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Appendix 21

PHASE IA CULTURAL RESOURCE SURVEY FOR
THE COLLEGE OF STATEN ISLAND AT WILLOWBROOK
(CUNY PROJECT NO. ST104-084)
AN HISTORICAL AND ARCHAEOLOGICAL EVALUATION

REVISED REPORT

86-024R

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GENERAL OVERVIEW/PHYSICAL SETTING

This Stage IA cultural resource survey analyzes the effects of implementing the proposed College of Staten Island (CSI) Master Plan on a portion of the Willowbrook site that is now occupied by the Staten Island Developmental Center (formerly the Willowbrook State School). The proposed Master Plan for the CSI campus utilizes approximately 216 acres of the 330 acre Willowbrook site. The remainder of the Willowbrook site will not be part of the campus, and will continue to be used by the Staten Island Developmental Center (SIDC) and the Institute for Basic Research.

The Willowbrook site is bounded by Forest Hill Road to the east, by Willowbrook Road and Victory Boulevard to the north; the western boundary is located between Main Entrance Road and Richmond Avenue, and the southern boundary is located between 1st Avenue and Rockland Avenue. This 330 acre parcel is presently owned by the New York State Office of General Services, and contains over 60 buildings, most of which are occupied by the Staten Island Developmental Center (SIDC), and the Institute for Basic Research.

The College of Staten Island, part of the City University of New York, seeks to consolidate its two existing campuses at St. George and Sunnyside into one expanded campus at the Willowbrook site.

The Willowbrook site is adjacent to and partially within the Staten Island Greenbelt, which consists of 3500 acres of public and private lands which have never been intensively developed. The western and southern borders of the Willowbrook site abut Willowbrook Park which contains a small lake and several ballfields.

There are two parcels of land on the Willowbrook property which will not be impacted by the CSI Master Plan. Both of these out parcels contain standing structures. The first is located off Forest Hill Road and contains the Basic Research Institute. The second is located off Willowbrook Road and contains two private residences and a garage.

Historically, land usage in the area surrounding the project area was residential, agricultural with some light manufacturing (saw mills, a gun factory), and institutional (Seaview Hospital, The New York Farm Colony). The rural character of the area attracted institutions with a need for space and seclusion.

In 1829, the county poorhouse was built on Brielle Road (now Manor Road). On that same site, the New York Farm Colony, initially a home for the indigent aged, functioned in various capacities until its closing in 1961. In 1913, the Seaview Hospital was opened under the auspices of the N.Y. City Department of Hospitals. At one time, Seaview was the largest tuberculosis hospital in the world. However, this tuberculosis

hospital was closed in 1961.

The Willowbrook State School was built during 1940-1941 to provide care for the mentally retarded. "First proposed in 1938 and bitterly opposed by the community, Willowbrook is a sprawling lay out consisting of 34 buildings spread over close to 400 acres" (Staten Island Advance, Sept. 22, 1959). During World War II, it was known as The Halloran Hospital for wounded soldiers, then as a VA hospital (ibid).

The Farm Colony/Seaview Hospital complex located east of Forest Hill Road has recently been designated an Historic District by the New York City Landmarks Preservation Commission, and had been previously approved (1981) for listing on the State and National Registers of Historic Places, as administered by the New York State Office of Parks, Recreation and Historic Preservation, and the National Park Service of the Department of the Interior, respectively.

The Willowbrook complex has been evaluated by the State Office of Parks, Recreation and Historic Preservation (OPRHP) for State and/or National Register eligibility. The OPRHP found that the complex was not of sufficient merit to meet the criteria for listing on the State Register.

PREHISTORIC SENSITIVITY

In terms of potential prehistoric sensitivity, the Willowbrook site was evaluated from two points of view: 1) the proximity of known prehistoric sites in or near the project area; and 2) the presence of fresh water drainage courses in general, and particularly the identification of river or stream confluence situations where two or more drainages come together providing access to both the water and food supplies of both systems.

As part of the project evaluation process, this sensitivity study has surveyed published and unpublished resources in the Archives and Library of Staten Island Institute of Arts and Sciences (SIIAS). Most prehistoric archaeological work undertaken by both professional and avocational archaeologists has historically been concentrated upon the southwestern portion of Staten Island (personal communication, Baugher 9/12/85). Published site reports as well as conversation with Bruce Fullem of the NYS Office of Parks, Recreation and Historic Preservation and Sherene Baugher of the N.Y.C. Landmarks Preservation Commission have confirmed that no known prehistoric sites have been reported within the project area. This does not imply that Indians did not inhabit central Staten Island, but perhaps reflects the lack of systematic archaeological survey work undertaken on the Willowbrook site and its immediate vicinity.

Although sites have been identified in the general region of central Staten Island, none are as yet known to exist within the Willowbrook site itself. No evidence, positive or negative,

based upon actual survey work is available for study. Although no prehistoric sites have been identified for the actual parcel, it would be inappropriate to characterize the interior upland region of Staten Island as without prehistoric sensitivity. Given the lack of systematic survey work, it is pertinent to point out that at least four sites have been identified for this interior zone of Staten Island.

The closest prehistoric site, located approximately 1/4 mile from the Willowbrook complex, was reported by Alanson Skinner, an early 20th century archaeologist with the American Museum of Natural History. Generally locating the site at New Springville on Corson's Brook, he reported that shells, graves and iron projectile points were found (Skinner 1909). "Many people have said that they have found Indian implements there...and at one time a skull, said to be Indian, was found in the bed of Corson's Brook after a freshet had eaten away the banks (Skinner 1909:10). Further research on this site located information on file at SIIAS. In a letter to Dr. Bert Salwen of New York University, former Institute Archivist Gale Schneider wrote "the New Springville site in the Davis Refuge has never been opened up, at least in the last twenty years or so. The Refuge is too full of mosquitoes in the summer months to be used for guided tours" (Schneider 1967). Ms. Schneider further stated that there was "no rush" to dig since the site "is protected and safe" (Schneider 1967).

The discovery of an unpublished "Site List" (1970) in the archives of the Institute has revealed the existence of a prehistoric site known only as "Todt Hill", located approximately 1 3/4 miles east of the Willowbrook project area (Schneider 1970). The exact location of this site could not be determined and "only one or two stone artifacts" dating to an unknown time period are mentioned (Schneider 1970).

A third site, located approximately 1 3/4 miles west of the project area was identified by Skinner in 1909. This site (Chelsea STD-20-3) is locally known as "The Burying Ground" (Skinner 1909:9). Located "at the angle of Bloomfield Avenue, near its junction with Chelsea Road", the site was within an area of relatively high ground (10' above sea level) and bordered by salt marshes on all sides (Salwen 1967). Finds noted included "lodges, grooved axes and projectile points" (Salwen 1967).

A fourth prehistoric site in project area vicinity, approximately 2 to 2 1/4 miles south, and called "Richmond" was also identified by Skinner in 1909. "A large campsite is in back of Richmond in a clearing in the woods near Ketchum's Mill Pond, on Simonsen's Brook, where grooved axes and other relics have been found. It is near Richmond Creek and distant from all other sites" (Skinner 1909:16-17). Skinner further adds that no shells or pottery were found.

An additional site, known as "Bulls Head" may be within a mile of the project area. This site appears on Schneider's site list,

but no locational reference was given. The only information available is a notation: "8 stone artifacts" (Schneider 1970). The area known as "Bulls Head" appears 3/4 mile west of the project area on the Leng and Davis 1896 Map of Staten Island (see Fig. 10).

STREAM COURSES

A report on the Willowbrook site was issued by Gruen Associates in 1982 which included the following discussion of stream courses:

"Two streams and numerous natural and man-made drainage ditches occur on the site. The two major streams are Willow Brook adjacent to and intersecting the northern boundary, and Corson's Brook in the southern portion of the site. A series of drainage ditches also occurs throughout the site, the largest of which originates at Forest Hill Road on the site's eastern boundary. All water bodies lie within the watershed of the Arthur Kill, which ultimately drains into Raritan Bay.

"The headwaters of Willow Brook occur some 1.25 miles east of the site between Harold Street and Holden Boulevard in a heavily developed area of Staten Island. For most of its length upstream of Willow Brook Park (immediately west of the site), the brook traverses densely populated suburban land.

"Physical features of Willow Brook in the vicinity of the Staten Island Developmental Center vary with location. Bank width is approximately 10 feet. The width of the stream itself is approximately 6 to 8 feet, but varies spatially and temporally. With respect to elevation, the brook undergoes a decrease from approximately 225 feet at its headwaters, to 50 feet in the site vicinity...

"Corson's Brook is located in the southeastern portion of the site and flows underground just across the street from Building 20. This is the downstream segment of the brook. Although this brook is not as severely stressed as Willow Brook, certain impacts of local activities are evident. The downstream segments, for example, appears to have been artificially paved (sic) with concrete. Although this channelization has served to diminish stream bank erosion in this area, it has also detracted from the natural features of the downstream portion of the brook. Bank width along this segment is approximately 8 to 10 feet. The actual width of the streambed in this vicinity is approximately 1.0 to 1.5 feet, becoming wider at upstream reaches.

"Numerous natural drainage ditches flow into Corson's Brook along its more upstream reaches. At the time of field check, these ditches were dry and water depth in the brook

reached only several inches.

"The largest drainage ditch on the site flows from Forest Hill Road, just north of the water tower, south to the vicinity of Buildings 26 and 28.

"Numerous smaller ditches drain into this main channel. At the time the field check was conducted, the upper portion was dry and standing water was found in the middle and lower reaches of the channel. Erosion and gouging from flooding was also detected in the upper reaches. Although this channel appears to be a significant drainage feature of the site, its suitability and significance as an aquatic habitat is negligible, if not nonexistent...." (Gruen 1982:9-10).

Visual inspection of the Willowbrook complex indicates that there are three areas in which former and/or surviving stream courses may still exist relatively undisturbed (See Figure 11). The first and largest of these is located in the southern portion of the Willowbrook site (outside the project site), immediately north of the staff housing, Buildings 47, 49, and 50-55, and south of D Street. This area, which is predominantly wooded, contains the source of Corson's Creek entering the eastern boundary of the site at an elevation of 165 feet and running down to an elevation of 95 feet where it enters a culvert just south of Building 20. The two other areas are both located in the northern portion of the Willowbrook site and contain sections of a former course of Willow Brook. The second largest area is located outside the project site to the east of Buildings 26 and 28, and is presently wooded. A portion of the former course of Willow Brook, now channelized in this section of the project area, still exists here between the elevations of 140 and 115 feet, just north of the property line for the Institute for Basic Research. It formerly flowed northwest and now ends where it enters a stone lined ditch at 115 foot elevation just east of Building 26. It is probably this identical former course of Willow Brook that appears in the third and smallest area, which is on the project site and is also wooded. This old stream bed, which now appears only as a topographic feature, is situated between the elevations of 85 feet and 65 feet in the area southeast of Building 61. This area has recently been used as a dump, an activity which has probably served to seal any archaeological deposits beneath recent debris. See Figure 14 for a map of the three archaeologically sensitive areas.

THE 17TH AND 18TH CENTURIES: CARTOGRAPHIC, ARCHIVAL AND DOCUMENTARY EVIDENCE

Staten Island was called Eghquaous, Montanucke, Monockong, or Aquehonga by the bands of Unami Delaware who inhabited the territory. The island was purchased from the Indians by the Dutch Director General in 1626. By 1630, a patent of the Island was granted to Michael Pauw. Ten years later, the Directors in Holland ordered Cornelis Melyn to establish a colony. In turn,

Melyn conveyed his right and title to land on Staten Island to the Dutch West India Company, which, in turn, granted land to "several French Waldenses and to a greater number of Huguenots" (Pickman 1978).

In 1664, Nieuw Amsterdam was ceded to the English. The final purchase of Staten Island from its aboriginal inhabitants was accomplished by the English Governor Francis Lovelace on April 13, 1670. By this time, however, there were a number of Dutch, French, and English settlers on the Island who had obtained first Dutch and then English permission to settle. No surveys had been made, however, "and the boundaries of their lands, as well as their title to them, were quite indefinite" (Leng & Davis 1930:741). Governor Lovelace ordered land surveys to be undertaken and this task was completed under Governor Andros by 1677.

Since "all...grants were delimited by natural features, creeks, trees, etc... which no longer exist", it is difficult, if not impossible, today to determine the boundaries of the individual grants (Bayles 1887:47). It is known, however, that certain individuals received larger parcels than the rest. Governor Thomas Dongan, for instance, used Judge John Palmer to obtain 5100 acres for himself.

Frederick Skene's (1907) map of Staten Island, tentatively delineating Colonial Land Patents between 1668 and 1712, primarily fixes the Willowbrook Site within lands granted to Palmer in 1687 (see Figure 2). The New York Land Papers (1864) cite a survey for Palmer undertaken by Philip Wells dating to 1687 for 5100 acres of land "lying upon Staten Island on the Kill van Kull, together with the great island of Salt Meadow near the Fish Kill and opposite Long Neck" (ibid).

"The Lordshippe or mannor of Cassiltowne" as the Palmer-Dongan grant was called in 1687, was established by the aforementioned survey of 5100 acres on January 17, 1687, by Governor Dongan to Judge John Palmer, all of which Palmer conveyed to the Governor on April 16, 1687. The 17th century Manor of Castletown (Cassiltowne) was named after the Dongan family residence in County Kildare, Ireland, and was Dongan's county seat on Staten Island. Present day Manor Road (Brielle Avenue) winds through a portion of the old Manor possessions (Davis 1896).

"The Dongan Manor extended on the north shore from the cove at the foot of Bement Avenue to the Mill Pond at Jewett Avenue and inland over the Iron Hill (Todt Hill) widening so as to include the Great Swamp which then existed to a greater extent than now at New Springville" (Leng & Davis 1930:742). Much of the present day Castletown, Middletown and even part of Northfield were included in the possessions of the Governor. Manor land, however, was not held intact. Governor Dongan and his nephew and heir, Walter Dongan, made a number of sales and by the Revolutionary War period, the Dongan possessions were much reduced, although....."the Manor remained for many years as a

geographical designation" (ibid).

