REDACTED - Matter No. 21-00750



Phase IB Archaeological Survey

South Ripley Solar Project

Town of Ripley, Chautauqua County, New York

Prepared for:

ConnectGen LLC 1001 McKinney Street, Suite 700 Houston, Texas 77002 Contact: Isaac Philips P: 346.998.2028 Project Email: info@southripleysolar.com



Prepared by:

Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. 217 Montgomery Street, Suite 1100 Syracuse, New York 13202 P: 315.471.0688 www.edrdpc.com



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April 2021

MANAGEMENT SUMMARY

NYSHPO Project Review Number:	20PR03687			
Involved State and Federal Agencies:	New York State Office of Parks Recreation and Historic Preservation (Section 14.09); Article 6 Section 94-c of the New York State Executive Law			
Phase of Survey:	Phase IB Archaeological Survey			
Location Information:	Town of Ripley, Chautauqua County, New York			
Survey Area:				
Facility Description:	A proposed 270-megawatt solar facility consisting of ground-mounted photovoltaic arrays and associated infrastructure.			
Facility Site	Approximately 3,381-acre Facility Site			
USGS Topographic Quadrangles:	South Ripley, NY and North East, PA			
Archaeological Survey Overview:				
Number/interval of shovel tests:	3,967 shovel tests at 50-foot (15-meter) intervals 133 radial shovel tests between 1 and 5-meter (3- to 50-foot) intervals			
Results of Archaeological Survey:				
Lithic scatters identified: Isolated lithic debitage: Multicomponent sites identified: Nineteenth century sites identified: Nineteenth century isolates:	7 3 1 3 1			
Report Authors:	Diane Yankel; Justin Sabino; Moira Magni; Kristen Olson; T. Arron Kotlensky, RPA, Douglas Pippin PhD, RPA			
Date of Report:	April 2021			

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ABSTRACT

On behalf of ConnectGen Chautauqua County LLC, a direct subsidiary of ConnectGen LLC (ConnectGen, or the Applicant), Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) conducted a Phase IB archaeological survey for South Ripley Solar Project (the Facility), a proposed utility-scale solar energy project, located in the Town of Ripley, Chautauqua County, New York.

The Facility's Area of Potential Effect (APE) for Direct Effects is evolving based on finalization of the layout. At the time of the Phase IB survey, the limits of significant ground disturbance in areas of elevated sensitivity was approximately 270 acres. The Phase IB archaeological survey was conducted in a series of site visits and mobilizations throughout 2020, concurrent with evolving Facility design. The Phase IB archaeological survey included the excavation of 4,100 shovel tests. The archaeological survey resulted in the identification of 15 archaeological resources, consisting of seven lithic scatters, three isolated lithic debitage, one multicomponent site, three sites dating to the nineteenth and early twentieth centuries, and one historic-period isolate find. Two hundred and fifty seven historic-period artifacts, and 26 nondiagnostic lithic debitage artifacts were collected during the survey (283 artifacts total collected). None of these resources, however, are recommended as potentially eligible for the State and National Register of Historic Places. Therefore, the proposed South Ripley Solar project is not anticipated to result in adverse effects to any S/NRHP-eligible archaeological resources.

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1.0 INTRODUCTION

1.1 Purpose of the Investigation

On behalf of ConnectGen, LLC (the Applicant), Environmental Design & Research, Landscape Architecture, Engineering, and Environmental Services, D.P.C. (EDR) conducted a Phase IB archaeological survey for the South Ripley Solar Project (the Facility), a proposed utility-scale solar energy project located in the Town of Ripley, Chautauqua County, New York. The purpose of the Phase IB survey is to assess for the presence of archaeological sites areas that may be directly affected by the proposed Facility and prepare appropriate recommendations for their management. The information and recommendations included in this report are intended to assist the New York State Department of Public Service (NYSDPS), the New York State Office of Parks, Recreation and Historic Preservation/State Historic Preservation Office (NYSHPO), and the New York State Office of Renewable Energy Siting (ORES) as part of review of the Project under Article 6 Section 94-C of the New York State Executive Law.

This Phase IB survey was conducted under the supervision of a Registered Professional Archaeologist who meets the Secretary of the Interior's Guidelines (per 36 CFR, Part 61) for Professional Qualifications in Archaeology in a manner consistent with the New York Archaeological Council's (NYAC) 1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (the NYAC Standards). This Phase IB report was prepared in further accordance with the NYSHPO's (2005) *Phase I Archaeological Report Format Requirements* (the NYSHPO Guidelines). Additionally, EDR conducted the Phase IB survey in accordance with the research design and archaeological sensitivity model presented in the South Ripley Solar Phase IA Archaeological Survey (EDR, 2021). Please note that this report addresses only archaeological resources and information concerning the Facility's potential effects on historic-architectural resources has been provided to the NYSHPO under separate cover.

The following terms are used throughout this document to describe the proposed action:

- The Facility: Collectively refers to all components of the proposed project, including PV panels, access roadways, buried and above ground collection lines, collection substation, point of interconnection switchyard, battery energy storage system, and staging areas. All components are located in the Town of Ripley, Chautauqua County, New York (Figures 1 and 2).
- Facility Site: Those leased parcels currently under agreement with the Applicant that will host all Facility components. The Facility Site parcels total approximately 3,381acres (Figure 2).
- The APE for Direct Effects: The Area of Potential Effect (APE) for Direct Effects for the proposed Facility is the area that includes all proposed soil disturbance associated with the Facility.

 The Limits of Significant Ground Disturbance: The portions of the APE for Direct Effects which contain Facility components which have the potential to impact archaeological resources. Per consultation with the NYSHPO, these components consist of all areas where Facility-related impacts involving *significant* ground disturbance, defined as trenching greater than 1.0 foot (0.3 meter) in width, or any excavation, grading, and/or paving.

The Phase IB survey was conducted concurrent with the evolving Facility layout. EDR completed the Phase IB archaeological survey fieldwork described in this report between July 2020 and April 2021. At the time the survey was completed in December 2020—and before the testing near the Clark-Wilcox Mill Site in March-April of 2021 (Section 3.3)—the total area in the Limits of Significant Ground Disturbance that was considered to have elevated sensitivity for archaeological resources was approximately 270 acres. In some cases Facility components were relocated or eliminated in the process of Phase IB archaeological fieldwork in order to avoid impacts to archaeological resources, or due to other siting constraints (e.g., accommodation of wetland impacts, slopes, land-owner preferences, etc.).

1.2 Project Location and Description

The proposed Facility is a 270 megawatt (MW) photovoltaic (PV) utility-scale solar energy generating project in the Town of Ripley, Chautauqua County, New York. The Facility will consist of rows of PV modules in discrete sub-arrays dispersed throughout the Facility Site. These arrays will be enclosed by fences (for safety and security purposes). Additionally, the Facility will include electrical direct current (DC) collection cables that connect to inverters and storage devices, and medium voltage alternating current (AC) cables that run from the sub-arrays to a collection substation and then to a Point of Interconnection (POI) switchyard, as well as other Facility components. The Facility may also incorporate energy storage technologies. The regional Facility location and Facility layout are depicted on Figures 1 and 2, respectively. The property parcels under evaluation for hosting the Facility are rural in nature. Not all the land included in this area will ultimately be developed for the Facility. Rather, the Facility Site represents all the parcels within which solar facilities will be sited on leased land. The Facility Site consists of approximately 3,381 acres of primarily agricultural land. The proposed Facility components, and the anticipated potential ground disturbance associated with those components are summarized here and will include:

- Uniform rows of PV solar panels producing DC electricity mounted on fixed-tilt structures with a maximum height of approximately 15 feet above the ground surface;
- Co-located inverters placed throughout the Facility (internal to the panel arrays) to convert DC electricity to AC electricity;
- Medium voltage transformers co-located with the inverters that will increase the voltage of the electricity to 34.5 kilo-volts (kV) for the collection system;

- A medium voltage collection system that will aggregate the 34.5 kV AC output from the collocated inverters and transformers and deliver electricity to the Facility substation;
- A collection substation where the Facility's electrical output voltage will be combined, and its voltage increased to the transmission line voltage of 230 kV via step-up transformers;
- A new point of interconnection with transmission equipment associated with existing National Grid substation;
- A potential operations and maintenance (O&M) building to be located within the Facility Area;
- Temporary laydown areas for equipment staging during construction;
- A potential 20 MW battery storage system with up to 80 megawatt-hours of energy storage capacity; and
- Internal infrastructure including access roads and security fencing;

As discussed in the previously prepared Phase IA Archaeological Survey report for the Facility (EDR, 2021), solar facilities result in minimal soil disturbance relative to other types of development projects. Impacts from the construction and operation of solar generation are largely the result of the fact that utility-scale solar energy facilities require a continuous area for the collection and distribution of energy. The Applicant has sited the Facility in a rural agricultural setting to reduce the need for land clearing and minimize the need for typical construction activities such as surface grading and soil compaction. Solar panels will be installed on a low-profile racking system, which typically consists of small I-beam posts driven or screwed into the ground, without the need for excavation, concrete, or other foundations.

Grading may be necessary in some areas, such as along the route of proposed access roads. In those areas where soil disturbance is necessary, topsoil will be stripped and stockpiled for restoration purposes. Following construction, disturbed areas within the PV array areas will be restored with topsoil, and a cover of native grass species will be established underneath and around the solar panels. Areas of soil disturbance located in areas that will remain in agricultural production (such as the routes of proposed buried collection lines) will be restored to their existing condition. The Applicant is committed to minimizing soil disturbance associated with the proposed Facility as a way to minimize impacts to cultural and natural resources alike.

It should also be noted that the areas proposed for development consist primarily of level to gently sloping agricultural fields, timber lots, and forested areas (Appendix B). During preliminary design, minimization of cut and fill areas was explored where possible. However, there are situations where cuts and fills will be necessary. For example, cuts and fills are expected in some sloped areas for the levelling of PV panel areas and for the construction of access roads, the collection substation, the POI switchyard, and the potential battery storage system. Construction of the Facility will be accomplished with machines that are generally consistent in terms of size, weight, and tread with the agricultural and other mechanized equipment that are currently used on these properties.

1.3 The APE for Direct Effects

A project's APE for Direct Effects is defined as those areas where soil disturbance will occur during project construction and access. The anticipated limits of soil disturbance for each proposed Facility component are described in detail below in Section 3.2 in the context of the archaeological survey and sensitivity model (see Figure 2). These areas cumulatively make up the South Ripley Solar Project's APE for Direct Effects. For the purposes of describing the APE for Direct Effects, the areas of disturbance listed in Section 3.2 represent the extent of potential temporary soil disturbance anticipated for Facility construction and do not represent permanent soil disturbance associated with the Facility. Note that this represents the total area that could be temporarily disturbed by construction. However, much of the APE for Direct Effects consists of construction activities which are unlikely to impact archaeological resources (such as the installation of small, pile-driven posts and associated mounting of PV panel arrays). Therefore, a smaller area, the "Limits of Significant Ground Disturbance" was investigated for the area of the Phase IB archaeological survey.

1.4 NYSHPO Consultation

16 NYCRR § 1001.20 specifies that the scope of cultural resources studies for a major electrical generating facility should be determined in consultation with the NYSHPO. On behalf of the Applicant EDR initiated consultation with the NYSHPO via correspondence submitted through the Cultural Resources Information System (CRIS) online portal, beginning in June 2020. This correspondence is included as Appendix A of this report. To date, consultation with the NYSHPO has included the following:

- On June 18, 2020, EDR submitted a Facility description and supporting information to the NYSHPO via the CRIS online portal. Relevant to the archaeological survey, the NYSHPO indicated that only areas of significant proposed ground disturbance (as defined above in Section 1.3) would require archaeological survey to satisfy their expectations.
- On June 24, 2020, the NYSHPO responded with a request for a Phase IA Historic Resource Survey and a Phase IA-IB archaeological survey for the Facility. This letter also provided guidance related to the development of the scope of work for the Phase IA-IB archaeological survey:

Phase IB archaeological testing is not recommended for panel arrays; perimeter fencing and utility poles, if their associated posts are driven or drilled into the ground and no grubbing or grading is involved, and for excavations and grading less than six inches in depth. Phase IB testing is also not recommended for trenches less than three feet wide. However, if the installation of the panel array supports, fencing or utility poles requires grubbing and grading exceeding six inches in depth, then Phase IB archaeological testing is recommended.

Phase IB archaeological testing is recommended for areas of substantial proposed ground disturbance, which includes areas of grading and excavation more than six inches deep, grubbing, tree and stump removal, and trenches more than three feet wide, unless the archaeological sensitivity warrants greater effort (Ferguson, 2020).

- On August 19, 2020, the *Phase IA Historic Resources Survey* (EDR, 2020) was submitted to NYSHPO via the CRIS website.
- On January 22, 2021, the Phase IA Archaeological Survey (EDR, 2021) was submitted to NYSHPO via the CRIS website.
- On February 8, 2021, OPRHP responded to the review of the Phase IA Archaeological Survey (EDR, 2021) and requested the Phase IB archaeology survey.

