



71 Oak Street  
Ellsworth, ME 04605

Edna M. Feighner  
Review and Compliance Coordinator  
New Hampshire Division of Historic Resources  
State Historic Preservation Office  
19 Pillsbury Street  
Concord, NH 03301

Dear Edna,

Please find the enclosed Phase I Archaeological Survey report for the Antrim Wind Energy Project proposed by Antrim Wind Energy LLC. The proposed Project is to develop a utility scale wind energy generation facility in the Town of Antrim, Hillsborough County, New Hampshire. The enclosed report includes both the Phase IA research completed on July 20, 2011 and previously submitted to NHDHR on October 25, 2011 as well as the Phase IB survey completed on November 26, 2011.

I would appreciate it if you could review the enclosed report and provide us with your concurrence that the proposed Project does not need to undergo further archaeological review. Feel free to contact me with any questions or concerns: phone – 207-479-5522 or email – [kemack@trcsolutions.com](mailto:kemack@trcsolutions.com).

Sincerely,

A handwritten signature in black ink that reads "KEMack". The signature is written in a cursive style with a large, stylized "K" and "M".

Karen E. Mack  
Senior Archaeologist  
TRC

cc: Drew Kenworthy, Eolian Renewable Energy LLC  
Sarah Verville, TRC  
Joshua Brown, TRC  
Richard Will, TRC



**Results of Phase I Archaeological Survey  
of the  
Antrim Wind Energy Project  
Antrim, Hillsborough County, New Hampshire**

Prepared by:

Richard Will and Karen Mack

TRC  
71 Oak Street  
Ellsworth, Maine

December 7, 2011

## **Management Summary**

Antrim Wind Energy LLC proposes to develop a utility scale wind energy generation facility in the Town of Antrim, Hillsborough County, New Hampshire. The Project is proposed to be located in the sparsely settled northwest portion of Antrim and includes property that extends from the east summit of the Tuttle Hill ridgeline to the flank of Willard Mountain to the west. TRC was asked to conduct a Phase I archaeological assessment of the Project area. Access to the ridgeline turbine locations will be accomplished through the construction of an access road originating on Route 9 and proceeding up the northern flank of Tuttle Hill, then extending to the northeast and southwest to reach all turbine positions. The Project proposes to interconnect the generated electrical power to the PSNH 115 kV line and will include collector lines that are below ground along the extent of the turbine string and pole-mounted along the access road from the collector system bus to the point of interconnection. Collectively, the turbine foundations, construction pads, access roads, and electrical upgrades are anticipated to directly impact an area of less than 65 acres. The archaeological APE is defined as the area where construction activities may result in ground disturbances. A review for both Precontact period and Historic period archaeological resources was completed at the NHDHR on July 20, 2011. No known Precontact period or Historic period sites exist within the Project area. An archaeological walkover survey was conducted of the Project archaeological APE from November 23 – 26, 2011. No landforms suitable for Precontact subsurface testing were observed within the Project area. No Historic features (e.g. cellar holes) were identified within the Project area with the exception of stonewalls in the lower elevations on the northern side of Tuttle Hill. Therefore no additional archaeological evaluation is recommended.

