



Proposed Condition

FIGURE SHPO-2



Photo Simulation
Hillsborough Lower Village Historic District
Town of Hillsborough



Proposed turbines are screened by existing foreground vegetation.

Proposed Condition - Annotated

FIGURE SHPO-2

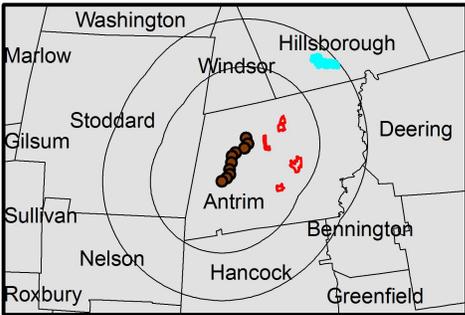
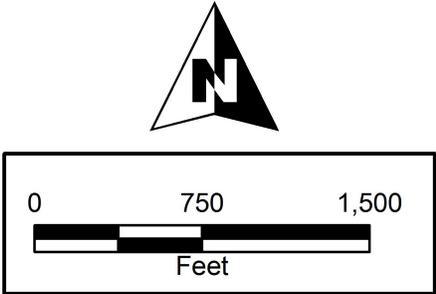


Photo Simulation
Hillsborough Lower Village Historic District
Town of Hillsborough

Hillsborough Lower Village Historic District Viewshed Map



-  AWE Eligible Resource
-  SHPO Photosim Point
-  Project Visibility



**HISTORIC PROPERTY/PROPERTIES AFFECTED TABLE
RESULTS OF EFFECT EVALUATION FOR
Pine Haven**

Significance (including Criteria): Pine Haven was determined eligible for listing in the National Register of Historic Places (National Register) and New Hampshire State Register of Historic Places (State Register) in 2012 under Criterion A in the area of Entertainment/Recreation for its association with automobile tourism. The property contains a collection of tourist cabins established in 1939 as “Pine Haven.” The property as a whole retains integrity of location, setting, association and feeling, which conveys its association with automobile tourism. Character-defining features of the property include its proximity to Route 9, the layout and design of the cabins in relation to the roadway, and the location and setting of the cabins in relation to Route 9.

NR Boundary (description/justification): The National Register boundary consists of the property lines for tax parcels 3 and 64 on tax map 213 (2007), which comprise the historic extent of the property (see the boundary as shown on the attached Pine Haven Viewshed Map). The boundary includes the collection of tourist cabins, dwelling, barn, roadway networks, and intervening wood lots that have comprised the property since its establishment in 1939.

Individual Properties	Districts
NR SR	NR SR
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Eligible (district N/A)	<input type="checkbox"/> <input type="checkbox"/> Eligible
<input type="checkbox"/> <input type="checkbox"/> Eligible, also in district	<input type="checkbox"/> <input type="checkbox"/> Not eligible
<input type="checkbox"/> <input type="checkbox"/> Eligible, only in district	<input type="checkbox"/> <input type="checkbox"/> Listed in the NRHP
<input type="checkbox"/> <input type="checkbox"/> Listed in the NRHP	<input type="checkbox"/> <input type="checkbox"/> Not evaluated as a district
<input type="checkbox"/> <input type="checkbox"/> Not evaluated for individual eligibility	

DEFINITION OF EFFECT

An effect may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register as defined in Section 800.16(1).

EVALUATION

The characteristics that qualify Pine Haven for the National Register may be affected by the construction of the proposed project.

RECOMMENDED FINDING

The construction of the proposed project will have an *Effect* on Pine Haven because it has the potential to alter characteristics that qualify the property for inclusion in the National Register. Antrim Wind Energy is proposing to construct a total of 10 wind turbines located on the Tuttle Hill and Willard Mountain ridgelines located southwest of Pine Haven. The wind turbines have the potential to be visible from within the property’s boundaries and alter its setting, which is one of the characteristics that qualify the property for inclusion on the National Register. Pursuant to 36 CFR § 800.11(e), the Criteria of Adverse Effect must be applied.

