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2002

**STAGE 1B ARCHAEOLOGICAL FIELD
RECONNAISSANCE SURVEY**

KREISCHER HOUSE SITE

4500 Arthur Kill Road. Borough of Staten Island.

Richmond County, New York

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KREISCHER HOUSE SITE
4500 Arthur Kill Road
Borough of Staten Island. Richmond County, New York

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INTRODUCTION

On May 5, 2002 CITY/SCAPE: Cultural Resource Consultants completed a field reconnaissance level archaeological survey of the Kreisler House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, NY. (See Map 1)

Archaeological fieldwork was supervised by Stephanie Roberg-Lopez, M.A., RPA, Principal Investigator. Preparation of the shovel test excavation records and report production were completed by Gail T. Guillet. Photographs, writing of the final report, laboratory analysis, and preparation of the Field Reconnaissance Map were completed by Stephanie Roberg-Lopez.

The excavation team included James Kennedy, computer mapping and surveying, and field technicians Jorge Lopez, Nasim Flores, Rick Redl, Tom Pulcastro, Scott Record, and Chris Dorn. The project sponsor, Mr. Isaac Yomtovian visited the site while excavations were in progress.

PROJECT AREA DESCRIPTION

The project area is located on a 3-acre tract of land on the east side of Arthur Kill Road, south central Staten Island. (See Maps 1 & 2) The site is bounded to the west and northwest by Arthur Kill Road, to the south by land owned by the City of New York, and to the east by a target shooting club. In the larger context of the site, the project area is located in the historic brick-making area of Staten Island. The Clay Pits park located nearby consists of ponds created by mining for clay, and the site is located in Kriescherville, the settlement that served the historic Kriescher Brickworks which was at one point, the largest firebrick manufacturing operation in the country. The history of the site has been comprehensively documented in the Stage 1A Literature Review completed by CITY/SCAPE: Cultural Resource Consultants in April, 2002.

CURRENT SITE CONDITIONS

The parcel in its present form is an unoccupied estate site. The historic Charles Kreisler house, a Stick style residence built circa 1885 dominates the landscape. (See Photo 2) A mirror image house, built at the same time for Charles Kriescher's brother E.B. Kriescher, and located no more than 50' to the west and slightly south of the extant house, has been demolished. There are currently two outbuildings, a garage and a shed, standing on the property. A historic carriage house has been demolished. During the time period when the Kreisler brothers occupied the site, a number of driveways wound around the estate. (See Fig. 1) Sections of these driveways are still extant, while traces of other sections can be noted in the land surface.

The highest point on the property is the southeast corner at 70' above sea level. The lowest point on the property is the northern boundary that meets Arthur Kill road at approximately 26' above sea level. The topography of the site is the result of surface alterations that took place as the landscape was altered to accommodate the two Kreischer brothers' houses and the associated outbuildings and roadways. Most significant is a cutting and filling episode that created an artificial flat platform for the houses. The natural landscape was a fairly acute slope (20 – 25 degrees) that can still be seen to the east of the house platform. The cutting and filling created the flat surface and the very steep hill that fronts Arthur Kill Road in the northwest quadrant of the site. The original land surface would have been the higher knoll to the south (rear) of the houses and in its natural state, the knoll would have quickly degraded into a fairly steep slope declining to Arthur Kill Road. (See Field Reconnaissance Map) The large-scale movement of soils to create the estate landscape has rendered much of the site profoundly disturbed.

In its current state, the landscape contains traces of estate vegetation. The field to the rear of the house is open grassland punctuated by an occasional tree. A number of these trees are "pedestaled", that is, growing out of small mounds that rise above the elevation of the field as a result of the topsoil around them having been removed. (See Photo 15 & 16) The southeast corner of this field was very wet on the day of excavation, and exhibited vegetation consistent with a wet area. The slope to the east of the house abutting the shooting club was more densely wooded, with a sparse grass cover over visibly disturbed soils. (See Photo 10) Landscaping plants such as hosta and daffodils surround the extant historic house.

There is little surface evidence of small fauna however numerous bird species were noted during the course of the excavation.

ENVIRONMENTAL AND ARCHAEOLOGICAL SETTING

An exhaustive Archaeological Evaluation and Sensitivity Assessment of Staten Island was completed in 1994 by Eugene J. Boesch for the New York City Landmarks Commission. In this study, a number of research problems are addressed, and the overall island is assessed zone by zone for archeological sensitivity. The ramifications of this study will be considered in both the following archaeological discussion and in the formulation of a testing strategy.

The project area lies within one of two geophysical provinces that make up Staten Island. The northwestern 20% of the island is Piedmont Lowland that gradually slopes south easterly until it meets the Atlantic Ocean. This long, sloping landscape is part of the Atlantic Coastal Plain, a geophysical and archaeological zone that unites the east coast. The Piedmont Lowland, which comprises the balance of Staten Island, is underlain by shales, siltstones and sandstones, while the Coastal Plain is underlain with unconsolidated clay, silt, sand and gravel overlain by glacial deposits from the Wisconsin period (Boesch, 1994:3). The clays encountered on the Kreischer site are a vivid reddish orange, and exist in a deep stratum immediately below the topsoil stratum. Boesch reports that in pre-

contact times, there were three predominant eco-zones, "saltwater/brackish water marshes", "freshwater marshes" and "upland forests". These eco-zones would be present in a mosaic of interlocking landscapes all over the island, grading from the saltwater estuaries, up brackish streams to freshwater streams. Wetland flora as well as oaks, chestnuts, beech, hickory maple, white ash and black cherry were present on the landscape (Boesch, 1994:5)

Among the food sources available to the prehistoric peoples of Staten Island would have been abundant fish and shellfish (clams, oysters, scallops and snails), mammals in the form of deer, bear, elk and smaller species such as rabbit and squirrel, many forms of birds and nuts, berries and tubers (Boesch, 1994:6). In later periods, the prehistoric residents would have had cultivated corn, beans and gourds. Reports by Dutch travelers indicate that agricultural fields were abundant on Staten Island during contact times.

PREHISTORIC BACKGROUND

As the first native Americans, indeed the first humans, entered the region that is now Staten Island during the Paleo-Indian period some 12,000 years ago, their logical route would be along the mighty river systems that were the "super-highways" of the times and along the open seacoast. Not only humans, but also the post Pleistocene mega fauna, the mammoth, the mastodon and the caribou that inhabited this tundra-like area would be logically drawn to these corridors. The glaciers reached their maximum extension in 18,000 B.C., covering most of Staten Island with a thick layer of ice. As the great ice sheets began to retreat from southern New England both the hunter, the Paleo-Indian, and the hunted began to move into this region. (Fig. 2)

Research indicates that the post glacial landscape was tundra-like, the colonizing grasses, sedges and herbs supporting a variety of large and small game animals. Among the fauna were mastodon and mammoth (two mastodons have been found in central and southern Staten Island and three mammoths in nearby New Jersey (Boesch, 1994:9)), giant beaver, giant ground sloth, and horse, all of which became extinct, as well as the caribou, musk-ox and bison that persist to modern times.

Paleo-Indians, as these small bands of nomadic hunter-gatherers are called by archaeologists, appear to have entered the previously uninhabited northeast from the south and west. Their sites, identified primarily by characteristically fluted points, are found all over North America. It has traditionally been assumed that these nomadic peoples were strictly "big game" hunters; however that assumption has been called into question by the discovery of fish, bird, small mammal bones and some plant remains found in association with Paleo-Indian sites. It now seems that in addition to the large animals that comprised their principal food source, the Paleo-Indians also hunted small game and gathered a wide variety of plants to support their diet. Paleo-Indian sites are quite rare in the archaeological record, and have been found in association with major waterways such as the Hudson, and in quarry zones such as the Wallkill Valley. Staten Island, however, has emerged as a major focus of Paleo-Indian activity. The most intense locus of Paleo-Indian

activity is the area between Rossville and Tottenville. The sites here are characterized as high, well-drained spots overlooking the Arthur Kill (Boesch, 1994:9). The Port Mobil site is among the best known Paleo-Indian sites in the northeast and is located less than a quarter of a mile to the northeast of the Kreischer House Site. Other Paleo-Indian sites in close proximity are the Cutting site, Smoking Point, Charleston Beach and the Kreischerville campsites. Somewhat further away are Ward's Point, Old Place and Richmond Hill. A number of other finds have been made to the south of this rich region, however they consist largely of surface finds of fluted points, collected in the absence of controlled excavation, and therefore subject to flaws in interpretation. Bearing in mind that the entire continental shelf was a vast tundra region, now submerged beneath the Atlantic Ocean, and that several Paleo-Indian points have been recovered from the ocean floor, the lower coastal plain zone of Staten Island might be seen as an inland buffer between this vast coastal plain and the higher lands of the New Jersey Piedmont.

