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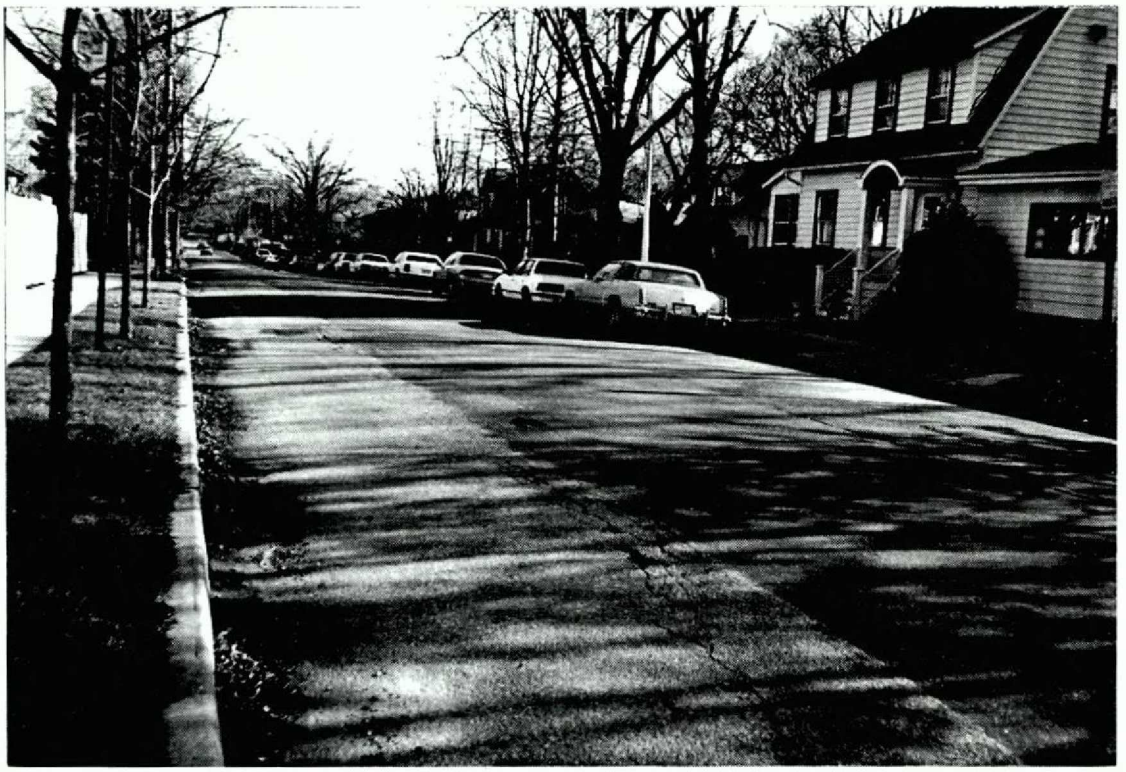
REPORT ON PHASE 1A ARCHAEOLOGICAL DOCUMENTARY RESEARCH IN ADVANCE OF SANITARY AND STORM SEWER CONSTRUCTION WILSON AVENUE EAST, ELTINGVILLE STATEN ISLAND, NEW YORK

Capital Project Numbers SE-604A-1 and SE-728



Wilson Avenue East

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EXECUTIVE SUMMARY

A Phase 1A evaluation of archaeological resources was done in advance of sewer construction within Wilson Avenue in the Eltingville section of Staten Island. The project area includes the eastern portion of a larger sewer project. The New York City Landmarks Preservation Commission identified the portion of Wilson Avenue between Eltingville Boulevard and Getz Avenue as potentially sensitive for the preservation of archaeological resources. Impacts to this part of the street from the planned project include two sewer trenches to be excavated within Wilson Avenue. One will be 8 feet wide and 20 feet deep. The other will be 5 feet wide and 25 feet deep.

This Phase 1A report is being conducted to comply with environmental review regulations and to meet the standards of the New York City Landmarks Preservation Commission. It addresses project area topography (both historically and currently), documents the prehistory and history of the project area and synthesizes the documentation to provide an evaluation of the potential for the property to contain archaeological resources.

The topographical data presented indicates the project area contains no disturbances which would have destroyed archaeological resources. It also indicates that the general area would have been favorable to prehistoric food resources. The closest known prehistoric archaeological sites are one-half mile or more from the project area. Likely proximity to fresh water sources during prehistory was over 700 feet away. Therefore there is little likelihood that prehistoric archaeological resources would be found within the project area.

The project area was most likely farm land since at least 1835. It had already become a street by at least 1870. There is no evidence of any buildings ever being constructed within the planned impact area. It is therefore unlikely that any historic archaeological resources would be present within the project area.

No further archaeological work is recommended for the Wilson Avenue East project area, as documented.

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INTRODUCTION

A program to implement sewer construction to replace outdated and overloaded septic systems and alleviate flooding has begun in the Eltingville section of Staten Island. The Wilson Avenue Sewer project is divided into two physical components, separated by Richmond Avenue. This Phase 1A archaeological evaluation covers the portion of the project area located to the east of Richmond Avenue. The New York City Landmarks Preservation Commission identified a portion of the Wilson Avenue sewer project as potentially sensitive for the preservation of archaeological resources; the segment of Wilson Avenue between Eltingville Boulevard and Getz Avenue (see Plate 1 and Figure 1). Although this is only one segment of the entire Wilson Avenue Sewer project, it will be referred to as the project area throughout the remainder of this report. A separate Phase 1A report of the Wilson Avenue West project area will be prepared upon completion of this report.

Both storm and sanitary sewers are planned for the project area. Figures 2 and 3 depict the specific impacts planned within the project area for both trenches. The storm sewer will be six feet wide and five and a half feet high. It will be constructed of flat top reinforced concrete. Construction will require the excavation of an eight foot wide trench dug to a depth of about twenty feet. Subsurface impacts from construction of the sanitary sewer will be to a depth of about 25 feet. The sanitary sewer will be made of thirty inch diameter reinforced concrete pipe placed in a five foot wide trench.

This report will detail the project area topography (both historically and currently), document the project area history and prehistory and synthesize the documentation to provide an evaluation of the potential for the property to contain archaeological resources. Sections on methodology, project area topography, prehistory, historic period and conclusions and recommendations are included. This report is being conducted to comply with environmental review regulations and to meet the standards of the New York City Landmarks Preservation Commission. The research was conducted and report prepared for Bedford Construction Corporation by Linda Stone, with the assistance of Patience Freeman.

METHODOLOGY

This Phase 1A archaeological documentary research report was prepared using cartographic, documentary and archival sources. The research included a survey of standard repositories of information, including the New York City Landmarks Preservation Commission (NYCLPC), the Staten Island Institute for Arts and Sciences, the New York Public Library, the Subsurface Exploration Bureau and the Staten Island Borough President's Topographic Bureau.

As part of the evaluation of prehistoric archaeological potential, three factors were considered. These are 1) known archaeological sites in the vicinity of the project area, 2) project area topography and 3) proximity to fresh water. Identification of known prehistoric archaeological resources was done through review of the New York City Landmarks Preservation Commission Archaeological Evaluation and Sensitivity Assessment of Staten Island, New York (Boesch 1994) and through written request to the New York State Museum and the Historic Preservation Division of the New York Office of Parks, Recreation and Historic Preservation (NYSOPRHP). Evaluation of sites was done using sources located at the New York City Landmarks Preservation Commission, the New York Public Library and the Staten Island Institute of Arts and Sciences (SIIAS).

Identification and evaluation of project area topography and proximity to fresh water, current as well as historic, was made through pedestrian survey, analysis of boring logs, current topographic data and historic research. The project area was visited, photographed and notes were taken by the author on two occasions, November 14 and 30, 1994. Cartographic and documentary sources found at the Staten Island Institute for Arts and Sciences, the New York Public Library and the Staten Island Borough President's Topographic Bureau were consulted. Boring data was provided by the Department of Environmental Protection. Additional research was conducted at the Subsurface Exploration Bureau of the Department of General Services.

As part of the evaluation of historic archaeological potential, a variety of information sources were used to collect data on the history of the project area and to document previous site disturbances. Cartographic and documentary sources were located at the New York Public Library's Main Research Branch, Local History and Genealogy Division and Map Division, the library and archives of the Staten Island Institute of Arts and Sciences and the Topographical Bureau of the Staten Island Borough President's Office. This

investigation was supplemented with limited research at the Staten Island County Clerks office. This report combines its presentation of the local history with the general history in order to provide a context for events, places and people which have potential significance to the project area.

PROJECT AREA TOPOGRAPHY

The project area is located in the Eltingville section of Staten Island, inland from Raritan Bay. All streets affected by the Wilson Avenue sewer project are located to the north of the Staten Island Railroad tracks, just over a mile from the bay (see Figure 1). The current terrain of the area can be characterized as undulating with gentle rises. Surface elevations of the Wilson Avenue East project area are recorded at between 56 and 63 feet. The higher elevations are recorded toward the west. There are no visible ponds or streams, sources of fresh water, in or near the project impact area. However there are places where water collects. Constant saturation of soils due to septic overflow was observed accumulating along the side of the road (see Plate 1). Looking at the larger surroundings, as depicted on the U.S.G.S. map, a stream is depicted about one thousand feet to the east of the project area (see Figure 1). It crosses Wilson Avenue between three to four blocks east of Getz Avenue. This stream flows toward Richmond Creek and ultimately into the Arthur Kill.

The project area extends east along Wilson Avenue from its intersection with Eltingville Boulevard about 200 feet to Getz Avenue, a paper street at its Wilson Avenue terminus. The street is paved with asphalt and carries automotive traffic. While the p. ing appears to have been relaid or patched in sections of the project area, no documented subsurface disturbances were identified in locations where the sewers will be placed. The road is lined with residences. Most of the buildings were probably constructed since 1915, around the time when the area was first subdivided on a large scale. Few, if any, trees older than that time still exist in the vicinity of the project impact area. It appears the area was cleared of vegetation for development and landscaping was left to individual home owners.

The project area falls within the inner lowland of the Coastal Plain. This region is composed of Cretaceous formations extending inland along the southern part of Staten Island (Leng and Davis 1930:14). Soils within the street bed, under the paving, consist mainly of till. Figure 4 is a stratigraphy profile of Wilson Avenue between Eltingville Boulevard and Getz Avenue based on 1993 Department of General Services logs of borings taken from within the street. Boring cores were 1.5 foot samples taken at five foot intervals. The till is described as red-brown sand with silt and a little clay. The western most boring contained a dark brown sand with silt and a little clay, below the asphalt. It was underlain with a brown silt, also containing sand and clay, before encountering till. The till found in the western two borings contained boulders. Moving to the east, the inclusions become smaller. Boring 59 contained

cobbles and Boring 60 contained gravel within the till deposit.

Current project area topography and proximity to fresh water are less likely than prehistoric topography and proximity to fresh water sources to be predictors of prehistoric archaeological resources. However, evaluation of prehistoric topography and proximity to fresh water sources cannot be directly addressed. In order to come to an understanding about what the area must have been like, a combination of factors are evaluated. These include current soils and topographic information from prior to the time of wide-scale development. It is clear from boring data that filling has not been conducted within the project area. All soils recorded within each of the four borings taken from the project area are natural deposits. The presence of boulders within the till was noted only in the western borings. This may be a result of sampling or it could be a that the stream currently located one thousand feet east of the project area has had an effect on the soil deposits over many hundreds of years, or longer.

The two earliest accurate topographic maps of the area were also evaluated. The earliest detailed topographic map of the project area vicinity dates to 1890 and was surveyed by Vermeule and Bien (see Figure 5). Unfortunately the project area was already made into a road by that time and the land around it was cleared of trees, therefore its pristine state cannot be seen. However, development was sparse in the vicinity at that time and it is therefore likely that the conditions depicted were similar to those of earlier times. The elevation of the project area in 1890 was around sixty feet, just as it is today. Additionally, the stream shown on the modern U.S.G.S. map located one thousand feet to the east of the project area was also recorded in 1890 by Vermeule and Bien.

