CLOVER ARCHAEOLOGICAL SERVICES, INC.

prehistoric and Historic Consultants...

STAGE IA AND IB ARCHEOLOGICAL INVESTIGATION OF THE BAYLEY SETON HOSPITAL PARCEL
STAGE IA AND IB HISTORICAL AND ARCHAEOLOGICAL INVESTIGATION OF
THE BAYLEY SETON HOSPITAL PARCEL, STATEN ISLAND,
RICHMOND COUNTY, NEW YORK

October 2, 1990

APPLICANT:
Sisters of Charity Health Care System Corporation
Bayley Seton Hospital
Staten Island, New York

PREPARED FOR:
New York State Office of Parks, Recreation
and Historic Preservation
The Governor Nelson A. Rockefeller Empire State Plaza
Agency Building 1
Albany, New York 12238-0001

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LOCATION:
A 3.5 acre parcel located
on the grounds of the
Bayley Seton Hospital
bordering Tompkins Avenue
on the west, in Staten
Island, Richmond County
New York
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I. INTRODUCTION

This report presents the results of an archaeological and archival investigation of a portion of the Bayley Seton Hospital site, Clifton and Stapleton, Staten Island, Richmond County, New York. The purpose of this Stage IA and IB Survey is to determine the prehistoric and historic sensitivity of the parcel through a review of archival, cartographic, and other published references, as well as by conducting a surface field reconnaissance and subsurface testing program on the parcel.

The study is divided into two main sections: 1) the archival search; and 2) the archaeological or field investigation. The archival search describes the existing setting of the parcel; reviews the prehistoric and historic sensitivity of Clifton and Stapleton, Staten Island; and presents the results of the research of the site location, public archives, maps, and other sources. The section on the archaeological investigation discusses the general methodology employed for the surface field reconnaissance and subsurface testing; the results of the surface survey and subsurface testing; and finally, provides conclusions based on the archival and archaeological surveys.
II. PHYSIO-GEOLoGIC SETTING

The portion of the Bayley Seton Hospital parcel that is the subject of this investigation is a 3.5 acre parcel located east of Tompkins Avenue and west of the existing Bayley Seton Hospital buildings in Clifton, Staten Island (Figure 1). The northern boundary of the site borders parcels in private ownership. The western boundary of the parcel borders Tompkins Avenue, and the eastern boundary borders the asphalt parking lot and heliport of the Bayley Seton Hospital. The southern boundary of the site borders a parcel now or formerly belonging to the Mariners' Family Asylum.

Topographically, the site is characterized by a uniform, gentle or moderate west-northwest slope (See Figure 2). The highest point of the slope, along the eastern boundary of the parcel, measures 68 feet in elevation. The lowest point on the parcel lies in the northwestern corner and measures 34 feet in elevation. Thus, the total relief of the parcel is approximately 34 feet.

The vegetation on the site consists of successional growth characterized by scattered saplings and shrubs with a grassy ground cover.

The geological deposits underlying the site (See Figure 3) are Pleistocene morainal deposits associated with the Harbor Hill Terminal Moraine, which forms an elongate irregular- hilly
ridge extending across Staten Island from Stapleton on the east
to Tottenville on the west. The Harbor Hill Terminal Moraine
was formed during the Wisconsinan glaciation and consists of
unsorted sand, gravel, cobbles, and boulders within a clayey
silty matrix (Soren, 1988: 9-10).

No comprehensive soil mapping has been done on Staten
Island, with the exception of the area around Fort Wadsworth,
which is classified information. Thus, there is no information
about the soil associations of the Bayley Seton Hospital site
(W. Duckery, Soil Conservation Service, personal communication,
September, 1990).
FIGURE 1
SITE LOCATION MAP

(Hagstrom, 1989)
FIGURE 2
U.S.G.S. TOPOGRAPHIC MAP

(U.S.G.S., 1956)
FIGURE 3
GEOLOGICAL MAP

Site is indicated by arrow.
III. ARCHIVAL SEARCH RELATED TO THE BAYLEY SETON HOSPITAL PARCEL

A. SITE LOCATION IN THE AREA OF THE BAYLEY SETON HOSPITAL PARCEL

1. PREHISTORIC SITES

Prehistoric archaeological sites and unstratified finds are known from Staten Island, but artifacts have not been reported from the Bayley Seton Hospital parcel. However, a review of published sources evidenced at least two sites or finds of prehistoric artifacts within one mile of the Bayley Seton Hospital parcel:

1) Remnants of Native American camp sites were reported around Silver Lake, including a shell pit and pottery (Skinner, 1909: 16).

2) An abundance of triangular arrow points was found on Ward's Hill near Cebra Avenue in Tompkinsville (Skinner, 1909: 17).

2. HISTORIC PERIOD SITES

The following historic period sites are representative of those which occur within one mile of the Bayley Seton Hospital parcel:

1) The Austen House, at the end of Hylan Boulevard in
Rosebank, is a 17th century structure with some 19th century exterior modifications (Eberlein, 1928: 280).

2) Two buildings of the former Seamen’s Retreat, now the Bayley Seton Hospital, have been designated as historic landmarks by the New York Landmarks Preservation Commission (1985). Both the main building and the physician-in-chief’s residence were built in the 19th century as part of the Seamen’s Retreat, a hospital for merchant seamen.
B. NATIVE AMERICANS AND THEIR LANDS

1. PREHISTORIC PERIOD

There is archaeological evidence for Native American occupation or use of Staten Island from the earliest Paleo-Indian times to the time of contact with Europeans. Skinner (1909) reported 24 Native American sites on Staten Island. Along the coastline from West New Brighton to Tottenville was, he said, "one practically unbroken chain of sites" that he classified into villages, shell heaps, burials, and camps. Few sites, however, were reported along the east shoreline (Skinner, 1909: 3).

More recent archaeological work has been able to date some of the sites, yielding a chronology for Staten Island. The earliest evidence for Native American land use comes from the Port Mobil site on high ground overlooking the Arthur Kill. The presence of fluted points indicates a probable small campsite of Paleo-Indian hunters who wandered over a large area, ca. 8000 BC (Ritchie, 1980: xvii, 3).

The next stage of occupation or use dates to the Archaic period, a time characterized by hunting, fishing, and gathering of wild plants; a time before the invention of pottery or practice of agriculture (Ritchie, 1980). A number of Early Archaic sites have been identified on Staten Island: The Hollowell site, near Tottenville; Old Place Site, near the
Goethals Bridge; Ward’s Point, near Tottenville; and Richmond Hill, in the center of the island. The Hollowell site, in particular, has produced Early Archaic artifacts previously unknown in the Northeast. Carbon 14 dates for these sites range from 7410 to 5310 BC (Ritchie and Funk, 1973: 38-39). Later Archaic levels have been found at a cluster of sites in the northwestern corner of the island: Bowman’s Brook A at Mariner’s Harbor, Old Place on the banks of the Arthur Kill, and Arlington Place A-1 (Ritchie, 1980: 146).

During the Transitional Stage, approximately 1300 to 1000 BC, Native Americans began to manufacture stone pots (usually steatite) and very early ceramics. A few fishtail-shaped points, characteristic of the Transitional Stage, have been recovered from Arlington Place A-1 on Staten Island (Ritchie, 1980: 146).

The Woodland Stage, which began in approximately 1000 BC and continued down to the time of European contact, was the time when ceramics were developed along with agriculture and the rudiments of village life. Some characteristic pottery of the Early Woodland has been found at the Hollowell site near Tottenville (Ritchie and Funk, 1973: 38). The Middle Woodland is represented by Bowman’s Brook at Mariner’s Harbor, and by sites in and around Tottenville (Ritchie, 1980: 146; Lopez, 1961: 264). The Tottenville sites are of particular interest since they seem to have affinities with Middle Woodland sites in
New Jersey (Lopez, 1961: 263-264). The Late Woodland began circa 1100 AD and was characterized by village sites accompanied by shell and refuse pits (Smith, 1950: 117). The upper strata of the site at Bowman’s Brook at Mariner’s Harbor provide type specimens for particular styles of incised and stamped pottery characteristic of Late Woodland I pottery in the surrounding coastal area (Smith, 1950: 122-123; Ritchie, 1980: 268-269).

2. HISTORIC PERIOD

At the time of European contact with the Native Americans, Staten Island was inhabited by members of the Delaware group (Smith, 1950: 103). The Delaware comprised culturally similar bands occupying the region from the Delaware Bay northwards to the Catskills; they spoke two related East Algonquian languages, Munsee and Unami (Goddard, 1978: 213). The Native Americans of Staten Island belonged to the branch of the Delaware who spoke the Munsee language. Munsee speakers mentioned in early sources and associated with Staten Island included Raritan, Hackensack, and Tappan (Skinner, 1909: 33; Goddard, 1978: 237). In some sources (eg., Ritchie, 1980; Skinner, 1909), the Staten Island Indians are referred to as Lenape or Leni-Lenape; this term, however, is a self-designation in both Munsee and Unami meaning ordinary or real person (Goddard, 1978: 235-236).

According to Verrazano’s account, the Native Americans who greeted him enthusiastically in the Upper Bay were "rowing
thirty or more of their small boats, from one shore to the other" and were "dressed out with feathers of birds in various colours" (in Murphy, 1875: 176). Seventeenth century sources, although differing in their attitudes toward the Native Americans, offer more information. All agree that the Native Americans practiced subsistence agriculture, maize being the chief crop grown along with beans and squash, and that hunting and fishing provided protein (Anon, 1647: 5; DeVries, 1655: 94-95). Women planted the corn, and only enough was raised for the year's needs plus a small surplus to barter for cloth from the Europeans (DeVries, 1655: 98-99). Their chief weapon in hunting was the bow and arrow, although this was quickly replaced by guns obtained from Europeans (Anon, 1647: 5; DeVries, 1655: 95). Similarly, they quickly adopted cloth for some of their clothing to replace the feathers noted by Verrazano and the deerskin noted by other sources (eg., Anon, 1647: 4).

Goods such as cloth and guns are included in the price paid to the Native Americans when Europeans purchased land. Staten Island was purchased at least five times from the Native Americans. Under the Dutch patroon system, the potential patron of a settlement was responsible for paying the Native Americans for their land. Under Dutch jurisdiction, Staten Island was bought first in 1630 by Michael Pauuw, then by Pieter De Vries, in 1641 by Cornelius Melyn, in 1651 by August Heermans, and in
1657 by Baron van Capellen (Clute, 1877: 26). The purchase price varied but usually included those trade objects that the Native Americans found most useful, particularly cloth goods and metal utensils. The price paid in 1630 included, "some duffels [a kind of shaggy cloth], kettles, axes, hoes, wampum, drilling awls, jews'-harps, and divers other small wares" (Van Rensselaer, 1909, I: 96-97). The drilling awls referred to were specially made metal drills used by the Native Americans in the manufacture of wampum. By 1657, in addition to cloth, kettles, axes, and awls, the deed specified 10 muskets, 10 bars of lead, and 30 pounds of powder (Fernow, 1883: 393). Thirteen men signed the deed as "hereditary owners", including representatives of the Hespatingh, Hackensack, Tappan, Nayack, Gweghkongh, and Hweghkongh. The last signatory was "Acchipoor, Sachem and Chief Warrior" (Fernow, 1883: 394). The mix of tribal designations may reflect the use of Staten Island from pre-contact times by a number of Delaware groups. On the other hand, it might also reflect changing demography as a result of European settlement and conflicts.

Although the Native Americans traded with the Dutch colonists, and indeed the colonists were eager to obtain the furs that the Indians had to trade (Anon, 1647: 7), the relations between the Europeans of New Netherland and the Native Americans were fraught with conflict. The Native Americans had several causes for dissatisfaction. European
settlement and agricultural practices inevitably came into conflict with Native American subsistence patterns and land use. For example, the Dutch allowed their cattle to roam freely, with the result that Indian cornfields were trampled (Anon, 1647: 7). Perhaps recognizing Native American hunting practices, Cornelius Melyn, who established a settlement at the Narrows on Staten Island in 1640, made a contract with the Indians that they would pay tribute of a certain number of turkeys and deer in return for retaining their hunting rights on Staten Island (Van Rensselaer, 1909, II: 80).

In the 1640’s, when Kieft was governor of New Netherlands, his lack of sympathy with the Indians was the cause of greater conflict. In 1640, Governor Kieft tried to exact a tax payable in corn from the Native Americans in New Netherlands. De Vries reported the Indians’ response as he heard it from them, "They were very much surprised that the Sachem, who was now at the Fort, dare exact it; and he must be a very mean fellow to come to this country without being invited by them, and now wish to compel them to give him their corn for nothing" (De Vries, 1655: 98-99).

Although De Vries was sympathetic to the Native Americans, the settlement he had established on Staten Island fell victim to Dutch mismanagement of Indian affairs in the so-called Pig War. In 1640, some swine were stolen from the De Vries plantation by employees of the Dutch West India Company.
Unaware of the real culprits, Governor Kieft promptly accused the Raritan Indians of the theft and sent 100 armed men to exact satisfaction. The troops proceeded to torture and murder at will (Skinner, 1909: 33; De Vries, 1655: 99). A year later, the Raritans had their revenge. As De Vries reported in his journal (1655: 100): "The 1st of September, my men on Staten Island were killed by the Indians; and the Raritans told an Indian, who worked for my people, that we might now come to fight them on account of our men; that we had before come and treated them badly on account of the swine... Thus I lost the beginning of my colony on Staten Island, by the orders of Commander Kieft, who wished to charge upon the Indians, what his own people had done."

In 1643, the Dutch exacted revenge for the raid on Staten Island and other incidents. A number of Indians fleeing inter-tribal warfare took refuge with the Dutch in the settlement of Pavonia (Jersey City). Governor Kieft duly sent out troops to murder them in their sleep; 80 were massacred in one night (Skinner, 1909: 35; De Vries, 1655: 113-117; Anon, 1647: 10-11). The Native Americans retaliated by burning and destroying European farms, including that of Cornelius Melyn on Staten Island (Lyman, 1964: 34). In the ensuing two years, there were numerous incidents throughout New Netherlands. The anonymous author of Journal of New Netherland reported an attempted expedition against the Staten Island Indians in 1644:
"Coming to Staten Island, they marched the whole night; the houses were empty and abandoned by the Indians; they got 5 or 6 hundred skepels of corn, burning the remainder without accomplishing any thing else" (1647: 14).

A treaty was concluded in 1645 between the Native Americans and the Europeans of New Netherlands. No armed Indian was to come near Dutch homes, nor was any European to visit an Indian village without a Native American guide. In case of trouble, appeals were to be addressed to the sachems on one hand or the New Amsterdam authorities on the other (Lyman, 1964: 35).

An uneasy peace prevailed for ten years. In fact, in the conflict between Cornelius Melyn of Staten Island and the new governor Peter Stuyvesant, Melyn took refuge from arrest in his house on Staten Island and placed Raritans as guards around it (Van Rensselaer, 1909, I: 318).

The peace was broken in 1655 by the "Peach War", caused by the murder of an Indian woman who was taking peaches from a Dutch settler's tree (Ellis, 1966: 65-67). In the ensuing violence, Staten Island was again attacked; 11 of its bouweries were ruined, a number of Europeans killed, and many of the rest taken captive (Van Rensselaer, 1909, I: 369; Skinner, 1909: 36; Lyman, 1964: 36). This was the last conflict in which the Native Americans of Staten Island were involved (Skinner, 1909: 36).

The friction between the Dutch and the Indians along with intertribal rivalry led to Native American migration; by the end
of the Dutch period, Native American displacement was well under way (Goddard, 1978: 221). Thus, when the British assumed control of New York, Governor Lovelace purchased Staten Island for the last time. The price included 400 fathoms of wampum, 30 match coats, 8 coats of durens made up, 30 shirts, 30 kettles, 20 guns, 60 bars of lead for bullets, 30 flints, a firkin of powder, 30 axes, 30 hoes, and 50 knives (Skinner, 1909: 37; Van Rensselaer, 1909,II: 80). In return, the Native Americans had to agree to leave Staten Island for good, but the sachems were to reappear annually to ratify the sale (Skinner, 1909: 37). The main body of Staten Island Indians decamped to the mainland, although a few remained behind; their descendants reportedly still lived on Staten Island up to modern times (Skinner, 1909: 37).
C. HISTORIC PERIOD: EUROPEAN SETTLEMENT OF STATEN ISLAND

The first documented European sighting of Staten Island was the 1524 voyage of Verrazano, who sailed into the Upper Bay. Because a storm was brewing, he was unable to land and explore the area. However, legend has it that a few sailors were sent ashore on Staten Island to fill their drinking water casks from a fresh water stream in present-day Tompkinsville. The stream has been known thereafter as the "Watering Place" (Lyman, 1964: 9; Murphy, 1875: 176, a translation of Verrazano's letter to the king of France).

The next European to see Staten Island was Henry Hudson, working for the Dutch East India Company. In 1609, he anchored in the Lower Bay, then sailed his boat The Half Moon through the Narrows and up the Hudson River. Although he did not find the passage to the Orient he was seeking, his voyage marked the beginning of the fur trade between merchants of Amsterdam and the Native Americans of New York (Ellis, 1966: 16).

A group of merchants in Amsterdam formed the Dutch West India Company to take advantage of the beaver and other fur-bearing animals abundant in the New World. To increase settlement of New Netherlands, the company directors set up the patroon system whereby a patroon would be given an estate and land for settlement. In return, he had to purchase the land from the Indians and transport and settle 50 adult colonists to

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the territory within four years (Ellis, 1966: 28). In 1630, Michael Paauw, himself a director of the West India Company, took the patroonship of Staten Island and part of New Jersey, which he named Pavonia. His settlement in Pavonia flourished, while Staten Island remained undeveloped. Thus, in 1637, Paauw sold his rights to the island back to the company (Van Rensselaer, 1909, I: 96-97; Ellis, 1966: 29; Lyman, 1966: 20).

In 1636, Pieter De Vries asked to register Staten Island under his name and in 1639 settled a few colonists near the Watering Place, although he himself did not live on the island (De Vries, 1655: 85, 88; Van Rensselaer, 1909, I: 162; Lyman, 1964: 24). About the same time, however, a tanner from Amsterdam, Cornelius Melyn, was granted permission to settle Staten Island as a patroon (Van Rensselaer, 1909, I: 175). He appeared in August 1641, much to the consternation of Pieter De Vries. In November of that year, Governor Kieft asked De Vries to allow Melyn to settle at the Narrows, "where the maize-land lay, saying that he wished to let him plant it, and that he would place soldiers there, who would make a signal by raising a flag, to make known at the fort whenever ships were in the bay, to which I have consented, --but am not to be prejudiced thereby,-- and to let him have twelve to fourteen or fifteen morgens of land, without abridging my right, as he intended to distil brandy and make goat's leather" (De Vries, 1655: 100-101).
Melyn was given a patent by Governor Kieft for all the island except De Vries' settlement. Unlike De Vries, Melyn actually settled with his family and dependents on the island (Van Rensselaer, 1909, I: 175).

Colonizing Staten Island was not without difficulty, however. The colonists of De Vries' settlement near the Watering Place abandoned the island in 1641 during the so-called "Pig War", when the Indians attacked and killed four Europeans (Lyman, 1964: 24; Ellis, 1966: 37). Melyn's attempts at settlement were bedevilled with set-backs. In 1640, pirates took his ship along with the people, cattle, and belongings (Van Rensselaer, 1909, I: 175). After he made another start at settlement, his house, barn, cattle, and crops were burned in 1643. Although Melyn fled at the time to New Amsterdam, he returned to his settlement, where he and the colonists stayed until 1655. In the "Peach War" of that year, Staten Island was attacked. According to Melyn's own account, 15 or 16 Europeans in his settlement were killed by the Indians, including some of his family members. The 51 survivors surrendered and were taken captive. Some of the hostages captured during this war were reprieved by the government in return for powder and lead; Melyn, however, paid a ransom of 1400 guilders out of his own pocket for himself and his family and finally abandoned Staten Island for good (Lyman, 1964: 36, 38, quoting Melyn; Van Renssalaer, 1909, I: 370).
The first permanent colony on Staten Island was established in 1661 with 19 Dutch and French settlers in what was later called Oude Dorp (Old Town) near the present site of Fort Wadsworth (Ellis, 1966: 55). Shortly thereafter, in 1664, the English claimed New York. Governor Lovelace of New York, on behalf of the Duke of York, made the last purchase of Staten Island from the Indians in 1670, with the understanding that the Indians would leave the island (Van Rensselaer, 1909, II: 80; Ellis, 1966: 79). To attract settlers to the island, Lovelace advertised through the governor of Bermuda an offer of land near the southeast shore, a town patent, and the liberty to choose their own minister for settlers who came to Staten Island (Van Rensselaer, 1909, II: 81). Surveyors were brought from England to lay out lots (Ellis, 1966: 79). One group that took advantage of available land in Staten Island was the Huguenots fleeing persecution (Bayles, 1887: 91).

The Duke of York’s grant of 1665 defined New York as including land "bounded on the East by the Hudson River". The wording of this grant gave rise to a boundary dispute between New Jersey and New York over the jurisdiction of Staten Island (Botkin, 1956: 33). Despite Captain Christopher Billopp’s legendary circumnavigation of Staten Island in less than 24 hours in 1676, which was supposed to settle the dispute in New York’s favor, New Jersey persisted in its claims. The dispute was finally laid to rest by a Boundary Commission after the
Revolutionary War (Botkin, 1956: 33n).

By 1698, the population of Staten Island had risen to 727, and by 1737, it was 1889, with inhabitants making their living primarily by farming and fishing (Steinmeyer, 1950: 120). A French traveler in the middle of the 18th century described the farms of Staten Island with their fields planted in wheat or rye and the wooden farmhouses, each with its apple orchard and cider press (quoted in Bayles, 1887: 145). In addition, grist and saw mills ran on water from the tides on the shore, iron was mined on Todt Hill, and shipbuilders served the needs of fishermen (Emerson, 1953: 252). In the 17th century, a tall pole with large black or white balls had been set up on Signal Hill to send messages to Manhattan harbor on the approach of ships into the bay. By the 18th century, a semaphore device was contrived to replace the painted balls (Roberts, 1980: 324).

The strategic location of Staten Island attracted British forces at the outbreak of the Revolutionary War. On July 2, 1776, General William Howe took over the island with thousands of British troops. On July 13, he was joined by his brother Admiral Lord Howe with more troops, including a number of Hessian mercenaries, and in August, Sir Henry Clinton arrived. By the end of August, 42,000 British soldiers were gathered on Staten Island, the largest overseas expeditionary force raised by the British up to that time (Roberts, 1980: 321; Jones, 1879, I: 103). According to a British report, the inhabitants of
Staten Island were "perfectly loyal" and "received the troops with open arms" (Jones, 1879, I: 103). Staten Island provided the base for the British victory in the Battle of Brooklyn of late August 1776 (Roberts, 1980: 321). It was also the setting for abortive peace talks between a Congressional Committee of Benjamin Franklin, John Adams, and Edward Rutledge and the British, represented by Lord Howe (Roberts, 1980: 321-322; Botkin, 1956: 35n).

The British retained control of Staten Island throughout the Revolutionary War until 1783, when they withdrew from New York. A number of forts, defense works, and encampments were built on the island. At Signal Hill near Rosebank, the Patriots had built a redoubt for 300 to 400 men, and at Tompkinsville at the "Watering Place Redoubts", the Patriots had built entrenchments. When the British captured the island, they strengthened and rebuilt the defenses at Rosebank and added three redoubts to the defenses at Tompkinsville. By 1779, the British were reported to have "lined the Narrows with cannon" (Roberts, 1980: 323-325).

All British forts on the island cannot be conclusively documented; however, among known sites are Decker's Ferry Fort on the Kill van Kull, the Amboy Ferry Post on the southwest shore, the Dutch Church Fort at Port Richmond, and the Elizabeth Ferry Redoubts. Fort Richmond, located in the present-day grounds of the La Tourette Country Club overlooking
restored Richmondtown, has been partially excavated. One redoubt with its ditch and gun platforms was uncovered, along with finds such as gunflints, bone buttons, scissors, etc. A number of military sites were clustered at St. George, where there was an encampment in addition to Fort Knyphausen, which commanded the harbor from Fort Hill (Roberts, 1980: 322-326).

Although Staten Island was not the scene of Revolutionary War battles, the occupying British troops left the island poverty-stricken and deforested (Lyman, 1964: 152). However, the island's inhabitants returned to their main occupations of fishing and farming, and by 1800, the population had risen to 4500 (Lyman, 1964: 152). New villages were established, such as Tompkinsville, named after Daniel Tompkins, the fifth governor of the state of New York (Emerson, 1933: 253). The young Cornelius Vanderbilt established a ferryboat service between Staten Island and New York City, charging 18 cents a trip, and enjoying tremendous business during the War of 1812 (Lyman, 1964: 152; Botkin, 1956: 63).

By the middle of the 19th century, the Staten Island economy was based on both industry and leisure. Inland in places such as Grymes Hill, the rural setting attracted the wealthy, who built rustic cottages and Gothic villas as hideaways. Vacationers could also enjoy summer hotels, such as the Pavilion in New Brighton (Lyman, 1964: 153). However, along the shore were dyeing and fabric-printing works, brickyards,
shipyards, ironworks using iron mined from Todt Hill, and a gun factory (Lyman, 1964: 153; Emerson, 1953: 253). During the 1830's to 1850's, German and Irish immigrants flocked to Staten Island to work in the industries (S.I. Museum). The island also provided a haven for Italian political exiles. In fact, from 1850-1854, Garibaldi lived in Stapleton, where he earned his living as a candlemaker before returning to Italy to liberate his country (Ellis, 1966: 419; Emerson, 1953: 254).

For seafarers, the Sailors' Snug Harbor in West New Brighton provided a haven and retirement home (Lyman, 1964: 153). The health of seafarers was also a concern that led to the building of a quarantine hospital on Staten Island in 1799 in the area that was later to become Tompkinsville (Landmarks Preservation Commission, 1985a: 1). In the middle of the 19th century, Staten Island inhabitants strongly objected to the presence of the hospital and petitioned for its removal to no avail (Ellis, 1966: 282). Finally, in 1858, an outbreak of yellow fever prompted citizens to take matters into their own hands. One night in July, a mob of over 1000 people set fire to the hospital and burnt it to the ground. G.T. Strong, a New York diarist of the era, wrote of the arson as a "mere operation in real estate, a movement which Staten Islanders consider justifiable for the sake of ten per cent increase in the market value of building sites and village lots" (quoted in Ellis, 1966: 282-283). A quarantine ship replaced the destroyed
hospital, and the Offices of Quarantine were moved from Tompkinsville to Rosebank (Lyman, 1964: 153; Ellis, 1966: 283).

During the Civil War, a number of camps were set up on Staten Island (Ellis, 1966: 294-295). The draft, however, occasioned much ill-will, and in the New York Draft Riots of 1863, 50 men on Staten Island attacked and burned the houses of Black people living in Stapleton (Ellis, 1966: 313).

Transportation on the island expanded in the late 19th century. The first steam railway was built in 1860; five trains a day made the journey from Vanderbilt's Landing (now Clifton) to Tottenville (Emerson, 1953: 255). By the 1880's, the railway system had expanded into the Staten Island Rapid Transit Railroad, with lines laid on both sides of the island. More boats were added to the ferry service, and St. George became the center and terminal for both the railroad and ferry service (Lyman, 1964: 201).

Despite the improved transport, Staten Island in the late 19th century was still largely rural with a population of 67,000 in scattered villages (Emerson, 1953: 255; Ellis, 1966: 451), for which small governmental units could provide only limited services. In 1890, a commission was formed to examine the consolidation of outlying areas into metropolitan New York City. Finally, in 1898, an act of the State Legislature gave New York City a new charter, and Staten Island became part of the growing metropolis (Ellis, 1966: 451-453).
As Staten Island came into the 20th century, manufacturing and industry flourished along the shores. By the 1920's, there were over 300 manufacturing establishments on Staten Island (S.I. Museum). In 1920-1921, municipal piers were built at Stapleton, a controversial construction at the time. However, following the Celler Act of 1934, which allowed the establishment of foreign-trade zones in ports of entry, Piers 12 to 16 and adjacent inland territory in Stapleton opened as Foreign Trade Zone #1 in 1937 (Writers Program of the WPA, 1941: 314-315).

The port facilities of Staten Island also played a part in World War II. When war broke out, the owner of a large uranium mine in Katanga province of the Belgian Congo transported 1,250 tons of uranium to the United States and stored it in steel drums in a warehouse on Staten Island, where it stayed from the fall of 1940 until 1942, when the Federal Government finally bought it for use in the Manhattan Project (Ellis, 1966: 563-564). Also during World War II and the Korean War, shipbuilding flourished on the north shore of the island.

Until the 1950's, however, large parts of Staten Island retained their rural character. In fact, some of the largest truck farms on the east coast were located there (S.I. Museum). Since the 1950's, however, Staten Island has become more urban and lost much of its once rural character. The building of bridges across the Arthur Kill and Kill van Kull in the late...
1920's and the completion of the Verrazano Bridge in 1964 have hastened the urbanization of the island (Lyman, 1964: 263; Emerson, 1953: 256).
FIGURE 4
THE 1775-1783 REVOLUTIONARY MAP

Site is indicated by arrow.
FIGURE 5
THE 1797 MAP OF STATEN ISLAND

Site is indicated by arrow
D. THE SETTLEMENT HISTORY OF CLIFTON AND THE BAYLEY SETON HOSPITAL PARCEL

The east shore of Staten Island was the site of earliest European settlement. De Vries set up his unsuccessful colony near the Watering Place at Tompkinsville (Kolff, 1926: n.p.), and Melyn located his farm at the Narrows. A 1670 map shows "Dutch Plantations" all along the east shore from the Narrows to St. George (Staten Island Tercentenary Commission, 1961: back cover). Governor Lovelace’s attempts to settle the island continued the trend for settlement on the east shore. The Austen House, still standing at the end of Hylan Boulevard in Clifton, was built in the 17th century by an English immigrant who received a grant of land on Staten Island in 1679 (Eberlein, 1928: 280). To serve the needs of Staten Island inhabitants, a public ferry service was established in 1708 from New York City to the Watering Place (Reed, 1961b: 24).

However, the inhabitants lived in farmsteads dotted along the shore rather than in a concentration of houses in villages and towns. A map compiled from various Revolutionary War sources (reproduced in Staten Island Tercentenary Commission, 1961: 18-19) shows the farm of C. Corsen on the site of the Bayley Seton Hospital (See Figure 4). The Corsens (or Corsons) belonged to an old Dutch family, attested on Staten Island in a land grant of 1680 and the census of 1706 (Clute, 1877: 359-362;
Kolff, 1926: n.p.). During Revolutionary War times according to the map, the nearest habitation to the north of the Corsen parcel was the farm of A. Cole and Cole's Ferry, located halfway between the Corsen farm and the Watering Place; to the south, the nearest was the Austen house. A road in line with the present-day Canal Street, Tompkins Avenue, and Vanderbilt Avenue linked up with the Richmond Road, believed to be the oldest road in Staten Island (Bayles, 1887: 143). According to the map, there do not seem to have been any British encampments or defenses built on the Corsen farm.

A post-Revolutionary War map of 1797 (Figure 5) shows the coastline along the Narrows lined with farmsteads but no villages in the vicinity of the Bayley Seton hospital parcel.

In the early 19th century, Cornelius Vanderbilt instituted his fast ferry service, initially with his sailboat The Dread (Reed, 1961b: 24; Hampton, 1961: 14), and installed the Vanderbilt Ferry Landing in 1812 at Clifton, near the southeast corner of the Bayley Seton parcel (Hampton, 1961: 14; Staten Island Tercentenary Commission, 1961: 59).

The convenience of transport may have been a factor in enticing David Tompkins, fifth governor of New York State, to found the village of Tompkinsville in 1815 on 700 acres of land around the Watering Place (Steinmeyer, 1950: 117). The streets of Tompkinsville were gridded out in 1821. Some of the streets in Stapleton, such as Van Duzer Street, Beach Street, and Grove
Street, were in Tompkins' original grid (Staten Island Institute of Arts and Science, 1979: 4).

In 1831, an "Act to Provide for Sick and Disabled Seamen" passed by the State legislature allowed the establishment of a hospital to treat merchant seamen. The Bayley Seton Hospital parcel, then the Cornelius Corson farm, with its buildings and 40 acres of farmland, was acquired for $10,000 for this purpose. Located on a hill with views of the bay and harbor on one side and farmland on the other, the Corson land seemed an appropriate spot for the recuperation of ailing sailors at the Seamen's Retreat (Landmarks Preservation Commission, 1985a: 1; Bayles, 1887: 643-645). The open farmland on the western end of the parcel extended further than the Bayley Seton Hospital grounds do today, including land that is now part of the Stapleton Housing (Staten Island Institute of the Arts and Sciences, 1979: 11). A 19th century physician wrote glowingly of the location and described the provision for those mariners who did not recover from their ailments: "The cemetery of the Retreat is located upon a knoll at the western end of the grounds, overlooking the Bay and City of New York" (quoted in Clute, 1877: 249).

Funds for the operation of the Seamen's Retreat were provided by a head-tax on sailors entering New York harbor (Landmarks Preservation Commission, 1985a: 1). Initially, the hospital operated out of the existing Corson farmhouse.
However, construction of the Greek Revival style main building of the hospital was begun in 1834. As needs increased, additional ward space was added to the building (Clute, 1877: 248-249; Landmarks Preservation Commission, 1985a: 2-3). The Corson farmhouse was then used as the residence of the Retreat’s superintendent, a non-medical officer. A new building was constructed in 1842 as residence for the physician-in-chief of the hospital (Landmarks Preservation Commission, 1985b: 3). Other buildings were also constructed on the grounds, including one to house the wives and other family members of patients of the hospital (Clute, 1877: 247-248; Bayles, 1887: 643-645). The main building and physician-in-chief’s residence were designated landmarks of the City of New York (Landmarks Preservation Commission, 1985a: 9; Landmarks Preservation Commission, 1985b: 8).

The villages of Stapleton to the north and Clifton to the south grew up around the Seamen’s Retreat (Staten Island Institute of Arts and Sciences, 1979: 4). Stapleton was named in 1836; previously, it had been known as "New Ferry" (Steinmeyer, 1950: 117). A gazeteer of the same year shows 30 to 40 houses in Stapleton and a large hotel (Staten Island Institute of Arts and Sciences, 1979: 4). Clifton was the product of a group of Manhattan businessmen who formed the Staten Island Association, bought up farmland in the Clifton area, laid it out in 1837, and advertised it in a brochure the
following year (Staten Island Institute of Arts and Sciences, 1979: 4). It was later incorporated into the village of Edgewater and for a few years mid-century was called Bay View Post Office (Steinmeyer, 1950: 109).

Available land for housing as well as job prospects attracted immigrants to the east shore. Newly arrived German immigrants provided expertise for breweries and a market for lager (Sachs, 1988: 46). The first brewery founded on Staten Island was the Clifton Brewery, later renamed Bachman’s. Tradition has it, however, that it was founded by two Italians, one of whom was Garibaldi (Clute, 1877: 332; Sachs, 1988: 48). The brewery was located on Lyndhurst Avenue and Ditson Street (Sachs, 1988: 48), and housing was constructed for brewery workers on Chestnut Avenue; the terrace of 103-125 Chestnut is still standing (Staten Island Institute of Arts and Sciences, 1979: 5).

In the second half of the 19th century, despite the construction of commercial strips, such as shop fronts along Bay Street, (Staten Island Institute of Arts and Sciences, 1979: 4), the east shore still retained its rural character. An oil painting done in 1873 by Hermann Fuchsel, "The Narrows from Staten Island" (Staten Island Museum), shows a largely rural landscape with a few houses clustered into hamlets and much undeveloped land and open space.

Technology, however, was catching up with the area. In
1860, "Commodore" Vanderbilt created the railway line from Clifton to Tottenville (Kolff, 1926: n.p.), and the first magnetic telegraph service was introduced at Vanderbilt's Landing (Reed, 1961a: 22).

Meanwhile, in the late 19th century, the Seamen's Retreat was also changing. In 1882, the port-entry tax, which had supported the Seamen's Retreat, was revoked. The Retreat was acquired by the New York Marine Society, which leased it to the federal government for use as a marine hospital (Landmarks Preservation Commission, 1985a: 1). Although the chief officer of the hospital urged the federal government to buy the Seamen's Retreat outright, this was not accomplished until 1903, when the Retreat was renamed the U.S. Marine Hospital (Landmarks Preservation Commission, 1985a: 1-2). Certain alterations were made in the structures of the hospital at this time. The old Corson farmhouse, which had been extant until the late 19th century, was replaced with a Colonial Revival style building on the same site, to be used for junior officers of the hospital (Landmarks Preservation Commission, 1985b: 3). Alterations were made to the main building, although they were in keeping with the original Greek Revival style (Landmarks Preservation Commission, 1985a: 1).

Staten Island's east shore continued to develop in the early decades of the 20th century, as reflected in the architectural style of some remaining buildings. The art deco
movement of the 1920’s and 1930’s, for example, is represented by buildings such as the Paramount Theatre on Bay Street in Stapleton. (The theatre is located on the site of Cornelius Vanderbilt’s modest residence of 1829 --Steinmeyer, 1950: 50). Another art deco building is the Water Street Building at the intersection of Wright Street and Water Street. Although the shop fronts on the ground floor are contemporary urban blight style, the facade of the second floor is classic art deco.

During the war years in the 1940’s, the east shore piers were commandeered by the U.S. Army for shipping troops and war materiel, with a consequent increase in available jobs for residents of the area.

After the Second World War, the clientele served by the U.S. Marine Hospital was widened as former Marine Hospitals were changed to U.S. Public Health Service Hospitals. However, a large number of patients of the hospital continued to be merchant seamen. When the system was disbanded in 1981, the Bayley Seton hospital property was transferred to the Sisters of Charity of St. Vincent de Paul, and the hospital acquired its present name (Landmarks Preservation Commission, 1985a: 2, 5).
IV. THE ARCHAEOLOGICAL INVESTIGATION OF THE BAYLEY SETON HOSPITAL PARCEL

A. METHODOLOGY

The archaeological investigation of the site was divided into two stages: 1) the surface field reconnaissance; and 2) the subsurface testing program. The site boundaries were clearly identified by the paved walkway on the south, the chain link fence on the north and west; and the paved parking lot and heliport on the east. The site was divided by transects following an east-west trending axis. The transects were separated by 40 m. intervals in the southern portion of the parcel and by 20 m. intervals in the northern portion of the parcel. The site was traversed by foot, following the transect lines. As the entire surface of the parcel was covered with successional vegetation, surface visibility was extremely limited.

The subsurface testing program placed the test holes at 20 m. intervals along the transect lines (See Figure 6), thereby establishing a 20 m. by 40 m. grid in the southern portion of the parcel and a 20 m. by 20 m. grid in the northern portion of the parcel. All excavated sediments were sieved using a 6 mm. (1/4 inch) mesh to ensure recovery of even the smallest artifacts.
FIGURE 6
MAP OF SITE SHOWING LOCATION OF TEST HOLES
B. THE SURFACE SURVEY

Almost the entire surface of the site is covered by successional vegetation including apple trees, grasses, shrubs, and miscellaneous deciduous saplings. Material found on the surface of the Bayley Seton Hospital parcel during the surface survey was contemporary refuse and included plastic and styrofoam. No historic period or prehistoric artifacts were evidenced.

C. THE SUBSURFACE TESTING PROGRAM

The test holes were dug at 20 m. intervals along the east-west trending transect lines. Five transect lines, designated A through E were established (Figure 6), and 17 test holes were plotted (representing a density of approximately five test holes per acre). The grid lines were parallel to the concrete sidewalk on the south of the parcel and the chain link fence along Tompkins Avenue on the west of the parcel respectively. A measuring tape was used to establish the location of holes along the grid. The entire site was investigated by the subsurface testing program, with the exception of three holes on the edge of the asphalted parking lot and heliport. A total of 14 test holes were dug.

The individual test holes measured roughly 30 cm in
diameter and were dug with a hand shovel. The test holes penetrated to a minimum depth of 60 cm.

D. LITHOLOGIC DESCRIPTION

The upper soil level encountered in the test holes on the parcel evidenced disturbance and fill as a result of former construction and dumping activity. In some test holes this disturbance extended to the lowest depth reached in the subsurface testing. During the laying of the gas and fire mains and the construction of hospital buildings between 1933-1937, the parcel may have been used as a staging area where sand, gravel, and other construction materials were stockpiled. In addition, up until recent years, hospital employees used the northwestern portion of the parcel for personal gardens (Interview with L. Reynolds).

Test hole C4, which was dug in the western portion of the parcel near the gas and fire mains is typical of test holes in the northern half of the parcel:

Test Hole C4

<table>
<thead>
<tr>
<th>Depth</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14 cm</td>
<td>humus</td>
<td>very dark greyish brown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10YR 3/2</td>
</tr>
</tbody>
</table>
-14-33 cm clayey sand reddish brown
   5YR 4/4
-33-81 cm pure sand dark brown
   7.5YR 3/4
Finds: 0-33 cm: fragments of green glass, modern blue and white glazed pottery, coal

Test hole A3 is typical of the test holes near the concrete path in the southern portion of the parcel:

Test Hole A3
0-20 cm fill mottled dark greyish brown
   10YR 4/2
-20-60 cm hard packed silty clay very pale brown
   10YR 7/4
Finds: 0-20 cm: coal, cement, piece of rubber garden hose, rusted modern screw, melted glass

Test Hole B2 is typical of the test holes in the center of the parcel:

Test Hole B2:
0-40 cm fill mottled very dark greyish brown; 10YR 3/2
-40-70 cm silty clay with decomposing rocks reddish brown
   5YR 4/4
Finds: 0-40 cm: clinkers, cinders; coal, brick, glass
E. RESULTS OF THE SUBSURFACE TESTING PROGRAM

All of the artifacts recovered in the subsurface testing program (Appendix A) are 20th century debris from disturbed contexts: coal, brick fragments, plastic, styrofoam, modern glass and pottery.
V. CONCLUSIONS BASED ON THE ARCHIVAL SEARCH AND ARCHAEOLOGICAL INVESTIGATION OF THE BAYLEY SETON HOSPITAL PARCEL

Although the archival search suggests a potential prehistoric and historic period sensitivity for the Bayley Seton Hospital parcel, no prehistoric or historic period artifacts were recovered during the surface survey or subsurface testing. All of the test holes produced negative results aside from 20th century refuse. No further archaeological testing is recommended.
APPENDIX A: DESCRIPTION OF TEST HOLES

<table>
<thead>
<tr>
<th>Test Hole:</th>
<th>A2</th>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-45</td>
<td>fill</td>
<td></td>
<td></td>
<td>mottled dark brown</td>
</tr>
<tr>
<td>-45-57</td>
<td>silty clay</td>
<td>7.5YR 3/2 and 5YR 3/4</td>
<td>10YR 5/4</td>
<td></td>
</tr>
<tr>
<td>-57-76</td>
<td>silty clay</td>
<td>very dark greyish brown</td>
<td>10YR 3/2</td>
<td></td>
</tr>
</tbody>
</table>

Finds: 0-45: coal, asphalt, glass fragments, 1 burnt bone

<table>
<thead>
<tr>
<th>Test Hole:</th>
<th>A3</th>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20</td>
<td>fill</td>
<td></td>
<td></td>
<td>mottled dark greyish brown</td>
</tr>
<tr>
<td>-20-60</td>
<td>hard packed silty clay</td>
<td>10YR 4/2 and 5YR 4/4</td>
<td>very pale brown</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10YR 7/4</td>
</tr>
</tbody>
</table>

Finds: 0-20: melted glass, fragment of rubber hose, rusted modern screw, coal, cement

<table>
<thead>
<tr>
<th>Test Hole:</th>
<th>A4</th>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-25</td>
<td>fill</td>
<td></td>
<td></td>
<td>mottled dark greyish brown</td>
</tr>
</tbody>
</table>

10YR 3/2 and 10YR 5/6
-25-60 coarse sand with clay dark reddish brown
2.5YR 3/4

Finds: 0-25: coal, brick, glass, burnt debris

Test Hole: B2

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-40</td>
<td>fill</td>
<td>mottled v. dark greyish brown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10YR 3/2 and 7.5YR 5/6</td>
</tr>
<tr>
<td>-40-70</td>
<td>silty clay</td>
<td>reddish brown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5YR 4/4</td>
</tr>
</tbody>
</table>

Finds: 0-40: clinkers, glass, modern pottery, coal, brick

Test Hole: B3

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-13</td>
<td>humus and debris</td>
<td>dark brown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10YR 3/3</td>
</tr>
<tr>
<td>-13-63</td>
<td>silty clay</td>
<td>mottled yellowish brown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10YR 5/4 and 5YR 3/4</td>
</tr>
</tbody>
</table>

Finds: 0-13: glass, coal

Test Hole: B4

<table>
<thead>
<tr>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-15</td>
<td>fill</td>
<td>mottled dark greyish brown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10YR 4/2 and 5YR 4/4</td>
</tr>
<tr>
<td>15-62</td>
<td>hard clayey</td>
<td>very pale brown</td>
</tr>
<tr>
<td>Test Hole: C2</td>
<td>Depth (cm)</td>
<td>Soil Type</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>0-50</td>
<td>sandy clay</td>
<td>dark greyish brown</td>
</tr>
<tr>
<td>50-70</td>
<td>clay with sand</td>
<td>dark brown</td>
</tr>
</tbody>
</table>

**Finds:** 0-40: clam shell fragment, concrete, brick, glass

<table>
<thead>
<tr>
<th>Test Hole: C3</th>
<th>Depth (cm)</th>
<th>Soil Type</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>fill</td>
<td>dark brown</td>
<td>7.5YR 3/2</td>
</tr>
<tr>
<td>-30-42</td>
<td>sandy clay</td>
<td>dark brown</td>
<td>7.5YR 3/3</td>
</tr>
<tr>
<td>-42-46</td>
<td>fill</td>
<td>dark brown</td>
<td>7.5YR 3/3</td>
</tr>
<tr>
<td>-46-73</td>
<td>sandy clay</td>
<td>dark brown</td>
<td>7.5YR 3/4</td>
</tr>
</tbody>
</table>

**Finds:**
- 0-30: styrofoam, asbestos siding, glass, concrete, coal, brick
- -46-70: rim sherd of buff colored stoneware
<table>
<thead>
<tr>
<th>Test Hole: C4</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (cm)</td>
<td>Soil Type</td>
</tr>
<tr>
<td>0-14</td>
<td>humus</td>
</tr>
<tr>
<td>-14-33</td>
<td>clayey sand</td>
</tr>
<tr>
<td>-33-81</td>
<td>pure sand</td>
</tr>
</tbody>
</table>

**Finds:** 0-33: glass, modern pottery, coal

<table>
<thead>
<tr>
<th>Test Hole: D2</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (cm)</td>
<td>Soil Type</td>
</tr>
<tr>
<td>0-65</td>
<td>fill</td>
</tr>
</tbody>
</table>

**Finds:** 0-65: flue pipe fragments, coal, concrete, white earthenware

<table>
<thead>
<tr>
<th>Test Hole: D3</th>
<th>Soil Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth (cm)</td>
<td>Soil Type</td>
</tr>
<tr>
<td>0-28</td>
<td>humus</td>
</tr>
<tr>
<td>-28-68</td>
<td>sandy</td>
</tr>
</tbody>
</table>

**Finds:** 0-40: modern glass, brick, coal, rusted metal
| Test Hole: | D4  |
| Deepth (cm) | Soil Type | Soil Color |
| 0-22 | humus | very dark greyish brown 10YR 3/2 |
| 22-43 | sandy clay | dark brown 7.5YR 4/4 |
| -43-80 | pure sand | dark brown 7.5YR 3/4 |
| **Finds:** | 0-22: green bottle fragments, coal, wood |

| Test Hole: | E3  |
| Deepth (cm) | Soil Type | Soil Color |
| 0-23 | humus | very dark greyish brown 10YR 3/2 |
| -23-70 | sandy | dark brown 7.5YR 4/4 |
| **Finds:** | 0-23: tiny fragments of coal |

| Test Hole: | E4  |
| Deepth (cm) | Soil Type | Soil Color |
| 0-23 | humus | very dark greyish brown 10YR 3/2 |
| -23-74 | sandy | dark brown 7.5YR 4/4 |
| **Finds:** | glass, tin foil, styrofoam, coal, plastic |
APPENDIX B
NEW YORK STATE FORMS
REPORT FOR ARCHAEOLOGICAL FIELD RECONNAISSANCE:
ARCHAEOLOGICAL SITE FILE/LITERATURE SEARCH REPORT
AND
REPORT OF FIELD RECONNAISSANCE
ARCHEOLOGICAL SITE FILE/LITERATURE SEARCH REPORT

Prepared by: J. Roes-Miller  Affiliation: Clover  Date: September 28, 1990
Archaeological Services, Inc.

A. Project Information

Permit Name:
Permit No.:
Permit Type:
Location of Proposed Action:
Description of Undertaking:
Estimated Size of Impact Area (acres):
Description of Impact:
Permit Areas (total acres):

B. Environmental Information

Topography: uniform slope
Geology: morainal deposits
Soils: fill
Drainage: well-drained
Vegetation: successional growth

Forest Zone: successional growth & planted trees, including apple, crab apple

Manmade Features and Alterations: water & gas mains bisect property; paved walk on southern edge, small gravel lot in southeast corner

C. Documentary Research

1. Site Files (within 1 mile radius)
   a. Office of Parks, Recreation and Historic Preservation (OPRHP)
      - State Inventory
      - State Register
      - National Register
      - National Register eligible listing
      - State/National Register proposed
   b. State Museum
2. References

a. Texts

   x Beauchamp, William
      1900 Aboriginal Occupation of New York. New York State
         Museum Bulletin No. 32. Albany, New York (p. ___).

   x Funk, Robert E.
      1976 Recent Contributions to Hudson Valley Prehistory.
         New York State Museum Memoir 22. Albany, New York
         (p. ___).

   x Parker, Arthur
         State Museum Bulletin Nos. 237, 238. Albany, New
         York (p. ___).

   x Ritchie, William, A.
      1969 The Archaeology of New York State. Natural History
         Press: Garden City, New York (p. ___).

   x Ritchie, William A. and Robert E. Funk
      1973 Aboriginal Settlement Patterns in the Northeast.
         New York State Museum and Science Service Memoir
         No. 20. Albany, New York (p. ___).

   x Other (see attached Bibliography).

b. Maps

   x Beers, F.W.
      18 County Atlas of _________.

   x Burr, D.H.

   x Library of Congress

   x Stone and Stewart, Publishers
      18 New Topographical Atlas of _________.

   x Other 1670; Revolutionary War map; 1797 (see attached bibliography)

3. Previous Surveys

   x None recorded in OPRHP files

   x Survey(s) completed for project area
4. Sensitivity Assessment/Site Prediction

Prehistoric finds have been made within one mile of the parcel. Two buildings of the Seton Bayley Hospital complex have been designated as historic landmarks of New York City. However, no artifacts of prehistoric or historic period were found on the parcel.

5. Recommendations

No further archaeological investigation is recommended.

6. Attachments

- Topographic map
- Project map/Site plan
- Environmental Assessment Form
- State Museum correspondence
- Site file information
- Previous survey information
- Other (specify)

September 28, 1990

[Signature]

Date

[Signature of preparer]
Part I: DOCUMENTARY RESEARCH ADDENDUM AND SITE IDENTIFICATION

A. Documentary Research Addendum (If needed)
   1. Local site inventory checked (specify)
   2. Informants interviewed (name, address, specialty)
   3. Other sources checked (specify)
      (See attached bibliography)

Results of Documentary Research
   no sites reported
   1 sites reported (describe briefly)
   2 buildings of Bayley Seton Hospital have been designated
   as historic landmarks of New York City.

B. Field Investigation

1. Methodology
   a. Description of structure for survey team (number, organization).
      One archaeologist and 2 field assistants.
   b. Date of survey and description of general surface and subsurface
      conditions (including season, ground visibility and relative wetness of
      soil).
      September, 1990. Ground surface was covered with
      successional vegetation. Ground surface was dry.
c. Description of general soil characteristics, including texture and depth to sterile soil.
Soil was fill underlain by sand or clay.
Sterile soil (either sand or clay) was reached at a maximum depth of 40 cm.

d. Outline of field testing strategy, specifying (when used): sampling techniques, surface inspection techniques (transect interval, method of ground examination), subsurface techniques (type, interval and average depth of excavation unit; for screening note size of mesh), remote sensing techniques.
Southern portion of site was tested with a 20 x 40 m grid; northern portion of site was tested with a 20 x 20 m grid. Test holes were dug with a shovel, and all sediments were sieved through a 6 mm mesh. Test holes were dug to a minimum depth of 60 cm.

e. Description of intensity of coverage and rationale for excluding areas from survey. Attach a map with location and type of each excavation unit; areas surface inspected. Any areas not surveyed should be clearly delineated.
No areas were excluded.
20 x 40 m grid was used for southern portion of site; 20 x 20 m grid was used for northern portion of site.

f. Description of problems encountered during survey which may have influenced results.
NA
Results of Field Investigation

X no sites identified

site(s) identified

Describe general nature and distribution of sites

- For each site, complete a site inventory form (OPRHP), providing general boundaries and information on nature of the site (e.g., lithic scatter, historic midden, rockshelter). Mark form "Confidential: For Agency Use Only".

2. Recommendations

X no additional work

additional investigation

project modification to avoid sites

3. Rationale

a. Evaluate the effect of the proposed undertaking on identified cultural resources.

- If cultural resources are present but will not be impacted, explain why.

- If cultural resources will be impacted, explain how each will be affected.
b. Describe possible precautions, protective measures or project modifications which would avoid or alleviate these impacts.

c. Identify sites and/or areas which require additional study.

d. Outline nature and extent of additional investigation(s) recommended.

END PART I

If site evaluation is not completed at this time, proceed to PART I.
REFERENCES


R-1


INTERVIEWS

William Duckery, District Conservationist with Soil Conservation Services.

Larry Reynolds, Bayley Seton Hospital.
MAPS CONSULTED

1989  Hagstrom New York City Five Borough Atlas
1988  Geology of Staten Island (Soren, 1988)
1955-66  The Narrows Quadrangle U.S.G.S. Topographic Map
1797  The County of Richmond
1775-1783  Map of Staten Island during the Revolution
1670  All of Staaten Eylandt