Facing East

### Description:

Data Point 518 PEM wetland data point for Wetland A510



#### Photo No. 524

Facing West

### Description:

Data Point 519 Upland data point for Wetland A510





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 526

Facing East/Upstream

## Description:

Data Point 520 Stream data point for Stream A502



#### Photo No. 527

Facing West/Downstream

## Description:

Data Point 520 Stream data point for Stream A502





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 528

Facing South/Right to

## Description:

Data Point 520 Stream data point for Stream 502



#### Photo No. 529

Facing North

### Description:

Artificial Drain A500 6" steel drain tile outlet





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 530

Facing South

## Description:

Artificial Drain outfall area, downstream view from Artificial Drain A500



#### Photo No. 531

Facing North

## Description:

Artificial Drain A501 10" steel drain tile outlet





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

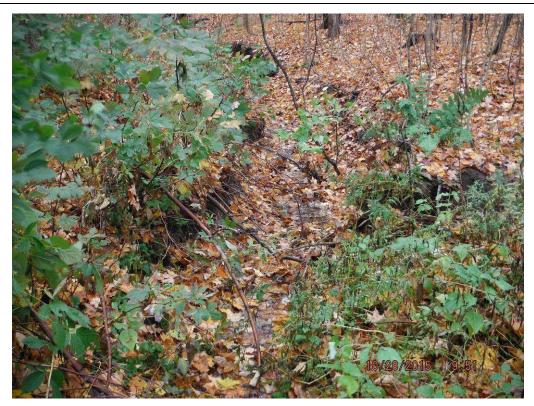
150001

#### Photo No. 532

Facing South

## Description:

Artificial Drain outfall area, downstream view from Artificial Drain A501



#### Photo No. 533

Facing West

### Description:

Artificial Drain A502 10" clay drain tile, tile is failed and discharging openly at this location





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 534

Facing West

## Description:

Ditch A500 Connection ditch for associated Artificial Drains/drain tiles



#### Photo No. 535

Facing East

### Description:

Artificial Drain A503 10" clay drain tile connects to and shown within Ditch A500





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 536

Facing East

## Description:

Artificial Drain A504 6" plastic drain tile outlet



#### Photo No. 537

Facing North

## Description:

Artificial Drain A505 10" steel drain tile outlet





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 538

Facing North

## Description:

Data Point 521 PEM wetland data point for Wetland A511



#### Photo No. 539

Facing West/Upstream

### Description:

Data Point 522 Stream data point for Stream A503





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 540

Facing East/Downstream

## Description:

Data Point 522 Stream data point for Stream A503



#### Photo No. 541

Facing North/Right to Left

## Description:

Data Point 522 Stream data point for Stream A503





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 542

Facing West

## Description:

Artificial Drain A506 4" PVC drain tile outlet



#### Photo No. 543

Facing West

### Description:

Data Point 523 PEM wetland data point for Wetland A512





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 544

Facing East

## Description:

Data Point 524 Upland data point for Wetland A512



#### Photo No. 545

Facing West/Upstream

## Description:

Data Point 525 Stream data point for Stream A504





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 546

Facing East/Downstream

### Description:

Data Point 525 Stream data point for Stream A504



#### Photo No. 547

Facing South/Left to Right

### Description:

Data Point 525 Stream data point for Stream A504





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

Project No.

150001

#### Photo No. 548

Facing West/Upstream

## Description:

Data Point 526 Stream data point for Stream A505



#### Photo No. 549

Facing East/Downstream

### Description:

Data Point 526 Stream data point for Stream A505





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 550

Facing North/Right to Left

### Description:

Data Point 526 Stream data point for Stream A505



#### Photo No. 551

Facing South/Upstream

### Description:

Data Point 527 Stream data point for Stream A506





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 552

Facing North/Downstream

## Description:

Data Point 527 Stream data point for Stream A506



#### Photo No. 553

Facing West/Right to Left

### Description:

Data Point 527 Stream data point for Stream A506





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 554

Facing South

# Description:

Data Point 528 PEM wetland data point for Wetland A515



#### Photo No. 555

Facing South

### Description:

Data Point 529 Upland data point for Wetland A516





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 556

Facing North/Upstream

### Description:

Data Point 530 Stream data point for Stream A507



#### Photo No. 557

Facing South/Downstream

## Description:

Data Point 530 Stream data point for Stream A507





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 558

Facing East/Right to Left

## Description:

Data Point 530 Stream data point for Stream A507



#### Photo No. 559

Facing North

### Description:

Data Point 531 PEM wetland data point for Wetland A516





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

Project No.

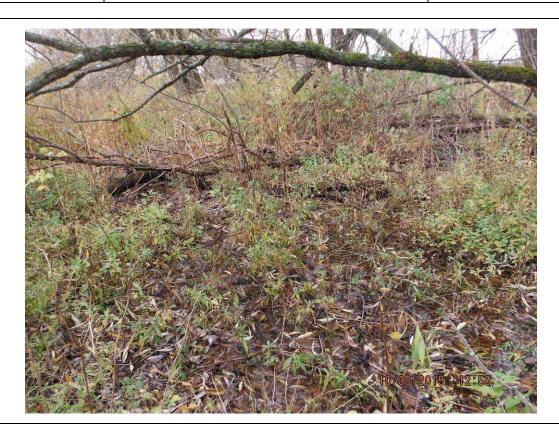
150001

#### Photo No. 560

Facing South

## Description:

Data Point 533 PEM wetland data point for Wetland A517



#### Photo No. 561

Facing North/Upstream

## Description:

Data Point 532 Stream data point for Stream A508





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 562

Facing South/Downstream

## Description:

Data Point 532 Stream data point for Stream A508



#### Photo No. 563

Facing East/Right to Left

### Description:

Data Point 532 Stream data point for Stream A508





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 564

Facing South

## Description:

Data Point 534 Upland data point for Wetland A517



#### Photo No. 565

Facing West

### Description:

Data Point 535 PEM wetland data point for Wetland A518





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 566

Facing North

## Description:

Data Point 536 Upland data point for Wetland A518



#### Photo No. 567

Facing South

### Description:

Data Point 537 PEM wetland data point for Wetland A519





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 568

Facing North

### Description:

Data Point 538 Upland data point for Wetland A519



#### Photo No. 569

Facing South

### Description:

Photo point for Wetland A520





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 570

Facing South

## Description:

Data Point 539 PFO wetland data point for Wetland A521



#### Photo No. 571

Facing North

## Description:

Data Point 540 Upland data point for Wetland A521





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 572

Facing East

## Description:

Data Point 541 PFO wetland data point for Wetland A522



#### Photo No. 573

Facing West

## Description:

Data Point 542 Upland data point for Wetland A522





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 575

Facing West

## Description:

Data Point 543 PEM wetland data point for Wetland A523



#### Photo No. 576

Facing East

## Description:

Data Point 544 Upland data point for Wetland A523





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 577

Facing North

## Description:

Data Point 545 PEM wetland data point for Wetland A524



#### Photo No. 578

Facing North

## Description:

Data Point 546 Upland data point for Wetland A524





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 579

Facing West/Upstream

## Description:

Data Point 547 Stream data point for Stream A509



#### Photo No. 580

Facing East/Downstream

## Description:

Data Point 547 Stream data point for Stream A509





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 581

Facing North/Right to Left

## Description:

Data Point 547 Stream data point for Stream A509



#### Photo No. 582

Facing East

## Description:

Data Point 548 PEM wetland data point for Wetland A525





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 583

Facing East

## Description:

Data Point 549 PFO wetland data point for Wetland A526



#### Photo No. 584

Facing North

### Description:

Data Point 550 PFO wetland data point for Wetland A527





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 585

Facing North

## Description:

Data Point 551 Upland data point for Wetland's A526, A527, A528, A530



#### Photo No. 586

Facing South

### Description:

Data Point 552 PFO wetland data point for Wetland A528





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 587

Facing East

## Description:

Data Point 553 PEM wetland data point for Wetland A529



#### Photo No. 588

Facing North

## Description:

Data Point 554 PEM wetland data point for Wetland A530





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 589

Facing North

### Description:

Data Point 555 PEM wetland data point for Wetland A533



#### Photo No. 590

Facing North

## Description:

Data Point 555 PEM wetland data point for Wetland A532





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 591

Facing North

## Description:

Data Point 556 Upland data point for Wetlands A532 and A533



#### Photo No. 592

Facing East

### Description:

Data Point 557 PEM wetland data point for Wetland A531





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 593

Facing West

## Description:

Data Point 558 Upland data point for Wetland A531



#### Photo No. 594

Facing East

### Description:

Data Point 559 PEM wetland data point for Wetland A534





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

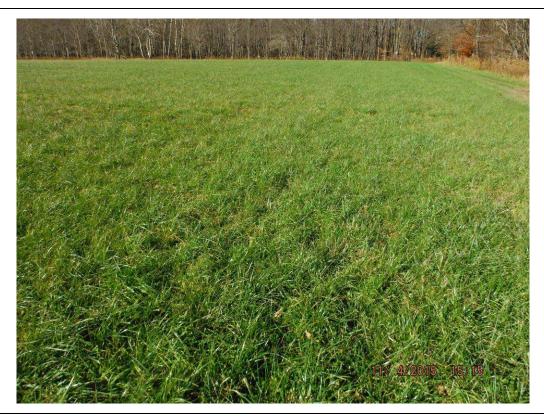
**Project No.** 150001

#### Photo No. 595

Facing North

## Description:

Data Point 560 Upland data point for Wetland A534



#### Photo No. 596

Facing South

### Description:

Data Point 561 PFO wetland data point for Wetland A535





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 597

Facing South

## Description:

Data Point 562 Upland data point for Wetland A535



#### Photo No. 598

Facing North/Upstream

### Description:

Data Point 563 Stream data point for Stream A510





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 599

Facing South/Downstream

## Description:

Data Point 563 Stream data point for Stream A510



### Photo No. 600

Facing East/Right to Left

### Description:

Data Point 563 Stream data point for Stream A510





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 601

Facing North

## Description:

Data Point 564 PEM wetland data point for Wetland A536



#### Photo No. 602

Facing South

### Description:

Data Point 565 Upland data point for Wetland A536





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 603

Facing North

### Description:

Data Point 566 PSS wetland data point for Wetland A537



#### Photo No. 604

Facing West

### Description:

Data Point 567 PEM wetland data point for Wetland A538





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 605

Facing West

## Description:

Artificial Drain A508 4" plastic drain tile outlet



#### Photo No. 606

Facing South

### Description:

Data Point 568 PSS wetland data point for Wetland A538





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 607

Facing North

## Description:

Data Point 569 PEM wetland data point for Wetland A540



#### Photo No. 608

Facing South

### Description:

Data Point 570 Upland data point for Wetland A540





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 609

Facing North

## Description:

Data Point 571 PEM wetland data point for Wetland A541



#### Photo No. 610

Facing South

### Description:

Data Point 572 PEM wetland data point for Wetland A542





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 611

Facing North/Upstream

## Description:

Data Point 573 Stream data point for Stream A511



#### Photo No. 612

Facing South/Downstream

## Description:

Data Point 573 Stream data point for Stream A511





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 613

Facing West/Right to Left

## Description:

Data Point 573 Stream data point for ST-A511



#### Photo No. 614

Facing North/Upstream

### Description:

Data Point 574 Stream data point for Stream A512





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

Project No.

