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REPORT ON
ARCHAEOLOGICAL MONITORING
DURING TRENCH EXCAVATIONS
FOR LIGHTENING RODS
IN NOLAN PARK
ON GOVERNORS ISLAND
NEW YORK, NEW YORK



Trench at Tree 346 facing east toward the Admiral's House

Prepared for: Bartlett Tree Experts
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EXECUTIVE SUMMARY

This is a report on the archaeological monitoring of two shallow hand excavated trenches that were dug for the placement of lightning protection in two trees in Nolan Park on Governors Island, New York City. Nolan Park is within the Governors Island National Historic Landmark District and the New York City Landmark district. This report is being prepared to comply with environmental review regulations and meets the standards of both the New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC). The work was conducted for the Bartlett Tree Experts by Linda Stone, RPA.

Previous research indicated the project had the potential to encounter archaeological resources relating to both Native American occupation and to pre-1813 military use. No archaeological deposits were identified in the trench at Tree 322. Part of a stone feature was identified in the trench for Tree 346. Excavation stopped and the trench was rerouted to preserve the feature. The diagnostic artifacts recovered from the stratum that contained the feature reflect an early- to mid-nineteenth century time frame. This date coincides with the construction and early use of Fort Jay. The location of the Tree 346 trench is in close proximity to the former Carpenters Shop depicted on Mangin's 1813 plan. Therefore it is most likely the stone feature bears some relationship to the Carpenters Shop. However further archaeological excavation would be required to make a determination. Archaeological evaluation is recommended should further ground disturbing actions be planned in that vicinity.

SHPO MANAGEMENT SUMMARY FORM

SHPO Project Review Number (if available):

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): *GIPEC*

Phase of Survey: *1B*

Location Information

Location: *Governors Island, New York City – Nolan Park*
Minor Civil Division: *n/a*
County: *New York*

Survey Area (Metric & English) - Monitoring of 2 trenches

Length: *17.5 feet (5.3 m) and 18.5 feet (5.6 m)*
Width: *about 1 foot (30.5 cm) each*
Depth: (when appropriate): *1.2 - 2 feet (37 - 61 cm)*
Number of Acres Surveyed: *n/a*
Number of Square Meters & Feet Excavated (Phase II, Phase III only): *n/a*
Percentage of the Site Excavated (Phase II, Phase III only): *n/a*

USGS 7.5 Minute Quadrangle Map: *Jersey City, NJ - NY*

Archaeological Survey Overview

Number & Interval of Shovel Tests: *n/a*
Number & Size of Units: *2 shallow trenches (see above for size)*
Width of Plowed Strips: *n/a*
Surface Survey Transect Interval: *n/a*

Results of Archaeological Survey

Number & name of prehistoric sites identified: *n/a*
Number & name of historic sites identified: *1 stone feature*
Number & name of sites recommended for Phase II/Avoidance: *1 stone feature*

Results of Architectural Survey

Number of buildings/structures/cemeteries within project area: *n/a*
Number of buildings/structures/cemeteries adjacent to project area: *n/a*
Number of previously determined NR listed or eligible buildings/structures/cemeteries/districts: *n/a*
Number of identified eligible buildings/structures/cemeteries/districts: *n/a*

Report Author(s): *Linda Stone, RPA*

Date of Report: *April 3, 2007*

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INTRODUCTION

The Governors Island Preservation and Education Corporation (GIPEC) has conducted improvements on Governors Island that include the placement of lightening rods in two trees in Nolan Park (see Figures 1 – 3). Nolan Park is within the Governors Island National Historic Landmark District and the New York City Landmark district. Nolan Park is home to three buildings listed individually on the National Register of Historic Places as well as fifteen other structures built during the mid- to late- nineteenth century.

GIPEC, the New York State Historic Preservation Office (SHPO) and the New York City Landmarks Preservation Commission (LPC) had previously indicated archaeological monitoring of the lightening rod trenches would be appropriate for this project. Appendix A is the approved archaeological work plan for this project.

This report presents the findings of archaeological monitoring conducted for lightening rod trenches. The work has been done in accordance with the guidelines of both the New York State Office of Parks Recreation and Historic Preservation and the New York City Landmarks Preservation Commission. This report was prepared by Linda Stone, RPA for Bartlett Tree Experts. The archaeological fieldwork described in this report was conducted by Ms. Stone on December 1, 2006. The author would like to acknowledge the assistance of Kevin Kenney of Bartlett Tree Experts and Claire Kelly of GIPEC for facilitating the archaeological component of this project.

SITE HISTORY AND ARCHAEOLOGICAL POTENTIAL

Pre-Contact Period

Previous testing in Nolan Park recovered archaeological resources from the Pre-Contact period in numerous locations within contexts that had been historically affected by landscaping. "No intact Native American features or soil anomalies were identified" (PAL 1997: 63-64). However, there are three documented Native American sites on Governors Island and Native American cultural material has been found on the Island in many other redeposited contexts as well (PAL 1996: 11; Stone 2006: 10; UMass 2003: 110-111).

Historic Period

The Phase 1A Archaeological Assessment of Governors Island indicates Nolan Park may contain barracks and other structures depicted on the 1813 Mangin Map (PAL 1996: 17). Figure 4 (Mangin) depicts the Barracks, Carpenter Shop and other structures within and in close proximity of the current Nolan Park. The location of Tree 346 is very near the former Carpenter Shop. The Barracks are somewhat further away from Tree 322. "These were barracks designed for those building Fort Jay. It was later used as enlisted quarters, and later still as a quarantine hospital". The structure was built in about 1813 and destroyed in 1870 (UMass. 2003: 121). Neither the Phase 1A Assessment nor the Archaeological Overview and Assessment of Governors Island provide any details about the former Carpenter Shop (PAL 1996; UMass 2003). One would presume it was also built and used during the construction of Fort Jay, based on its proximity. Potential archaeological resources may include structural remains or other deposits associated with the Carpenter Shop and, to a lesser extent, the Barracks.

METHODOLOGY AND RESULTS

This section of this report describes the work at each trench and the findings. The scope of work for archaeological monitoring is attached as Appendix A. It included the ability of the archaeologist to temporarily halt excavations should any potentially significant archaeological resources be encountered during contractor excavations. The protocol also allowed for the trenches to be rerouted to avoid archaeological features. All excavations were preceded by detection for unexploded ordinance (UXO) hazards. Trenches were also rerouted when potential UXO targets were detected. Trench rerouting was possible because the lightening protection did not require straight trenches.

The trenches were hand excavated by the contractor using a shovel and/or pick. A small pit was excavated at the end of each trench furthest away from the trees. These pits were two to three feet (61 – 90 cm) deep and about two and a half feet (76 cm) in diameter. Stratigraphy throughout was recorded using comparison to the Munsell Soil Color Charts and is summarized below. The elevations were recorded as depth below ground surface (bgs).

A few ceramic sherds were recovered from the backdirt of Tree 322. Ceramic and glass sherds were recovered from the Tree 346 trench. The recovered artifacts were washed and rebagged in plastic zip bags labeled "Governors Island Lightening Rods" and the tree number. The artifacts were individually labeled "GILR" and either 322 or 346. The artifact inventory is attached here as Appendix B.

Tree 322

The trench at Tree 322 was 17.5 feet (5.3 m) long and about one foot (30 cm) wide. It was located on the south side of Tree 322 (see Figure 3). The excavation depth of the trench was 1.2 feet (37 cm). The pit at the southern end of this trench was three feet (90 cm) deep and two and a half feet (76 cm) in diameter (see Photo 1).

Topsoil and turf were generally 0.9 feet (27 cm) bgs. However, this stratum was somewhat shallower near the tree, as would be expected due to the growth action of the tree. The topsoil was 10 YR 3/2 very dark grayish brown silty sand. This was underlain with 7.5 YR 4/3 brown sand that continued to the base of excavation.

The soils were generally clean with no stones and very few artifacts. Several sherds of white ware were recovered from the backdirt. One similar sherd was recovered from the trench's west profile at about 1 foot (30 cm) bgs. The similarity of these sherds would indicate they were part of the same deposit, however there are no mends among them.

Tree 346

The Tree 346 trench was on the northwest side of the tree. It was 18.5 feet (5.6 m) long and about 0.8 feet (24 cm) deep near the tree and 1.2 feet (37 cm) near the northern end of the trench. The pit at the end of this trench was two feet (61 cm) deep and two feet in diameter.

The topsoil was 10 YR 3/2 very dark grayish brown sandy loam, similar to that in the Tree 322 trench. Topsoil extended to 0.7 feet (31 cm) bgs, slightly shallower than in the Tree 322 trench. It was underlain with 7.5 YR 4/3 brown silty sand that contained some gravel. This stratum continued to the base of excavation. It was not as pristine as the basal stratum of the Tree 322 trench. Here this stratum appeared more like an interface between the topsoil and an underlying cleaner deposit which was never reached here, but likely similar to the soil documented in the base of the Tree 322 trench.

Excavation of the Tree 346 trench was rerouted to avoid a stone feature located six feet (183 cm) north of the tree (see Figure 5 and Photo 2). The feature was buried 0.8 feet (24 cm) bgs. It was comprised of closely laid stones and no mortar. The surface of the stones was at a uniform elevation. A total of six stones were fully or partially exposed. The feature extended into the north and east profiles of the trench so it is not possible to determine the extent of it in those directions. The topsoil above and near the stone feature was slightly shallower than in the remainder of the trench; about 0.5 feet (15 cm). An interface of mottled soil between the two strata was also observed in this area.

Most of the artifacts observed and recovered from the Tree 346 trench were found within the interface stratum. A bottle base was recovered from 4.5 feet (137 cm) south of the pit at the northern end of the trench at 0.8 feet (24 cm) bgs (see Photo 3). Several ceramic sherds were also recovered from the trench in this vicinity (see Photo 4). A bottle finish was recovered from 1.2 feet (37 cm) bgs at eight feet (244 cm) north of Tree 346. In addition to the recovered ceramic and glass sherds, several fragments of brick and clam shell, as well as badly corroded nails, were observed during excavations of the Tree 346 trench, but not retained.

CONCLUSIONS AND RECOMMENDATIONS

Two small trenches were excavated for installation of lightening protection in Nolan Park on Governors Island. These trenches were archaeologically monitored. The Tree 322 trench was the southern most of the two and located closer to the middle of Nolan Park. No archaeological features were encountered during monitoring of this trench. The Tree 346 trench was located toward the northern end of Nolan Park. Excavation for this trench exposed part of a stone feature. Excavation was stopped and the trench rerouted to avoid damage to the feature. Several diagnostic artifacts were recovered from this trench, from the stratum in which the feature was buried and perhaps built.

The date ranges of manufacture for the artifacts recovered from the Tree 346 trench reflect an early- to mid-nineteenth century time frame. This is the stratum associated with the stone feature and therefore, it may be inferred the feature dates from that time period. This date coincides with the construction and early use of Fort Jay. The location of the Tree 346 trench is in close proximity to the former Carpenters Shop (see Figure 4). Therefore it is most likely the stone feature bears some relationship to the Carpenters Shop. However further archaeological excavation would be required to make a determination. Should additional ground disturbing actions be planned near the stone feature, they should be preceded by archaeological evaluation, and possibly data recovery, of this feature.

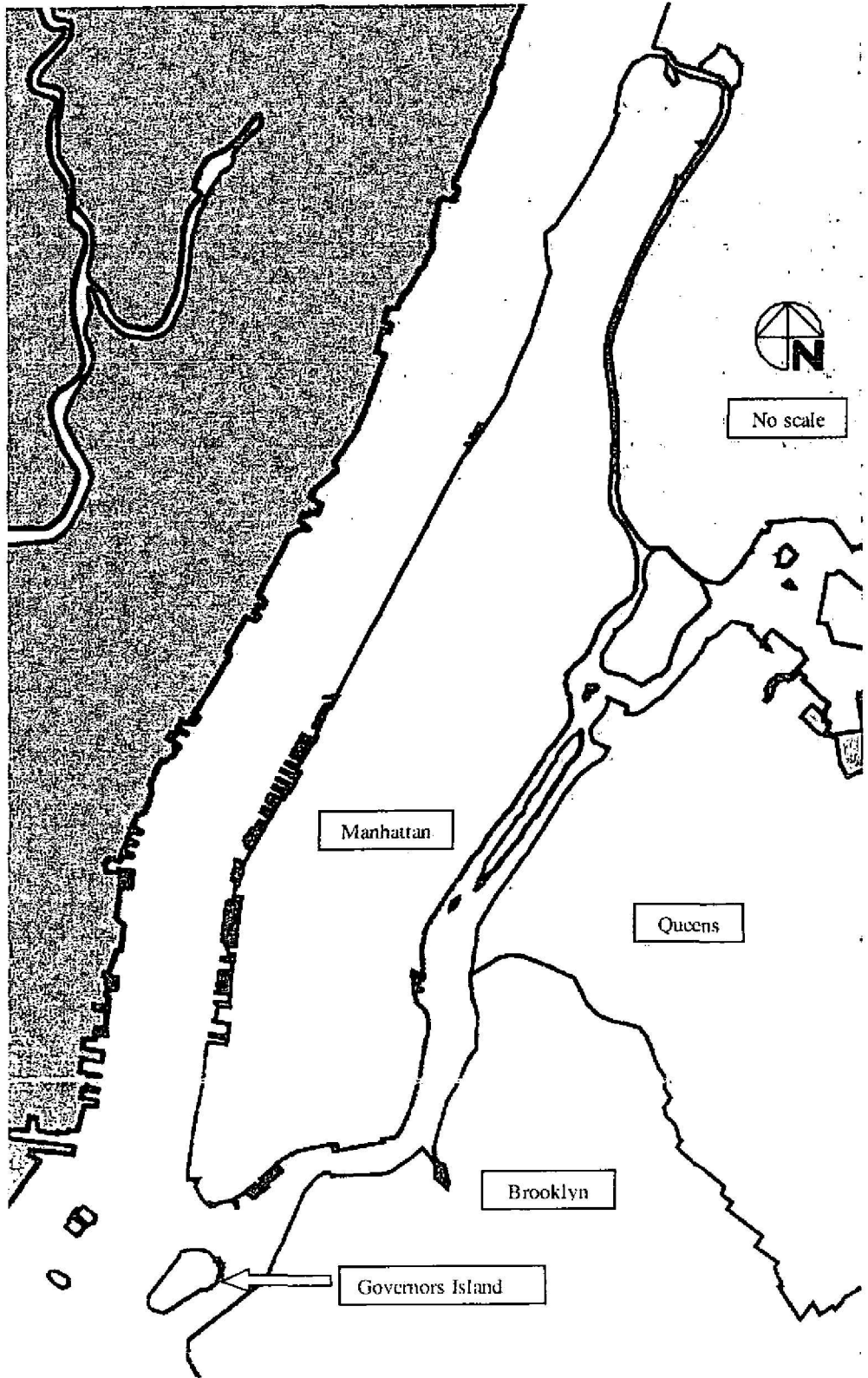


Figure 1 Location of Governors Island in New York City.



Figure 2 Location of Nolan Park within Governors Island.

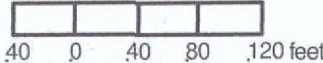
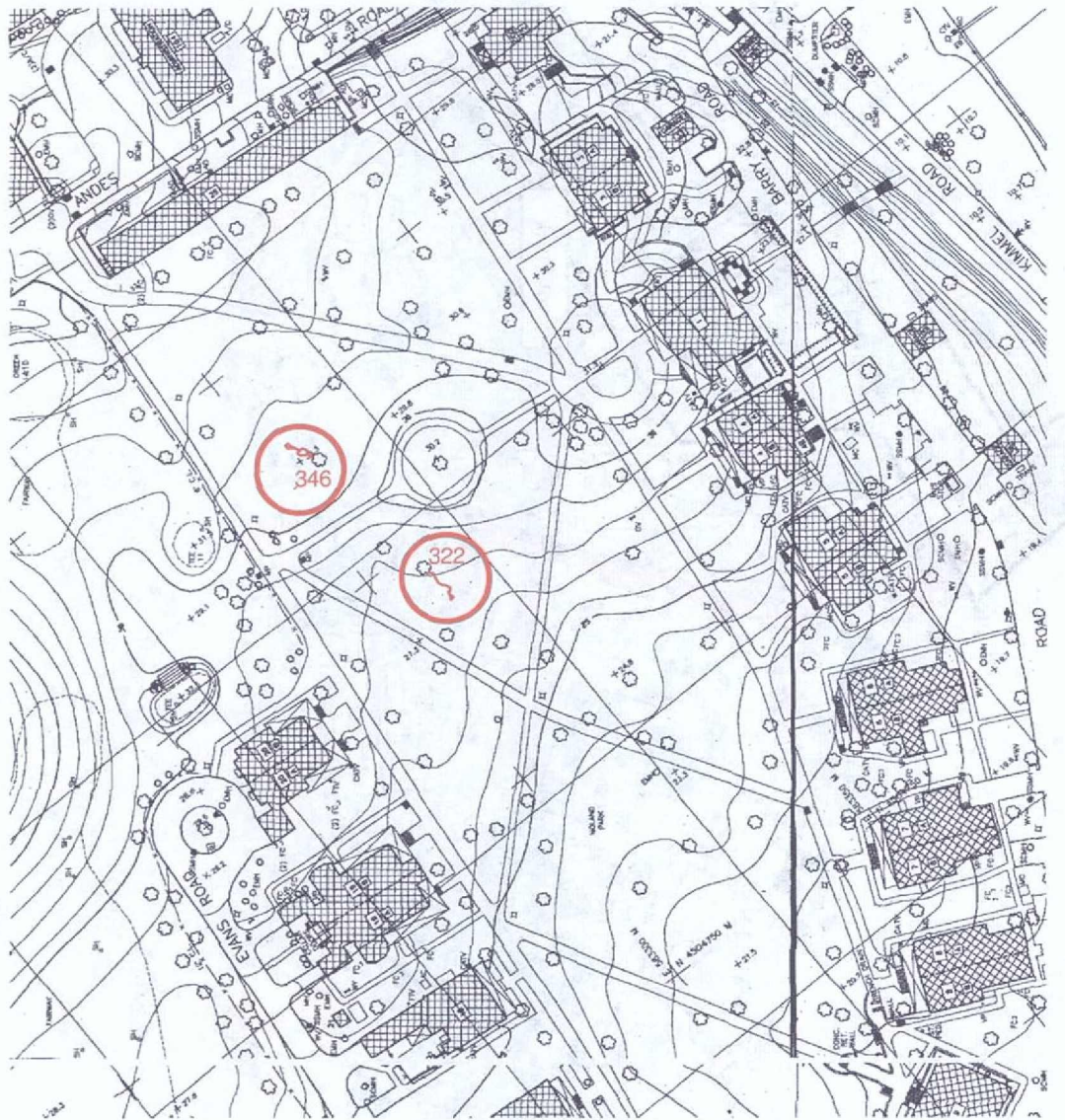


Figure 3 Location of the lightning rod trenches in Nolan Park shown on the Governors Island topographic survey.

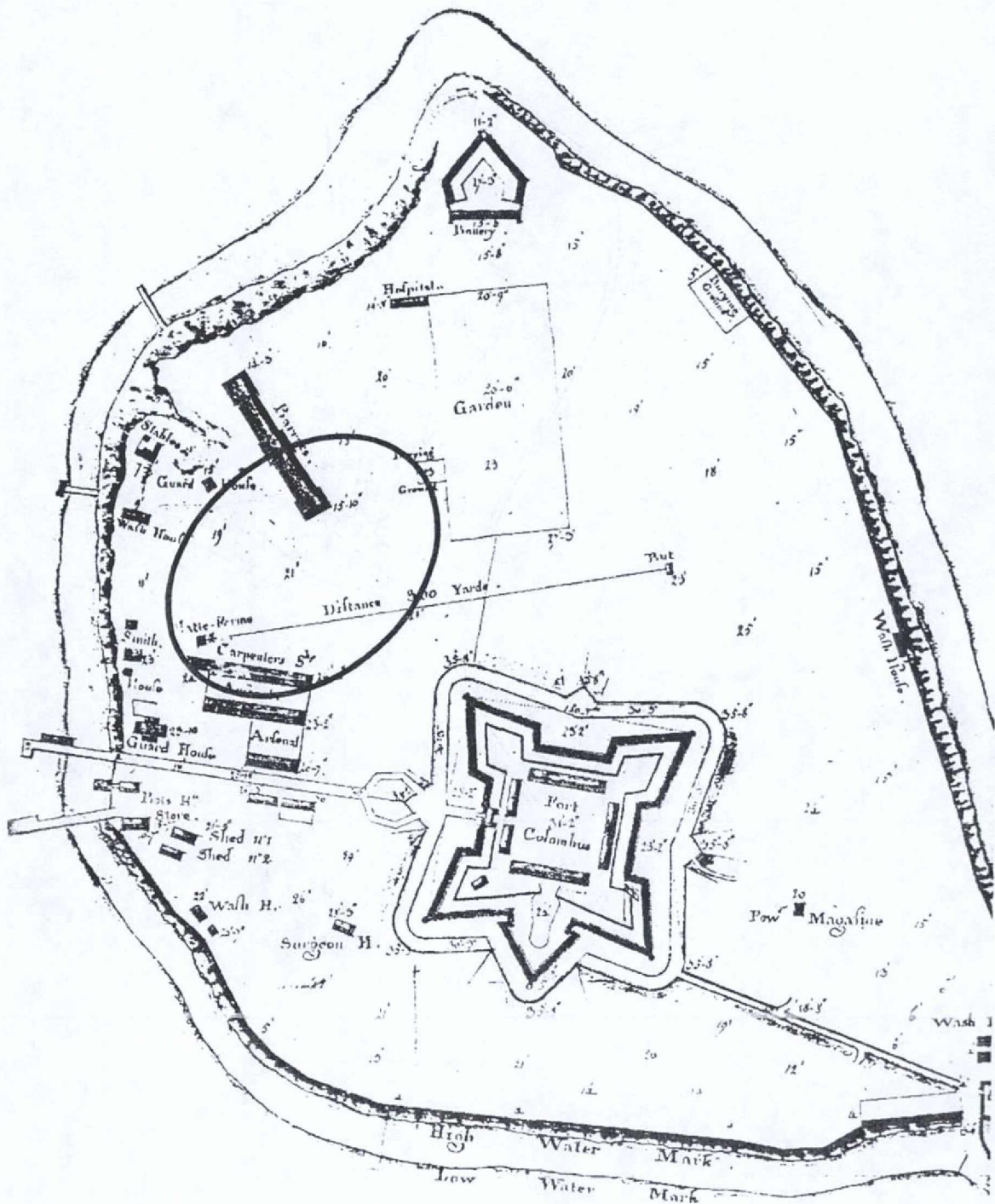


Figure 4 Mangin's 1813 Map of Governors Island with what is now Nolan Park encircled.

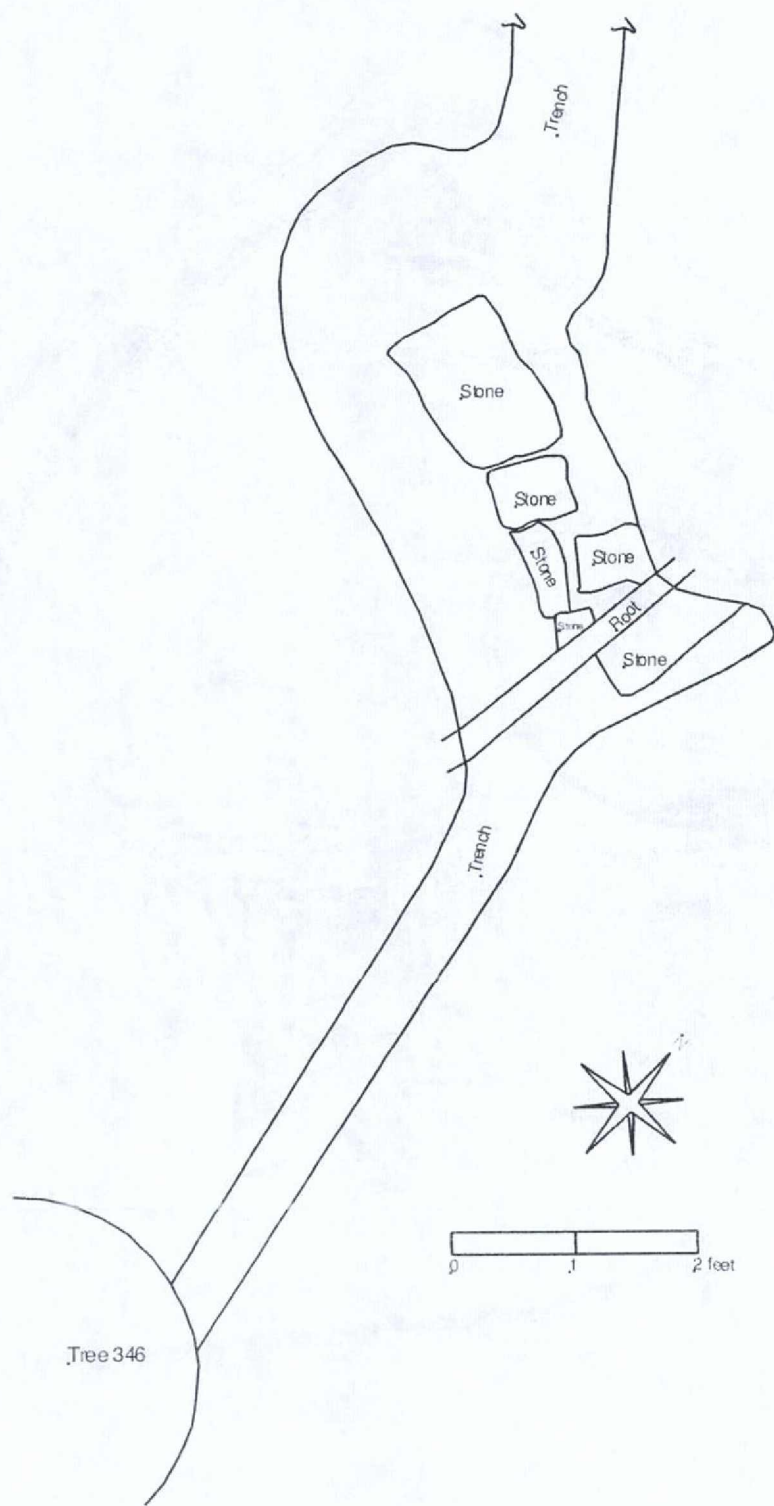


Figure 5 Plan view of the stone feature found in the Tree 346 trench.



Photo 1 Completed trench at Tree 322 facing south.



Photo 2 Completed trench at Tree 346 facing southeast showing the stone feature.



Photo 3 Glass recovered from the Tree 346 trench.



Photo 4 Ceramic recovered from the Tree 346 trench.

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APPENDIX A
SCOPE OF WORK

SCOPE OF WORK FOR
ARCHAEOLOGICAL MONITORING
DURING TRENCH EXCAVATIONS
FOR LIGHTENING RODS
ON GOVERNORS ISLAND
NEW YORK, NEW YORK

October 10, 2005

The Governors Island Preservation and Education Corporation (GIPEC) is preparing to install *lightening* rods near Building 18 & 25 on Governors Island (see Figure 1 for location). This area is adjacent to the Governors Island National Historic Landmark and within New York City Landmark district. Each trench will be about nine feet long and eighteen inches deep.

The proposed work is in the grassy lawn in the center of Nolan Park. The areas have not been previously disturbed by the existing utilities.

The archaeological work recommended here will be conducted in a manner consistent with the New York Archaeological Council's Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State (1993) and their Monitoring Guidelines (adopted 2002), as well as the New York City Landmarks Preservation Commission's Guidelines for Archaeological Work in New York City (2002).

Previous archaeological research done on Governors Island indicates the potential to encounter previously unrecorded Native American archaeological resources is "extremely high" in locations which have not been since disturbed (U.Mass. 2003: 132,143). Other potential resources include material from the Dutch period, the British occupation, the French and Indian War Garrison, the Revolutionary War, post-1812 military uses (U.Mass 2003: 133, 144).

Because the trenches will only be a foot deep, archaeological monitoring in lieu of preconstruction testing is recommended. Monitoring will document the nature of the deposits in the alignment. In the case that an *in situ* archaeological deposit is encountered, the surrounding deposits will be archaeologically excavated within the footprint of the planned trench, to assess the extent and significance of the find. Should the find be potentially eligible for listing on the National Register of Historic Places, consultation with SHPO and LPC will occur to consider available options, including project redesign.

The monitoring protocol gives the archaeologist authority to halt contractor excavations to document any archaeological resources, should they be encountered. Should this be necessary, excavation will be temporarily suspended while the archaeologist hand excavates, measures and records the find(s). The amount of time necessary for this will be relative to the extent of the find(s) and the weather conditions. A minimum of one half hour will be needed for each trench segment where an archaeological resource is encountered. Should an archaeological feature be encountered, it will be archaeologically exposed. Measurements will be taken for field drawings and the find(s) will be *photographed*. If the feature can be removed by hand it will be and any associated soils will be screened.

Should the potential findings be determined to be archaeologically significant, the archaeologist will contact GIPEC, who will consult with the SHPO and the Landmarks Preservation Commission (LPC) and the State Museum to offer the opportunity to visit the site. As with any historically important site, significant archaeological finds could be incorporated into interpretive programs and such recommendations would likely be made for Governors Island if such finds are encountered, possibly altering construction plans midstream. Any changes to the construction plan will also be archaeologically evaluated. The State Museum of New York will be contacted immediately at such a time as any artifacts are uncovered in order to determine their proper management.

Standard methods of artifact processing, labeling, identification, evaluation and documentation will be done on the recovered materials. Upon completion of all archaeological work specified in this scope, the consultant will provide a written report to Turner Construction (the contractor), GIPEC, the SHPO and the Landmarks Preservation Commission detailing the results of the field testing and monitoring. Map(s) at a scale of 1"=20' will be provided indicating results from such investigations with locations of shovel tests and of archaeological resource recovered, if any.

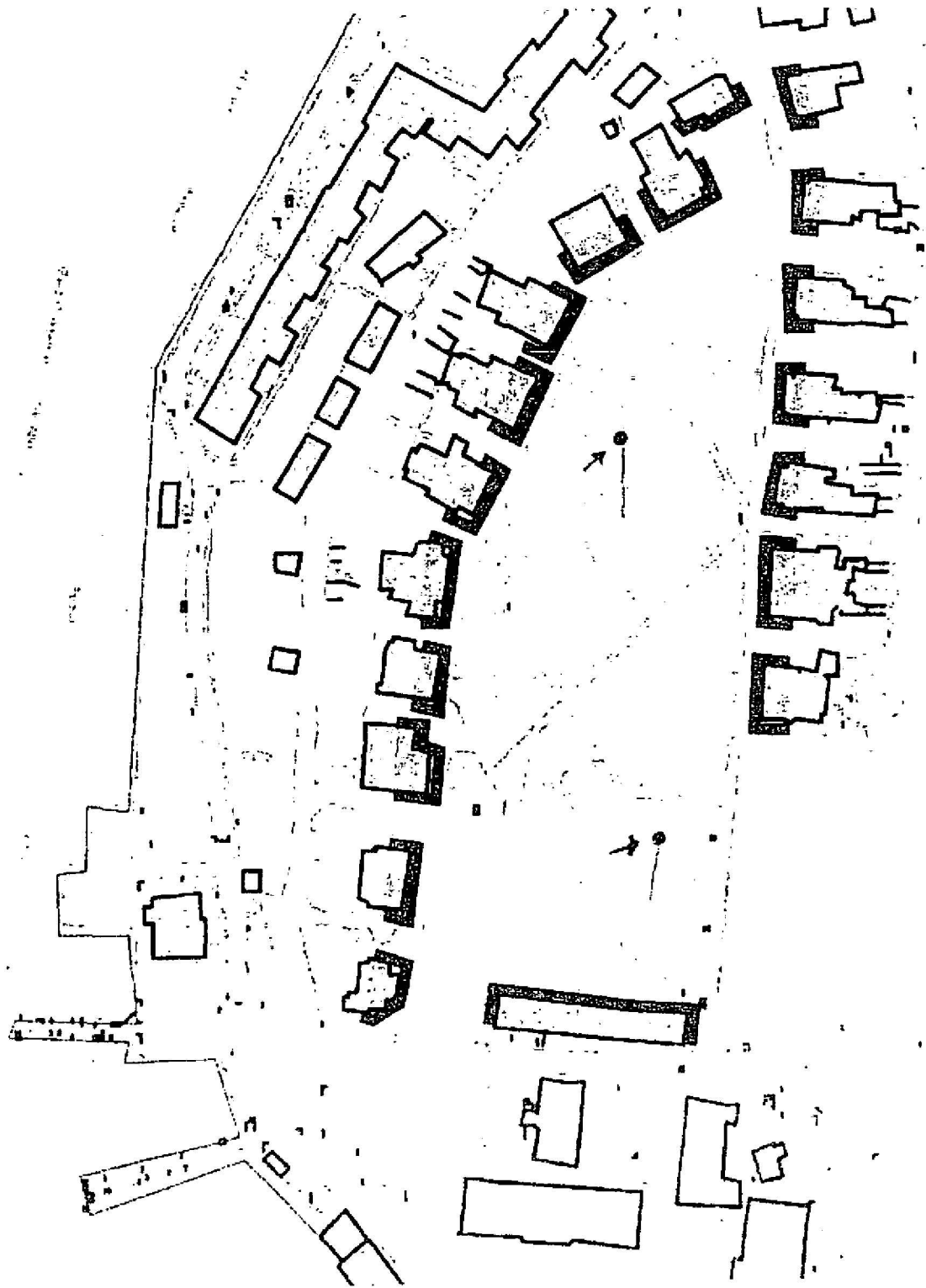


Figure 1 Location of planned lightning rods in Nolan Park on Governors Island.

APPENDIX B
ARTIFACT INVENTORY

Governors Island - Lightning Rod Trenches

Artifact Inventory

Page 1 of 1

Context	Material	Identity	Form	Color	Count	Description	Date Range
322	Ceramic	white ware		white	8		early 19th C.-1900+
346	Ceramic	earthenware			1	spall; unglazed one side	
	Ceramic	pearlware		white	1	blue transfer print both sides	c.1780-early 20th C.
	Ceramic	pearlware		white	6	blue transfer print exterior	c.1780-early 20th C.
	Ceramic	redware		red	1	clear glaze both sides	
	Ceramic	white ware		white	1	brown annular exterior	early 19th C.-1900+
	Glass		bottle base	green	1	devitrified; 3 3/8" diameter; empontilled push up	c.1740-1820s
	Glass		bottle finish	green	1		1840-1880s
	Glass		curved	green	1		
Total Artifact Recovered =					21		