APPLICATION OF THE CRITERIA OF ADVERSE EFFECT FOR Pine Haven

Significance (including Criteria): Pine Haven was determined eligible for listing in the National Register of Historic Places (National Register) and New Hampshire State Register of Historic Places (State Register) in 2012 under Criterion A in the area of Entertainment/Recreation for its association with automobile tourism. The property contains a collection of tourist cabins established in 1939 as “Pine Haven.” The property as a whole retains integrity of location, setting, association and feeling, which conveys its association with automobile tourism. Character-defining features of the property include its proximity to Route 9, the layout and design of the cabins in relation to the roadway, and the location and setting of the cabins in relation to Route 9.

NR Boundary (description/justification): The National Register boundary consists of the property lines for tax parcels 3 and 64 on tax map 213 (2007), which comprise the historic extent of the property (see the boundary as shown on the attached Pine Haven Viewshed Map). The boundary includes the collection of tourist cabins, dwelling, barn, roadway networks, and intervening wood lots that have comprised the property since its establishment in 1939.

Individual Properties		Districts	
NR	SR	NR	SR
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRITERIA OF ADVERSE EFFECT

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur late in time, be farther removed in distance or be cumulative.

Example of Adverse Effects, pursuant to Section 800.5(a)(2)	Evaluation
Adverse effects on historic properties include, but are not limited to:	
(i) Physical destruction of or damage to all or part of the property;	The nearest of the 10 wind turbines proposed as part of the Antrim Wind Energy project will be located approximately 1.5-miles southwest of the Pine Haven. Therefore, the proposed project will not result in the physical destruction of or damage to all or part of the property.
(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary’s Standards for the Treatment of Historic	The proposed project will not involve alteration of the property that is inconsistent with the Secretary’s Standards.

Properties (36 CFR§68) and applicable guidelines;	
(iii) Removal of the property from its historic location;	The proposed project will not involve the removal of the property from its historic location.
(iv) change of the character of the property's use or of physical features within the property's setting that contribute to its historic features;	The proposed project will not result in a change of the character of the property's use or of physical features within its setting that contribute to its significance. The proposed wind turbines will be located approximately 1.5-miles southwest of the property and will not alter the views to and from the cabin colony and Route 9 from which it derives its significance under Criterion A.
(v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;	A total of 10 wind turbines will be constructed on the Tuttle Hill and Willard Mountain ridgelines located southwest of Pine Haven. The nearest turbines to the property (turbines number 1 and 2) are located approximately 1.5 miles to the southwest (see attached Pine Haven Photosimulation Location Map). A comprehensive sound level assessment was conducted for the Antrim Wind Energy Project by Epsilon Associates, Inc. in November 2011. Sound levels due to wind turbine operation are expected to be less than 45 dBA at all residences within the project area, including historic properties. These sound levels are expected to meet previously approved noise conditions from the New Hampshire Site Evaluation Committee, the World Health Organization's 45-dBA nighttime guideline for residential locations, and the US EPA guideline of 48.6 dBA. Calculations based on the viewshed mapping prepared by Saratoga Associates indicate that the turbines may be visible from only 30.2% of the approximate 63-acre property (see attached Pine Haven Viewshed Map). The viewshed map indicates that the majority of the 30.2 % visibility of the turbines at Pine Haven is located along the southern side of Route 9, not around the grouping of tourist cabins. This area of visibility is heavily wooded and was not historically utilized by guests of Pine Haven. The remaining visibility is scattered throughout the property. A photo simulation was prepared from within the property's boundaries (See attached Figure SHPO-3, Pine Haven). In the photo simulation, the wind turbines are almost completely obscured by trees and vegetation. The trees throughout the property are a mix of deciduous and coniferous. While portions of the turbines (mainly the blades) may be visible from a small portion of Pine Haven that was historically utilized by guests, the turbines will not be visible from the majority of the property due to topography, the vegetative groundcover, presence of other buildings, and the intervening distance between the nearest turbine (1.5 miles) and the property. The construction of the turbines will not alter the viewshed to and from the cabin colony and Route 9, from which it derives its significance under Criterion A. Therefore, the project will not introduce visual, atmospheric, or audible elements that

	will not diminish the integrity of setting of Pine Haven nor alter character-defining features of the property.
(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property or religious and cultural significance to an Indian tribe or Native Hawaiian organization; and	The proposed project will not result in the neglect of the property.
(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.	The proposed project will not result in the transfer, lease, or sale of the property.
(viii) OTHER:	
RECOMMENDED FINDING	The proposed project will have <i>No Adverse Effect</i> on Pine Haven as it does not have the potential to alter, either directly or indirectly, any of the characteristics that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property and its ability to convey its significance under Criterion A.