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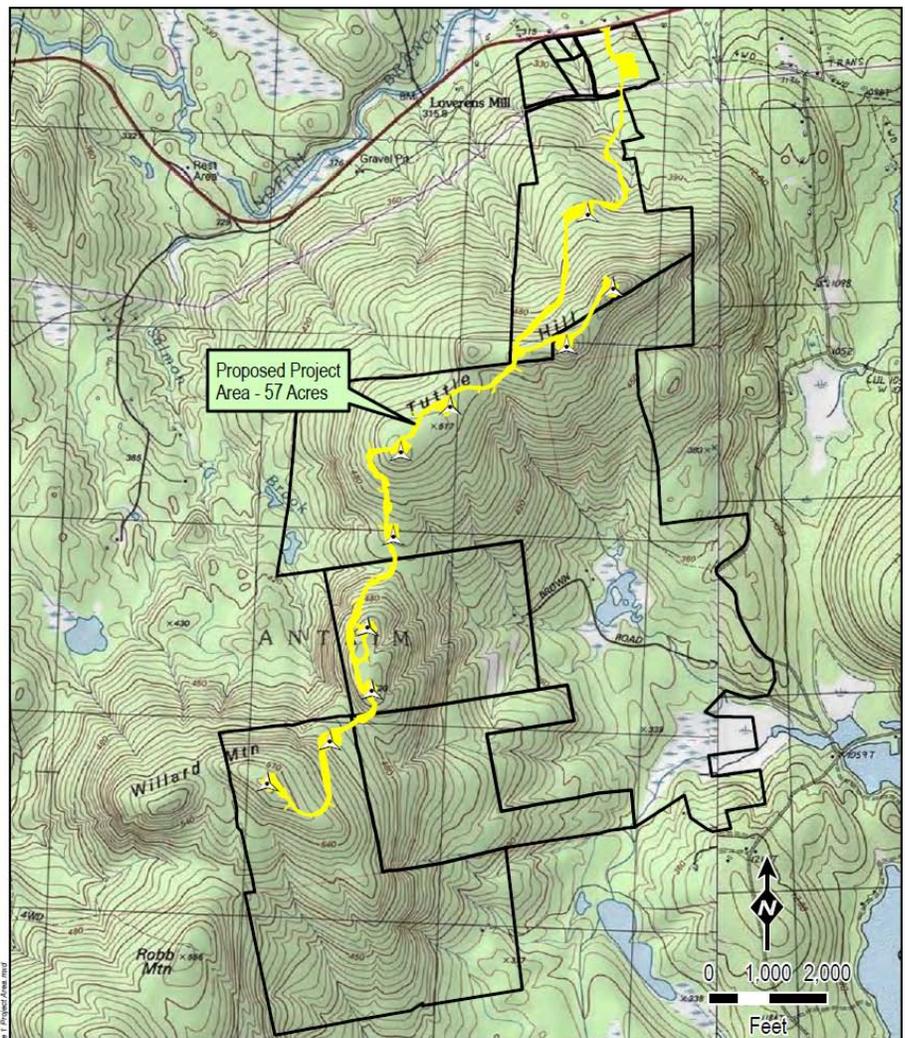
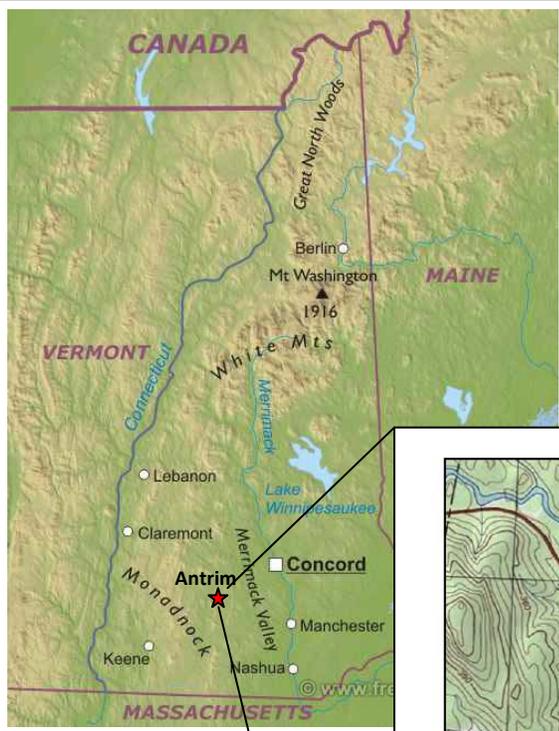
## **Phase IA & IB Archaeological Assessment of the Proposed Antrim Wind Energy Project**

### **I. Project Description & Overview**

Antrim Wind Energy LLC proposes to develop a utility scale wind energy generation facility in the Town of Antrim, Hillsborough County, New Hampshire. The Project is proposed to be located in the sparsely settled northwest portion of Antrim and includes property that extends from the east summit of the Tuttle Hill ridgeline to the flank of Willard Mountain to the west. The proposed Project boundaries are shown in Figure 1. To the north of the Project area lie the PSNH electrical transmission corridor, which contains 34.5kV and 115kV transmission lines, and the Franklin Pierce Highway (State Route 9). The Project will consist of the erection of ten wind turbine generators, the construction of an access road, and the construction of an electrical substation along with collector lines. The proposed Project has been sited to avoid sensitive wildlife habitats and the potential for impacts to neighboring properties to the greatest extent possible.

The installed nameplate capacity of the Project is expected to be between 25 and 30 MW. The exact turbine model to be employed for the Project has not yet been selected but it is anticipated that the turbines will have a generating capacity between 2.5 and 3.0 MW and that total turbine height from foundation to blade tip will not exceed 500 feet. Access to the ridgeline turbine locations will be accomplished through the construction of an access road originating on Route 9 and proceeding up the northern flank of Tuttle Hill, then extending to the northeast and southwest to reach all turbine positions. The Project proposes to interconnect the generated electrical power to the PSNH 115 kV line and will include collector lines that are below ground along the extent of the turbine string and pole-mounted along the access road from the collector system bus to the point of interconnection. Collectively, the turbine foundations, construction pads, access roads, and electrical upgrades are anticipated to directly impact an area of less than 65 acres (Figure 1).

