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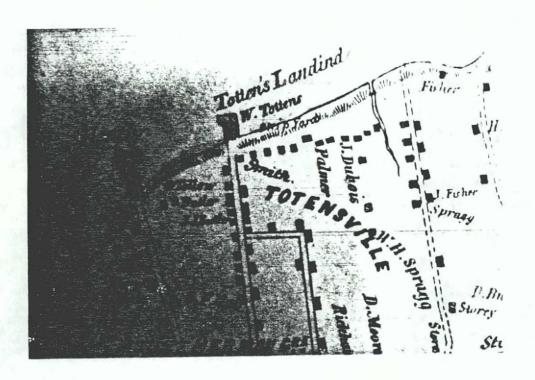
ENVIRONMENTAL REVIEW

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LANDMARKS PRESERVATION
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DOCUMENTARY STUDY AND FIELD SURVEY
TOTTEN'S LANDING PROJECT

Tottenville, Staten Island

NYSDEC Application Number 20-85-0948

Totten's Landing Corporation

85-103R

Dr. Karen S. Rubinson, SOPA
KEY PERSPECTIVES



TABLE OF CONTENTS

List of Figures	ii					
Introduction	1					
Topography 3						
Prehistoric Assessment and Sensitivity 7						
Historic Period Assessment and Sensitivity l						
Field Testing	28					
Pickman and Yamin 1984	29					
Core Testing	30					
Field Survey	31					
Conclusions and Recommendations 3						
Bibliography	40					
List of Maps and Atlases Consulted	43					
Appendix A - Artifact Catalogue 4						
Appendix B - Trench Plans and Sections	50					

LIST OF FIGURES

		<u>Figure</u> P	age
Fig.	1	Project Area Location	2
Fig.	2	Geological Map of Richmond County	4
Fig.	3	Site Views	5
Fig.	4	Site Views	6
Fig.	5	Prehistoric Sites in Southern Staten Island	8
Fig.	6	Skene 1907 (Colonial Patents)	11
Fig.	7	Butler 1853 Walling 1857	13
Fig.	8	Dripps 1872 Beers 1874	16
Fig.	9	Bird's Eye View 1878	18
Fig.	10	Sanborn 1885 - correct to 1891	20
Fig.	11	Robinson 1898	22
Fig.	12	Robinson 1907	24
Fig.	13	Tottenville Railroad Turntable	25
Fig.	14	Bromley 1917	26
Fig.	15	View of Test Trenches 3 and 2	36
Fig.	15	Views of Test Trench 4	37
			ž.
Append	dix B	Site plan, trench plans and sections	50ff.

INTRODUCTION

This study comprises the results of documentary research about and a field survey on the property to be developed as Totten's Landing, Ellis Street, Tottenville, Staten Island, New York (figure 1). The property includes Block 8002, Lots 2,6,14, and 20 and Block 8003, Lots 96, 109, and 120. Of these, lots 96 and 120 are entirely water lots. The total project area including the water lots is approximately eight and one-third acres. proposed project, being developed by Tottens Landing Corporation, will include approximately 50 town-houses and 70 boat slips. Approximately 25 feet of the property frontage north of Ellis Street will be turned over to New York City for roadway, as well as a 60-foot frontage at the corner of Main and Ellis. The documentary research and field survey were required under New York State Department of Environmental Conservation (NYSDEC) Tidal Wetlands, Protection of Water, Water Quality Certification Application Number 20-85-0948.

Documentary research was carried out in the following libraries and repositories: The Staten Island Institute of Arts and Sciences, The New York City office of the New York State Department of Environmental Conservation, The New York Public Library, the New York City Municipal Archives and Library, the New York City Landmarks Preservation Commission and Avery Library, Columbia University. Other information was collected from the New York State Historic Preservation Office, the Albany office of the New York State Department of Environmental Conservation and the Staten Island Historical Society.

The documentary research and field survey were carried out in accordance with the requirements of the New York State Department of Environmental Conservation Notice of Incomplete Application, December 29, 1987, section 11 and in telephone consultation with Mr. Michael Cinquino of the NYSDEC.



Figure 1 - Project Area Location
USGS 7.5 minute series
Arthur Kill Quadrangle

TOPOGRAPHY

Most of southern and eastern Staten Island rests on a Cretaceous formation of sand and clay covered by the glacial soils deposited at what was the southernmost extent of the Wisconsin Glaciation. The project site lies within the area of the terminal moraine (figure 2) (Jacobson 1980:5; Bayles 1887:9; Berger 1987a:4).

The project area is quite low, even today no higher than 10 feet above sea level at the southern edge, with the area west of Main Street even lower than that on the east. These low elevations are still higher than the original surface; the project area was extensively filled in the nineteenth century (Healey 1983; Pickman and Yamin 1984:195ff; and see results of testing below). The original ground surface is barely above the present water table and in some cases below, which can been seen in the engineer's borings (Healey 1983). There are no streams or fresh water ponds on the site.

The project area is set well below the elevation of Ellis Street. It has been suggested on the basis of testing by Pickman and Yamin that Ellis Street was built on fill (1984:194), which would account for the elevation of the road in contrast to the project site (See figure 3).

The project area west of Main Street is open and covered with weeds and reeds; east of Main Street a secondary growth of trees, shrubs and poison ivy covers most of the project site (figure 3). The eastern area is used as a dump site, with tires, cars, and other debris over much of the area. Main Street itself is preserved as an open area, although the surface paving is only partially preserved. A dirt road which leads to a dumping area leads from Ellis Street towards the eastern part of the site (figure 3). Remains of the 19th century docks and wharfs stand in the water (figure 4).

At the corner of Main and Ellis, on lot 2, is preserved the front steps and fragmentary concrete flooring of a building which was at one time probably the West End Hotel (see below) (figure 4). Other concrete slabs occur on lot 109, which are said to have been poured by the lumber company on the lot after a fire in 1942 (Archaeological-Structural Assessment Form:1). One other slab exists on lot 14.

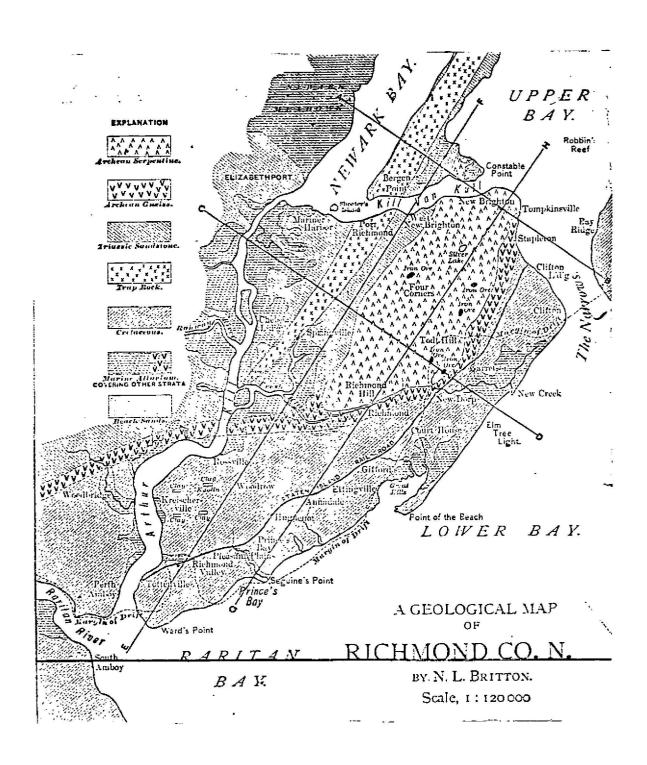
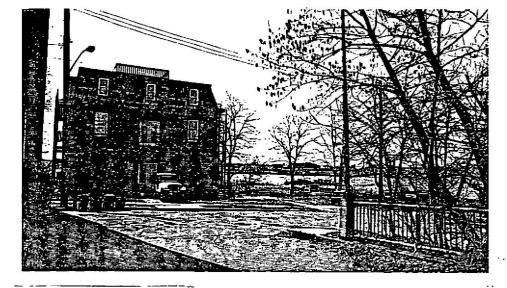


Figure 2 - Geological Map of Richmond County

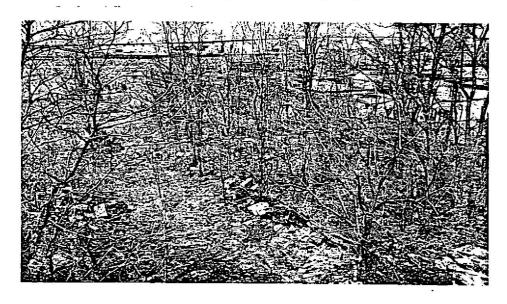
(after Bayles 1887:9)



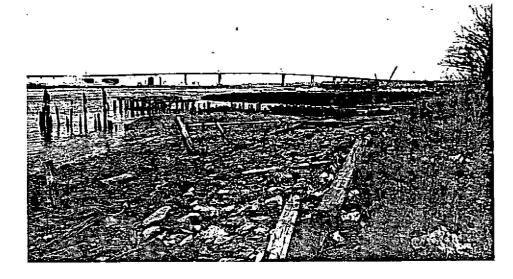
View of lot 105 with structure and lot 109 across
Main Street



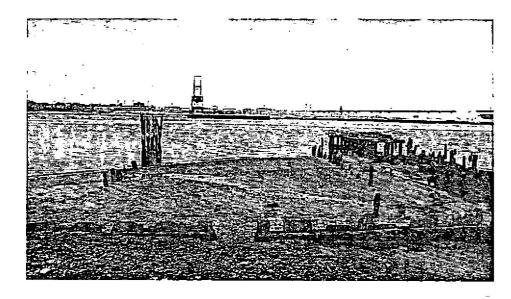
View from viaduct towards west along lot 20. Note that Ellis Street is higher than project site.



Dirt road on lot 20 and dumped debris. Figure 3



Waterfront of project site, from west to east.



Remains of boat slip at end of Main Street.



Corner of Main and Ellis, looking east. Note steps of West End Hotel at left.

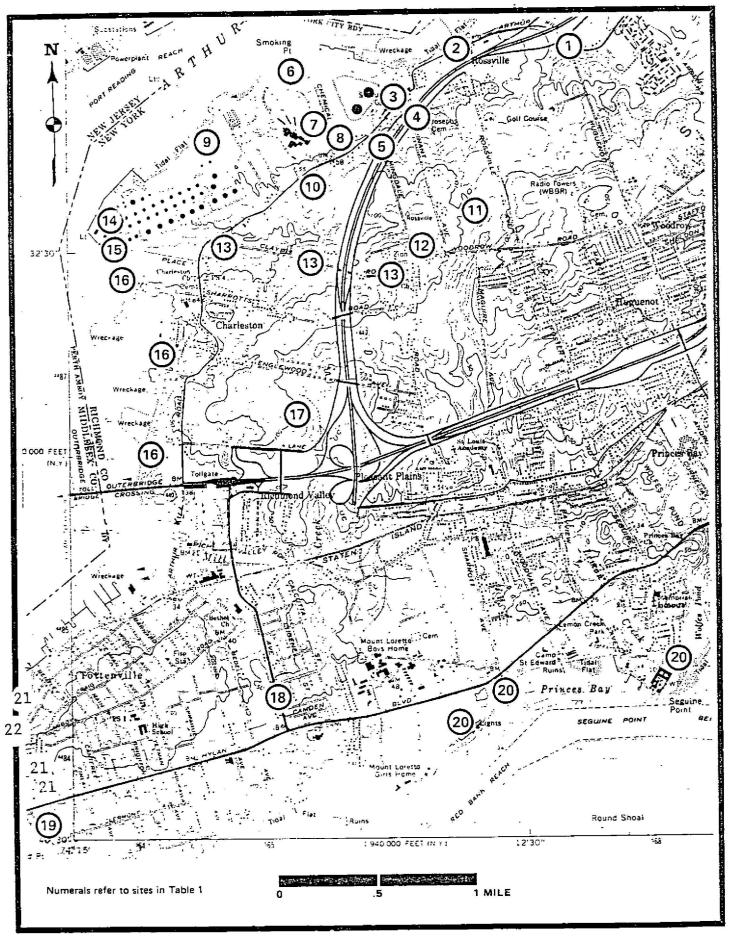
PREHISTORIC ASSESSMENT AND SENSITIVITY

The nature and distribution of prehistoric sites in Southern Staten Island has been recently reviewed in two studies: one for the New York State Department of Environmental Protection (Pickman 1988) and a second for the New York City Landmarks Preservation Commission (Berger 1987). The author reviewed the site files at the Staten Island Institute of Arts and Sciences and was apprised of the information in the New York State Historic Preservation Office files but did not find any information omitted in the two cited reports. Thus, except for the following brief summary, readers are referred to the above reports for detailed information and bibliography. However, the graphical information from these recent and complete summaries is included below as Figure 5 and Table 1. The only pertinent addition to the literature is McManamon and Bradley, which discusses the various interpretations of an ossuary found on Cape Cod and concludes that permanent Amerind residence along the coast may have begun in the late Archaic, around 2500 B.C., and suggests that the Ward's Point area may have been one such region (1988:100ff).

The Amerindian remains which have been found in southern Staten Island have generally been found on the high ridges of the island, near Arthur Kill and Raritan Bay,or in inland areas in the regions of streams. 1 These materials were generally excavated from areas of orange sandy soil. Some Paleo-Indian have been found in areas of tidal flats. Of these sites only one, Burial Ridge, is a burial ground. The adjacent Ward's Point, as well as possibly the Smoking Point site, are the two excavated areas of permanent settlement. (Pickman 1988:4-6; Berger 1987:5-8). The complex including Burial Ridge and Ward's Point is included in the National Register of Historic Places, along with the historic period Conference (Billopp) House discussed below.

Based on the information briefly summarized above, the probability of Amerindian remains in the project area is very low, a conclusion also noted by Pickman and Yamin (1984:193). The project has neither the tidal flat at the water's edge nor a high ridge on, or even adjacent, to the project site.

¹See Pickman 1988 for summary and most recently detected sites in the Tottenville area.



Prehistoric Sites in Southern Staten Island

Figure 5

BASE MAP: USGS 7% Minute Series. Arthur Kill, NY,
Quadrangle (1966, Photorevised 1981)

after Berger 1987a

TABLE 1

Documented Prehistoric Sites in Southern Staten Island

Site Name	Period
 Huguenot Site Cutting Site St. Luke's Cemetery Hammerstone Hill (Rossville Shell Heap Harik's Sandy Ground 	Middle Woodland Paleo-Indian to Woodland Prehistoric) Woodland
	Late Archaic
6. Smoking Point	(Paleo-Indian?), Late Archaic, Woodland
7. Chemical Lane	Archaic, Woodland
8. Pottery Farm Site	Archaic, Middle or Late Woodland
9. Port Socony Site-North	Paleo-Indian to ?
10. Gerike Organic Farm	Archaic to Late Woodland
11. Wort Farm	Late Archaic to Late Woodland
AND THE PERSON NAMED OF THE PERSON NAMED TO A PE	Woodland
 Clay Pit Pond Sites Port Socony Site-South(Port Mobil Hil 	Middle and Late Woodland
	Paleo-Indian to Late Woodland
	Paleo-Indian to Woodland
	Prehistoric
	Middle Woodland
19. Wards Point (8 sites)	Archaic, Woodland
Billopp Ridge	
Burial Ridge	
Block bounded by Clermont	
Crt., Surf Ave., McDonald	
Crt., and Moon Ave.	
20. Princes Bay	Prehistoric
Sharrott Avenue Site	
Wolfes Pond Site	
Red Bank	Duchistoria
21. Oakwood Beach Survey	Prehistoric
Hopping Avenue Satterlee Street	
Hylan and Satterlee	
22.Amboy Road and Hopping Avenue	Prehistoric

after Berger 1987a with addition from Pickman 1988

HISTORIC PERIOD ASSESSMENT AND SENSITIVITY

CARTOGRAPHIC AND DOCUMENTARY SURVEY

The area of the project site first enters the historic record as part of the Manor of Bentley, officially established in its entirety in 1687, although probably already occupied by Captain Christopher Billopp in 1675 (Leng and Davis 1930:351; Zavin et al. 1980:5). On March 25, 1676, Billopp received the patent to 932 acres on the southwest of Staten Island (Zavin et al. 1980:50). A second patent, apparently increasing Billopp's holdings to 1600 acres, was granted on June 6, 1687. The second patent names the grant the Manor of Bentley (Zavin et al. 1980:7-8). On the map published by Skene in 1907 the two patents are listed, though the acreage on the earlier patent is noted incorrectly as 922 acres (see figure 6).

The house Billopp built, known today as the Conference House, is the only historic site on the National Register near to the project area. This building was the site of negotiations between the Americans and the British during the Revolutionary War. Billopp also operated a ferry to Perth Amboy, beginning no later than 1709, which existed at the end of Arthur Kill Road for more than one hundred and fifty years. That ferry remained in the hands of the Billopp family until 1781, when it was taken over by Samuel Ward and subsequently operated by Isaac Butler (Leng & Davis 1930:351). After the middle of the nineteenth century, when the railroad was completed, the Perth Amboy ferry was moved and was operated from the project site for a few years, departing from a dock at the end of Main Street, a short distance from the new railroad terminal (see below) (Reed 1960:33).

Prior to the Revolution, the Billopp family divested much of their property. A large sale of Billopp land took place in 1762, when 600 acres were sold off. 23.5 acres were sold at that time to Joseph Totten, newly arrived from Hempsted, Long Island (Fitzgerald 1971:42). Since the Billopp family were loyalists, after the Revolution additional Billopp lands were sold in order to avoid forfeiture. Thirty-five acres were sold in 1780-81 to "Jon and Jas" Totten for L350 (Zavin et al. 1980:21). The Totten family remained a presence in Tottenville and of course, eventually gave the area its name (Leng and Davis 1930:351; Bayles 1887:583). In fact, much of the land in the project area remained in the hands of the Totten family until well into the nineteenth century. Nevertheless, the family was not considered

²According to Fitzgerald 1971:42, the land was sold to Joseph Totten by Thomas Billopp, grandson of Captain Billopp. However, Thomas Farmar Billopp had died in 1750. It was his son, Colonel Christopher Billopp who owned and sold Billopp property in 1762 (Zavin et al. 1980:9-10).

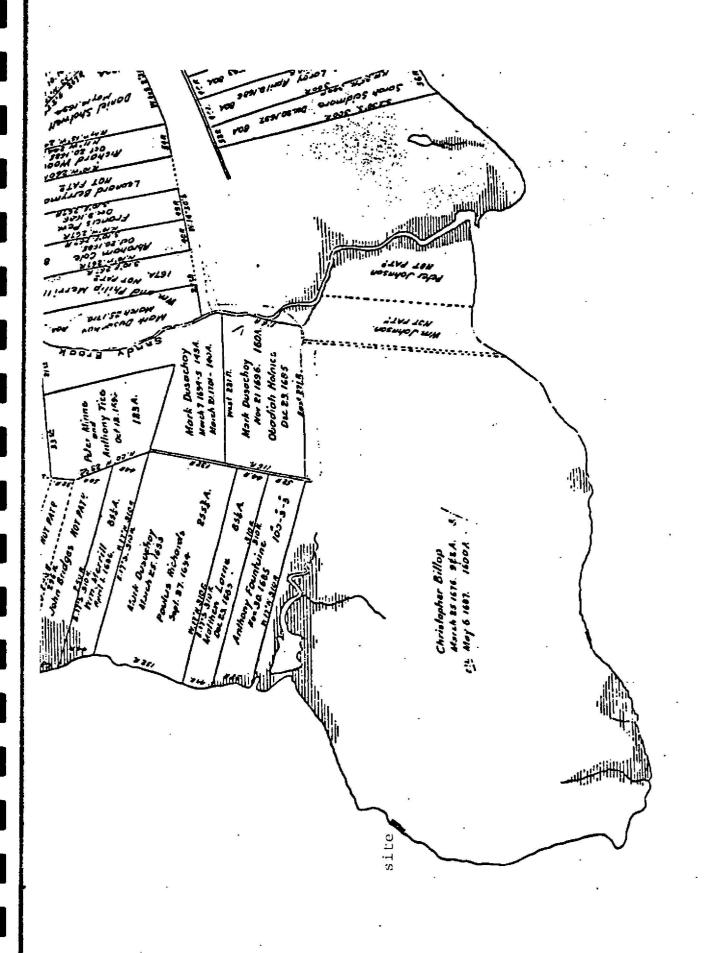


Figure 6 Skene's 1907 Map - Colonial Land Patents (site location approximate)

important in Staten Island society. According to Clute "We can scarcely consider this family [the Tottens] as among the old families of the Island, though the name is found in local records for more than a century" (1877:427-428).

The area now named after the Totten family was commonly called "The Neck" after the Revolution. Among other names for the area were Totten's Landing, Bentley Dock, Arentsville, and, on the Dripps 1850 and Higginson 1860 maps, Unionville. The post office was named Bentley until 1861; in 1862 it became Tottenville, which name has continued until today, except for an interval in 1910 when it was called Bentley Manor. Tottenville was incorporated in 1869 (Leng and Davis 1930:329f.,351).

Tottenville followed a pattern of development typical for southern Staten Island. Scattered small villages developed by the mid-nineteenth century and the majority of the citizens either farmed or worked on the water as fishermen, sailors, or in maritime support services. Manufacturing also began to play a role in the economy in this period (Bayles 1887:702ff; Zavin and Gilbertson 1986:42f,50ff).

The first construction on the project site was by William Totten. It consisted of a dock called Totten's Landing which accompanied a shipyard, as indicated on several maps: Dripps 1850, Barnes 1852 and Butler 1853 (fig. 7a). Presumably this shipyard occupied some portion or all of lots 2, 6, and 14, which were transferred to James and William Totten on March 13, 1837. Several structures are shown along what was to become the south side of Ellis Street, but none are indicated on the project site in this period and the street had not yet been built. 3

Shipbuilding as an industry was important on Staten Island from at least the middle of the eighteenth century until the middle of the nineteenth, but it was ship repair work which was the principal occupation of most shipyards (Bayles 1887:702ff.; Morris 1900:469). Totten's shipyard was the first of three eventually occupying the project parcel.

By the time of the 1857 Walling map (figure 7b), there was more activity in the project area, partly due to the increase in industry and population in the area. The proposed rail line for the Staten Island Railroad is indicated as passing by the site and continuing southwest. In fact, although the initial incorporation of the railroad was in 1851, the 13-mile line from Vanderbilt Landing to Tottenville was not completed until June 2, 1860, when the first passengers arrived by train to Tottenville.

³Pickman and Yamin suggest that the street was put in place on filled land (1984:194), thus creating a street to the north of the higher, drier land on which the earlier settlement was built.

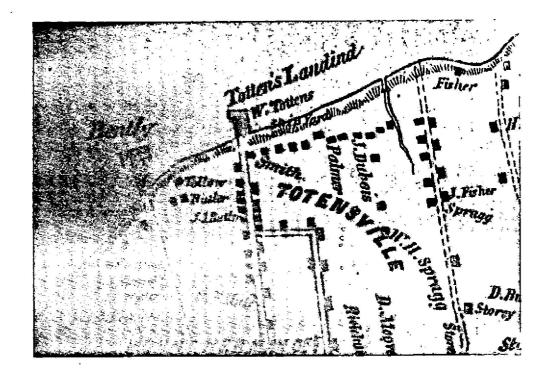


Figure 7a. Project Area - Butler 1853

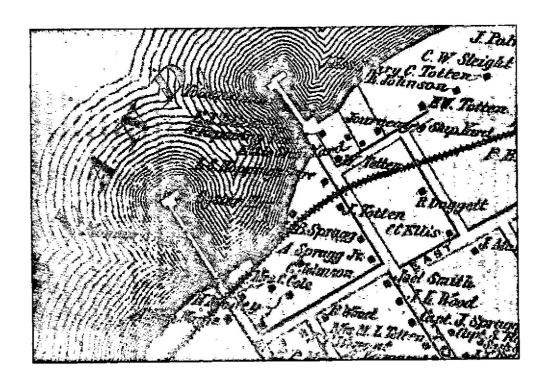


Figure 7b. Project Area - Walling 1857

Figure 7

(Bayles 1887:687; Medditto 1973:134). And in 1860 the railroad stopped at Main Street, directly south of project site, only in later years beginning at Bentley -- and never extended to Amboy Road -- so in that detail the Walling map shows future and hypothetical events.

However, on the site are indicated two shipyards, the Ellis Shipyard on lot 14 and Robert Journeay's Shipyard on the western part of lot 20 (Leng & Davis 1930:652). On the Walling map what had been Totten's Shipyard is called E.J. Totten's Store and Repairing Yard. This may indicate that the Ellis Shipyard was doing most of the shipbuilding in the area; by 1880 Jacob Ellis and Son was mentioned as one of three "prominent men engaged in shipbuilding" in Tottenville (Bayles 1887:704). Additionally, Ephraim J. (E.J.) Totten, born in Tottenville in 1806 and still living when Bayles wrote glowingly of his early days at sea and his return to Tottenville shortly after 1850, was described as a "leading and successful merchant" prior to his retirement in 1874, rather than as a shipbuilder (1887:583). Totten's Landing is called Totten's Wharf.

At the corner of Totten (Main) and what is now Ellis, a street drawn but not named on this map and probably filled and built at this time (Pickman and Yamin 1984:194), is a building of unknown function labeled W. Totten, on what is today lot 2. West of Main Street two structures are indicated: the one fronting on Main is called L.S. Hopping's Store, the one at the westmost extreme "Oyster House." Whether these two buildings occupied lot 105, which is not part of the project parcel, or lot 109 cannot be determined with certainty, although it is likely they were not on the project site. (See figure 7b).

The location of the property owned by William Totten at this time may have been a factor in the placement in 1860 of the Staten Island Railroad terminal. William Totten was one of 13 men on the railroad's board of directors, elected on October 18, 1851 (Bayles 1887:687). Certainly the coming of the railroad to Tottenville increased the value of property near the railroad (see below).

There is a gap in the maps for this area between the Walling maps of 1857 and 1859 and the Dripps map of 1872. We do know from other evidence that the railroad was brought to the area in 1860 and had its terminal east of Totten (Main) Street, across what is now Ellis Street from the site. When the construction which we see on the maps of the 1870's was completed cannot be determined from the evidence examined. However, the Civil War began in 1860, slowing the economy throughout the United States. Staten Island was greatly affected by the war, suffering the disruptions of the draft riots in 1863 and torn by pro- and antislavery loyalties (Reekstin 1969). As in all of New York City, building ceased during the war and it is likely that the struc-

tures visible on the maps of the early 1870's were built only a few years before the maps were drawn. (Real Estate 1967:43)

The Dripps map of 1872 (figure 8a) indicates no land at all on the west of Totten (Main) Street. On the east side of Totten are shown two structures. The scale is small and it is difficult to be certain which labels belong to the buildings. However, the one at the shore appears to be labeled the Hopping Hotel. The railroad depot is indicated at Totten Street and the connecting ferry to Perth Amboy departed at this time from the end of the dock earlier called Totten's Landing. In fact, the ferry to Perth Amboy had been moved to this location by 1861, to facilitate travel from New Jersey to New York City. (Reed 1960:33). E.J. Totten and LaTourette are designated landowners, though no structures are shown on their properties.

In the Beers 1874 Atlas (figure 8b) the scale is larger and the attributions of ownership differ from the 1872 record. It is likely that the information in the atlas is more accurate than on the Dripps map, due both to the scale and to the general conformity of this information with later sources. Lot 2 housed two structures, one at the intersection of La Tourette (Ellis) and Main and the second just north of La Tourette along the lot line adjacent to lot 14. E.J. Totten is indicated as the owner of a building on lot 6 and the wharf at the end of Main Street is called Amboy Landing. Lot 14 and the western part of lot 20 are still occupied by shipyards, as they had been in 1857, but that on lot 14 is designated as owned by one "B.S." and J.S. Ellis owned one apparently at the western edge of what is now lot 20.4 Four buildings of unknown function occupy Abraham LaTourette's property, two fronting La Tourette Street, one of which is at the western lot line and one directly north of Johnson Street, and two smaller structures near the water and at the eastern edge of the lot. West of Main Street the property now lot 109 is owned by Mrs. E. Hopping, but no structures are indicated on the site. The post office building appears to occupy lot 105, which is not part of the project parcel, and the train terminal at the southeast corner of Main and La Tourette is clearly indicated. later evidence it seems that the structure on the property of S.J. Kron as well as the largest building on A. LaTourette's property were small hotels, the construction of which was probably spurred by the presence of the railroad terminal and the connecting Perth Amboy ferry. They may have served day-trip visitors to Staten Island, as did other hotels in the area (Zavin and Gilbertson 1986:52).

⁴The Ellis family later owned the shipyard on lot 14. The ownership designations may be reversed on this map, but the functions of the land as shipyards is not questioned since that use continues for many years.

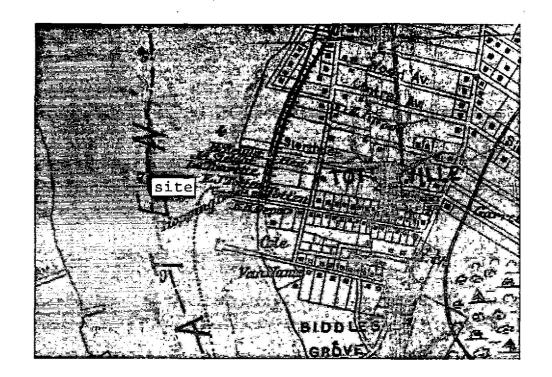


Figure 8a. Project Area - Dripps 1872

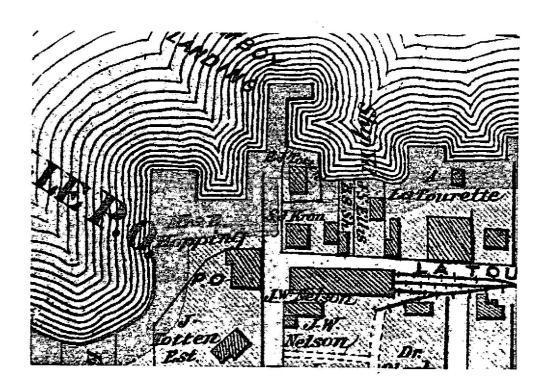


Figure 8b. Project Site - Beers Atlas 1874 scale 1/5000

Figure 8

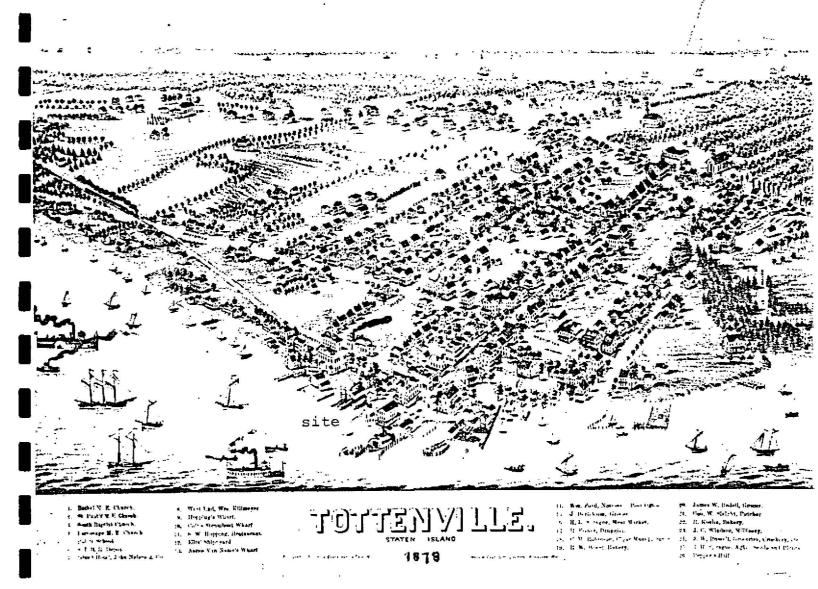
The bird's eye view of Tottenville in 1878 (figure 9) illustrates the rapid development of the project site subsequent to the coming of the railroad and the ending of the Civil War. Extending off the shore of lot 109 was Hopping's Wharf and the wharf at the end of Main Street was now Cole's Steamboat Wharf. Directly south of the steamboat wharf is a small building which was S. W. Hopping's Restaurant, on lot 109.5 The multi-story structure on lot 2 was the West End (Hotel), owned by Wm. Killmeyer. Lot 6 had another 3-story building, which, since E.J. Totten's retirement may have been put to new uses and perhaps increased in size.6 Other hotels are clustered in the area. On lot 20 is a multi-story unlabeled building which may be the building eventually called the Union Hotel and the same large unlabeled structure visible at the end of Johnson Street on the Beers 1874 atlas noted above.

In fact in the later Sanborn 1885 and Beers 1887 atlases the large square structure on A. La Tourette's property is named the Union Hotel, shown as a five story building with two-and-a-half story wings, a side porch, and a one-story shed attached in back, fronting on La Tourette Place. This plan conforms in most details to the 1878 bird's eye view. According to Morris, the Union Hotel at Tottenville was originally a farmhouse on the Johnson estate, erected in 1784, a fact not corroborated cartographically, unless the structure had been moved across La Tourette when the railroad was brought to the area. Morris describes the building as having two or three stories added to the original by Captain Latourette, who opened the hotel to the public in 1865 (1900:184). Although the physical building illustrated in plan and view could be the result of such a process, no building is shown on the property before 1874. Nevertheless,

⁵Pickman and Yamin suggest on the basis of their shovel test AW2 that this area was filled in the 19th century prior to the late 19th century construction on this lot. The area closer to the water may have been filled later than the area to the south (1984:195-97).

⁶A store which was transformed and enlarged into a hotel at about the same time may be a documented example of what happened on this lot. A grocery store and residence of John Batchellors, built in 1845 in Charleston, was converted to a hotel by the early 1880's with the building of a large addition (Savin and Gilbertson 1986:47).

⁷There is one house on both Dripps 1850 and Butler 1853 which could have been on the north side of what became "Ellis" but it appears to be east of the project site and not owned by a Johnson at that time. Those owned by A. and E. Johnson are south of the unbuilt street on Dripps 1850 in the area of the project site, but the same buildings are east of the site on Walling 1857.



Bird's Eye View of Tottenville - 1878

from Kouwenhoven 1972:291 Original in Staten Island Historical Society

Figure 9

since the Dripps 1872 map is lacking in precision, it is certainly possible that Morris is correct about the existence of a hotel on this site by 1865. Johnson's name is preserved in the name of Johnson Street. Whether the name Union Hotel is mis-applied on these maps or Morris is incorrect in some details of his information cannot be determined on the present evidence.

Together, the Sanborn 1885 Atlas (corrected to 1891) (figure 10) and the Beers 1887 map and atlas give a quite complete picture of the structures on the project site in this period. At the corner of Main or Totten Street and La Tourette Place (Ellis) is the West End Hotel, B.E. Streeter Proprietor. This shown as a three-story building with a surrounding porch and a series of outbuildings in back, some directly adjacent to the hotel and others in the northeast corner of the lot. Along the eastern lot line are shown a series of four privies, on the West End Hotel lot but attached by a low structure to the building on lot 6, the Cassonia Hotel, P.P. Grosjean (Grosgeon), Proprietor. The Cassonia Hotel had an adjacent concert hall and a series of This hotel had its front one-story outbuildings on the lot. porches on Main Street. The advertisement placed on the Beers 1887 map outlines the enticements of the hotel:

Cassonia Hotel, on the Staten Island Sound, special accommodations for fishing, hunting, chowder and yachting parties; attached is a large pavilion which can be engaged for balls, parties, etc.; three minutes to R.R. depot or ferry; meals at all hours; foot of Totten St., Tottenville, P.P. Grosjean, prop.

The ferry described in the advertisement is the Perth Amboy Ferry. The landing is at the end of Main (Totten) Street, off lots 6 and 109. The advertisement underscores the relationship of the hotel development to the growth of transportation and recalls the role that Staten Island played as a summer resort for city residents, which had begun in the more easily accessible northern parts of the Island in the 1830's (Zavin and Gilbertson 1986:5).

On lots 14 and 20 were two shipyards, with marine railroads and ancillary structures. Altogether there were eight shipyards in Tottenville in 1887, the marine railroads of which were worked by horse-power. The shipyards did both repairing of small vessels and some shipbuilding. The types of vessels involved in repair work included smacks, tugs, coal barges and oyster boats; steam tugs and propeller yachts were built. The shipyard on lot 14 was owned by Jacob Ellis and Son, one of three men considered prominent among the Tottenville shipyard owners. The other two were A.C. Brown and the Messrs. Conklin, whose yards were to the east and west of the project property (Bayles 1887:703-704).

West of Main Street on lot 109 was the S.L. Hopping Saw and

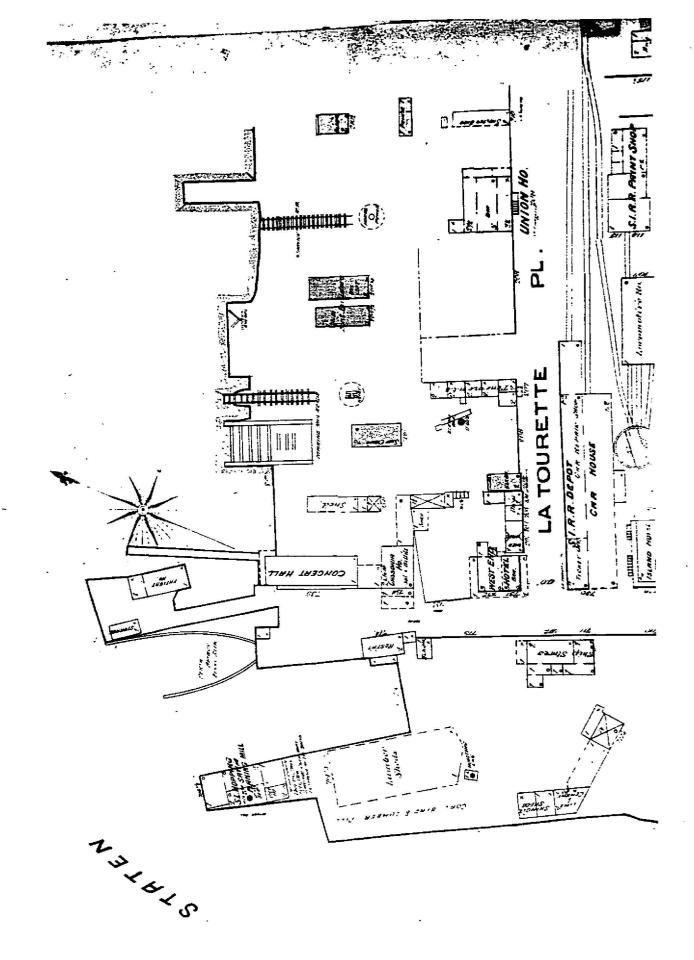


Figure 10 Sanborn 1885 (corrected to 1891) Scale 1"= 100'

Planing Mill/Store and Lumber Yard, consisting of a series of low structures primarily occupying the wharf, with storage for coal and lumber on the land of the lot.⁸ A restaurant and blacksmith shop were also on this lot, across from Main Street from the Cassonia Hotel.

Between 1891 and 1898 the railroad, which had become part of the Staten Island Rapid Transit Railroad Company in July 1884, moved the terminal further west in Tottenville, to Bentley Street (Bayles 1887:687; Morris 1900:463). Switching tracks replaced the station across from the project site and the ferry to Perth Amboy was moved from the project site to the end of Bentley Street, adjacent to the new train station, where it continued to function until the 1960's (Ferries 1971:59).

According to the Robinson 1898 Atlas (figure 11), most of the structures standing in 1891 remained and water and sewers had reached the site. The street parallel to the site is called Railroad Avenue at this time. The property formerly owned by La Tourette may have been owned at this time by A. Kreusler; the ship repair yard on the site was run by W.H. Smith. The Jas. S. Ellis & Son Shipyard was still functioning in the hands of the long-time family owners and was both building and repairing boats (Industries 1898:78). What had been the site of the Cassonia Hotel, along with the former Ferry landing, had become the property of the Cole Brothers, who ran a coal and lumber business on The wharf was now open for public use as a steamboat the site. landing and freight dock (Bayles 1887:514; Industries 1898:74). Lot 2 is occupied by what is identified as the George Bechtel Brewing Company; although it may have been owned by the company and does appear as Bechtel family property subsequently, the well-known brewery itself was long established in Stapleton (Bayles 1887:727; Clute 1877:332). According to the <u>Industries</u> of Staten Island the site was still occupied by the West End Hotel, run by B.E. Streeter. It was the "leading hotel at this end of the Island" (1898:75). The Tottenville Hotel is listed at 5 Main Street, J.F. Boss, Proprietor, which may be the small building at the edge of lot 109 which had formerly been a restaurant (Industries 1898:74). The Hopping Coal and Lumber Yard was now in the hands of two different companies: the Henry G. Stiles Coal and Wood Yard, which was "dealer in all sizes of Lehigh coal, Cumberland soft coal and wood," and the Tottenville Lumber Company, which provided lumber and building materials (Industries 1898:74). S.L Hopping retained ownership of only the building on lot 105, not part of the project parcel.

⁸This lumberyard apparently remained in the hands of a single family until the yard's closing in 1969, according to Mr. Edwin Styles, who sold the property to the present owners (Structural-Archaeological Assessment Form Supplement, Totten's Landing, Inc.:1)

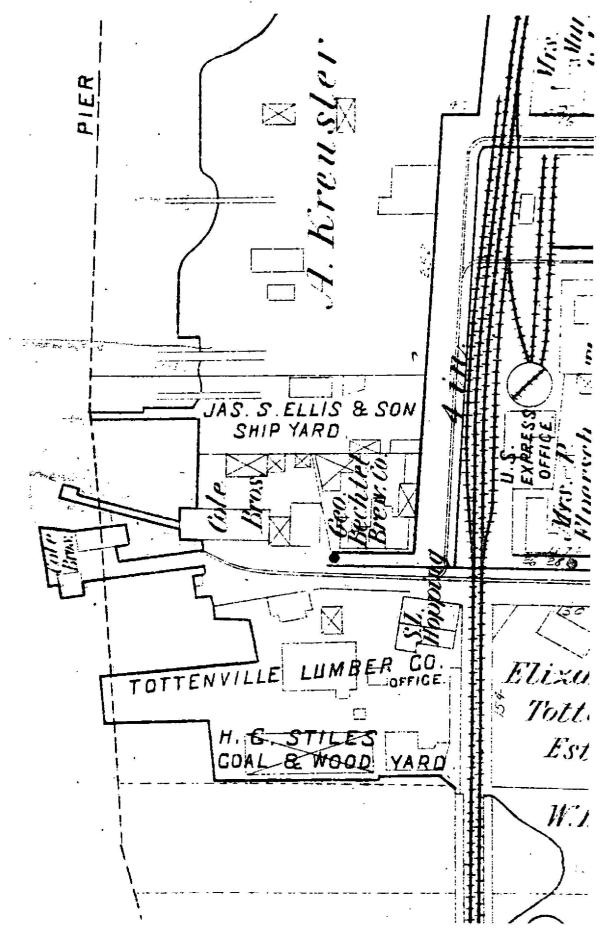


Figure 11
Project Site - Robinson 1898

Scale: 1" = ca. 100'

The nature of the businesses on the project parcel did not change significantly in the following decade. The Robinson 1907 Atlas (figure 12) shows a combination of coal and lumber yards, ship yards, and hotels on the project site. Some of the properties have changed hands in the ensuing years: Lot 120 was sold to Hubbard R. Yetman, a real estate and insurance agent, and that owned by the Cole Brothers may now have been transferred to one F.W. O. Schmitz (Industries 1898:79). An entity known as the Tottenville Holding Company owned the Coal and Lumber Yard on lot The hotel at the intersection of Main and Front (Ellis) is owned by Eva Bechtel, presumably one of the daughters of the brewery owner (Bayles 1887:729). The building on lot 105, not part of the project parcel, is also marked as a hotel. Across the railroad tracks, the turntable of the railroad had been moved adjacent to Johnson Street, across from what was once the Union Hotel. Main Street is the name now in exclusive use.

We may be able to see what the structure which had been the Union Hotel looked like sometime between 1907, when Yetman is shown as owner of the site, and 1917, when only a small structure is shown in the general area once occupied by the hotel. A view from the railroad turntable shows a two-story frame building with a porch, with Yetman's name on the sign in front. Although the direction of the photograph is not indicated, it is rather likely that it is the former Union Hotel, in view of its relative location to the turntable, as seen on the 1907 map (figure 13).

In 1917, there was still little change in the uses of the property on the project site, according to the Bromley Atlas (figure 14). New sheds were erected on lot 109 and the lumberyard is now owned by the Seguine Runyon and Stiles Company. Eva Bechtel still owned lot 2, and we can see that the hotel on the site has retained its long-time name: West End. The designated ownership of lot 6 is by the Cole brothers, as it had been in 1898. The shipyard on lot 14 is still in the hands of the Ellis family and lot 20 continued to be owned by H. R. Yetman. With the exception of the West End hotel, most standing structures at this time are designated one-story buildings or sheds. The present name for the street between the railroad tracks and the project site was in use, but not preferred, by this time.

Sometime between 1917 and 1935 the name Ellis Street had come into dominant use, though Front Street was still remembered. The train tracks had been expanded onto the southern part of that street. (The overpass at Johnson Avenue which exists today was constructed in 1939, according to the date on the bridge.) During the period between 1917 and 1935 the entire project parcel east of Main Street was abandoned and many of the standing structures disappeared, particulary the ones fronting on Ellis. Before closing the shipyard on lot 20 had been owned by Stephen Cossay, whose family had owned the shipyard just adjacent to the

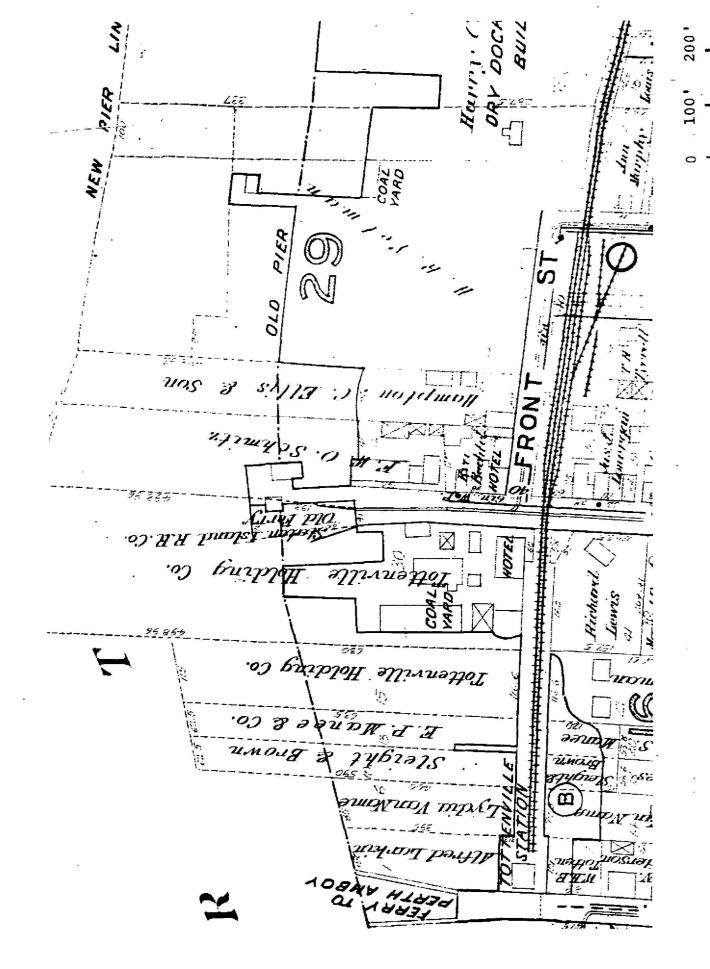
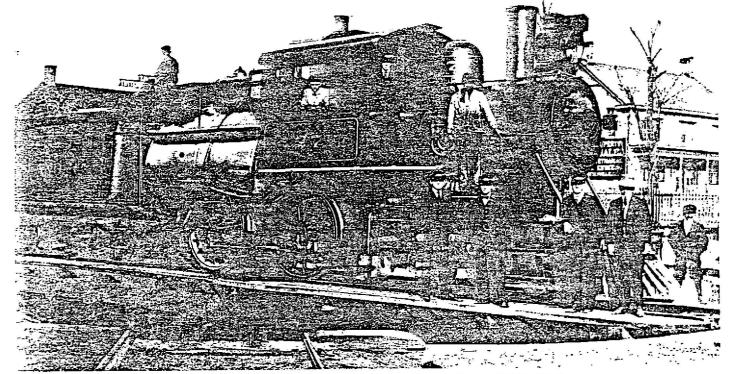


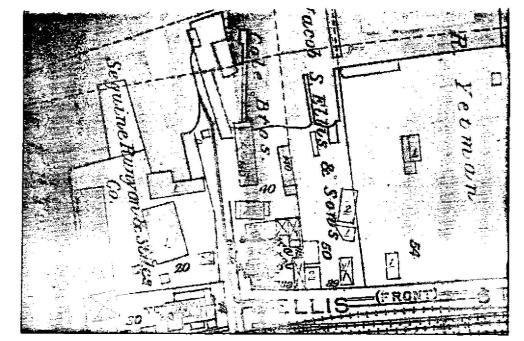
Figure 12 Project Site - Robinson 1907



PASSENGER LOCOMOTIVE #27 ON THE TOTTENVILLE TURNTABLE

Staten Island Historian 16, 1973, p. 133

View of a building beyond the Tottenville turntable. This building may be the former Union Hotel. Photo undated but after 1900.



Scale 1" = 150'

Figure 14
Project Site - Bromley 1917

east for many years. Only the lumber company of Seguine Runyon and Stiles occupied lot 109 of the project parcel, with its wharfs and piers demolished; the business remained until 1969 (Structural-Archaeology Assessment Form Supplement:1). The economic lassitude of this part of Staten Island continued from the post-World Wart I period until very recently, when pressures on residential housing and a new appreciation for the waterfront has seen an increase in construction in southern Staten Island, including Tottenville and the project site.9

HISTORIC SENSITIVITY

The primary use of the project area through time has been industrial: shipbuilding, coal and lumber yards. Many of the structures once in the area were on the wharfs and docks, which are now destroyed. None of the industrial activities was associated with a significant historical figure, nor were they unique in the commercial history of Staten Island. In addition, the principal structures associated with these activities were flimsy wooden buildings and sheds, without potential for substantial architectural remains.

Of the structures once on the project site, the three hotels east of Main Street, probably all built by 1874, were the largest and most likely to have remains preserved, even though they had all been destroyed by 1935. Since water and sewage were not brought to the area until the late nineteenth century, cisterns and privies associated with these hotel sites might yield intact deposits associated with limited and discrete periods of occupancy of these structures. The field survey was directed to these ends.

⁹The AIA Guide to New York City in 1968 refers to this area as "the real backwoods of Staten Island" (White and Willensky :390)

FIELD TESTING

Field testing on the project site consisted of three distinct efforts. Five shovel tests were placed on the site by Pickman and Yamin in 1984, during preliminary testing for the Oakwood Beach Interceptor project (Pickman and Yamin 1984:195ff). Key Perspectives' Dr. Frederick A. Winter and Dr. H. Arthur Bankoff did a walkover and placed four core tests on the site in April 1988, to explore the nature of the site and to determine if mechanical equipment would be required for further testing. Finally, on May 9, 1988, after discussions with Michael Cinquino of the NYSDEC, a field survey was undertaken, using mechanical equipment and a field crew from The Cultural Resource Group, Louis Berger and Associates Inc., under the field direction of John W. Martin, with Dr. Karen S. Rubinson of Key Perspectives as Principal Investigator. The results of each of these efforts is summarized below.

PICKMAN AND YAMIN 1984

Altogether, Pickman and Yamin placed six shovel tests in the area of the project site. Shovel tests AW-2, AW-3, and AX-3 were placed on lot 109 (1984:195ff, sheet 42). The approximate locations of these shovel tests are placed on the site plan in Appendix B. Test AW-2 encountered large stones at a depth of eight inches below the surface (Pickman and Yamin 1984:195). Test AW-3 was 46 inches in depth, revealing 19th century fill (Pickman and Yamin 1984:196). Test AX-3 also revealed fill and a great deal of coal, perhaps from the coalyard on the site. The fill in that test contained no datable artifacts (Pickman and Yamin 1984:196-197).

The remaining tests were placed east of Main Street. Test AS-8 was apparently located in lot 2. According to Pickman and Yamin, this test, which was dug to an unspecified depth below fifteen inches below the surface, contained stratified domestic refuse of nineteenth century date. (1984:198-99). However, the large amounts of nails and window glass which were found with the ceramic and bone are more likely to be associated with the destruction of the structure on the site or even a fill episode, as were found in our more extensive field survey (see trenches 3 and 4 below). The stratified appearance of the fill in our backhoe trench 3 corresponds to that which Pickman and Yamin found in the shovel test; the small area that they opened could easily have been deceiving.

Test AV-3 was placed along the edge of Main Street, west of the traces of the foundation of the West End Hotel. The test encountered Belgian blocks at a depth of 15 inches below the surface; here the test ended. Presumably the blocks represent paving of the former surface of Main Street (Pickman and Yamin 1984:199-200). The final test placed by Pickman and Yamin on the project site was placed about thirty feet north of Ellis Street in lot 20, approximately 150 feet west of the eastern lot line. According to Pickman and Yamin, the area appeared disturbed with the original topsoil stripped off. Approximately 14 inches of soil mixed with debris was found in the test (1984:200, sheet 43).

CORE TESTING

Drs. Frederick A. Winter and H. Arthur Bankoff performed four core tests with a manual borer in order to determine whether the field survey could be undertaken with shovel testing or would require mechanical equipment. Three of the tests (CT 1 - 3) were placed in the area of the Cassonia Hotel on the east side of Main Street and one (CT 4) was placed on the west side of Main Street in the area of the hotel/restaurant at edge of the pier on lot 109. The results of the testing were as follows:

Core Test 1: at 35.5 inches, brick was encountered.

Core Test 2: at 9.75 inches, tree root was encountered.

Core Test 3: at 19.6 inches, brick was encountered.

Core Test 4: at 19.7 inches, wood was encountered.

It was clear from the testing that mechanical equipment would be necessary to test in the area of the Cassonia Hotel, since demolition debris was encountered in the testing. In fact, once the trenching began in that area, it was clear that the brick encountered belonged to the upper levels of the foundation, which had collapsed.

The wood encountered in Core Test 4 might have belonged either to the destroyed wooden structure which had stood on the site or the underpinnings of the pier which was once associated with the activities on lot 109.

FIELD SURVEY

INTRODUCTION

The Cultural Resource Group of Louis Berger and Associates, Inc., conducted backhoe trenching in Tottenville, N.Y., in order to investigate three hotels which once stood on a tract of land that will be impacted by the Totten's Landing development. The project involved the excavation of four backhoe trenches in three areas within the project boundaries. Samples from the cultural deposits from each trench were screened and the artifacts retained for analysis. In addition, soil excavated from the upper portions of a cistern uncovered during the excavation was sampled. Soil profiles of three of the trenches were drawn and the fourth trench was mapped in plan view. Photographic documentation of the fieldwork was also accomplished. The project was performed for Key Perspectives, under the direction of Dr. Karen S. Rubinson.

