PHASE 1A HISTORICAL/ARCHAEOLOGICAL SENSITIVITY EVALUATION OF THE TOTTEN VILLAGE DEVELOPMENT STATEN ISLAND, NEW YORK

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#### TOTTEN VILLAGE DEVELOPMENT

#### INTRODUCTION

The purpose of this Phase 1A Sensitivity Study is to document potential prehistoric and historic sensitivity of the proposed Totten Village Development Project through the review of existing archival, cartographic and published references and then to make recommendations regarding possible further testing. In order to provide a context for evaluating any identified resources within the parcel itself, this survey shall include a synthesis of published and unpublished prehistoric and historic resources in the immediate area surrounding the project area.

The Totten Village Development project area is located in southwestern Staten Island. The project area consists of six parcels, all located to the northwest of the intersection of Amboy Road and Bethel Avenue. The Tax Block and Lot designations in these parcels consist of Block 8012 Lot 1; Block 8015 Lot 1; Block 8016 Lot 1; Block 8020 Lot 1; Block 8034 Lot 74; Block 8036 Lots 33, 37, 40, 43 and 46; and Block 8039 Lot 1. The Totten Village project area is located on the northeastern edge of the village of Tottenville. See Figure 1 for the location of the project parcels.

This study is organized in the following manner: first, a section describes the geography and physical setting; second, a section on the prehistoric sensitivity of the area; third, a review of the historic sensitivity of the area; and fourth, the conclusions and recommendations.

#### GEOGRAPHY AND PHYSICAL SETTING

The project area is located in the Atlantic Coastal Lowland Physiographic Province of New York State. There is only one other location in the state (Long Island) where this province occurs (Van Diver 1985:34). Geographically, Staten Island is part of New Jersey from which it is separated by the Kill Van Kull and the Staten Island Sound (Skinner 1909).

The surficial geology of Staten Island consists of landforms and deposits of glacial origin. The sediments were deposited by the Wisconsin Ice Sheet 55,000-10,000 years ago and generally consist of ground moraine, terminal moraine and outwash sediments (Jacobson 1980:5). The shoreline area in this portion of Staten Island is comprised of sandy embankments of beach sand adjacent to and at times overlying the area's geologically earlier glacial deposits of Cretaceous formations of sand and clay (Weingartner (1967:41). Local glacial deposits may be overlaid by fill as well as beach, marsh, dune, swamp, and estuarine deposits (Jacobson 1980:5).

During June 1989, the Principal Investigator visited the Totten Village Development project parcels in Staten Island. During this visit, a pedestrian survey was utilized to inspect the project area. The majority of the project area is presently covered with much growth of grasses, shrubs and trees on the higher ground, and reeds on a few areas of lower elevation. A few locations have suffered from wind erosion especially on Block 8034. The soil appeared sandy in most of the locations where it could be seen.

#### PREHISTORIC SENSITIVITY

As part of the project evaluation process, this sensitivity study has surveyed published and unpublished resources in the Archives and Library of the Staten Island Institute of Arts and Sciences (hereinafter S.I.I.A.S.), the library of the New York City Landmarks Preservation Commission, the files of the New York State Museum Division of Historical and Anthropological Services, the Research Branch of the New York Public Library, and the New York State Office of Parks, Recreation and Historical Preservation (N.Y.S.O.P.R.H.P.). Materials collected by the Principal Investigator over the last five years were also utilized during this research effort. Most prehistoric archaeological work undertaken by both professional and avocational archaeologists has historically been concentrated on this southwestern portion of Staten Island (Baugher 1985 pers. comm.). This should eliminate the problems of inadequate archaeological survey coverage particularly evidence in the interior of the island.

Table 1 presents the results of our search for prehistoric sites in the vicinity of the Totten Village Development project area. Included in the table are nineteen sites located two miles or less from the project area. The locations of these sites are presented on Figure 2 with letter code identifiers which correspond to those in Table 1.

Of the nineteen known occurrences of prehistoric occupation within two miles of the project area, a few, including portions of the Wards Point/Burial Ridge complex, were excavated under controlled conditions. The rest represent either surface finds, less well documented excavated finds by local amateur archaeologists, or the usually completely undocumented finds of pothunters.

Alanson Skinner, one of the first professional archaeologists to work extensively on Staten Island, characterized the locations chosen by prehistoric populations on the island as follows: "Throughout Staten Island, with very few exceptions, aboriginal sites are confined entirely to the sandy spots" (1912:90).

A number of these nineteen prehistoric sites are known primarily through the work of Arthur C. Parker, the former New York State Archaeologist, during the first quarter of this century. Included are seven sites designated "C", "J", "K", "L", "O", "P", and "Q" in Table 1 and on Figure 2. These are described as varying in size and importance from traces of occupation through campsites to villages. Occasionally other features such as burials or shell middens are mentioned in these brief descriptions. With the exception of sites "J", "K", and "L" which are discussed in more detail below, these sites do not have names associated with them.

### TABLE 1: PREBISTORIC SITES IN THE VICINITY OF THE TOTTEM VILLAGE DEVELOPMENT

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<u>SITE_HANB</u>	SIIAS	<u>PARKER</u>	<u>Nyski</u>	REFERENCE	PERIOD(S)	DESCRIPTION
A Richmond Valley (Boiling Spring)	STD-RV			The New Builetin 1961	Wood l and	
B Page Ave., North	30-RIC-7-AJA		768	Anderson 1965 Anderson 1966	Archaic & Woodland	Burial, campsite
C (Kreischerville)		ACP-RICH-16	4606	Parker 1922:683		Campsite
D Page Ave., South	30-RIC-7-AJA		767 (748?)	Kaesar 1966	Archaic & Woodland	
B Bedell Avenue				Pickman & Tamin 1984		Lithic scatter
P Surfside Village				Roberts & Stehling 1987		Campsite
G Canada Hill			770	Williams a.d.		
A Mount Loretto				Pickman & Yamin 1984		Lithic flakes
I Pittsville Avenue				Pickman & Yamin 1984		Lithic scatter and projectile point
J Burial Ridge/ Ward's Point	STD-1-3	ACP-RICH	(4619?)	Jacobson 1980 Skinner 1909	Archaic, Woodland & Contact	Many burials hunting/fishing camp, poss. village
K Kreischerville "Indian Fields"		ACP-RICH-13	771 4603	Parker 1922:682 Tamin 1987:pers.comm.		Traces of occupation
L Red Bank (Jack's Creek)	STD-PB	ACP-RICE	741 4620	Skinner 1909 Salwen 1957 Parker 1922:pl 211 Pickman 1978	Woodland	
W Sharrot Ave.	STD-PB		740	Salwen 1957, 1967		
W Clay Pit Road				Pickman 1978	Mid-Late Woodland	
O Sandy Brook		ACP-RICH-14	4604	Parker 1922:682		Burials, Traces of Occupation

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P (Lemon Creek)		ACP-RICH	4612	Parker 1922:pl 211		Traces of occupation
Q (Ellis Point)		ACP-RICE	4623	Parker 1922:pl 211		Village
R New Site #2			5702	Regensburg in Jacobsen 1980	Barly Woodland	
S Sandy Ground	STD 24-3		747			Placed in Nat. R 23 Sept. 1982

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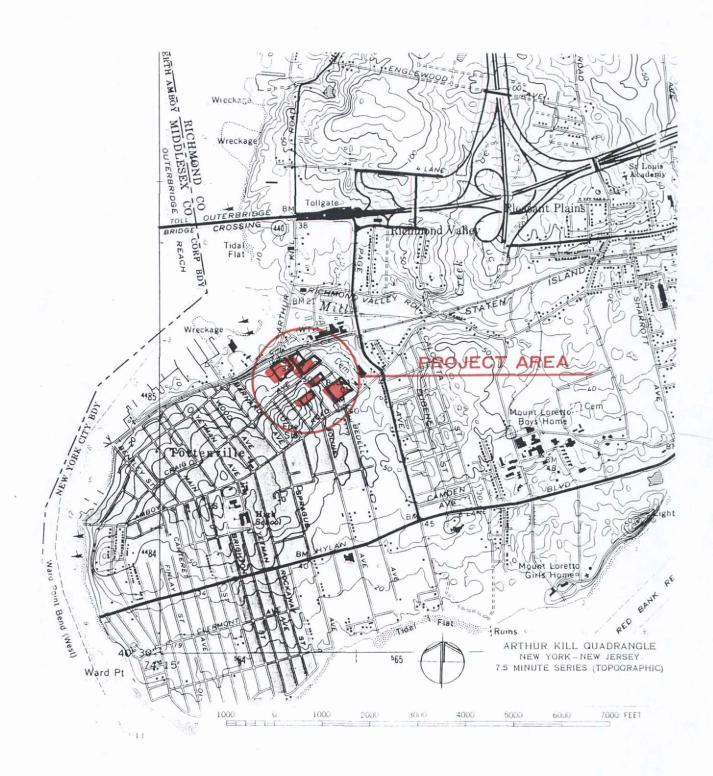


Figure 1 Location of the project area shown on U.S.G.S. 7.5 minute series, Arthur Kill N.Y.-N.J.



Figure 2 Known prehistoric sites within a two mile radius of the project area shown on U.S.G.S. 7.5 minute series, Arthur Kill N.Y. N.J. Quadrangle.

We have supplied the name Kreischerville for site "C" due to its location near this old settlement now known as Charleston, and Sandy Brook and Lemon Creek, respectively for sites "O" and "P" due to their proximity to these streams. Unfortunately no detailed descriptions of artifacts recovered from these sites are supplied, so no assessments of date ranges can be made (Parker 1922).

Approximately 0.1 miles northeast of the project area, a prehistoric site was reported in the Richmond Valley which included a shell midden and artifacts from the Woodland Period.

> Joseph Bodnar and his sons have been working on a shell heap in Richmond Valley which was a dumping ground of prehistoric Indians. They have brought to light many decorated shards of pottery, several broken awls, triangular arrowheads and carbon for dating (The New Bulletin 1961).

This site was probably located at Boiling Spring in Richmond Valley, based on Leng and Davis' statement that "at Richmond Valley, paths led through to the red sandstone lighthouse on the bluff overlooking Prince's Bay (see above); another went past the one time Indian camping place at the spring ... " (Leng and Davis 1930:726). The Richmond Valley Site is designated "A" in Table 1 and on Figure 2. It dates to the Woodland period based on the presence of pottery and triangular projectile points.

Two prehistoric sites exist in the vicinity of the Totten Village development, known by the name Page Avenue, which we have designated Page Avenue North and South. The closer prehistoric site to the project area is the Page Avenue North Site, designated "B" in Table 1 and on Figure 2, approximately 0.5 miles southeast of the project area. This site is situated along both sides of Page Avenue about 0.2 miles north of Hylan Boulevard and over 0.3 miles south of Amboy Road (Anderson 1965). Thought to be a possible "campsite", artifacts recovered included projectile points, flakes, a two-holed gorget, large blades, a decorated shaftweight, prehistoric ceramic sherds, pestles, graver, drills, knives and scrapers, a grooved ax and decorated pendants. A mortar was uncovered at 22 inches below grade which was the lowest depth at which artifacts were Anderson further states that " ... countless fires and shifting found. winds have altered this sandy site considerably ... " (Anderson 1965:64), which again indicates a preference of the prehistoric inhabitants for occupying areas of sandy soil. An area of the Page Avenue North Site to the east of that described above also produced a burial pit containing the secondary burial of a child and a dog. "The oval shaped pit, measuring approximately 3' in each direction was possibly no more than 2' in depth. Originally, a knoll nearby had been eroded by the elements to such an extent that it has deposited about 12" of fill over the site" (Anderson 1966:87). Carbon dates applied elsewhere to this focus offered dates of "sometime between 700 and 905 A.D." (Anderson 1966). Associated with the burial were sherds of fabric-impressed pottery, a net-sinker and a quartz projectile point. Anderson further stated that "the site had been occupied on at least 4 different occasions" (Anderson 1966:90); the

lowest level dating to the Early Archaic. Shell pits in the area near the burial pit produced pendants and a pebble celt. A large concentration of projectile points, scrapers and a grooved ax were found 25 feet from the burial. It was also reported that "historic material including a cannonball, two George II coins (ca. 1700-sic) a Spanish Real of the same period, and colonial dishware fragments" (Pickman 1978:II-23) as well as prehistoric artifacts were recovered. If the identification of the British coins is accurate, then they date between 1727 and 1760.

A second area of prehistoric finds approximately 0.40 miles to the south of the above Page Avenue site is also known by the same name. This second site is referred to here as the Page Avenue South Site, and is designated "D" in Table 1 and Figure 2. This site is also apparently known as Tottenville Campsite 4, and the Hollowell Site in the files of the New York State Museum. This site is situated along both sides of Page Avenue south of Hylan Boulevard, approximately 0.7 miles southeast of the project area. These finds were first reported to the S.I.I.A.S. in 1966 (Kaesar 1966). The area of prehistoric remains was reported to be approximately 200 yards in length beginning 50 feet south of Hylan Boulevard. A description of the remains includes Middle-Late Woodland type pottery, the basal portion of a side-notched projectile point which had been reworked to make a drill, a hammerstone, chert debitage, burned oyster and clam shells, a 'small conch and columella of conch', and 'split deer bone fragments' (ibid.). A series of letters by avocational archaeologist Donald R. Sainz to Gail K. Schneider, then with the Staten Island Museum, indicate that earlier Archaic Period remains were also recovered at this site (Sainz 1968). A visit to this site in April 1985 by Greenhouse Consultants staff confirmed its existence on reasonably elevated sandy Greenhouse Consultants undertook Phase 1B archaeological testing soil. at this site during 1987 but no intact prehistoric deposits were found.

The third nearest prehistoric site located by our research is a campsite initially reported by Parker on what appears to be a bluff overlooking a beach north of the Outerbridge Crossing. This site is designated as "C" in Table 1 and on Figure 2. Since Parker only described this location as his site 16 in Richmond County, we have decided to call it Kreischerville Flats after the name given this place in the 1968 edition of Leng and Davis' Map showing old place names. No description is given by Parker or others of any artifacts recovered from Kreischerville Flats so the site cannot be assigned to a period of occupation (Parker 1922:683, pl.211). The Kreischerville Site is approximately 0.6 miles north of the project area.

The fifth nearest prehistoric site to the Totten Village project area is the Bedell Avenue Site located about 0.8 miles away to the southeast. This site was found during survey work for the Oakwood Beach Water Pollution Control Project. It was reported to the New York State Office of Parks, Recreation and Historic Preservation by archaeologists Arnold Pickman and Rebecca Yamin. This site is described as a lithic scatter (Pickman 1989: pers. comm.) and is designated "E" in Figure 2 and Table 1.

The sixth nearest prehistoric site to the Totten Village project area is the Surfside Village site, located approximately 0.8 miles to the south. This site, designated "F" in Table 1 and on Figure 2, was located by Greenhouse Consultants during subsurface survey work. This small site was probably a temporary camp, but it was disturbed by a nineteenth century farmstead which was built at the same location. No diagnostic artifacts were recovered from the prehistoric site, so no estimate of period or date range could be made (Roberts and Stehling 1987:8-9).

The seventh site found during our research into prehistoric resources near the Totten Village development is Canada Hill which is approximately 1.0 miles northeast of the project area. This site was initially located during a field survey by L. Williams, then of New York University, and presently curator of collections at the New Jersey State Museum. A1 -though never formally published, a brief site registration form with site map was placed on file at the S.I.I.A.S. Williams described "Canada Hill" as a sector of high ground "bounded by Drumgoole Blvd., Arthur Kill Road, Englewood Avenue and the West Shore Expressway" (Williams n.d.). In her limited survey of the site, Williams collected both prehistoric and historic artifacts including tobacco pipe fragments, a whelk column, chert and quartz debitage, historic ceramics, and fire-cracked rock (Williams n.d.). Unfortunately, this description is not sufficient to assign the site to a period of occupation. Canada Hill is designated "G" in Table 1 and on Figure 2.

The eighth and ninth nearest prehistoric sites are the Mount Loretto and Pittsville Avenue Sites, designated "H" and "I" respectively on Figure 2 and Table 1. The Mount Loretto site is located approximately 1.1 miles to the southeast of the project area and the Pittsville Avenue site is about 1.1 miles to the southwest. Both sites were discovered during the survey undertaken in advance of the Oakwood Beach Water Pollution Control Project, and reported by Pickman and Yamin to the N.Y.S.O.P.R.H.P. Arnold Pickman described the Mount Loretto site as a small lithic scatter, and the Pittsville Avenue site as a somewhat larger concentration of lithic material including a projectile point (Pickman 1989:pers. comm.). Due to its location immediately north of the well-known Burial Ridge Site, it is possible that the Pittsville Avenue site is a part of the Burial Ridge/Ward's Point complex discussed below.

The extensive Wards Point/Burial Ridge complex of prehistoric sites is located approximately 1.25 miles southwest of the project area. This complex is designated "J" on Table 1 and on Figure 2. "Extensive shell mounds may still be seen near the Billop house. Shells occur all over the point, and as far north as Richmond Valley. A grooved ax weighing 12 pounds was found here" (Skinner 1909). Local lore states that "the last known Indians to reside in Staten Island as a group, camped on the Billop house property" (Anderson 1965). Burial Ridge immediately next to the Billop House, contained more than 100 Indian graves (ibid.). Jacobson's stratigraphic reconstruction of Burial Ridge is described as:

1. A surface of sand, humus or black topsoil, 2-12" with historic materials;

- 2. a second layer consisting of oyster shells from 6-20" in thickness, often well mixed with earth containing shell and grittempered pottery including collared and incipient collared types and no European goods;
- 3. a third layer of "stained soil" a few inches thick bearing no artifacts and only existing on the eastern edge of the ridge;
- 4. a fourth layer of sandy subsoil of unknown thickness in which "Algonkian" sherds were found and from which stemmed projectile points were retrieved, as well as uncollared grit-tempered ceramics (Jacobson 1980:19-20).

Jacobson's description of strata encountered indicates the sandy nature of the soil and makes no mention of clay. Artifacts recovered from this complex of sites indicate intermittent or continuous occupations from the Early Archaic Period through to the Late Woodland and Contact Periods (Jacobson 1980:65-66). The Ward's Point/Burial Ridge Complex has been called the largest prehistoric cemetery in New York City (Jacobson 1980). One further location in this region has been recorded by the State Museum as site number 4619. This was based on Parker's map of sites in Richmond County (Parker 1922:pl.211), where he shows a campsite less than 1/2 mile east of Ward's Point. It is our opinion that this is probably another reference to the Ward's Point/ Burial Ridge complex and not a separate site, hence its exclusion from Table 1 and Figure 2.

The eleventh nearest site found during the search for prehistoric resources near the development is known as the Kreischerville "Indian Fields" site. which is located approximately 1.4 miles north of the pro-This site was originally reported by the former New York ject area. State Archaeologist, A.C. Parker, who described it as a series of "Indian Fields" from Sandy Brook to Kreischerville (Parker 1922:682). The New York State Museum lists this site as numbers 771 and 4603, and describes it as "traces of occupation". The site was again identified during a Rebecca Yamin, an archaeologist on that 1977 archaeological survey. survey described it as a surface scatter (Yamin 1987:pers. comm.). The Kreischerville "Indian Fields" site is designated "K" in Table 1 and Figure 2.

A series of prehistoric sites have been reported along the south shore of the island in the vicinity of Prince's Bay. The earliest mention of these is by Skinner who shows three locations, all referenced as Huguenot (Skinner 1909:16). All three locations are currently listed in the files of the S.I.I.A.S. as the Red Bank Site, the Sharrott Avenue Site, and the Wolfes Pond Site. Two of these sites lie within two miles of the Totten Village project area. The Red Bank site is also noted by Arthur C. Parker, the former New York State Archaeologist, as a campsite location on his distribution map of prehistoric sites in Richmond County (Parker 1922:Plate 211). The site registration form on file with the S.I.I.A.S. described the Red Bank Site as being on the property of the Mount Loretto Girls Home on the shorefront approximately 500 feet east of the former location of Jack's Creek (Salwen 1957). A description of artifacts recovered includes pottery, so the period of occupation is within the Woodland Period (Pickman 1978: II/27). The Red Bank Site is approximately 1.4 miles southeast of the project area and is designated "L" in Table 1 and on Figure 2. The Sharrott Avenue Site is located approximately 0.6 miles northeast of the Red Bank Site or about 1.45 miles east-southeast of the project area. Forms on file with the S.I.I.A.S. describe its location as the shore end of Sharrott Avenue but describe the artifacts found there in such general terms as to preclude identification of the period of occupation (Salwen 1957, 1967). The Sharrott Avenue Site is designated "M" in Table 1 and on Figure 2.

The final site found during our research into the prehistory of this region is the Sandy Ground Site, designated "S" in Figure 2 and Table 1. This site, approximately 2.0 miles northeast of the project area is primarily an historic site known for its association with early black settlers. The N.Y.S.O.P.R.H.P. indicates that some prehistoric artifacts were also recovered there.

In terms of potential prehistoric sensitivity, the project impact area 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 water and food supplies of both systems.

This survey has documented the recorded or published location of nineteen sites within a two mile radius of the Totten Village project area. Although sites have been identified in the general region of the proposed project impact area, none are known to exist within the project area itself. No evidence, positive or negative, based on previous survey work is available. It would be inappropriate, however, to characterize the Totten Village project area as without prehistoric sensitivity, especially since the project area is situated within approximately 1000 feet of Mill Creek, a permanent stream that drains the Richmond Valley into the Arthur Kill. The project area would have had reasonably good access to both fresh water and the marine resources of the Arthur Kill. Temporary or seasonal fishing camps would be the type of occupation mostly likely to exist here.

#### HISTORIC SENSITIVITY

The location of the project area is in Tottenville, a community at the southern end of Staten Island, directly across the Arthur Kill from Perth Amboy, New Jersey (Figure 1). Modern Tottenville still has the appearance and atmosphere of a rural village with its small private homes, its quiet streets, and its slow-paced business section. The Staten Island Railway connects Tottenville with other parts of Staten Island as well as with the rest of New York City. The project area is located to the south and southwest of Bethel Avenue and the Bethel Cemetery, between the Staten Island Railway and Amboy Road (see Figure 1).

#### Seventeenth Century

Staten Island was known as Eghgauous, Motanucke, Monockong, or Aquehonga by the Indians who occupied it. In 1626 the island was bought from the natives by the Director of the Dutch West Indian Company. Michael Pauw was given a patent of Patroonship in 1630, but he relinquished it to the Dutch West Indian Company. The company sold the patent to David Peters de Vries who established the first permanent settlement of Europeans on the island in 1638. In 1640 an Indian war broke out which brought destruction to the settlement. The Dutch West India Company granted Cornelius Melyn all of Staten Island in 1641 except for the de Vries farm (Historical Records Survey 1942:XIV). Ten years Melyn granted Baron Hendrick van der Capellan a deed for one third of the island (ibid.:xv). Upon the death of Capellan in 1659, Melyn sold his interest to the company thus ending the Patroon system on Staten Island (ibid.:xvi).

The British assumed control of the colony of Nieuw Amsterdam from the Dutch West India Company in 1664. Governor Francis Lovelace made the final purchase of Staten Island from the Indians in 1670. The English made all of Staten Island into a single town with Nicholas Stillwell as the first constable. Lovelace set up two towns on the island, Old Dorp or Town and New Dorp, and granted patents to several people (Historical Records Survey 1942:xviii). Land surveys were initiated under Lovelace and completed under the governorship of Edmund Andros in 1677.

The next governor, Thomas Dongan, divided the colony of New York into counties with Staten Island designated as Richmond County. In March 1688 Richmond County was partitioned into four towns, Castletown, Northfield, Southfield, and Westfield (Bayles 1887:95). Present-day Tottenville and the project area are within the old town of Westfield (ibid.: map facing 1).

The first individual associated with what was to become Tottenville was Captain Christopher Billopp. Captain Billopp helped the British secure Staten Island in 1664. In return for this service, the Duke of York granted him a tract of land in the southern part of the island (Bayles 1887:102). Billopp named the tract the "Manor of Bentley," after his ship. Billopp was granted 1163 acres according to Bayles (1887:102) or 1300 acres (Leng and Davis 1930 I:121). The Council Minutes state that Captain Billopp's land as of 1675 consisted of about 1300 acres (Leng and Davis 1930 I:121). The patent was granted officially on March 25, 1676. The unusual size of the tract was probably due to Billopp's father, a London merchant, being a friend of the King (ibid.:120-21). In June 1687 Billopp's property increased to 1600 acres (ibid.:129). It is not clear whether or not the project area was included within the original 1300 acres, but there is little doubt that Billopp's property as of June 1687 included it (see Figure 3).

#### Eighteenth Century

The Billopp family continued to live on the estate. Christopher Billopp had a daughter, Eugenia (b. 1712), who married Thomas Farmar, her cousin (Morris 1898 I:138). Eugenia inherited her father's property. Farmar took the Billopp name. Farmar held some important positions in the colonial government (ibid.:138-39). He was associate judge of the county courts and Major of the Staten Island militia (ibid.:139). They had a son, Christopher, who served in the colonial legislature and who helped the British during the Revolutionary War as provost marshall of Staten Island (ibid.:139-41). It was Colonel Christopher Billopp, son of Eugenia and Thomas, and grandson of Captain Christopher Billopp (the original grantee), who began to sell off the property.

In May 1780 Colonel Billopp "sold to Joseph Totten a tract of twenty acres and another of three and a half acres" (Morris 1898 I:142). Benjamin Drake purchased sixty acres from Billopp at the same time. The Billopps were loyalists and, therefore, had to face the confiscation of their property after the Revolutionary War (Bayles 1887:236). Commissioners of Forfeitures for the Southern District of New York sold some of the Billopp property in 1784 to Thomas McFarren, a New York merchant (Morris 1898 I:142-43). Colonel Billopp left Staten Island and settled in Nova Scotia (ibid.:142). McFarren's share of the Billopp estate was the largest at 850 acres. The rest of the land was bought by a number of other individuals (Bayles 1887:236, Figure 4).

Joseph Totten, as noted above, purchased land from Colonel Billop in 1780. The Totten family accrued influence and property on the southern end of Staten Island. The Tottens came originally from Hempstead, Long Island (Morris 1898 II:116). The records of St. Andrew's Church on Staten Island show a Silas and Charity Totten in the 1760s, but they yield no information on where the Tottens were living (Leng and Davis 1930 II:962). Gilbert Totten, who came from Hempstead, owned many acres of land on Staten Island. One of the eighteenth century maps shows the property of G. Totten (Figure 4, Morris 1898 II:116). Joseph Totten, who bought land from Billopp, married Mary Cubberly in 1804 (Leng and Davis Though it cannot be determined exactly where all of the 1930 II:962). Tottens owned property in the eighteenth century, most of the Totten lands were probably in the town of Westfield and within the part of the would later become the village of Tottenville (Bayles town that 1887:236).

Much of what is known about the Tottens of Westfield, Staten Island is a result of their close association with Methodism. Joseph entered the ministry in the Methodist Church (Morris 1898 II:117). Francis Asbury, Jy Bishop of Methodists in America, preached on Staten Island in 1791 (Hamp-

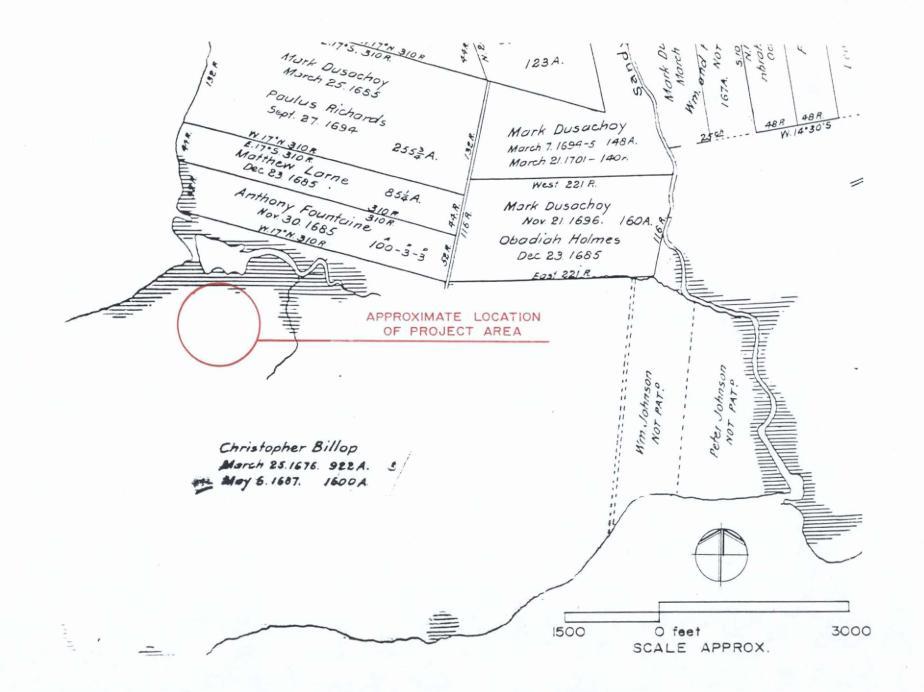


Figure 3 From Skene's 1907 Map of Staten Island, showing Colonial Land Patents 1668-1712.

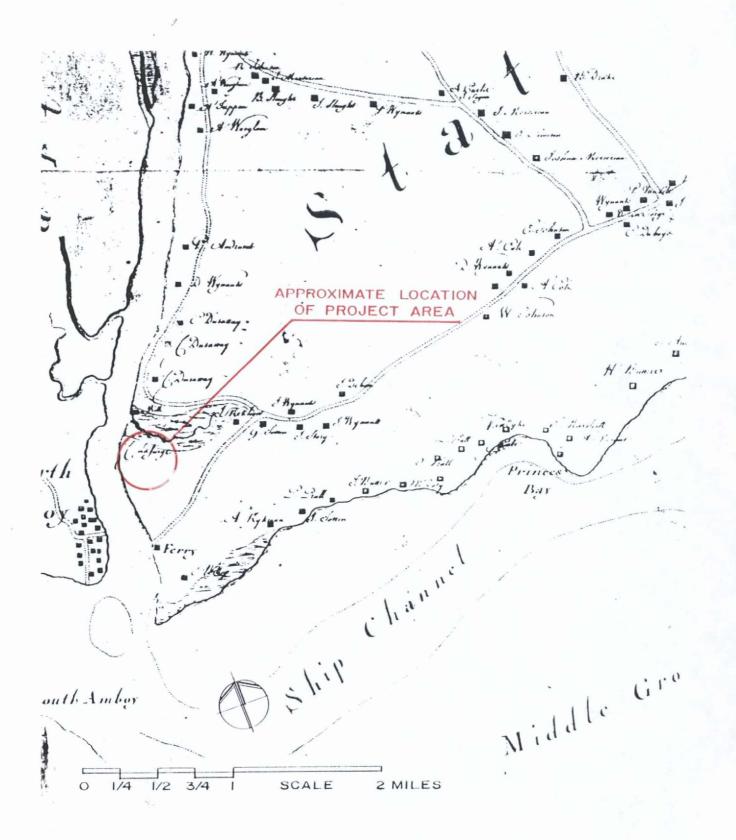


Figure 4 From Plan No. 31 Du Camp Anglo-Hessois dans Staten Island, 1780-1783.

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ton 1948:3). Asbury lodged at the home of Joseph Totten (ibid.:2-3). Totten's house was close to the site of the future Bethel Methodist Episcopal Church and was close to the present project area (Bogart 1935:2, Figure 4).

The sources do not give detailed information on the other local families. There was an individual by the name of Jacob Reckhow who owned land to the north of the McFarren property in the 1780s (Morris 1898 I:142-43, Figure 4). The La Forge (Le Forge) family was located in the vicinity and the 1790 Census listed David and Charles, both in Westfield (North 1908:160). The property of C. La Forge appeared on the Anglo-Hessois Map within the project area (Figure 4). There were no buildings depicted on the La Forge property. The DeHart family was on Staten Island since the early eighteenth century (Morris 1898 II:77). The 1790 Census noted James Hart in the town of Westfield (North 1908:160). The Atlas of the Borough of Richmond (Robinson 1898) designated the vicinity of the project area as "Hart Heights" (see Figure 9). There is not enough evidence, however, to make any connection between James Hart and Hart Heights. Another prominent local family, the Spragues, appeared in the county records as early as the 1760s and 1770s (Bayles 1887:581). The 1790 Census mentioned Jacob Sprague as residing in Westfield (North 1908:160).

Toward the close of the eighteenth century there were 1158 people, including 267 slaves, living in the town of Westfield (Bayles 1887:252). The sources offered more detailed information on the Totten family than on any of the other families. The role of the Tottens in Westfield's history continued into the following century.

#### Nineteenth Century

The Totten family was influential in local affairs throughout the nineteenth century. They owned property in and around the project area, and they were closely associated with the Bethel Church. The church is located across the road from the project area.

Ephraim J. Totten (b. 1806) was a mariner for twenty-two years. In 1850 he returned home to Westfield where he ran a store until his retirement in 1874 (Bayles 1887:583). In 1848 he served in the state legislature and he helped to plan and direct the Staten Island Railroad. Ephraim's place of birth was the same house that the Totten family had lived in since their arrival in Staten Island during the Revolutionary War (Hubbell and Howard 1898:117). The house was situated to the east of the present project area (see Figure 4). In 1855 the house was demolished and a new one was erected behind the site of the original one (Hubbell and Howard 1898:117).

Gilbert Totten, Ephraim's father, owned some property in the early nineteenth century adjacent to the present project area, which he donated to the Bethel Church (Bayles 1887:583).

James Totten, another of Gilbert's sons, decided in 1822 to organize a new Methodist Society and build a church (Joline 1950:13). The church,

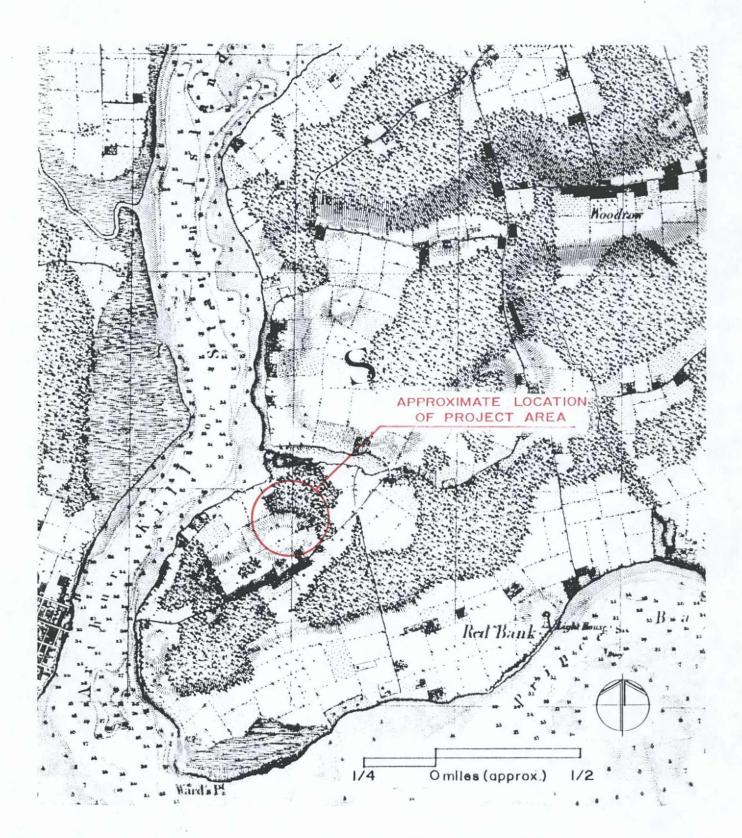


Figure 5 From U.S. Coastal Survey Charter of New York Harbor, 1845.

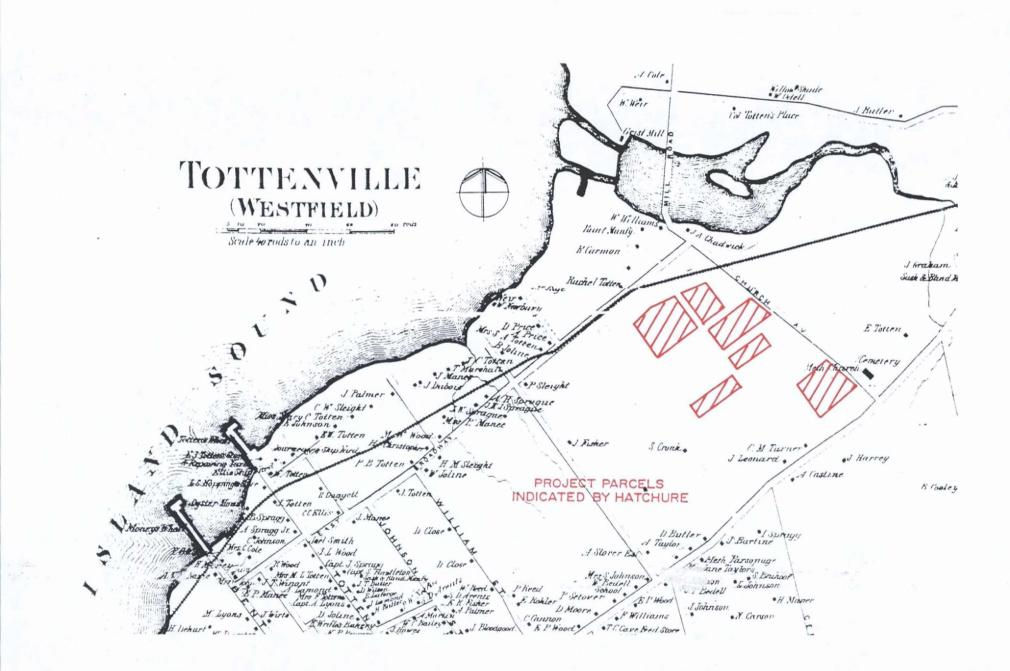


Figure 6 From Walling's 1859 Map of Staten Island.

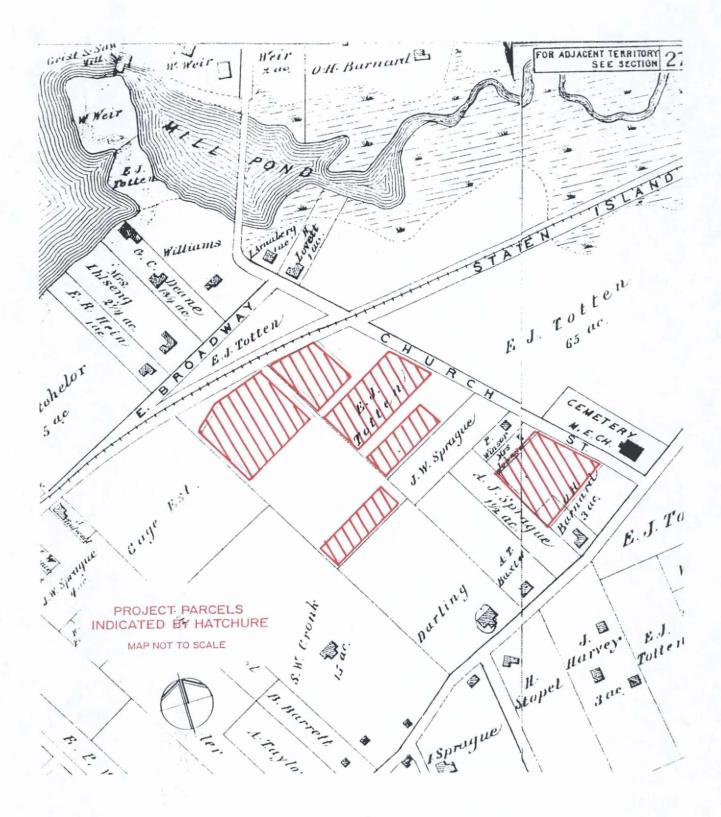


Figure 7 From Beers' 1874 Atlas of Staten Island.

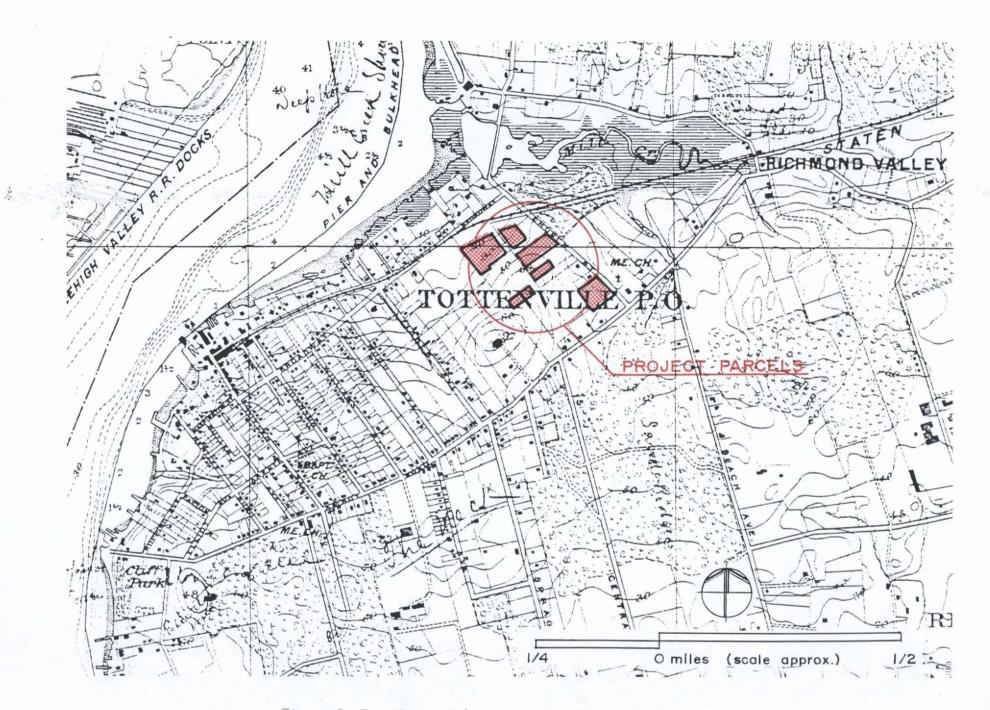
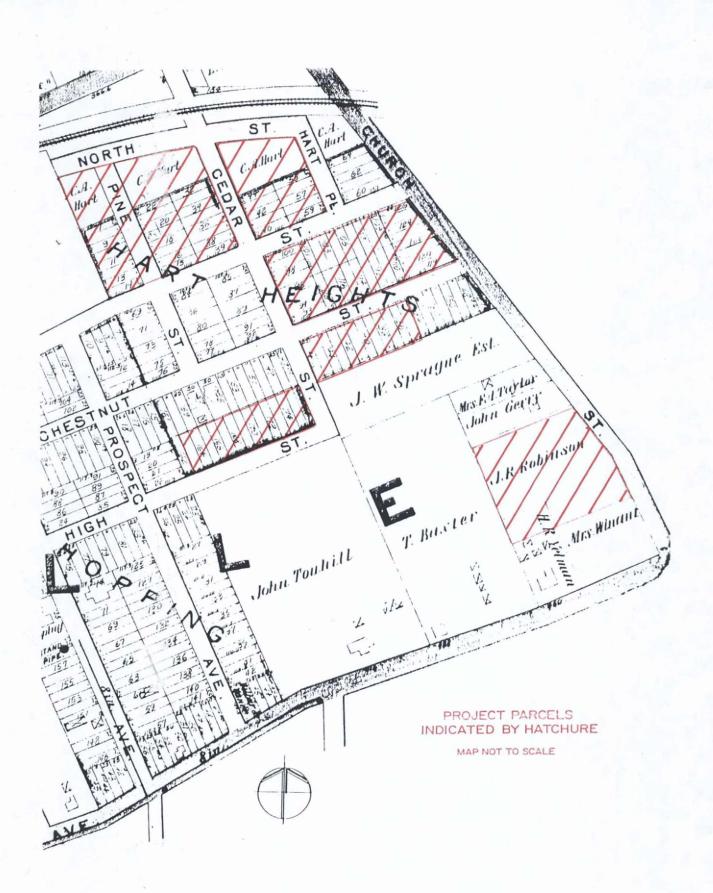
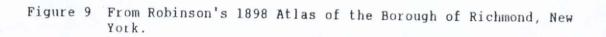


Figure 8 From Vermuele's and Bien's 1890 Topographical Map of Staten Island.





called "The Tabernacle," was erected where Amboy and Arthur Kill Roads met (ibid.). This was just a "short distance east of the old La Forge store" (Hubbell and Howard 1898:56). If the La Forge store was located in the same place as indicated on the Anglo-Hessois map as C. La Forge, it would have been in the project area (see Figure 4). The Tabernacle, therefore, would have been in the project area or immediately to the east of it. The sources, however, do not give enough information to make a connection between the property of C. La Forge as shown on the Anglo-Hessois Map and the La Forge store mentioned by Hubbell and Howard.

By 1840 a larger church was needed and The Tabernacle was closed down (Joline 1950:14). The new church, the Bethel Methodist Episcopal Church, was built close by (ibid.). It was located north of Amboy Road to the immediate east of the project area (see Figure 6). In 1851 a parsonage was built on Amboy Road near Sprague Avenue, southwest of the project area (Joline 1950:15). The church building was enlarged in 1856 and again in 1862 (Hubbell and Howard 1898:69). In 1882 the church purchased another five acres of land to enlarge the cemetery (ibid.:67). On January 10, 1886 the church burned to the ground and a new building, this time made of brick instead of wood, was erected immediately to replace it (ibid.:133).

The part of Westfield which became known as Tottenville was called "The Neck" (Joline 1950:6). B.F. Joline, a historian of Tottenville, stated the following:

we learn, mostly by tradition, that all of that part of the Town of Westfield lying south of the Richmond Valley line was classified as The Neck, and that, on this extreme southern point, were located a number of small communities (ibid.).

The population was increasing during the 1850s and expanding toward the north and east (ibid.). The Staten Island Railroad, extending thirteen miles from Vanderbilt's Landing to The Neck (Tottenville), was constructed between 1852 and 1860 (Clute 1877:331).

The name, Tottenville, started to come into use after 1860. Due to the local importance of the Totten family the new post office established in 1861 was called Tottenville Post Office instead of "Bentley", its original name (Joline 1950:7-8). Until 1890 Tottenville remained as the Town of Westfield. In 1890 it was incorporated and became the Village of Tottenville with its incorporation papers, its own tax and property records (ibid.:9). Village government was formed by 1894 (Jacobs 1979:8).

The economy of Tottenville during the late nineteenth and early twentieth centuries expanded. The ferry to Perth Amboy and the Staten Island Railroad connected Tottenville to the outside (Judson 1886:147). The oyster business, important all over Staten Island, employed three or four hundred locals in Tottenville (Clute 1877:329; Judson 1886:147). There were at least eight shipyards at which oyster boats, tugs, yachts, and schooners were built (Judson 1886:14&). Sawmills were also a part of Totten-

ville's economy (ibid.). By the late nineteenth century farming was no longer vital to the area's economy. Hay, oats, corn, and berries were being produced, but only in small amounts. Shipbuilding continued into the twentieth century. With industrial growth came copper smelting, lumbering, a brick factory, and a silk factory which opened in 1890 (Tottenville Improvement Council 1971:68).

Much has been said about the Totten family and its influence in the locality as described in the written sources. The location of the Totten's property in relation to the project area is clarified by nineteenth century maps. Walling's 1859 Map of Staten Island shows nothing in the project area. To the immediate northwest of the project area, the property of Rachel Totten is indicated with a building (see Figure 6). One of Gilbert Totten's daughters was named Rachel (Morris 1898 II:116). The property of E. Totten is shown to the northeast of the project area not far from the Bethel Church (see Figure 6).

Beers' 1874 map indicates a number of parcels belonging to Ephraim J. Totten, including some within the project area (see Figure 7). There are no structures indicated on any of the parcels. The Vermeule and Bien 1890 map shows the same parcels but the name E.J. Totten is not shown (see Figure 8). Two buildings are indicated on one of the parcels, but they are east of the project area. There are no structures shown within the project area. There are other Tottens in the vicinity beside E.J. Totten, but their property was not within the project area.

The La Forge property does not appear on the maps of the nineteenth century. The U.S. Coastal Survey Charter of New York Harbor (1845) shows a structure in the project area, but no name was assigned to it (see Figure 5). This building could have been the old La Forge store mentioned by Hubbell and Howard (1898:56). The structure does not appear on any of the maps after 1845 and was most likely demolished in the 1850s.

On Robinson's 1898 Atlas of the Borough of Richmond the designation Hart Heights is shown in the project area and its vicinity (see Figure 9). The 1790 Census lists James Hart as a resident of Westfield (North 1908:160). There is not enough evidence, however, to connect the Hart family with the project area until the end of the nineteenth century. Robinson's map (1898) shows C.A. Hart's property within the project area (see Figure 9). There is also a small street, Hart Place, adjacent to the project area. The literary sources offer no information on the Hart family. No buildings are depicted on C.A. Hart's property.

The maps of the late nineteenth century indicate that a portion of the project area was owned by a certain J.R. Robinson (see Figures 8 and 9). The sources give no further information on the Robinson family. J.R. Robinson may have been related to the Rev. Wesley Robinson, one of the planners of the Bethel Methodist Church, but there is no evidence to prove such an association (Joline 1950:14). Vermeule and Bien's 1890 map indicates the presence of a building on Robinson's property, but Robinson's 1898 map does not do so (see Figures 8 and 9). The Sprague family, which had been in Staten Island since the 1760s, is on all of the nineteenth-century maps. On Walling's 1859 map the name appears three times to the southwest of the project area (see Figure 6). On Beers' 1874 map, J.W. Sprague is shown as owning property adjacent to the project area (see Figure 7). According to one of the sources, J.W. (James) Sprague was the captain of a ship (Tottenville Improvement Council 1971:66). A.J. Sprague owned a parcel to the immediate southwest of the project area (see Figures 7 and 8). No structures are indicated on any of the Sprague parcels.

0.H. Barnard owned property on Amboy Road to the immediate southeast of the project area (Beers 1874, see Figure 7). The map shows a building on the Barnard parcel. Barnard's name appears on three different parcels. One of the parcels is northwest of the project area on the other side of the Staten Island Railroad. There is a second parcel to the southeast of the project area. O.H. Barnard is likely to have been the Owen Barnard who opened a silk factory in Tottenville in 1890 (Tottenville Improvement Council 1971:68).

In conclusion the section of Westfield that became Tottenville has a long history of settlement. During the colonial period it was owned by the Billopp family. After the Revolutionary War the land was sold to a number of families. The La Forge family and the Totten family are both connected with the present project area. The La Forge property included the project area during the late eighteenth and early nineteenth centuries. The Tottens owned parcels in and around the project area throughout the second half of the nineteenth century. By the close of the nineteenth century the names Hart and Robinson made their appearance in the project area.

Tottenville began to expand demographically and economically after the middle of the nineteenth century. Oysters and ships were the two main local industries. The Staten Island Railroad reached Tottenville in 1860 and one year later the new post office was established as the Tottenville Post Office. In 1890 the Village of Tottenville was incorporated. Growth in population and development of the economy brought on administrative autonomy.

#### <u>Twentieth</u> <u>Century</u>

The 1911 topographical map shows Chestnut Street running southwest from Church Street (Figure 10). Chestnut separates Parcels III and IV that lie within the project area. The map indicates a row of buildings on property outside the project parcels to the southeast of Chestnut Street. In addition to the row of buildings, there is another such structure facing Church Street. There are no structures shown on the two parcels (I and II) which lie close to the railroad, and nothing is indicated on the parcel on Church Avenue closest to Amboy Road (VI) or on the small

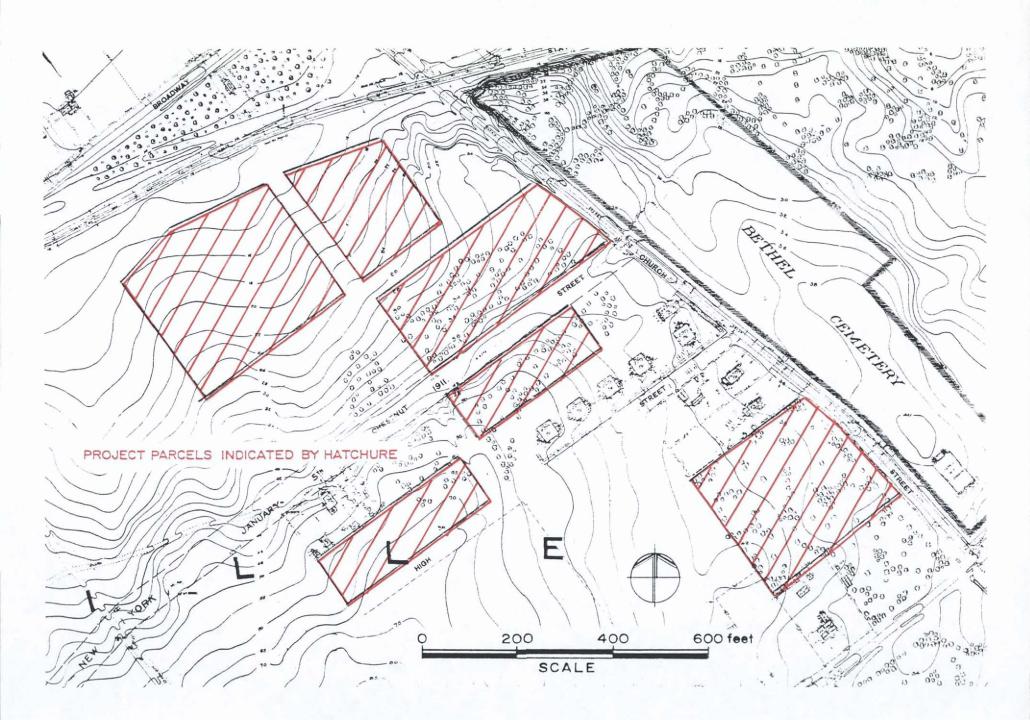


Figure 10 From Borough of Richmond Topographic Survey, Sheet No. 93 (January 1911).

rectangular parcel to the south of Chestnut Street (V). In summary, all six project parcels were undeveloped forest or fields in 1911.

Bromley's 1917 map shows both residences and some businesses in the vicinity (Figure 11). According to this map, the area was still known as Hart Heights. The parcel closest to Amboy Road (VI) was the property of A.E. Johnson, but no buildings are shown. Immediately adjacent to Johnson's property, but outside the project area, was the Inter Island Realty Company. Parcel IV west of Bethel Avenue (Church Street) and south of Elliot Avenue (Chestnut Street) contained a row of lots but no buildings. Parcel III on the other side of Elliot Avenue (Chestnut Street) belonged to Adolph Weiss. Weiss also owned some property across Maiden Lane (Oak Street), some of which included Parcel II. Parcels I and V southwest of Weiss' property were the property of B. Lowenstein. The only changes that are evident from 1911 to 1917 are that several more streets have been mapped and that Parcel IV has been divided into five lots.

On the 1937 Sanborn map Parcel VI formerly belonging to A.E. Johnson (see Figure 12) is shown as part of Block #8034 and contains no structures. Block #8036, across Lennart Street from Block #8034, contains nine structures. Six of them appear to be houses, but the other three appear to be sheds. On Parcel III beyond Craig Avenue (formerly Chestnut Street on earlier maps), where Weiss' property appeared in 1917, no structures are shown. Parcels I and II which are close to the railroad are also empty. Property names which are given on Bromley's map are not shown on the Sanborn map. According to the Sanborn map many of the local streets were still closed and unpaved in 1937. The only changes seen between 1917 and 1937 in the project area concern changes in the names of the streets and the division of Parcel V into four lots, two of which contain small sheds or garages partly or entirely within the project area.

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Presently parcels I and II, those closest to the railroad, are empty lots with heavy undergrowth (Raymond 1989:Photos 3 and 6). Parcel III, between Maiden Lane and Craig Avenue, appears to be less endowed with undergrowth (ibid.:Photos 14 and 17). Parcel VI, adjacent to Bethel Avenue and closest to the Bethel Methodist Church, is also empty except for telephone poles and is moderately wooded (ibid.:Photos 32 and 36).

In conclusion, the project area and the surrounding locality have remained undeveloped throughout the present century. The vicinity has retained its rural character with its relatively sparse population, small roads, and open spaces. The only evidence of structures are the two outbuildings along the northwestern side of Parcel V, although inspection of the property indicated possible disturbance of Parcel VI through erosion and/or deliberate earth moving by bulldozer or other machine.

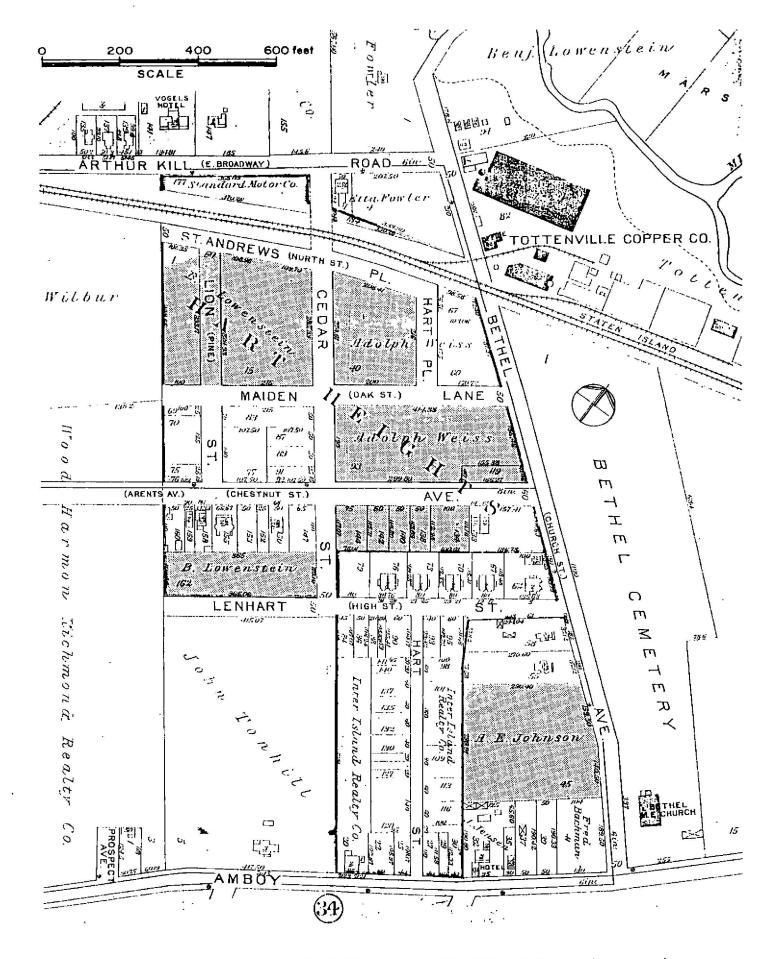


Figure 11 From Bromley's 1917 Atlas of the City of New York, Borough of Richmond, Staten Island.

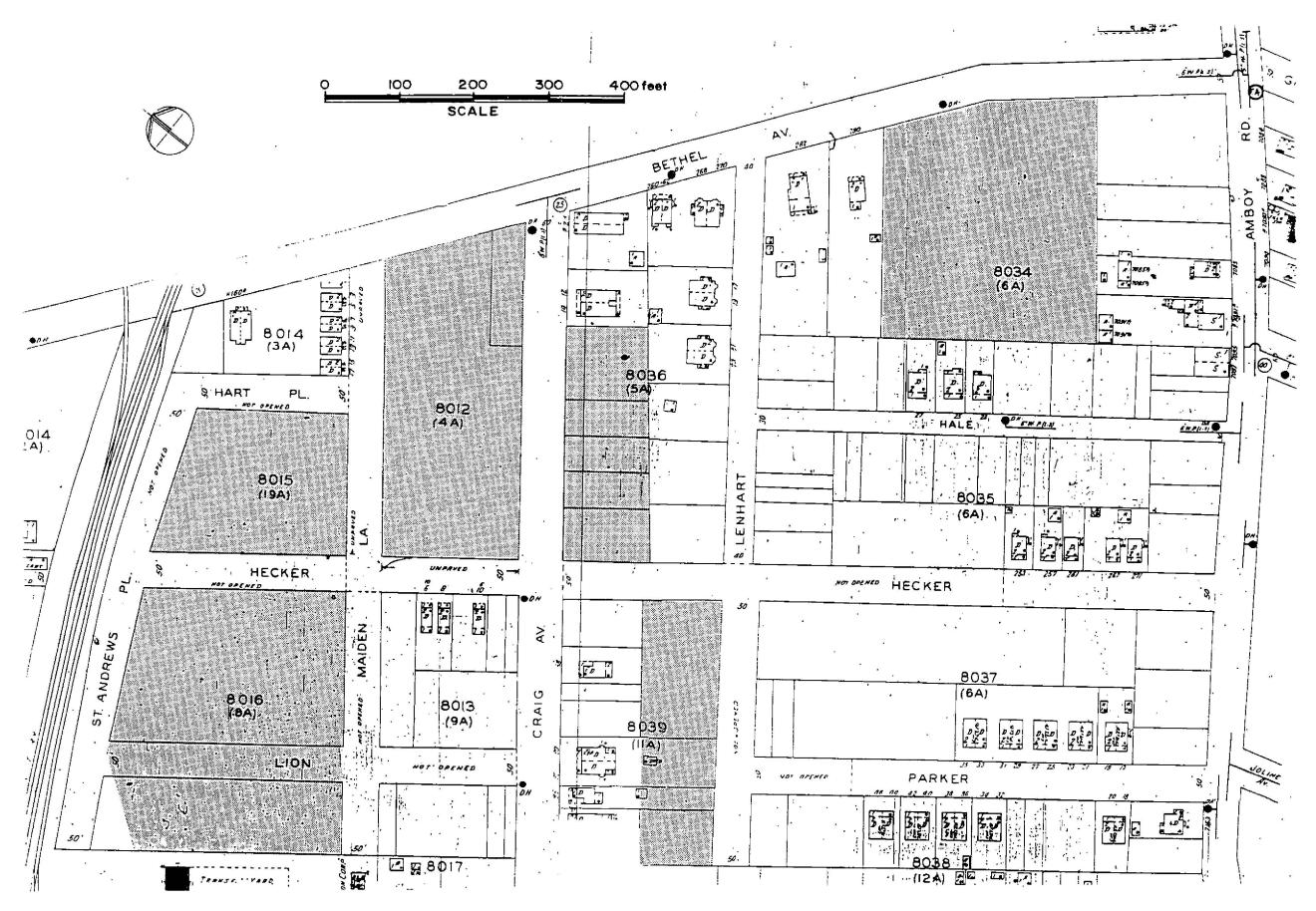


Figure 12 From 1937 Sanborn's Borough of Richmond, New York City, Staten Island, New York.