Two visits to the New Hampshire Division of Historical Resources (NHDHR) were completed in May and July 2011 to identify and collect information pertaining to the archaeological resources context of the proposed Project. The first meeting, on May 19, was to work with Ms. Edna Feigner, review and compliance officer, to identify and understand expectations for completing an archaeological resources assessment of the Project area. The objective of the second meeting, on July 20, was to collect relevant background and archival information on known Precontact period and Historic period archaeological resources in the Project area (within 10 km of the Project) and within the Project boundaries. Section II



**Legend**

-  Proposed WTG
-  Proposed Project Area - 57 Acres
-  Project Parcels



**ANTRIM WIND ENERGY PROJECT**  
 354 KEENE ROAD, ANTRIM, NH  
**Figure 1**  
 Project Area Map

Produced by:  12/19/2011



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Figure 1. Antrim Wind Energy Project Area: yellow lines indicate the archaeological APE.

of this report documents the archaeological cultural context for the Project area and reviews existing information on archaeological sites within the Project boundaries. Section III discusses the concept of archaeological sensitivity. Section IV describes the archaeological sensitivity of the Antrim Wind Energy Project based on the background and archival review that was undertaken at the NHDHR. The plan for completing a Phase IB archaeological survey appears in Section V. Section VI contains the results of the Phase IB walkover survey of the Project area and finally Section VII includes conclusions and recommendations. Note that an earlier version of the Phase IA report written by Richard Will was submitted to NHDHR. This report contains results of both the Phase IA and Phase IB archaeological investigations.

## **II. Background Research & Cultural Context**

A review for both Precontact period and Historic period archaeological resources was completed at the NHDHR on July 20, 2011. The review involved examination of historic maps, soils and topographic maps, and archaeological site files. The cultural context for both kinds of archaeological resources is briefly reviewed here to provide a backdrop for understanding what kinds of archaeological resources might exist within or near the Project area.

### *Precontact period archaeological resources*

New Hampshire archaeologists have identified four cultural temporal periods for the Precontact period in New Hampshire. These periods are similarly identified throughout eastern North America and begin with the Paleoindian period and terminate with the Contact period, which begins with trade and direct contact with Europeans in the opening decades of the 1600s.

The Paleoindian period (11,000-9,000 years before present [BP]) is defined by the widespread use of a specialized stone tool kit that included fluted projectile points and implements for processing hunted animals for food and clothing (e.g., endscrapers, graters and other unifacially flaked tools). Similar stone tool kits have been uncovered in archaeological sites in neighboring Maine, Vermont, and Massachusetts (Spiess et al. 1998). Whether these first people to colonize New Hampshire were specialized hunters of large mammals, such as caribou, or more generalized hunters and gatherers is unknown. Likely, subsistence and settlement strategies were adapted to accommodate both patterns depending on where people were living. Use of lithic materials for tool making encompassed raw material extraction from a large area to find the high-quality rocks that were valued for tool production (Spiess and Wilson 1989). Mt. Jasper rhyolite from Berlin, New Hampshire was greatly valued as a raw material for Paleoindian period tool production in New Hampshire and, indeed, neighboring states

(Pollock et al. 1996). Similarly, Munsungun Formation cherts from north-central Maine are found in Paleoindian period sites throughout New England, including New Hampshire. Whether these rocks reached their final destination through trading networks or by quarrying by people utilizing a large geographical catchment area is still unknown. Later Paleoindian people adopted different projectile forms (e.g., unfluted, long and narrow parallel flakes projectile points), but other aspects of the tool kit including unifacially-made tools appear to persist. Settlement and subsistence patterns were likely developing in responses to climatic changes detected between the Late Pleistocene and early Holocene environments. Paleoindian period archaeological sites are not abundant in New Hampshire; some of the best known are from the White Mountains which are located far to the north of the Project area (Boisvert 1998). A review of archaeological sites files at NHDHR showed that no Paleoindian period archaeological sites were located either within the Project boundaries or the Project area.