2.0 BACKGROUND AND RESEARCH DESIGN

2.1 Summary of Previous Phase IA Archaeological Survey

EDR previously prepared and submitted to the NYSHPO via CRIS a *Phase IA Archaeological Survey Report* for review and comment. The purpose of the *Phase IA Archaeological Survey* was to:

- define the Facility's area of potential effect (APE) for Direct Effects relative to archaeological resources;
- record and describe previously identified archaeological resources located within the APE for Direct Effects; and,
- propose a methodology to identify archaeological resources within the APE for Direct Effects, evaluate their eligibility for the S/NRHP, assess potential effects of the Facility on resources, if present, and make recommendations for their management.

The Phase IA Archaeological Survey included a review of previously identified archaeological sites and previously conducted archaeological surveys within a one-mile radius of the Facility Area. Relative to the potential presence of archaeological sites in the Facility Site, the results of the Phase IA archaeological resources survey can be summarized as follows:

- No previously recorded archaeological sites are located within the Facility Area.
- One previously recorded Native American archaeological site is located within one mile of the Facility Area (as defined at the time the Phase IA report was prepared). This site was reported as traces of a Native American occupation of unknown time period (Parker, 1922).
- No previously recorded historic-period archaeological sites are mapped within the Facility Area, but numerous historic-period farmsteads are depicted on historic-period maps of the area. Therefore, areas located in the immediate vicinity—i.e., within approximately 200 feet [61 meters]—of map-documented structure (MDS) locations are considered to have an elevated potential for the presence of historic-period archaeological resources. The remaining (non-MDS) portions of the Facility Area exhibit for a low sensitivity for the presence of significant historic-period archaeological sites.

2.2 Phase IB Archaeological Survey Research Design

The *Phase IA Archaeological Survey Report* included a GIS-based archaeological sensitivity model that evaluated the probability of encountering archaeological resources within the Facility Area. The goal of the archaeological sensitivity model was to target archaeological survey in areas of higher sensitivity while maintaining a level of effort that is consistent with the scope of ground disturbance associated with the proposed Facility. The model evaluated the

relative potential for the presence of archaeological resources based on elevated and low sensitivity for archaeological resources.

2.2.1 Archaeological Sensitivity Assessment

As described in Section 2.1 of this report, one previously recorded archaeological site occurs within 1-mile (1.6-km) of the Facility Area and is described as "traces of occupation". Sensitivity for Native American archaeological resources is typically assessed based on topography, setting, soil, and proximity to water sources, as well as the presence of previously recorded archaeological sites. The primary assumption behind the assessment of archaeological sensitivity is that populations located their settlements in areas that maximized their access to key subsistence resources (e.g., water, fish, game, wild plant foods, and domesticated plants for Woodland period groups). Therefore, major habitation sites are often located on flat terrain, along major streams and rivers, in proximity to wetlands, and on well-drained soils.

In order to explicitly identify areas of elevated Native American archaeological sensitivity, EDR developed a GIS-based archaeological sensitivity model. The archaeological sensitivity model was designed in order to identify portions of the Survey Site which would be more likely to contain Native American archaeological materials than others (Figure 3). The model incorporates the following variables:

- Proximity to previously recorded archaeological sites (typically NYSHPO or New York State Museum [NYSM] Sites or Areas);
- Proximity to water, wetlands, and hydric soils;
- Presence of well drained soils; and,
- Slope.

EDR examined the one previously recorded site within 1 mile (1.6 km) of the Facility Area containing Native American components in terms of proximity to water, wetlands, and hydric soils, as well as soil drainage, and ground slope. NYSM Areas were excluded from the analysis due to their large size and non-specific nature. In addition to the environmental variables examined, the model also takes into account inadequacy of a sample consisting of a single site, therefore EDR employed a wider set of variables and conditions than the analysis of the single previously reported site necessarily indicates. The distribution of the three environmental variables (proximity to water/wetlands, soil drainage, and ground slope) has been successfully applied to previous models in western New York in order to establish the appropriate criteria (or thresholds) for areas of elevated archaeological sensitivity. The purpose of the model is to use these variables to identify a subset of lands within the Facility Area that are more likely to contain archaeological materials.

Therefore, based on analysis of the variables described above, EDR established the following criteria to define elevated archaeological sensitivity:

- Areas within 1,000 feet (305 meters) of known archaeological sites (defined as NYSOPRHP or NYSM Sites);
- 2. Areas within known NYSM Areas;
- 3. Areas within 1,500 feet (457 meters) of water, wetlands, or hydric soils;
- 4. Soils classified as moderately well drained, well drained, somewhat excessively drained, and excessively drained, according to ESRI and SSURGO (2021) soils mapping; and,
- 5. Ground slope of 5% or less.

Therefore, as depicted on Figure 3, the entire Facility Area was categorized as having either elevated or reduced sensitivity, based on the above criteria. All areas within 1,000 feet (305 meters) of previously recorded archaeological sites, are considered to have elevated sensitivity. Furthermore, those locations within the Facility Area having a combination of at least two or more of criteria #3-5 (proximity to water, well-drained soils, and slope of 5% or less) are also considered to have elevated sensitivity (see Figure 3). For this model, proximity to water was prioritized over slope within the Facility Area. It is important to note, however, that any areas containing 12% or greater slopes were considered as low sensitivity due to steep slopes regardless of whether they met any of criteria 1 through 5 above.

2.3 Map-Documented-Structure Sensitivity Assessment

Areas where there is a greater potential for encountering historic-period archaeological resources include those areas located proximate to water and navigable waterways, railways, roadways, as well as the former locations of structures depicted on historical maps and atlases within the Facility Area. As described in the Phase IA Survey Report (EDR, 2021) and illustrated on historical maps, the Facility Area has been occupied by Europeans and Americans since the eighteenth century. The locations of former structures within and near the Facility Area were found on the 1881 Beers *Illustrated Historical Atlas of the County of Chautauqua, New York*, Keeney's 1854 *Map of Chautauqua County, New York*, the 1867 Stewart "Ripley" [Township] in New Topographical Atlas of Chautauqua County, New York, the 1905 *Clymer, NY* and 1913 *North East, PA* 1:62,500 USGS Topographic Quadrangles, the 1916 Rand McNally "Ripley" in *Wall Map of Ripley, Chautauqua County, New York*, the 1939 *Clymer, NY* and the 1941 *Clymer, NY* 1:62,500 USGS Topographic Quadrangles, the 1943 *North East, PA* 1:62,500 USGS Topographic Quadrangle, and the 1954 South Ripley 1:24000 USGS Topographic Quadrangle.

Historically map-documented structure (MDS) locations within the Facility Area are generally located adjacent to existing roadways. In some instances, MDS represent existing buildings and/or farms. In other instances, they are abandoned structures that now may be represented only by archaeological remains. Potential archaeological resources associated with these MDS locations could include abandoned residential and/or farmstead sites, where the complete residential and/or agricultural complex consisting of foundations, structural remains, artifact scatters, and other features, would constitute an archaeological site. In other locations, more limited remains of these sites, perhaps represented by only a foundation or an artifact scatter, may be present.

Areas located in the immediate vicinity—within approximately 200 feet (61 meters)—of MDS locations are considered to have an elevated sensitivity for the presence of historic-period archaeological resources. The remaining portions of the Facility Site exhibit minimal (if any) likelihood for significant historic-period archaeological sites to be present. Based on this and the results of the background research and historical map analysis, the Facility Site is considered to have a moderate to high probability to contain historic-period archaeological resources.

3.0 PHASE IB ARCHAEOLOGICAL SURVEY

3.1 Phase IB Archaeological Survey Fieldwork Organization and Methods

EDR conducted Phase IB archaeological survey fieldwork at the Facility Site between July and December of 2020. Fieldwork was supervised by Diane Yankel and Moira Magni, assisted by a crew of up to 16 archaeological field technicians throughout the process. EDR conducted additional Phase IB archaeological survey fieldwork between March and April of 2021. As described in Section 1.1 of this report, the fieldwork occurred over the course of 2020 and 2021, concurrent with the Facility design process, so some areas subjected to Phase IB survey no longer part of the APE for Direct Effects. In these areas, Facility components were moved or eliminated following archaeological survey fieldwork in order to avoid impacts to archaeological resources, or due to other siting constraints (e.g., wetland impacts, slopes, land-owner preferences, etc.) (see Figures 2 and 4).

Phase IB archaeological survey fieldwork consisted of the following:

- Shovel Testing. In areas not suitable for pedestrian surface survey, shovel tests were excavated to determine whether archaeological sites were present. Shovel tests were typically excavated along transects or in grid patterns at 50-foot (15-m) intervals within the APE for Direct Effects or placed judgmentally in the vicinity of MDS locations. Shovel tests were typically 12 to 20 inches (30 to 50 cm) in diameter and excavated to sterile subsoil or the practical limits of hand excavation (in accordance with *the NYAC Standards*; NYAC, 1994). Field notes for each shovel test were recorded on standardized forms that described soil stratigraphy, recorded whether any artifacts were recovered, and noted any other relevant observations. All soils excavated from shovel tests were screened through 0.25-inch hardware cloth. If Native American artifacts were recovered from an isolated shovel test, then up to eight additional shovel test in order to determine whether the artifacts represented an isolated find or indicated the presence of a more substantial archaeological site.
- Steeply sloped, wetland, and disturbed areas. No systematic archaeological survey work is proposed in steeply sloped areas, delineated wetlands, or areas where visual inspection can confirm previous soil disturbance (per the NYAC Standards; NYAC, 1994). In these areas, archaeological survey will be restricted to pedestrian walkover supplemented by judgmental shovel testing if indications of a potential archaeological site are observed (e.g., foundations, structural remains, or rock overhangs suitable for use as shelters).

Tabulated shovel test records for shovel tests excavated during the Phase IB archaeological survey for the South Ripley Solar Project are included in Appendix C.

3.2 Phase IB Archaeological Survey Fieldwork Results

During fieldwork conducted throughout 2020, EDR personnel excavated a total of 4,100 shovel tests for the South Ripley Solar Project. Table 1 (below) summarizes the shovel tests excavated and archaeological resources identified during the Phase IB archaeological survey. The level of effort for the Phase IB survey was a comprehensive survey of the Facility Site. Following completion of the archaeological fieldwork, some Facility component locations were revised in order to avoid archaeological resources or based on the results of other environmental studies or other practical considerations (e.g., to avoid wetlands or due to property owner concerns). Therefore, some of the areas shovel tested or surveyed are no longer associated with proposed Facility components. For the purposes of organization EDR arranged the survey by impact type (see Table 1 below).

Site Name	Description	Extent (acre)	Avoidance Measures/Recommendations
JA-001	Non-diagnostic lithic scatter	>0.01	None (Does not meet S/NRHP Criteria)
RA-001	Non-diagnostic lithic scatter	>0.01	None (Does not meet S/NRHP Criteria)
PA-002	Non-diagnostic lithic scatter	>0.01	None (Does not meet S/NRHP Criteria)
OA-001	Non-diagnostic lithic scatter	0.01	None (Does not meet S/NRHP Criteria)
WB-AR4-001	Non-diagnostic lithic scatter	>0.01	None (Does not meet S/NRHP Criteria)
WB-AR6-001	Non-diagnostic lithic scatter	>0.01	None (Does not meet S/NRHP Criteria)
19020-TS01	Non-diagnostic lithic scatter	0.11	None (Does not meet S/NRHP Criteria)
SB-002	19 th century artifact scatter	>0.01	None (Does not meet S/NRHP Criteria)
FC-001	19 th century artifact scatter	0.40	None (Does not meet S/NRHP Criteria)
EB-AR1-001	19 th century artifact scatter	0.38	None (Does not meet S/NRHP Criteria)
19020-MS01	19th century artifact scatter and lithic scatter	0.53	None (Does not meet S/NRHP Criteria)
CL02-001	Isolate lithic debitage	>0.01	None (Does not meet S/NRHP Criteria)
SB-001	Isolate lithic debitage	>0.01	None (Does not meet S/NRHP Criteria)

Table 1. Summary of Archaeological Survey Results

Site Name	Description	Extent (acre)	Avoidance Measures/Recommendations
LA-001	Isolate lithic debitage	>0.01	None (Does not meet S/NRHP Criteria)
NC-001	Isolated 19 th century artifact	>0.01	None (does not meet S/NRHP Criteria)

EDR collected 257 historic-period artifacts, and 26 nondiagnostic lithic debitage artifacts were collected during the survey (283 artifacts total collected).

In some cases where individual historic-period artifacts were observed with no associated foundation, feature, or other indication of a potential archaeological site, the historic-period artifacts were observed and noted but not collected. At sites with a surface component, clearly diagnostic historic-period artifacts, and a representative sample of other artifacts were collected but the entire surface assemblage was not collected. All artifacts potentially related to Native American activities or occupation encountered during the Phase IB survey were collected.

All the artifacts collected by EDR over the course of the primary stage of the Phase IB archaeological survey are listed in Appendix D of this report.

3.3 Identified Archaeological Sites

In total, the Phase IB archaeological survey conducted for the South Ripley Solar Project resulted in the identification of 15 archaeological resources, consisting of 11 sites and four isolates. These include seven non-diagnostic lithic scatters, three isolated lithic debitage, one multicomponent site, three nineteenth century sites, and one nineteenth century isolated find. Each of these resources is discussed in detail in Subsections 3.3.1 through 3.3.11 below. In addition to the descriptions of these sites provided herein, the information for each site has been entered into NYSHPO 's online CRIS database concurrent with submission of this report. The isolated finds are discussed in detail in Subsections 3.4.1 through 3.4.4 below.

As explained in Section 3.2 above, EDR archaeologists identified several low-density scatters of historical and modern debris within the agricultural fields surveyed. These field scatters are the results of manure-seeding activities, consist of highly-fragmented late-nineteenth and twentieth-century household and architectural debris, and are not associated with historically map-documented structure locations. Therefore, they were not treated as archaeological sites.

3.3.1 JA-001 <u>Site Type</u>: Lithic Scatter <u>Archaeology Survey Area</u>: JA <u>Site Description</u>: The JA-001 lithic scatter consists of a low density chert debitage scatter confined to approximately 152 square feet (14 square meters) within three shovel test locations. A total of ten radial shovel tests were excavated around the find to delineate the site boundary. The artifacts remained confined to the 1-meter of the shovel test radials but did not extend beyond the 1-meter radial excavations. The artifacts that were recovered consist of a fragmented secondary flake and four unmodified angular debris. These materials do not represent a unique or unusual artifact type. They cannot be associated with a specific time-period and future research at the location is unlikely to produce significant information.

LOCATION REDACTED



The JA-001 lithic scatter consists of five total chert artifacts recovered from three shovel tests (Appendix B, Photo 12). All artifacts recovered at this location are summarized in Table 2 below and detailed in Appendix D. A secondary flake fragment was recovered from a depth of 12 to 33 cmbs within the second stratigraphic horizon of shovel test JA5.02 (Appendix B, Photo 13). Following the recovery of the flake from JA5.02, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the find. Two of the 1-meter radial shovel tests, JA5.02R1N and JA5.02R1E, contained angular shatter. An additional two shovel tests were excavated at 7.5-meter interval in the direction of the finds to define the site boundary (Figure 4 REDACTED; Figure 5 REDACTED).

All lithics were recovered from the second stratigraphic soil horizon. Soils encountered in shovel tests at this site consisted of a dark grayish brown (10YR 4/2) silt loam plowzone, which overlaid a dark yellowish brown (10YR 4/4) silt loam B horizon, which overlaid a second B horizon consisting of a light yellow brown (10YR6/4) silt loam, which overlaid an oxidized light yellowish brown (2.5Y 6/4) silt loam which was interpreted as culturally sterile subsoil and excavated into by ten centimeters before terminating the shovel tests (see Appendix C for shovel test stratigraphic profiles).

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time period
JA5.02	Ш	12-33	1	Secondary Flake	Gray chert	Nondiagnostic
JA5.02R1N	Ш	11-30	1	Angular Debris/Shatter	Gray chert	Nondiagnostic

Table 2. Artifacts Collected at the JA-001 Lithic Scatter

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time period
JA5.02R1E	Ш	14-33	2	Angular Debris/Shatter with cortex	Gray chert	Nondiagnostic
JA5.02R1E	Ш	14-33	1	Angular Debris/Shatter	Gray chert	Nondiagnostic
Total	Artifacts Co	ollected:	5			

<u>Recommendation</u>: In the opinion of EDR, the site does not satisfy S/NRHP-eligibility criteria. The JA-001 lithic scatter is currently located within an area of proposed tree removal for PV array within the APE and it may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.2 RA-001 <u>Site Type</u>: Lithic Scatter <u>Archaeology Survey Area</u>: RA

<u>Site Description</u>: The RA-001 lithic scatter consists of a low density lithic scatter confined to approximately 103 square feet (9 square meters) within two shovel test locations. A total of ten radial shovel tests were excavated around the find to delineate the site boundary. The artifacts remained confined to the 1-meter of the shovel test radials but did not extend beyond the 1-meter radial excavations. While the presence of artifacts within the second stratum of this site indicates a potential for undisturbed cultural deposits to be present, it is EDR's opinion that the close proximity of the radial shovel tests in conjunction with the paucity of artifacts identified during radial shovel testing are adequate to demonstrate that no significant cultural deposits or features are present within the site area. The artifacts consist of a two secondary flakes. These materials do not represent a unique or unusual artifact type. They cannot be associated with a specific time-period and future research at the location is unlikely to produce significant information.

LOCATION REDACTED

The RA-001 lithic scatter consists of two total chert secondary flakes recovered from two shovel tests (Appendix B, Photo 16). All artifacts recovered at this location are summarized in Table 3 below and detailed in Appendix D. The site was initially identified with the identification of secondary flake fragment recovered from a depth of 9 to 20 cmbs within the second stratigraphic horizon of shovel test RA2.07. Following the recovery of the flake from RA2.07, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the find. One of the 1-meter radial shovel tests (RA2.07R1N), also contained a secondary flake recovered from the second stratigraphic horizon. An additional two shovel tests were excavated at 7.5-meter interval to the north and to the east to further define the site boundary (Figure 4 REDACTED; Figure 5 REDACTED).

All lithics were recovered from the second stratigraphic soil horizon. Shovel tests at this site with intact soils typically consisted of a dark grayish brown (10YR 4/2) silt loam plowzone, which overlaid a yellowish brown (10YR 5/4) silt loam B horizon, which overlaid a second B horizon consisting of a light yellow brown (10YR6/4) silt loam, which overlaid an oxidized light brownish gray (10YR 6/2) silt clay with decaying rock which was interpreted as culturally sterile subsoil and excavated into by ten centimeters before terminating the shovel tests (Appendix B, Photo 17). A few of the shovel tests had stripped topsoil or truncated B horizons from logging activity in the surrounding area (see Appendix C for shovel test stratigraphic profiles).

Table 3. Artifacts	Collected at the	RA-001 Lithic Scatter
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Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time Period
RA2.07	Ш	9-20	1	Secondary Flake	Gray chert	Nondiagnostic
RA2.07R1N	11	11-29	1	Secondary Flake	Gray chert	Nondiagnostic
Total	Artifacts C	ollected:			2	

Recommendation:

In the opinion of EDR, the site does not satisfy S/NRHP-eligibility criteria. The RA-001 lithic scatter is currently located within an area of proposed tree removal for PV array within the APE and it may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.3 PA-002

Site Type: Lithic Scatter

Archaeology Survey Area: PA

Site Description: LOCATION REDACTED

The PA-002 lithic scatter consists of three total chert secondary flakes recovered from two shovel tests (Appendix B, Photo 20). All artifacts recovered at this location are summarized in Table 4 below and detailed in Appendix D. Two secondary flakes were recovered from a depth of 0 to 15 cmbs within the plowzone of shovel test PB1.04. Following the recovery of the flakes from PB1.04, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the find. One of the 1-meter radial shovel tests, PB1.04R1E encountered a layer of overburden which overlayed a plowzone stratum II where an additional secondary flake was identified. Shovel test PB1.04R1E encountered a rocky overburden stratum I, consisting of spoil at the edge of the agricultural field resulting from field clearance. Stratum II consisted of a plowzone identical to the stratum I plowzone encountered in the surrounding shovel tests and was interpreted as belonging to the same cultural deposit. An additional three shovel tests were excavated at 7.5 and 15-meter interval to the east and to the west to further define the site boundary (Figure 4 **REDACTED**; Figure 5 **REDACTED**).

Shovel tests at this site with intact soils typically consisted of a very dark grayish brown (10YR 3/2) silt loam plowzone, which overlaid a yellowish brown (10YR 5/4) silt loam B horizon, which overlaid an oxidized light yellowish brown (2.5Y 6/2) silt clay with decaying rock which was interpreted as culturally sterile subsoil and excavated into by ten centimeters before terminating the shovel tests (Appendix B, Photo 21). A few of the shovel tests had overburden from push associated with the edge of agricultural field clearance (see Appendix C for shovel test stratigraphic profiles). Radial shovel test PB1.04R3E was excavated at a one-meter offset to avoid logging slash pile clearance and modern dumping activity.

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time period
PB1.04	L	0-15	2	Secondary Flake	Gray chert	Nondiagnostic
PB1.04R1E	11	14-34	1	Secondary Flake	Gray chert	Nondiagnostic
Total	Artifacts C	ollected:			3	

Table 4. Artifacts Collected at the PA-002 Lithic Scatter

<u>Recommendation</u>: The PA-002 lithic scatter consists of a low-density lithic scatter confined to approximately 73 square feet (6 square meter) within two shovel test locations. A total of eleven radial shovel tests were excavated around the finds to delineate the site boundary. The artifacts remained confined to the 1-meter shovel test radials and did not extend beyond the 1-meter radial excavations. The artifacts recovered from the site consist of a three secondary

flakes. These materials do not represent a unique or unusual artifact type. They cannot be associated with a specific time-period, and future research at the location is unlikely to produce significant information. In the opinion of EDR, the site does not satisfy S/NRHP-eligibility criteria. The PA-002 lithic scatter is currently located within an area of proposed tree removal for PV array within the APE and it may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.4 OA-001 <u>Site Type</u>: Lithic Scatter <u>Archaeology Survey Area</u>: OA

Site Description: LOCATION REDACTED

The OA-001 lithic scatter consists of two total chert artifacts recovered from two adjacent shovel tests among a grid of shovel tests excavated at 15-meter intervals (Appendix B, Photo 24). All artifacts recovered at this location are summarized in Table 5 below and detailed in Appendix D. The site was initially identified by the recovery of a secondary flake from stratum I of shovel test OA5.08 and OA5.20. Following the recovery of the flakes from OA5.08 and OA5.20, an additional six radial shovel tests were excavated at 7.5-meter intervals around the finds within the established shovel test grid. None of the radial shovel tests contained cultural material (Figure 4 REDACTED; Figure 5 REDACTED).

Shovel tests at this site consisted primarily of hydric soils (Appendix B, Photo 25), including a very dark gray (10YR 3/1) silt loam, which overlaid a heavily oxidized light olive brown (2.5Y 5/3) silt clay loam, which was interpreted as culturally sterile subsoil and excavated into by ten centimeters before terminating the shovel tests (see Appendix C for shovel test stratigraphic profiles).

Table 5. Artifacts Collected at the OA-001 Lithic Scatter

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time Period
OA5.08	Ĩ.	0-21	1	Secondary Flake	Gray chert	Nondiagnostic

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time Period	
OA5.20	1	0-26	1	Angular Debris / Shatter	Gray chert	Nondiagnostic	
Total	Artifacts Co	ollected:			2		

<u>Recommendation</u>: The OA-001 lithic scatter consists of a low density lithic scatter confined to approximately 4,293 square feet (398 square meters) within two adjacent shovel test locations among a grid of shovel tests at 15-meter intervals. A total of six radial shovel tests were excavated around the finds to delineate the site boundary None of the radial shovel tests contained cultural material. The artifacts consist of a one secondary flake and one chert angular debris. These materials do not represent a unique or unusual artifact types and they cannot be associated with a specific time-period or cultural tradition and future research at the location is unlikely to produce significant information. In the opinion of EDR, the site does not satisfy S/NRHP-eligibility criteria. The OA-001 lithic scatter is currently located within an area of proposed tree removal for PV array and may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.5 WB-AR4-001 <u>Site Type</u>: Lithic Scatter <u>Archaeology Survey Area</u>: WB-AR4



The WB-AR4-001 lithic scatter consists of two total chert artifacts (Appendix B, Photo 28), recovered from two shovel tests. All artifacts recovered at this location are summarized in Table 6 below and detailed in Appendix D. A secondary flake was recovered from the plowzone in shovel test WB-AR4.13. Following the recovery of the flake from WB-AR4.13, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the find. One of the 1-meter radial shovel tests, WB-AR4.13R1E contained a secondary flake also recovered from the plowzone. An additional two shovel tests were excavated at 15-meter interval to the east and to the west to further define the site boundary (Figure 4 **REDACTED**; Figure 5 **REDACTED**).

All lithics were recovered from the plowzone. Stratigraphy encountered in shovel tests at this site typically consisted of a brown (10YR 4/3) silt loam plowzone, which overlaid an oxidized light yellowish brown (2.5Y 6/3) silt clay loam with decaying rock, which was interpreted as a culturally sterile subsoil (Appendix B, Photo 29). Shovel tests were excavated ten centimeters into sterile subsoil before terminating excavation (see Appendix C for shovel test stratigraphic profiles).