References

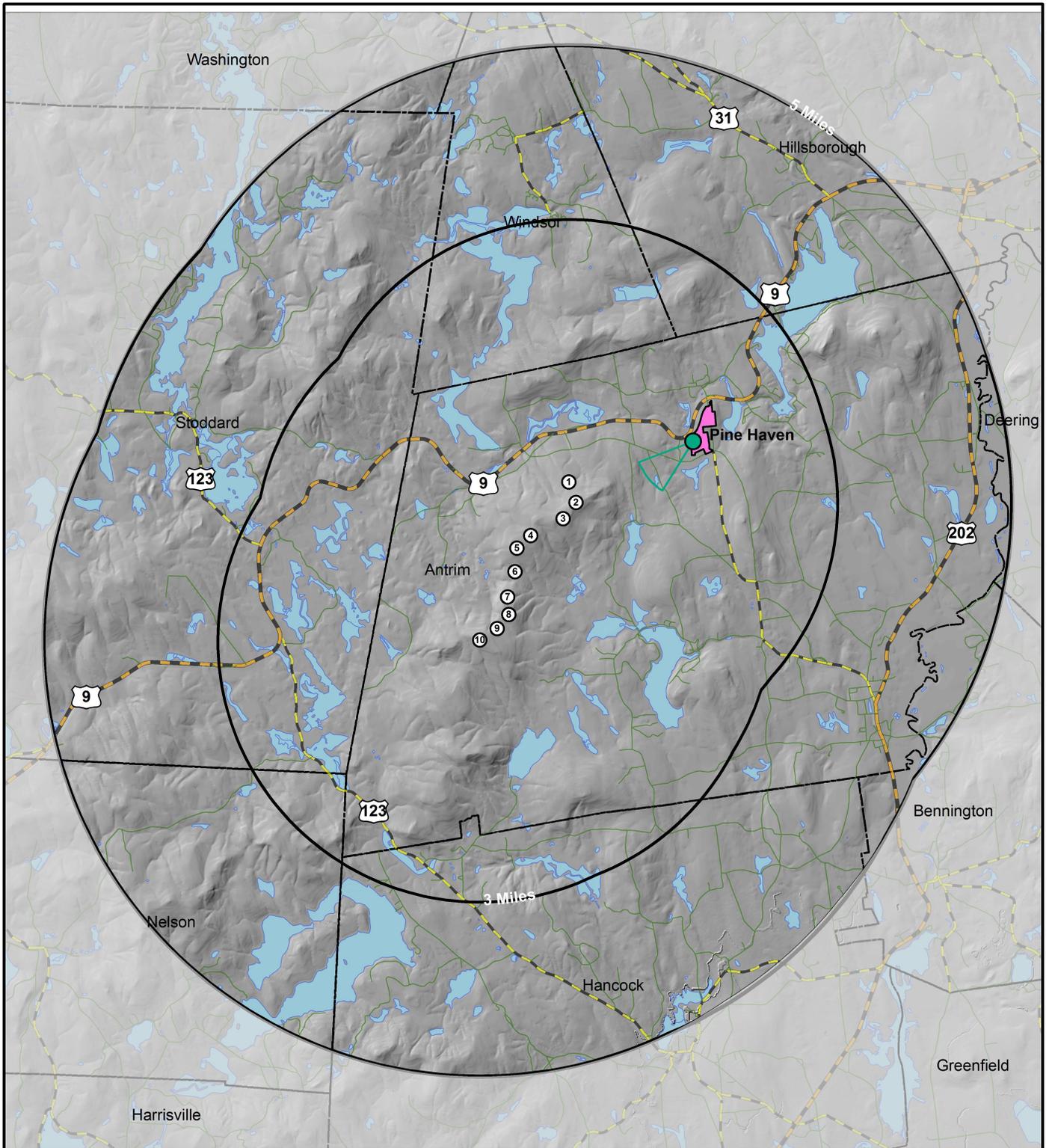
Epsilon Associates, Inc.