The Archaic period (ca 9,000-3,000 years BP), which follows the Paleoindian period, has three major subdivisions (Early, Middle, and Late) that are differentiated based on changes in tool kits that presumably reflect cultural changes to environmental changes and concomitant changes in social organization. The Early Archaic period (9,000 – 7,500 years BP) is recognized by a combination of environmental and technological changes that included exploitation of environments with a broader range of food resources than hypothesized for the Paleoindian Period, and use of more localized lithic resources including cherts, quartzites and quartz (Bolian 1980; Bunker 1992). The number of Early Archaic period sites is less than that for the preceding period; however, this may be due more to inadequate sampling methods than to real differences in the sizes of human populations between the two periods. Many of the Early Archaic period sites in New Hampshire may be deeply buried in thick alluvial deposits present along the major water ways; a pattern that has been found to be the case in Maine (see Robinson and Petersen 1993). There are no recorded Early Archaic period archaeological sites within the Project boundaries or the Project area.

The Middle Archaic period (ca 7,500-6,000 years BP) marks a continuation of subsistence and settlement practices first observed during the Early Archaic period. During the Middle Archaic people lived in widely distributed locations (Bunker 1994). Settlement is still seen along major waterways, falls and lakes, with a decided reliance on aquatic resources. Unlike the Early Archaic period, the Middle Archaic period is marked by a warmer and drier climate. The tool assemblage during the Middle Archaic period was comprised of a variety of stemmed projectile points including the Neville, Neville variant, and Stark bifaces. In association with these tools are bifacial preforms, unhafted flake scrapers, tiny quartz scrapers, wedge-shaped unhafted flake knives, perforators, winged atlatl weights, full

grooved axes, cobble hammers, and heavy flaked choppers. Expediency or only slightly modified tools make up a portion of the tool assemblage. Heavy woodworking tools, such as ulus, bifacial chipped knives, plummets, and gouges arise in the Middle Archaic period, suggesting that heavy wood working originated during this time.

The Neville Site (27-HB-77), which is located at the Amoskeag Falls, has long served as a base line for interpreting Middle Archaic components in northern New England and has given its name to its most characteristic biface type (Dincauze 1976). Occupation began in the Middle Archaic and continued to the Contact period at the Neville site. The site is considered archaeologically significant because it clearly represented a temporal sequence for the Archaic period projectile point forms. Other nearby, major Middle Archaic sites include the Smyth site (27-HB-76) and Eddy site (27-HB-78) in Manchester (Kenyon 1987; Starbuck 1982). There are no recorded Middle Archaic period sites within the Project boundaries or the Project area.

The Late Archaic period (ca 6,000-3,000 years BP) is marked by a warmer and drier climate with warm summers and less intense winters. Burial ceremonialism is an important feature of this period (Bunker 1994). Based on subtle artifact assemblage variations, the Late Archaic has been divided into three traditions: the Small Stemmed, the Laurentian, and the Susquehanna (or Broad Blade). The Small Stemmed tradition typically includes small triangular or stemmed bifaces. The Laurentian tradition is associated with several projectile point types (i.e., Otter Creek, Brewerton and Vosburg). The material cultural of the Susquehanna tradition includes bifaces of the Susquehanna and Perkiomen bifaces.

Late Archaic sites are found virtually everywhere in New Hampshire (Bunker 1994). The Smyth, Neville, and Eddy sites, all located at Amoskeag Falls, have substantial Late Archaic components (Foster, Kenyon, and Nicholas 1981) and they contain Squibnocket and small stemmed points, Brewerton, and Normanskill, Otter Creek, Vosburg, Susquehanna, and Atlantic point types. Archaeological evidence reveals that sites were repeatedly visited to carry out seasonal activities. Artifact assemblages and features show signs of tool manufacture, fish processing along with horticulture. Again, there are no recorded Late Archaic period sites within the Project boundaries or the Project area.

By about 3,000 years BP, native peoples incorporated the manufacture of ceramics into their subsistence and economic strategies, and the period from 3000 BP to ca. 450 BP is known as the Woodland period. The Woodland period is well represented by a number of sites and is subdivided into Early, Middle, and

Late Woodland periods, each with a distinctive style of ceramic production and decoration. Most commonly associated with the Early Woodland period is the Vinette I ceramic type (Foster, Kenyon, and Nichols 1981; Howe 1988). There are no recorded Early Woodland period archaeological sites within the Project boundaries or the Project area.

Climatic stabilization around AD 150 led to a chain of events ultimately creating a significant human population growth in New Hampshire during this time. The Middle Woodland period (2,000-1,000 years BP) is known for its dentate stamped and cord-wrapped stick impressed ceramics, Jack's Reef pentagonal and corner-notched points, Woodland stemmed, and lanceolate points (Dincauze 1976; Foster, Kenyon, and Nicholas 1981). There are no recorded Middle Woodland period archaeological sites within the Project boundaries or the Project area.

