

# PHASE IA ARCHAEOLOGICAL SURVEY MILL POINT SOLAR PROJECT MONTGOMERY COUNTY, NEW YORK

**March 2021** 

### **Prepared For:**

ConnectGen Montgomery County LLC 1001 McKinney, Suite 700 Houston, Texas 77002

Prepared By:

TRC 4425-B Forbes Boulevard Lanham, MD 20706



# PHASE IA ARCHAEOLOGICAL SURVEY MILL POINT SOLAR PROJECT TOWN OF GLEN, MONTGOMERY COUNTY, NEW YORK

Prepared for:

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#### **OPRHP MANAGEMENT SUMMARY**

SHPO Project Review Number: 21PR00133

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): Office of Renewable Energy Siting

(ORES)

Phase of Survey: Phase IA

Location: North and west of the Town of Glen in central Montgomery County.

Minor Civil Division: Town of Glen

**County: Montgomery County** 

Survey Area Dimensions: Irregular dimension (see below)

Number of Acres Surveyed: 3,733 acres

USGS 7.5 Minute Quadrangle Map: Tribes Hill and Randall (2019)

Number & Interval of Shovel Tests (STPs): N/A

Number & Size of Units: N/A

Width of Plowed Strips: N/A

Surface Survey Transect Interval: N/A

Results of Archaeological Survey: N/A

Number & name of prehistoric sites identified: N/A

Number & name of historic sites identified: N/A

Number & name of sites recommended for Phase II/Avoidance: N/A

Results of Architectural Survey: N/A

Report Author(s): Jasmine Gollup, Justin Warrenfeltz, Tim Sara, and Robert Wall.

Date of Report: March 2021

#### **MANAGEMENT SUMMARY**

This report documents a Phase IA archaeological survey (literature search and sensitivity study) conducted for the Mill Point Solar Project (Project) in the Town of Glen, Montgomery County, New York, conducted on behalf of ConnectGen Montgomery County LLC, a subsidiary of ConnectGen LLC. The Phase IA archaeological survey was completed for the Project under Section 94-c of the New York State Law. The Project will obtain a siting permit from the Office of Renewable Energy Siting (ORES). The Project will obtain and adhere to all other applicable federal, state, and local permits not supplanted by 94-c, including a Section 404 permit from the United States Army Corps of Engineers (USACE) if Project activities will result in fill or dredge within jurisdictional wetlands and waters of the U.S. as well as a New York State Department of Environmental Conservation (NYSDEC) Article 24 permit if disturbance activities occur in NYSDEC state-protected wetlands or regulated adjacent areas. The Project will also be conducted in accordance with Section 106 of the National Historic Preservation Act (NHPA).

The Project will consist of the construction and operation of a 250+ megawatt (MW) solar energy center. The total Project Area is approximately 3,733 acres and will be located on land leased or purchased from owners of private property. Project components will include photovoltaic panels and associated racking systems, co-located inverters and medium voltage transformers, a Battery Energy Storage System (BESS), a new 345 kilovolt (kV) substation and switching station, underground and/or overhead alternating current (AC) collection, access roads, temporary laydown areas, and a potential operations and maintenance facility located within an approximate 3,733-acre site (Project Area). The final solar array specification, as well as locations of arrays, will be finalized as part of ongoing engineering efforts. Engineering drawings will be used to define the archaeological area of potential effects (APE) as they are developed and in consultation with the Office of Parks, Recreation, and Historic Preservation (OPRHP).

The Phase IA survey examined the archaeological site files and historic resource files of the OPRHP and

the New York State Museum (NYSM).
The Project Area consists of agricultural fields and wooded areas north and west of the Town of Glen in central Montgomery County. Based on the archaeological sensitivity assessment,
A Phase IB survey is recommended for areas of significant construction impacts, as defined in consultation with the OPRHP, within areas of high archaeological sensitivity.

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#### 1. INTRODUCTION

This report presents the results of a Phase IA archaeological survey (literature search and sensitivity study) conducted for the Mill Point Solar Project (Project) located in the Town of Glen, Montgomery County, New York (Figure 1-1). The Phase IA archaeological survey was completed for the Project in support of the Office of Renewable Energy Siting (ORES) Section 94-c permitting process, a Section 404 permit from the USACE (if Project activities will result in fill or dredge within jurisdictional wetlands and waters of the U.S.), a NYSDEC Article 24 permit if disturbance activities occur in NYSDEC state-protected wetlands or regulated adjacent areas, and in accordance with Section 106 of the National Historic Preservation Act (NHPA). The survey was conducted by TRC on behalf of ConnectGen Montgomery County LLC, a subsidiary of ConnectGen LLC, in order to identify areas of archaeological sensitivity within the proposed Project development areas and to provide recommendations to support the permitting for this Project.

The Project will consist of the construction and operation of a 250+ megawatt (MW) solar energy center. The total Project Area is approximately 3,733 acres. The Project will include photovoltaic panels and associated racking systems, co-located inverters and medium voltage transformers, a Battery Energy Storage System (BESS), a new 345 kV substation and switching station, underground and/or overhead AC collection, access roads, temporary laydown areas, and a potential operations and maintenance facility. The final solar array specification, as well as locations of arrays, will be determined during ongoing engineering efforts.

The overall purpose of the Phase IA survey is to use archival methods to determine the amount and type of cultural resources presently known in the Project Area environs and to develop a sensitivity assessment for the potential existence of properties eligible for inclusion in the National Register of Historic Places (NRHP) in the proposed Project development areas. This information will be used to guide subsequent field studies once the Project plans are finalized. The overall study was conducted in compliance with Section 106 of the NHPA and its implementing regulations at 36 CFR Part 800 and in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation, the New York Office of Parks, Recreation, and Historic Preservation (OPRHP) Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State (NYAC 1994), and applicable portions of the OPRHP's Phase I Archaeological Report Format Requirements (OPRHP 2005).

The Phase IA background research was initiated the week of October 26, 2020, and included a review of county and town histories, historical and archaeological research reports, historical maps, cultural resource survey reports, archaeological site files, county soil maps, and aerial photographs. Research was conducted using OPRHP's online Cultural Resource Information System (CRIS). The Principal Investigator for this study was Timothy Sara, M.A., RPA. Jasmine Gollup, M.A., RPA, conducted background research, prepared report figures, and was the principal author of this report.

The report is organized as follows: Chapter 2 describes the physical environment of the Project Area. Chapter 3 presents an overview of the region's cultural chronology and describes previous archaeological research conducted within the immediate and surrounding region. Chapter 4 presents the sensitivity assessment and Chapter 5 provides study conclusions and recommendations for Phase IB field investigations. Appendix A contains TRC personnel qualifications.

#### 2. ENVIRONMENTAL SETTING

#### PHYSIOGRAPHY AND GEOLOGY

The Project Area is located in the Glaciated Allegheny physiographic province (Figure 2-1). The Glaciated Allegheny Plateau lies to the north and west of the Unglaciated Plateau. This region forms an arc to the west in eastern Ohio, extending into a belt in southern New York State and the central Susquehanna River basin. The plateau is cross-cut by various stream and deep river valleys. Dominant rock formations sandstones, siltstones, and shales all date to the Devonian age and formed generally from deltaic deposits (Davis and Landry 1978).

The county is underlain by sedimentary rocks that range from the Middle

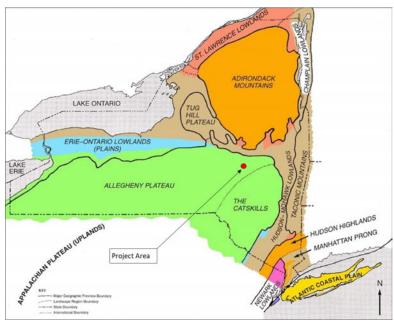


Figure 2-1. New York physiographic province map showing the location of the Project Area.

Ordovician to Upper Devonian periods in age and consist of sandstone, siltstone, limestone, and shale with the oldest rocks found in the northern part of the county. In the extreme northern part of the county, the low plateau is underlain by the Schenectady formation, characterized by brown sandstone and dark-gray shale (Davis and Landry 1978). During the Pleistocene, the Laurentian ice sheet covered the region during four different periods. The last of these, the Wisconsin glaciation, ended approximately 12,500 years ago (Dreimanis 1977; Miller 1914). This glacial advance and retreat continuously eroded and redeposited underlying material. Glacial deposits in the county include till, lacustrine sediments, and outwash material. More recent alluvial deposits formed following glacial retreat along river floodplains and along fans at the base of hill slopes. The availability of igneous and metamorphic rocks from these deposits, including gneiss, quartz, quartzite, and slate, along with naturally occurring cherts, was important for the manufacturing of stone tools by prehistoric populations in this region (Davis and Landry 1978).

Drainage from the Project Area is into Auries Creek, which lies within the Project Area, and ultimately into the Mohawk River. The Mohawk River is a tributary of the Hudson River, which eventually drains into the Atlantic Ocean.

#### SOILS OF THE PROJECT AREA

United States Department of Agriculture (USDA) soils series in the Project Area are described in Table 2-1 and shown in Figures 2-2 through 2-7.

Table 2-1. Soils of the Project Area

USDA Mapping Symbol	USDA Name	Slope %	Drainage	Landform	Parent Material
AnB	Angola silt loam	3-8	Somewhat poorly drained	Till plains, benches, and ridges	Loamy till derived mainly from shale and siltstone
ApA	Appleton silt loam	0-3	Somewhat poorly	Till plains, drumlins,	Calcareous loamy lodgment till derived
ApB	Appleton sht toam	3-8	drained	and ridges	from limestone, sandstone, and shale.
AtC	Arnot channery silt	8-15			
AtD	loam, rocky	15-25	Well drained	Ridges, hills, and	Loamy till derived mainly from acid
AZF	Arnot-Rock outcrop associated, very steep	35-60		benches	sandstone, siltstone, and shale
CFL	Cut and fill land	0-15	Somewhat excessively drained	n/a	n/a
ChA	Churchville silty clay	0-3	Somewhat poorly	Lake plains and till	Clayey glaciolacustrine deposits over
ChB	loam	3-8	drained	plains	loamy till
DaB	AND THE RESIDENCE AND ADMINISTRATION OF THE PERSON OF THE	3-8	3-8 Somewhat poorly	Till plains,	Loamy till derived predominately from
DaC	Darien silt loam	8-15	drained	drumlinoid ridges, and hills	calcareous gray shale
FL	Fluvaquents, loamy	0-2	Poorly drained	Flood plains	Alluvium with highly variable texture
Fo	Fonda mucky silty clay loam	0-3	Very poorly drained	Depressions	Clayey glaciolacustrine deposits
GP	Gravel pits	n/a	n/a	n/a	n/a
Gr	Granby loamy fine sand	0-3	Poorly drained	Depressions	Sandy glaciofluvial deposits or sandy glaciolacustrine deposits
На	Hamlin silt loam	0-3	Well drained	Flood plains	Silty alluvium mainly from areas of siltstone, shale, and limestone
НоВ	Hornell silt loam	3-8	Somewhat poorly drained	Till plains, benches, and ridges	Clayey till, or till and residuum, derived from acid shale and siltstone
HrB		3-8	Well drained		

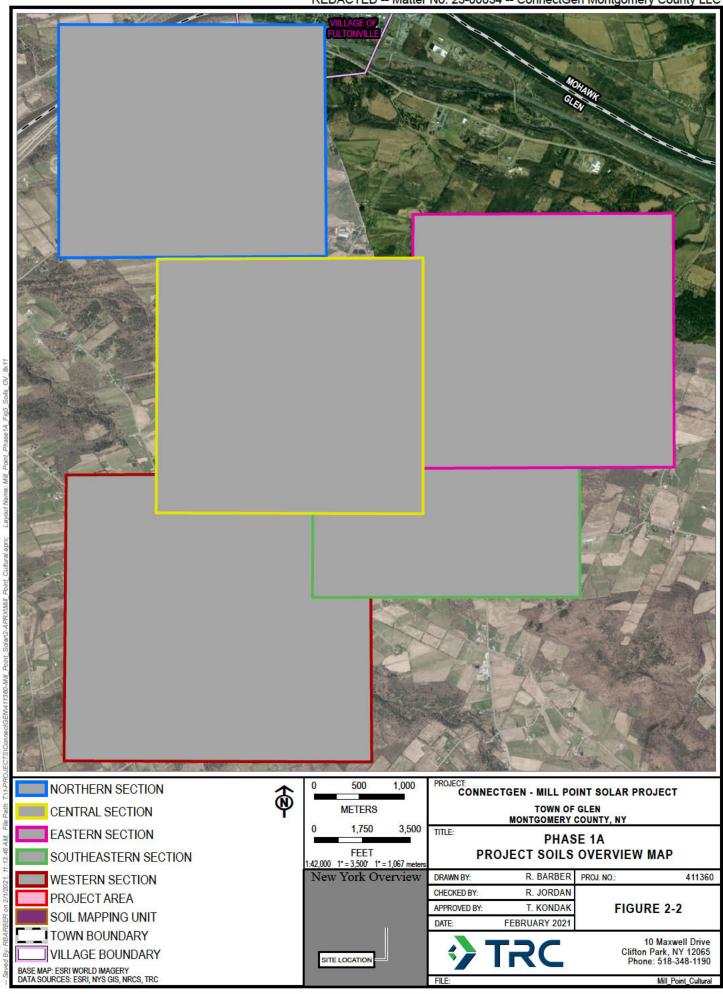
USDA Mapping Symbol	USDA Name	Slope %	Drainage	Landform	Parent Material
HrC	Howard gravelly silt loam	8-15		Terraces and valley trains	Gravelly loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone
HuB	Hudson silty clay loam	3-8	Moderately well drained	Lake plains	Clayey and silty glaciolacustrine deposits
IIA	Ilion silt loam	0-3	D 1 1 ' 1	D.	Loamy till derived from calcareous dark
IIB	llion silt loam	3-8	Poorly drained	Depressions	shale
LaB		3-8			
LaC	Lansing silt loam	8-15	Well drained	Till plains, drumlins, and hills	Calcareous loamy lodgment till derived from limestone, sandstone, and shale
LaD		15-25		uid iiiis	nom innesione, suitasione, una suare
LMF	Lansing and Mohawk soils	25-60	Well drained	Hills, till plains, and drumlins	Calcareous loamy lodgment till derived from limestone, sandstone, and shale
Ma	Madalin silty clay loam	0-3	Poorly drained	Depressions	Brown clayey glaciolacustrine deposits derived from calcareous shale
Md	Madalin silty clay loam, moderately shallow variant	0-3	Poorly drained	Depressions	Clayey and silty glaciolacustrine deposits
MmB	Manheim silt loam	3-8	Somewhat poorly drained	Drumlinoid ridges, hills, and till plains	Loamy till dominated by black or dark gray shale that is neutral or calcareous
MsB		3-8		Till plains,	
MsC	Mohawk silt loam	8-15	Well drained	drumlinoid ridges,	Loamy till that is generally calcareous, derived mainly from black soft shale
MsD		15-25		and hills	derived mainly from black soft shale
PaB		3-8		Withhard Dr. DR. 1900 Feb.	1000 12 H2000 21 10 IV 10000
PaC	Palatine silt loam	8-15	Well drained	Till plains, benches, and ridges	Channery loamy till dominated by calcareous dark shale
PaD		15-25		and mages	Carcarcous Gark Share
PmC	Palmyra gravelly silt loam	8-15	Well drained	Outwash plains, terraces, and deltas	Loamy over sandy and gravely glaciofluvial deposits, derives mainly from limestone and other sedimentary rocks

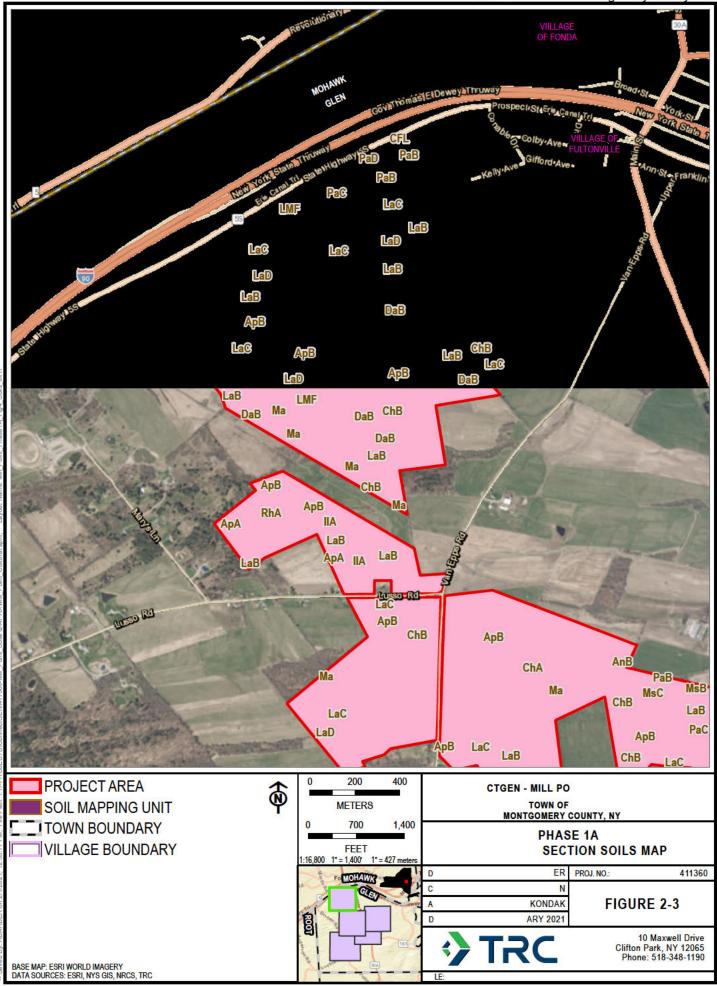
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Phase IA Archaeological Survey – Mill Point Solar Project Town of Glen, Montgomery County, New York

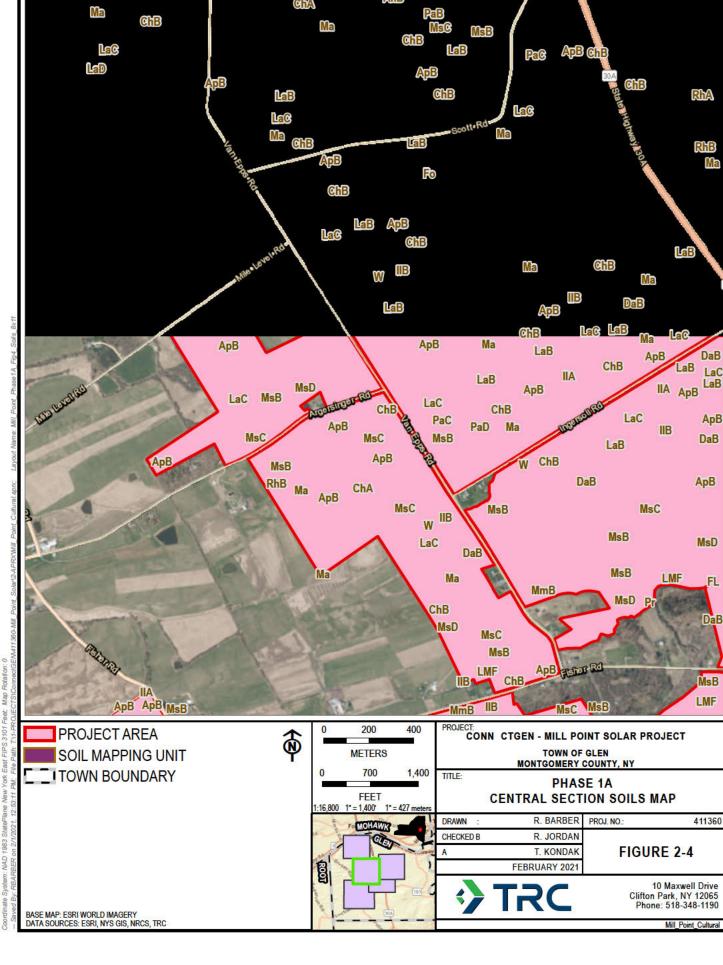
USDA Mapping Symbol	USDA Name	Slope %	Drainage	Landform	Parent Material
РрВ	Phelps gravelly loam	3-8	Moderately well drained	Terraces and valley trains	Loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone
Pr	Phelps gravelly loam, fan	0-8	Moderately well drained	Alluvial fans	Loamy glaciofluvial deposits over sandy and gravelly glaciofluvial deposits, containing significant amounts of limestone
PsB	Plainfield loamy sand	3-10	Excessively drained	Outwash plains, terraces, and deltas	Sandy glaciofluvial or deltaic deposits
RhA	Rhinebeck silty clay	0-3	Somewhat poorly	T also also	
RhB	loam	3-8	drained	Lake plains	Clayey and silty glaciolacustrine deposits
Te	Teel silt loam	0-3	Moderately well drained	Flood plains	Silty alluvium
W	Water	n/a	n/a	n/a	n/a

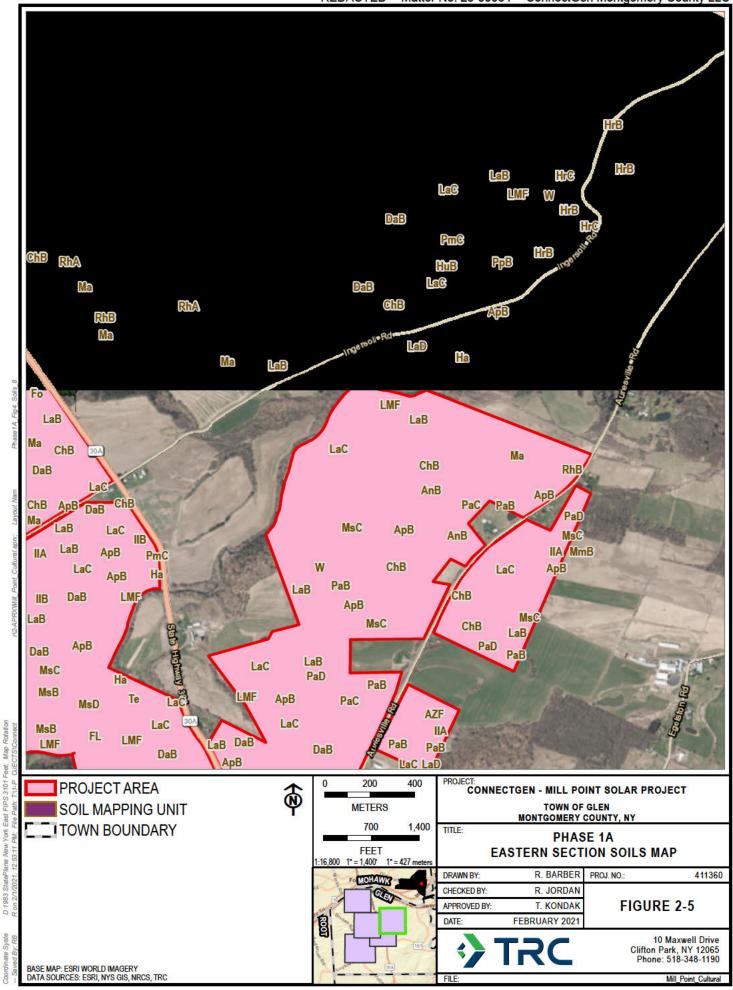
Source: USDA National Cooperative Soil Survey, accessed December 2020.





NAD





Rotation

Man

Phone: 518-348-1190

Mill Point Cultural

Coordinate System: NAD 1983 StatePlane New York East FIPS 3101 Feet; Map Rotation;
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BASE MAP: ESRI WORLD IMAGERY DATA SOURCES: ESRI, NYS GIS, NRCS, TRC

Mill Point Cultural

Map Rotation:

NAD

BASE MAP: ESRI WORLD IMAGERY DATA SOURCES: ESRI, NYS GIS, NRCS, TRC

#### FLORA AND FAUNA

The ecological profile of Montgomery County consists of northern hardwood, deciduous forest. Historically, the Project region was covered primarily with hardwoods, such as beech and sugar maple, and conifers, including spruce, pine, and hemlock (McIntosh 1972).

Native Americans did not substantially occupy the Catskills, which limited forest disturbance (McIntosh 1972). European settlement began in the early 17<sup>th</sup> century in the adjacent Hudson River Valley and grew toward the Catskill Mountains in the 1800s (McIntosh 1972). At the time of European settlement, most of the Project region was covered with large forested tracts of conifers and hardwoods, such as oak, beech, and maple. White pine was the first species of tree to be harvested by Euro-American lumbermen. Various nut- and acorn-producing hardwood species would have been of special importance to the prehistoric peoples of central and southern New York. The acorns of the white oak species (includes chestnut oak) and red oak species, such as northern red oak and pin oak, are good sources of protein and carbohydrates, but some species require processing to remove high levels of bitter tannin (Petruso and Wickens 1984). Black walnut and chestnut are other tree species that were important to subsistence during the prehistoric period but require various levels of effort in separating nutmeat from shells (Talalay et al. 1984).

The region was classified as Hemlock-White Pine-Northern Hardwoods Region in the mid-20<sup>th</sup> century due to the presence of red spruce (McIntosh 1972). Today, wooded areas in the Project region are mostly forests of maple-beech-birch, oak, and hemlock cover types (McNab et al. 2005; Widmann et al. 2015). Chestnut, formerly an important and widely distributed species, has practically disappeared due to blight (McIntosh 1972).

During the late Pleistocene, a rich diversity of fauna existed in this region. Although many species did not survive into the Holocene, the region still supports a rich diversity of wildlife. Wildlife in the Project region includes bats, American black bear, white-tailed deer, cottontail rabbit, raccoon, chipmunk, fox, squirrel, and several others (Stegemann & Gawalt 2003). Among avian fauna are various species of hawks, pheasant, grouse, wild turkey, and woodpeckers (McNab et al. 2005). Some of these species would have been important subsistence items during the prehistoric period. Avian fauna of the Catskill region also supports a distinctive sub-alpine bird breeding community, including species of thrushes, warblers, sparrows, and fly-catchers (National Audubon Society n.d.).

#### **PALEOENVIRONMENT**

The more than 11,000 years of human occupation in this region is divided into two broad climatic periods: the Pleistocene and the Holocene. The Holocene corresponds to the post-glacial period after 11,000 B.C. At the end of the Pleistocene, a mosaic pattern of vegetation emerged, i.e. a species-diverse, patchy arrangement of plant and animal communities that have no modern analogs. Human occupation of this region likely began during the fully-glacial climatic episode that occurred near the end of the Pleistocene and which effectively ended in the Northeast by 10,750 B.C. (Dreimanis 1977; Muller 1977).

Although Pleistocene conditions ended around this time, near ice-age conditions reappeared in the Northeast due to the wasting of the Laurentian ice sheet (Delcourt and Delcourt 1983; Fitting 1974). The grandest of these cold episodes followed 9,000 B.C. when runoff from the melting glacier suddenly shifted from the Mississippi River to the St. Lawrence River (Broecker and Denton 1988). The rush of cold water from the St. Lawrence River disrupted the Gulf Stream's warm northward current, returning the north Atlantic basin to ice age-like conditions for about 700 years. During the Holocene, the glacier retreated and finally disappeared; warmer and drier climatic conditions than currently exist in the Northeast may have occurred between *ca.* 7,000 and 3,000 B.C. This period was followed by modern conditions, punctuated by relatively short temperature and humidity fluctuations.

A number of temperate forest species were present at the opening of the Holocene, and the range of these trees soon expanded northward. The earliest Holocene forests included oak, elm, ash, birch, ironwood, and sugar maple. Davis (1983) has described the pollen assemblage for the early Holocene as resembling modern assemblages from the northern Great Lakes region. Significantly, ironwood was present in higher percentages than at any later time. Its presence "suggests a forest with a diffuse canopy and well-lighted forest floor" (Davis 1983). These early forests, however, lacked chestnut, hickory, and red maple, which became dominant in late Holocene forests. With their importance as a food source to contemporaneous populations in other areas, particularly the Southeast, the slow migration of nut-bearing trees into the region is perhaps one of the most significant factors effecting both human and animal populations.

The modern vegetation patterns in the Northeast include a pine-dominant conifer/hardwoods region in the northern sections, and oak-dominant, deciduous forests in the southern portions. The modern ecotone extends from southern Maine west along the Massachusetts/Vermont border, then southwest across southern New York, and then west across northern Pennsylvania to Lake Erie. All of Long Island is included in the deciduous zone, and the pollen records indicate that the ecotone between the two major zones was established as early as 7,000 B.P. Bernabo and Webb (1977) caution that, although the ecotone was stable from that period, the species composition of the forest has continued to change for several millennia.

#### **MODERN CLIMATE**

Montgomery County has a humid continental climate similar to other areas of the northeastern United States that feature warm, humid summers and cool, wet winters. Variations in topography, including differences in elevation and in slope, affect the climate. Average temperatures are 80 degrees Fahrenheit in the summer months and 35 degrees Fahrenheit in the winter months. The average annual precipitation is 35 to 38 inches. Minimum precipitation occurs in the winter season, with an average monthly accumulation averaging from 2.3 to 2.9 inches. Summer precipitation ranges from 2.7 to 3.8 inches (Davis and Landry 1978).

#### 3. CULTURAL OVERVIEW AND PREVIOUS RESEARCH

This chapter presents an overview of the prehistory and history of the Project region and provides a review of the previous archaeological investigations that have been conducted in the Project Area vicinity. Following the prehistoric overview, a review of the regional history, from the colonial period through the twentieth century is included. Archaeological site and survey reports from the immediate region are also reviewed to provide a context for interpreting the archaeological resources of the local Project Area.

#### PREHISTORIC OVERVIEW

The prehistory of this region of New York is conventionally divided into the Paleoindian, Archaic, Woodland, and Protohistoric/Contact cultural periods. These periods are further divided into sub-periods, traditions, and phases based upon distinguishing cultural, technological, or economic changes (Table 3-1). These time frames are summarized below.

Cultural Period	Approximate Dates
Paleoindian Period	10,500 – 8000 B.C.
Archaic Period  Early Archaic sub-period  Middle Archaic sub-period  Late Archaic sub-period  (Terminal Archaic)	8000 – 1000 B.C. 8000 – 6000 B.C. 6000 – 4000 B.C. 4000 – 1000 B.C. (1700 – 700 B.C.)
Woodland Period Early Woodland sub-period Middle Woodland sub-period Late Woodland sub-period	1000 B.C.– A.D. 1600 1000 B.C. – 300 B.C. 300 B.C. – A.D. 1000 A.D 1000 – 1600
Protohistoric/Contact Period	A.D. 1600 – 1660

Table 3-1. Prehistoric Cultural Chronology of the Northeast

#### Paleoindian Period (10,500 – 8,000 B.C.)

The Paleoindian period represents the earliest human occupation in the northeastern United States. This occupation began in the Late Pleistocene, soon after the continental ice sheet began to recede northward. The new landscape was dotted by postglacial lakes that changed size and shape as the surface of the land adjusted to the loss of pressure from the ice sheet (Isachsen et al. 1991). By 10,500 B.C., the Holocene environment in the Project region consisted of tundra or park-tundra represented by spruce, pine, birch, and a predominance of non-arboreal pollen that, between about 9000 and 8000 B.C., developed into a mosaic of open spruce parkland and pine forests (Funk 1976 and 1977; Funk et al. 1970).

Paleoindian peoples were highly mobile hunter-gatherers who specialized in hunting large game such as caribou, musk ox, and the now-extinct mastodon (Funk 1976) as well as a variety of smaller game, fishing, and the exploitation of available plant foods (McNett 1985; Nicholas 1983 and 1987). Distinctive fluted projectile points, typically manufactured from high-quality cryptocrystalline stone materials such as jasper, Normanskill chert, and chalcedony, were the principal hunting tool used by Paleoindian peoples. The

locations of Paleoindian sites suggest a preference for high, well-drained ground near streams or wetlands offering vantage points for observing game, and rockshelters near lithic source areas (Custer 1986; Gardner 1974, 1977, and 1983; Nicholas 1987).

Paleoindian populations occupied the Hudson River and Mohawk River valleys at the end of the Pleistocene following the retreat of the Laurentian ice sheet and the expansion of Glacial Lake Albany. The lake covered much of the area east of Montgomery County with delta deposits present on its western shore where the Mohawk River drained (Lothrop and Bradley 2012). In the Hudson Valley region, a very low frequency of known Paleoindian sites is considered to reflect low population densities.

In the region west of Albany, the Sundler site contained possible mid-Paleoindian points originally described by Ritchie (1957) (Lothrop and Bradley 2012). The site also contained unifacial tools, some made from jasper. Others are made from the commonly occurring Coxsackie chert. Another site, Putnam, is located near Saratoga Lake in a ridge top setting (Lothrop and Bradley 2012). This site, along with most of the others in the area, are simply collections of fluted points with surface finds of unifacial tools.

Many Paleoindian sites in the broader region have been classified as either camps or quarry workshops, although many "sites" consist merely of isolated fluted point finds (Ritchie and Funk 1973). Known Paleoindian sites within the region include Dutchess Quarry Caves No. 1 and No. 8 in the Town of Goshen, West Athens Hill in Athens, Kings Road in Coxsackie, King's Road, Zappavigna, and Twin Fields in Dwaarkill (Funk 1976; Salwen 1975).

The West Athens Hill and Flint Mill Hill sites are quarry-related sites (Brumbach and Weinstein 1999) which have been quarried since Paleoindian times based on finds of fluted points (Funk 2004). Both of these sites contain outcrop exposures of high quality chert associated with the Mount Merino Formation (formerly known as Normanskill). The chert is primarily grey to green in color with some variants of red and black (Funk 2004; Brumbach and Weinstein 1999).

West Athens Hill was excavated primarily in the late 1960s. Several fluted points were recovered from the site that were made from both local and exotic (Onondaga) cherts and jasper. A number of late-stage bifaces that were likely used as preforms for fluted points were also recovered (Funk 2004). Some of these were made from Pennsylvania jasper, but most were local chert. Other Paleoindian tools recovered from the West Athens Hill site include scrapers, bifacial knives, gravers, wedges, and flake tools.

The Dutchess Quarry Cave site (A07106.00002) has been radiocarbon dated, in association with a Cumberland fluted point, to 10,580 B.C. (Funk 1976) though this date has been more recently questioned as too early for the association with Cumberland fluted points (Funk and Steadman 1994). The site also contained caribou (*Rangifer tarandus*) bone in the same basal stratum as the Paleoindian point find, one of the few faunal elements not also present in historic period assemblages in the region (Guilday 1969). The context of the original caribou bone finds have been questioned (Funk and Steadman 1994), however, there is sufficient evidence from other Paleoindian sites in the broader region to conclude that caribou were being hunted by Paleoindians in the northeast.

#### **Archaic Period (8000 – 1000 B.C.)**

The term "Archaic" is used in North American archaeology to describe a culture in the New York region that had not developed ceramic container technology and was dependent on hunting, gathering, and fishing (Ritchie 1932 and 1980; Ritchie and Funk 1973). Environmental changes associated with the end of the Pleistocene included climatic warming, a shift to a more closed forest with a greater abundance of northern hardwoods and coniferous species, the extinction of Pleistocene animal species and extirpation of other species, and a rise in sea levels (Sirkin 1977). The subsistence and technology changes that occurred in response to these environmental shifts are reflected in new technologies and tool types that define the Archaic period. The period is generally divided into Early, Middle, and Late sub-periods, and a Terminal Archaic (or Transitional sub-period) occurs at the end of the Late Archaic.

Generally, Early Archaic (8000–6000 B.C.) cultures represented an adjustment to changing post-Pleistocene conditions, although settlement patterns appear to represent the same preferences for site location as the preceding Paleoindian period. With the exception of diagnostic projectile points, the Early Archaic tool kit is similar to that of the Paleoindian, exhibiting an orientation toward hunting and gathering activities. Early Archaic projectile points are typically corner- and side-notched. The Palmer, Kirk, and LeCroy projectile point types are usually assigned to the Early Archaic in New York (Broyles 1971; Coe 1964).

Evidence for new technologies and tools during the Early Archaic includes sporadic occurrence of netsinkers, chipped-stone axes/celts, and flat, pitted stones, possibly representing milling equipment (Bebrich 1967; Dumont and Dumont 1979; Kraft 1975; McMillan 1977). This suggests subtle shifts in subsistence strategies and related technology. Some usage of shellfish resources in the lower Hudson Valley may have occurred at this time, ca. 7000 B.C. (Brennan 1974), but stable estuarine systems did not likely become established until much later. The Dogan Point site (Claassen 1995) has the earliest dated shell midden deposit in the region at 6950 ± 100 B.P. (L-1381). The paucity of Early Archaic sites has been attributed to ecological explanations such as the low carrying capacity of early Holocene, post-glacial, conifer-dominated forests for game animals and human populations. Many sites may have been inundated by post-Pleistocene rising sea levels. Deep burial of Early Archaic sites in floodplain alluvium may also explain their rarity.

The Middle Archaic sub-period (6000–4000 B.C.) is viewed as a time of dramatic change in the subsistence strategies employed by hunter-gatherers. Bifurcate-based, serrated projectile points illustrate the transition from Early to Middle Archaic, followed by the introduction of stemmed and notched forms. Woodworking, milling, and ground stone tools found on sites dated to this period suggest reliance on a wider variety of resources and technological changes in tools (Dincauze 1976; Funk 1991; Snow 1980; Stewart and Cavallo 1991). Changes in technology are viewed as a response to environmental shifts into what were essentially modern-day conditions. The most extensive studies of Middle Archaic sites are from the southern New York region, particularly from stratified sites in the Upper Delaware River valley (Dumont and Dumont 1979).

During the Late Archaic sub-period (4000–1000 B.C.), regional complexity developed as populations rapidly increased and developed elaborate settlement systems utilizing broader ranges of habitats, both upland and lowland. In general, the subsistence and settlement system of the Late Archaic was marked by

a dramatic increase in both the number of sites and the diversity of seasonally focused activities that occurred at different site types.

New tool technologies were developed to maximize the exploitation of resources found in northeastern deciduous forest regions, a process that ultimately increased food supplies dramatically (Kinsey 1977; Kraft and Mounier 1982). This includes milling equipment, ground stone axes, and adzes. Milling stones were used to process wild foods. Ground stone tools were significant improvements to chipped stone technology when applied to heavy-duty woodworking tasks. Projectile points commonly found in Late Archaic contexts consist of narrow-stemmed, broad-stemmed, and side-notched types, such as Lamoka, Normanskill, Lackawaxen, Bare Island, Poplar Island, and Archaic triangles. Some of these point types may represent distinct regional populations or broader adaptive patterns.

The Terminal or Transitional Archaic, which some researchers date from 1700–700 B.C., was a transitional period in which subsistence and settlement systems became more focused around semi-sedentary base camps and specialized procurement sites were established in support of these camps. The Susquehanna tradition, marked by broad-stemmed projectile points and their associated assemblages, characterizes the early Terminal Archaic. Projectile points include a number of regional varieties, including the Genesee, Perkiomen, Snook Kill, and Susquehanna Broadspear types. Characteristics of the Susquehanna tradition include a marked preference for a riverine adaptation and a predilection for the fine-grained lithic resources of the Piedmont province, including rhyolite, felsite, argillite, and slate (Dincauze 1975; Turnbaugh 1975). The shift in settlements from inland wetlands to riverine zones coincides with an inferred economic shift from a diffuse adaptation in the interior uplands to a focal adaptation in the floodplain locales.

The latter half of the Terminal Archaic period is marked by the appearance of narrow, tapered Orient Fishtail projectile points. Named for the original type locations at Orient Point on eastern Long Island, Orient Fishtail Points tend to be found on Long Island, the Hudson Valley, and in southern New England. Another hallmark of the Terminal Archaic period is steatite cooking vessels, which occur towards the end of the Susquehanna Tradition and throughout the Orient Tradition. The existence of these large steatite vessels suggests that the "people who made, traded, and used them had reached a point in the evolution of their settlement and subsistence systems where the use of heavy cooking vessels was advantageous" (Snow 1980:240), implying that the people lived in more sedentary settlements and utilized foodstuffs that required long processing with heat.

#### Woodland Period (1000 B.C. - A.D. 1600)

The Woodland period is divided into three subperiods: the Early, Middle, and Late Woodland. In general, the Early Woodland sub-period is signaled by the appearance of new cultural traits, namely the widespread use of ceramics, and the intensification of mortuary ceremonialism (Ritchie 1980; Ritchie and Funk 1973). Although the beginning of the Early Woodland sub-period is generally marked at 1000 B.C., there is considerable overlap with the Terminal Archaic, including similar projectile point forms such as Orient Fishtail, Rossville, and Lagoon (Ritchie 1944 and 1980).

The Early Woodland period is technologically defined by the first significant use of pottery (Ritchie 1980). Building on the use of steatite containers in the Terminal Archaic, steatite temper was used in some of the earliest ceramics such as Marcey Creek. These containers are thick, flat bottomed, and morphologically

similar to the earlier stone bowl forms. The introduction of Vinette I ceramic wares signals a major technological innovation for this period and this new type of container technology spreads quickly throughout the eastern woodlands.

Based on habitation and burial traits, Ritchie (1980) defined a Meadowood phase that represents the earliest and most prominent Early Woodland cultural complex in New York (1000–500 B.C.). It is better represented in western New York but is present in the Hudson drainage at Nahrwold No. 2 in the Schoharie Creek drainage where Vinette ceramics are associated with Meadowood projectile points (usually made from non-local Onondaga chert) and dated to 760 B.C. (Y-1651) (Funk 1976). Adena points, in contrast, are usually made from local raw materials and have been associated with bundle burials and copper beads near Catskill (Funk 1976). The eastern New York Early Woodland period culture known as Adena-Middlesex, lasting from 800 to 300 B.C., is represented at several sites in the Hudson drainage. Adena-Middlesex people had a rich material culture consisting of pipes, gorgets, pendants, boat stones, Cresap stemmed points, Adena Beavertail points, and copper beads. Examples of ordinary Early Woodland period habitation and specialized procurement sites include both rock shelter sites in the uplands and shell middens and large sites in riverine and large tributary creek settings (Claassen 1995).

Ritchie (1944 and 1980) defined the Middle Woodland sub-period by the introduction of the classic Woodland rocker or dentate-stamped styles (Vinette II), which may have originated in the Great Lakes region. Relationships with the Hopewell culture of Ohio have also been noted in New York (Ritchie 1980) and eastern Massachusetts (Dincauze 1974) with the occurrence of platform smoking pipes. Site distribution during the Middle Woodland period exhibits a significant rise in frequency and occupation area, with particular increase in coastal/riverine locations and a corresponding decrease in upland base camps (Lavin 1988a; McBride 1984; McBride and Dewar 1981). McBride's research suggests that, by the end of the Middle Woodland period, major subsistence and settlement changes were taking place as people began to aggregate along major rivers for the entire year (Juli and McBride 1984). Subsistence during the Middle Woodland period of the Northeast consisted primarily of hunting, fishing, and collecting, with shellfish comprising a significant part of the diet for the inhabitants of coastal sites (Ritchie 1969).

During the latter part of the Middle Woodland period in New York, experimentation with cultivation of domesticated plants began and horticulture played a minor subsistence role within the broader context of a hunting and gathering subsistence economy (Funk 1976; Ritchie 1980). An important Middle Woodland phase in eastern New York is the Fox Creek phase identified on sites in both the Susquehanna and Hudson Valleys (Ritchie and Funk 1973). Artifact types typically assigned to the Middle Woodland period include the Fox Creek stemmed and Fox Creek lanceolate points; the Greene point, first named in the Hudson Valley (Ritchie and Funk 1973); and the Jack's Reef corner-notched and Jack's Reef pentagonal points in central New York. Utilitarian tools include drills, scrapers, Petalas (convex base bifaces), flake knives, and polished adzes. Most of the sites described for this phase (e.g., Fredenburg, Westheimer and Ford) are small, seasonal occupations with no storage features (Funk 1976). Other Middle Woodland phases include the Fourmile Phase, Kipp Island, Hunter's Home, and Burnt Hill phase. Some alterations to this sequence have been made since Funk's (1976) original summary.

During the Late Woodland period (A.D. 1000–1600) the antecedents of the historically recognized Native groups became recognizable. North, central, and western New York and the Mohawk Valley were occupied by groups of Iroquoian speakers living in large, nucleated, semi-permanent sedentary villages (Ritchie

1980; Ritchie and Funk 1973). A major alteration in settlement patterns during the Late Woodland occurred with the formation of large villages, which, during the latter part of the period, were fortified, indicating hostility between neighboring groups (Ritchie 1980). The adoption of horticulture played an integral part in population growth and subsistence and settlement systems as well as in the establishment of large villages in mostly riverine settings.

Late Woodland–period characteristics include increased villages sizes, sedentism, more established trade networks, and the utilization of cultigens such as maize, squash, and beans as well as eastern agricultural complex plants. Distinguishing trademarks of this period include Levanna and Madison projectile points and an increased use of non-local lithic material. Other characteristics include a highly variable ceramic assemblage that includes plain, cord-marked, fabric-impressed, brushed, stamped, and incised surface treatment and decoration.

The overall increase in site frequency, size, and length of occupation for sites in the Late Woodland period continued, with the largest sites located in coastal and estuarine settings (Lavin 1988b; McBride 1984). Settlement patterns were characterized by semi-sedentary villages or base camps located on floodplains or terraces immediately adjacent to major drainages, with temporary and task-specific camps located in the uplands (McBride 1984; McBride and Dewar 1981). The subsistence system of the Late Woodland period included hunting terrestrial animals and migratory fowl, fishing, shellfish collecting, and gathering wild plants (McBride 1984). In addition, cultivated foods such as maize, beans, and squash became a part of the subsistence regime. The earliest radiocarbon dates in the Northeast for the presence of cultigens are ca. A.D. 1100 (Mulholland 1988), and evidence for the exploitation of these cultigens is not abundant before the Final Woodland period, ca. A.D. 1500 (McBride and Dewar 1987). In addition, the earliest dates are generally associated with inland sites.

Funk (1976) divides the Late Woodland into the Late Woodland I and Late Woodland II phases, corresponding to the Owasco (A.D. 1000–1300) and Iroquois (A.D. 1300–1600) traditions. Owasco sites are poorly represented in the Hudson Valley though Owasco components exist at the Bronck House rockshelter and the Zimmermann rockshelter in Coxsackie Township, Greene County and at the Dennis site in the village of Manands, Albany County, New York (Funk 1976:300). At the Dennis site, there is a sharp distinction between the presence of cultigens (maize) in the Owasco component and the strictly wild foods found in the earlier Middle Woodland features. Woodland II cultures, include the Oak Hill, Chance, and Garoga horizons which relate to tribal affiliations of the Onondaga, Oneida, and Mohawk. The cultural changes of the period A.D. 1300 to 1600 suggest a possible movement of Munsee populations into the lower Hudson Valley (Funk 1976; Snow 1980). Historic period native populations include the Hackensack, Haverstraw, Tappan, Esopus, and Warside tribes along the west side of the Hudson River (Kraft 1991).

#### The Haudenosaunee and the Iroquois Confederacy

The dominant tribes in New York by the Late Woodland period were of the Iroquoian culture. Two theories of Iroquoian development have been proposed. The first theory focuses on migration and claims that the Iroquoian people forced the native Algonquian people from the area (Parker 1920). The second theory, known as the *in situ* theory, was originally proposed by Griffin (1944) and further explored by Ritchie and MacNeish (1949). This theory claims that the Iroquoian tribes formed through natural development and

adaptation from local tribes. Supporters of this theory point to similarities between the Owasco culture and the Iroquoian culture.

The term 'Iroquois' was a label given to the tribes living in the upstate New York region at the time of European contact. The tribes used the autonym Haudenosaunee, meaning 'people who build a house' to distinguish themselves (NMAI 2009). The five Iroquoian tribes that made up the Haudenosaunee include, in geographical order from east to west, the Mohawk, Oneida, Onondaga, Cayuga, and Seneca. These five groups shared a similar culture and language. Societies were organized by extended family groups called clans that were both matrilineal and matrilocal. Families lived in long, rectangular houses called Longhouses that averaged between 80 to 100 feet in length and 20 feet in width and would hold about 60 people. A typical village in the seventeenth century consisted of 200 to 3,000 people. Located in clearings near forested areas and waterways, the villages were often surrounded by tall wooden palisades. Communities moved every 20-30 years as resources were depleted (NMAI 2009).

The Iroquois League, or Iroquois Confederacy, was a loosely-bound association of the five Iroquoian-speaking tribes that occupied the upstate New York region. According to Beauchamp (1900), the League formed in ca. A.D. 1600, while Tooker (1978a) provides a broader range of A.D. 1400 to 1600. The Peacemaker story describes the formation of the Iroquois Confederacy and the Great Law of Peace, a code that guides Haudenosaunee life (NMAI 2009). According to the story, a Peacemaker, identified by some as Dekanawidah (Huron) (Encyclopedia Britannica 2020), was said to have persuaded Hayo'wetha, an Onondaga leader, to advance "peace, civil authority, righteousness, and the great law" (Encyclopedia Britannica 2020). The five Iroquoian tribes united in a common council composed of clan and village chiefs and embraced all civil affairs at the intertribal level following the principles set forth in the Great Law of Peace (NMAI 2009; Encyclopedia Britannica 2020). The Great Law of Peace is one of the earliest examples of a formal democratic governance structure and has been compared to the United States Constitution. The Grand Council, still in operation in the twenty-first century, is the oldest governmental institution in its original form in North America (NMAI 2009).

The Iroquois League served as a "non-aggression pact" among its members, focused on curtailing intertribe violence (Beauchamp 1900). By preventing or discouraging intra-League violence, the Iroquoian nations focused outward, quickly dominating neighboring tribes (Encyclopedia Britannica 2020). Powerful both politically and economically, the Iroquois tribes hunted and traded throughout the northeast and played a significant role in colonial affairs and commerce from Virginia to New York with the English, French, Dutch, and Swedish colonies (Tooker 1978a).

Originally known by the British as the Five Nations, the Tuscarora, who originally occupied land in what is now North Carolina, were invited to join the Iroquois Confederacy in 1722, known since then as the Six Nations. The Six Nations or the Iroquois Confederacy maintain a powerful political and economic presence in New York State today.

#### **Contact Period (A.D. 1600–1660)**

The Iroquoian Mohawk tribe inhabited the area that would become Montgomery County at the time of European contact. The Mohawk were a member of the Iroquois League and formed the eastern boundary of the League territory. The Iroquois League, or Iroquois Confederacy, was a loosely-bound association of Iroquoian-speaking tribes that occupied the region between the Mohawk and Genesee rivers. According to Beauchamp (1900), the League formed in ca. AD 1600, although a much earlier date of AD 1459 was suggested by Lewis Henry Morgan (1962). The five original Members of the League, in geographical order from east to west, included the Mohawk, Oneida, Onondaga, Cayuga, and Seneca. The League served as a "non-aggression pact" among its members, focused on curtailing inter-tribe violence rather than serving as a military alliance. Powerful both politically and economically, the Iroquois tribes hunted and traded throughout the mid-Atlantic colonies and played a significant role in colonial affairs and commerce from Virginia to New York with the English, French, Dutch, and Swedish colonies.

The Mohawk played a large role in the early trade with European colonies, a role they had previously filled with other regional tribes. When Europeans arrived, the area was bisected by a series of trails or paths created and utilized for generations by the local Indian tribes. Contact-period archaeological sites are identified by the presence of European objects such as axes, knives, and hoes, found in association with Native American artifacts. Thus, a major change in Iroquois lifestyle during the contact period was the replacement of tools and other materials manufactured by Native American technologies to those manufactured by Europeans (brass kettles, iron knives, glass beads, etc.). These sites are difficult to locate and often cannot be clearly distinguished as a result of scant material remains.

Several contact period village sites have been excavated in central New York and have yielded European trade items in association with burials dated from the early sixteenth century (Trubowitz 1983; Wray 1973). There are a number of Mohawk-affiliated sites, including Contact period sites, along the Mohawk River just upstream from the Project Area, some in similar settings (Funk and Kuhn 2003; Snow 1995). The original territory of the Mohawks extended from Schoharie Creek (just east of the Project Area) west to East Canada Creek (Fenton and Tooker 1978).

The Mohawk village of Caughnawaga is located north of the Project Area on the other side of the Mohawk River (Funk and Kuhn 2003). Caughnawaga was one of four palisaded villages located along the Mohawk River. In the sixteenth century, nearly 8,000 Mohawk resided in these four villages. French Jesuits operated a mission in Caughnawaga from 1668 to 1679. The village of Caughnawaga was abandoned in 1693. The Mohawk allied with the British during the Revolutionary War and were thus forced out of the Mohawk Valley after the American victory. In the 1780s, English settlers established a new town, called Caughnawaga, near the site of the former Mohawk village. The original site of the Mohawk village Caughnawaga was discovered in 1950 and has since been completely excavated. The village is known to contain evidence of 12 longhouses and a defensive stockade (Hoxie 1996; Funk and Kuhn 2003).

#### HISTORIC OVERVIEW

The following describes the general historic context of the region in which the Project is located. This information is provided to assist in interpreting the historic archaeological record of the general Project area.

#### **Early Settlement**

The area that would become Montgomery County remained populated by the Mohawk tribe throughout the mid-seventeenth century. Originally part of the Dutch colony of New Amsterdam, the region was not settled by Europeans until the eighteenth century. In 1664, Dutch Governor Stuyvesant surrendered New Amsterdam to English Colonel Richard Nicolls. The colony was renamed New York, after the Duke of York (New Netherland Institute 2018). In 1683, Albany County was created. A large county, Albany was divided multiple times throughout the eighteenth century. In 1772, Tyron County was formed from a western portion of Albany County.

In 1711, the English built Fort Hunter in what would become Montgomery County, sending Anglican missionaries, traders, and settlers to the area. The fort was built at the request of the Mohawk, allies to the British, to prevent French Catholic missionaries from gaining influence in the area. In exchange, German Palatines were permitted to settle in the area. The first European settlers in the area include Palatine Germans in the 1720s and 1730s and Scots-Irish immigrants in the mid-eighteenth century (Roscoe 1882). European settlers utilized the American Indian trails that bisected the area to further settlement, trade, and violence during the French and Indian and Revolutionary wars (Sullivan 1927). The economy of the area was primarily subsistence agriculture, with nascent agricultural related industries emerging (Noyes 1964).

#### **Revolutionary Period**

As social and political tensions rose, many of the Loyalists in the region fled to Canada. The Hudson and Mohawk Rivers were of great importance to both the British and American armies and the area surrounding the two rivers saw increased military activity as the two armies jostled for dominance. Located to the south and west, the project area saw hostilities primarily in the form of small skirmishes and raids by British-allied American Indians. The area also provided much needed agricultural products to support the war effort (Mohawk Valley History 2020). By the end of the War, much of the area was depopulated and farms were left abandoned as residents fled. The Tyron County militia, formed 1772, fought and won a battle against the British at the Battle of Oriskany in August 1777 (Montgomery County Tourism 2020).

#### **Post-War and Nineteenth Century**

After the Revolutionary War, Tyron County was renamed Montgomery County to honor General Richard Montgomery, who died trying to capture the city of Quebec during the Revolutionary War. The Mohawk River Valley continued to function as a crucial trade route between the Atlantic Ocean and the interior of North America via the Great Lakes. As the only natural gap in the Appalachian Mountains was found in Montgomery County at Canajoharie, the county was at the forefront of transportation and westward advancement. Transportation improvements, including roads, railroads, and canals, helped to further population and economic advancement.

As early as the mid-eighteenth century, the idea of connecting the Atlantic Ocean and Great Lakes via canal was explored. In 1808, the New York Legislature funded a survey that would eventually lead to the construction of the Erie Canal, begun in 1817. Mockingly known as "Clinton's Big Ditch", named for New York Governor Dewitt Clinton, the Erie Canal was completed in 1825. An engineering marvel, the canal helped moved products and people through the area and spurred industrialization and immigration in the Mohawk Valley (Montgomery County Tourism 2020; Finch 1925; Roberts 2017).

Railroads were constructed in the area in the mid-nineteenth century. The New York Central Railroad was constructed through the Mohawk Valley, further increasing the industrial allure of the region. While agriculture remained common in the countryside, the area surrounding the Mohawk River saw increasing industrialization throughout the nineteenth century. Fort Hunter was dismantled in 1820 during construction of the Erie Canal. The city of Amsterdam gained notoriety for its production of carpets and brooms. Factories for shoes, clothing, cooking oil, paper, iron, clothes wringers, soap, springs, coffins, wagon hubs, and buttons were also found throughout Montgomery County. The factories of Amsterdam were particularly appealing, drawing thousands of immigrants, primarily from Eastern Europe. The population of Amsterdam increased from 5,135 in 1865 to 33,524 in 1920 (Montgomery County Tourism 2020).

#### **Twentieth Century to Present**

Agriculture remains an important part of the economy of Montgomery County. Farms, orchards, and dairies operate throughout the county, supporting a bourgeoning agri-tourism industry. Other important industries include construction, manufacturing, health care, and education (Sullivan 1928).

In 1918, the Erie Canal was replaced by the larger New York State Barge Canal. The new canal replaced much of the original route, leaving abandoned sections, and focused on canalizing certain rivers, including the Mohawk River. The Canal continues to operate, with an increasing focus on historic tourism and recreational use (Montgomery County Tourism 2020; Roberts 2017). The Project Area is near the Erie Canal National Heritage Corridor. As of the 2010 census, Montgomery County was home to 50,219 residents (U.S. Census Bureau 2010).

#### History of the Town of Glen

The Town of Glen is a rural, agricultural town in central Montgomery County. The Town was established in 1823, named after Jacob Glen, an early landowner. The town has a total area of 40 sq mi and contains the hamlets of Auriesville, Glen, and Stone Ridge and the Village of Fultonville. The town is home to a large Amish community (Montgomery County Tourism 2020; Town of Glen 2018). As of the 2010 Census, the population of Glen was approximately 2,507 (U.S. Census Bureau 2010).

#### HISTORICAL ARCHAEOLOGICAL STUDIES

In his Aboriginal Occupation of New York, Beauchamp (1900) reports a total of 36 sites in Montgomery County, the majority of which are clustered along the Mohawk River (Figure 3-1). No sites are noted within the Project Area; however, several are located in the general area.

Parker's 1920 Archaeological History of New York supplemented Beauchamp's (1900) earlier work and synthesized archaeological

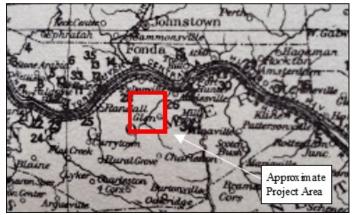


Figure 3-1. Sites reported by Beauchamp (1900) in Montgomery County.

"localities" throughout the state based on his own investigation with the NYSM and work by others. Parker reported a total of 61 such localities in Montgomery County, including Beauchamp's original 36 (Figure 3-2). The majority of the sites remain clustered around the Mohawk River. No sites are noted within the Project Area; however, several are located in the general area.

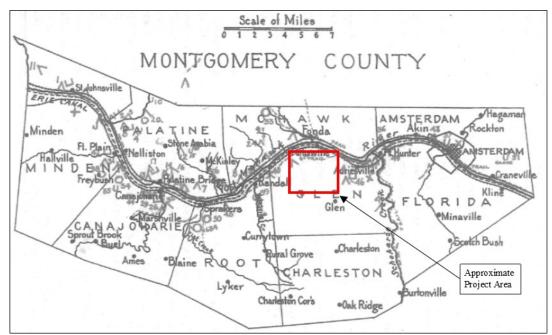


Figure 3-2. Sites reported by Parker (1920) in Montgomery County.

#### PREVIOUS ARCHAEOLOGICAL STUDIES

A site file search conducted on the OPHRP web-based CRIS system revealed that 14 archaeological surveys and 30 consultation projects have been previously conducted within a one-mile radius of the Project Area. One of the surveys and one consultation project are located within the Project Area.

In 2011, Birchwood Archaeological Services conducted a Phase I cultural resources survey for the proposed R and R Farms CPEP project in the Town of Glen. Systematic shovel test excavation was conducted. No cultural materials or features were identified, and no further work was recommended (Cole and Moyer 2011).

#### PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES

Based on review of		on the Cultural Resour neologically sensitive	vstem (CRIS),	
(Table 3	3-2). These	include		
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#### 4. ARCHAEOLOGICAL SENSITIVITY ASSESSMENT

#### SENSITIVITY ASSESSMENT MODEL

The purpose of the archaeological sensitivity assessment is to provide an initial assessment of the overall archaeological sensitivity of a project area for the presence of archaeological sites and a guide for subsequent field investigations. OPRHP denotes areas where archaeological sites are most likely to be identified as having high archaeological sensitivity. In their updated guidelines for Phase IA/IB archaeological survey (2020), OPRHP identifies areas of high sensitivity as those:

All other areas, including areas of previous ground disturbance, are considered to have low archaeological sensitivity and are not recommended for Phase IB testing. The archaeological sensitivity assessment was developed following review of the online OPRHP CRIS database, historical documentation, prehistoric
background information, historic maps, aerial photographs, and soils data. Figure 4-9 depicts the archaeological sensitivity for the Project Area, including known disturbances and the approximate location of historic structures as depicted on historic maps.
SENSITIVITY ASSESSMENT ANALYSIS
Permanent water sources and hydric soils are present throughout the Project Area. Auries Creek and its associated tributaries provide drainage in the eastern and central portions of the Project Area near the Town of Glen. Small, unnamed waterways are noted in the northwestern portion of the Project Area. All waterways drain into the Mohawk River, located immediately north of the Project Area. Hydric soils are also noted throughout the Project Area, primarily in the central and southwestern portions.
(see Figure 4-9).
Slope within the Project Area ranges from 0 to 60 percent. Areas of steep slope are primarily found in the northern, western, and eastern edges of the Project Area. The central portion is primarily flat. (see Figure 4-
9).
As indicated in Chapter 3, archaeologically sensitive on the
OPRHP CRIS webviewer. There are (see Table 3-2).
(500 14610 5 2).



#### **Historic Map Analysis**

Documentary research was used to determine

Evidence on historic maps included the addition of town names over time, the location of transportation routes, residential structures, and other cultural features. The following historic maps show the gradual change in occupation in Montgomery County, New York.

The 1817 Map of the State of New York by Lay depicts the major political, geographic, and transportation features of the area (Figure 4-1). Several towns are noted within Montgomery County, including the town of Amsterdam to the northwest of the Project Area. The Town of Caghnawaga [sic], is located to the immediate north of the Project Area, near the modern-day Town of Fonda. Caughnawaga was established by English settlers in the 1780s and named after the Mohawk Village that had originally occupied the area and which was abandoned after the Revolutionary War. Settlements are located primarily near major waterways, with the majority of the county residents clustered along the Mohawk River. A military fort, Fort Hunter, is depicted on the southern bank of the Mohawk River, near the Schoharie River.

Several roads or trails are noted bisecting the County, particularly to the north of the Mohawk River, with one road is noted running east-west along the southern bank of the Mohawk River to the north of the Project Area. The Erie Canal is noted along the southern bank of the Mohawk River, north of the Project Area. The Project Area is located within an area called "Mohawk Flats". No settlements are depicted in the vicinity of the Project Area.

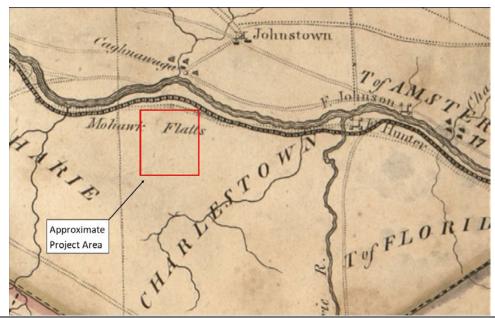


Figure 4-1. 1817 Map of the State of New York by Lay showing approximate Project Area.

The 1829 Map of the County of Montgomery (New York) by Burr depicts the major political and transportation features of the area (Figure 4-2). Since 1817, the population of the area has greatly increased, with towns and villages noted throughout the area. Town boundaries are noted by color. The Project Area is located in the Town of Glen. Property boundaries are noted, with lots identified numerically. The Towns of Fulton, Auriesville, and Voorheesville are noted in the general proximity of the Project Area. The Town of Caughnawaga is noted to the north across the Mohawk River. Airies [sic] Kill, now Auries Creek, is noted bisecting the eastern portion of the Project Area.

The Erie Canal continues to operate along the southern bank of the Mohawk River. Several roads are noted throughout the area, including one immediately south of the Erie Canal and northeast of the Project Area, and roads bisecting the Project Area. The Project Area is within the property boundaries of several Lots and landowners Visger, Scott, Delaney, and TenEyele.

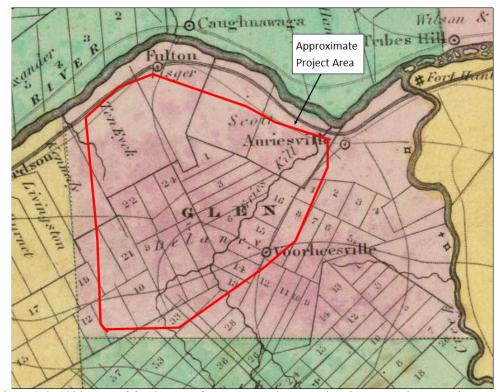


Figure 4-2. 1829 Map of the County of Montgomery by Burr showing approximate Project Area.

The 1868 *Glen, Auriesville: Montgomery and Fulton Counties, NY* map by Stranahan and Nichols depicts the political and transportation features of the area plus structural and landowner details (Figure 4-3). The population of the general area has grown with increased settlement, particularly throughout the rural countryside. The Towns of Auriesville, Glen, and Fultonville are noted within or in the vicinity of the Project Area. The creek that bisects the Project Area is identified by name (Auries Creek). Additional roads are noted throughout the area, including several within the Project Area. The Erie Canal continues to operate to the north of the Project Area.



The 1902 United States Geological Survey (USGS) Fonda 15-minute topographic quadrangle map provides detail on the political, topographic, and transportation features of Montgomery County (Figure 4-4). Located within the Town of Glen, the Project Area remains relatively rural. Small roads bisect the area, The closest towns are Fultonville, located to the north, Auriesville, located to the northeast, and Fonda, located to the north across the Mohawk River. The Erie Canal remains in operation, now paralleled on both banks by railroads, the New York Central and Hudson River Railroad on the northern bank, and the West Shore Railroad on the southern bank.

The 1944 USGS *Randall* and *Tribes Hill* 7.5-Minute quadrangle maps provide details on political, topographic, and transportation features of Montgomery County (Figure 4-5). The area remains rural, with scattered structures

Several additional roads bisect the area, falling within the Project Area. The Towns of Fonda and Fultonville have expanded. The West Shore Railroad (now a branch of the New York Central) and the New York Central (now the F & G branch) continue to operate on the southern and northern banks, respectively. The Erie Canal remains in operation, though a section near the Project Area is noted as abandoned.



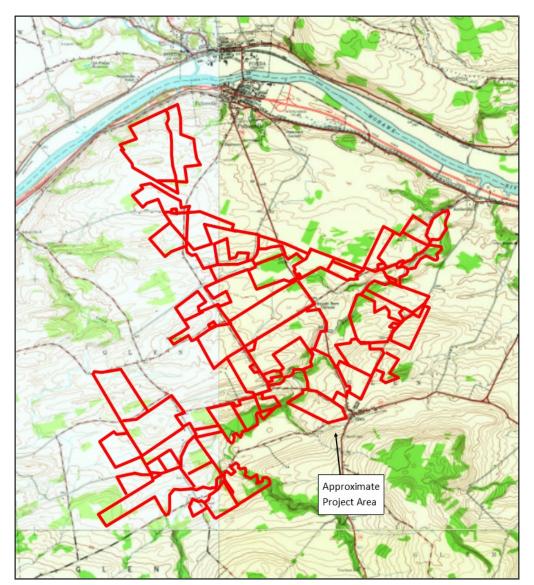


Figure 4-5. USGS 1944 *Randall* and *Tribes Hill* 7.5-Minute topographic quadrangle maps showing the Project Area.

Historic map analysis and historic research demonstrates that the area has been occupied by Euro-Americans since the late eighteenth century. Structural detail is provided on the 1868, 1902, and 1944 historic maps.

(see Figure 4-9).

Aerial

photographs show that the area has remained agricultural since 1952, with many of the currently extant structures shown on the 1952 photograph.

#### INITIAL FIELD INSPECTION

Site visits were conducted by TRC in October 2020 to document current conditions of the Project Area (Figures 4-6 through 4-8). The central portion of the Project Area is primarily flat, with sloped areas present to the west, east, and south. The Project Area contains agricultural land and forested areas, with the forested areas found in areas of steep slope or low-lying wetland areas. Minimal disturbance, primarily in the form of domestic residences or farmsteads, is noted throughout the Project Area. A transmission corridor crosses the Project Area. This information was used in combination with the environmental and historical background research described above to inform the archaeological sensitivity assessment for the Project Area (see Figure 4-9).



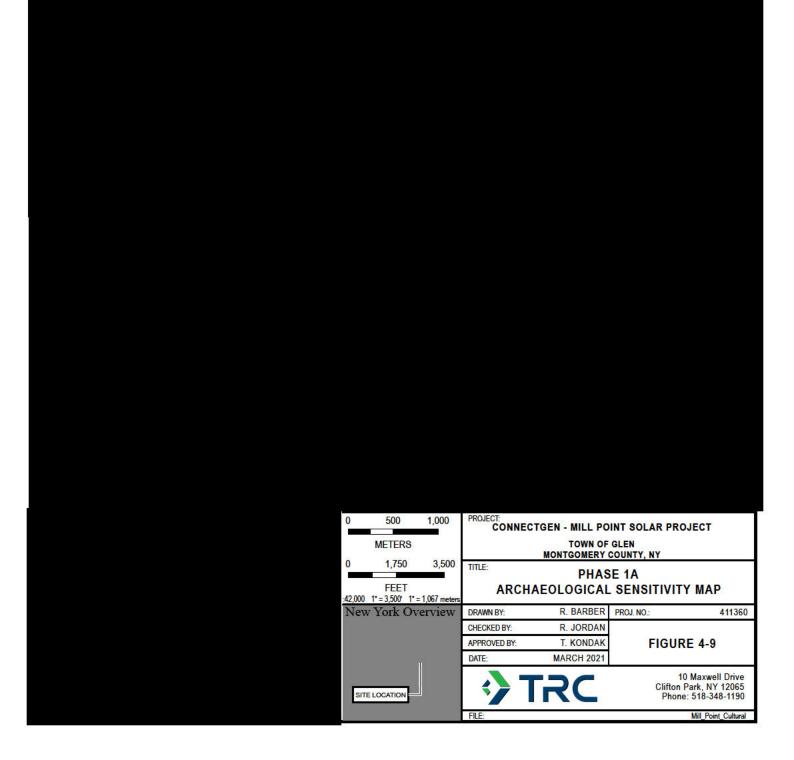
Figure 4-6. View from agricultural field with transmission line, northeastern portion of the Project Area, facing southwest.



Figure 4-7. View from Auries Creek, eastern portion of the Project Area, facing southwest.



Figure 4-8. View from wooded area, southwestern portion of the Project Area, facing northwest.



# 5. CONCLUSIONS AND RECOMMENDATIONS

The Phase IA archaeological survey completed for the Mill Point Solar Project under Section 94-c of the New York State Law. The Project will obtain a siting permit from ORES. The Project will obtain and adhere to all other applicable federal, state, and local permits not supplanted by 94-c, including a Section 404 permit from the USACE if Project activities will result in fill or dredge within jurisdictional wetlands and waters of the U.S. as well as an NYSDEC Article 24 permit if disturbance activities occur in NYSDEC state-protected wetlands or regulated adjacent areas. The Project will also be conducted in accordance with Section 106 of the NHPA.

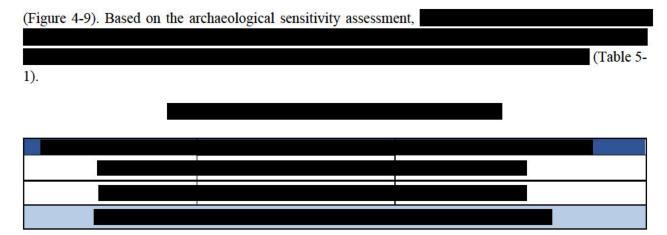
The Project will consist of the construction and operation of a 250+ megawatt (MW) solar energy center. The total Project Area is approximately 3,733 acres and will be located on land leased or purchased from owners of private property. Project components will include photovoltaic panels and associated racking systems, co-located inverters and medium voltage transformers, a Battery Energy Storage System (BESS), a new 345 kV substation and switching station, underground and/or overhead AC collection, access roads, temporary laydown areas, and a potential operations and maintenance facility located within an approximate 3,733-acre site. The final solar array specification, as well as locations of arrays, will be finalized as part of ongoing engineering efforts. Engineering drawings will be used to define the archaeological APE as they are developed and in consultation with the OPRHP.

#### SUMMARY OF BACKGROUND RESEARCH

The Phase IA background research included a review of archaeological site files, cultural resources survey reports, archaeological research reports, county and town histories, historical maps, county soil maps, and aerial photographs. Research on previously recorded archaeological sites and previous cultural resources surveys was conducted using OPRHP's web-based CRIS system. As part of this review, data was gathered on other known and potential archaeological resources in the Project vicinity including information on possible historic-period archaeological sites as indicated on historic maps and in other data sources.

# ARCHAEOLOGICAL SENSITIVITY

Areas considered to have high sensitivity, as defined by OPRHP,



#### RECOMMENDATIONS FOR PHASE IB ARCHAEOLOGICAL SURVEY

In their updated guidelines for Phase IA/IB archaeological survey (2020), OPRHP recommends Phase IB survey for areas of substantial proposed ground disturbance that fall within areas of high archaeological sensitivity. As defined by the OPRHP in their updated Phase IA/IB guidelines (2020), substantial proposed ground disturbance includes:

- (1) grading and excavation more than six inches deep;
- (2) grubbing, tree and stump removal; and
- (3) trenches more than three feet wide.

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); or for excavations and grading less than six inches in depth. It is noted that areas identified as previously disturbed would not be subject to archaeological survey.

In accordance with New York State guidelines (NYAC 1994), the Phase IB archaeological field survey would consist of systematic excavation of shovel tests at 15-m (50-ft) intervals in all proposed significant construction impact areas identified as having high archaeological sensitivity. Additional shovel tests (radials) would be excavated around positive tests in a radial pattern in order to define isolated finds. Plowed or planted agricultural fields with greater than 70% ground visibility will be subjected to systematic surface survey using 3- or 5-meter transect spacing, dependent on field conditions and archaeological sensitivity. It is assumed the Phase IB survey would be conducted following final engineering design of the facility identifying the locations of all build features that would require survey.

Per *OPRHP Guidelines*, all shovel tests will measure 30-50 cm in diameter, and will be excavated to sterile subsoil. All excavated soil will be screened through ¼-inch hardware cloth over tarps or plastic sheeting. Soil strata within each shovel test will be recorded on standardized forms describing Munsell color and USDA soil types. All recovered artifacts will be bagged, labeled, and sent to the TRC laboratory in Lanham, Maryland for processing and analysis. All shovel tests will be backfilled after completion. All positive shovel tests will be recorded using a *Trimble* GPS unit and plotted on aerial photographs and Project maps.

The Phase IB archaeological field survey will follow the *Standard for Cultural Resource Investigations* and the Curation of Archaeological Collections in New York State (NYAC 1994) guidelines and will be conducted in consultation with the OPRHP Regional Archaeologist. Project design plans showing the proposed locations for these areas will be submitted to OPRHP for review once advanced.

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# APPENDIX A: TRC PERSONNEL QUALIFICATIONS

*Tim Sara, M.A., RPA* (Principal Investigator) Mr. Sara has 34 years of experience in cultural resources management. He has designed and directed surveys and excavations of historic and prehistoric archaeological resources in the Northeast, Mid-Atlantic, Southeast, Midwest, Southwest, and Caribbean. He has obtained a thorough knowledge of Section 110 and Section 106 and of the National Historic Preservation Act as amended (NHPA) and applying the National Register of Historic Places (NRHP) eligibility criteria to cultural resources. Mr. Sara has received honors and awards for academic and professional studies and is a member of the New York Archaeological Council. He has been a contributing author more than 40 Environmental Assessments (EAs) and/or Environmental Impact Statements (EIS) and principal or contributing author to more than 150 cultural resources management reports.

Robert Wall, Ph.D., RPA (Senior Archaeologist) has more than 40 years of experience in archaeological field investigations in the Middle Atlantic region, with a particular focus on the Susquehanna, Potomac, Delaware, and Upper Ohio drainages. He is qualified under the Secretary of the Interior's Professional Qualifications (Archeology) (36 CFR 61) and is certified by RPA. Dr. Wall has expertise in Archival Research/Land Use Studies; Archeological Inventory Surveys; Archeological Site Assessments and National Register Testing; Archeological Site Mitigation and Data Recovery; Cemetery Delineation, Archeology Laboratory Processing, Analysis, Curation, Research and Report Writing. Dr. Wall has also authored numerous publications on the archaeology of Maryland, Pennsylvania, and West Virginia.

Jasmine Gollup, M.A., RPA (Archaeologist/Laboratory Director) Ms. Gollup has ten (10) years of experience performing archaeological investigations throughout the Mid-Atlantic and Northeast regions. She has worked on over 50 Phase I, II, and III projects and is experienced with both historic and prehistoric material culture and faunal analysis. She is qualified under the Secretary of the Interior's Professional Qualifications (Archeology) (36 CFR 61) and is certified by RPA. Ms. Gollup has been the principal author of more than 30 cultural resources management reports, including over a dozen solar or wind facility projects in New York.

Justin Warrenfeltz, B.A. (Archaeologist) has nine (9) years of experience in archaeological field investigations in the Middle Atlantic and Northeast regions. He has extensive experience with CRM Projects throughout the Northeast, including numerous Phase I, II, and III investigations and historic and prehistoric artifact analysis. His experience working in New York includes more than a dozen Phase IA and Phase IB projects in support of solar and wind energy projects in Steuben, Orange, Greene, Sullivan, Ulster, Dutchess, Montgomery, Schoharie, Oneida, Suffolk, Seneca, Schuyler, and other Counties.



PHASE IB ARCHAEOLOGICAL SURVEY
MILL POINT SOLAR I PROJECT
MONTGOMERY COUNTY, NEW YORK

June 2023

Prepared For:

ConnectGen LLC 1001 McKinney, Suite 700 Houston, Texas 77002

Prepared By:

TRC 4425-B Forbes Boulevard Lanham, MD 20706



# PHASE IB ARCHAEOLOGICAL SURVEY MILL POINT SOLAR I PROJECT TOWN OF GLEN, MONTGOMERY COUNTY, NEW YORK

Prepared for:

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- VAN/ANA

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#### **OPRHP MANAGEMENT SUMMARY**

SHPO Project Review Number: 21PR00133

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc.): Office of Renewable Energy Siting

(ORES)

Phase of Survey: Phase IB

Location: North and west of the Town of Glen in central Montgomery County

Minor Civil Division: Town of Glen

**County: Montgomery County** 

Survey Area Dimensions: **Irregular dimension (see below)** 

Number of Acres Surveyed: 4,225 acres

USGS 7.5 Minute Quadrangle Map: Tribes Hill and Randall (2019)

Number & Interval of Shovel Tests (STPs): 11,840 STPs in 15-m intervals, 211.84 acres of systematic

surface survey

Number & Size of Units: Standard STPs (40 cm diameter)

Width of Plowed Strips: N/A

Surface Survey Transect Interval: 3 meter

Results of Archaeological Survey:

Number & name of precontact sites identified:

Number & name of historic sites identified:

Number & name of sites recommended for Phase II or Avoidance:

Results of Architectural Survey: N/A

Report Author(s): Erin Steinwachs, Jordan Riccio, Justin Warrenfeltz, Timothy Sara, Robert Wall

Date of Report: June 2023

# MANAGEMENT SUMMARY

In September – December 2021, April 2022, and October – December 2022, TRC conducted a Phase IB archaeological survey of the Mill Point Solar I Project (Project), in Montgomery County, New York. The Project will be permitted under 94-c of the New York Executive Law on behalf of ConnectGen Montgomery County LLC, a subsidiary of ConnectGen LLC (ConnectGen). The Project will consist of the construction and operation of a utility-scale solar energy generation facility. The current Project Study Area is approximately 4,225 acres. The Project will include photovoltaic solar arrays, inverters, a substation, access roads, temporary laydown yards and staging areas, buried electric collection lines, and electrical interconnection facilities. Final solar array specifications, as well as locations of arrays, will be determined as part of ongoing design efforts.

A Phase IA archaeological study and sensitivity assessment for the Project was conducted by TRC in 2021
(Gollup et al. 2021). This study identified within the Mill
Point Solar I Project and determined
Based on the <i>New York State Historic Preservation Office Guidelines for Solar Facility Development Cultural Resources Survey Work</i> (OPRHP 2021 Guidelines), the Phase IA study also recommended a Phase IB survey within all areas of high archaeological sensitivity that fall within proposed areas of substantial ground disturbance. The Office of Parks, Recreation, and Historic Preservation (OPRHP) reviewed the Phase IA study and concurred with the report's findings in its review letter of April 5, 2021.
The Phase IB survey was conducted prior to finalization of design plans and as such, all areas defined as highly sensitive for archaeological resources were subjected to Phase IB survey. In addition, collection lines in areas of high sensitivity were specifically surveyed. Exclusion areas, defined by ConnectGen as areas that would not be disturbed by the Project, were not surveyed. In total, 11,840 shovel test pits (STPs) were excavated, and 211.84 acres were subjected to systematic surface survey, resulting in the recovery of 1,009 artifacts from Resources identified included
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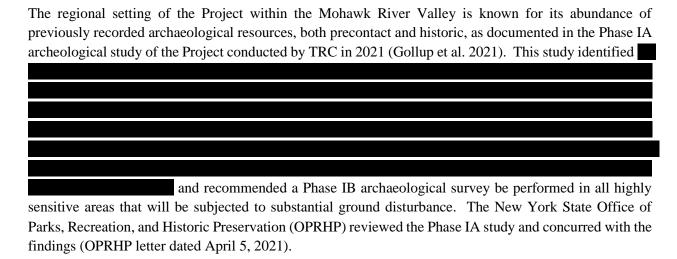
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# 1. INTRODUCTION

TRC has completed a Phase IB archaeological survey of the Mill Point Solar I Project (Project) located in Montgomery County, New York (Figure 1-1; Figure 1-2). The survey was conducted on behalf of ConnectGen Montgomery County LLC, a subsidiary of ConnectGen LLC (ConnectGen) and took place in September – December 2021, April 2022, and October – December 2022. The Project will consist of the construction and operation of a utility-scale solar energy generation facility. The total Study Area is approximately 4,225 acres. The Project will include photovoltaic solar arrays, inverters, a substation, access roads, temporary laydown yards and staging areas, buried electric collection lines, and electrical interconnection facilities. Final solar array specifications, as well as locations of arrays, will be determined as part of ongoing design efforts.



The Phase IB archaeological survey initially began in the Fall of 2021 prior to finalization of Project design plans. Because areas of proposed substantial ground disturbance were not yet known, 100 percent of high sensitivity areas were surveyed with the exception of exclusion areas, which represent areas designated by ConnectGen as non-disturbance areas. The survey was interrupted in December 2021 due to inclement weather and subsequently resumed in the Spring 2022. Additional survey was conducted in previously excluded areas between October and December 2022. The objectives of the Phase IB archaeological survey were to: 1) identify archaeological sites within the Study Area; 2) provide an initial assessment of identified archaeological sites for their potential eligibility for inclusion in the NRHP; and 3) to determine the effects of the proposed development on those sites.

The archaeological investigations were conducted in accordance with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation, the New York Archaeological Council's Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State (1994), the New York State Historic Preservation Office Guidelines for Solar Facility Development Cultural Resources Survey Work, and in consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP). Timothy Sara, M.A., RPA, served as the Principal Investigator. The field survey was directed by Jordan Riccio M.A., RPA, Al Honsinger M.A., and Justin Warrenfeltz M.A., RPA, with the aid of between 10 and 20 field technicians.

This report is organized as follows. Chapter 2 summarizes the Phase IA sensitivity assessment, outlining the objectives, results, and recommendations of the study. Chapter 3 describes the field and laboratory methods used for the survey and Chapter 4 presents the survey results. Conclusions and recommendations are presented in Chapter 5. Appendix A presents TRC personnel qualifications, Appendix B provides the artifact inventory, and Appendix C contains soils information from STPs as required by the OPRHP.

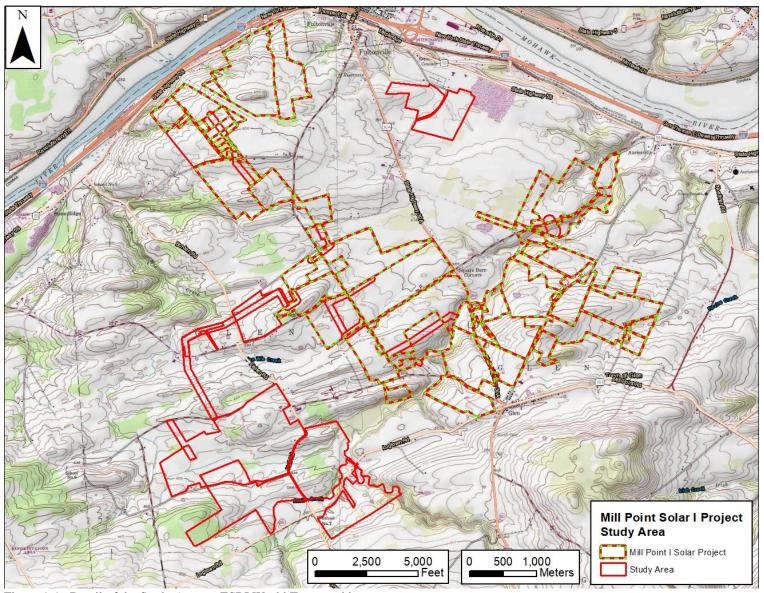


Figure 1-1. Detail of the Study Area on ESRI World Topographic map.

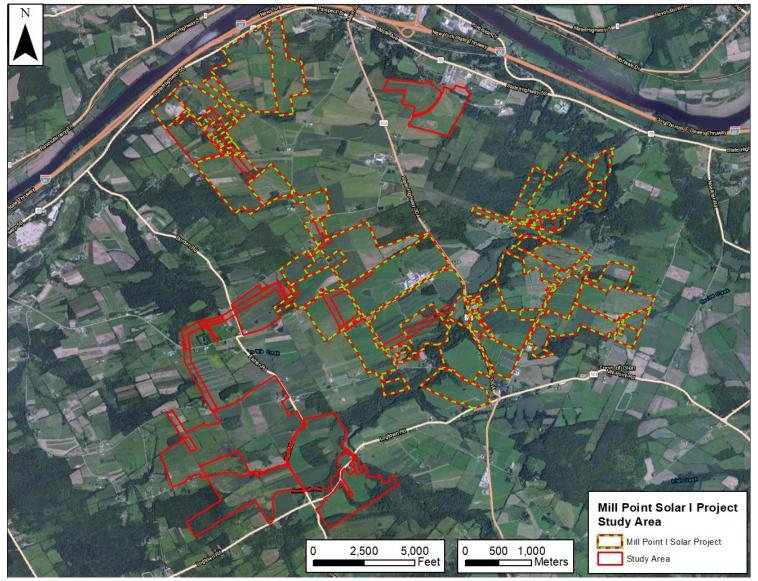


Figure 1-2. Detail of the Study Area on ESRI World Imagery Clarity Basemap.

# 2. SUMMARY OF PHASE IA SENSITIVITY ASSESSMENT

The Phase IA sensitivity assessment for the Project was completed in 2021 and involved a review of maps, a search of state site files, and a field inspection of the Study Area (Gollup et al. 2021). The objectives of the Phase IA study were to assess the sensitivity of the Study Area for containing archaeological resources and provide recommendations for future archaeological investigations based on a newly adopted archaeological sensitivity model as provided in the *New York State Historic Preservation Office Guidelines for Solar Facility Development Cultural Resources Survey Work* (OPRHP Guidelines 2021). The Phase IA sensitivity assessment provided detailed descriptions of the environmental and cultural contexts for the Project (Gollup et al. 2021). A brief summary of previously recorded sites within the Study Area and vicinity are provided below.

#### ARCHAEOLOGICAL SITES IN PROJECT VICINITY

(Table 2-1). These resources were identified from a search of both the OPRHP and New York State Museum (NYSM) site files using the web-based Cultural Resources Information System
(CRIS).
(see Table 2-1).
(see Table 2-1).
(Gollup et al. 2021).
In addition to the previously recorded archaeological sites, the Phase IA study identified  These areas of interest are
mapped in CRIS and their significance to the archaeological record is unknown. No information is
available about the archaeological areas from CRIS, although
The Phase IA study identified
(Gollup et al. 2021).

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## RECOMMENDATIONS FOR PHASE IB ARCHAEOLOGICAL SURVEY

Based on the Phase IA sensitivity assessment and the newly adopted OPRHP Guidelines (OPRHP 2021), a Phase IB archaeological survey was recommended in areas of high archaeological sensitivity that would be subject to substantial ground disturbance. The OPRHP reviewed and concurred with the findings of the Phase 1A study in April of 2021 (OPRHP letter dated April 5, 2021). Following the Phase IA sensitivity assessment, ConnectGen provided updates to the Study Area boundaries that included new parcels not reviewed during the Phase IA sensitivity assessment. In addition, exclusion areas that will not be subject to substantial ground disturbance were provided in advance of the Phase IB study. The Phase IA sensitivity assessment is shown in Figure 2-1 and the updated Phase IB sensitivity assessment with exclusion areas is shown in Figure 2-2.

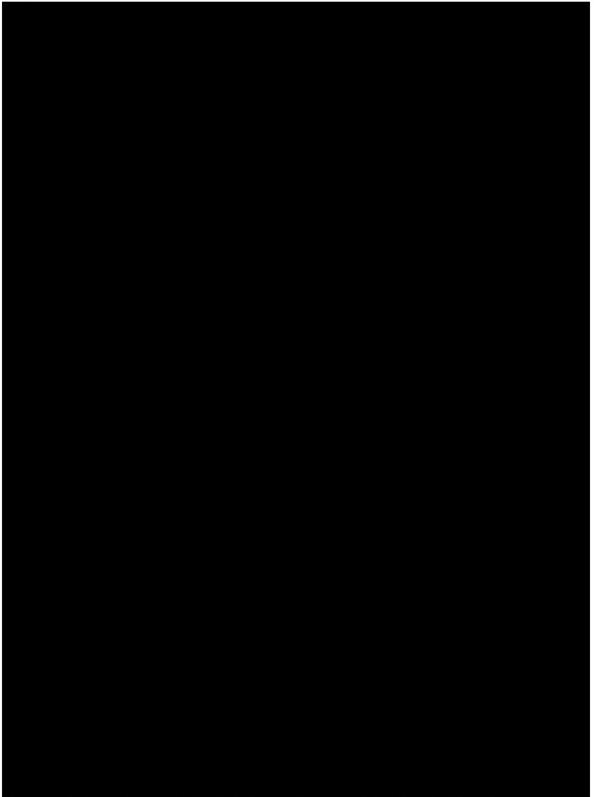


Figure 2-1. Archaeological sensitivity, Study Area, and recommendations from the Phase IA report.



Figure 2-2. Updated archaeological sensitivity and Study Area for the Phase IB survey based on OPRHP Guidelines (May 2021).

# 3. FIELD AND LABORATORY METHODS

## FIELD METHODS

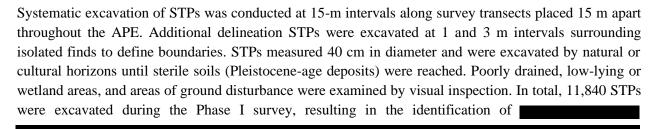
#### **Area of Potential Effects**

The total Study Area is approximately 4,225 acres. Following OPRHP's 2021 Guidelines that allow for pre-design flexibility, the area of potential effects (APE) for the Phase IB archaeological survey was defined as all areas determined to have high archaeological sensitivity which are not to be excluded from Project design. For the proposed Mill Point Solar I Project, Phase IB survey was conducted pre-design, and as such, 100 percent of areas of high archaeological sensitivity not within exclusion areas were surveyed.

# **Systematic Surface Survey**

Field crews aligned themselves at 3-m intervals and traversed the area in straight lines searching the surface for artifacts. The location of each isolated find spot or concentration of artifacts was recorded with a handheld GPS unit and given a unique field identification number. Artifacts were then collected and bagged by field identification number for laboratory processing and cataloging. Areas suitable to systematic surface survey were also subjected to sub-surface testing to assess depth of plowzone deposits and underlying soil characteristics. In total, 211.84 acres were subjected to systematic surface survey.

# **Shovel Test Survey**



# **Study Area and Site Documentation**

Recovered artifacts were bagged according to natural soil stratum and depth below surface. The results of individual tests were recorded on standardized field forms. All soils were described in terms of color and texture using Munsell color notations and USDA classification schemes. The Field Director recorded daily notes describing the progress of the survey in terms of the number of STPs excavated, area surveyed, and pertinent environmental information. Recovered artifacts were assigned a unique field specimen number that was used for laboratory tracking.

TRC generated Project-specific maps in the field to record essential Survey Area and site details which were used to generate Project maps that are reproduced in Chapter 4. The field maps include Survey Area boundaries, local physiographic and cultural features, individual STPs, and newly recorded sites; all mapped locations were referenced to proposed disturbance areas. The Survey Areas were photographed with general views showing environmental conditions at the time of survey; these views are depicted on Study Area maps.

The location of all STPs and surface features were mapped in the field, and geospatially recorded using a *Trimble Geo7x* handheld GPS unit. The GPS data was post-processed in GPS Pathfinder Office Version 5.6 and plotted onto USGS topographic maps and satellite imagery in ArcGIS 10. The site was photographed from several vantage points to show general topography and site conditions. All recovered artifacts were retained by TRC for processing and curation.

Cultural resources are identified as either Isolated Finds or Sites. A Site is a resource comprised of more than one positive STP, surface find, or feature. Each of the positive STPs or surface finds within a Site are located within 25 m of at least one other contemporaneous cultural positive STP or surface find. In addition to the methods described above, identified Sites were delineated through additional shovel testing based on field conditions. An Isolated Find (IF) is defined as a single positive STP, or surface find occurring greater than 25 m from the nearest contemporaneous cultural find. In some cases, surface finds which are located greater than 25 m from each other – but occurring on the same landform as one another – were grouped into Sites rather than remaining as isolated finds.

Non-site historic field scatters are defined as diffuse scatters of artifacts that are likely removed from their original context, typically through agricultural or construction activity. These scatters are displaced from locations of Map Documented Structures (MDS) identified during background research. Non-site historic field scatters frequently occur along roadways where fill has been deposited during roadway construction or within plowed agricultural fields. The locations of these scatters are recorded in the field, but are not considered archaeological resources by OPRHP, and as such artifacts are not retained and NRHP eligibility recommendations are not considered.

# LABORATORY AND ANALYTICAL METHODS

# **Artifact Processing and Analysis**

All artifacts recovered in the field were bagged in 4-mil, resealable plastic bags along with artifact cards bearing provenience information. A catalog number was assigned to each unique provenience, and this number appears with all provenience information. All artifacts were transported from the Study Area to TRC's laboratory facility in Lanham, Maryland, and artifact bag numbers were examined for accuracy with field provenience information and the general artifact inventory. At this point, any labeling errors detected on artifact cards, bags, or the inventory, were corrected. Artifacts were sorted by general categories (historic, precontact faunal) and then by material type within each category (i.e., precontact lithics or ceramics; historic glass, ceramics, architectural material, etc.). The catalog number remained with each artifact during washing and analysis.

All non-metal artifacts were washed in tap water using a soft toothbrush; metal artifacts were dry brushed. Artifacts were allowed to air-dry before being submitted for analysis. All diagnostic artifacts were labeled with the official site number and catalog number. Labeling will be done with ink on a coat of Acryloid B-72 and sealed over with another coat of Acryloid B-72. In total, 1,009 artifacts were recovered during the survey.

The historic artifact analysis followed an industry-standard format based on the South/Noel Hume typology (South 1977). Artifact pattern analysis, based on form or material type, was conducted for all artifacts recovered from the survey. The purpose of artifact pattern analysis is to organize an assemblage and to

provide a description of its contents. The collection is thus organized by Functional Group, including Domestic, Architectural, Personal, and Indeterminate, as per the work of South (1977). The principal reference sources for historic artifact identification include but are not limited to Denker and Denker (1985), Ketchum (1983), Noel Hume (1969), and South (1977). The ceramic and glass analyses provide information on ware or vessel types, techniques of surface decoration and manufacture, description of decorative motifs, beginning and ending dates of manufacture, and, if present, maker's marks.

When precontact lithics are present, the analysis is completed as follows. Raw materials are identified based on macroscopic characteristics: color, texture, hardness, fracturing attributes, and inclusions. Precontact lithic artifacts were sorted into the following classes: cores, tools, debitage, and FCR and classified into subclasses accordingly. Chipped stone tools, for example, were sorted into the following subclasses: biface, uniface, and flake. Chipped stone tools were identified based on morphology, manufacturing method, and use-wear. Guidelines for the analysis of bifacial and cobble reduction followed research conducted over the years by several individuals (e.g., Andrefsky 2001 and 2005; Bonnichsen 1977; Callahan 1979; Crabtree 1972; Ericson 1984; Hayden 1980; Odell 2003; and Sullivan and Rosen 1985). The staged biface reduction sequence developed by Callahan (1979) was applied to cobble reduction strategies and to the importing of non-local raw materials in blank form.

Surfaces and edges were examined for traces of use-wear and polish with the unaided eye and with a 16X hand lens. If applicable, the identification of utilized and edge-retouched flake tools was undertaken with the acknowledgment that other factors such as trampling, spontaneous retouch during flake detachment, and trowel or shovel damage can also cause damage to tool and flake edges. When present, cobble tools were analyzed in this way since unintentional damage to on-site cobbles may be considered as marginal to the primary site activities.

Each artifact was counted and weighed to the nearest 0.1 gram (g). Debitage was counted and weighed by provenience and raw material type. The result of the lithic analysis provides preliminary data regarding site function, raw material procurement strategies, and features of native technology.

# **Artifact Inventory**

The artifact inventory was generated in Microsoft Excel 2021. Each artifact was described by basic type utilizing descriptive information (characteristics) (Appendix A).

### **Curation**

After analysis, artifacts were placed in clean, perforated 4-mil, resealable plastic bags. Artifacts were divided by general type and placed into sub-bags within a general bag for each provenience. An acid-free artifact card with provenience information and bag number was included with each bag. All artifacts and original field records generated from this survey will be temporarily stored at the TRC Lanham, Maryland office until a permanent curation facility is designated. Once a curation facility is identified, all artifacts will be prepared for final curation according to the curation guidelines specified by that facility. All Project records will be included in the transfer to the facility. Upon Project completion, it is anticipated TRC will work closely with ConnectGen in identifying an acceptable curation facility.

# 4. FIELD RESULTS

To organize the Phase IB archaeological survey, the Study Area was divided into 25 Survey Areas (Survey Areas 1-15, 17-18, and CL1-8) (Figure 4-1). Following survey, some parcels within Survey Areas were removed from the Project because no construction activities will occur within those parcels. The results of
the survey in each area are summarized below. A report of the results by individual Survey Area follows in total, 11,840 STPs were excavated and 211.84 acres of systematic surface survey were performed
resulting in the recovery of 1,009 artifacts from
estiting in the recovery of 1,00% armaets from

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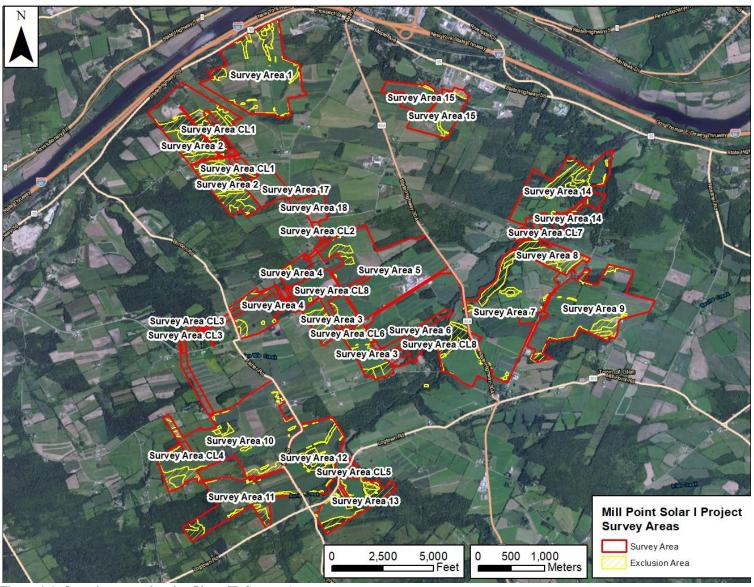


Figure 4-1. Overview map showing Phase IB Survey Areas.

#### SURVEY AREA 1

Survey Area 1 (SA 1) consists of an approximately 325-ac parcel located south of the Mohawk River in the northernmost portion of the Study Area (Figure 4-1). The parcel is bounded by NY-5S along its northern margin and a utility line corridor along its western margin. The northern section is characterized by diffuse stands of trees and fallow agricultural fields where field grasses and underbrush predominate. SA 1 also consists of fallow agricultural fields bounded by wooded areas and a forested area in the southwestern portion (Figure 4-2).



Figure 4-2. Overview photo - Survey Area 1, facing North.

Topography within SA 1 consists of a broad,

steeply sloping terrace rising from the Mohawk River to the north, trending roughly north to south, toward a gently sloping plain to the south. Elevations range from 321 ft amsl in the northeastern corner along NY-5S, to 630 ft amsl in the southwestern portion. The most distinctive landscape features in SA 1 are four intermittent streams which drain into the Mohawk River and a forested moraine in the southwestern portion. These drainages cross the northern, eastern, and western boundaries of SA 1, trending north toward the Mohawk River.

The access

road trends roughly north to south between the two intermittent streams which cross the northern boundary of the Survey Area.

The map features were located within areas of exclusion and were avoided during field investigations (Figure 4-6). If project plans are modified to impact the concentration of historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 1 consisted of an 49 cm Ap horizon of black (10YR 2/1) silty loam overlying a B horizon of a yellowish brown (10YR 5/4) sandy loam to a depth of 61 cmbs (Figure 4-3: STP C-6). Another typical soil profile in SA 1 consisted of a 45

cm Ap horizon of very dark brown (10YR 2/2) sandy loam overlying a B horizon of a brown (10YR 4/3) sandy clay loam to a depth of 59 cmbs (Figure 4-3:STP H-6).

Phase IB testing in SA 1 included the excavation of 1,152 STPs. An additional 79 STPs were unexcavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-5; Figure 4-6)

# Mill Point Solar Project Survey Area 1 Representative Soil Profiles



<u>Key:</u> Ap - Ap Horizon

B - B Horizon

(-) - no artifacts recovered

(+) - artifacts recovered

BOE - base of excavation

Figure 4-3. Representative soil profiles – Survey Area 1.



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#### **SURVEY AREA 2**

Survey Area 2 (SA 2) consists of an approximately 366-ac parcel located south of the Mohawk River in the northernmost portion of the Study Area west of SA 1 (Figure 4-1). The parcel is bounded by NY-114 along its southern margin and a utility line corridor along its eastern margin. Marys Lane bisects SA 2 roughly northwest to southeast, providing access to residential housing and the Glenridge Motor Sports Park. East of Marys Lane, houses and forested areas predominate, terminating in a large, open field recently mowed at the time of survey. On the western side of Marys Lane, forests predominate and cease to the north at the margin of the raceway (Figure 4-7).



Figure 4-7. Overview photo – Survey Area 2, facing East.

Topography within SA 2 consists of a broad, steeply sloping terrace rising from the Mohawk River to the north, trending roughly north to south, toward a gently sloping plain to the south. Elevations range from 450 ft amsl in the northernmost portion along the terrace, to 630 ft amsl in the southeastern portion. The most prominent landscape feature in SA 2 is an intermittent stream approximately 430 meters in length, which trends roughly east to west and bisects the area west of Marys Lane.

A typical soil profile in SA 2 consisted of a 40 cm Ap horizon of brown (10YR 4/3) sandy loam overlying a B horizon of a dark yellowish brown (10YR 4/4) silty loam to a depth of 50 cmbs (Figure 4-8: STP A-1). Another typical soil profile in SA 2 consisted of a 21 cm Ap horizon of dark grayish brown (10YR 4/2) silty loam overlying a B horizon of a brown (10YR 5/3) silty clay loam to a depth of 31 cmbs (Figure 4-8: STP D-6).

Phase IB testing in SA 2 included the excavation of 145 STPs. An additional 48 STPs were not excavated due to inundated soils, previous ground disturbance, and/or steep slope.

(Figure 4-10).

# Mill Point Solar Project Survey Area 2 Representative Soil Profiles

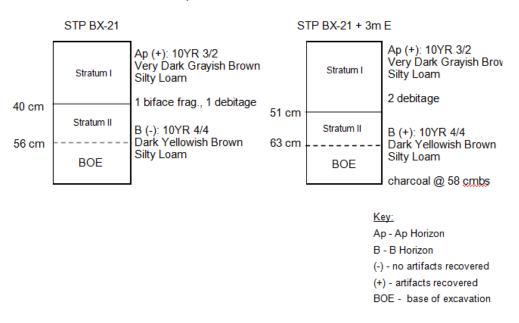


Figure 4-8. Representative soil profiles – Survey Area 2.



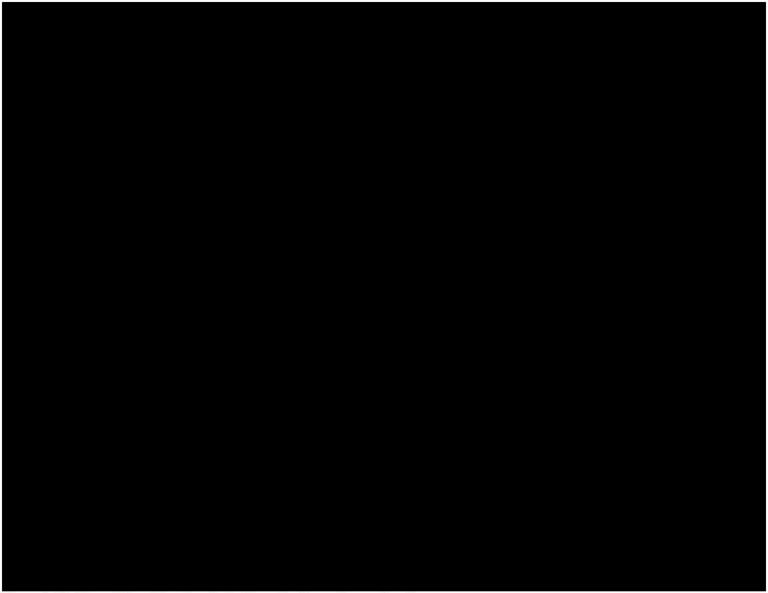


Figure 4-10. Map of Phase IB archaeological investigations – Survey Area 2.

#### **SURVEY AREA 3**

Survey Area 3 (SA 3) consists of an approximately 178-ac parcel located west of Van Epps Road and south of Agersinger Road in the central portion of the Study Area (Figure 4-1). The parcel is bounded by Fischer Road along its southern margin and Van Epps Road along its eastern margin. Fallow agricultural fields comprise the majority of SA 3, with forested areas restricted to the central and southern portions (Figure 4-11).

Topography within SA 3 is comprised of a relatively level to gently undulating plain. Elevations range from 570 ft amsl in the northeastern corner at the junction between Agersinger and Van Epps Road, to



Figure 4-11. Overview photo – Survey Area 3, facing Northwest.

620 ft amsl in the southern portion. The most prominent landscape feature within SA 3 is one intermittent stream which drains from the northwest, entering along the eastern boundary and emptying into a small pond.

A typical soil profile in SA 3 consisted of a 32 cm Ap horizon of very dark grayish brown (10YR 3/2) silty clay loam overlying a B horizon of a brown (10YR 5/3) clay loam to a depth of 43 cmbs (Figure 4-12: STP 2A-3). Another typical soil profile in SA 3 consisted of a 32 cm Ap horizon of dark brown (10YR 3/3) silty loam overlying a B horizon of a brown (10YR 5/3) silty clay loam to a depth of 42 cmbs (Figure 4-12: STP O-16).

Phase IB testing in SA 3 included the excavation of 414 STPs and 3.86 acres of systematic surface survey. An additional 112 STPs were not excavated due to inundated soils, previous ground disturbance, and/or



# Mill Point Solar Project Survey Area 3 Representative Soil Profiles

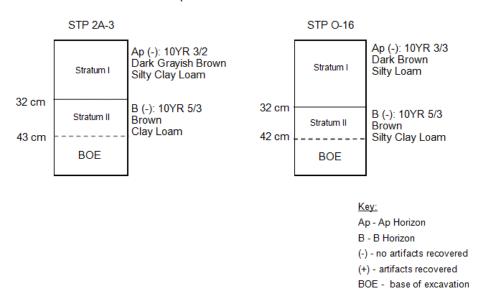


Figure 4-12. Representative soil profiles – Survey Area 3.



Figure 4-13. Map of Phase IB archaeological sensitivity – Survey Area 3.



#### SURVEY AREA 4

Survey Area 4 (SA 4) consists of an approximately 200-ac parcel located south of Mile Level Road and west of Van Epps Road in the west-central portion of the Study Area (Figure 4-1). The parcel is also bounded by Agersinger Road along its southern margin and Borden Road along its western margin. The northern section is characterized by agricultural fields which were recently harvested and formerly planted in corn at the time of survey. Forested areas are located along field margins in the northeastern and south-central portions (Figure 4-15).



Figure 4-15. Overview photo - Survey Area 4 facing West.

Topography within SA 4 consists of a gently sloping plain, trending roughly north to south. Elevations range from 520 ft amsl in the northwestern corner along Mile Level Road, to 685 ft amsl in the south-central portion. The most distinctive topographic feature in SA 4 is a small knoll located in the south-central portion.

If project plans are modified to impact the concentration of historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 4 consisted of a 22 cm Ap horizon of dark yellowish brown (10YR 4/4) silty clay loam overlying a B horizon of a yellowish brown (10YR 5/4) silty clay to a depth of 39 cmbs (Figure 4-16: STP J-1). Another typical soil in SA 4 consisted of a 28 cm Ap horizon of dark brown (10YR 3/3) silty loam overlying a yellowish brown (10YR 5/4) silty loam B horizon to a depth of 38 cmbs (Figure 4-16: STP J-3).

Phase IB testing in SA 4 included the excavation of 47 STPs and 6.6 acres of systematic surface survey. An additional 8 STPs were not excavated due to inundated soils, previous ground disturbance, and/or steep slope. The total STP survey included 3 judgmental STPs and 16 radial STPs.

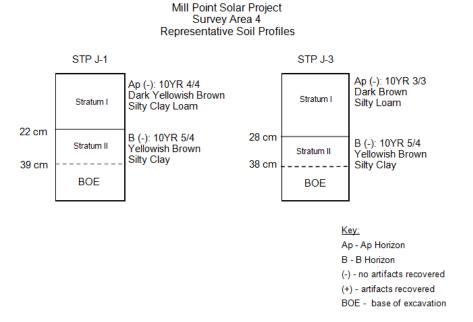


Figure 4-16. Representative soil profiles – Survey Area 4.





Figure 4-18. Map of Phase IB archaeological investigations – Survey Area 4.

## **SURVEY AREA 5**

Survey Area 5 (SA 5) consists of approximately 357-ac parcel located north of Ingersoll Road and east of Van Epps Road in the central portion of the Study Area (Figure 4-1). The northern section is characterized by agricultural fields which were recently harvested and formerly planted in corn at the time of survey. SA 5 also contains fallow agricultural fields bounded by wooded areas and a forested area in the central portion (Figure 4-19).

Topography within SA 5 consists of a gently sloping plain, roughly trending southwest to northeast. Elevations range from 600 ft amsl in Figure 4-19. Overview photo – Survey Area 5, facing East. the southwestern corner along Van Epps Road,



to 470 ft amsl in the northeastern corner of the Survey Area. The most distinctive topographic feature in SA 5 is an intermittent stream which enters from the eastern boundary, roughly trending northeast. If project plans are modified to impact the concentration of the historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 5 consisted of a 27 cm Ap horizon of dark grayish brown (10YR 4/2) silty loam overlying a B horizon of a yellowish brown (10YR 5/4) silty clay to a depth of 42 cmbs (Figure 4-20: STP G-4). Another typical soil profile in SA 5 consisted of a 31 cm Ap horizon of very dark grayish brown (10YR 3/2) silty clay loam overlying a B horizon of a grayish brown (10YR 5/2) silty clay loam to a depth of 42 cmbs (Figure 4-20: STP Q-11).

Phase IB testing in SA 5 included the excavation of 2,062 STPs and 6.34 acres of systematic surface survey. An additional 704 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

Mill Point Solar Project

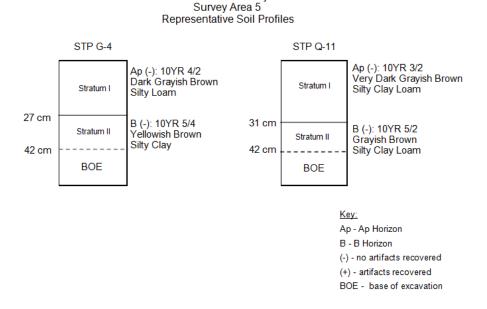


Figure 4-20. Representative soil profiles – Survey Area 5.





#### **SURVEY AREA 6**

Survey Area 6 (SA 6) consists of an approximately 397-ac parcel located north of Fischer Road in the central portion of the Study Area (Figure 4-1). The parcel is bounded by Van Epps Road along its western margin and NY-30A along its eastern margin. The northern section is characterized by open agricultural fields which were planted in pumpkins at the time of survey and bounded by wooded areas which abut Auries Creek. SA 6 also contains agricultural fields to the south which were fallow at the time of survey and bounded by wooded field margins (Figure 4-23).



Figure 4-23. Overview photo – Survey Area 6, facing North.

Topography within SA 6 consists of two gently

sloping plains, trending roughly northwest to southeast, toward Auries Creek. Elevations range from 630 ft amsl in the southeastern corner along NY-5S, to 470 ft amsl in the central portion. Auries Creek represents the most distinctive landscape feature, bisecting SA 6 and running roughly southeast to northeast, crossing the southern and eastern boundaries.

(Figure 4-25). If

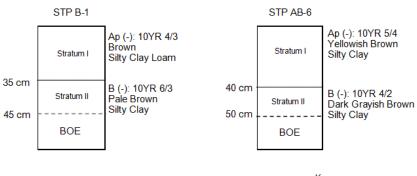
project plans are modified to impact the concentration of the historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 6 consisted of a 35 cm Ap horizon of brown (10YR 4/3) silty clay loam overlying a B horizon of a pale brown (10YR 6/3) silty clay to a depth of 45 cmbs (Figure 4-24: STP B-1). Another typical soil profile in SA 6 consisted of a 40 cm Ap horizon of yellowish brown (10YR 5/4) silty clay overlying a B horizon of a dark grayish brown (10YR 4/2) silty clay to a depth of 50 cmbs (Figure 4-24: STP AB-6).

Phase IB testing in SA 6 included the excavation of 1,575 STPs and 8.38 acres of systematic surface survey. An additional 696 STPs were not excavated due to inundated soils, previous ground disturbance, or steep



## Mill Point Solar Project Survey Area 6 Representative Soil Profiles



Key:

Ap - Ap Horizon

B - B Horizon

(-) - no artifacts recovered

(+) - artifacts recovered

BOE - base of excavation

Figure 4-24. Representative soil profiles – Survey Area 6.





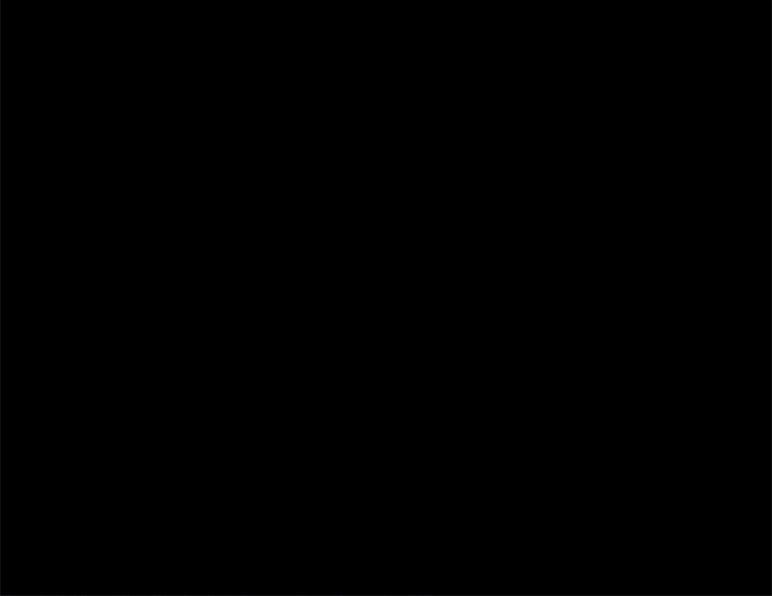


Figure 4-27. Map of Phase IB archaeological investigations – Survey Area 6 West.

### SURVEY AREA 7

Survey Area 7 (SA 7) consists of an approximately 358-ac parcel located north of Fischer Road in the central portion of the Study Area (Figure 4-1). The parcel is bounded by Auriesville Road along its eastern margin and Auries Creek in its western margin. The northern section is characterized by a mix of wooded field margins, fallow agricultural fields, and an agricultural field recently harvested and formerly planted in corn at the time of survey. The western section is comprised of a forested floodplain located south of Auries Creek (Figure 4-28).



Figure 4-28. Overview photo – Survey Area 7, facing Southeast.

Topography within SA 7 consists of a gradually

sloping plain, trending roughly southeast to northwest, toward Auries Creek. Elevations range from 690 ft amsl in the southeastern corner along Auriesville Road, to 470 ft amsl in the southwestern corner along Auries Creek. Auries Creek also represents the most distinctive landscape feature in SA 7, bounding its western margin and forming a travel corridor which connects the upland plains of present-day Montgomery County to the Mohawk River Valley.

If project plans are modified to impact the concentration of the historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 7 consisted of a 40 cm Ap horizon of brown (10YR 4/3) silty clay loam overlying a B horizon of a yellowish brown (10YR 5/6) clay loam to a depth of 50 cmbs (Figure 4-29: STP A-1). Another typical soil profile in SA 7 consisted of a 30 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a B horizon of a brown (10YR 4/3) silty clay to a depth of 40 cmbs (Figure 4-29: STP 2G-6).

Phase IB testing in SA 7 included the excavation of 282 STPs and systematic surface survey of 3.6 acres. An additional 29 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

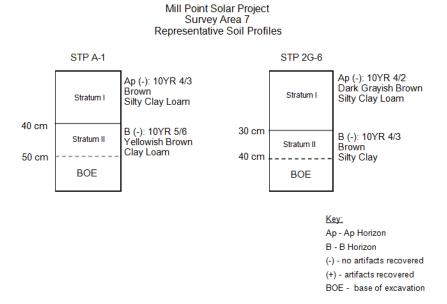


Figure 4-29. Representative soil profiles – Survey Area 7.



Figure 4-30. Map of Phase IB archaeological sensitivity – Survey Area 7.

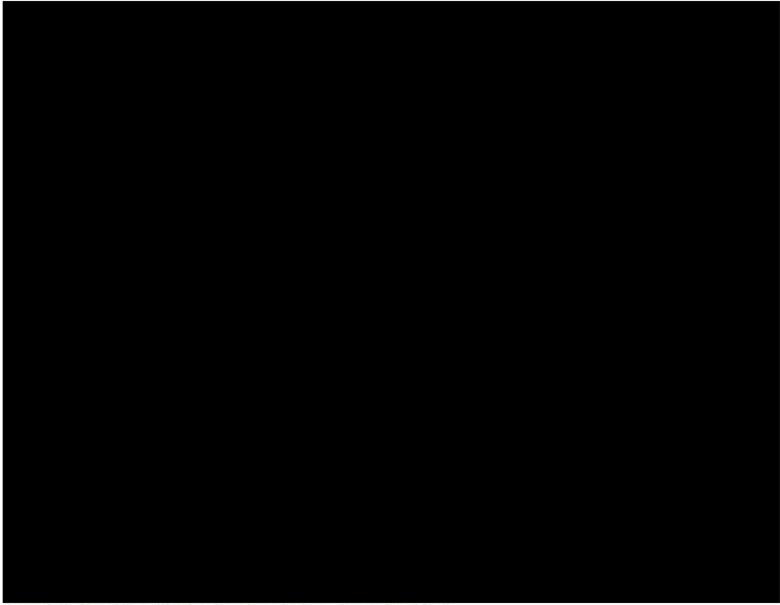


Figure 4-31. Map of Phase IB archaeological investigations – Survey Area / North.



# **SURVEY AREA 8**

Survey Area 8 (SA 8) consists of an approximately 85-ac parcel located west of Auriesville Road in the east-central portion of the Study Area (Figure 4-1). The parcel is bounded by Ingersoll Road along its western margin and a utility line corridor along its northern margin. The central section is characterized by agricultural fields which were recently harvested and formerly planted in corn at the time of survey. Forested areas are located along field margins in the north-central, south-central, and western portions (Figure 4-33).



Figure 4-33. Overview photo - Survey Area 8, facing East.

Topography within SA 8 generally consists of a gently undulating plain with elevations ranging

from 430 ft amsl in the northeastern corner along NY-Auriesville Road, to 470 ft amsl in the central portion. The most distinctive landscape feature in SA 8 is Auries Creek near its western margins, which forms a travel corridor connecting the upland plains of Montgomery County to the Mohawk River Valley. The drainage crosses the eastern and northern boundaries of SA 8, trending north toward the Mohawk

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(Figure 4-36). If project plans are modified to impact the concentration of historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 8 consisted of a 25 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay overlying a B horizon of a dark reddish gray (5YR 4/2) clay to a depth of 40 cmbs (Figure 4-34: STP A-1). Another typical soil profile in SA 8 consisted of a 27 cm Ap horizon of dark yellowish brown (10YR 4/4) clay overlying a B horizon of a dark yellowish brown (10YR 4/6) clay to a depth of 40 cmbs (Figure 4-34: STP C-6).

BOE - base of excavation

Phase IB testing in SA 8 included the excavation of 287 STPs. An additional 21 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-36).

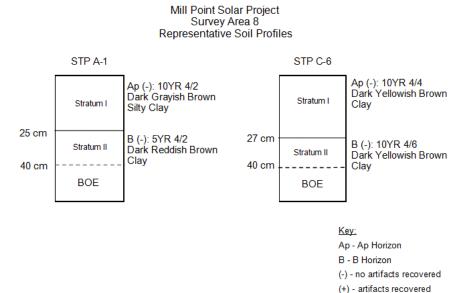


Figure 4-34. Representative soil profiles – Survey Area 8.



Figure 4-35. Map of Phase IB archaeological sensitivity – Survey Area 8.



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### **SURVEY AREA 9**

Survey Area 9 (SA 9) consists of an approximately 312-ac parcel located north of Mill Point Road in the east-central portion of the Study Area (Figure 4-1). The parcel is bounded by Auriesville Road along its western margin and Egelston Road its eastern margin. The northern section is characterized by agricultural fields which were recently harvested and formerly planted in corn at the time of survey. SA 9 also consists of fallow agricultural fields in the southern section of testing bounded by wooded margins (Figure 4-37).



Figure 4-37. Overview photo - Survey Area 9, facing North.

Topography within SA 9 is comprised of a gradually sloping plain, trending roughly from the southwest to northeast, toward a series of unnamed, intermittent streams. Elevations range from 720 ft amsl in the southwestern corner along Auriesville Road, to 415 ft amsl in the northeastern portion. The most distinctive landscape features in SA 9 are two intermittent streams which diverge from a single source in the southeastern section. These drainages cross the eastern and southern boundaries of SA 9, trending west and south where they diminish just outside the parcel boundary.

[Figure 4-39]. If project plans are modified to impact the concentration of historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 9 consisted of a 35 cm Ap horizon of dark brown (10YR 3/3) silty clay overlying a B horizon of a dark yellowish brown (10YR 4/4) silty clay loam to a depth of 45 cmbs (Figure 4-38: STP B-2). Another typical soil profile in SA 9 consisted of a 35 cm Ap horizon of very dark brown (10YR 2/2)

clay loam overlying a B horizon of a dark yellowish brown (10YR 3/4) silty clay to a depth of 45 cmbs (Figure 4-38: STP P-7).

Phase IB testing in SA 9 included the excavation of 371 STPs and systematic surface survey of 34.62 acres. An additional ten STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

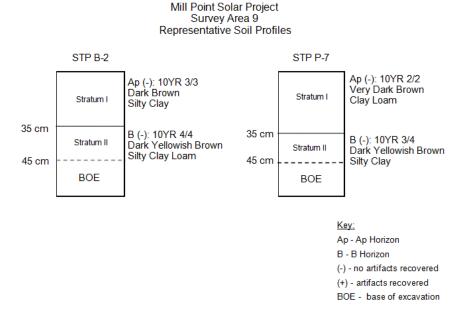


Figure 4-38. Representative soil profiles – Survey Area 9.

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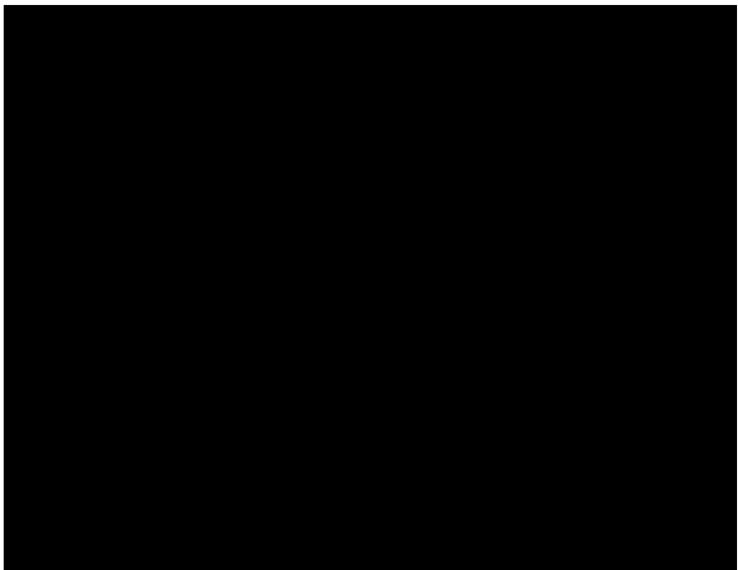


Figure 4-40. Map of Phase IB archaeological investigations – Survey Area 9.

## **SURVEY AREA 10**

Survey Area 10 (SA 10) consists of an approximately 430-ac parcel located west of Hall Road in the southwestern portion of the Study Area (Figure 4-1). The parcel is bounded by Lansing Road along its northern margin and Pryne Road along its southern margin. The eastern section is characterized by agricultural fields which were recently harvested and formerly planted in corn or hay at the time of survey. The western section SA 10 consists of fallow agricultural fields where field grasses and underbrush predominate (Figure 4-41).



Figure 4-41. Overview photo – Survey Area 10, facing Northeast.

Topography within SA 10 consists of a small

knoll in the northeast corner which gently slopes toward the southwest and a level, nearly featureless plain which encompasses most of the parcel. Elevations range from 680 ft amsl in the northeastern corner along Hall Road, to 580 ft amsl in the west-central portion. The most distinctive landscape feature in SA 10 is the unnamed tributary of Auries Creek which bisects the parcel, running roughly east to west.

(Figure 4-43). If project plans are modified to impact the concentration of historic structures identified above, additional fieldwork would be required.

A typical soil profile in SA 10 consisted of a 32 cm Ap horizon of dark brown (10YR 3/3) silty loam overlying a B horizon of a dark grayish brown (10YR 4/2) silty clay to a depth of 42 cmbs (Figure 4-42: STP R-10). Another typical soil profile in SA 10 consisted of a 30 cm Ap horizon of brown (10YR 4/3) silty clay loam overlying a B horizon of a dark yellowish brown (10YR 4/6) silty clay to a depth of 43 cmbs (Figure 4-42: STP 2F-10).

Phase IB testing in SA 10 included the excavation of 1,652 STPs and 23.4 acres of systematic surface survey. An additional 212 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

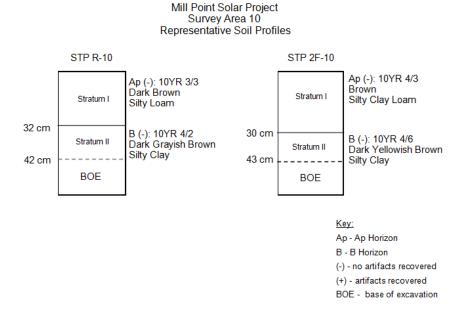


Figure 4-42. Representative soil profiles – Survey Area 10.







Figure 4-45. Map of Phase IB archaeological investigation – Survey Area 10 West.

## **SURVEY AREA 11**

Survey Area 11 (SA 11) consists of an approximately 191-ac parcel located west of Hall Road in the southwestern portion of the Study Area (Figure 4-1). The parcel is bounded by Pryne Road along its northern margin and Logtown Road along its southern margin. SA 11 is characterized by agricultural fields which were recently harvested and formerly planted in corn or hay and at the time of survey (Figure 4-46).

Topography within SA 11 consists of a small, wooded knoll in the southwestern corner which gently slopes toward the Figure 4-46. Overview photo - Survey Area 11, facing northeast and a plain which encompasses most of the parcel. Elevations range

identified above, additional fieldwork would be required.



Northwest.

from 770 ft amsl in the southwestern, forested corner, to 580 ft amsl in the southeastern portion along Auries Creek. The most distinctive landscape feature in SA 11 is Auries Creek, which forms a travel corridor connecting the upland plains of Montgomery County to the Mohawk River Valley. The drainage forms a significant portion of the southern boundary of the parcel, running roughly east to west and briefly crossing into SA 11.

(Figure 4-49). If project plans are modified to impact the concentration of historic structures

A typical soil profile in SA 11 consisted of a 40 cm Ap horizon of dark brown (10YR 3/3) sandy loam overlying a B horizon of a dark yellowish brown (10YR 4/4) silty loam to a depth of 50 cmbs (Figure 4-47: STP J-1). Another typical soil profile in SA 11 consisted of a 21 cm Ap horizon of dark grayish brown (10YR 4/2) clay loam overlying a B horizon of a brown (10YR 4/3) clay loam to a depth of 43 cmbs (Figure 4-47: STP JG-1).

Phase IB testing in SA 11 included the excavation of 33 STPs and 25.9 acres of systematic surface survey. An additional 26 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

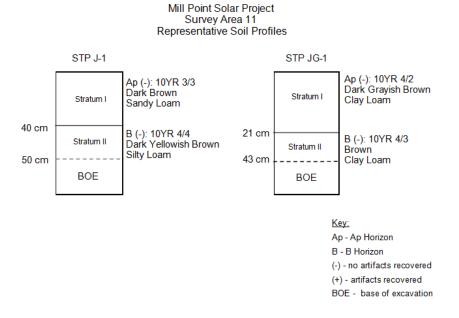


Figure 4-47. Representative soil profiles – Survey Area 11.



Figure 4-48. Map of Phase IB archaeological sensitivity – Survey Area 11.



### **SURVEY AREA 12**

Survey Area 12 (SA 12) consists of an approximately 184-ac parcel located south of Logtown Road in the south-central portion of the Study Area (Figure 4-1). The parcel is bounded by Hall Road along its western margin and Auries Creek along its eastern and southern margins. SA 12 is characterized by a series of agricultural fields which were recently harvested and formerly planted in corn or fallow at the time of survey (Figure 4-50).

Topography within SA 12 is comprised of a drainage flanked by two knolls in the northern and southern Figure 4-50. Overview photo – Survey Area 12, sections which gently slope roughly north to south facing Northeast.



toward the central stream bed. Elevations range from 620 ft amsl in the northwestern corner along Hall Road, to 560 ft amsl along the drainage in the central portion. The most distinctive landscape features within SA 12 are three streams which diverge from a central point near the eastern parcel boundary. Two of these drainages form the northern boundary and southern boundaries of the parcel, while the third bisects SA 12 flowing roughly east to west

SA 12 Howing roughly east to west.		

A typical soil profile in SA 12 consisted of a 35 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a B horizon of a yellowish brown (10YR 5/6) silty loam to a depth of 45 cmbs (Figure 4-51: STP F-3). Another typical soil profile in SA 12 consisted of a 35 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a B horizon of a yellowish brown (10YR 5/4) silty clay to a depth of 45 cmbs (Figure 4-51: STP S-6).

Phase IB testing in SA 12 included the excavation of 381 STPs and 62.7 acres of systematic surface survey. An additional 55 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

## Mill Point Solar Project Survey Area 12 Representative Soil Profiles

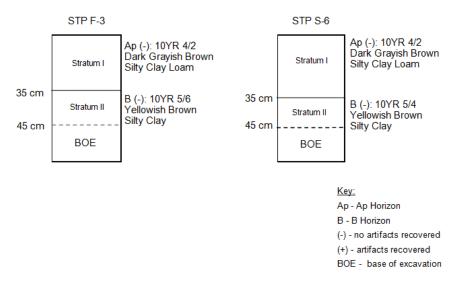


Figure 4-51. Representative soil profiles – Survey Area 12.





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### **SURVEY AREA 13**

Survey Area 13 (SA 13) consists of an approximately 128-ac parcel located east of Hall Road in the south-central portion of the Study Area (Figure 4-1). The parcel is bounded by Logtown Road along its northern margin and an unnamed stream tributary of Auries Creek along its eastern margin. The eastern section is characterized by agricultural fields recently harvested hay at the time of survey. Vegetation in the western section is comprised of a fallow agricultural field where field grasses and underbrush predominate (Figure 4-54).

(Figure 4-55: STP H-1).



Figure 4-54. Overview photo – Survey Area 13, facing East.

Topography within SA 13 consists of a gradually sloping plain, trending roughly southwest to northeast, toward the stream which forms the eastern boundary of the parcel. Elevations range from 730 ft amsl atop the small knoll in the southwestern corner, to 570 ft amsl along the drainage in the northeastern portion. The most distinctive landscape feature in SA 13 is the unnamed drainage along the eastern margin which diverges from Auries Creek north of the parcel. Like Auries Creek, its tributaries form travel corridors connecting the upland plains of present-day Montgomery County to the Mohawk River Valley.

A typical soil profile in SA 13 consisted of a 30 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a B horizon of a yellowish brown (10YR 5/4) silty clay to a depth of 40 cmbs (Figure 4-55: STP 3D-2). Another typical soil profile in SA 13 consisted of a 20 cm Ap horizon of dark grayish brown (10YR 4/2) silty loam overlying a B horizon of a gray (10YR 5/1) silty clay loam to a depth of 33 cmbs

Phase IB testing in SA 13 included the excavation of 711 STPs. An additional 53 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-57).

### Mill Point Solar Project Survey Area 13 Representative Soil Profiles

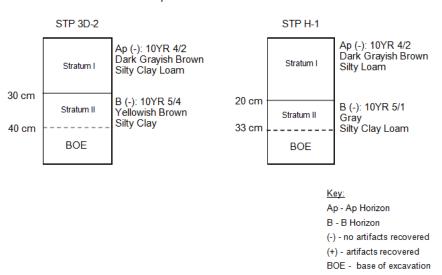


Figure 4-55. Representative soil profiles – Survey Area 13.

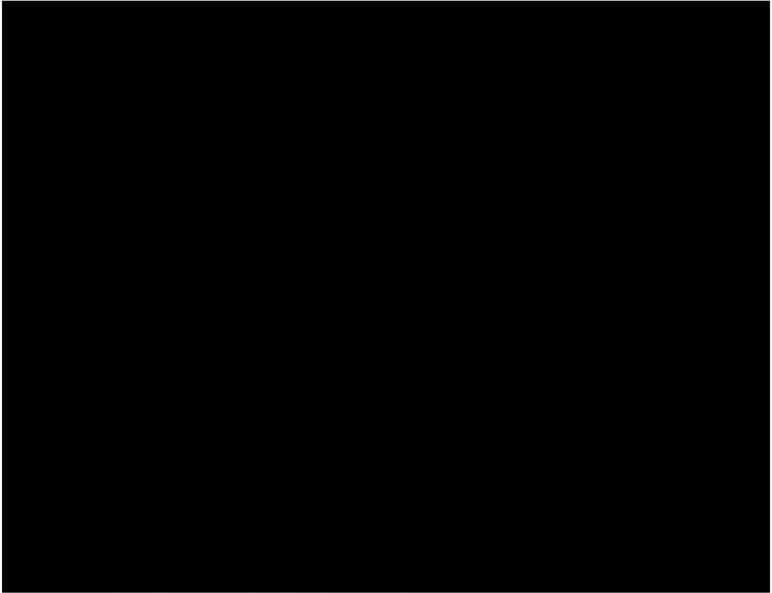


Figure 4-56. Map of Phase IB archaeological sensitivity – Survey Area 13.

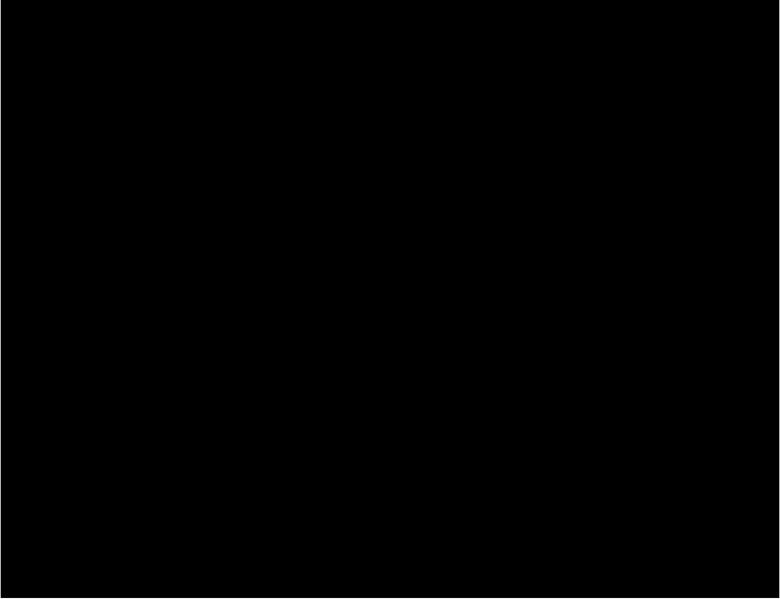


Figure 4-57. Map of Phase IB archaeological investigations – Survey Area 13.

### **SURVEY AREA 14**

Survey Area 14 (SA 14) consists of an approximately 242-ac parcel located approximately 800 meters south of the Mohawk River in the northeastern portion of the Study Area (Figure 4-1). The parcel is bounded by Auries Creek along its northeastern margin, while Ingersoll Road comprises the northwestern margin before bisecting the parcel, shifting eastward, and bounding the southeastern margin. The eastern and south-central portions of SA 14 are comprised of agricultural fields which were recently harvested and formerly planted in corn at the time of survey. Forested zones in SA 14 form a perimeter around agricultural



Figure 4-58. Overview photo – Survey Area 14, facing North.

fields and predominate in the northern and central portions (Figure 4-58).

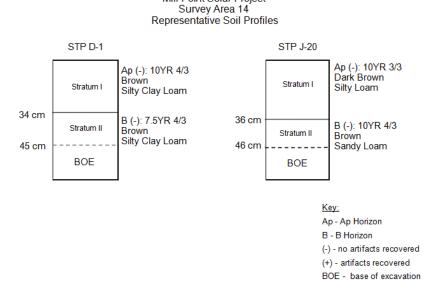
toward Auries Creek in the northeast. Elevations range from 480 ft amsl in the southwestern portion along Ingersoll Road, to 300 ft amsl in the northeastern portion along Auries Creek. The most distinctive landscape features in SA 14 are Auries Creek and the two stream tributaries which diverge from its course in the northern portion of the parcel. The flow of Auries Creek has produced a level floodplain in the northeastern corner of SA 14 and forms a travel corridor which connects the Mohawk River Valley to the upland hills of present-day Montgomery County.

Topography within SA 14 consists of a gently sloping plain, trending roughly southwest to northeast,

A typical soil profile in SA 14 consisted of a 34 cm Ap horizon of brown (10YR 4/3) silty clay loam overlying a B horizon of a brown (7.5YR 4/3) silty clay loam to a depth of 45 cmbs (Figure 4-59: STP D-1). Another typical soil profile in SA 14 consisted of a 36 cm Ap horizon of dark brown (10YR 3/3) silty

loam overlying a B horizon of a brown (10YR 4/3) sandy loam to a depth of 46 cmbs (Figure 4-59: STP J-20).

Phase IB testing in SA 14 included the excavation of 249 STPs and 11.4 acres of systematic surface survey. An additional 239 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.



Mill Point Solar Project

Figure 4-59. Representative soil profiles – Survey Area 14.

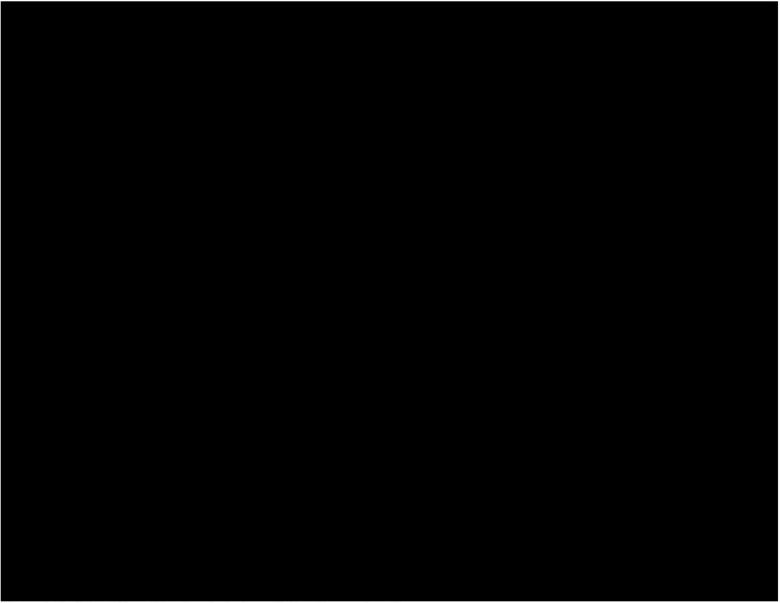


Figure 4-60. Map of Phase IB archaeological sensitivity – Survey Area 14.

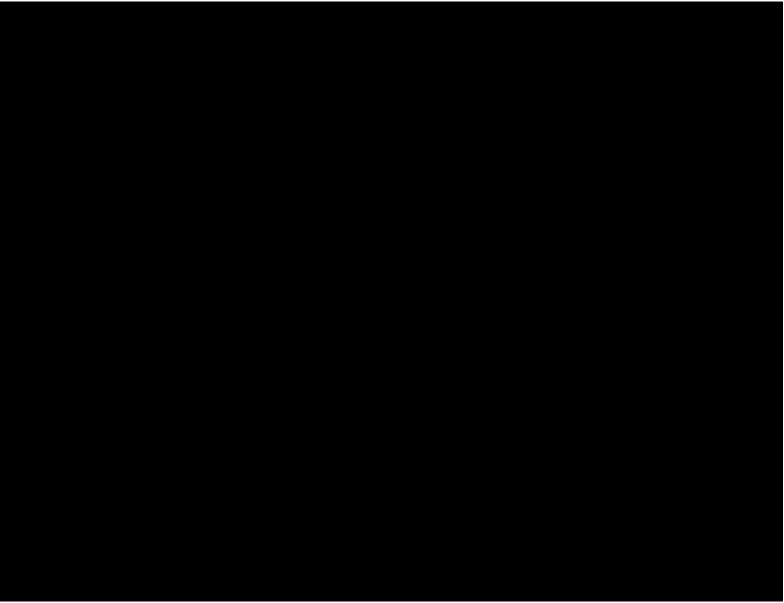


Figure 4-61. Map of Phase IB archaeological investigations – Survey Area 14.

### **SURVEY AREA 15**

Survey Area 15 (SA 15) consists of an approximately 146-ac parcel located south of the Mohawk River and NY-5S in the north-central portion of the Study Area (Figure 4-1). The parcel is bisected by Maple Avenue Road roughly north to south and bounded to the north by the Maple Avenue cemetery. The section west of Maple Avenue Road is characterized by agricultural fields recently harvested and formerly planted in hay at the time of survey. The eastern section is comprised of agricultural fields which were recently harvested and formerly planted in corn at the time of survey (Figure 4-62).



Figure 4-62. Overview photo – Survey Area 15, facing Southwest.

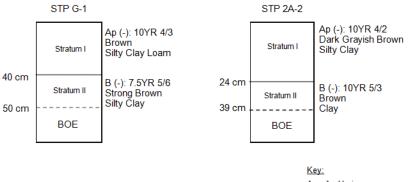
Topography within SA 15 consists of a gently sloping plain, trending roughly northwest to southeast, toward a small knoll in the northwestern corner. Elevations range from 455 ft amsl in the northwestern section atop the knoll, to 415 ft amsl in the southeastern section. The most distinctive landscape feature in SA 15 is an unnamed stream which follows along the northern boundary and shifts south, carving a meandering, roughly north to south course through the eastern section.

A typical soil profile in SA 15 consisted of a 40 cm Ap horizon of brown (10YR 4/3) silty clay loam overlying a B horizon of a strong brown (7.5YR 5/6) silty clay to a depth of 50 cmbs (Figure 4-63: STP G-1). Another typical soil profile in SA 15 consisted of a 24 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay overlying a B horizon of a brown (10YR 5/3) clay to a depth of 39 cmbs (Figure 4-63: STP 2A-2).

Phase IB testing in SA 15 included the excavation of 984 STPs and 26.4 acres of systematic surface survey.

An additional 50 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

### Mill Point Solar Project Survey Area 15 Representative Soil Profiles



Ap - Ap Horizon B - B Horizon

(-) - no artifacts recovered

(+) - artifacts recovered BOE - base of excavation

Figure 4-63. Representative soil profiles – Survey Area 15.





#### **SURVEY AREA 17**

Survey Area 17 (SA 17) consists of an approximately 56-ac parcel located south of the Mohawk River and NY-5S in the central portion of the Study Area (Figure 4-1). The parcel is east of Van Epps Road and is bounded on the northeast, northwest, and southwest by property divisions. The Survey Area is characterized by fallow agricultural fields with no crops planted at the time of survey (Figure 4-66).

Topography within SA 17 consists of a gently sloping plain, trending roughly west to east, toward a knoll in the western portion of the area. Elevations range from 585 ft amsl in the western section atop the knoll, to 530 ft amsl in



Figure 4-66. Overview photo – Survey Area 17, facing East.

the eastern section. The most distinctive landscape feature in SA 17 is an unnamed stream which follows along the southern boundary and shifts south, carving a roughly east to west course through the southern section.

A typical soil profile in SA 17 consisted of a 31 cm Ap horizon of dark yellowish brown (10YR 3/4) silty clay loam overlying a strong brown (10YR 4/6) silty clay loam B horizon to a depth of 41 cmbs (Figure 4-67: STP A-1). Another typical soil profile in SA 17 consisted of a 31 cmbs Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a dark gray (7.5YR 4/1) sandy clay loam B horizon to a depth of 41 cmbs (Figure 4-67: STP 3A-2).

Phase IB testing in SA 17 included the excavation of 345 STPs. An additional 17 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-69).

## Mill Point Solar Project Survey Area 17 Representative Soil Profiles

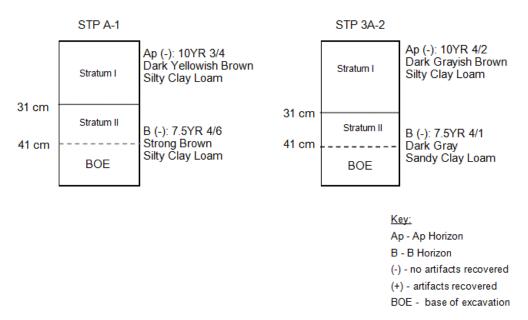


Figure 4-67. Representative soil profiles – Survey Area 17.

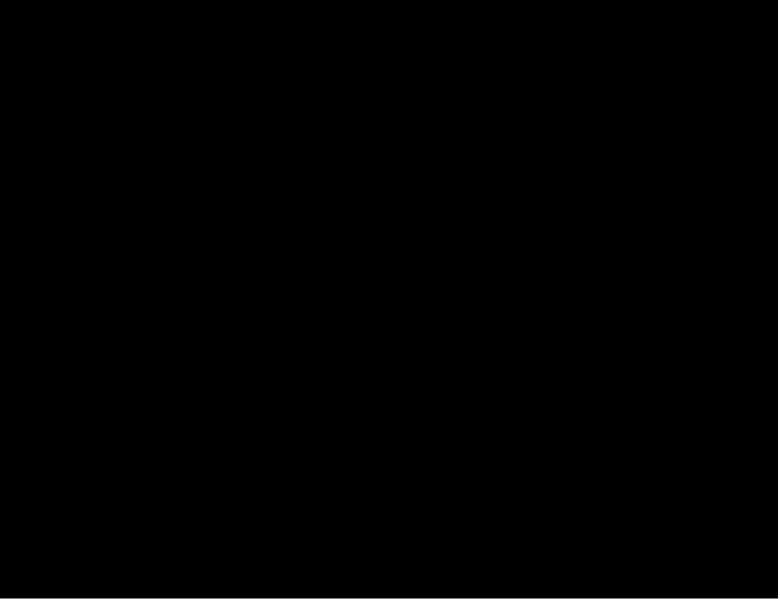
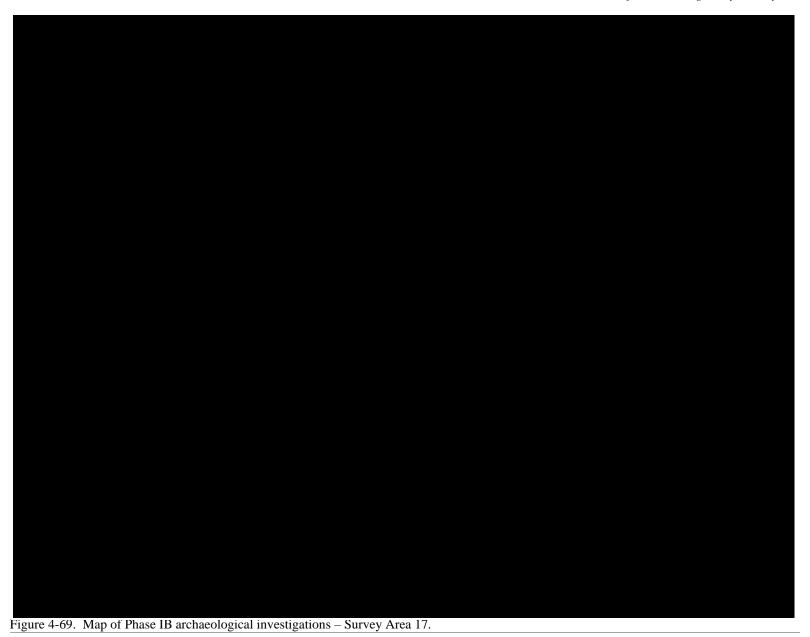


Figure 4-68. Map of Phase IB archaeological sensitivity – Survey Area 17.



#### **SURVEY AREA 18**

Survey Area 18 (SA 18) consists of an approximately 36-ac parcel located south of the Mohawk River and NY-5S in the central portion of the Study Area (Figure 4-1). The parcel is located north of Scott Road and east of Van Epps Road bounded to the west, north, and east by property divisions. The Survey Area is characterized by fallow agricultural fields with no crops planted at the time of survey (Figure 4-70).

Topography within SA 18 consists of a gently sloping plain, trending roughly northwest to southeast, toward a knoll in the northwestern corner. Elevations range from 540 ft amsl in the



Figure 4-70. Overview photo – Survey Area 18, facing West.

northwestern section atop the knoll, to 490 ft amsl in the southeastern section. The most distinctive landscape feature in SA 18 is an unnamed stream which bisects the southern portion of the area, carving a roughly east to west course before turning south.

A typical soil profile in SA 18 consisted of a 33 cm Ap horizon of (10YR 3/3) silty clay loam overlying a brown (10YR 4/3) sandy clay loam B horizon to a depth of 43 cmbs (Figure 4-71: STP A-1). Another typical soil profile in SA 18 consisted of a 35 cm Ap horizon of brown (10YR 4/3) silty loam overlying a yellowish brown (10YR 5/6) silty loam B horizon to a depth of 45 cmbs (Figure 4-71: STP 5K-1).

Phase IB testing in SA 18 included the excavation of 310 STPs. An additional 38 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

# Mill Point Solar Project Survey Area 18 Representative Soil Profiles

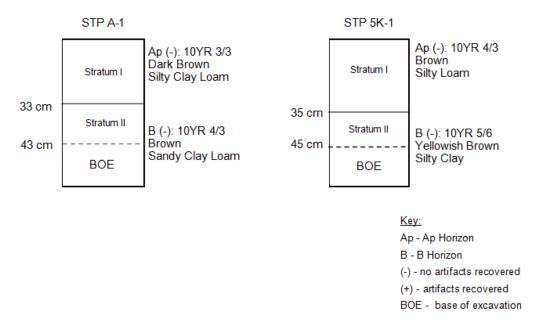


Figure 4-71. Representative soil profiles – Survey Area 18.



Figure 4-72. Map of Phase IB archaeological sensitivity – Survey Area 18.



Figure 4-73. Map of Phase IB archaeological investigations – Survey Area 18.

### **SURVEY AREA CL1**

Survey Area CL1 (SA CL1) is an approximately 26.2-ac segment of the Study Area lying on the east side of Mary's Lane, north and south of Lusso Road in the northern portion of the overall Study Area (Figure 4-1). SA CL1 is partially contained within SA2 and extends from its southern border to SA17. The Survey Area constitutes a 300 ft (91.4 m) corridor around a planned 1,250 m segment of collection line.

At the time of the survey, the Survey Area consisted of open agricultural fields, wooded areas, and low-lying wetlands adjacent to agricultural fields (Figure 4-74). Elevations in



Figure 4-74. Overview photo – Collection Line 1, facing East.

SA CL1 range from 553-606 ft amsl. No streams or drainages are present in SA CL1.

A typical soil profile in SA CL1 consisted of a 28 cm Ap horizon of brown (10YR 3/2) silty clay loam overlying a gray (7.5YR 5/1) silty clay loam B horizon to a depth of 40 cmbs (Figure 4-75: STP A-2). Another typical soil profile in SA CL1 consisted of a 40 cm Ap horizon of very dark yellowish brown (10YR 4/4) silty loam overlying a grayish brown (10YR 5/2) silty clay B horizon to a depth of 50 cmbs (Figure 4-75: STP 4E-2).

Phase IB testing in SA CL1 included the excavation of 159 STPs. An additional 43 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-77).

(-) - no artifacts recovered (+) - artifacts recovered BOE - base of excavation

# Mill Point Solar Project Collection Line 1 Representative Soil Profiles

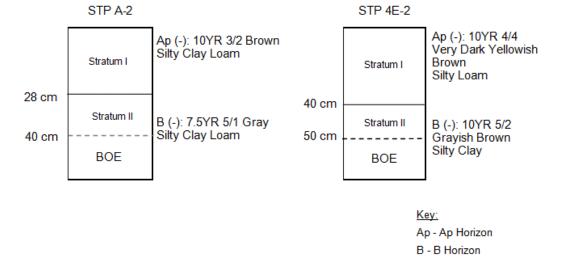


Figure 4-75. Representative soil profiles – Collection Line 1.



Figure 4-76. Map of Phase IB archaeological sensitivity – Collection Line 1.

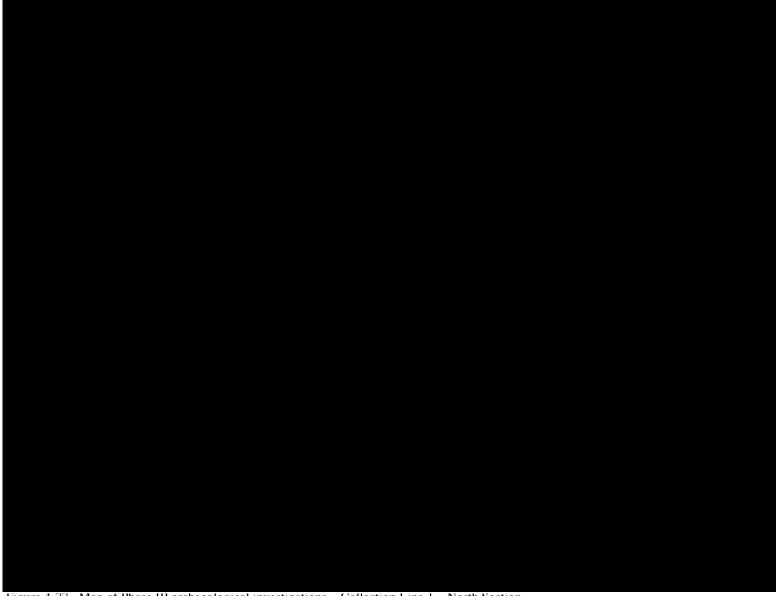


Figure 4-77. Map of Phase IB archaeological investigations – Collection Line 1 – North Section.



Figure 4-78. Map of Phase IB archaeological investigations – Collection Line 1 – South Section.

### **SURVEY AREA CL2**

Survey Area CL2 (SA CL2) is an approximately 15.1-ac segment of the Study Area lying on the south side of Scott Road, east and west of Van Epps Road in the north-central portion of the overall Study Area (Figure 4-1). SA CL2 is partially contained within SA 5 and extends from the southern border of SA 18 to the eastern border of SA 4. The Survey Area constitutes a 300 ft (91.4 m) corridor around a planned approximately 710 m segment of collection line.



Figure 4-79. Overview photo – Collection Line 2, facing North.

At the time of the survey, the Survey Area consisted of open agricultural fields and low-lying wetlands adjacent to agricultural fields. Elevations in SA CL2 range from 489-534 ft amsl. An unnamed stream traverses east-west through the central portion of the Survey Area.

A typical soil profile in SA CL2 consisted of a 33 cm Ap horizon of dark brown (10YR 3/3) silty clay loam overlying a gray (7.5YR 5/1) silty clay loam B horizon to a depth of 42 cmbs (Figure 4-80: STP A-2). A typical soil profile in SA CL2 consisted of a 33 cm Ap horizon of dark brown (10YR 3/3) silty clay loam overlying a gray (7.5YR 5/1) silty clay loam B horizon to a depth of 42 cmbs (Figure 4-80: STP 2A-2).

Phase IB testing in SA CL2 included the excavation of 93 STPs. An additional 29 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

### Mill Point Solar Project Collection Line 2 Representative Soil Profiles

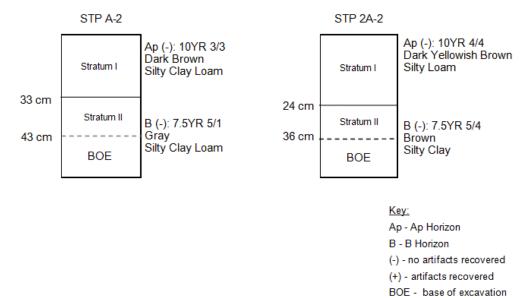


Figure 4-80. Representative soil profiles – Collection Line 2.





Figure 4-82. Map of Phase IB archaeological investigations – Collection Line 2.

#### **SURVEY AREA CL3**

Survey Area CL3 (SA CL3) approximately 96-ac segment of the Study Area lying on the north side of Argersinger Road, west of Borden Road and Fisher Road in the west-central portion of the overall Study Area (Figure 4-1). SA CL3 is located west of SA 4's western boundary and north of SA 10's northern boundary. The Survey Area constitutes a 300-ft (91.4 m) corridor around a planned approx. 1,907 m segment of collection line. An associated planned access road corridor connecting the collection line to Argersinger Road was also examined.



Figure 4-83. Overview photo – Collection Line 3, facing Northeast.

At the time of the survey, the Survey Area consisted of open agricultural fields, wooded field margins, and low-lying wetlands adjacent to agricultural fields. Elevations in SA CL3 range from 522-565 ft amsl. Van Wie Creek is located approximately 125m north and west of the Survey Area.

A typical soil profile in SA CL3 consisted of a 30 cm Ap horizon of dark brown (10YR 3/3) silty loam overlying a grayish brown (10YR 5/2) silty clay B horizon to a depth of 40 cmbs (Figure 4-84:STP A-1). Another typical soil profile in SA CL3 consisted of a 30 cm Ap horizon of dark yellowish brown (10YR 4/4) silty loam overlying a grayish brown (10YR 5/2) silty loam B horizon to a depth of 40 cmbs (Figure 4-84:STP 2I-4).

Phase IB testing in SA CL3 included the excavation of 190 STPs. An additional 83 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-86).

# Mill Point Solar Project Collection Line 3 Representative Soil Profiles

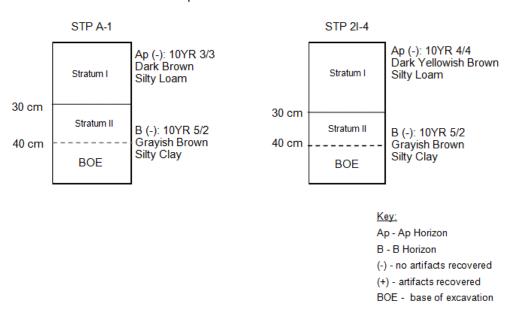


Figure 4-84. Representative soil profiles – Collection Line 3.



Figure 4-85. Map of Phase IB archaeological sensitivity – Collection Line 3



Figure 4-86. Map of Phase IB archaeological investigations – Collection Line 3.

#### SURVEY AREA CL4

Survey Area CL4 (SA CL4) is an approximately 5-ac segment of the Study Area located north of Pryne Road and south of Lansing Road in the southwestern portion of the overall Study Area (Figure 4-1). SA CL4 is entirely contained within SA10. The Survey Area constitutes a 300-ft (91.4 m) corridor around a planned 100 m segment of collection line.

At the time of the survey, the Survey Area consisted of open agricultural fields and wooded field margin (Figure 4-87). Elevations in CL4 range from 571-581 ft amsl. No streams or drainages are present in SA CL4.



Figure 4-87. Overview photo – Collection Line 4, facing North.

A typical soil profile in SA CL4 consisted of a 29 cm Ap horizon of grayish brown (10YR 5/2) silty clay loam overlying a weak red (2.5YR 4/2) silty clay B horizon to a depth of 39 cmbs (Figure 4-88: STP A-1). Another typical soil profile in SA CL4 consisted of a 27 cm Ap horizon of dark yellowish brown (10YR 4/4) silty loam overlying a grayish brown (10YR 5/2) silty clay B horizon to a depth of 40 cmbs (Figure 4-88: STP L-1).

Phase IB testing in SA CL4 included the excavation of 89 STPs. An additional nine STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

## Mill Point Solar Project Collection Line 4 Representative Soil Profiles

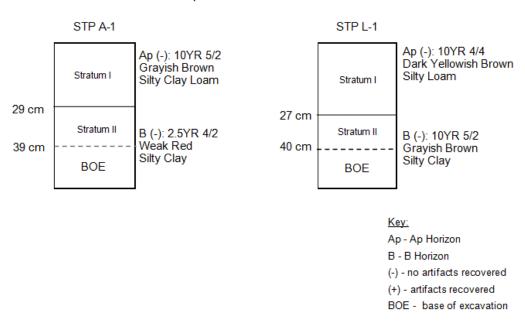


Figure 4-88. Representative soil profiles – Collection Line 4.





### **SURVEY AREA CL5**

Survey Area CL5 (SA CL5) is an approximately 6-ac segment of the Study Area lying on the north and south sides of Logtown Road east of Hyney Hill Road and west of Olmstead Road in the southern portion of the overall Study Area (Figure 4-1). SA CL5 is partially contained within SA13 and extends from SA12 to the north across Logtown Road into the northeast corner of SA13. The Survey Area constitutes a 300-ft (91.4 m) corridor around a planned 320 m segment of collection line.



Figure 4-91. Overview photo – Collection Line 5, facing East.

At the time of the survey, the Survey Area consisted of open agricultural fields, wooded areas, low-lying wetlands adjacent to agricultural fields, and a previously disturbed area associated with a standing structure. Elevations in SA CL5 range from 561-587 ft amsl. An unnamed stream crosses southeast-northwest through the northern portion of the Survey Area.

A typical soil profile in SA CL5 consisted of a 40 cm Ap horizon of dark yellowish brown (10YR 4/4) silty clay loam overlying a brown (7.5YR 4/4) silty clay loam B horizon to a depth of 50 cmbs (Figure 4-92: STP 2B-2). Another typical soil profile in SA CL5 consisted of a 30 cm Ap horizon of dark yellowish brown (10YR 4/4) silty loam overlying a brown (7.5YR 4/4) silty clay loam B horizon to a depth of 40 cmbs (Figure 4-92: STP 2-H10).

Phase IB testing in SA CL5 included the excavation of 50 STPs. An additional 26 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-94).

# Mill Point Solar Project Collection Line 5 Representative Soil Profiles

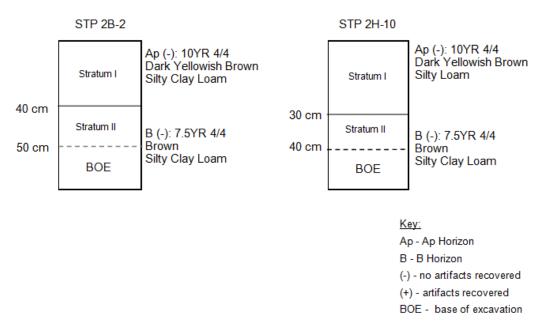


Figure 4-92. Representative soil profiles – Collection Line 5.





Figure 4-94. Map of Phase IB archaeological investigations – Collection Line 5.

### SURVEY AREA CL6

Survey Area CL6 (SA CL6) is an approximately 9-ac segment of the Study Area lying on the west side of Van Epps Road south of Argersinger Road and north of Ingersoll Road in the central portion of the overall Study Area (Figure 4-1). SA CL6 is entirely contained within SA3 and extends east to Van Epps Road. The Survey Area constitutes a 300-ft (91.4 m) corridor around a planned 385 m segment of collection line.



Figure 4-95. Overview photo – Collection Line 6, facing Northeast.

At the time of the survey, the Survey Area consisted of open agricultural fields and a wooded field margin. Elevations in SA CL6 range from 565-605 ft amsl. An unnamed stream is located south of the Survey Area.

A typical soil profile in SA CL6 consisted of a 39 cm Ap horizon of dark yellowish brown (10YR 4/4) silty clay loam overlying a light brownish gray (10YR 6/2) silty clay loam B horizon to a depth of 51 cmbs (Figure 4-96: STP B-2). Another typical soil profile in SA CL6 consisted of a 40 cm Ap horizon of dark yellowish brown (10YR 4/4) silty loam overlying a brown (10YR 3/2) silty clay B horizon to a depth of 50 cmbs (Figure 4-96: STP D-8).

Phase IB testing in SA CL6 included the excavation of 97 STPs. An additional eight STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-98).

# Mill Point Solar Project Collection Line 6 Representative Soil Profiles

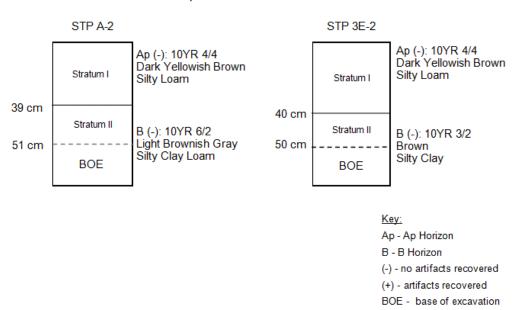


Figure 4-96. Representative soil profiles – Collection Line 6.



Figure 4-97. Map of Phase IB archaeological sensitivity – Collection Line 6.



Figure 4-98. Map of Phase IB archaeological investigations – Collection Line 6.

#### SURVEY AREA CL7

Survey Area CL7 (SA CL7) is an approximately 16-ac segment of the Study Area lying on the north and south side of Ingersoll Road east of State Highway 30A in the northeastern portion of the overall Study Area (Figure 4-1). SA CL7 is partially contained within SAs 8 and 14, extending south from SA14 across Ingersoll Road to Auries Creek and picking back up south of the power line corridor on the south bank of the Creek. The Survey Area constitutes a 300-ft (91.4 m) corridor around a planned 350 m segment of collection line.



Figure 4-99. Overview photo – Collection Line 7, facing East.

At the time of the survey, the Survey Area consisted of open agricultural fields,

wooded areas, and low-lying wetlands adjacent to Auries Creek (Figure 4-99). Elevations in SA CL7 range from 377-503 ft amsl. Auries Creek bisects the Survey Area east-west into two separate sections.

A typical soil profile in SA CL7 consisted of a 49 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a grayish brown (10YR 5/2) silty clay loam B horizon to a depth 61 cmbs (Figure 4-100: STP B-2). Another typical soil profile in SA CL7 consisted of a 25 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay loam overlying a yellowish brown (10YR 5/4) silty clay B horizon to a depth of 37 cmbs (Figure 4-100: STP D-8).

Phase IB testing in SA CL7 included the excavation of 62 STPs and 2.5 acres of systematic surface survey.

## Mill Point Solar Project Collection Line 7 Representative Soil Profiles

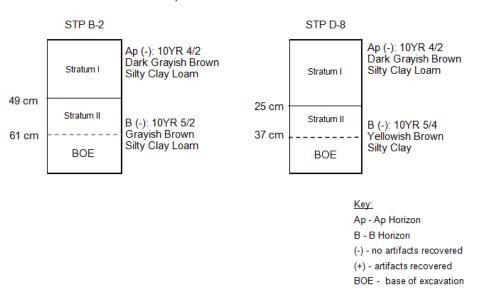


Figure 4-100. Representative soil profiles – Collection Line 7.



Figure 4-101. Map of Phase IB archaeological sensitivity – Collection Line 7.

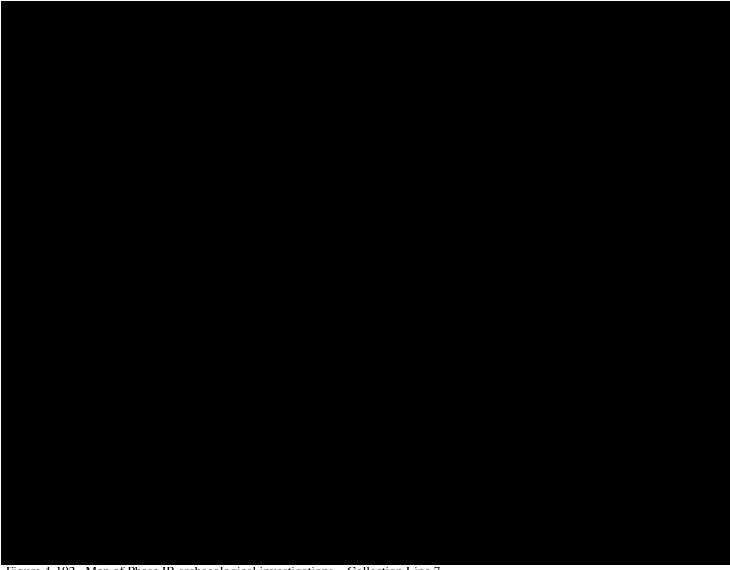


Figure 4-102. Map of Phase IB archaeological investigations – Collection Line 7.

## **SURVEY AREA CL8**

Survey Area CL8 (SA CL8) is an approximately 51-ac portion of the Study Area in two separate segments. The northern segment is located immediately south of Argersinger Road and extends from Survey Area 5 west across Van Epps Road into Survey Area 3. The southern segment is located immediately east of Van Epps Road and extends from the road through Survey Area 6 to Auries Creek in the east. SA CL8 is located in the central portion of the overall Study Area (Figure 4-1). SA CL8 is contained entirely



Figure 4-103. Overview photo – Collection Line 8, facing Northeast.

within SAs 3, 5, and 6. The Survey Area constitutes a 300-ft (91.4 m) corridor around a two planned collection line segments totaling 2,520 m.

At the time of the survey, the Survey Area consisted of open agricultural fields, wooded areas, and low-lying wetlands adjacent to Auries Creek. Elevations in SA CL8 range from 440-625 ft amsl. Auries Creek forms the eastern boundary of the southern segment of SA CL8.

A typical soil profile in SA CL8 consisted of a 30 cm Ap horizon of dark yellowish brown (10YR 4/4) silty loam overlying a brown (7.5YR 5/4) silty loam B horizon to a depth of 40 cmbs (Figure 4-104: STP A-1). Another typical soil profile in SA CL8 consisted of a 32 cm Ap horizon of dark brown (10YR 3/3) silty clay loam overlying a dark yellowish brown (10YR 4/4) silty clay loam B horizon to a depth of 45 cmbs (Figure 4-104: STP 2H-1).

Phase IB testing in SA CL8 included the excavation of 100 STPs. An additional 28 STPs were not excavated due to inundated soils, previous ground disturbance, or steep slope.

(Figure 4-106).

## Mill Point Solar Project Collection Line 8 Representative Soil Profiles

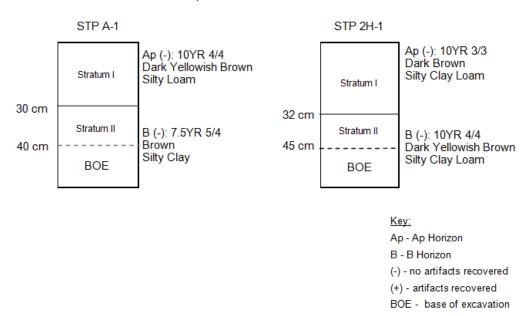


Figure 4-104. Representative soil profiles – Collection Line 8.





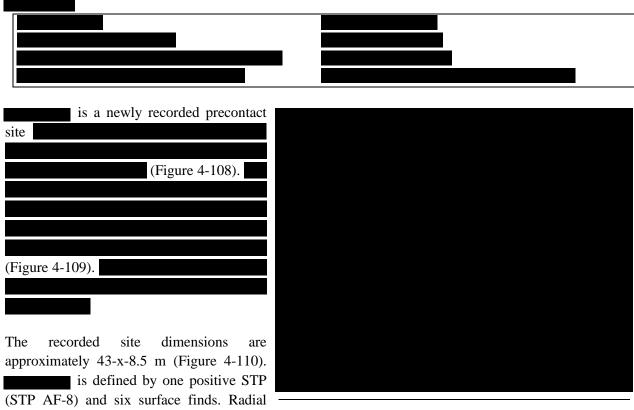


Figure 4-107. Map of Phase IB archaeological investigations – Collection Line 8 – South Section.

he Phase IB archaeolo	ogical survey resulted in	n the identification	n of	
		(Figure 4-108).	These sites are dis	scussed and mapped
rther detail within the	Newly Recorded Resour			
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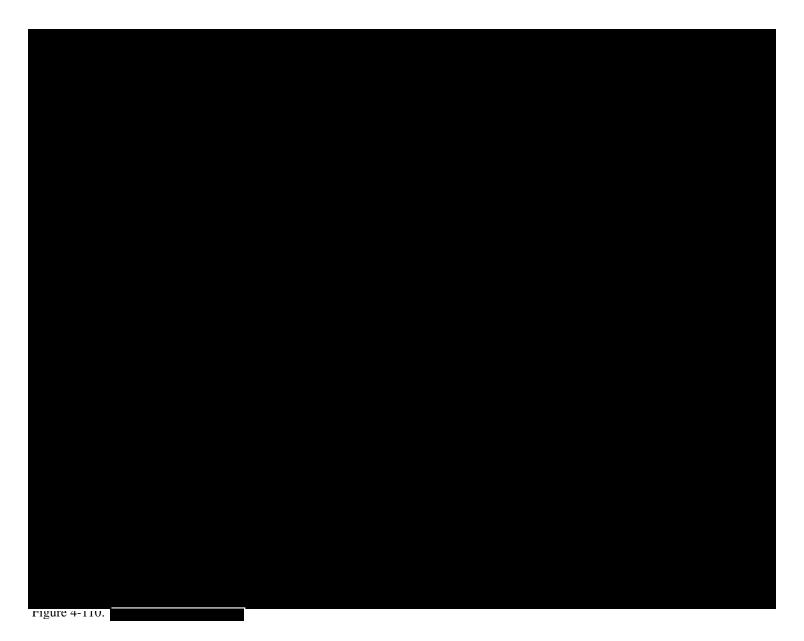


Figure 4-108. Newly Recorded Archaeological Sites.



STPs were excavated at 1 m and 3 m intervals in four cardinal directions of the original positive STP. A typical soil profile consisted of a 38 cm Ap horizon of dark grayish brown (10YR 4/2) silty clay overlying a B horizon of a light yellowish brown (10YR 6/4) silty clay to a depth of 48 cmbs (Figure 4-112: STP AF-8). Artifacts were recovered from the ground surface or Stratum I.

In total, eleven precontact lithic artifacts were recovered from one STP and five surface finds within (Figure 4-110). Identified artifacts include eleven flake fragments (n=9). One is a proximal, fine-grained, chert biface thinning flake (Figure 4-111). is is interpreted as a low-density precontact lithic scatter of unknown temporal affiliation. The site context likely represents a limited-use, and likely seasonal, subsistence-related activity area.



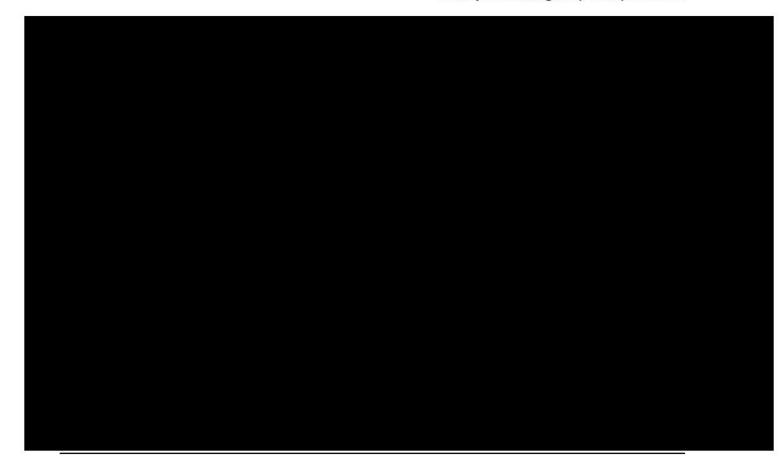
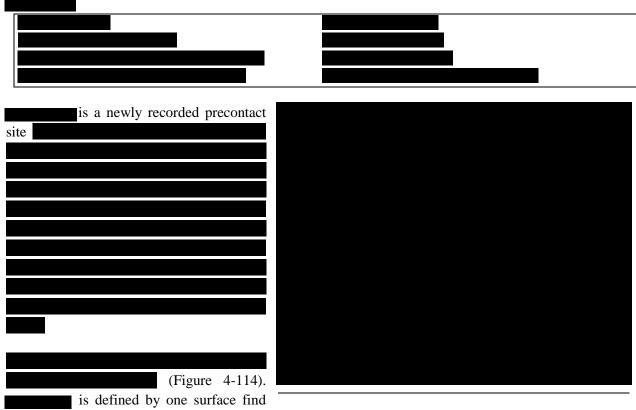




Figure 4-111. A) Black chert flake (3.3); B) Black chert flake fragment, proximal fragment (3.2); C) Gray chert flake fragment (3.1).



(SF1) and one positive radial STP (SF1 + 1mS). Radial STPs were excavated at 1 m and 3 m intervals in four cardinal directions of the original surface find. A typical soil profile consisted of a 32 cm Ap horizon of dark grayish brown (10YR 4/2) clay loam overlying a B horizon of a brown (10YR 4/3) clay to a depth of 42 cmbs (Figure 4-115: STP SF1+1mS). Artifacts were recovered from the ground surface or Stratum I.

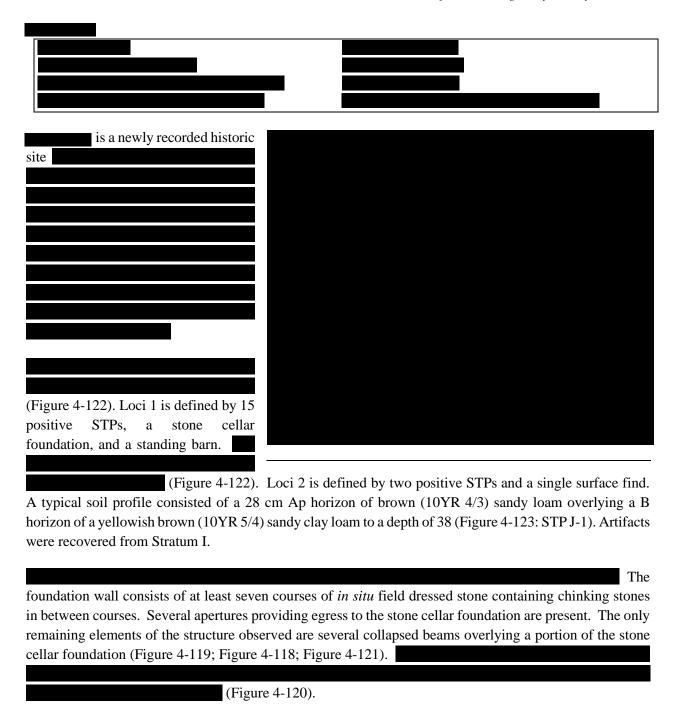
In total, two precontact lithic artifacts were recovered from one STP and one surface find within (Figure 4-114). Identified artifacts include one proximal, grey chert utilized flake fragment and one black chert piece of shatter with cortex (Figure 4-116). is interpreted as a low-density precontact lithic scatter of unknown temporal affiliation. The site context likely represents a limited-use, and likely seasonal, subsistence-related activity area.







Figure 4-116. A) Black chert shatter, with cortex (1.1); B) Gray chert utilized flake, proximal fragment (2.1).



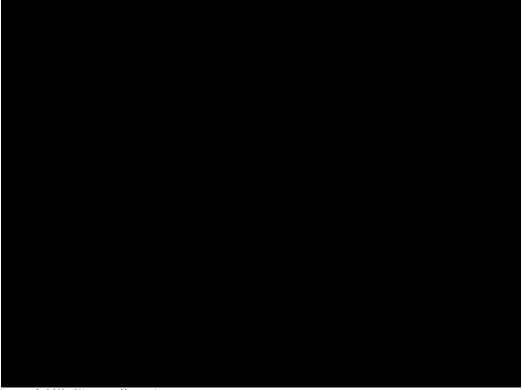


Figure 4-118. Stone cellar entrance.

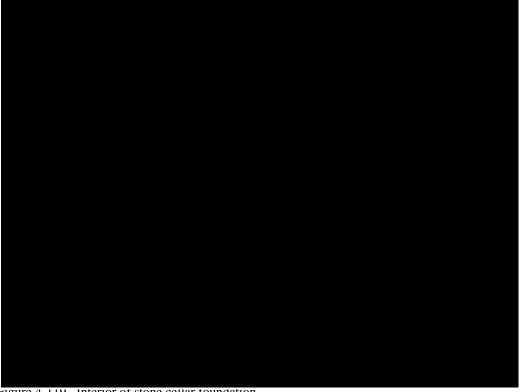


Figure 4-119. Interior of stone cellar foundation.

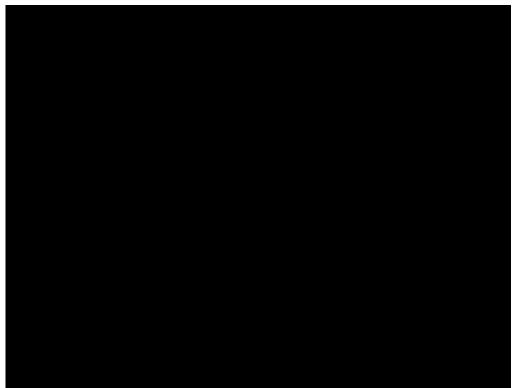


Figure 4-121. Stone cellar foundation wall.



Figure 4-120. Collapsing barn.

In total, 230 historic artifacts were recovered from surface survey and 15 STPs excavated with	in site
(Figure 4-122). Artifacts in the combined assemblages of	include 222
historic period artifacts, four (4) mineral artifacts, and four (4) modern pieces including rubber	and plastic.
Historic artifacts in, separated by functional group include 46 domestic	artifacts, 16
architectural artifacts, and six (6) miscellaneous artifacts.	

The domestic artifacts include 31 pieces of glass, 13 pieces of ceramic, one piece of metal, and one piece of leather. Identified glass include 24 pieces of container glass, five (5) pieces of bottle glass, one milk glass mason jar lid insert, and one milk glass jar bass from a J.R. Watkins cold cream jar (Figure 4-125). Identified ceramics include the following five (5) sherds of whiteware, three (3) sherds of pearlware, two (2) sherds of redware, one sherd of ironstone, one sherd of stoneware, and one sherd of Jackfield. Most of the whiteware sherds were undecorated (n=4) but one was decorated with blue transfer-print. The metal artifact is a mason jar lid, and the leather artifact is a shoe fragment that has holes on one side.

The architectural artifacts include 25 nails, five (5) brick fragments, and four (4) pieces of flat glass (aqua n=4). Identified nails include cut (n=5) and wire (n=1). The remaining nail was too corroded to be identified (n=1).

Miscellaneous artifacts recovered include five (5) pieces of unidentified iron and one 1902 one cent Indian head penny (n=1) (Figure 4-125). The organic artifacts include one fragment of avian bone and one unidentified bone fragment (n=2).

Historic artifacts in separated by functional group include 141 domestic artifacts, nine (9) miscellaneous artifacts, and eight (8) architectural artifacts.

The domestic artifacts include 88 pieces of ceramic, 50 pieces of glass, two (2) pieces of metal, and one piece of crystal. Identified ceramics include the following: 33 sherds of whiteware, 22 sherds of ironstone, 13 sherds of stoneware, eight (8) sherds of porcelain, five (5) sherds of pearlware, five (5) sherds of redware, and two (2) sherds of yellowware. Only eight (8) whiteware sherds were undecorated; no other decorations dominated the assemblage. Decoration types included aqua transfer-print in a botanical pattern, blue annular, blue decal in a floral pattern, blue edge molded, blue flow transfer, blue transfer-print, brown annular, green transfer-print, polychrome banded slip with black bands and a blue body, polychrome decal decorated, polychrome hand painted, polychrome slip decorated, and red transfer-print. One ironstone base fragment has a partial makers mark 'JOHN V...TREN...B' and was produced by John Venables & Co. at Trent Pottery in Burslem (The Potteries 2022a) (Figure 4-126).

Another ironstone base fragment has a partial makers mark 'W...B...STO...FENTON' and was produced by W. Baker and Co. Stone China Fenton (The Potteries 2022b) (Figure 4-126). Identified glass include 22 pieces of bottle glass, 18 pieces of container glass, four (4) piece of tableware, three (3) pieces of milk glass cap fragments, one clear glass jar rim, and one aqua glass lid from a Millville atmospheric fruit jar (Figure 4-128). The piece of crystal is round and similar to a knob or stopper. The metal artifacts include a spoon (n=1) and a green patina single-framed square buckle with scalloped edges and one pin (n=1) (Figure 4-130).

The architectural artifacts include four (4) brick fragments, two (2) pieces of flat glass (aqua n=2), and two (2) insulators – one brown glazed ceramic and one porcelain attached to a metal bracket.

Miscellaneous artifacts include four (4) metal fragments and a white undecorated pipestem fragment (n=1). The organic artifacts include two pieces of oyster shell (n=2). Modern artifacts include three (3) pieces of plastic and one piece of rubber.

site is recommended. If avoidance is not possible, further work is recommended to further ascertain the

site's integrity and research value.

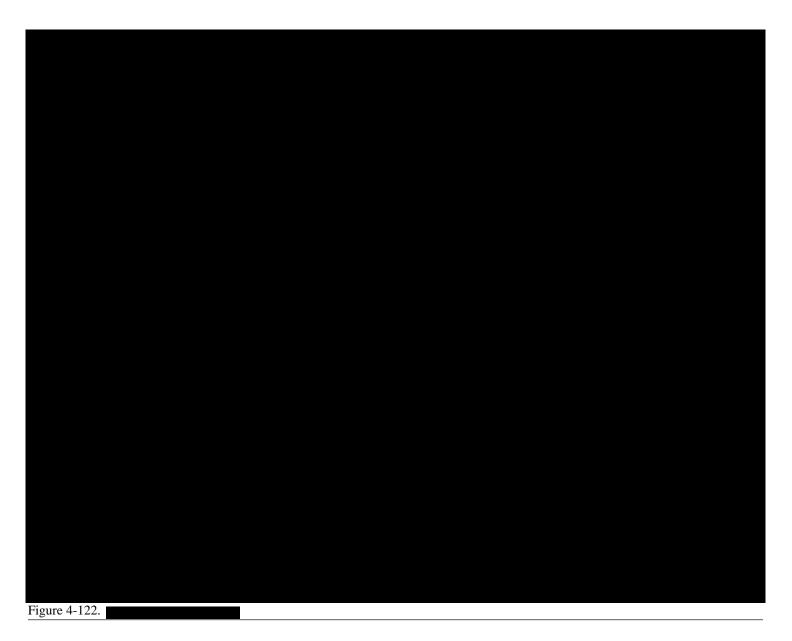






Figure 4-125. A) Black-glazed Jackfield body fragment (6.2); B) Machine cut nail, corroded (6.1); C) Milk glass jar base, "...KINS" embossing on side, J.R. Watkins cold cream jar (8.1); D) Light aqua flat glass fragments (6.4); E) Blue transfer-printed whiteware fragment (6.3); F) 1901 one cent Indian head penny (2.3).



Figure 4-124. A) Leather shoe fragment, one side portion with visible lace holes (9.1); B) Metal mason jar lid (9.4); C) Brick fragments (9.2).



Figure 4-127. A) Grey-bodied salt-glaze stoneware rim with cobalt annular decoration (12.80); B) Stoneware rim, interior and exterior Albany slip, exterior salt-glaze (12.78); C) Undecorated yellowware body fragment (12.89); D) Stoneware rim, interior Albany slip, exterior salt-glaze (12.79).



Figure 4-126.
A) Undecorated ironstone base, makers mark visible, "JOHN V...TREN...B..." John Venables & Co. Trent Pottery Burslem c. 1856 (12.109); B) Undecorated ironstone base, molded makers mark visible, "W. B...STO...FENTON" W. Baker and Co. Stone China Fenton c. 1839-1860 (12.108); C) Molded ironstone rim fragments, possibly bowl, fig/union pattern (12.112); D) Molded ironstone pitcher handle, hyacinth pattern (12.110).



Figure 4-129. A) Clear glass container handle (12.27); B) Clear glass container fragment, molded diamond design (12.30); C) Crystal knob fragment, likely from furniture or door (12.22).



A) Green glass coke bottle fragment, embossed "OCA C...DE-MARK RE...6 F" visible, c. 1940 (12.18); B) Yellow glass edge fragment, lace edged design, depression era 1929-1939 (12.14); C) Pink glass cup base, molded ribbed design, depression era 1929-1939 (12.13); D) Olive glass bottle finish, champagne design (12.3); E) Purple carnival glass fragment, possibly pressed, c. 1900-1940 (12.21); F) Amber glass bottle base, stippled base and embossed "GB2130" on side, c. 1940 (12.7); G) Aqua glass lid fragment, embossed "WHITEALL'S...JUNE" visible, Millville atmospheric fruit jar lid, c. 1861-1880s (12.8); H) Aqua glass medicine bottle finish, Perry Davis' Vegetable Pain Killer c. late 19th early 20th century (12.20).

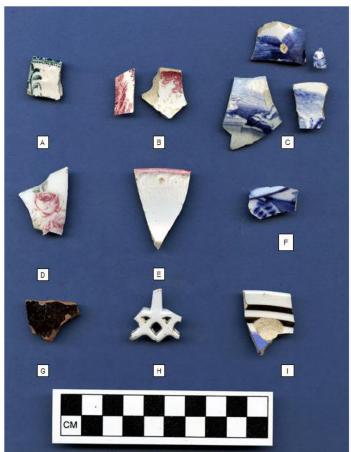
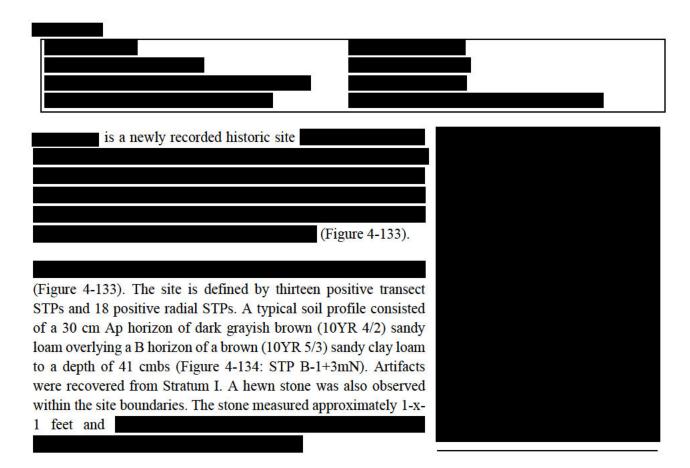


Figure 4-131. A) Aqua transfer-printed whiteware rim, botanical pattern (12.53); B) Red transfer-printed whiteware fragments, botanical pattern (12.55); C) Blue transfer-printed whiteware body fragments, landscape pattern (12.56); D) Polychrome decal-decorated porcelain body fragment, rose pattern (12.74); E) Edge-molded pearlware rim with red sponge decoration (12.62); F) Blue hand-painted whiteware fragment (12.69); G) Black-glaze redware fragment (12.76); H) Gilded lattice patterned porcelain rim, possibly fruit bowl (12.90); I) Polychrome banded slip whiteware rim, black bands blue bodied (12.64).



Figure 4-130.

A) Metal spoon (12.44); B) Brown glazed ceramic insulator fragment, molded "H" visible on top (12.46); C) Green patina single-framed square buckle with single pin, scalloped edges (12.45); D) White porcelain insulator attached to metal bracket (12.115).



In total, 131 historic artifacts were recovered from 25 STPs excavated within site (Figure 4-133). Historic artifacts, separated by functional group include 73 domestic artifacts, 45 architectural artifacts, two (2) activities artifacts, and one miscellaneous artifact.

The domestic artifacts include 45 pieces of ceramic, 27 pieces of glass, and one slate pencil. Identified ceramics include the following 25 sherds of whiteware, five (5) sherds of stoneware, five (5) sherds of pearlware, five (5) sherds of ironstone, two (2) sherds of porcelain, two (2) sherds of redware, and one sherd of yellowware. Most of the whiteware sherds were undecorated (n=20) but other decorations included blue shell-edged, blue slip, blue sponge decorated, blue transfer-print, and floral green transfer-print. One ironstone rim was mold decorated with the fig/union pattern. Identified glass include 20 pieces of container glass, three (3) pieces of bottle glass, one piece of tableware, and the remaining three (3) pieces of glass are unidentified.

The architectural artifacts include 25 nails, nine (9) pieces of flat glass (aqua n=6 and clear n=3), five (5) brick fragments, and one piece of concrete with two nails embedded. Identified nails include cut (n=14) and wire (n=21). The remaining seven (7) nails were too corroded to be identified.

Activities artifacts include two (2) pieces of unidentified metal, one is likely a machine or farm equipment part and the other is an unidentifiable a piece of hardware. The miscellaneous artifact recovered is an unidentified metal fragment.

The organic artifacts include three (3) pieces of oyster shell and one mammal bone fragment. The mineral artifacts include two (2) fragments of coal and four (4) slag fragments.

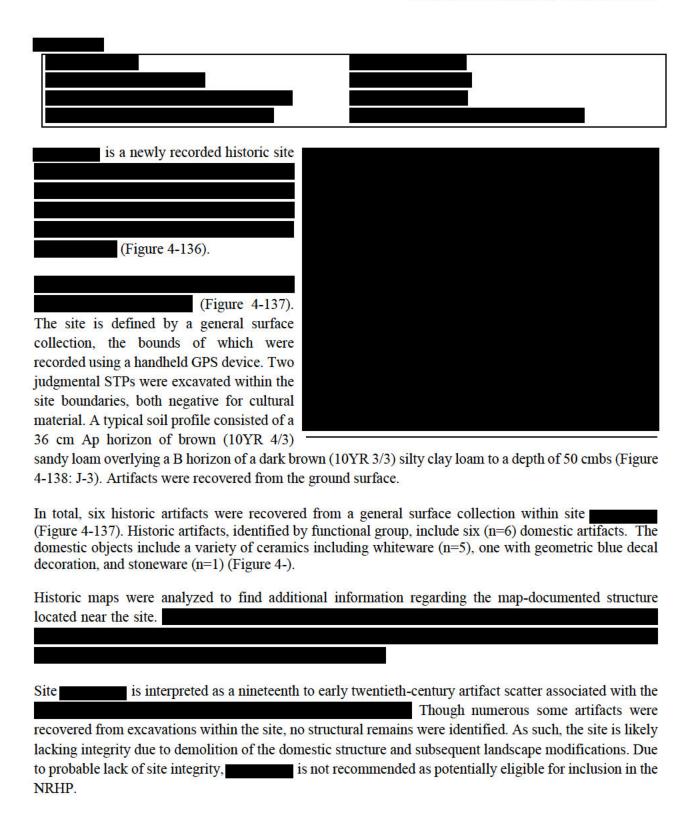
Site is interpreted as a nineteenth to early twentieth-century domestic site associated with the MDS location mapped approximately 12.5 m south of the site's southern boundary. Due to the likelihood additional cultural information would be gained through subsequent testing, the site is recommended as potentially eligible for inclusion in the NRHP. As such, avoidance is recommended.







Figure 4-135. : A) Unidentified metal, possibly hardware (24.3); B) Machine cut nail fragments, corroded (25.1); C) Undecorated whiteware handle (24.10); D) Slate pencil tip fragment (25.7); E) Amber bottle base, embossed "...ATOGA...", possibly Star Saratoga Springs, NY, heavy base wear (17.1); F) Clear glass container rim (25.6); G) Blue shell-edged whiteware rim (19.3); H) Stoneware body fragment with exterior Albany slip, interior unglazed (16.1).







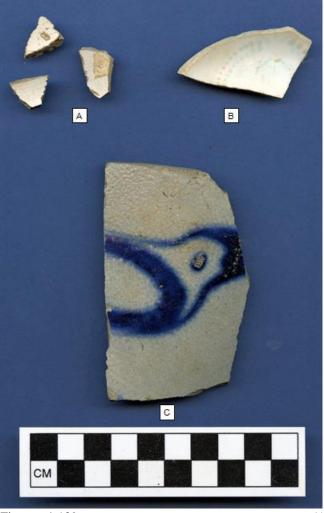


Figure 4-139. A) Undecorated whiteware fragments (1.2); B) Blue geometric decal decorated whiteware base (1.1); C) Clear salt-glazed stoneware with cobalt decoration in possible bird motif, interior Albany slip (1.4).

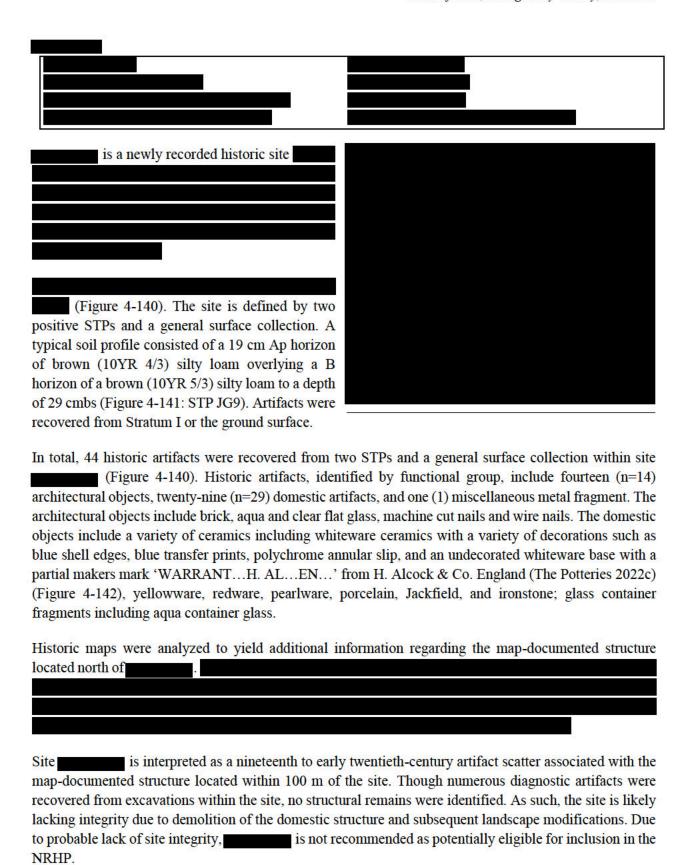




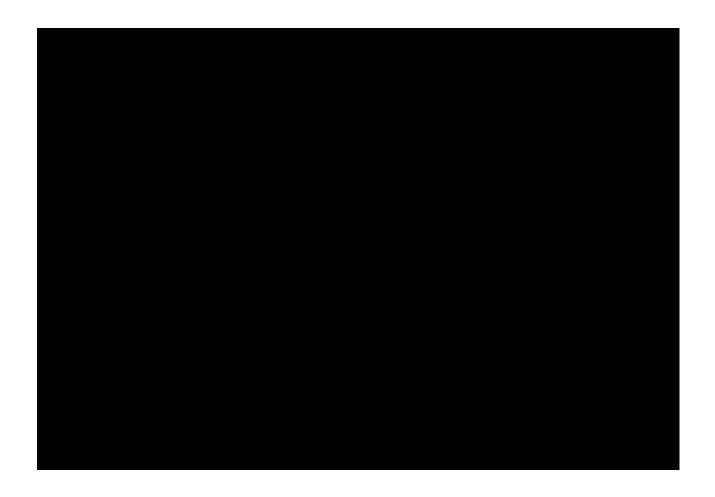


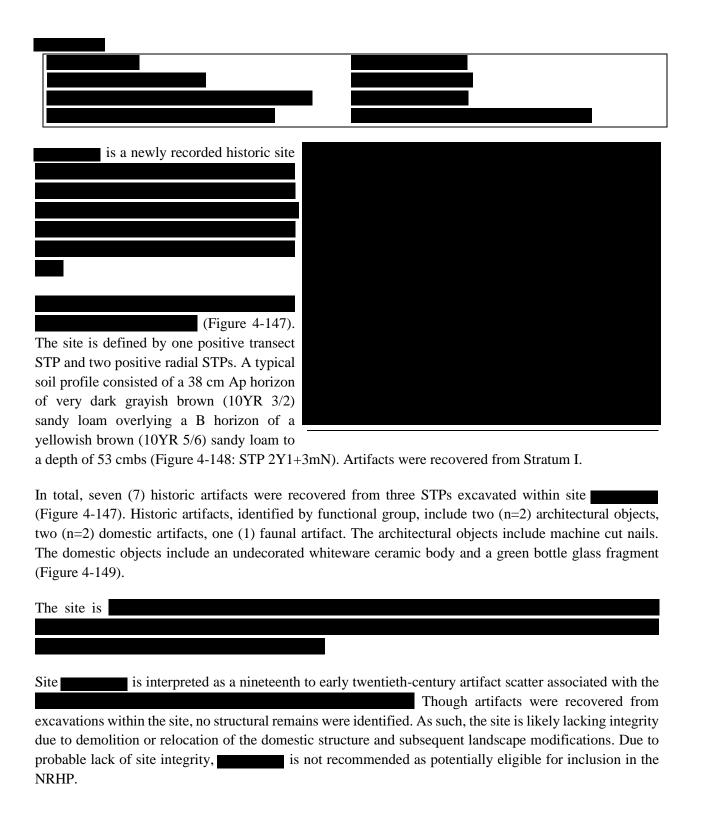


Figure 4-142. A) Aqua glass fragment, possibly from mason jar (1.16); B) Brick fragment (1.1); C) Unidentified metal fragment, corroded (3.2); D) Blue transfer-printed whiteware rim (1.12); E) Black-glazed redware fragment (1.13); F) Undecorated whiteware base, makers mark visible, "WARRANT...H. AL...EN..." and lion. H. Alcock & Co. England, c. 1891 (1.14).

is a newly recorded historic site
(Figure 4-144).
The site is defined by a partially intact
structural foundation. Several STPs were
excavated within and immediately adjacent
to the site but produced no cultural material.
A typical soil profile consisted of a 60 cm Ap
horizon of very dark brown (10YR 2/2) silty loam overlying a B horizon of a grayish brown (10YR 5/2) silty play loam to a darth of 70 (Figure 4.145; STR IC. 1). No artifacts were recovered from
silty clay loam to a depth of 70 (Figure 4-145: STP JG-1). No artifacts were recovered from
Historic maps were analyzed to find additional information regarding the map-documented structures
mapped near the site.
Site is interpreted as a nineteenth to early twentieth century building foundation associated with
one or all of the mapped historic structures located within 100 m of the site. No artifacts were located within
the site boundaries. With good site integrity and high potential for recovery of additional cultural material
with additional testing, is recommended as potentially eligible for inclusion in the NRHP.







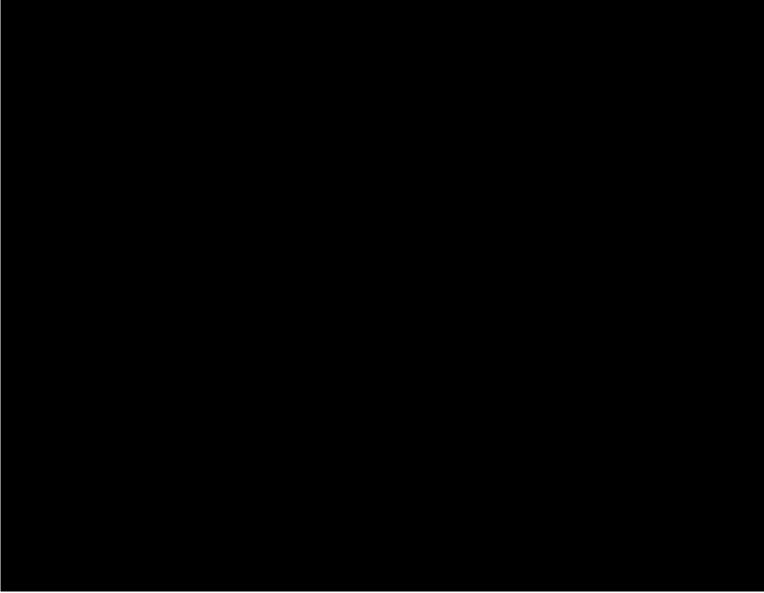


Figure 4-147.

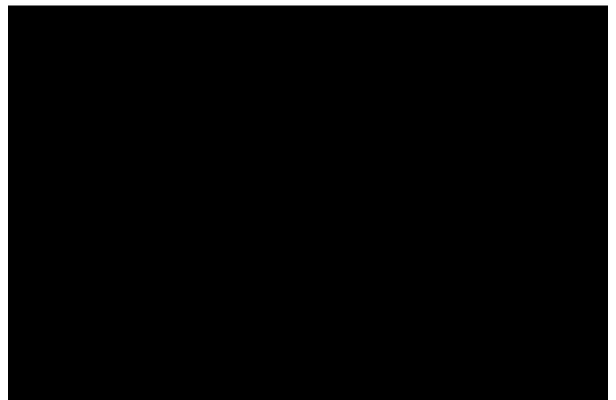




Figure 4-149. A) Green bottle glass fragment (3.3); B) Undecorated whiteware fragment (1.2); C) Machine cut nail, head and body fragment, corroded (1.1).

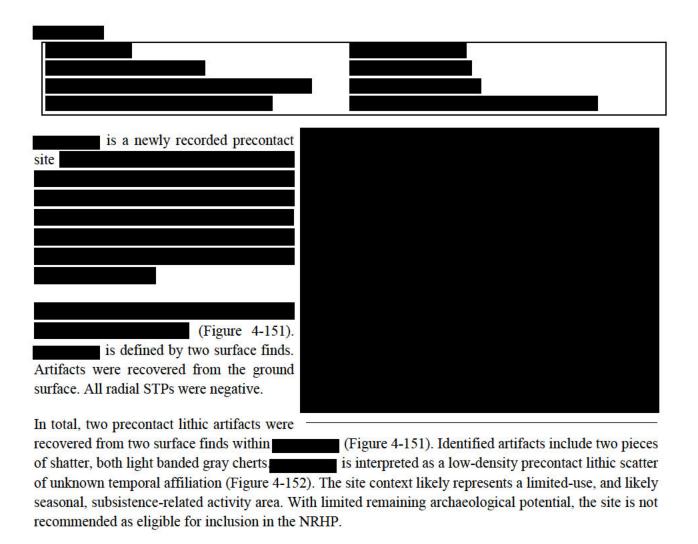






Figure 4-152. Light banded gray chert shatter (1.1).

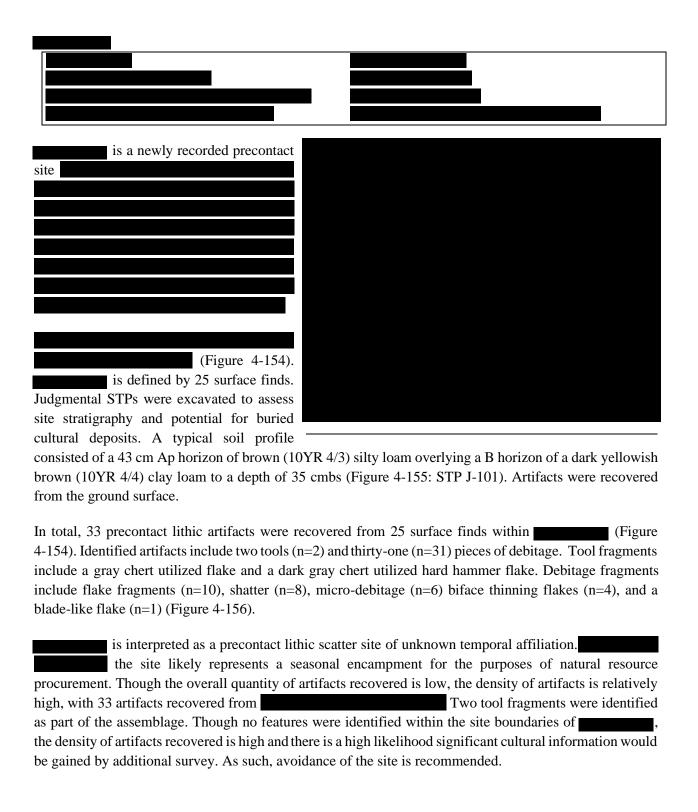
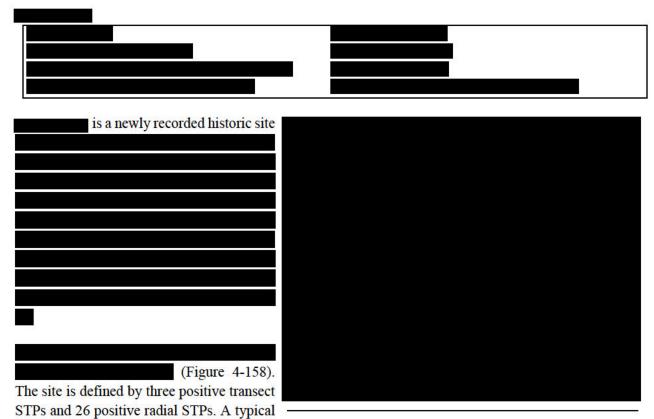








Figure 4-156. A) Gray chert shatter (11.1); B) Dark gray chert utilized hard hammer flake fragment (2.1); C) Gray chert early reduction flake, body fragment (21.1); D) Gray chert early reduction flake, body fragment (16.1).



soil profile consisted of a 39 cm Fill horizon of very dark brown (10YR 2/2) silty clay loam overlying a second Fill horizon of a black (10YR 2/1) silty clay loam to a depth of 89 cmbs (Figure 4-159: STP 3H1+30mE). Artifacts were recovered from Stratum I. Additionally, structural remains were encountered at the base radial STP 3H1 + 12mE in the form of mortared stone. The stone encompassed the entire base of the 50 cm STP.

In total, 487 historic artifacts were recovered from 29 STPs excavated within site (Figure 4-158). Artifacts include 445 historic period artifacts, 32 organic artifacts, and 10 mineral artifacts (Figure 4-165)(Figure 4-161). Historic artifacts, separated by functional group include 222 domestic artifacts, 213 architectural artifacts, six (6) miscellaneous objects, three (3) activities artifacts, and a bullet.

The architectural artifacts include 111 nails, 69 pieces of flat glass (aqua n=68 and clear n=1), 30 brick fragments, four (4) mortar fragments, one screw, one iron stake, and one metal washer. Identified nails include cut (n=38), wire (n=21), and hand wrought (n=1). The remaining 51 nails were too corroded to be identified.

The domestic artifacts include 133 pieces of ceramic and 85 pieces of glass. Identified ceramics include the following 92 sherds of whiteware, 13 sherds of stoneware, nine (9) sherds of pearlware, six (6) sherds of creamware, six (6) sherds of porcelain, five (5) sherds of yellowware, and two (2) sherds of redware. Most of the whiteware sherds were undecorated (n=71) but other decorations included black transfer-print, blue decal, blue edge, blue transfer-print, brown transfer-print, green transfer-print, molded, polychrome decal, polychrome slip, purple transfer-print, and red transfer-print. Two (2) pearlware rim sherds were

decorated with blue transfer-print in a botanical pattern. Identified glass include 68 pieces of container glass, eight (8) pieces of bottle glass, three (3) pieces of jar glass; the remaining six (6) pieces of glass are unidentified.

Miscellaneous artifacts recovered include six (6) unidentified metal objects with varied levels of corrosion. Activities artifacts include three (3) pieces of tobacco pipes. One is a horse head molded white pipe with visible lettering 'GERMAN' on the stem. The two pieces, one of the bowl and one of the stem, fit together. This is likely a 20th century miniature cigarette pipe (Figure 4-160). A single unfired .32 caliber bullet with headstamp 'WCC 43' from the Western Cartridge Company, 1943 was recovered (Figure 4-160).

The organic artifacts include 22 pieces of oyster shell and 10 pieces of mammal bone fragments, six (6) of which are long bone fragments and two (2) of which are burnt. The mineral artifacts include 10 fragments of coal, five (5) of which are anthracite coal fragments.

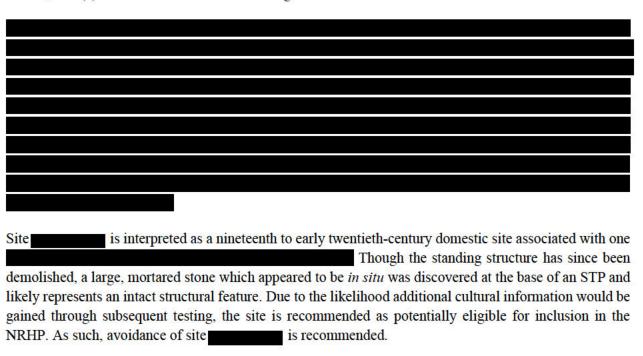








Figure 4-160. A) Horse head molded white pipe, visible lettering "GERMAN" on stem. Bowl and stem fit together. Likely 20th century miniature cigarette pipe (7.2); B) Unfired .32 caliber bullet, headstamp "WCC 43", Western Cartridge Company 1943 (26.21); C) Blue transferprinted whiteware fragments, chinoiserie pattern (1.25); D) Aqua flat glass fragments (1.6).



Figure 4-161.

A) Solarized manganese glass bottle finish, tool finished (30.6); B) Salt-glazed stoneware body fragment, interior Albany slip (30.8); C) Polychrome decal-decorated whiteware rim, floral rose pattern (20.10); D) Iron stake, corroded (20.1).

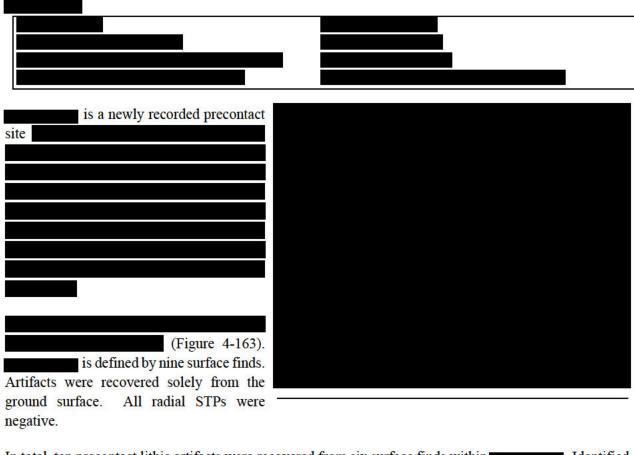
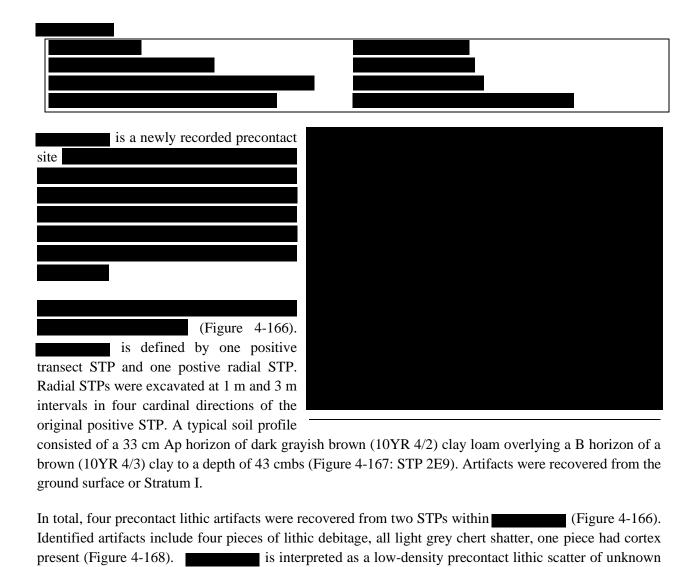






Figure 4-164. A) Gray chert flake fragment, distal fragment (2.1); B) Gray chert utilized flake (4.1); C) Gray chert flake fragment (6.1).



temporal affiliation. The site context likely represents a limited use, seasonal subsistence-related activity area. With limited remaining archaeological potential, the site is not recommended as eligible for inclusion

in the NRHP.







Figure 4-168. A) Fine-grained light banded gray chert shatter (1.1); B) Light banded gray chert shatter, one with cortex (3.1); C) Fine-grained light banded gray chert shatter (2.1).

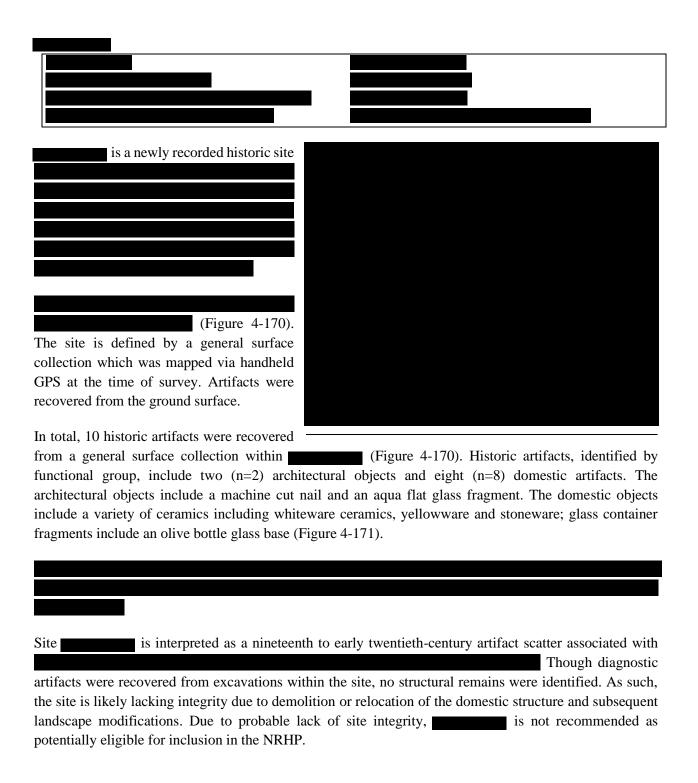
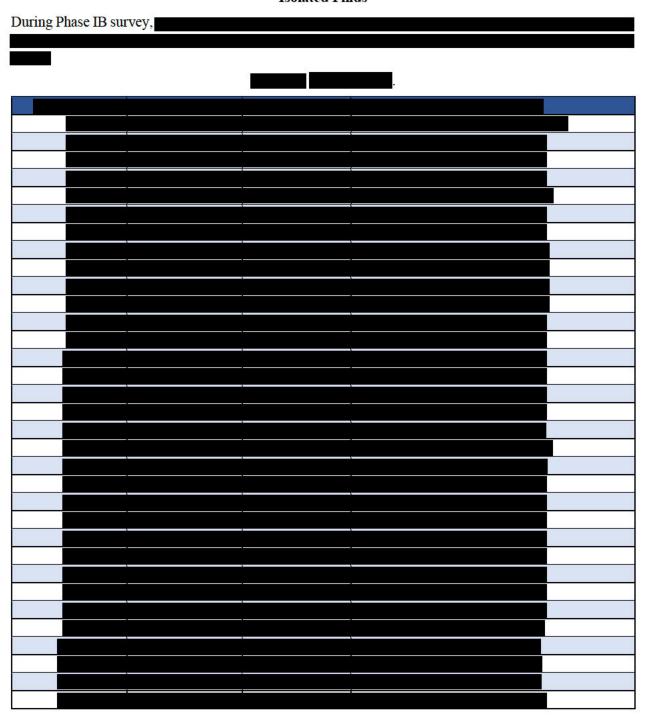






Figure 4-171. A) Metal button (1.4); B) Aqua flat glass fragment (1.2); C) Machine cut nail, head and body fragment, corroded (1.1); D) Salt-glaze stoneware body fragment with cobalt decoration, interior slip (30.8); E) Olive bottle glass finish, tool finished (1.4).

## **Isolated Finds**



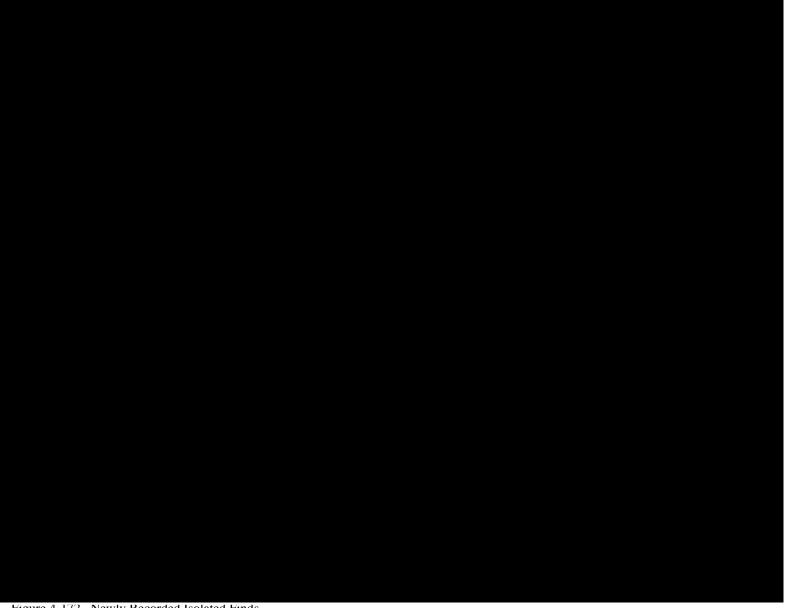


Figure 4-172. Newly Recorded Isolated Finds.

Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from , a black chert shatter
fragment.
Close-interval
systematic surface survey was conducted in the immediate area following the initial surface find. No additional cultural material was recovered from subsequent survey. One artifact was recovered from a light banded gray chert shatter fragment, with cortex.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original surface find. No additional cultural material was recovered from radial testing. One artifact was recovered from grained light banded gray chert proximal flake fragment.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original surface find. No additional cultural material was recovered from radial testing. One artifact was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original surface find. No additional cultural material was recovered from radial testing. One artifact was recovered from the parameter of the original surface find. No additional cultural material was recovered from the parameter of the original surface find. No additional cultural material was recovered from the parameter of the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find. No additional cultural material was recovered from the original surface find.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material

was recovered from close-interval survey. One artifact was recovered from gray chert hard hammer shatter fragment.
Close-interval systematic surface
survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from the survey, a light gray chert shatter fragment, with cortex.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from grained light banded gray chert shatter fragment.
Close-interval
systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from , a fine-grained dark gray chert biface thinning proximal flake fragment.
Close-interval
systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from , a fine-grained light banded gray chert shatter fragment, with cortex.
Close-interval
systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from , a light gray chert flake fragment.
Close-interval systematic

surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from banded gray chert flake fragment.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from the surface find, a light banded gray chert shatter fragment, with cortex.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from the surface find, a light banded gray chert shatter fragment.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from chert utilized early reduction flake.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from gray fine-grained chert proximal flake fragment.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from utilized distal flake fragment.

Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from a light, a light banded gray chert shatter fragment, with cortex. Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from , a white banded chert shatter fragment, with cortex. Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One artifact was recovered from a brownish gray chert hard hammer shatter fragment. Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find. No additional cultural material was recovered from close-interval survey. One

Figure 4-173. Projectile Point: A) Gray chert projectile point base (proximal), from the Late Archaic to Middle Woodland and likely a Brewerton, Snyders, or Jacks Reef variant.

Close-interval systematic

surface survey was conducted in the area immediately surrounding the surface find. No additional cultural

artifact was recovered from \_\_\_\_\_, a gray chert projectile point base (proximal), from the Late Archaic to Middle Woodland and likely a

Brewerton, Snyders, or Jacks Reef variant

(Figure 4-173).

material was recovered from close-interval survey. One artifact was recovered from chert proximal biface thinning flake fragment.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find, in addition to the excavation of a judgmental STP. No additional cultural material was recovered from this additional testing. One artifact was recovered from , a gray chert shatter fragment, with cortex.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find, in addition to the excavation of a judgmental STP. No additional cultural material was recovered from this additional testing. One artifact was recovered from , a dark gray chert flake fragment, possibly utilized.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from the original positive STP, a fine-grained gray chert biface thinning flake.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from , an oölitic chert shatter fragment, with cortex.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from grained light gray chert shatter fragment, with cortex.
Radial STPs were excavated at 1 and 3-m

intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from a light grey chert shatter fragment.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from grey flake fragment.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from radial testing. One artifact was recovered from the context with cortex.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from testing. One artifact was recovered from , a white/grey flake fragment.
Radial STPs were excavated at 1 and 3-m intervals in each cardinal direction of the original positive STP. No additional cultural material was recovered from testing. One artifact was recovered from a light grey flake fragment.
Close-interval systematic surface survey was conducted in the area immediately surrounding the surface find, in addition to the excavation of a judgmental STP. No additional cultural material was recovered from radial testing. One artifact was recovered from the surface from the excavation and its properties of the surface find, in addition to the excavation of a judgmental STP. No additional cultural material was recovered from the surface from the excavation and its properties of the surface find, in addition to the excavation of a judgmental STP. No additional cultural material was recovered from the excavation and its properties of the excavation of a judgmental STP. The additional cultural material was recovered from the excavation of a judgmental STP. The additional cultural material was recovered from the excavation of a judgmental STP. The additional cultural material was recovered from the excavation of a judgmental STP. The additional cultural material was recovered from the excavation of a judgmental STP. The additional cultural material was recovered from the excavation of the exca