150001

#### Photo No. 615

Facing South/Downstream

## Description:

Data Point 574 Stream data point for Stream A512



#### Photo No. 616

Facing West/Right to Left

### Description:

Data Point 574 Stream data point for Stream A512





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 621

Facing North

## Description:

Data Point 575 PEM wetland data point for Wetland A543



#### Photo No. 622

Facing South

### Description:

Data Point 576 Upland data point for Wetland A543





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 623

Facing South

## Description:

Data Point 577 PEM wetland data point for Wetland A544



#### Photo No. 624

Facing North

### Description:

Data Point 578 Upland data point for Wetland A544





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 625

Facing West

## Description:

Data Point 579 PEM wetland data point for Wetland A546



#### Photo No. 627

Facing South

### Description:

Data Point 581 PFO wetland data point for Wetland A547





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 628

Facing North

## Description:

Data Point 582 Upland data point for Wetland A547



#### Photo No. 629

Facing North

### Description:

Data Point 583 PFO wetland data point for Wetland A548





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 630

Facing West

## Description:

Data Point 584 Upland data point for Wetland A548



#### Photo No. 633

Facing West

## Description:

Data Point 585 PFO wetland data point for Wetland A549





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 634

Facing East

## Description:

Data Point 586 Upland data point for Wetland A549



#### Photo No. 635

Facing North/Upstream

### Description:

Data Point 587 Stream data point for Stream A514





Project Name:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

Site Location:

150001

#### Photo No. 636

Facing South/Downstream

## Description:

Data Point 587 Stream data point for Stream A514



#### Photo No. 637

Facing East/Right to Left

### Description:

Data Point 587 Stream data point for Stream A514





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 638

Facing West

## Description:

Culvert within Wetland A552



#### Photo No. 640

Facing South/Upstream

### Description:

Data Point 588 Stream data point for Stream A516





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 641

Facing North/Downstream

## Description:

Data Point 588 Stream data point for Stream A516



#### Photo No. 642

Facing West/Right to Left

### Description:

Data Point 588 Stream data point for Stream A516





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 643

Facing West

## Description:

Data Point 589 PFO wetland data point for Wetland A553



#### Photo No. 644

Facing North

### Description:

Data Point 590 Upland data point for Wetland A553





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 645

Facing West/Upstream

## Description:

Data Point 591 Stream data point for Stream A517



### Photo No. 646

Facing East/Downstream

### Description:

Data Point 591 Stream data point for Stream A517





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 647

Facing North/Right to Left

## Description:

Data Point 591 Stream data point for Stream A517



#### Photo No. 648

Facing West

### Description:

Data Point 592 PEM wetland data form for Wetland A554





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 649

Facing East

## Description:

Data Point 593 PFO wetland data point for Wetland A555



#### Photo No. 650

Facing South

### Description:

Data Point 594 Upland data point for Wetland A555





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 651

Facing East

## Description:

Photo of Wetland A556



#### Photo No. 653

Facing North

### Description:

Data Point 595 PEM wetland data point for Wetland A552





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 654

Facing South

### Description:

Data Point 596 Upland data point for Wetland A552



#### Photo No. 655

Facing North

### Description:

Data Point 597 PEM wetland data point for Wetland A559





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 656

Facing North

## Description:

Data Point 598 Upland data point for Wetland A559



#### Photo No. 657

Facing North

### Description:

Data Point 599 PEM wetland data point for Wetland A560





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 658

Facing West

## Description:

Data Point 600 Upland data point for Wetland A560



#### Photo No. 661

Facing North

### Description:

Data Point 601 PEM wetland data point for Wetland A557





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

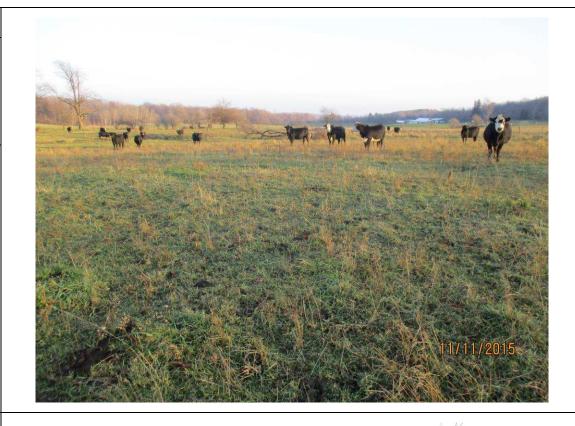
150001

### Photo No. 662

Facing North

### Description:

Data Point 602 Upland data point for Wetland A557



#### Photo No. 663

Facing South/Upstream

### Description:

Data Point 603 Stream data point for Stream A518





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 664

Facing North/Downstream

## Description:

Data Point 603 Stream data point for Stream A518



#### Photo No. 665

Facing West/Right to Left

### Description:

Data Point 603 Stream data point for Stream A518





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 666

Facing North

# Description:

Data Point 604 PEM wetland data point for Wetland A562



#### Photo No. 667

Facing West

### Description:

Data Point 605 Upland data point for Wetland A562





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 668

Facing South

## Description:

Data Point 606 PEM wetland data point for Wetland A564



#### Photo No. 669

Facing North

### Description:

Data Point 607 Upland data point for Wetland A564





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 670

