

December 14, 2022

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RE: Preliminary Archaeological Assessment of a Proposed Battery Storage Facility Project in East Hampton, Connecticut

Ms. Nickerson:

Heritage Consultants, LLC (Heritage), is pleased to have this opportunity to provide Flycatcher, LLC (Flycatcher) with the following preliminary archaeological assessment of a proposed battery storage facility located in East Hampton, Connecticut (Figure 1). The current project entails completion of a cultural resources summary based on the examination of data obtained from the Connecticut State Historic Preservation Office (CT-SHPO), as well as GIS data, including mapping, aerial photographs, and topographic quadrangles, maintained by Heritage. This investigation is based upon project location information provided to Heritage by Flycatcher. The objectives of this study were to (1) gather and present data regarding previously identified cultural resources situated within 1.6 km (1 mi) of the proposed project area and (2) to investigate the proposed project parcel in terms of its natural and historical characteristics so that the need for completing additional cultural resources investigations could be evaluated.

Figure 2, which is an excerpt of an 1859 map shows that the region containing the proposed battery storage facility was already developed by the middle of the nineteenth century. In addition, a great deal of the present-day road alignment was in place by that time. The 1859 map in Figure 2 shows that the project parcel is bisected by a railroad that extends from southwest to northeast; however, the precision of the map is low and the railroad likely did not cross the project area (see aerial image discussion below). Nearby residences as of 1859 included those of H. Skinner, S. Skinner, W.E. Burton, J.C. Kellogg, O.L. Clark, and Reverend W. Hurst. A Methodist Church also was located to the southeast of the project parcel, and nearby industrial structures visible on the 1859 map include the Patent Bell Manufactory, the Niles & Parmalee Bell Manufactory, the W.E. Barton Bell Manufactory, and the Skinners Saw & Grist Mill. A subsequent map dating from 1874 shown in Figure 3 indicates that the overall project region remained largely unchanged during the last quarter of the nineteenth century, with the exception of additional residences belonging to A. Flood, L. Butler, and W. Banning, as well as a Catholic Church that was constructed to the northwest. The 1874 map also shows the railroad bisecting the project area, however, aerial images show the railroad to the north and outside of the project area. Both of the historical maps suggest that the local area was characterized by farmsteads, wooded areas, and industrial locales during the middle to late nineteenth century.

The earliest available aerial photograph of the project area dates from 1934 (Figure 4). This image shows the project parcel to be situated in a region containing wooded areas, plowed fields, residences, and industrial structures, confirming the interpretation of the 1859 and 1874 maps. The Airline Railroad is visible to the north and it remained in operation during the early twentieth century. The 1934 aerial

confirms that the 1969 and 1874 amps were in error with respect to the railroad location. The 1934 aerial also depicts a mill pond to the east along the Pocotopaug Creek. This pond is likely associated with the H. Skinner sawmill depicted in the 1874 map. A subsequent 1951 aerial photograph (Figure 5) shows very little apparent change in the general area. The road alignment remained unchanged, and land cover still consisted of a combination of forest and agricultural fields. Figure 5 also shows that the project parcel remained undeveloped as of the middle of the twentieth century. Figure 6, a 1986 aerial photograph, shows residential development to the north and the south of the project parcel, replacing the previous agricultural fields. By this time, the mill pond to the east of the parcel had changed in shape and alterations had been made to the associated industrial structures. These changes suggest changes to the economics and demographics of the surrounding area in the mid to late twentieth century. A 1995 aerial photograph shows construction of two small structures along the eastern edge of the parcel, along with apparent land clearing in the center (Figure 8). By this time, further changes to the industrial buildings to the northeast had taken place. Finally, Figure 9, an excerpt from 2021 aerial photograph, depicts the proposed battery storage facility location in its current state. The southern portion of the project parcel contains a recently built solar panel array, surrounded by cleared and graded land. The northeastern portion of the project parcel where the battery storage facility is planned remains wooded, however.

Background research for the current project also included a review of previously identified archaeological sites and State/National Register of Historic Places properties/districts sites within 1.6 km (1 mi) of the proposed battery storage facility (Figures 9 and 10). This review resulted in the identification of eight previously recorded archaeological sites within 1.6 km (1 mi) of the project location. The review also resulted in the identification of a single National Register of Historic Places listed district located within 1.6 km (1 mi) of the proposed battery storage facility. The review also resulted in the identification of Historic Places listed properties within 1.6 km (1 mi) of the proposed battery storage facility. The review also resulted in the identification of Historic Places listed properties within 1.6 km (1 mi) of the proposed battery storage facility. The review also resulted in the identification of three State Register of Historic Places listed properties within 1.6 km (1 mi) of the proposed project parcel. These resources are discussed.

Site 42-15

Site 42-15, which is also known as the Skinners Saw and Grist Mill Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on maps and public records, the occupation is estimated to have spanned the nineteenth century. It consists of standing ruins of two stone and brick structures on the banks of Pocotopaug Creek. Early in its history, the mill supplied materials for the local wagon and shipbuilding industries. As these sectors of the economy declined, part of the mill was repurposed for paper box manufacturing. The mill was largely destroyed by a fire in 1974. Site 42-5 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

Site 42-16

Site 42-16, which is also known as the Skinner Street Dam Site, is a post-European Contact period site in East Hampton, Connecticut. The site consists of ruins of a dam that supplied water to the nearby Skinners Saw and Grist Mill Site. Based on investigation of maps, the dam appears to have been built prior to 1859. The dam was also possible associated with a nearby bell factory, though this information has not been confirmed through documentation or archaeological fieldwork. Site 42-12 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is

situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

<u>Site 42-17</u>

Site 42-17, which is also known as the Patent Bell Manufactory Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on investigation of public records, the manufacturing facility is estimated to have been in use from ca., 1850 to 1920. Associated structures include a concrete hardstand, stone drain pit, and iron conduit. Surface collection of the site area has yielded a leather harness and children's toys. The factory primarily produced sleigh bells, an industry for which the town of East Hampton is known. Site 42-17 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

Site 42-18

Site 42-18, which is also known as the Unknown Metal Foundry Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on investigation of maps, the period of occupation ranges from ca., 1830 to 1880. Site 42-18 contains standing ruins of three industrial structures, including a stone foundation and walls. Slag, coal, iron, and barrel bands have been observed within the ruins. Although the exact proprietor and purpose of the facility are unknown, it was possibly owned by the W.E. Barton Bell Manufactory. Site 42-18 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

Site 42-19

Site 42-19, which is also known as the Dam Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on association with nearby industrial site, occupation is estimated to range from 1830 to 1978. This industrial occupation consists of the standing ruins of a dam. The brownstone component of the dam is a later addition, likely coinciding with the construction of a nearby bell factory (Site 42-18), to which the dam supplied water. Site 42-19 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

<u>Site 42-20</u>

Site 42-20, which is also known as the Sexton Bell Factory Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on investigation of maps and public records, the period of use for this site is estimated to range from ca., 1840 to 1900. This industrial site consists of standing stone and concrete ruins, including a wheel pit, vertical gear shaft, and cylindrical kiln. The factory was originally owned by J. Arthur, but later expanded by D.W. and L.S. Sexton, who had purchased the plot by 1859. The factory was used for the production of cowbells, part of the town's extensive bell industry. Site 42-20 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

<u>Site 42-24</u>

Site 42-24, which is also known as the Niles and Parmalee Bell Manufactory Site, is a post-European Contact period site located in East Hampton, Connecticut. The site was originally used during the nineteenth century, and the plot of land is still in use for modern industry. According to Walling and Beers nineteenth century maps, the facility was used by the Niles and Parmalee Company for the production of bells and coffin trimmings and was later sold to the Labanay Casket Company. The original factory structures were likely abandoned by 1884, and since have demolished, with modern storage facilities built upon their ruins. Relative to other bell manufacturing sites in the town of East Hampton, this site is in poor condition with most archaeological potential having been destroyed.

Site 42-25

Site 42-25, which is also known as the Hoe Manufactory Site, is a Post European Contact period site located in East Hampton, Connecticut. Based on investigation of maps and public records, the period of use for this site is estimated to range from ca., 1840 to 1860. This industrial site consists of standing ruins of a brownstone dam and foundation. Pottery, bottle glass fragments, a ladle, and coal and slag debris have been observed on the surface of Site 42-25. The factory was originally used by A.H. Markham to produce agricultural tools, and later acquired by Newbury Darling. It was later purchased by Clark and Watrous bell and coffin trim manufacturers. Site 42-25 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project.

Belltown Historic District

The Belltown Historic District is a National Register of Historic Places listed district located in East Hampton, Connecticut. Of the structures in the district, 147 out of 176 are contributing elements. Contributing buildings were constructed between 1800 and 1935, and are considered significant for their architecture, industrial usage, and economic history. Building types identified within the Belltown Historic District include mills, dams, residences, churches, and public buildings. Architectural styles represented contributing element of the district include Colonial, Federal, Gothic Revival, Greek Revival, Colonial Revival, Italianate, and Queen Anne. The Belltown Historic District is located on the opposite side of Skinner Street and Pocotopaug Creek from the proposed project area. It will not be impacted directly by the proposed batter storage facility. In addition, there are significant amounts of intervening vegetation between the two and no indirect impacts to the Belltown Historic District are anticipated by the proposed construction.

State Register Property 42-5

State Register Property 42-5 is a historic residence located on Middletown Avenue in East Hampton, Connecticut. This house, which is octagonal in shape, was constructed in ca., 1850, and it represents a rare building style attributed to architect Orson Squire Fowler of Fishkill, New York. The exterior of the house is clad in stucco over masonry, and it is characterized by a center chimney. Originally owned by Deming W. Sexton, the house is still used as a residence today. State Register Property 42-5 will not be impacted directly by the proposed batter storage facility. In addition, it is located well away from the proposed batter storage facility, and no indirect impacts to this residence are anticipated by the proposed construction.

State Register Property 42-6

State Register Property 42-6 is a historic residence located in East Hampton, Connecticut. This house was built in ca., 1870 in the Mansard Style. The house includes a square cupola and a tower at the right front corner. The porch is supported by square columns and pilasters with molded wooden arches. The property is described as having a "sense of solidity, repose, and good living" on the submitted resource form. State Register Property 42-6 will not be impacted directly by the proposed batter storage facility. In addition, it is located well away from the proposed batter storage facility, and no indirect impacts to this historic built resource are anticipated by the proposed construction.

State Register Property 42-7

State Register Property 42-7 is a historic residence located on Bevin Boulevard in East Hampton, Connecticut. This house, which is also octagonal in shape, was constructed in ca., 1850. It too represents a rare building style attributed to architect Orson Squire Fowler of Fishkill, New York. This is the second house of its style in the town of East Hampton. The house has a porch on three of its eight sides, and the main body of the house consist of masonry. A two-story wing also appears to be original or at least an early addition to the residence. State Register Property 42-7 will not be impacted directly by the proposed batter storage facility. In addition, it is located well away from the proposed batter storage facility, and no indirect impacts to this residence are anticipated by the proposed construction.

In addition, a review of cultural resources, Heritage also completed research into the types of soils located within the project area (Figure 11). The proposed project parcel contains Canton and Charlton, Nipmuck-Brimfield, Nipmuck-Brookfield, Udorthents, and Urban Land soils. The first three of the above-referenced soil complexes are well drained, and where they are undisturbed and possess slopes of less than eight percent, they are generally well correlated with cultural deposits. Udorthents and Urban Land soils consist of moderately to excessively drained soils that have been disturbed by cutting or filling, as well as areas that are covered by buildings and pavement. These disturbed soils generally do not retain archaeological sensitivity.

Pedestrian survey and photo-documentation of the project area and area of interest was completed by representatives of Heritage in early December of 2022. The walkover investigation revealed a single area that was considered to retain a moderate/high archaeological sensitivity. It encompasses 4.45 acres of land and is found throughout most of the area of interest for the project. Based on the results of the pedestrian survey, as well as the number of archaeological sites and the historic district in the general vicinity of the proposed battery storage facility, it is the professional opinion of Heritage to recommend that the moderate/high portion of the area of interest be subjected to phase IB cultural resources reconnaissance survey prior to construction.

If you have any questions regarding this Technical Memorandum, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call me at 860-299-6328 or email me at dgeorge@heritage-consultants.com. We are at your service.

Sincerely,

Dent R. Hurge

David R. George, M.A., R.P.A. Heritage Consultants, LLC



Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the project parcel in East Hampton, Connecticut.





















Excerpt of a 1986 aerial photograph showing the location of the project parcel in East Hampton, Connecticut.





Excerpt of a 1995 aerial photograph showing the location of the project parcel in East Hampton, Connecticut.







Figure 9. Digital map depicting the locations of the previously identified archaeological sites in the vicinity of the project parcel in East Hampton, Connecticut.



Digital map depicting the locations of the previously identified National Register of Historic Places and State Register of Historic Places properties in the vicinity of the project parcel in East Hampton, Connecticut.



Figure 11. Digital map depicting the soil types present in the vicinity of the project parcel in East Hampton, Connecticut.





Excerpt of a 2021 aerial photograph showing the location of the project parcel and sensitivity areas in East Hampton, Connecticut.



Photo 1. Photo taken from northwest corner of parcel facing southeast.



Photo 2. Photo taken from southeast corner of parcel facing northwest.



Photo 3. Photo taken from east boundary of parcel facing northwest.



Photo 4. Photo of disturbance in area designated no/low archaeological sensitivity.



Photo 5. Photo of steep slope in area designated no/low archaeological sensitivity.

PHASE IB CULTURAL RESOURCES RECONNAISSANCE SURVEY OF THE PROPOSED CT-8 BATTERY STORAGE FACILITY PROJECT IN EAST HAMPTON, CONNECTICUT

PREPARED FOR:



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ABSTRACT

This report presents the results of a Phase IB cultural resources reconnaissance survey of the proposed CT-8 Battery Storage Facility Project located in East Hampton, Connecticut. This work was completed on behalf of Flycatcher, LLC and entailed the investigation of a 4.45 acre sensitivity area previously identified within the Project are during Phase IA cultural resources assessment survey conducted by Heritage Consultants, LLC. The Phase IB survey of the sensitivity area was completed in May of 2023 during which 54 planned shovel tests were excavated. Excavations resulted in the recovery of a single isolated post-European contact period artifact, which was identified as a shard of embossed, machine-made clear bottle glass. The isolated find was assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). No additional archaeological examination of the Project area is recommended prior to construction.

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CHAPTER I INTRODUCTION

This report presents the results of a Phase IB archaeological reconnaissance survey of the proposed CT-8 Battery Storage Facility Project (the Project) in East Hampton, Connecticut. Flycatcher, LLC (Flycatcher) requested that Heritage Consultants, LLC (Heritage) complete the investigation of a archaeologically sensitivity area measuring 4.45 acres within the area of interest in the northwestern corner of the Project parcel. The area was previously determined to have moderate/high sensitivity for archaeological resources during a Phase IA cultural resources assessment completed by Heritage in December 2022. The Phase IA investigation found that while the majority of the Project parcel had been previously developed for a solar array, the area of interest and overlapping sensitivity area fell in a section that remained undisturbed and thus required further survey. Heritage completed the fieldwork for the Phase IB investigation in May of 2023. All work associated with this Project was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987) promulgated by the Connecticut State Historic Preservation Office (CT-SHPO).

Project Description and Methods

A Phase IB reconnaissance survey utilizing systematic shovel testing, GPS recordation, and photodocumentation was completed within the area deemed to retain a moderate/high potential for containing intact cultural deposits during the previous Phase IA survey. During the Phase IB survey, Heritage conducted the systematic excavation of shovel tests positioned at 15 m (49.2 ft) intervals along parallel survey transects spaced 15 m (49.2 ft) apart throughout the sensitivity area. Each shovel test measured 50 x 50 cm (19.7 x 19.7 in) in size, and each was excavated to the glacially derived C-Horizon or until immovable objects (e.g., tree roots, boulders, etc.) or water was encountered. Each shovel test was excavated in 10 cm (3.9 in) arbitrary levels within natural soil horizons, and the fill from each level was screened separately. All shovel test fill was screened through 0.635 cm (0.25 in) hardware cloth and examined visually for cultural material. Soil characteristics were recorded using Munsell Soil Color Charts and standard soils nomenclature. Each shovel test was backfilled after it was recorded.

Project Results

A review of data currently on file at the CT-SHPO, as well as the electronic site files maintained by Heritage revealed eight previously identified archaeological sites, three State Register of Historic Places properties, and one National Register of Historic Places district within 1.6 km (1 mi) of the Project area. They are discussed in detail in Chapter V. In addition, the soil types that defined the Project area are characterized as well-drained. As a result, it was determined that the Project area fell within an area of moderate/high potential to yield archaeological sites or intact deposits and therefore was subjected to a Phase IB archaeological reconnaissance survey.

During the Phase IB survey, 54 of 54 (100 percent) planned shovel test pits were excavated through the sensitivity area. The investigation resulted in the recovery of a single isolated post-European contact artifact. Given the lack of other archaeological deposits, soil anomalies, or surface features, the isolated find was assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). Thus, no additional archaeological examination of the Project area is recommended prior to construction.

Project Personnel

Heritage Personnel who contributed to the project include David R. George, M.A., R.P.A., (Principal Investigator); Brenna Pisanelli, M.A. (Project Archaeologist); Stephanie Scialo, B.A. (Project Archaeologist); Nita Vitaliano, M.A., (Historian); Christopher Brouilette, B.A., (Field Director); and Sean Buckley, B.A., (Geographic Information Specialist).

CHAPTER II NATURAL SETTING

Introduction

This chapter provides a brief overview of the natural setting of the region containing the CT-8 Battery Storage Facility Project in East Hampton, Connecticut. Previous archaeological research has documented that a few specific environmental factors can be associated with both precontact and post-European Contact period site selection. These include general ecological conditions, as well as types of freshwater sources and soils present. The remainder of this section provides a brief overview of the ecology, hydrological resources, and soils present within the Project area and the larger region in general.

Ecoregions of Connecticut

Throughout the Pleistocene and Holocene Periods, Connecticut has undergone numerous environmental changes. Variations in climate, geology, and physiography have led to the "regionalization" of Connecticut's modern environment. It is clear, for example, that the northwestern portion of the state has very different natural characteristics than the coastline. Recognizing this fact, Dowhan and Craig (1976), as part of their study of the distribution of rare and endangered species in Connecticut, subdivided the state into various ecoregions. Dowhan and Craig (1976:27) defined an ecoregion as:

"an area characterized by a distinctive pattern of landscapes and regional climate as expressed by the vegetation composition and pattern, and the presence or absence of certain indicator species and species groups. Each ecoregion has a similar interrelationship between landforms, local climate, soil profiles, and plant and animal communities. Furthermore, the pattern of development of plant communities (chronosequences and toposequences) and of soil profile is similar in similar physiographic sites. Ecoregions are thus natural divisions of land, climate, and biota."

Dowhan and Craig defined nine major ecoregions for the State of Connecticut. They are based on regional diversity in plant and animal indicator species (Dowhan and Craig 1976). Only one of the ecoregions is germane to the current investigation: Southeast Hills ecoregion. A brief summary of this ecoregion is presented below. It is followed by a discussion of the hydrology and soils found in and adjacent to the Project area.

Southeast Hills Ecoregion

The Southeast Hills ecoregion consists of "coastal uplands, lying within 25 miles of Long Island Sound, characterized by low, rolling to locally rugged hills of moderate elevation, broad areas of upland, and local areas of steep and rugged topography" (Dowhan and Craig 1976). Elevations in the Southeast Hills ecoregion generally range from 75.7 to 227.2 m (250 to 750 ft) above sea level (Dowhan and Craig 1976). The bedrock of the region is composed of schists, and gneisses deposited during the Paleozoic. Soils in the region have developed on top of glacial till in upland locales, and on top of stratified deposits of sand, gravel, and silt in the local valleys and upland areas (Dowhan and Craig 1976).

Hydrology in the Vicinity of the Project area

The proposed Project parcel is situated within close proximity to several sources of freshwater, including Muddy Gutter Brook, Pine Brook, Pocotopaug Creek, Bevins Pond, and Pocotopaug Lake to the north. The Pocotopaug Creek flows into Pine Brook, which eventually flows into the Salmon River and Connecticut River 10.4 km (6.5 mi) south of the Project area. Previously completed archaeological investigations in Connecticut have demonstrated that streams, rivers, and wetlands were focal points for precontact era occupations because they provided access to transportation routes, sources of freshwater, and abundant

faunal and floral resources. These water sources also provided the impetus for the construction of water powered mill facilities during the eighteenth and nineteenth centuries.

Soils Comprising the Project Area

Soil formation is the direct result of the interaction of a number of variables, including climate, vegetation, parent material, time, and organisms present (Gerrard 1981). Once archaeological deposits are buried within the soil, they are subject to a number of diagenic processes. Different classes of artifacts may be preferentially protected, or unaffected by these processes, whereas others may deteriorate rapidly. Cyclical wetting and drying, freezing and thawing, and compression can accelerate chemically and mechanically the decay processes for animal bones, shells, lithics, ceramics, and plant remains. Lithic and ceramic artifacts are largely unaffected by soil pH, whereas animal bones and shells decay more quickly in acidic soils such as those that are present within the current Project area. In contrast, acidic soils enhance the preservation of charred plant remains.

A review of the soils within the Project area is presented below. The Project area is characterized by the presence of five major soil types characterized as sandy loams (Figure 2). The most ubiquitous soil types found within the Project area include Canton-Charlton, Charlton-Chatfield, Hollis-Chatfield, Udorthents-Smoothed, Udorthents-Urban. Canton-Charlton and Charlton-Chatfield soil types are well drained and are correlated with both post-European Contact and precontact era archaeological site locations, while the Hollis-Chatfield series is comprised of shallow soils on well-drained slopes atop bedrock outcrops. Udorthents soil types are well to excessively drained soils often correlated with modern disturbance for construction purposes. Descriptive profiles for each, which were accessed via the National Resources Conservation Service, are presented below.

Canton-Charlton Soils (Soil Code 61B)

The Canton series consists of very deep, well drained soils formed in a loamy mantle underlain by sandy till. They are on nearly level to very steep moraines, hills, and ridges. Slope ranges from 0 to 45 percent. A typical profile associated with Canton soils is as follows: **Oi**--0 to 5 cm; slightly decomposed plant material; **A**--5 to 13 cm; very dark grayish brown (10YR 3/2) fine sandy loam; weak fine granular structure; friable; common fine roots; 5 percent gravel; very strongly acid (pH 4.6); abrupt smooth boundary; **Bw1**--13 to 30 cm; yellowish brown (10YR 5/6) fine sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; 5 percent gravel; very strongly acid (pH 4.6); clear smooth boundary; **Bw2**--30 to 41 cm; yellowish brown (10YR 5/4) fine sandy loam; weak medium subangular blocky structure; friable; common fine and medium roots; 5 percent gravel; strongly acid (pH 5.1); clear smooth boundary; **Bw3**--41 to 56 cm; yellowish brown (10YR 5/4) gravelly fine sandy loam; weak medium subangular subangular blocky; friable; common fine and medium roots; 15 percent gravel; strongly acid (pH 5.1); abrupt smooth boundary; and **2C**--56 to 170 cm; grayish brown (2.5Y 5/2) gravelly loamy sand; massive; friable; 25 percent gravel; moderately acid (pH 5.6).

The Charlton series consists of very deep, well drained soils formed in loamy melt-out till. They are nearly level to very steep soils on moraines, hills, and ridges. Slope ranges from 0 to 60 percent. A typical profile associated with Charlton soils is as follows: **Oe**--0 to 4 cm; black (10YR 2/1) moderately decomposed forest plant material; **A**--4 to 10 cm; dark brown (10YR 3/3) fine sandy loam; weak fine granular structure; very friable; many fine roots; 5 percent gravel; very strongly acid; abrupt smooth boundary; **Bw1**--10 to 18 cm; brown (7.5YR 4/4) fine sandy loam; weak coarse granular structure; very friable; many fine and medium roots; 5 percent gravel; very strongly acid; clear wavy boundary; **Bw2**--18 to 48 cm; yellowish brown (10YR 5/6) fine sandy loam; weak medium subangular blocky structure; very friable; common fine and medium roots; 10 percent gravel and cobbles; very strongly acid; clear wavy boundary; **Bw3**--48 to 69 cm; light

olive brown (2.5Y 5/4) gravelly fine sandy loam; massive; very friable; few medium roots; 15 percent gravel and cobbles; very strongly acid; abrupt wavy boundary; and **C**--69 to 165 cm; grayish brown (2.5Y 5/2) gravelly fine sandy loam with thin lenses of loamy sand; massive; friable, some lenses firm; few medium roots; 25 percent gravel and cobbles; strongly acid.

Charlton-Chatfield (Soil Codes 73C; 73E)

The Charlton series consists of very deep, well drained soils formed in loamy melt-out till. They are nearly level to very steep soils on moraines, hills, and ridges. Slope ranges from 0 to 60 percent. A typical profile associated with Charlton soils is as follows: **Oe**--0 to 4 cm; black (10YR 2/1) moderately decomposed forest plant material; **A**--4 to 10 cm; dark brown (10YR 3/3) fine sandy loam; weak fine granular structure; very friable; many fine roots; 5 percent gravel; very strongly acid; abrupt smooth boundary; **Bw1**--10 to 18 cm; brown (7.5YR 4/4) fine sandy loam; weak coarse granular structure; very friable; many fine and medium roots; 5 percent gravel; very strongly acid; clear wavy boundary; **Bw2**--18 to 48 cm; yellowish brown (10YR 5/6) fine sandy loam; weak medium subangular blocky structure; very friable; common fine and medium roots; 10 percent gravel and cobbles; very strongly acid; clear wavy boundary; **Bw3**--48 to 69 cm; light olive brown (2.5Y 5/4) gravelly fine sandy loam; massive; very friable; few medium roots; 15 percent gravel and cobbles; very strongly acid; abrupt wavy boundary; and **C**--69 to 165 cm; grayish brown (2.5Y 5/2) gravelly fine sandy loam with thin lenses of loamy sand; massive; friable, some lenses firm; few medium roots; 25 percent gravel and cobbles; strongly acid.

The Chatfield series consists of well drained soils formed in loamy melt-out till. They are moderately deep to bedrock. They are nearly level to very steep soils on bedrock-controlled hills and ridges. Slope ranges from 0 to 70 percent. A typical profile associated with Chatfield soils is as follows: **Oi**--0 to 3 cm, slightly decomposed leaf, needle, and twig litter; extremely acid, pH 4.2; **A**--3 to 5 cm, very dark gray (10YR 3/1) fine sandy loam, gray (10YR 5/1), dry; weak fine subangular blocky structure; friable; many fine and medium roots throughout; 5 percent mixed gravel and cobbles; very strongly acid, pH 4.5; abrupt smooth boundary; **Bw1**--5 to 33 cm, strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common fine roots throughout and common medium roots throughout; 15 percent mixed gravel strongly acid, pH 4.5; abrupt wavy boundary; **Bw2**--33 to 76 cm, strong brown (7.5YR 5/6) gravelly fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; friable; fine sandy loam; moderate medium subangular blocky structure; finable; fine sandy loam; moderate medium subangular blocky structure; finable; fine sandy loam; moderate medium subangular blocky structure; finable; fine sandy loam; fine cost strongly acid, pH 4.5; abrupt irregular boundary; and **2R**--76 cm; fractured slightly-weathered schist bedrock.

Hollis-Chatfield Rock Outcrop (Soil Codes 75C; 75E)

The Hollis series consists of well drained and somewhat excessively drained soils formed in a thin mantle of till. They are shallow to bedrock. They are nearly level to very steep upland soils on bedrock-controlled hills and ridges. Slope ranges from 0 through 60 percent. Saturated hydraulic conductivity is moderately high or high. Depth to hard bedrock ranges from 25 to 50 cm. Mean annual temperature is about 9 degrees C, and mean annual precipitation is about 1205 mm; **Oi**--0 to 3 cm; slightly decomposed plant material. **Oa**--3 to 5 cm; black (10YR 2/1) highly decomposed plant material; moderate fine granular structure; very friable; many fine and very fine roots; abrupt smooth boundary; **A**--5 to 18 cm; very dark grayish brown (10YR 3/2) gravelly fine sandy loam, light brownish gray (10YR 6/2) dry; weak fine granular structure; very friable; common fine, very fine, medium, and coarse roots; 10 percent gravel, 5 percent channers; very strongly acid; clear smooth boundary; **Bw1**--18 to 25 cm; dark yellowish brown (10YR 4/4) gravelly fine sandy loam; moderate medium subangular blocky structure; friable; few very fine and fine roots, common medium roots; 10 percent gravel, 10 percent channers; strongly acid; clear wavy boundary; **Bw2**--25 to 41 cm; yellowish brown (10YR 5/6) gravelly fine sandy loam; moderate medium and coarse subangular blocky

structure; friable; few fine and very fine roots, common medium roots; 10 percent gravel, 5 percent channers; strongly acid; abrupt smooth boundary; and **2R**--41 cm; schist bedrock.

The Chatfield series consists of well drained soils formed in loamy melt-out till. They are moderately deep to bedrock. They are nearly level to very steep soils on bedrock-controlled hills and ridges. Slope ranges from 0 to 70 percent. **Oi** -- 0 to 3 cm, slightly decomposed leaf, needle, and twig litter; extremely acid, pH 4.2. **A** -- 3 to 5 cm, very dark gray (10YR 3/1) fine sandy loam, gray (10YR 5/1), dry; weak fine subangular blocky structure; friable; many fine and medium roots throughout; 5 percent mixed gravel and cobbles; very strongly acid, pH 4.5; abrupt smooth boundary; **Bw1**-- 5 to 33 cm, strong brown (7.5YR 5/6) gravelly fine sandy loam; weak fine subangular blocky structure; friable; common fine roots throughout; 15 percent mixed gravel and cobbles; very strongly acid, pH 4.5; abrupt structure; friable; few fine roots throughout; 20 percent mixed rock fragments; very strongly acid, pH 4.5; abrupt irregular boundary; **and 2R** -- 76 cm; fractured slightly-weathered schist bedrock.

Udorthents, Smoothed Soils (Soil Code 308)

Udorthents, smoothed soils are a well drained to moderately well drained, disturbed soil area that has had two or more feet of the original soil surface altered by filling, excavation or grading activities. Udorthents, smoothed soils commonly occur on leveled land and fill landforms.

Udorthent-Urban Soils (Soil Code 306)

The Udorthents-Urban Land Complex consists of moderately well drained to excessively drained soils that have been disturbed by cuffing or filling, and areas that are covered by buildings and pavement. The areas are mostly larger than 5 acres. Udorthents are in areas that have been cut to a depth of 2 feet or more or are on areas with more than 2 feet of fill. Udorthents consist primarily of moderately coarse textured soil material and a few small areas of medium textured material. In some areas fill has been used to build up recreational areas and highways.

Summary

The natural setting of the area containing the proposed Project area is common throughout the Southeast Hills ecoregion. Streams and rivers of this area empty into the Salmon River, which in turn drains into the Connecticut River and Long Island Sound. In general, the region was well suited to Native American occupation throughout the precontact era. This portion of East Hampton was also used during the post-European Contact period, as evidenced by the presence of residences, outbuildings, and agricultural fields throughout the region; thus, archaeological deposits dating from the precontact era and post-European Contact periods may be expected near or within the proposed Project area.

CHAPTER III PRECONTACT ERA SETTING

Introduction

Prior to the late 1970s and early 1980s, very few systematic archaeological surveys of large portions of the State of Connecticut had been undertaken. Rather, the precontact era occupation of the region was studied at the site level. Sites chosen for excavation were highly visible and they were in such areas as the coastal zone, e.g., shell middens, and Connecticut River Valley. As a result, a skewed interpretation of the precontact era occupation of Connecticut was developed. It was suggested that the upland portions of the state, i.e., the northeastern and northwestern hills ecoregions, were little used and rarely occupied by precontact era Native Americans, while the coastal zone, i.e., the eastern and western coastal and the southeastern and southwestern hills ecoregions, was the focus of settlements and exploitation. This interpretation remained unchallenged until the 1970s and 1980s when several town-wide and regional archaeological studies were completed. These investigations led to the creation of Several archaeological phases that subsequently were applied to understand the precontact period of Connecticut. The remainder of this chapter provides an overview of the precontact era setting of the region encompassing the Facility.

Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])

The earliest inhabitants of the area encompassing the State of Connecticut, who have been referred to as Paleo-Indians, arrived in the area by ca., 13,000 B.P. (Gramly and Funk 1990; Snow 1980). Due to the presence of large Pleistocene mammals at that time and the ubiquity of large fluted projectile points in archaeological deposits of this age, Paleo-Indians often have been described as big-game hunters (Ritchie and Funk 1973; Snow 1980); however, as discussed below, it is more likely that they hunted a broad spectrum of animals. While there have been over 50 surface finds of Paleo-Indian projectile points throughout the State of Connecticut (Bellantoni 1995), only three sites, the Templeton Site (6-LF-21) in Washington, Connecticut, the Hidden Creek Site (72-163) in Ledyard, Connecticut, and the Brian D. Jones Site (4-10B) in Avon, Connecticut have been studied in detail and dated using the radiocarbon method (Jones 1997; Moeller 1980; Singer 2017a; Leslie et al. 2020).

The Templeton Site (6-LF-21) in Washington, Connecticut was occupied between 10,490 and 9,890 years ago (Moeller 1980). In addition to a single large and two small, fluted points, the Templeton Site produced a stone tool assemblage consisting of gravers, drills, core fragments, scrapers, and channel flakes, which indicates that the full range of stone tool production and maintenance took place at the site (Moeller 1980). Moreover, the use of both local and non-local raw materials was documented in the recovered tool assemblage, suggesting that not only did the site's occupants spend some time in the area, but they also had access to distant stone sources, the use of which likely occurred during movement from region to region. More recently, the site has undergone re-investigation by Singer (2017a and 2017b) who has determined that the overwhelming majority of tools and debitage are exotic and were quarried directly from the Hudson River Valley. Recent research has focused on task-specific loci at the Templeton Site, particularly the production of numerous Michaud-Neponset projectile points, as identified through remnant channel flakes.

The Hidden Creek Site (72-163) is situated on the southeastern margin of the Great Cedar Swamp on the Mashantucket Pequot Reservation in Ledyard, Connecticut (Jones 1997). While excavation of the Hidden Creek Site produced evidence of Terminal Archaic and Woodland Period components (see below) in the

upper soil horizons, the lower levels of the site yielded artifacts dating from the Paleo-Indian era. Recovered Paleo-Indian artifacts included broken bifaces, side-scrapers, a fluted preform, gravers, and end-scrapers. Based on the types and number of tools present, Jones (1997:77) has hypothesized that the Hidden Creek Site represented a short-term occupation, and that separate stone tool reduction and rejuvenation areas were present.

The Brian D. Jones Site (4-10B) was identified on a Pleistocene levee on the Farmington River in Avon, Connecticut; it was buried under 1.5 m (3.3 ft) of alluvium (Leslie et al. 2020). The Brian D. Jones Site was identified by Archaeological and Historical Services, Inc., in 2019 during a survey for the Connecticut Department of Transportation preceding a proposed bridge construction project. It is now the oldest known archaeological site in Connecticut at +12,500 years old. The site also provides a rare example of a Paleo-Indian site on a river rather than the more common upland areas or on the edges of wetlands. Ground-penetrating radar survey revealed overbank flooding and sedimentation that resulted in the creating of a stable ancient river levee with gentle, low-energy floods. Archaeological deposits on the levee were therefore protected.

Excavations at the Brian D. Jones Site revealed 44 soil anomalies, 27 of which were characterized as cultural features used as hearths and post holes, among other uses. Of these, one hearth has been dated thus far (10,520 ± 30 14C yr BP; charred Pinus; 2-sigma 12,568 to 12,410 CAL BP) (Leslie et al. 2020:4). Further radiocarbon testing will be completed in the future. Artifact concentrations surrounded these features and were separated in two stratigraphic layers representing at least two temporally discrete Paleo-Indian occupations. The recovered lithic artifacts are fashioned from Normanskill chert, Hardyston jasper, Jefferson/Mount Jasper rhyolite, chalcedony, siltstone, and quartz. They include examples of a fluted point base, preforms, channel flakes, pièces esquillées, end scrapers, side scrapers, grinding stones, bifaces, utilized flakes, gravers, and drilled stone pendant fragment. Lithic tools numbered over 100, while toolmaking debris was in the thousands. The channel flakes represent the production of spear points used in hunting. Scrapers, perforators, and grinding stones indicate animal butchering, plant food grinding, the production of wood and bone tools, and the processing of animal skins for clothing and tents. Other collected cultural materials included charred botanicals and calcined bone. Botanical specimens recovered in hearth features included burned remains of cattail, pin cherry, strawberry, acorn, sumac, water lily, and dogwood. In addition, pieces of ochre were recovered during the excavations; these, in combination with the drilled pendant fragment, are the earliest evidence of personal adornment and artistic expression identified in Connecticut (Leslie et al. 2020). Approximately 15,000 artifacts were collected in total.

The scarcity of identified Paleo-Indian sites suggests a low population density during this period. The small size of most Paleo-Indian sites, their likely inundation by rising sea levels, and the high degree of landscape disturbance over the past 10,000 years likely contribute to poor site visibility, although the presence of two deeply alluvially buried Paleo-Indian sites in Connecticut suggests that other sites may be located along stable rivers (Leslie et al. 2021).

Archaic Period (10,000 to 2,700 B.P.)

The Archaic Period, which succeeded the Paleo-Indian Period, began by ca., 10,000 B.P. (Ritchie and Funk 1973; Snow 1980), and it has been divided into three subperiods: Early Archaic (10,000 to 8,000 B.P.), Middle Archaic (8,000 to 6,000 B.P.), and Late Archaic (6,000 to 3,400 B.P.). These periods were devised to describe all non-farming, non-ceramic producing populations in the area. Regional archeologists recently have recognized a final "transitional" Archaic Period, the Terminal Archaic Period (3,400-2,700 B.P.), which was meant to describe those groups that existed just prior to the onset of the Woodland
Period and the widespread adoption of ceramics into the toolkit (Snow 1980; McBride 1984; Pfeiffer 1984, 1990; Witthoft 1949, 1953).

Early Archaic Period (10,000 to 8,000 B.P.)

To date, very few Early Archaic sites have been identified in southern New England. As a result, researchers such as Fitting (1968) and Ritchie (1969) have suggested a lack of these sites likely is tied to cultural discontinuity between the Early Archaic and preceding Paleo-Indian Period, as well as a population decrease from earlier times; however, with continued identification of Early Archaic sites in the region, and the recognition of the problems of preservation, it is difficult to maintain the discontinuity hypothesis (Curran and Dincauze 1977; Snow 1980).

Like their Paleo-Indian predecessors, Early Archaic sites tend to be very small and produce few artifacts, most of which are not temporally diagnostic. While Early Archaic sites in other portions of the United States are represented by projectile points of the Kirk series (Ritchie and Funk 1973) and by Kanawha types (Coe 1964), sites of this age in southern New England are identified on the basis of a series of ill-defined bifurcate-based projectile points. These projectile points are identified by the presence of their characteristic bifurcated base, and they generally are made from high quality raw materials. Moreover, finds of these projectile points have rarely been in stratified contexts. Rather, they occur commonly either as surface expressions or intermixed with artifacts representative of later periods. Early Archaic occupations, such as the Dill Farm Site and Sites 6LF64 and 6LF70 in Litchfield County, are represented by camps that were relocated periodically to take advantage of seasonally available resources (McBride 1984; Pfeiffer 1986). In this sense, a foraging type of settlement pattern was employed during the Early Archaic Period.

Another localized cultural tradition, the Gulf of Maine Archaic, which lasted from ca. 9,500 to 6,000 14C BP, is beginning to be recognized in Southern New England (Petersen and Putnam 1992). It is distinguished by its microlithic industry, which may be associated with the production of compound tools (Robinson and Peterson 1993). Assemblages from Maine (Petersen et al. 1986; Petersen 1991; Sanger et al. 1992), Massachusetts (Strauss 2017; Leslie et al. 2022), and Connecticut (Forrest 1999) reflect the selection of local, coarse-grained stones. Large choppers and hoe-like forms from southeastern Connecticut's Sandy Hill Site likely functioned as digging implements. Woodworking tools, including adzes, celts, and gull-channeled gouges recovered at the Brigham and Sharrow sites in Maine (Robinson and Petersen 1993; 68), may have been used for dugout canoe manufacture. The deeply stratified Sandy Hill (Forrest 1999; Jones and Forrest 2003) and Sharrow sites (Petersen 1991), with their overlapping lenses of "black sand" floor deposits, suggest intensive site re-occupations according to an adaptation that relied, in part, on seasonally available wetland resources. Thus far, sites from this tradition have only been identified within coastal and near-coastal territories along the Gulf of Maine, in southeastern Connecticut, and in Massachusetts.

Middle Archaic Period (8,000 to 6,000 B.P.)

By the onset of the Middle Archaic Period modern deciduous forests had developed in the region (Davis 1969). Increased numbers and types of sites associated with this period are noted in Connecticut (McBride 1984). The most well-known Middle Archaic site in New England is the Neville Site in Manchester, New Hampshire studied by Dincauze (1976). Careful analysis of the Neville Site indicated that the Middle Archaic occupation dated from between 7,700 and 6,000 years ago. In fact, Dincauze obtained several radiocarbon dates from the Middle Archaic component of the Neville Site associated with the then-newly named Neville type projectile point, ranging from 7,740+280 and 7,015+160 B.P. (Dincauze 1976).

In addition to Neville points, Dincauze (1976) described two other projectile points styles that are attributed to the Middle Archaic Period: Stark and Merrimac projectile points. While no absolute dates were recovered from deposits that yielded Stark points, the Merrimac type dated from 5,910<u>+</u>180 B.P. Dincauze argued that both the Neville and later Merrimac and Stark occupations were established to take advantage of the excellent fishing that the falls situated adjacent to the site area would have afforded Native American groups. Thus, based on the available archaeological evidence, the Middle Archaic Period is characterized by continued increases in diversification of tool types and resources exploited, as well as by sophisticated changes in the settlement pattern to include different site types, including both base camps and task-specific sites (McBride 1984:96).

Late Archaic Period (6,000 to 3,700 B.P.)

The Late Archaic Period in southern New England is divided into two major cultural traditions that appear to have coexisted. They include the Laurentian and Narrow-Stemmed Traditions (Funk 1976; McBride 1984; Ritchie 1969a and b). Artifacts assigned to the Laurentian Tradition include ground stone axes, adzes, gouges, ulus (semi-lunar knives), pestles, atlatl weights, and scrapers. The diagnostic projectile point forms of this time period in southern New England include the Brewerton Eared-Notched, Brewerton Eared and Brewerton Side-Notched varieties (McBride 1984; Ritchie 1969a; Thompson 1969). In general, the stone tool assemblage of the Laurentian Tradition is characterized by flint, felsite, rhyolite, and quartzite, while quartz was largely avoided for stone tool production.

In terms of settlement and subsistence patterns, archaeological evidence in southern New England suggests that Laurentian Tradition populations consisted of groups of mobile hunter-gatherers. While a few large Laurentian Tradition occupations have been studied, sites of this age generally encompass less than 500 m² (5,383 ft²). These base camps reflect frequent movements by small groups of people in search of seasonally abundant resources. The overall settlement pattern of the Laurentian Tradition was dispersed in nature, with base camps located in a wide range of microenvironments, including riverine as well as upland zones (McBride 1978, 1984:252). Finally, subsistence strategies of Laurentian Tradition focused on hunting and gathering of wild plants and animals from multiple ecozones.

The second Late Archaic tradition, known as the Narrow-Stemmed Tradition, is unlike the Laurentian Tradition, and it likely represents a different cultural adaptation. The Narrow-Stemmed Tradition is recognized by the presence of quartz and quartzite narrow stemmed projectile points, triangular quartz Squibnocket projectile points, and a bipolar lithic reduction strategy (McBride 1984). Other tools found in Narrow-Stemmed Tradition artifact assemblages include choppers, adzes, pestles, antler and bone projectile points, harpoons, awls, and notched atlatl weights. Many of these tools, notably the projectile points and pestles, indicate a subsistence pattern dominated by hunting and fishing, as well the collection of a wide range of plant foods (McBride 1984; Snow 1980:228).

Terminal Archaic Period (3,700 to 2,700 B.P.)

The Terminal Archaic, which lasted from ca., 3,700 to 2,700 BP, is perhaps the most interesting, yet confusing of the Archaic Periods in the southern New England precontact period. Originally termed the "Transitional Archaic" by Witthoft (1953) and recognized by the introduction of technological innovations, e.g., broadspear projectile points and soapstone bowls, the Terminal Archaic has long posed problems for regional archeologists. While the Narrow-Stemmed Tradition persisted through the Terminal Archaic and into the Early Woodland Period, the Terminal Archaic is coeval with what appears to be a different technological adaptation, the Susquehanna Tradition (McBride 1984; Ritchie 1969b). The Susquehanna Tradition is recognized in southern New England by the presence of a new stone tool industry that was based on the use of high-quality raw materials for stone tool production and a settlement pattern

different from the "coeval" Narrow-Stemmed Tradition.

The Susquehanna Tradition is based on the classification of several Broadspear projectile point types and associated artifacts. There are several local sequences within the tradition, and they are based on projectile point type chronology. Temporally diagnostic projectile points of these sequences include the Snook Kill, Susquehanna Broadspear, Mansion Inn, and Orient Fishtail types (Lavin 1984; McBride 1984; Pfeiffer 1984). The initial portion of the Terminal Archaic Period (ca., 3,700-3,200 BP) is characterized by the presence of Snook Kill and Susquehanna Broadspear projectile points while the latter Terminal Archaic (3,200-2,700 BP) is distinguished by Orient Fishtail projectile points (McBride 1984:119; Ritchie 1971).

In addition, it was during the late Terminal Archaic that interior cord marked, grit tempered, thick-walled ceramics with conoidal (pointed) bases made their initial appearance in the Native American toolkit. These are the first ceramics in the region, and they are named Vinette I (Ritchie 1969a; Snow 1980:242); this type of ceramic vessel appears with much more frequency during the ensuing Early Woodland Period. In addition, the adoption and widespread use of soapstone bowls, as well as the implementation of subterranean storage, suggests that Terminal Archaic groups were characterized by reduced mobility and longer-term use of established occupation sites (Snow 1980:250).

Finally, while settlement patterns appeared to have changed, Terminal Archaic subsistence patterns were analogous to earlier patterns. The subsistence pattern still was diffuse in nature, and it was scheduled carefully. Typical food remains recovered from sites of this period consist of fragments of white-tailed deer, beaver, turtle, fish, and various small mammals. Botanical remains recovered from the site area consisted of *Chenopodium* sp., hickory, butternut, and walnut (Pagoulatos 1988:81). Such diversity in food remains suggests at least minimal use of a wide range of microenvironments for subsistence purposes.

Woodland Period (2,700 to 350 B.P.)

Traditionally, the advent of the Woodland Period in southern New England has been associated with the introduction of pottery; however, as mentioned above, early dates associated with pottery now suggest the presence of Vinette I ceramics appeared toward the end of the preceding Terminal Archaic Period (Ritchie 1969a; McBride 1984). Like the Archaic Period, the Woodland Period has been divided into three subperiods: Early, Middle, and Late Woodland. The various subperiods are discussed below.

Early Woodland Period (ca., 2,700 to 2,000 B.P.)

The Early Woodland Period of the northeastern United States dates from ca., 2,700 to 2,000 B.P., and it was thought to have been characterized by the advent of farming, the initial use of ceramic vessels, and increasingly complex burial ceremonialism (Griffin 1967; Ritchie 1969a and 1969b; Snow 1980). In the Northeast, the earliest ceramics of the Early Woodland Period are thick walled, cord marked on both the interior and exterior, and possess grit temper. Archaeological investigations of Early Woodland sites in southern New England resulted in the recovery of narrow stemmed projectile points in association with ceramic sherds and subsistence remains, including specimens of white-tailed deer, soft and hard-shell clams, and oyster shells (Lavin and Salwen 1983; McBride 1984:296-297; Pope 1952). McBride (1984) has argued that the combination of the subsistence remains and the recognition of multiple superimposed cultural features at various sites indicates that Early Woodland Period settlement patterns were characterized by multiple re-use of the same sites on a seasonal basis by small co-residential groups.

Middle Woodland Period (2,000 to 1,200 B.P.)

The Middle Woodland Period is marked by an increase in the number of ceramic types and forms utilized (Lizee 1994a), as well as an increase in the amount of exotic lithic raw material used in stone tool

manufacture (McBride 1984). The latter suggests that regional exchange networks were established, and that they were used to supply local populations with necessary raw materials (McBride 1984; Snow 1980). The Middle Woodland Period is represented archaeologically by narrow stemmed and Jack's Reef projectile points, and increased amounts of exotic raw materials in recovered lithic assemblages, including chert, argillite, jasper, and hornfels; and conoidal ceramic vessels decorated with dentate stamping. Ceramic types that are indicative of the Middle Woodland Period include Linear Dentate, Rocker Dentate, Windsor Cord Marked, Windsor Brushed, Windsor Plain, and Hollister Stamped (Lizee 1994a:200).

In terms of settlement patterns, the Middle Woodland Period is characterized by the occupation of village sites by large co-residential groups that utilized native plant and animal species for food and raw materials in tool making (George 1997). These sites were the principal place of occupation, and they were positioned close to major river valleys, tidal marshes, estuaries, and the coastline, all of which would have supplied an abundance of plant and animal resources (McBride 1984:309). In addition to villages, numerous temporary and task-specific sites were utilized in the surrounding upland areas, as well as in closer ecozones such as wetlands, estuaries, and floodplains. The use of temporary and task-specific sites to support large village populations indicates that the Middle Woodland Period was characterized by a resource acquisition strategy that can best be termed as logistical collection (McBride 1984:310).

Late Woodland Period (ca., 1,200 to 350 B.P.)

The Late Woodland Period in southern New England dates from ca., 1,200 to 350 B.P., and it is characterized by the earliest evidence for the use of corn in the lower Connecticut River Valley (Bendremer 1993; Bendremer and Dewar 1993; Bendremer et al. 1991; George 1997; McBride 1984); an increase in the frequency of exchange of non-local lithics (Feder 1984; George and Tryon 1996; McBride 1984; Lavin 1984); increased variability in ceramic form, function, surface treatment, and decoration (Lavin 1980, 1986, 1987; Lizee 1994a, 1994b); and a continuation of a trend towards larger, more permanent settlements in riverine, estuarine, and coastal ecozones (Dincauze 1974; McBride 1984; Snow 1980).

Stone tool assemblages associated with Late Woodland occupations, especially village-sized sites, are functionally variable and they reflect plant and animal resource processing and consumption on a large scale. Finished stone tools recovered from Late Woodland sites include Levanna and Madison projectile points; drills; side-, end-, and thumbnail scrapers; mortars and pestles; nutting stones; netsinkers; and celts, adzes, axes, and digging tools. These tools were used in activities ranging from hide preparation to plant processing to the manufacture of canoes, bowls, and utensils, as well as other settlement and subsistence-related items (McBride 1984; Snow 1980). Finally, ceramic assemblages recovered from Late Woodland sites are as variable as the lithic assemblages. Ceramic types identified include Windsor Fabric Impressed, Windsor Brushed, Windsor Cord Marked, Windsor Plain, Clearview Stamped, Sebonac Stamped, Selden Island, Hollister Plain, Hollister Stamped, and Shantok Cove Incised (Lavin 1980, 1988a, 1988b; Lizee 1994a; Pope 1953; Rouse 1947; Salwen and Ottesen 1972; Smith 1947). These types are more stylistically diverse than their predecessors with incision, shell stamping, punctation, single point, linear dentate, rocker dentate stamping, and stamp and drag impressions common (Lizee 1994a:216).

Summary of Connecticut's Precontact Era

The precontact period of Connecticut spans from ca., 13,000 to 350 B.P., and it is characterized by numerous changes in tool types, subsistence patterns, and land use strategies. Much of this era is characterized by local Native American groups who practiced a subsistence pattern based on a mixed economy of hunting and gathering plant and animal resources. It is not until the Late Woodland Period that incontrovertible evidence for the use of domesticated species is available. Further, settlement patterns throughout the precontact period shifted from seasonal occupations of small co-residential

groups to large aggregations of people in riverine, estuarine, and coastal ecozones. In terms of the region that includes the proposed Project area, a variety of precontact site types may be expected, ranging from seasonal camps utilized by Paleo-Indian and Archaic populations to temporary and task-specific sites of the Woodland era.

CHAPTER IV POST EUROPEAN CONTACT OVERVIEW

Introduction

The proposed CT-8 Battery Storage Facility Project is located in the town of East Hampton, in Middlesex County, Connecticut. Most Connecticut towns, including East Hampton, originated as Indigenous settlements, and later became English colonial villages. Originally called Chatham, East Hampton was initially settled in 1710, incorporated as a town in 1767, and renamed East Hampton in 1915. East Hampton's location along the Connecticut River made it ideal for commerce, industry, agriculture, and shipbuilding. Into the twenty-first century, East Hampton remains a rural community that focus on tourism and ties to the Connecticut River. This chapter presents an overview of Middlesex County and the town of East Hampton, as well as data specific to the project area.

Middlesex County

Middlesex County was incorporated in 1785 with land taken from Hartford County and New London County (Beers 1884). Located in south-central Connecticut, it is bounded to the north by Hartford and New London Counties, to the west by New Haven County, to the east by New London County, and to the south by Long Island Sound. Bisected by the Connecticut River, the County is also the location of the city of Middletown, incorporated in 1651 and named in 1653. Other important population centers in Middlesex County include Portland and Cromwell (Connecticut 2021). The landscape varies from coastal lowlands and river basin to higher elevations in the interior. Important bodies of water associated with Middlesex County include the Salmon River, Coginchaug River, Mattabesset River, Millers Pond, and Pocotopaug Lake. The shoreline also has many smaller unnamed rivers, harbors, islands, and inlets.

Woodland Period to the Seventeenth Century

During the Woodland Period of northeastern North American history (ca., 3,000 to 500 years ago), the Indigenous peoples who resided along the shoreline in central Connecticut were part of the greater Algonquian culture of northeastern North America (Lavin 2013). They spoke local variations of Southern New England Algonquian (SNEA) languages and lived in extended kinship groups on lands they maintained for a variety of horticultural and resource extraction purposes (Goddard 1978). Indigenous people in the region practiced subsistence activities including hunting, fowling, and fishing, along with the cultivation of various crops, the most important of which were maize, squash, and beans. They supplemented these foods seasonally by collecting shellfish, fruits, and plants during warmer periods, and gathering nuts, roots, and tubers during colder times. Additionally, these communities came together in large groups to hunt deer in the fall and winter. Indigenous peoples lived with their immediate or extended families in large settlements, often concentrated along rivers and/or wetlands. Some villages were fortified by wooden palisades. Their habitation, known as a weetu or wigwam, was usually constructed of a treesapling frame and covered in reed matting during warm months and tree bark throughout the winter. These varied in size from a small, individual dwelling, to an expansive "long house," which could accommodate several families. Native communities commonly traded among their immediate neighbors and often maintained long-distance networks (Lavin 2013).

Seventeenth Century through Eighteenth Century

As Indigenous communities maintained oral tradition rather than a written record, most surviving information of the Indigenous people of present-day Connecticut was recorded by European observers

who were Dutch or English colonists (Lavin 2013). At the time of the arrival of Europeans, the Native people who resided in present-day East Hampton included the Wangunk who likely utilized Lake Pocotopaug, one of Connecticut's largest inland bodies of water (Spiess 1934). The earliest Europeans known to have sailed along Long Island Sound and the Connecticut River were the Dutch around 1614 (Love 1903). The Dutch developed trade relationships with local Native communities. By the early 1620s, Dutch traders entered into an agreement with the Pequot of present-day southeastern Connecticut in which the Pequot supplied wampum (polished shells) and furs in return for European goods. In 1624, the Dutch West India Company formally established New Netherland Colony centered around Manhattan and the Hudson River with its eastern bounds extending as far as Cape Cod, including much of present-day Connecticut (Jacobs 2009). Through their relationship with the Dutch, the Pequot accessed a variety of trade goods they distributed to tributaries and traded with other groups in the region. The Pequot extended their dominance over the region, bringing all the Native nations in the area into a tributary relationship under their leadership (Hauptman and Wherry 2009; McBride 2013).

In 1633, the Pequot allowed the Dutch to build a fortified trading post, the Huys de Hoop, on the Connecticut River at the site of present-day Hartford to further cement both parties' domination over the flow of wampum, fur, and trade goods. To break from the Pequot, several Connecticut River sachems invited the English to the valley who then settled Windsor (1633), Wethersfield (1634), and Hartford (1635), as well as Saybrook Colony (1635) at the mouth of the river (Trumbull 1886; Van Dusen 1961). Increased European interaction resulted in exposure to diseases and epidemics Indigenous people had never encountered and to which they had no natural immunity. Illnesses such as smallpox, measles, tuberculosis, and cholera devastated Native communities. In 1633, one epidemic spread from Plimoth Colony to Connecticut, impacting the Pequot and the people of the Connecticut River Valley in 1634 (Trumbull 1886). Tensions between Native and European groups in the region resulted in the death of several English traders in 1634 and 1636, which were blamed on the Pequot. In retaliation, English forces from Massachusetts Bay destroyed Pequot and Niantic villages on the Pequot (Thames) River in August of 1636, which began the Pequot War. The Pequot laid siege to Saybrook Fort at the mouth of the Connecticut River during the winter of 1636-1637 and attacked Wethersfield in April of 1637. The Connecticut Colony declared war on the Pequot and was joined by Native warriors from the Connecticut River and Mohegans under the Sachem Uncas (Oberg 2006). In May of 1637, English allied forces destroyed the fortified Pequot village at Mistick and in July they pursued refugees west. The Pequot were defeated in present-day Fairfield and the war soon came to an end (Cave 1996). Afterwards, the English considered Pequot territory, including land in the Connecticut River Valley, to be conquered lands and they were claimed by Connecticut Colony (Trumbull 1886).

At this time, Mattabesett, the area now known as Middletown, was situated within the territory of the Wangunk, led by Sachem Sowheag (Lavin 2013). This territory covered what are now the towns of Wethersfield, Newington, Rocky Hill, Cromwell, Middletown, Middlefield, Durham, Haddam, East Haddam, East Hampton, Portland, as well as parts of Glastonbury, Marlborough, and Colchester (Spiess 1934). In 1651, the colonial legislature granted a colonial settlement at "Mattabeseck", and in 1653 it was renamed Middletown. Two reservations were established: 300 acres were reserved on the east bank of the river (now Portland), and another tract on the west side, north of the present center of Middletown in the area known as Newfields (De Forest 1852; Crofut 1937). The Haddam area was purchased in the 1660s as part of a larger area running from Middletown to its north down to Chester to its south, out of which the Wangunks (according to De Forest and Spiess) reserved Thirty Mile Island in the Connecticut River at Haddam, and an area called Pattyquonck in what is now Chester (Clark 1808). There is also evidence that several stayed on at Haddam Neck on the river, at a place called Indian Hollow (Field 1819). Others, it appears, resided in the Middletown area.

Early colonial interest in the East Hampton area was first centered on two islands in the Connecticut River that are part of Haddam. These islands were originally called Twenty Mile Island and Thirty Mile Island and were later known as Lord's Island and Haddam Island, respectively. In 1652, Captain John Cullick received a confirming grant from the colonial legislature for Twenty Mile Island, which he initially acquired from the Wangunk (Spiess 1934). In 1662, the legislature purchased the Thirty Mile Island area from the local Indigenous people (Bayles 1884). The post European Contact record states that the purchase included an area encompassing what are now the areas of Haddam and East Haddam (Crofut 1937). The deed indicates that the land purchased ran from a point just to the north of the present-day city of Middletown southward to a point in what is now the town of Chester and extended six miles on each side of the Connecticut River. The Native American signatories of the deed retained Thirty Mile Island and 40 acres of land for their use in the area that later became known as Chester (Clark 1808). Soon after the 1662 purchase, 28 colonists and their families moved to Thirty Mile Island (now Haddam Island State Park). By 1668, the settlement was granted legal status as a town and named Haddam. The first settlement was at what is now known as Walkely Hill, which is located on the west side of the Connecticut River and opposite Thirty Mile Island. Also on the Connecticut River, but approximately a mile downstream from the first settlement, was the area known as the Lower Plantation or Lower Town Plot. This settlement eventually became the village of Haddam, while the first location was largely abandoned (Bayles 1884). While some histories state that East Hampton was settled as early as 1639, the first recorded English settlers within the limits of present-day East Hampton were members of the Goffe family in 1710 (Beers 1884). Subsequent settlers from Eastham, Massachusetts settled in the area in the following decades, and in 1767 the Connecticut General Assembly incorporated the town of Chatham (currently East Hampton) from land that included the parishes of East Middletown, Middle Haddam, East Hampton, and Westchester (Chatham Historical Society 2023). Early industry in East Hampton included a forge established at the outlet of Pocotopaug Lake in 1743, and a cobalt mine was opened in 1762 with exports made to Europe (Beers 1884).

Slavery existed in the region since the seventeenth century and by the eighteenth century it was primarily practiced by wealthy families, merchants, and ministers in larger towns. The 1774 Connecticut colonial census for East Hampton, then known as Chatham, listed 2,369 "whites" and 28 "blacks." The number of enslaved individuals was not documented (Hoadley 1887). In 1784, the State passed a gradual manumission law, but slavery was not fully abolished until 1848 (Normen 2013). During the American Revolution (1775-1783), the state of Connecticut played an important role in the process of recruiting soldiers, supplying food stores, and providing a variety of military goods for the war effort. Throughout the war, Connecticut was a leader in sourcing provisions for American forces, due to a rationing system set up by individual towns, including Chatham. Following the war, on January 9, 1788, Connecticut ratified the U.S. Constitution to become the fifth state (Van Dusen 1961).

Nineteenth Century through the Twenty-First Century

Prior to the Civil War, East Hampton was primarily an agricultural settlement that benefited from its proximity to the Connecticut River. As such, fishing, particularly for shad, was an important part of the economy. In 1817, 169 barrels of shad were caught in East Hampton during the fishing season (Field 1819). Regarding industry, the Bevin Brothers' Manufacturing Company was established in 1830. This company produced a variety of bells, including sleigh bells, ship bells, and cow bells, amongst others. At its peak in the 1800s there were 30 different bell manufacturers in East Hampton which led the town to become known colloquially as "Belltown USA" (Beers 1884; Connecticuthistory.org 2020). During the Civil War (1861-1865) many Connecticut towns, including East Hampton, directly provided men and resources to the Union. From East Hampton, 141 men served in the Union Army (Hines 2002). Shipbuilding, already

well-established in area, also served to support the Union effort via construction of naval vessels (Niven 1965). In East Hampton, post war industrial growth included the establishment of silk manufacturing at the Eureka Silk Manufacturing Company and the Merrick Conant Manufacturing Company in addition to new bell manufacturing facilities (Beers 1884). In 1873, East Hampton became connected to New Haven and further points via the opening of the Boston & New York Air Line Railroad (Turner and Jacobus 1989). This line, which travelled through small towns with the intention of linking New York and New Haven with Boston, presented engineering challenges. In East Hampton, the tracks traversed along the Lyman Viaduct, a 1,110-foot-long stretch of single track 137 feet above Dickinson Brook (Turner and Jacobus 1989).

In 1915, Chatham was renamed East Hampton, a name that may have been originally selected as the town name by the initial settlers from Eastham (Chatham Historical Society 2023). During World War I, the Swanson Mine in East Hampton provided lepidolite, which contains lithium, as a valuable resource for the war efforts. Lithium is used in specialized lubricants, batteries, and alloying metals. During the war, 40 tons of lepidolite were stored at the mine in East Hampton (Pawlowski 2022). Following the First World War, the economy of East Hampton was still focused on agriculture and the manufacture of bells (Connecticut 1940). Unfortunately, the flood of the Connecticut River in 1936 and the subsequent Hurricane of 1938 inflicted heavy damage upon the region (Van Dusen 1961). By the mid-twentieth century, the trend toward post-war suburban living brought more permanent residents to industrial towns and cities, further boosting the regional population. During this period, the railroad's transportation role was replaced by the limited-access highway system, which was represented by nearby Connecticut Route 9. Plans for an expressway were first made in 1953, but this road did not actually open until the late 1960s (Oglesby 2013). Once constructed, Route 9 paralleled the Connecticut River, west of the town of East Hampton, and bisected Middlesex Country, providing greater transportation connectivity throughout the state and increased growth to the city of Middletown. The pace of East Hampton's population growth coincided with the opening of the Route 9 highway (Table 1).

Changes continued in East Hampton through the twenty-first century, with a trend towards greater population growth. In East Hampton, the key employers in 2021 were American Distilling/Dickinson Brands, Stop & Shop Supermarket, and Eversource (AdvanceCT and CTData Collaborate 2021). Lake Pocotopaug continues to serve as a draw for recreation in the area and promotes the well-established lakefront community (Connecticuthistory.org 2021). Additionally, Bevin Brothers' Bell Company continues to produce bells including cow bells and those for the Salvation Army (Connecticuthistory.org 2020).

Town	1790	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900
East Hampton, Middlesex County	3,230	3,295	3,258	3,159	3,646	3,413	1,525	1,776	2,771	1,967	1,949	2,271
	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020
	2,390	2,394	2,616	2,955	4,000	5,403	7,078	8,572	10,428	13,352	12,959	12,800

 Table 1: Population of East Hampton, Connecticut 1790-2020 (Connecticut 2023a-d, Connecticut 2021)

History of the Project Area

The CT-8 Battery Storage Facility is located in the town of East Hampton, Connecticut. An excerpt from Walling's map from 1859 shows that the project parcel is in the central part of East Hampton and is bisected by a rail line. Several bell manufacturers are labelled on Walling's map, including Bevin Brothers' Bell Manufacturing to the northeast of the project parcel and the Patent Bell Manufacturing Company directly to the east of the project area (Figure 3). There were no property owners labelled within the project parcel; the closest property owners to the parcel were members of the Barton family, including

W.E. Barton, likely William E. Barton, a bell manufacturer, to the east of the parcel and the Skinner family along with Skinners Saw and Grist Mill to the south of the parcel (Figure 3; USCB 1870a).

An excerpt from Beers' 1874 map shows that the rail line bisecting the project parcel was a part of the Air Line Railroad (Figure 4). By 1874, the Patent Bell Manufacturing Company was no longer noted on the map, nor were the Barton family properties. The Skinner family property and sawmill were still documented on the map to the south of the project area. A series of properties were present along the southern boundary of the parcel, but there were no owners recorded. The closest known property owner was A. Flood, likely Andrew Flood, a farm laborer, located at the southwest corner of the project parcel (Figure 4; USCB 1870).

During the twentieth and early twenty-first centuries, aerial photography shows that the project area transitioned from a wooded and agricultural area to a solar facility with residential neighborhoods in the surrounding area. In 1934, the first year in which aerial photography is available, the project parcel was largely wooded with one area of cleared agricultural space in the northwest corner of the parcel (Figure 5). Most of the present-day road alignments in the area were already in place at this time. While few changes were evident by 1951, aerial photography from 1986 shows that the project parcel had become almost entirely wooded, with a small structure at the easternmost point in the parcel (Figure 6). The larger environment included the presence of residential single-family homes in neighborhoods to the north, east, and south of the project area, as well as what appears to be a commercial/industrial facility to the northeast of the parcel. In 1995, two additional structures were present along the eastern border of the project parcel (Figure 7). By 2021, a solar field had been constructed within the project parcel (Figure 8). The area of interest within the northeast corner of the project parcel remained wooded land.

Conclusions

The post European Contact investigation indicates that the proposed project area is not likely to be associated with cultural resources. No known landowners were associated with this property according to nineteenth century mapping, and its recorded photo history as a wooded parcel suggest that it is not likely that post European Contact cultural resources will be encountered at this site. In the portion that was open agricultural fields, as documented in the 1934 photography, there is the possibility of encountering evidence of post European Contact period farming activities.

CHAPTER V PREVIOUS INVESTIGATIONS

Introduction

This chapter presents an overview of previous cultural resources research completed within the vicinity of the CT-8 Battery Storage Facility Project area in East Hampton, Connecticut. This discussion provides the comparative data necessary for assessing the results of the Phase IB survey, and it ensures that the potential impacts to all previously recorded cultural resources located within and adjacent to the Project area are taken into consideration. Specifically, this chapter reviews previously identified archaeological sites, National/State Register of Historic Places properties, and inventoried standing structures over 50 years old situated in the project region. The discussions presented below are based on information currently on file at the CT-SHPO in Hartford, Connecticut. In addition, the electronic site files maintained by Heritage were examined. Both the quantity and quality of the information contained in the original cultural resources survey reports and State of Connecticut archaeological site forms are reflected below.

Previously Recorded Archaeological Sites

A review of data currently on file at the Connecticut State Historic Preservation Office, as well as the electronic site files maintained by Heritage indicated that eight archaeological sites have been identified within 1.6 km (1 mi) of the Project area (Figure 9). A brief discussion of the identified cultural resources is provided below.

Site 42-15

Site 42-15, which is also known as the Skinners Saw and Grist Mill Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on maps and public records, the occupation is estimated to have spanned the nineteenth century. It consists of standing ruins of two stone and brick structures on the banks of Pocotopaug Creek. Early in its history, the mill supplied materials for the local wagon and shipbuilding industries. As these sectors of the economy declined, part of the mill was repurposed for paper box manufacturing. The mill was largely destroyed by a fire in 1974. Site 42-5 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located approximately 150 m (492.1 ft) to the south of the southern boundary of the Project area and will not be impacted by the proposed Project.

Site 42-16

Site 42-16, which is also known as the Skinner Street Dam Site, is a post-European Contact period site in East Hampton, Connecticut. The site consists of ruins of a dam that supplied water to the nearby Skinners Saw and Grist Mill Site. Based on investigation of maps, the dam appears to have been built prior to 1859. The dam was also possibly associated with a nearby bell factory, though this information has not been confirmed through documentation or archaeological fieldwork. Site 42-12 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located approximately 125 m (410.1 ft) to the southeast of the southeast corner of the Project area and will not be impacted by the proposed Project.

Site 42-17

Site 42-17, which is also known as the Patent Bell Manufactory Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on investigation of public records, the manufacturing facility is estimated to have been in use from ca., 1850 to 1920. Associated structures include a concrete

hardstand, stone drain pit, and iron conduit. Surface collection of the site area has yielded a leather harness and children's toys. The factory primarily produced sleigh bells, an industry for which the town of East Hampton is known. Site 42-17 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located approximately 100 m (328.1 ft) to the east of the southeast corner of the Project area and will not be impacted by the proposed Project.

<u>Site 42-18</u>

Site 42-18, which is also known as the Unknown Metal Foundry Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on investigation of maps, the period of occupation ranges from ca., 1830 to 1880. Site 42-18 contains standing ruins of three industrial structures, including a stone foundation and walls. Slag, coal, iron, and barrel bands have been observed within the ruins. Although the exact proprietor and purpose of the facility are unknown, it was possibly owned by the W.E. Barton Bell Manufactory. Site 42-18 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located approximately 100 m (328.1 ft) to the east of the access road for the Project area and will not be impacted by the proposed Project.

<u>Site 42-19</u>

Site 42-19, which is also known as the Dam Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on association with nearby industrial site, occupation is estimated to range from 1830 to 1978. This industrial occupation consists of the standing ruins of a dam. The brownstone component of the dam is a later addition, likely coinciding with the construction of a nearby bell factory (Site 42-18), to which the dam supplied water. Site 42-19 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located approximately 150 m (492.1 ft) to the northeast of the access road for the Project area and will not be impacted by the proposed Project.

<u>Site 42-20</u>

Site 42-20, which is also known as the Sexton Bell Factory Site, is a post-European Contact period site located in East Hampton, Connecticut. Based on investigation of maps and public records, the period of use for this site is estimated to range from ca., 1840 to 1900. This industrial site consists of standing stone and concrete ruins, including a wheel pit, vertical gear shaft, and cylindrical kiln. The factory was originally owned by J. Arthur, but later expanded by D.W. and L.S. Sexton, who had purchased the plot by 1859. The factory was used for the production of cowbells, part of the town's extensive bell industry. Site 42-20 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located approximately 375m (1230.3 ft) to the south of the southeast corner the Project area and will not be impacted by the proposed Project.

Site 42-24

Site 42-24, which is also known as the Niles and Parmalee Bell Manufactory Site, is a post-European Contact period site located in East Hampton, Connecticut. The site was originally used during the nineteenth century, and the plot of land is still in use for modern industry. According to Walling and Beers nineteenth century maps, the facility was used by the Niles and Parmalee Company for the production of bells and coffin trimmings and was later sold to the Labanay Casket Company. The original factory structures were likely abandoned by 1884, and since have demolished, with modern storage facilities built upon their ruins. It is located approximately 300 m (984.3 ft) to the northeast of the northeast corner the Project area and will not be impacted by the proposed Project.

Site 42-25

Site 42-25, which is also known as the Hoe Manufactory Site, is a Post European Contact period site located in East Hampton, Connecticut. Based on investigation of maps and public records, the period of use for this site is estimated to range from ca., 1840 to 1860. This industrial site consists of standing ruins of a brownstone dam and foundation. Pottery, bottle glass fragments, a ladle, and coal and slag debris have been observed on the surface of Site 42-25. The factory was originally used by A.H. Markham to produce agricultural tools, and later acquired by Newbury Darling. It was later purchased by Clark and Watrous bell and coffin trim manufacturers. Site 42-25 has not been assessed applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is situated away from the project parcel and the area of interest and it will not be impacted by the proposed battery storage project. It is located approximately 600 m (1968.5 ft) to the northeast of the northeast corner the Project area and will not be impacted by the proposed Project.

Previously Recorded State/National Register of Historic Places Properties

A review of data currently on file at the Connecticut State Historic Preservation Office, as well as the electronic site files maintained by Heritage indicated that three State Register of Historic Places properties and one National Register of Historic Places district have been identified within 1.6 km (1 mi) of the Project area (Figure 10). A brief discussion of the identified cultural resources is provided below.

State Register Property 42-5

State Register Property 42-5 is a historic residence located on Middletown Avenue in East Hampton, Connecticut. This house, which is octagonal in shape, was constructed in ca., 1850, and it represents a rare building style attributed to architect Orson Squire Fowler of Fishkill, New York. The exterior of the house is clad in stucco over masonry, and it is characterized by a center chimney. Originally owned by Deming W. Sexton, the house is still used as a residence today. State Register Property 42-5 is located approximately 725 m (2460.6 ft) to the southeast of the southeast corner Project area and will not be impacted by the proposed Project.

State Register Property 42-6

State Register Property 42-6 is a historic residence located in East Hampton, Connecticut. This house was built in ca., 1870 in the Mansard Style. The house includes a square cupola and a tower at the right front corner. The porch is supported by square columns and pilasters with molded wooden arches. The property is described as having a "sense of solidity, repose, and good living" on the submitted resource form. State Register Property 42-6 is located approximately 725 m (2460.6 ft) to the north of the northern boundary of the Project area and will not be impacted by the proposed Project.

State Register Property 42-7

State Register Property 42-7 is a historic residence located on Bevin Boulevard in East Hampton, Connecticut. This house, which is also octagonal in shape, was constructed in ca., 1850. It too represents a rare building style attributed to architect Orson Squire Fowler of Fishkill, New York. This is the second house of its style in the town of East Hampton. The house has a porch on three of its eight sides, and the main body of the house consists of masonry. A two-story wing also appears to be original or at least an early addition to the residence. State Register Property 42-6 is located approximately 1.2 km (0.75 mi) to the north of the northern boundary of the Project area and will not be impacted by the proposed Project.

National Register District – Belltown Historic District

The Belltown Historic District is a National Register of Historic Places listed district located in East Hampton, Connecticut. Of the structures in the district, 147 out of 176 are contributing elements.

Contributing buildings were constructed between 1800 and 1935, and are considered significant for their architecture, industrial usage, and economic history. Building types identified within the Belltown Historic District include mills, dams, residences, churches, and public buildings. Architectural styles represented contributing element of the district include Colonial, Federal, Gothic Revival, Greek Revival, Colonial Revival, Italianate, and Queen Anne. The Belltown Historic District is located on the opposite side of Skinner Street and Pocotopaug Creek from the proposed project area. It will not be impacted directly by the proposed battery storage facility. In addition, there are significant amounts of intervening vegetation between the two and no indirect impacts to the Belltown Historic District are anticipated by the proposed construction.

Summary and Interpretations

The review of previously identified cultural resources in the vicinity of the Project area indicates that the larger project region contains post-European contact period resources related to colonial settlement and later industrial activities associated with the nineteenth to early twentieth century development of East Hampton. Their presence also suggests that other archaeological resources of these periods may be expected within or near the project area.

Introduction

This chapter describes the research design and field methods used to complete the Phase IB survey of the proposed CT-8 Battery Storage Facility Project in East Hampton, Connecticut. In addition, the location and point-of-contact for the facility at which all cultural material, drawings, maps, photographs, and field notes generated during survey will be curated is provided below.

Research Design

The cultural resources investigations were designed to identify all Precontact era and post-European Contact period cultural resources located within the Project area. Fieldwork for the Project was comprehensive in nature and planning utilized the information gathered during the background research portion of the Project. The methods used to complete this investigation were designed to provide complete and thorough coverage of all portions of the Project area. This undertaking entailed pedestrian survey, systematic subsurface testing, detailed mapping, and photo-documentation.

Field Methods

The following sections present overview discussions of the methods used to complete the Phase IB cultural resources reconnaissance survey of the sensitivity area within the Project parcel.

Phase IB Survey Methods

The Phase IB archaeological reconnaissance survey, utilizing pedestrian survey, photo-documentation, GPS recordation, and systematic shovel testing was conducted in the identified sensitivity area in the Project area. The field strategy was designed such that the sensitivity area was examined visually and photographed. Field methods included subsurface testing during which shovel tests were excavated at 15 m (49.2 ft) intervals along parallel survey transects space 15 m (49.2 ft) apart throughout proposed archaeologically sensitive portions of Project area.

During the survey, each shovel test measured 50 x 50 cm (19.7 x 19.7 in) in size and each was excavated until the glacially derived C-Horizon was encountered or until large buried objects (e.g., boulders) prevented further excavation. Each shovel test was excavated in 10 cm (3.9 in) arbitrary levels within natural strata, and the fill from each level was screened separately. All shovel test fill was screened through 0.635 cm (0.25 in) hardware cloth and examined visually for cultural material. Soil characteristics were recorded in the field using Munsell Soil Color Charts and standard soils nomenclature. Each shovel test was backfilled after it was recorded.

Curation

Following the completion and acceptance of the Final Report of Investigations, all cultural material, drawings, maps, photographs, and field notes will be curated with:

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CHAPTER VII RESULTS & MANAGEMENT RECOMMENDATIONS

Introduction

This chapter presents the results of the Phase IB archaeological reconnaissance survey for the proposed CT-8 Battery Storage Facility Project in East Hampton, Connecticut. The goals of the investigation included completion of the following tasks: 1) preparation of a contextual overview of the region's Precontact and post-European Contact periods and natural setting (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously recorded cultural resources in the region encompassing the Project area; 3) a review of maps and aerial imagery depicting the Project area in order to identify potential post-European Contact resources and/or areas of past disturbance; 4) pedestrian survey and photo-documentation of the proposed Project area; and 5) subsurface examination of the moderate/high archaeologically sensitive area identified during the Phase IA survey portion of the investigation.

The sensitivity area entails 4.45 acres of land within the area of interest located in the northwest corner of the Project parcel that was determined during the previous Phase IA cultural resources assessment survey to retain moderate/high sensitivity for archaeological resources (Figure 1). All fieldwork was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources*, which is promulgated by the Connecticut State Historic Preservation Office (Poirier 1987). Field methods employed during the current investigation consisted of pedestrian survey, mapping, photodocumentation, and subsurface testing throughout the array area. Field methods and results are discussed below.

Results of Phase IA Survey

The pedestrian survey portion of the Phase IA cultural resources assessment determined that the area of interest in the Project area fell within an area of moderate/high archaeological sensitivity to yield archaeological sites or intact deposits based on the presence of well-drained soils, level topography, and proximity to fresh water. The majority of the Project area was previously developed with a solar array, access roads, and associated buildings and parking lots (Figure 8). The identified sensitivity area in the area of interest fell in an undeveloped portion of the Project parcel characterized by low to moderate slopes with young deciduous trees (Photos 1 and 2). As a result, it was recommended that Phase IB archaeological testing be conducted within the sensitivity area prior to construction.

Results of Phase IB Survey

During the Phase IB survey fieldwork, 54 of 54 (100 percent) planned shovel tests were excavated throughout the moderate/high sensitivity area (Figure 11). The landscape of the sensitivity area was comprised of a mixed deciduous forest with young trees (Photos 1 and 2). A drainage ditch possibly relating to the old rail line located north of the Project parcel was identified running north to south through the western portion of the sensitivity area (Photos 3 and 4). A typical shovel test excavated within the sensitivity area exhibited four soil horizons in profile and reached a depth of 80 centimeters (31.5 inches) below surface. The uppermost soil horizon (Ap-Horizon) of a typical shovel test extended from 0 to 25 centimeters (0 to 9.8 inches) below surface and was described as a deposit of dark yellow brown (10YR 3/4) fine sand with loam. It was underlain by a layer of subsoil (B-Horizon) that ranged in depth from 25 to 50 centimeters (9.8 to 19.7 inches) below surface and was classified as a deposit of dark yellow brown (10YR 4/6) sand with loam. It was underlain by a second layer of subsoil (B2-Horizon) that ranged

in depth from 50 to 70 centimeters (19.7 to 27.6 inches) below surface and was classified as a deposit of dark yellow brown (10YR 3/6) sand with silt. In those cases where the C-Horizon was reached, it extended to approximately 80 cmbs (31.5 inches) below surface and was described as a layer of brown yellow (10YR 6/6) coarse sand. A digital rendition and photograph of shovel test T8-6 has been included in this report as an example of the average soil profile found in the Project area (Figure 12).

The Phase IB survey fieldwork produced a single post-European contact period artifact from the sensitivity area. This artifact was identified as a shard of embossed, machine-made clear bottle glass, most likely relating to an alcohol bottle, from Shovel Test T8-6. The artifact was recovered from the upper layer of plowzone soil and is seen in Photo 5. An abandoned Mack Thermodyne B-series dump truck dating from ca., 1960 also was encountered along the access road running along the southeast boundary of the sensitivity area (Photos 6 and 7). No other artifacts, soil anomalies, or surface features were identified during the survey of the sensitivity area. While the recovered artifact clearly relates to the post-European contact period, its recovery from disturbed plowzone soils combined with the lack of other identified archaeological deposits indicates that the glass lacks contextual information, and thus was classified as an isolated find. As a result, the single artifact recovered from the sensitivity area was assessed as not significant applying the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]).

Summary and Management Recommendations

In sum, the Phase IB survey failed to produce any evidence of significant precontact era or post-European Contact period archaeological resources within the limits of the sensitivity area in the Project parcel. As a result, no additional archeological examination of the Project area is recommended prior to construction.

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APPENDIX A

FIGURES



Figure 1. Excerpt from a USGS 7.5' series topographic quadrangle image showing the location of the area of interest (red) and Project area (blue) in East Hampton, Connecticut.



Figure 2. Digital map showing the soil types present in the vicinity of the Project area in East Hampton, Connecticut.



Figure 3. Excerpt from an 1859 Middlesex map showing the location of the Project area in East Hampton, Connecticut.



Figure 4. Excerpt from an 1874 Chatham map showing the location of the Project area in East Hampton, Connecticut.



Figure 5. Excerpt from a 1934 aerial photograph showing the location of the Project area in East Hampton, Connecticut.



Figure 6. Excerpt from a 1986 aerial photograph showing the location of the Project area in East Hampton, Connecticut.



Figure 7. Excerpt from a 1995 aerial photograph showing the location of the Project area in East Hampton, Connecticut.



Figure 8. Excerpt from a 2021 aerial photograph showing the location of the Project area in East Hampton, Connecticut.



Figure 9. Digital map showing the location of previously identified archaeological sites in the vicinity of the Project area in East Hampton, Connecticut.


Figure 10. Digital map showing the location of previously identified National and State Register of Historic Places properties in the vicinity of the Project area in East Hampton, Connecticut.



Figure 11. Excerpt from a 2019 aerial photograph showing excavated shovel tests from within the sensitivity area in East Hampton, Connecticut.



Figure 12. Digital rendition and photo of the south wall soil profile of Shovel Test Pit T8-6 from the Project area in East Hampton, Connecticut.

Appendix B

Рнотоз



Photo 1. Overview of sensitivity area with shovel test T1-1 in progress. Photo facing north.



Photo 2. Overview of sensitivity area crew excavating shovel test T7-6. Photo facing east.



Photo 3. Drainage ditch located in the western portion of the sensitivity area in the Project area. Photo facing north.



Photo 4. Drainage ditch located in the western portion of the sensitivity area in the Project area. Photo facing south.



Photo 5. Post-European contact period embossed, machine-made clear bottle glass shard recovered from the Project area.



Photo 6. Mack Thermodyne B-series dump truck located along east access road in the sensitivity area. Photo facing south.



Photo 7. Mack Thermodyne B-series dump truck located along east access road in the sensitivity area. Photo facing east.