More detailed early topography can be seen on the Borough of Richmond Topographic Survey of 1912 (see Figure 6). This greater detail enables further observations. Once again the elevation of the project area is shown at around sixty feet, as it was in both 1890 and is today. Areas of cultivation, marshland and wooded areas can be seen near the project area. However none of these exist in or adjacent to the Wilson Avenue East project area. The project area is shown on land cleared of trees, however it does not appear to have been cultivated at that time. The closest cultivated area in 1912 was located about 125 feet northeast of the project area. The closest wooded area was located over 750 feet to the west. Water courses and marshland are shown in more detail on the 1912 survey. The stream shown to the east of the project area on both the 1890 map and the current U.S.G.S. map is also shown on the 1912 survey. However, instead of terminating north of the Staten Island Rapid Transit tracks, it is shown flowing

parallel to the tracks on both the north and south sides in 1912. At that time a small pond and marsh were both recorded at about 700 feet to the northeast of and about 750 feet to the west of the project area. These are shown as flowing to streams which, like that described above, flow into Richmond Creek.

This review of the historic topography demonstrates that the elevation, grade and proximity to water sources has not changed since a time prior to full-scale development of the project area vicinity. It may therefore be inferred the area has changed very little since prehistory. This early environment of well drained sandy soils in gently undulated terrain with nearby fresh water, marshland and woods would certainly have been a hospitable one for fauna. A wide variety of wildlife would most likely have flourished in the project area vicinity during prehistory.

PREHISTORIC PERIOD

As presented in the methodology section of this report, three factors were considered in the evaluation of prehistoric archaeological potential; 1) known archaeological sites in the vicinity of the project area, 2) project area topography and 3) proximity to fresh water. The reasons these indicators are useful in predicting locations of unknown sites has to do with their relationship to subsistence and settlement patterns during prehistory. Ecological factors such as distance to fresh water, elevation, slope, and soils are generally used as predictors of past animal habitats. If it can be demonstrated that past environmental conditions were conducive to exploitation by game animals, birds and fish then it can be inferred that human population may have in turn exploited these resources. Furthermore, if evidence of prehistoric human activity can be found near the project area, this assertion can be strengthened.

Hunter-gatherers first arrived in the New York region from the west toward the end of the last ice age, over 12,000 years ago, marking the beginning of the Paleo-Indian cultural period. The ice sheet was rapidly melting and the environment was changing. Food resources were not yet stabilized to seasonal cycles and resource predictability and density were both low. About 10,000 years ago the Paleo-Indian period came to an end. The advent of the Archaic Period was marked by a change in foraging strategy precipitated by the warming climate. The economic strategy of the Archaic period was becoming more diffuse as more varieties of flora and fauna were becoming established in the warming climate of the northeast. There is a belief that the Early Archaic people were beginning to establish territories and a "restricted wandering" foraging behavior (Snow 1980:171). The transition from the Early Archaic to the Middle Archaic is not as sharp. Dincauze and Mulholland (1977) believe:

> the Middle Archaic subsistence and settlement patterns appear to represent the expansion and increase of a successful resident population. Sites proliferate along obvious communication routes and in the richest habitats; territorial ranges are established, and the resource base is broadened. (Dincauze and Mulholland 1977:454)

Very little archaeological data exists for the earliest prehistoric cultural periods in the New York City area, the Paleo-Indian through Middle Archaic periods prior to about 5,000 years ago. Staten Island is one locus of what little information exists. One possible explanation is that these early sites were buried under water as the sea level rose. Funk (1991) summarizes what little is known of these periods.

> In the case of the Port Mobil site, located on the western shore of Staten Island near the Arthur Kill, evidence suggests that Paleo-Indians lived at the site when sea level was considerably lower than at present and the Arthur Kill was an upland creek (Kraft 1977). Similarly, Early Archaic sites on Staten Island close to the present shore lines and

> elevated slightly above sea level, such as Ward's Point, Hollowell, and Old Place (Ritchie and Funk 1971), would have been inland and upland locations at the time of occupation. No Paleo-Indian sites, as such, are known along the Lower Hudson north of Staten Island. (Funk 1991:51).

The amount of data on the prehistoric population of the Late Archaic increases dramatically. This large increase in archaeological evidence is what separates the Late Archaic from the previous periods. It also indicates that adaptations must have been such as to allow for the increase in the number of recorded sites. The three well known Late Archaic sites of Staten Island are all along its northern shore; Bowman's Brook, Old Place and Arlington Place (Ritchie 1980:146). The environment had essentially stabilized during the Late Archaic, with conditions much the same as today's. The prehistoric cultural periods defined after the Archaic are generally marked by the introduction of innovations in pottery and vessel type and changes in artifact assemblages, rather than by changes in the environment.

The Transitional Phase, 1500 - 1000 B.C., is marked by the introduction of steatite vessels into the artifact assemblage as well as the prevalent use of certain projectile point types. The Woodland Period of prehistory, 1000 B.C. to about A.D. 1600, like the Archaic, is divided into early, middle and late sequences. These Woodland Period divisions are defined based on changes in the style and type of pottery and projectile points found at archaeological sites. With the use of pottery for cooking and storing food resources, the people of the Woodland Period were able to become increasingly sedentary, relying less on seasonal movement to exploit available resources. Ultimately, this led to the development of cultigens during the Late Woodland period, about A.D. 1000.

The Late Woodland period ended at the time of European contact, in the early seventeenth century. From this time through the early to mid-eighteenth century is identified as the Contact period. Native American archaeological sites have been identified as contemporaneous with European sites. The influence of European contact can be seen in the artifact assemblages from the Native American sites of this time.

Many prehistoric archaeological sites were occupied during multiple periods. The Old Place site contained artifacts dating from both the Archaic and Woodland periods. Ward's Point near Tottenville has been documented with materials dating from Late Archaic, Middle and Late Woodland (New York State Museum n.d.:61).

Identification and evaluation of known prehistoric archaeological resources and their potential to affect the identification of unknown prehistoric archaeological resources relies on current information. In general, known prehistoric sites in the southern part of Staten Island are located on high ground overlooking Raritan Bay and the Arthur Kill or inland near streams. Locations of known prehistoric archaeological sites in the project area vicinity are shown on Figure 7. Early identification of sites has been provided by William T. Davis in 1896 and by Alanson B. Skinner in 1909. Three sites were mapped by Davis in the vicinity of the Wilson Avenue East project area. "Indian implements" were found in two locations; one near the current Annadale Road, Richmond Parkway and Arthur Kill Road, over a mile from the project area, and the other west of Arbutus Lake, closer to two miles away. Davis also shows "Indian Hill" in Annadale, but there is no indication of what artifacts were found or what the site may have been used for.

Skinner (1909:10-16) reports three sites in the vicinity of the project area. Two sites are in the Greenridge section. One is a "small village site on Lake's Meadow Island", close to Richmond Creek and the Arthur Kill, where a shell midden and artifacts were found. Skinner quotes an 1843 letter recounting a number of "arrowheads" found in the area. The other Greenridge site is a camp containing "early relics" located near what is now Annadale Road, Richmond Parkway and Arthur Kill Road. This is probably the same site where Davis reported "Indian implements". Skinner also shows several shell midden sites in the Huguenot area near Princes Bay and Seguine Point, over two miles from the project area.

Data provided by the New York State Museum includes the identification of three sites. One site identified by the Museum, located over a half mile from the project area, was listed in its old 1904 records, but no other information is available. The other two sites were originally reported by Arthur C. Parker for the New York State Museum in 1922. One was described as a camp site where "early relics" were found on Richmond Plank Road between Journeay Avenue and Annadale Road (Parker 1922:682). This is the same site identified by both Davis and Skinner, above. The other site, also more than a half mile away, was described as a "'clam-drying' place" located "on the salt meadow near Lake's mill". It was characterized by a shell heap where "a few flint flakes" were found. Parker labels this site with the symbol indicating traces of occupation on his map of Richmond County (ibid.:676, 685). Parker, like Skinner, also reported a few "isolated shell heaps" near Seguine Point and Princes Bay (ibid.683-684). Additionally, Parker mapped the location of a camp site along the shore between Seguine

Point and Great Kills, likely more than a mile from the project area.

Bolton also reported a number of sites in the vicinity of the Wilson Avenue East project area. Like Parker, he repeated much of what had been identified earlier, adding newly discovered sites. Bolton described two sites at Princes Bay, one a probable fishing station and the other unexplored. He also recorded a "probable fishing station" at Seguine Point. Closer to the project area, in Woods of Arden, just under a half mile away, "signs of native occupancy" were noted. Bolton also reported "signs of occupancy" in Oakwood at the "head of the kills", possibly a mile from the Wilson Avenue East project area. He described Great Kills as "the refuge, for about 16 years, of the Nayack natives when they removed from Long Island" (Bolton 1922:195,234-235; 1934:153-156).

The New York State Office of Parks, Recreation and Historic Preservation has the records of one site in the vicinity of the Wilson Avenue East project area. This is the Fiddler's Green site, as recorded by Pickman and Yamin in 1978. The site was originally reported by Skinner in 1909 as a camp.

The New York City Landmarks Preservation Commission's Archaeological Evaluation and Sensitivity Assessment of Staten Island summarizes these earlier finds as well as incorporating other data (Boesch 1994). The additional data comes from older, obscure references as well as from more recent archaeological investigations done under environmental review. Five sites in the area west of Arbutus Lake were identified. These include the site from Davis (1896) as well as an unnamed site from the same time period. There is also reference to a site at Bunker Hill, in the same location. These three mentions could all be the same site. The early references are vague enough to bring their discrete locations into question. The other two sites in the area were reportedly identified through shovel testing in the 1980s. A "scatter of lithic debitage" was found at Arbutus Lake and at a site near Hylan Boulevard and Huguenot Avenue (Boesch 1994:112-123). One additional site was identified in the LPC study. This was an unnamed small camp site located at Carlton Boulevard and Arthur Kill Road and mapped a mile and three-quarters from the project area (ibid.:121).

None of these known archaeological sites have been ascribed to specific Native American groups or prehistoric cultural periods, stylistically or temporally. Skinner identifies the Raritans or Assanhicans occupying the area from Trenton, New Jersey northward to the southern end of Staten Island (Skinner 1909: 31). Bolton applies the place name "Shawcopshee" to the Oakwood area. It is implied the name

is derived from the Nayack, originally of Long Island (Bolton 1922:156). Grumet identifies Bolton as the first to apply a location to this place name. However he reports the first known occurrence of the name in 1664, well into the Contact or early historic period (Grumet 1981:52).

HISTORIC PERIOD

Seventeenth Century

Although Verrazano was the first European recorded to have spotted Staten Island, in 1524, the history of Staten Island begins in earnest in 1609, when Henry Hudson anchored at Sandy Hook in the Narrows and took two Staten Island Indians on his trip up the Hudson River (Bayles 1887:44-45; Historical Records Survey 1942:v). The native Staten Islanders were members of the Delaware nation. They called the Island "Eghquaons" or "Aquehonga Manacknong", meaning high sandy banks or dark bad wood (Clute 1877:8; Federal Writers' Project 1939:598; Grumet 1981:2; Kolff 1926:1; Leng and Delavan 1924:1). Hudson named it "Staaten Eylandt" after the States General of Holland. He claimed the entire area between the Delaware and Connecticut Rivers where fur was plentiful, and called it New Netherlands (Historic Records Survey 1942:xii; Kolff 1926:16).

A lack of control over the fur trade in New Netherlands resulted in the charter of the Dutch West India Company in 1621. This company then came into power over all matters related to the New Netherlands (Clute 1877:12-13; Leng and Delavan 1924:2). The Dutch West India Company had among its responsibilities on Staten Island, issuing land grants. The grants stipulated the simultaneous purchase of the land from the Indians.

The first grant of land on Staten Island was in 1630 to Michael Pauw. However, no settlement was established at the time and Pauw transferred his interest in Staten Island back to the Dutch West India Company directors in 1634 (Bayles 1887:63; Historical Records Survey 1942:xiii). A 1636 land grant to David Pietersen de Vries did result in a settlement at what is now Tompkinsville. However, this settlement was abandoned after a war with the Indians in 1642 (Kolff 1926:17-18). A large grant covering most of Staten Island, except for de Vries farm, was issued to Cornelius Melyn in 1641 (Historic Records Survey 1942:xiii). This settlement also encountered problems with the Indians and it was virtually destroyed. Additionally, Melyn was at odds with the Governor over Indian issues (Bayles 1887:66-69). He eventually sold his interests in Staten Island back to the Dutch West India Company in 1659 which, in turn, granted land to some French immigrants (ibid.:70-71). The French first established a church in Greenridge around 1698. It was the first church on Staten Island and was located

to the north of the project area on Arthur Kill Road (SIIAS n.d.).

In 1664 New Netherlands was surrendered by the Dutch to the English. New Amsterdam became New York. Staten Island became part of the West Riding of Yorkshire, which also included Long Island and Westchester (Historic Records Survey 1942:xvii). The English Governor Francis Lovelace made the final purchase of Staten Island from the Indians in 1670. This purchase effectively led to the departure of almost all Native Americans from Staten Island. All of these native Staten Islanders signed this final deed in order to bind it (Kolff 1926:22).

The English governance allowed many of the same freedoms the Dutch conferred, therefore many of the Dutch and French settlers chose to remain on Staten Island (Bayles 1887:75). However, no property survey had been conducted "and the boundaries of their lands, as well as the title to them, were quite indefinite" (Leng and Davis 1930:741). Governor Lovelace began conducting land surveys in 1675, the year Staten Island became an independent judicial district. This task was completed in 1677 by his successor, Governor Andros (Clute 1877:56, Leng and Delavan 1924:6). These surveys extended only as far south as Great Kills and did not include the Wilson Avenue East project area (Steinmeyer 1987:24).

In 1683 the first assembly of the colony of New York adopted a bill of rights. This included the establishment of counties. The county was promptly divided into four precincts. The project area was located in the former Westfield, although parts of what is now Eltingville were located in Southfield (Historic Records Survey 1942:xix). Five years later Richmond County was divided into four towns encompassing the four precincts (ibid.:xx; Bayles 1887:90).

By the end of the seventeenth century the population of Staten Island had grown to 727 (Steinmeyer 1987:30). The first roads began to be laid out. The English, as one of their first public improvements, began making dirt roads on Staten Island in 1694 (Bayles 1887:141, Leng and Delavan 1924:12). Many of these have become the major roads of today, including parts of Amboy Road, Arthur Kill Road and Richmond Road (Historic Records Survey 1942:xxvi; McMillen 1946:1; Reed 1965:17). Although the dates of the origin of several old roads are questionable it is possible they follow the course of Indian trails (Bayles 1887:143). Despite this development, Staten Island maintained an agricultural economy which continued throughout the eighteenth century.

Eighteenth Century

The first recorded owner of the Wilson Avenue East project area was F. Vincent. Frederick Skene's map of Staten Island shows the general location of colonial land patents from 1668 to 1712. This map places the project area within the land of F. Vincent, a sixty-six acre parcel granted in 1708 (see Figure 8). No information was found on Vincent's use of the property. However later records indicate the property was not build upon.

An historically important mode of transportation of Staten Islanders has been ferry service. Unlicensed ferries probably ran in the seventeenth century, but the first licensed service was from Clifton to Long Island in 1713 (Leng and Delavan 1924:12). The first record of a licensed ferry crossing the Kill van Kull from what is now Port Richmond to Bergen Point, New Jersey was in 1764 (Clute 1877:82). The first direct ferry service to Manhattan was established in 1745 (Historic Records Survey 1942:xxxi).

In addition to the improvements in transportation, other services were also introduced on Staten Island during the early eighteenth century. In 1707 two schoolmasters were hired and supported up until the Revolution (Leng and Delavan 1924:14). A jail was constructed at Richmond in 1710 (Bayles 1887:132). The early eighteenth century courts were held in Stone Brook, but moved to Richmond in 1729 (Leng and Delavan 1924:12).

Religious congregations of French, Dutch and English denominations continued and grew under British rule during the eighteenth century. However the French Church at nearby Greenridge was demolished before 1776 (SIIAS n.d.). No records of how or why exists (Steinmeyer 1987:29).

Prior to the Revolution, manufacturing and industry on Staten Island were discouraged by the British. Livelihoods were generally based on farming, stock raising, shell fishing, saw and grist milling and shipbuilding with a few shops and craftsmen to supplement the economy (Federal Writers' Project 1939:600, Leng and Delavan 1924:14). The population of the Island had grown to almost 3000 (Steinmeyer 1987:37).

With the impending Revolutionary War, Staten Island was valued for its location, from a military point

of view. The Staten Islanders of that time were generally in favor of reconciling with the British (Historic Records Survey 1942:xxi; Leng and Delavan 1924:16). These feelings were made known by five Island representatives at the First Provincial Congress. The Continental Congress was not pleased by the attitude of the Staten Islanders and wanted to send them a colonel from New Jersey to protect the Island from British possession. Island representatives protested these actions and agreed to form militias for the "association". This is confirmed by a report made in April 1776 on the progress of these military companies (Smith 1970:57-58).

Although actions were taken by the rebels, Staten Island became a British military stronghold. By 1776 there were over 30,000 troops camped on Staten Island under the direction of General Hoe. Many of the rebels fled to New Jersey for their safety (Clute 1877:85-86). While Staten Island played a major role in the War, there are no reports of any Revolutionary War incidents at what is now Eltingville.

The declaration of peace did not immediately ease life on Staten Island. There was a period of time, before the large number of British troops evacuated their camps, when their relations with the Americans were strained. The last of the British troops left Staten Island, and New York, on November 25, 1783 (Bayles 1887::172, 216). After their withdrawal, former British land was taken and sold, including the project area vicinity and "the whole eastern shore, was opened up to settlement by small farmers" (Historical Records Survey 1942:xxiii).

Figure 9 is a copy of the map of British-Hessian's camps on Staten Island from 1780 and 1783. This map is known for its detail in presenting both geographical features and names and locations of property owners (McMillen 1944:19). The project area falls within an open part of the map. It is closest to homes shown along Amboy Road. The names of those property owners are A. Taylor and J. Sylvester. Figure 9 also shows the early roads of Staten Island. The closest roads to the project area still exist today and are now Amboy Road to the south, Giffords Lane to the east, Arthur Kill Road to the north and Annadale Road to the west. All of these can be seen with better clarity in Figure 10, McMillen's Map of Staten Island during the Revolution. At that time Amboy Road was known as New Road and Annadale Road was called Seaman's Lane. Giffords Lane and the community of Giffords were originally named for a Major Gifford who owned property in that area (Morris 1898:442). A J. Gifford can be seen on Figure 10 near the intersection of Giffords Land and Arthur Kill Road, to the northeast of what is now the project area.

Nineteenth Century

At the turn of the century Staten Island's population had grown to 4564 (Steinmeyer 1987:57). The early nineteenth century was a time of increased development on Staten Island and in what is now the Eltingville area. However it was not until after the War of 1812 that Staten Island's economic base expanded. Agriculture was still predominant, but "other occupations as fisheries, shipbuilding, and manufacturing gradually developed and became important" (Historic Records Survey 1942:xxxi). However the project area appears to have been farmed at least through the 1830s as shown in the U.S. Coast Survey from that time (see Figure 11).

According to the 1840 census of Richmond County, 31 percent of those listing professions were employed in the field of agriculture, 29 percent in trades and manufactures and 24 percent in navigation (Akerly 1843:189). These numbers show that while agriculture and navigation still played a predominant role at that time, more industrial pursuits were also well established.

Two wooden plank roads were created on Staten Island about 1850. Port Richmond and Fresh Kills Plank Road was part of what is now Richmond Avenue and Richmond Plank Road was part of what is now Richmond Road (McMillen 1946:8; Reed 1965:18). Road improvements continued and, in 1864 macadamization began on Staten Island when stone from the Port Richmond quarry was used for paving Richmond Avenue and the street name was changed to Stone Road (Reed 1965:20-21). Plank roads made what is now Eltingville more easily accessible to summer travelers. It "was quite a popular resort" (Morris 1898:442). In addition to improvements in the roads of this time, the 1860s brought the first rail service to Staten Island (Leng and Delavan 1924:24-25, Reed 1953:3). The Staten Island Railroad from Vanderbilt Landing opened in 1860 running parallel to the Wilson Avenue East project area. At the time it ran as far as Eltingville. The advertisement for the service said trains ran three times per day, twice on Sundays, to meet with the ferry from New York (Steinmeyer 1987:78). Later in 1860, the short-lived Staten Island Steam Railroad commenced with service from Clifton to Tottenville (ibid.:93). Walling's 1859 map of Staten Island is a slightly earlier, perhaps the earliest, reference to the place name Eltingville. While it is not shown on the map itself, Walling's list of postmasters contains "M. Elting, Eltingville, Southfield". What is now Amboy Road was the boundary between Southfield and Westfield. The Eltingville area was known as South Side until 1873 when records show the name was changed to

Sea Side (Davis 1896:64).

> The Elting Family, for whom Eltingville is named, came, according to Dingman Versteeg in the New Netherland Register, February, 1811, from the Province of Drenthe, and settled at New Paltz...whence they came to Staten Island early in the nineteenth century (Leng and Davis 1930:895).

The Civil War had little effect on the Island, as evidenced by the progress in services throughout the 1860s. Despite draft riots, Staten Island was considered a safe haven during the Civil War and southern farmers reportedly sent their women to the Island as a refuge during these years (Federal Writers' Project 1939:601). In 1862 the first gas light company on Staten Island was established (Bayles 1887:740). The Church of the Holy Comforter in Eltingville was erected in 1865 (Clute 1877:274; NYCLPC 1992:232).

The nineteenth century Richmond County land grantee books show an 1869 property transfer from Andrew and Catharine Eddy to Marvin Wilson (Liber 18:157). This being the only recorded deed of Marvin Wilson's prior to 1870, it is assumed to include the project area. This is because Mr. Wilson had a survey of his Eltingville farm, which included the project area, made in 1870 (see Figure 12). Although the survey is marked "M. Wilson", the Topographic Bureau index lists the property belonging to "Marvin Wilson". The map shows that Wilson owned the property north of Amboy Road and east of Richmond Avenue, then called Bridge Avenue. A symbol which may indicate a home is shown in the southern part of the property, north of South Amboy Road. The Staten Island Railroad traversed Wilson's property which also included the depot. Most importantly, the survey shows Wilson Avenue, indicating this road was in existence at this time. Presumably the road was laid and named after Wilson's purchase of the land, recorded in 1869. The church depicted on Richmond Avenue, south of Wilson's farm, may be the first church built in Eltingville, the Church of the Holy Comforter, later moved and known as St. Alban's Church (NYCLPC 1992:232; SIIAS n.d.).

By 1874 Wilson sold part of his holdings including his house and most of the land north of Wilson Avenue and south of the Staten Island Railroad tracks (see Figure 13). The train depot was labeled Eltingville Station. The estate of N. Elting owned property both north and south of the tracks and west of Richmond Avenue, then called Seaside Avenue. By 1887 Wilson's name is no longer shown in Beers Atlas, although this may be because the detail is not provided (see Figure 14). Robinson's 1898 Atlas shows that most of Wilson's property was owned by Mrs. E.E. Hardin (see Figure 15). By that time

only a small piece of land, without a house, at the corner of Bridge Avenue and the tracks remained under the name Wilson. However since no first initial or name is depicted, one may only assume it was retained by Marvin Wilson. Late nineteenth century directories were consulted and no listings for anyone by the name Wilson was found living in Sea Side, South Side or Eltingville (Standard 1895; Trow's 1898; Webb's 1888, 1890, 1892).

The mid to late nineteenth century was a time when new services were being introduced on Staten Island. The Richmond County Gas Company was formed in 1856. The Staten Island Water Supply Company was incorporated in 1879 (Steinmeyer 1987:115). Telephone service began on Staten Island in 1882 (Leng and Delavan 1924:28). Shortly after, the electric power industry took hold on Staten Island (ibid.:29; Steinmeyer 1987:116). A large effort to bring summer visitors to the Eltingville area began in 1882 with the initiation of construction for the North South Railroad. This abandoned venture was to extend from the Kill van Kull to the shore in Eltingville. However funding was not available and the project was aborted in 1883 (Leng and Davis 1930:316). Plans for the rail show it was to cut southward through the property of George White, Mrs. Edward Banker, the Stuyvesant heirs and John Benham, in the project area vicinity, before crossing the Staten Island Railway in Eltingville (Kelly 1883). Figure 6 shows remnants of the abandoned railroad to the west of the project area, crossing over the current locations of Chesebrough Street, Wilson and Wainwright Avenues and Sylvia Street.

The 1885 Sanborn Insurance Company Map of Staten Island provides a population figure of 16,000 for the east shore of the Island. However the project area vicinity was not mapped, most likely because it was too sparsely populated at that time. Staten Island became a borough of New York City in the 1890s and by the end of the century the Staten Island Road Bill was passed. Almost half of the roads in existence at that time were macadamized, including Washington Avenue, now Arden Avenue (Morris 1898:453-455). The status of Wilson Avenue at that time was not identified.

