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HISTORICAL
PERSPECTIVES INC.



Phase IA Archaeological Documentary Study

**Proposed Fingerboard Road Development
239 Fingerboard Road; Block 3019, Lot 120
Staten Island, Richmond County, New York**

NYSOPRHP # 14PR00950

1606

2014

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Staten Island, Richmond County, New York**

NYSOPRHP # 14PR00950

Prepared For:

M.S.B. Development Company, Inc.
5655 Amboy Road
Staten Island, NY 100309

Prepared By:

Historical Perspectives, Inc.
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June 2014

MANAGEMENT SUMMARY

SHPO Project Review Number (if available): **14PR00950**

Involved State and Federal Agencies: **DEC, DOT**

Phase of Survey: **Phase IA Archaeological Documentary Study**

Location Information

Location: **Block 3019, Lot 120**

Minor Civil Division: **08501, Staten Island**

County: **Richmond**

Survey Area

Length: **varies, irregular shape**

Width: **varies, irregular shape**

Number of Acres Surveyed: **ca. 15**

USGS 7.5 Minute Quadrangle Map: **The Narrows, N.Y.-N.J.**

Archaeological Survey Overview

Number & Interval of Shovel Tests: **N/A**

Number & Size of Units: **N/A**

Width of Plowed Strips: **N/A**

Surface Survey Transect Interval: **N/A, urban area**

Results of Archaeological Survey

Number & name of precontact sites identified: **None**

Number & name of historic sites identified: **None**

Number & name of sites recommended for Phase II/Avoidance: **None**

Report Authors(s): **Julie Abell Horn, M.A., R.P.A. and Sara Mascia, Ph.D., R.P.A., Historical Perspectives, Inc.**

Date of Report: **June 2014**

EXECUTIVE SUMMARY

M.S.B. Development Company, Inc. proposes improvements to the former Mount Manresa Jesuit Retreat House campus, hereinafter referred to as the Fingerboard Road Development. The property is located at 239 Fingerboard Road, Block 3019, Lot 120, on Staten Island, Richmond County, New York (Figures 1 and 2). Proposed improvements include demolition of existing buildings, tree removal, construction of private housing and a road system, curb cuts, and numerous utility installations. Due to the extent of the proposed subsurface impacts, the Area of Potential Effect (APE) includes the entire project site.

The New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP) has determined that the former Mount Manresa retreat complex is eligible for the State/National Register of Historic Places (S/NRHP). The eligibility form Statement of Significance notes:

Established in c. 1861, the fifteen acres of land associated with Mount Manresa were developed for prominent ship and rail businessman Louis H. Meyer. In 1911, Fr. Terence J. Shealy, the chief organizer of the Jesuit's retreat movement, organized the order's purchase and development of the site. As the first established Jesuit Retreat House, they have carried out their charitable mission in the tradition of St. Ignatius Loyola at this site for the past 100 years. The grounds include features from the estate era, including the artesian well and water tower, a gate house, and the iron ore/Sacred Heart Grotto. The 1920s marked a period of growth at the site and in 1925/26, the late-gothic revival Shealy Hall and Sacred Heart Chapel were constructed. The period of significance for the site has been formed from the c. 1860 estate period to the 1920s building campaigns. Buildings onsite that date to the midcentury are considered not contributing. The complex is eligible under Criterion C in the area of architecture and Criterion A in the area of social history for its association with the establishment of the Jesuit Retreat House movement (McEneny 2013).

Additionally, the NYSOPRHP has indicated the project site is located in an area of archaeological sensitivity, based on proximity to previously recorded precontact period archaeological sites. The agency has indicated the necessity for a Phase I archaeological survey for any portions of the project site that will experience ground disturbance as part of the proposed project (Kuchar 2013).

The proposed Fingerboard Road Development does not fall under New York City Environmental Quality Review (CEQR) and there are no compliance requests for cultural resource evaluations from the City of New York. In 2013, and again in 2014, the NYC Landmarks Preservation Commission (LPC) reviewed the Mount Manresa buildings, grotto, and campus for eligibility as a landmark resource and determined that it did not meet the standards for consideration (Tierney 2013, Betts 2014). No further LPC deliberation is anticipated for archaeological or historic cultural resources. This report constitutes the recommended Phase IA Archaeological Documentary Study. This study complies with the standards of the NYSOPRHP (New York Archaeological Council 1994, NYSOPRHP 2005).

The archival research and field inspection of the project site revealed limited areas of both precontact and historic period archaeological sensitivity, as shown on Figure 11. Factors reducing precontact sensitivity included prior disturbance and sloped landforms. The project site is the location of the former Bowne/Meyer house. The house was constructed by Samuel Bowne in ca. 1852 and enlarged by Louis H. Meyer in ca. 1861. There was a short occupation by Manuel X. Harmony and his family from ca. 1859-1860. The house, which during the second half of the nineteenth century had twenty bedrooms and numerous large additional rooms, was altered after 1911 by Mount Manresa to accommodate additional guests. The house stood on the property until it was demolished in 1965. Today, a modern gazebo is located within the former footprint of the house. Additionally, the property, known as Fox Hill Villa, contained a number of other service buildings, including sizeable greenhouses and root cellars, as well as housing for servants and a coach house. The greenhouses, servants' house, and root cellars were located at the southwestern end of the property, and the coach house was located in the area now covered by concrete block garage buildings. Figure 11 illustrates the location of the original mansion house and the area where the coach house, greenhouses, servants' house, and root cellars were located. Although there has been substantial earthmoving in proximity to these areas, there may be sections that could contain historic period archaeological resources associated with the nineteenth-century use of the property. Shaft features, such as privies in use before the installation of sewers, and cisterns, which were known to have been built by Meyer, may still exist in proximity to

these locations. One of these potential shaft features was noted during the site visit. Additionally, the nineteenth-century root cellar structure, which is built into the side of a hill, may warrant archaeological study.

Based on the conclusions, HPI recommends that a program of archaeological field testing be undertaken on the project site in the areas of precontact and historic period archaeological sensitivity. This testing, often referred to as Phase IB, would determine the presence or absence of any precontact or historic period archaeological resources. Figure 11 illustrates the former footprint of the Bowne/Meyer house, the coach house, the gardener's house, and other former historic buildings and structures on the project site and the area of archaeological sensitivity. Field testing would involve a combination of backhoe trenching and shovel testing, depending on location. The testing should be undertaken in coordination with construction planning, but ideally be completed prior to construction. All archaeological testing should be conducted according to OSHA regulations and applicable archaeological standards (New York Archaeological Council 1994, NYSOPRHP 2005). Professional archaeologists, with an understanding of and experience in urban archaeological excavation techniques, would be required to be part of the archaeological team.

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3. Project site showing shaded areas of 12 percent slopes and greater (Rogers Surveying PLLC 2014).
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11. Project site showing locations of former buildings and areas of precontact and historic archaeological sensitivity with shaded areas of 12 percent slopes and greater (HPI 2014 and Rogers Surveying PLLC 2014).

PHOTOGRAPHS
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1. Entry driveway, facing west.
2. Entry driveway, facing east.
3. Lawn area to the west of the water tower, facing north.
4. Lawn area to the south of the water tower, facing northwest.
5. Lawn area along northern property boundary, with former caretaker's house in background, facing northwest.
6. Modern water feature (dry well) along northern property boundary near former caretaker's house, facing northeast.
7. Former caretaker's house at the northwest corner of the project site, facing northwest.
8. Former caretaker's house at the northwest corner of the project site, facing southwest.
9. Looking southeast from the western property boundary, with Mount Manresa buildings in background.
10. Path and hillside along western boundary of the property, facing southwest.
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12. Knoll near the southwest corner of property, facing northwest.
13. Grassy area west of building complex, facing southwest.
14. Grassy area along southern property border, facing east.
15. Southern right of way with Narrows Road north in background, facing southwest.
16. Entry to the meditation garden, facing southwest.
17. Meditation garden area, facing southeast.
18. Grassy lawn along eastern boundary of property, facing northeast.
19. Paved path leading to northeast gate, facing northeast.
20. Path across grassy lawn on east side of property, facing southwest.
21. Possible covered shaft feature, facing northwest.
22. Nineteenth-century water tower, facing north. National Register eligibility contributing resource.
23. Nineteenth-century gatehouse at the former entry gate, facing south. National Register eligibility contributing resource.
24. Brick root cellar entrance, facing southeast. National Register eligibility contributing resource.
25. Western end of the root cellar brick foundation, facing northwest. National Register eligibility contributing resource.

I. INTRODUCTION

M.S.B. Development Company, Inc. proposes improvements to the former Mount Manresa Jesuit Retreat House campus, hereinafter referred to as the Fingerboard Road Development. The property is located at 239 Fingerboard Road, Block 3019, Lot 120, on Staten Island, Richmond County, New York (Figures 1 and 2). Proposed improvements include demolition of existing buildings, tree removal, construction of private housing and a road system, curb cuts, and numerous utility installations. Due to the extent of the proposed subsurface impacts, the Area of Potential Effect (APE) includes the entire project site.

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This report constitutes the recommended Phase IA Archaeological Documentary Study. This study complies with the standards of the NYSOPRHP (New York Archaeological Council 1994, NYSOPRHP 2005). The HPI project team consisted of Julie Abell Horn, M.A., R.P.A., who conducted the research and wrote the report; Sara Mascia, Ph.D, R.P.A., who conducted the site visit and assisted with the report, and Cece Saunders, M.A., R.P.A., who managed the project and provided editorial and interpretive assistance.

II. METHODOLOGY

The present study entailed review of various resources:

- Primary and secondary sources, including historic newspapers, concerning the general precontact period and history of Staten Island and specific events associated with the project site were reviewed using materials at the New York Public Library, the Staten Island Historical Society, the Staten Island Museum, and online resources.
- Historic maps and photographs were reviewed at the Map Division of the New York Public Library, the Staten Island Historical Society, the Staten Island Museum, and using various online websites. These maps and photographs provided an overview of the topography and a chronology of land usage for the study site. Appendix A presents a selection of these images.

- A Phase I Environmental Site Assessment was provided by the project sponsors (Equity Environmental Engineering, LLC 2013).
- Selected records from the Richmond County Clerk's Land Records Office were reviewed to establish ownership of the property over time using familysearch.org.
- Selected records from the Richmond County Surrogate's Court Office were reviewed for information about wills and probates of former residents. using familysearch.org
- State and Federal census records and vital statistics were searched for information about former site occupants using resources on ancestry.com and familysearch.org.
- Information about previously recorded archaeological sites and surveys in the area was compiled from data available at the NYSOPRHP and the LPC.
- Last, a site visit was conducted on May 7, 2014, to assess any obvious or unrecorded subsurface disturbance (Photographs 1–43; Figures 2a and 2b).

III. CURRENT CONDITIONS AND ENVIRONMENTAL SETTING

A. Current Conditions

The project site contains the buildings and land features associated with the former Mount Manresa Retreat, as well as a series of diverse landscape elements. The site is currently comprised of approximately 15 acres and includes open landscaped lawns, wooded hillsides, and garden areas; each situated at a variety of elevations. At the time of the site visit, numerous large trees had recently been cut down, making some areas of the property inaccessible.

- **Project site grounds**

The main entrance to the property is located at the northeast corner of the project site where an asphalt drive leads up a sloped hillside along the northern border of the parcel (Photographs 1 and 2). Near the apex of the drive is an elevated area to the north (110 feet above sea level [ASL]) where the site's nineteenth-century brick water tower and a surrounding lawn area are located (Photograph 3). On the south side of the drive a sloped manicured lawn area is present (125-110 feet ASL) that is flanked by several flowering trees and bushes around the exterior (Photograph 4).

Further along the northern project site boundary there is a significant drop in elevation to another grassy area (ca. 90 feet ASL) (Photograph 5). This location is open with little surface evidence of significant landscape alterations. Along the northern boundary within this relatively flat area, the surface was waterlogged at the time of the site visit and a makeshift drywell was observed (Photograph 6).

The twentieth-century caretakers' cottage, currently in disrepair, is present at the northeast corner of the project site (Photographs 7 and 8) and the terrain to the south of the cottage along the western boundary of the project site is significantly sloped down to the grassy area (Photograph 9).

The southwest portion of the project site is the location of the highest hill (Mount Manresa) on the property and a path leading to the summit of the hill is located along the western boundary (Photograph 10). At the southwest corner of the property there is an artificially flat area that was likely created when the hill to the south was cut down for the construction of the Staten Island Expressway (Photograph 11). The apex of the hill is at an elevation of approximately 165 feet ASL and the ground surface contained both new and old growth trees (Photograph 12). No evidence of the historic orchard noted on maps (see below) was noted on the current landscape.

Along the southern boundary, the hillside slopes downward to the east toward the main building complex where a grassy area is located (Photograph 13). A lawn area is situated between the dormitory building and the southern boundary of the project site (Photograph 14). A narrow right of way entry is also present between two residential lots along the southern boundary, where subsurface utilities enter the site from Narrows Road North (Photograph 15).

Heading east along the southern boundary, there are remains of a meditation garden (Photographs 16 and 17). Along the eastern boundary of the property, a sloped grassy lawn is present at elevations between 115-95 feet ASL (Photograph 18). A paved pathway is present in this location (Photographs 19 and 20).

Within the main complex, Founders Hall (built 1950) is the southernmost building of the newer structures. It is a three-story brick and frame rectangular building with a basement, and was used as dormitories (Photographs 36-37). It is attached to Shealy Hall on its northwest corner.

The final building constructed by Mount Manresa for retreatants is the Men of Manresa administration building (completed 1965), which after a renovation in 2002 was renamed Bruno Hall. It is one and two-stories, of brick and frame (Photographs 38-41). It has a basement, and contains administrative offices, a dining hall and kitchen, and meeting rooms.

Finally, there are two concrete block one-story garages and one concrete block one-story shed that were constructed in the 1980s (Photograph 42). A modern gazebo, located in the approximate location of the former mansion house, was erected in 2001 (Photograph 43).

B. Topography and Hydrology

Early maps of Staten Island record the general topography and environment of the project site prior to development. The project site is located within an area of undulating topography at the crest of a large hill. The earliest recorded numerical elevations are derived from topographic maps and real estate atlases. The 1891 topographical map shows that the project site ranged in elevation from ca. 100 feet above sea level at its lowest point along Fingerboard Road to over 160 feet above sea level at its highest point in the interior of the property (U.S.C.S. 1891). More recent topographical maps from the early twentieth century (see Figure 8) confirm these general elevations, although specify that the lowest point was closer to 90 feet above sea level and the highest point closer to 180 feet above sea level. Comparison with the modern topographical survey (Figure 2) shows that the overall elevations on the project site have been largely preserved from the pre-development times. Large portions of the project site are moderately to heavily sloped. Figure 3 shows areas of 12 percent slopes and higher on the project site.

The project site vicinity contained several small glacial kettle holes that filled with water, creating small ponds, as shown on the 1891 and 1907 topographical maps. The property was also said to contain an underground stream that fed the historic grotto fountain (Matteo 2010:35), but this stream is not depicted on historic topographical maps. There are no other natural water sources in the vicinity.

C. Geology

The project site is located along the terminal moraine of the Piedmont Lowlands. As described by Boesch (after Wolfe 1977),

The Piedmont Lowlands make up about one fifth of the land area of Staten Island and consist of gently rolling terrain, generally between 50 and 100 feet in elevation, which gradually slopes to the southeast. The undulating surface is interrupted by an intrusive ridge, 200 to 250 feet in elevation, and by slightly lower, plateau-like topographic features. The rolling lowlands are generally underlain by Triassic and Jurassic age shales, siltstones, and sandstones of the Brunswick Formation of the Newark Group[,] while the ridges are composed of basaltic lava flows and diabase traprock. The plateau-like features developed on erosion resistant Lockatong Formation Argillites. (Boesch 1994: 3)

During the precontact era the woodlands of the Piedmont Lowlands consisted of broadleaf deciduous trees, which provided a habitat for “game birds, small mammals, deer, bear, and during at least a portion of the precontact period, elk” (Boesch 1994: 6). Mixed wetland ecologies provided numerous floral and faunal resources, the most important faunal resources being the shellfish found in saltwater and brackish environments. Freshwater faunal resources include “mussels, fish, certain amphibians and reptiles, migratory fowl, and semi-aquatic mammals. Anadromous fish species would have been present seasonally within Staten Island via streams emptying into the estuary system (Boesch 1994: 5-6).

D. Soils

The USDA soil survey for New York City (Figure 4) indicates that the project site is located primarily within soil mapping unit 314, Greenbelt-Cheshire-Pavement & buildings complex, 0 to 8 percent slopes. It is described as:

Nearly level to gently sloping areas of till plains and moraines that have been partially filled with natural soil materials, mostly for residential use; a mixture of anthropogenic soils and red till soils, with 15 to 49 percent of the surface covered by impervious pavement and buildings; located in eastern Staten Island (USDA 2008:21).

The project site is at the interface of adjoining soil mapping unit 324, Pavement & buildings-Greenbelt-Cheshire complex, 0 to 8 percent slopes. It is described as:

Nearly level to gently sloping areas of till plains and moraines that have been partially filled with natural soil materials, mostly for residential use; a mixture of anthropogenic soils and red till soils, with 50 to 80 percent of the surface covered by impervious pavement and buildings; located in eastern Staten Island (USDA 2008:21).

The two soil series found within these mapping units are further described in the table, below.

Name	Soil Horizon Depth	Color	Texture, Inclusions	Slope %	Drainage	Landform
Greenbelt Series	A 0-3 in	7.5YR 4/4	Lo	0-8	Well	Anthropogenic fill areas on urbanized till plains
	Bw 3-13 in	5YR 4/6	Lo			
	C 13-57 in	2.5YR 4/4	GrlLo			
	Ab 57-58 in	7.5YR 3/2	Lo			
	Bwb 58-65 in	5YR 4/6	Lo			
Cheshire Series	A 0-2 in	7.5YR 3/2	Lo	0-8	Well	Till plains and hills, and moraines
	Bw1 2-5 in	5YR 4/3	Lo			
	Bw2 5-10 in	5YR 4/6	FiSaLo			
	Bw3 10-28 in	2.5YR 4/4	Lo			
	C 28-60 in	2.5YR 3/4	GrlSaLo			

Key: Soils: Lo-Loam, Sa-Sand, Si-Silt
Other: Grl-Gravelly, Fi-Fine

No soil borings have been undertaken on the project site.

IV. BACKGROUND RESEARCH/HISTORICAL OVERVIEW

A. Precontact Summary

For this report, the word precontact is used to describe the period prior to the use of formal written records. In the western hemisphere, the precontact period also refers to the time before European exploration and settlement of the New World. Archaeologists and historians gain their knowledge and understanding of precontact Native Americans on Staten Island from three sources: ethnographic reports, Native American artifact collections, and archaeological investigations.

The Paleo Indian Period (c. 10,500 B.C. - c. 8000 B.C.) represents the earliest known human occupation of Staten Island. Approximately 14,000 years ago the Wisconsin Glacier retreated from the area leading to the emergence of a cold dry tundra environment. Sea levels were considerably lower than modern levels during this period (they did not reach current levels until circa 5,000 B.C., in the Early to Middle Archaic Period). As such, Staten Island was situated much further inland from the Atlantic Ocean shore than today, and was characterized by higher ground amid glacial lakes and rivers (Boesch 1994). The material remains of the Paleo Indians include lithic tools such as Clovis-type fluted projectile points, bifacial knives, drills, graters burins, scrapers, flake cores, and flake tools, although sites generally are represented by limited small surface finds. The highly mobile nomadic bands of this period specialized in hunting large game animals such as mammoth, moose-elk, bison, and caribou and gathering plant foods. It has been theorized that the end of the Paleo-Indian Period arose from the failure of over-specialized, big-game hunting (Snow 1980:150-157). Based on excavated Paleo-Indian sites in the Northeast, there was a preference for high, well-drained areas in the vicinity of streams or wetlands (Boesch 1994). Sites have also been found near lithic sources, rock shelters and lower river terraces (Ritchie 1980). Paleo-Indian materials have been

recovered at several sites on Staten Island including Port Mobil, the Cutting site, Smoking Point and along the beach in the Kreischerville area, all of which are at least several miles distant from the project site.

During the ensuing Archaic Period (c. 8000 B.C. - 1000 B.C.) a major shift occurred in the subsistence and settlement patterns of Native Americans. Archaic period peoples still relied on hunting and gathering for subsistence, but the emphasis shifted from hunting large animal species, which were becoming unavailable, to smaller game and collecting plants in a deciduous forest. The settlement pattern of the Archaic people consisted of small bands that occupied larger and relatively more permanent habitations sites along the coast of Staten Island, its estuaries and streams and inland areas (Boesch 1994). Typically such sites are located on high ground overlooking water courses. This large period has been divided up into four smaller periods, the Early, Middle, Late and Terminal Archaic.

The environment during the Early Archaic (c. 8000 B.C. - 6000 B.C.) displayed a trend toward a milder climate and the gradual emergence of a deciduous-coniferous forest with a smaller carrying capacity for the large game animals of the previous period (Ritchie and Funk 1971). The large Pleistocene fauna of the previous period were gradually replaced by modern species such as elk, moose, bear, beaver, and deer. New species of plant material suitable for human consumption also became abundant. The increasing diversification of utilized food sources is further demonstrated by a more complex tool kit. The tool kit of the Early Archaic people included bifurcated or basally notched projectile points generally made of high quality stone. Tool kits were more generalized than during the Paleo-Indian period, showing a wider array of plant processing equipment such as grinding stones, mortars and pestles. Although overall evidence of Early Archaic sites on Staten Island is sparse, it should be noted that the Old Place site is recognized as one of the most important Early Archaic component sites in the area (Ritchie and Funk 1971; Ritchie 1980; Cantwell and Wall 2001). Other Early Archaic component sites on Staten Island include the Hollowell, Charleston Beach, Wards Point, Travis, and Richmond Hill sites, which all are located at least several miles from the project site (Ritchie and Funk 1971; Boesch 1994).

The archaeological record suggests that a population increase took place during the Middle Archaic Period (c. 6000 - c. 4000 B.C.). This period is characterized by a moister and warmer climate and the emergence of an oak-hickory forest. The settlement pattern during this period displays specialized sites and increasing cultural complexity. The exploitation of the diverse range of animal and plant resources continued with an increasing importance of aquatic resources such as mollusks and fish (Snow 1980). In addition to projectile points, the tool kits of Middle Archaic peoples included grinding stones, mortars, and pestles. Such artifacts have been found throughout Staten Island, including the Old Place site and the Wards Point site on the southern tip of the island (Boesch 1994).

Late Archaic people (c. 4000 - c. 1000 B.C.) were specialized hunter-gatherers who exploited a variety of upland and lowland settings in a well-defined and scheduled seasonal round. The period reflects an increasingly expanded economic base, in which groups exploited the richness of the now established oak-dominant forests of the region. It is characterized by a series of adaptations to the newly emerged, full Holocene environments. As the period progressed, the dwindling melt waters from disappearing glaciers and the reduced flow of streams and rivers promoted the formation of swamps and mudflats, congenial environments for migratory waterfowl, edible plants and shellfish. The new mixed hardwood forests of oak, hickory, chestnut, beech and elm attracted white-tailed deer, wild turkey, moose and beaver. The large herbivores of the Pleistocene were rapidly becoming extinct and the Archaic Indians depended increasingly on smaller game and the plants of the deciduous forest. The projectile point types attributed to this period include the Lamoka, Brewerton, Normanskill, Lackawaxen, Bare Island, and Poplar Island. The tool kit of these peoples also included milling equipment, stone axes, and adzes. A large number of Late Archaic Period sites have been found on Staten Island. These include the Pottery Farm, Bowman's Brook, Smoking Point, Goodrich, Sandy Brook, Wort Farm, and Arlington Avenue sites. All of these sites are at least several miles distant from the project site. In addition, the Old Place Site contained a Late Archaic component (Boesch 1994).

During the Terminal Archaic Period (c. 1700 B.C. - c. 1000 B.C.), native peoples developed new and radically different broad bladed projectile points, including Susquehanna, Perkiomen and Orient Fishtail types. The use of steatite or stone bowls is a hallmark of the Terminal Archaic Period. Sites on Staten Island from the Terminal Archaic Period include the Old Place site, as well as the Pottery Farm, Wards Point, and Travis sites (Boesch 1994).

The Woodland Period (c. 1000 B.C. - 1600 A.D.) is generally divided into Early, Middle and Late Woodland on the basis of cultural materials and settlement-subsistence patterns. Settlement pattern information suggests that the

broad based strategies of earlier periods continued with a possibly more extensive use of coastal resources. The Early Woodland was essentially a continuation of the tool design traditions of the Late Archaic. However, several important changes took place. Clay pottery vessels gradually replaced the soapstone bowls during the Early Woodland Period (c. 1000 B.C. to A.D. 1). The earliest ceramic type found on Staten Island is called Vinette 1, an interior-exterior cordmarked, sand tempered vessel. The Meadowood-type projectile point is a chronological indicator of the Early Woodland Period.

Cord marked vessels became common during the Middle Woodland Period (c. A.D. 1 to c. 1000 A.D.). Jacks Reef and Fox Creek-type projectile points are diagnostic of the Middle Woodland. Another characteristic projectile point of the early to Middle Woodland Period is the Rossville type, named for the site at Rossville where it predominated. It is believed to have originated in the Chesapeake Bay area and is found in New Jersey, southeastern New York and southern New England (Lenik 1989:29). The Early and Middle Woodland periods display significant evidence for a change in settlement patterns toward a more sedentary lifestyle. The discovery of large storage pits and larger sites in general has fueled this theory. Some horticulture may have been utilized at this point but not to the extent that it was in the Late Woodland period.

In the Late Woodland period (c. 1000 A.D. - 1600 A.D.), triangular projectile points such as the Levanna and Madison types, were common throughout the Northeast, including Staten Island (Lenik 1989:27). Made both of local and non-local stones, brought from as far afield as the northern Hudson and Delaware River Valleys, these artifacts bear witness to the broad sphere of interaction between groups of native peoples in the Northeast. Additionally, during this period collared ceramic vessels, many with decorations, made their appearance.

Woodland Period Native Americans in Staten Island and surrounding regions shared common attributes. The period saw the advent of horticulture and with it, the appearance of large, permanent or semi-permanent villages. Plant and processing tools became increasingly common, suggesting an extensive harvesting of wild plant foods. Maize cultivation may have begun as early as 800 years ago. The bow and arrow, replacing the spear and javelin, pottery vessels instead of soap stone ones, and pipe smoking, were all introduced at this time. A semi-sedentary culture, the Woodland Indians moved seasonally between villages within palisaded enclosures and campsites, hunting deer, turkey, raccoon, muskrat, ducks and other game and fishing with dug-out boats, bone hooks, harpoons and nets with pebble sinkers. Their shellfish refuse heaps, called "middens," sometimes reached immense proportions of as much as three acres (Ritchie 1980:80, 267). Habitation sites of the Woodland Period Indians increased in size and permanence. A large number of Woodland Period archaeological sites have been found on Staten Island in a variety of environmental settings. A favored setting for occupation during this period was well-drained ground near stream drainages and coastal waterways. The Old Place Site, which also had a Woodland component, exhibited all of these locational characteristics.

During the early Contact period (1500 to 1700 A.D.) there was a continuation of the Late Woodland settlement patterns of the coastal Algonquians. By the seventeenth century the Dutch settlers of lower New York were in frequent contact with the many Native Americans who lived in the vicinity. Historic accounts describe both peaceful and violent interchanges between these two groups (Brasser 1978, Flick 1933). Through at least the 1650s, Native Americans known as the Raritans occupied portions of Staten Island and New Jersey's Raritan Valley (Ruttenber 1872). The Raritans were but one of many native groups, which as a whole were known as the Delaware Indians by the European settlers. As the European population increased, and internecine warfare due to increased competition for trade with the Europeans intensified, the Raritans, and the Delaware in general, retreated inland away from the eastern coast. By the 1800s their migration had scattered them across the Mid West and even into Canada (Weslager 1972), where they have continued living to the present day. Journal accounts by European explorers, settlers and travelers describe Native settlements and lifeways. However, only a few Historic Contact Period sites have been found on Staten Island. Sites include those at Wards Point, Old Place, Corsons Brook, Travis, New Springfield, and at the PS56R Site in Woodrow (Boesch 1994; HPI 1996).

B. Previously Recorded Archaeological Sites and Surveys

Records on file at the OPRHP and the New York State Museum (NYSM) as well as the Boesch (1994) *Archaeological and Sensitivity Assessment of Staten Island, New York* indicate that there have been a number of both precontact period archaeological sites and historic period archaeological sites documented within one mile of the project site. They are listed in the table, below. Of note, NYSM site locations and descriptions often are vague,

due to the fact that many of these sites were documented based on non-professional records (such as information from local landowners, avocational collectors, or historic accounts); descriptions and distances of these sites from the project site are given based on available mapping and other data, but should not be considered definitive. Some sites have had different numbers and names applied to them over time; all known appellations are listed in the first column.

Site # and Name	Location	Time Period	Site Type
08501.000027 Old Town Oude Dorp	Southern corner of Fort Wadsworth Reservation, beach area, includes NYSM 750, below	Precontact (Archaic-Woodland), Dutch (1641+)	Precontact and Dutch settlement site
NYSM 750 Walton-Stillwell Boesch 76	Southern corner of Fort Wadsworth Reservation, beach area	Dutch (1670+), unknown precontact	Historic house remains and aboriginal refuse pit/house
NYSM 8479	Area east of Grasmere Lake (Brady's Pond)	Unknown precontact	Camp
NYSM 8478	Large, vaguely shaped area on both sides of Staten Island Expressway in Arrochar and Grasmere neighborhoods, overlapping project site	Unknown precontact	Traces of occupation
NYSM 8477	Area near intersection of Hylan Boulevard and Steuben Street	Unknown precontact	Camp
NYSM 4611 Boesch 75	Area roughly bounded by Fort Wadsworth, Robin Road, Major Road, and Sand Lane	Unknown precontact, possible Woodland	Camp, shell middens
Boesch 103 STD-C Clifton	Tompkins Avenue and Staten Island Railroad	Woodland	Unknown
Boesch 108 Brady's Pond Grasmere	West side of Brady's Pond (Grasmere Lake)	Woodland	Camp
Boesch 111 STD-25-4	Shoreline of South Beach between lines of Sand Lane and Vulcan Street	Unknown precontact	Unknown
08501.000007 Fountain-Moquin House	Fort Wadsworth	Woodland Period, 1790-1907	House site with precontact component
Boesch 36 STD 24-4	Fort Wadsworth	Unknown precontact	Unknown
Boesch 45 Van-Deventer Fountain House	Fort Wadsworth	Middle-Late Woodland	Camp
Boesch 100 STD-RB Rosebank	Bay Street and Hylan Boulevard	Unknown precontact	Unknown
Boesch 99 STD-FH Fox Hills	Fox Hills neighborhood	Unknown precontact	Unknown

Last, based on proximity to previously recorded archaeological sites, the NYSOPRHP GIS indicates that the project site is within an area of archaeological sensitivity and the Boesch (1994) study notes that the project site is within an area of moderate archaeological sensitivity.

and planted a large variety of trees, shrubs, and flowers, many imported from Europe. He had a series of paved roadways constructed within the property, along with paved gutters, which served to divert storm water, a feature not common for the period. On the northwestern part of the property, Meyer also constructed several large greenhouses for tropical fruit and planted numerous fruit trees and a vineyard on that hillside. Along the east side of the hill he built a series of root cellars, and had a fish pond installed near them. Tucked into the steep, forested hillside north of the greenhouses, Meyer also had a large stone-lined grotto constructed, using local iron ore from nearby Todt Hill. Finally, he installed a fountain within the grotto that was fed from an underground spring (Matteo 2010:14, 35, 39, 46, 47, 48, 55).

Louis H. Meyer and his wife Anna Meyer lived at Fox Hill Villa from ca. 1861 through the 1890s, at times with some of their adult children and with multiple European born servants, some of who might have lived in other buildings on the property (state and federal census records). They entertained lavishly and often, and Fox Hill Villa was known as a showpiece property on Staten Island (Matteo 2010). Historic maps from the remainder of the nineteenth century confirm the Meyer occupation of the project site (Dripps 1872, Beers 1874 [Figure 7], Beers 1887). In 1892, Louis H. Meyer died and five years later in 1897 Anna Meyer died. After Anna Meyer's death the property was used briefly as a boarding house. The 1907 Robinson map notes the property at that time as the Anna C. Meyer estate, known as Fox Hill Villa. And the 1907 Borough of Richmond topographic survey (Figure 8), made that same year, illustrates the details of the numerous buildings on the property, as well as the roadways and topographic features. In particular, the cluster of greenhouses and the orchard are shown on the interior of the property, along with a dwelling that had once presumably housed the gardeners and other estate workers. The grotto built by Meyer is shown cut into the steeply wooded hillside north of the greenhouses.

The next chapter of the project site history began in 1911, when Father Terence J. Shealy, who was the chief organizer of the nascent Jesuit retreat movement in the New York City area, visited Fox Hill Villa and purchased the property from local real estate broker Cornelius Kolff. Shealy had been conducting weekend retreats for working men at various locations in the region, including Fordham University, but was looking for a permanent location that could be dedicated fully to the retreat movement. That same year he and others formed the Mount Manresa Corporation and the group purchased the land and buildings on it. Kolff was a good friend of the late Louis H. Meyer, and the man responsible for many of the large developments on Staten Island during this period, including Woods of Arden, Emerson Hill, Bement Estates, Hillcrest Park, and Shore Acres. Mount Manresa was said to be the first Jesuit layman's retreat in the United States (Matteo 2010:20, 41).

The Jesuits adapted the Meyer mansion for their retreat needs, and added a number of other features to the property, including several religious statues, one of which was placed in the grotto. During the first decade of Mount Manresa's existence on the project site, the property was used primarily on weekends for laymen retreats, with only a Jesuit brother who served as a caretaker living on the site part time. However, as the number of men attending the retreats grew, the existing accommodations proved too small. In 1914, a former coach house on the property (known as "the Bungalow") was converted for lodging by attendees, although because it was not heated it could not be used all year long (Matteo 2010:32, 58). The 1917 Sanborn map as well as the 1917 Bromley map (Figure 9) illustrate the layout of the buildings on the property during this period.

During World War I, the United States Army used part of the Mount Manresa property to build a medical facility, known as the Fox Hill Hospital, to serve soldiers. The large hospital facility encompassed ca. 160 acres, with the main complex located to the northwest of the project site (*New York Herald* 1918). It appears that the portion of the Mount Manresa property used by the hospital is land that has since been sold for creation of the Staten Island Expressway. The hospital buildings were razed in 1923, but remnants of the complex can still be seen on a 1924 aerial photograph (Bureau of Engineering 1924).

In 1925, the large dormitory known as Shealy Hall (after founder Father Shealy, who had died in 1922) was completed. It was designed by the Manhattan architectural firm of Henry H. Braun and had 43 private bedrooms. In 1926, the Sacred Hall Chapel was completed, and in 1951 an underground passageway was completed between Shealy Hall and the chapel to allow access in inclement weather. A caretakers cottage was built near Hope Avenue in 1946, property was purchased on what is now Narrows Road North to access municipal water and electricity, and Founders Hall building was completed in 1950 (Matteo 2010:80, 81, 83). The 1951 Sanborn map (Figure 10) shows the Mount Manresa complex after Shealy Hall, Sacred Heart Chapel, and Founders Hall had been built.

By the 1960s, the nineteenth-century mansion house had become unsuitable for modern purposes, and in 1965, it was demolished. The new administration and dining hall building, called Men of Manresa, had been constructed to replace it in 1963, and was later reconfigured and renamed Bruno Hall in 2002. Meanwhile, in 1964 four acres of the original Mount Manresa property (the southwestern tip of the "panhandle" section) were sold to the City of New York for construction of the Staten Island Expressway, which led to the new Verrazano-Narrows Bridge (Matteo 2010:89, 95, 105, 120, 121). Mount Manresa continued to host retreats through the twentieth century. The land was finally sold by the New York Province of the Society of Jesus, known as the Jesuits, in 2013, after years of declining retreat activity (Foderaro 2014).

V. CONCLUSIONS

A. Precontact Archaeological Sensitivity

From what is known of precontact period settlement patterns in New York City, most habitation and processing sites are found in sheltered, elevated sites close to wetland features, major waterways, and with nearby sources of fresh water. At one time there was said to be a natural spring on the project site that fed the historic grotto, but which has since been diverted and is no longer visible on the landscape. Several small glacial ponds were located in the general vicinity. Original soils on the site were well drained. However, the site has significant topography, with much of the property containing slopes of 12 percent or greater, as shown on Figure 3. Based on these factors, in its natural state those sections of the project site that are not excessively sloped would have had a moderate precontact sensitivity. However, there has been a significant program of building and demolition on the site, most notably in the central section where the existing buildings are located. Figure 11 illustrates those less sloped areas of the project site that have not experienced obvious heavy disturbance from building and demolition, and may still retain precontact sensitivity.

B. Historic Period Archaeological Sensitivity

The project site is the location of the former Bowne/Meyer house. The house was constructed by Samuel Bowne in ca. 1852 and enlarged by Louis H. Meyer in ca. 1861. There was a short occupation by Manuel X. Harmony and his family from ca. 1859-1860. The house, which during the second half of the nineteenth century had twenty bedrooms and numerous large additional rooms, was altered after 1911 by Mount Manresa to accommodate additional guests. The house stood on the property until it was demolished in 1965. Today, a modern gazebo is located within the former footprint of the house. Additionally, the property, known as Fox Hill Villa, contained a number of other service buildings, including sizeable greenhouses and root cellars, as well as housing for servants and a coach house. The greenhouses, servants' house, and root cellars were located at the southwestern end of the property, and the coach house was located in the area now covered by concrete block garage buildings. Figure 11 illustrates the location of the original mansion house and the area where the coach house, greenhouses, servants' house, and root cellars were located. Although there has been substantial earthmoving in proximity to these areas, there may be sections that could contain historic period archaeological resources associated with the nineteenth-century use of the property. Shaft features, such as privies in use before the installation of sewers, and cisterns, which were known to have been built by Meyer, may still exist in proximity to these locations. One of these potential shaft features was noted during the site visit. Additionally, the nineteenth-century root cellar structure, which is built into the side of a hill, may warrant archaeological study.

Shaft features such as privies, wells, and cisterns, are often filled with contemporary refuse related to the dwellings and their occupants, can provide important stratified cultural deposits for the archaeologist and frequently provide the best remains recovered on sites. Frequently, wells or cisterns would be located in reasonably close proximity to a residence, for use in washing or cooking (additional wells and/or cisterns might be located further away from a residence for other uses, such as watering livestock). Privies often were situated further away from the residence, for sanitary purposes. Portions of these shaft features are often encountered because their deeper and therefore earlier layers remain undisturbed by subsequent construction, and in some cases construction often preserves the lower sections of the features by sealing them beneath structures and fill layers. Wells would have been excavated as far as the water table, and cisterns and privies often were dug up to 10-15 feet below grade. Thus, these shaft features often survive in truncated form after grading episodes. Other commonly occurring but more fragile yard remains include fence lines, paths, traces of landscaping and sheet midden scatter.

Identifying and examining buried features associated with the nineteenth century occupation of the project site may reflect the daily activities of the residents and provide insight into cultural behavior of the upper class Bowne, Harmony, and Meyer families and the servants who lived on the property. If undisturbed deposits of cultural material do still exist in this location, they may have the potential to provide meaningful information regarding the lives of the people who lived there. When recovered from their original context and in association with a specific historical occupation, historical deposits can provide a wealth of information about consumption patterns, consumer choice, gender relations, ethnicity, economic status, and other important issues.

VI. RECOMMENDATIONS

Based on the conclusions outlined above, HPI recommends that a program of archaeological field testing be undertaken on the project site in the areas of precontact and historic period archaeological sensitivity. This testing, often referred to as Phase IB, would determine the presence or absence of any precontact or historic period archaeological resources. Figure 11 illustrates the former footprint of the Bowne/Meyer house, the coach house, the gardener's house, and other former historic buildings and structures on the project site and the area of archaeological sensitivity. Field testing would involve a combination of backhoe trenching and shovel testing, depending on location. The testing should be undertaken in coordination with construction planning, but ideally be completed prior to construction. All archaeological testing should be conducted according to OSHA regulations and applicable archaeological standards (New York Archaeological Council 1994, NYSOPRHP 2005). Professional archaeologists, with an understanding of and experience in urban archaeological excavation techniques, would be required to be part of the archaeological team.

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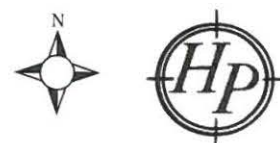


Figure 1: Project site on *The Narrows*, N.Y.-N.J. 7.5 Minute Topographic Quadrangle (U.S.G.S. 1981)

0 500 1000 1500 2000 2500 FEET

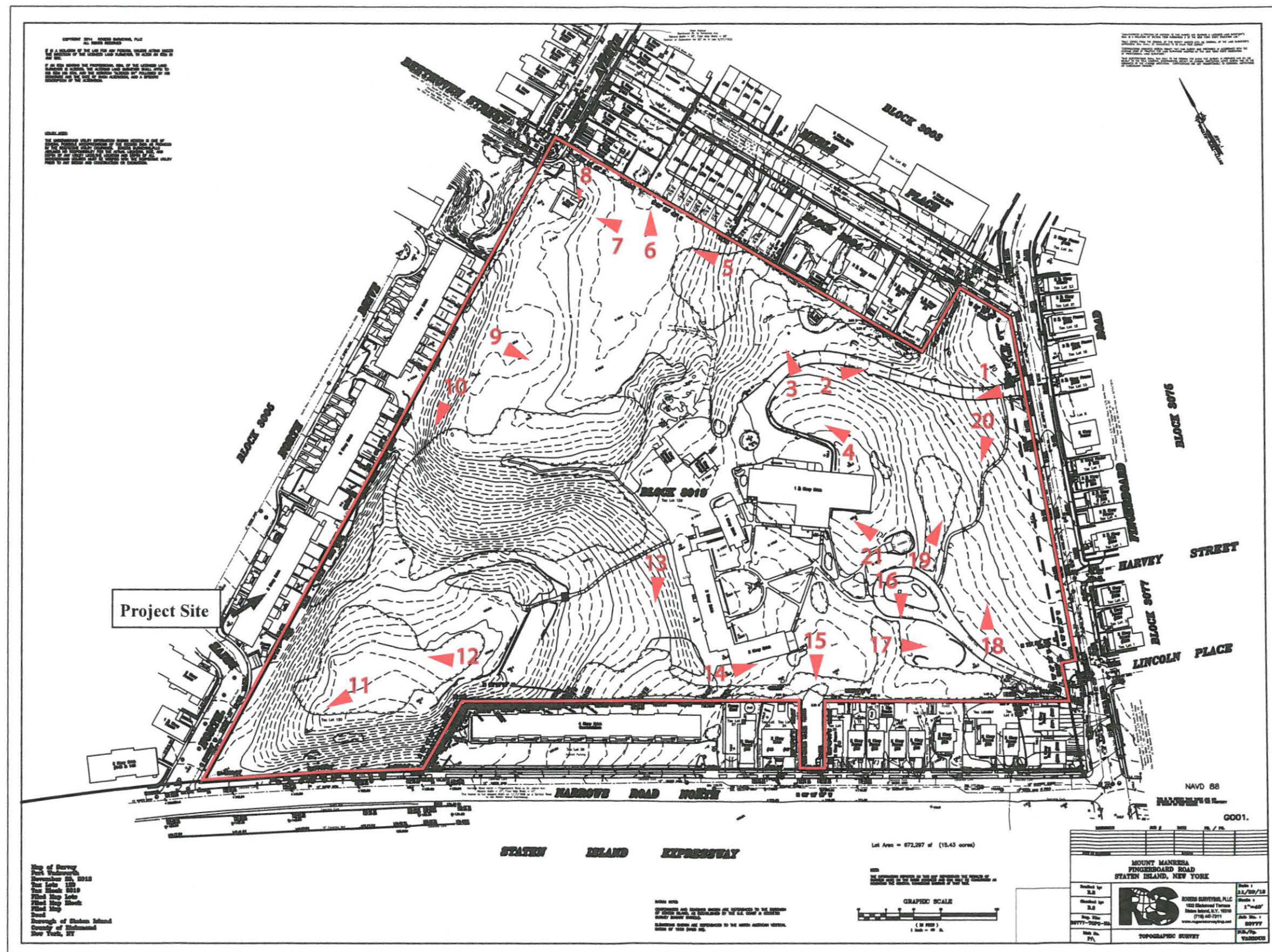
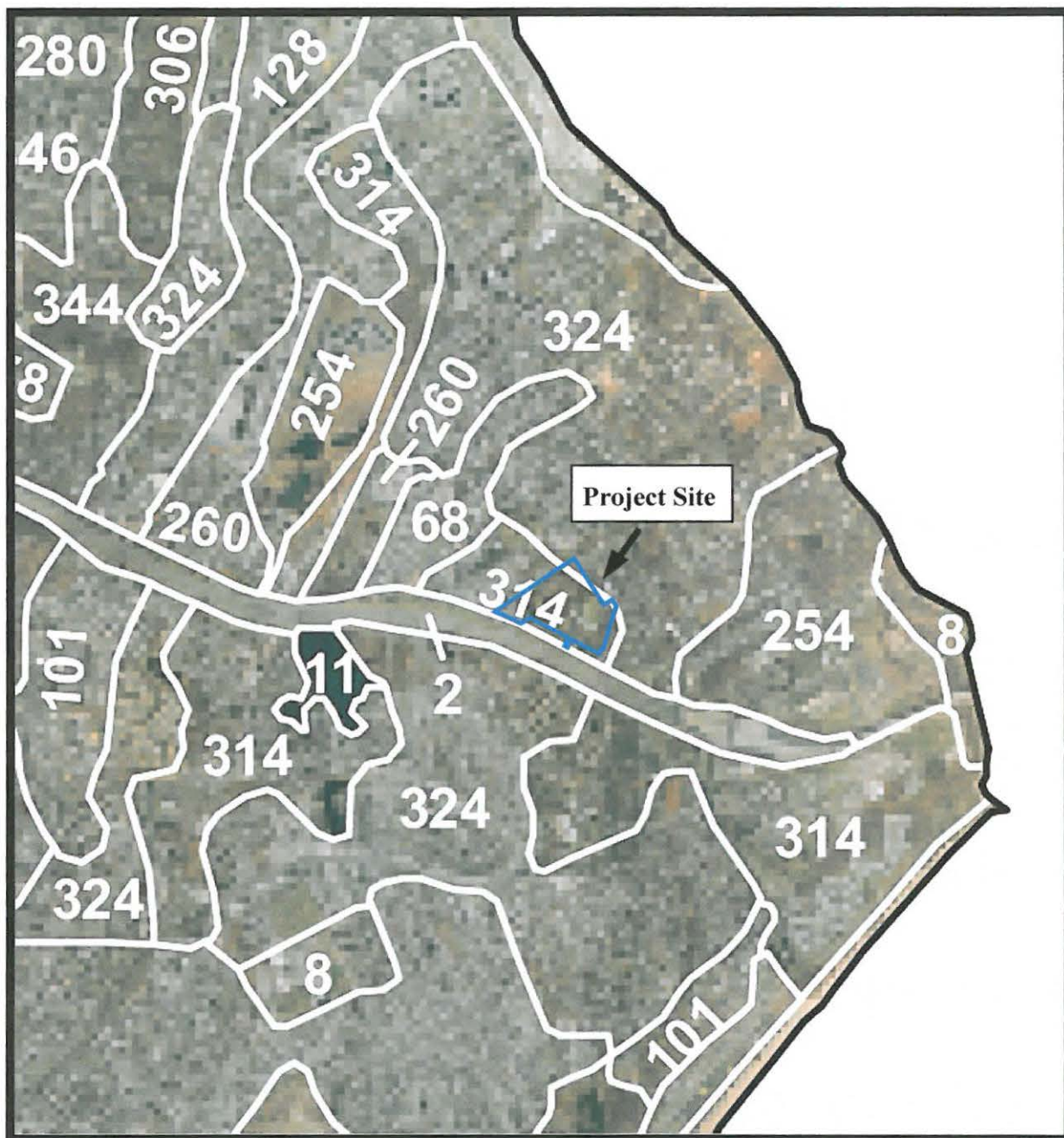


Figure 2a: Project site and photograph locations on modern topographical survey (Rogers Surveying PLLC 2014).



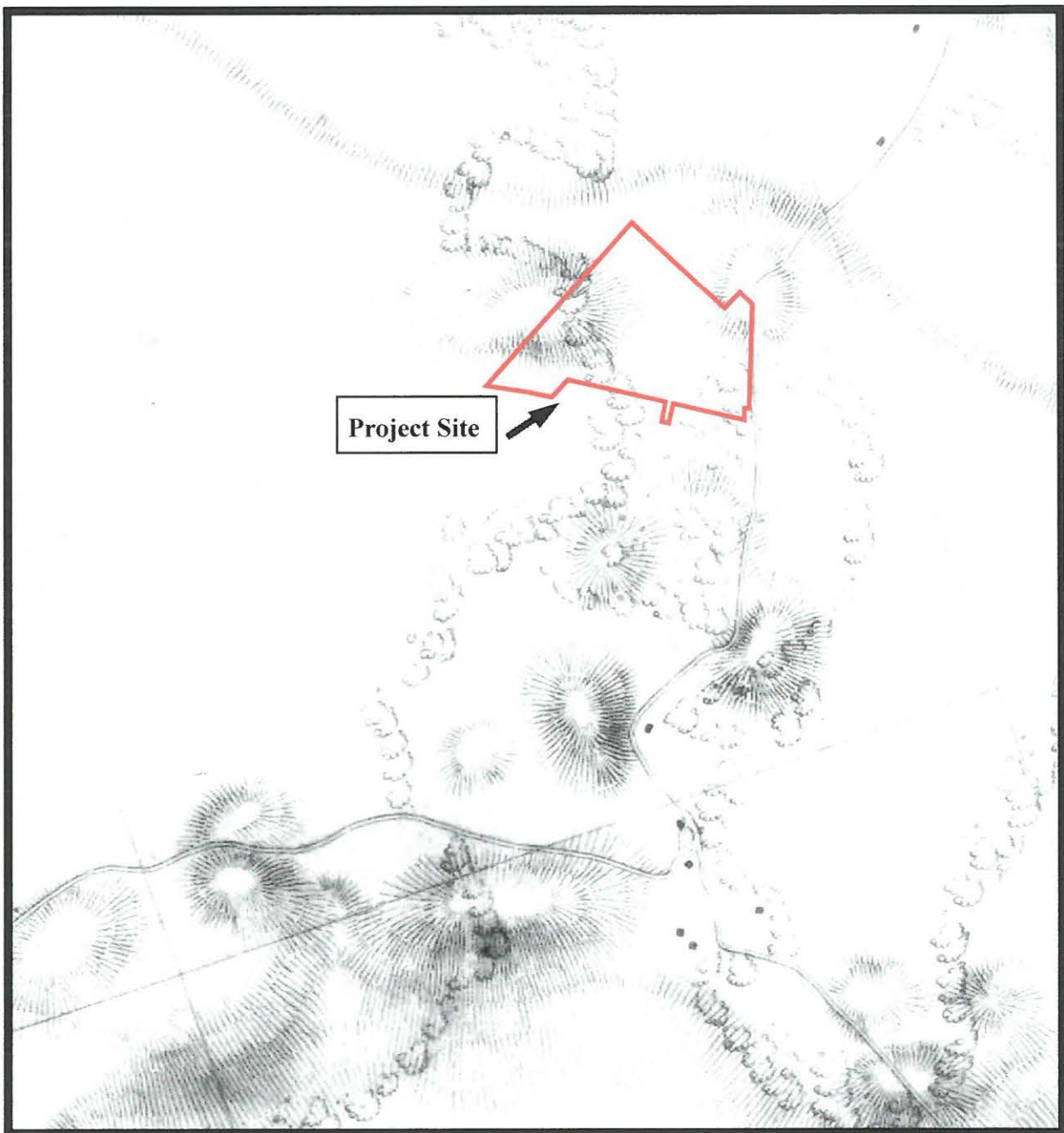
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Figure 4: Project site on *New York City Reconnaissance Soil Survey*
 (U.S.D.A. 2006)

0 1000 2000 3000 4000 5000 FEET





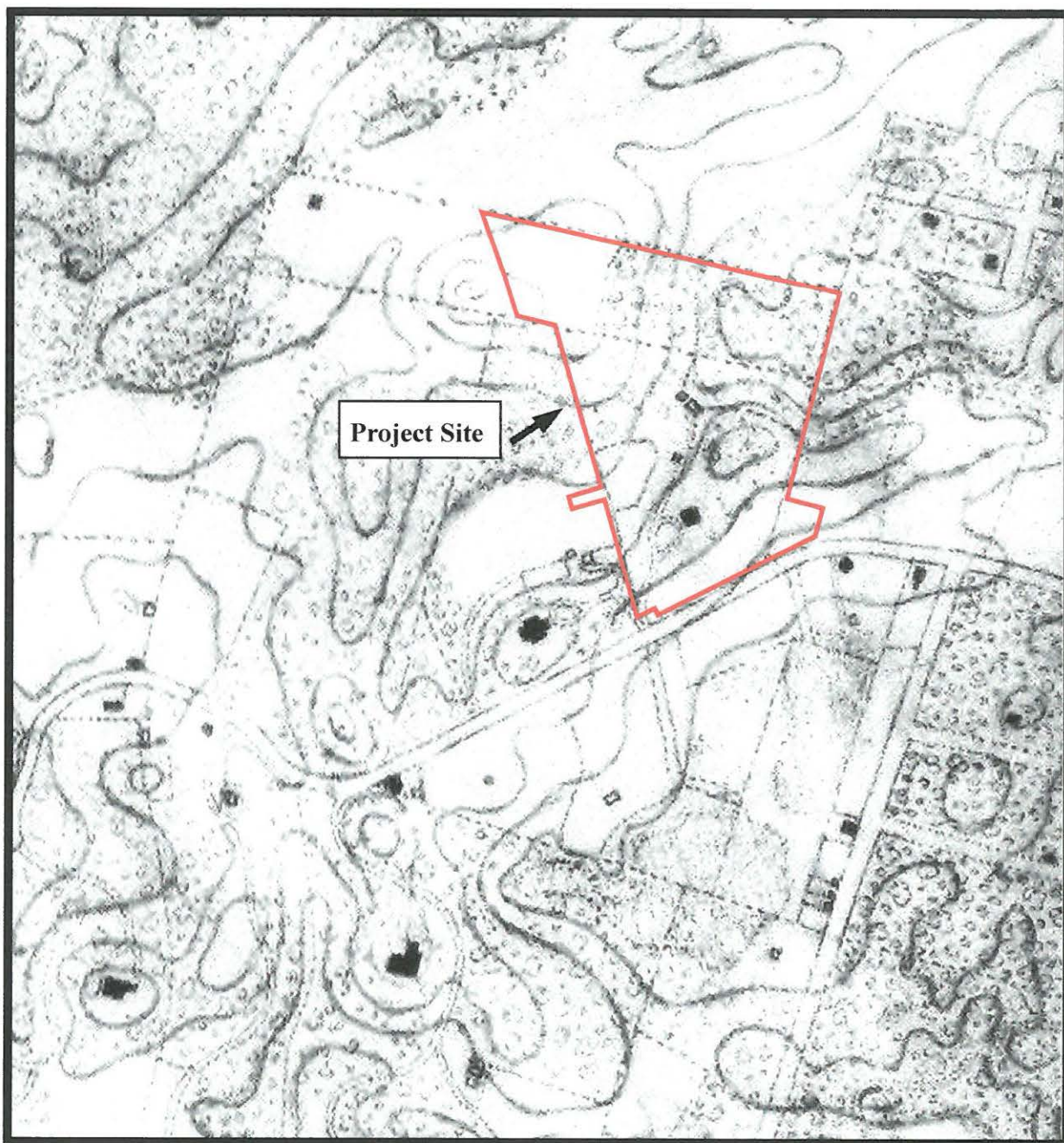
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Figure 5: *Staten Island from Kill van Kull to the Narrows (U.S.C.S. 1836).*

0 300 600 900 1200 1500 FEET





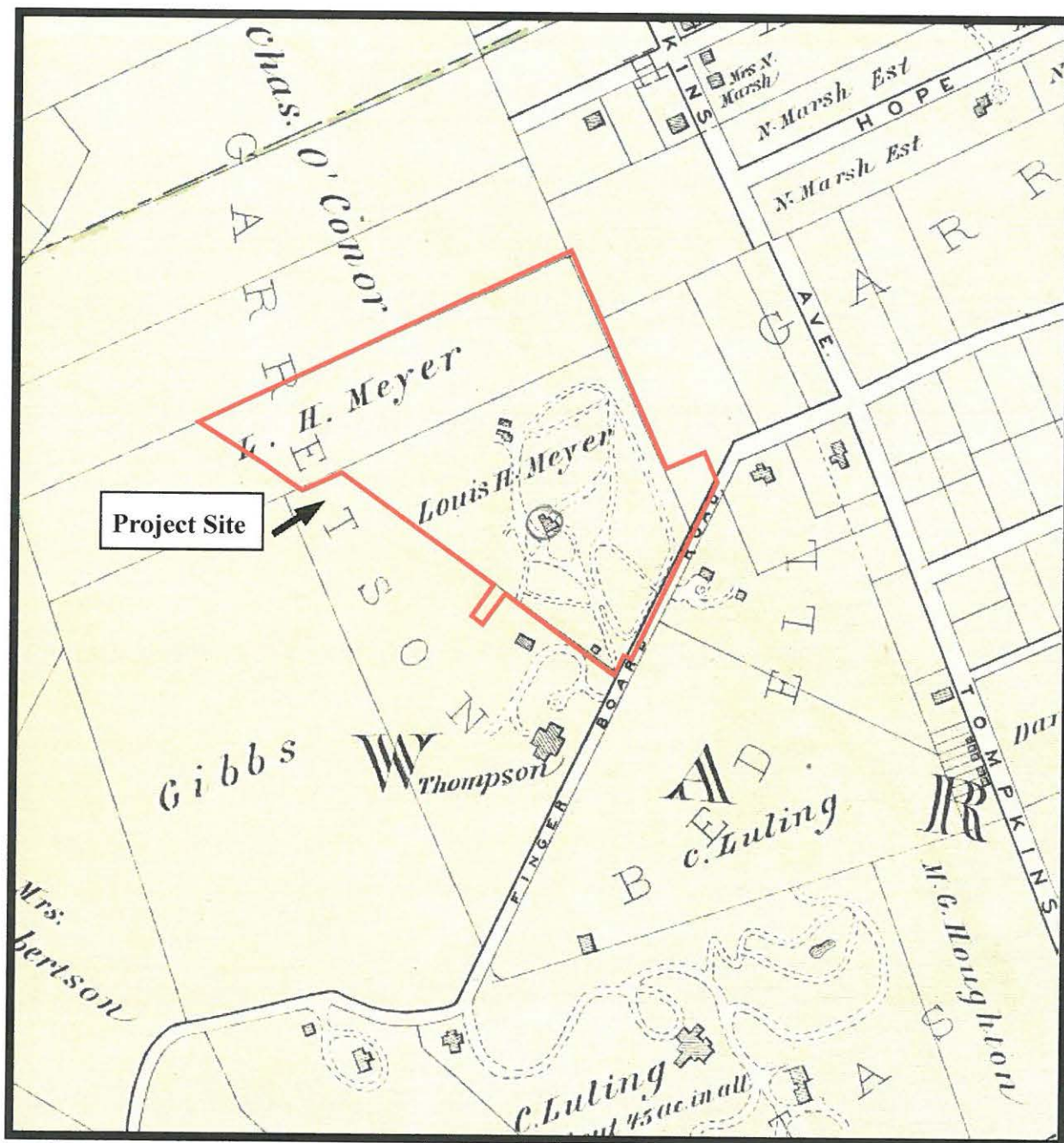
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Figure 6: *Staten Island From New Brighton to Great Kills (U.S.C.S. 1856).*

0 200 400 600 800 1000 FEET

 A horizontal scale bar with markings at 0, 200, 400, 600, 800, and 1000 feet.

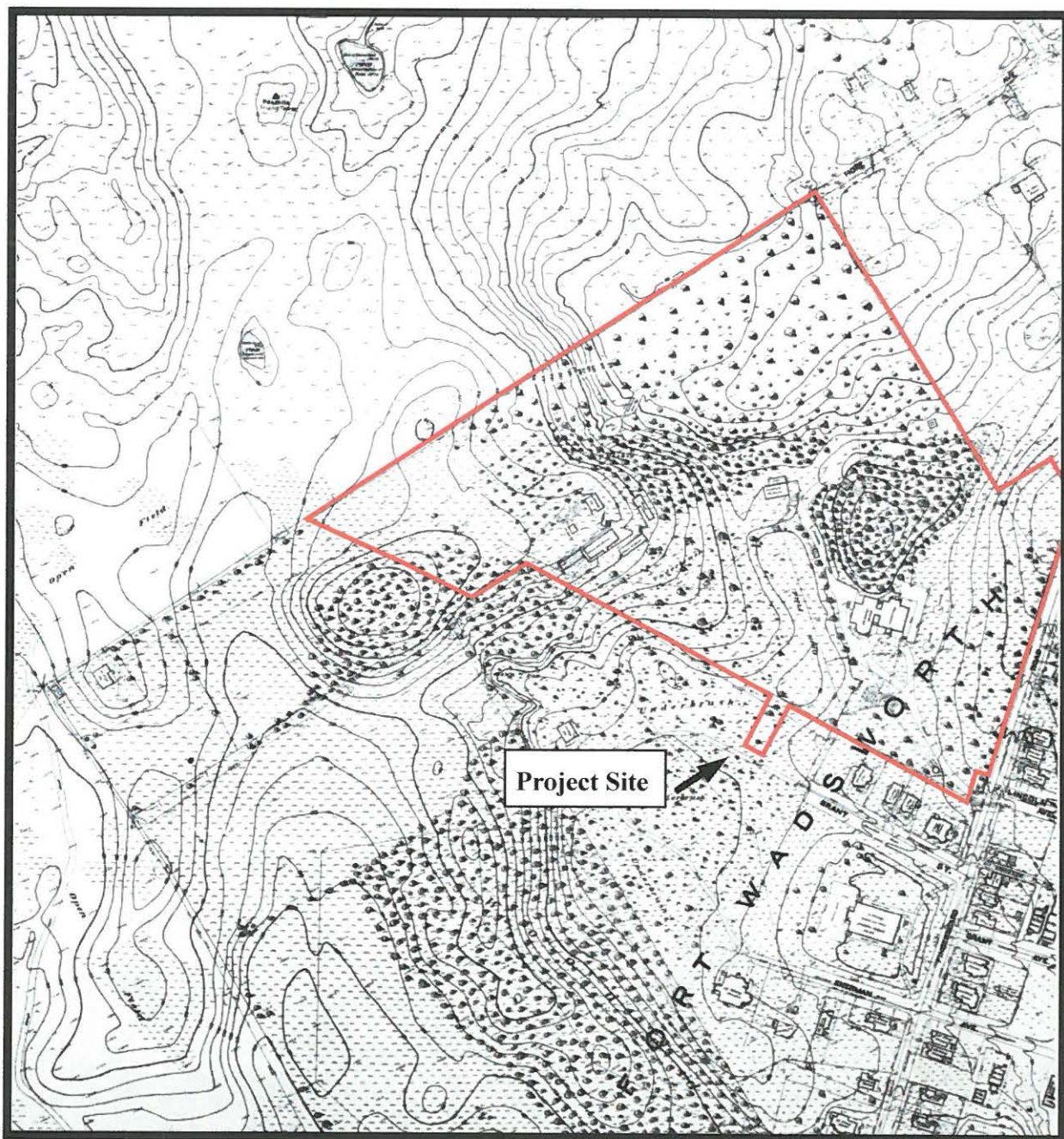


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Figure 7: *Atlas of Staten Island, Richmond County, New York* (Beers 1874).

0 200 400 600 800 1000 FEET

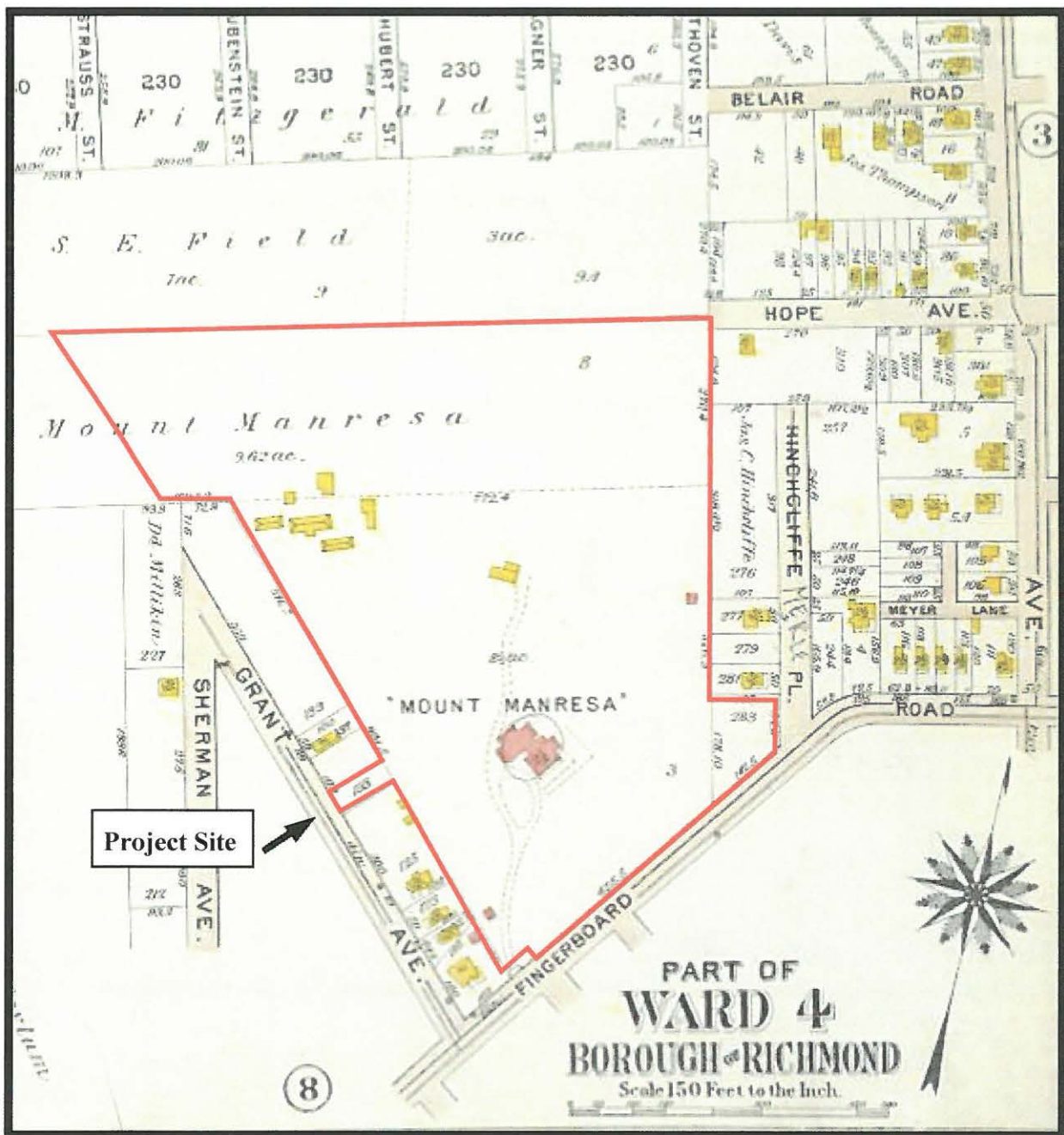


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Figure 8: *Borough of Richmond, Topographical Survey*
 (Borough of Richmond 1907)

0 100 200 300 400 500 FEET

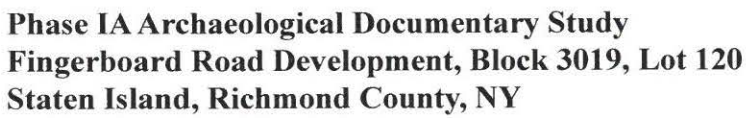


Phase IA Archaeological Documentary Study
 Fingerboard Road Development, Block 3019, Lot 120
 Staten Island, Richmond County, NY



Figure 9: *Atlas of the City of New York, Borough of Richmond, Staten Island* (Bromley 1917).

0 100 200 300 400 500 FEET



0 100 200 300 400 500 FEET

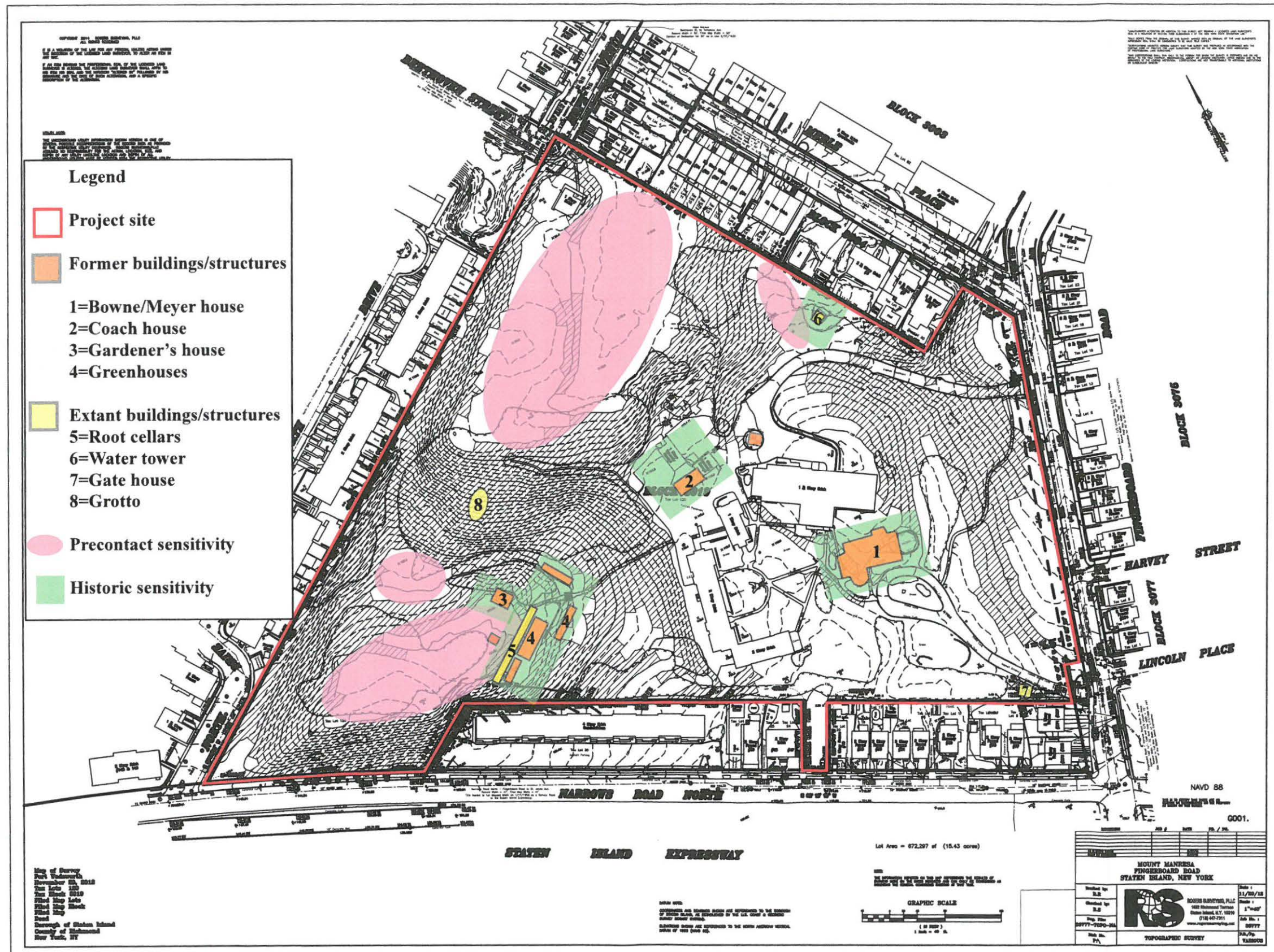


Figure 11: Project site showing locations of former buildings and areas of precontact and historic archaeological sensitivity with shaded areas of 12 percent slopes and greater (HPI 2014 and Rogers Surveying PLLC 2014).



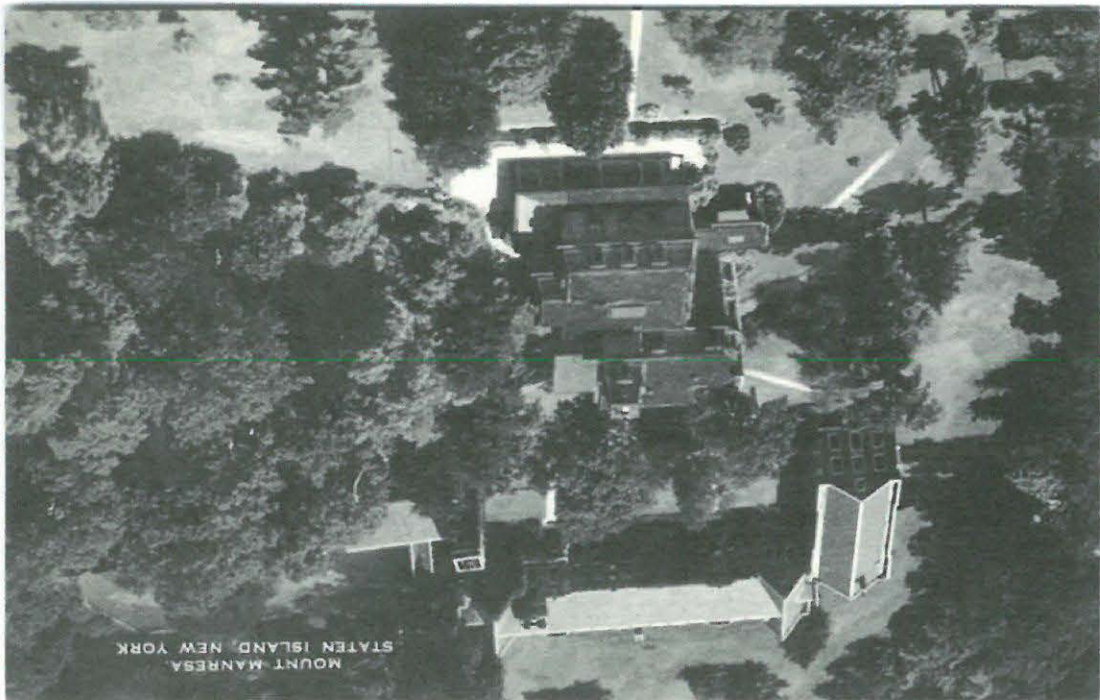
Photograph 1. Entry driveway, facing west.



Photograph 2. Entry driveway, facing east.

APPENDIX A: HISTORIC IMAGES OF MOUNT MANRESA
(NEW YORK PUBLIC LIBRARY DIGITAL GALLERY)

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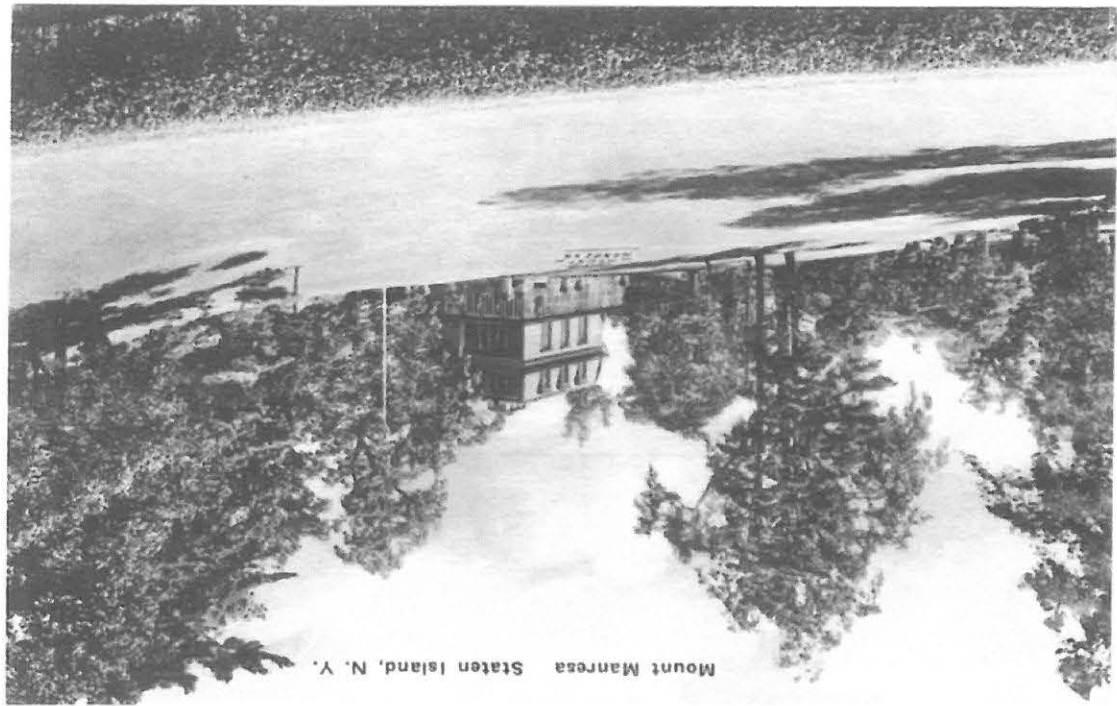
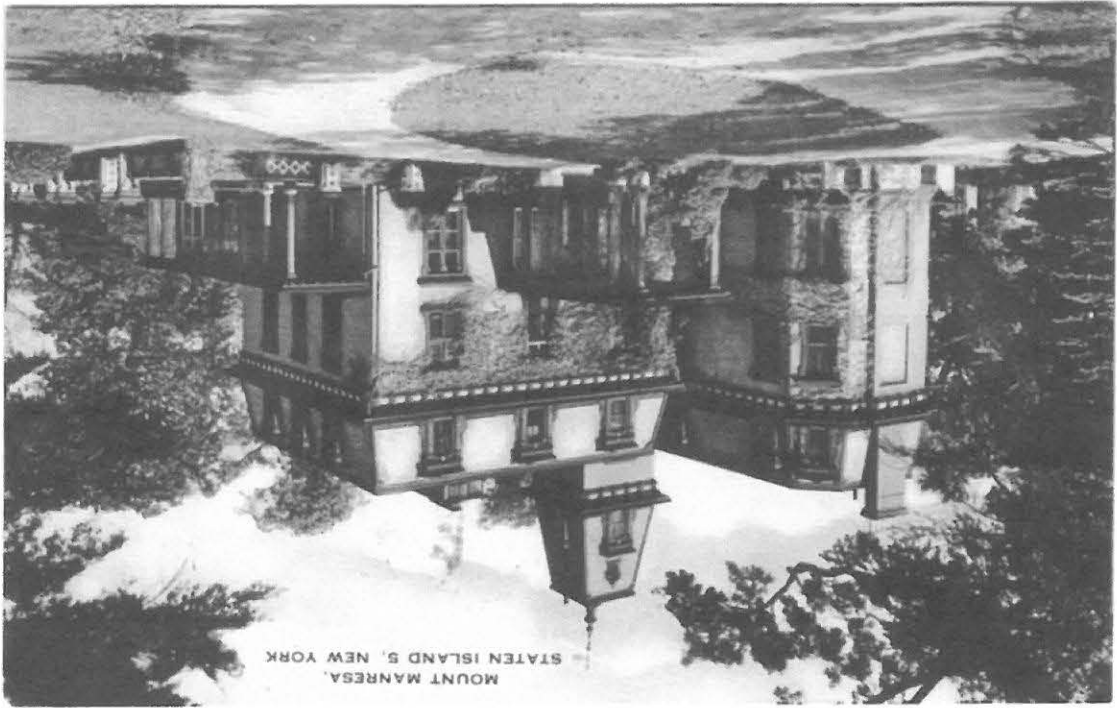




Image ID: 104635

Shealy Memorial Hall and Chapel at America's First Retreat House Mount Manresa, Staten Island 5, N.Y.



Image ID: 104673

Terrace and Side View, Mount Manresa, Fort Wadsworth, Staten Island, N.Y.



Shrine of the Sacred Heart, Mount Manresa,
Fort Wadsworth, Staten Island, N. Y.