The Archaic period in Staten Island is better represented than the Paleo-Indian. It is divided into four stages: the Early Archaic, the Middle Archaic, the Late Archaic and the Terminal Archaic. In many important respects, the nature of life in the Archaic period was little different from the nomadic lives lived by the Paleo-Indians; however, during the time span of the Archaic significant changes in the environment occurred. The tundra-like landscape began to give way, first to spruce forest and then to a forest composed of various conifers, hemlocks and hardwoods. As the hardwood forests advanced northward, a new ecosystem became available, an ecosystem that provided a range of nuts (in particular the acorn), grasses and tubers that supported both the smaller game of the Archaic period and the human population as well.

Population growth is inferred for this time period as sites increase in density and versatility. The Late Archaic period is well represented on Staten Island. The period lasted from roughly 4000 BC to 1700 BC, a time during which the Copper and Bronze Ages and the construction of the great Pyramids of Giza were all taking place in the Old World (Snow, 1980:187). Archaic sites on Staten Island include the Clay Pit Pond site, Chemical Lane, Pottery Farm, Harik's Sandy Ground, Gerike Organic Farm, Wort Farm, Charleston Beach, the Kreischerville Campsite, Hollowell, Old Place, Charleston Beach, Ward's Point, Travis, Richmond Hill, Bowman's Brook and a number of others. A number of these sites are in close proximity to the project area.

The people of this time followed a life-way called the "Mast Forest Tradition", an adaptation that focused on the processing of a broad range of nuts and plant foods that supplemented the hunting of the white tail deer and other small game. Ritchie says "seeds, nuts, berries, roots (and) dried meat . . ." were processed with a variety of grinding implements, with the main focus being acorn meal (Ritchie 1969a:62). Sites are not large, but they are numerous.

A number of excavations have yielded evidence of small houses based on a spiral plan, with overlapping walls creating the entryway. Few burial sites have been excavated, but it is suggested that cremation was the preferred mortuary practice for these people

(Snow, 1980:231). On Staten Island, Long Island and along the southern coast of New England, shell middens associated with the consumption of coastal and riverine shellfish are abundant. The overall profile of these Late Archaic people, then, is of a group of nomadic hunter-gatherers organized in relatively small groups with an extremely flexible adaptation to a varied landscape.

The Archaic period in Staten Island is followed by the Transitional Stage. Chief among the general characteristics that separate the Transitional Stage from the earlier period is the use of stone vessels. With soapstone being the usual raw material, these vessels were extremely heavy, and were later replaced by pottery vessels of various types. The Transitional period is identified by the highly distinctive Orient Fishtail projectile point, by the use of soapstone vessels, whose raw materials were most probably quarried in Rhode Island and in Bristol Connecticut, by distinctive burials and by the intense exploitation of shellfish. Boesch indicates that a radically different broad-bladed projectile point type arrived in Staten Island at this time (probably the "Susquehanna Broad" tradition). Transitional sites have been found at the Pottery Farm, Wards point, Old Place and the Travis site. Orient Fish Tail points have been recovered along the beach at Kreischerville (Boesch, 1994:12).

The Woodland Stage, like the Archaic is divided into several substages, including the early Woodland Stage, the Middle Woodland Stage, and the Late Woodland Stage. Sites used by Woodland groups tend to be away from the major waterways and are frequently located on inland streams. There are a number of Woodland sites in the area - Canada Hill is located immediately southeast of the project area. In later periods there is some indication of the presence of palisaded villages. Around these sites, on the alluvial plains of nearby streams, the Indian fields were located. Horticulture, although practiced in other parts of North America at an earlier date, does not appear in this area until c. 1000 AD. The changeover to cultivation of a variety of domesticates, among them maize, beans, gourds, sumpweed and sunflower, created a marked change in the pattern of land use and settlement. With the advent of sedentary or semi-sedentary occupations, the character of sites changed.

By the time the Europeans arrived the dominant indigenous groups inhabiting Staten Island were the Lenape/Delaware, Munsee speakers who had migrated into the area during the Late Woodland. The Munsee are a sub-group of the very extensive Algonquian cultural and linguistic group.

Population figures are difficult to calculate due to the lightening speed with which European diseases wiped out the indigenous population. Snow states that "There are almost no data on which to base a population estimate for the middle and lower Connecticut and central Long Island population". This assessment would be equally true of Staten Island. With the coming of first the Dutch, then the British settler, the indigenous population of New England decreased to its current negligible size.

An assessment of the broader ecological setting in the general region of the project area indicates that substantial streams and wetlands exist in the area. As the subsistence patterns of the indigenous inhabitants of the northeastern United States have become clearer to modern archaeologists, it has become increasingly accepted that not only the streams, but the associated tidal marshes, wetlands and their fringes were intensively exploited as one of the richest subsistence zones available. Wetlands and abundant streams provided aquatic life such as the fish, frogs, shellfish, water insects and water flora. Avian resources in the form of the birds that were themselves attracted to the teeming life of the wetlands abounded, as did the large game species that watered in these spots. The mosaic of food sources available to the inhabitants of the project area would have been quite rich.

In terms of the greater archaeological context, because of the concentration of prehistoric sites in the immediate vicinity of the project area, the Kreischer site is considered highly sensitive. (See Appendix B: Fig. 5 & Table 1 & 3 taken from CITY/SCAPE: Cultural Resources Stage 1A report) Virtually all prehistoric phases up to the contact period are represented in close proximity to the project area. The ecological richness of this landscape in addition to the proximity of known archaeological sites indicate that undisturbed areas on the Kreischer House Site possess a high potential to yield prehistoric cultural resources, should they be present on the site.

TESTING STRATEGY

Testing strategy for the Kreischer House site was structured around the knowledge that the property possessed a high probability to yield prehistoric cultural resources should intact, undisturbed sediments be present. Although the site is relatively small, it was concluded that sub surface testing presented the potential to recover cultural material.

As the result of a negotiated easement that protects both the physical and visual integrity of the historic house, this important resource has been placed in an area that will not be impacted by construction of the proposed senior citizen housing. The focus of archaeological testing, therefore, was to determine whether prehistoric cultural resources were present on the site, as well as to locate the associated carriage house foundation identified on historic maps. The scope of work was developed in collaboration with the Landmarks Preservation Commission, which proposed transects of shovel test pits spaced at 15' intervals with the transects spaced 25' apart. In areas of disturbance, the shovel test interval would be increased to 25'. This scope of work was designed to maximize the probability of encountering cultural resources should they be present.

FIELD METHODOLOGY

Field methodology for the Kreischer House site consisted of several stages of investigation. These included:

1. A walkover and visual inspection of the site to assess areas of disturbance versus areas of potential sensitivity for prehistoric activity.

2. The excavation of a stratigraphic control test to establish the stratigraphy of the site and to identify the depth and composition of the sterile glacially deposited sub soils.
3. Shovel testing the area identified as having a potential sensitivity for prehistoric remains.
4. Photographic documentation of the overall site.

Within the archaeologically sensitive areas identified, 40 cm diameter shovel tests were excavated at 15' intervals along transects set 25' apart (See Field Reconnaissance Map). Soils were passed through a 0.25 inch steel mesh screen and the materials remaining in the screens were carefully examined for historic and prehistoric artifacts. Items recovered from the tests were assigned to the strata from which they were obtained. The stratigraphy of each test was recorded, including the depth and the soil description of each stratum. (Appendix A: Shovel Test Record)

FIELD RESULTS

The Kreischer site was carefully walked and inspected by the archaeological team. As the topographical maps suggest, the original landscape was a southern knoll that quickly degraded northward to a slope of approximately 25 degrees. Topographically the property is a continuation of "Kreischer's Hill" to the south, which once held the house of Charles' father, Balthazar Kreischer. The Kreischer House sits on an artificial platform of dirt created by extensive cutting and filling, profoundly disturbing the original sediments. Much of the land surface surrounding the house, both in the easement area and outside has therefore lost its archaeological integrity. A map dated to 1913 shows extensive driveways linking the historic house, the now destroyed Edward Kreischer House the three outbuildings. (See Fig. 1 & Field Reconnaissance Map). These driveways are the source of additional significant disturbance to the site. The Kreischer House, in one recent usage episode, was a restaurant. The flat area directly behind the house and extending up the knoll to the back (south) of the house has been churned and paved with a mixture of concrete and gravel, further disturbing the site over a large area. (Photos 8-9 & 12) Only the area east of the house appears to retain the original topographic profile with approximately 80 percent of this area sloping northward at approximately 25 degrees, a degree of slope normally eliminated from testing.