Twentieth Century

At the turn of the century Staten Island's population had grown to over 67,000 (Steinmeyer 1987:116). The early twentieth century brought the continued increase of development on Staten Island. The municipal ferry was established at St. George in 1900 (Kolff 1926:30). The Richmond Light and

Railroad Company was formed in 1902 after purchasing electric rail rights (Leng and Delavan 1924:29).

Robinson and Pidgeon's 1907 Atlas shows very little change in the project area vicinity. Mrs. Hardin's holdings, south of the project area and north of the tracks, had been transferred to Webb's Academy. Figure 6 shows that there were no changes through 1912. Sanborn's maps of 1910 and 1917 once again did not include the project area. Bromley's 1917 Atlas did include the project area vicinity (see Figure 16). It shows Eltingville Boulevard mapped and Getz Avenue as a broken line. Most notably, the property adjacent to the project area is depicted as subdivided for the first time. Five lots were laid out on the northern side of the project area and four on the south. Although lots are shown on the map, only one has been constructed with a dwelling on it by that time. The stream located to the east of the project area is also depicted on Figure 16. This stream was a branch of what was known as Benham's Brook or Betty Holmes' Brook at the turn of the century (Davis 1896:32).

Sanborn's 1938 Insurance Map of the vicinity only includes from the project area northward (see Figure 17). The house depicted in the 1917 Bromley Atlas had likely been demolished and another reconstructed in its place because the lot size, building orientation, shape and size changed over those years. Two of the lots laid out in 1917 were probably combined on this property by 1938. No change was seen in this area in the 1951 updated Sanborn Map. The current status of the homes located on the northern side of the Wilson Avenue East project area can be seen on Figure 2. The only notable change is in the western lot which now contains attached homes.

CONCLUSIONS AND RECOMMENDATIONS

This report has evaluated three components of the Wilson Avenue East project area to determine the potential for it to contain preserved archaeological resources. Topography was discussed for its potential to document past site disturbances that would have obliterated any archaeological resources which may have been present, as well as to effect the determination of prehistoric archaeological potential. This was followed by a discussion of prehistoric and historic archaeological sensitivity.

The topographical data presented indicates the project area contains no disturbances which would have destroyed archaeological resources. It also indicates that the general area would have been favorable to prehistoric food resources. Prehistoric archaeological sites are known to be within one-half mile from the project area. However, the likely proximity to fresh water sources during prehistory was over 700 feet away, making it closer to the Wilson Avenue West project area. The Wilson Avenue East project area is therefore less likely to contain prehistoric archaeological resources and no Phase 1B archaeological testing is recommended for that purpose.

The project area is not within any New York City designated landmark district, nor does it contain any designated landmarks (NYCLPC 1979, 1992). The Wilson Avenue East project area was already a street by at least 1870. Prior to that time, no construction was found on any plans or in any histories of the project area. The property was most likely farm land since at least 1835. Therefore, it is unlikely that any historic archaeological resources would be present within the project area and no Phase 1B archaeological testing is recommended for that purpose.

Plate 1 View of the Wilson Avenue East project area from the corner of Eltingville Boulevard facing east.

Figure 1 Wilson Avenue East project area location shown on the U.S.G.S. 7.5 minute series map of Arthur Kill, New York.

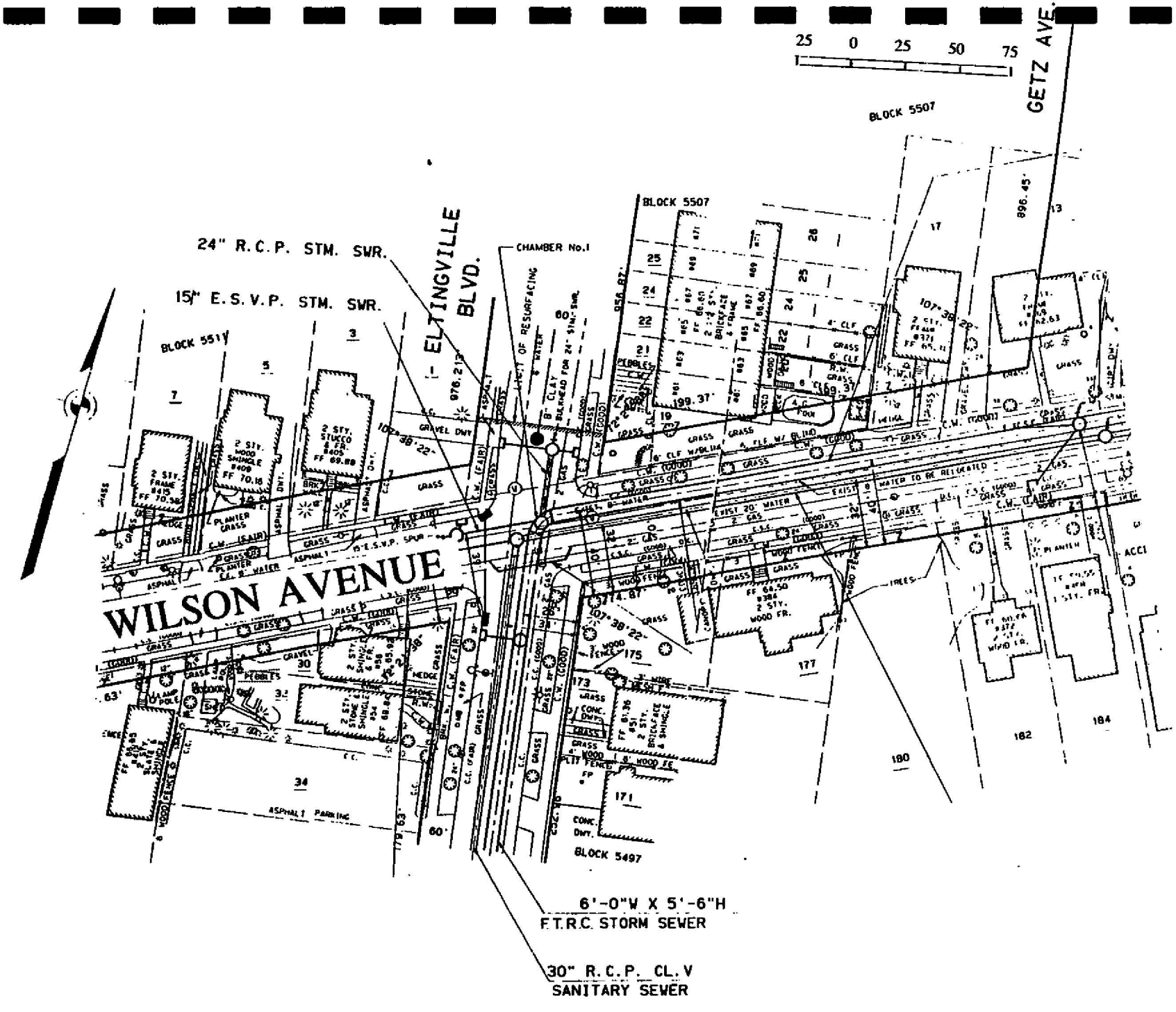


Figure 2 Plan of the proposed sanitary and storm sewers in Wilson Avenue.

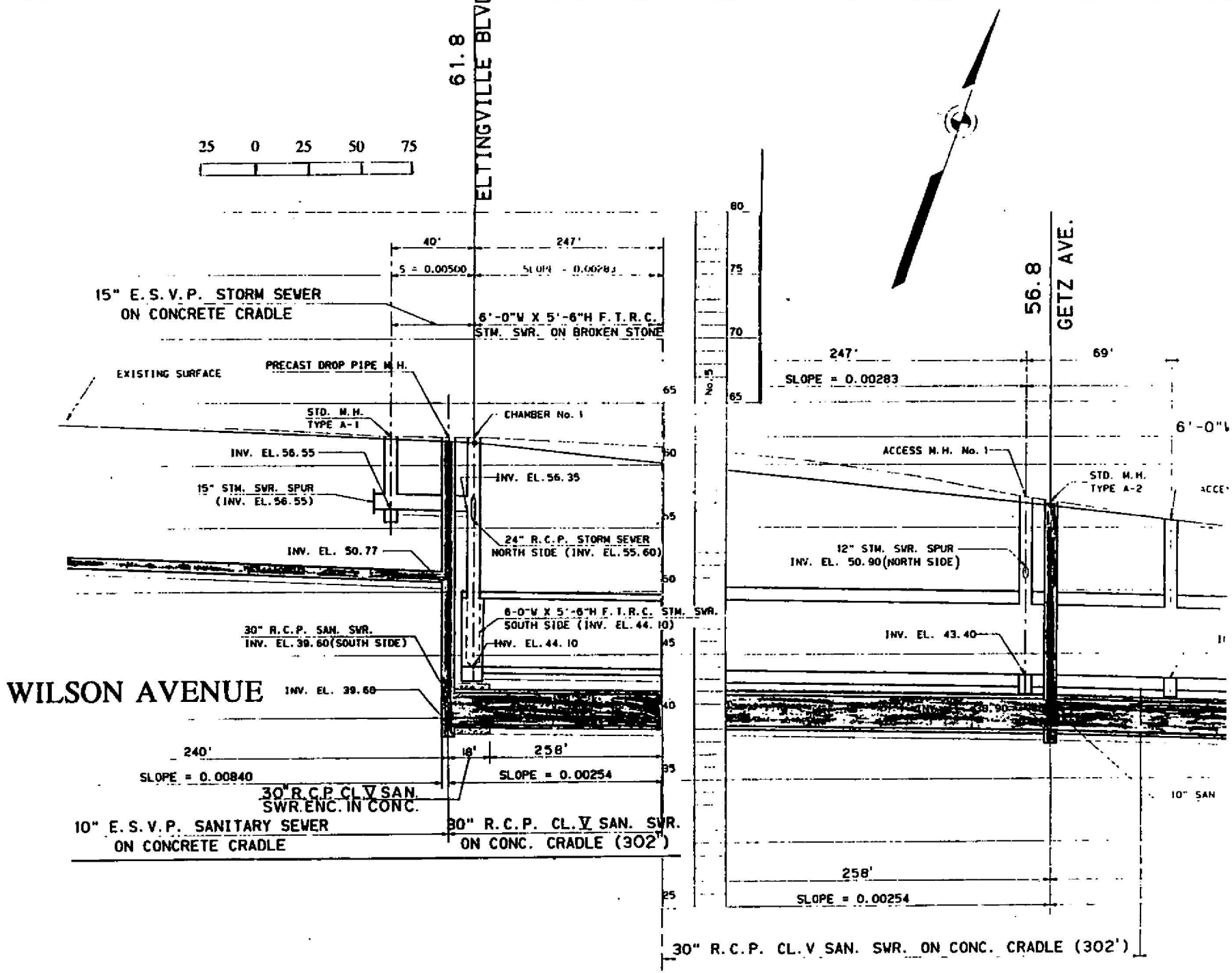


Figure 3 Profile of the proposed sanitary and storm sewers in Wilson Avenue.