#### CONCLUSIONS AND RECOMMENDATIONS

The above text has documented that the Totten Village Development project area potentially may preserve archaeological evidence from the prehistoric period. This location is considered sensitive to the preservation of prehistoric archaeological remains because it is topographically similar to several locations of documented prehistoric According to information recorded by various professional, sites. avocational and amateur archaeologists over the last eighty years, nineteen prehistoric sites exist within a two mile radius of the project Nearly all are on relatively elevated sandy soils, a description area. which characterizes several locations within the Totten Village Development site. While its physical condition would have been conducive to its use and/or occupation during prehistory, particularly in the Woodland and Archaic periods, no prehistoric artifacts have been reported from this location. It is also our conclusion that the Totten Village project area is not sensitive to the preservation of historic archaeological evidence. The project parcels have remained undeveloped and were evidently used only as farmland.

Analysis of subsequent impacts to the project parcels during the nineteenth and twentieth centuries indicate that disturbance to these locations has been relatively minor. Streets were mapped and some were cleared and graded but very few officially opened. Part of all of two small structures were built within the edge of Project Parcel V. Project Parcel VI has been disturbed, apparently by erosion which may have been the result of a brush fire. A Phase IB archaeological survey would determine the presence or absence of any prehistoric site(s) that may be within Project Parcels I-IV and the southern portion of Parcel V of the Totten Village Developement. This would be done primarily to test the entire tract for the presence of aboriginal occupation, especially burials, given the presence of prehistoric sites including the Burial Ridge complex 1.25 miles to the southwest of the project area, as well as the presence of Mill Creek within 700 feet of Parcels II and III which would have provided a source of fresh water.

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#### BIBLIOGRAPHY

Anderson, Albert J.

- 1966 A child and his dog. <u>The New Bulletin</u> 15 (9). Staten Island Institute of Arts and Sciences (SIIAS).
- 1965 The Page Avenue Site, Tottenville, S.I., N.Y. Reprinted from The Chesopiean III (3).

Baugher, Sherene

- 1985 Personal Communication. New York City Archaeologist, Landmarks Preservation Commission, New York City.
- Bayles, Richard M.
- 1887 <u>History of Richmond County, Staten Island, New York, From its</u> <u>Discovery to the Present Time</u>. New York: L.E. Preston and Co.
- Bogart, Mary
  - 1935 Old Homes on Amboy Road. Unpublished manuscript on file at the Staten Island Institute of Arts and Sciences, Staten Island, New York.
- Clute, John Jacob
  - 1877 <u>Annals of Staten Island From its Discovery to the Present Time</u>. New York: Charles Vogt.

Davis, William T. and Charles W. Leng

1896 <u>Staten Island Names; Ye Olde Names and Nicknames</u>. Staten Island: Natural Science Association.

- Fast, Frances S.
  - 1941 <u>Wills of Richmond County, New York</u>. Volume 1. Staten Island: Free Press.
- Hampton, Vernon
  - 1948 Francis Asbury on Staten Island. <u>The Staten Island Historian</u> IX(1). Staten Island Institute of Arts and Sciences.
- Historical Records Survey Service Division
  - 1942 <u>The Earliest Volume of Staten Island Records (1678 1813)</u>. New York: Work Projects Administration.

Hubbell, A.Y. and J.H. Howard

1898 <u>History of Methodism and the Methodist Churches of Staten Is-</u> <u>land</u>. New York: Richmond Publishing Company.

•

Jacobs, I	rene
1979	A Chronological History of Tottenville, 1860-1978 and Report of Architectural Survey. Unpublished manuscript on file at the Staten Island Institute of Arts and Sciences, Staten Island, New York.
Jacobson, 1980	Jerome Report of the Stage 1B Archaeological Survey for the Oakwood Beach Water Pollution Control Project, County of Richmond, N.Y. Contract Numbers FK-24 and FK-25.
Joline, B 1950	enjamin F. <u>Tottenville in Retrospect</u> . Staten Island: B.F. Joline.
Judson, S 1886	.C. <u>Illustrated Sketch Book of Staten Island, New York, Its Indus-</u> <u>tries and Commerce</u> . New York: S.C. Judson.
Kaesar, E 1966	dward J. Rossville, Site Survey Sheet, Archaeological Survey of Staten Island.
Leng, Cha 1930	rles and William T. Davis <u>Staten Island and Its People: A History 1609-1929</u> . Volumes I and II. New York: Lewis Historical Publishing Company, Inc.
McMullin, 1971	Phillip <u>New York in 1800: An Index to the Federal Census Schedules of</u> <u>the State of New York, with Other Aids to Research</u> . Provo, Utah: Gendex Corporation.
Morris, I 1898	ra K. <u>Morris's Memorial History of Staten Island</u> . Volumes I and II. New York: Memorial Publishing Company.
<u>The</u> <u>New</u> <u>B</u> 1961	<u>ulletin</u> Richmond Valley. Staten Island Institute of Arts and Sciences. II (4).
North, S.1 1908	N.D. <u>Heads of Families at the First Census of the United States</u> <u>Taken in the Year 1790 (New York)</u> . Washington, D.C.: Govern- ment Printing Office.
Parker, A 1922	rthur C. The Archaeological History of New York. <u>New York State Museum</u> <u>Bulletin</u> Nos. 235-238.

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#### Pickman, Arnold

- 1989 Personal Communication, Archaeologist, Manhattan, New York.
  1978 EIS Background Document. Preliminary Cultural Resources Assessment: Literature Search and Windshield Survey Oakwood Beach Water Pollution Control Project: Phase II and Future Plans. Contract # 68-01-4616, DOW #1.
  Raymond, George M. and Associates
  1989 Totten Village Staten Island, New York: Project Data Statement. New York: George M. Raymond Associates.
- Roberts, William I. IV and Nancy A. Stehling 1987 Phase 1B Archaeological Survey of the Surfside Village Development Project, Staten Island, N.Y. CEQR # 87-231R.
- Sainz, Donald
  - 1968 Letter to Gail Schneider of the Staten Island Museum, March 13, 1968. On file at S.I.I.A.S., S.I., N.Y.
- Salwen, B.
  - 1967 Metropolitan Area Archaeological Survey, Site Survey Sheet. Department of Anthropology, New York University. On file at Staten Island Archives. Sharrott Avenue Site.
  - 1957 Metropolitan Area Archaeological Survey, Site Survey Sheet. Department of Anthropology, New York University. On file at Staten Island Archives. Prince's Bay Area.
- Skinner, Alanson B.
  - 1912 Indian camps or village sites in the southern part of Staten Island and adjacent parts of New Jersey. <u>Proceedings of the</u> <u>Staten Island Institute of Arts and Sciences</u> 4(3).
  - 1909 The Indians of Greater New York and the Lower Hudson. <u>Anthropological Papers</u>, American Museum of Natural History. Volume 3.
- Tottenville Improvement Council
  - 1971 <u>Tottenville Community Study</u>. Staten Island: Tottenville Improvement Council.

Van Diver, Bradford B.

1985 <u>Roadside Geology of New York</u>. Missoula, Montana: Mountain Press Publishing Company. Weingartner, Mathilde P.

1967 Changes at Ward's Point, Staten Island, Part One. <u>Proceedings</u> of the Staten Island Institute of Arts and Sciences 22(2).

Williams, Lorraine E.

- n.d. Metropolitan Area Archaeological Survey, Site Survey Sheet. Department of Anthropology, New York University. On file at Staten Island Archives. Page Avenue I and II.
- Yamin, Rebecca
  - 1987 Personal Communication, Archaeologist, Highland Park, New Jersey.

#### MAPS AND ATLASES

Beers, J.B.

- 1887 <u>Beers' New Map of Staten Island</u>. New York: J.B. Beers and Company.
- 1884 <u>Atlas of Staten Island, Richmond County, New York</u>. New York: J.B. Beers and Company.

Borough of Richmond

1911 <u>Topographical Survey</u>. Sheet No. 93.

Bromley, G.W.

- 1917 <u>Atlas of the City of New York, Borough of Richmond, Staten</u> <u>Island</u>. Philadelphia: Bromley and Company.
- <u>Plan (No. 31) Du Camp Anglo-Hessois dans Staten Island (Baie de New York</u> <u>de 1780-1783).</u>

Robinson, E.

1898 <u>Atlas of the Borough of Richmond, City of New York</u>. New York: E. Robinson and Company.

Sanborn Map Company

- 1937 <u>Borough of Richmond, New York City, Staten Island, New York</u>. Volume 4. New York: Sanborn Map Company.
- Skene, Frederick
  - 1907 <u>Map of Staten Island, Richmond County, New York</u>. Showing the <u>Colonial Land Patents from 1668-1712</u>.
- United States Coast Survey Charter of New York, Harbor, 1836-1839. 1845

United States Geological Survey, Topographic Map, 7.5 Minute Series. 1966 <u>Arthur Kill N.Y.-N.J. Quadrangle</u>. Photorevised 1981.

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Walling, Henry Francis

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1859 <u>Map of Staten Island, Richmond County, New York</u>. New York: D.A. Fox.