Historic maps refer to what is now labeled a "stream", as a "channel" or "canal". The boundaries of this water feature are extremely rectilinear in early maps, indicating that this channel was either cut for drainage, or a historic stream was channelized to conform to the needs of the estate planners. Despite its current state of decay and silting one can still see the artificial nature of the channel construction. This represents an early but undocumented disturbance episode.

The area considered to contain the greatest potential to produce cultural resources was the relatively flat, elevated area behind the house. A total of 75 shovel tests along

three transects were excavated in this area. A stratigraphic control test (ST 1) was excavated to a depth of 16", but ended in impassable soggy clay. A second test (ST 2) was somewhat more successful, reaching a depth of 24". The stratigraphic profile, where soils were undisturbed, yielded two soil strata. The upper stratum consisted of a dark brown silty loam underlain by bright orange-red, wet, often sodden clay. (Photo 6)

This area behind the house was quickly divided into three distinct zones primarily characterized by the degree of their disturbance. The first zone, which was the highest, best drained and most southerly part of the project was the only locus on the site to yield undisturbed soils. Shovel tests revealed an upper layer of silty loam underlain by bright orange-red clay. The clay stratum was damp, but did not appear to be disturbed. This locus was quite small, however, and did not yield cultural material of any significance.

As testing moved toward the southeastern corner of the site, very wet conditions made screening the sediments difficult to impossible. (Photo 5 & 13-14) This second locus would prove to be both very wet and very disturbed. Shovel test 18 through shovel test 32, soils were either too wet to dig or yielded only one stratum, a sodden clay in which water quickly percolated into the hole to depths of up to nine inches. (Photo 14) Further investigation of this southeastern locus revealed a disturbance history that was supported by vegetation and geophysical features. This entire area is overgrown with a wetland grass that clearly delineates a large area that is lacking topsoil. (Photo 10-12). In addition, the several large trees that punctuate this area are "pedestaled" – that is to say, they are growing out of soils that are one to two feet higher than the modern landscape. (Photos 15 & 16) It appears that some time in that past this area was graded or mined for topsoil. This would explain the lack of a topsoil layer, the distinctive vegetation growing in this locus, and the unnaturally low elevation of the modern land surface. The location of the old carriage house indicated on historic maps was identified in the profoundly disturbed soils at the southeastern corner of the site. (See Field Reconnaissance Map) A local visitor informed the team that it was common practice to remove destruction debris and dump it in the clay mining pits up the road. This would explain the relatively thin debris scatter in this area.

The third locus behind the house was identified as the gravel and cement parking lot probably constructed during the restaurant phase of the Kreischer House's history. (Photos 7-9) In areas where shovel tests could be excavated, the soil profile yielded an upper layer of gravel and concrete underlain by a thin topsoil layer or no topsoil layer, and finally, the ubiquitous dark orange-red clay that underlies the entire site. This area abuts the cutting and filling area behind the house and overlies the historic driveway that ran through the rear yard. The soils in this area were profoundly disturbed.

Once the high probability zone had been tested, the excavators' focus turned to the naturally sloping areas on the site. An area east of the extant garage and shed was tested, despite its rather steep slope. (Photo 17 & 18) This area was selected due to its proximity to the water channel that borders the site. A total of 15 shovel tests were excavated in this area. One hundred percent of the shovel tests in this area produced profoundly disturbed

soils that included coal ash, clinker, brick fragments and gravel. Some of the tests ended in debris obstructions where the brick fragments had fused with other materials into a concrete-like jumbled mass. This area also contained large trees that were set on soil pedestals above the current land surface, implying an episode of soil removal.

The final area tested was the eastern edge of the property. The drainage culvert described above, forming the eastern boundary of the site, was visually inspected. It is currently choked with debris and soil and functioning poorly. A close inspection revealed that the culvert has been altered by the use of heavy machinery that had cut and reshaped the banks of the waterway. As mentioned above, it is unknown whether this is a re-shaping of a natural brook or stream or a deliberately created drainage system.

Despite the relatively acute 25 degree slope, a series of transects were placed across the eastern locus on the site. A total of 16 shovel tests were excavated in this area. The driveway indicated on historic maps was located. The majority of the shovel tests yielded extremely disturbed soils that contained coal, clinker, bits of asphalt and brick debris. The entire area was judged to be not only excessively steep, but profoundly disturbed as well.

CONCLUSIONS AND RECOMMENDATIONS

A walkover reconnaissance was completed on the Kreischer House site, located in Staten Island, New York. A thorough review of the existing body of archaeological data relevant to the project area was undertaken and conclusions drawn concerning the probability of encountering prehistoric cultural remains on the site. Areas of prior disturbance were identified and locations potentially sensitive for prehistoric cultural resources were selected for sub surface testing.

Using a fine grid system of shovel tests at 15' intervals along transects spaced 25' apart, a total of 109 shovel tests were excavated in the areas considered to possess a probability of yielding prehistoric cultural material. Eight 20th century ceramic fragments were noted, however all were recovered from highly disturbed soils lacking archaeological integrity. Tests were excavated to sterile subsoil where possible. Numerous tests were excavated to the point of saturation, whereupon sodden soils and percolating water made further excavation impossible. No prehistoric cultural material was recovered in any of the tests. It is the conclusion of CITY/SCAPE: Cultural Resource Consultants that most of the land surface making up the Kreischer House site has been profoundly disturbed. Nor further archaeological investigation is recommended for this site.

APPENDICES

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APPENDIX A

SHOVEL TEST RECORDS

Appendix A: Shovel Test Record**Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York**

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
TR 1	ST 1	0-14	10YR3/4	dark yellowish brown silty clay	NCM
		14-16	10YR4/6	dark yellowish brown clay	NCM
	ST 2	0-20	10YR3/4	dark yellowish brown silty clay	NCM
		20-24	10YR4/6	dark yellowish brown clay	NCM
	ST 3	0-9	10YR3/3	dark brown silty loam	NCM -
				Root obstruction	NCM
	ST 4	0-12	10YR3/4	dark yellowish brown silty clay	NCM
		12-14	10YR4/6	dark yellowish brown clay	NCM
	ST 5	0-6	10YR3/4	dark yellowish brown silty clay	NCM
		6-15	10YR5/8	dark reddish brown clay (damp)	NCM
	ST 6	0-2	10YR3/4	dark yellowish brown silty clay	NCM
		2-18	10YR5/8	dark reddish brown clay (balls in screen)	NCM
	ST 7	0-8	10YR3/4	dark reddish brown clay (balls in screen)	NCM
		8-22	10YR5/8	dark reddish brown clay (will not pass through screen)	NCM
	ST 8	0-7		concrete & gravel (disturbed)	NCM

Appendix A: Shovel Test Record**Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York**

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 9	0-7	10YR3/4	dark yellowish brown silty clay	NCM
		7-12	10YR5/8	dark reddish brown clay (will not pass through screen)	NCM
	ST 10	0-8	10YR3/4	dark yellowish brown silty clay	NCM
		8-13	10YR5/8	dark reddish brown clay (damp clay)	NCM
	ST 11	0-8	10YR3/4	dark yellowish brown silty clay	NCM
		8-17	10YR5/8	dark reddish brown clay (damp clay)	NCM
	ST 12	0-12	10YR5/8	clay mixed with gravel & concrete (disturbed)	NCM
	ST 13	0-12	10YR5/8	clay mixed with gravel & concrete (disturbed)	NCM
	ST 14	0-2	10YR3/3	dark brown silt	1 sherd gray crockery
		2-17	10YR5/8	dark reddish brown clay	NCM
	ST 15	0-2	10YR3/3	dark brown silt	NCM
		2-2014	10YR3/4	dark yellowish brown silty clay (water pooled 4" in bottom)	NCM
	ST 16	0-2	10YR3/3	dark brown silt	NCM
		2-22	10YR3/4	dark yellowish brown silty clay (3" water pooled in STP)	NCM

Appendix A: Shovel Test Record**Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York**