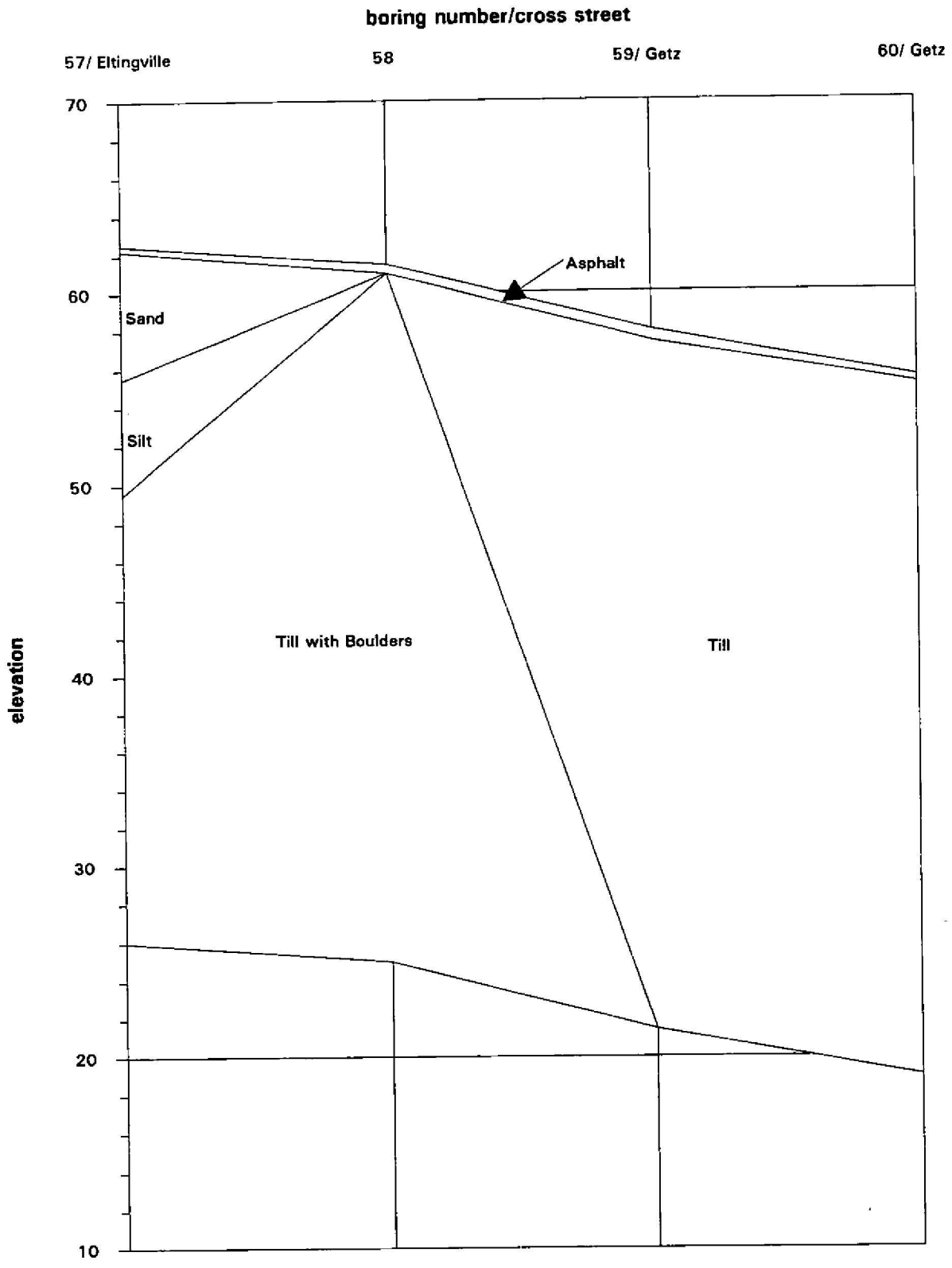


Figure 4 Wilson Avenue stratigraphy profile.

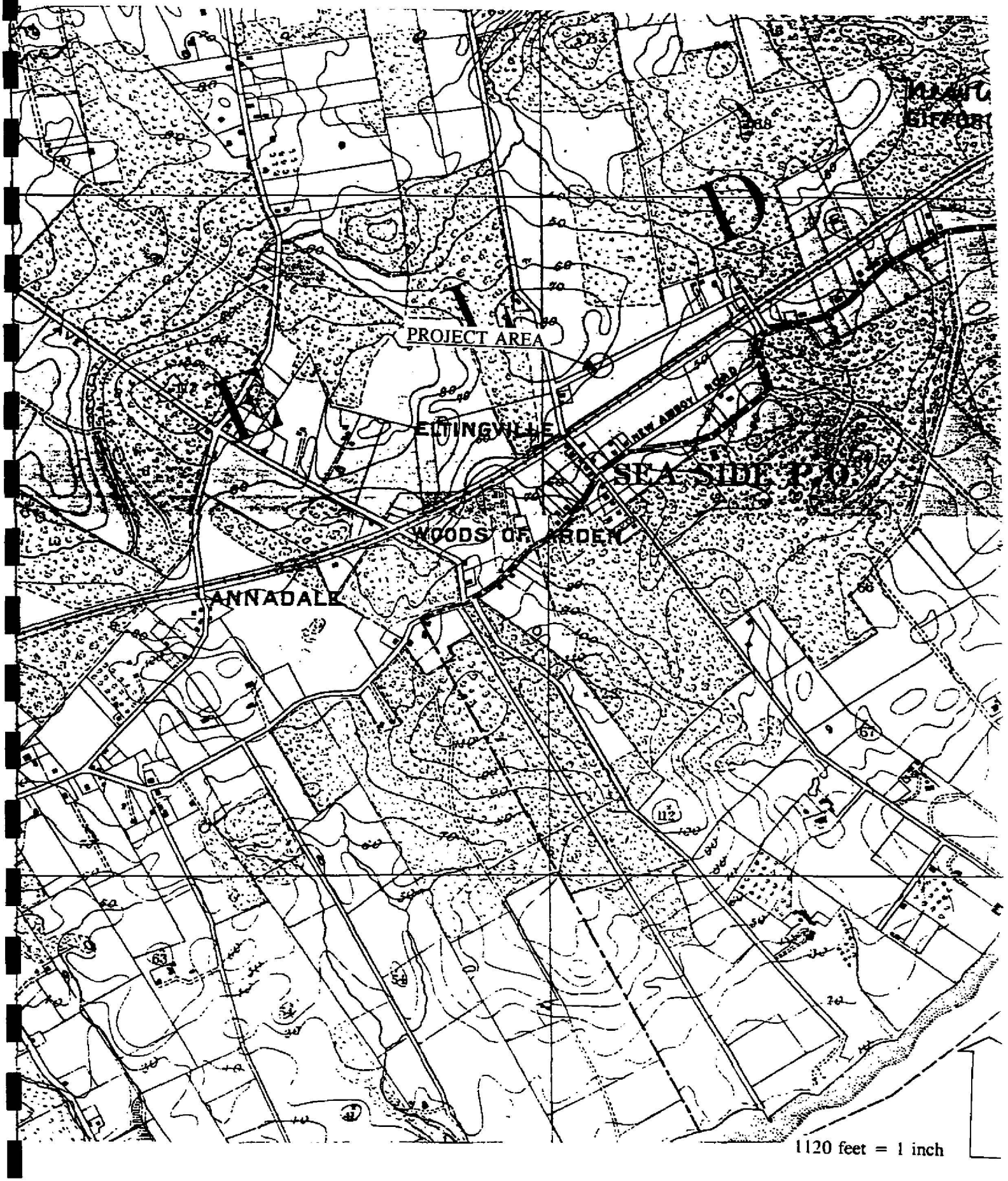


Figure 5 From Vermeule and Bien's 1890 Topographical Map of Staten Island.

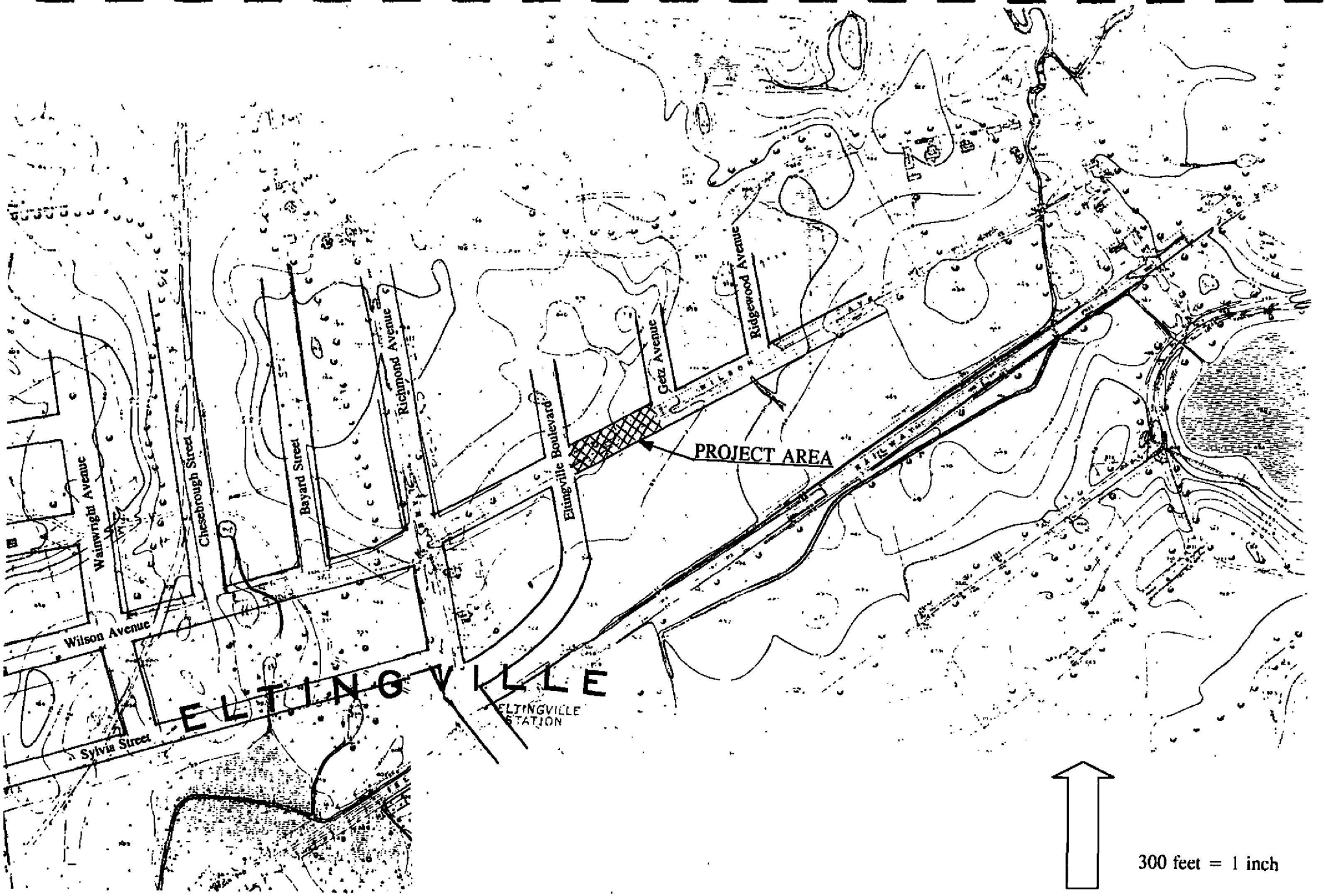


Figure 6 From Borough of Richmond 1912 Topographical Survey Sheet 77 with some modern streets superimposed.

Figure 7 Known prehistoric archaeological sites in the vicinity of the Wilson Avenue East Sewer project.