2011 Sound Level Assessment Report, Antrim Wind Energy Project, Antrim, New Hampshire. Epsilon Associates, Inc., Maynard, Massachusetts.

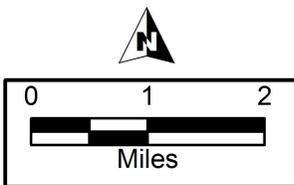
Saratoga Associates

2011 Antrim Wind Energy Project Visual Impact Analysis. Saratoga Associates; Saratoga Springs, NY.

Pine Haven Historic District Photosimulation Location Map



-  Towns
-  AWE Eligible Resource
-  Proposed Turbine
-  SHPO Photosim Point
-  Photo Direction





Existing Condition

FIGURE SHPO-3

Photo Simulation
Pine Haven
Town of Antrim





Proposed Condition

FIGURE SHPO-3



Photo Simulation
Pine Haven
Town of Antrim



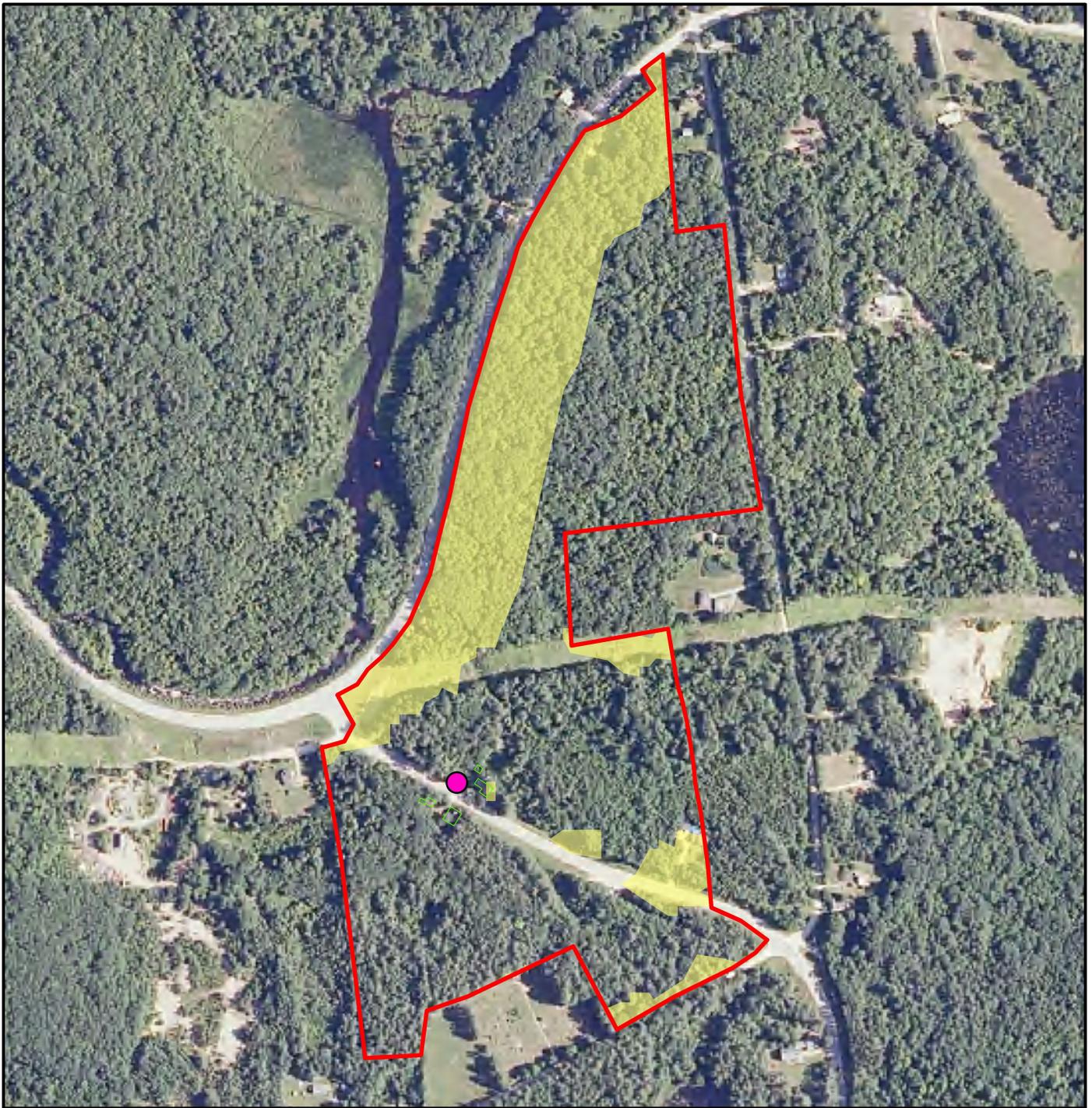
Proposed Condition - Annotated

FIGURE SHPO-3

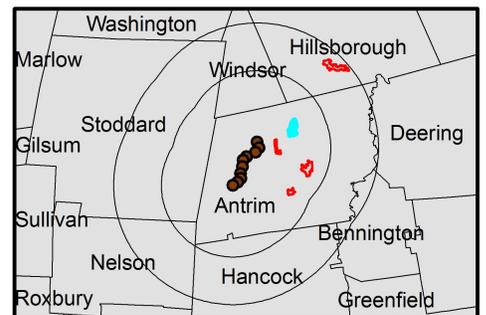
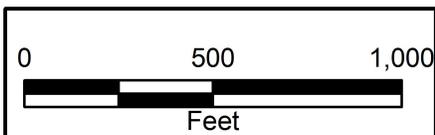


Photo Simulation
Pine Haven
Town of Antrim

Pine Haven Historic District Viewshed Map



-  AWE Eligible Resource
-  SHPO Photosim Point
-  Project Visibility
-  Structure Outlines



**HISTORIC PROPERTY/PROPERTIES AFFECTED TABLE
RESULTS OF EFFECT EVALUATION FOR
White Birch Point Historic District**

Significance (including Criteria): The White Birch Point Historic District was determined eligible for listing in the National Register of Historic Places (National Register) and New Hampshire State Register of Historic Places (State Register) in 2012, under Criterion A in the area of Entertainment/Recreation. The collection of cottages represents summer and vacation home tourism in New Hampshire in the early twentieth century. The property was initially planned and laid out by Paul and Helen Thayer in 1914, although the majority of the 149 planned lots were never developed. Character-defining features of the district under Criterion A include the retention of the individual cottages’ original