2692K 1985 AN ARCHAEOLOGICAL ASSESSMENT OF THE MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT, PRINCE'S BAY, STATEN ISLAND, NEW YORK



prepared for AKRF, INC. NEW YORK, NEW YORK

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SEPTEMBER 23, 1985

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PLEASE RETURN TO LIBRARY LANDMARKS PRESERVATION COMMISSION An Archaeological Assessment of the Muss Waterfront Housing Development Project, Prince's Bay, Staten Island, New York

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prepared for AKRF, Inc. New York, New York

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#### ABSTRACT

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This report presents an assessment of the archaeological and historical potential of the Muss Waterfront Housing Development site located on Seguine's Point, Prince's Bay, Staten Island. Intensive documentary research indicates that the proposed development will not impact any viable archaeological resources. However, this beach and marshland site was the location of a mid-nineteenth century palm oil and candle factory that ultimately became the S. S. White Dental Manufacturing Co.; more than twenty-five structures still stand, two of them dating from the mid-nineteenth century. Since these buildings repre-sent over a century of industrial development on Staten Island, they should be documented photographically; it also is recommended that transportable components of these industries, such as doors from a turn-of-the century boiler and a wrought iron gate both marked with the S. S. White name, should be given to an appropriate repository, such as the Staten Island Historical Society. And finally, it is recommended that soil borings taken in anticipation of construction should be analyzed by an archaeologist to confirm the site evaluation and to confirm the assessment that no deeply buried possibly culture-bearing surfaces will be impacted.

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### INTRODUCTORY SUMMARY AND RECOMMENDATIONS

## Introductory Summary

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This report presents an evaluation of the archaeological potential of the Muss Waterfront Housing Development site located on Prince's Bay, Richmond County, Staten Island, New York.

In accordance with the procedures of the City Environmental Quality Review (CEQR), this assessment was undertaken to ensure that no cultural resources will be impacted by development planned by the Muss Company at Prince's Bay. It is an assessment based on intensive research as well as site observation, and it addresses questions pertaining to both prehistoric and historic cultural resources.

The Muss Waterfront Housing Development site is located in southeastern Staten Island on Seguine's Point, a projection of land surrounded on the east by Raritan Bay and on the west by Prince's Bay (Figure 1). In addition, the property is also bounded by Seguine Avenue to the west, Holten Aveune to the east, and a ditch-like creek to the north. The land on either side of the point belongs to the New York City Department of Parks and Recreation (Figure 2); private houses, including "Purdy's Hotel", a New York City Landmark with a section that may date to the late-seventeenth century, and a tavern are located just north of the site on the far side of Purdy Place.

The site and its surroundings reflect their geological and historical development. To the west is Lemon Creek Park named for the partially tidal creek that flows through it; the mouth

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(based on a map prepared for the NYC Dept. of City Planning-modified detail)



project area circled

AN

Figure 1. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Project Location.



Figure 2. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Site Location (modified detail of NYC Dept. of City Planning Map).



<u>Plate 1.</u> S. S. White Dental Manufacturing Co. from Hylan Boulevard. Lemon Creek is in the foreground. Note boat marina to the right of the building in the distance (August, 1985).

of this creek is periodically dredged to accommodate docking boats, including those berthed at the Prince's Bay marina adjacent to the Muss property (Plates 1 and 2). To the east is Wolfe's Pond Park, its fresh water pond once a creek that ponded only intermittently when its funnel-shaped mouth was dammed by natural sand barriers. Sometime late in the nineteenth century, with the building of a sand dam, a more permanent but shallow pond was created. Although it cannot be verified, it appears that the barrier and pond were stabilized about twenty or thirty years ago. On the Muss site itself, a marsh just north of Johnston Terrace between the pond and Lemon Creek has been filled over the years (see Plates 14 and 16). Although the marshland has been altered, the creek that crossed it continues to serve as a runoff from Wolfe's Pond to Lemon Creek (see Plate 12).

Bordered by two creeks, with a protected bay that historically and undoubtedly prehistorically produced some of the finest oysters in the New York area on one side, and with a marsh extending across part of it, the site would have been rich in the food resources sought both by hunting and gathering Native American populations and early European settlers. In the first decade of this century, Native American artifacts mainly in the form of surface finds were recovered from bluffs east and west of the project area, and, as noted above, a seventeenthcentury homestead attests to the area's early historic occupation. However, it appears that development of the site as an industrial complex may have obliterated the very sparse evidence

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of any prehistoric or early historic use that would be found in a marsh, or at least made it virtually irretrievable.

By the mid-1700s, Prince's Bay was a popular oystering ground and it became a center of the oyster industry that flourished on Staten Island in the nineteenth century. In addition, the depth of the surrounding water, which is comparable to the deep Narrows to the north, made the site suitable for industrial development at a time when water was the primary means of transport. Consequently, although the surrounding area has remained relatively rural and even bucolic, Seguine's Point has been an industrial site since the mid-nineteenth century.

By 1854, Joseph H. Seguine, for whom the point is named, had added industry to his farming and oystering pursuits. At that time, apparently with several partners, he built and operated a palm oil processing plant and candle factory on land that had been in his family since the end of the eighteenth century. The deep water that surrounds the site provided dockage for the sailing vessels that first brought the palm oil from Africa for processing and later carried candles off to New York City and beyond.

Two years after establishing his new enterprise (see Plate 17), Joseph Seguine died suddenly. At his death the business was flourishing, but it apparently faltered soon after and in 1861 an announcement was made of its foreclosure sale. During the Civil War, it may have become a munitions factory, but this is somewhat speculative. After the War, it operated first as a drainpipe manufactory and then a dental supply manufacturing

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concern owned by the Johnston Brothers, another Prince's Bay family.

In 1881, this concern merged with the S. S. White Dental Manufacturing Company of Philadelphia, and after a trial period, the operation expanded from four original factory buildings to more than fifty structures of varying sizes and functions. It was here that nitrous oxide, or laughing gas, was first packaged for transport, and every kind of dental supply--ranging from filling materials and delicate tools to office furniture and equipment--was shipped from the company dock on Prince's Bay. By the 1940s, flexible shafting and molded plastic products were also produced; by this time, the S. S. White Company was the largest manufacturer of dental equipment in the world.

At least through the 1940s, all of the original factory buildings continued to function; today, only two, remain. It also appears that the marsh and creek north of the factory complex became a dump for debris from S. S. White's manufacturing processes, particularly waste from molded plastics.

Prior to becoming a dump, a walking survey and shovel testing of the marshland might have yielded some evidence of prehistoric or early historic use. However, when current site elevations are compared with those recorded at the beginning of the century (see Figures 6 and 7), it becomes apparent that any archaeological material that may exist is buried under 2 to 4 ft. of fill apparently consisting of manufacturing debris covered with soil. Since marshland is the setting for the isolated artifact found on the surface rather than a dwelling,

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campsite, or burial, recovery is virtually impossible if the surface cannot be surveyed. However, given its shoreline location, it is conceivable that deeply buried surfaces dating from a time when sea level was lower and the site configuration different may bear evidence of cultural activity; but, on the basis of two available but sketchy boring logs, it appears that the site was once the location of a glacial lake, a situation that eliminates the possibility for this kind of evidence. Soil boring analysis would verify the assessment of the site and ensure that there will be no impact on any buried, culturebearing levels.

By the mid-1970s, the Muss Waterfront Housing Development Corporation, the site's present owner, had turned the S. S. White buildings into a shopping complex. The current plan for the site is for the factory buildings to be demolished and replaced by condominiums (Figure 3).

While the now-deserted factory buildings are imposing (see Plates 1, 3-11, 24), as noted above, only two buildings from Seguine's original complex remain and neither is considered unique. However, with its first buildings dating from 1854, this factory complex that took over a century to evolve is noteworthy, particularly given its setting adjacent to Raritan and Prince's Bays (see Plate 24).

#### Recommendations

Although the S. S. White Dental Manufacturing Company buildings may not be unique, they form an impressive complex. They also represent the growth and expansion of an American

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Figure 3. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Proposed Development (August, 1985).

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Plate 2. Prince's Bay Boatmen's Association Marina on Lemon Creek just to west of the project area. Note the 1840 Seguine Mansion, a NYC Landmark, on hill (July, 1985).



Plate 3. S.S. White main factory building from beach at Prince's Bay (July, 1985).

<u>Plate 4</u>. S.S. White buildings from Raritan Bay beach at rear of complex. Two story brick building on left dates from 1919; center building from 1901; building just visible on right side was built in 1950s (July, 1985)



Plate 5. View from rear of S.S. White complex. 1919 building on right; building to far left dates from 1885. Raritan Bay to rear (July, 1985).





Plate 6. Side entrance to S.S. White complex from Johnston Terrace. Buildings date from the 1950s (July, 1985).



<u>Plate 7</u>. Southwest view from filled marsh north of Johnston Terrace. Building dating from 1950s on left; gate house in center, with parking lot beyond to right (July, 1985).



Plate 8. Southern prospect of S.S. White complex along beach at Prince's and Raritan Bays (July, 1985).



Plate 9. S.S. White, Building No. 25, built in 1885 (July, 1985).

<u>Plate 10.</u> Interior buildings of S.S. White complex. Building on left (no. 28) is from the original Sequine Palm Oil and Candle Factory (ca. 1854-1856); the low building in center was built by the S.S. White Co. before 1885 (August, 1985).



industry, apparently the largest of its kind for many decades, as well as industrial development on Staten Island.

Without question, the building types and styles represented by this complex are worth recording if not keeping. Consequently, to ensure that the design of these buildings and their construction techniques are documented, it is recommended that a detailed photographic record be made of the complex and the interior and exteriors of its individual buildings. Particularly important are buildings No. 11, the first factory building constructed on the site, and No. 28, both part of the original Seguine complex.

It is also recommended that the doors of a boiler dating from the turn of the century and still installed in building No. 8, and a wrought iron gate from the main entrance, both of them bearing the S. S. White name (see Plates 25 and 26), should be preserved. While neither is industrially unique, they are valuable artifacts of a Staten Island industry. It is therefore suggested that Barnett Shepherd, Director of the Staten Island Historical Society at Richmondtown, should be consulted in this matter.

As noted in the previous section, given its marshland setting, any archaeological deposits or artifacts from the site are expected to be of an ephemeral nature. To verify the fill history of the site and the nature of its pre-fill soil conditions, it is recommended that soil borings drilled in preparation for construction be made available for analysis by an archaeologist. Examination of these borings would be a cost-

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effective means of testing the validity of this assessment and would also ensure that no ancient buried surfaces of cultural significance will be destroyed.

The summary and recommendations presented here are based on the detailed information found in the following sections. This includes a description of the site's geological and physical setting, a summary of the archaeological data relevant to the project area, and its general and specific history. SETTING

# Introduction

The total setting of an archaeological site--its geographical, physical, geological, environmental, historical, and social setting--is a major factor in its development and preservation. For example, both human and animal populations will be found most intensively in areas where food and fresh water are available, and site conditions determine the availability of both these resources. In addition, the development of a site, particularly the way it has been altered or built upon, must be assessed to determine the potential for finding evidence of any past human activity as well as too evaluate the significance of the development itself. These aspects of the Muss Waterfront Housing Development site will be addressed here. Geography, Physical Environment, and Geology

Seguine's Point, the location of the proposed Muss Waterfront Housing Development project, is a low, flat, projection of land that extends into two bodies of water: Raritan Bay on the east and Prince's Bay on the west. The site is located on the

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southeastern shore of Staten Island in a beach and marsh area cut and bounded by tidal creeks and a man-made freshwater pond. A small, ditch-like creek crosses the site north of the S. S. White Dental Manufacturing Company buildings that cover a major portion of the project area (Plate 12). Tall, salt-tolerant reeds (Phragmites) (Holt 1985:personal communication) and other marsh vegetation border this creek and the larger Lemon Creek to the west as well as the entrance to Wolfe's Pond to the east. Α scrub vegetation extends away from the creek and surrounds a dirt-covered lot that may have recently served as a parking area (see Plate 14). The reddish sand beaches of Raritan and Prince's Bays surround the factory complex on two sides. West of the project area, land has been recently filled in attempt to keep Lemon Creek from silting (Oechsley 1985:personal communication; Plate 13).

In its undisturbed state, this site would have been rich in food resources, but, although it is now available in Wolfe's Pond to the east, prehistorically it appears that fresh water would have been at best only occasionally available.

Like most of Staten Island's observable surface features, those in the project area are mainly of geologically recent origin. These would be the features created by the movement of the Wisconsin ice sheet that covered much of the northeast 55,000 to 10,000 years ago. Except for the very end of this period, there was no known human occupation of this continent.

On Staten Island, glacial material in the form of ground and terminal moraines and outwash sediments may be locally

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Plate 12. Ditch-like creek running across the Muss site. Called "Rum Creek" locally (Oechsley 1985: personal communication), it is partially tidal and carries runoff from Wolfe's Pond to Lemon Creek. View east from Sequine Avenue Bridge (July, 1985).

<u>Plate 13</u>. Fill contained by cement culvert pipes at entrance to Lemon Creek. These pipes were recently placed by the Prince's Bay Boatmen's Association to act as bulkhead for fill intended to deter silting in in the creek (July, 1985).





Plate 14. Filled marsh north of the S. S. White complex between Johnston Terrace and Purdy Place. Houses to the rear are beyond the project area on the north side of Purdy Place (July, 1985).

overlain by beach, dune, marsh, swamp, and estuary deposits (Jacobson 1980a:5 citing Wapora 1978:10-13). It appears that the Muss Waterfront Housing Development site embodies almost all of these geological elements.

The site appears to represent a valley in the glacial outwash from the terminal moraine that extends from Stapleton on the northern part of the island to Tottenville to the south (Okulewicz 1985:personal communication; Permutter and Arnow 1953:23; Figure 4 this report)). The moraine can be seen west of the project area in the high bluff at Red Bank on Prince's Bay (Britton 1884); here this ice-transported deposit has been cut by the bay, exposing the reddish brown morainal deposits that that give the bluff its name and represent the end of the advance of the last glacier in our area about 10,000 to 12,000 years ago.

Both Lemon Creek located west of the site and what was Wolfe's Creek to the east, and even the small ditch-like runoff creek that crosses the Muss property (locally called "Rum Creek" [Oechsley 1985:personal communication]), may have formed to carry glacial runoff from the moraine; but it is also possible that their origin may extend even further back in geologic time, perhaps initially forming to carry water from Staten Island's relatively high spine of Serpentine bedrock (Okulewicz 1985: personal communication), the Precambrian rock that cuts across the northwestern part of the island. Of more recent (Triassic) geologic origin is the undifferentiated Cretaceous bedrock that underlies the project area (Figure 5).

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Figure 4. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Surface Geology of Staten Island (Perlmutter and Arnow 1953).



Figure 5. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Subsurface Geology of Staten Island (Perlmutter and Arnow 1953).

Since Lemon and Wolfe Creeks carry fresh water, they potentially could have provided drinking water to humans and animals in the site area. However, the situation is complicated by the tidal action of the bays and beach dynamics. For example, today Lemon Creek west of the site is tidal, and therefore brackish, as far north as Amboy Road (Luthmann 1985:personal communication); this was undoubtedly also true of Wolfe's Creek before it was dammed to create a pond. However, old maps suggest that the funnel-shaped mouths of these creeks sometimes partially dammed naturally (Plate 15). This may have occurred from shifting sands in the case of Wolfe's Pond or silting at Lemon Creek. Today, Lemon Creek is kept tidal by dredging to remove silt and accommodate the boats that dock at four private marinas leased from the city (N.Y.C. Dept. of Parks and Recreation [hereafter NYCDPR] 1964-1966:Park Correspondence; Oecksley 1985:personal communication). However, when both creeks ponded it is possible that the little runoff creek on the Muss site -- an intermittent little creek that appears to have ancient origins<sup>1</sup>--may have carried fresh water between the two ponds (Beil 1985:personal communication), but this is purely speculative.

Today, the site area mainly comprises beach and, based on the differences between elevations from 1910 and today, a filled marsh. In 1910, the elevations between what is now Johnston Terrace and the runoff creek that crosses the site ranged from +0.2 to +2.0 (Borough of Richmond Topographical Survey [hereafter BRTS] 1910:sheet 95); today, they range from +2.2 to +6.2 (BRTS 1910:sheet 95; Site map 1984; Figures 6 and 7 this re-

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<u>Plate 15.</u> Detail of Walling's 1859 map of Staten Island (NYPL). Note "Staten Island Adamantine Co." and the property belonging to Mrs. Seguine, Joseph H. Seguine's widow. Also note that Wolfe's Pond to the east of Seguine's Point and Lemon Creek Pond to the west appear to have formed naturally. port). People who have lived and worked in the area recall that the S. S. White Company used the marsh area north of the factory complex as a dump; although not readily apparent because of a soil cover, it appears that over the last 40 years or so about 2 to 4 ft. of waste, mainly from the manufacture of plastics, has been deposited (e.g., Luthmann 1985:personal communication).

After the retreat of the glacier and the stabilization of the environment about 4,000 B.C. until as recently as 40 years ago, it appears that the area north of the S. S. White factory buildings was undeveloped marshland (Plate 16). As will be discussed in the section on archaeological resources, this is an environment that precludes habitations, campsites, or burials-the most obvious Native American and early historic features. However, it does not preclude the spearhead or arrowpoint or other implement lost while hunting and gathering, but these isolated artifacts are very difficult if not impossible to retrieve without careful survey and shovel testing, an impossibility on a filled site. In addition, it appears that disturbance would have occurred in this area when a culvert was installed sometime before 1910 (see Figure 6 and Plate 24). But while the site has been rendered unamenable to recovering evidence for relatively recent prehistoric or early historic use<sup>2</sup>, the possibility of finding evidence for buried surfaces that may bear more ancient cultural material must be assessed.

With the melting of glaciers, sea level has risen as much as 200 to 300 ft., inundating coastal areas (parenthetically, sometimes this inundation was tempered by the land rebounding

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Figure 6. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Detail of 1910 Topographic Survey (Borough of Richmond Topographic Survey 1910; sheet 95).



Figure 7. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Current Site Plan (modified; based on Borough of Richmond Survey #39553/#58498).



Plate 16. Early-twentieth-century postcard showing main building of the S. S. White Dental Manufacturing Co. View is from the marsh, later filled, north of Johnston Terrace. Note white buildings to left replaced in the 1950s by those shown in Plates 6 and 7. Also note that spire roof was removed sometime later in this century (see Plate 3). Postcard from Hugh Powell Collection, Staten Island Institute of Arts & Sciences.

when the weight of the ice mass was eliminated [Schuberth 1968: 195]). A rising Sea level is accompanied by a corresponding rise in the water table, often causing surfaces around streams in addition to those along the coast to be submerged. Moreover, an elevated water table would also create swamps and marshes in low but previously dry areas. This may have been the origin of the marsh on the Muss Waterfront Housing Development Corporation property although it is also possible that it represents a former lake (Newman 1985:personal communication).

Soil borings are useful in assessing the likelihood of finding buried surfaces. A soil boring drilled in 1886 at an unidentified location on the S. S. White property--the only one currently available from the project area--indicates the presence of thick beach deposits overlying glacial outwash which in turn overlies a 25 ft. deposit of soft mud (Hollick 1899; Table 1 this report). It appears that this depositional sequence represents the modern environment, glacial outwash, and the presence of what may have been a glacial lake, conceivably glacial Lake Hackensack (Newman 1985:personal communication). Of interest is a boring drilled on Seguine Avenue in 1950 (Perlmutter and Arnow 1953:66, boring R71; Table 1 this report); drilled about one mile north of the site (Figure 8), this boring provides an identical sequence, suggesting that this glacial lake covered an extensive area and that its shore was not within the confines of the site. It is a sequence that tends to negate the possibility of finding shoreline deposits that may contain buried, ancient cultural material (Newman 1985:personal communication).

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Well	at	s.	s.	White	e Dental
Manuf	fact	ur	ing	Co.,	Location
unkno	own				

Date: 1886 Source: Hollick, 1899 Test Boring R71, c. 1 mi. north of Seguine's Pt. at Princes Bay (see Figure 8)

.

Date: 1950 Source: Permutter and Arnow 1953, Table 6:66

Depth	Thickness	Soil Descrption				
			Recent and Pleistocene			
16	16	sand	sand			
31	15	coarse sand and gravel	<ul> <li>coarse sand and gravel</li> </ul>			
56	25	soft mud	mud			
70	14	coarse sand and gravel	coarse sand and gravel			
			Cretaceous			
120	50	mud	mud			
121	1	fine sand	fine sand			
124	3	hard pan and gravel	hard pan and gravel			
147	23	fine white sand (kaolin)	fine white sand			
		clay at bottom				

Note: depth and thickness are in ft.

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Figure 8. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Location of Boring R71 (Permutter and Arnow 1953).

#### CULTURAL RESOURCES

#### Prehistoric Data

Staten Island's earliest European settlers were made painfully aware that it was an Indian stronghold (see History Section) and, since early in the twentieth century, archaeologists have known and recorded Native American sites throughout the island (for example, Skinner 1909; see Figure 9 this report). More recently, archaeology has determined that this Native American occupation or use extends back to the earliest Indians known in the northeast.

More specifically, the first evidence for this Native American culture period, which dates from approximately 10,000 to 12,000 years ago in the northeast, was found in 1917 on the Cutting farm on the Arthur Kill, approximately three and one half miles directly north of the project area (see Figure 9). These finds, which included the fluted points and stone scrapers that are now Paleo-Indian diagnostics, predated an awareness of the great age these artifacts represent. Not until the 1950s, when Radio-carbon dating was developed and the antiquity of similar finds from the American southwest established, was the age of these artifacts realized (Sainz 1962).

Additional Paleo-Indian materials have since been excavated from three sites or components from the Socony-Port Mobil area situated about three miles southwest of the Cutting farm; all of these finds were made on tidal beaches on the Arthur Kill (Sainz 1964:3; Ritchie 1968:xvii-xviii; Pickman 1978:II-13/II-14). In 1967 the Charleston Beach site, the most recently excavated of

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Figure 9. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Staten Island Archaeological Sites Prior to 1910 (with Cutting Site indicated) (Skinner 1909). the three, produced Paleo-Indian through more recent Middle Woodland material in a mixed context apparently caused by tidal action (Salwen 1968 cited in Pickman 1978:II-14).

As discussed earlier, older deposits, perhaps dating back to Paleo-Indian occupation, may not be found on or near the surface, but instead may be deeply buried. At the beginning of this century, well before the antiquity of this kind of material was fully realized or perhaps confirmed, Skinner noted that the earliest deposits were located along the coast and that others were perhaps inundated (1909:3). Now, as discussed earlier, we are aware that rising sea levels and shifts in the earth's crust during and since the retreat of the last glacier, in addition to erosional mechanisms that have produced meanderings in streams and brooks, may have caused ancient cultural deposits to be well covered. While early deposits in buried strata have been found along the Arthur Kill, similar deposition is so far only postulated for areas along the coast or further inland (Geismar 1985: 16-23; Pickman 1978:III-3/III-4).

More recent Native American material has come from several sites on the island. At least two have been recorded in the vicinity of the project area, most notably the Redbank site west of the project area and the Wolfe's Pond site to the east, both of them located on bluffs. Recorded by Skinner in the first decade of the twentieth century, both sites produced sparse material (Skinner 1909), mainly pottery and deer bone fragments; in addition the Wolfe's Pond site, located east of the pond, may also have included a grooved axe (Pickman 1978:II-28).

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With few exceptions (see below), from the earliest archaeological investigations (e.g., Skinner 1909) to the most recent (Pickman and Salwen 1984), Native American archaeological deposits on the island have been found in relatively shallow contexts, often merely as surface finds. Archaeological evidence usually consists of worked stone tools or flakes and debris from their manufacture, shell pockets or heaps, fire pits and hearths, pottery sherds, and shallow burials (the largest Indian burial site in the metropolitan area and beyond is found southwest of the project area along the Arthur Kill at Burial Ridge\_in Tottenville [Jacobson 1980b]). As is the case on Manhattan Island, while extensive camp and burial grounds have been discovered, no village sites that include evidence for permanent or semi-permanent dwellings have been excavated on Staten Island, or at least been carefully recorded.

It has been noted that there is a "pattern of Indian presence if not occupation along the southern shoreline [of Staten Island]" (Pickman 1978:II-28). From the evidence presented here, it is apparent that the project area and its environs are sensitive in regard to prehistoric evidence but apparently only in the form of observation points for the hunt or transient campsites. And it appears that this kind of elusive deposit is more likely to be found on bluffs than in marshland.

## <u>Historic Data</u>

As is the case with its prehistoric occupation, Staten Island has a long history of European-American use.

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Supposedly first named by Henry Hudson in 1609, an abortive Dutch attempt to settle the island may have occurred as early as 1623 or 1624 (Tysen 1842:5). If so, this settlement would have been chronologically comparable to that on Manhattan Island.

Staten Island's first authenticated settlement was initiated in 1639 at the "Watering Place" situated at the northernmost part of the island (Smith 1970:8; McMillen 1939:25). Unfortunately, animosity stirred up among the Indians by the actions of Kieft, then the Dutch governor, resulted in a massacre by the Raritans of Amboy that wiped out the entire colony only two years after its inception (Tysen 1842:6).

In general, the English found Staten Island well situated and blessed with rich soil and abundant wild life; they also seem to have found the natives quiet and inoffensive (Tysen 1842:6-7). Perhaps this is an indication that the hostile Indians encountered by the Dutch were not the local population but were from the mainland as were those who wiped out the

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incipient Dutch colony in 1641. Or it may be that the English were better than the Dutch at dealing with the Native American (Geismar 1985:29).

When Staten Island was sold for the last time in 1670, the price was 400 fathoms of wampum, guns, axes, kettles, and "watch coats", or warm overcoats. Upon payment, the Indians apparently left the island (Tysen 1842:7), perhaps abandoning what had only been a seasonally occupied hunting and burial ground prior to European contact.

By 1683 counties were established by the English and, with 200 families living on Staten Island, it became Richmond County. About this time the Huguenots, fleeing persecution in Europe, arrived and numerous schools, churches, cemeteries, and ferries were established prior to the Revolutionary War.

In 1688, the Staten Island settlements were divided into four (later to become five) towns, and the project area became part of the town of Westfield (Clute 1877:206). By the beginning of the eighteenth century, it was considered the wealthiest of the four (Morris 1900:41), but by the end of the nineteenth, although it comprised more than one third of the island, it may have lost this prime position (Edwards 1883:444).

By 1694, roads had been laid out in Westfield, but whether any of these were in the site area is unknown (McMillen 1946: 16). As late as 1910, many of those in the project area remained unimproved (BRTS 1910:Sheet 95).

During the Revolution, Staten Island was not so much affected by fighting as by the constant coming and going of

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British and Hessian troops who used it as a way station as well as an access route. It has been noted that Staten Island was the first position occupied by the enemy in New York State and the last deserted (Tysen 1842:10).

Several enemy encampments are known, most notably at Richmondtown where archaeologists have documented earthworks and recovered artifacts, among them at least 3000 often-identifiable regimental buttons (Sainz 1946). Prince's Bay was apparently used by the British as a point of departure for raids on New Jersey, and both American and British forces may have erected minor fortifications just west and east of the project area, but this remains a question as does a report of an enemy redoubt east of Purdy's Hotel (Powell 1976:6). Revolutionary War incidents in the project area appear to have been limited to skirmishes on the water (Powell 1976:8-9), and any evidence for beach encampments that conceivably could be found on the site undoubtedly were destroyed by later industrial development (see below; for a detailed discussion of Staten Island during the Revolution see Sainz 1946-1948). It should be noted, however, that during the War of 1812 a redoubt and block house were constructed where the Redbank lighthouse, built in 1828, was located; no military action took place in the area, and erecting the lighthouse apparently destroyed any evidence of these constructions (Powell 1976:10; today the lighthouse is also gone and its base supports a religious statue).

In the decades following the Revolution, settlement in the immediate project area appears to have remained sparse (see

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Figures 11 and 12). From the Revolution through the nineteenth century, three Prince's Bay families have been involved with the history of the project site. The two earliest of these, the Manees and the Seguines, were both of French Huguenot origin.

In(1786, the Sequine family purchased their homestead and farm, about 140 acres that included the project area, from the estate of Abraham Manee (Liber H:37), a longtime resident of the area and a loyalist (Powell 1976:6). This long, narrow property was approximately bounded by the bays to the south, Lemon Creek to the west (sometimes referred to as Seguine's Creek or Little North River [see Figure 13 this report; Davis and Leng 1896: 30-31]), Amboy Road to the north, and Wolfe's Creek to the east (LPCD 1984:1398). The house, now known as the Manee-Sequine Homestead or the Homestead or Purdy's Hotel, is a New York City Landmark located across from the project area on Purdy Place. Among the oldest houses on the island, a section of the building is believed to date from the late-seventeenth century (LPCD 1984:1398). And, finally, the Johnston brothers, who apparently acquired the property after the Civil War, were its last local owners.

In 1832, Joseph H. Seguine, who became a successful farmer and oysterman (LPCD 1984:1398) as well as an industrialist (see below), purchased the farm and homestead from his father, Henry (Liber T:475-476). In 1840 or thereabout, he built a magnificent Greek revival mansion, another designated landmark (LPCD 1967:0389:), that stands on a rise west of Seguine Avenue overlooking Prince's Bay (see Plate 2).

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Figure 11. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Detail of Mc-Millen's 1775-1783 Map (McMillen 1933).



Figure 12. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Detail of 1797 Map of Staten Island--Town of Westfield.



In 1854, when he was 53 years old, this farmer, oysterman, and planner and president of the Staten Island Railroad, added yet another undertaking to his pursuits when he and several partners started the Staten Island Oil Company on the project site (<u>Staaten Islander</u> 1856; Anon. 1944). This four-building factory (Plate 17) processed palm oil brought from Africa and then, either as part of the original plan or as an extension of the enterprise, made and shipped candles around the globe (<u>Staaten Islander</u> 1856). The deep water of Raritan and Prince's Bays provided ideal dockage for this and subsequent industry (Staten Island Gazette & Sentinel 1881).

Two years later, when the factory was apparently flourishing (<u>Staaten Islander 1856</u>), Seguine died suddenly of a stroke (Powell 1976:16). His business had changed the physical and social fabric of Prince's Bay, providing direct and indirect employment to over 100 people. However, by the time of the Civil War, this enterprise apparently failed and the sale of the factory was advertised in a foreclosure proceeding (Powell 1968 V:859). After this, until it was bought by the S. S. White Dental Manufacturing Company in 1881, the history of the factory remains somewhat vague.

According to one account, the Johnston Brothers purchased it by 1865 (Morris 1898:472), however, no record of this sale has been located. It has been stated that bullets were manufactured here during the Civil War (Anon. 1944; Talbot 1949), but by whom is not indicated. A newspaper account from 1873 reports that after a long negotiation, a William A. Allen

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Plate 17.

17. Illustration and article from Hagdorn's Staaten Islander, April 5, 1856, with a story and engraving of the Palm Oil and Candle Factory at Seguine's Point. The second building from the right is building No. 11 seen in Plate 11. Note that at this times the building didn't have skylights. (SIIAS). succeeded in selling the factory to the Messrs. Middleton for their drain and water culvert manufactory (<u>Richmond County</u> <u>Gazette</u>:May 28, 1873). Again, no record of this sale can be found, but the Middleton's are documented in both the factory and the former Seguine mansion on an 1874 atlas (Beers 1874: section 32; Figure 14 this report).

It appears that by 1876, the Johnston Brothers either acquired or reacquired the factory and opened a dental supply manufacturing plant (Talbot 1949). In 1881, trustees of the estate of S. S. White, a Philadelphia dental manufacturer, merged his company with the Johnston Brothers (Talbot 1949), perhaps on a trial basis; at the time, the Philadelphia company bought one acre and what appear to be water rights from the Johnston Brothers (Liber 138:192-197).

Apparently, the Johnstons remained to administer the company, and their involvement is documented through 1931 (Anon. 1944:44). It also appears that they expected increased settlement of the area since at the time of the sale, subdivision of their land north of the factory was planned (<u>Staten Island</u> <u>Gazette & Sentinel</u> 1881; Richmond County Map 439, Figure 15 this report).

Soon after, but only very briefly, it appears that the S. S. White company contemplated moving from Seguine's point, (<u>Richmond County Gazette</u>:Feb. 4, 1885, Feb. 11, 1885), but instead extensive expansion was begun that continued until the 1950s (see Figure 16 for Building configuration and dates).

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Figure 14. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Detail of 1874 Beers Atlas (Section 32).



Figure 15. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Johnston Brothers 1881 Subdivision Map (Richmond County Map #439-redrawn by J. Geismar).



Building Dates (except where noted, based on S.S. White commemorative book, 1944)

Building #	Erected	Building #	Erected
1	1888	27	1940
2	1888	28	1854-1856*
3	1888	29	prior to 1885 (demolished)
4	1901	30	prior to 1885
5	1901	35	1894
6	1901	40	1903
7	1901	41	1903
8	1889	42	1907 (demolished ?)
9	1940 (demolished ?)	44	1913 (demolished ?)
10	1941 (demolished ?)	45	1918
11	1854-1856*	46	1919
12	1942 (demolished ?)	47	1919
16/14	1854-1856, but replaced	48	1950s **
17	prior to 1885 (demolished ?)	49	1929 (demolished)
18	prior to 1885 (demolished ?)	50	1950s **
21	1894 (demolished ?)	51	1937
22	1854-1856* (demolished)	52	1937 (demolished ?)
23	1884 (demolished ?)	53	1937 (demolished ?)
25 -	1885	54	1939 (demolished ?)
26	1890 (remodeled 1943)	55	1939
*Staaten Islan	der 1856 ** Bill Fiore, Muss	57 Development C	?

Figure 16. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: 1984 Plan and Construction Dates of S. S. White Buildings (from site plan, Figure 7 this report, and cited information). S. S. White became the largest dental supply manufacturer in the world (Talbot 1949), and the factory continued to operate at Seguine's Point until the early 1970s when it merged with the Pennsalt Company and moved to Holmdel, New Jersey (Anon. 1985). At that time, the Muss Waterfront Housing Development Corporation acquired the land and initiated conversion of the site and buildings into a shopping mart fashioned after the successful Ghiradelli Square in San Francisco (Oster 1976), a rehabilitated chocolate factory. At present, demolition of the factory buildings and the construction of condominiums is planned (see Figure 3).

The names of the local families involved with this history are found on many of the streets and features around and on the site: what is now Seguine's Point was originally named Menee's or Manee's Point after Abraham Manee, the property's eighteenthcentury owner; as documented on a U. S. Coastal Survey map, by the 1830s it had been renamed Seguine's Point (see Plate 18); and in the twentieth century, the east-west road crossing the Muss property was changed from Shore Road to Johnston Terrace (BRTS 1910:sheet 95; see Figures 6 and 7 this report). In addition, the streets of the Johnston Brothers subdivision bear their names (see Figure 15).

Throughout the nineteenth century, industrialization of varying intensity affected much of Staten Island. In the project area, the burgeoning oyster industry was a major factor in its development as was the introduction of manufacturing by Seguine in the 1850s and the expansion and operation of the

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Plate 18. Detail of 1845 U.S. Coast Map. Surveyed from 1835-1837 (Powell 1976); this is the first published map documenting Sequine Point as a place name. Note that the runoff creek (see Plate 12) found on many early maps is not shown here; also, Wolfe and Lemon Creek, respectively east and west of the point, are shown as ponds (NYPL Map Division).

S. S. White Dental Manufacturing Company in the last decades of the nineteenth century and for almost three quarters of the twentieth. The affect of these industries on the project site will be discussed briefly in the following sections.

## The Prince's Bay Oyster Industry

In the eighteenth century, the Prince's Bay oyster, which undoubtedly had flourished for millenia prior to European settlement, became justifiably famous for its flavor and size; but, by the first decades of the nineteenth century, despite regulations, the oyster beds had been overworked. Ironically, as early as 1812, the famous "Prince's Bay" oysters were in fact grown from seed oysters brought first from Long Island and then, by 1820, the Chesapeake (Kochiss 1974:30; Powell 1976:10). Apparently, not only did the bay provide excellent growing grounds, but the mouth of Lemon Creek as well as the other creeks and rivers on Raritan Bay were ideal for "refreshing" mature oysters from less agreeable locations, improving their freshness and flavor (Powell 1976:12).

This industry, which flourished throughout most of the nineteenth century, had ramifications for the project area and other parts of the island. Populations grew as oystermen from other locales, particularly from the Chesapeake, migrated into the area.

Among those who came to the island and established a Staten Island community were black oystermen and their families from Snow Hill, Maryland. Since free blacks leaving Maryland could not return prior to emancipation, a community known as Sandy

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Ground was established in the 1840s; this community still functions near Rossville, several miles north of the project area (Powell 1976:12). Recently, it has been nominated as an historic district (Baugher 1985:personal communication).

Prior to the planting of the oyster beds, Prince's Bay was considered underpopulated and undercultivated (Bayles 1887: 707). However, by the middle of the nineteenth century, the southern coast of Staten Island was planted with oysters and its population had grown, although farming may have continued to be neglected (McMillen 1971:50). It has been noted that at sometime almost every family living in the area from Prince's Bay to Tottenville was involved in the oyster industry (Powell 1976:12). For example, as mentioned previously, Joseph H. Seguine was involved in oystering as well as farming and his other pursuits.

By the mid-nineteenth century, the oyster industry was nearing its peak. In an unpublished article, Hugh Powell notes that at this time, 3000 people on Staten Island's south shore were supported by this industry which involved 100 boats. In 1853, oystering reportedly yielded a \$50,000 wholesale crop (Powell 1976:17).

It's no wonder, then, that Prince's Bay oystermen rebelled violently against a state quarantine briefly opened in 1857 on land that is now Wolfe's Pond Park (Powell 1976:18). The isolation of the area was the motive behind the state locating here, and fear of epidemics and contamination of the fruitful waters was the motive for the violence. The uprising was successful,

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and at least this impediment to the industry was removed. Others, such as silting and water pollution, were not so easily dealt with.

Water pollution, the greatest threat to the survival of the oyster (Powell 1976:25), began to affect the industry by the 1880s, and by the 1890s, Lemon Creek had silted up making dredging mandatory for oystering to survive. Pollution occurred mainly from the dumping of industrial and domestic waste, and since 1927, New York has condemned all the water around Staten Island and New York Bay (Kochiss 1974:33).

Apparently, to combat some of these destructive factors as well as to organize the industry, associations were formed and storage houses were built along Lemon Creek. Organized in 1883 and functioning until at least 1916, one of the most tenacious was the Prince's Bay Oyster Company which had its headquarters in a large brick building, now gone, located at the foot of Seguine Avenue (Powell 1976:24; Plate 19 this report).

In 1907, privately owned strips of land are documented along the creek (Plate 20); it was here that the oystermen kept their equipment and their "floats", the flat, loosely-planked barges used for refreshing the oysters (Powell 1976:28; Cleaves 1973:106).

Howard Cleaves, a local resident reminiscing about his childhood on Purdy Place across from the project site, mentioned the mounds of oyster shells found along Lemon Creek when he was a child at the turn of the century. Apparently, these shells were used for surfacing roads, lanes, and driveways and, in a

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Plate 19.

Detail of 1898 atlas map showing Seguine's Point. Note the hotel west of Seguine Avenue across from S. S. White Dental Manufacturing Company (circle Robinson 1898:plate 12).





Plate 20. Detail of 1907 atlas showing Seguine's Point (Robinson 1907: plate 21). Again, note the hotel west of Seguine Avenue (circled) Also note that filling appears to have occurred just below the mouth of Lemon Creek on land belonging to the Princes Bay Oyster Co. (arrow); compare with Plate 19 above. Above this, the shore of the creek is now owned by individual oystermen; it was here they stored equipment and "refreshed" their oysters (Powell 1976). pulverized form, were fed to chickens as a source of lime (1973: 106).

At least twice, in 1898 and again in 1902, the U.S. government dredged the creek to keep it open for oyster sloops and boats, but silting and pollution continued to threaten the viability of the industry. By 1916, with local markets abandoned because of typhoid scares and with the condemnation of oyster beds by Board of Health, the industry died (Powell 1976:30).

In the 1960s, Lemon Creek Park was created (NYCDPR 1964-1966:correspondence). Since then, silting has occasionally been combated by the city to accommodate the more than 400 boats that now dock at the four leased marinas along the creek, but dredging is more often implemented by the private Prince's Bay Boatmen's Association, the marina nearest the site (Oechsley 1985:personal communication; NYCDPR 1964-1966:correspondence; see Plate 2). As mentioned earlier, in an attempt to deter silting, recently the dredged material has been used to augment an embankment extending into the bay (Oechsley 1985:personal communication; see Plate 13). It is possible this embankment was originally created from one or more of the dredging episodes mentioned above (compare Plates 19 and 20).

## The S. S. White Dental Manufacturing Company

As outlined in the site history, the 1881 merger of the Johnston Brothers' Prince's Bay dental manufacturing company with the S. S. White Company, created a firm that would become the largest manufacturer of dental equipment in the world.

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Once the decision was made to remain on Staten Island, the factory expanded (e.g., Plate 21) and ultimately more than fifty structures were included in a complex that incorporated the four factory buildings originally constructed by Joseph H. Sequine for his Palm Oil and Candle factory in 1854 (see Plate 17). It should be noted that the Seguine complex originally consisted of four factory building and a separate office. Of these, three factory buildings were still in use in 1944; currently only two, one of them the first to be constructed, remain, apparently in a somewhat altered state (Staaten Islander 1856; see Plates 22, 23, and 10, 11). The earliest building (No. 11), which became the foundry of the S. S. White complex and perhaps of the Johnston Brother's firm before that, was used as a "still" room (Staaten Islander 1856); today, it has skylights that are not shown on the 1856 engraving or a 1902 plan of the factory (Insurance Association Map 1902); however, they are found on a 1944 plan (Plate 24), indicating that this alteration was made sometime in the first half of the twentieth century.

An article written soon after the 1881 merger describes the operation and the products manufactured at the plant (<u>Staten</u> <u>Island Gazette & Sentinel</u> 1881). At this time, there were over 15,000 dentists in the United States who spent approximately \$4,500,000 on dental equipment and supplies annually, and S. S. White manufactured almost everything they might need. Products included dental chairs and other office furniture, dental "engines", and nitrous oxide (laughing gas) packaged in cylinders for shipment. This was in addition to the production

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Plate 21. Detail of 1917 Sanborn Insurance Map (updated to 1932) showing S.S. White Complex. Note "Princess" Bay Hotel west of Seguine Avenue (arrow).



Plate 22. Interior of building No. 11, foundry. Originally built in 1854, this was the first factory building built by Joseph H. Seguine in 1854. The building was apparantly altered and skylights added sometime after 1902 (see below) (August, 1985).

Plate 23. View of skylights in building No. 11.



Plate 24. Detail of 1944 plan of the S. S. White Dental Manufacturing Company (Anon. 1944). Shown are buildings Nos.11, 22, and 28, all dating from 1854-1856. Only No. 11 and No. 28 still remain. The skylights on building No. 11 apparently were added sometime between 1902 and 1944. of filling materials and small tools; it appears that the only dental product not produced at the Seguine's Point factory was dentures, and these were made in the Philadelphia plant.

In 1881, the operation at Seguine's Point employed about 100 people of diverse trades (approximately the same number as were employed by Joseph Seguine in his oil and candle factory). Apparently, this industry quickly increased the population in the project area. The writer of the article notes '/' that because of the factory there were no vacant houses for miles. He goes on to say that he hopes the company will remain in Prince's Bay, suggesting that the operation was then operating on a trial basis, a condition that appears to have persisted until 1885.

As noted earlier, with some vacillation the company did remain, and in 1888 expansion began that continued until the 1950s. By the 1940s, in addition to a vast inventory of dental supplies and equipment, industrial materials such as flexible shafting and tons of molded plastic were also produced (Anon. 944:43). It appears that the water transport provided by the company dock continued to be an important factor in the factory's success (Anon. 1944:43).

During the Second World War, S. S. White also manufactured equipment for the military; this included delicate airplane controls as well as bullets (history may have repeated itself since, as mentioned earlier, bullets may have been produced at the factory during the Civil War).

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As noted previously, the factory continued to function until about 1970 when it was absorbed by a larger company and moved to New Jersey. Today, the S. S. White name has been bought and dental equipment is again being manufactured under the old firm name (Anon. 1985).

The buildings continue to stand in silent testimony to industrial development on Seguine's Point and Prince's Bay (Plate 25; see also Plates 3-11). Evidence for S. S. White's tenure is found not only in this massive complex, but also in factory equipment, such as a boiler dating from 1901 (Erwin 1985:personal communication), and the main gate proudly labeled with the company name (see Plates 26 and 27).

While the gate is removable, the boiler is not, nor are either of these items particularly unique (Milster 1985:personal communication). However, it would be possible to the remove the boiler doors as well as the gate should a proper repository be found for these artifacts of a Staten Island industry.

Today, with both oystering and manufacturing gone, the area appears rural and quiet. One can only speculate about what it would have been like with a functioning factory and a thriving oyster industry coexisting. In addition, it was an area that provided seaside recreation and well as industry (see Plates 19 and 28).

A longtime local resident and employee of the S. S. White Company, who wishes to remain anonymous (Anon. 1985), somewhat wistfully recalls Seguine's Point as a verdant area bordered by an active beach; he also remembers the landscaped, park-like

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Plate 28. Early-twentieth-century postcard showing boat landing and bathers at Prince's Bay (Hugh Powell Collection).



Plate 2.6. Boiler probably dating from c, 1901 in building No. 8 of the S.S. White Company Building constructed ca. 1889 (August, 1985)



Plate 27. Gate of the S.S. White Dental Manufacturing Co. at entrance to building No. 1 off Dental Avenue (August, 1985).



Plate 25. Ariel view of the S.S. White Dental Manufacturing Co. taken in 1972. Note runoff creek across in foreground with evidence for branch leading to Dental Avenue to right of complex. Note also, spire atop water tower on building No. 1 (see Plate 16) is gone. Raritan and Prince's Bays are to rear (courtesy of Muss Development Co.). park-like factory grounds as an integral part of the pleasant, rural but bustling scene. The rural quality remains but, at least for the time being, the bustle and activity are gone.

## NOTES

1. The ditch-like appearance of this tidal creek (see Plate 12) makes it seem man-made, but its configuration apparently has not changed at least since the mid-nineteenth century when it was first clearly recorded (e.g., Butler 1853, Figure 17 this report; compare with Figures 6, 7, and 18). Howard Cleaves, who lived on Purdy Place at the turn of the century, described it "as a small ditch-like stream which ran under Prince's s Bay Road (now Seguine Avenue) and discharged into Lemon Creek, which it still does" (Cleaves 1973:106). Despite its appearance and any alterations made to accommodate the stabilization of Wolfe's Pond, this little creek apparently has run this same course, perhaps intermittently, for centuries if not millenia.

2. Historic fill that may date to the late-eighteenth or early-nineteenth century was noted when the Seguine Avenue bridge was reconstructed about two years ago (Burke 1985: personal communication). Since this fill is from an unknown context, it is significant only in relation to the building of the original bridge and not the Muss Waterfront Housing Development property.



Figure 17. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Detail of Butler's 1853 Map of Staten Island. Note Creek (arrow). This is among the first maps depicting this creek.

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Figure 18. MUSS WATERFRONT HOUSING DEVELOPMENT PROJECT: Detail of 1934 Map of Wolfe's Pond Park and Adjoining Lands (NYCDPR 1934:R-L-31-102). Note configuration of creek in project area is virtually the same here as it is on earlier and later maps in this report.

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