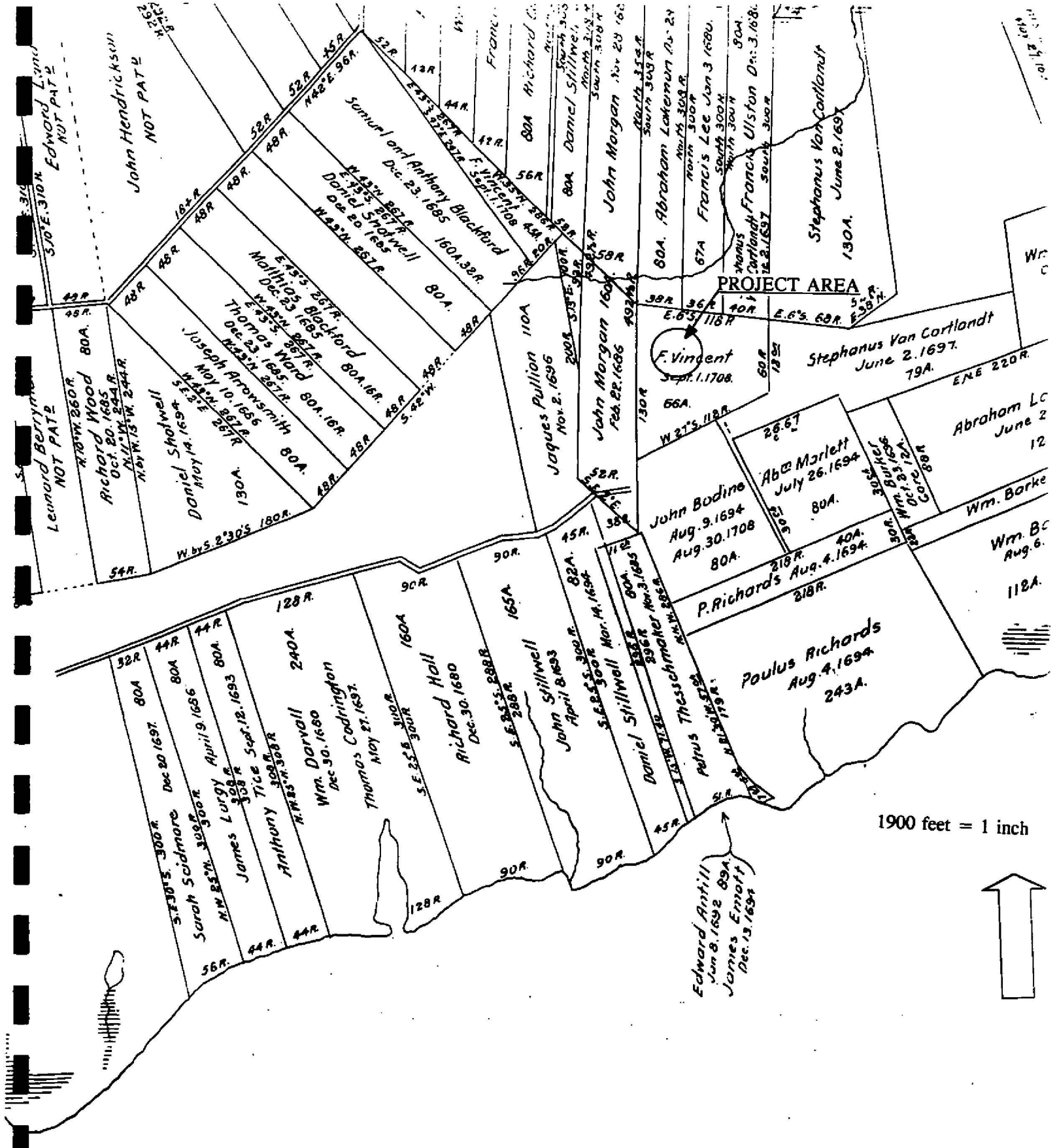


Figure 8 From Skene's map of Staten Island showing Colonial Land Patents.

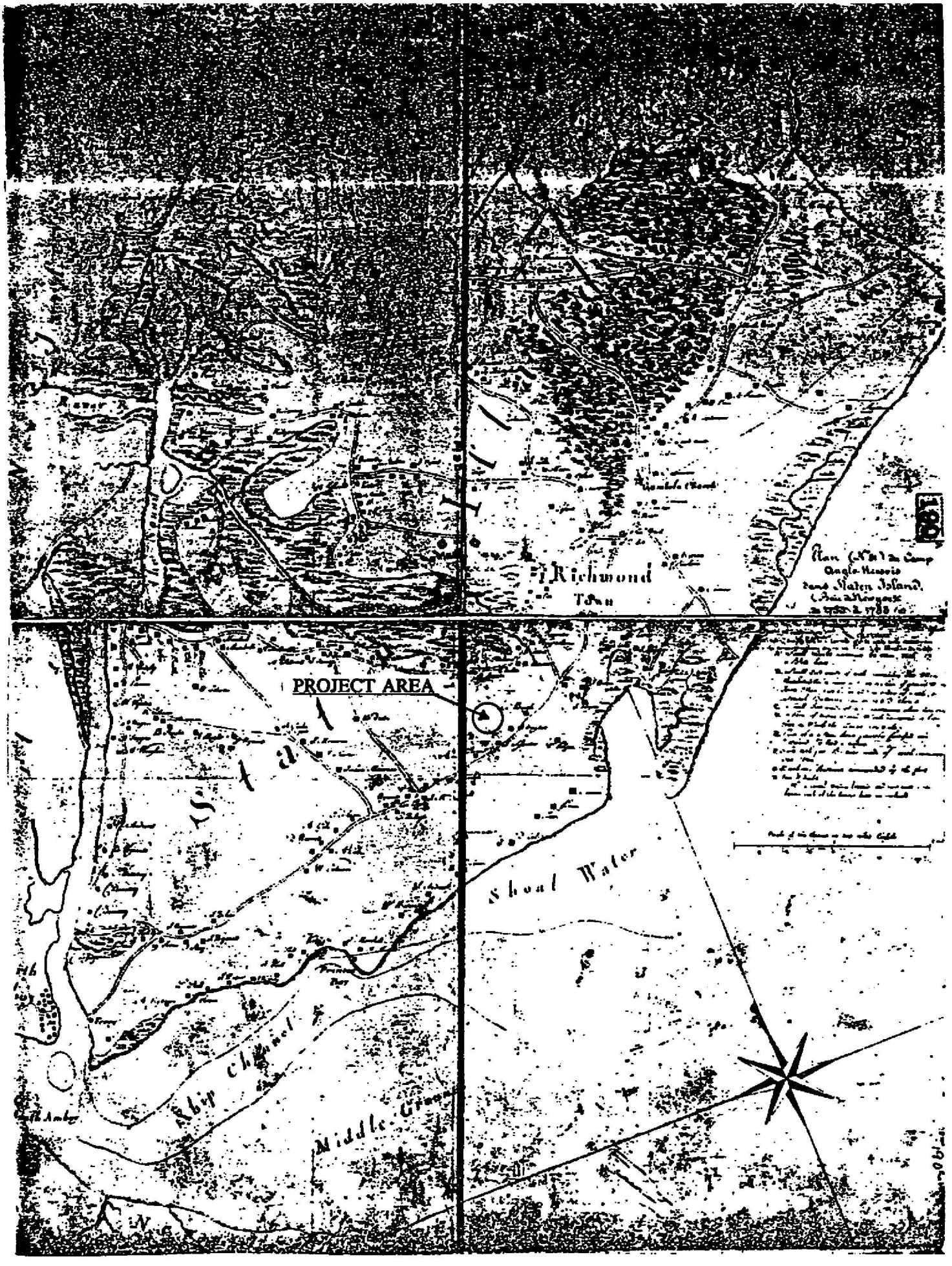


Figure 9 Plan du Camp Anglo-Hessois dans Staten Island (Baie de New York) de 1780-1783.

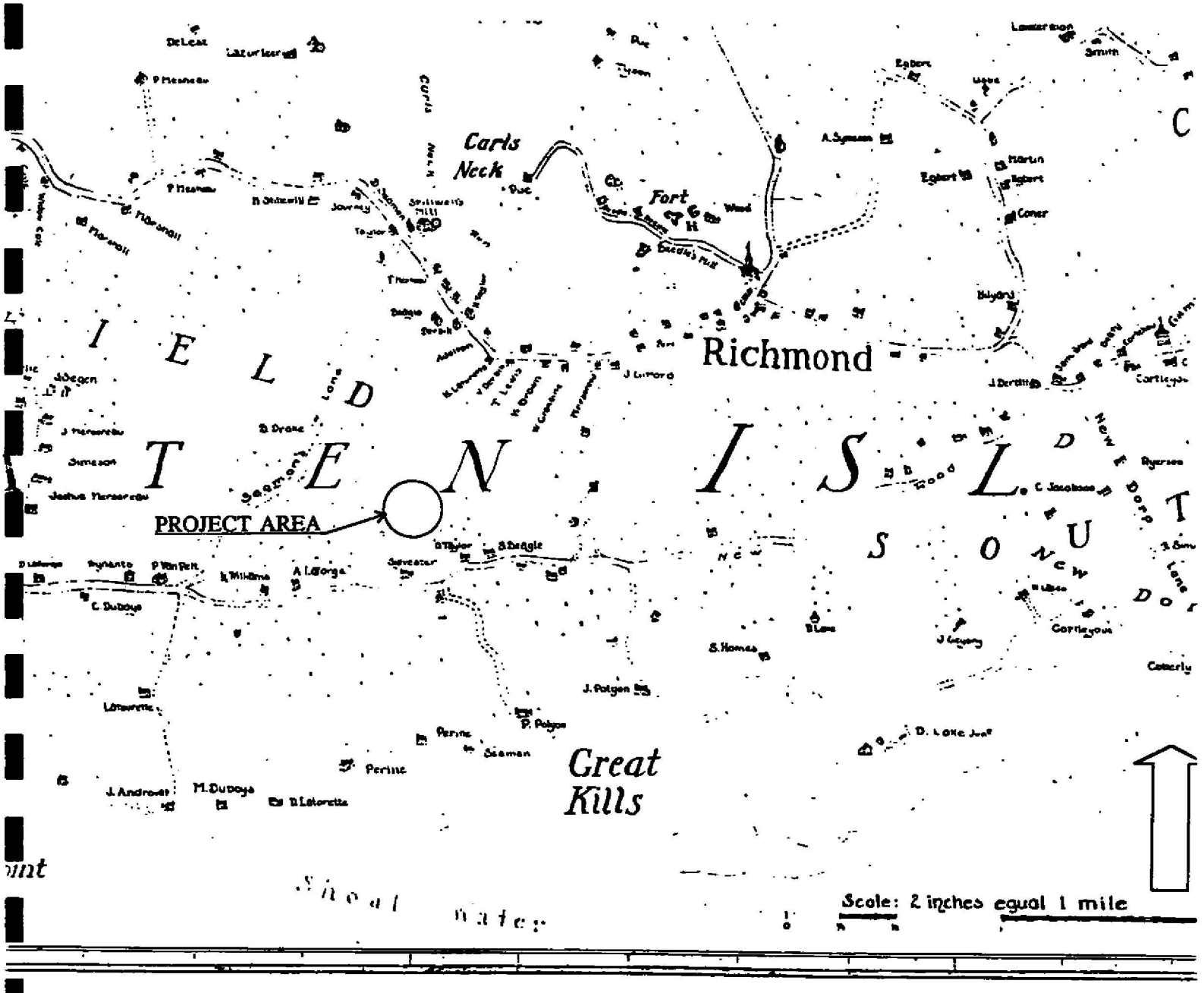


Figure 10 From McMillen's Map of Staten Island during the Revolution.

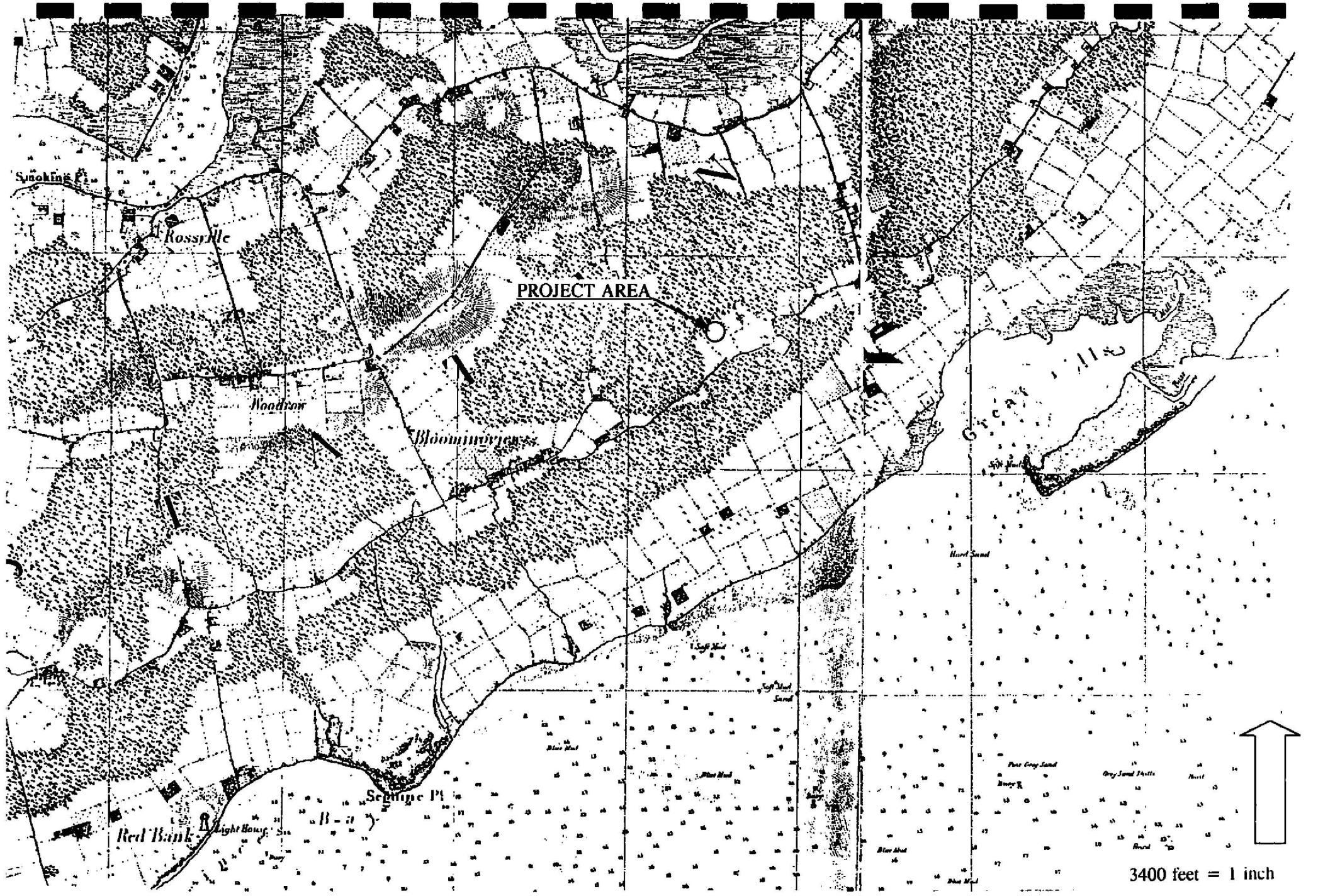


Figure 11 From the Charter of New York Harbor, Constructed 1836-39.

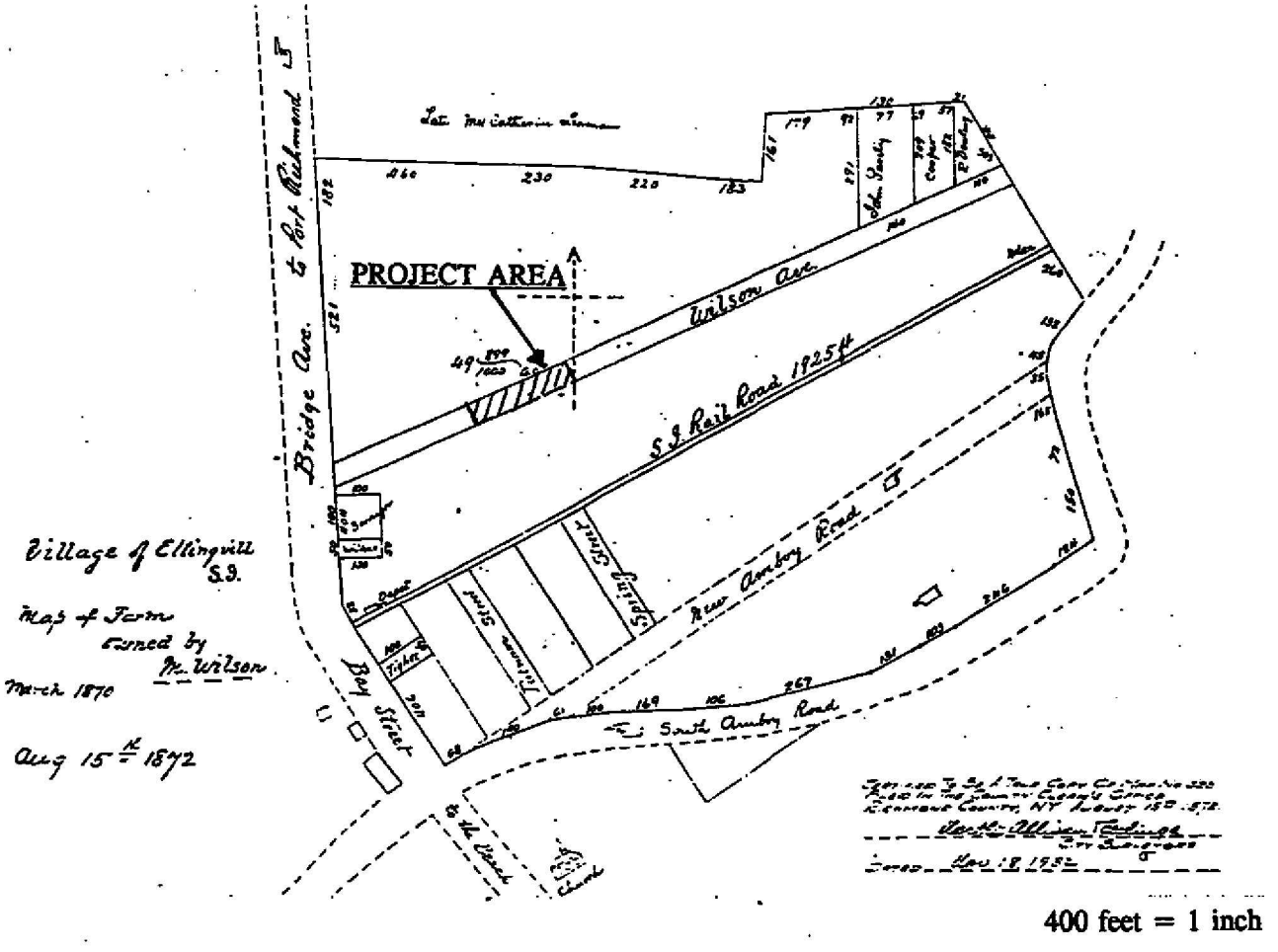


Figure 12 Map of Farm owned by M. Wilson, 1870.

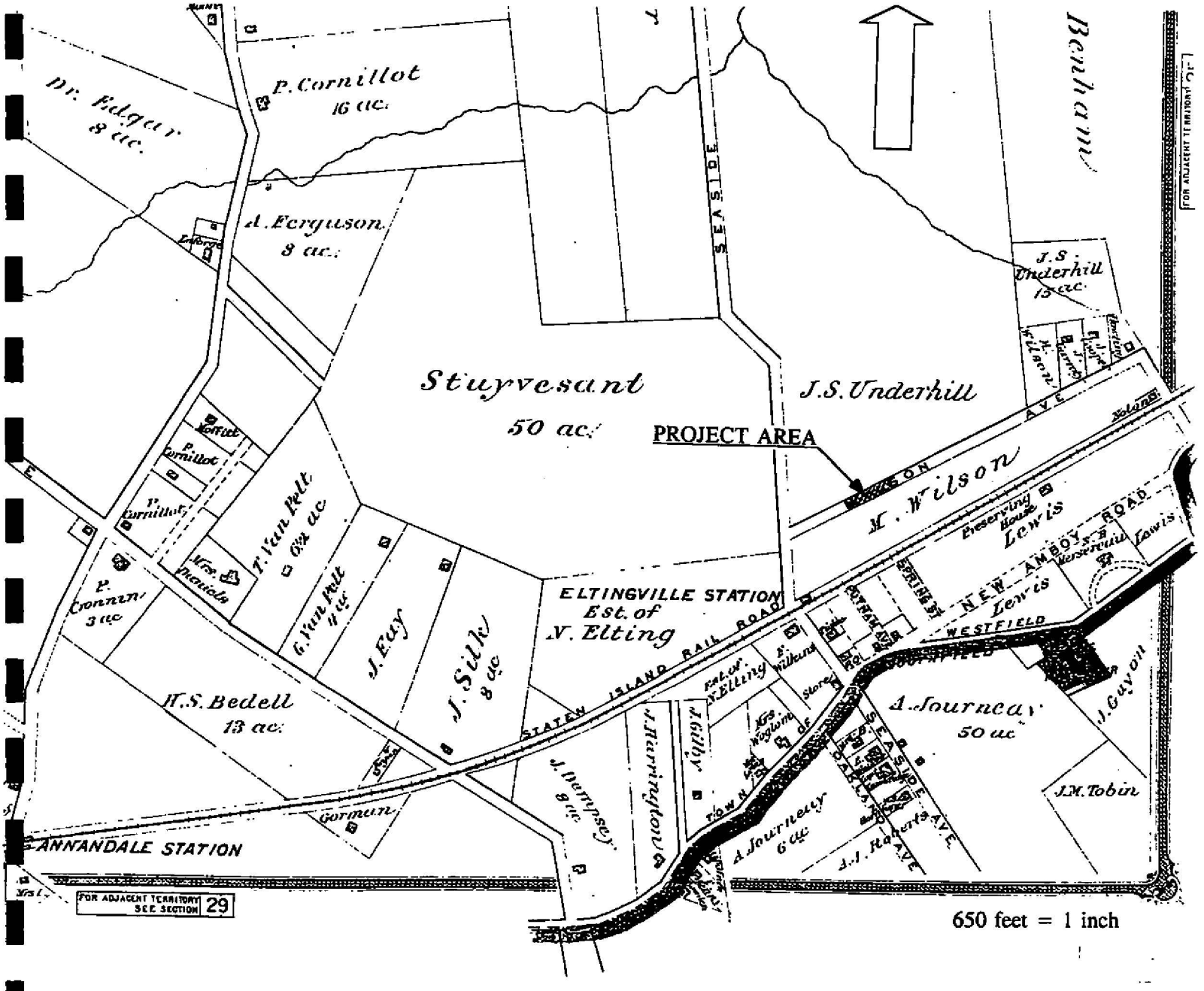


Figure 13 From Beers' 1874 Atlas.

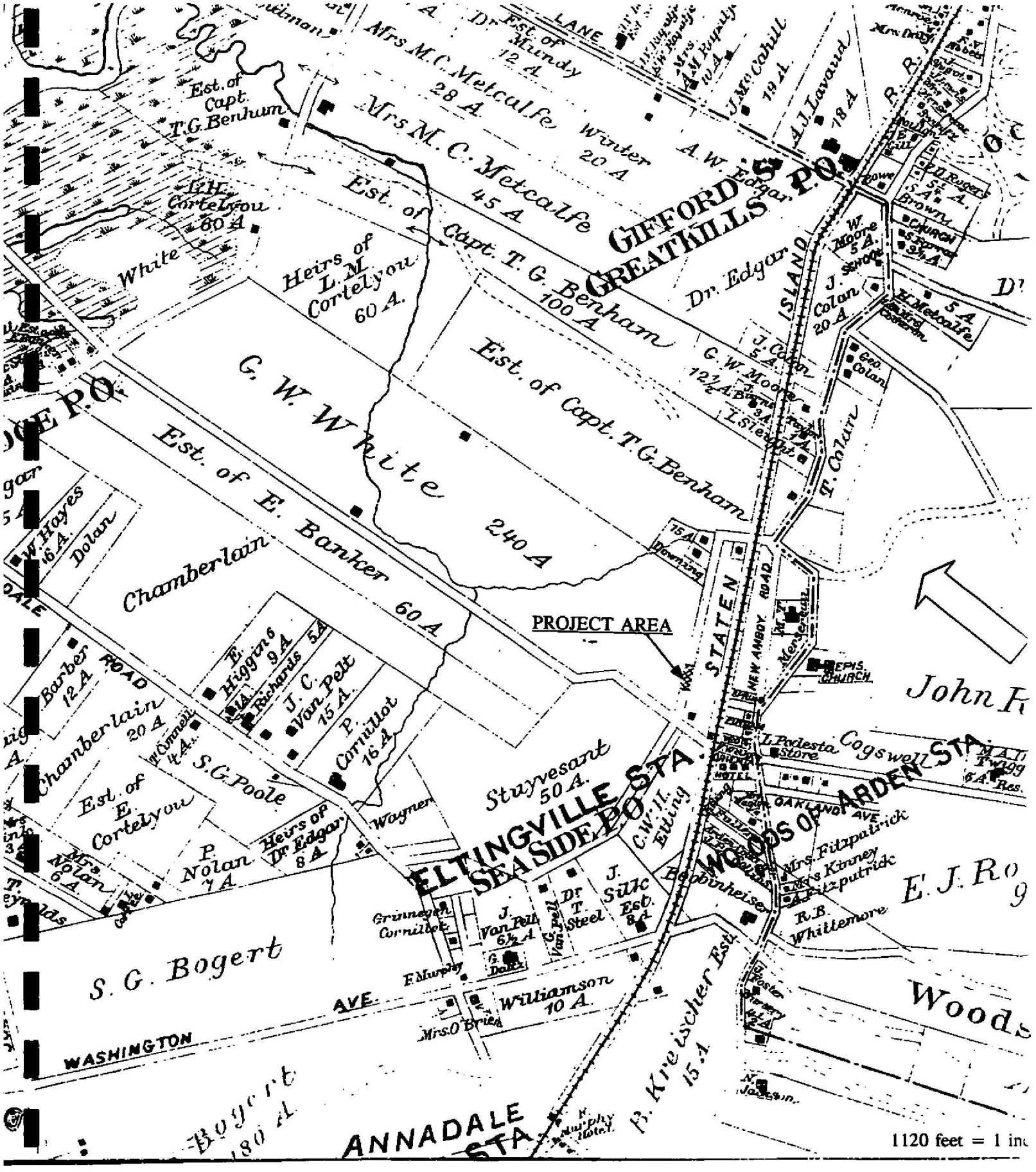
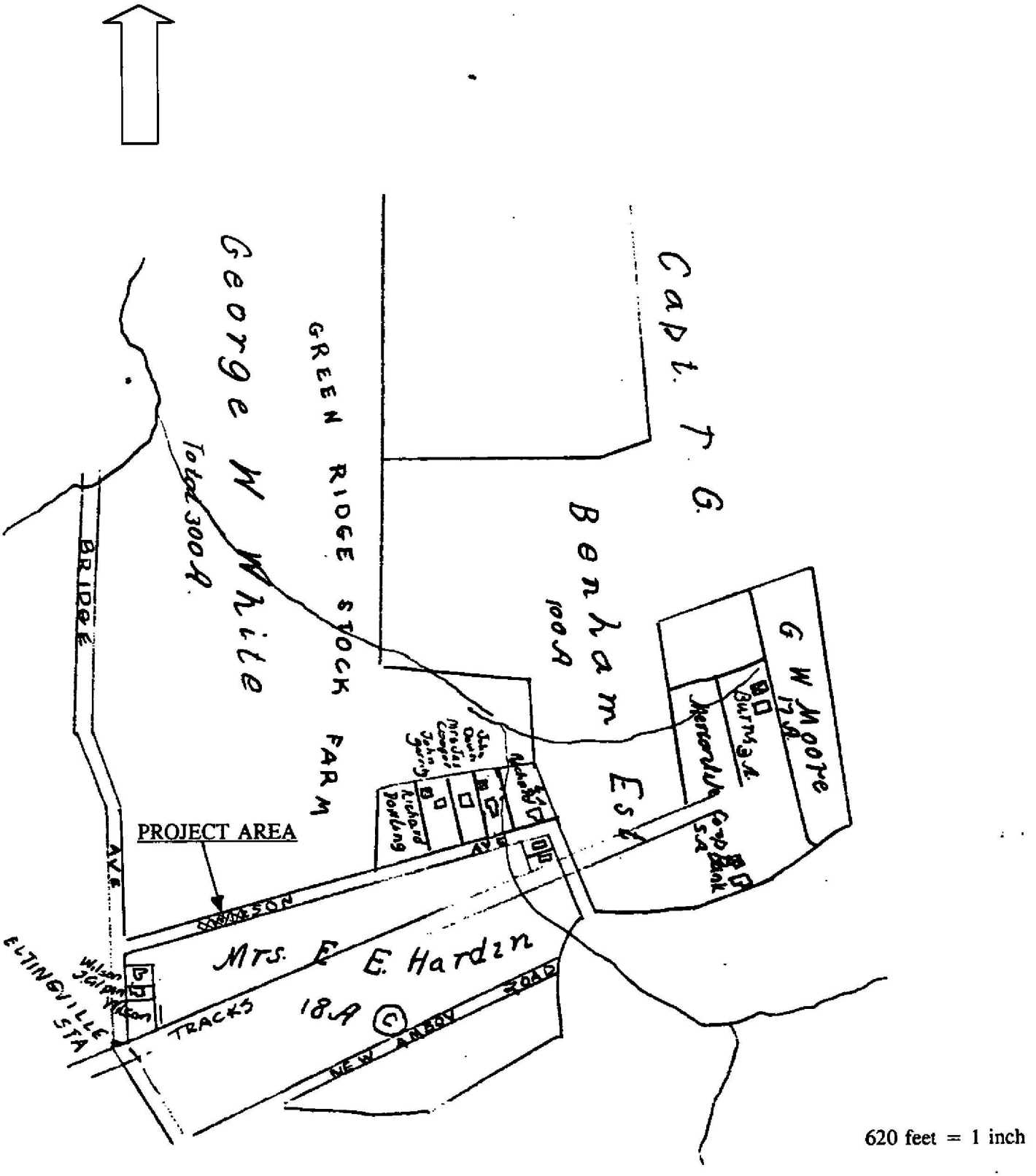


Figure 14 From Beers' 1887 Atlas.



620 feet = 1 inch

Figure 15 From tracing of Robinson's 1898 Atlas.

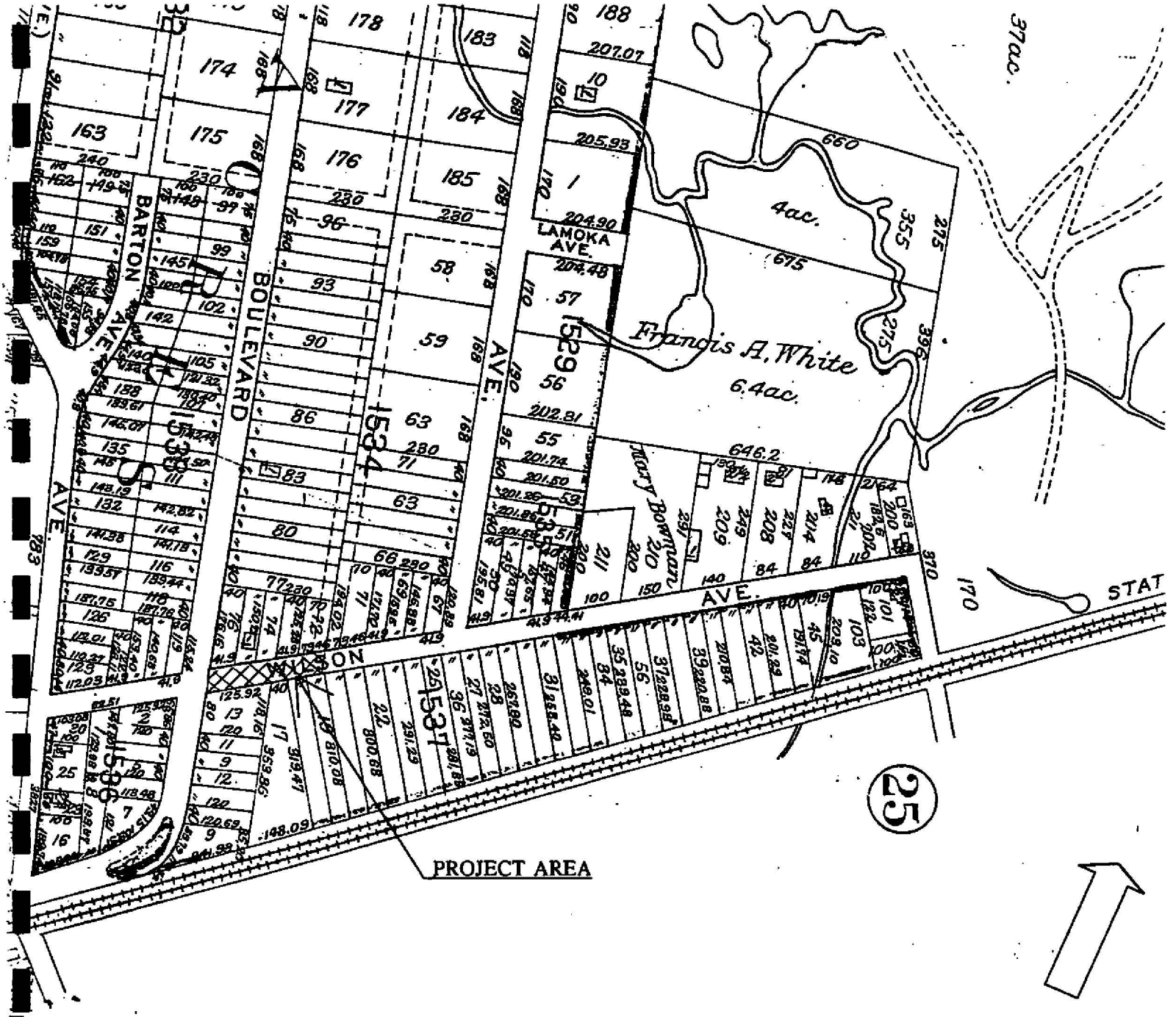


Figure 16 From Bromley's 1917 Atlas.

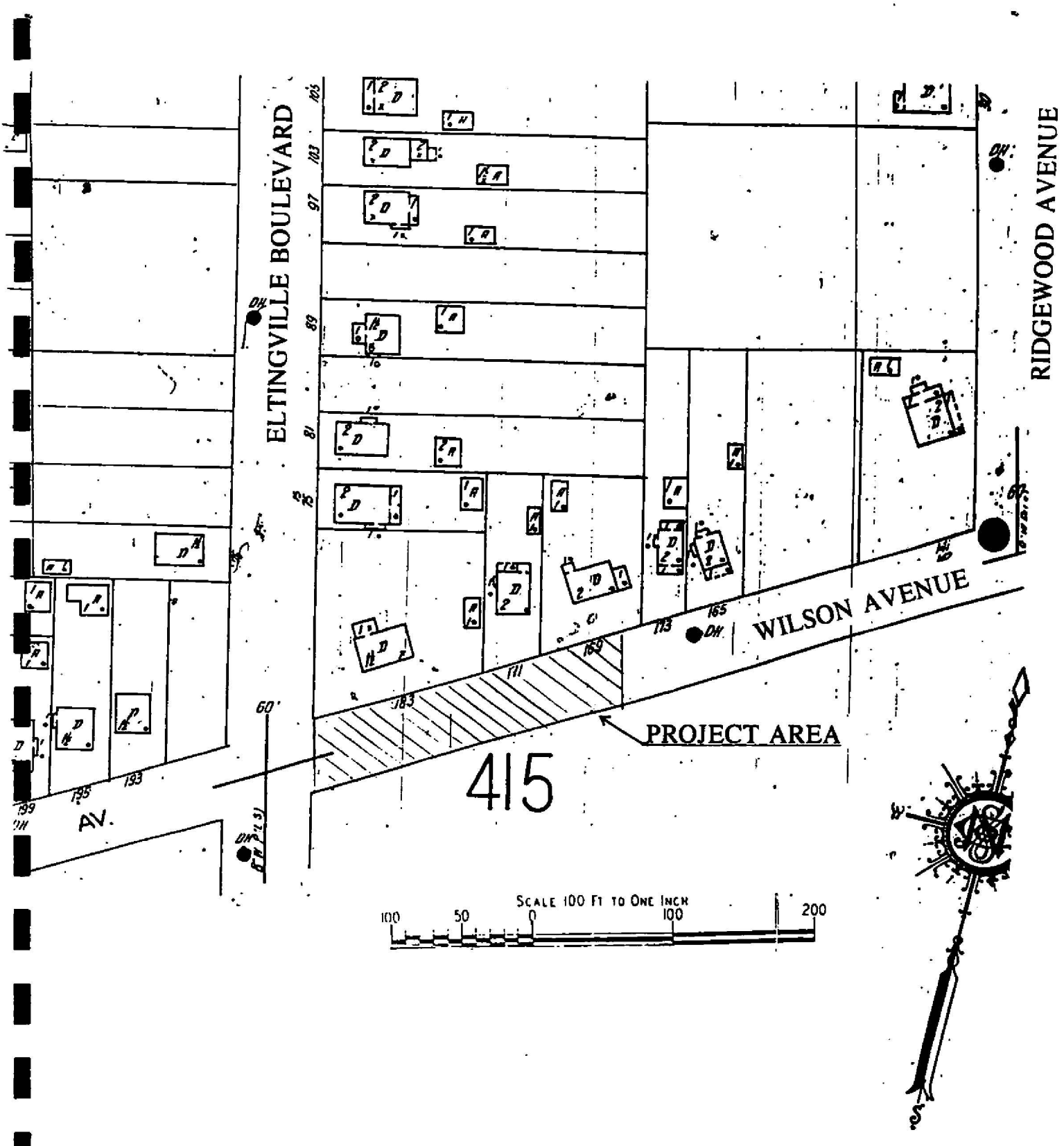


Figure 17 From Sanborn's 1938 Insurance Maps.

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