Although the bulk of real estate within the project impact area consisted of lands granted to Palmer, Skene's map also revealed that a small portion of the Peter Peterson grant (dated April 2; 1697), Gillis Inyard's grant (Dec. 9, 1697) and David Thomas' grant (Dec. 30, 1680), as well as land granted to Arent Prall (Jan. 10, 1694-95) were also within the project impact area. "The earliest mention of the (Prall) family on Staten Island was in 1675 when a parcel of land on Long Neck was granted to Prall by Governor Andros" (Leng & Davis 1930:940). It is believed that the Prall family were Walloons, originally living in Artois, where the name was spelled DuPrael, Du Praielle, or De Praelles (ibid).

The earliest extant published references to man-made structures within the project area date to the 18th century. However, Leng & Davis' 1896 Map of Staten Island/"Ye Olde Names and Nicknames" referred to an intriguing 17th century manifestation called "Jone's Wolf Pit", located within the boundaries of the Willowbrook site (see Figure 10). Research revealed references to wolves in the area of the Jones/Rockland/Sawmill or Manor Road, leading towards Willowbrook Road (Davis 1896). Abraham Jones owned a farm on Jones Road, his nearest neighbor lived on Willowbrook Road. The path between the two farms wound through wood where wolves lurked. A "wolf pit" was dug sometime during the 17th century and, according to Leng & Davis in 1930, "Jone's wolf pit may still be seen in these woods" (Leng & Davis 1930:350).

McMillen's composite map of Staten Island during the Revolutionary War period (1775-1783) compiled from the Taylor and Skinner Map of 1781, the Hessian Map ca. 1777 and Plan du Camp de Hessois dans Staten Island 1780-1783, and other sources, identifies a single structure labeled "D. Carson" near the northern Willowbrook Road boundary of the project impact area (See Fig. 3).

This structure eventually became the Darcey (Darcy) dwelling ca. 1874, and would have been located at the site of present day Buildings 60 and 61 (See Figures 7 and 13).

The "New and Correct Map of the County of Richmond made in the year 1797", commissioned by the New York State Legislature, places the project site within the town of Castletown. The Carson dwelling is illustrated but the owner unidentified (see Figure 4).

19TH CENTURY: THE CARTOGRAPHIC AND DOCUMENTARY EVIDENCE

The earliest map dating to the 19th century was the U.S. Coast Survey Charter of N.Y. Harbor (1836-1839), published in 1845. This document depicted the Willowbrook site as primarily wooded with several of the northerly parcels divided into agricultural

fields. It was valuable for its characterization of the general landscape of Staten Island during the early portion of the 19th century (see Fig. 5).

Likewise, Butler's 1853 Map of Staten Island clearly depicted the Willowbrook region as primarily woodland with an orchard, possibly owned by W. Wood, located at the eastern boundary of the project impact area (see Fig. 6). The Wood family is well represented in the early records of land near Rossville in 1680 (Leng & Davis 1930).

Northwest of this orchard, Butler (1853) illustrated the existence of two structures, the ownership of which he did not document. However, these buildings were located on land owned by a Mr. Wilcox in 1874 (see Beers 1874, Fig. 7). Northwest of the aforementioned structures was a short road which later came to be known as Darcey Lane (see Fig. 9). Two structures were located south of the lane. This may have been the property of Dr. C.C. Schmidt, but it is not likely.

Butler (1853) illustrated an additional structure on land owned by H. Vroom, which was located at the northern entrance of the project impact area, south of the Richmond Turnpike (Victory Blvd.). Subsequent maps and atlases, however, prove Butler was in error and that the building in question was located outside of the project parcel.

It should be noted that the Vroom (Vroome) family is first mentioned in baptismal records dating to 1787. Although various Vrooms are cited in collateral documents, an H. Vroom is not specifically mentioned.

Beers 1874 Atlas located the Willowbrook site within the town of Northfield. The present day primary access road overlaps a portion of H. Vroom's 30 acre parcel (see Fig. 7). Although numerous persons owned real estate within the project area at this time, the number of structures was sparse. For instance, the Willowbrook site encompassed lands owned by E. F. Dryer, L.W. Darcey, J. Eddy, H. Wilcox, D. Deckers, H.J. Corson, A.A. Crocheron, A. Prall, Jacob Korn and Mrs. Mesier.

Several of these family names are prominent in the history of Staten Island. For instance, the progenitor of the Decker family, Johannes de Decker, had a Dutch land grant on Staten Island that was not recognized by the English in 1670. "The first definite record on Staten Island is that of Matthew Decker, whose cattlemark was recorded in 1704. Clute (1887) stated that the Decker family was, by far, the most numerous on the island" (Leng & Davis 1930).

John Crocheron, from Flanders, was the progenitor of the Crocheron family. Inhabiting Staten Island since 1677, he died in 1696. "The Crocheron homestead at new Springville was among one of the sights of Staten Island", although it is no longer extant (Leng & Davis 1930:882) (see Plate 1).

For a history of the Prall family, see above.

Two large and three relatively smaller structures were located on land in the possession of L.W. Darcey in 1874 (Beers 1874). This 51 1/4 acre parcel located south of Willow Brook Road also included a pond formed from the Willow Brook which flows in an easterly direction. The Darcey farmstead as well as its pond, was located where Buildings 60 and 61 stand today (see Fig. 13). Photographs of the Darcey house taken in 1922 and 1930 and located in the archives of the SIIAS, offered additional historical information about the dwelling house that was not available on previous maps and atlases. A note attached to the 1930 photograph stated that originally "Darcey lived in the old stone house on Decker property back of the dye works, (Barrett, Nephews and Co.), and the story goes that he found a large sum of money down the old well which enabled him to buy the property on Willow Brook Road at the bend". This information was given by Abraham De Puy, a relative of the Vreeland family, who was a member of the Staten Island Historical Society. This photo further stated that the "stone cottage" on the right of the picture dated to 1770. The 1922 photograph of the "Darcey House/Willowbrook Road" noted that this structure was the "Dawson house during the Revolution".

East of the Darcey farmstead, H. Wilcox's 18 acre parcel contained a structure in its northwesterly corner. A dirt road provided access from Willowbrook Road. This building is no longer extant.

It should be noted at this point that several light industries existed in the vicinity of the Willowbrook site prior to 1874. A saw mill, located approximately 300' west of the southwestern project site boundary, stood on H.J. Corson's 50 acre farm at New Springville.

Abutting the northern Willowbrook site boundary and located on the opposite side of Willowbrook Road was Joseph Hall's "Hardware Manufactory" (Beers 1874). Hall established a Gun Factory at Willowbrook Road south of the Richmond Turnpike in 1835. The road was known as Gun Factory Road for many years. In 1874, Joseph Hall owned 8 acres "through which ran a considerable stream of water. Two ponds were formed by dams in this stream, one of which supplied power for Hall's Hardware Manufactory, (probably the Gun Factory), the other for Thomas Standring's Manufactory (Leng & Davis 1930:618). "Standring's Pond on the Willowbrook Road and a few graves in Astbury Churchyard at New Springville are mementos of a family that....prospered by making steel combs for carding the wool of sheep that then were pastured on Staten Island" (Leng & Davis 1930:956).

Other than minor changes in title, Beer's Atlas shows little change in the development of the project area between 1874 and 1887. However, it should be noted that the 18 acre parcel of land owned by H. Wilcox in 1874, which contained a standing

structure at that time, is in the possession of a Mr. Drone in 1887 and is depicted as being devoid of that building. Beers may have been in error, however.

Robinson's 1898 Atlas (see Fig. 9) clearly shows a large dwelling as well as two barns or stables located on Constant Dronne's land (spelled Drone in 1887). This appears to be the identical dwelling as that illustrated in Beers' 1874 Atlas, suggesting strongly that Beers 1887 Atlas is, in fact, inaccurate. Because of this inaccuracy, and because a portion of the 1887 Atlas was destroyed, it was decided to discuss the 1898 Atlas by comparing it with that of 1874 (Beers).

In 1874, D. Decker's parcel consisted of 60 acres. By 1898, it had been subdivided - approximately half held by David Decker and the other half by E. J. Fields.

H.J. Corson was dead by 1896, his son John J. Corson inheriting the land. Much of it had been subdivided by that time, however, and small 10.26 acres parcels were owned by Sarah E. Prall, Oscar A. Prall, and Cornelius Prall.

Jacob Korn's land (1874) was owned by E.C. Dissoway in 1898 and Mrs. Mesier's (1874) parcel by George Fisher. The title to A. Prall's land (1874) had been subdivided according to the 1898 Atlas and titles were held by Arthur Prall and J.L. Decker. A.A. Crocheron's 1874 property was sold to Augustus Miller (1898). The L.W. Darcy (Darcey) estate contained a dwelling, a smokehouse and a large barn or stable.

20TH CENTURY: CARTOGRAPHIC EVIDENCE

The Borough of Richmond Topographic Survey of 1911 showed that the majority of the Willowbrook site was being utilized as cultivated fields, meadows and orchards. A good portion of the area was labeled "underbrush". See Figure 11.

A building complex, consisting of a 1 1/2 story frame barn attached to a 1 story shed, a 1 story frame barn and 2 indeterminate outbuildings, as well as a 2 1/2 story frame porched dwelling, existed on the project site near the northern property boundary between the 50'-55' contours. This complex probably represented the Darcey farm.

On the project site to the east, between the 85'-90' contours was a second farm complex which consisted of a 2 1/2 story stone dwelling with 4 extensions ranging from 1 to 2 stories high, a small chicken house, a 1 story frame shed, 3 attached sheds, a large chicken house, a 2 story frame barn with attached shed, and another shed. The remainder of the property which was probably the Dronne farm, is under cultivation. There was a dirt road running south to provide access.

Another farm/light industry complex was shown along the western

boundary of the Willowbrook site outside the project area, along Corson's Brook between the 55'-60' contours. A pond had been created and the structures were clustered nearby. These buildings may represent the sawmill complex, depicted on the 1874 Beer's Atlas (see Fig. 7). A barn with attached shed, 1 story shed and an indeterminate (sawmill?) building lay just west of the project area. One double shed appeared to be just inside the project area and may well have been right on the boundary. This complex was on the property of a Charles H. Blair who owned it in 1917. It was the former Corson property shown in Robinson 1898 (see Fig. 9). There are dirt access roads shown.

The latest insurance atlas consulted was Bromley's 1917 Atlas, presented in part here as Fig. 12. Here, the property line boundaries appeared the same as those of Robinson's 1898 Atlas, although some property ownership has changed. The property owners were as follows: Mary Anderson et al (34.87a); E. Mitchell (17a); Mary Henderson et al (17a); Elizabeth Dronne (116.9a); Dennis Darcy (47.32a); Charles H. Blair (116.9a) (30.78a); A.S. Lyman (3.87a); Arthur Prall (8.92a); Sarah Jane Decker (7.96a); Henry Meyer (48.20a); William Fischer (17.76a); D.F. Simonsen, Mary A. Darr. The City of New York owned the former Augustus Dryer estate along the western boundary.

Only two properties had standing structures. Near the northern boundary on Dennis Darcy's property was a frame dwelling and frame stable. To the east, on the property of Elizabeth Dronne, were two frame dwellings and two stables. The out-parcel on this property also contained a frame structure. The former pond and possible sawmill complex along the western boundary on Corson's Brook depicted on the 1911 topographic map were gone by 1917.

WILLOWBROOK STATE SCHOOL

In 1837 a commission was appointed by the New York Common Council to look into the conditions of various city and state institutions including the New York City Almshouse and Bellevue Hospital. A shocked panel found that in the Almshouse, the adult males were in a "filthy and ragged condition"; there was a lack of food and care and "evidence of neglect of the public interest and want of a proper regard to the subjects of misfortune" (Carlisle 1893:37). Further, the report went on, as to the "colored subjects", who were in their own building, the commissioners had never witnessed such misery in any public receptacle for even the most abandoned dregs of human society (ibid). As to the hospital, there were 265 patients in the wards and "over one half were insane". The conditions of Bellevue Hospital were also "disgusting"; "the building from cellar to garret abounded in filth" (ibid). Wards had not been whitewashed for ten years. The sick were without adequate clothing or bedding. Typhus was rampant; the sick lay in filthy blankets without sheets or pillow cases. Those chronically ill hadn't a bedding change in three months, many had no clothing at all and there was nothing to dress wounds or apply poultices (ibid, 38-

Early in 1972, an account of the conditions at Willowbrook State School found that care for severely retarded children and adults was almost non-existent. "The overcrowding", the observers wrote, "was desperate - beds jammed one next to the other in wards and along the hallways - and the filth ubiquitous so that virulent intestinal diseases like shigella, spread through the population. Staffing was minimal, one attendant to fifty or sixty inmates, and injuries common, with residents abusing themselves or assaulting others" (Rothman 1984:15). The report was not unique or new. In 1963, 6000 residents occupied space set for 4200. When in 1964 a legislative committee, headed by State Senator William Conklin, toured Willowbrook, they discovered the "vile stench" in its buildings and the "crude way of life led by its residents". In 1965, newspapers reported the deaths of a forty-two year old inmate and a ten year old boy, both scalded to death in a shower - the result of inadequate plumbing, as well as supervision. A twelve year old child strangled himself on a restraining device. State Senator Robert Kennedy visited the institution unannounced and subsequently told the press that Willowbrook's wards were "less comfortable and cheerful than the cages in which we put animals in a zoo...We cannot tolerate a new Snakepit" (ibid:23).

Willowbrook was a direct result of the constant search in New York for decent hospital and special service care. Its history is directly in line with that of Bellevue Hospital and the abundant need of care for the sick, insane and mentally defective was apparent even in the earliest days of New York's history. As early as December 20, 1658, a hospital was created with surgeon Jacob Hendrickzen Varrevanger in charge. It was known in 1680 as the "old Hospital" or "Fire House". Through the 18th century, a tradition of care for the sick and poor was created and maintained. In 1771, New York Hospital was built at present day Worth Street and in 1811, a new almshouse was built at Kips Bay, now 28th Street and the East River. The impressive three story structure was 325 feet by 55 feet, with ten wings north and south (for "colored" patients), each 100 feet by 55 feet. Also constructed at about the same time were two hospitals at right angles to the almshouse - one on 28th Street and the other at 29th Street. The entire unit was enclosed by a stone wall known as the Bellevue Establishment. Thirty new units were also built on 23rd Street and by 1825, a major hospital complex was in existence (Carlisle 1893:1-30).