form (including open porches), roof lines, fenestration patterns, and materials. The preservation of panoramic views and landscaping features, such as stone walls, paths, flower gardens, open fields, and wooded lots, and the community’s original siting to and from Gregg Lake enhance integrity of location, association, feeling, and setting.

NR Boundary (description/justification): The boundary for the White Birch Point Historic District is limited to dwellings that were constructed along White Birch Point Road on the northwestern slope of Patten Hill, located on the eastern shore of Gregg Lake. This boundary includes the collection of cottages, the shared lot named “The Grove”, the mail shelter at the entrance of the community, associated pathways and roadways, and landscaping features that contribute to the property’s significance under Criterion A (see the boundary as shown on the attached White Birch Point Viewshed Map).

Individual Properties

NR	SR	
<input type="checkbox"/>	<input type="checkbox"/>	Eligible (district N/A)
<input type="checkbox"/>	<input type="checkbox"/>	Eligible, also in district
<input type="checkbox"/>	<input type="checkbox"/>	Eligible, only in district
<input type="checkbox"/>	<input type="checkbox"/>	Listed in the NRHP
<input type="checkbox"/>	<input type="checkbox"/>	Not evaluated for individual eligibility

Districts

NR	SR	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Eligible
<input type="checkbox"/>	<input type="checkbox"/>	Not eligible
<input type="checkbox"/>	<input type="checkbox"/>	Listed in the NRHP
<input type="checkbox"/>	<input type="checkbox"/>	Not evaluated as a district

DEFINITION OF EFFECT

An effect may occur when there is alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register as defined in Section 800.16(1).

