

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Town: Mansburg
County: Lewis
State: NY

Investigator: Pippin/Hrempach/Skiba

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: A

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: A25 wet

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-4"</u>	<u>A</u>	<u>10YR 2/1</u>	<u>none</u>	<u>silty loam</u>
<u>4"+</u>		<u>rocky layer</u>	<u>rejects larger</u>	

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☒ convex ☐
undulating ☐

sloping ☐ Approximate slope:

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.
YES Soil Saturated.

Depth to Free Water 2-3" inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches.
☒ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/16/07
Plot ID Number: A25 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 tussock sedge	☒ H S/S T V	OBL	40 -
2 narrow leaf gold	☒ H S/S T V	FAC	10
3 wool grass	☒ H S/S T V	FACW+	40 -
4 soft rush	☒ H S/S T V	FACW+	10
5 marsh St. Johns wort	☒ H S/S T V	OBL	5
6 nodding blue maigold	☒ H S/S T V	OBL	5
7	H S/S T V		
8 steep le bush	H ☒ S/S T V	FACW	20 -
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or No

Hydric Soils Present? ☒ Yes or No

Wetland Hydrology Present? ☒ Yes or No

Is this Sampling Point Within a Wetland? ☒ Yes or No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes or No

Is this Wetland Potentially Isolated? ☐ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 8/26/02

Investigator: Pippin/McCarthy/Jensen

Town: Martinezburg

County: Levy

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: forested

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: A

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: A 25 upL

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-6"</u>	<u>O</u>	<u>organic duff</u>		
<u>6" +</u>		<u>rocky layer rejects duff</u>		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave convex sloping Approximate slope:
flat undulating

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☐ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 7/26/07
Plot ID Number: A25 upL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>balsam</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
2 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
3 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
4	H S/S T V		
5 <u>velvet leaf blueberry</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>25</u>
6 <u>black cherry</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>10</u>
7	H S/S T V		
8 <u>bunchgrass</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>5</u>
9 <u>wood sorrel</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>10</u>
10 <u>blue beard</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>5</u>
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 75%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

space in wetland

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No No

Hydric Soils Present? Yes or No No

Wetland Hydrology Present? Yes or No No

Is this Sampling Point Within a Wetland? Yes or No No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/24/07

Investigator: Pippin/Trembath/Slebbins

Town: Montgomery

County: Lewis

State: NY

Do normal circumstances exist on site? Yes ☒ No

Community: PEM/PSS

Is the site significantly disturbed? Yes ☒ No

Transect/Flag ID: B

Is the area a potential Problem Area? Yes ☒ No

Plot ID: B5 Wet

SOILS

Series and Phase: _____

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-2"</u>	<u>O</u>	<u>organic muck</u>		
<u>2-6"</u>	<u>A</u>	<u>10YR 4/2</u>		<u>silty loam</u>
<u>6-</u>	<u>B</u>	<u>10YR 6/2</u>		<u>silty sand</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☐ undulating ☐

sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.
YES Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches.
☒ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

channel avg width 10 feet (wide by dam)
runs + pools organic muck, ripples cobbles

Project Number: 07025

Date:

9/26/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

B5 wet

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	Wetland grass	☒ H	S/S	T	V	FACW/OBL	40
2	Soft mud	☒ H	S/S	T	V	FACW+	20
3	Wet grass	☒ H	S/S	T	V	FACW+	40
4		H	S/S	T	V		
5	meadow sweet	H	☒ S/S	T	V	FACW+	60
6	Scrub brush	H	☒ S/S	T	V	FACW	30
7	Willow shrubs	H	☒ S/S	T	V	FACW/OBL	10
8	Rub. hisp.	H	☒ S/S	T	V	FACW	20
9		H	S/S	T	V		
10		H	S/S	T	V		
11		H	S/S	T	V		
12		H	S/S	T	V		
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or NoHydric Soils Present? ☒ Yes or NoWetland Hydrology Present? ☒ Yes or NoIs this Sampling Point Within a Wetland? ☒ Yes or NoHydrologic Connectivity to Off-site Wetlands? ☒ Yes or NoIs this Wetland Potentially Isolated? ☐ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Lipson/Trembore/Sullivan

Town: Watkinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? Yes ☒ No ☐

Community: forested

Is the site significantly disturbed? Yes ☒ No ☐

Transect/Flag ID: B

Is the area a potential Problem Area? Yes ☒ No ☐

Plot ID: B5 up L

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-8"	O	organic	duff	
8"		rejects	dug	

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave ☐ convex ☐ sloping ☐ flat ☐ undulating ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators
☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)
☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025

Date: 9/26/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number: B5 WPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 Black cherry	H S/S <u>T</u> V	FACU	20
2 red maple	H S/S <u>T</u> V	FAC	20
3	H S/S T V		
4 mountain holly	H <u>S/S</u> T V	OBL	30
5 red maple	H <u>S/S</u> T V	FAC	40
6 blackberry	H <u>S/S</u> T V	FACU-	10
7	H S/S T V		
8 sarsaparilla	<u>H</u> S/S T V	FACU	5
9 wood fern	<u>H</u> S/S T V	FACU	10
10 goldthread	<u>H</u> S/S T V	FACW	5
11 parsnip	<u>H</u> S/S T V	FAC-	5
12 bunchberry	<u>H</u> S/S T V	FAC-	5
13 branched fern	<u>H</u> S/S T V	FACU	60
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 60%

Percent of Dominant Species OBL, FACW 20%

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present?

Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland?

Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated?

Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Trembath/Schubert/Pippen

Town: Mansburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: forested wet P SS

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: C

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: C 10 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-16"</u>	<u>A</u>	<u>10YR 2/1</u>	<u>none</u>	<u>Silt / clay</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave ☐ flat ☒ convex ☐ undulating ☐ sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☒ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025

Date: 9/26/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number: C10 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 Red maple	H S/S <u>T</u> V	FAC	40 -
2 yellow birch	H S/S <u>T</u> V	FAC	20 -
3	H S/S T V		
4 black spruce	H <u>S/S</u> T V	FACW -	20
5 balsam	H <u>S/S</u> T V	FAC	30 -
6 alder	H <u>S/S</u> T V	FACW+	70 -
7 white birch	H <u>S/S</u> T V	FACW+	5
8 cinnamon fern	<u>H</u> S/S T V	FACW	30
9 wetland grass	<u>H</u> S/S T V	FACW/OBL	40 -
10 large reed	<u>H</u> S/S T V	OBL	30
11 sphagnum	<u>H</u> S/S T V	FACW/OBL	50 -
12 flat topped aster	<u>H</u> S/S T V	FACW	10
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 50%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or NoHydric Soils Present? Yes or NoWetland Hydrology Present? Yes or NoIs this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

274 North Goodman Street
Rochester, New York 14607

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/24/07
Investigator: Trembath/Stebbins/Pippin Town: Martinsburg
County: Lewis
State: NY
Do normal circumstances exist on site? Yes No
Is the site significantly disturbed? Yes No
Is the area a potential Problem Area? Yes No
Community: Buck up
Transect/Flag ID: C
Plot ID: C/D upl

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-10"</u>	<u>0</u>	<u>organic dirt</u>		
<u>10"</u>	<u>rocky layer</u>	<u>light's angle</u>		

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat _____ undulating X

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025

Applicant: Roaring Brook Wind Power Project

Date:

9/24/07

Plot ID Number:

C10 upL

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	basil	H	S/S	☒ T	V	FAC	40	-
2	red maple	H	S/S	☒ T	V	FAC	30	-
3	yellow birch	H	S/S	☒ T	V	FAC	20	-
4		H	S/S	T	V			
5		H	S/S	T	V			
6	hobblebush	H	☒ S/S	T	V	FAC	85	-
7	striped maple	H	☒ S/S	T	V	FACU	5	
8	black spruce	H	☒ S/S	T	V	FACW-	10	
9		H	S/S	T	V			
10		H	S/S	T	V			
11	wood fern	☒ H	S/S	T	V	FACU	20	-
12	can mayflower	☒ H	S/S	T	V	FAC-	5	
13	addthreaf	☒ H	S/S	T	V	FACW	5	
14	blue bead	☒ H	S/S	T	V	FAC	5	
15		H	S/S	T	V			
16		H	S/S	T	V			

Percent of Dominant Species OBL, FACW, FAC 80%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or ☒ No

Hydric Soils Present?

Yes or ☒ NoWetland Hydrology Present? Yes or ☒ No

Is this Sampling Point Within a Wetland?

Yes or ☒ No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated?

Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Trembath/Poppin/Sebbins

Town: Marietta

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No
drainage ditch

Community: REM

Is the site significantly disturbed?

☒ Yes ☐ No

Transect/Flag ID: D

Is the area a potential Problem Area?

☒ Yes ☐ No

Plot ID: D7 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>A</u>	<u>10YR 3/2</u>	<u>—</u>	<u>silt loam</u>
<u>8"</u>	<u>B</u>	<u>6YR 4/10GY</u>		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☒ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☒ convex ☐
undulating ☐

sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☒ Ground Surface Inundated 5" inches.
☒ Soil Saturated.

Depth to Free Water 0 inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

*channel not wetland
man made*

Project Number: 07025

Date: 9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number: D7 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 cattails	☒ H S/S T V	DBL	20
2 Bidens frondosa	☒ H S/S T V	FACW	20
3 jewelweed	☒ H S/S T V	FACW	20
4 purplestemmed aster	☒ H S/S T V	DBL	10
5 Arrowroot sedge	☒ H S/S T V	DBL	30
6	H S/S T V		
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ NoHydric Soils Present? ☒ Yes ☐ NoWetland Hydrology Present? ☒ Yes ☐ NoIs this Sampling Point Within a Wetland? ☒ Yes ☐ NoHydrologic Connectivity to Off-site Wetlands? ☒ Yes ☐ NoIs this Wetland Potentially Isolated? ☐ Yes ☐ No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Trombath/Pippin/Stubbins

Town: Mansbury

County: LEWIS

State: NY

Do normal circumstances exist on site?

☒ No

Community: forested ? UPL

Is the site significantly disturbed?

☒ Yes

Transect/Flag ID: # P

Is the area a potential Problem Area?

☒ Yes

Plot ID: 07 UPL

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave

flat

convex

undulating

sloping

Approximate slope: _____

Remarks:

all spoils - all rock - no natural soil structure

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025

Date:

9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

D7 UPL

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	Sugar maple	H	S/S	<u>T</u>	V	FACW-	20
2		H	S/S	T	V		
3		H	S/S	T	V		
4	Raspberries	H	<u>S/S</u>	T	V	FAC-	20
5	Diervilla lonicera	H	<u>S/S</u>	T	V	UPL	20
6	Sugar maple	H	<u>S/S</u>	T	V	FACW-	20
7		H	S/S	T	V		
8	Equisetum arvense	<u>H</u>	S/S	T	V	FAC	5
9	hairscented fern	<u>H</u>	S/S	T	V	UPL	30
10		H	S/S	T	V		
11		H	S/S	T	V		
12		H	S/S	T	V		
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 33%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present?

Yes or NoWetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland?

Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated?

Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Town: Martinsburg
County: Lewis
State: NY

Investigator: Trembach/Pippin/Stubbins

Do normal circumstances exist on site? Yes No

Community: _____

Is the site significantly disturbed? Yes No

Transect/Flag ID: E

Is the area a potential Problem Area? Yes No

Plot ID: E4

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex _____ sloping _____
flat _____ undulating _____ Approximate slope: _____

Remarks:

Not a wetland - data not supporting jurisdiction - no data collected

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: _____
Plot ID Number: _____

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 _____	H S/S T V	_____	_____
2 _____	H S/S T V	_____	_____
3 _____	H S/S T V	_____	_____
4 _____	H S/S T V	_____	_____
5 _____	H S/S T V	_____	_____
6 _____	H S/S T V	_____	_____
7 _____	H S/S T V	_____	_____
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

NO
data
collected

Percent of Dominant Species OBL, FACW, FACW _____

Percent of Dominant Species OBL, FACW _____

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Promskins/Trembach

Town: Marysburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed?

☒ Yes ☐ No

Transect/Flag ID: F

Is the area a potential Problem Area?

☒ Yes ☐ No

Plot ID: F11 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-2"</u>	<u>O</u>			
<u>2-5"</u>	<u>A</u>	<u>10YR 2/1</u>	<u>—</u>	<u>silty loam</u>
<u>5"</u>	<u>B</u>	<u>7.5YR 5/2</u>	<u>—</u>	<u>stily loam</u>

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave

flat ☒

convex

undulating ☐

sloping

Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☒ Inundated

☒ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☒ Oxidized Root Channels in upper 12 inches

☒ Water-Stained leaves

☒ Local Soil Survey

☒ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025

Date:

9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

F11 Wet

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	reed canopy grass	☒ H	S/S	T	V	FACW+	80 -
2	Joe Pye weed	☒ H	S/S	T	V	FACW	10
3	rough leaved gold	☒ H	S/S	T	V	OBL	20
4	lady fern	☒ H	S/S	T	V	FAC	5
5		H	S/S	T	V		
6		H	S/S	T	V		
7		H	S/S	T	V		
8		H	S/S	T	V		
9		H	S/S	T	V		
10		H	S/S	T	V		
11		H	S/S	T	V		
12		H	S/S	T	V		
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or NoHydric Soils Present? ☒ Yes or NoWetland Hydrology Present? ☒ Yes or NoIs this Sampling Point Within a Wetland? ☒ Yes or NoHydrologic Connectivity to Off-site Wetlands? ☒ Yes or NoIs this Wetland Potentially Isolated? ☒ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Pippin/Steinhilber/Tremblay

Town: Morrisburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: Forest

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: F

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: F11 UPL

SOILS

Series and Phase: (EdB) Empcyville stony loam

Drainage Class: WD MWD SED PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>O</u>		<u>organic duff</u>	
<u>8"+</u>	<u>A</u>	<u>7.5YR 3/3</u>		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☐ undulating ☐

sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025

Date:

9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

F11 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Yellow maple</u>	H S/S <u>T</u> V	<u>FACU-</u>	<u>40</u>
2 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u>
3	H S/S T V		
4 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u>
5 <u>striped maple</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>20</u>
6 <u>black h</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>40</u>
7 <u>black cherry</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>20</u>
8	H S/S T V		
9 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>20</u>
10 <u>oxalis mont</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>10</u>
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 50%Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No No

Hydric Soils Present?

Yes or No NoWetland Hydrology Present? Yes or No No

Is this Sampling Point Within a Wetland?

Yes or No No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated?

Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/27/07
Investigator: Stebbins/Hrombach/Pippin Town: Martinsburg
County: Lewis
State: NY
Do normal circumstances exist on site? ☒ Yes ☐ No Community: PEM
Is the site significantly disturbed? ☒ Yes ☐ No Transect/Flag ID: G
Is the area a potential Problem Area? ☒ Yes ☐ No Plot ID: G2 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam Drainage Class: WD MWD SPD PD VPD
Subgroup: _____ Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>QA</u>	<u>10Me 6Z</u>	<u>high organic content</u>	
<u>3"+</u>		<u>rocky layer rejects auger</u>		

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave ☐ flat ☐ convex ☐ undulating ☐
sloping ☒ Approximate slope: 3%

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☒ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Channel avg width 3 feet, rocky substrate
diffuse vegetated banks

Project Number: 07025

Date:

9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

G2 wet

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	bone set	☒ H	S/S	T	V	FACW+	20
2	ice plant weed	☒ H	S/S	T	V	FACW	30
3	flat topped aspen	☒ H	S/S	T	V	FACW	25
4	jewel weed	☒ H	S/S	T	V	FACW	15
5	purple stemmed aspen	☒ H	S/S	T	V	OBL	10
6	Bidens frondosa	☒ H	S/S	T	V	FACW	10
7	single sedge	☒ H	S/S	T	V	OBL	20
8		H	S/S	T	V		
9		H	S/S	T	V		
10		H	S/S	T	V		
11		H	S/S	T	V		
12		H	S/S	T	V		
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or NoHydric Soils Present? ☒ Yes or NoWetland Hydrology Present? ☒ Yes or NoIs this Sampling Point Within a Wetland? ☒ Yes or NoHydrologic Connectivity to Off-site Wetlands? ☒ Yes or NoIs this Wetland Potentially Isolated? ☒ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 7/27/07

Investigator: Stebbins/Trembath/Pippin

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

Yes ☒ No ☐

Is the site significantly disturbed?

Yes ☒ No ☐

Is the area a potential Problem Area?

Yes ☒ No ☐

Community: forested upland

Transect/Flag ID: G

Plot ID: G2

VPL

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-6"	A	tan-z11	—	silty loam
6"+		rocky layer roots auger		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☒ undulating

sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025

Date:

9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

G 2 1204

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	Sugar maple	H	S/S	(T)	V	FACU-	30	-
2	y. birch	H	S/S	(T)	V	FAC	20	-
3		H	S/S	T	V			
4	Sug maple	H	(S/S)	T	V	FACU-	30	-
5	y. birch	H	(S/S)	T	V	FAC	20	-
6	red maple	H	(S/S)	T	V	FAC	20	-
7		H	S/S	T	V			
8	large fern	(H)	S/S	T	V	FAC	10	-
9	wood fern	(H)	S/S	T	V	FACU	5	-
10		H	S/S	T	V			
11		H	S/S	T	V			
12		H	S/S	T	V			
13		H	S/S	T	V			
14		H	S/S	T	V			
15		H	S/S	T	V			
16		H	S/S	T	V			

Percent of Dominant Species OBL, FACW, FAC 57%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present?

Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland?

Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated?

Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Town: Maurice
County: Lewis
State: NY

Investigator: Pippen/Stebbins/Trenbarn

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: H

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: H 6 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-16"</u>	<u>A</u>	<u>7.5YR 2.5/2</u>	<u>7.5YR 3/1</u>	<u>Silt loam</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave

flat

convex

undulating

sloping

Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

- NO Ground Surface Inundated N/A inches.
- YES Soil Saturated.
- Depth to Free Water N/A inches.
- Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
- ☒ Saturated in upper 12 inches.
- ☒ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
- ☒ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: H/6 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 purple-stemmed aster	☒ H S/S T V	DBL	5
2 jewel weed	☒ H S/S T V	FACW	20
3 sensitive fern	☒ H S/S T V	FACW	10
4 heartthrust	☒ H S/S T V	DBL	20
5 wetland grass	☒ H S/S T V	FACW/OBL	60%
6 cat tails	☒ H S/S T V	DBL	20
7 borealis	☒ H S/S T V	FACW+	5
8 rough hard grass	☒ H S/S T V	DBL	30
9 jay eye weed	☒ H S/S T V	FACW	5
10 lycopus wither	☒ H S/S T V	DBL	10
11 cinnamon fern	☒ H S/S T V	FACW	25%
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or No

Hydric Soils Present? ☒ Yes or No

Wetland Hydrology Present? ☒ Yes or No

Is this Sampling Point Within a Wetland? ☒ Yes or No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes or No

Is this Wetland Potentially Isolated? ☒ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/03
Town: Madison
County: Lewis
State: NY

Investigator: Pippen/Seabins/Henkel

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: forested upl

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: H#

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: H6 upL

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth

Horizon

Matrix color

Mottle color/abundance

Texture, Structure, Other

6-3"

O

organic duff

3-10"

A

10YR 2/1

silt loam

10-16"

B

10YR 6/2

Silty Sandy loam

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave

☐ flat

convex

☒ undulating

sloping

Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.

☐ Soil Saturated.

☐ Depth to Free Water _____ inches.

☐ Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated

☐ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches

☐ Water-Stained leaves

☐ Local Soil Survey

☐ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025

Date: 9/26/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number: H6 up

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 Sugar maple	H S/S <u>T</u> V	FACU-	20
2	H S/S T V		
3 Sugar maple	H <u>S/S</u> T V	FACU-	30
4 beech	H <u>S/S</u> T V	FACU	20
5 Raspberry	H <u>S/S</u> T V	FAC-	30
6 huckle berry	H <u>S/S</u> T V	FAC	15
7	H S/S T V		
8 Lady fern	<u>H</u> S/S T V	FAC	5
9 wood fern	<u>H</u> S/S T V	FACU	5
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 33%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or NoHydric Soils Present? Yes or NoWetland Hydrology Present? Yes or NoIs this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Stebbins/Trembach/Pippin

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: I1-5

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: I1 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-4"</u>	<u>A</u>	<u>10YR 4/3</u>	<u>—</u>	<u>silty loam</u>
<u>4-10"</u>	<u>B</u>	<u>10YR 2/1</u>	<u>—</u>	<u>silty loam</u>
<u>10"+</u>	<u>rocky layer rigors auger</u>			

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave ☐ flat ☒ convex ☐ undulating ☐ sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

N/A Ground Surface Inundated N/A inches.

yes Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☒ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 7/26/02
Plot ID Number: F1 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Amorpha sedge</u>	<u>(H)</u> S/S T V	<u>DBL</u>	<u>70</u>
2 <u>Karstmann</u>	<u>(H)</u> S/S T V	<u>OBL</u>	<u>20</u>
3 <u>Soft rush</u>	<u>(H)</u> S/S T V	<u>FACW+</u>	<u>15</u>
4 <u>Carly wet</u>	<u>(H)</u> S/S T V	<u>FACW/OBL</u>	<u>20</u>
5 <u>Sensitive fern</u>	<u>(H)</u> S/S T V	<u>FACW</u>	<u>15</u>
6	H S/S T V		
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? (Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) or No

Hydric Soils Present? (Yes) or No

Wetland Hydrology Present? (Yes) or No

Is this Sampling Point Within a Wetland? (Yes) or No

Hydrologic Connectivity to Off-site Wetlands? (Yes) or No

Is this Wetland Potentially Isolated? (Yes) or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Skebins/Trembore/Pippin

Town: Monticello

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: Forest UPL

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: I

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: I1 UPL

SOILS

Series and Phase: _____

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>0</u>	<u>grayish buff</u>		
<u>3"+</u>	<u>rocky</u>	<u>tan to light brown</u>		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☒ undulating ☐

sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: #1 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Sua nape</u>	H S/S <u>T</u> V	<u>FACU-</u>	<u>60</u>
2 <u>y. brn</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
3	H S/S T V		
4 <u>Sua nape</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>10</u>
5 <u>brn</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>10</u>
6 <u>no blueish</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>5</u>
7	H S/S T V		
8	H S/S T V		
9 <u>may scattered fan</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>80</u>
10 <u>wood ann</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>20</u>
11 <u>thorned aster</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>5</u>
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 33%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland?

Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated?

Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Skibins/Trembach/Pippin

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

Yes No

Community:

Is the site significantly disturbed?

Yes No

Transect/Flag ID:

Is the area a potential Problem Area?

Yes No

Plot ID:

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth

Horizon

Matrix color

Mottle color/abundance

Texture, Structure, Other

0-4"

D

organic matter

4-6"

A

WYR 3/2

silt

6"+

B

WYR 6/2

none

fine silt sand

Hydric Soil Indicators:

Histisols

Concretions

Listed on Local Hydric Soils List

Histic Epipedon

High Org. Content in Surface Layer of Sandy Soils

Listed as Potential for Hydric Inclusions Only

Sulfidic Odor

Organic Streaking in Sandy Soils

Other (Explain in Remarks)

Reducing Conditions

Gleyed or Low Chroma color

Aquic Moisture Regime

Landscape position:

concave

flat

convex

undulating

sloping

Approximate slope:

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

No Recorded Data Available

Stream, Lake or Tide Gauge

Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water inches.

Depth to Saturated Soils inches.

Wetland Hydrology Indicators:

Primary Indicators

Inundated

Saturated in upper 12 inches.

Water Marks

Drift Lines

Sediment Deposits

Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

Oxidized Root Channels in upper 12 inches

Water-Stained leaves

Local Soil Survey

Morphological Plant Adaptations

Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/24/07
Plot ID Number: J4 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 sensitive fern	☒ H S/S T V	FACW	40 -
2 cinnamon fern	☒ H S/S T V	FACW	30
3 wetland grass	☒ H S/S T V	FACW/OBL	30
4 rough leaved gold	☒ H S/S T V	OBL	10
5 labrum fern	☒ H S/S T V	FAC	10
6 red canopy	☒ H S/S T V	FACW+	40 -
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or No

Hydric Soils Present? ☒ Yes or No

Wetland Hydrology Present? ☒ Yes or No

Is this Sampling Point Within a Wetland? ☒ Yes or No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes or No

Is this Wetland Potentially Isolated? ☐ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Stebbins/Trembach/Pippen

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: forested

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: J1-4

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: J4 upl

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>D</u>	<u>organic dark</u>		
<u>3-6"</u>	<u>A</u>	<u>7.5YR 3/3</u>	<u>none</u>	<u>silt loam</u>
<u>6"+</u>	<u>B</u>	<u>7.5YR 5/6</u>	<u>none</u>	<u>fine silt</u>

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave ☐ flat ☐ convex ☒ undulating ☐ sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: J4 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>yellow birch</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>20</u> -
2 <u>red maple</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>40</u> -
3	H S/S T V		
4 <u>red maple</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>30</u> -
5 <u>hobblebush</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>40</u> -
6 <u>striped maple</u>	H <u>(S/S)</u> T V	<u>FACW</u>	<u>20</u> -
7	H S/S T V		
8 <u>wood fern</u>	<u>(H)</u> S/S T V	<u>FACW</u>	<u>20</u> -
9 <u>interrupted fern</u>	<u>(H)</u> S/S T V	<u>FAC</u>	<u>20</u> -
10 <u>lunchberry</u>	<u>(H)</u> S/S T V	<u>FAC</u>	<u>5</u>
11 <u>gold thread</u>	<u>(H)</u> S/S T V	<u>FACW</u>	<u>5</u>
12 <u>false violet</u>	<u>(H)</u> S/S T V	<u>FAC</u>	<u>5</u>
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 71%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? (Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No (Yes)

Hydric Soils Present? Yes or No (Yes)

Wetland Hydrology Present? Yes or No (Yes)

Is this Sampling Point Within a Wetland? Yes or No (Yes)

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Tremblay/Fipon/Sebbins

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? Yes No

Community: _____

Is the site significantly disturbed? Yes No

Transect/Flag ID: K

Is the area a potential Problem Area? Yes No

Plot ID: K wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat _____ undulating _____

Remarks: not a wetland - no data collected

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☐ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: _____
Plot ID Number: _____

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 _____	H S/S T V	_____	_____
2 _____	H S/S T V	_____	_____
3 _____	H S/S T V	_____	_____
4 _____	H S/S T V	_____	_____
5 _____	H S/S T V	_____	_____
6 _____	H S/S T V	_____	_____
7 _____	H S/S T V	_____	_____
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

NO
data
collected

Percent of Dominant Species OBL, FACW, FACW _____

Percent of Dominant Species OBL, FACW _____

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Pippin/Tremblay/Stebbins

Town: Mansfield

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed?

☒ Yes ☐ No

Transect/Flag ID: L

Is the area a potential Problem Area?

☒ Yes ☐ No

Plot ID: L1 wet

SOILS

Series and Phase: (Tab) Tughill stony silt loam

Drainage Class:

WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: ☒ Yes ☐ No

Depth

Horizon

Matrix color

Mottle color/abundance

Texture, Structure, Other

0-16"

A

10YR 2/1

mucky

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave

☒

convex

sloping

Approximate slope:

flat

undulating

Remarks:

high organic content

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

NO

Ground Surface Inundated N/A inches.

YES

Soil Saturated.

Depth to Free Water 3" inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☒ Inundated

☒ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches

☒ Water-Stained leaves

☐ Local Soil Survey

☒ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025

Date:

7/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

1 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 Sensitive fern	☒ H S/S T V	FACW	80
2 Lycopodium uniflorum	☒ H S/S T V	OBL	40
3 Cinnamon fern	☒ H S/S T V	FACW	20
4 Ice plant weed	☒ H S/S T V	FACW	10
5 Bidens cernua	☒ H S/S T V	FACW+	20
6 Purple stemmed adiantum	☒ H S/S T V	OBL	10
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or NoHydric Soils Present? ☒ Yes or NoWetland Hydrology Present? ☒ Yes or NoIs this Sampling Point Within a Wetland? ☒ Yes or NoHydrologic Connectivity to Off-site Wetlands? ☒ Yes or NoIs this Wetland Potentially Isolated? ☒ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual274 North Goodman Street
Rochester, New York 14607Lot No: 07025Applicant: Roaring Brook Wind Power ProjectDate: 9/27/07Town: MannsburgCounty: LewisState: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Is the site significantly disturbed?

☒ Yes ☐ No

Is the area a potential Problem Area?

☒ Yes ☐ NoCommunity: ForestvilleTransect/Flag ID: L1-9Plot ID: L1 WPL

SOILS

Series and Phase: (Tab) Tughill stony silt loamDrainage Class: WD MWD SPD PD☒ VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth

Horizon

Matrix color

Mottle color/abundance

Texture, Structure, Other

0-4"

O

organic duff

4-10"

A

7.5Y 4/6

silt

10"+

rocky layer 1/2" or larger

Hydric Soil Indicators:

☐ Histisols☐ Concretions☐ Listed on Local Hydric Soils List☐ Histic Epipedon☐ High Org. Content in Surface Layer of Sandy Soils☐ Listed as Potential for Hydric Inclusions Only☐ Sulfidic Odor☐ Organic Streaking in Sandy Soils☐ Other (Explain in Remarks)☐ Reducing Conditions☐ Gleyed or Low Chroma color☐ Aquic Moisture Regime

Landscape position:

concave

flat

convex

undulating ☒

sloping

Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available☐ Stream, Lake or Tide Gauge☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.☐ Soil Saturated.☐ Depth to Free Water _____ inches.☐ Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated☐ Saturated in upper 12 inches.☐ Water Marks☐ Drift Lines☐ Sediment Deposits☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches☐ Water-Stained leaves☐ Local Soil Survey☐ Morphological Plant Adaptations☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025

Date: 9/27/07

Applicant: Roaring Brook Wind Power Project

Plot ID Number: 4 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 y. brch	H S/S <u>T</u> V	FAC	20
2 sug maple	H S/S <u>T</u> V	FACU-	40
3 red maple	H S/S <u>T</u> V	FAC	30
4 black cherry	H S/S <u>T</u> V	FACU	30
5	H S/S T V		
6 red maple	H <u>S/S</u> T V	FAC	20
7 striped maple	H <u>S/S</u> T V	FACU	20
8 sug maple	H <u>S/S</u> T V	FACU-	10
9 black cherry	H <u>S/S</u> T V	FACU	15
10	H S/S T V		
11 wood fern	<u>H</u> S/S T V	FACU	25
12 fragrant fern	<u>H</u> S/S T V	UPL	40
13 sarsaparilla	<u>H</u> S/S T V	FACU	5
14 gold thread	<u>H</u> S/S T V	FACW	10
15 shining clubmoss	<u>H</u> S/S T V	FACW	5
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 25%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or NoHydric Soils Present? Yes or NoWetland Hydrology Present? Yes or NoIs this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/27/07
Investigator: Stebbins/Pippen/Trembooth Town: Marionburg
County: Lewis
State: NY
Do normal circumstances exist on site? ☒ Yes ☐ No Community: PEM
Is the site significantly disturbed? ☒ Yes ☐ No Transect/Flag ID: M
Is the area a potential Problem Area? ☒ Yes ☐ No Plot ID: M7 wet

SOILS

Series and Phase: (TAB) Tughill stony silt loam Drainage Class: WD MWD SPD PD ☒ VPB
Subgroup: _____ Confirm Mapped Type: ☒ Yes ☐ No
Depth Horizon Matrix color Mottle color/abundance Texture, Structure, Other
0-2" D organic muck _____
2-5" A 10YR 2/1 _____ fine silt
5-12" B 10YR 6/2 _____ sandy silt
Hydric Soil Indicators: 12" + rocky layer
☐ Histisols ☐ Concretions ☐ Listed on Local Hydric Soils List
☐ Histic Epipedon ☐ High Org. Content in Surface Layer of Sandy Soils ☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor ☐ Organic Streaking in Sandy Soils ☐ Other (Explain in Remarks)
☐ Reducing Conditions ☐ Gleyed or Low Chroma color ☐ Aquic Moisture Regime
Landscape position: concave ☒ flat _____ convex _____ undulating _____ sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs
Field Observations
NO Ground Surface Inundated N/A inches.
VPS Soil Saturated.
Depth to Free Water N/A inches.
Depth to Saturated Soils 0 inches.
Wetland Hydrology Indicators:
Primary Indicators
☒ Inundated
☒ Saturated in upper 12 inches.
☒ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland
Secondary Indicators (2 or more required)
☒ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☒ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Plot ID Number: M7 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>fringed sedge</u>	<u>H</u> S/S T V	<u>OBL</u>	<u>30</u>
2 <u>woot grass</u>	<u>H</u> S/S T V	<u>FACW+</u>	<u>40</u>
3 <u>tufted sedge</u>	<u>H</u> S/S T V	<u>OBL</u>	<u>30</u>
4 <u>ghnoman fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>5</u>
5 _____	H S/S T V	_____	_____
6 _____	H S/S T V	_____	_____
7 _____	H S/S T V	_____	_____
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: J. Robbins / Pippin / Trembath

Town: Rochester

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: Amherst

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: M

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: M7 UPL

SOILS

Series and Phase: (TAB) Tughill stony silt loam

Drainage Class: WD MWD SPD PD

☒ PD

Subgroup:

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-6"</u>	<u>D</u>	<u>organic</u>	<u>dnf b</u>	
<u>6"+</u>	<u>A</u>	<u>10% 4/6</u>	<u>—</u>	<u>Silt</u>

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave

convex

sloping

Approximate slope:

flat

undulating X

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated inches.

☐ Soil Saturated

Depth to Free Water inches.

Depth to Saturated Soils inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated

☐ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches

☐ Water-Stained leaves

☐ Local Soil Survey

☐ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Plot ID Number: M7 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u> -
2 <u>acer</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>30</u> -
3 <u>black cherry</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>10</u>
4	H S/S T V		
5 <u>yellow birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
6 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
7 <u>hobble bush</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
8 <u>blackberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>50</u> -
9	H S/S T V		
10 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>5</u>
11 <u>hayscented fern</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>40</u> -
12 <u>can may</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>5</u>
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 25%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No No

Hydric Soils Present? Yes or No No

Wetland Hydrology Present? Yes or No No

Is this Sampling Point Within a Wetland? Yes or No No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Rippon, Robbins Treascoe

Town: Northburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: N

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: N17 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-2"</u>	<u>D</u>	<u>Organic</u>	<u>much</u>	
<u>2-12"</u>	<u>A</u>	<u>10YR2/1</u>		<u>Silty loam</u>
<u>12"+</u>		<u>rocky layer rejects auger</u>		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave ☐ flat ☒ convex ☐ undulating ☐ sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☒ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/29/07
Plot ID Number: N17 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>WOO/grass</u>	☒ H S/S T V	<u>FACW+</u>	<u>40</u>
2 <u>Sphagnum</u>	☒ H S/S T V	<u>FAW/OBL</u>	<u>20</u>
3 <u>Cinnamon fern</u>	☒ H S/S T V	<u>FACW</u>	<u>40</u>
4 <u>Loyal fern</u>	☒ H S/S T V	<u>OBL</u>	<u>20</u>
5 <u>Soft musk</u>	☒ H S/S T V	<u>FACW+</u>	<u>10</u>
6	H S/S T V		
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? ☐ Yes ☐ No

Is this Wetland Potentially Isolated? ☐ Yes ☐ No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Lipin Trembath (Helding)

Town: Marion

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: Forest up

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: N

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: N 17 up

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD (WD) SPB PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-6"	D	organic	duff	
6-11"	A	10YR 6/2	—	Sandy silty loam
11"+	B	10YR 4/6	—	Sandy silty loam

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☒ undulating ☒

sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Plot ID Number: N17 UPL

VEGETATION

Dominant Plant Species:		Stratum: (circle one)		Indicator:	% Cover:
1	<u>Hackberry</u>	H	S/S <u>T</u> V	<u>FACU</u>	<u>30</u> -
2	<u>Burn</u>	H	S/S <u>T</u> V	<u>FACU</u>	<u>40</u> -
3		H	S/S T V		
4	<u>Striped maple</u>	H	S/S <u>T</u> V	<u>FACU</u>	<u>10</u>
5	<u>Beech</u>	H	S/S <u>T</u> V	<u>FACU</u>	<u>20</u> -
6	<u>Blackberry</u>	H	S/S <u>T</u> V	<u>FACU</u>	<u>40</u> -
7	<u>Red maple</u>	H	S/S <u>T</u> V	<u>FAC</u>	<u>20</u> -
8		H	S/S T V		
9	<u>Wood fern</u>	<u>H</u>	S/S T V	<u>FACU</u>	<u>15</u> -
10		H	S/S T V		
11		H	S/S T V		
12		H	S/S T V		
13		H	S/S T V		
14		H	S/S T V		
15		H	S/S T V		
16		H	S/S T V		

Percent of Dominant Species OBL, FACW, FAC 17%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

Sparsely wooded / open

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Trembach/Pippin/Sclibens

Town: Maulsding

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: 0

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: 0-3 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-6"</u>	<u>A</u>	<u>10YR 2/1</u>		<u>silt loam</u>
<u>6" +</u>	<u>B</u>	<u>10YR 3/2</u>	<u>10YR 5/6 - common</u>	<u>silt loam</u>

Hydric Soil Indicators:

- | | | |
|---|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☒ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☒ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex _____ sloping _____
flat _____ undulating _____ Approximate slope: _____

Remarks: high organic content

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
N/A Ground Surface Inundated N/A inches.
YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025

Date:

9/27/02

Applicant: Roaring Brook Wind Power Project

Plot ID Number:

0-3 wet

VEGETATION

Dominant Plant Species:

Stratum: (circle one)

Indicator:

% Cover:

1	wetland Grass	☒ H	S/S	T	V	FACW/OBL	80
2	blue flag	☒ H	S/S	T	V	DBL	20
3	royal fern	☒ H	S/S	T	V	DBL	20
4	Chinomom fern	☒ H	S/S	T	V	FACW	30
5		H	S/S	T	V		
6		H	S/S	T	V		
7		H	S/S	T	V		
8		H	S/S	T	V		
9		H	S/S	T	V		
10		H	S/S	T	V		
11		H	S/S	T	V		
12		H	S/S	T	V		
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied?

☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or NoHydric Soils Present? ☒ Yes or NoWetland Hydrology Present? ☒ Yes or NoIs this Sampling Point Within a Wetland? ☒ Yes or NoHydrologic Connectivity to Off-site Wetlands? ☒ Yes or NoIs this Wetland Potentially Isolated? ☒ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 7/27/02

Investigator: Trembath/Pippin/Sullivan

Town: Monticello

County: Lewis

State: NY

Do normal circumstances exist on site?

Yes No

Community: Do not know

Is the site significantly disturbed?

Yes No

Transect/Flag ID: 0

Is the area a potential Problem Area?

Yes No

Plot ID: 0-3 UPL

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-6"</u>	<u>0</u>	<u>organic</u>	<u>duff</u>	
<u>6"+</u>		<u>rocky layer</u>	<u>rejects</u>	<u>area</u>

Hydric Soil Indicators:

- | | |
|--|--|
| ☐ Histisols | ☐ Concretions |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils |
| ☐ Sulfid Odor | ☐ Organic Streaking in Sandy Soils |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color |

- | |
|---|
| ☐ Listed on Local Hydric Soils List |
| ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Other (Explain in Remarks) |
| ☐ Aquic Moisture Regime |

Landscape position:

concave _____ convex _____
flat _____ undulating X

sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- | |
|---|
| ☐ No Recorded Data Available |
| ☐ Stream, Lake or Tide Gauge |
| ☐ Aerial Photographs |

Field Observations

- | |
|---|
| ☐ Ground Surface Inundated _____ inches. |
| ☐ Soil Saturated. |

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- | |
|--|
| ☐ Inundated |
| ☐ Saturated in upper 12 inches. |
| ☐ Water Marks |
| ☐ Drift Lines |
| ☐ Sediment Deposits |
| ☐ Drainage Patterns in Wetland |

Secondary Indicators (2 or more required)

- | |
|--|
| ☐ Oxidized Root Channels in upper 12 inches |
| ☐ Water-Stained leaves |
| ☐ Local Soil Survey |
| ☐ Morphological Plant Adaptations |
| ☐ Other (Explain in Remarks) |

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Plot ID Number: 0-3 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>black cherry</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>60</u>
2 <u>beech</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>30</u>
3 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
4	H S/S T V		
5 <u>beech</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>40</u>
6 <u>hobble bush</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>40</u>
7 <u>y. birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u>
8 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
9	H S/S T V		
10 <u>can mayflower</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>5</u>
11 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>20</u>
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 43%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks: beech drops < 5%
Sparsely herb layer

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No Yes

Hydric Soils Present? Yes or No Yes

Wetland Hydrology Present? Yes or No Yes

Is this Sampling Point Within a Wetland? Yes or No Yes

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: _____
Investigator: _____ Town: _____
County: _____
State: NY

Do normal circumstances exist on site? Yes No Community: _____
Is the site significantly disturbed? Yes No Transect/Flag ID: _____
Is the area a potential Problem Area? Yes No Plot ID: P Wet (NOT Wet)

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other

Hydric Soil Indicators:

☐ Histisols ☐ Concretions ☐ Listed on Local Hydric Soils List
☐ Histic Epipedon ☐ High Org. Content in Surface Layer of Sandy Soils ☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor ☐ Organic Streaking in Sandy Soils ☐ Other (Explain in Remarks)
☐ Reducing Conditions ☐ Gleyed or Low Chroma color ☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat _____ undulating _____

Remarks:

*Wetland data not supportive
* NOT a wetland **

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025

Date: _____

Applicant: Roaring Brook Wind Power Project

Plot ID Number: _____

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 _____	H S/S T V	_____	_____
2 _____	H S/S T V	_____	_____
3 _____	H S/S T V	_____	_____
4 _____	H S/S T V	_____	_____
5 _____	H S/S T V	_____	_____
6 _____	H S/S T V	_____	_____
7 _____	H S/S T V	_____	_____
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

no
data
collected

Percent of Dominant Species OBL, FACW, FAC _____

Percent of Dominant Species OBL, FACW _____

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/07

Investigator: Hebberts/Pippen/Trembath

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: emergent

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: AAA 1-11

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: AAA 3 wet

SOILS

Series and Phase: _____

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>A</u>	<u>10YR 2/2</u>	<u>none</u>	<u>silty loam</u>
<u>3-16"</u>	<u>B</u>	<u>10YR 2/2</u>	<u>2.5Y 6/3</u>	<u>silty loam</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: ☐ concave ☐ flat ☒ convex ☐ undulating ☐ sloping ☐ Approximate slope: _____

Remarks: high organic content

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated NA inches.

YES Soil Saturated.

Depth to Free Water NA inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

- Primary Indicators
- ☐ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetland

- Secondary Indicators (2 or more required)
- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☒ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks: hummocky terrain

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: AAA 3 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Carex crinita</u>	<u>(H)</u> S/S T V	<u>OBL</u>	<u>90</u>
2 <u>Heathhumb</u>	<u>(H)</u> S/S T V	<u>OBL</u>	<u>10</u>
3 <u>Lycopodium uniflorum</u>	<u>(H)</u> S/S T V	<u>OBL</u>	<u>10</u>
4	H S/S T V		
5	H S/S T V		
6 <u>meadowsweet</u>	H <u>(S/S)</u> T V	<u>FACW+</u>	<u>10</u>
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? (Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) or No

Hydric Soils Present? (Yes) or No

Wetland Hydrology Present? (Yes) or No

Is this Sampling Point Within a Wetland? (Yes) or No

Hydrologic Connectivity to Off-site Wetlands? (Yes) or No

Is this Wetland Potentially Isolated? (Yes) or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/25/07
Investigator: Stebbins/Rippin/Trembath Town: Martinsburg
County: Lewis
State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: forested

Is the site significantly disturbed?

Yes ☐ No ☒

Transect/Flag ID: AAA

Is the area a potential Problem Area?

Yes ☐ No ☒

Plot ID: AAA 3 upl

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>0</u>		<u>organic duff</u>	
<u>3"+</u>		<u>rocky layer</u>	<u>rejects auger</u>	

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position:

concave _____ convex _____
flat _____ undulating X

sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: AAA 3 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 yellow birch	H S/S <u>(T)</u> V	FAC	40 -
2 black cherry	H S/S <u>(T)</u> V	FACU	30 -
3 beech	H S/S <u>(T)</u> V	FACU	20 -
4 red maple	H S/S <u>(T)</u> V	FAC	30 -
5	H S/S T V		
6 yellow birch	H <u>(S)</u> T V	FAC	20 -
7 blackberry	H <u>(S/S)</u> T V	FACU-	10 -
8 black cherry	H <u>(S/S)</u> T V	FACU	10 -
9	H S/S T V		
10 hayscented fern	<u>(H)</u> S/S T V	UPL	80 -
11 wood fern	<u>(H)</u> S/S T V	FACU	15 -
12 bracken fern	<u>(H)</u> S/S T V	FACU	10 -
13 Canada Mayfl.	<u>(H)</u> S/S T V	FAC-	5 -
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 43%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? (Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 7/25/07

Investigator: Stebbins/Pippin/Trenbath

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: Forested wet

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: BBB 1-19

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: BBB 3 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>D</u>	<u>organic</u>	<u>deft</u>	
<u>3-110"</u>	<u>A</u>	<u>10-12 d/1</u>	<u>none</u>	<u>silty loam</u>

Hydric Soil Indicators:

- | | | |
|---|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☒ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex ☒ sloping _____
flat _____ undulating _____ Approximate slope: _____

Remarks:

high organic content

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
no Ground Surface Inundated N/A inches.
yes Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: BBB3wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 black spruce	H S/S <u>T</u> V	FACW-	5
2 yellow birch	H S/S <u>T</u> V	FAC	20
3 red maple	H S/S <u>T</u> V	FAC	40
4	H S/S T V		
5 nemophanthus	H <u>S/S</u> T V	OBL	20
6 balsam	H <u>S/S</u> T V	FAC	10
7 black spruce	H <u>S/S</u> T V	FACW-	10
8	H S/S T V		
9 cinnamon fern	<u>H</u> S/S T V	FACW	30
10 sphagnum	<u>H</u> S/S T V	FACW/OBL	50
11 lycopus uniflorus	<u>H</u> S/S T V	OBL	10
12 bunchberry	<u>H</u> S/S T V	FAC-	5
13 blue bead lily	<u>H</u> S/S T V	FAC	5
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 57%

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/07

Investigator: Stebbins/Pippin/Tremblay

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: forest

Is the site significantly disturbed?

Yes ☐ No ☒

Transect/Flag ID: BBB

Is the area a potential Problem Area?

Yes ☐ No ☒

Plot ID: BBB 3 up!

SOILS

Series and Phase: _____

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-15"</u>	<u>D</u>	<u>organic</u>	<u>duff</u>	
<u>15"+</u>	<u>A</u>	<u>7.5 ym 5/4</u>	<u>none</u>	<u>fine silt</u>

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave

flat

convex

undulating ☒

sloping

Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.

☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated

☐ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches

☐ Water-Stained leaves

☐ Local Soil Survey

☐ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: BBB 3 upl

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>yellow birch</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>20</u>
2 <u>red maple</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>40</u>
3 <u>balsam</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>20</u>
4	H S/S T V		
5 <u>red maple</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>20</u>
6 <u>hobblebush</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>40</u>
7 <u>black cherry</u>	H <u>(S/S)</u> T V	<u>FACU</u>	<u>10</u>
8 <u>beech</u>	H <u>(S/S)</u> T V	<u>FACU</u>	<u>20</u>
9	H S/S T V		
10 <u>canada mayflower</u>	<u>(H)</u> S/S T V	<u>FAC-</u>	<u>10</u>
11 <u>wood fern</u>	<u>(H)</u> S/S T V	<u>FACU</u>	<u>20</u>
12 <u>indian cucumber root</u>	<u>(H)</u> S/S T V	<u>UPL</u>	<u>5</u>
13 <u>wood fern</u>	<u>(H)</u> S/S T V	<u>FACU</u>	<u>10</u>
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 67%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

(Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/07

Investigator: Trembath/Pippin/Flabbers

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: emergent

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: CCC

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: CCC 2 wet

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-4"	A	10YR 3/2	—	silt loam
4-12"	AB	10YR 2/1	—	silt loam
12"+	B	10YR 5/2	—	silty sand

Hydric Soil Indicators:

- | | | |
|---|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☒ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☒ undulating ☐

sloping ☐ Approximate slope:

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: CCC 2 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Mid Carolina grass</u>	☒ H S/S T V	<u>FACW+</u>	<u>25</u>
2 <u>flat topped aster</u>	☒ H S/S T V	<u>FACW</u>	<u>10</u>
3 <u>purple stemmed aster</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
4 <u>Impatiens</u>	☒ H S/S T V	<u>FACW</u>	<u>20</u>
5 <u>fringed sedge</u>	☒ H S/S T V	<u>OBL</u>	<u>15</u>
6 <u>erect stem fern</u>	☒ H S/S T V	<u>FACW</u>	<u>20</u>
7 <u>yellow eye weed</u>	☒ H S/S T V	<u>FACW</u>	<u>20</u>
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

catails outside plot

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes or No

Hydric Soils Present? ☒ Yes or No

Wetland Hydrology Present? ☒ Yes or No

Is this Sampling Point Within a Wetland? ☒ Yes or No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes or No

Is this Wetland Potentially Isolated? ☒ Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/07

Investigator: Trembath/Pippin/Stebbins

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: forested

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: CCC

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: CCC2 up

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-3"	D	10YR 2/1		organic duff
3-6"	A	10YR 3/3		silty loam
6"		rocky layer rejects auger		

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☒ undulating

sloping ☐ Approximate slope:

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated inches.
☐ Soil Saturated.

Depth to Free Water inches.

Depth to Saturated Soils inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: CCC 2 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>sugar maple</u>	H S/S <u>T</u> V	<u>FACU-</u>	<u>40</u>
2 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
3 <u>black cherry</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>10</u>
4	H S/S T V		
5 <u>red raspberry</u>	H <u>S/S</u> T V	<u>FAC-</u>	<u>75</u>
6 <u>black cherry</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>10</u>
7 <u>kuoh</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>10</u>
8 <u>lady fern</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>5</u>
9 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>20</u>
10 <u>oxalis</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>10</u>
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 60%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/07

Investigator: Pippin/Trembath/Selkins

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: Forest

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: DDD 1-14

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: DDD 3 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>0</u>		<u>organic matter</u>	<u>mostly sphagnum</u>
<u>8-16"</u>	<u>4</u>	<u>light grey</u>	<u>none</u>	<u>silt 10cm</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: ☐ concave ☐ flat ☒ convex ☐ undulating ☐ sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

- No Ground Surface Inundated N/A inches.
- Yes Soil Saturated.
- Depth to Free Water N/A inches.
- Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
- ☒ Water-Stained leaves
- ☐ Local Soil Survey
- ☒ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: DDO 3 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>30</u>
2 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>30</u>
3	H S/S T V		
4 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
5 <u>yellow birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
6 <u>dwarf maple</u>	H <u>S/S</u> T V	<u>FACW</u>	<u>40</u>
7	H S/S T V		
8 <u>common fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>60</u>
9 <u>Lycopodium anisfloum</u>	<u>H</u> S/S T V	<u>OBL</u>	<u>30</u>
10 <u>sensitive fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>20</u>
11 <u>Sphagnum</u>	<u>H</u> S/S T V	<u>FACW/OBL</u>	<u>30</u>
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 50%

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/25/07
Investigator: Pippen/Trembath/Stebbins Town: Martinsburg
County: Lewis
State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: forested

Is the site significantly disturbed?

Yes ☐ No ☒

Transect/Flag ID: DDP 1-14

Is the area a potential Problem Area?

Yes ☐ No ☒

Plot ID: DDP 3 upl

SOILS

Series and Phase:

Drainage Class:

WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-3"	0	Organic	duff	
3"+		Rocky layer	Myces auger	

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position:

concave

flat

convex

undulating

sloping

Approximate slope:

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

No wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: DD03 upl

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u> -
2 _____	H S/S T V	_____	_____
3 _____	H S/S T V	_____	_____
4 <u>blackberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>40</u> -
5 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u> -
6 <u>hollyhocks</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u> -
7 _____	H S/S T V	_____	_____
8 _____	H S/S T V	_____	_____
9 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>10</u> -
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 60%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

sparse herb layer

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/15/07

Investigator: Trembath/Stebbins/Pippin

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: emergent

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: EEE

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: EEE 4 wet

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth

Horizon

Matrix color

Mottle color/abundance

Texture, Structure, Other

0-4"

A

10YR 4/2

silty loam

4"

rocky layer rejects angle

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave ☐

convex ☒

sloping ☐

Approximate slope: ☐

flat ☐

undulating ☐

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated

☒ Saturated in upper 12 inches.

☒ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☒ Oxidized Root Channels in upper 12 inches

☒ Water-Stained leaves

☐ Local Soil Survey

☐ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: EEF4 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Cattails</u>	☒ H S/S T V	<u>DBL</u>	<u>30</u>
2 <u>Wetland Carex</u>	☒ H S/S T V	<u>FACW/OBL</u>	<u>10</u>
3 <u>Sensitive Fern</u>	☒ H S/S T V	<u>FACW</u>	<u>30</u>
4 <u>Wool Grass</u>	☒ H S/S T V	<u>FACW+</u>	<u>20</u>
5 <u>Juncus eff</u>	☒ H S/S T V	<u>FACW+</u>	<u>10</u>
6 <u>Bur Reed</u>	☒ H S/S T V	<u>DBL</u>	<u>10</u>
7 <u>Royal Fern</u>	☒ H S/S T V	<u>DBL</u>	<u>15</u>
8 <u>Marsh St John wort</u>	☒ H S/S T V	<u>DBL</u>	<u>5</u>
9 <u>Lycopus uniflorus</u>	☒ H S/S T V	<u>DBL</u>	<u>5</u>
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes ☐ No

Is this Wetland Potentially Isolated? ☐ Yes ☒ No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/07

Investigator: Trombath/Stebbins/Piper

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: Forestville

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: EEE

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: EEE 4 upl

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-6"</u>	<u>O</u>		<u>organic duff</u>	
<u>6" +</u>		<u>rocky layer</u>	<u>rejects auger</u>	

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☐ undulating ☒

sloping ☐ Approximate slope:

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated inches.
- ☐ Soil Saturated.
- Depth to Free Water inches.
- Depth to Saturated Soils inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☐ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

No wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25/07
Plot ID Number: EEE4 YPL

VEGETATION

Dominant Plant Species:		Stratum: (circle one)	Indicator:	% Cover:
1	<u>Bleed</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>40</u> -
2	<u>sugar maple</u>	H S/S <u>T</u> V	<u>FACU-</u>	<u>10</u>
3	<u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>10</u>
4		H S/S T V		
5	<u>pear</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>60</u> -
6	<u>blackberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>20</u> -
7	<u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>10</u>
8	<u>black cherry</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>10</u>
9		H S/S T V		
10	<u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>10</u> -
11	<u>Canada mayflower</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>5</u> -
12		H S/S T V		
13		H S/S T V		
14		H S/S T V		
15		H S/S T V		
16		H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 20%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks: Spaced but large

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/25/02

Investigator: Trembath/Apple/Kiebbins

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: emergent/shrub

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: FFF

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: FFF 2 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-16"</u>	<u>A</u>	<u>10YR 4/1</u>	<u>none</u>	<u>silty loam</u>

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave ☐ convex ☐ sloping ☐ flat ☐ undulating ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
N/A Ground Surface Inundated N/A inches.
N/A Soil Saturated.
Depth to Free Water N/A inches.
Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☒ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☒ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/25
Plot ID Number: FFF 2 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Cattails</u>	☒ H S/S T V	<u>OBL</u>	<u>40</u> -
2 <u>Sens. fern</u>	☒ H S/S T V	<u>FACW</u>	<u>60</u> -
3 <u>Flat topped Aster</u>	☒ H S/S T V	<u>FACW</u>	<u>10</u>
4 <u>Sphagnum</u>	☒ H S/S T V	<u>FACW/OBL</u>	<u>30</u> -
5 <u>Lycopus vir</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
6	H S/S T V		
7	H S/S T V		
8 <u>Wetland Salix</u>	H ☒ S/S T V	<u>FACW/OBL</u>	<u>30</u> -
9 <u>Viburnum coss</u>	H ☒ S/S T V	<u>FACW</u>	<u>10</u>
10 <u>Red maple</u>	H ☒ S/S T V	<u>FAC</u>	<u>20</u> -
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 80%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/25/02
Investigator: Trembach / Prop / Stubbs Town: Martinsburg
County: Lewis
State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No
Is the site significantly disturbed? ☒ Yes ☐ No
Is the area a potential Problem Area? ☒ Yes ☐ No
Community: forested
Transect/Flag ID: FFF
Plot ID: FFF 2 upl

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD
Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-4"</u>	<u>0</u>		<u>Organic Matter</u>	
<u>4"+</u>	<u>A</u>	<u>10YR 4/1</u>	<u>none</u>	<u>silty loam</u>

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____
flat _____ undulating X Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

Ground Surface Inundated _____ inches.
Soil Saturated _____

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 7/25/07
Plot ID Number: FFF 2 up

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>60</u>
2	H S/S T V		
3	H S/S T V		
4 <u>striped maple</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>30</u>
5 <u>hobblebush</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>40</u>
6 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u>
7 <u>yellow birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>10</u>
8	H S/S T V		
9	H S/S T V		
10 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>10</u>
11 <u>whorled asar</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>5</u>
12 <u>goldthread</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>5</u>
13 <u>Sarsaparilla</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>5</u>
14 <u>can mayflower</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>5</u>
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 60%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Stebbins/Trembath/Pippin

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: emergent/shrub in upland forest

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: GGG 1-10

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: GGG 2 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-6</u>	<u>A</u>	<u>10YR 2/1</u>	<u>—</u>	<u>silt loam</u>
<u>6-16+</u>	<u>B</u>	<u>10YR 6/2</u>	<u>—</u>	<u>silt sand</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☒ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave ☒ flat ☐ convex ☐ undulating ☐ sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

- ☒ Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☒ Aerial Photographs

Field Observations

ND Ground Surface Inundated _____ inches.
yes Soil Saturated.

Depth to Free Water 716 inches.

Depth to Saturated Soils 8 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches.
☒ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: 666 Z wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>winterberry</u>	H <u>S/S</u> T V	<u>FACW+</u>	<u>30</u>
2 _____	H S/S T V	_____	_____
3 _____	H S/S T V	_____	_____
4 <u>wool grass</u>	<u>H</u> S/S T V	<u>FACW+</u>	<u>30</u>
5 <u>cinnamon fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>20</u>
6 <u>fringed sedge</u>	<u>H</u> S/S T V	<u>OBL</u>	<u>10</u>
7 <u>Bidens cernua</u>	<u>H</u> S/S T V	<u>FACW+</u>	<u>10</u>
8 <u>sphagnum</u>	<u>H</u> S/S T V	<u>FACW/OBL</u>	<u>30</u>
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/26/07
Investigator: Subbion/Trembath/Pirapin Town: Martinsburg
County: Lewis
State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No Community: forested
Is the site significantly disturbed? ☐ Yes ☒ No Transect/Flag ID: G66
Is the area a potential Problem Area? ☐ Yes ☒ No Plot ID: G66 2 upl

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD
Subgroup: _____ Confirm Mapped Type: ☐ Yes ☐ No
Depth Horizon Matrix color Mottle color/abundance Texture, Structure, Other
0-5 0 N/A — organic matter
5-16+ B 10YR 6/2 — Silt Sand.

Hydric Soil Indicators:

☐ Histisols ☐ Concretions ☐ Listed on Local Hydric Soils List
☐ Histic Epipedon ☐ High Org. Content in Surface Layer of Sandy Soils ☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor ☐ Organic Streaking in Sandy Soils ☐ Other (Explain in Remarks)
☐ Reducing Conditions ☐ Gleyed or Low Chroma color ☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat _____ undulating X

Remarks:

HYDROLOGY

X Recorded Data (Describe in Remarks)
_____ No Recorded Data Available
_____ Stream, Lake or Tide Gauge
X Aerial Photographs

Field Observations

_____ Ground Surface Inundated _____ inches.
_____ Soil Saturated.
Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: GGG 2 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Black spruce</u>	H S/S <u>(T)</u> V	<u>FACW-</u>	<u>20</u>
2 <u>red maple</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>30</u>
3	H S/S T V		
4	H S/S T V		
5 <u>red maple</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>50</u>
6 <u>black cherry</u>	H <u>(S/S)</u> T V	<u>FACU</u>	<u>20</u>
7 <u>yellow birch</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>30</u>
8 <u>blackberry</u>	H <u>(S/S)</u> T V	<u>FACU-</u>	<u>40</u>
9 <u>hobblebush</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>20</u>
10	H S/S T V		
11 <u>wood fern</u>	<u>(H)</u> S/S T V	<u>FACU</u>	<u>20</u>
12 <u>Indian cucumber</u>	<u>(H)</u> S/S T V	<u>UPL</u>	<u>5</u>
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 60%

Percent of Dominant Species OBL, FACW 20%

50/20 Rule Applied? (Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or (No)

Hydric Soils Present? Yes or (No)

Wetland Hydrology Present? Yes or (No)

Is this Sampling Point Within a Wetland? Yes or (No)

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/26/07
Investigator: Pipon/Trenbark/Skibbins Town: Martinsburg
County: Lewis
State: NY
Do normal circumstances exist on site? ☒ Yes ☐ No Community: shrub/forested wet
Is the site significantly disturbed? Yes ☒ No Transect/Flag ID: HHH
Is the area a potential Problem Area? Yes ☒ No Plot ID: HHH 7 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD
Subgroup: _____ Confirm Mapped Type: Yes No
Depth Horizon Matrix color Mottle color/abundance Texture, Structure, Other
0-10" 0 organic muck - spinous mosses
10" rocky layer rejects auger

Hydric Soil Indicators:

☐ Histisols ☐ Concretions ☐ Listed on Local Hydric Soils List
☐ Histic Epipedon ☐ High Org. Content in Surface Layer of Sandy Soils ☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor ☐ Organic Streaking in Sandy Soils ☐ Other (Explain in Remarks)
☐ Reducing Conditions ☐ Gleyed or Low Chroma color ☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat ☒ undulating _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
NO Ground Surface Inundated NA inches.
YES Soil Saturated.
Depth to Free Water 6" inches.
Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☒ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 2/26/07
Plot ID Number: HHH 7 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>40</u>
2 <u>black spruce</u>	H S/S <u>(T)</u> V	<u>FACW-</u>	<u>20</u>
3 <u>yellow birch</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>10</u>
4 <u>balsam</u>	H S/S <u>(T)</u> V	<u>FAC</u>	<u>10</u>
5	H S/S T V		
6 <u>spotted alder</u>	H <u>(S/S)</u> T V	<u>FACW+</u>	<u>70</u>
7 <u>red maple</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>20</u>
8 <u>y. birch</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>20</u>
9 <u>hemlock</u>	H <u>(S/S)</u> T V	<u>FAC</u>	<u>10</u>
10	H S/S T V		
11 <u>sensitive fern</u>	<u>(H)</u> S/S T V	<u>FACW</u>	<u>30</u>
12 <u>cinnamon fern</u>	<u>(H)</u> S/S T V	<u>FACW</u>	<u>40</u>
13 <u>sphagnum</u>	<u>(H)</u> S/S T V	<u>FACW/OBL</u>	<u>60</u>
14 <u>mad dog skullcap</u>	<u>(H)</u> S/S T V	<u>FACW+</u>	<u>5</u>
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 83%

50/20 Rule Applied?

(Yes) No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? (Yes) or No

Hydric Soils Present? (Yes) or No

Wetland Hydrology Present? (Yes) or No

Is this Sampling Point Within a Wetland? (Yes) or No

Hydrologic Connectivity to Off-site Wetlands? (Yes) or No

Is this Wetland Potentially Isolated? (Yes) or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/26/07
Investigator: Pippin/Tremblay/Stebbins Town: Martinsburg
County: Lewis
State: NY
Do normal circumstances exist on site? Yes ☒ No
Is the site significantly disturbed? Yes ☒ No
Is the area a potential Problem Area? Yes ☒ No
Community: forested upland
Transect/Flag ID: HHH
Plot ID: HHH 7 UPL

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD
Subgroup: _____ Confirm Mapped Type: Yes No
Depth Horizon Matrix color Mottle color/abundance Texture, Structure, Other
0-4" Organic duff
4" + Rocky layer rejects auger

Hydric Soil Indicators:

☐ Histisols ☐ Concretions ☐ Listed on Local Hydric Soils List
☐ Histic Epipedon ☐ High Org. Content in Surface Layer of Sandy Soils ☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor ☐ Organic Streaking in Sandy Soils ☐ Other (Explain in Remarks)
☐ Reducing Conditions ☐ Gleyed or Low Chroma color ☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat _____ undulating X

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: HHH 7 upl

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u>
2 <u>beech</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>30</u>
3 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>30</u>
4 <u>black cherry</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>30</u>
5	H S/S T V		
6 <u>y. birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u>
7 <u>striped maple</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>30</u>
8 <u>hobblebush</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
9 <u>black cherry</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>20</u>
10 <u>lowbush blueberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>10</u>
11 <u>large leaved fern</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>40</u>
12 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>25</u>
13 <u>blue bead lily</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>5</u>
14 <u>gold thread</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>10</u>
15 <u>shining club moss</u>	<u>H</u> S/S T V	<u>FACW-</u>	<u>5</u>
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 38%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project Date: 9/26/07
Investigator: Trombain/Piper/Stebbins Town: Martinsburg
County: Lewis
State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PFD/PSS

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: HHH

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: HHH 22 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>O</u>	<u>Organic muck</u>		
<u>8"+</u>		<u>Sandy layer</u>	<u>Roots</u>	<u>drain</u>

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position:

concave ☒ flat ☐ convex ☒ undulating ☐

sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☒ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: HHH 22 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u> -
2 <u>black spruce</u>	H S/S <u>T</u> V	<u>FACW-</u>	<u>20</u> -
3 <u>y. birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u> -
4	H S/S T V		
5 <u>speckled alder</u>	H <u>S/S</u> T V	<u>FACW+</u>	<u>80</u> -
6 <u>Ribes sp.</u>	H <u>S/S</u> T V	<u>FAC/FACW</u>	<u>30</u> -
7	H S/S T V		
8 <u>sensitive fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>60</u> -
9 <u>jewelweed</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>20</u> -
10 <u>cinnamon fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>20</u> -
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 63%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Trembach / Papp / Stubbins

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: forested up

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: HHH

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: HHH 22 UPL

SOILS

Series and Phase:

Drainage Class: WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-12"	D	organic	duff	
12"-14"	A	10YR 2/1	none	silt loam
14"+		rocky	layer	mixts auger

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☒ undulating ☐

sloping ☐ Approximate slope:

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated inches.

☐ Soil Saturated.

Depth to Free Water inches.

Depth to Saturated Soils inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☐ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: H/H 22 UPL

VEGETATION

Dominant Plant Species:		Stratum: (circle one)				Indicator:	% Cover:
1	<u>red maple</u>	H	S/S	<u>T</u>	V	<u>FAC</u>	<u>40</u>
2	<u>black spruce</u>	H	S/S	<u>T</u>	V	<u>FACW-</u>	<u>20</u>
3	<u>yellow birch</u>	H	S/S	<u>T</u>	V	<u>FAC</u>	<u>20</u>
4		H	S/S	T	V		
5	<u>striped maple</u>	H	<u>S/S</u>	T	V	<u>FACU</u>	<u>10</u>
6	<u>beech</u>	H	<u>S/S</u>	T	V	<u>FACU</u>	<u>40</u>
7	<u>hobblebush</u>	H	<u>S/S</u>	T	V	<u>FAC</u>	<u>30</u>
8		H	S/S	T	V		
9	<u>sarsaparilla</u>	<u>H</u>	S/S	T	V	<u>FACU</u>	<u>5</u>
10	<u>wood fern</u>	<u>H</u>	S/S	T	V	<u>FACU</u>	<u>20</u>
11	<u>blue bradleya</u>	<u>H</u>	S/S	T	V	<u>FAC</u>	<u>10</u>
12	<u>oxalis mont</u>	<u>H</u>	S/S	T	V	<u>FAC-</u>	<u>5</u>
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 71%

Percent of Dominant Species OBL, FACW 14%

50/20 Rule Applied?

Yes No

Remarks:

St. flower 25%
dalibarda
bunchberry

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025

Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Town: Martinsburg

Investigator: Stebbins/Pippin/Trembath

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed?

Yes ☐ No ☒

Transect/Flag ID: HHH

Is the area a potential Problem Area?

Yes ☐ No ☒

Plot ID: HHH 44 wet

SOILS

Series and Phase: _____

Drainage Class: _____

WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-6"	O	organic muck		
6"-12"	A	2.5Y 6/1	2.5Y 5/1	silty clay
12"+	B	2.5Y 6/3	2.5Y 5/1	silty loam

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave _____

convex _____

sloping _____

Approximate slope: _____

flat ☒

undulating _____

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

0 Ground Surface Inundated N/A inches.

9PS Soil Saturated.

Depth to Free Water 3-10 inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated

☒ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☒ Oxidized Root Channels in upper 12 inches

☐ Water-Stained leaves

☐ Local Soil Survey

☒ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/22
Plot ID Number: HH#44wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Fringed sedge</u>	☒ H S/S T V	<u>DBL</u>	<u>30</u>
2 <u>cattails</u>	☒ H S/S T V	<u>OBL</u>	<u>20</u>
3 <u>willow herb</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
4 <u>bidens cornata</u>	☒ H S/S T V	<u>FACW+</u>	<u>20</u>
5 <u>Soft rush</u>	☒ H S/S T V	<u>FACW+</u>	<u>10</u>
6 <u>bidens cernua</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
7 <u>tough leaved gold</u>	☒ H S/S T V	<u>OBL</u>	<u>20</u>
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes ☐ No

Is this Wetland Potentially Isolated? ☐ Yes ☒ No

Remarks:

Photo Reference Number:

HYDROLOGY		Field Observations	
_____ Recorded Data (Describe in Remarks)		_____ Ground Surface Inundated _____ inches.	
_____ No Recorded Data Available		_____ Soil Saturated.	
_____ Stream, Lake or Tide Gauge			
_____ Aerial Photographs			
		Depth to Free Water _____ inches.	
		Depth to Saturated Soils _____ inches.	
Wetland Hydrology Indicators:			
Primary Indicators		Secondary Indicators (2 or more required)	
_____ Inundated		_____ Oxidized Root Channels in upper 12 inches	
_____ Saturated in upper 12 inches.		_____ Water-Stained leaves	
_____ Water Marks		_____ Local Soil Survey	
_____ Drift Lines		_____ Morphological Plant Adaptations	
_____ Sediment Deposits		_____ Other (Explain in Remarks)	
_____ Drainage Patterns in Wetland			
Remarks:			
no wetland hydrology			

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: HHH 44 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>black cherry</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>40</u> -
2 <u>beech</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>30</u> -
3 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u> -
4	H S/S T V		
5 <u>sugar maple</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>10</u>
6 <u>yellow birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
7 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>40</u> -
8 <u>blackberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>20</u>
9 <u>striped maple</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>20</u>
10 <u>bayberry</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>70</u> -
11 <u>Canada mayflower</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>5</u>
12 <u>Saxifraga</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>5</u>
13 <u>blueberry</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>5</u>
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 40%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/87

Investigator: Pippin/Trembore/Skibbs

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PEM (on upland forest)

Is the site significantly disturbed? Yes ☐ No ☒

Transect/Flag ID: III

Is the area a potential Problem Area? Yes ☐ No ☒

Plot ID: III / wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>O</u>	<u>organic</u>	<u>much</u>	
<u>8-16"</u>	<u>A</u>	<u>10YR 2/1</u>	<u>10YR 5/8 - some</u>	<u>silt loam</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex _____ sloping _____ Approximate slope: _____
flat ☒ undulating _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
NO Ground Surface Inundated N/A inches.
X Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: III / wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Cinnamon Fern</u>	☒ H S/S T V	<u>FACW</u>	<u>10</u>
2 <u>Royal Fern</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
3 <u>Lycopodium umbr.</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
4 <u>Wetland Carex</u>	☒ H S/S T V	<u>FACW/OBL</u>	<u>20</u>
5 <u>Wetland grass</u>	☒ H S/S T V	<u>FACW/OBL</u>	<u>40</u>
6 <u>Sphagnum</u>	☒ H S/S T V	<u>FACW/OBL</u>	<u>20</u>
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes ☐ No

Is this Wetland Potentially Isolated? ☒ Yes ☐ No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/24/07

Investigator: Pippin/Trembath/Sebbins

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: forested upland

Is the site significantly disturbed?

Yes ☐ No ☒

Transect/Flag ID: III

Is the area a potential Problem Area?

Yes ☐ No ☒

Plot ID: III / up

SOILS

Series and Phase:

Drainage Class:

WD MWD SPD PD VPD

Subgroup:

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-6"	O	organic	duff	
6-8"	A	10YR 2/1	—	silty loam
B+	B	10YR 6/2	—	sandy silt

Hydric Soil Indicators:

☐ Histisols

☐ Concretions

☐ Listed on Local Hydric Soils List

☐ Histic Epipedon

☐ High Org. Content in Surface Layer of Sandy Soils

☐ Listed as Potential for Hydric Inclusions Only

☐ Sulfidic Odor

☐ Organic Streaking in Sandy Soils

☐ Other (Explain in Remarks)

☐ Reducing Conditions

☐ Gleyed or Low Chroma color

☐ Aquic Moisture Regime

Landscape position:

concave

convex

sloping

Approximate slope:

flat

undulating

Remarks:

HYDROLOGY

☐ Recorded Data (Describe in Remarks)

☐ No Recorded Data Available

☐ Stream, Lake or Tide Gauge

☐ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.

☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated

☐ Saturated in upper 12 inches.

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposits

☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches

☐ Water-Stained leaves

☐ Local Soil Survey

☐ Morphological Plant Adaptations

☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: III 1 up

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>60 20</u>
2 _____	H S/S T V	_____	_____
3 <u>Canada maple</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>10</u>
4 <u>WDOA fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>20</u>
5 _____	H S/S T V	_____	_____
6 _____	H S/S T V	_____	_____
7 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>40</u>
8 <u>yellow birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>40</u>
9 <u>black blueberry</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>10</u>
10 <u>striped maple</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>10</u>
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 80%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 7/26/07

Investigator: Pippin/Travis and Stoblin

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? Yes ☒ No

Community: PEM

Is the site significantly disturbed? ☒ Yes No

Transect/Flag ID: JJJ 1-8

Is the area a potential Problem Area? Yes ☒ No

Plot ID: JJJ 3 wet

SOILS

Series and Phase: _____

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-4"	A	10YR 2/1	—	silt loam
4"-8"	B	10YR 3/2	—	silt loam
8"	Rocky layer reject auger			

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave _____ convex _____
flat ☒ undulating _____

sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☒ Saturated in upper 12 inches.
- ☒ Water Marks
- ☐ Drift Lines
- ☒ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☒ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: JTT 3 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 Soft rush	☒ H S/S T V	FACW+	15
2 sedge fern	☒ H S/S T V	FACW	20
3 Jewelweed	☒ H S/S T V	FACW	20
4 Willowherb	☒ H S/S T V	OBL	10
5 Cattails	☒ H S/S T V	OBL	30
6 Slough fern	☒ H S/S T V	FACW	30
7 Wood grass	☒ H S/S T V	FACW+	20
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes ☐ No

Is this Wetland Potentially Isolated? ☐ Yes ☐ No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Pippin / Tremblay / Stetson

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: forested upland

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: JTT

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: JTT 3 upl

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-3"</u>	<u>O</u>			
<u>3-5"</u>	<u>A</u>	<u>10YR 2/1</u>	<u>—</u>	<u>silty loam</u>
<u>5-16"</u>	<u>B</u>	<u>10YR 3/2</u>	<u>—</u>	<u>silty loam</u>

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave _____ convex _____ sloping _____
flat _____ undulating X Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.
Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/02
Plot ID Number: TTT 3 4pt

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>Sugar maple</u>	H S/S <u>T</u> V	<u>FACU-</u>	<u>50</u>
2 <u>Yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
3 _____	H S/S T V	_____	_____
4 <u>beech</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>60</u>
5 <u>Sugar maple</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>40</u>
6 <u>hophornbeam</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u>
7 _____	H S/S T V	_____	_____
8 <u>Waxscented fern</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>40</u>
9 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>20</u>
10 <u>foamflower</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>10</u>
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 29%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No No

Hydric Soils Present? Yes or No No

Wetland Hydrology Present? Yes or No No

Is this Sampling Point Within a Wetland? Yes or No No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Pippin/Stebbins/Trembath

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PSS/PFO

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: KKK

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: KKK 2 WCT

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-16"</u>	<u>0</u>	<u>organic muck</u>	<u>grass</u>	

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex _____ sloping _____
flat ☒ undulating _____ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
- ☒ Water-Stained leaves
- ☐ Local Soil Survey
- ☒ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/20/07
Plot ID Number: KKK 2 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20%</u>
2 _____	H S/S T V	_____	_____
3 <u>shrubby willow</u>	H <u>S/S</u> T V	<u>FACW/OBL</u>	<u>40</u>
4 <u>alders</u>	H <u>S/S</u> T V	<u>FACW+</u>	<u>60</u>
5 <u>yellow birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
6 _____	H S/S T V	_____	_____
7 _____	H S/S T V	_____	_____
8 <u>sensitive fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>40%</u>
9 <u>glyceria</u>	<u>H</u> S/S T V	<u>OBL</u>	<u>50%</u>
10 <u>lady fern</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>10%</u>
11 <u>cinnamon fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>25%</u>
12 <u>flat topped aske</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>20%</u>
13 <u>de pye weed</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>10%</u>
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 80%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07

Investigator: Pippin/Skelbins/Trembath

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: forested upland

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: KKK

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: KKK 2 4/L

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: Yes No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-4"</u>	<u>0</u>	<u>organic</u>	<u>duff</u>	
<u>4"+</u>		<u>rocky</u>	<u>tan/r</u>	<u>riplets</u>
		<u>angular</u>		

Hydric Soil Indicators:

☐ Histisols	☐ Concretions	☐ Listed on Local Hydric Soils List
☐ Histic Epipedon	☐ High Org. Content in Surface Layer of Sandy Soils	☐ Listed as Potential for Hydric Inclusions Only
☐ Sulfidic Odor	☐ Organic Streaking in Sandy Soils	☐ Other (Explain in Remarks)
☐ Reducing Conditions	☐ Gleyed or Low Chroma color	☐ Aquic Moisture Regime

Landscape position: concave ☐ convex ☐ sloping ☐ flat ☐ undulating ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☒ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators
☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)
☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: R1K1R2UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>beech</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>40</u>
2 <u>Sug maple</u>	H S/S <u>T</u> V	<u>FACU-</u>	<u>30</u>
3 <u>yellow birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u>
4	H S/S T V		
5	H S/S T V		
6 <u>beech</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>30</u>
7 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>30</u>
8 <u>striped maple</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>20</u>
9	H S/S T V		
10	H S/S T V		
11 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>25</u>
12 <u>blue head lily</u>	<u>H</u> S/S T V	<u>FAC</u>	<u>5</u>
13 <u>ray sanded con</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>25</u>
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 25%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/02

Investigator: Pippin/Trembath/Stebbins

Town: Mansfield

County: Lewis

State: NY

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PFO

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: KKK

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: KKK 12 wet

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>O</u>	<u>organic muck</u>		
<u>8-16"</u>	<u>A</u>	<u>10yr 2/1</u>	<u>—</u>	<u>silty loam</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave ☐ flat ☒ convex ☐ undulating ☐ sloping ☐ Approximate slope: _____

Remarks:

HYDROLOGY

- Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☐ Aerial Photographs

Field Observations

NO Ground Surface Inundated N/A inches.

YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☒ Inundated
- ☒ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☒ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Plot ID Number: KKK 12 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u>
2 <u>y. birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u>
3	H S/S T V		
4	H S/S T V		
5 <u>red maple</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>20</u>
6 <u>black spruce</u>	H <u>S/S</u> T V	<u>FACW-</u>	<u>20</u>
7 <u>y. birch</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>10</u>
8	H S/S T V		
9	H S/S T V		
10 <u>cinnamon fern</u>	<u>H</u> S/S T V	<u>FACW</u>	<u>40</u>
11 <u>fringed sedge</u>	<u>H</u> S/S T V	<u>DBL</u>	<u>20</u>
12 <u>Lycopodium uniflorum</u>	<u>H</u> S/S T V	<u>DBL</u>	<u>20</u>
13 <u>Sphagnum</u>	<u>H</u> S/S T V	<u>FACW/DBL</u>	<u>40</u>
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 43%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/26/07
Town: Mannsbury
County: Lewis
State: NY

Investigator: Pippin/Trembly/Stebbins

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: Forested UPL

Is the site significantly disturbed? ☐ Yes ☒ No

Transect/Flag ID: KKK

Is the area a potential Problem Area? ☐ Yes ☒ No

Plot ID: KKK 12 UPL

SOILS

Series and Phase: _____ Drainage Class: WD MWD SPD PD VPD

Subgroup: _____ Confirm Mapped Type: ☐ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>D</u>	<u>organic duff</u>		
<u>8-11"</u>	<u>A</u>	<u>10YR 2/1</u>	<u>—</u>	<u>silty loam</u>
<u>11-16"</u>	<u>B</u>	<u>10YR 6/2</u>	<u>—</u>	<u>sandy silt</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave _____ convex _____ sloping _____
flat _____ undulating X Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☐ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

no wetland hydro

Project Number: **07025**
Applicant: **Roaring Brook Wind Power Project**

Date: 9/26/07
Plot ID Number: K14K 12 UP

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>beech</u>	H S/S <u>T</u> V	<u>FACU</u>	<u>70</u>
2 <u>Mad maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u>
3	H S/S T V		
4 <u>beech</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>60</u>
5 <u>blackberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>20</u>
6	H S/S T V		
7 <u>wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>30%</u>
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 20%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

puttballs

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No No

Hydric Soils Present? Yes or No No

Wetland Hydrology Present? Yes or No No

Is this Sampling Point Within a Wetland? Yes or No No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Town: Martinsburg
County: Lewis
State: NY

Investigator: Trombador/Pippin/Schubert

Do normal circumstances exist on site? ☒ Yes ☐ No

Community: PEM

Is the site significantly disturbed? ☒ Yes ☐ No

Transect/Flag ID: LLL 1-B

Is the area a potential Problem Area? ☒ Yes ☐ No

Plot ID: LLL 3 wet

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-8"</u>	<u>D</u>	<u>organic</u>	<u>much</u>	
<u>8-16"</u>	<u>A</u>	<u>10YR 3/2</u>	<u>—</u>	<u>silty loam</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position: concave ☐ convex ☐ sloping ☐ flat ☐ undulating ☐ Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations
NO Ground Surface Inundated N/A inches.
YES Soil Saturated.

Depth to Free Water N/A inches.

Depth to Saturated Soils 0 inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☒ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☒ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Plot ID Number: U3 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>fringed sedge</u>	☒ H S/S T V	<u>OBL</u>	<u>10</u>
2 <u>wool grass</u>	☒ H S/S T V	<u>FACW+</u>	<u>30</u>
3 <u>wetland grass</u>	☒ H S/S T V	<u>FACW/OBL</u>	<u>70</u>
4 <u>cinnamon fern</u>	☒ H S/S T V	<u>FACW</u>	<u>10</u>
5 <u>soft rush</u>	☒ H S/S T V	<u>FACW+</u>	<u>10</u>
6	H S/S T V		
7	H S/S T V		
8	H S/S T V		
9	H S/S T V		
10	H S/S T V		
11	H S/S T V		
12	H S/S T V		
13	H S/S T V		
14	H S/S T V		
15	H S/S T V		
16	H S/S T V		

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? ☒ Yes ☐ No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? ☒ Yes ☐ No

Hydric Soils Present? ☒ Yes ☐ No

Wetland Hydrology Present? ☒ Yes ☐ No

Is this Sampling Point Within a Wetland? ☒ Yes ☐ No

Hydrologic Connectivity to Off-site Wetlands? ☒ Yes ☐ No

Is this Wetland Potentially Isolated? ☒ Yes ☐ No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 9/27/07

Investigator: Trembath/Pippin/Stebbins

Town: Manhasset Neck

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: Forested upland

Is the site significantly disturbed?

☒ Yes ☐ No

Transect/Flag ID: UL 1-13

Is the area a potential Problem Area?

☒ Yes ☐ No

Plot ID: UL 3 UPL

SOILS

Series and Phase: (EdB) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-6"	O		organic detrit	
6-8"	A	10YR 7/1		silty loam
8" +			reject larger rocky layers	

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfidic Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave

flat

convex

undulating ☒

sloping

Approximate slope: _____

Remarks:

HYDROLOGY

Recorded Data (Describe in Remarks)

- ☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☐ Aerial Photographs

Field Observations

- ☐ Ground Surface Inundated _____ inches.
☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
☐ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
☐ Water-Stained leaves
☐ Local Soil Survey
☐ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 9/27/07
Plot ID Number: UL3 UPL

VEGETATION

Dominant Plant Species:		Stratum: (circle one)				Indicator:	% Cover:
1	<u>Sug maple</u>	H	S/S	<u>T</u>	V	<u>FACU-</u>	<u>30</u>
2	<u>y. birch</u>	H	S/S	<u>T</u>	V	<u>FAC</u>	<u>20</u>
3		H	S/S	T	V		
4	<u>beech</u>	H	<u>S/S</u>	T	V	<u>FACU</u>	<u>30</u>
5	<u>red maple</u>	H	<u>S/S</u>	T	V	<u>FAC</u>	<u>30</u>
6	<u>y. birch</u>	H	<u>S/S</u>	T	V	<u>FAC</u>	<u>20</u>
7	<u>hobblebush</u>	H	<u>S/S</u>	T	V	<u>FAC</u>	<u>10</u>
8	<u>raspberry</u>	H	<u>S/S</u>	T	V	<u>FAC-</u>	<u>20</u>
9		H	S/S	T	V		
10	<u>wood fern</u>	<u>H</u>	S/S	T	V	<u>FACU</u>	<u>60</u>
11	<u>translucent fern</u>	<u>H</u>	S/S	T	V	<u>UPL</u>	<u>20</u>
12	<u>clam mayflower</u>	<u>H</u>	S/S	T	V	<u>FAC-</u>	<u>5</u>
13		H	S/S	T	V		
14		H	S/S	T	V		
15		H	S/S	T	V		
16		H	S/S	T	V		

Percent of Dominant Species OBL, FACW, FAC 33%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 10/4/07

Investigator: Stebbins/Enders/Schwab

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

☒ Yes ☐ No

Community: PSS/PEM

Is the site significantly disturbed?

☐ Yes ☒ No

Transect/Flag ID: mmm 1-6

Is the area a potential Problem Area?

☐ Yes ☒ No

Plot ID: mmm 2 wet

SOILS

Series and Phase: (Edb) Empeyville stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
0-4	A	10YR 3/1		Silty loam
4-8	B	10YR 7/2	10YR 3/2, 10YR 4/2 abun.	Silty clay
8+	C	10YR 4/4		Silty clay

Hydric Soil Indicators:

☐ Histisols
☐ Histic Epipedon
☐ Sulfidic Odor
☐ Reducing Conditions

☐ Concretions
☐ High Org. Content in Surface Layer of Sandy Soils
☐ Organic Streaking in Sandy Soils
☒ Gleyed or Low Chroma color

☐ Listed on Local Hydric Soils List
☐ Listed as Potential for Hydric Inclusions Only
☐ Other (Explain in Remarks)
☐ Aquic Moisture Regime

Landscape position:

concave ☒ flat ☐ convex ☐ undulating ☐

sloping _____ Approximate slope: _____

Remarks:

HYDROLOGY

☒ Recorded Data (Describe in Remarks)
☐ No Recorded Data Available
☐ Stream, Lake or Tide Gauge
☒ Aerial Photographs

Field Observations

Ground Surface Inundated _____ inches.
Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

☐ Inundated
☒ Saturated in upper 12 inches.
☐ Water Marks
☐ Drift Lines
☐ Sediment Deposits
☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

☒ Oxidized Root Channels in upper 12 inches
☒ Water-Stained leaves
☐ Local Soil Survey
☒ Morphological Plant Adaptations
☐ Other (Explain in Remarks)

Remarks:

hummocky

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 10/4/07
Plot ID Number: mmm-2 wet

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>winterberry</u>	H <u>S/S</u> T V	<u>FACW+</u>	<u>60</u>
2 <u>mountain holly</u>	H <u>S/S</u> T V	<u>OBL</u>	<u>5</u>
3 _____	H S/S T V	_____	_____
4 <u>royal fern</u>	<u>H</u> S/S T V	<u>OBL</u>	<u>75</u>
5 <u>sphagnum</u>	<u>H</u> S/S T V	<u>FACW/OBL</u>	<u>50</u>
6 <u>soft rush</u>	<u>H</u> S/S T V	<u>FACW+</u>	<u>15</u>
7 <u>wool grass</u>	<u>H</u> S/S T V	<u>FACW+</u>	<u>20</u>
8 _____	H S/S T V	_____	_____
9 _____	H S/S T V	_____	_____
10 _____	H S/S T V	_____	_____
11 _____	H S/S T V	_____	_____
12 _____	H S/S T V	_____	_____
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 100%

Percent of Dominant Species OBL, FACW 100%

50/20 Rule Applied? Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number:

DATA FORM
ROUTINE WETLAND DETERMINATION
1987 COE Wetlands Delineation Manual

Project No: 07025 Applicant: Roaring Brook Wind Power Project

Date: 10/4/07

Investigator: Stebbins/Enders/Schwarz

Town: Martinsburg

County: Lewis

State: NY

Do normal circumstances exist on site?

Yes ☒ No ☐

Community: logged hardwood forest

Is the site significantly disturbed?

Yes ☐ No ☒

Transect/Flag ID: MMM

Is the area a potential Problem Area?

Yes ☐ No ☒

Plot ID: MMM-2 UPL

SOILS

Series and Phase: (EdB) Empeville Stony loam

Drainage Class: WD MWD SPD PD VPD

Subgroup: _____

Confirm Mapped Type: ☒ Yes ☐ No

Depth	Horizon	Matrix color	Mottle color/abundance	Texture, Structure, Other
<u>0-4</u>	<u>D</u>			<u>Organic</u>
<u>4+</u>		<u>rejects</u>	<u>anger</u>	<u>Rocky substrate</u>

Hydric Soil Indicators:

- | | | |
|--|--|---|
| ☐ Histisols | ☐ Concretions | ☐ Listed on Local Hydric Soils List |
| ☐ Histic Epipedon | ☐ High Org. Content in Surface Layer of Sandy Soils | ☐ Listed as Potential for Hydric Inclusions Only |
| ☐ Sulfid Odor | ☐ Organic Streaking in Sandy Soils | ☐ Other (Explain in Remarks) |
| ☐ Reducing Conditions | ☐ Gleyed or Low Chroma color | ☐ Aquic Moisture Regime |

Landscape position:

concave ☐ flat ☐ convex ☐ undulating ☐

sloping ☒ Approximate slope: 3%

Remarks:

No hydric soil indicators

HYDROLOGY

- ☒ Recorded Data (Describe in Remarks)
- ☐ No Recorded Data Available
- ☐ Stream, Lake or Tide Gauge
- ☒ Aerial Photographs

Field Observations

☐ Ground Surface Inundated _____ inches.

☐ Soil Saturated.

Depth to Free Water _____ inches.

Depth to Saturated Soils _____ inches.

Wetland Hydrology Indicators:

Primary Indicators

- ☐ Inundated
- ☐ Saturated in upper 12 inches.
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposits
- ☐ Drainage Patterns in Wetland

Secondary Indicators (2 or more required)

- ☐ Oxidized Root Channels in upper 12 inches
- ☐ Water-Stained leaves
- ☐ Local Soil Survey
- ☐ Morphological Plant Adaptations
- ☐ Other (Explain in Remarks)

Remarks:

no wetland hydrology

Project Number: 07025
Applicant: Roaring Brook Wind Power Project

Date: 10/4/07
Plot ID Number: MMM 2 UPL

VEGETATION

Dominant Plant Species:	Stratum: (circle one)	Indicator:	% Cover:
1 <u>red maple</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>40</u> -
2 <u>yel. birch</u>	H S/S <u>T</u> V	<u>FAC</u>	<u>20</u> -
3 _____	H S/S T V	_____	_____
4 <u>hobblebush</u>	H <u>S/S</u> T V	<u>FAC</u>	<u>10</u>
5 <u>blackberry</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>10</u>
6 <u>beech</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>40</u> -
7 <u>black cherry</u>	H <u>S/S</u> T V	<u>FACU</u>	<u>20</u> -
8 <u>sugar maple</u>	H <u>S/S</u> T V	<u>FACU-</u>	<u>10</u>
9 _____	H S/S T V	_____	_____
10 <u>hay scented fern</u>	<u>H</u> S/S T V	<u>UPL</u>	<u>60</u> -
11 <u>int wood fern</u>	<u>H</u> S/S T V	<u>FACU</u>	<u>10</u>
12 <u>Oxalis</u>	<u>H</u> S/S T V	<u>FAC-</u>	<u>5</u>
13 _____	H S/S T V	_____	_____
14 _____	H S/S T V	_____	_____
15 _____	H S/S T V	_____	_____
16 _____	H S/S T V	_____	_____

Percent of Dominant Species OBL, FACW, FAC 40%

Percent of Dominant Species OBL, FACW 0

50/20 Rule Applied?

Yes No

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes or No

Hydric Soils Present? Yes or No

Wetland Hydrology Present? Yes or No

Is this Sampling Point Within a Wetland? Yes or No

Hydrologic Connectivity to Off-site Wetlands? Yes or No

Is this Wetland Potentially Isolated? Yes or No

Remarks:

Photo Reference Number: