Appendix 9-A
Phase IA Cultural Resources Investigation for the Hecate Energy Cider Solar Project
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PHASE 1A CULTURAL RESOURCES INVESTIGATION FOR THE HECATE ENERGY - CIDER SOLAR PROJECT, TOWNS OF OAKFIELD AND ELBA, GENESEE COUNTY, NEW YORK

New York State Historic Preservation Office
 # 20PR03191

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July 2020

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July 2020

Management Summary

SHPO Project Review Number (if available): 20PR03191

Involved State and Federal Agencies (NYSDEC, US Army Corps of Engineers, FHWA): NYSDPS (Lead agency); Article 10 of the Public Service Law with the NYSPSC

Phase of Survey: Phase 1A Cultural Resources Investigation

Location Information:
Location:
Minor Civil Division: Towns of Oakfield and Elba
County: Genesee

Survey Area (Metric & English): This Phase 1A cultural resources sensitivity assessment includes approximately 3,500 acres of leased private land where Hecate Energy LLC plans to develop an approximately 500-megawatt (MW) solar project. The project's construction Area of Potential Effect (APE) has not been determined.

USGS 7.5 Minute Quadrangle Map: Batavia North, NY 1950 (photo-revised 1978); Oakfield, NY 1950 (photo-revised 1978).

Archaeological Survey Overview: The project area is considered to be sensitive for both Precontact Period and Historic archaeological sites. The setting of the project area having well drained soils, a combination of relatively level terrain and hills, multiple small creeks, and the proximity of Oak Orchard Swamp/Oak Orchard Creek was favorable for Precontact land-use and settlement. This is further supported by the presences of multiple previously reported Precontact Period sites within and adjacent to the project's APE. Those sites were found as a result of surveys conducted for the Empire Pipeline and Oakfield Compressor Station. Although previously reported Precontact Period archaeological sites are clustered in the northwest portion of the project area, the remainder of the project area is also sensitive for similar sites.

The project area is also considered to be sensitive for mid-to-late nineteenth century farmstead sites due to the presence of numerous historic MDSs and extant historic structures in proximity to the APE. Historic cultural features associated with the historic farmsteads/homesteads include middens, wells, privies, or foundations that could be present within the project's APE. The project design for the Hecate Solar facility will likely intentionally avoid direct impacts to extant nineteenth and early twentieth century historic structures as the facility will largely consist of solar panel arrays placed in what are presently agricultural fields behind buildings primarily located along roads.

The maximum APE for construction of the solar facility is approximately 3,500 acres (1,416 hectares), but the ultimate construction APE will likely be a smaller area within the project limits. Once the project design is complete and project component locations are determined, a Phase 1B cultural resources investigation is recommended for portions of the project area where soils could be significantly disturbed during construction. The S/NRHP eligibility for all but one of the previously reported Precontact Period sites (USN 03710.000038/ANR-166 SHARPKNOLL) has not been determined. Phase 2 cultural resources investigations are recommended to assess eligibility of these previously reported sites for S/NRHP-listing if their locations fall within the construction APE of the project design once it is complete and available for review.

Report Author(s): R. Hanley, M. Steinback

Date of Report: July 2020

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1.0 Introduction

1.1 PROJECT DESCRIPTION

Panamerican Consultants, Inc. was contracted by Stantec, Rochester, New York, to conduct a Phase 1A cultural resources investigation for the Hecate Energy - Cider Solar Project in the Towns of Oakfield and Elba in Genesee County, New York. Hecate Energy LLC plans to develop an approximately 500-megawatt (MW) solar project on approximately 3,500 acres (1,416 hectares) of leased private land. For the purposes of this investigation, the Project Area includes the parcels that comprise the approximately 3,500 acres (1,416 hectares) and this is also considered the maximum Area of Potential Effect (APE). The project design is not complete and ultimately the construction APE will be smaller and encompassed within the limits of the project area of the Phase 1A investigation. The project will involve the installation of photovoltaic panels arrayed primarily in fields on tracking structures and include buried electrical collection cables, inverters, access drives, a gen-tie line and a point of interconnection station adjacent to an existing substation, fencing, and temporary laydown areas for equipment staging during construction. The New York State Historic Preservation Office (NYSHPO) has assigned this project number 20PR03191.

The purpose of the investigation was to identify any recorded cultural resources that may be impacted by the proposed project and to assess the likelihood that unrecorded resources may be present in the project area. The cultural resource investigation was conducted in compliance with the National Historic Preservation Act, the State Historic Preservation Act, the National Environmental Policy Act, the New York State Environmental Quality Review Act, and all relevant federal and state legislation. The investigation was also conducted according to New York Archaeological Council's *Standards for Cultural Resource Investigations* and New York State Historic Preservation Office guidelines.

The Phase 1A field reconnaissance was conducted in June 2020 and included field survey and photographic documentation of the setting (e.g., previous disturbances, structures, field conditions). Mr. Robert Hanley, M.A., RPA, served as Principal Investigator and also conducted the reconnaissance portion of the investigation, and Mr. Mark Steinback, M.B.A., served as Senior Historian and Project Manager.

1.2 ENVIRONMENTAL SETTING

Topography. The project area is located in the Ontario Lake Plain or Ontario Lowlands physiographic province, "a moderately flat or undulating plain that has no abrupt or sudden changes in relief" (Wulforst et al. 1969:172). From Oak Orchard Swamp, north of the project area, the lake plain extends southward towards Tonawanda Creek. Elevations within the province in Genesee County range from approximately 620 feet (189 meters) above mean sea level at Oak Orchard Swamp to approximately 1,000 ft (305 m) above mean sea level (amsl). The project area is situated between two subareas within the lowlands province: the drumlin area to the east and the glacial lake area to the west and including Oak Orchard Swamp (Wulforst et al. 1969:172-173). Drumlins are "hills of glacial debris that have been molded into streamlined forms by overriding ice" (Van Diver 1985:31, 188-189) and create a rolling hilly topography. The glacial lake area is nearly level and less than 880 ft (268 m) amsl. Elevations within the project area range from approximately 620 ft (898 m) in the southwest portion of the project area to approximately 780 ft (238 m) amsl atop the higher drumlins in the eastern portion of the project area.

Drainage. The project area is just south of Oak Orchard Swamp. Small unnamed streams cross the project area and ultimately drain northwest to Oak Orchard Creek located less than 4,000 ft (1,220 m) north of the project area. Portions of these streams have been artificially channelized and straightened.

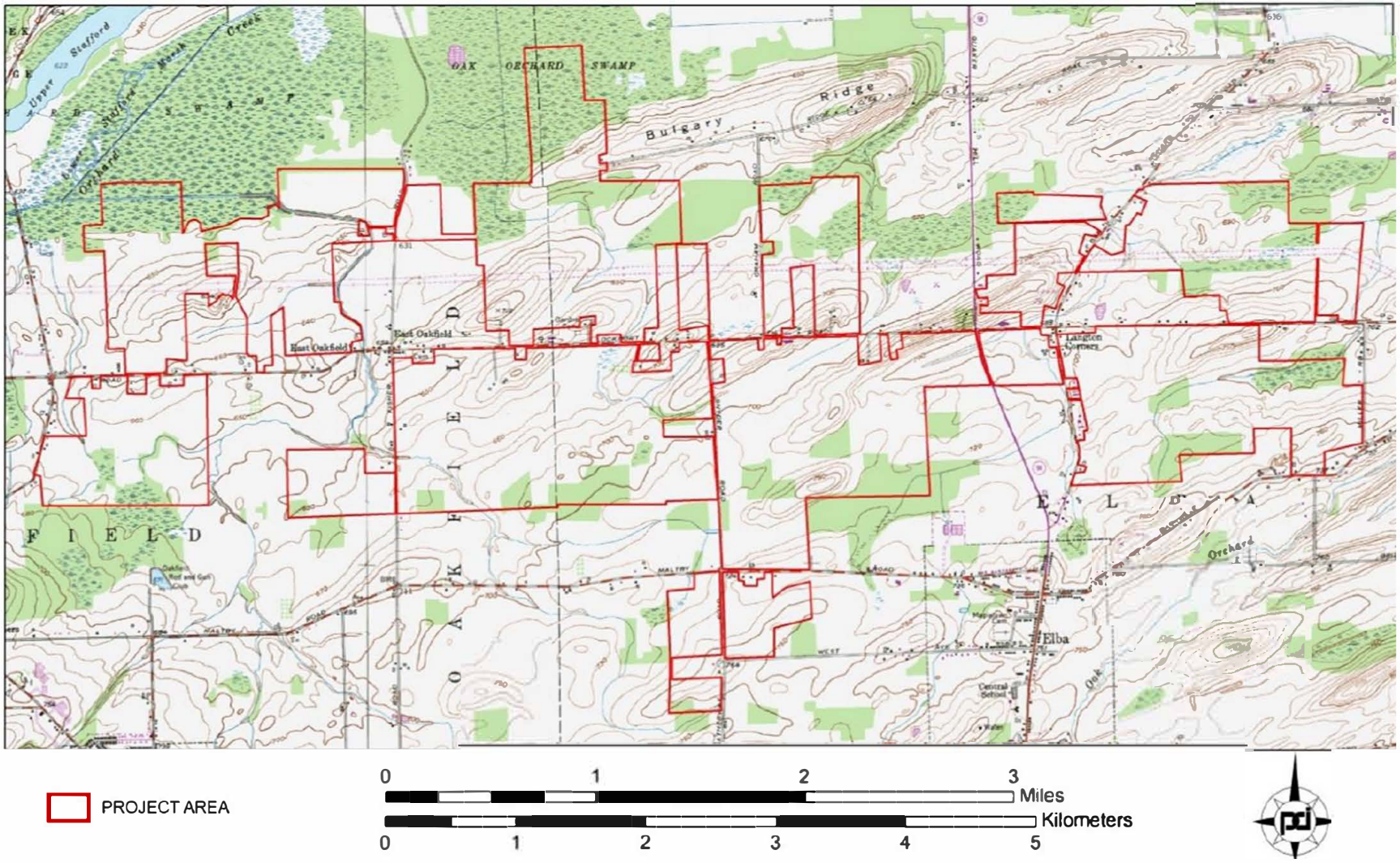

Figure 1. Location of the project area in the Towns of Oakfield and Elba, Genesee County, New York *(USGS Quadrangles, from west to east: Oakfield, NY 1950 [1978]; Batavia North, NY 1950 [1978])*.

Geology. Bedrock underlying the project area consists of horizontal beds of sedimentary rocks, including limestone and shale and shaly sandstone. Devonian age (approximately 400 million years ago) limestone outcrops at the Onondaga escarpment south of the project area. During the Wisconsin glaciation (the last glaciation), Genesee County was completely covered by ice. As a result, glacial till was deposited as ground moraines and drumlins and in proglacial lacustrine sediments of fine sand and silt laid down in glacial Lake Warren (Cressey 1966:24; Wulforst et al. 1969:171-172).

Soils. Soils within the project area belong to four USDA NRCS-assigned soil associations including: Ontario-Hilton; Cazenovia-Ovid; Collamer-Galen-Canandaigua-Lamson; and Muck (Figure 2). These are primarily glacially deposited sediment and have drainage qualities including from well-drained (Ontario-Hilton, Cazenovia-Ovid), somewhat well-drained (Collamer-Galen-Canandaigua-Lamson), and very poorly drained (Muck).

- *Ontario-Hilton*. Soils of this association account for approximately 80 percent of the project area. These are deep, nearly level to sloping, well drained and moderately well drained soils with medium texture were formed on glacial till (Wulforst et al. 1969:132-133).

- *Cazenovia-Ovid*. These soils are formed in glacial till or a mixture of till and lacustrine material. These soils tend to hold moisture, especially in the spring (Wulforst et al. 1969:134). This soil association is confined to the southwestern portion of the project area.

- *Collamer-Galen-Canandaigua-Lamson*. Soils in this association were developed in glacial lake sediments. They are deep, moderately well drained to poorly drained soils. This soil association is only found in small area in the northwestern portion of the project APE at Oak Orchard Swamp.

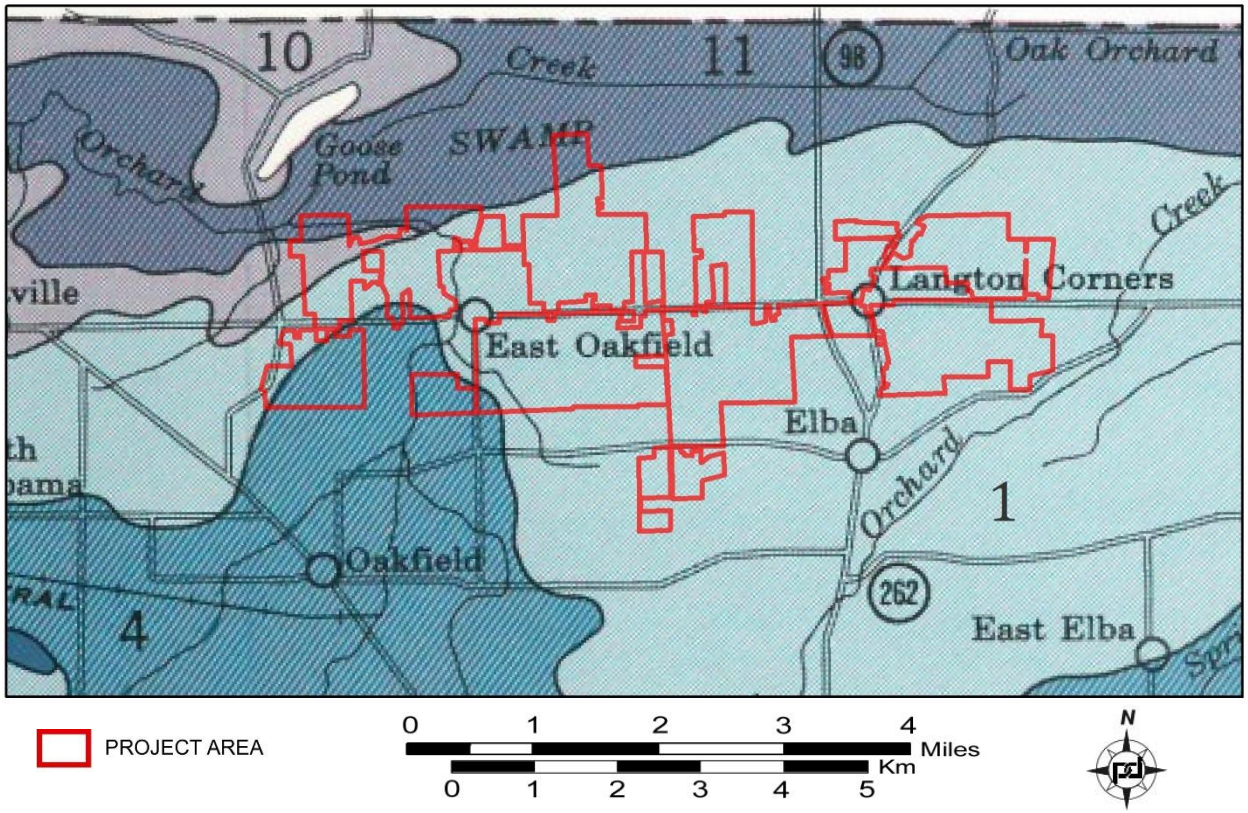

Figure 2. Soil Associations within and adjacent to the project area [note: (1) Ontario-Hilton, (4) Cazenovia-Ovid, (10) Collamer-Galen-Canandaigua-Lamson, and (11) Muck] *(Genesee County Soil Map 1968* in Wulforst et al. 1969*).*

- *Muck*. Muck includes deep to shallow, very poorly drained organic soils. This soil association is only found in the northwestern extent of the project APE at Oak Orchard Swamp.

***Forest Zone and Vegetation*.** The northern portion of Genesee County, which includes the project area, lies within the Elm-Red Maple-Northern Hardwood forest zone (de Laubenfels 1966:92). The prevalence of elm and red maple is due to recent conditions where poorly-drained areas have been created by human activities, better-drained areas have been utilized for agriculture, and the natural forest has been removed (de Laubenfels 1966:95). The project area is largely open pasture.

Manmade Features and Alterations. The project area is located within active pasture/agricultural land. Existing land-use impacts include deforestation activities, agricultural plowing and planting, and the potential for the presence of buried field drains.

2.0 Phase 1A Methodology

A Phase 1A cultural resources investigation is designed to identify and assess sensitivity and potential for locating cultural resources within the project's APE. These resources include archaeological sites (prehistoric and historic) and standing structures or other aboveground features. The investigation consists of a background/literature search, a site file check, and a field reconnaissance of the project area. The geography, prehistory and history of the region are reviewed in order to understand the historic background of the project area and provide a context for any cultural resources that may exist within the project's APE. Archaeological and historic site files at the New York State OPRHP's online Cultural Resources Information System (CRIS) are reviewed as an initial step to determine the presence of known archaeological sites within one mile (1.6 km) of the APE. These files include data recorded at both the OPRHP and the New York State Museum (NYSM). Field reconnaissance is conducted to observe and photographically document the setting and general conditions (e.g., disturbances, drainage, sensitive terrain) of the APE.

Information collected during the Phase 1A survey (i.e., background research and field investigation) is used to assess the sensitivity of the project area for the presence of cultural resources. Areas are considered to have low archaeological sensitivity according to the following criteria:

- graded and cut areas through surrounding terrain (e.g., hills or gorges), such as those resulting from road construction
- areas that appear to have large amounts of fill
- areas previously impacted by construction of utilities, drainage ditches, streets or other obvious areas of significant earth movement
- areas including poorly drained soils and wetlands
- areas having slopes greater than 15 percent

Areas of archaeological potential and high sensitivity are identified based on the following criteria:

- undisturbed areas that are environmentally sensitive with relatively level well-drained soils or in the vicinity of potable water such as springs, streams or creeks (these characteristics typify known site locations in the region)
- known prehistoric or historic site locations within or adjacent to the project area
- historic map-documented structure (MDS) locations identified within or immediately adjacent to the project area

3.0 Documentary Review

3.1 PREHISTORIC PERIOD

Paleo Period (ca. 12,000-8000 BC). Hunter-gatherer bands of the Paleo culture were the first humans in New York State after the last glacial retreat approximately 14,000 years ago. As the climate gradually became more temperate, forays into the region likely became more extended. At the end of the Pleistocene Era, what is now central New York provided an important habitat for large mammals and other game potentially significant for human subsistence. The area represented a major wetland/glacial lake environment that supported a large Pleistocene biomass. The subsistence strategy traditionally has been viewed as emphasizing big-game hunting. These species, many of which are extinct, included mastodon, mammoth, great beaver, caribou, and moose-elk, along with a variety of smaller game. Few tool associations have been made with aquatic resources remains, although this diverse and abundantly available food source was probably utilized once water conditions allowed (Funk 1972:11; Ritchie 1980; Salwen 1975). The remains of mammoth, mastodons, and Pleistocene elk have been found in northern and eastern Ontario County along the Port Huron moraine; Pleistocene elk remains were identified near the Ontario-Yates county line near Seneca Lake; and the mammoth remains were identified at the northern end of Seneca Lake in Seneca County (Ritchie 1980:10-11).

Adapted to the harsh tundra or park-tundra environment, Paleo peoples utilized a nomadic settlement system in which their movements were directed by the migration of game animals and locations of lithic raw materials. During seasonal peaks of resources, larger populations occupied strategically located large camps; during periods of low resource potential, the population dispersed, occupying small camp sites and rockshelters on a temporary basis. A band-level social organization is attributed to Paleo groups, with each band consisting of 25 or 30 people (Snow 1980:150; Funk 1978). As climatic conditions allowed more permanent occupation of an area, this wandering became more restrictive and bands settled into loose territories. Located near the margin of extinct glacial lakes, many Paleo Period sites in the northeast are located on elevated areas “where good drainage, meaning a dry living floor, was an important consideration” (Funk 1978:18). These hills or rises also served as loci for monitoring the migratory patterns of game species.

Paleo Period sites have not been excavated in the vicinity of the current project area. Fluted points gradually decreased in size as larger game animals moved north or became extinct (Kraft 1986:47). Two fluted points have been recovered around Mud Creek, west of the project area, and two have been found near the southern end of Canandaigua Lake (Ritchie 1980). Fluted points were eventually replaced in the late Paleo-Period (8000-6000 BC) with unfluted triangular points, stemmed points and Plano points, which are lanceolate-shaped points without flutes (Kraft 1986; Ritchie 1980). This general Paleo-Period adaptive pattern overlapped the beginning of the subsequent Archaic period, leading some to refer to the earlier periods of the Archaic as a transitional stage.

Archaic Period (ca. 8000-1500 BC). The Archaic period is differentiated from the Paleo-Period by a functional shift in lithic technology, an apparent increase in population, changes in the subsistence strategy, and a less nomadic settlement system (Funk 1978; Tuck 1978). These changes reflect an adaptation to an improved climate and a more diversified biome (Funk 1972:10).

People began to develop woodworking tools during this period, using coarse-grained stones and river Despite evidence that Early and Middle Archaic cultures occupied this portion of New York, excavations have not been carried out on sites primarily related to these periods (Funk 1991, 1993). The territorial "settling in" process begun during the Early Archaic continued into the Middle Archaic, stimulating a process of group isolation. Sites from these periods cluster along major rivers and marshy, swampy land as well as lowlands (Mason 1981).

The Late Archaic is seen as the flowering of preceramic culture in the northeast (Snow 1980; Mason 1981). The period begins about 6,000 years ago and continues to the advent of pottery around 1200 BC. During the Late Archaic hunting, fishing, and gathering remained the principal daily activities, although greater

emphasis was placed on deer and small game like birds and turtles, shellfish, nuts and possibly wild cereal grains like *chenopodium*. Charred acorn shells were found in hearths at the Lamoka Lake site in Schuyler County (Ritchie 1980). Associated with the shift in subsistence strategies was an increase in population densities and, as population increased, camps became larger and more numerous. People still lived in bands whose territories may have been well defined. They moved seasonally or when resources dwindled. Most sites of the Late Archaic period were seasonal, special purpose habitation sites. These include winter hunting camps, spring fishing stations, fall nut-gathering and processing stations, and shellfish processing. Principal settlements, such as Frontenac Island (Cayuga County), Lamoka Lake (Schuyler County), and Geneva (Seneca County), were located near major rivers or lakes and were multi-activity spring and summer villages (Ritchie and Funk 1973). Lamoka-phase beveled adzes have been found around Canandaigua Lake, with one location north of the lake, along the Canandaigua Outlet, and along Honeoye Lake and Honeoye Creek (Ritchie 1980:45).

Ritchie and Funk (1973) argue that several of the Finger Lakes Lamoka-type sites are unique in being permanent, sedentary, or semi-sedentary villages supported by food storage in addition to an optimum mix of a broad range of food resources. At Lamoka Lake numerous house sites were identified with laminated sand floors, large roasting platforms, and deep storage pits were discovered.

Another Late Archaic phase identified by Ritchie (1980) is Brewerton, a local variant of the Laurentian tradition. Although Brewerton-type, notched points have been found throughout the state, the phase is known primarily from the Oberlander no. 1 and Robinson sites, which straddle the Oneida River at the foot of Oneida Lake (Ritchie 1940). Both of these sites are considered to represent recurrently occupied central base camps used primarily during the spring and summer. Brewerton sites are said to be most closely associated with swamps and watercourses (Ritchie and Funk 1973). In contrast to Lamoka phase sites where nut-gathering and fishing was important, Brewerton people are thought to have been more focused on hunting since projectile points dominate site assemblages (Ritchie 1980).

The Transitional period (ca. 1500-1000 BC) continues Late Archaic cultural and economic patterns with only a few innovative traits. Among these are a developing burial/ceremonial complex and, toward the end of the period, the introduction of ceramics. Frost Island phase culture was generally situated in Central New York with extensions into western and northern New York (Snow 1980; Ritchie 1980). Artifacts characteristic of this phase include Perkiomen, Susquehanna Broad points, drills and strike-a-lights made of reworked Susquehanna Broad points, flake tools, celts, netsinkers, hammerstones, pitted stones, anvil stones, and milling slabs (Funk 1993:197). The hallmark of this transition is the adoption of pottery around 1200 BC. The shift to pottery appears to have been preceded by the adoption of steatite or soapstone pots which made cooking and food preparation easier (Ritchie and Funk 1973:87; Funk 1993:198). The earliest pottery in New York State (Vinette 1 type) has been radiocarbon dated to about 1250 BC at the Frost Island component of the O'Neil site, and 500 to 600 BC at the Morrow site (Ontario County near Honeoye Lake).

Woodland Period (1000 BC-AD 1500). The definitive characteristic of the Woodland period in New York State is the adoption of pottery technology, a development that occurred at different times from one location to another. While the previous hunting-and-gathering economy continued as a means of subsistence during Woodland times, Native groups became more dependent on domesticated plants for food. Agriculture brought with it a score of new problems that required new adaptations and every aspect of Native culture was transformed. With agriculture came settled village life, a general increase in population, technological changes, warfare, and a litany of social and political changes. Early and Middle Woodland sites often contain exotic and numerous trade goods within burials, which suggest the existence of widespread exchange or trade networks

The Middle Woodland period (100 BC-AD 1000) shows continued long-distance exchange, although perhaps with varying strength at different times. The end of the Middle Woodland occurred when people in New York adopted the suite of characteristics he associated with the Late Woodland: primarily agriculture based on maize, beans, and squash; Owasco-style pottery; and house structures resembling historical Haudenosaunee (or Iroquois) longhouses.

The Late Woodland, in Ritchie's scheme for the northeast, was the period between AD 1000 and the time at which Native people traded for or otherwise obtained European goods, the precise timing of which varied throughout the region. In the 1930s, Ritchie (1937 [1936]) proposed dividing the Late Woodland into two shorter periods: the Owasco and Iroquois (see also Ritchie 1944). At the time, he believed Iroquoian groups migrated to the New York State area and replaced the Algonquian Owasco people already living there (see Tuck 1971:11-14). While researchers have generally accepted that Iroquoian speakers did not immigrate to the northeast at the beginning of the Late Woodland, the distinction between Owasco and Iroquois periods has remained. Also, with the development of radiocarbon dating, the two have acquired distinct temporal boundaries, with the Owasco lasting from AD 1000 to 1300, and the Iroquois spanning the years thereafter (Hart and Brumbach 2003: 747). In terms of material culture, the primary differences between the two entities are related to ceramic vessel form and decoration.

Although, as outlined above, some of the cultural developments Ritchie associated with the Late Woodland did not occur between AD 1000 and 1100, some—particularly those related to the development of an agricultural system based on maize, beans, and squash—did happen in the succeeding years. In fact, several developments appear to cluster around AD 1200 to 1300: the earliest evidence for longhouses and multiple household villages is from the thirteenth century AD and people added beans to their diets around AD 1300 (Hart and Brumbach 2003: 744-746; Hart 2011). In addition, Snow (2000:30) notes that groups in Central New York began surrounding their settlements with defensive palisades after AD 1200. During the later years of the Iroquois period, people in some areas began clustering their villages within the territories occupied by historically known Native nations (Snow 2000:46-51). Likely in part because of the large amounts of wood consumed during the construction and maintenance of these settlements, as well as that needed for firewood, inhabitants periodically relocated their villages roughly every 10 to 20 years (Engelbrecht 2003:101-103). In several cases, researchers have reconstructed parts of the resulting sequences of settlements and produced detailed data concerning local culture change and the effects thereon of contact with Europeans (e.g., White 1961).

The horticultural complex of corn, beans and squash, called the Three Sisters by the Haudenosaunee in later times, are found together in some of the earliest Late Woodland sites (Ritchie and Funk 1973; Hart et al. 2003), indicating the importance of these plants for at least some early garden systems and subsistence strategies. However, the frequency with which these crops were grown together is poorly understood (Smith 1992; Kuhn and Funk 2000). The common perception is that a heavy reliance on corn horticulture was supplemented by growing beans and squash, with declining roles for hunting, fishing and gathering. Primary animal prey most likely included one or more of deer, fish, and shellfish, based on faunal evidence, site locations, and the prevalence of netsinkers and other fishing technology at some sites (Cleland 1982; Ritchie 1980; Ritchie and Funk 1973).

The Late Woodland period brought increasing sociopolitical complexity and diversification of resource exploitation. These trends were greatly accelerated by contact with European explorers beginning in the sixteenth century (Kuhn and Funk 2000). Native groups were profoundly affected by direct and indirect contacts with the fur trade, long before the arrival of a permanent European-American population to the area (Brasser 1978:79-81). These contacts mark the beginning of the end of traditional Native American cultural patterns due to ever-increasing political, military, religious and economic interactions with Europeans.

Cultural changes within the Late Woodland period laid the groundwork for the development of the individual nations of the Haudenosaunee Confederacy during the historic period. In Central New York, this occurred in three areas: the Western Finger Lakes (Canandaigua, Keuka, Seneca, Cayuga), the Little Finger Lakes (Honeoye, Hemlock, Conesus, Canadice), and the Bristol Hills and Genesee valley (Cayuga and Seneca tribal emergence). Archaeologists generally agree that the historic Haudenosaunee nations were preceded in their home territories by Haudenosaunee ancestors during the late prehistoric era. This interpretation is based partly on settlement patterns. In both prehistoric and historic times, Haudenosaunee nations moved their villages at intervals that may have been related to the exhaustion of local resources, such as soil, wood or game. Sequences of village movement spanning the prehistoric, protohistoric and historic periods have been inferred for each of the individual Haudenosaunee nations, for example the Seneca (Wray and Schoff 1953; Wray et al. 1987) and Seneca and Cayuga (Niemczcki 1984). The Seneca generally occupied

the area encompassing the project area (Wray and Schoff 1953; Niemczycki 1984; Abler and Tooker 1978; Engelbrecht 2003).

Contact Period. Each of the five Haudenosaunee nations is represented by a cluster of sites during the late prehistoric and protohistoric periods. In some cases, Owasco sites occur in sufficient proximity to suggest hypothetical ancestors of the Haudenosaunee site cluster (Tuck 1971, Snow and Starna 1986), although settlement pattern change is apparent. Owasco sites are often located adjacent to rivers, other sizeable streams and lakes, or on bluffs or terraces immediately overlooking these kinds of water bodies (e.g., the Sackett Site in Canandaigua). Haudenosaunee villages, however, tend to be located on hillier sites, often defensible elevations near springs or small creeks. Niemczycki (1987) argues that the merger or alliance of western Owasco and Ontario Iroquoian populations accounts for prominent characteristics of later Seneca culture, including the division of the Senecas into eastern and western branches. Seneca cultural history, village formation and abandonment sequences after AD 1500 took place in Ontario and Livingston counties (Niemczycki 1987; Wray and Schoff 1953). Although warfare is suggested by settlement fortifications in the Susquehanna valley and central New York and by the high percentage of deaths by arrows at the middle Owasco Sackett site cemetery (Canandaigua, Ontario County; Ritchie 1937 [1936]), the lack of fortifications at numerous Late Woodland and later sites, particularly in the Mohawk, Hudson, and Delaware drainages, may indicate that warfare was intermittent, or a geographically or culturally limited activity. At the time of European contact, the traditional territory of the Seneca was between the western Finger Lakes and the Genesee River, north and east of Hemlock Lake (on the western boundary of Ontario County). The Seneca had extensive hunting territories beyond their villages, which extended north to the St. Lawrence River and south to the Susquehanna River, as well as east to Seneca Lake. This territory included the project area, and all of what is now Ontario County (Niemczycki 1984; Abler and Tooker 1978:505).

By the seventeenth century, the fur trade was central to the Seneca economy and they were adamant in protecting their position as suppliers of pelts. After 1600, however, the supply of animal skins diminished within Seneca hunting territory, and they began to expand the range of their hunting and trading efforts into the traditional areas of other Iroquoian groups. Between 1638 and 1655, large-scale concerted attacks by the Seneca against their rivals in western New York secured the resources of the Niagara Frontier. The Seneca “dispersed” (i.e., extermination and assimilation) the Wenro (by 1638), the Huron Confederacy (1649), the Petun (1650), the Neutral Confederacy (1651) and, finally, the Erie Confederacy (1655). By the mid-seventeenth century, the Haudenosaunee Confederacy of New York emerged as a politically, militarily, and economically united confederacy with sole access to both the land and resources surrounding the lower Great Lakes as well as their traditional areas around the Finger Lakes (Abler and Tooker 1978:505-507; Trigger 1978:354-356). At this time, what is now Ontario County remained within Seneca control, utilized for hunting, resource procurement and settlement (Tooker 1978:432-434).

3.2 HISTORIC PERIOD

For almost all of the seventeenth and eighteenth centuries European activities in central New York involved limited religious, commercial, and military endeavors. The French were the first Europeans to penetrate the Finger Lakes region. As early as the 1620s, Jesuit missionaries and French traders were establishing contacts with Native groups. These visits, however, were infrequent until the 1650s. The earliest recorded Jesuit contact with the Seneca occurred in 1656 when Pierre Joseph Marie Chaumonot visited them at Ganondagan (the Boughton Hill site) northwest of the present-day City of Canandaigua. He reported that the Seneca had two large villages in addition to several smaller ones. In the same year, the Jesuits visited the Cayuga, where René Ménard established a short-lived mission. As hostilities intensified between the Haudenosaunee and the French over territorial issues related to the fur trade, the Jesuits were forced to evacuate Sainte Marie (established among the Onondaga) in 1658. Several years later, upon invitation from the Cayuga, Simon Le Moyne briefly left the Onondaga to visit the Cayuga for a few weeks during the winter of 1661-1662. The Jesuits finally returned to the western Finger Lakes in 1668 when permanent missions were established among the Seneca under the direction of Jacques Frémin and Julien Garnier and among the Cayuga at a mission called Saint Joseph. Jean Pierron re-established the Jesuit mission of St. Jacques at Ganondagan. While the sowing of Christianity among the Seneca and Cayuga by the Jesuits

generally bore little fruit, the missions had modest effects on moderating the hostility between the Haudenosaunee and the French (Tooker 1978:431-432; Abler and Tooker 1978:505-507).

The relationship between the French and the Haudenosaunee continually fluctuated between grudging acceptance and outright war. Dealings among the Seneca and the French and their Native American allies over the western fur trade flared periodically into violence. In July 1687, forces under the command of Jacques René de Brisay, Marquis de Denonville, governor of New France (Canada), attacked the Seneca in an attempt to eliminate them from the fur trade. Denonville and his forces landed at Irondequoit Bay and moved southeastward into what is now Ontario County where the principal Seneca villages were located. However, the Seneca ambushed the French invaders before Denonville reached their principal eastern village, which the Seneca themselves burned prior to the ambush. After the attack, the Seneca, badly outnumbered, fled the field. The French enjoyed great success destroying the ripening corn crop and burning several vacated Seneca villages, two of which were located in present-day Ontario County, before retreating to reconstruct the fort at Niagara. Ganondagan (the Boughton Hill site, now a New York State Historic Site) was one of the villages destroyed during Denonville's assault. During the seventeenth and eighteenth centuries, other Seneca villages located in Ontario County in addition to Ganondagan included villages in the towns of Victor, Bloomfield, Bristol, and Richmond. The Haudenosaunee did not reach a final peace with the French until 1701 (Abler and Tooker 1978: 506-7; Tooker 1978:431-432).

During the ensuing half-century of peace between the Europeans and the Seneca, the Seneca expanded their influence over the beaver trade to the south and west, but did not resettle the towns destroyed by the French. Subsequent Seneca settlements trended both eastward toward the Canandaigua and Geneva areas and the Finger Lakes and westward through the Genesee Valley (Abler and Tooker 1978: 505-507; Wray and Schoff 1953:53; Jordan 2002:15).

> The eastern Seneca drifted east, finally establishing one village at the foot of Canandaigua Lake and another, their principal village, at the foot of Seneca Lake. From there, they also established settlements on both sides of Seneca Lake and down the Chemung River. The western Seneca drifted westward, settling along the fertile flats of the middle Genesee. From there, they also moved up the Genesee, across to the Allegheny and down that river into Ohio. No longer threatened by attack, the eighteenth-century Senecas built unpalisaded villages in which the houses were dispersed [Abler and Tooker 1978:507].

Jordan (2002) presents a chronology of selected Seneca sites for the early historic period (1687-1779), presented as Table 1.

Table 1. Chronology of Seneca Sites *(Jordan 2002:295)*

Site Name	Occupation Dates (approximate)
Boughton Hill (Ganondagan)	1670-1687
Rochester Junction	1670-1687
Snyder-McClure	1688-1710/1715
White Springs	1688-1715
New Ganechstage	1715-1754
Huntoon	1710/1715-1740
Kendaia	1710/1720-1779
Fall Brook	1740-1775
Honeoye	1740-1779
Kanadesaga	1754-1779
Genesee Castle	1775-1779

The post-1779 period witnessed extensive cessions of Native American land by the Haudenosaunee to European-Americans and the establishment of reservations in New York State. The Treaty of Big Tree in 1797 marks the beginning of the reservation period for the Seneca. The concept of the reservation at this time seems to be "what the term literally implied—lands reserved by the Indians from a cession of land and intended for their own use and occupancy. Generally, such reservations included an already existing settlement and some surrounding area deemed minimally adequate to supply the subsistence needs of the local population living by traditional custom" (Wallace 1970:444). At a time when the nearby European-American settlements were small, few and far between, these reservations were not conceived as locations surrounded by invisible fences that compelled the Seneca to remain inside, but which allowed the Seneca the control to keep European-American interlopers out.

Native American title to the land in the Genesee Valley was largely extinguished with the Treaty of Big Tree in 1797, although several areas were reserved for the Native Americans to use and live on, including reservations at Buffalo Creek, Tonawanda, Cattaraugus, Tuscarora, and Allegany (Turner 1974 [1850]: 403; Abler and Tooker 1978:509, 512). The Seneca sold most of their remaining lands, except for their reservations, to Robert Morris for $100,000 and individual cash payments to specific Seneca leaders. Under this treaty tracts of land along the Genesee River as well as along major waterways in western New York were reserved for the Haudenosaunee. The population of Senecas in New York State at about the time of the Big Tree treaty was approximately 1,700 or 1,800, with one-third living along the Genesee River, one-third at the Buffalo Creek reservation and the remainder spread among the other reservations (Abler and Tooker 1978:509). The current Tonawanda reservation is less than ten miles west of the project area. The reservation originally comprised 46,209 acres (72 square miles), but has been reduced over the preceding two centuries to approximately 7,550 acres (Amrhein 2001).

Early in the nineteenth century, the Seneca, succumbing to the intense pressure and unscrupulous tactics of land speculators to sell their remaining reservations in the state, began to divest themselves of their property in the Genesee Valley and western New York. With the Buffalo Creek Treaty of 1826, the Seneca sold their remaining reservations on the Genesee River. Prior to this treaty, David Ogden, later the Ogden Land Company, had acquired the pre-emption right to the remaining Seneca reservations from the Holland Land Company. Under the 1826 treaty the Seneca sold the Big Tree, Canawaugus, Caneadea, Squawkie Hill reservations, and the remaining lands at Gardeau, in addition to parts of the Buffalo Creek, Cattaraugus, Tonawanda reservations. With the Buffalo Creek Treaty the Tonawanda reservation was reduced to 12,800 acres (Tooker 1978b:452; Abler and Tooker 1978:511; Kappler 2003 [1904]). "At the time this treaty was signed there were approximately 550 Senecas living at Buffalo Creek, 350 at Cattaraugus, 500 at Allegany, 325 at Tonawanda, and 450 on the Genesee. Within a few years after the sale of the Genesee lands, the Senecas who had lived there had moved to the other Seneca reservations" (Abler and Tooker 1978:511).

Despite the cession of land by the Haudenosaunee in 1826, pressure continued from the land speculators to acquire the remainder of their reservations in the state and relocate them to the Midwest. The Ogden Land Company retained the rights to buy Haudenosaunee lands in western New York, including the Tonawanda reservation. Questionable and devious actions by the federal government and the Ogden Company marked the negotiations surrounding the controversial Buffalo Creek Treaty of 1838. This treaty would have resulted in the removal of the Haudenosaunee from New York State, but the Seneca claimed that it was fraudulent and illegally obtained. They and their allies fought the treaty in the courts and had it nullified. In the subsequent Compromise Treaty of 1842, the Seneca retained three small reservations, but lost both the Buffalo Creek and Tonawanda reservations. The Senecas at Tonawanda refused to accept the compromise treaty and Seneca Chiefs John Blacksmith and Jimmy Johnson led the battle in the courts against it. Ultimately, the Tonawanda Senecas were partially successful in their fight. In an 1857 treaty, the Tonawanda Seneca were allowed to purchase their own lands back from the Ogden Land Company, who had acquired the title fraudulently, but they could not afford to buy back the entirety of their former reservation (Kappler 2003 [1904]; Haudenosaunee 2005; Amrhein 2001).

Most of what is now the Town of Oakfield was part of the original Tonawanda Reservation and was not sold to American settlers until after 1832. The earliest European-American settlers in the non-reservation portion were Erastus Wolcott, Gideon Dunham and Christopher Kenyon in 1801. Other pioneers prior to the War of 1812 included Elijah Blodgett, George Driggs, Peter Lewis, William McCrellis, Aaron White, Calvin

Nobles, and Jeremiah, George and John Gardner. What is now the village of Oakfield was originally Plain Brook or Plainbrook. Gideon Dunham opened the first tavern in the town ca. 1802. Christopher Kenyon constructed the first grist and saw mills in 1811. The United States Gypsum Mills were first opened in 1812 (Child [2004] 1869; Bow 2004; North 2004 [1899]).

Western New York received a tremendous economic boost when one terminus of the Erie Canal was located at the village of Buffalo. The route of the canal passed well north of the project area, through Orleans County, and economic benefits were largely centered in areas closer to the canal as shipping was relocated from generally poor roads in the region. Begun in 1817, the Erie Canal linked Buffalo and Lake Erie with New York City when it opened in October 1825 (Shaw 1990).

The 1830s and 1840s marked a period of expansion for Oakfield. Othniel Brown opened the first cloth-dressing mill in 1829. He operated a woolen factory from 1835 to 1848. Colonel Alfred Cary opened the first store at Plainbrook in 1833. The village was renamed Caryville in 1837 after Colonel Cary. In 1840, Cary established the Cary Collegiate Seminary, which was a select boarding school. The Town of Oakfield was formed from the Town of Elba on April 11, 1842. Elba had been created from the original Town of Batavia in 1821. The Hamlet of Caryville was incorporated as the Village of Oakfield in 1858. It had approximately 600 residents in 1868 (Bow 2004; Weir et al. 1991:100; Child 2004 [1869]; North 2004 [1899]). What is now the Hamlet of East Oakfield was originally called Mechanicville and contained a sawmill, a wagon shop, a blacksmith shop, two cooper shops, and a school in addition to 15 dwellings (Child 2004 [1869]).

3.2.1 Site File and Records Review. A review of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) archaeological site and historic structures files through the online Cultural Resources Information System (CRIS) identified 16 precontact archaeological sites within the project area and 6 precontact period sites within a half-mile radius of the project area (Table 2). Eleven of the sites also have a historic component to them but they consist of historic scatters, trash dumps, and stray/isolated finds. All but one of the Precontact sites are [redacted] of the project area ([redacted]). The single site not found among this cluster is Precontact site ANR-47 Torrey Farm (USN 03708.000007) which is reported to be approximately [redacted] (see Table 2). No NYSM Museum archaeological sites have been reported within one-half mile of the project area. The project area does cross three SHPO-designated "Archaeologically Sensitive Areas" which encompass the cluster of previously reported archaeological sites within the project area and previously reported archaeological sites east and west of the project area.

The Precontact sites include a wide range of time periods including: Paleo (possible/not confirmed), Late Archaic, Laurentian Archaic, Transitional, Early Woodland, Middle Woodland, and Late Woodland. No large settlements (e.g., villages) or sites with human burials have been reported in the vicinity of the project area. The previously reported Precontact sites include camps, workshops, and stray/isolated finds. None of the 22 previously reported sites have been assessed for eligibility for listing in the New York State and National Registers of Historic Places (S/NRHP). All of these sites appear to have been found during cultural resource surveys for the Empire Pipeline which crosses the project area from west to east.

Table 2. Archaeological Sites Previously Reported within One-Half Mile of the Project Area.

OPRHP USN#	Additional Site Name	Distance to APE (ft/m)	Time Period	Site Type
03708.000007	ANR-47 Torrey Farm	190 (58)	Laurentian Archaic	Workshop
03710.000027	ANR-103 Falker no. 6	Within	Late Archaic, Historic	Precontact Camp, Historic trash dump
03710.000033	ANR-109 Falker no.8	65 (20)	Unidentified precontact, Historic	Precontact Camp/workshop, Historic scatter
03710.000024	ANR-100 Heslor no. 3	285 (87)	Multi-Component (Possible Paleo, Early Woodland, Late Woodland	Workshop
03710.000023	ANR-99 Heslor no. 2	480 (146)	Transitional, Historic	Precontact Camp/workshop, Historic scatter
03710.000025	ANR-101 Falker no. 4	Within	Unidentified Precontact, Historic	Precontact Camp, Historic scatter
03710.000026	ANR-102 Falker no. 5	Within	Unidentified Precontact, Historic	Precontact Camp, Historic stray find
03710.000022	ANR-98 Heslor no. 1	350 (107)	Unidentified Precontact, Historic	Precontact Camp/workshop, Historic scatter
03710.000030	ANR-106 Heslor no. 4	550 (168)	Unidentified Precontact	Stray find
03710.000015	ANR-94 Falker no. 1	Within	Middle Woodland, Historic	Precontact workshop/camp, Historic stray find
03710.000017	ANR-95 Falker no. 2	Within	Unidentified Precontact	Stray find, workshop
03710.000038	ANR-166 Sharpknoll	Within	Unidentified Precontact	no information
03710.000039	ANR-167 Falker no. 9	Within	Early Woodland	Stray find
03710.000028	ANR-104 Sharp	Within	Early Woodland	Stray find
03710.000019	ANR-96 Falker no. 3	Within	Unidentified Precontact	Stray find
03710.000034	ANR-112 Heslor no.7	Within	Unidentified Precontact, Historic	Workshop, Historic scatter
03710.000032	ANR-108 Heslor no. 6	Within	Late Woodland, Historic	Precontact workshop, Historic trash scatter
03710.000031	ANR-107 Heslor no. 5	Within	Unidentified Precontact, Historic	Stray find, Historic scatter
03710.000029	ANR-105 Falker no. 7	Within	Unidentified Precontact, Historic	Camp, Historic Stray Find
03710.000021	ANR-38 Falker no. 3	Within	Unidentified Precontact	Workshop
03710.000020	ANR-37 Falker Chase no. 2	Within	Unidentified Precontact	Stray Find
03710.000014	ANR-34 Falker Chase no. 1	Within	Unidentified Precontact	Camp/Workshop

Register Listings and Inventoried Structures/Cemeteries. No S/NRHP-listed structures, sites, or districts are present within a half-mile radius of the project area as recorded in the files of the OPRHP as accessed through CRIS. Only two structures and two historic cemeteries with assigned USNs are recorded on CRIS in the vicinity of the project area. The structures include USN 03708.000026, a circa 1830 Greek Revival dwelling located at 4048 Maltby Road, Oakfield (assessed as NRHP-eligible); and USN 03708.000016, a circa 1820-1840 vernacular dwelling at 6357 Oak Orchard Road, Elba (assessed as "not eligible" for NRHP-listing due to lack of integrity).

The two historic cemeteries include USN 03708.000028 (Gardner Cemetery) at 3753 Lockport Road/ County Route 12 in Oakfield (NRHP eligibility is not assessed) and USN Number 03710.000049 (East Oakfield Cemetery) at 3562 Lockport Road in Oakfield (assessed as "eligible" for NRHP-listing).

Previous Surveys. According to OPRHP's CRIS, six archaeological surveys have been previously conducted within one-half mile of the project area. A seventh archaeological survey for the Empire State Pipeline (not listed in CRIS) also crosses the project area following the NYSEG power corridor. These seven surveys were conducted for projects including waterlines, a gas pipeline, a gas compressor station, and a wetland reserve:

- Survey Number: 18SR55961; Cultural Resources Overview and Survey Investigation for the Proposed Empire Connector Project, Compressor Station Project Area, Town of Oakfield, Genesee County, New York;

- Survey Number: 14SR62813; Phase 1 (1A & 1B) Cultural Resource Investigations for the Town of Oakfield Water District No. 4 Project, Town of Oakfield, Genesee County, New York;

- Survey Number: 15SR00266; Phase 1A/1B Cultural Resource Investigation for the proposed Water District No. 7, Town of Oakfield, Genesee County, New York;

- Survey Number: 16SR00477; Phase 1A Cultural Resource Investigation for the proposed Water District No. 2, Town of Elba, Genesee County, New York;

- Survey Number: 17SR00921; Phase 1A/1B Cultural Resource Investigation for the proposed Oakfield Water District No. 10, Town of Oakfield, Genesee County, New York;

- Survey Number: 04SR55074; Phase 1 Cultural Resources Survey of the Lamb Wetland Reserve Program Easement, Oakfield Township, Genesee County, New York.

- Survey Number (Unavailable); Phase 1 Cultural Resources Investigation for the Empire State Pipeline Project. Conducted by Commonwealth Cultural Resources Group.

3.2.2 Historical Map Analysis. Four historic period maps (Ellicott 1800; Gillett 1854; Everts, Ensign & Everts 1876; and Century Map Co. 1904) were reviewed for the project area. The rural setting of the project area is largely unchanged through the years. The most notable difference is the change in the Tonawanda Reservation which is shown overlapping the project area in 1800 (Figure 3), but is now located approximately seven miles (11.2 km) to the west. Major roads currently present in the project area (e.g., Lockport, Albian, Fisher, Maltby, Oak Orchard, Graham, Snyder) were established by 1854 (Figure 4).

- **Ellicott 1880 (Figure 3).** As mentioned above, the most notable feature on this map is the former location of the "Tonnewanta Reservation" shown to overlap the southwest portion of the project area. Now known as the Tonawanda Reservation, its location is presently approximately seven miles (11.2 km) west of the project area. This large-scale map does not illustrate map-documented structures (MDS). A northwest-flowing drainage is shown crossing the project area and "Salt Spring" is noted but its location is unclear.

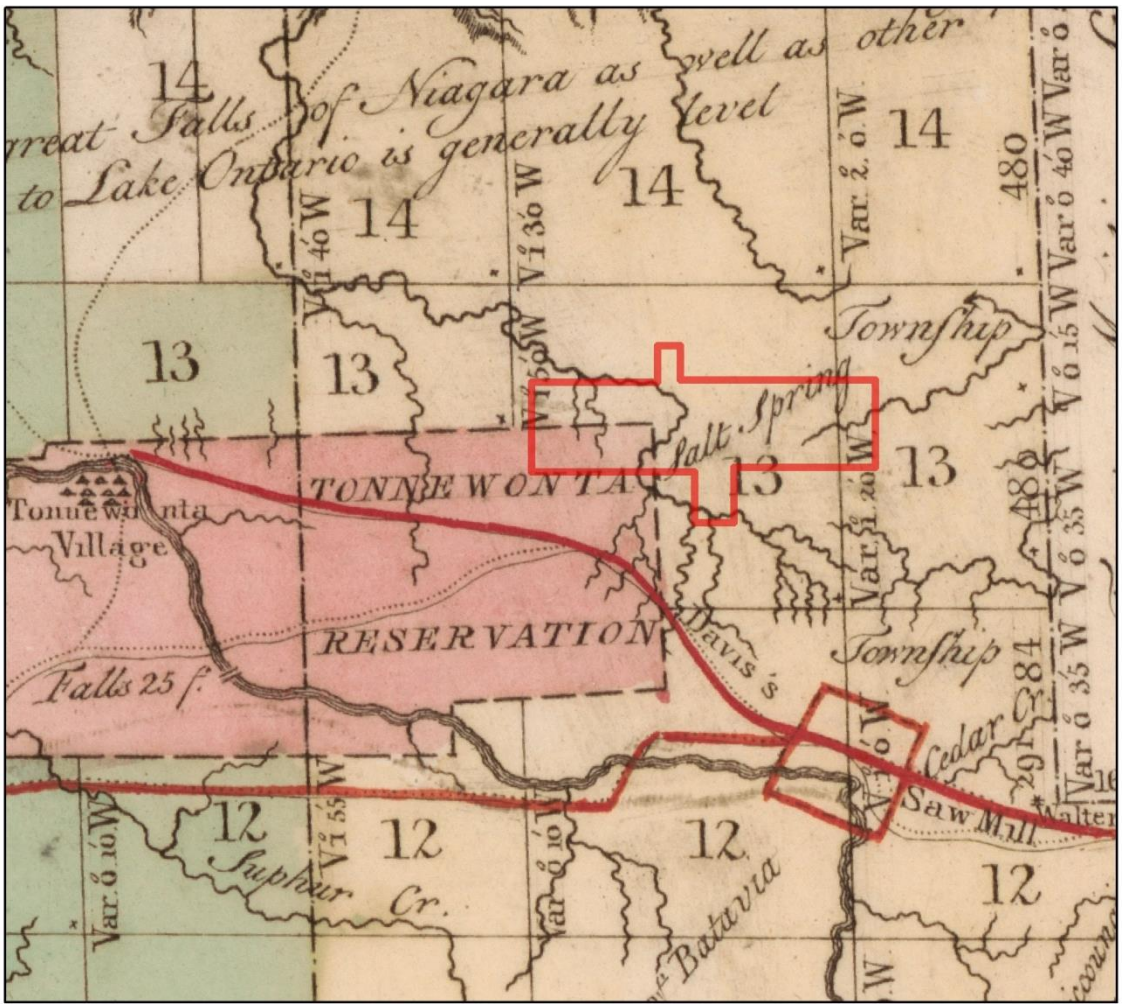

Figure 3. Approximate location of the project area (in red) in 1800 *(Ellicott 1800).*

- **Gillett 1854 (Figure 4).** This map depicts the southern portion of Oak Orchard Swamp extending into the northern portion of the project area. The boundary between the Towns of Oakfield and Elba is depicted in green and red and is shown crossing the project area. Numerous MDSs are shown adjacent to roads and a few MDSs are shown set-back away from roads. The APE of the project typically excludes the depicted MDS locations and many are likely extent dwellings and the solar facility project plans to avoid direct impacts to extant structures.

- **Everts, Ensign & Everts 1876 (Figure 5).** As with the Gillett map of 1854, the boundary between the Towns of Oakfield and Elba is depicted in green and red and is shown crossing the project area. Numerous MDSs associated with farmsteads, schools and churches are shown adjacent to roads and a few MDSs are shown set-back away from roads. Orchards are also depicted in and around the project's APE. As before, the APE typically excludes the depicted MDS locations and many are likely extent dwellings and the solar facility project plans to avoid direct impacts to extant structures. Unlike the previous two maps, this historic map depicts lot numbers.

- **Century Map Co. 1904 (Figure 6).** This map is very similar to the Evert, Ensign, Everts map of 1876. The Towns of Oakfield and Elba are differentiated by color and lot numbers are included. The density of MDSs has increased, especially at East Oakfield (intersection of Lockport and Fisher Roads) and Lancton Corners (intersection of Lockport and Oak Orchard Roads.

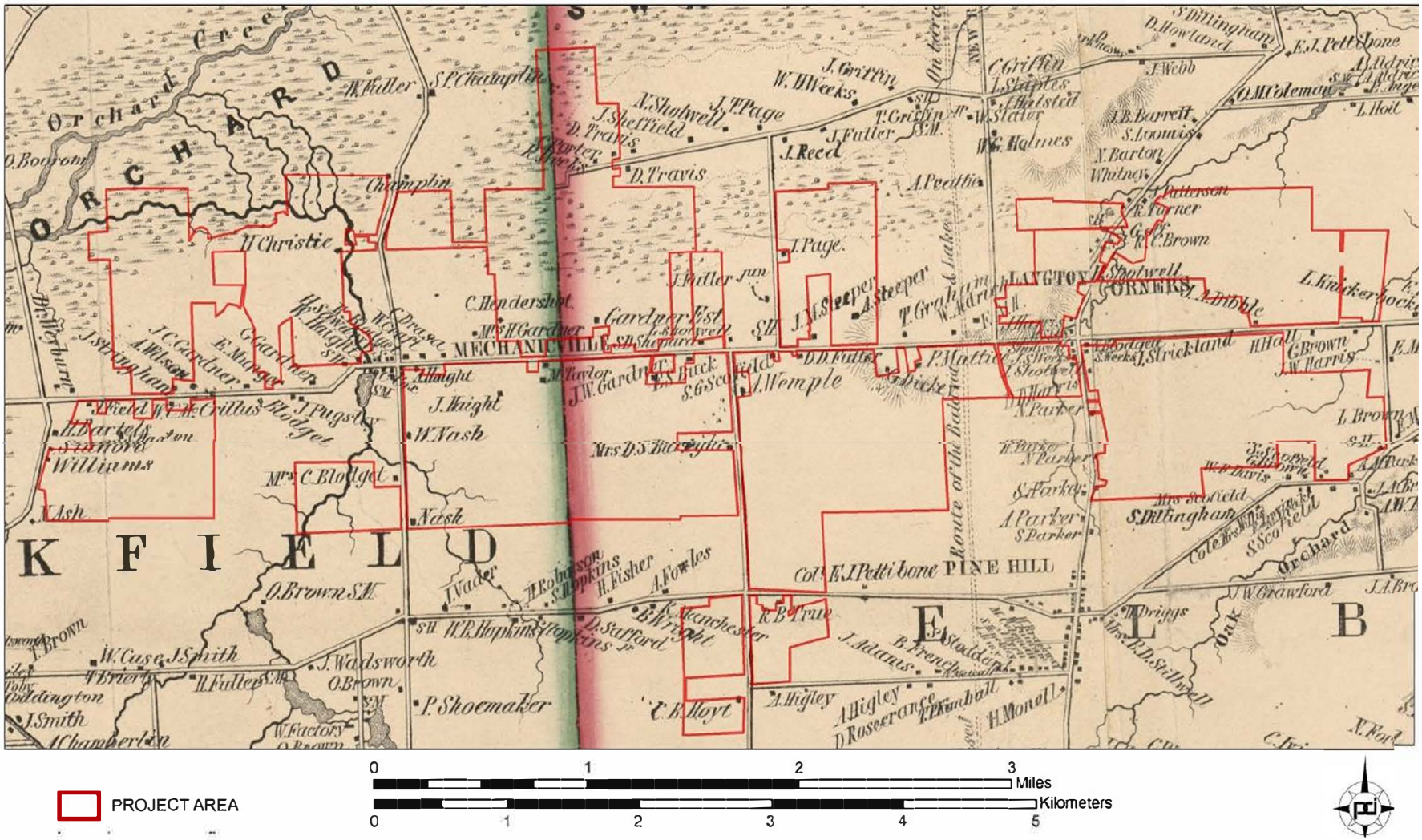

Figure 4. Approximate location of the project area in the Towns of Oakfield and Elba in 1854 *(Gillett 1854)*.

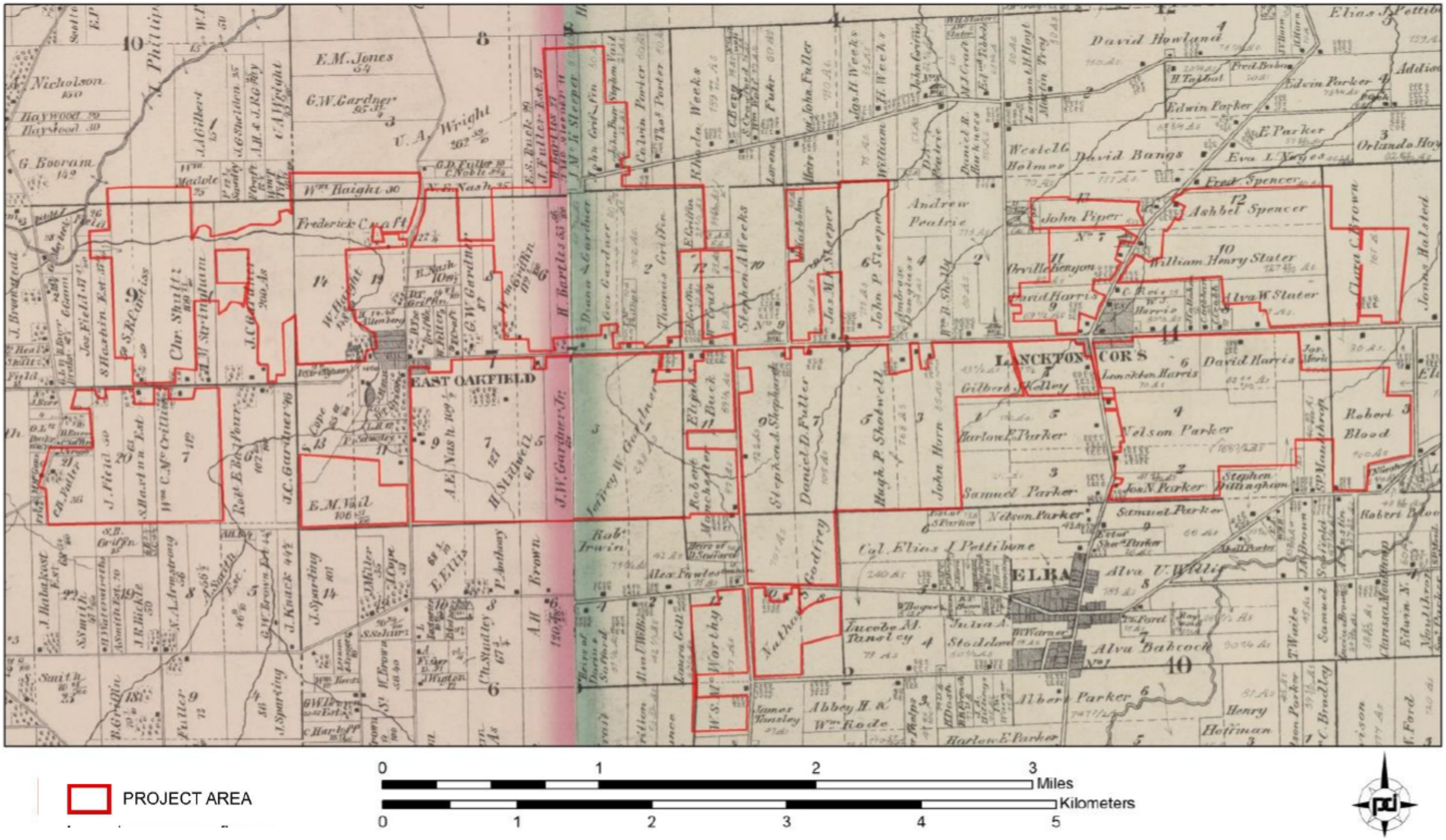

Figure 5. Approximate location of the project area in the Towns of Oakfield and Elba in 1876 *(Everts, Ensign & Everts 1876).*

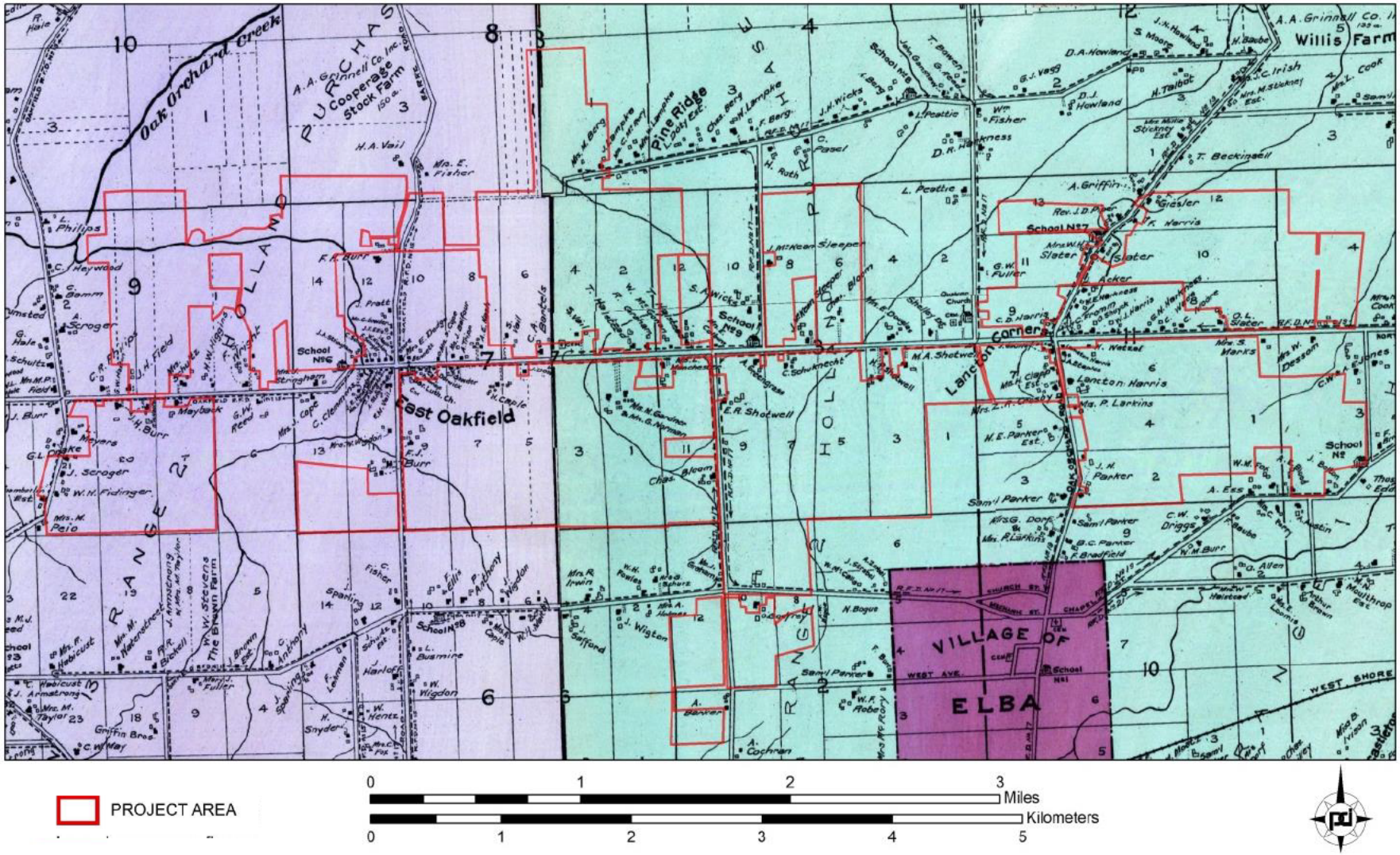

Figure 6. Approximate location of the project area in the Towns of Oakfield and Elba in 1904 *(Century Map Co. 1904).*

4.0 Field Reconnaissance

Field reconnaissance of the project area was conducted to observe and photographically document the setting and general conditions (e.g., disturbances, drainage) of the project area to complete an archaeological cultural resources sensitivity assessment. The APE of the project will be within approximately 3,500 acres of leased private land south of Oak Orchard Swamp and spread across portions of two townships. The majority of the project area is presently (and has historically been) used for agriculture. Figure 7 presents an aerial view of the project area with the locations of photographs presented in Appendix A. The most commonly observed agricultural practice is crop cultivation (e.g., corn, soy, alfalfa, freshly plowed fields), but cow and horse pastures were also observed in the eastern portion of the project area. Small scattered portions of the project area are stands of woods likely unworked due to poor drainage and tree lines left to separate fields or line drainages. As previously mentioned in Section 1.2, small creeks/drainages cross the project area but none are named and do not appear to be perennial. Artificial channelization and straightening were also observed (see Appendix A: Photographs 7, 9, 10, and 11). The setting of the project area is largely level or gently sloping, but a series of parallel drumlins/hills cross the project area (see topographic lines in Figure 1; see Appendix A: Photograph 13).

Development in the project area includes a large NYSEG overhead powerline corridor that crosses the northern portion of the project area north of, and roughly parallel to Lockport Road (see Appendix A: Photographs 2, 3, 15, 16, and 20). The subsurface natural gas Empire Pipeline is adjacent to the south side of the NYSEG corridor and the APE surrounds the National Fuel Gas Oakfield Compressor Station. Other than the Empire Pipeline, subsurface utilities are primarily located adjacent to roads (e.g., waterlines/hydrants and servicing houses (see Appendix A: Photograph 2).

Although the project design for the Hecate Solar facility is not complete or available, the available boundaries of the maximum APE generally shift to avoid the residences and farmsteads in the area. Numerous nineteenth and early twentieth century historic structures are common in this area although few have been inventoried and assessed for historic significance (e.g., Appendix A: Photograph 14). Direct impacts (e.g., demolition) to historic structures are not expected as the proposed solar facility will largely consist of solar panel arrays placed in what are presently agricultural fields.

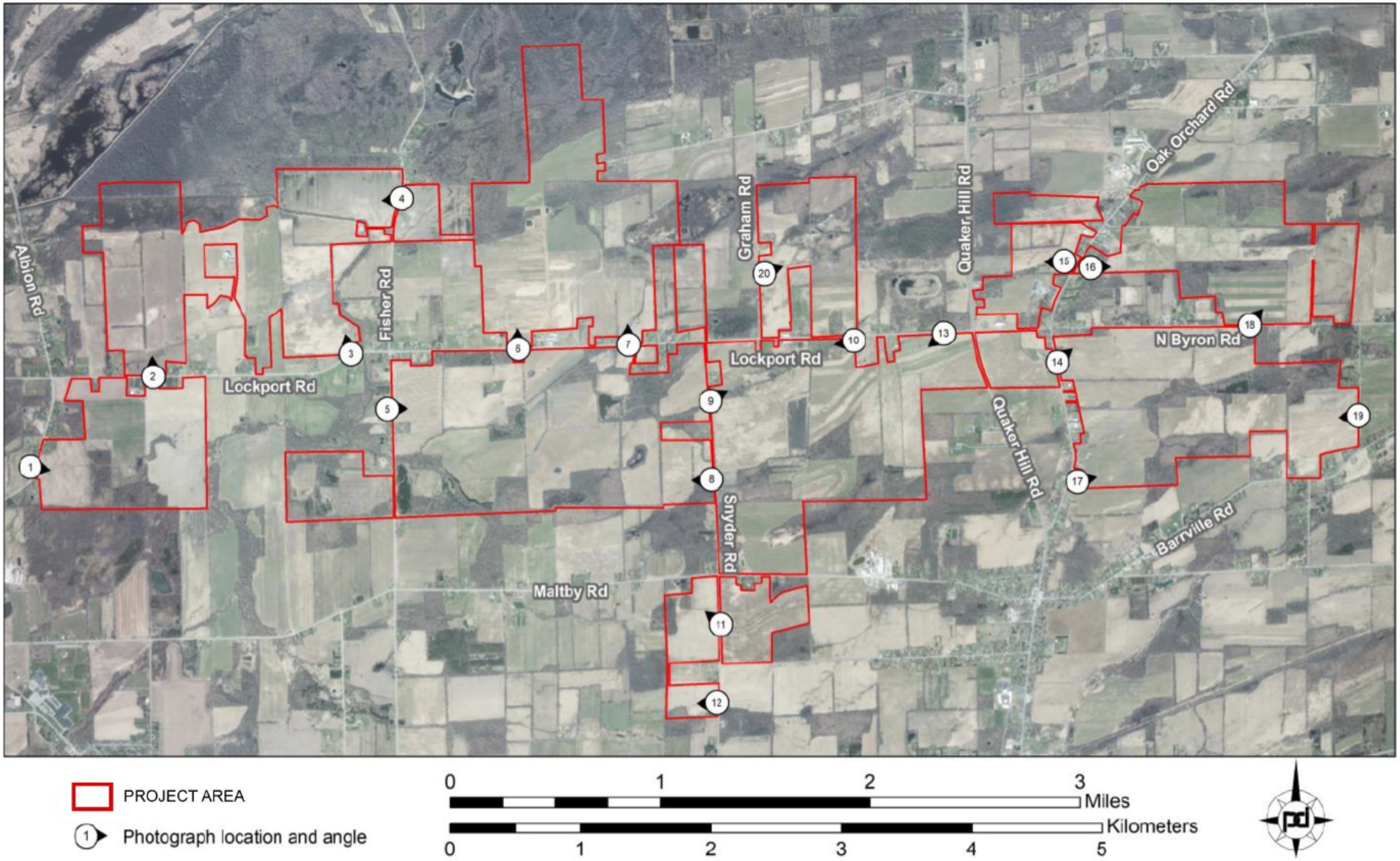

Figure 7. Location of photographs in the project area *(aerial source: New York State Orthos Online 2019).*

5.0 Conclusions and Recommendations

The project area is considered to be sensitive for both Precontact Period and Historic archaeological sites. The setting of the project area having well drained soils, a combination of relatively level terrain and hills, multiple small creeks, and the proximity of Oak Orchard Swamp/Oak Orchard Creek was favorable for Precontact land-use and settlement. This is further supported by the presence of multiple previously reported Precontact Period sites within and adjacent to the project's APE (see Section 3.2.1). Those sites were found as [redacted]. Although previously reported Precontact Period archaeological sites are [redacted].

The project area is also considered to be sensitive for mid-to-late nineteenth century farmstead sites due to the presence of numerous historic MDSs and extant historic structures in proximity to the APE (see Section 3.2.2). Historic cultural features associated with the historic farmsteads/homesteads include middens, wells, privies, or foundations that could be present within the project's APE. As previously stated, the project design for the Hecate Solar facility will likely intentionally avoid direct impacts to extant nineteenth and early twentieth century historic structures as the facility will largely consist of solar panel arrays placed in what are presently agricultural fields behind buildings primarily located along roads.

As presented in the introduction, the maximum APE for construction of the solar facility is approximately 3,500 acres (1,416 hectares), but the ultimate construction APE will likely be a smaller area within the project limits. Once the project design is complete and project component locations are determined, a Phase 1B cultural resources investigation is recommended for portions of the project area where soils could be significantly disturbed during construction. The S/NRHP eligibility for all but one (USN 03710.000038/ANR-166 SHARPKNOLL) of the previously reported Precontact Period sites has not been determined. Phase 2 cultural resources investigations are recommended to assess eligibility of these previously reported sites for S/NRHP-listing if their locations fall within the construction APE of the project design once it is complete and available for review.

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Appendix A. Photographs

Photograph 1. View from Albion Road of agricultural fields and some wooded terrain in the southwest corner of the project area, facing east *(PCI 2020).*

Photograph 2. View from Lockport Road of agricultural fields and northwest portion of the project area, facing north *(PCI 2020).*

Photograph 3. View from [redacted], facing northwest *(PCI 2020).*

Photograph 4. View of agricultural fields from [redacted] facing west *(PCI 2020).*

Photograph 5. View of agricultural fields from Fisher Road in the western portion of the project area, facing east *(PCI 2020).*

Photograph 6. View from Lockport Road of agricultural fields between Fisher Road and Graham Road, facing north *(PCI 2020).*

Photograph 7. View from Lockport Road of a small unnamed tributary of Oak Orchard Creek lined by trees, facing north *(PCI 2020).*

Photograph 8. View from agricultural fields west of Snyder Road, facing west *(PCI 2020).*

Photograph 9. View of trees along a channelized drainage crossing Snyder Road in the central portion of the project area, facing northeast *(PCI 2020).*

Photograph 10. View of a channelized drainage in the central portion of the project area. Photograph taken from Lockport Road facing southwest *(PCI 2020).*

Photograph 11. View of a channelized drainage west of Snyder Road in the south-central portion of the project area, facing northwest *(PCI 2020).*

Photograph 12. View of agricultural fields in the south-central portion of the project area. Photograph taken from Snyder Road facing west *(PCI 2020).*

Photograph 13. View looking down a hill (drumlin) south of Lockport Road in the central portion of the project area, facing southwest *(PCI 2020).*

Photograph 14. View of a nineteenth century house at 6529 Oak Orchard Road in the eastern portion of the project area, facing northeast *(PCI 2020).*

Photograph 15. View along the NYSEG power corridor and Empire State Pipeline, facing west from Oak Orchard Road *(PCI 2020).*

Photograph 16. View of pasture along the NYSEG power corridor and Empire State Pipeline, facing east from Oak Orchard Road *(PCI 2020).*

Photograph 17. View of agricultural fields in the eastern portion of the project area, facing east-northeast from Oak Orchard Road *(PCI 2020).*

Photograph 18. Agricultural fields in the northeast corner of the project area. Photograph taken from North Byron Road facing northeast *(PCI 2020).*

Photograph 19. Agricultural fields in the southeast corner of the project area. Photograph taken from Miller Road facing west *(PCI 2020).*

Photograph 20. View of pasture along the NYSEG power corridor and Empire State Pipeline, facing east from Graham Road in the north-central portion of the project area *(PCI 2020).*