Table 6. Artifacts Collected at the WB-AR4-001 Lithic Scatter

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time Period
WB-AR4.13	E.	0-40	1	Secondary Flake	Gray chert	Nondiagnostic
WB-AR4.13R1E	I.	0-37	1	Secondary Flake	Gray chert	Nondiagnostic
Total Art	tifacts Collec	ted:	2			

<u>Recommendation</u>: The WB-AR4-001 lithic scatter consists of a low-density lithic scatter confined to approximately 99 square feet (9 square meters) within two shovel test locations. A total of eleven radial shovel tests were excavated around the finds to delineate the site boundary. The artifacts remained confined to the plowzone of the initial find and a single 1-meter radial shovel test. They do not represent a unique or unusual artifact type, and the materials cannot be associated with a specific time-period, or cultural tradition. Future research at the location is unlikely to produce any new significant information. In the opinion of EDR, the WB-AR4-001 site does not satisfy S/NRHP-eligibility criteria. The WB-AR4-001 lithic scatter is currently located within an area of proposed access road and it may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.6 WB-AR6-001 <u>Site Type</u>: Lithic Scatter in Isolated Shovel Test <u>Archaeology Survey Area</u>: WB-AR6

Site Description: LOCATION REDACTED

The WB-AR6-001 lithic scatter consists of three total chert artifacts recovered from a single shovel test (Appendix B, Photo 32). All artifacts recovered at this location are summarized in Table 7 below and detailed in Appendix D. Two secondary flakes and an angular debris were recovered from within the plowzone of shovel test WB-AR6.06. The chert angular debris appears to have been thermally altered or heat treated. Following identification of artifacts in shovel test WB-AR6.06, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the initial find. An additional two shovel tests were excavated at 15-meter interval to the north and to the south to further define the site boundary. None of the radial shovel tests contained cultural material (Figure 4 REDACTED; Figure 5 REDACTED).

All lithics were recovered from the plowzone horizon. Shovel tests at this site typically consisted of a brown (10YR 4/3) silt loam plowzone, which overlaid an oxidized light brownish gray (2.5Y 6/2) silt clay loam with decaying rock which was interpreted as culturally sterile subsoil (Appendix B, Photo 33) Shovel tests were excavated ten centimeters into the culturally sterile subsoil before terminating excavation (see Appendix C for shovel test stratigraphic profiles).

Table 7. Artifacts Co	ollected at the	WB-AR6-001 Lithic	Scatter in Isolated	Shovel Test
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Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time Period
WB-AR6.06	1	0-30	2	Secondary Flake	Gray chert	Nondiagnostic
WB-AR6.06	I.	0-30	1	Angular Debris / Shatter	Gray chert	Nondiagnostic
Total Artifacts Collected:		3				

<u>Recommendation</u>: The WB-AR6-001 lithic scatter consists of a lithic scatter confined to no more than the 32 square feet (3 square meters) surrounding the single shovel test with cultural material. A total of ten radial shovel tests were excavated around the initial find to delineate the site boundary. The three artifacts recovered consist of chert lithic debitage including one angular debitage, and two secondary flakes which do not represent a unique or unusual artifact type. The materials cannot be associated with a specific time-period and future research at the location is unlikely to produce significant information. In the opinion of EDR, the site does not satisfy S/NRHP-eligibility criteria. The WB-AR6-001 lithic scatter is currently located within an area of proposed underground collection line and access road and it may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.7 19020-TS01 <u>Site Type</u>: Lithic Scatter <u>Archaeology Survey Area</u>: MILL01

Site Description: LOCATION REDACTED

The 19020-TS01 lithic scatter consists of two total chert artifacts (Appendix B, Photo 71), recovered from the plowzone of two shovel tests. All artifacts recovered at this location are summarized in Table 8 below and detailed in Appendix D. A tertiary flake was recovered shovel test MILL01-01.17 and a secondary flake was recovered from shovel test MILL01-02.19. Shovel test MILL01-02.19 is located approximately 15 meters south of shovel test MILL01-01.17. Following the recovery of the flakes from two adjacent shovel tests, an additional six radial shovel tests were excavated at 7.5-meter and two radial shovel tests at 15-meter intervals around the finds to further delineate the site boundary. None of the radial shovel tests contained cultural material (Figure 4 REDACTED; Figure 5 REDACTED).

All lithics were recovered from the plowzone. Stratigraphy encountered in shovel tests at this site typically consisted of a very dark brown (10YR 3/2) silt loam plowzone, which overlaid an oxidized yellowish brown (10YR 5/4) silt clay loam with decaying rock, which was interpreted as a culturally sterile subsoil (Appendix B, Photo 72. Shovel tests were excavated ten centimeters into sterile subsoil before terminating excavation or within the practical limits of hand excavation (see Appendix C for shovel test stratigraphic profiles).

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Material	Time Period
MILL01-01.17	Ť	0-20	1	Tertiary Flake	Gray chert	Nondiagnostic
MILL01-02.19	L	0-35	1	Secondary Flake	Gray chert	Nondiagnostic
Total Ar	tifacts Collec	ted:	2			

Table 8. Artifacts Collected at the 19020-TS01 Lithic Scatter

<u>Recommendation</u>: The 19020-TS01 lithic scatter consists of a low density lithic scatter within two shovel test locations. A total of eight radial shovel tests were excavated around the finds to delineate the site boundary. None of the radial shovel tests contained cultural material. The artifacts consist of one secondary flake and one tertiary flake. These materials do not represent a unique or unusual artifact type, and the materials cannot be associated with a specific time-period, or cultural tradition. Future research at the location is unlikely to produce any new significant information. In the opinion of EDR, the 19020-TS01 lithic scatter does not satisfy S/NRHP-eligibility criteria. The 19020-TS01 lithic scatter is currently located within an area of proposed overhead collection line and PV array and it may be impacted by Facility-related construction. Because the site does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.3.8 SB-002

<u>Site Type</u>: Nineteenth Century Artifact Scatter <u>Archaeology Survey Area</u>: SB

Site Description: LOCATION REDACTED

The SB-002 historic-period artifact scatter consists of a total of 42 fragmented artifacts dating to the nineteenth century. Twenty-one artifacts were recovered from the initial positive shovel test (SB6.05) which was part of a grid of shovel tests excavated at a 15 meter (50 foot) spacing. An additional four radial shovel tests were excavated 7.5 meter (25 foot) from the initial find within the existing grid of shovel tests to further delineate the site. A further 21 nineteenth century artifacts were recovered from two of the radial shovel tests, both of which were both located in a disused, overgrown farm road. LOCATION REDACTED

LOCATION REDACTED

Inset 1. 1854 Map of Chautauque County, New York: From Actual Surveys (left).



LOCATION REDACTED

Inset 2. 1941 Clymer, New York 1:62,500 USGS Topographic Quadrangle (left).



EDR collected any diagnostic artifacts as well as a representative sample of common artifacts identified in shovel test pits. Artifacts encountered consisted almost entirely of highly fragmented architectural materials, (e.g., degrading cinderblock, degrading limestone fragments, and small red brick fragments (Appendix B, Photo 35). These architectural materials were noted, but not collected, with the exception of a sample of red brick, which was retained in order to be cleaned and confirmed as brick in the EDR laboratory. The materials collected from this location are summarized in Table 9 below and detailed in Appendix D.

Soils encountered at the SB-002 site primarily consisted of a redeposited stratum I which overlayed a buried, natural surface. Cultural material was confined to the redeposited soil layer, with no materials identified in the underlaying naturally deposited strata (Appendix B, Photo 36). Following the identification of artifacts in shovel test SB6.05 an additional four radial shovel tests were excavated at a 7.5m (25 foot) distance from the initial find within the surrounding grid of 15-meter (50 foot) interval shovel tests. Shovel tests that recovered artifacts at the site encountered a very dark brown silt loam (10YR 2/2) mixed with angular to subangular gravel and rock, which overlaid an intact brown (10YR 4/3) silt loam, which overlaid a yellowish brown (10YR 5/4) silt loam, overlying an oxidized grayish brown (10YR 5/2) silt clay loam. Artifacts were only recovered from shovel tests which encountered the redeposited soil layer, and only from that layer itself in those shovel tests, indicating that this layer is not native to this site and has been deposited from another location.

Of the four radial shovel tests excavated, two of the 7.5-meter radial tests encountered artifacts. SB6.05R7.5E contained multiple sections contemporary barb wire fencing, cut nail and cut nail fragments, and several unidentified ferrous metal fragments recovered from a context identical to SB6.05. SB6.05R7.5W contained one red brick fragment and one small undecorated whiteware fragment also recovered from the redeposited soil layer. All materials identified during excavation were recovered from the topmost soil horizon, which overlayed an undisturbed natural stratigraphic profile identical to that which was encountered in the surrounding shovel tests where no cultural materials were identified. The redeposited soil layer did not extend beyond the 7.5-meter radials of the initial shovel test location. No evidence of intact foundations or associated features were identified during subsurface investigation. All shovel tests were excavated to the limits of practical hand excavation or ten centimeters into what was interpreted as culturally sterile subsoil before terminating excavation.

Shavel Test	Stratu	Depth	Depth Coun		Time Deried	Courses
Shovel Test	m	(cmbs)	t	Description	nine Penoa	Sources
			1	Red Brick Fragment	2	-
			3	Machine Cut Square Bolt	1805 +	Miller, George L.
SB6.05	1	0-19	7	Wire Nail	1850 +	Miller, George L.
			3	Machine Cut Nail	1805 +	Miller, George L.
			7	Machine Cut Nail	1805 +	Miller, George L.
			9	Unidentified Nail Fragment	-	
SB6.05R7.5E	1	0-27	2	Unidentified Nail Fragment	-	-
			8	Machine Cut Nail	1805 +	Miller, George L.
	201	0.42	1	Red Brick Fragment	-	-
SB6.05R7.5W		0-13	1	Whiteware	1820 +	Bagley, Joe
Total A	rtifacts Co	llected:	42			

Table 9. Artifacts Collected at the SB-002 Nineteenth Century Artifact Scatter

Recommendation: The SB-002 nineteenth century artifact scatter is in a redeposited context and is currently recommended as not eligible for listing on the NRHP under any Criteria. It consists of a highly disturbed artifact scatter spatially confined to 4,229 square feet (392 square meters) within three shovel test locations. The artifacts consisted almost entirely of highly degraded architectural materials. No evidence of an intact foundation or associated features were identified during surface or subsurface investigation and shovel testing results demonstrate that the site lacks a significant buried component. The site's integrity of setting and feeling have been significantly compromised by historic and contemporary logging practices in the area as well as contemporary dump and burn activity. The site's integrity of location is compromised due to the redeposited nature of the artifact bearing soils. Given the poor integrity of association, the site cannot be associated with significant historic trends or individuals and it does not embody significant architectural or engineering attributes, therefore, it is not eligible for listing on the NRHP under Criteria A, B, or C. Given the fragmented and damaged state of the artifact assemblage and the apparent lack of intact features, further research at the site is unlikely to obtain significant data pertinent to understanding regional history. Therefore, the site is not eligible under Criterion D.

The site is currently located within an area of proposed tree removal for PV array and it may be impacted by Facilityrelated construction. However, regardless of Facility-related impacts, it does not meet the S/NRHP Criteria for evaluation so there will be no impacts to significant resources. No further archaeological investigations are recommended.

3.3.9 FC-001

<u>Site Type</u>: Nineteenth Century Artifact Scatter <u>Archaeology Survey Area</u>: FC



The FC-001 historic-period artifact scatter consists of a total of 101 fragmented artifacts primarily dating to the nineteenth to the early twentieth centuries. Shovel tests at this site were excavated as part of a 15-meter grid to evaluate this location for proposed tree clearing for PV array panels. Three of the four initial shovel tests excavated in the 15m (50 foot) grid contained historic period artifacts. The plowzone of one of the shovel tests, (FC1.02) contained a fragment of burnt glass. The remaining of the artifacts were recovered from possible disturbed context. An additional sixteen shovel tests were excavated at 15m (50 foot) interval to extend the shovel test grid. A further two radial shovel tests were excavated at 7.5-meter intervals of which one, (FC2.06) also contained artifacts. Eighty-four of the 101 artifacts recovered at this site were identified in shovel test FC2.04 which was located between push piles within an overgrown clearing.

LOCATION REDACTED

LOCATION REDACTED

Inset 3. 1916. "Ripley" in Wall Map of, Chautauqua County, New York (left).



LOCATION REDACTED

Inset 4. 1941 Clymer, New York 1:62,500 USGS Topographic Quadrangle (left).



Further review of Google Earth historic aerial imagery depicts a residence north of the site and an outbuilding adjacent to the south of the site standing from 1994 through 2013. These structures are no longer present on imagery recorded after September 2014 indicating that both the main residence and the larger outbuilding were demolished sometime after May of 2013 and before September of 2014 (Google Earth 1994-2014). At the time of survey, the remains of these buildings were no longer present, and a wood framed shed on a poured concrete foundation was present at the location of the former residence and its outbuilding.

EDR collected all artifacts from shovel tests with the exception of clearly modern materials, which were noted, but not collected. The artifacts collected consisted almost entirely of highly fragmented domestic materials (Appendix B, Photo 40). All artifacts recovered at this location are summarized in Table 10 below and detailed in Appendix D.

Following the identification of artifacts in four initial shovel tests, a total of 20 shovel tests were excavated at 15-meter interval and two additional shovel tests were excavated at a 7.5-meter interval to further refine the extent and nature of subsurface archaeological material at the site (Figure 4 REDACTED). The soils encountered in shovel tests varied, with several excavations containing what was interpreted as redeposited and mixed horizons some of which contained historic-period artifacts. Shovel tests excavated at this site encountered stripped/graded/redeposited soils, mechanically crushed gravel fills in addition to natural soils (Appendix B, Photo 41-43). The soils interpreted as naturally deposited consisted of a dark grayish brown (10YR 4/2) silt loam overlying an oxidized light brownish gray (10YR 6/2) silt clay loam. Soils that were interpreted as disturbed and/or redeposited were contain a mix of soils identical to those identified as the plowzone and sterile subsoil from surrounding intact shovel test soils along with coarse sands and gravel fills. All artifacts recovered are associated with soils that have been disturbed, redeposited, or were from the plowzone in the naturally deposited soils. All shovel tests were excavated to the limits of practical hand excavation or ten centimeters into what was interpreted as culturally sterile subsoil before terminating excavations (Appendix C).

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Time Period	Sources
FC1.01	П	24-54	1	Undecorated Whiteware	1820 +	Bagley, Joe
FC1.02	I	0-26	1	Aquamarine Vessel Glass	÷.	-
			1	Colorless Flat Glass		5
FC2.02	Ш	24-33	2	Undecorated Yellowware	1840 to 20th Century	FLMNH
			27	Undecorated Yellowware	1840 to 20th Century	FLMNH
			1	Annular Banded	1840 to 20th	FLMNH
			33	Undecorated Whiteware	1820 +	Bagley, Joe
			2	Unidentified Nails	-	
FC2.04	I.	0-48	1	Aquamarine Bottle Base	1800s to 1930s	Lindsey, Bill
			3	Colorless Vessel Glass	-	-
			9	Colorless Flat Glass	7.	
			6	Aquamarine Vessel Glass	2)	-
			1	Opaque White Vessel Glass	1890s to present	Horn, Jonathon C.
			1	Red Brick Fragment	-:	-
			1	Wire Nail	1850 +	Miller, George L.
FC2.06	L	0-19	3	Colorless Vessel Glass	-	^{ین}
			1	Glass Marble	1901 to present	Miller, George L.

Table 10. Artifacts Collected at the FC-001 Nineteenth Century Artifact Scatter

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Time Period	Sources
			3	Undecorated Whiteware	1820 +	Bagley, Joe
FC2.06		19-41	4	Machine Made Terracotta	1848 to present	Miller, George L.
Total Artifacts Collected:			101	en en seksennen en en en en en en bekenden bekenden besinnen. Anne beit nich		

<u>Recommendation</u>: The FC-001 site is currently recommended as not eligible for listing on the S/NRHP under any Criteria. It consists of a highly disturbed artifact scatter spatially confined to 18,576 square feet (1,725 square meters) within five shovel test locations. The artifacts consisted almost entirely of fragmented domestic materials with few highly degraded architectural materials. No evidence of an intact foundation or associated features were identified during surface or subsurface investigation and shovel testing results demonstrate that the site lacks a significant intact buried component. All structural components appear to have been dismantled and removed entirely during demolition. The site's integrity of setting and feeling have been significantly compromised by structural demolition and contemporary terrain modification. The site's integrity of location is somewhat compromised because the artifacts have been heavily fragmented prior and/or subsequent to their deposition through local terrain manipulation. Given the poor integrity of association, the site cannot be associated with significant historic trends or individuals (H. A Chapman is not considered to be a significant individual) and it does not embody significant architectural or engineering attributes, therefore, it is not eligible for listing on the NRHP under Criteria A, B, or C. Given the fragmented and damaged state of the artifact assemblage and the apparent lack of intact features, further research at the site is unlikely to obtain significant data pertinent to understanding regional history. Therefore, the site is not eligible under Criterion D.

The site is currently located within the Facility and it may be impacted by Facility-related construction. However, regardless of Facility-related impacts, it does not meet the S/NRHP Criteria for evaluation so there will be no impacts to significant resources. No further archaeological investigations are recommended.

3.3.10 EB-AR1-001 <u>Site Type</u>: Nineteenth Century Artifact Scatter <u>Archaeology Survey Area</u>: EB-AR1

Site Description: LOCATION REDACTED


The EB-AR1-001 historic-period artifact and debris scatter consists of a total of 67 fragmented and damaged nineteenth century artifacts recovered from four shovel tests and one artifact recovered from the ground surface within a small copse of trees. The majority of the artifacts recovered consist of common household items which continue to be manufactured to this day primarily dating to the nineteenth to early twentieth centuries (Table 11). Shovel tests at this site were excavated in 15-meter (50 feet) grid with excavations commonly requiring displacement from the grid to avoid areas where dense vegetation and root matting prevented hand excavation. Two of the initial 15-meter interval shovel tests recovered artifacts. An additional 12 shovel tests were excavated at 15-meter (50 feet) and 7.5-meter intervals to further delineate the extent of the subsurface artifact scatter. Two of these shovel tests recovered further artifacts and were confined to within 7.5-meter of the initial finds (Figure 4 **REDACTED**).

LOCATION REDACTED



LOCATION REDACTED

LOCATION REDACTED

Inset 5. 1867 Map of "Ripley" in New Topographical Atlas of Chautauqua County, New York (left).



Inset 6. 1881 Map of "Ripley" in Illustrated Historical Atlas of the County of Chautauqua, New York (left).



LOCATION REDACTED

Inset 7. 1954 South Ripley, NY. New York. 1:24,000 Topographic Quadrangle (left).

The site consists of the remains of a nineteenth century outbuilding comprised of fragmented portions of a poured concrete foundation. The foundation has been significantly destroyed, likely during the demolition of the structure with few large remnants remaining disarticulated along the terrain. One of the foundation remnants overlaid rock push along the edge of cultivated agricultural field (Appendix B, Photo 46-47). A mid-twentieth century bottle was visible on the ground surface and was collected as surface find (EB-AR1-001.01) (Appendix B, Photo 48). A total of 14 shovel tests were excavated at this location to determine the extent and nature of subsurface archaeological material at the site and to determine if the contemporary dump/push piles were associated with the foundation remnants. Of the 14 shovel tests that were excavated at the site location, four contained historic-period material (EB-AR1-001.56, EB-AR1-001.57, EB-AR1-001.58, EB-AR1-001.84). EDR collected any diagnostic artifacts as well as a representative sample of common artifacts recovered from shovel test pits which consisted almost entirely of highly fragmented domestic and architectural materials (Appendix B, Photo 49). Degrading small red brick fragments, slag, coal flecking, and the majority of unidentified ferrous metal flecks were noted but not collected. All artifacts collected from this location are summarized in **Error! Reference source not found.** below and detailed in Appendix D.

Soils encountered at the EB-AR1-001 site primarily consisted of redeposited artifact bearing soils overlaying buried natural surface with cultural material confined to the redeposited soils. Two mixed or redeposited soil horizons were identified within shovel test EB-AR1-001.56 (Appendix B, Photo 50). Similar materials dating to the late nineteenth to early twentieth centuries were recovered from both of these soil depositions. One of the opaque white glass fragments recovered from the first stratum of this shovel test refits with fragments recovered within the second stratum indicating

these artifacts were recovered in what is presumed a secondary context soil deposit. Modern materials including shredded fragments of plastic sheeting were noted but not collected along with the artifacts dating to the late nineteenth century recovered from the first stratum of shovel test EB-AR1-001.84.

All artifacts recovered at this location were identified in the redeposited mix of soil horizons. No cultural material was identified in the underlaying natural soil strata, and therefore this artifact cluster is presumed to be in a secondary context. The artifact scatter and disarticulated poured foundation remnants remained confined to the thicket of trees. Additional shovel testing was excavated at 15-meter intervals with several excavations offset due to large piles of push, contemporary slash and trash dumps, and deadfall within the tree line. Only one shovel test was excavated at a 7.5-meter interval due to the dense vegetation and existing conditions at the time of survey (Appendix B, Photo 51). A depression the ground surface was filled in with disarticulated cobbles and modern push presumably associated with the graded crush gravel residential driveway. No evidence of intact foundations or associated features were identified during subsurface investigation. All shovel tests were excavated to the limits of practical hand excavation or ten centimeters into what was interpreted as culturally sterile subsoil before terminating excavations (Appendix C).

Shovel Test	Stratum	Depth	Count	Description	Time	Sources	
Shover rest	(cmbs)		Description	Period	Sources		
			9	Colorless Flat Glass	9. 19 7 8	15.	
			1	Colorless Vessel Glass	-	6 <u>2</u> 3	
EB-AR1.56	E	0-19	7	Red Brick Fragment	-	9 -	
			1	Milk Glass Jar Liner Fragment	1871-1950s	Whitten, David	
			3	Unidentified Nail	273	11-1-	
		II 19-40	4	Milk Glass Jar Liner Fragment	1871-1950s	Whitten, David	
			4	Colorless Flat Glass	-	-	
			2	Colorless Vessel Glass	-	14 1	
EB-AR1.56	Ш		19-40	4	Unidentified Nail	-	
			1	Decorative Cabinet Hardware with Flathead Screw	19th Century +	Miller, George L.	
			1	Red Brick Fragment	-	-	
EB-AR1.57	Ш	12-32	1	Molded Bone China	Late 19 th Century +	Magid, Barbara H.	
			1	Stoneware Crock Fragment	1740 to present	Bagley, Joe	
EB-AR1.58	Ш	9-28	8 2 1 1 1	Undecorated Whiteware Colorless Flat Glass Colorless Vessel Glass Cut Nail Fragment Unidentified Nail	1820 + - 1805 +	Bagley, Joe - Miller, George L.	

Table 11.	Artifacts	Collected a	at the E	EB-AR1-001	Nineteenth	Century	Artifact	Scatter	with	Foundation	Debris
Remnants	5										

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Time Period	Sources
			10	Molded Bone China	Late 19 th Century +	Magid, Barbara H.
EB-AR1.84	Ĕ	0- 1 7	1	Molded Bone China	Late 19 th Century +	Magid, Barbara H.
			2	Colorless Flat Glass	2.73	0.70
			1	Aquamarine Vessel Glass	121	80 <u>2</u> 0
			1	Unidentified Nail	-	50 -
EB-AR1- 001.01	Surface	Surface	1	Machine Made Bottle	1940s	Whitten, David
Total Art	ifacts Colle	cted:	68			

Recommendation: The EB-AR1-001 nineteenth century artifact scatter with foundation debris remnants in a redeposited context and is currently recommended as not eligible for listing on the NRHP under any Criteria. It consists of a highly disturbed artifact scatter with disarticulated portions of poured foundation remnants spatially confined to approximately 16,797 square feet (1,560 square meters) within four shovel test locations. The artifacts consisted almost entirely of domestic items dating to the nineteenth and early twentieth centuries and highly degraded architectural materials. No evidence of an intact foundation or associated features were identified during surface or subsurface investigation and shovel testing results demonstrate that the site lacks a significant buried component. The foundation has been significantly destroyed with remnant portions disarticulated with contemporary rubble and field clearance. The site's integrity of setting and feeling have been significantly compromised by agricultural field clearing and contemporary rubble dumping practices in the area as well as razing and removal of significant structural components. The site's integrity of location is somewhat compromised because its artifacts have been moved and rearranged to an unknown extent by agricultural activities as well as the process of razing the structure. Given the poor integrity of association, the site cannot be associated with significant historic trends or individuals and it does not embody significant architectural or engineering attributes, therefore, it is not eligible for listing on the NRHP under Criteria A, B, or C. Given the fragmented and damaged state of the artifact assemblage and the apparent lack of intact features, further research at the site is unlikely to obtain significant data pertinent to understanding regional history. Therefore, the site is not eligible under Criterion D.

The site is currently located within a portion of proposed tree clearing for underground collection line, access road, and PV array and it may be impacted by Facility-related construction. However, regardless of Facility-related impacts, it does not meet the S/NRHP Criteria for evaluation so there will be no impacts to significant resources. No further archaeological investigations are recommended.

3.3.11 MS-01 – Clark-Wilcox Mill Site <u>Site Type</u>: Historic-Period Cellar Hole and Well <u>Archaeology Survey Area</u>: QD

Site Description:	LOCATION REDACTED

During reconnaissance of the advance
ground surface indicative of the remains of a cellar hole were identified bordering a two-track roadway (Figures 4 and
5; Appendix B, Photo 56, 57).
For fieldwork organization purposes, this historic domestic site were identified as a component of
the Clark-Wilcox Mill site, although neither feature is likely directly connected with the operation of the former mill site.
No artifacts were visible on the ground surface and no further indication of features were visible at the time of the initial
pedestrian reconnaissance.

LOCATION REDACTED

LOCATION REDACTED

Inset 8. 1854 Map of Chautauque County, New York: From Actual Surveys (left).



Inset 9. 1941 Clymer, New York 1:62,500 USGS Topographic Quadrangle (left).



LOCATION REDACTED

Inset 10. 1954 South Ripley, New York 1:24,000 USGS Topographic Quadrangle (left).



EDR conducted shovel test excavations during the supplemental survey of the Clark-Wilcox Mill Site from March 30 through April 2, 2021 for a proposed reroute of overhead lines. Two transects of shovel tests (MILL01-01 and MILL01-02) were excavated at 15 meter interval (Figure 4 **REDACTED**, Figure 5). A total of 38 shovel tests were excavated along these two transects to determine the extent and nature of subsurface archaeological material. Two sites were identified consisting of cultural materials identified in eight of the 38 shovel tests. Three shovel tests encountered nondiagnostic lithic artifacts, one shovel test contained both a chert flake and a single nineteenth century ceramic, and four shovel tests contained nineteenth century artifacts. Two of the lithic finds identified within shovel tests (MILL01-01.17 and MILL01-02.19) are discussed in detail as a separate site due to distance and a change in landform (see above section 3.3.7 – 19020-TS01). The remaining of the identified cultural material is discussed below in detail as site 19020-MS01 Multicomponent Nineteenth Century Artifact Scatter and Lithic Scatter.

The 19020-MS01 Multicomponent Nineteenth Century Artifact Scatter and Lithic Scatter site consists of a dry-laid stone well, a depression in the ground surface indicative of the remains of a cellar hole, a moderate density of highly fragmented nineteenth century artifacts, and a low density chert lithic scatter. The site is approximately 0.53 acres bounded to the west by Twentymile Creek and to the east by an unnamed delineated wetland (Appendix B, Photos 73-77). Cultural materials were identified within six shovel tests excavated at 15 meter interval along the two transects. An additional twenty three radial shovel tests were excavated between 7.5 and 22.5 meter intervals. EDR collected any diagnostic artifacts as well as a representative sample of common artifacts recovered from shovel test pits which

consisted almost entirely of highly fragmented domestic and architectural materials (Appendix B, Photo 78-79). All artifacts collected from this location are summarized in Table 12 below and detailed in Appendix D.

Soils at the Clark-Wilcox Mill Site varied (Appendix B, Photos 80-82). Only a few shovel test soil profiles will be discussed in detail (see Appendix C). The soil profile for shovel test MILL01-01.10, located along the eastern embankment of Twentymile Creek, contained a dark grayish brown (10YR 4/2) sandy loam, which overlaid a yellowish brown (10YR 5/4) sandy clay loam, which overlaid a pale brown (10YR 6/3) sandy clay loam, which overlaid a very dark grayish brown (2.5Y 3/2) sandy clay loam with decaying rock which was interpreted as culturally sterile subsoil (Appendix C). Several shovel test soil profiles contained a disturbed mix of redeposited soils containing nineteenth century artifacts.

Table 12. Artifacts Collected at the 19020-MS01 Multicomponent Nineteenth Century Artifact Scatter and Lithic Scatter

Shovel Test	Stratum	Depth (cmbs)	Count	Description	Time Period	Sources
			3	Red Brick Fragment	152	
			8	Colorless Flat Glass	152	=
			18	Lead Glazed Redware	1800-1840	Magid, Barbara H.
MS01-01 13	Т	12-25	1	Ironstone	<mark>1</mark> 865+	Magid, Barbara H.
		12-23	1	Brown Transfer Printed Whiteware	Late 19 th Century	Magid, Barbara H.
			3	Transfer Printed Whiteware	1828+	Magid, Barbara H.
			1	Undecorated Whiteware	1820+	Magid, Barbara H.
MS01-02.11	1	0-28	1	Stinthal China Crooksville Ironstone	1902-1959	Meryl, Baer
		28-38	2	Ironstone	1865+	Magid, Barbara H.
MS01-02.14	Ш		1	Red Brick Fragment	555	5
			1	Lead Glazed Redware	1800-1840	Magid, Barbara H.
MS01-02.15	1	0-30	1	Transfer Printed Whiteware	Late 19 th Century	Magid, Barbara H.
MS01.R04	1	0-30	1	Gray Chert Tertiary Flake	Nondiagnostic	ā
MS01.R10	J	0-26	1	Gray Chert Tertiary Flake	Nondiagnostic	a

			1	Iranstana	1865+	Magid,
			1	lionstone	1000+	Barbara H.
MS01.R20	I	0-25	1	Load Clazed Redware	1800 1840	Magid,
			1		1000-1040	Barbara H.
			1	Colorless Flat Glass	-	-
MS01-01.10	I	0-12	1	Gray Chert Tertiary Flake	Nondiagnostic	-
			1	Gray Chert Tertiary Flake	Nondiagnostic	-
MS01-02.13	I	0-26	1	Transfor Brintod Ironstono	1965	Magid,
			1		1000+	Barbara H.

EDR excavated 33 shovel tests within the Clark-Wilcox Mill Site (Figure 5 REDACTED). Of these 33 shovel tests, ten shovel tests yielded cultural material: four shovel tests yielded four precontact artifacts only (all lithic debitage), five shovel tests yielded historic period artifacts only, and one shovel test yielded both precontact and historic period artifacts. In total, 49 artifacts were collected, which include 45 historic period artifacts largely comprising lead-glazed redware, ironstone, and whiteware type ceramics and four gray chert tertiary debitage flakes. The historic period artifacts represent a low-density domestic scatter likely associated with the structure depicted in Insets 10-12, above. The precontact artifact scatter is also indicative of a low-density scatter related to short-term occupation and transient hunting activities in the immediate area.

Recommendation: The Phase IB archaeological survey characterized the extent and nature of subsurface archaeological material at the Clark-Wilcox Mill Site. The site is currently located within the Project APE and may be impacted by Facility-related construction. However, regardless of Facility-related impacts, the site does not meet the S/NRHP Criteria for eligibility because it lacks significant data value and association with historic events and persons and therefore, there are no anticipated adverse effects to historic properties. No further archaeological investigations are recommended for the site.

3.4 Identified Archaeological Isolated Finds

In total, the Phase IB archaeological survey conducted for the South Ripley Solar Project resulted in the identification of four isolated archaeological finds, consisting of three lithic debitage finds and one nineteenth century ceramic find. Each of these resources is discussed in detail in Subsections 3.4.1 through 3.4.4 below.

3.4.1 CL02-001 Site Type: Isolated Lithic Debitage Archaeology Survey Area: CL02

Site Description: LOCATION REDACTED

CL02-001 consists of a single unmodified, non-cortical, gray chert tertiary flake measuring approximately 0.9 cm (9 mm) long and 0.8 cm (8 mm) wide (Appendix B, Photo 59). The artifact was recovered from a depth of 0 to 20 cmbs within the first stratigraphic horizon of shovel test CL02.04. Soils encountered in shovel test CL02.04 consisted of a redeposited or disturbed plowzone with a mix of brown (10YR 4/3) sandy loam, very dark grayish brown (10YR 3/2) sandy loam, and a coarse sand and angular gravel fill (Appendix B, Photo 60). The plowzone overlaid over a saturated very dark grayish brown (10YR 3/2). The excavation terminated at water inundation. Following the recovery of the flake from CL02.04, a total of ten additional radial shovel tests were excavated. Eight shovel tests were excavated at 1-meter and 3-meter intervals around the find. An additional two shovel tests were excavated at 15-meter interval to the north and south of the find to define the site boundary. Six of the radial shovel tests terminated at water inundation. None of the shovel tests contained cultural material (Appendix C).

Recommendation: CL02-001 consists of a single subsurface gray chert flake discovered in a disturbed or redeposited soil horizon mixed with coarse sands and angular gravel fill spatially confined to approximately 68 square feet (6 square meters). An additional ten radial shovel tests were excavated around the find to delineate the site boundary. None of the shovel tests contained cultural material however six of the ten shovel tests inundated with water. The artifact consists of an unmodified chert flake and does not represent a unique or unusual artifact type. It cannot be associated with a specific time-period and future research at the location is unlikely to produce significant information. Therefore, the isolate does not meet the S/NRHP Criteria for Evaluation. The isolate is currently located within the Facility Site and it may be impacted by Facility-related construction. Because it does not meet the S/NRHP criteria, however, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.4.2 SB-001 Site Type: Isolated Lithic Debitage Archaeology Survey Area: SB

Site Description: LOCATION REDACTED

SB-001 consists of a single unmodified, non-cortical, gray chert tertiary flake (Appendix B, Photo 62). The flake measures approximately 1.5 cm (15 mm) long and 2.1 cm (21 mm) wide. The artifact was recovered within a grid of 68 shovel tests excavated at a 15-meter (50 foot) interval to evaluate this location for a portion of tree clearing for proposed PV array and Laydown Yard. The artifact was recovered from a depth of 10 to 38 cmbs within the second stratigraphic horizon of shovel test SB8.06 (Appendix B, Photo 63). Soils encountered in shovel test SB8.06 consisted of a very dark brown (10YR 3/2) silty loam plowzone, which overlaid a dark yellowish brown (10YR 4/4) silt loam, which overlaid over an oxidized pale brown (10YR 6/3) silty loam which was interpreted as culturally sterile subsoil and excavated into by ten centimeters before terminating the shovel test. Following the recovery of the flake from SB8.06, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the find to define the site boundary. None of the shovel tests contained cultural material (Appendix C).

Recommendation: SB-001 consists of a single subsurface gray chert flake spatially confined to approximately 35 square feet (3 square meters) within one shovel test location. An additional eight radial shovel tests were excavated around the find to delineate the site boundary. None of the shovel tests contained cultural material. The artifact consists of an unmodified chert flake and does not represent a unique or unusual artifact type. It cannot be associated with a specific time-period and future research at the location is unlikely to produce significant information. Therefore, the isolate does not meet the S/NRHP Criteria for Evaluation. The isolate is currently located within a portion of tree clearing for proposed PV array and Laydown Yard and it may be impacted by Facility-related construction. Because it does not meet the S/NRHP criteria, however, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.4.3 LA-001 <u>Site Type</u>: Isolated Lithic Debitage <u>Archaeology Survey Area</u>: LA

Site Description: LOCATION REDACTED

LA-001 consists of a single unmodified, non-cortical, gray chert secondary flake (Appendix B, Photo 65). The material appears to have been thermally altered or heat treated. The flake measures approximately 1.7 cm (17 mm) long and 1.2 cm (12 mm) wide. The artifact was recovered within a grid of 52 shovel tests excavated at a 15-meter (50 foot) interval to evaluate this location for a portion of tree clearing for proposed access road and underground collection line. The artifact was recovered from a depth of 0 to 31 cmbs within the first stratigraphic horizon of shovel test LA1.03 (Appendix B, Photo 66). Soils encountered in shovel test LA1.03 consisted of a dark yellowish brown (10YR 4/4) silty loam plowzone, which overlaid a yellowish brown (10YR 5/4) silt loam, which overlaid over an oxidized light yellowish brown (10YR 6/4) silty loam which was interpreted as culturally sterile subsoil and excavated into by ten centimeters before terminating the shovel test. Following the recovery of the flake from LA1.03, an additional eight radial shovel tests were excavated at 1-meter and 3-meter intervals around the find to define the site boundary. None of the shovel tests contained cultural material (Appendix C).

Recommendation: LA-001 consists of a single subsurface gray chert flake spatially confined to approximately 29 square feet (2 square meters) within one shovel test location. An additional eight radial shovel tests were excavated around the find to delineate the site boundary. None of the shovel tests contained cultural material. The artifact consists of an unmodified chert flake and does not represent a unique or unusual artifact type. It cannot be associated with a specific time-period and future research at the location is unlikely to produce significant information. Therefore, the isolate does not meet the S/NRHP Criteria for Evaluation. The isolate is currently located within a portion of proposed tree clearing for access road and underground collection line and it may be impacted by Facility-related construction. Because it does not meet the S/NRHP criteria, however, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

3.4.4 NC-001 Site Type: Isolated Nineteenth Century Ceramic Archaeology Survey Area: NC

Site Description: LOCATION REDACTED

NC-001 consists of a single fragment of undecorated whiteware measuring approximately 0.8 cm (8 mm) by 0.9 cm (9 mm) (Appendix B, Photo 68). The artifact was recovered from a depth of 0 to 31 cmbs within the first stratigraphic horizon of shovel test NC2.01. Soils encountered in shovel test NC2.01 consisted of a brown (10YR 4/3) silt loam plowzone, which overlaid a moderately compact, and oxidized light brownish gray (10YR 6/2) silt loam with decaying rock. The second stratigraphic horizon was interpreted as sterile subsoil and excavated to 43 cmbs before terminating the shovel test. A map documented structure was noted prior to survey on a georeferenced historical map reviewed by EDR. The earliest documented residence nearby the NC-001 isolated nineteenth century ceramic is depicted on the 1854 Keeney Map of Chautauque County, New York: From Actual Surveys (Keeney, 1854). A residence along the western stream bank belonging to a "J. Ireland." An additional four shovel tests were excavated at a 7.5-meter interval in cardinal directions of shovel test NC2.01 to further determine if the find was associated with the map documented structure (Appendix B, Photo 69). No surface or subsurface structural components were identified. None of the additional shovel tests contained cultural material (Appendix C).

Recommendation: NC-001 is recommended as not eligible for listing on the S/NRHP. It is an isolated nineteenth century ceramic artifact spatially confined to approximately 1,685 square feet (156 square meters) within a single shovel test. The artifact is a single fragment of undecorated whiteware and does not represent a unique or unusual artifact type that could produce significant information. No other historic-period artifacts were recovered in the vicinity and no evidence of intact foundations or associated features were identified during subsurface investigation. Similar historic artifact scatters are primarily the result of low-intensity refuse disposal/manure seeding/agricultural activity and are very common in rural areas of New York State. Therefore, the NC-001 historic-period isolate does not meet the S/NRHP Criteria for Evaluation. It is currently located within the Facility Site and it may be impacted by Facility-related construction. Because the isolated find does not meet the S/NRHP criteria for eligibility, ground disturbance in this area would not result in a significant impact to cultural resources. No additional archaeological investigation is recommended.