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 17	0-3	10YR3/4	dark yellowish brown silty clay	2 fragments brown bottle glass (l. 20 th century)
		3-17	10YR5/8	dark reddish brown clay (1" water in STP)	NCM
	ST 18	0-22	10YR5/8	dark reddish brown clay	1 sherd yellow crockery
	ST 19	0-3	10YR3/3	dark brown silt	NCM
		4-23	10YR5/8	dark reddish brown clay (3" water in STP)	NCM
	ST 20			Not dug – pooled water on surface	
	ST 21			Not dug – pooled water on surface	
	ST 22			Not dug – pooled water on surface	
	ST 23			Not dug – pooled water on surface	
	ST 24	0-17	10YR5/8	dark reddish brown clay (5" water in bottom)	NCM
	ST 25	0-15	10YR5/8	dark reddish brown clay (5" water in STP)	NCM
	ST 26	0-2	10YR5/8	dark reddish brown clay (5" water in STP – soils will not pass screen)	NCM
	ST 27	0-11	10YR5/8	dark reddish brown clay (6" water in STP)	NCM
	ST 28	0-8	10YR5/8	dark reddish brown clay (sodden clay, will not pass through screen)	NCM
	ST 29	0-17	10YR5/8	dark reddish brown clay (2" water in STP)	NCM

Appendix A: Shovel Test Record

Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 30	0-14	10YR5/8	dark reddish brown clay (sodden clay will not pass through screen)	NCM
	ST 31			Not dug - disturbed	
	ST 32	0-20	10YR5/8	dark reddish brown clay (mixed clay, cement & hard pan)	NCM
TR 2	ST 33	0-2	10YR3/3	dark brown silty clay	NCM
		2-17	10YR5/8	dark reddish brown clay (2" water in STP)	NCM
	ST 34	0-2	10YR3/3	dark brown silty clay	NCM
		2-16	10YR3/4	dark yellowish brown silty	NCM
	ST 35	0-23	10YR3/4	dark yellowish brown silty clay	NCM
	ST 36	0-3	10YR3/3	dark brown silty clay	2 fragments blue transfer
		3-18	10YR3/4	dark yellowish brown silty clay (sodden soils)	NCM
	ST 37	0-15	10YR5/8	dark reddish brown clay	NCM
	ST 38	0-2	10YR3/3	dark brown silt	NCM
		2-14	10YR5/8	dark reddish brown clay (3" water in STP)	NCM
	ST 39	0-6		Mixed concrete & gravel	NCM
		6-8	10YR3/3	dark brown silt	NCM
		8-22	10YR5/8	dark reddish brown clay (3" water in STP)	NCM

Appendix A: Shovel Test Record

Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 40	0-6		mixed concrete & gravel	NCM
		6-8	10YR3/3	dark brown silty clay	NCM
		8-22	10YR5/8	dark reddish brown clay (sodden clay)	NCM
	ST 41	0-6		mixed concrete & gravel	NCM
		5-8	10YR3/3	dark brown silty clay	NCM
		8-13	10YR5/8	dark reddish brown clay (impassible hardpan/clay)	NCM
	ST 42	0-4		mixed concrete & gravel	NCM
		4-8	10YR3/3	dark brown silty clay	NCM
		8-17	10YR5/8	dark reddish brown clay/hardpan Rock obstruction	NCM
	ST 43	0-4		mixed concrete & gravel	NCM
		4-6	10YR3/3	dark brown silty clay	NCM
		6-14	10YR3/4	dark yellowish brown silty clay/hardpan	NCM
	ST 44	0-4		mixed concrete & gravel	NCM
		4-8	10YR3/3	dark brown silty clay	NCM
		8-20	10YR5/8	dark reddish brown clay/hardpan	NCM

Appendix A: Shovel Test Record

Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 45	0-4	10YR3/3	dark brown silty clay	NCM
		4-22	10YR5/8	dark reddish brown clay (sodden clay)	NCM
	ST 46	0-4	10YR3/3	dark brown silty clay	NCM
		4-19	10YR5/8	dark reddish brown clay	NCM
	ST 47	0-2	10YR3/3	dark brown silty clay	1 fragment whiteware
		2-19	10YR5/8	dark reddish brown clay (sodden clay)	NCM
	ST 48	0-24	10YR5/8	dark reddish brown clay (sodden clay)	NCM
	ST 49	0-22	10YR5/8	dark reddish brown clay (7" water in STP)	NCM
	ST 50	0-16	10YR5/8	dark reddish brown clay (7" water in STP)	NCM
	ST 51	0-20	10YR5/8	dark reddish brown clay (8" water in STP)	NCM
	ST 52	0-15	10YR5/8	dark reddish brown clay (8" water in STP)	NCM
	ST 53	0-4	10YR5/8	dark reddish brown clay (impassible, sodden clay))	NCM
	ST 54	0-10	10YR5/8	dark reddish brown clay (6" water in STP)	NCM
	ST 55	0-18	10YR5/8	dark reddish brown clay (9½" water in STP)	NCM
	ST 56	0-14	10YR5/8	dark reddish brown clay (3" water in STP)	NCM
	ST 57	0-21	10YR5/8	dark reddish brown clay (4" water in STP)	NCM

Appendix A: Shovel Test RecordKreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 58	0-4	10YR3/3	dark brown silty clay	NCM
		4-16	10YR5/8	dark reddish brown clay (2½" water in STP)	NCM
	ST 59	0-2	10YR3/3	dark brown silty clay	NCM
		2-14	10YR5/8	dark reddish brown clay (3" water in STP)	NCM
	ST 60	0-17	10YR5/8	dark reddish brown clay (brick debris)	NCM
	ST 61	0-2	10YR3/3	dark brown silty clay	NCM
		2-20	10YR5/8	dark reddish brown clay (4" water in STP)	NCM
	ST 62	0-14	10YR5/8	dark reddish brown silty clay	NCM
TR 3	ST 63	0-10	10YR3/3	dark brown silty clay	NCM
		10-16	10YR5/8	dark reddish brown clay	NCM
	ST 64	0-8	10YR5/8	dark reddish brown clay (sodden clay)	NCM
	ST 65	0-4	10YR5/8	dark reddish brown clay	NCM
	ST 66	0-1	10YR3/3	dark brown silty clay	NCM
		1-8	10YR5/8	dark reddish brown clay	NCM
	ST 67	0-2	10YR3/3	dark brown silty clay	NCM
		2-15	10YR5/8	dark reddish brown clay	NCM
	ST 68	0-6		mixed concrete & gravel (disturbed)	NCM

Appendix A: Shovel Test Record**Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York**

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 69	0-4		mixed concrete & gravel	NCM
		4-13	10YR5/8	dark reddish brown clay	NCM
	ST 70	0-2		mixed concrete & gravel	NCM
		2-3	10YR3/3	dark brown silty clay	NCM
		3-15	10YR5/8	dark reddish brown clay	NCM
	ST 71	0-4		mixed concrete & gravel	NCM
		4-10	10YR5/8	dark reddish brown clay	NCM
	ST 72	0-6		mixed concrete & gravel (impassible)	NCM
	ST 73	0-6		mixed concrete & gravel (impassible)	NCM
	ST 74	0-3		mixed concrete & gravel (impassible)	NCM
	ST 75	0-2	10YR3/3	dark brown silty clay	NCM
		2-11	10YR5/8	dark reddish brown clay	NCM
TR 4	ST 76	0-15		mixed concrete & gravel (impassible)	NCM
	ST 77	0-2	10YR3/3	dark brown silty clay	NCM
		2-6	10YR5/8	dark reddish brown clay	NCM
		6-16	10YR4/4	dark yellowish brown silty clay	NCM
	ST 78	0-13	10YR3/4	dark yellowish brown silty clay	NCM

Appendix A: Shovel Test Record

Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 79	0-9	10YR5/8	dark reddish brown clay mixed w/ brick debris	NCM
	ST 80			Not dug – root obstruction	
TR 5	ST 81	0-13		mixed soil – clay & lots of brick debris	NCM
	ST 82	0-2	10YR3/3	dark brown silty clay	NCM
		2-16	10YR5/8	dark reddish brown clay (2" water in STP)	NCM
	ST 83	0-5	10YR3/3	dark brown silty clay	NCM
		5-12	10YR5/8	dark reddish brown clay	NCM
	ST 84	0-13		mix of coal ash, clinker, brick & clay	
	ST 85	0-13		mix of coal ash, clinker, brick & clay	
TR 6	ST 86	0-6		Disturbed – mixed soil & debris	
	ST 87	0-18		Disturbed – mixed soil & debris	8 fragments whiteware
	ST 88			Not dug – disturbed	
	ST 89			Not dug – disturbed	
	ST 90			Not dug – disturbed	
TR 7	ST 91	0-11	10YR5/8	dark reddish brown clay	NCM
	ST 92	0-15	10YR3/4	Dark yellowish brown silty clay disturbed – mixed soil w/ coal ash Road	NCM

Appendix A: Shovel Test Record

Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 93	0-3	10YR3/3	dark brown silty clay	NCM
		3-15	10YR5/8	dark reddish brown clay	NCM
	ST 94			Not dug – root obstruction	
TR 8	ST 95			Not dug – root obstruction	
	ST 96			Not dug – root obstruction	
	ST 97	0-3	10YR3/3	dark brown silty clay	NCM
		3-11	10YR5/8	dark reddish brown clay (wet clay)	NCM
	ST 98	0-6	10YR3/4	dark yellowish brown silty clay Root obstruction	NCM
TR 9	ST 99			Not dug – root obstruction	
	ST 100	0-4	10YR3/4	dark yellowish brown silty clay Rock obstruction	NCM
	ST 101	0-4	10YR3/4	dark yellowish brown silty clay	NCM
		4-10	10YR5/8	dark reddish brown clay	NCM
	ST 102	0-2	10YR3/4	dark yellowish brown silty clay	NCM
		2-14	10YR5/8	dark reddish brown clay	NCM
TR 10	ST 103	0-2	10YR3/4	dark yellowish brown silty clay	NCM
		2-9	10YR5/8	dark reddish brown clay	NCM

Appendix A: Shovel Test Record

Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

Transect	STP Number	Depth in Inches	Munsell	Soil Description	Cultural Material Recovered
	ST 104	0-17		Disturbed – mixed soils w/ brick debris	
	ST 105			Not dug - disturbed	
	ST 106	0-12	10YR5/8	dark reddish brown clay	NCM
TR 11	ST 107	0-2	10YR3/3	dark brown silty clay	NCM
		2-10	10YR5/8	dark reddish brown clay	NCM
TR 12	ST 108	0-6		Disturbed – brick fragments	
TR 13	ST 109	0-14		Disturbed – coal/clinker Roadway	
TR 14	ST 110	0-6		Disturbed – coal/clinker Roadway	

APPENDIX B

MAPS, FIGURES & TABLES

MAP, FIGURE & TABLE LIST

Maps

- Map 1 Location Map including Project Area. USGS Topo. 7.5 Minute Series. Arthur Kill-New York Quad. Scale: 1:24,000
- Map 2: Location Map (taken from Hagstrom's 5 Borough Atlas) Scale: Approximately 3" = 1 Mile.

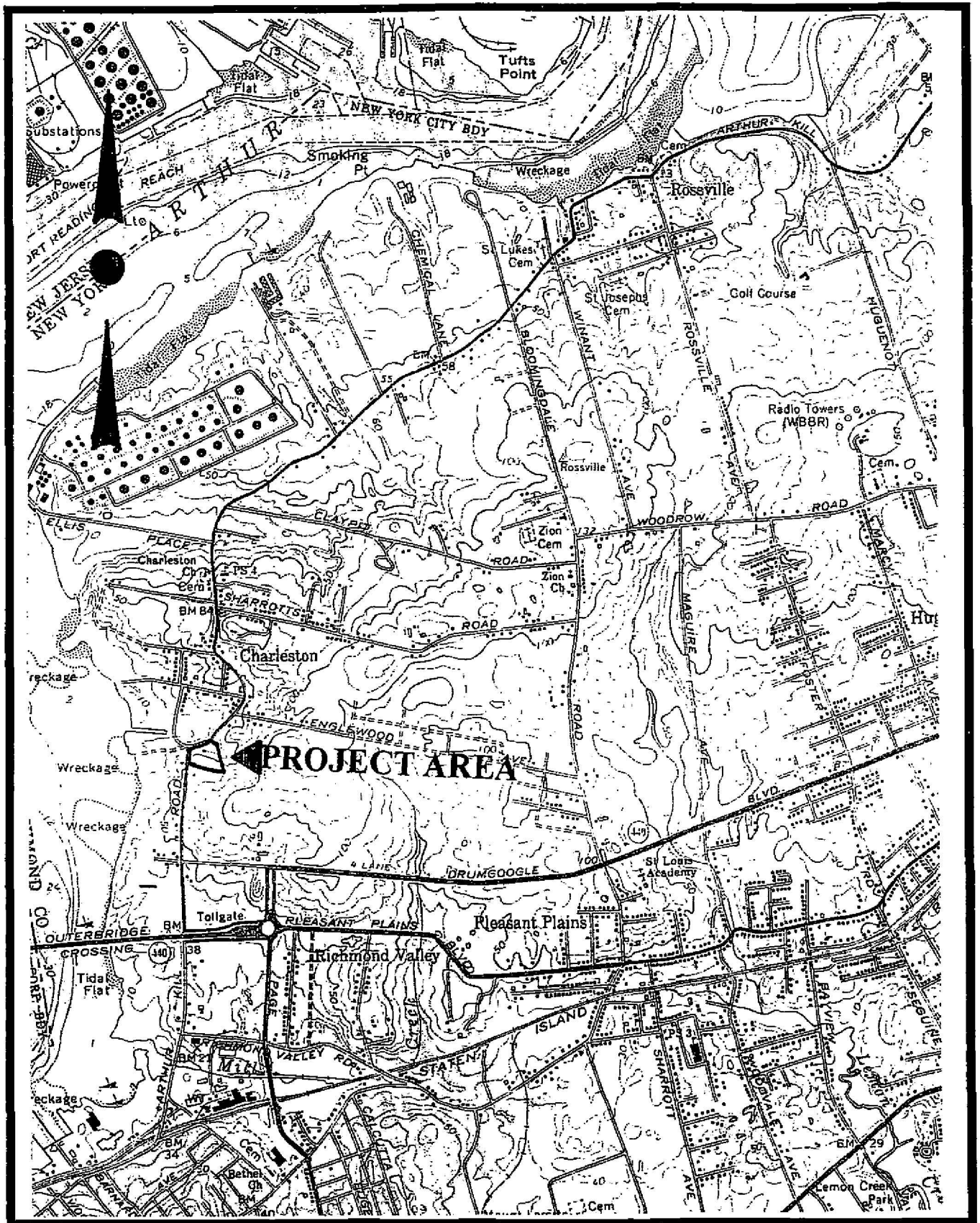
Figures

- Fig. 1 1913 Map of Kreischer Property showing Topography & Built Features, including drives (Scale: 1" = 150')
- Fig. 2 Excavated Paleo-Indian period sites & published fluted point finds (Snow, 1980: Fig. 3.1)

Figures from Stage 1A Literature Review & Sensitivity Analysis

- Fig. 5: Archaeological Sites in Vicinity of Project Area. USGS Topo. 7.5 Minute Series. Arthur Kill-New York Quad. Scale: 1:24,000. (taken from Boesch 1994)
- Table 1: Archaeological Sites within 0.5 to 1 Mile Radius of Project Area (compiled from research performed by CITY/SCAPE: Cultural Resource Consultants for other projects on Staten Island and resources identified in other reports, including Hunter Research 2000)
- Table 3: Identified Prehistoric Sites in Vicinity of Project Area (Referenced in Boesch 1994)

Map 1: Location of Project Area. USGS Topo. 7.5 Minute Series. Arthur Kill-New York Quad. (Scale: 1:24,000)
 Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York



Map. 2: Location Map. (taken from Hagstrom's 5Borough Atlas) Scale: Approximately 3" = 1 Mile
 Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York