The goals of the field survey were twofold. The first was to locate the privies which were shown on the 1885 Robinson map as existing on the property of the West End Hotel and connected by a shed to the Cassonia Hotel. The privies may have served one or both hotels from their construction (after 1865 and by 1874) until the coming of water and sewage to the site by 1898. A second goal was to locate the hotels which had existed on the project site and determine if there were basements or intact deposits in association with them.

FIELD METHODOLOGY

The initial field task involved the re-establishment of property boundaries in order to aid in the selection of locations for the backhoe trenches. The lot lines indicated on the <u>Survey of Property Situated in the Borough of Staten Island</u> map for the property once occupied by the West End Hotel appear to have remained the same, and so measurement on the ground could be accomplished using reference points or objects indicated on the map. The lot lines for the Union Hotel had to be estimated from the Robinson map of 1897, where lot dimensions were noted, as the property boundaries for the hotel were no longer in existence. Precise locations of the trenches were then selected based on areas of interest denoted by Dr. Rubinson.

The areas of investigation were designated in accordance with the trenches indicated on the copy of the property survey map marked by Dr. Rubinson. The indicated privy locations within the property of the West End Hotel were designated as Area 1. Area 2 consisted of the rear portion of the site once occupied by the Union Hotel. The Cassonia Hotel property was designated as Area 3. Trenches were labeled numerically in order of excava-

tion, regardless of area number.

During the excavation of the trenches, five-gallon buckets of soil were taken from the fill levels for screening in order to sample the material contained in the fill, with the goal of obtaining a date range for the fill episode(s). All trenches had approximately five buckets of soil collected for screening. The cistern exposed in Trench 4 was excavated to a depth of two feet below the top of the opening of the cistern. Two five-gallon buckets of the material removed were screened, in addition to the samples from the rest of the trench. In addition, a few artifacts were collected from the surface of Area 1.

All soil collected in the buckets was passed through one-quarter-inch hardware mesh and all artifacts were collected for processing. Artifact processing included washing all cultural material where appropriate and a brief analysis, including identification of manufacturing date ranges where possible. The artifact lists are in Appendix A.

RESULTS

Trench 3 in Area 1 was located to investigate the privies indicated as water closets within the property lines of the West End Hotel on the Sanborn map of 1885, which illustrated them as also connected by a series of sheds to the Cassonia Hotel. The trench was oriented at an oblique angle to the depicted line of water closets in an attempt to both maximize the chance of exposing some evidence of the privies and to avoid the trees currently standing on the lot. The effort began as simply an attempt to scrape the upper soils down to the original ground surface in a fairly large area. After scraping down more than a foot below the surface it became clear that the fill was quite deep and that a trench would be needed to remove fill layers in search of the privies.

The resulting trench was twenty feet long, six feet wide, and over six feet deep. The soil profile of a seven-foot section was drawn and it indicated multiple episodes of filling. upper most stratum (left undesignated on the profile drawing) was a 10 YR 3/1 very dark gray sandy loam mixed with layers of a 10 YR 5/4 yellowish-brown medium-grained sand. Stratum A appears as though it may have been a relatively recent surface, based on the absence of substantial leaching. Strata B and C appear to be natural subsoils which may have been excavated from a near-by More fill is location and subsequently deposited in this area. evidence by the D and E strata which are thin lenses of sand. Stratum F consists of a layer of discarded coal, possibly from one of the adjacent coal yards. The soils directly underlying stratum F probably derive at least a portion of their color from Stratum J consists of clean sand leaching of the coal layer.

layered in various hues. The original land surface (stratum K) appears at what is apparently over five feet below the current ground level. That surface, or what remains of it, was a 10 YR 6/8 brownish-yellow clayey sand overlying the 5 YR 4/3 reddish-brown very compact sandy clay natural subsoil. No direct evidence of flooding was apparent; however, the fact that such extensive filling has taken place would seem to be an indication that water inundation was a problem well above the natural surface (figure 15).

Area 2 was in the location of the Union Hotel, and trenches placed in this area were to investigate the foundation and possible basement of that structure. Trench 1 was located at the estimated rear of the hotel, approximately one hundred and six feet north of the northern edge of Ellis Street and parallel to the street, in the hope of encountering the hotel's foundation walls. No foundations were evidenced in the eighteen-foot-long trench, and the observed fill was fairly shallow, being a foot or less in depth. The underlying soils correspond with those naturally occurring on the island in this area. Water seepage quickly filled the bottom of the trench indicating the proximity of the water table to the surface.

Trench 2 of Area 2 was placed approximately nineteen feet southeast of Trench 1 and oriented perpendicular to that trench. The trench succeeded in revealing three large wooden beams, possibly supports for the hotel (Geismar 1983:703). It is also possible that the exposed beams were associated with later occupations of the property. Original ground level appeared in section to lie below the beam, indicating that fill in this portion of Area 2 was also shallow. No additional evidence of a foundation was discovered and no basement is believed to have existed under the Union Hotel based on the two trenches excavated (figure 15).

Area 3 was selected to investigate the foundation of the Cassonia Hotel, close to the property line shared with the West Trench 4 was begun approximately twenty feet east of the east edge of Main Street, just inside the lot boundary. trench was expanded as more cultural remains were exposed. A brick wall parallel to the street was uncovered, with a corner at the southern end which turned away from the street. The exterior of the wall was faced with cement, most likely to control water seepage, and the interior of the foundation wall was left with exposed brick. A small portion of the basement floor was clearshowing that it was made of concrete. Soil from both the inside and outside of the structure was sampled. Towards the north, along the wall, a brick cistern was uncovered, also faced with cement on the exterior only. The cistern abutted the exterior of the wall and was situated so that the circular outline of the cistern was flattened where it came in contact with the Four feet south of the exposed corner of the wall was a wall.

concrete sidewalk, the eastern end of which aligned with the west foundation wall. The cistern was excavated to a depth of two feet below the top of the opening at which time excavation became impossible due to a concrete impediment, thought to be a collapsed cover for the cistern (figure 16).

ARTIFACT SUMMARY

Ceramics from Area 1, the area of the privies on the West End Hotel property, range in manufacturing date from 1800 to the present day, with the majority of those which can be dated having a beginning date in the first half of the nineteenth century. The only datable glass from this area is an embossed bottle which is of post-1857 design. This bottle date would appear to provide the TPQ for the fill deposits in Area 1. None of the additional artifacts recovered provided temporal information on the use of this area.

The datable ceramics Area 2, the location of the Union Hotel, have beginning manufacturing dates which are predominately in the middle of the nineteenth century, with the exception of two sherds of plain hard paste porcelain which were not manufactured until 1900. Datable glass is generally traced to the early twentieth century. A TPQ of 1933 for these deposits, based on dated glass, post-dates the existence of the Union Hotel and other documented occupations of the site. Other recovered material includes wire and asbestos tile fragments.

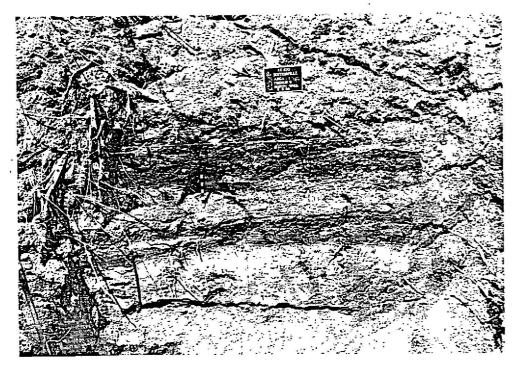
Ceramics from Trench 4 in Area 3, the area of the Cassonia Hotel, consist of a kaolin pipe stem and a single ironstone sherd which dates from the middle to the end of the nineteenth century. The glass which can be dated all post-date 1891, with the screwtop jar recovered from the interior of the structure having a manufacturing date-range of 1930 to 1954, and providing the TPQ for the deposits around the foundation. The cistern ceramics date from the early nineteenth century to the present day. The only datable glass from the cistern was manufactured within two decades of the turn of the twentieth century. Wire nails were also recovered from the cistern along with crown top closures.

SUMMARY

The field investigation of the project area succeeded in the location of the brick foundation and concrete floored basement of the Cassonia Hotel and an abutting cistern. Sampling of the deposits appears to indicate that much of the fill in and around the structure dates well into this century and is possibly related to the demolition of the building. The search for the privies which perhaps served both the West End and Cassonia Hotels failed to yield any evidence of their existence but did

reveal over five feet of historic period fill. No evidence of a cellar for the Union Hotel was uncovered. The only remains located were wooden beams with metal spikes driven in them which could relate to the hotel or later ship yard facilities.10

 $^{^{10}\}mbox{For}$ the use of wooden supports to support buildings in wet environments see Geismar 1983:703.



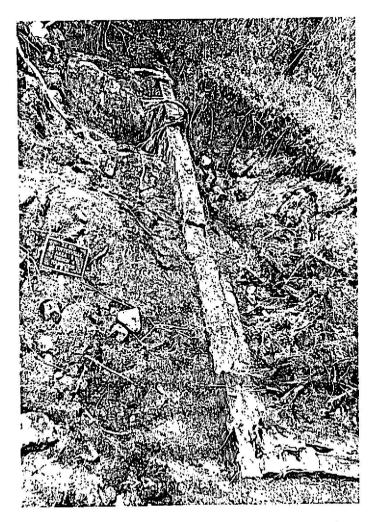
Area 1, Trench 3, North Wall

(note erosion of trench bottom due to water seepage



Figure 15

Area 2, Trench 2, towards north



Area 3, Trench 4, towards north southwest corner, "Cassonia Hotel" foundation



Area 3, Trench 4, cistern and basement (note concrete on outer wall of basement)

basement floor, at left, a maximum of 3' below top of foundation

CONCLUSIONS AND RECOMMENDATIONS

The TPQ for the fill in Area 1, the area of the privies of the West End Hotel, and the ceramic information from Area 2, of the Union Hotel, confirms the assertion of Pickman and Yamin that the filling episodes on the project site occurred in the nine-teenth century (1984:195f). In fact, according to the archaeological information, the filling episodes occurred after the middle of the 19th century. This date conforms to the documentary evidence which indicates that, with the exception of Totten's Shipyard, the project site was not developed until at least 1865, the end of the Civil War.

The efforts to locate the hotels on the project site had varying results. Steps and fragments of a concrete floor of the West End Hotel is still visible on the surface. The hotel, which had been destroyed between 1917 and 1935, had privies at least until the mid-1880's, fifteen or twenty years after the hotel was built. However, the privies could not be located in the field. Additionally, from shovel-test AS-8 of Pickman and Yamin, adjacent to the hotel, the area near the hotel contains the mixed remains of filling episodes, some of which probably relate to the hotel's destruction.

No trace of the Union Hotel could be found, unless the wooden timbers exposed in Trench 2 were supports for the hotel. Pickman and Yamin determined that the near-by area was heavily disturbed.

The foundations and a cistern probably associated with the Cassonia Hotel were located. However, no intact deposits were found. Both the subsequent use of the building as a lumber and coal yard and the ultimate destruction of the structure apparently yielded the mixed, disturbed deposits which were excavated.

Thus, for even the largest and most permanent structures built on the project parcel, no intact remains were found in any of the three types of testing. The one historical fact clearly documented and confirmed by the tests was the extensive filling of the site, beginning in the mid-nineteenth century.