4.0 SUMMARY AND CONCLUSIONS

4.1 Summary and Discussion of Phase IB Archaeological Survey Results

This Phase IB archaeological survey was completed in accordance with the Phase IA research design (EDR, 2021). Fieldwork described in this report occurred over the course of 2020, from July to December and through March and April of 2021. As noted previously, the survey was conducted concurrent with the evolving Facility layout. As a result, some areas subjected to Phase IB survey are no longer part of the APE for Direct Effects or the Limits of Significant Ground Disturbance (Figure 4 **REDACTED**). In these areas, Facility components were moved or eliminated following archaeological survey fieldwork in order to avoid impacts to archaeological resources, or due to other siting constraints (e.g., wetland impacts, slopes, lease-issues, etc.). In total, EDR excavated 4,100 shovel tests for the Phase IB survey. Therefore, this Phase IB survey effort is equivalent to approximately 256 acres of Phase IB survey. However, as noted above, the Limits of Significant Ground Disturbance is pending a final layout.

Table 11 below contains summaries of the 11 sites and four isolates identified during the Phase IB archaeological survey for the South Ripley Solar Project Phase IB survey, as well as potential impacts and avoidance measures taken by the Applicant.

Site Name	Description	Extent (acre)	Figure	Potential Impacts	Avoidance Measures/Recommendations
JA-001	Non-diagnostic lithic scatter		I		None (Does not meet S/NRHP Criteria)
RA-001	Non-diagnostic lithic scatter				None (Does not meet S/NRHP Criteria)
PA-002	Non-diagnostic lithic scatter		Ĩ		None (Does not meet S/NRHP Criteria)
OA-001	Non-diagnostic lithic scatter		I		None (Does not meet S/NRHP Criteria)
WB-AR4-001	Non-diagnostic lithic scatter		I		None (Does not meet S/NRHP Criteria)
WB-AR6-001	Non-diagnostic lithic scatter				None (Does not meet S/NRHP Criteria)
19020-TS01	Non-diagnostic lithic scatter		I		None (Does not meet S/NRHP Criteria)
SB-002	19th century artifact scatter		I.		None (Does not meet S/NRHP Criteria)

Table 13. Summary of Archaeological Resources Identified During the Phase IB Survey LOCATION REDACTED



As summarized in Table 13 and detailed above, the archaeological survey resulted in the identification of 15 archaeological resources, consisting of seven nondiagnostic chert lithic debitage sites, three isolated lithic debitage finds, one multicomponent site, three nineteenth century artifact scatter sites, and one nineteenth century artifact isolated find. Two hundred and fifty-seven historic-period artifacts, and 26 nondiagnostic lithic debitage artifacts were collected during the survey (283 artifacts total collected). As noted above, the Phase IB survey identified seven nondiagnostic chert lithic debitage sites. All lithic debitage sites recorded during this survey consist of spatially confined, low-density, nondiagnostic chert debitage scatters consisting of a fine-grained chert that ranges from light to dark gray. The unmodified lithic debitage cannot be associated with a specific time-period or cultural tradition.

The lack of spatially extensive or concentrated densities of lithics, combined with the complete lack of diagnostic artifacts indicates a very limited use of this landscape by indigenous populations prior to its occupation by European settlers. The majority of lithic sites consist of small numbers of artifacts and likely represent single- or limited-use camps or task sites. These sites are similar in that they all are composed of a few artifacts located within a relatively confined area, indicating relative lack of indigenous use of the Facility Site for resource exploitation, or habitation. This can be perhaps attributed to the harsh winters and excessive precipitation common within the Facility Site combined with the abundance of more suitable terrain for habitation and the acquisition of natural resources in the local vicinity. Though these sites indicate an indigenous presence within the Facility Site, they do not provide significant information pertaining to the lifeways and cultures of these peoples and are unlikely to yield further data.

The historic-period sites identified during the survey, although small in number, represent Euro-American occupation of Chautauqua County beginning in the late-eighteenth and continuing through the twentieth century. The sites are primarily related to agriculture which remains the primary land-use in the area today and they do not appear to be representative of any noteworthy activities or individuals. However, one site, the Clark Wilcox Mill Site was the focus of greater attention merits discussion. A dry-laid stone well and a depression in the ground surface indicative of the remains of a cellar hole were identified bordering a two-track roadway during the initial reconnaissance of the floodplain east of Twentymile Creek. LOCATION REDACTED



excavated 34 total shovel tests within the 19020-MS01 Multicomponent site. Of these 34 shovel tests, nine shovel tests contained cultural material. Five shovel tests contained nineteenth century artifacts, three shovel tests contained nondiagnostic chert flakes, and one shovel test contained a single nineteenth century ceramic and a single nondiagnostic chert flake. These finds, however, lack substantial integrity in context and artifact deposits and therefore, are not considered potentially eligible for inclusion in the S/NRHP.

4.2 Recommendations

As described in Sections 3.3 and 3.4, and Table 13 of this report, all 11 of the sites and all four isolates identified during the Phase IB archaeological survey are recommended as not eligible for listing in the S/NRHP. The Phase IB archaeological survey was conducted in a series of site visits and mobilizations ongoing throughout 2020 and 2021, concurrent with evolving Facility design. Therefore, in several instances, the Applicant has revised the proposed Facility layout to avoid the locations of sensitive resources.

In the event that unanticipated archaeological resources are encountered during construction, the Facility's unanticipated discovery plan will include provisions to stop all work in the vicinity of the archaeological finds until those resources can be evaluated and documented by an archaeologist, in consultation with NYSHPO.

With the adoption of these measures and based on continued consultation with the NYSHPO, the proposed South Ripley Solar project is not anticipated to result in significant adverse effects to any S/NRHP-eligible archaeological resources.

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Figures



South Ripley Solar Project Town of Ripley, Chautauqua County, New York

Phase IB Archaeology Survey

Figure 1: Regional Facility Location

Notes: 1. Basemap: ESRI ArcGIS Online "USGS Topo" map service. 2. This map was generated in ArcMap on April 28, 2021. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.





South Ripley Solar Project

Town of Ripley, Chautauqua County, New York Phase IB Archaeology Survey Report

Figure 2: Proposed Facility Layout

Access Road
Underground Collection Line
Overhead Collection Line
Inverter
Battery Energy Storage System
Substation
Laydown Yard
Fenceline
PV Panel Area
Facility Site
Town Boundary
State Boundary

Notes: 1. Basemap: USDA NAIP "2019 New York 60cm" orthoimagery map service. 2. This map was generated in ArcMap on April 28, 2021. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.





South Ripley Solar Project

Town of Ripley, Chautauqua County, New York Phase IB Archaeology

Survey Report

Figure 3: Archaeological Sensitivity Assessment

- Elevated Archaeological Sensitivity
- Facility Site
- Town Boundary
- State Boundary

Notes: 1. Basemap: ESRI ArcGIS Online "USA Topo Maps" map service. 2. This map was generated in ArcMap on April 28, 2021. 3. This is a color graphic. Reproduction in grayscale may misrepresent the data.



Appendix A

NYSHPO Correspondence



memorandum

To:	Jennifer Walkowski, Survey & National Register Unit Dr. Josalyn Ferguson, Archaeology Unit New York State Office of Parks, Recreation and Historic Preservation Division for Historic Preservation
From:	Grant Johnson and Doug Pippin Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (EDR)
Date:	June 18, 2020
EDR Project No:	19020
Reference:	Request for Consultation South Ripley Solar Project Town of Ripley, Chautauqua County, New York Siting Board Case 19-F-0560

On behalf of ConnectGen Chautauqua County LLC (ConnectGen or the Applicant), a direct subsidiary of ConnectGen LLC, Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C. (EDR) prepared this request for consultation for the proposed the South Ripley Solar Project (or the Facility), a major renewable energy electric generating facility to be located in the Town of Ripley in Chautauqua County, New York (see Figure 1). The information included in this memorandum is intended to initiate consultation with the New York State Office of Parks, Recreation and Historic Preservation (SHPO) to assist in their review of the Facility under Section 14.09 of the New York State Parks, Recreation, and Historic Preservation Law, and/or Section 106 of the National Historic Preservation Act, as applicable.

Description of the Facility

The South Ripley Solar Project is a proposed 270-megawatt (MW) solar photovoltaic (PV) energy generating project located within the Town Ripley in Chautauqua County, New York. The regional Facility location and Facility Site are depicted on Figures 1 and 2, respectively. The lands being evaluated to host the Facility infrastructure (Facility Site) are rural in nature. Not all land included in the Facility Site will ultimately be developed as part of the Facility. The Facility Site is ultimately expected to include approximately 2,000 acres of leased or purchased private land, consisting primarily of open agricultural fields, fallow fields, and large forest stands. The location of the Facility Site and Facility components will be identified in detail in a forthcoming application to New York State.¹

¹ The Applicant has initiated state permitting with the New York State Board on Electric Generation Siting and the Environment (Siting Board) as set forth under Article 10 of the Public Service Law (Article 10), but may elect to become subject to Section 94-c of the Executive Law, with the Office of Renewable Energy Siting (ORES) as the lead agency. SHPO will be informed of any changes to the lead agency or review process for the Facility. For the purpose of this memorandum, all proposed cultural resources work references the requirements of Article 10.

Agency Consultation

The initial Public Involvement Program (PIP) for the Facility was filed on August 30, 2019²; following receipt of comments from the New York State Department of Public Service (DPS) staff, a Final PIP was filed on October 30, 2019.³ The Preliminary Scoping Statement (PSS) for the South Ripley Solar Project was submitted to NYSDPS on May 22, 2020.⁴ The proposed scopes of work for cultural resources surveys listed below are based on the scopes of work described in the PSS for the Facility.

Archaeological Surveys

As described in 16 NYCRR § 1001.20, an Article 10 application must include:

Exhibit 20: Cultural Resources:

- a. A study of the impacts of the construction and operation of the facility interconnections and related facilities on archaeological resources including:
 - 1. A summary of the nature of the probable impact on any archaeological/cultural resources identified addressing how those impacts shall be avoided or minimized;
 - A Phase IA archaeological/cultural resources study for the Area of Potential Effect (APE) for the facility site and any areas to be used for interconnections or related facilities, including a description of the methodology used for such study;
 - 3. A Phase IB study, if required, as determined in consultation with OPRHP;
 - 4. Where warranted based on Phase I study results as determined in consultation with OPRHP, a Phase II study based on intensive archaeological field investigations shall be conducted to assess the boundaries, integrity and significance of cultural resources identified in Phase I studies. Phase II shall be designed to obtain detailed information on the integrity, limits, structure, function, and cultural/historical context of an archaeological site, as feasible, sufficient to evaluate its potential eligibility for listing on the State or National Register of Historic Places. The need for and scope of work for such investigations shall be determined in consultation with OPRHP and DPS;
 - 5. A statement demonstrating that all archaeological materials recovered during the facility cultural resources investigation shall be cleaned, catalogued, inventoried, and curated according to New York Archaeological Council standards; that to the extent possible, recovered artifacts shall be identified as to material, temporal or cultural/chronological associations, style and function; and that the facility archaeologists shall provide temporary storage for artifacts until a permanent curatorial facility is identified; and
 - 6. An Unanticipated Discovery Plan that shall identify the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance are encountered during the excavation process. This plan shall include a provision for work stoppage upon the discovery of possible archaeological or human remains. In addition, the plan shall specify the degree to which the methodology used to assess any discoveries follows the most recent Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State. Such an assessment, if warranted, shall be conducted by a professional archaeologist, qualified according to the standards of New York State Archaeological Council.

As noted in the PSS for the Facility, the Applicant does not anticipate significant impacts to archaeological or cultural resources due to Facility construction or operation. Relative to other types of energy generation projects, utility-scale solar facilities present a lower risk for impacts to archaeological resources due to their comparatively minimal amount of ground disturbance required during construction and operation. The site design and construction elements to be

⁴ Available at: http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={26873EB5-22E5-495C-BF20-FF88C78BF634}

² Available at: <u>http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={B019DE2A-EB40-4915-B7F9-F82219F817A0}</u>

³ Available at: http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={72326AFF-61E5-48C5-AF06-2D461B0C2140}

used in constructing the Facility will minimize the need for soil disturbance wherever possible, by shifting the Facility components and by utilizing low-impact construction methods.

SHPO has recently developed *Guidelines for Solar Facility Development Cultural Resources Survey Work⁵* which includes the following requirements for archaeological surveys for solar facilities over 300 acres in size:

A Phase IA archaeological survey, including recommendations for potential Phase IB archaeological field testing, is recommended for all solar facilities covering 300-acres or more.