Facing West/Upstream

## Description:

Data Point 608 Stream data point for Stream A519



### Photo No. 671

Facing East/Downstream

### Description:

Data Point 608 Stream data point for Stream A519





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 672

Facing North/Right to Left

# Description:

Data Point 608 Stream data point for Stream A519



#### Photo No. 673

Facing West/Upstream

### Description:

Data Point 609 Stream data point for Stream A520





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

Project No.

150001

#### Photo No. 674

Facing East/Downstream

### Description:

Data Point 609 Stream data point for Stream A520



### Photo No. 675

Facing North/Right to Left

### Description:

Data Point 609 Stream data point for Stream A520





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 676

Facing South

## Description:

Data Point 610 PEM wetland data point for Wetland A565



#### Photo No. 677

Facing North

### Description:

Data Point 611 Upland data point for Wetland A565





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 678

Facing West

### Description:

Photo of Wetland A566
This wetland is a
purpose-built treatment
wetland for manure
management servicing
the adjacent feedlot and
associated structures.



#### Photo No. 679

Facing West

### Description:

Photo of portion of Wetland A566 down gradient of the treatment wetland area shown in the photo above. This portion of the wetland is located within an active livestock feedlot and provides a downstream connection to a roadside ditch.





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

#### Photo No. 680

Facing West/Upstream

## Description:

Data Point 612 Stream data point for Stream A521



#### Photo No. 681

Facing East/Downstream

### Description:

Data Point 612 Stream data point for Stream A521





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 682

Facing North/Right to Left

## Description:

Data Point 612 Stream data point for Stream A521



#### Photo No. 683

Facing West

### Description:

Data Point 613 PSS wetland data point for Wetland A567





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 684

Facing North

## Description:

Data Point 614 Upland data point for Wetland A567



#### Photo No. 685

Facing East

### Description:

Data Point 615 PFO wetland data point for Wetland A568





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 686

Facing South

## Description:

Data Point 616 Upland data point for Wetland A568



#### Photo No. 687

Facing South

### Description:

Photo of Wetland A569





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 688

Facing North

# Description:

Data Point 617 PEM wetland data point for Wetland A570



#### Photo No. 689

Facing South

### Description:

Data Point 618 Upland data point for Wetland A570





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 690

Facing South/Upstream

## Description:

Data Point 619 Stream data point for Stream A522



### Photo No. 691

Facing North/Downstream

## Description:

Data Point 619 Stream data point for Stream A522





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

#### Photo No. 692

Facing West/Right to Left

## Description:

Data Point 619 Stream data point for Stream A522



#### Photo No. 693

Facing North

### Description:

Data Point 620 PEM wetland data point for Wetland A573





Project Name:

Ball Hill Wind Project

Site Location:

Chautauqua County, NY

**Project No.** 150001

### Photo No. 694

Facing East

## Description:

Data Point 621 Upland data point for Wetland A573



#### Photo No. 695

Facing South

### Description:

Data Point 622 PSS wetland data point for Wetland A578





Project Name:

Site Location:

Project No.

Ball Hill Wind Project

Chautauqua County, NY

150001

### Photo No. 696

Facing North

## Description:

Data Point 623 Upland data point for Wetland A578