In the Late Woodland period (ca 1,000-400 years BP), cultigens begin to play a role in the subsistence and settlement behavior of Native people. It is generally agreed that cultigens, such as maize, beans, squash and sunflower, arrived in New England around 1,000 BP that had spreading from the south and west (McBride and Dewar 1987). Habitation sites tend to be larger (as if supporting a greater population density) with some indications of sedentary lifestyles, such as storage pits and semi-permanent structures. A drastic reduction in exotic lithic material is noted in archaeological sites of this cultural time period in New Hampshire, perhaps indicating that people were staying much closer to home than in the previous Early and Middle Woodland periods.

Late Woodland sites in New Hampshire generally co-occur at locations of earlier occupations, indicating a continuation of earlier settlement patterns (Starbuck 1982). There are no recorded Late Woodland period archaeological sites within the Project boundaries or the Project area.

European exploration of the New World resulted in contact with indigenous peoples, beginning in the 1500s. The Contact period continued through the end of the Colonial Wars in the 1760s, as local, Native American groups accommodated a new European population while they suffered decimating diseases, a new weaponry, and metal technology. European manufactured goods such as iron or brass kettles, metal tools and utensils, sheet copper and brass, clay pipes, textiles and glass bottles begin to appear in the archaeological record of the Native Americans, although many of these items were recycled into traditional forms. Levanna shaped projectile points made of brass were recovered from early Contact period components, along with their lithic counterparts, at both the Hormel and Rocks Road sites in New Hampshire (Bunker 1994).

The adoption of European materials had a profound impact on Native lifestyles, as traditional techniques of lithic tool and ceramic manufacture were lost. By about 1630, lithic use in northern New England virtually disappears from the archaeological record, although native ceramic use persists for some time after the introduction of metal vessels. As a result of this loss of traditional technology, Native Americans became increasingly dependent on economic ties to the Europeans. Palisade villages begin to appear, located at strategic positions, perhaps as a result of trade-related warfare. Epidemic disease between 1616 and 1617 exacerbated a cultural collapse, virtually eradicating many Native populations. There are no recorded Contact period archaeological sites within the Project boundaries or the Project area. In the early post-Contact period (also known as the Historic period), it is assumed that Native Americans were quietly integrated into the Euroamerican culture, but various avenues of research in the Northeast have brought to light many examples of continued struggle, resistance, and desire to maintain to a separate cultural identity (e.g., Calloway 1990).

#### *Historic period archaeological resources*

A recent discussion concerning the history of the town of Antrim appears in Goodby (2005); portions of that discussion are abstracted here. The initial settlement of the area was by Scotch-Irish immigrants who brought the name, “Antrim” with them in the mid-18<sup>th</sup> century from Ireland. Although the French and Indian Wars led to the abandonment of the first settlement, the first grist mill was constructed in Antrim along the banks of the Contoocook River in 1777. It was not long afterward that the first meeting house and school were constructed in the 1780s. The 1790 population census counted 528 people living in Antrim (Whiton 1852:25-28). Antrim remained primarily an agrarian settlement throughout the first half of the 19<sup>th</sup> century (Ellison 1977). However, with the construction of the Peterborough and Hillsborough Railroad in 1878, the community was transformed from an agrarian way of life to one that opened many new markets to its residents. In spite of new markets for trade and commerce, the population of Antrim and its outlying villages (e.g., Antrim Center, North Branch, Clinton Village) has only increased by 2,109 inhabitants in 220 years (US Census, 2010). Antrim is largely a bedroom community to larger commercial centers, such as Peterborough and Hillsborough.

A review of historic maps shows the growth of Antrim and at the same time the lack of development in the Project area. No Euroamerican (*i.e.*, Historic) activity is recorded around or near Willard Mountain and Tuttle Hill in 1858. And, while the town of Antrim and surrounding villages continued to grow, there was no development (either residential or commercial) in or near the Project area in 1880 (Cochrance 1880). This settlement pattern continues unchanged on the map of Antrim in 1892

(Anonymous 1881) and on the USGS 15' topographic map of the Antrim area in 1929. Collectively, the historic maps document that the Project area does not contain any Euroamerican or Historic period resources. A review of archaeological sites files at NHDHR also corroborated that no Historic period archaeological sites were located either within the Project boundaries or the Project area.