A Phase IA: Literature Search and Sensitivity Study is the initial assessment of the overall sensitivity of a project area (Area of Potential Effects or APE) for the presence of archaeological sites and Native American sites of religious and cultural significance and to guide any subsequent field investigations. The Phase IA should be conducted early in project planning to allow the results to be used in developing project options. **Research should be comprehensive, using the Division's site files and archeological library, as well as other** sources such as universities, local libraries, museums, Indian Nations, historical societies, local informants or other pertinent sources. An initial field inspection of the project area must be conducted to assess the level of testing that may be necessary. This study should document the cultural history of the project area, relevant environmental and geological data, the boundaries and description of the proposed project, any previous ground disturbance, known archaeological sites and provide Phase IB field investigation recommendations.

To protect the archaeological record and to refine the Phase IB archaeological testing scope-of-work, the Division strongly encourages developers to reduce grubbing and grading activities, reduce the width of trenches to less than 3 feet, and reduce or eliminate grading for the construction of roadways and staging areas.

Recommendations for the Development of the Phase IB Archeological Scope of Work

Phase IB archaeological testing is not recommended for panel arrays; perimeter fencing and utility poles, if their associated posts are driven or drilled into the ground and no grubbing or grading is involved; and for excavations and grading less than six inches in depth. Phase IB testing is also not recommended for trenches less than three feet wide. However, if the installation of the panel array supports, fencing or utility poles requires grubbing and grading exceeding six inches in depth, then Phase IB archaeological testing is recommended.

Phase IB archaeological testing is recommended for areas of substantial proposed ground disturbance, which includes areas of grading and excavation more than six inches deep, grubbing, tree and stump removal, and trenches more than three feet wide, unless the archaeological sensitivity warrants greater effort.

If Native American cultural resources may be affected by a solar facility, the pertinent Indian Nations should be provided the Phase IA Report, including Phase IB archaeological testing scope-of-work, for review and comment (SHPO, 2020).

EDR has performed a preliminary review of the Cultural Resource Information System (CRIS) website and historical documentation relevant to this area. Based on a review of CRIS, no previously recorded archaeological sites are located within 2 miles of the Facility Site. In addition, a review of CRIS determined that the Facility Site is not within an area of archaeological sensitivity. However, based on previous archaeological investigations associated with solar

⁵ New York State Historic Preservation Office (SHPO). 2020. Guidelines for Solar Facility Development Cultural Resources Survey Work. New York State Historic Preservation Office, Waterford, NY. June 2020.

facilities located in predominantly rural areas in New York State, there is a moderate potential for archaeological resources to be present at the Facility Site.

In accordance with 16 NYCRR § 1001.20 and the SHPO *Guidelines for Solar Facility Development Cultural Resources Survey Work*, EDR will conduct a Phase IA Archaeological Survey for review and approval by SHPO. The purpose of the Phase IA Archaeological Survey is to:

- Define the Facility's area of potential effect (APE) for Direct Effects relative to archaeological resources⁶
- Determine whether previously identified archaeological resources are located within the APE for Direct Effects
- Propose a methodology to identify archaeological resources within the APE for Direct Effects (i.e., Phase IB subsurface testing), evaluate their eligibility for the State/National Register of Historic Places (S/NRHP), and assess the potential effect of the Facility on those resources

All archaeological studies will be conducted under the supervision of a Registered Professional Archaeologist (RPA) in a manner consistent with the SHPO Phase I Archaeological Report Format Requirements⁷ and the Guidelines for Solar Facility Development Cultural Resources Survey Work as well as the New York Archaeological Council (NYAC) Standards for Cultural Resource Investigations and Curation of Archaeological Collections in New York State (the NYAC Standards).⁸

Historic Resources Surveys

As described in 16 NYCRR § 1001.20 (Exhibit 20: Cultural Resources), an Article 10 application must include:

(b) A study of the impacts of the construction and operation of the facility and the interconnections and related facilities on historic resources, including the results of field inspections and consultation with local historic preservation groups to identify sites or structures listed or eligible for listing on the State or National Register of Historic Places within the viewshed of the facility and within the study area, including an analysis of potential impact on any standing structures which appear to be at least 50 years old and potentially eligible for listing in the State or National Register of Historic Places, based on an assessment by a person qualified pursuant to federal regulation (36 C.F.R. 61).

Construction of the Facility is not anticipated to require the demolition or physical alteration of any aboveground historic properties. As the Facility is planned to be constructed almost entirely on open lands, no direct physical impacts to historic properties are anticipated to occur as a result of the Facility. Historically significant properties are defined herein to include buildings, districts, objects, structures and/or sites that have been listed on or have been determined eligible for listing on the S/NRHP.

⁶ It is anticipated that the APE for Direct Effects will change as the Facility's design advances and becomes more refined.

⁷ SHPO. 2005. New York State Historic Preservation Office (SHPO) Phase 1 Archaeological Report Format Requirements. New York State Historic Preservation Office, Waterford, NY.

⁸ New York Archaeological Council (NYAC). 1994. Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State. New York State Office of Parks, Recreation, and Historic Preservation, Waterford, NY.

The Facility's potential effect on aboveground historic properties may result in a change (resulting from the introduction of PV panels or other Facility components) in the visual or auditory setting associated with a given historic property. These potential effects may be highly variable and are dependent on several factors, including distance to the Facility, the number of visible panels/components, the extent to which the Facility is screened or partially screened by buildings, trees, or other objects, and the amount of existing visual clutter and/or modern intrusions in the view. In addition, visibility of the Facility from surrounding areas is anticipated to be very limited because the height of the PV arrays will not exceed approximately 12 feet above grade and the forested areas and topography surrounding the Facility Site will serve to significantly restrict visibility.

The SHPO *Guidelines for Solar Facility Development Cultural Resources Survey Work* established the following preliminary guidance for the assessment of historic and cultural resources associated with the development of ground-mounted solar facility projects covering 100 acres or more in New York State:

Visual Impact Area for Historic Resources

4. Solar arrays covering 100 acres or more.

- *i.* Complete a GIS analysis of areas that will have positive visibility of the solar field based upon topography only (do not factor in vegetation).
- ii. A survey of all properties 50 years old or older within 2 miles of the solar array should be completed.*
- iii. Identification of any New York State and/or National Register listed property or district or National Historic Landmark within 5 miles of project with positive visibility.

*NOTE: The determined distance of survey from the solar field is for those areas that fall within the positive viewshed as established by the GIS analysis only.

To ensure that potential visual effects on regional visually sensitive historic resources are adequately considered in the application process, and consistent with SHPO guidance, all areas of potential Facility visibility within a 5-mile radius Historic Resources Study Area will be evaluated in all support studies related to aboveground historic properties (see Figure 3). The Historic Resources Study Area will be used for the purpose of identifying historic properties and evaluating visibility and potential visual impacts to those properties listed on or determined by SHPO to be eligible for listing on the S/NRHP, and is defined as the areas within five miles of the Facility's participating parcel boundaries (i.e., the Facility Site). The APE for Indirect Effects on historic resources includes those areas where the Facility may result in indirect effects on cultural resources, such as visual or auditory impacts. As presently envisioned, the APE for Indirect Effects would be confined to areas where the Facility would be visible (based on a viewshed analysis considering only topography) or where noise created by the Facility would be noticeable.

A preliminary review of the CRIS website indicates there are 11 properties previously determined eligible for listing on the S/NRHP, and 25 properties for which S/NRHP eligibility has not been formally determined located within the Historic Resources Study Area. No properties and districts listed on the S/NRHP or National Historic Landmarks are located within the Historic Resources Study Area.

In accordance with 16 NYCRR § 1001.20 and the SHPO *Guidelines for Solar Facility Development Cultural Resources Survey Work*, EDR will conduct a Phase IA Historic Resources Survey for review and approval by SHPO. The purpose of the Phase IA Historic Resources Survey is to:

- Propose an APE for Indirect Effects to serve as the basis for the historic resources survey⁹
- Identify previously inventoried historic properties within the Facility's APE for Indirect Effects
- Consult municipalities as well as local stakeholders (such as municipal historians and regional historical societies) to identify locally significant historic properties within the Historic Resources Study Area and APE for Indirect Effects
- Provide a scope of work for additional survey of historic properties within the Facility's APE for Indirect Effects in accordance with the SHPO *Guidelines* for Solar Facility Development *Cultural Resources Survey Work*

All historic resources surveys will be prepared by qualified architectural historians who meet the U.S. Secretary of Interior's Standards for Historic Preservation Projects (36 CFR Part 61) and in a manner consistent with the SHPO *Guidelines for Solar Facility Development Cultural Resources Survey Work.*¹⁰

Summary

EDR has provided this request for consultation to SHPO in advance of conducting cultural resources surveys for the Facility to ensure that the scope of the proposed surveys is consistent with SHPO's expectations. Please provide a formal response indicating SHPO's concurrence with and/or comments on the methodologies described herein.

If you have any questions/concerns or would like to discuss the information described herein, please contact Grant Johnson by email at <u>gjohnson@edrdpc.com</u>, or by phone at (315) 471-0688 ext. 642.

M

Grant Johnson Senior Project Manager – Historic Preservation Environmental Design & Research, Landscape Architecture, Engineering, & Environmental Services, D.P.C.

Attachments:

- Figure 1. Regional Facility Location
- Figure 2. Facility Area
- Figure 3. Five-Mile Study Area

⁹. The Facility's APE relative to historic resources will likely be revised in association with subsequent layout changes during the permitting process, which will be documented in the Historic Resources Survey report that is anticipated to be prepared as a subsequent step in the consideration of the Facility's potential effect on historic properties.

Appendix B

Photographs



A representative example of shovel test survey within forested conditions. Survey Area WB-AR14. Viewed North.



Photo 2

A representative example of shovel test survey within field conditions. Survey Area WB-AR7. Viewed Northeast.

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A representative example of shovel test survey within pasture conditions. Survey Area EB-AR5. Viewed West.



Photo 4

A representative example of logging activity throughout the Facility. Survey Area CL08. Viewed North.

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A representative example of logging activity throughout the Facility. Survey Area AD. Viewed Northeast.





Photo 6

A representative example of areas excluded from shovel testing due to visible ground disturbance. Survey Area QB. Viewed South.

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A representative example of areas excluded from shovel testing due to visible inundation. Survey Area AR-13 Viewed West.



Photo 8

A typical example of disturbances along agricultural field edges and in hedgerows. Survey Area OA. Viewed Northeast.

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A typical example of disturbance along access roads. Survey Area AR13. Viewed West.



Photo 10

An overview of the JA-001 lithic scatter. Viewed Southwest.

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EDR conducting radial investigatory test excavations within site JA-001. Viewed South.

Photo 12

Artifacts collected from the JA-001 lithic scatter.



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The soil profile from shovel test JA5.02. Representative soil profile for site JA-001. Viewed North.

Photo 14

An overview of the RA-001 lithic scatter. Viewed North.

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EDR conducting radial investigatory test excavations within site RA-001. Viewed North.



Artifacts collected from the RA-001 lithic scatter.



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The soil profile from shovel test RA2.07R3S. Representative soil profile for site RA-001. Viewed North.

Photo 18

An overview of the PA-002 lithic scatter. Viewed Southeast.

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The edge of an agricultural field along the eastern extent of site PA-002. Viewed Northwest.



Artifacts collected from the PA-002 lithic scatter.



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The soil profile from shovel test PB1.04R3W. Representative soil profile for site PA-002. Viewed West.

Photo 22

An overview of the OA-001 lithic scatter. Viewed Northeast.

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EDR conducting radial investigatory test excavations within site OA-001. Viewed East.

Photo 24

Artifacts collected from the OA-001 lithic scatter.



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The soil profile from shovel test OA5.20R7.5N. Representative soil profile for site OA-001. Viewed East.





Photo 26

An overview of the WB-AR4-001 lithic scatter. Viewed North.

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The gradually sloping terrain with the WB-AR4-001 lithic scatter. Viewed West.

Photo 28

Artifacts collected from the WB-AR4-001 lithic scatter.



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The soil profile from shovel test WB-AR4.13. Representative soil profile for site WB-AR4-001. Viewed South.



Photo 30

An overview of the WB-AR6-001 lithic scatter. Viewed East.

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The gradually sloping terrain with the WB-AR6-001 lithic scatter. Viewed East.

Photo 32

Artifacts collected from the WB-AR6-001 lithic scatter.

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The soil profile from shovel test WB-AR6.06. Representative soil profile for site WB-AR6-001. Viewed North.



Photo 34

An overview of the SB-002 historic-period scatter. Viewed Northwest.

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Photo 35

A representative sample of the artifacts collected from the SB-002 historic-period scatter.





Photo 36

The soil profile from shovel test SB6.05R7.5S. Representative soil profile for site SB-002. Viewed North.

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An overview of the FC-001 historic-period scatter within the conifer tree line. Viewed South.

Photo 38

An overview of the FC-001 historic-period scatter within the overgrown clearing. Viewed North.

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A typical example of soil and rock push pile disturbances within the eastern extent of Site FC-001. Viewed Southeast.



Photo 40

A representative sample of the artifacts collected from the FC-001 historic-period scatter.

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The soil profile from shovel test FC5.04. Representative soil profile with stripped soils for site FC-001. Viewed South.

Photo 42

The soil profile from shovel test FC1.01. Soil profile with decaying sandstone lens for site FC-001. Viewed Southeast.

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