The documentary research and the field survey, which consisted of core testing and the excavation of four trenches, combined with the information from the documentary survey and field testing by Pickman and Yamin (1988:191ff) yield no indication that the project site contains any prehistoric or historic remains of significance. In fact, there was little probability and no evidence of prehistoric remains. The large amounts of fill on the site preceded the late nineteenth century development of industrial sites and businesses of which little evidence remained. The one foundation located archaeologically and the other partially preserved on the surface are of no historical

significance and thus would not be eligible for the National Register. No closed intact deposits were found which could be directly associated with a specific period of use of structures on the site. Rather excavated materials merely confirmed the conclusions of the documentary research, that the site was occupied in the late nineteenth century, an occupation which continued into the twentieth century as well.

Based on these results of the documentary study and field testing, there would be no impact of significance on archaeological resources were the project site developed. No further archaeological work is recommended.

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	ury Skene, Colonial Land Patents (1907)
1733	Popple, British Empire in North America
1775-83	Constitution of the consti
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1781	Taylor and Skinner
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1836-39	U.S. Coastal Survey, published 1945
1850	Dripps, Map of Staten Island
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1853	Butler, Map of Staten Island
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1859	Walling, Map of Staten Island
1872	Dripps, Map of Staten Island
1874	Beers Atlas of Staten Island
1874	Sanborn Atlas of Staten Island
1878	Tottenville (in Kouwenhoven)
1878	Sanborn Atlas, Staten Island
1885	Sanborn Atlas, Staten Island
1887	Beers Atlas, Richmond County, Staten Island
1887	Beers Map, Richmond County, Staten Island
1890	Topographical Map of Staten Island
1898	Robinson Atlas, Borough of Richmond
1907	Robinson Atlas, Borough of Richmond
1917	Bromley Atlas, City of New York, Borough of Richmond
1917-1935	Sanborn Insurance Atlas

APPENDIX A

ARTIFACT CATALOGUE

Backhoe Trench 1, Area 2 (Union Hotel)

<u>Glass</u>

unidentified bottle body - embossed; amethyst tint-	1880-1915
ed; mold-blown	
unidentified bottle body; olive green	n.d.
beverage bottle body, emerald green	n.d.
unidentified bottle body - embossed; aquamarine;	n.d.
mold-blown	
unidentified bottle body; aquamarine	n.d.
unidentified bottle base - embossed; clear; automa-	1929-1954
tic bottle machine-made (cut-off scar); Owens Il-	
linois Glass Co.	
unidentified bottle base/body; clear, automatic	post 1903
bottle machine-made (cut-off scar)	_
unidentified bottle body; clear; mold blown	n.d.
unidentified body; clear	n.d.
unidentified bottle base; milk glass, mold-blown	n.d.
window glass; aqua	n.d.
window glass; clear	n.d.
	ed; mold-blown unidentified bottle body; olive green beverage bottle body, emerald green unidentified bottle body - embossed; aquamarine; mold-blown unidentified bottle body; aquamarine unidentified bottle base - embossed; clear; automatic bottle machine-made (cut-off scar); Owens Il- linois Glass Co. unidentified bottle base/body; clear, automatic bottle machine-made (cut-off scar) unidentified bottle body; clear; mold blown unidentified bottle body; clear; mold blown unidentified bottle base; milk glass, mold-blown window glass; aqua

Ceramic

6	plain white ware	1820- present
2	blue transfer printed white ware, one marked " EMEN, possibly J. Clementson	-
2	ironstone	1840-
1	yellow ware	present 1820-1940

<u>Other</u>

- 3 red brick fragments; 1 lettered, undecipherable
- 2 synthetic tile fragments
- 14 coal
- 2 bathroom tile fragments, mend
- 1 terracotta tile
- 1 wood chip
- 2 cinders

- 3 slag
- 3 shoe sole
- 1 nail, unidentified
- 1 metal, unidentified
- 1 hard clam shell, fragment
- 1 oyster shell

Backhoe Trench 2, Area 2 (Union Hotel)

Glass

whiskey Bottle (intact with paper label) - embossed 1933-1964
"since 1892/Kinsey/The <u>Unhurried</u>/Whiskey" also
"Federal Law Forbids Sale/or re-use of this Bottle";
Brown; Automatic Bottle Machine-made (cut-off scar);
collared lip
unidentified bottle body; olive green
unidentified bottle base; clear
unidentified body; clear
unidentified body; clear
unidentified body; milkglass
window glass; clear
n.d.

Ceramic

2 hard paste porcelain, thick; white; undecorated 1900present

Other

- 1 square cut nail
- 1 ferrous wire
- 2 terracotta tile fragments
- 1 synthetic tile
- 1 wood chip
- 2 slag
- 1 hard rubber button b.d. 1840
- 1 small china button
- 4 hard shell clam fragments
- 1 oyster shell
- 1 copper metal ring

Surface, Area 1 (West End Hotel)

<u>Glass</u>

1 Beverage bottle (base to neck) - embossed "The post 1857
Hadkins Bottling Co/Net/Contents/7 3/4 oz./ Tottenville/N.Y. - - -New Jersey/Registered/
New York (on base); clear; snap cased; post
bottom molded

Ceramic

- 1 brown salt-glazed stoneware with interior Albany 1800-1940 slip
- 1 flow-blue decorated white ware 1835-1910

Other

none

Backhoe Trench 3, Area 1, West End Hotel

Glass

1	unidentified bottle base; brown	n.d.
2	unidentified bottle body; brown	n.d.
1	unidentified bottle body; olive green; mold-blown	n.d.
1	unidentified bottle body - embossed; emerald green	n.d.
	unidentified bottle body; aquamarine	n.d.
1	unidentified bottle base; clear; unidentified ma-	n.d.
	ker's mark	
1	unidentified bottle body - embossed; clear; mold	n.d.
	blown	
2	unidentified bottle body - stippled; clear; mold	n.d.
	blown	
	unidentified bottle body; clear; mold blown	n.d.
6	unidentified body; clear	n.d.

Ceramic

1	blue shell-edged white ware	1820-1900
1	hand painted white ware	1820-1860
1	plain ironstone	1860-
		present
1	hard paste porcelain	undated

<u>Other</u>

- 4 unidentified nails
- 1 tar
- 1 cinder
- 1 coal
- 9 oyster shell
- 4 hard shell clam
- 1 medium mammal long bone section, sawed

Backhoe trench 4, Area 3, Cassonia Hotel

<u>Glass</u>

- beer bottle (intact); brown; snap cased; post post-1891
 bottom molded; crown closure
 beverage bottle finish (crown closure); amber;mold- post-1891
 blown
- 1 wine/liquor bottle base; olive green; mamelon n.d.

- 1 unidentified bottle base embossed; aquamarine; n.d.
 mold-blown
- 1 unidentified bottle base (square-sided); aquamarine; n.d.
 mold-blown
- 1 beverage bottle finish (crown-closure); aquamarine; post-1891
 mold-blown
- 1 jar (intact); clear; machine-made valve mark; Owens 1930-1954 Illinois Glass Co.; threaded screw closure
- 1 jar finish (straight); clear; mold-blown n.d.
- 1 unidentified tableware finish (straight)/body; n.d.
 milkglass; mold-blown
- 1 unidentified finish; milkglass n.d.

Ceramic

- 1 plate sherd; embossed ironstone 1840-1900
- white clay pipestem partially burned, 6/64th bore
 diameter

Other

- 1 sheep metacarpus
- 1 mammal section, sawed

Area 3, Cistern Feature (Cassonia Hotel)

Glass

unidentified body; amethyst tinted
unidentified bottle body; olive green
unidentified bottle body - embossed; clear; mold- n.d.
blown
unidentified finish (straight/ground); clear
unidentified body - paralleled; clear; mold-blown
unidentified body; clear
window glass; aqua
1880-1915
n.d.
n.d.

Ceramic

2	plain white ware	1820-
1	white ware with beaded rim	present 1850-
	,	present

Other

```
red brick
  salt-glazed stoneware sewer pipe
  cinder
  wire nails
  crown cap closure fragments
  metal bolts
  unidentified nails
  ferrous metal fragments
  tar
7
  oyster shells
  hard clam shell fragments
  medium mammal long bone section >1"; thick sawed;
  (steakbone)
  medium mammal long bone diaphysis; immature
1 cow: tibia distal section; sawed; spiral fracture
```

APPENDIX B

Trench Plans and Sections

Site Plan: 1 and Site Plan: 2 (pages 51 and 52)

The locations of all core tests and test trenches are located on these plans. The locations of Pickman and Yamin 1984 shovel tests are located approximately. The planview of Trench 4 is included on page 51.

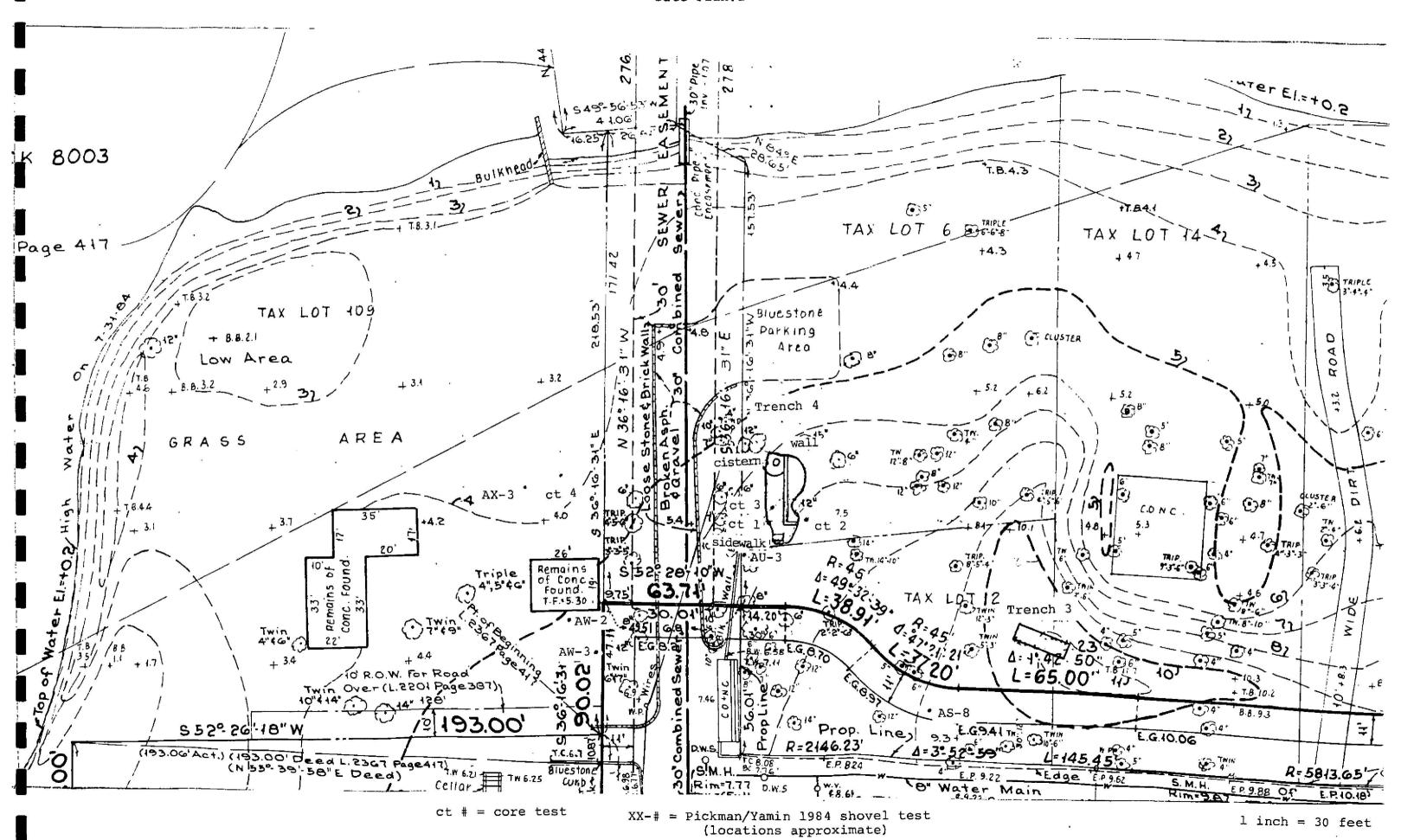
Backhoe Trench 1, South Profile (page 53)

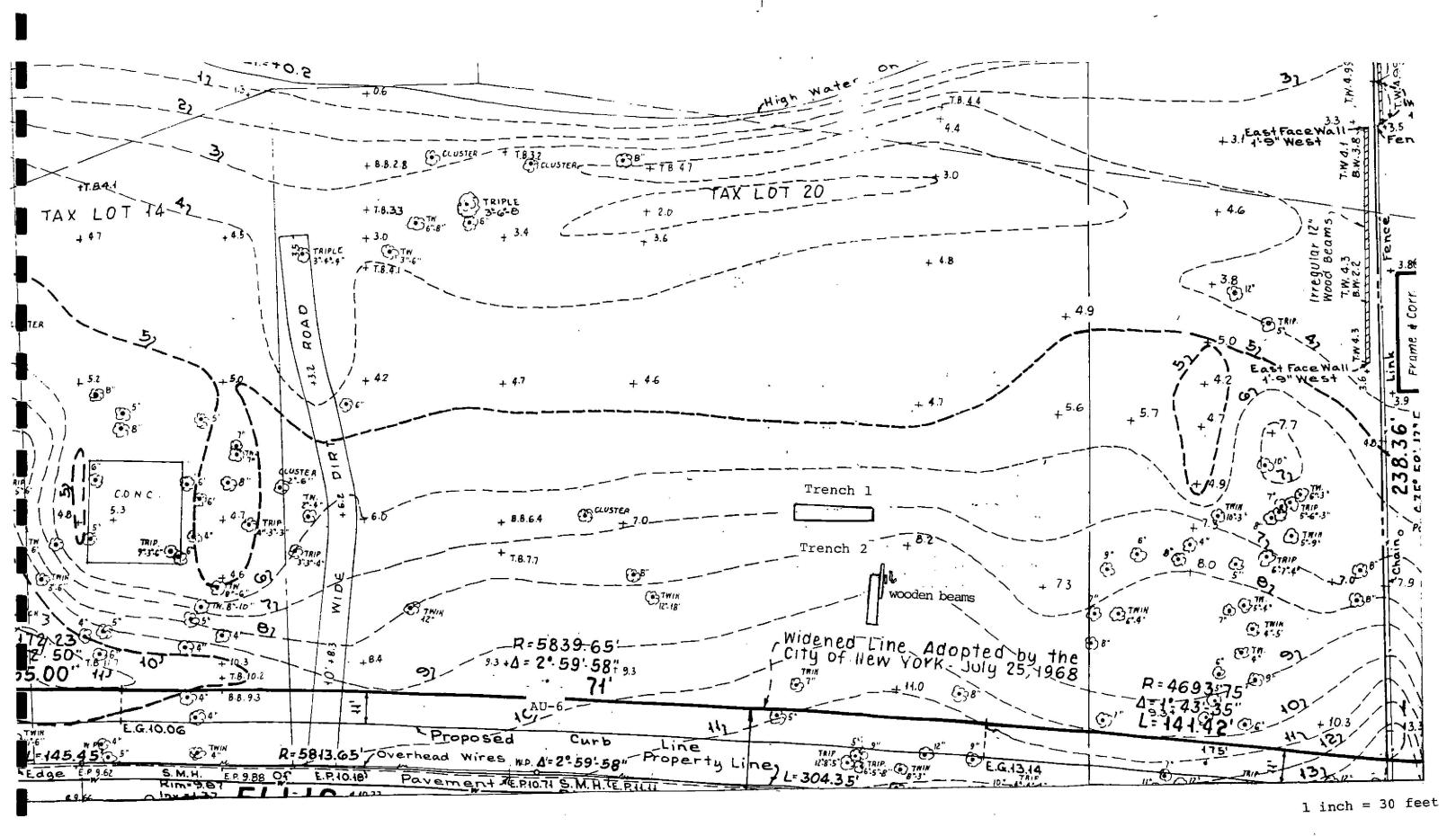
Backhoe Trench 2, Planview of Cleared Area (page 54)

Backhoe Trench 2, East Profile (page 55)

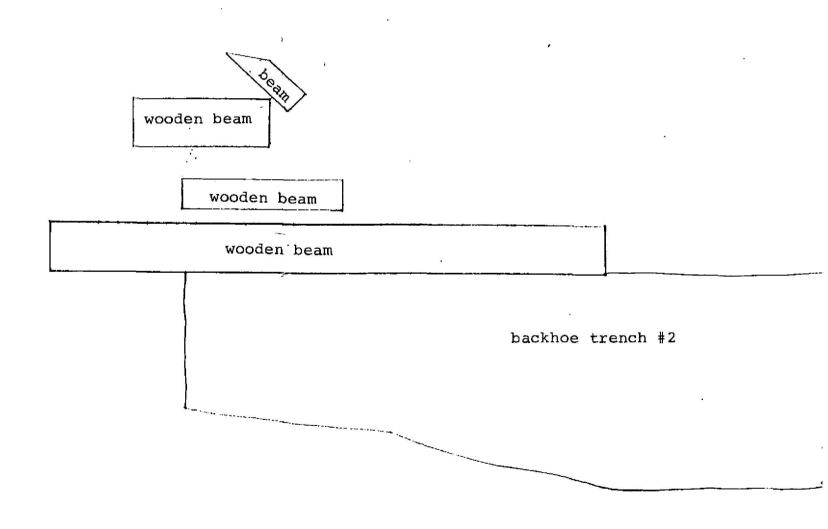
Backhoe Trench 3, North Profile (western third) (page 56)

Backhoe Trench 3, Key to drawing on page 56 (page 57)

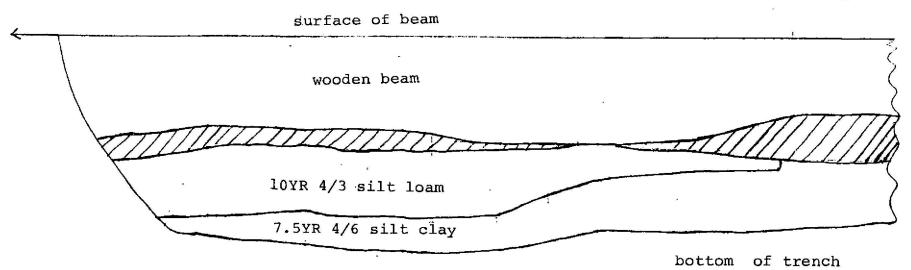




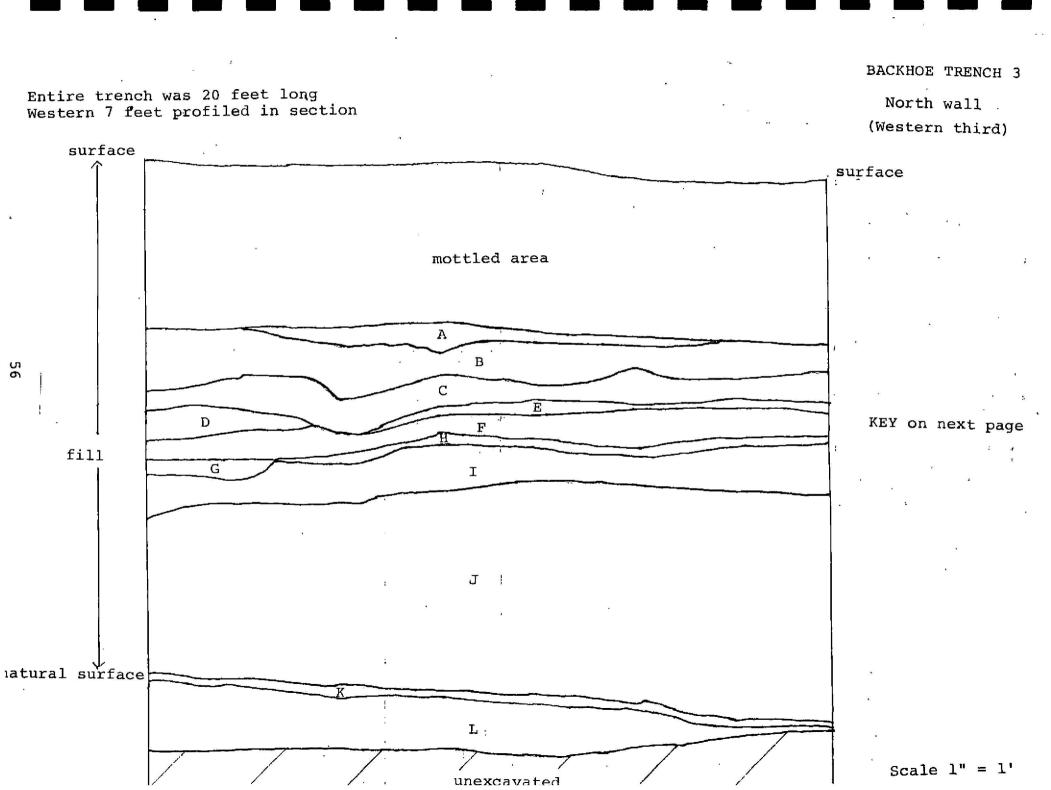
BACKHOE TRENCH #2
Planview of cleared area



East Wall profile



10YR 2/1 silt loam



Backhoe Trench 3 - North Wall

Key

Mottled area	<pre>10YR 3/1 very dark gray sandy loam with intruding 10YR 5/4 yellowish-brown medium to coarse sand lenses</pre>
A	7.5YR 2/0 black sandy loam
В	5YR 4/4 reddish-brown sandy clay
С	5YR 4/2 dark reddish-gray sandy clay
D	<pre>10 YR 5/6 yellow-brown mottled with 10YR 3/3 dark brown medium porous-grained sand</pre>
E	10YR 4/2 dark grayish-brown silty sand
F	Black spent coal
G	10YR 6/2 light brownish-gray medium to coarse sand
Н	10 YR 3/1 very dark gray mottled with 7.5YR 3/2 dark brown fine to medium-grained sand
I	10YR 3/1 very dark gray silty sand
J	10YR 5/6 yellowish-brown changing to a 10YR 4/4 dark yellowish-brown fine to medium-grained sand
K	10YR 6/8 brownish-yellow clayey sand
L	5YR 4/3 reddish-brown very compact sandy clay