### **III. Archaeological Sensitivity**

One commonly accepted approach to ascertain whether archaeological resources may be located within the boundaries of a project is predictive modeling. Although the NHDHR does not use modeling to predict archaeological site locations, it does recognize that certain archaeological and environmental variables frequently demonstrate a correlation with the locations of various kinds of archaeological resources. To date, and with surveys that have been conducted on large projects, such as transmission and natural gas pipelines, archaeologists have discovered a few variables that do possess some value in aiding prediction of whether archaeological resources may be present in a given area (e.g., Clark et al. 1999; Clark and Will 2005). These variables include proximity to other sites, water, soil type, and slope. These associations may not be causal; but they have been documented to predict archaeological site locations as a result of examining the cultural/environmental context of thousands of archaeological sites scattered over wide regions.

One of the variables used by archaeologists to evaluate an area for archaeological resources is to identify previously recorded resources within or nearby the boundaries of a project. The working assumption is that if Precontact period or Historic period archaeological resources are located near a project and within similar environmental contexts, then there is a reasonable expectation that archaeological sites of similar age and cultural affiliation could be located within the Project area.

Water proximity is an important predictor for site location because of the human need for water to sustain life, the human food resources that either occur in water or proximate to it, and the use of waterways and water bodies for transportation and commerce. These qualities of water are important for people who lived in both the Precontact period and Historic period.

Soil type was obviously important to Euroamerican farmers who settled in New Hampshire and required soils with certain properties to grow food. Another potential predictor of Historic period sites is the proximity of historic roads. For most of the Precontact period, horticulture was not an important subsistence practice; however soil permeability has been shown to be a site predictor based on the

conclusion that people would have likely have camped in areas where they could stay dry under foot even after heavy rains.

Finally, documentation of slope and archaeological site locations shows that people are more likely to settle on flat, rather than steep, surfaces. This is a rather obvious correlation when applied to predicting where settlements may be located, but does not have great predictive value in locating specialized kinds of sites (*i.e.*, rock quarries).

#### **IV. Phase IA Results**

As discussed above, no Historic period or Precontact period archaeological sites have been previously recorded within the Antrim Wind Energy Project boundaries or within 10 km of the Project boundaries. Those archaeological sites that are recorded in NHDHR archaeological site files show that Precontact period sites are close to water (e.g., a Precontact period scatter of stone flakes at site 27-CH-0005, which is located on Nubanusit Lake to the south of the Project area and Historic period 19<sup>th</sup> century sites, such as 27-HB-0070 and 27-HB-0406, which are located to the south and east on the Contoocook River in Bennington).

The availability of water is localized in the Antrim Wind Energy Project boundaries. It includes a number of small third-order drainages that descend hillsides within the Project boundaries and one small brook (Salmon brook) that skirts the Project area on the west side of the central portion of the Project north of Willard Mountain. There are also three small wetlands along Hattie Brown Road in the southeastern corner of the Project area. Wetlands were sometimes used in the past for hunting and gathering by Precontact period people. But, in themselves, they are not important predictors of archaeological site locations.

Soils within the Project area are varied. A soils map provided by the NHDHR on July 20, 2011 shows that soils within the Project boundaries include a variety of stony well drained soils, the majority of which are found on steep slopes (8-35 percent). In particular, Marlow Stony Loam occurs throughout the Project area, whereas Monadnock Stone Fine Sandy Loam occurs in small areas, particularly in the southern parts of the Project area. Bedrock outcrops occur on Tuttle Hill at the north end of the Project area and on Willard Mountain in the southwestern part of the Project area. Both of the mountaintop rock outcrops are composed of granodiorite or tonalite (Lyons et al. 1997). In both cases, these igneous, granitic-based rocks could not have been used for making chipped stone tools because they do not yield a conchoidal fracture pattern when impacted.

The review of historic maps described above shows that the area of the proposed wind park (at least as far back as 1858) contained no settlements or roads. Indeed, the only major road near the Project area today is Route 9, which is located just beyond the Project's northern boundary.

## **V. Proposed fieldwork for Phase 1B**

In summary, environmental and cultural variables that have been demonstrated to be important predictors of archaeological site locations are either rare or non-existent within the proposed wind park boundaries. There are no areas within the Project where archaeological resources would be predicted to be located or areas that might initially be assessed to be sensitive for archaeological resources. However, guidelines for archaeological surveys in New Hampshire for wind parks stipulate that a 100% walkover survey of a project's archaeological area of potential effect (APE) be completed. The archaeological APE is defined as the area where construction activities may result in ground disturbances. Disturbances caused by construction are the single-most important factor that could negatively affect an archaeological site. The archaeological APE for the proposed Antrim Wind Energy Project is shown in Figure 1.

One of the primary reasons for requiring walkover survey is because the database for archaeological sites in upland areas of New Hampshire is small. This is due to the lack of prior survey work in such environments and to the limitations of our understanding how such areas may have been utilized by people, particularly Precontact period people. Although the Antrim Wind Energy Project shows a low sensitivity for either Precontact period or Historic period archaeological resources, it is possible that such upland areas contain unusual or previously unidentified archaeological site types. The Phase 1B field review of this Project area will involve walkover survey of the archaeological APE. The focus will be on visual examination of proposed roads, wind turbine locations, and the electrical transmission system to transmit power out of the wind park. We recommended that 100 shovel test pits be set aside for testing of any landforms that the field archaeologist determines may have archaeological resource potential or for any historic structures (e.g., cellar holes) that may be encountered during the walkover inspection. The Phase IA report containing the above proposed Phase 1B investigations was submitted to NHDHR on October 25, 2011.

## **VI. Phase 1B Results**

An archaeological walkover survey was conducted of the Project archaeological APE from Nov 23 – 26, 2011. Due to recent snowfall of about 6 inches and the limited amount of daylight a 100 % walkover of

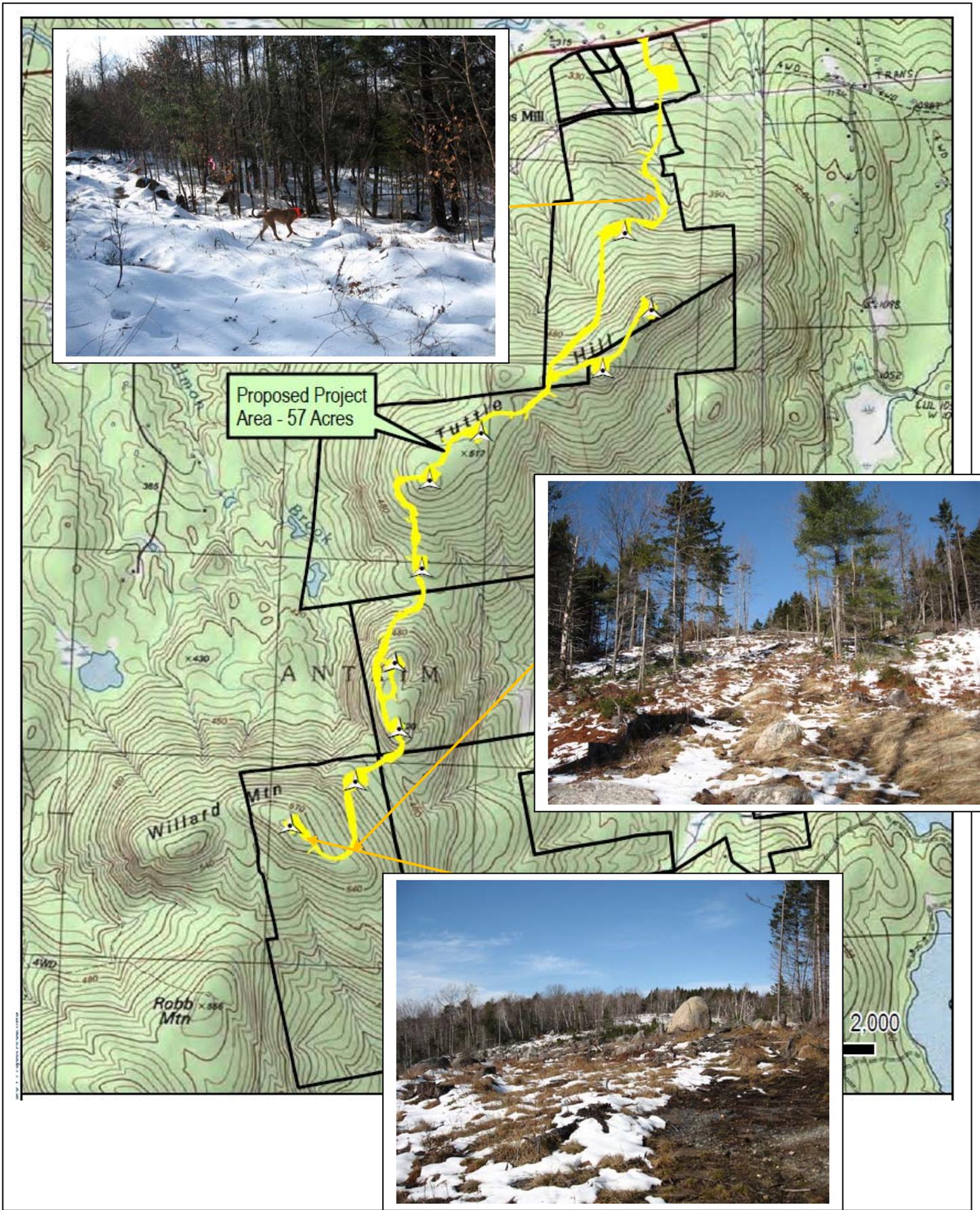


Figure 2. Views of the archaeological APE.

the Project area could not be completed without staying overnight on the upper elevations. Therefore, walkover was conducted on the northern and southern portions of the Project area including the tops of Tuttle Hill and Willard Mt. but not along the ridge line between the two. Personal communication with Edna Feighner at NHDHR on December 16, 2011 confirmed that less than 100% walkover of the Project area was adequate. The northern portion of the Project area is characterized by extremely rocky sediment dominated by large cobbles and boulders visible on the surface surrounded by wetlands and immature mixed forest vegetation. A few inches of snow covered the area (see Figure 2). Stonewalls were present within this portion of the Project area but no cellar holes were observed. The small third-order streams lacked any terrace development. Old logging/skidder roads were visible cross-cutting the Project in numerous locations on the northern face of Tuttle Hill.

The southern portion of the Project leading up to the archaeological APE is actively being logged. A well maintained logging road allowed archaeologists to drive into the Project area and then hike to the archaeological APE. The landscape in the area of Willard Mountain is similar to that observed at Tuttle Hill with fewer wetlands and more exposed boulders and exposed bedrock in the upper elevations (see Figure 2). Stonewalls were not observed in the upper elevations of the northern portion of the Project area.