Up to 1843, most of the state's insane were kept in poor houses or jails where they often lived subject to extreme forms of brutality. New York City had an institution for the mentally ill in 1834 - an appendage of the poorhouse, but in 1843, the first state-built hospital at Utica provided some accomodation for several hundred poor mental patients. Principally as a result of the work of Dr. Sylvester Williard, Dorothea Dix and others, who had uncovered the horrors of treatment given the helpless, the Legislature in 1865 established the Williard State Asylum for the

Chronic Insane in Ovid, Seneca County, N.Y. The asylum was opened in 1869. There followed others - the Hudson River State Asylum at Poughkeepsie in 1867; the Buffalo State Asylum for the Insane opened in 1880, and the Binghamton Asylum for the Chronic Insane in 1881. Subsequently, construction of a number of other county asylums and state hospitals followed with the Manhattan State Hospital being established in 1896 (Schneider 1941:II, 89-100).

In 1878, overcrowded conditions at the Syracuse State Asylum for Idiots at Syracuse, N.Y., which had opened in 1851, led to investigations which revealed rampant callousness, indifference and even brutality (Schneider & Deutsch 1941:II, 8 & 99). In 1894, the first custodial asylum in the United States for "unteachable mental defectives" was opened and was soon known as the Rome State School. earlier, with the support of the State Board of Charities, branches of the Syracuse institutions were started at Newark, Wayne County (1878) as well as an experimental branch of the Syracuse State Asylum for Idiots (1878). In almost all instances, what were laudatory attempts to provide adequate, humane care for the insane and the mentally ill, soon fell victim to charges of overcrowding and misery. Willowbrook is part of that scenario.

Staten Island, too, had its caring institutions - one of the earliest if not most well known was Sailor's Snug Harbor, a gift of Captain Robert Richard Randall as a "Home for Aged Decrepit and Wornout Sailors". The "Home" is along the Kills on 140 acres of land, salt meadow and marsh. The first inmates arrived in August 1833 (Smith 1970:211-12). Earlier, in 1799, the state had established on a thirty acre plot a lazaretto or pesthouse known as the Quarantine, for the care of smallpox and yellow fever patients or those with other contagious diseases entering the harbor. The hospital on Hyatt Street and Victory Blvd. facing the waterfront, though surrounded by a stone wall, incurred increasing anger from neighborhood residents as staff and patients wnet beyond the walls and moved freely in Tompkinsville, carrying "mortal infection to hundreds of Islanders for fifty-eight years". Despite frequent protests and petitions, little, if anything, was done. Then on a warm September night in 1858, a group of citizens set fire to the buildings which were instantly destroyed. Though labeled "barbarians, savages, incarnate fiends", the Islanders had made their point and The Quarantine was never rebuilt (Smith 1970:185-86). This public outcry foreshadowed later concerns with the Willowbrook complex. Staten Island's own almshouse or "poor farm" was first begun in 1803 with a ten acre purchase on Richmond Road near Egbertville. In 1829, a new facility was acquired on ninety-one acres on Brielle Avenue; a cholera hospital was instituted in 1832 and housing for the insane was provided in 1837, within the Brielle Avenue site (Report of the Committee 1913:427-35). Initially, many of the care facilities on Staten Island mirrored similar institutions in New York City proper.

With the incorporation of the Boroughs, including Richmond, into

the complex of Greater New York in 1898, a new department of Public Charities decided to send all able-bodied indigents to the Richmond County Poor Farm, renamed the New York City Farm Colony, while the Blackwell's Island almshouse would house the infirm. A number of new buildings were added to those on the Richmond County Poor Farm dating back to 1829 in an attempt to provide proper institutional care. In 1915, the Farm Colony was merged with Seaview Hospital and became known as Seaview Farms. In the 1930's, a series of other dormitory buildings were built. Seaview Hospital was started in 1905, and dedicated in 1913, basically in an attempt to provide a fresh and clean environment for those suffering from tuberculosis. It adjoined the Farm Colony on the east side of Brielle Avenue (Annual Report, Public Charities, 1905:18-19).

It was partly against this background of providing health and welfare care that the Willowbrook State School facility took shape. The other more immediate source in tracing the history was the New Deal of the 1930's and its basic utilitarian aspirations of providing the greatest good for the greatest number. With the election of Franklin Roosevelt as President, Herbert H. Lehman as Governor and Fiorello La Guardia as Mayor, such goals were deemed quite attainable. Large sums of money were spent to support civic improvements and a portion of this was given to new hospital construction. Willowbrook was conceived and finally became a reality in the early and late 1930's (Levins 1963:167-172; Rothman 1984:22-63). Although funded entirely by the New York State Legislature, the intent was one of the best examples of the spirit of the New Deal. It was here that the dreams of a brighter future were to be seen and touched. In 1939, the Commission of the Department of Hospitals, Dr. Sigismund S. Goldwater and the Commission of the Department of Health, Dr. John L. Rice, could boast of the excellent care provided the citizens of the city. William Hodson, Commissioner of the Department of Welfare, could assure all that "the City is actually a compassionate friend who, through its Department of Welfare opens hospitable doors to all in need" - providing for 30,000 homeless or destitute children, 2,826,780 lodgings for the homeless adult and 9,190,520 meals in lodging houses for 36,572 different persons per year. Furthermore, death from tuberculosis was down to 51 out of every 100,000 inhabitants, the lowest then recorded in New York history. The same was true for many other diseases, with a promise to drop even more in the future (Rankin 1945:55-68). The New York Legislature authorized construction at Willowbrook as a school for the retarded in 1938 and the facilities were still under construction in 1941 when this country entered the war (Rothman 1984:23).

HALLORAN GENERAL HOSPITAL (1941-1951)

Soon after Pearl Harbor, the government, in need of hospital beds, took over the Willowbrook site (still under construction) as Halloran General Hospital - though the city insisted on using

its facilities even if only partially. Mayor La Guardia stated in his city budget proposal of 1942 that he saw the possible need for emergency beds in case of enemy attacks and announced that the Government "has been good enough" to loan the use of the Willowbrook State Hospital for such use. He also thought chronic cases at Welfare Hospital, located on Welfare Island in the East River, might be transferred to the institution if the hospital "was not completed by the state because of national priorities". Furthermore, patients from various city institutions would be sent to the new Riverside Tuberculosis Hospital, located on North Brother Island in the East River (New York Times, April 2, 1942). Governor Lehman had earlier given approval to this plan (New York Times, March 25, 1942).

Even as the city continued to make use of the facilities, it was at Halloran Hospital that Willowbrook entered its most non-controversial and noted period as thousands of wounded and convalescing soldiers were brought in to be treated, entertained and finally discharged. These were surely the glory days for Willowbrook, as leading figures from the arts and entertainment world regularly converged at Halloran to provide necessary recreation and inspiration to the wounded. For example, the New York Philharmonic Symphony Orchestra under conductor Artur Rodzinski, gave a concert to some 700 or 800 men, partly as a birthday salute to the conductor, but mostly as a tribute to the soldiers. Beginning with "Happy Birthday to You", the program proceeded to Beethoven's Fifth Symphony with "Stars and Stripes Forever" as an encore. Leonard Bernstein was also present as assistant conductor and after the concert men crowded around for autographs. The orchestra members had been driven out to Willowbrook by a corps of young Red Cross women using Red Cross station wagons and ambulances. Though this was the first symphony concert at the hospital, many other forms of musical entertainment had been given there (New York Times, Jan. 9, 1944).

The war years were busy years. The wounded were treated to Broadway shows and the violin playing of Mischa Elman (N.Y. Times Dec. 26, 1944). Besides entertainment, reading and writing rooms were made available, repatriated wounded prisoners of war decorated (N.Y. Times Mar. 6, 1944) and War Bond sales drives conducted (N.Y. Times June 8, 1944). The Army Radio Corps provided a central radio system and plans were announced to provide a PGA golf course (N.Y. Times Aug. 25, 29, 1944). Comic books were collected, tickets to Broadway shows provided and a wide variety of training and occupational therapy given (N.Y. Times Dec. 8, 1944). Swimming and sculpture instruction and arts and crafts exhibits added to the variety of the day to day life at the hospital (N.Y. Times Feb. 2, 7, 1946). Flowers were sent in from Palestine for the wounded G.I.'s. Some of the G.I.'s paintings were exhibited at the Washington Square Art Show (N.Y. Times May 25, 1946). By the end of 1946, President Truman approved, after considerable negotiations, (Governor Thomas Dewey wanted the government to buy the hospital), temporary transfer to the Veterans Administration from the Department of the Army (N.Y.

Times, June 28, Dec. 11, 1946).

During the war years, after the wounded were treated, many were sent home or to institutions closer to their homes. This transfer of patients accelerated from 1947 to 1951, and as the soldiers or ex-soldiers slowly left the wards, others, mostly the retarded, were moved in. By April 1951, Willowbrook finally became a state institution for the mentally ill as the institution entered its most difficult and controversial years.

WILLOWBROOK STATE SCHOOL 1951-1985

From the start of the post-war years this facility for the retarded was beset with problems, a good deal of it caused by overcrowding and lack of adequate funding, opposition on the part of nearby residents (the Quarantine days again) and improper administration. In the first few years after 1951, 3600 residents ranging in age from infancy to the 70's were living in a facility having an official capacity of 2950. By 1963, there were 6000 patients occupying space set aside for 4275. This, even after an \$8.5 million investment in one of the largest construction and expansion programs on Staten Island in the past decade which included the building of five large infirmaries and a huge new kitchen and cafeteria (Staten Island Advance Sept. 22, 1959; Rothman 1984:23). In 1962, plans were announced for the construction of a research institute for the mentally retarded on a site adjoining Willowbrook (Staten Island Advance Mar. 15, 1962). However, what materialized was a Short-Term Adolescent Resident Training Center (STARTC) meant initially to house twenty girls. The structure off of Forest Hill Road was to be opened Aug. 1, 1965 (Staten Island Advance June 17, 1965).

Such construction did little to solve the growing problems at the State School which was run by the N.Y. State Department of Mental Hygiene. Willowbrook in the late 1950's and early 1960's was a spreading complex of some thirty-four buildings on almost 400 acres serving 6000 patients with a staff of 2000. See Table 2 for the dates of many of these structures. The number of residents at the institution was eight times the combined beds in the borough's three voluntary hospitals. There were more children there than in all of the borough's orphanages. Ten children a week under five years of age were brought in and there were among eighty to 100 new patients a month - all mentally retarded. In 1959, Dr. Harold H. Berman, the then director at Willowbrook, estimated that there were 500,000 mentally retarded persons in New York State with only 26,000 institutionalized. He hoped new psychiatric therapy including hormonal treatment would lead to a breakthrough as in the case of polio and tuberculosis and which would, in the end, empty Willowbrook. Willowbrook was emptied - not by hormones, but by scandal (Staten Island Advance Sept. 22, 1959; March 23, 1964).

In 1965 after great public fanfare the Department of Mental Hygiene, with the approval and support of Governor Nelson

Rockefeller, unveiled a five-year plan providing a program of "Comprehensive Mental Health" for the retarded. This program envisioned new construction of psychiatric hospitals and expansion of older ones including Willowbrook which was now, as one official said, "on the move" (Rothman 1984:30). For an evaluation team of the American Association on Mental Deficiency, the institution was, in 1967, moving "in the right direction". But what of the understaffing, insufficient clothing, patients who were frequently naked or in rags, or toilets that didn't flush, the incredible odors and the flies? The report ended with the statement that "the standard of care is now unacceptable" (Rothman 1984:31). The State acted - it reduced the Dept. of Health's budget in 1971 by \$35 million. Willowbrook lost 633 (22%) of its staff. The New York Times protested this "Betraying the Helpless" and a drive was begun by a handful of people to reform Willowbrook. It led to a long fight in the courts and to bitter and angry charges and countercharges by officials and concerned citizens. Through the following years there was a constant fight waged against the inadequacies at Willowbrook. There were many New York Times, Village Voice or Staten Island Advance editorials and articles. Radio and T.V. stories and interviews were highlighted by protest rallies at the gates of Willowbrook - placards read "Willowbrook is a Snakepit"; "Lets Clear it Up" and "Remember Dauchau, Remember Belsen, Remember Willowbrook". To the reformer and the caring, the New Dealer and the Progressive, Willowbrook became a symbol of bureaucracy at its worst, uncaring, insensitive, dashing the hopes of the future on rocks of red tape.

Those seeking relief for the patients in the "Snake Pit" turned to the courts. The N.Y. State Association for Retarded Children (NYARC), a parent organization seeking to safeguard the rights of retarded children formed in 1948, grew by the 1970s into the State's largest such organization. With the help of the Legal Aid Society, a suit was filed against Governor Rockefeller and the State of New York (ARC vs. Rockefeller). The first step was taken in March 17, 1972 as papers were filed in Federal Court, 7th Eastern District, New York. What followed over ten years of testimony, hearings, orders, reports and a decision in April 1982 by the court to appoint a "special master to protect the class members from harm" (Rothman 1984:348), was that the presiding judge ordered a reduction of Willowbrook's population by 1985 to no more than 250 patients. An offer by the State followed on March 31, 1983 and the courts allowed, in effect, the State to decide the future of Willowbrook and to give it time to find other solutions within a "wider constellation of interests" (Rothman 1984:351-352).

Willowbrook is slowly being emptied and will close by 1987. Most of the site and buildings are in the process of being turned over to the City University of New York to be used as a new college facility. The "Snake Pit" that was Willowbrook is gone and a new chapter of the acreage in Staten Island waits to be written.

