

Northeast Archaeology Research Center, Inc.

REDACTED VERSION

September 19, 2019

Kamran Hassan
Green Mountain Power
2152 Post Rd.
Rutland, VT 05701

RE: Archaeological Phase I Survey of the GMP Transmission Line # 133 Lowell to Johnson Upgrade Project, Orleans and Lamoille Counties, Vermont

Dear Kamran:

We write to inform you of the status of the archaeological phase I survey of the Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project, in the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. The work was conducted by the Northeast Archaeology Research Center, Inc. (NEARC) on behalf of Green Mountain Power (GMP) from May 21st through July 19th, 2019 as part of the Section 248 review process for the Project (Figure 1). The Project involves the retirement and replacement of conductor line and structures from the Lowell Substation to the Johnson Substation, to include re-spanning. The Lowell substation will also be rebuilt. The area of potential effect (APE) of the project will be within the existing corridor, which measures 100' in width, for a total of approximately 18 miles (29.0 km). Potential project effects related to a range of activities include removal of the existing Lowell substation, construction of the new substation, removal and replacement of all structures (poles) and associated guys, and both on- and off-corridor access. The removal and replacement of structures will either be in-situ, considered within 1.0-2.0 m of the structure's current position, or in a new, nearby location, typically greater than 10.0 m from its current position.

Prior to the current study, NEARC conducted an archaeological resource assessment (ARA) for the project in which 59 Archaeologically Sensitive Areas were defined, designated ASAs 1 to 59 (Hudgell et al. 2017) (Table 1). Archaeological sensitivity is largely based on the presence of generally level terraces, knolls, and valley-edge features proximate to drainages, heads of draw, and wetland areas associated with the Gihon River and its tributaries. All were deemed sensitive for the presence of Native American archaeological sites and include 58 areas within the project corridor and three areas of off-corridor access. A single ASA, 46, was additionally deemed sensitive for the presence of historic Euroamerican cultural material relating to a 19th century school.

Survey completed to date included the excavation of 1,258 0.5 m x 0.5 m test pits within 57 of the 59 ASAs and followed standardized NEARC methodological procedures focusing within the area of potential effect (APE) of each ASA. Specifically, five 0.5 x 0.5 m test pits were excavated at each structure removal, replacement, and relocation site, where possible. The test pits were arranged such that one was placed adjacent to existing structures or proposed structure locations with the remaining four placed in cardinal directions 5.0-10.0 m distant. Testing for on-corridor access consisted of 0.5 m x 0.5 m test pits placed along the proposed routes at 10.0 m intervals. Each proposed guy location was tested with a single test pit placed in its proposed location. Following discussion with the Vermont Division of Historic Preservation (VDHP), where single artifacts were identified additional testing (utilizing finer mesh 1/8th inch screening) was conducted in order to complete a 12 meter 'grid' of testing around the positive test pit in order to establish if they were 'isolated' finds. In certain instances, test pits were not excavated if in an obviously disturbed area or in an otherwise untestable location.

As detailed in Table 1, the phase I survey resulted in the identification of five newly recorded Native American sites. Additional testing at four of the five sites established that they represent 'isolated finds' and as such no additional archaeological work is recommended for these locations. Archaeological phase II testing is recommended at one of the sites, VT-LA-0059 in the area of [REDACTED] in order to determine its significance, i.e. eligibility status for the State and National Registers of Historic Places and to determine potential project effects to archaeological resources. Access was denied in the following locations: Structures 40, 41, and 44 owned by Charles Stearns and Structures 118-122 owned by Cheryl Buchanan. It is recommended that GMP contact these landowners and phase I survey be completed at these locations once access issues are resolved. Phase I survey within all other areas of the project proved negative therefore no additional archaeological work is recommended outside of the newly defined VT-LA-0059 site area, and the untested portions of the ASAs owned by Stearns and Buchanan.

Site VT-LA-0059

Site VT-LA-0059 was newly identified on June 8, 2019, during archaeological phase I survey of ASA [REDACTED]. Survey work in [REDACTED] included the excavation of 29 0.5 m x 0.5 m test pits placed at 10-meter intervals along the proposed on-corridor access route and around three existing structures, [REDACTED] and two locations proposed for structure #'s [REDACTED] which are located within the ASA (Figure 2). A single test pit, T135 P1, proved positive, located approximately 10 m to the northwest of Structure [REDACTED], within the southwestern portion of the ASA. The positive test pit yielded three soapstone or steatite flakes (possibly from the early stages of producing a ground stone object or vessel) at a depth of 10-20 cmbs within an 'Ap' horizon. In general terms, soapstone vessels are attributable to the transitional period between the Terminal Archaic and early portions of the Early Woodland period, ca. 3,800-2,100 BP (1,800-100 B.C.).