EVALUATION

The characteristics that qualify the White Birch Point Historic District for the National Register may be affected by the construction of the proposed project.

RECOMMENDED FINDING

The construction of the proposed project will have an *Effect* on the White Birch Point Historic District because it has the potential to alter characteristics which qualify the district for inclusion in the National Register. Antrim Wind Energy is proposing to construct a total of 10 wind turbines located on the Tuttle Hill and Willard Mountain ridgelines located west and northwest of the White Birch Point Historic District. The wind turbines have the potential to be visible from within the historic district and alter its setting, which is one of the characteristics that qualify the historic district for inclusion on the National

Register. Pursuant to 36 CFR § 800.11(e), the Criteria of Adverse Effect must be applied.

APPLICATION OF THE CRITERIA OF ADVERSE EFFECT FOR White Birch Point Historic District

Significance (including Criteria): The White Birch Point Historic District was determined eligible for listing in the National Register of Historic Places (National Register) and New Hampshire State Register of Historic Places (State Register) in 2012, under Criterion A in the area of Entertainment/Recreation. The collection of cottages represents summer and vacation home tourism in New Hampshire in the early twentieth century. The property was initially planned and laid out by Paul and Helen Thayer in 1914, although the majority of the 149 planned lots were never developed. Character-defining features of the district under Criterion A include the retention of the individual cottages' original form (including open porches), roof lines, fenestration patterns, and materials. The preservation of panoramic views and landscaping features, such as stone walls, paths, flower gardens, open fields, and wooded lots, and the community's original siting to and from Gregg Lake enhance integrity of location, association, feeling, and setting.

NR Boundary (description/justification): The boundary for the White Birch Point Historic District is limited to dwellings that were constructed along White Birch Point Road on the northwestern slope of Patten Hill, located on the eastern shore of Gregg Lake. This boundary includes the collection of cottages, the shared lot named "The Grove", the mail shelter at the entrance of the community, associated pathways and roadways, and landscaping features that contribute to the property's significance under Criterion A (see the boundary as shown on the attached White Birch Point Viewshed Map).

Individual Properties

NR	SR	
<input type="checkbox"/>	<input type="checkbox"/>	Eligible (district N/A)
<input type="checkbox"/>	<input type="checkbox"/>	Eligible, also in district
<input type="checkbox"/>	<input type="checkbox"/>	Eligible, only in district
<input type="checkbox"/>	<input type="checkbox"/>	Listed in the NRHP
<input type="checkbox"/>	<input type="checkbox"/>	Not evaluated for individual eligibility

Districts

NR	SR	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Eligible
<input type="checkbox"/>	<input type="checkbox"/>	Not eligible
<input type="checkbox"/>	<input type="checkbox"/>	Listed in the NRHP
<input type="checkbox"/>	<input type="checkbox"/>	Not evaluated as a district

CRITERIA OF ADVERSE EFFECT

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register of Historic Places in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse Effects may include reasonably foreseeable effects caused by the undertaking that may occur late in time, be farther removed in distance or be cumulative.

Example of Adverse Effects, pursuant to Section 800.5(a)(2)

Evaluation

Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

The nearest of the 10 wind turbines proposed as part of the Antrim Wind Energy project will be located approximately 2.5-miles west and northwest of the historic district.