HISTORICAL EVALUATION

The history of the Willowbrook State School and Hospital is of fairly recent origin dating officially from 1938. It is a history filled with bitter controversy and except for the years 1941-1951, the decade when the institution became Halloran General Hospital (used primarily as a wounded veterans treatment center), one which does not seem to have been a positive one. Its role during World War II was an industrious one, but one duplicated by many similar hospitals throughout the nation, many of course, still in use. It would seem that Willowbrook has little by way of cultural distinction.

In contrast, the New York City Farm Colony/Seaview Hospital Historic District..."reflects the turn-of-the-century commitment made by the City of New York to improve the quality of both the social and health care services received by members of its dependent community" (Zavin 1985:1). It "ranks among New York City's finest examples of early 20th Century architecture with social purpose" (ibid).

The Willowbrook State School does not appear to be a fine example of architecture with a social purpose. An architectural evaluation of the standing structures at the Willowbrook State School has been undertaken by our consulting architectural historian. See Addendum A following this report text.

FINDINGS

The purpose of this Stage IA cultural resource evaluation was to provide an archaeological and historical assessment regarding the presence/absence of potential resources, both prehistoric and historic, in the impact area for the College of Staten Island at Willowbrook (formerly the Willowbrook State School; Staten Island Developmental Center), project ST104-084.

Documentary, cartographic and archival research was undertaken, and a visual inspection of the property was conducted.

Historic land use was proved to have been primarily agricultural, the acreage being cultivated fields through time. A few historic resources have been identified, primarily near the northern boundary of the project area. The McMillen Revolutionary War Map (1775-1783) depicts the earliest known dwelling, identified as that of a D. Carson (see Fig. 3). It is located on the parcel of land which becomes that of Darcey by 1874 (see Fig. 7). This structure appears in approximately the same location on Butler's 1853 Map (see Fig. 6). Also known to be in the project area is "Jones Wolf Pit", which probably dates to the 17th Century. The exact locations of this pit and dwelling cannot be accurately determined due to scale distortion when depicting structures/features on these particular historic maps. However, the dwelling appears to be in the same location as present day Buildings 59-62, with 60 and 61 having the deepest basements of

any buildings in the project area (11.8 and 13 feet respectively). Therefore, the integrity of any 18th Century building remains has been lost and we see no need for further archaeological testing. There have been no other indications of potential historic resources encountered, therefore no further specific recommendations are being presented.

While the Willowbrook site does not appear to contain intact subsurface historic resources, there does exist a potential for surviving prehistoric resources in three separate locations of the site. These three areas are located where former and/or surviving stream courses may still exist relatively undisturbed. See Page 6 of this report for a description of these areas.

RECOMMENDATIONS

As an initial, minimally appropriate level of investigation, we recommend that the involved agencies undertake presence/absence testing of any of the three areas containing potential prehistoric archaeological materials that will be impacted by the planned development. This testing will be conducted to define the existence, precise location and stratigraphic integrity of these potential prehistoric occupations as a basis for evaluating their research significance for local and regional history.

More precise information regarding the definition of the impact area recently made available to us (Ken Klindtworth, Jan. 16, 1986, Pers. Comm.), indicates that only one of the three areas of potentially surviving prehistoric resources is within the impact zone. This, the smallest of the three sensitive areas, is located southeast of Building 61 and contains a portion of a former course of Willow Brook.

We recommend the use of standard physical subsurface testing procedures to be developed in accordance with the guidelines presently in use by the Landmarks Preservation Commission and the N.Y.S. Office of Parks, Recreation and Historic Preservation.

ADDENDUM A

ARCHITECTURAL/HISTORICAL SENSITIVITY EVALUATION AND LITERATURE SEARCH

The construction of the Staten Island Developmental Center (SIDC) was authorized by the New York State Legislature as a school for the retarded in 1938 (Rothman 1984:23). The institution was deemed necessary by the State Department of Mental Hygiene to relieve overcrowding at other state institutions such as Letchworth and Wassaic (Rothman 1984:24). Originally termed the New York State School for Mental Defectives, the institution was designed, and the construction supervised, by the State Commissioner of Architecture, William E. Haugaard, for the New York State Department of Public Works 1. This institution was funded and built entirely by the State of New York.

The original design for the institution consists of a series of pavilions arranged in quadrangles within a square. This layout was typical of larger health institutions of the time, a design concept first conceived by Sir Christopher Wren for Greenwich Hospital, England, circa 1715 (Fletcher 1967:898) and distilled through time to represent the pavilion hospital of the 19th century and the multi-unit institution of the 20th century (Burdett 1925: various pages).

ORIGINAL DESIGN

The original scheme for Willowbrook (based on the construction drawing previously mentioned) consists of a square divided into nine rectangles of different sizes depending on the function of the quadrangle. Outside the square, the power plant and maintenance buildings are located to the north (Building #60 and #61), and the administration building (Building #1) is located immediately to the west of the hospital (Building #2).

The location of the administration building and the hospital building is typical of mental institutions of this era. The receiving of patients was separated from the patients' living quarters so that "as far as possible, disagreeable sights sometimes attendant upon this act will be eliminated or at least not viewed by other patients" (Modern Hospital, March 1938:58). The administrative offices should be "near the main entrance, convenient to the public and away from diagnostic and treatment areas" (Architectural Record, Nov. 1953:192).

To the north and south of the star-shaped hospital building, the architect envisioned twelve smaller scale buildings, six on each side, situated around a rectangular courtyard. These buildings were to be identical to the administration building. For some reason, these were not built. In their place Buildings #32 and #33 were constructed as three to four story buildings with flat, unrelieved brick facades, contrasting with the two story brick

dormitory buildings with pedimented entrances flanked by recessed wings and relieved by a moulded brick water table.

Immediately to the east of the main hospital building, but on the same axis, is the school (Building #3) with its more recent flanking additions. On either side of the school are the largest quadrangles of the campus-like grounds, consisting of a large kitchen/dining facility with seven wings surrounded by five dormitories. These quads were originally designed with six dormitories, one on the east and west of the dining hall and two on the north and south. The single east dormitory was never built. In the northern (womens') quad, Building 310, an infirmary, was built in its place. Nothing was built in place of the southern quad, east dormitory (mens'). The kitchen/dining facilities were originally designed with eight porticoed extensions; only seven were built. The east wing was eliminated in both buildings.

The infirmaries (Buildings #11, 13, 15, 25, 27 and 29) were built as planned, however, designed as a double row of six buildings in each quad, only three were built. The power plant and laundry (Buildings #60 and #61) were built as planned. The staff housing was planned and built as part of the Willowbrook School. The buildings were shown on a plot plan for electrical connections labeled "State of New York Department of Public Service, Division of Architecture, November 22, 1940".

The Art Moderne influence is most prevalent in Building #2, the six to seven story high-rise hospital, where it can be seen in the limestone door surrounds at the entrances to the hospital wings (see Plate 1). The door surrounds consist of a triple trabeated planar stone surround ornamented with a single circular disk at the midpoint above each of the openings. The stepping-up of levels in the buildings is also an Art Moderne feature. The wings start at five stories, then step-up one story, and finally step-up to seven stories in the cupola surmounted tower. This step-up element is also evident in the smokestack of the power plant.

The plan of Building #2, the star-shaped building within the complex, had been previously used for both prisons and hospitals in the 19th century. The most famous example of this type of building was Philadelphia's Eastern State Penitentiary (1823-29), designed by John Haviland. The design concept behind the plan was that a central rotunda with radiating spokes would provide improved light, heat and ventilation, and cell space (National Trust for Historic Preservation, America's Forgotten Architecture, 1976:128). In 1898, a star-shaped building was constructed for Sailor's Snug Harbor Sanatorium on Staten Island (Shepard 1979:47).

This combination of stylistic influences, Colonial revival and Art Moderne, is typical of the 1930s and 1940s and is used in many public buildings in the northeast, i.e. post offices (United States Postal Service Significance Survey 1982).

ORIGINAL CIRCULATION

The original circulation is rather rigid in plan; roads are set at 90 degree angles to each other with the main axis road dividing the site into quadrangles. The only deviation occurs at the dining facilities where paths radiate from the structures at 45 degree angles to each of the dormitories. Presently, a winding road which appears to be original leads to the staff housing. Located immediately outside the confines of the institutions, the only freely and naturally designed road in the complex. The semi-circular paths located between the wings of the hospital (Building 32) do not appear on the original "Plot and Grading Plan".

REGIONAL PARALLELS

Several parallels for the star-shaped building in the Willowbrook Complex (Building 32) exist within the tri-state region.

As detailed below, Willowbrook's architect, William E. Haugaard, was New York State architect from 1928-1944, responsible for the design of numerous state office building facilities, including hospitals, prisons and schools. Thus, it is not surprising that similar institutional complexes exist in other regions in general, and in New York State in particular, and that specific design elements such as the star-shaped building have been manifested in identical or similar forms. No less than seven examples of this star-shaped design were identified at four other facilities in New York State. Therefore, as pointed out by staff of the Division of Buildings and Construction, Design and Construction Group of the N.Y. State Office of General Services in Albany, although Building #2 is unique in form, relative to other buildings at the Willowbrook site, it is not prototypical in design when evaluated in the context of other contemporary state built institutional complexes 2.

Although additional research may bring to light other examples, this initial survey has documented the existence of this star-shaped building pattern in eight buildings at five other institutions, four at New York locations and one in Connecticut. In addition to Willowbrook, similar star-shaped structures are present at Central Islip State Hospital (Building No.'s 134 and 150); Rockland County State Hospital (Building No.'s 58, 59 and 60); Kings Park State Hospital (North-West building); and at Pilgrim State Hospital (L.I. Correctional Institute, Building No. 25) (New York State Office of General Services, Albany).

These seven examples from New York State health facilities are augmented in number by an 8th example, at the contemporary Fairfield State Hospital in Newton, Connecticut.

3

The 1929-1934 Fairfield State Hospital is an example of an almost contemporary mental institution also utilizing typical institutional design of the era. Although not designed in a

quadrangle, the individual buildings are very similar to those at Willowbrook. At Fairfield, the receiving and general hospital functions are separated into two star-shaped buildings, each with a central core similar to Building 32 at Willowbrook. The administration building is identical in plan to Willowbrook's, the nurses' and employees' dormitories are identical to the patients' dorms at Willowbrook. The Fairfield dining hall is very similar to the Willowbrook infirmary buildings. The maintenance and power plants are also separated to the north from the main institution and staff houses are on a winding road to the south of the main complex (Modern Hospital, May, 1934:45-51).

Stylistically, both hospitals employ influences of the Colonial revival, such as pedimented entrances with set-back flanking wings, dentillated cornices and pilastered door surrounds. Fairfield's setting in New England is probably responsible for the stricter classicizing approach to design and detailing whereas at Willowbrook, the Colonial Revival elements are tempered with Art Moderne influence such as is seen in more unrelieved wall surfaces and stylized vestigial classicizing ornament.

ALTERATIONS

The original design of the Willowbrook school seems to have been doomed from the start. In 1942, shortly after the bombing of Pearl Harbor, the United States government was looking for hospital facilities for wounded soldiers and decided the yet incomplete Willowbrook would be an ideal site for an Army hospital. Re-named Halloran General Hospital, the institution underwent many changes before it was even finished.

The first aim of the Army was to convert Willowbrook into a straight Army hospital of 1500 beds. The architects for the conversion, the U.S. Army Corps of Engineers and William Gehron, first had to paint, furnish and grade the site as well as convert the existing facilities in hospital buildings 4. New buildings were constructed as required, including a surgery wing on Building #2 (the western annex) and covered walks to connect all possible facilities under one roof. But no sooner was the original conversion work near completion than a new decision changed Halloran to a receiving hospital with a redouble capacity of 3000 beds. extensive additions were made, including six new clinical buildings, 32 new barracks for enlisted men, numerous barracks for WAC's, a chapel, post exchange (PX), and various recreational facilities. A large addition was made to Building #15 which was used as the main reception building for the patients (Architectural Record Jan. 1944:71-78).

The Army and the Veterans Administration used the hospital until 1947 when the State of New York was able to recapture it after lengthy negotiations. From 1947 to 1951, as the veterans slowly left the wards, residents moved in. In April 1951, Willowbrook finally became a state institution serving the retarded (Rothman

1984:23).

Few vestiges of Army occupation remain at Willowbrook. These include Building #37, the gymnasium, the surgery wing on Building 32, and remnants of covered walkways throughout the site. Most of the Army buildings appear to have been temporary wood frame, clapboard-exterior structures, or cement block buildings with wood details (Architectural Record Ja. 1944:71-78). Although Building #37 was extant during Greenhouse Consultants visits to the site during 1985, it has since been demolished.

The two circle of flat-roofed pre-fabricated metal clad buildings radiating behind Building 319 appear to be later, post-Army structures (Buildings #66-76). The additional school buildings flanking Building #3 are also post-Army era (Staten Island Advance, Mar. 23, 1964:13 and June 17, 1965:21), as is the Richmond Complex (Buildings #12, 14, 16, 17, 26, 28, 40 and 41)--now known as the Karl D. Warner Complex, built 1959-1965 (ibid).

THE ARCHITECT

William E. Haugaard (1889-1948) was responsible for the design and construction of the Willowbrook School. Serving as New York State Architect from 1928 to 1944, Haugaard designed State office buildings, prisons, hospitals, schools and other public structures. His most notable works include Pilgrim State Hospital, Brentwood, Long Island; Attica State Prison; Green Haven State Prison, Poughkeepsie; New York State Training School for Boys, Warwick; Wassaic State School for Mental Defectives, Wassaic; and the State Institute of Applied Architecture at Farmingdale, Long Island. The New York State Theodore Roosevelt Memorial Building was erected under his supervision as part of the American Museum of Natural History.

Born in Brooklyn, Haugaard graduated in 1908 from Pratt Institute. He then studied at Massachusetts Institute of Technology, where he won the Rotch Scholarship, which enable him to study at the ecôle des Beaux Arts in Paris.

In 1913 he began four years work at the Panama Canal construction area, where he designed hydro-electric plants, hospitals, office buildings and even entire villages for Isthmian Canal Commission employees.

During World War I, Haugaard served as Constructing Quartermaster at Fort McHenry General Hospital, Baltimore. Prior to his appointment as State Architect and as a member of the firm of Haugaard and Burnham, he designed many new York residences and other buildings (New York Times, Sept. 18, 1948:17).

As N.Y.S. Architect from 1928-1944, William E. Haugaard was responsible for all State construction projects during this period. His design for the Willowbrook State School was a standard design used throughout the state on similar projects

such as Pilgrim State Hospital, Central Islip State Hospital, Rockland County State Hospital, and at Kings Park State Hospital.

In 1947, Haugaard served as Chief of Planning for the N.Y.C. Housing Authority. He also designed several buildings for the Long Island Park Commission, such as the Field House on Grand Central Parkway, Alley Pond Park (Architectural Record, May 1935:352-54).

SIGNIFICANCE

The Willowbrook State School is typical of 1920s to 1940s era mental hospital design. Individual buildings of the complex housed separate living functions, 5 such as the dining hall and the dormitories.

The buildings themselves are good examples of simple brick structures influenced by the historical revivalism which characterized American architecture in this era. The symmetry and use of classicizing details are suggestive of 18th century American Georgian architecture. Influence of the Art Moderne are evident generally in the main hospital building (#2) and in the power plant (Building #60).

Alterations to the institutions date back to even before its completion, when the Army took over the site for a receiving hospital. Due to the increasing demand for bed space, the school underwent further changes with additional buildings, additions onto existing buildings and internal changes as needs demanded. Therefore, Willowbrook has a long history (since 1942) of changes based on need.

Willowbrook's greatest significance lies perhaps in its notoriety as a modern day Bedlam. The years of litigation following public outrage at the treatment of patients resulted in what will probably be considered the largest de-institutionalization of mental patients ever to take place. Through a letter dated March 12, 1986, Norman Becker of City University was informed by Joseph Ketas of the Department of City Planning that the Landmarks Preservation Commission staff believes Willowbrook Complex is a potential historical/architectural resource. The New York State Office of Parks, Recreation and Historic Preservation determined that the Willowbrook Site did not meet the eligibility criteria for the State Register.

NOTES

1. The title "New York State School for Mental Defectives" appears on an original construction drawing labeled "Plot and Grading Plan" in the possession of Edward Durell Stone Associates, P.C.
2. The star-shaped institutional building plan was not developed in New York, although it was used there as early as 1898 for the Sailor's Snug Harbor Sanatorium (Shepard 1979:47). Perhaps the most famous American example of this type of building was Philadelphia's Eastern State Penitentiary (1823-29), designed by John Haviland. "Its innovative design provided for a central rotunda with seven cell blocks radiating out like spokes. With improved light, heat, ventilation and cell space, including solitary confinement facilities, the prison was ahead of its time" (NIHP, America's Forgotten Architecture, N.Y., Pantheon Books 1976:128).
3. The Fairfield State Hospital was chosen as an example after an extensive literature search of architectural books and periodicals revealed no information on contemporary N.Y. State hospitals or mental institutions.
4. This information is taken from the article "Quickly Converted for Casualties", Architectural Record, Jan. 1944, pp. 71-72. The actual paragraph in the magazine article reads: "At first the aim of the Army was to convert this state institution into a straight Army hospital of 1500 beds. The U.S. engineers and William Gehron, their architect for conversion, had a manifold task before them. First there were sundry finishing jobs to be done that could still be performed under the state contracts, and involved chiefly painting, furnishing and grading. Then there were thousands of changes to be made in the existing buildings. And finally, new buildings were required, such as modern surgery wing, and covered walks to connect all possible facilities under roof".
5. For more cases of contemporary hospitals, see The Modern Hospital, a monthly periodical reviewing various advances in hospital technology, including planning and design.
6. For more information on the conditions at Willowbrook and the resulting litigation, see Geraldo Rivera, Willowbrook: a report on how it is and why it doesn't have to be that way (N.Y. Vintage Books, 1972); and David J. Rothman, The Willowbrook Wars (N.Y. Harper & Row, 1984).

ARTHUR KILL QUADRANGLE
NEW YORK-NEW JERSEY
7.5 MINUTE SERIES (TOPOGRAPHIC)

8188 II NE
JERSEY CITY

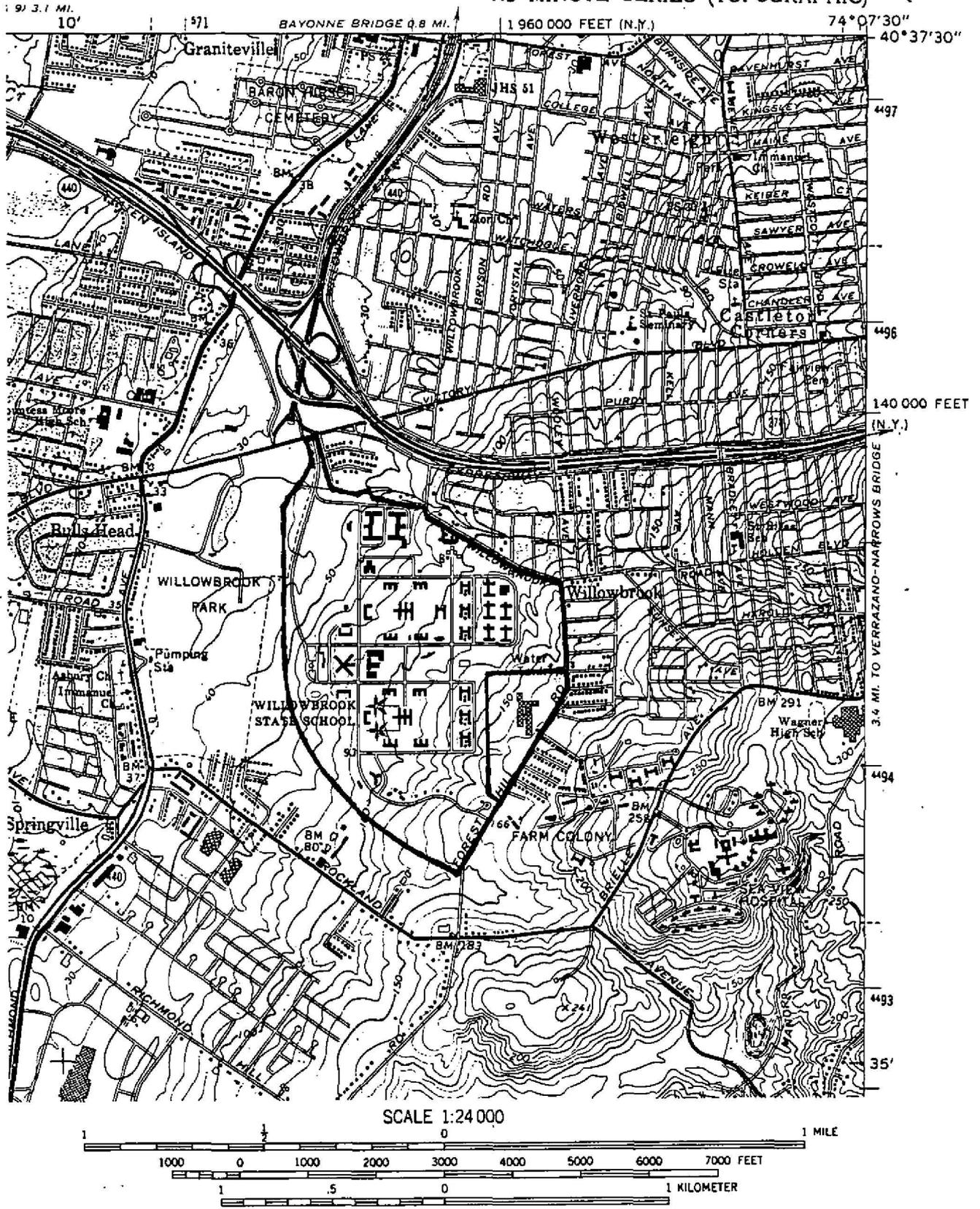


Figure 1: Project Area location on USGS Topographic Map.

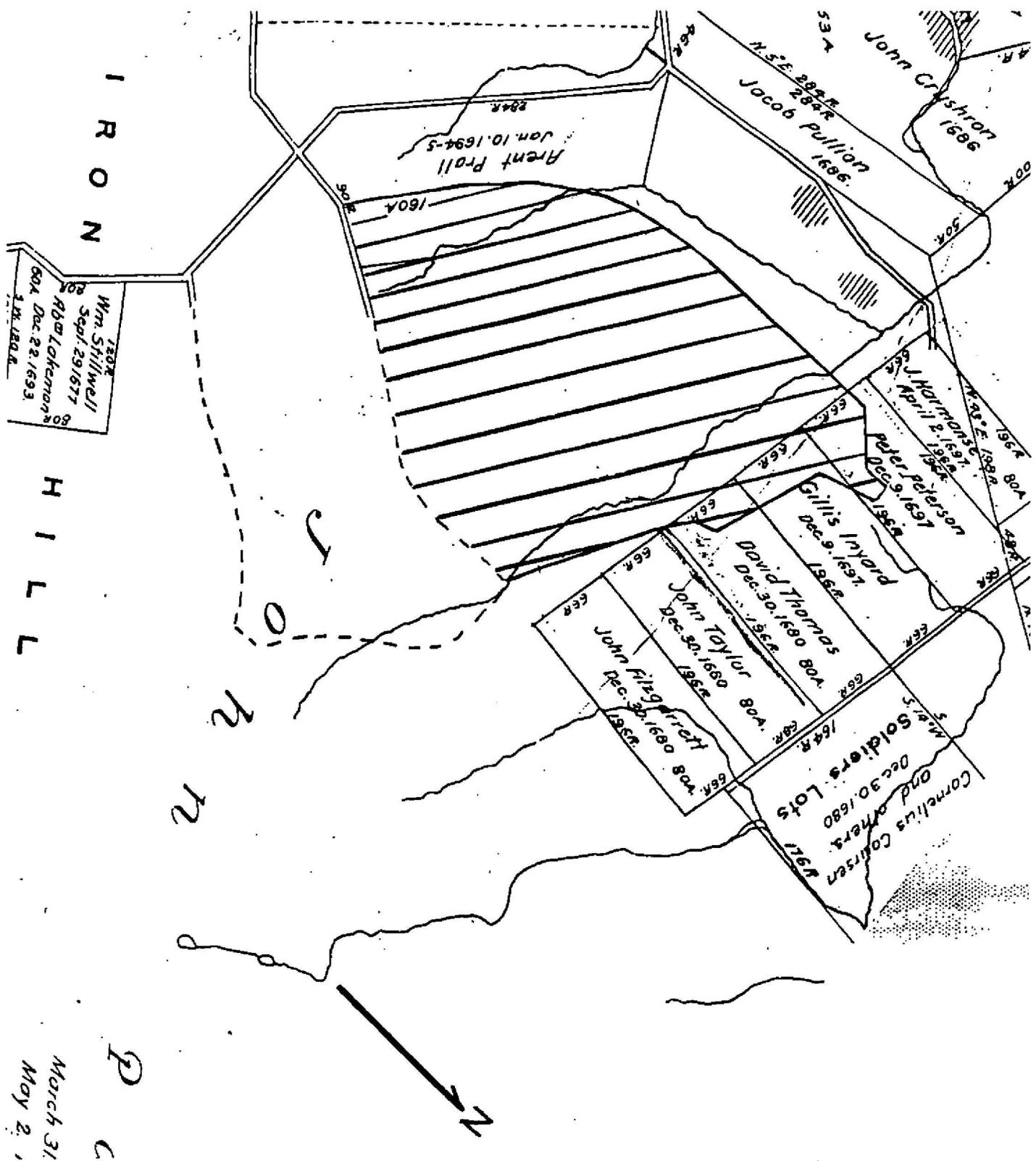
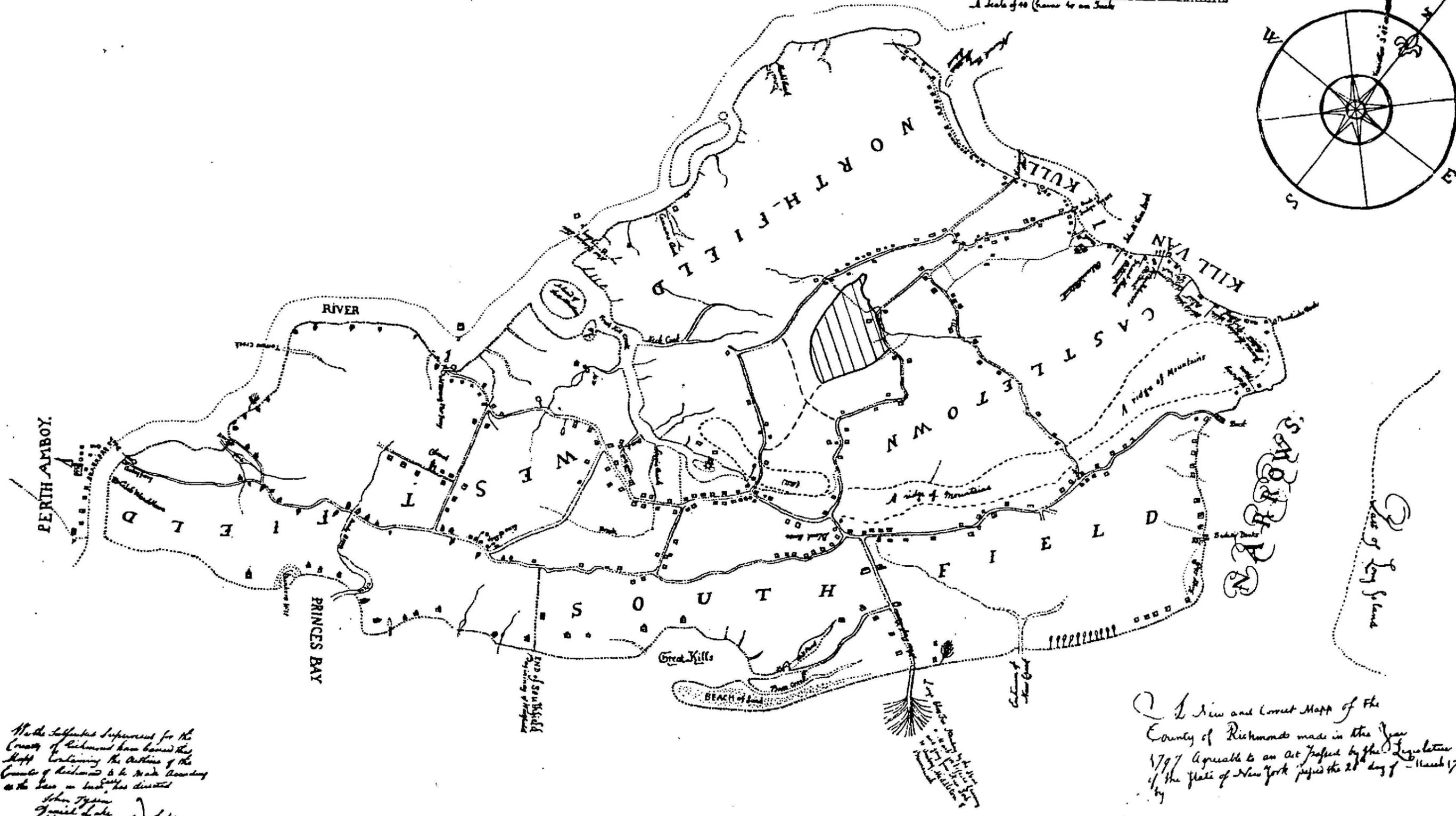
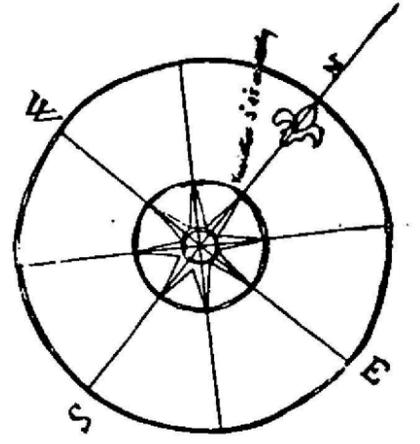


Figure 2: Frederick Skene's 1907 Map of Staten Island, N.Y. showing the Colonial Land Patents from 1668-1712.



*The following Survey for the
 County of Richmond has been the
 Map containing the Actions of the
 Council of Richmond to be made according
 to the Law in that behalf directed
 John Tyson
 Surveyor of the County
 His Deputy
 Benj. Langdon*

*A New and Correct Map of the
 County of Richmond made in the Year
 1797 agreeable to an Act passed by the Legislature
 of the State of New York passed the 28th day of March 1797.*

Figure 4: A New and Correct Map of the County of Richmond made in the year 1797.

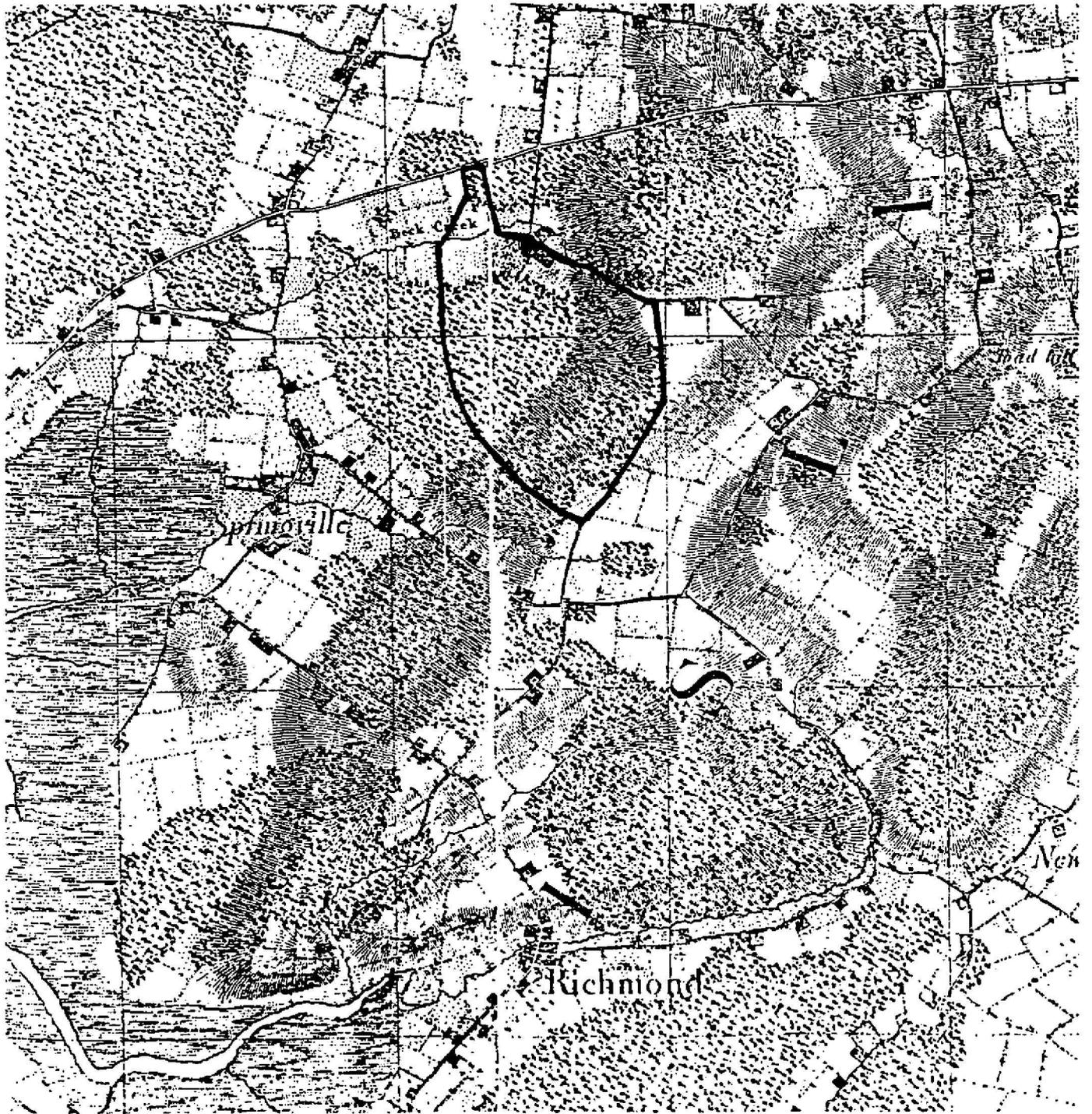


Figure 5: The U.S. Coast Survey Charter of N.Y. Harbor, 1836-1839.

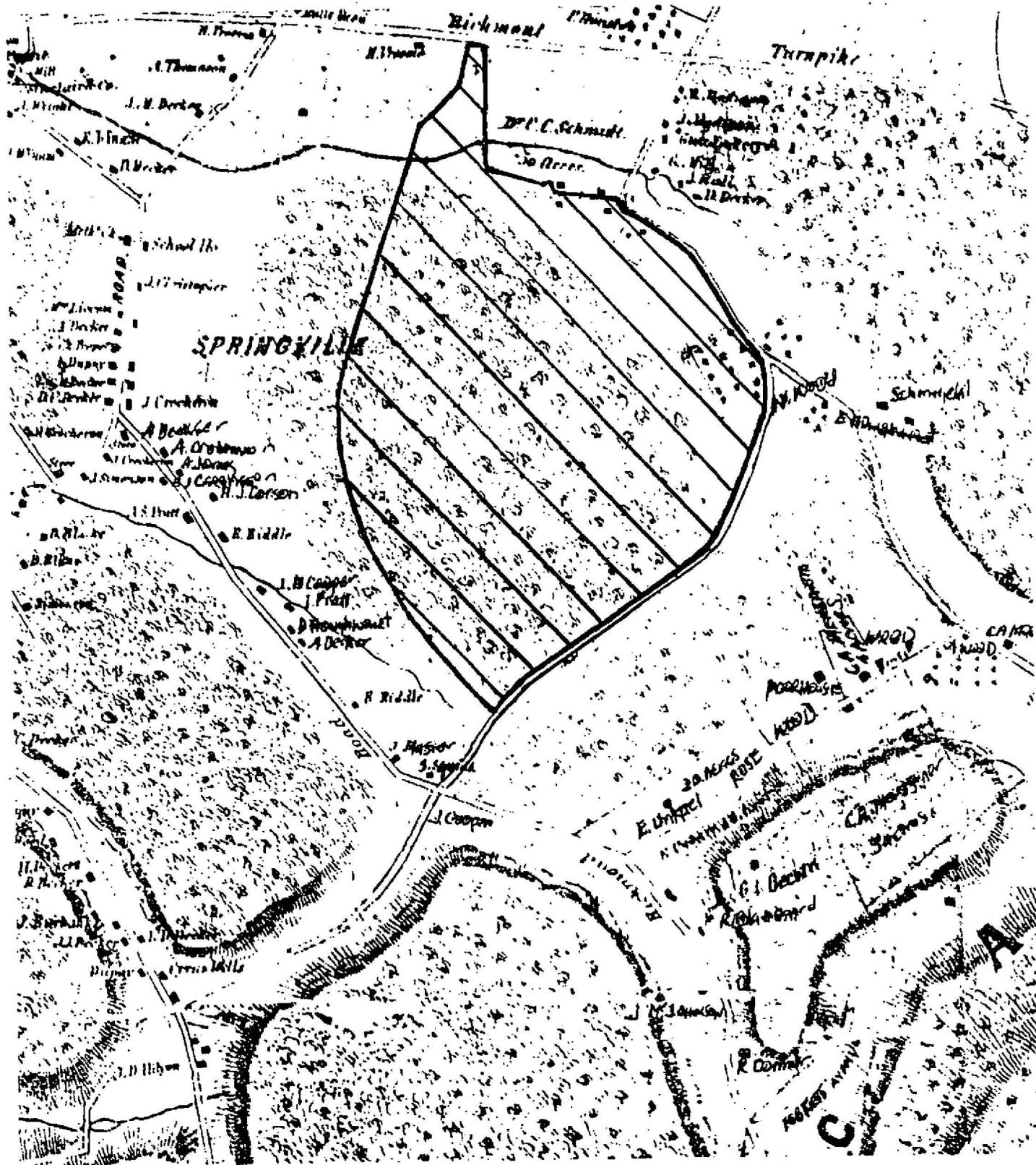


Figure 6: Butler's Map of Staten Island, 1853.

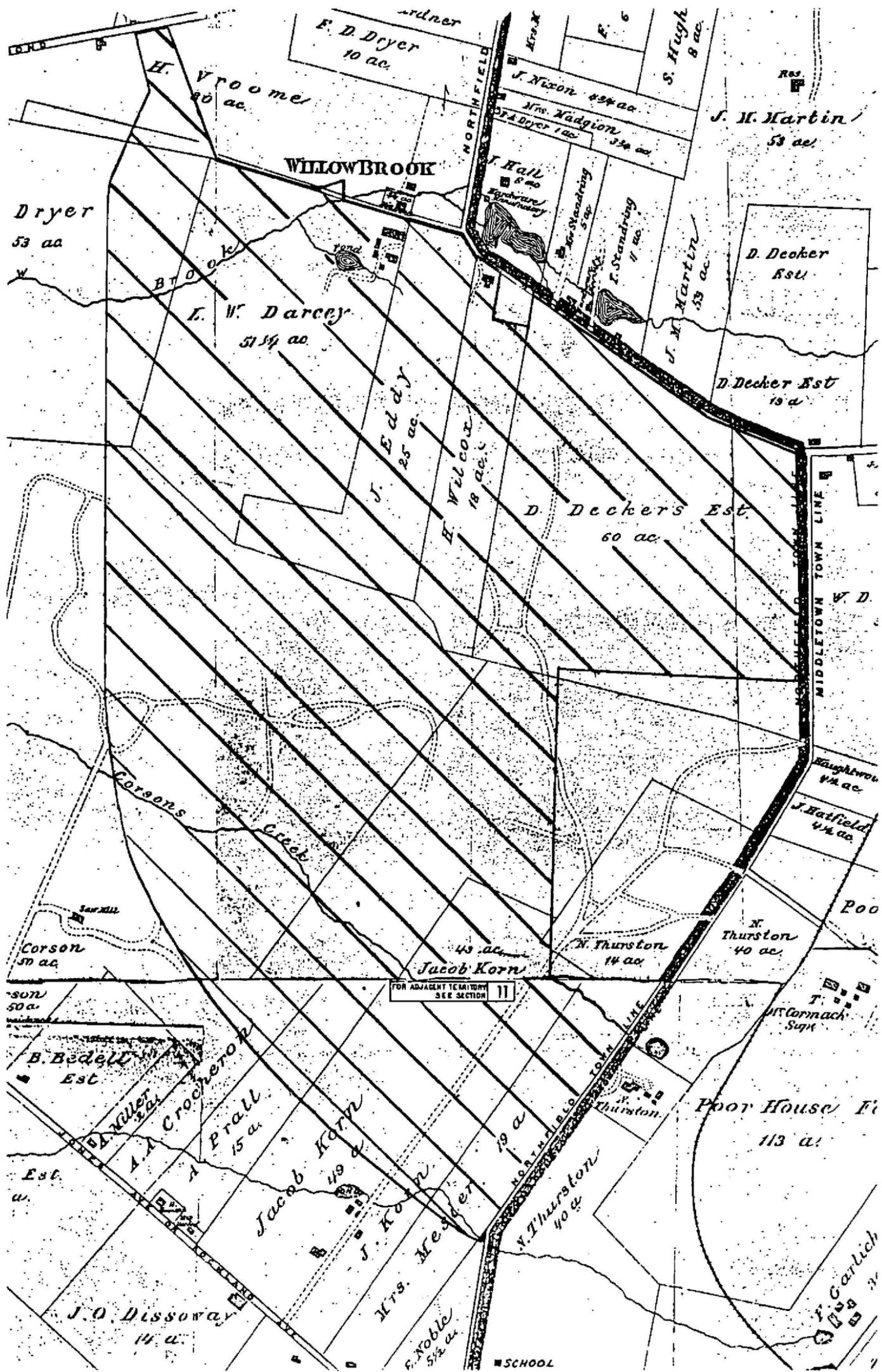


Figure 7: Beer's Atlas of Staten Island, 1874.

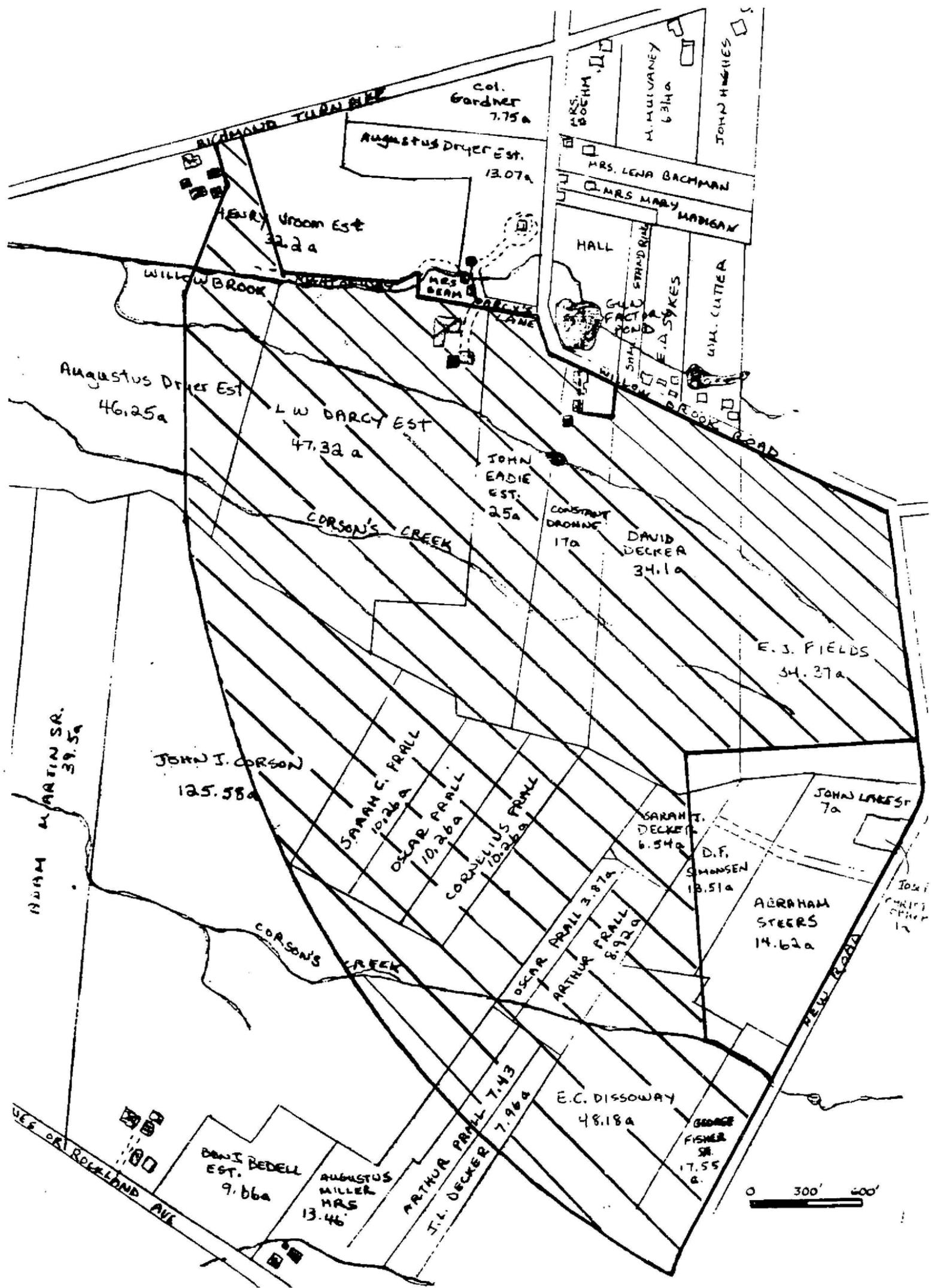


Figure 9: Robinson's Atlas of the Borough of Richmond, 1898.



Figure 10: Leng and Davis' 1896 Map of Staten Island showing Bulls Head and Jones's Wolf Pit.

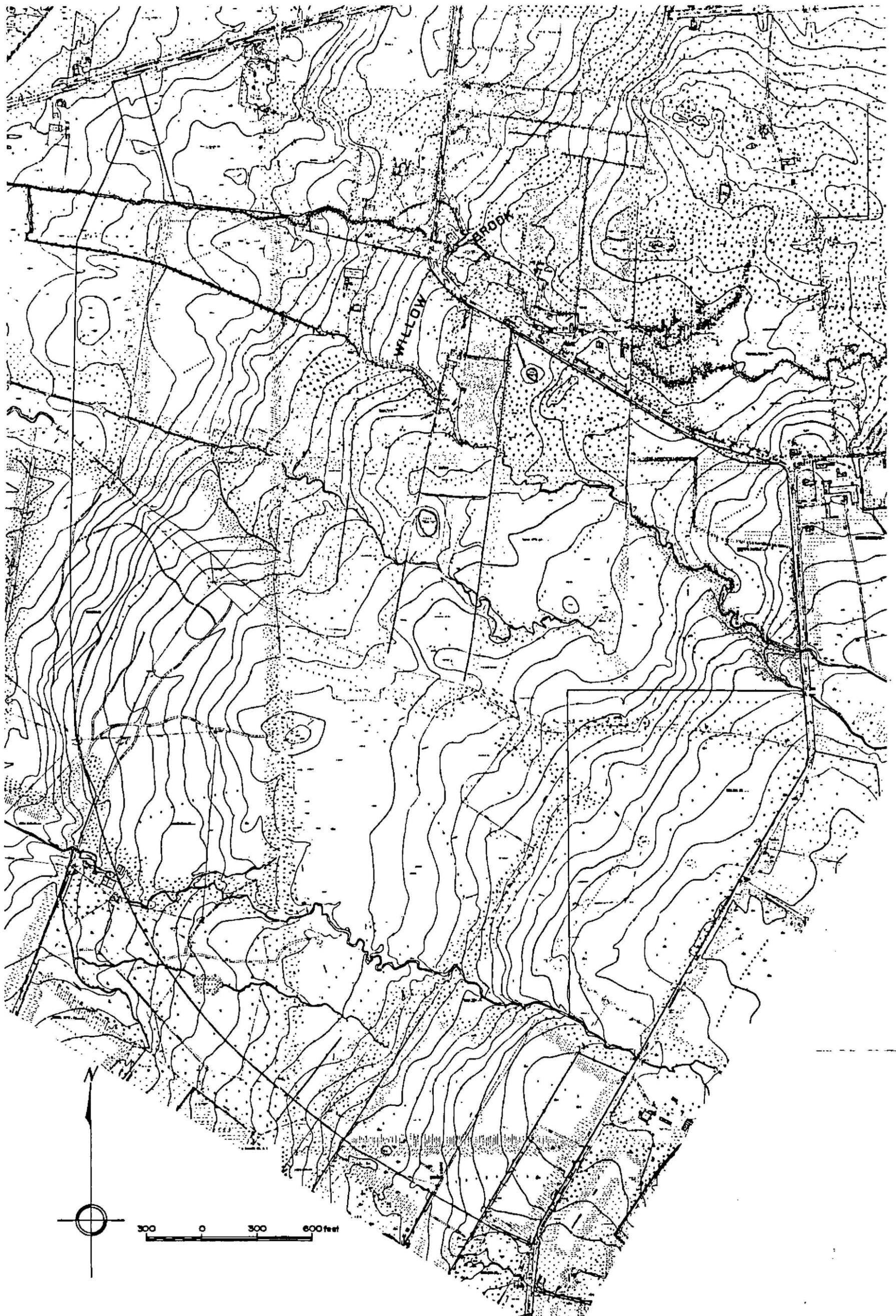


Figure 11: Borough of Richmond Topographic Survey, 1911, showing Project Area boundary.

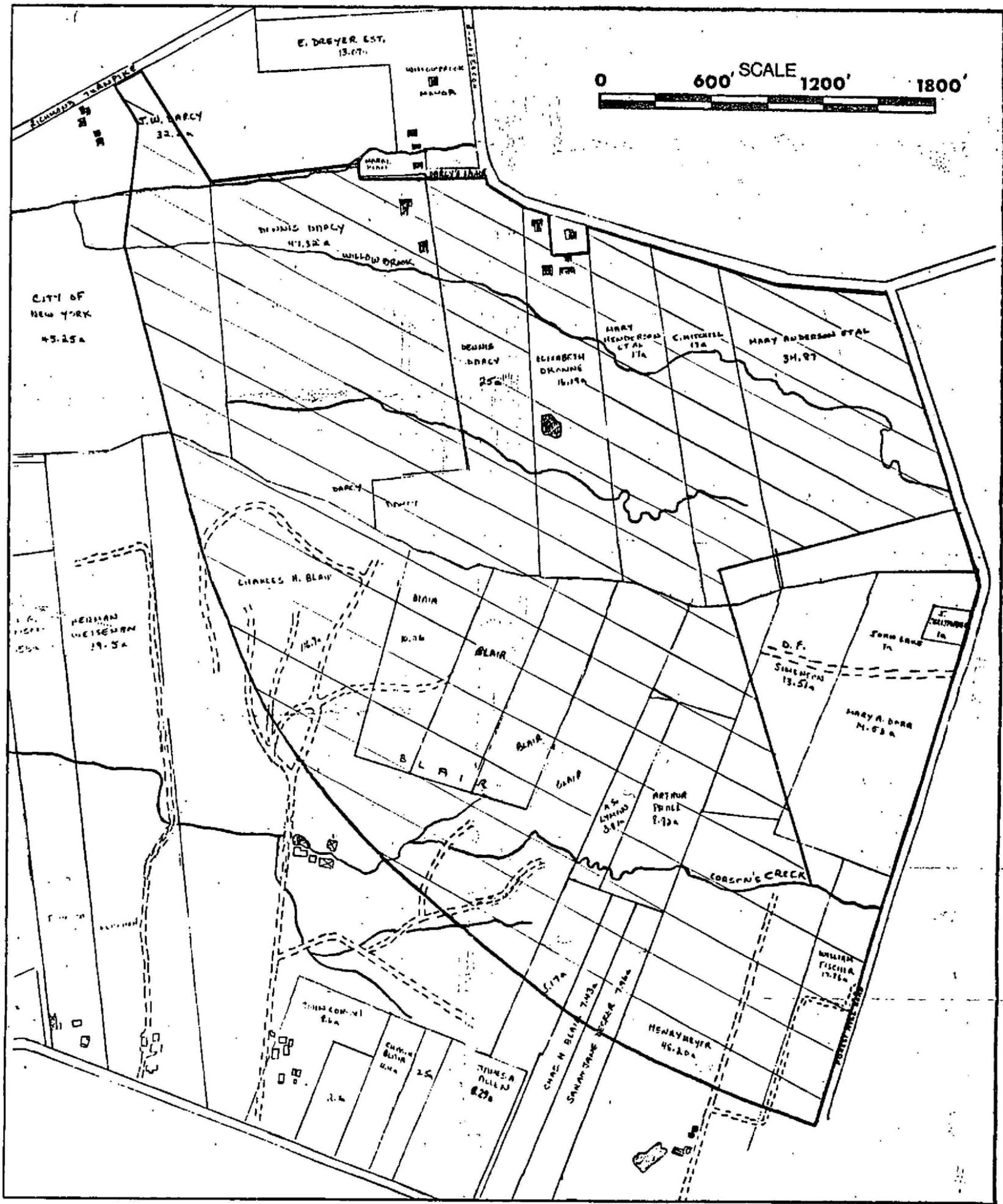


Figure 12: Bromley's Atlas of the City of New York, Borough of Richmond, 1917.

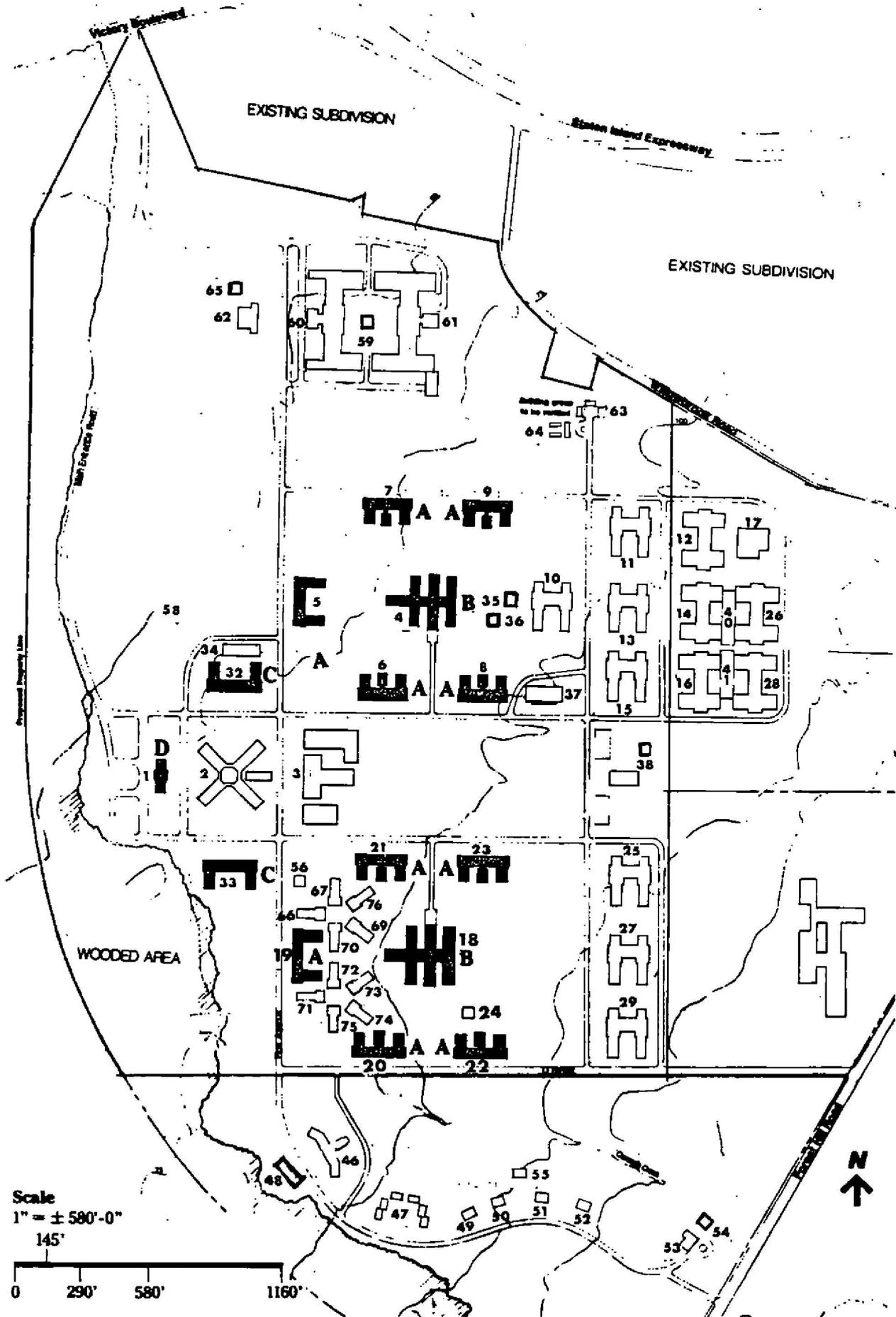


Figure 13: Extant Buildings

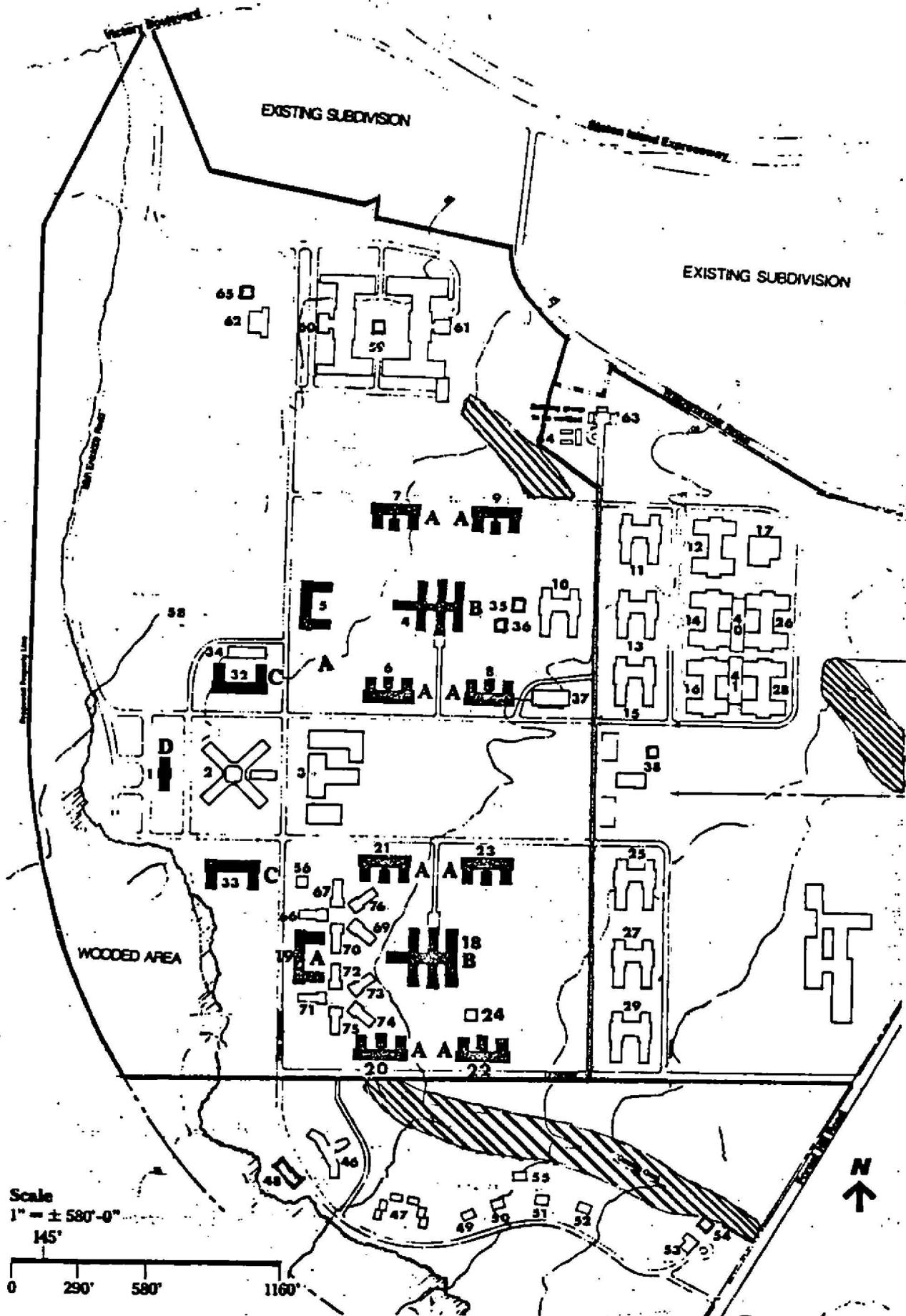
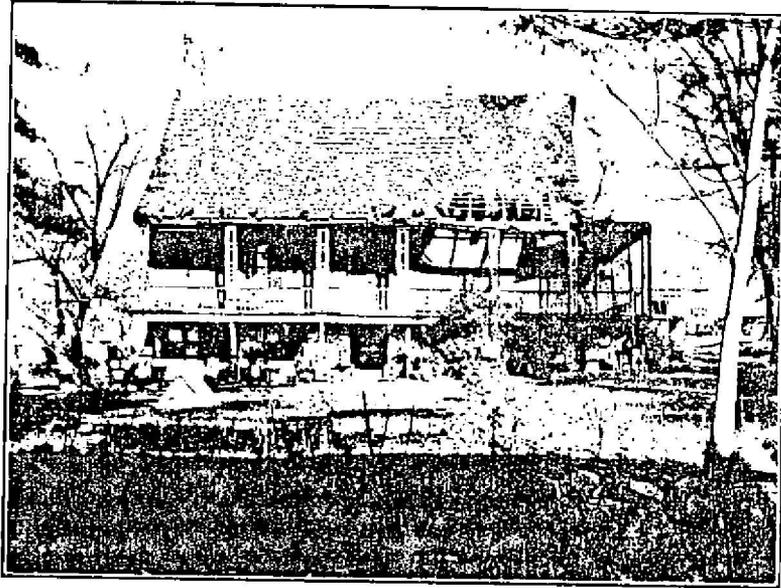


Figure 14: Archaeological Sensitivity Map
 Hatchure indicates areas of archaeological sensitivity.



CROCHERON HOUSE, NEW SPRINGVILLE

Photo by C. A. Ingalls

Plate 1: The Crocheron Homestead at New Springville

Table 1: Building Elevations and Basement Depths

BL	USES	DRIGEL	TYP ^{6*}	YEAR	BASEMEN	TOPD69
1	ADMINISTRATION	65-70'	A,C,E	- 0	-10.06'	72-75'
2	RECEPTION AND MEDICAL	75-95'	A,B,C,E	- 0	-11.12'	76-89'
3	SCHOOL	90-103'	A,C,E	- 0	-12.40'	92-94'
4	FEMALE DINING CENTER	75-85'	A,D,E	1940-1942	-10.88'	85-86'
5	FEMALE ABLE BODIED	65-70'	A,D,E	- 0	- 8.50'	66-71'
6	NE FEMALE ABLE BODIED	75-85'	A,D,E	1941-1943	-11.36'	85-86'
7	NW FEMALE ABLE BODIED	63-78'	A,D,E	1941-1943	-10.00'	70-75'
8	NE FEMALE ABLE BODIED	95-103'	A,D,E	1941-1943	-11.61'	95-102'
9	NW FEMALE ABLE BODIED	88-92'	A,D,E	1941-1943	-11.39'	86-88'
10	INFIRMARY FEMALE	93-98'	A,B,D,E	- 0	- 9.17'	97-99'
11	INFIRMARY FEMALE	93-98'	A,B,D,E	- 0	- 9.31'	98-99'
12	INFIRMARY FEMALE	100-108'	A,B,D,F	- 0	-11.10'	102-110'
13	INFIRMARY FEMALE	98-105'	A,B,D,E	- 0	- 9.69'	101-104'
14	INFIRMARY FEMALE	103-113'	A,B,D,F	- 0	-11.17'	102-110'
15	INFIRMARY FEMALE	103-108'	A,B,D,E	- 0	- 9.26'	105-107'
16	INFIRMARY FEMALE	108-110'	A,B,D,F	- 0	- 9.97'	102-110'
17	INFIRMARY	106-108'	A,B,D,F	- 0	-11.05'	112-112'
18	MALE DINING	100-100'	A,D,E	1940-1942	- 9.70'	106-108'
19	MALE ABLE BODIED	88-98'	A,D,E	1940-1942	- 8.96'	92-94'
20	SE MALE ABLE BODIED	96-98'	A,D,E	1941-1943	-11.44'	96-100'
21	SW MALE ABLE BODIED	100-100'	A,D,E	1941-1943	-11.41'	95-97'
22	NE MALE ABLE BODIED	103-113'	A,D,E	1941-1943	-11.42'	107-112'
23	NW MALE ABLE BODIED	103-110'	A,D,E	1941-1943	-11.49'	106-108'
24	COVERED PLAY AREA	107-107'		- 0	- 0.00'	107-112'
25	MALE INFIRMARY	117-129'	A,B,D,E	- 0	- 9.28'	122-130'
26	FEMALE INFIRMARY	106-112'	A,B,D,F	- 0	-11.15'	112-112'
27	MALE INFIRMARY	127-139'	A,B,D,E	- 0	- 9.28'	122-130'
28	FEMALE INFIRMARY	112-115'	A,B,D,F	- 0	-11.06'	112-112'
29	MALE INFIRMARY	133-148'	A,B,D,E	- 0	- 9.66'	136-141'
32	SINGLE FEMALE EMPLOYEE	73-79'	A,B,C,E	1941-1943	- 9.85'	75-80'
33	MARRIED + SINGLE MALE EMPLOYEE	78-91'	A,B,C,E	- 0	- 9.31'	83-89'
34	NURSES	73-76'	A,B,C,E	- 0	- 0.00'	75-80'
35	COVERED PLAY AREA	90-90'		- 0	- 0.00'	90-90'
36	COVERED PLAY AREA	90-90'	NOT BUILT	- 0	- 0.00'	90-90'
37	GYMNASIUM	100-102'	A,B,D,E	- 0	- 0.00'	102-102'
38	BATH HOUSE	115-115'		- 0	- 0.00'	115-120'
39	WATER TOWER	150-155'		- 0	- 0.00'	150-155'
40	FEMALE INFIRMARY	107-112'	B,D,F	- 0	- 0.00'	102-110'
41	FEMALE INFIRMARY	110-110'	B,D,F	- 0	- 0.00'	102-110'
46	MEDICAL STAFF	87-91'	A,B,C,E	- 0	- 7.17'	93-98'
47	SIX FAMILY STAFF	103-108'	A,B,C,E	- 0	- 9.00'	104-109'
48	MULTI-FAMILY STAFF	87-91'		- 0	- 8.82'	93-98'
49	SINGLE-FAMILY STAFF	120-120'		- 0	- 8.80'	123-145'
50	SINGLE-FAMILY STAFF	123-123'		- 0	- 8.80'	123-145'
51	SINGLE-FAMILY STAFF	130-130'		- 0	- 8.80'	123-145'
52	SINGLE-FAMILY STAFF	140-140'		- 0	- 8.80'	123-145'
53	SUPERINTEND. HOUSE	160-163'		- 0	- 8.80'	160-163'
54	GARAGE	158-160'		- 0	- 0.00'	160-163'
55	GARAGE	123-123'		- 0	- 5.50'	123-145'
56	COVERED PLAY AREA	95-100'		- 0	- 0.00'	95-100'
58	FUTURE GARAGE	55-60'	NOT BUILT	- 0	- 0.00'	55-60'
59	STORAGE BLDG.	45-50'		- 0	- 0.00'	51-60'
60	POWER AND MAINTEN.	43-53'	A,B,D,E,F	- 0	-11.80'	51-60'
61	BAKERY, LAUNDRY, ETC.	43-65'	A,B,D,E,F	- 0	-13.00'	51-60'
62	SEWAGE DISPOSAL	40-45'		- 0	- 6.50'	45-46'

Table 1 Continued

BL	USES	ORIGEL	TYP	YEAR	BASEMEN	TOP069
63	HORSE BARN AND STORAGE	88-90'		- 0 - 0.00'		90-90'
64	PROPAGATING HOUSE (GREENHOUSES)	85-90'		- 0 - 8.50'		90-90'
65	PUMP HOUSE	40-40'		- 0 - 0.00'		45-46'
66	MALE ABLE BODIED	93-98'	B,D,F	- 0 - 0.00'		92-94'
67	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		95-97'
68	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		95-97'
69	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		95-97'
70	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		95-97'
71	MALE ABLE BODIED	88-93'	B,D,F	- 0 - 0.00'		91-94'
72	MALE ABLE BODIED	95-95'	B,D,F	- 0 - 0.00'		91-95'
73	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		91-95'
74	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		91-95'
75	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		91-95'
76	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		91-97'
77	MALE ABLE BODIED	95-100'	B,D,F	- 0 - 0.00'		91-95'
78	ED.+DORMITORY FOR JUVENILES	53-58'		- 0 - 0.00'		50-50'

** Type: (A) Load bearing brick wall, (B) Fireproofed steel frame
 (B) Wood post and truss, (C) T-beam concrete slab,
 (D) 1&2 way concrete slab, (E) Hipped roof, (E) Gable
 and shed roof, (F) Flat roof, (F) Galvanized metal
 roofing

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