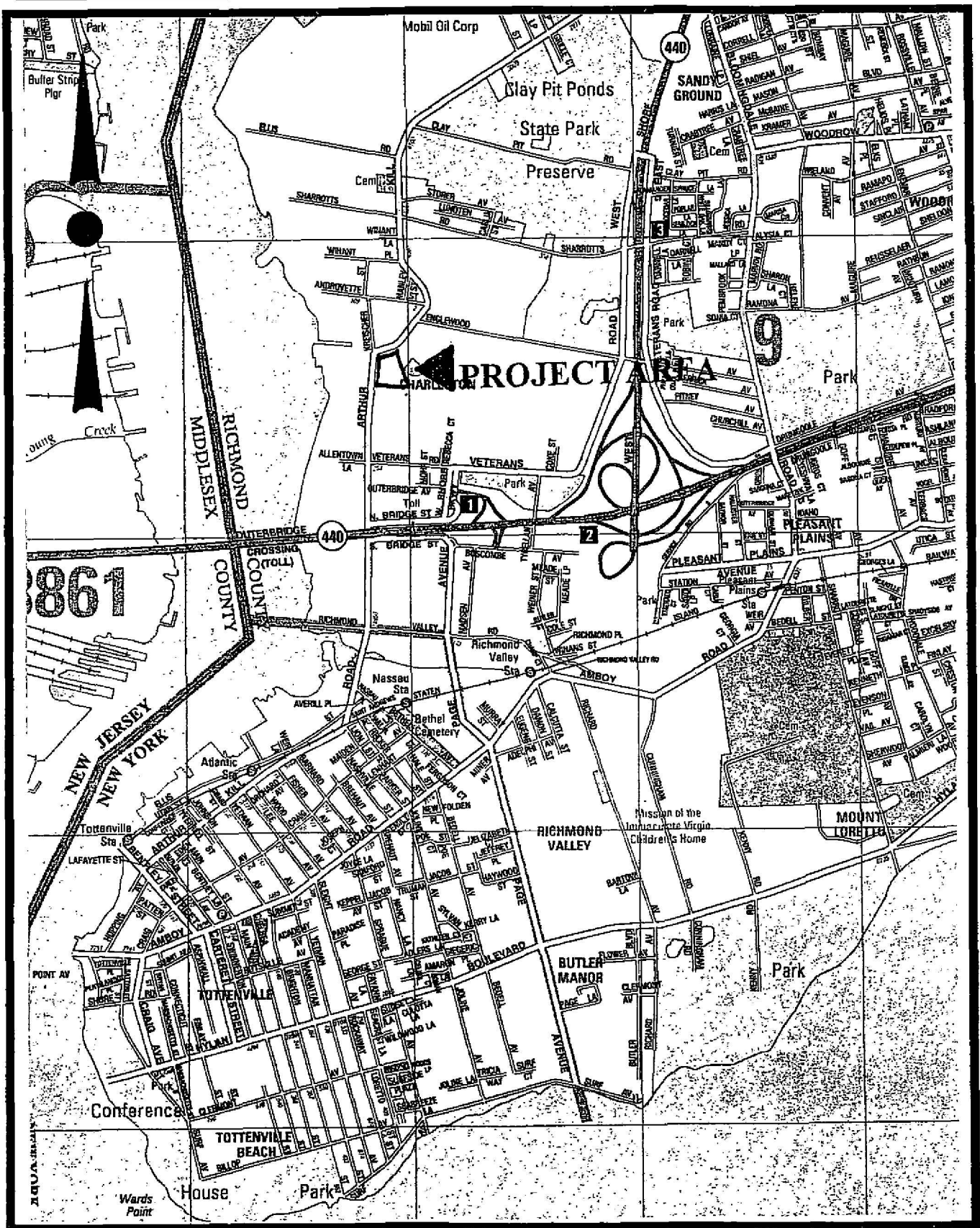


Fig. 1: 1913 Map of Kreischer Property showing Topography & Built Features, including drives (Scale: 1" = 150')
 Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York

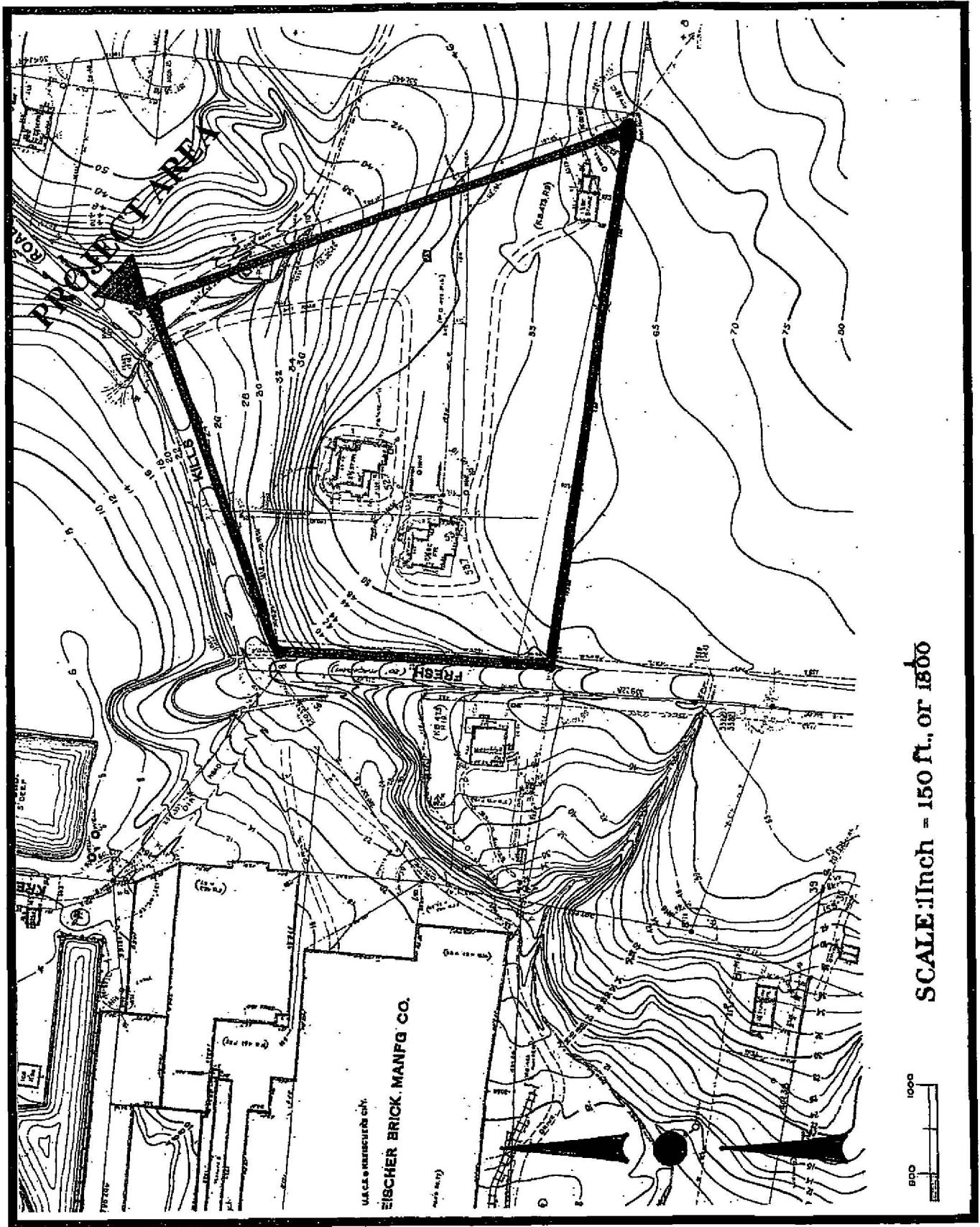


Table 1 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
 Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York

TABLE 1				
ARCHAEOLOGICAL SITES WITHIN 0.5 TO 1 MILE RADIUS OF PROJECT AREA				
OPRHP Number	NYSM Number	Site identification	Remarks	Recorder
		Brooklyn Quad		
A085-01-0026		Nassau Place	Prehistoric; buried site, 3 borings	Pickman & Yamin 1984
A085-01-0073	770	Canada Hill	Wld./Historic; surface collection of chert & quartz flakes, shell, hist. ceramics; 5 shallow test units; small pond formerly here	Williams 1967
A085-01-0079	771 (?)	Anderson Brick Works	Hist.; late 19 th century brick works	Pickman & Yamin 1984
A085-01-0080		Dubois House	Hist.; foundation & buried; shovel tests	Yamin & Pickman 1986
A085-01-0081		Liss House	Hist.; standing structure, shovel tests	Yamin & Pickman 1986
A085-01-0082		Porzio House	Hist.	Yamin & Pickman 1986
A085-01-0083		Winant House	Hist.	Yamin & Pickman 1986
A085-01-0115	742 743	Port Mobil (North & South)	Paleo, Woodland; disturbed, fluted ppts, Woodland burial (Kraft 1994); north of Ellis Place	Ritchie 1969 Kraft 1977
A085-01-0116		Winant	Prehist.; buried, shovel tests; 3 flakes	Yamin & Pickman 1986
A085-01-0118		T & J	Prehist.; surface & buried; shovel tests; 18 flakes, biface, hammer, FCR	Yamin & Pickman 1986

Table 1 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

OPRHP Number	NYSM Number	Site identification	Remarks	Recorder
A085-01-0121		Clay Pit Pond East	Prehist.; surface & buried; shovel tests; 31 flakes, mano, FCR	Pickman & Yamin 1978
A085-01-0122	744	Charlestown Beach	Paleo, Archaic, Early -Lt. Wldd; disturbed surface, 10 fluted ppts - Clovis & Cumberland	Sainz 1962 Salwen 1967, 1968, Kraft 1977
A085-01-0123		Clay Pit Road Bluff North	Archaic-Wldd.; surface, 7 flakes, biface	Pickman & Yamin 1978; Anderson 1967, Salwen, Boesch & Pickman 1986
A085-01-0124		Clay Pit Road	Prehist, Wldd; surface & buried; 40 flakes, ground stone; ceramic, FCR	Yamin & Pickman 1986
A085-01-0130		Park Headquarters	Prehist.; surface & buried, shovel tests, 2 flakes, ground stone, FCR	Yamin & Pickman 1986
A085-01-0131		Junkyard	Prehist., Late Wldd; surface & buried, shovel tests, 9 flakes, 2 Madison ppts., biface, ground stone, FCR	Yamin & Pickman 1986
A085-01-0878		Abraham's Pond A	Prehist.; surface, 14 flakes, ground stone, FCR	Yamin & Pickman 1986
		Abraham's Pond B	Prehist., surface, 27 flakes, FCR	Yamin & Pickman 1986
		Abraham's Pond C	Prehist.; buried, 1 flake	Yamin & Pickman 1986
A085-01-2378		Salamander	Prehist., buried, shovel tests, 3 flakes, FCR (?)	Roberts 1987