## **VII. Conclusions & Recommendations**

No landforms suitable for Precontact subsurface testing were observed within the Project. The terrain is characterized by steep slopes covered with a veneer of glacial deposits consisting mostly of boulders and cobbles visible on the surface. On the upper elevations there are large areas of exposed bedrock with no sediment. Some small streams and wetlands are present on lower elevations but they do not exhibit testable margins. None of the boulders or bedrock outcrops observed were composed of suitable lithic material for manufacture of stone tools by Precontact peoples. Likewise, the ground surfaces lack well drained sediments which allow preservation of archaeological materials. No Historic features (e.g. cellar holes) were identified within the Project with the exception of stonewalls in the lower elevations on the northern side of Tuttle Hill. Therefore no subsurface testing was conducted and no additional archaeological evaluation is recommended for the proposed archaeological APE. If significant changes are made in the proposed archaeological APE prior to the construction of the Project additional archaeological assessment is recommended.

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**Report Type:** Phase I Archaeological Survey

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**Title:** Results of Phase I Archaeological Survey of the Antrim Wind Energy Project  
Antrim, Hillsborough County, New Hampshire

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**Sponsor Agency:** Antrim Wind Energy LLC

**Abstract:**

Antrim Wind Energy LLC proposes to develop a utility scale wind energy generation facility in the Town of Antrim, Hillsborough County, New Hampshire. The Project will be located in the northwest portion of Antrim extending from the east summit of the Tuttle Hill to Willard Mountain. The Project proposes to interconnect the generated electrical power to the PSNH 115 kV line and will include collector lines that are below ground along the extent of the turbine string and pole-mounted along the access road from the collector system bus to the point of interconnection. The archaeological APE is defined as the area where construction activities may result in ground disturbances. A review for both Precontact and Historic period archaeological resources was completed at the NHDHR on July 20, 2011. No known sites exist within the Project area. An archaeological walkover survey was conducted of the Project archaeological APE from November 23 – 26, 2011. No landforms suitable for Precontact or Historic subsurface testing were observed within the Project area. No Historic features were identified within the Project area. Therefore no additional archaeological evaluation is recommended.

**Investigation Type:**     Phase IA     Phase IB     Phase II     Phase III  
                                   Analytical Study                       Other

**Sites Found:**             Yes                       No

**Excavated:**              Yes                       No

**Comments:**

**Approximate Area Surveyed:** \_\_\_\_\_    **Acres:** 50    **Hectares:** \_\_\_\_\_

**Date Survey Completed (mm/dd/yy):** 11/26/11

**No. of Pages:** 16                      **No. of Maps:** 1                      **No. of Figures:** 2