The site as currently defined is located approximately [REDACTED] on a small knoll at the top of a hill overlooking Gihon Valley at an elevation of approximately 1,054 ft a.m.s.l. The site area overlooks a drainage close to the head of draw for an unnamed tributary of White Branch. Vegetation within the site area currently consists of mown lawn with some established trees and domestic gardens nearby.

Test pits in the site area were excavated to depths of 28-50 cm below ground surface and included an uppermost 'Ap,' or plow zone, horizon of dark yellowish brown sandy loam with silt which extends to approximately 20-25 cmbs, overlying an intermittently present 'B' horizon of strong brown sandy loam with silt, which in turn overlies a sterile 'C' horizon of light olive brown fine sandy loam, within which excavations were terminated. Soils at the site are classified as Berkshire-Tunbridge Complex, which is formed from a parent material of loamy supraglacial meltout till derived from phyllite and/or granite and gneiss and/or mica schist, which corroborates field observations (USDA 2018).

Isolated Finds

A total of four Native American archaeological sites were identified on the basis of the recovery of single artifacts. One of these, VT-LA-0057 was identified during the initial ARA of the project as represented by a grey chert projectile point tip found on the ground surface in the vicinity of Structure [REDACTED] (Figure 3). The remaining three sites, VT-LA-0058, VT-OL-0084 and VT-OL-0085 are located along the access to Structure [REDACTED] and at the newly proposed location of Structure [REDACTED] respectively (Figures 4 to 6). All three included single positive test pits with one quartz flake each. As mentioned above, additional testing was conducted at each in order to complete a 12 meter 'grid' of testing around the positive test pit, as possible. No additional artifacts were identified establishing that they represent 'isolated finds'.

Conclusions and Recommendations

Archaeological phase I survey for the proposed GMP Transmission Line # 133 Lowell to Johnson Upgrade Project to date has included the excavation of 1,258 0.5 m x 0.5 m test pits within 57 of 59 defined archaeologically sensitive areas. As detailed in Table 1, the phase I survey resulted in the identification of five newly recorded Native American sites. No additional archaeological work is recommended for the four sites that were determined to be isolated finds nor is additional work recommended for 'negative' ASAs. Archaeological phase II testing is recommended at one of the sites, VT-LA-0059, in the area of Structure [REDACTED] in order to determine its significance, i.e. eligibility status for the State and National Registers of Historic Places and to determine potential project effects to archaeological resources. In addition, it is

recommended that phase I survey be completed in the areas of Structures 40, 41, and 44 owned by Charles Stearns, and Structures 118-122 owned by Cheryl Buchanan once access issues are resolved.

The full technical report detailing the results of the phase I survey will be prepared and submitted in the upcoming months. Please call if you have any questions and thank you for the opportunity to conduct this study.

Sincerely,



David W. Beale
Project Director, NE ARC



Robert N. Bartone, M.A.
Director, NE ARC

Table 1. Summary of Results and Recommendations for the Archaeological Phase I Survey of the proposed Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont.

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Figure 1. Topographic map showing the location of the proposed Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. Note locations of newly identified Native American sites.

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Figure 2. Aerial photograph showing archaeological phase I survey work conducted at newly identified Native American site VT-LA-0059 within ASA 23 in the Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. Note location of newly identified Native American site VT-LA-0059, which is recommended for phase II testing.

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Figure 3. Aerial photograph showing archaeological phase I survey work conducted at ASA 40 within the Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. Note location of newly identified Native American site VT-LA-0057.

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Figure 4. Aerial photograph showing archaeological phase I survey work conducted at ASA 13 within the Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. Note location of newly identified Native American site VT-LA-0058.

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Figure 5. Aerial photograph showing archaeological phase I survey work conducted at ASA 44 within the Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. Note location of newly identified Native American site VT-OL-0084.

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Figure 6. Aerial photograph showing archaeological phase I survey work conducted within ASA 50 in the Green Mountain Power Transmission Line # 133 Lowell to Johnson Upgrade Project within the towns of Lowell, Eden, and Johnson, Orleans and Lamoille Counties, Vermont. Note the location of newly identified Native American site VT-OL-0085.