Table 1 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York

OPRHP Number	NYSM Number	Site identification	Remarks	Recorder
	4604 771	Kreischerville Camp Site (ACP-RICH-16)	Paleo-L. Wdld.; series of small sites between Pt. Mobil & Outerbridge Crossing; 10 fluted ppts.; Orient fishtail; pestle, net snkers, scrapers, axes, hammerstones, lithic debitage, FCR	Parker 1922, Anderson 1963, 1967.
0029		Ellis Street Hotel	Hist.; buried, 4 shovel tests	Pickman & Yamin 1984
0030	8192	Ward's Point Archaeological Conservation Zone	E. Archaic, M. Archaic, Transitional, M. Wdld, Late Wdld.; strata, 1-LW; 2-shells; 3-MW; 40T; 5-Kanawha, LeCroy, Kirk ppts., burials, features, shell midden	Ritchie & Funk 1971, Berger 1987, Pickman 1988
A085-01-0074	739 & 7323	Chemical Lane	L. Archaic, E. Wdld.; 2 loci excavated, s-broadsphear; N- strata, atlant, Bare Island & Poplar Island, Brewerton ppts.; same stream as Smoking Point; aka "Burial Hill", shell deposits, suggest hunting/fishing/shell fish gathering station	Sainz 1964 Salwen 1967 & others
A085-01-0075	738	Pottery Farm	M. & L. Wdld.; stratified, shell midden strata; much pottery (E. Wdld) collected; same stream as Smoking Point & Chemical Lane	Sainz Salwen 1967 & others
A085-01-0076	737	Smoking Point	L. Archaic, Transitional, Wdld.; 2 loci, knoll, shell midden w/ ceramic; fishtail ppt. discards; may represent permanent or semi-permanent village; disturbed by construction	Anderson Slew 1967; Salwen, 1976 & others
A085-01-0120		Gericke Organic Farm	Archaic to L. Wdld.; "spearheads" & triangular ppts. + lithic debitage & small amt of ceramics.	Anderson 1963 & Yamin & Pickman 1986

**Table 1 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York**

OPRHP Number	NYSM Number	Site identification	Remarks	Recorder
A085-01-2376		Sprague Avenue	Prehist.; surface & buried, 39 shovel tests, 1 unit; 102 flakes, scraper, FCR	Roberts 1987
A085-01-2377		Honey Blossom	M. Wldd., L. Wldd.; buried, 7 shovel tests, Jack's Reef ppt.	Manchester 1989
A085-01-2426		SICF - Area c-1	E. Wldd, L. Wldd.; buried, 1 shovel test, 4 units; Bare Island/Lamoka ppt.; North Beach ceramic; Levanna ppt., Bowman's Brook ceramic.	Pickman & Boesch Pickman 1988
A085-01-2427		Winant Homestead Cottage	Hist.; buried, 2 shovel tests, 1 unit; 19-20 th century domestic	Pickman & Boesch, 1988
		A7-MCB	Prehist.; non-local debitage	Historic Perspectives, 1996; John Milner Assoc. 2000
		C4-MCB-1	Prehist.; lithic debitage, possible quartz biface	Historic Perspectives, 1996; John Milner Assoc. 2000

Table compiled from research performed by CITY/SCAPE: Cultural Resource Consultants for other projects on Staten Island and resources identified in other reports, including Hunter Research 2000 (See Bibliography for some of the reports consulted)

Table 3 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
 Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York

TABLE 3			
IDENTIFIED PREHISTORIC SITES IN VICINITY OF PROJECT AREA (REFERENCED IN BOESCH 1994)			
No. (See Fig. 5)	Site Name	Cultural Period	Remarks
1	Huguenot site	Middle Woodland	Intersection of Huguenot & Arthur Kill Road adjacent to stream flowing into Arthur Kill. Decorated ceramics & diagnostic lithics
2	Cutting site	Paleo to M. Woodland	Paleo site discovered in c. 1917; fluted points, overlooks Arthur Kill; other cultural periods also present
3	Saint Luke's Cemetery	Archaic-L. Woodland	North edge of Arthur Kill Road near Winant Avenue; multicomponent site, lithic debris & ceramics.
4	Hammerstone Hill	Woodland	Between Winant Avenue & Bloomingdale Road; lithic debitage & ceramics; destroyed by construction of expressway
5	Harik's Sandy Ground	Archaic	Lithics indicate hunting & butchering; north of Wort Farm near expressway; lack of ceramics suggests Archaic
6	Smoking Point	Paleo (?) - Lt. Archaic/ Woodland	Stratified village site in Rossville overlooking Arthur Kill near mouth of small stream; only known site of permanent or semi-permanent village; shell midden; burials recovered
7	Chemical Lane	Archaic-Woodland	On same stream as Smoking Point site; prehistoric burial found; lithics & ceramics; possible hunting/fishing/shell fish station
8	Pottery Farm	Lt. Archaic/Transitional- Md.-Lt. Woodland	Also on stream with Smoking Pt & Chemical Lane; stratified; shell midden; pottery, stone tools & lithic debitage; pottery may be E. Woodland
9	Port Socony site North	Paleo-Woodland	Lithics & ceramic sherds, probable temporary hunting camp

**Table 3 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
Kreischer House Site, 4500 Arthur Kill Road, Borough of Staten Island, Richmond County, New York**

No. (See Fig. 5)	Site Name	Cultural Period	Remarks
10	Gerike Organic Farm	Archaic-Woodland	Archaic "spearheads" & Lt. Woodland triangular ppts, lithic debitage & some ceramics
11	Wort Farm	Lt. Archaic-Lt. Woodland	NE of Woodrow Road & Winant Avenue near source of Tappen's Brook; apparently large stratified camp site occupied seasonally over long time; weapons, hearths, destroyed
12	Rossville Campsite	Woodland	Ceramics, FCR, lithic debitage, oyster shell; dated to Bowman's Brook period
13	Clay Pit Pond Road	Archaic-Woodland	Both sides of road extending from Arthur Kill Road to east side of expressway; little information available
14	Port Socony South (Port Mobil Hill)	Paleo-Indian	Bluffs north of Ellis Place, fluted ppts. & lithic debris associated with hunting
15	Charleston Beach	Paleo-Lt. Woodland	Recovered from beach & buried beach margin; may be in situ or eroded from bluff before development of marsh (related to sea level rise)
16	Kreischerville Campsites	Paleo-Lt. Woodland	Series of small camps between Pot Mobil & Outerbridge Crossing; 10 fluted ppts., Orient Fishtail, pestle, large net-sinkers, scrapers, axes, hammerstones, lithic debitage & FCR. Whether in situ or eroded from nearby bluffs is not know.
17	Canada Hill	Woodland	Shell & lithic debitage, bounded by Drumgoole Blvd, Arthur Kill Road, Englewood Ave., & West Shore Expressway, underlain by red clay, small pond formerly located on hill (likely clay pit pond)
21	Rossville campsite	Woodland	Second camp north of Rossville campsite 1 (Parker 1922)
43	Sharrott Estates	Lt. Woodland	Small intermittent hunting camp, perhaps satellite camp for Sandy Brook site; west of Bloomingdale Rd. betwn. Sharrott Rd & Clay Pit Road

Table 3 (from CITY/SCAPE: Cultural Resource Consultants Stage 1A Literature Review & Sensitivity Analysis)
 Kreischer House Site. 4500 Arthur Kill Road. Borough of Staten Island. Richmond County, New York

No. (See Fig. 5)	Site Name	Cultural Period	Remarks
44	Sandy Brook	Lt. Archaic-Lt. Woodland	West of Sandy Brook betwn. Pleasant Plains & Journey Ave. Described as "large prehistoric base camp."
50	Clay Pit Pond Park sites	Archaic-Woodland	Series of small, temporary camp sites along bluff bordering Tappen Brook
78	Indian Field	Woodland	Traces of Native American occupation (Parker 1922)
56	Unnamed site	Lt. Woodland	Small camp associated with shell midden, lithic debitage & ceramic sherds
91	Ultramarine site	Prehistoric	Lithic debitage, ceramics, charcoal; may be associated with Smoking Point
92	Unnamed site	Prehistoric	"Indian implements" reported
110	Benedict Creek/Fresh Kills	Prehistoric	Scatter of Native American artifact along creek
113	Unnamed site	Woodland	Small camp site at Carlton Blvd. & Arthur Kill Road
116	Outerbridge	Prehistoric	Native American implements on beach & bluff; probably related to Kreischerville sites
118	Unnamed site	Prehistoric	Reportedly small village site inland from Ellis Point
119	Unnamed site	E. Woodland	No information except cultural affiliation

(Key to Fig. 5, derived from Boesch 1994)

APPENDIX C

PHOTOGRAPHS



Photo 1: View of Kreischer House looking north. Field technicians in foreground.



