



Appendix K

Description

Historical and Archaeological Supporting Documents

*Note that some information in Phase IA has been redacted due to archaeological sensitivity.



ARCHAEOLOGY COMMENTS

Phase IA Archaeological Survey Recommendation 18PR04232 – Woodmere Club, LLC. Housing Development

The project is in an archaeologically sensitive area. The Office of Parks, Recreation and Historic Preservation (OPRHP) anticipates some prior soil disturbance resulting from the construction of the golf course, but there is a potential for areas with relatively intact soils. Therefore, OPRHP recommends that a Phase IA archaeological survey is warranted, unless prior ground disturbance for the entire project area can be documented. If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land. Agricultural activity is not considered to be substantial ground disturbance.

A Phase IA archaeological survey is designed to identify previously recorded archaeological sites and other cultural resources within or near the project area, and to assess the archaeological sensitivity of the project area. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct archaeological surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase IA survey. Many archaeological consulting firms advertise their availability in the phone book and online. The services of qualified archaeologists can also be obtained by contacting local, regional, or statewide professional archaeological organizations. Phase IA surveys can be expected to vary in cost, depending on the size of the project area. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

If you have any questions concerning archaeology, please contact Tim Lloyd at 518-268-2186 or Timothy.Lloyd@parks.ny.gov

Phase IA Archaeological Study

Woodmere Country Club in the Incorporated Villages of Lawrence and Woodsburgh and the Town of Hempstead, Nassau County, NY.

PREPARED FOR

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1/18/2018

Project Summary

SHPO Project Review Number: 18PR04232

Involved Local, State and Federal Agencies: New York State Department of Environmental Conservation (NYSDEC), United States Army Corp of Engineers (USACE)

Phase of Survey: Phase 1A Documentary Study

Survey Area (English & Metric): N/A

Number of Acres Surveyed: approx. 112 acres

- › Number of Square Meters and Feet Excavated: None
- › Percentage of Site Excavated: N/A

USGS 7.5 Minute Quadrangle Maps: *Lawrence, New York* and *Lynbrook, New York* 2016

Results of Archaeological Assessment

Number & Name of Archaeological Sites identified: None

Number & Name of Historic Sites identified: None

Number & Name of Sites Recommended for Phase II/Avoidance: None

Recommendations: Due to a century of disturbance at the site, most of the project area has been determined not sensitive for archaeological sites and no further archaeological investigations are recommended. In the northern section of the property, two map-documented structures were identified. In this location, additional survey work is necessary to determine if intact remains of the structures may be preserved below fill. Phase IB shovel testing is proposed for approximately 3 acres of the 112-acre parcel.

Report Author(s): Allison McGovern, PhD (RPA 16468)

Date of Report: January 18, 2019

Table of Contents

1	Introduction	1
2	Project Description	4
3	Research Design	1
4	Background Research	3
4.1	Archaeological Site File Search	6
4.2	Historic Map Survey.....	6
5	Archaeological Sensitivity Assessment	13
5.1	Prehistoric Sensitivity	13
5.2	Historic Sensitivity	14
6	Surface Reconnaissance	20
7	Results and Recommendations	36
8	References	38

List of Tables

Table No.	Description	Page
Table 1:	Archival research and repositories.....	2
Table 2:	Project area soils	4
Table 2:	Archaeological sites identified within 1.6 kilometers (1 mile) of the project area	6

List of Figures

Figure No.	Description	Page
Figure 1	Regional Map	2
Figure 2	USGS topographic map <i>Lawrence, New York and Lynbrook, New York, 7.5 minute series.</i>	3
Figure 3	Civil survey.....	5
Figure 4	Proposed subdivision.....	1
Figure 5	USDA Soil Map	5
Figure 6	1829 Burr <i>Map of the Counties of New York, Queens, Kings, and Richmond</i>	7
Figure 7	1844 United States Coastal Survey	8
Figure 8	1873 Beers <i>Atlas of Long Island</i>	9
Figure 9	1879-90 United States Coastal Survey	10
Figure 10	1903 USGS topographic map (7.5 minute series).....	11
Figure 11	1914 Hyde <i>Atlas of Nassau County</i>	12
Figure 12	Historic photograph of Woodmere Club, c. 1912	19
Figure 13	Bird's eye view of Woodmere, c.1917.....	19
Figure 14	Proposed location of Phase IB archaeological testing.....	37

List of Photos

Photo No.	Description	Page
Photo 1	Southern view of the Woodmere Club main clubhouse and paved entrance.	21
Photo 2	Looking south at the pro shop and cart house surrounded by a paved parking area.	21
Photo 3	Looking northeast at tennis courts behind the clubhouse. Keene Lane is visible in the foreground.....	22
Photo 4	Northeast view of poolhouse, paved courtyard, and gazebo.	22
Photo 5	Southeast view of the paved parking area east of the clubhouse.	23
Photo 6	Looking east at bar on the green in the eastern portion of Parcel 1.....	23
Photo 7	Looking west across the practice area and golf course in the northern portion of Parcel 1.....	24
Photo 8	Southeast view of the golf course along Meadow Drive, looking toward the clubhouse. The topography is level and at grade with Meadow Drive.	24
Photo 9	Southwest view of the golf course across the fairway in the northwest portion of the parcel. Note the visual evidence of land recontouring associated with the construction of sand traps in the distance.	25
Photo 10	Looking northwest toward sand traps in the northern portion of the property. Ground disturbance from the installation of below-ground utilities is evident in the foreground (surrounded by pink flags).	25
Photo 11	Looking southeast at a constructed pond and paved cartway in the eastern portion of Parcel 1. The clubhouse is visible in the distance.....	26
Photo 12	Looking southeast across the graded landscape toward Keene Lane (in the distance).	26
Photo 13	Southwest view of an elevated tee box in the western portion of Parcel 1. Note the visual evidence of cutting and filling for construction of the tee..	27
Photo 14	The installation of drains, seen here in the northwest portion of Parcel 1, is evidence of ground disturbance. View is north.....	27
Photo 15	Looking southwest where the edge of Parcel 1 meets the rear yards of the homes along Iris Street. The difference in grade here suggests that this portion of the project area has been cut to accommodate the fairway and sand trap (the edge of which is visible in the background, left).....	28
Photo 16	Southwest view of landscaping in Parcel 1 near Ivy Street.	28

Phase IA Archaeological Study - Woodmere Country Club

Photo 17	Northern view of the fairway in the southwest portion of the project area. The flat land against the sand traps in the distance suggest that this area was graded and filled in sections. The installation of below-ground utilities in the foreground is also evidence of ground disturbance.....	29
Photo 18	Looking toward one of two ponds in the southwest portion of Parcel 1; view is southwest.....	29
Photo 19	This southwest view shows cart pathways through and around a berm in the southwest portion of the golf course. Note the phragmites to the right of the berm	30
Photo 20	Northern view of two ponds in the southeast corner of Parcel 1.....	30
Photo 21	Northeast view of golf course landscaping from an elevated tee box in the southeast corner of Parcel 1. Wetland vegetation (associated with standing water) is shown to the left.....	31
Photo 22	Eastern view of ground disturbance from road construction in the southern portion of the parcel along Keene Lane.	31
Photo 23	Looking north at ground disturbance in the southern portion of Parcel 2. Note the elevated tee box. A large berm is evident behind the elevated tee.	32
Photo 24	Looking north along terraced land toward a constructed berm in the distance. Though not visible in this photo, there is evidence of recent dumping on the berm. The basin of Woodmere Channel is visible to the east.	32
Photo 25	Looking south at bulkhead along the basin in the southeast portion of the property.	33
Photo 26	Looking east at the golf cart bridge that crosses Woodmere Channel.	33
Photo 27	Northwest view of waterline at Woodmere Channel in Parcel 2. A graded surface for a tee box is evident in the distance to the right.	34
Photo 28	Looking north toward the rear of the clubhouse. Note the berm to the left and the graded fairway to the east. The pool house and a children's playground are visible in the distance to the left.	34
Photo 29	Southern view of garage/storage building east of Keene Lane and south of the tennis courts. This section of the project area has been altered by grading and paving for an access road for heavy equipment.....	35
Photo 30	This southern view of the property east of the basin shows extensive grading in the foreground and a berm constructed in the background.....	35



1

Introduction

VHB Engineering, Surveying, Landscape Architecture, and Geology P.C. (VHB), Hauppauge, New York, has prepared this Phase IA Archaeological Documentary Study report for review by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). In July of 2018, GEI Consultants submitted a Notice of Project to OPRHP through OPRHP's Cultural Resource Information System (CRIS), noting that the project will need US Army Corps of Engineers approval. A response letter dated July 10, 2018 from OPRHP review archaeologist Tim Lloyd noted that the project is in an archaeologically sensitive area, and that a Phase 1A archaeological survey is warranted.

The project area is located at 99 Meadow Drive in Woodmere, Town of Hempstead, Nassau County, New York (Figures 1 and 2) and comprises roughly 112 acres that also lie partially within the villages of Woodsburgh and Lawrence. The property was established as the Woodmere Club on this site in 1910, and currently includes the 18-hole golf course, golf practice facilities, main clubhouse, a pool house, pro shop and cart house, a maintenance building, a restaurant and bar on the green, and six tennis courts. As proposed, the entire site is slated for redevelopment as a residential subdivision.

The goals of this study are to research the archaeological sensitivity, and to determine the extent of historic-period and modern-era disturbances within the project area. The study was performed in accordance with the guidelines outlined in the *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* issued by the New York Archaeological Council (1995) and the *Phase I Archaeological Report Format Requirements*

Phase IA Archaeological Study - Woodmere Country Club

issued by the New York State Office of Parks, Recreation, and Historic Preservation (2005).
No structures have been reviewed as part of this Phase IA.

Figure 1 Regional Map

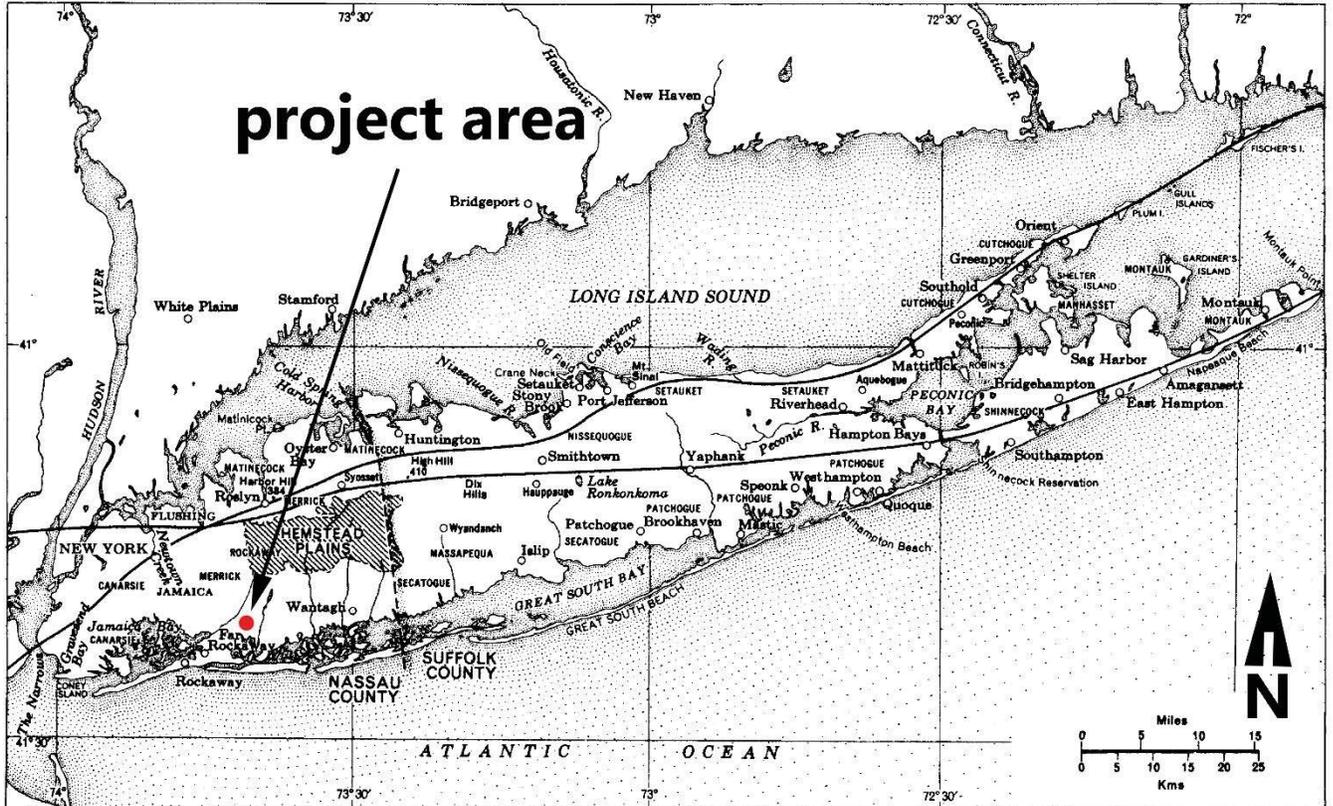
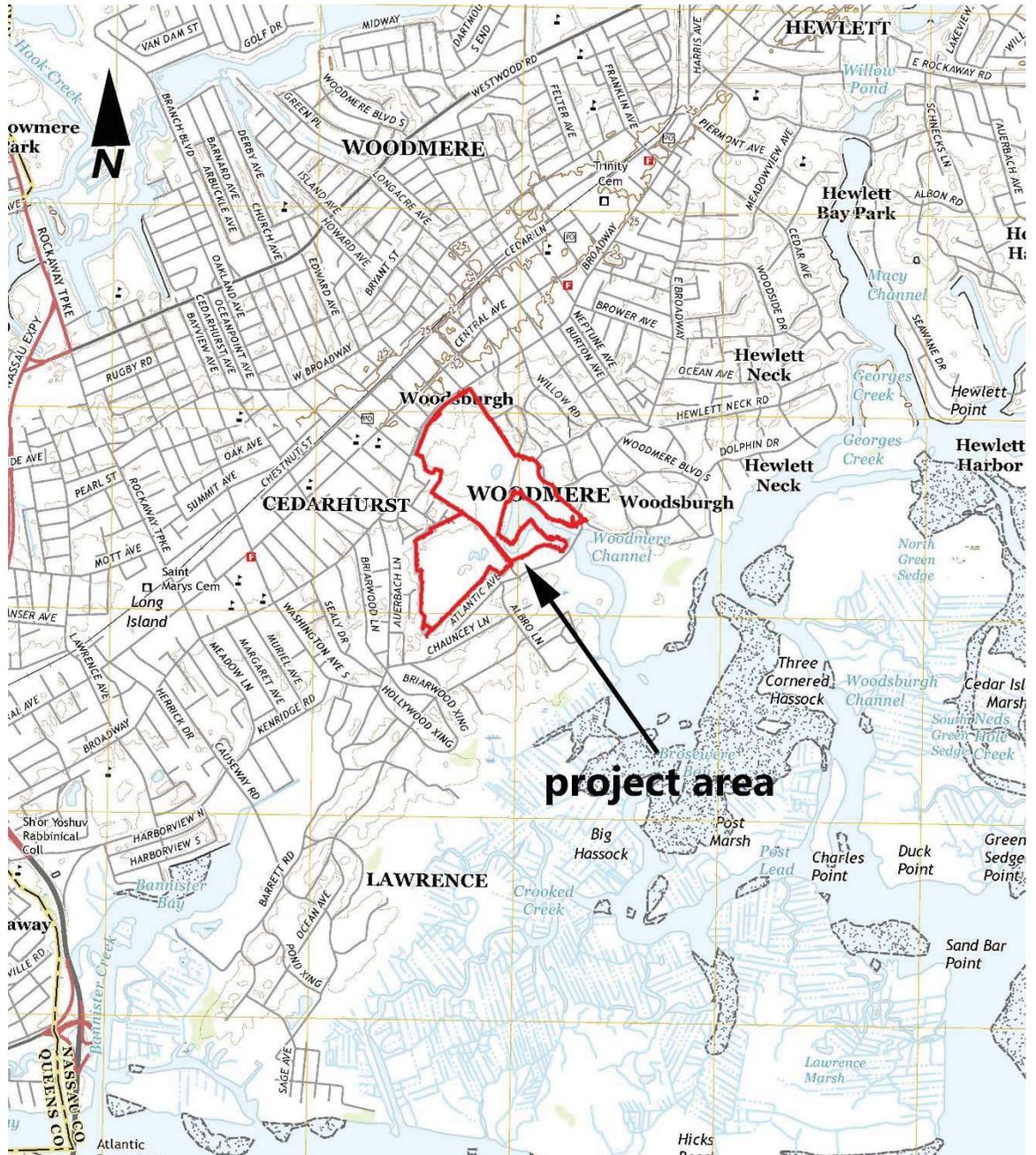


Figure 2 USGS topographic map *Lawrence, New York and Lynbrook, New York, 7.5 minute series.*



2

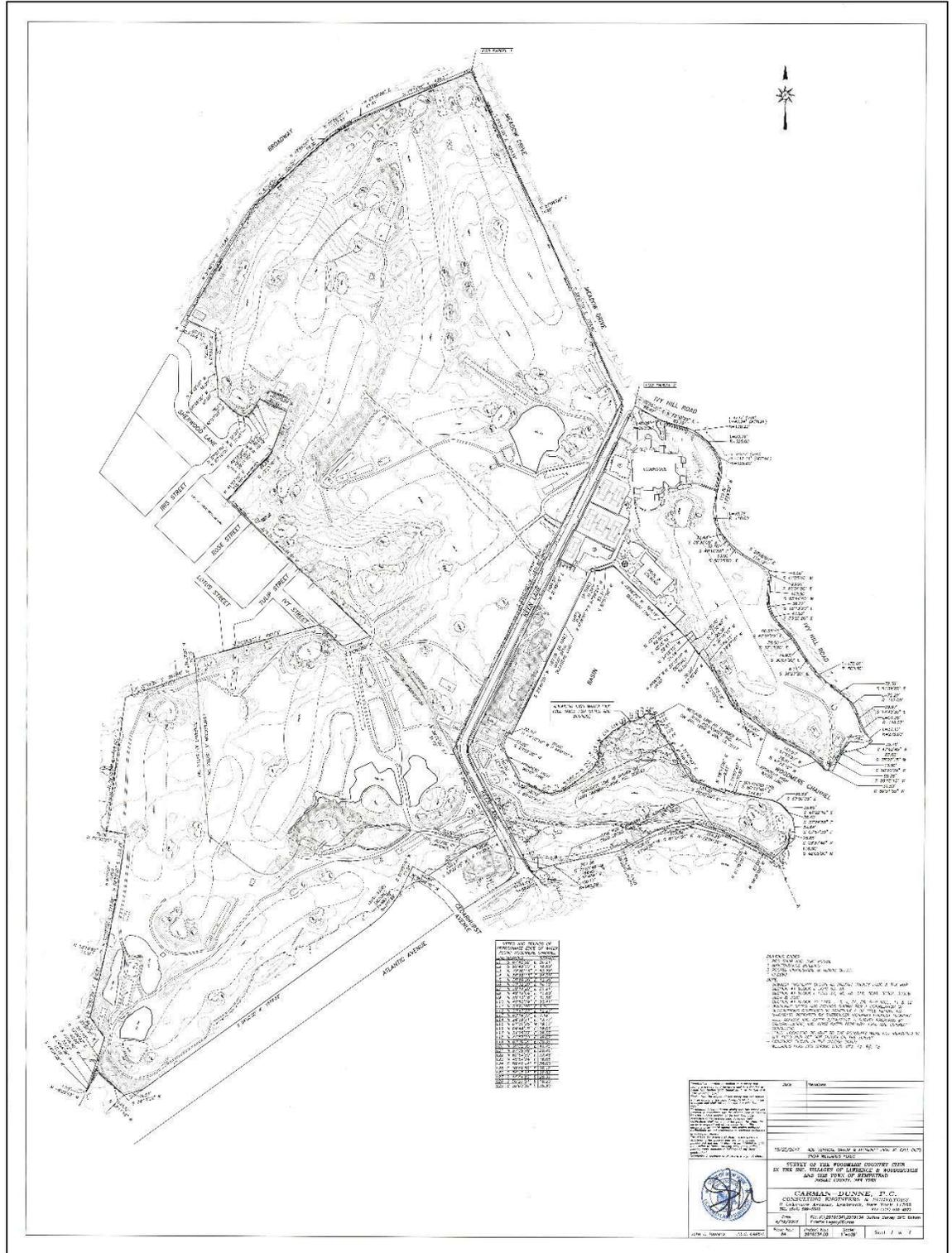
Project Description

The project area is located at 99 Meadow Drive in Woodmere in the Town of Hempstead with portions of the property also lying within the villages of Woodsburgh and Lawrence. The site is comprised of two parcels (Figure 3). Parcel 1 is bordered by Broadway to the northwest, Meadow Drive and Keene Lane to the east, the rear yards of homes that border Atlantic Avenue to the south, and residential development to the west. Parcel 2 is located east of Keene Lane, southwest of Ivy Hill Road, and north of another golf course, with much of the eastern edge of the property bordering the Woodmere Channel and basin. The total project area measures approximately 112 acres.

As currently proposed, and if approved, the entire property will be subdivided, graded, and filled in preparation for new residential construction. Most of the property will be subdivided into residential lots with three bioretention areas, and wetland setbacks and a bioretention filtration area along the basin northwest of Woodmere Channel (Figure 4).

Based on industry standards, the top 6 to 10 inches of topsoil will be stripped and stockpiled, then new fill will be hauled in to raise the grade to design elevations. The previously-removed topsoil will then be laid on top of the new fill. According to a very preliminary earthwork analysis, it is anticipated that upwards of 450,000 cubic yards of fill material will need to be brought in to achieve the grades shown on the subdivision plans. However, as the current design is still in flux, this estimate is expected to change as the project progresses.

Figure 3 Civil survey



3

Research Design

A Phase I archaeological survey typically involves archival research (reconnaissance, or Phase IA) and archaeological testing (intensive, or Phase IB). Initial consultation with OPRHP resulted in a review letter dated July 10, 2018 noting that because the project is in an archaeologically sensitive area, a Phase 1A archaeological survey is warranted.

According to the New York Archaeological Council (NYAC) *Cultural Resource Standards Handbook* (2000):

Phase IA investigations are intended to gather information concerning the environmental/physical setting of a specific project area as well as its cultural setting. It is the interrelationship of the physical environment and cultural/historical setting that provides the basis for the sensitivity assessment (Standards, Section 2.2).

A Phase IA archaeological investigation is designed to identify previously-recorded archaeological sites and other cultural resources within or near the project area, and to assess the archaeological sensitivity of the project area. Archival research is conducted to document the site's use and occupation in the past (including historic-era disturbances), assess the probability that potential archaeological resources will be disturbed by the proposed project, and explain why further archaeological work should or should not be required. In order to accomplish these goals, this study includes a review of data from a variety of digital and archival repositories for relevant information, including archaeological site forms and archaeological surveys conducted near the project area; archival research to determine the range of potential archaeological sites that may exist within the project area; a summary of the specific land use history for the project area that focuses on the physical integrity of potential archaeological resources and the impact of previous disturbance to the

archaeological record; a brief sketch of the area history and how the specific history of the project area fits within that general historical context; and evidence of historic and existing ground disturbance.

A variety of published and unpublished materials was reviewed for this study, including historic maps and photographs, local histories, building records, and secondary historical accounts. In addition to historic/archival research, VHB consulted resources on soils and geology and performed a site walkover to determine if intact soil deposits that could contain archaeological traces might be encountered during the proposed development project. VHB conducted research at the repositories noted in Table 1.

Table 1: Archival research and repositories

Source Repository	Information Obtained
Ancestry.com	Historical texts, US Federal Census data
Hathi Trust Digital Library	Historical texts and manuscripts
Hewlett-Woodmere Public Library	Local history resources
Inc. Village of Woodsburgh website	Historic images
New York Public Library, Digital Collections	Historic maps, 1776-1921
New York State GIS Clearinghouse	Map, aerial, and LiDAR data and images
New York State Office of Parks, Recreation and Historic Preservation, Cultural Resource Information System	Archaeological report and archaeological form records
Museum of the City of New York	Historic images
Nassau County Viewer	Property cards, historic aerials
Preservation Long Island	Files on historic sites and surveys
U.S. Library of Congress	Historic maps, 1800-1896
Historic Map Works	Historic maps, 1890
Stony Brook University Libraries Digital Research Collection	Long Island Coastal Maps Collection
University of New Hampshire Library Government and Information Unit	Historic USGS Maps of New England and NY
United States Geological Survey Map Locator	Topographic maps
United States Department of Agriculture Web Soil Survey	Soil data

4

Background Research

The project area is located near the south shore of western Nassau County on the northeast portion of the Rockaway peninsula. The site is situated on the broad glacial Hempstead outwash plain, a landscape feature created more than 15,000 years ago by meltwater runoff from the Wisconsin ice sheet (Sirkin 1996). As is typical of the sandy outwash plain, the natural topography in the project area is gently sloping, with an average elevation of 3.3 meters (10 feet) above mean sea level (Figure 2). Two wetlands are mapped within the project area (Figures 2 and 5). The project area is adjacent to Woodmere Channel which provides access to Brosewre Bay (Figure 2). It is likely that more creeks and streams were located near the project area prior to extensive land filling along the shores during the twentieth century (see Historic Map Survey section, below).

Vegetation in the project area consists of rolling, manicured lawns and landscaping for recreational purposes (Photographs 1-30). The northern portion of Parcel 2 includes several buildings and structures, including the main clubhouse (Photograph 1), a pro shop and cart house (Photograph 2), six tennis courts (Photograph 3), a roofed grand stand and tennis office, a pool and lockers (Photograph 4), a gazebo, and several storage sheds and structures (Figure 3). A paved parking area is present east of the clubhouse (Photograph 5). In Parcel 1, a bar/restaurant is evident on the green next to a pond (Photograph 6). The landscape is meticulously designed to include tee boxes, putting greens, fairways, sand traps, and paved pathways that can be used to transport golfers by cart to each hole throughout Parcels 1 and 2. Scattered deciduous trees are present along the edges of the fairway. Phragmites and other wetland vegetation is evident in the southwest portion of Parcel 1 and in the southern portion of Parcel 2 (Photographs 19 and 23-26).

Soils in the project area consist mostly of Udipsamments, wet substratum, with a small section of Riverhead sandy loam, 3 to 8 percent slopes in the western portion of the golf course and Urban land-Riverhead complex, 0 to 3 percent slopes along the paved roads that border the site (Wulforst 1987: Sheets 16 and 19; Figure 5). Udipsamments, wet substratum is found in nearly-level low areas that have been filled with sandy material dredged primarily from adjacent waterways. The sandy fill can be 1.1 to 2.4 meters (3.5 to 8 feet) thick and is often placed over organic tidal marsh sediments. The typical profile for Udipsamments, wet substratum, includes a surface layer of grayish brown loamy sand to an average depth of 10 centimeters (4 inches) below the ground surface, followed by light gray sand to 140 centimeters (55 inches) (Wulforst 1987:40). The Riverhead soil series is characterized by deep, well-drained soils that formed in glacial outwash deposits (Wulforst 1987:80). Urban land is comprised of areas of disturbed soils near buildings, roads, parking lots, and other manmade structures. This soil map unit is often covered by 85% or more by impervious materials, and soil identification is difficult in Urban land locations (Wulforst 1987:41). Typical soil profiles for these soil series are provided in Table 2.

Table 2: Project area soils

Soil Series	Horizon depth	Color	Texture	Slope %	Drainage
Riverhead Soils					
A	0-7.5 cm (0-3 in)	brown	sandy loam	3-8	well
Bw1	7.5-20 cm (3-8 in)	strong (orange) brown	fine sandy loam	3-8	well
Bw2	20-43 cm (8-17 in)	yellowish brown	fine sandy loam	3-8	well
Bw3	43-60 cm (17-24 in)	yellowish brown	sandy loam	3-8	well
BC	60-89 cm (24-35 in)	brownish yellow	loamy sand	3-8	well
Udipsamment, wet substratum					
N/A	0-25 cm (0-10 in)	Gray brown	Loamy sand	N/A	excessive
N/A	25-140 cm (10-55 in)	Light gray	Sand	N/A	excessive
Urban land					
N/A	N/A	N/A	N/A	N/A	N/A

4.1 Archaeological Site File Search

Consultation with the NYS CRIS indicates that the project area lies within an Area of Archaeological Sensitivity. Three New York State Museum (NYSM) archaeological sites and one Phase I archaeological survey have been documented within a 1.6-kilometer (1-mile) radius of the project area and filed with OPRHP (Table 3).

The archaeological sensitivity of the project area is based on documentary and archaeological evidence of Native American habitation and burial practices throughout the south shore of Nassau County. These are mentioned in site files (Table 2) and local lore (see Historic Context, below).

The project area is also located adjacent to the Flower Streets Historic District (USN 05993.000005) and the Rockaway Hunt Historic District (USN 05941.000402), both of which have been determined eligible for listing on the State/National Register of Historic Places (S/NRHP). These building districts show evidence of historically-significant community planning/development and architecture.

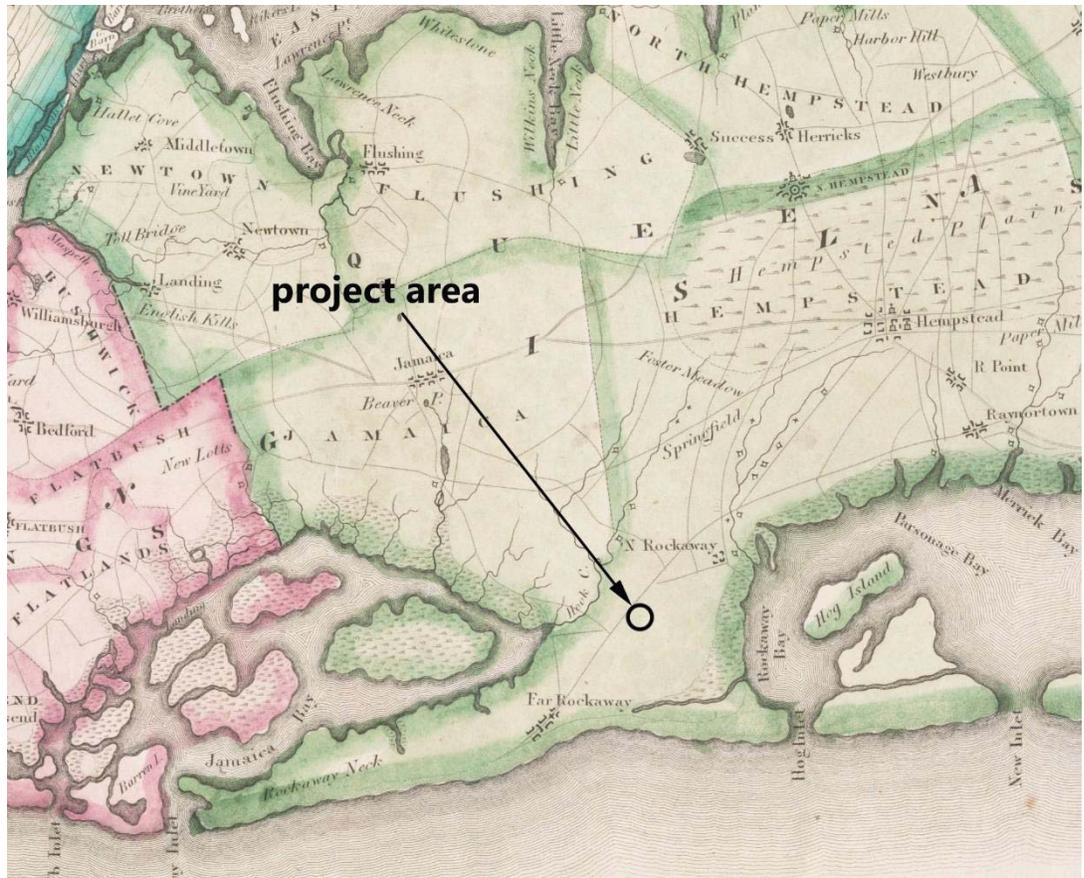
There are no S/NRHP listed or previously determined eligible archaeological sites within or adjacent to the project area, and there are no known S/NRHP listed or previously determined eligible historic structures or properties within the project area. The Woodmere Clubhouse (USN 05993.000007) has been determined not eligible for listing on the S/NRHP.

4.2 Historic Map Survey

A survey of maps dating from the early nineteenth through the early twentieth century (Figures 6-11) provide a means for understanding past land use and development. Rockaway Neck was among the last of the necks on the south shore of western Long Island to be settled by Euro-Americans. Although early nineteenth century maps are not as accurate as

those drawn later in the century, they suggest that there was little notable settlement on much of Rockaway Neck beyond small villages. The 1829 Burr *Map of the Counties of New York* (Figure 6) depicts a few roads on the neck, including Broadway (running southwest-northeast), which dates to the Colonial period. A small village is marked on the map as N. Rockaway northeast of the project area, but no buildings, structures, or development of any kind is shown within or adjacent to the project area.

Figure 6 1829 Burr *Map of the Counties of New York, Queens, Kings, and Richmond*

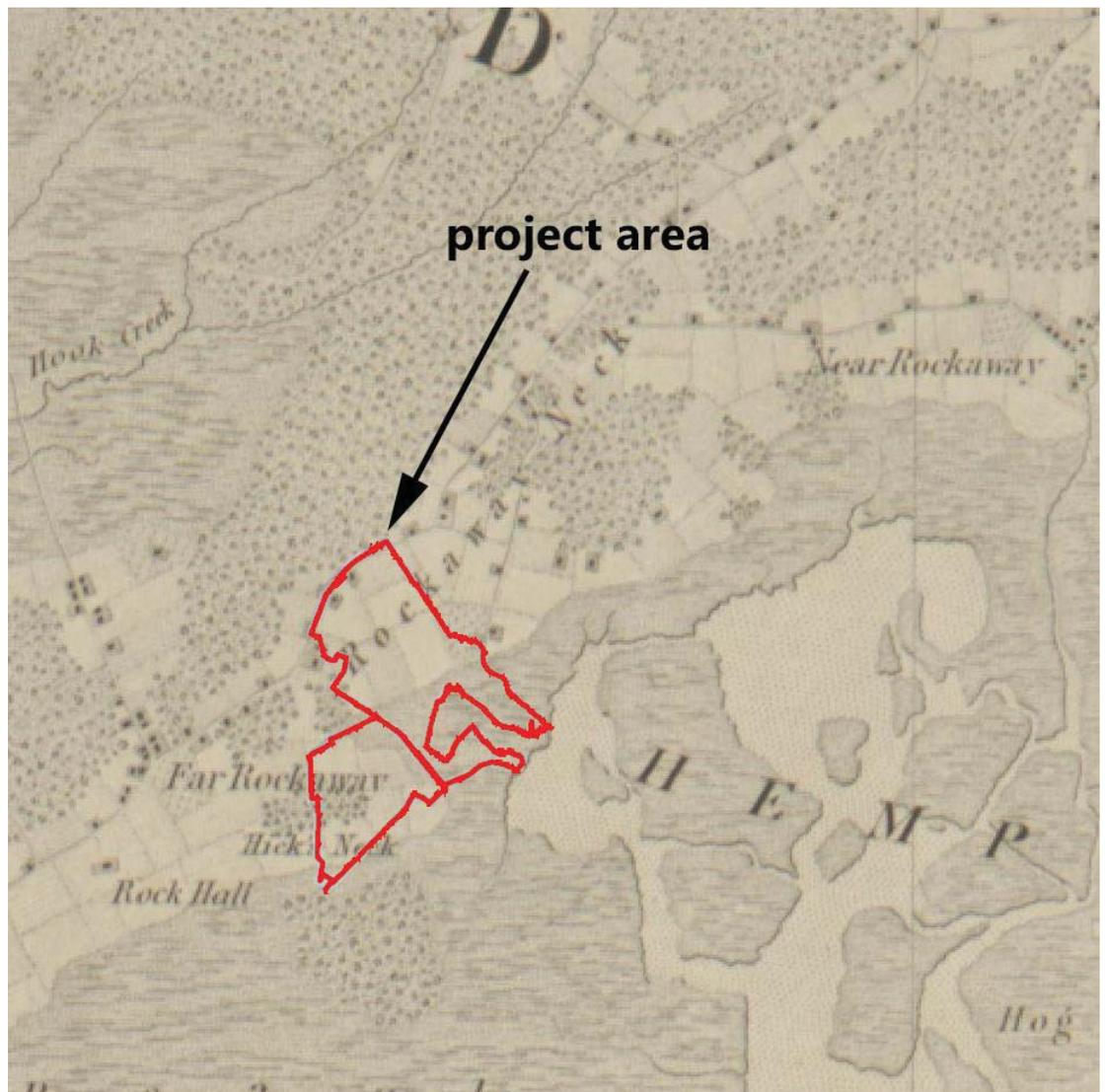


This map shows the approximate location of the project area on the northern portion of Rockaway Peninsula. New York Public Library Digital Collections.

Beginning in the nineteenth century, the United States Coastal Survey (USCS) published a series of nautical charts, including several for the New York Harbor area. Although land ownership is not indicated on the USCS maps, they are remarkably accurate and detailed in their depiction of natural and man-made features along the coast. The 1844 USCS *Map of New-York Bay* (Figure 7) illustrates the slow development of the area around present-day Woodmere through the century, with most farmsteads aligned along Broadway. Near Rockaway (which is likely the same village that was shown on the 1829 map as N. Rockaway) is illustrated northeast of the project area, and Far Rockaway is shown to the southwest. Two

structures are mapped in the northern portion of the project area near Broadway. Property ownership is not indicated on this map, but the illustrated agricultural fields in the vicinity of the project area suggest that the structures were farmhouses or residences. Indeed, several homes are shown to have lined Broadway on either side and to the north of the project area at this time, but none of these houses are extant. The northern portion of the project area consists of cleared agricultural fields, while the southern two-thirds of the project area appear to be entirely within wetlands on the 1844 map.

Figure 7 1844 United States Coastal Survey

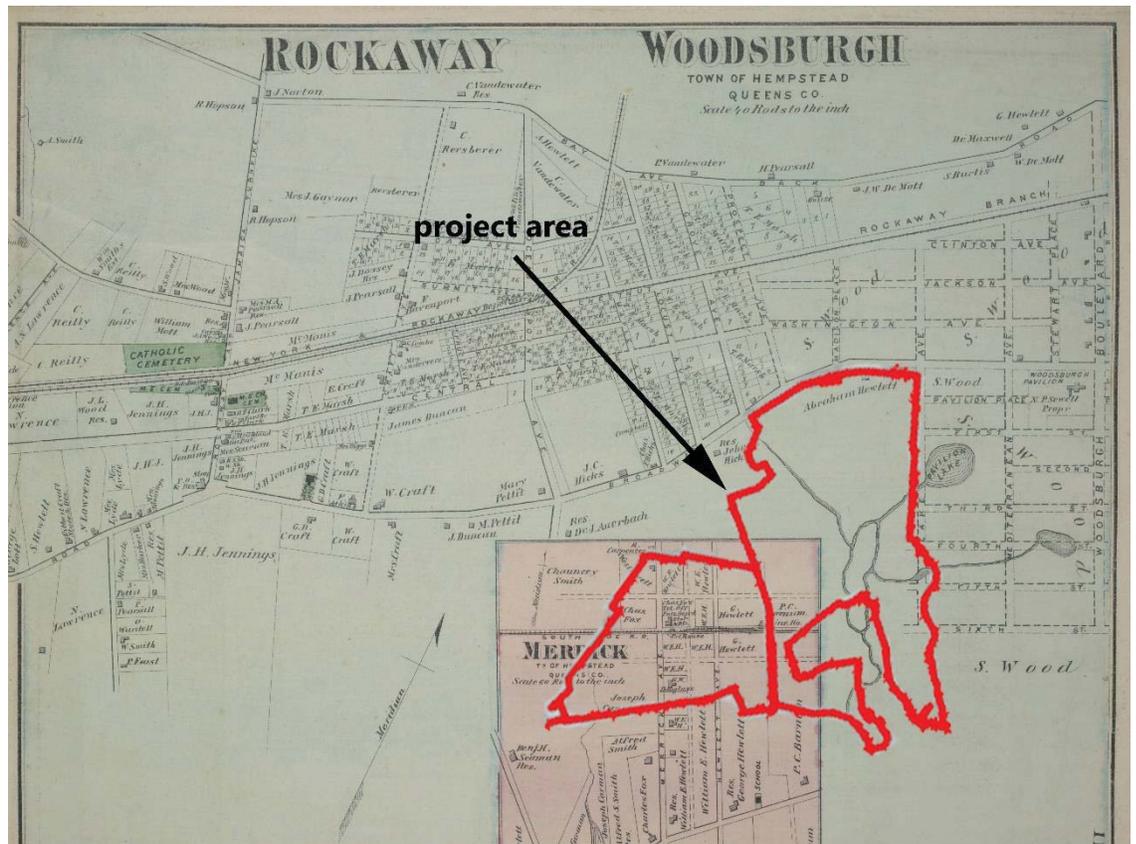


This map shows the coastline before it was dredged to create Woodmere Channel. Stony Brook University Library Digital Research Collection

Phase IA Archaeological Study - Woodmere Country Club

The 1873 Beers *Atlas of Long Island* (Figure 8) shows increased residential settlement along main roads and in concentrated villages. This map illustrates property ownership/habitation that can often be corroborated with Federal Census data. Both the key map and the insert for *Rockaway Woodsburgh* show minimal habitation of the project area. Only one building - the Abraham Hewlett house - is shown in the northern portion of the parcel on the inset map.

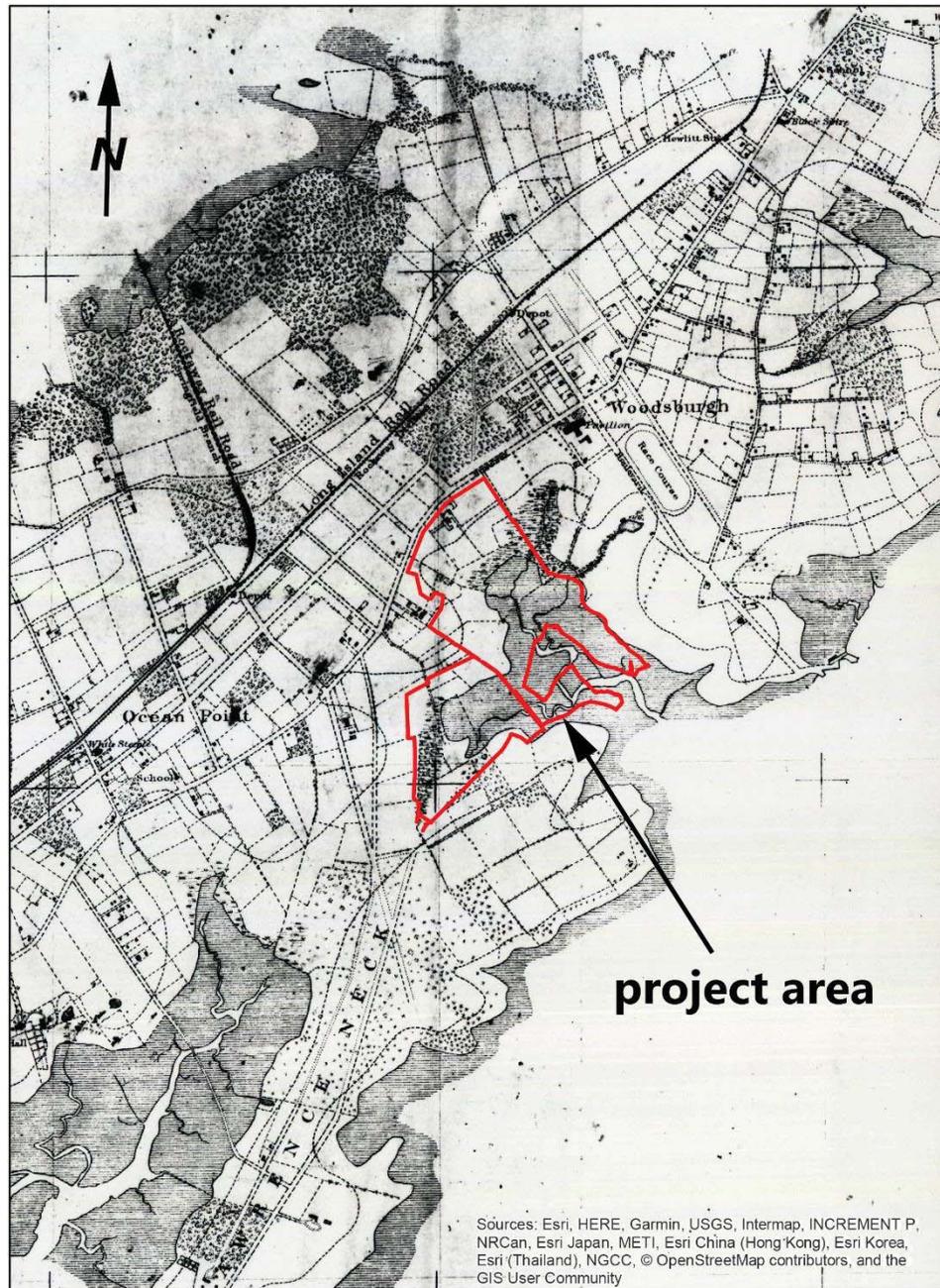
Figure 8 1873 Beers *Atlas of Long Island*



This map shows only the most densely-settled portions of Woodmere; the coastline is not defined. New York Public Library Digital Collections

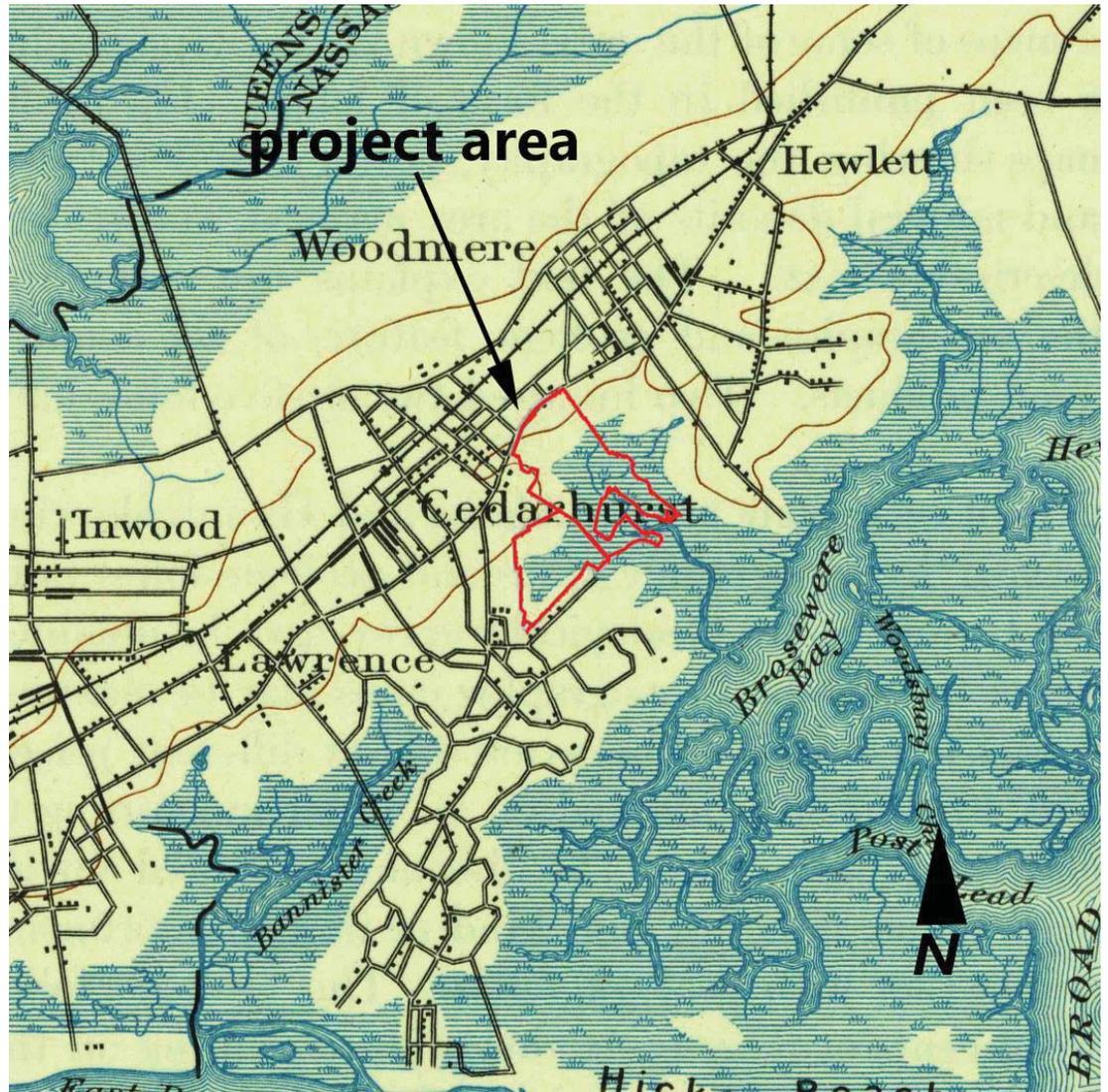
By the time of the 1879-90 USCS map (Figure 9), substantial tracts of Rockaway Neck had been cleared, more roads established, and residential settlement had increased due in large part to the opening of the Long Island Rail Road. At least one structure (possibly two) is shown in the northern portion of the project area (in the same location where the Abraham Hewlett house was illustrated on the 1873 map). A similar settlement pattern is shown on the 1903 topographic map of *Hempstead, New York* (15-minute series; Figure 10). There is one building depicted in the northern portion of the parcel along Broadway. This map-documented structure is no longer standing.

Figure 9 1879-90 United States Coastal Survey



United States Coastal Survey showing the project area with agricultural lands in the north and marsh in the south. This map shows the coastline prior to dredging for Woodmere Channel. Stony Brook University Library Digital Collections.

Figure 10 1903 USGS topographic map (7.5 minute series)



No property ownership is shown on this map. University of New Hampshire Library Government and Information Unit.

By the time of the 1914 map, two structures in the northern portion of the property, south of Broadway, between Elm and Madison (present-day Linden Street), were identified with Robert L. Burton, who had purchased all the property formerly owned by Samuel Wood and Abraham Hewlett, respectively (Figure 11).

Figure 11 1914 Hyde Atlas of Nassau County



The project area is shown on the edge of this map. Two structures in the northern section are identified as owned or occupied by Robert Burton. New York Public Library Digital Collection.

Based on the results of the Historic Map Survey, the project area vicinity was only lightly settled during the historic period (nineteenth century and earlier), and a substantial portion of the parcel was marsh and wetlands. Only in the northern section of the project site (near Broadway) is there documentation of habitation in the nineteenth century. Undisturbed portions of the project area, if they exist, would have a moderate sensitivity for the presence of historic-period archaeological remains associated with the two map-documented structures in the northern portion of the property. These were likely residential buildings situated along Broadway associated with Abraham Hewlett around the mid-nineteenth century. Most of the rest of the property was wetlands and marsh with little evidence of documented habitation or use, suggesting the sensitivity for historic archaeological sites in the southern two-thirds of the property is low.

5

Archaeological Sensitivity Assessment

5.1 Prehistoric Sensitivity

[REDACTED]

Prehistoric cultural sequences represented in New York State comprise the three major archaeological time periods known as the Paleoindian (c. 13,500-10,000 years Before Present, or B.P.), Archaic (10,000-3,000 years B.P.), and Woodland (3,000-350 years B.P.). Overall, these generalized cultural sequences, with minor localized subdivisions (e.g., Early Archaic, Late Woodland), conform well to the wider settlement and site patterns observed throughout the Mid-Atlantic and Northeast regions of eastern North America.

The results of more than twenty years of archaeological studies in coastal New York and the southern New England region suggest that the locations of pre-contact archaeological sites

appear to be strongly influenced by the proximity of navigable bodies of water (e.g., streams, rivers, bays), natural sources of fresh drinking water (e.g., springs, seeps), elevated landforms, and lithic outcrops (sources of raw material for the manufacture of stone tools). Sites located away from water sources are typically considered to be short-term resource procurement zones. These are considered logistically mobile sites where a limited range of activities were performed, such as hunting, nut collecting, plant processing, or lithic raw material procurement (i.e. quarries). Archaeological assemblages recovered from interior regions frequently contain a low diversity of artefactual remains, due to the short-term/specialized use of resource procurement zones. Typically, pre-contact archaeological deposits encountered on landforms associated with larger water bodies like rivers or bays, contain a greater diversity of artifact assemblages, subsurface features, and overall dimensions.

Browsewre Bay and the surrounding marshes and uplands would have been attractive to prehistoric peoples as a rich source of water, food (aquatic and terrestrial flora and fauna), and raw material (such as marsh reeds and clay). The marshy area may have been an area where hunting took place during the pre-contact area. However, fluctuations in water level and subsequent dredging and filling (especially around present-day Woodmere Channel and basin) suggest the project area is unlikely to contain archaeological traces of pre-contact habitation. Based on the results of the site file search, undisturbed portions of the project area, if they exist, would have a moderate sensitivity for the presence of prehistoric remains.

5.2 Historic Sensitivity

The Woodmere Country Club is situated within the hamlet of Woodmere (Town of Hempstead), the incorporated village of Woodsburgh, and the incorporated village of Lawrence. These areas are historically referred to as part of the Five Towns area, which is comprised of Woodmere (including the village of Woodsburgh), Cedarhurst, Lawrence, the Hewletts, and Inwood. As such, the history of the Woodmere Country Club is connected to the development of planned communities in the Five Towns area broadly, with a more intimate connection to the settlements at Woodmere and Woodsburgh. Prior to the formation of Nassau County in 1899, this area - comprising the eastern part of the Rockaways peninsula - was considered part of Queens County (Bellot 1917).

Permanent settlement by Europeans did not occur in southwestern Long Island until the middle of the seventeenth century. At that time, the area around eastern Jamaica Bay was inhabited by the Rockaway Indians, a Munsee-speaking Delaware group who probably had stronger cultural ties to Delaware peoples on mainland New York and New Jersey than with the Eastern Algonquian groups of central and eastern Long Island (Cantwell and Wall 2001; Goddard 1978; Grumet 2005). However, according to some local historical accounts, the name "Reckouwacky" was used by the Canarsie Indians in an effort to distinguish their settlement from other tribal villages in the region (Bellot 1917:9). The Munsee speakers that inhabited coastal New York were loosely organized communities with fluid concepts of community and collective membership (Cantwell and Wall 2001:120). The names for some of these groups still resonate today in local geography. The Munsee term for sandy place, Reckouw Hacky, is first mentioned in a 1639 Indian deed of land to the Dutch.

Devastating epidemics and sporadic armed conflicts between the European and Rockaway Indians greatly reduced the Native American population on western Long Island, though hostilities abated after August 1645 when a peace treaty between local Indian groups (including the Rockaway) and Dutch was signed. The Rockaway Indians lost land to the townships of Hempstead and Jamaica, but they reserved the right to camp on unfenced land at Rockaway in exchange for their acknowledgment of European claims (Grumet 2005). In other parts of Long Island, undocumented indigenous habitation of marshy and undeveloped areas continued into the twentieth century when they were confronted by urban developers and land speculators; this may well have been the case for the indigenous communities that settled the Rockaway peninsula.

The Dutch ceded control of New Amsterdam to England in 1664, and the area surrounding Jamaica Bay east to Hempstead Bay was settled by both Dutch and English farmers in the 1660s (Hazelton 1925). European village life was concentrated in the Town of Hempstead, with the Rockaways as outlying areas of the town (Bellot 1917:10). An indigenous presence continued in the area until the beginning of the eighteenth century. Indeed, one local historian noted that Hog Island (later referred to as Barnum Island), located roughly 3.2 kilometers (two miles) southeast of the project site in Woodmere Bay, was the "headquarters" for the Reckouwacky tribe (Bellot 1917:9). The meadows and marshes surrounding Woodmere Bay were utilized for occasional grazing of Indian-owned cattle, based on land negotiations between the tribe and the European settlers. The Euro-American economy of southwestern Long Island at this time was principally agricultural, supplemented by fishing and other maritime trades in communities along the shore. The earliest documented European house in the Rockaways was built by Richard Cornell circa 1690 more than 1.6 kilometers (one mile) southwest of the project area in present-day Far Rockaway; at the time, it is assumed that the area would have been occupied by indigenous structures and little else (Bellot 1917:11). The area northeast of the Woodmere Country Club (which comprises portions of present-day Woodsburgh village and Hewlett Neck) was occupied by the Browsers and Hewletts - farming families - in the eighteenth century.

The rural economy was disrupted by the American Revolution. The Battle of Long Island took place in nearby central Brooklyn during August 1776, and despite the efforts of George Washington, New York City quickly came under British control. The southern part of the Town of Hempstead was largely Loyalist in political sentiment, but both Patriot and Loyalist families that remained in the region following the Battle of Long Island suffered hardships as British garrisons were provisioned with crops, wood, and livestock, seriously depleting local resources (Luke and Venables 1976). Families that had actively aided the British during the Revolution were forced to surrender property to the returning Patriots during the 1780s and 1790s. Pre-war economic patterns were gradually resumed during the early nineteenth century, facilitated by waterborne trade.

A series of early- to mid-nineteenth century maps (see Historic Map Survey, above) illustrates linear settlement along main roads throughout the Town of Hempstead. The 1829 Burr *Map of the Counties of New York, Queens, Kings, and Richmond* (Figure 6), for instance, shows Broadway established north of the project area, and two villages on Rockaway Neck: N. Rockaway to the northeast and Far Rockaway to the southwest, but no development within the project area. The 1844 map (Figure 7) shows more detail, illustrating houses and

farmsteads along both sides of Broadway, which borders the property to the north. The project area appears to have served as farmland at this time, and two structures are documented in the northern section of the property along Broadway.

By 1860, the villages of Woodmere and Hewlett are documented on area maps, their development linked to the arrival of the railroad. Prior to this time, the area was inhabited by scattered farming families with an inn, a church, and a country store. The Hewlett and Woodmere Bays contained oyster and clam beds. These and other products of the meadow and marshland were sold by the half-dozen farming families that lived in Woodmere in the mid-nineteenth century. This rural section of the Rockaway peninsula was often referred to as Brower's Point.

The opening of the Rockaway branch of the Long Island Railroad in the 1860s spurred development in southwest Nassau County. A station was built at Brower's Point, and the name of the area was changed to Woodsburgh after Samuel Wood, a wealthy businessman who bought up all the farms in the area, donated the land for building the railroad station, and set out to build an upscale development. Around 1870, Wood built the Woodsburgh Pavilion Hotel on the corner of Woodsburgh Boulevard and Broadway, which served 500 wealthy and fashionable guests (Bellot 1917; Vollono 2012, 2015). After Samuel Wood died, his estate passed into the hands of Abraham Hewlett. In fact, the 1873 Beers *Atlas of Long Island* (Figure 8) shows this period of transition, as one structure in the northern portion of the property is identified as belonging or occupied by Abraham Hewlett, and surrounding lands are marked as owned and under development by S. Wood. Interestingly, the streets are mapped as proposed at this time, and do not necessarily reflect contemporary road layout.

A portion of the Wood/Hewlett estate (comprising 200 acres of woodland and 100 acres of marsh and meadowland south of the railroad track and 100 acres north of the railroad) was eventually purchased by Robert L. Burton (Bellot 1917; Figure 11). The large Pavilion Hotel on Woodsburgh Boulevard was demolished, and nearly every residence within the purchased lands was either razed or relocated to the eastern edge of the village. In an effort to develop a high-end restricted suburban development, local historian Bellot notes:

Burton laid out streets, dredged the creeks in Woodmere Bay, built a bridge, laid out tennis courts and golf links, erected a clubhouse and connected gas, water, electric lights and the telephone system. Burton spent more than a million dollars in improvements. Many residences of great architectural beauty were built on portions of the property sold to individuals, and some of the best-known people made Woodmere their home (1917:67).

At the same time that Burton purchased the Wood/Hewlett lands, other urban land speculators were also buying up land in neighboring parts of Cedarhurst, Lawrence, and Hewlett Bay Park. Investors in these properties hired dredging companies to create deep-water channels for yacht and ferry access (Vollono 2015:170-180). Burton teamed up with investors of properties to the east and west, working to enhance transportation and expand amenities for the new planned communities. He and other area developers employed well-known architects and landscape architects to design aesthetically-pleasing and thoughtfully-planned neighborhoods that would draw urban elites. These are among the earliest planned

communities on Long Island, which incorporated the ideas of residential parks into the new developments that, due to innovations in transportation, were within a reasonable commuter's distance to New York City (see MacKay 2015).

An interesting historical legend remains about a Native American man who may have once resided on or near the northern portion of the project area. In the late nineteenth century, Cullolou Telewana, a Rockaway Indian, was remembered as "the last Rockaway Indian" who guided local boys through the woods and taught them woodcraft and fishing. Abraham Hewlett was one of those local boys. In memory of his friend Cullolou Telewana¹, he commissioned a memorial in 1881 to commemorate his life (Cullolou Telewana died in 1818). According to historian Millicent Vollono:

Originally located at Broadway near Linden Street in Woodmere, where Culluloo's hut had been situated, [the monument] was moved in 1901 with the development of the surrounding land by Robert Burton (2012:3).

When Burton purchased the Wood/Hewlett Estate, he had the memorial statue relocated to a triangle of land on Woods Lane in Woodsburgh, where it stands today.

The Woodmere Club was originally built as part of Burton's development in 1908 on land in the village of Woodsburgh east of the project area. Shortly thereafter, Burton sold the development to Maximilian Morgenthau, President of the Hudson Bay Realty Company (Vollono 2015:174). In 1910, the Woodmere Club moved to its present location (the project area) on some land that was purchased along Railroad Avenue and some adjacent land leased from the White family (Figure 12). The Woodmere Club eventually expanded to include some of the lands of the Rockaway Hunting Club (Woodmere Club n.d.).

During the late nineteenth and early twentieth centuries, the small fishing communities on the south shore of southwest Long Island were transformed into thriving summer resorts (Figure 13). Several large hotels, parks, and beaches were developed for the tourist industry, including the Woodmere Club, the Rockaway Hunting Club (which is adjacent to the Woodmere Club), the Seawane Club and the Inwood Club. Other attempts at economic development in the region were made, and although plans to turn Jamaica Bay into a harbor to rival the Port of New York were never realized (Seitz and Miller 1996), southwestern Nassau County witnessed a housing boom that did not abate until the latter part of the twentieth century.

Based on a review of historical maps and other sources, the project area appears to have been a mixture of agricultural fields and wetlands in the eighteenth century and the nineteenth century. The parcel became developed as a country club with golf course and tennis courts in the first quarter of the twentieth century, at which time extensive land recontouring (i.e., cutting and dredging to form Woodmere channel and subsequent filling to create the coastal golf course) altered the property. As a result, most of the property has a

¹ Vollono notes that "Historians now question whether Culluloo was native American or an escaped black slave, known as "Colored Lou" (2012). This is a popular practice of historical revision in the twentieth century, to re-interpret Native American identity as black and/or enslaved, the purpose of which was to eliminate indigenous claims to land (McGovern 2015). Because the Rockaway area was still home to indigenous tribal groups in the nineteenth century, there is no reason to question the identity of this Native American man.

Phase IA Archaeological Study - Woodmere Country Club

low sensitivity for the presence of historic-period archaeological sites. However, due to the presence of two map-documented structures near Broadway in the mid to late nineteenth century, the northern portion of the property has a moderate sensitivity for the presence of historic archaeological deposits associated with those structures.

Figure 12 Historic photograph of Woodmere Club, c. 1912

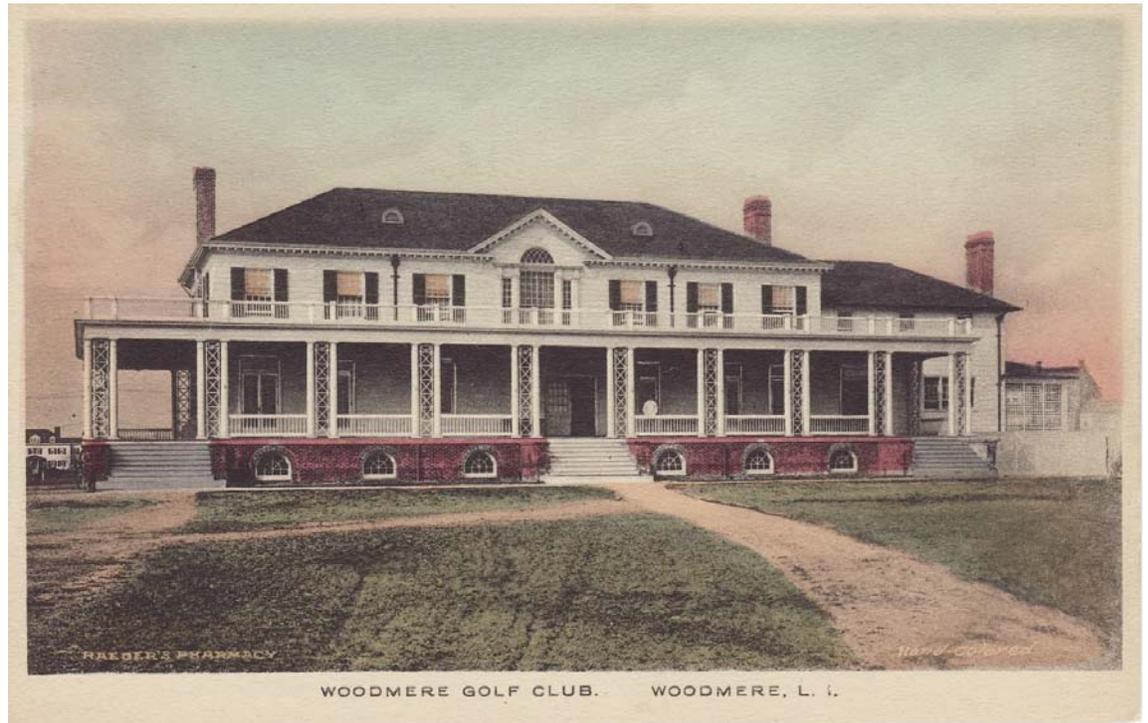
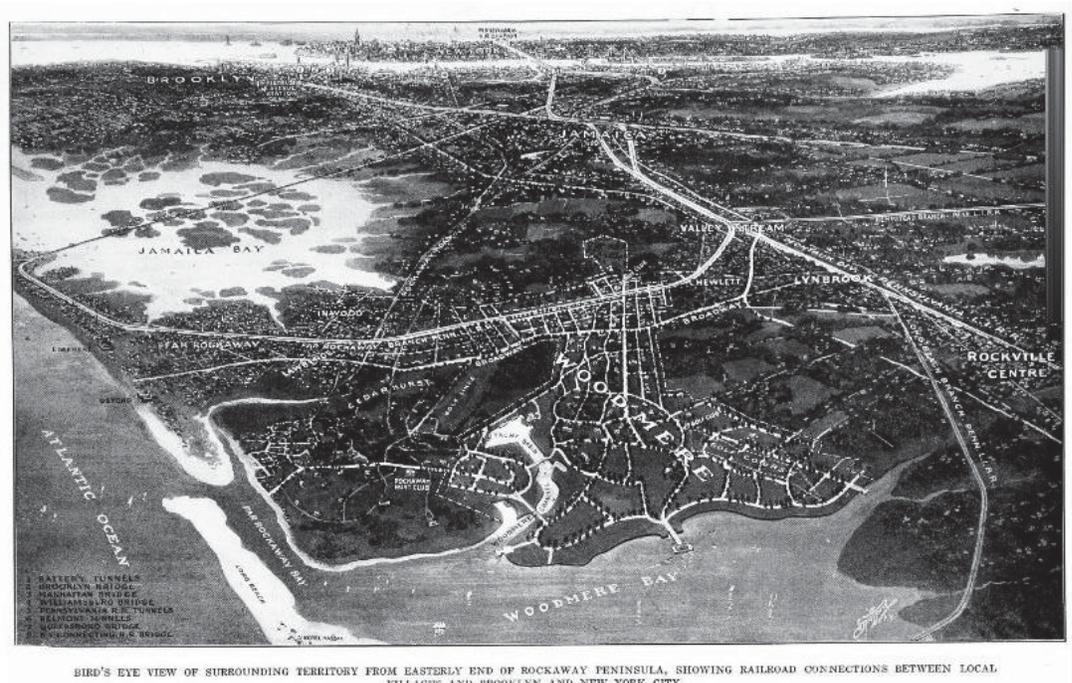


Figure 13 Bird's eye view of Woodmere, c.1917



6

Surface Reconnaissance

The entire project area was walked over on December 14, 2018. During the walkover, special attention was given to examining exposed soils for artifacts or other surface manifestations of past human activity. Vegetation patterns and topographic features, which might provide insight into early land use, were also noted. Ground surface visibility is generally good throughout the project corridor, due to landscaping and lawn maintenance for the golf course. Recent dumping of trash and other debris (including cut and fallen trees) was present on the surface in portions of the property east of Keene Lane and south of the tennis courts, but no archaeological material was encountered anywhere on the property during the surface survey.

Photographs 1 through 30 illustrate existing conditions within the project area. The photograph captions describe existing conditions and visible evidence of ground disturbance. Photograph angles are illustrated on Figure 3. All photographs were taken during the site visit conducted by VHB on December 14, 2018, unless otherwise specified.

Phase IA Archaeological Study - Woodmere Country Club

Photo 1 Southern view of the Woodmere Club main clubhouse and paved entrance.



Photo 2 Looking south at the pro shop and cart house surrounded by a paved parking area.



Phase IA Archaeological Study - Woodmere Country Club

Photo 3 Looking northeast at tennis courts behind the clubhouse. Keene Lane is visible in the foreground



Photo 4 Northeast view of poolhouse, paved courtyard, and gazebo.



Phase IA Archaeological Study - Woodmere Country Club

Photo 5 Southeast view of the paved parking area east of the clubhouse.



Photo 6 Looking east at bar on the green in the eastern portion of Parcel 1.



Phase IA Archaeological Study - Woodmere Country Club

Photo 7 Looking west across the practice area and golf course in the northern portion of Parcel 1.



Photo 8 Southeast view of the golf course along Meadow Drive, looking toward the clubhouse. The topography is level and at grade with Meadow Drive.



Photo 9 Southwest view of the golf course across the fairway in the northwest portion of the parcel. Note the visual evidence of land recontouring associated with the construction of sand traps in the distance.



Photo 10 Looking northwest toward sand traps in the northern portion of the property. Ground disturbance from the installation of below-ground utilities is evident in the foreground (surrounded by pink flags).



Phase IA Archaeological Study - Woodmere Country Club

Photo 11 Looking southeast at a constructed pond and paved cartway in the eastern portion of Parcel 1. The clubhouse is visible in the distance.



Photo 12 Looking southeast across the graded landscape toward Keene Lane (in the distance).



Phase IA Archaeological Study - Woodmere Country Club

Photo 13 Southwest view of an elevated tee box in the western portion of Parcel 1. Note the visual evidence of cutting and filling for construction of the tee.



Photo 14 The installation of drains, seen here in the northwest portion of Parcel 1, is evidence of ground disturbance. View is north.



Photo 15 Looking southwest where the edge of Parcel 1 meets the rear yards of the homes along Iris Street. The difference in grade here suggests that this portion of the project area has been cut to accommodate the fairway and sand trap (the edge of which is visible in the background, left).



Photo 16 Southwest view of landscaping in Parcel 1 near Ivy Street.



Photo 17 Northern view of the fairway in the southwest portion of the project area. The flat land against the sand traps in the distance suggest that this area was graded and filled in sections. The installation of below-ground utilities in the foreground is also evidence of ground disturbance.



Photo 18 Looking toward one of two ponds in the southwest portion of Parcel 1; view is southwest.



Photo 19 This southwest view shows cart pathways through and around a berm in the southwest portion of the golf course. Note the phragmites to the right of the berm



Photo 20 Northern view of two ponds in the southeast corner of Parcel 1.



Photo 21 Northeast view of golf course landscaping from an elevated tee box in the southeast corner of Parcel 1. Wetland vegetation (associated with standing water) is shown to the left.



Photo 22 Eastern view of ground disturbance from road construction in the southern portion of the parcel along Keene Lane.



Phase IA Archaeological Study - Woodmere Country Club

Photo 23 Looking north at ground disturbance in the southern portion of Parcel 2. Note the elevated tee box. A large berm is evident behind the elevated tee.



Photo 24 Looking north along terraced land toward a constructed berm in the distance. Though not visible in this photo, there is evidence of recent dumping on the berm. The basin of Woodmere Channel is visible to the east.



Phase IA Archaeological Study - Woodmere Country Club

Photo 25 Looking south at bulkhead along the basin in the southeast portion of the property.



Photo 26 Looking east at the golf cart bridge that crosses Woodmere Channel.



Phase IA Archaeological Study - Woodmere Country Club

Photo 27 Northwest view of waterline at Woodmere Channel in Parcel 2. A graded surface for a tee box is evident in the distance to the right.



Photo 28 Looking north toward the rear of the clubhouse. Note the berm to the left and the graded fairway to the east. The pool house and a children's playground are visible in the distance to the left.



Phase IA Archaeological Study - Woodmere Country Club

Photo 29 Southern view of garage/storage building east of Keene Lane and south of the tennis courts. This section of the project area has been altered by grading and paving for an access road for heavy equipment.



Photo 30 This southern view of the property east of the basin shows extensive grading in the foreground and a berm constructed in the background.



7

Results and Recommendations

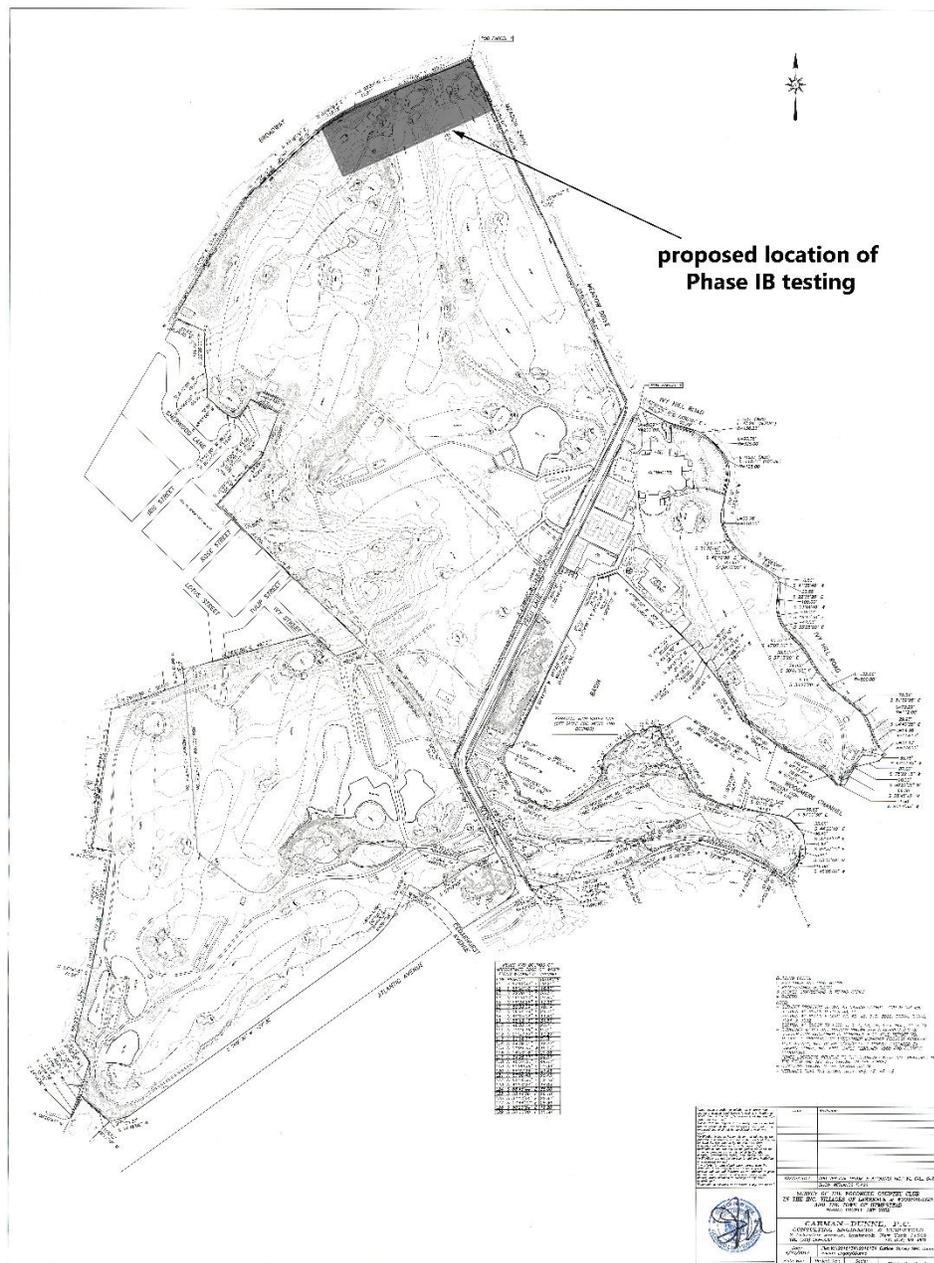
Based on the results of the site file search and OPRHP sensitivity models, the project area appears to be within an Area of Archaeological Sensitivity. However, a subsequent review of historic maps, historical records, and existing soils surveys indicates that the majority of the property was impacted in the nineteenth century by cutting and filling of the marshy lands, dredging of the property along Brosewre Bay for construction of the Woodmere Channel and basin, and subsequent construction of the golf course, tennis courts, main clubhouse and associated buildings and structures (see Bellot 1917). These land transformations are evident on historic maps, which illustrate changes in the land from farming in the north and marsh in the south (c. 1844-1903) to recreational use in the twentieth and twenty-first centuries (c. 1914-2016). Furthermore, maintenance of the grounds and installation of drainage, electric, and other below-ground utilities in the late twentieth through twenty-first century were photo-documented during the field reconnaissance. This evidence suggests that most of the property has been thoroughly disturbed and, therefore, is unlikely to yield intact evidence of archaeological sites.

In the northern section of the project area, two structures were illustrated on mid- to late-nineteenth century maps. These were likely situated to face Broadway (between Pine and Elm Streets). There is no surface evidence of these structures. In this section of the project area, the landscape shows evidence of filling and recontouring for the construction of tee boxes, greens and sand traps. However, the depth and extent of disturbance associated with golf course construction is unknown. Traces of the map-documented structures may be buried below layers of fill. Because of this, Phase IB archaeological testing is recommended in the northern portion of the parcel in the vicinity of the map-documented structures. Phase IB

Phase IA Archaeological Study - Woodmere Country Club

archaeological testing consists of the excavation of shovel test pits to detect the presence or absence of buried archaeological materials (e.g., artifacts) and to document human activity (e.g., historic and recent ground disturbance) through soils observation. For the Woodmere Country Club, Phase IB testing is proposed for a section of property located within 60 meters (200 feet) south of Broadway, east to a point across from Pine Street and west to a point across from Elm Street. It is estimated that the excavation of 45-60 shovel test pits at 15-meter intervals will be necessary to investigate this roughly 3-acre section of property in the northern section of the project area in accordance with New York Archaeological Council standards (Figure 14).

Figure 14 Proposed location of Phase IB archaeological testing.



8

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Parks, Recreation, and Historic Preservation

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Governor

ERIK KULLESEID
Commissioner

February 27, 2019

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100 Motor Parkway
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Re: USACE
Woodmere Club, LLC. - Housing Development
99 Meadow Drive, Woodmere, NY 11598
18PR04232
NAN-2017-01459-ERO

Dear Ms. McGovern:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York State Environmental Conservation Law Article 8).

We have reviewed the report entitled "Phase IA Archaeological Study, Woodmere Country Club in the Incorporated Villages of Lawrence and Woodsburgh and the Town of Hempstead, Nassau County, NY" (January 18, 2019). The SHPO concurs with your proposal for Phase IB archaeological testing in the portion of the project area shown in Figure 14 of your report.

If further correspondence is required regarding this project, please refer to the OPRHP Project Review (PR) number noted above. If you have any questions I can be reached at 518-268-2186.

Sincerely,

Tim Lloyd, Ph.D., RPA
Scientist - Archaeology
timothy.lloyd@parks.ny.gov

via e-mail only

cc: D. Buttacavoli and L. Bekofsky

Division for Historic Preservation

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Phase IB Archaeological Survey

Woodmere Country Club in the Incorporated
Villages of Lawrence and Woodsburgh and the
Town of Hempstead, Nassau County, NY

PREPARED FOR

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PREPARED BY



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6/19/2019

Project Summary

SHPO Project Review Number: 18PR04232

Involved Local, State and Federal Agencies: New York State Department of Environmental Conservation (NYSDEC), United States Army Corp of Engineers (USACE)

Phase of Survey: Phase IB archaeological survey

Survey Area (English & Metric): N/A

Number of Acres Surveyed: approx. 3 acres

› Percentage of Site Excavated: N/A

USGS 7.5 Minute Quadrangle Maps: *Lawrence, New York* and *Lynbrook, New York* 2016

Results of Archaeological Assessment

Number & Name of Archaeological Sites identified: None

Number & Name of Historic Sites identified: One, Abraham Hewlett Historic Site

Number & Name of Sites Recommended for Phase II/Avoidance: None

Recommendations: A light density of historic artifacts dating to the late 19th through the 20th century was recovered in ten shovel test pits. These materials appear to be a domestic assemblage, likely associated with the map-documented Abraham Hewlett house. The presence of these materials in such a low quantity, buried within disturbed soils, suggests that the historic site was disturbed by the construction of the golf course features in the first half of the 20th century. Due to the low density and low diversity of the artifacts recovered, no further archaeological investigations are recommended.

Report Author(s): Allison McGovern, PhD (RPA 16468)

Date of Report: June 19, 2019

Table of Contents

1	Introduction	1
2	Project Description	4
3	Research Design	6
4	Archaeological Field Investigations	8
4.1	Surface Survey.....	9
4.2	Subsurface Testing.....	9
4.3	Results	9
5	Conclusions	14
6	References	15

List of Figures

Figure No.	Description	Page
Figure 1	Regional Map	2
Figure 2	USGS topographic map <i>Lawrence, New York</i> and <i>Lynbrook, New York</i> , 7.5 minute series.	3
Figure 3	Civil survey with shaded APE.....	5
Figure 4	Shovel test pit survey within the APE	11

List of Photos

Photo No.	Description	Page
Photo 1.	Looking northwest at fieldstone line at northern edge of property.....	12
Photo 2.	Crew excavating shovel test pit S45/W60 during active golf play.....	12
Photo 3.	Excavation of shovel test pit S30/W150 near tee boxes; view is northeast.....	13



1

Introduction

VHB Engineering, Surveying, Landscape Architecture, and Geology P.C. (VHB), Hauppauge, New York, has prepared this Phase IB Archaeological Survey report for review by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). The Woodmere Country Club development property is located at 99 Meadow Drive in Woodmere, Town of Hempstead, Nassau County, New York (Figures 1 and 2) and comprises roughly 112 acres that lie partially within the villages of Woodsburgh and Lawrence and partially within the unincorporated portion of the Town of Hempstead. The property was established as the Woodmere Club on this site in 1910, and currently includes the main club house, a pool house, pro shop and cart house, a maintenance building, a restaurant and bar on the green, and six tennis courts. As proposed, the entire site is slated for redevelopment as a residential subdivision.

In January 2019, VHB completed a Phase IA Archaeological Documentary Study for the Woodmere Club (also known as the Woodmere Country Club). The Phase IA entailed archival research, historic map review, and a surface reconnaissance. This research indicated that two structures once stood in the northern section of the property, as illustrated in mid- to late-19th century maps. Based on this assessment, a Phase IB was recommended to search for the presence or absence of associated archaeological materials and to document suspected disturbance within a limited portion of the development property, comprising approximately 3 acres. For the purposes of the Phase IB, this 3-acre section in the northern portion of the development site comprises the archaeological Area of Potential Effect (APE).

The goals of this Phase IB study are to recover and document archaeological materials associated with mid-19th through early 20th century settlement (if present), and/or to document suspected disturbance before the APE is disturbed by proposed new construction.

The study was performed in accordance with the guidelines outlined in the *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* issued by the New York Archaeological Council (1995) and the *Phase I Archaeological Report Format Requirements* issued by the New York State OPRHP (2005). No structures have been reviewed as part of this Phase IB.

Figure 1 Regional Map

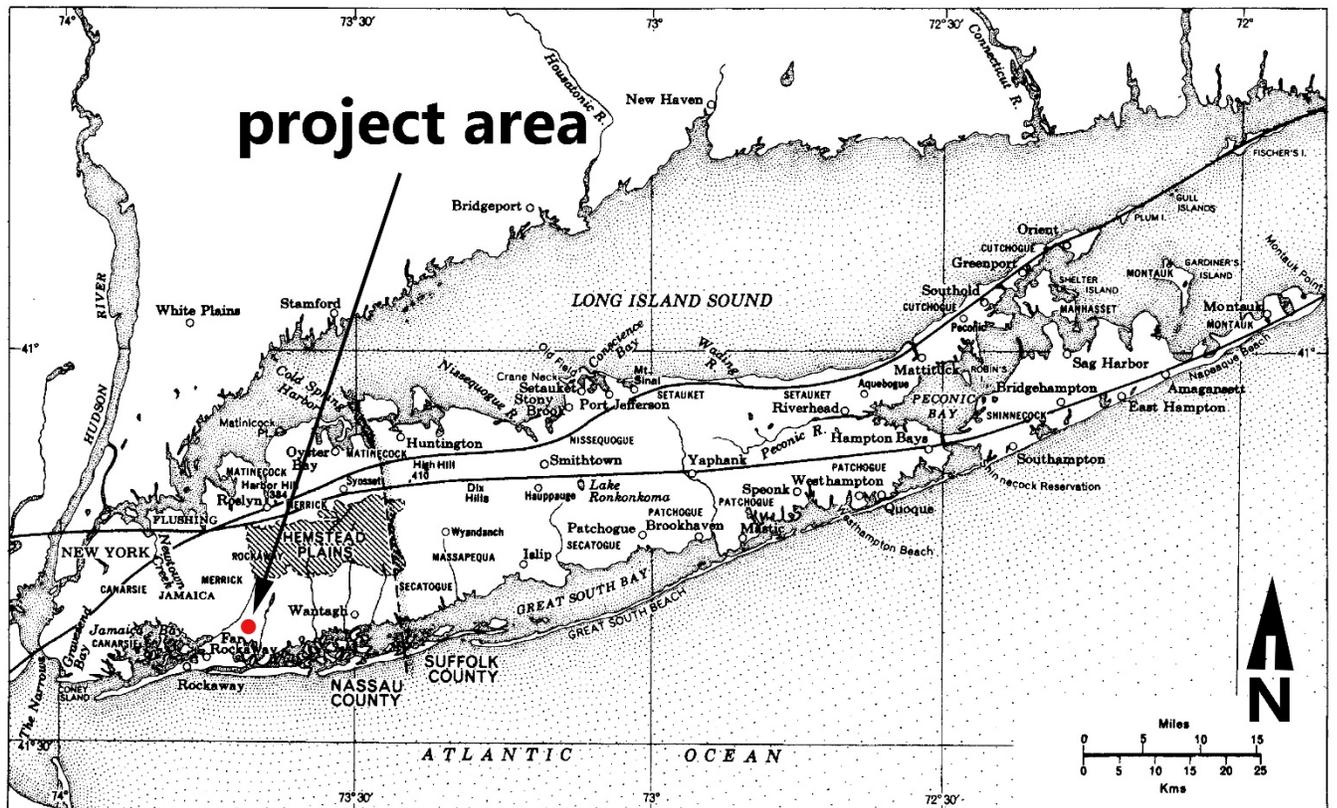
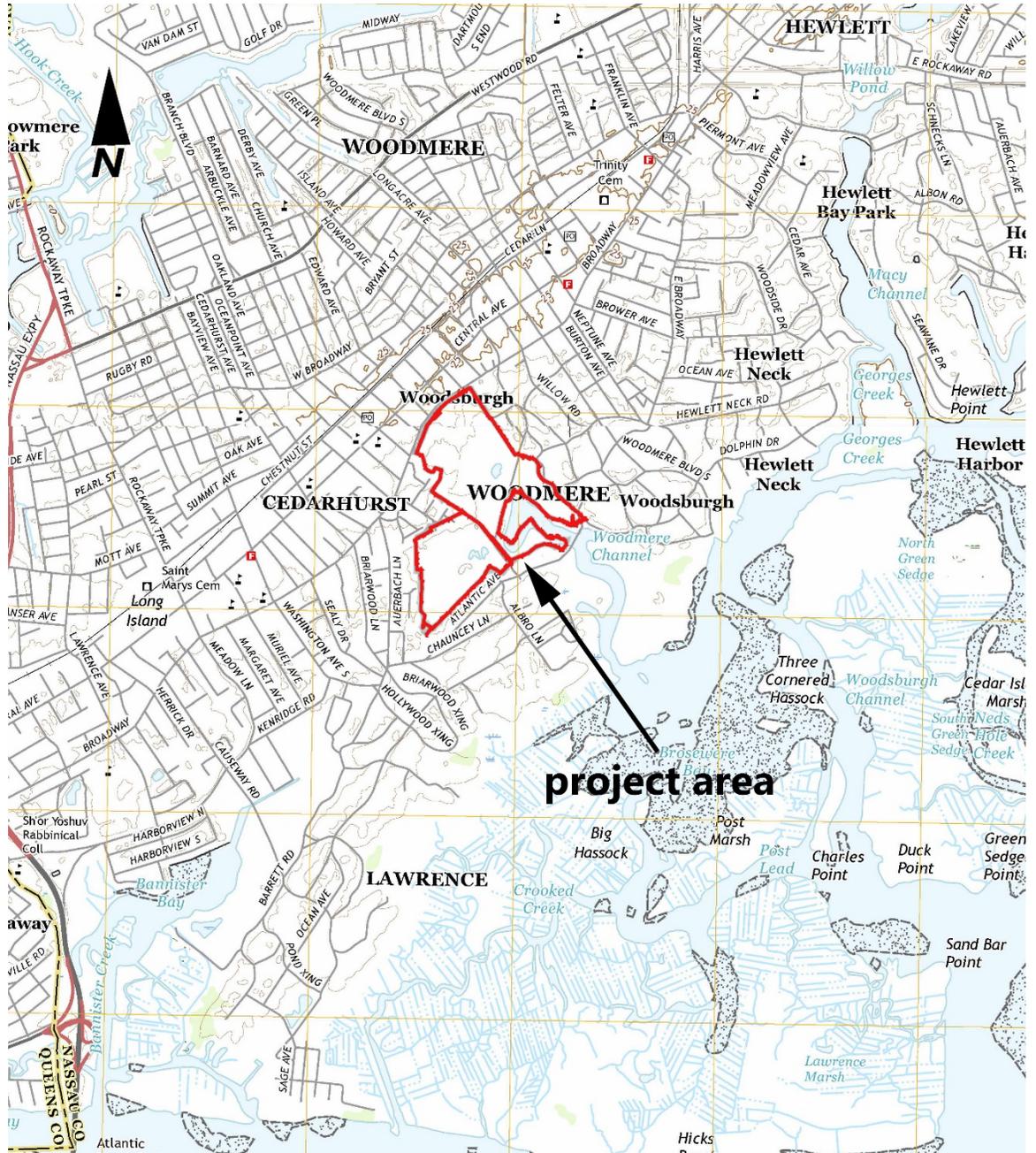


Figure 2 USGS topographic map Lawrence, New York and Lynbrook, New York, 7.5 minute series.



2

Project Description

The project area is located at 99 Meadow Drive in Woodmere in the Town of Hempstead with portions of the property lying within the villages of Woodsburgh and Lawrence. The site is comprised of two parcels (Figure 3). Parcel 1 is bordered by Broadway to the northwest, Meadow Drive and Keene Lane to the east, the rear yards of homes that border Atlantic Avenue to the south, and residential development to the west. Parcel 2 is located east of Keene Lane, southwest of Ivy Hill Road, and north of another golf course, with much of the eastern edge of the property bordering the Woodmere Channel and basin. The total project area measures approximately 112 acres. Of this total, approximately 3 acres in the northern section of Parcel 1 comprise the archaeological APE.

As currently proposed, the entire property will be subdivided, graded, and filled in preparation for new residential construction. Most of the property will be subdivided into residential lots with three bioretention areas, and wetland setbacks and a bioretention filtration area along the basin northwest of Woodmere Channel (VHB 2019).

Based on industry standards, the top 6 to 10 inches of topsoil will be stripped and stockpiled, then new fill will be hauled in to raise the grade to design elevations. The previously-removed topsoil will then be laid on top of the new fill. According to a very preliminary earthwork analysis, it is anticipated that upwards of 450,000 cubic yards of fill material will need to be brought in to achieve the grades shown on the subdivision plans. However, as the current design is still in flux, this estimate is expected to change as the project progresses.

3

Research Design

A Phase I archaeological survey typically involves archival research (Phase IA) and archaeological testing (Phase IB). Initial consultation with OPRHP resulted in a review letter dated July 10, 2018 noting that because the project is in an archaeologically sensitive area, a Phase IA archaeological survey is warranted. The Phase IA was completed in January 2019 and submitted to OPRHP for review. In a response letter dated February 27, 2019, OPRHP stated that it concurred with the results of the Phase IA and agreed that a limited Phase IB should be conducted within a 3-acre portion of the northern section of the project area.

According to the New York Archaeological Council (NYAC) *Cultural Resource Standards Handbook* (2000):

Field-testing procedures for Phase IB Field Investigations should verify site locations provided by informants, confirm site locations suggested by the literature search, and discover previously unknown sites. The areas to be subjected to a field survey are selected on the basis of the data gathered during the Phase IA evaluation and all probable locations of project construction, staging areas, or any other areas of potential impact.

A Phase IB archaeological investigation is a field-based study consisting of systematic survey, subsurface testing, and/or other field-based strategies to assess archaeologically sensitive areas and environmental characteristics relevant to site locations and formation processes.

For this Phase IB, a two-phase survey design was employed to search for archaeological remains in the APE. Similar survey designs, used in other areas of Long Island, have proven successful in detecting prehistoric and historic sites (Bernstein et al. 1999; Lightfoot 1986). The initial phase of a typical two-phase survey involves a surface reconnaissance and inspection intended to locate large and easily visible remains. The second phase entails subsurface testing.

4

Archaeological Field Investigations

For the Woodmere Club, Phase IB testing was conducted in a section of property located approximately 45 meters (150 feet) south of Broadway, east to a point across from Pine Street and west to a point across from Elm Street. This area is referred to as the APE and measures approximately 3 acres.

The general environmental characteristics of the project area were discussed in the Phase IA report (VHB 2019). The APE is part of an active, 18-hole golf course. Because of this, the landscape within the APE includes portions of greens, fairways, tee boxes, sand traps and bunkers, and paved pathways. Due to earth-moving activities (including grading and filling) associated with the construction of sand traps and bunkers, the topography of the APE is rolling, with a range of elevation from 4.6-10 meters (15-35 feet) above mean sea level (amsl).

According to the Nassau County Soil Survey, soils in the APE are mapped as Udipsamments, wet substratum (Wulforst 1987: Sheets 16 and 19). However, it is important to note that the mapped soils are predictions based on soil models, and therefore, soils in the field may differ from those mapped in the Soil Survey. Typically, Udipsamments, wet substratum is found in nearly-level low areas that have been filled with sandy material dredged primarily from

adjacent waterways. The sandy fill can be 1.1 to 2.4 meters (3.5 to 8 feet) thick and is often placed over organic tidal marsh sediments. The typical profile for Udipsamments, wet substratum, includes a surface layer of grayish brown loamy sand to an average depth of 10 centimeters (4 inches) below the ground surface, followed by light gray sand to 140 centimeters (55 inches) (Wulforst 1987:40).

4.1 Surface Survey

The entire project area was walked over on March 8, 2019, at which time the ground was frozen. During the walkover, special attention was given to examining exposed soils for artifacts or other surface manifestations of past human activity. Vegetation patterns and topographic features, which might provide insight into early land use, were also noted. Ground surface visibility is generally good throughout the project corridor, due to landscaping and lawn maintenance for the golf course. Remains of a stone wall were identified in the western portion of the APE running parallel to the fence line that forms the boundary of the project area (Photo 1). This appears to have served as a boundary marker for the golf course that pre-dates the installation of the chain link fence. No artifacts were identified on the surface during the surface reconnaissance.

4.2 Subsurface Testing

The second phase of the field survey consisted of the excavation of shovel test pits (STPs) designed to detect the presence of artifacts buried beneath the ground surface. A mapping datum was established at a fence corner in the northeastern portion of the APE, and all the test units are designated using metric grid coordinates relative to this point (Figure 4).

Shovel test pits have a diameter of approximately 40 centimeters (16 inches). Most of the shovel test pits were dug well into subsoil (identified as B2 soils in the appendix), typically to 50 or 60 centimeters (20-24 inches) below the present ground surface. The soil from each test unit was screened through six-millimeter (1/4 inch) wire mesh to aid in the identification and recovery of artifacts.

4.3 Results

A total of 33 shovel test pits was excavated (Photos 2 and 3). The parcel was tested mostly at 15 meter (49 foot) intervals. Subsurface testing was performed throughout the APE on low-lying surface areas. Tee boxes, sand traps, bunkers, and greens were eliminated from subsurface testing (Figure 4).

The specific data recorded in the field for each shovel test pit, including information on soil stratigraphy and artifacts, are presented in the Appendix.

The topsoil layer (referred to in the Appendix as the sod cap) consists of a partially shallow grass layer and dark brown loam and extends to an average of 2.7 centimeters (one inch) below the ground surface. All of the shovel tests contained a disturbance stratum of mostly mottled dark brown sandy loam (occasionally with pebbles, gravel, and/or cobbles) that extended to roughly 35 centimeters (14 inches) below the ground surface. This was followed by the B2 subsoil (yellow brown sand, occasionally with pebbles, gravel, and/or cobbles). Disturbed soils were the result of filling, grading, and redeposition of soils in association with golf course construction, maintenance, and associated utility construction.

No pre-contract artifacts, and no pre-contact or post-contact archaeological features were encountered during the shovel test pit survey. A light density of historic artifacts dating to the late 19th through the 20th century was recovered in ten shovel test pits. These materials include small sherds of whiteware, stoneware, redware and flowerpot ceramics; curved, chimney and bottle glass; unidentified corroded nails; small brick fragments; coal/slag; and one grazing mammal tooth. These materials appear to be a domestic assemblage, likely associated with the map-documented Abraham Hewlett house that was identified in this location during the Phase IA Documentary Study. However, the presence of these materials in such a low quantity in disturbed soils suggests that the historic site was disturbed by the construction of the golf course features in the first half of the 20th century. Due to the low density and low diversity of the artifacts recovered, no further archaeological investigations are recommended.

Photo 1. Looking northwest at fieldstone line at northern edge of property.



Photo 2. Crew excavating shovel test pit S45/W60 during active golf play.



Photo 3. Excavation of shovel test pit S30/W150 near tee boxes; view is northeast.



5

Conclusions

The results of the Phase IA Documentary Survey for the Woodmere Club suggested that the APE was sensitive for the presence of historic archaeological traces associated with the map-documented Abraham Hewlett house. Because of this, a Phase IB shovel test pit survey was performed within the APE. A total of 33 shovel test pits was excavated. A light density of historic artifacts dating to the late 19th through the 20th century was recovered in ten shovel test pits. These materials include small sherds of whiteware, stoneware, redware and flowerpot ceramics; curved, chimney and bottle glass; unidentified corroded nails; small brick fragments; coal/slag; and one grazing mammal tooth. These materials appear to be a domestic assemblage, likely associated with the map-documented Abraham Hewlett house. However, the presence of these materials in such a low quantity, buried within disturbed soils, suggests that the historic site was disturbed by the construction of the golf course features in the first half of the 20th century. Due to the low density and low diversity of the artifacts recovered, no further archaeological investigations are recommended.

6

References

- VHB Engineering, Survey, Landscape Architecture and Geology, P.C. (VHB). 2019. Phase IA Archaeological Documentary Study for the Woodmere Country Club in the Incorporated Villages of Lawrence and Woodsburgh and the Town of Hempstead, Nassau County, NY. Report on file, VHB, Hauppauge, NY.
- Wulforst, John P. 1987. *Soil Survey of Nassau County, New York*. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

APPENDIX:

SHOVEL TEST PIT EXCAVATION AND ARTIFACT INVENTORY

Basic descriptive data from the Woodmere Club project area are presented in the following appendix. Excavation, stratigraphic, and artifactual information are included. Excavation information includes shovel test pit (STP) coordinates relative to mapping datum, level number, stratigraphic designation (stratum), and starting (SD) and ending (ED) depths (in centimeters) for each excavated level.

The following abbreviations are used in the appendix:

Stratum

A0/A1-root mat

dist-disturbed

B2-lower subsoil

Soils

bn-brown

cb-cobbles

dk-dark

gb-gray brown

gv-gravel

lm-loam

mo-mottled

pb-pebbles

sd-sand(y)

st-silt(y)

yb-yellow brown

APPENDIX

SHOVEL TEST PIT EXCAVATION AND ARTIFACT INVENTORY

STP	SD	ED	Stratum	Soils	Cultural Material
N0/W135	0	47	dist	mo dk bn lm sd	1 sm brick, 1 unidentified shell
	47	60	B2	yb sd w/pb&gv	
N0/W120	0	75	dist	mo dk bn lm sd	1 utilitarian stoneware (white exterior, grey interior slip), 1 whiteware rim, 1 ginger glazed redware, 3 clear curved glass, 1 chimney glass, 2 coal/clinker, unidentified shell, asphalt, plastic
	58	58	B2	yb sd w/pb&gv	
N0/W90	0	3	sod cap	dk bn lm sd	
	3	56	dist	mo dk bn lm sd w/pb	1 unidentified shell
	56	70	B2	yb sd w/pb&gv	
N0/W75	0	4	sod cap	dk bn lm sd	1 terra cotta utility pipe fragment
	4	47	dist	mo dk bn lm sd w/pb	
	47	60	B2	yb sd w/pb&gv	
N0/W60	0	48	dist	mo dk bn lm sdw/pb&gv	1 plastic
	48	65	B2	yb sd w/pb&gv	
N0/W45	0	56	dist/fill	mo dk bn lm sd	
	56	60	B2	yb sd	
N0/W30	0	4	sod cap	dk bn lm sd	
	4	40	dist	mo dk bn lm sd	3 unidentified nails, 1 slate

STP	SD	ED	Stratum	Soils	Cultural Material
	40	60	B2	yb sd w/pb&gv	
N0/W15	0	52	dist/fill	mo dk bn lm sd	1 blue printed whiteware, 1 whiteware, 1 clear curved glass, 1 small brick, 1 coal/clinker, 1 large mammal tooth, 1 shell
	52	60	B2	yb sd	
S7.5/W165	0	43	dist	mo dk bn lm sd	1 polychrome painted whiteware, 1 clear bottle glass, 1 small brick, 1 unidentified shell
	43	60	B2	yb sd w/pb&gv	
S15/W135	0	3	sod cap	dk bn lm sd	
	3	27	dist	mo dk bn lm sd w/pb	1 small brick
	27	60	B2	yb sd w/pb&gv	
S15/W30	0	5	sod cap	dk bn lm sd	
	5	50	dist	mo dk bn lm sd w/pb&gv	1 plastic
	50	60	B2	yb sd w/pb&gv	
S22.5/W165	0	4	sod cap	dk bn lm sd	
	4	72	dist/fill	dk gb lm sd w/pb&gv	1 porcelain, 1 flowerpot, 1 unidentified earthenware, 1 brown glazed earthenware, 2 clear bottle glass, 1 green bottle glass, 1 coal (STP inundated with water @72cm)
S30/W180	0	3	sod cap	dk bn lm sd	
	3	37	dist	mo dk bn lm sd w/pb&gv	1 unidentified nail, 1 coal, 1 unidentified shell
	37	60	B2	yb sd w/pb&gv	
S30/W150	0	2	sod cap	dk bn lm sd	

STP	SD	ED	Stratum	Soils	Cultural Material
	2	23	dist	mo dk bn lm sd w/pb	1 black glazed redware, 2 flowerpot, 1 unidentified nail, 1 coal (STP hit buried utility cable @ 23cm)
S30/W135	0	2	sod cap	dk bn lm sd	
	2	31	dist	mo dk bn lm sd w/pb	2 clinker (coal slag), 2 unidentified shell
	31	60	B2	yb sd w/pb, gv& cb	
S30/W105	0	2	sod cap	dk bn lm sd	
	2	25	dist	mo dk bn lm sd	
	25	55	B2	yb sd w/pb&gv	
S45/W180	0	3	sod cap	dk bn lm sd	
	3	28	dist	mo dk bn lm sd w/pb	1 brown bottle glass, 1 coal, 2 unidentified shell
	28	60	B2	yb sd w/pb, gv &cb	
S45/W165	0	2	sod cap	dk bn lm sd	
	2	27	dist	mo dk bn sd lm	
	27	60	B2	yb sd	
S45/W150	0	2	sod cap	dk bn lm sd	
	2	24	dist	mo dk bn sd lm	
	24	60	B2	yb sd w/gv	
S45/W135	0	3	sod cap	dk bn lm sd	
	3	29	dist	mo dk bn sd lm	
	29	60	B2	yb sd w/pb	

STP	SD	ED	Stratum	Soils	Cultural Material
S45/W120	0	2	sod cap	dk bn lm	
	2	22	dist	mo dk bn sd lm	
	22	55	B2	yb sd w/pb&gv	
S45/W105	0	2	sod cap	dk bn lm	
	2	24	dist	mo dk bn sd lm	
	24	55	B2	yb sd w/pb&gv	
S45/W60	0	2	sod cap	dk bn lm	
	2	23	dist	mo dk bn sd lm	
	23	42	fill	yb sd w/pb&gv	(STP hit utility pipe @ 42cm)
S45/W45	0	2	sod cap	dk bn sd lm	
	2	25	dist	dk bn lm sd	
	25	55	B2	yb sd	
S45/W30	0	4	sod cap	dk bn lm sd	
	4	20	dist/fill	lt bn lm sd	
	20	29	dist	dk bn lm sd	
	29	40	dist/B2	yb sd w/pb&gv	(STP hit buried utility @ 40cm)
S45/W15	0	3	sod cap	dk bn st lm	
	3	29	dist	dk bn lm sd	
	29	60	B2	yb sd	
S60/W180	0	2	sod cap	dk bn lm sd	
	2	26	dist	mo dk bn sd lm	2 whiteware rims, 3 whiteware body, 2 clear curved glass, 1 aqua bottle glass, 1 aqua window glass, 1 brown bottle glass, 2 green bottle glass, 1 coal
	26	55	B2	yb sd	

STP	SD	ED	Stratum	Soils	Cultural Material
S60/W120	0	3	sod cap	dk bn lm sd	
	3	27	dist	mo dk bn sd lm	
	27	50	B2	yb sd w/pb&gv	
S60/W105	0	3	sod cap	dk bn lm	
	3	20	dist	mo dk bn sd lm	
	20	60	B2	yb sd w/pb&gv	
S60/W90	0	2	sod cap	dk bn lm	
	2	18	dist	mo dk bn sd lm	
	18	60	B2	yb sd w/pb&gv	
S60/W45	0	2	sod cap	dk bn sd lm	
	2	20	dist	mo dk bn lm sd	
	20	50	B2	yb sd	
S60/W30	0	3	sod cap	dk bn lm sd	
	3	22	dist	dk bn lm sd	
	22	60	B2	yb sd	
S60/W15	0	2	sod cap	dk bn st lm	
	2	28	dist	dk bn lm sd	
	28	60	B2	yb sd	



**Parks, Recreation,
and Historic Preservation**

ANDREW M. CUOMO
Governor

ERIK KULLESEID
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August 02, 2019

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Re: USACE
Woodmere Club, LLC. - Housing Development
99 Meadow Drive, Woodmere, NY 11598
18PR04232
NAN-2017-01459-ERO

Dear Ms. McGovern:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the submitted materials in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

We have reviewed the report entitled "Phase IB Archaeological Survey, Woodmere Country Club in the Incorporated Villages of Lawrence and Woodsburgh and the Town of Hempstead, Nassau County, NY" (6/19/2019). One archaeological site was identified: the Abraham Hewlett Historic Site (SHPO No. 05901.003482). SHPO concurs with your report recommendation that the site does not meet the eligibility criteria of the New York State and National Registers of Historic Places and no additional archaeological work is necessary. SHPO has no remaining concerns regarding the project's potential to impact archaeological resources.

There is an outstanding request for additional information from Linda Mackey of SHPO's Survey and Evaluation Unit, issued via CRIS on 5/8/2019. If you have any questions regarding the information request, contact Linda at 518-268-2148 or Linda.Mackey@parks.ny.gov

If further correspondence is required regarding this project, please refer to the SHPO Project Review (PR) number noted above. If you have any questions, I can be reached at 518-268-2186.

Sincerely,

Tim Lloyd, Ph.D., RPA
Scientist - Archaeology
timothy.lloyd@parks.ny.gov

via e-mail only

cc: D. Buttacavoli and L. Bekofsky

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