	Therefore, the proposed project will not result in the physical destruction of or damage to all or part of any property within the White Birch Point Historic District.
(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR§68) and applicable guidelines;	The proposed project will not involve alteration of the historic district that is inconsistent with the Secretary's Standards.
(iii) Removal of the property from its historic location;	The proposed project will not involve the removal of the historic district, or any properties contained within, from their historic location.
(iv) change of the character of the property's use or of physical features within the property's setting that contribute to its historic features;	The proposed project will not result in a change of the character of the historic district's use or of physical features within its setting that contribute to its significance. The proposed wind turbines will be located approximately 2.5-miles west and northwest of the historic district. The construction of the wind turbines will not result in a change of the physical features, including alteration or destruction of Gregg Lake, the associated beaches, or individual cottages that comprise White Birch Point, that make up the historic district and its immediate setting.
(v) Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;	A total of 10 wind turbines will be constructed on the Tuttle Hill and Willard Mountain ridgelines located west and northwest of the White Birch Point Historic District. The nearest turbines to the historic district (turbines number 7, 8 and 9) are located approximately 2.5 miles west and northwest of the historic district (see attached White Birch Point Photosimulation Location Map). A comprehensive sound level assessment was conducted for the Antrim Wind Energy Project by Epsilon Associates, Inc. in November 2011. Sound levels due to wind turbine operation are expected to be less than 45 dBA at all residences within the project area, including historic properties. These sound levels are expected to meet previously approved noise conditions from the New Hampshire Site Evaluation Committee, the World Health Organization's 45-dBA nighttime guideline for residential locations, and the US EPA guideline of 48.6 dBA. The viewshed map prepared by Saratoga Associates indicates that the visibility of at least a portion of the proposed wind turbines is scattered through the central and southern portions of the district (see attached White Birch Point Viewshed Map). Calculations based on the viewshed mapping indicate that the turbines may be visible from 10.3 % of the approximate 29-acre historic district (see attached White Birch Point Viewshed Map). The trees throughout the district are a mix of deciduous and coniferous. The view of the turbines from the central and southern portions of the district will likely be obscured by the dense stands of trees that surround the district. The viewshed map depicts a small area of visibility at the

	<p>entrance to the district where White Birch Point Road intersects with Gregg Lake Road and along the shore line of the recreational beach area known as “The Grove.” Visibility of the turbines from these areas is likely to be similar to the view shown in the photo simulation (see attached Figure SHPO-6, Representative Location of White Birch Point Shoreline). In the photo simulation, the turbines are fully visible from the shoreline. While portions of the turbines will be visible from the entrance to the district and “The Grove,” the introduction of these visible elements will not be such that they will detract from the overall feeling and association of the historic district as an early twentieth-century collection of tourist cottages associated with Gregg Lake. The construction of the turbines will not impede the viewshed to and from Gregg Lake and the associated cottages nor will the introduction of the turbines significantly detract from the overall surrounding viewshed of the historic district. Furthermore, the turbines will not be visible from the majority of the district, due to the vegetative groundcover, topography, presence of other buildings, and the intervening distance between the nearest turbine (2.5 miles) and the historic district. While the turbines will be visible from 10.3 % of the district, this visibility will not compromise the district’s ability, as a whole, to convey its significance under Criterion A since the turbines will not be visible from 89.7 % of the district. Therefore, the proposed project will not introduce visual, atmospheric, or audible elements that will not significantly diminish the integrity of setting or alter the character-defining features of the White Birch Point Historic District.</p>
<p>(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property or religious and cultural significance to an Indian tribe or Native Hawaiian organization; and</p>	<p>The proposed project will not result in the neglect of the historic district.</p>
<p>(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property’s historic significance.</p>	<p>The proposed project will not result in the transfer, lease, or sale of the historic district or any of the properties contained therein.</p>
<p>(viii) OTHER:</p>	
<p>RECOMMENDED FINDING</p>	<p>The proposed project will have <i>No Adverse Effect</i> on the White Birch Point Historic District as it does not have the potential to significantly alter, either directly or indirectly, the characteristics that qualify the historic district for inclusion in the National Register in a manner that would diminish the integrity of the historic district or compromise its ability to convey its significance under Criterion A.</p>

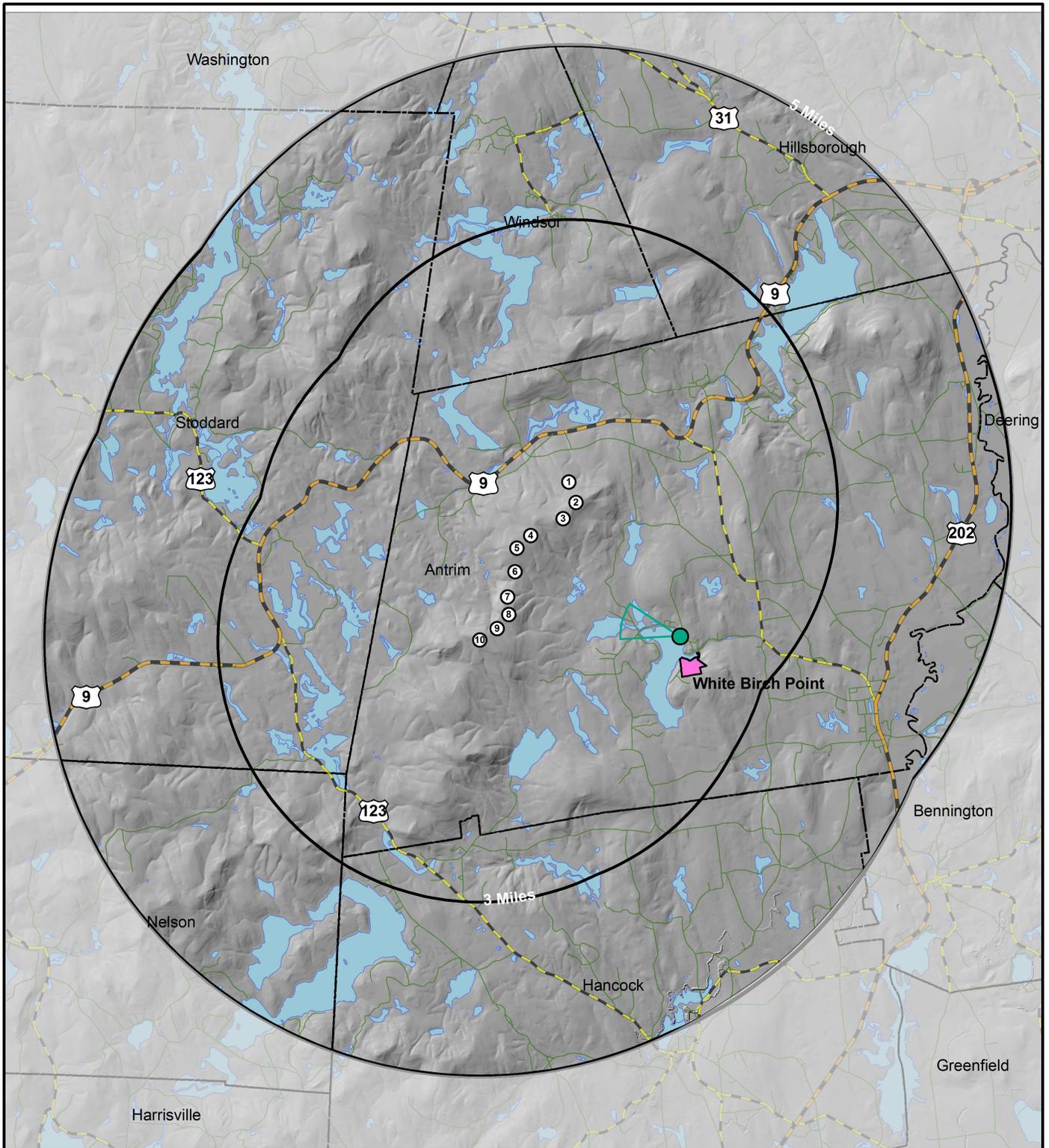
Epsilon Associates, Inc.

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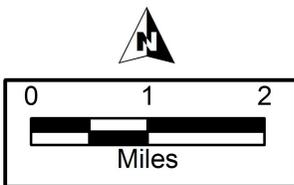
Saratoga Associates

2011 Antrim Wind Energy Project Visual Impact Analysis. Saratoga Associates; Saratoga Springs, NY.

White Birch Point Historic District Photosimulation Location Map



-  Towns
-  AWE Eligible Resource
-  Proposed Turbine
-  SHPO Photosim Point
-  Photo Direction





Existing Condition

FIGURE SHPO-6



Photo Simulation
Representative Location of White Birch Point Shoreline
Town of Antrim



Proposed Condition

FIGURE SHPO-6



Photo Simulation
Representative Location of White Birch Point Shoreline
Town of Antrim

White Birch Point Historic District Viewshed Map



-  AWE Eligible Resource
-  SHPO Photosim Point
-  Project Visibility
-  Structure Outlines