Photo 2: Field crew laying out transects on knoll behind Kreischer House. View to northwest.



Photo 3: Excavating transects one, two and three at rear of Kreischer House. View to northwest.



Photo 4: View from north to south behind Kreischer House. Vegetation in foreground indicates disturbance.



Photo 5: In some loci sodden orange-red clay would not pass through screens. (Also Photo 13)



Photo 6: Relatively intact sediments showing a topsoil stratum.



Photo 7: Disturbed parking area south of Kreischer House showing gravel/cement paving. View to west.



Photo 8: Gravel paving. Facing east toward wet area.



Photo 9: Shovel test showing gravel/cement paving underlain by disturbed soils overlying clay substratum.



Photo 10: View to east showing clear vegetation line where wet area begins (arrow). Building in background is small shed located behind Kreischer House.

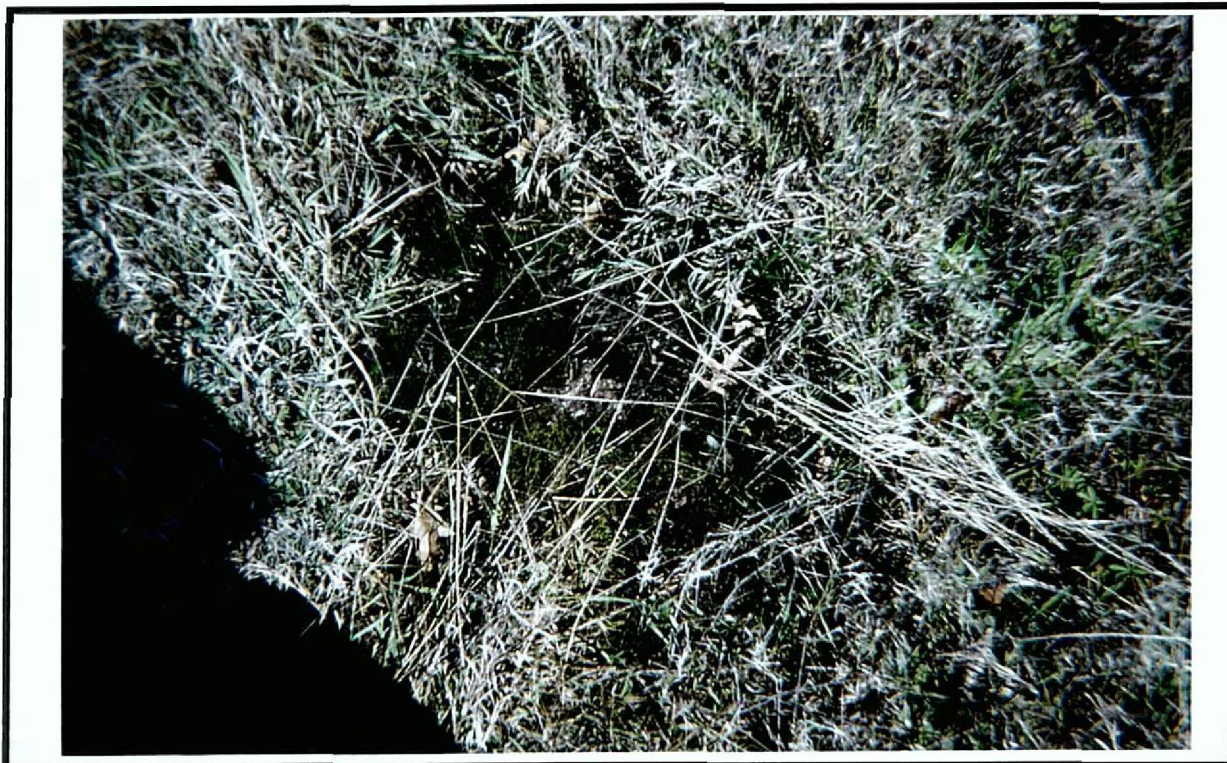


Photo 11: Moss and water on wet area where topsoil has been removed.



Photo 12: Edge of gravel parking area where it meets wet, disturbed area in southeast corner.



Photo 13: Sodden clays would not pass through screen.



Photo 14: In many shovel tests water percolated in to a depth of up to 9 inches.



Photo 15: View of trees pedestaled above present land surface. Topsoil has been removed to depth of 10 inches. Arrow indicates current land surface. Scrub grass is visible.



Photo 16: View of trees pedestaled above present land surface. Topsoil has been removed to depth of 10 inches. Arrow indicates current land surface. Scrub grass is visible.



Photo 17: View of slope east of Kreischer House. Outbuilding currently located on site is on right of photo.



Photo 18: Transects on east side of Kreischer House sloping to Arthur Kill Road. View to west.

LEGEND

WOOD FENCE	---
WIRE FENCE	---
SEWER	---
WATER	---
GAS	---
ELECTRIC	---
TELEPHONE	---
FIRE ALARM	---
CATCHBASIN	---
FIRE HYDRANT	---
TREE & TRUNK DIAMETER	---
CURB CUT	---
STREET LINE	---
PROPERTY LINE & DIMENSION	---
MANHOLES	---

MISCELLANEOUS	
O.T.S. TRAFFIC SIGN	+
O.F.A. FIRE ALARM	+
O.M.B. MAILBOX	+
O.T.E. TELEPHONE BOOTH	+
+	TRAFFIC LIGHT
+	POWER POLE
+	STREET LIGHT
+	STREET LIGHT ON POWER POLE

- NOTES:
1. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
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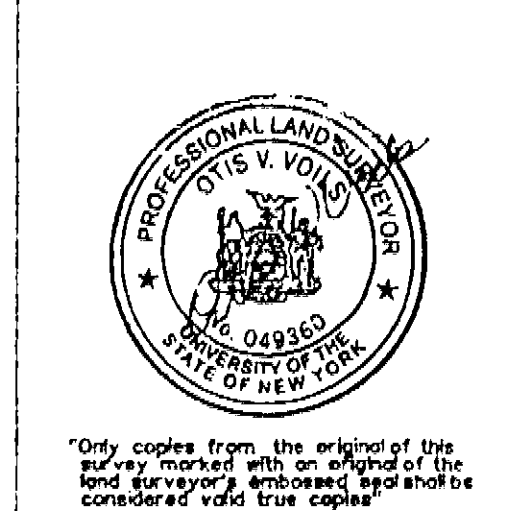
KEY
--- TRANSECT
● SHOVEL TEST
--- HISTORIC FEATURE NO LONGER EXTANT

KREISCHER HOUSE SITE
4500 Arthur Kill Road, Borough of Staten Island,
Richmond County, New York

Stage IB Archaeological Field Reconnaissance Survey
FIELD RECONNAISSANCE MAP

Scale: 1 Inch = 20 Feet

Prepared by:
CITYSCAPE, Cultural Resource Consultants
726 Canal Street, Brooklyn, New York 11215



SCALE: 1" = 20'	TAX MAP INFORMATION: SEC. 30 VOL. 1	BOROUGH OF STATEN ISLAND
SURVEY: 3616 XL	BLOCK 7485, LOTS 114, 115 & 126	CITY OF NEW YORK
F.B. # 112472 DC		SURVEYED: FEBRUARY 2, 2001
REVISIONS: 3/28/01 Visual Corridor		WOHL & OMARA
4/02/01 Pt. of Beg.		CIVIL ENGINEERS AND LAND SURVEYORS
5/10/01 Visual Corridor		544 VANDERBILT AVENUE
12/08/01 Subdiv		S.I., N.Y. 10304 C78M448-7456
		FOUNDATION LOCATED:
		FINAL LOCATION:
		THIS SURVEY IS CERTIFIED TO: