Stone 2011-M

26006

REPORT ON ARCHAEOLOGICAL MONITORING OF BORINGS AND TEST PITS IN THE GOVERNORS ISLAND HISTORIC DISTRICT NEW YORK, NEW YORK

Start of work at LTP-5, facing northeast (photo courtesy B. Craine, Ocean and Coastal Consultants).

Prepared for: Langan Engineering & Environmental Services
619 River Drive Center 1
Elmwood Park, NJ 07407-1338

Submitted by: Linda Stone, MA, RPA
249 East 48th Street, #12B
New York, New York 10017

February 7, 2011

1506

EXECUTIVE SUMMARY

This is a report on the archaeological examination of borings and monitoring of test pits on Governors Island, New York City, within the Governors Island Historic District. Three borings were examined and two test pits were monitored. Two other test pits were also placed in the historic district, but monitoring was not recommended for those locations since they were outside of the original Governors Island footprint and therefore in a known fill deposit. However, the excavation and engineering crew recovered a number of artifacts from one of those test pits. The artifacts were processed with those recovered from the archaeological work and are also reported on here.

The borings and test pits were examined for their archaeological potential for the preservation of evidence of the original shoreline. It was also possible one of the borings could have contained evidence of a privy mapped in that location in 1867. Possible original ground surface was encountered in borings at a depth of between 12 and 15 feet (366 - 457 cm) below ground surface. The test pits did not contain any evidence of the original ground surface. Artifacts recovered from LTP-7, a non-monitored location, are related to the early-20th century expansion of Governors Island.

No further archaeological work was recommended for the project unless plans change and additional excavation needed. It was also recommended the locations examined for this project be recorded in the TGI Governors Island GIS database.

This report is being prepared to comply with environmental review requirements 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 Langan Engineering and Environmental Services by Linda Stone, RPA.

SHPO MANAGEMENT SUMMARY FORM

SHPO Project Review Number (if available):

Involved State and Federal Agencies (DEC, CORPS, FHWA, etc): Trust for Governors Island

Phase of Survey: 1B

Location Information
- Location: Governors Island Historic District, New York City – various locations
- Minor Civil Division: n/a
- County: New York

Survey Area (Metric & English) - Test pit monitoring and boring examination
- Length: approximately 4 - 8 feet (122 - 244 cm)
- Width: approximately 4 - 8 feet (122 - 244 cm)
- Depth: (when appropriate): up to 9 feet (274 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: n/a
- Width of Plowed Strips: n/a
- Surface Survey Transect Interval: n/a

Results of Archaeological Survey
- Number & name of prehistoric sites identified: none
- Number & name of historic sites identified: none
- Number & name of sites recommended for Phase II/Avoidance: none

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: February 7, 2011

TABLE OF CONTENTS

Executive Summary
SHPO Management Summary Form

List of Figures and Photographs ii

INTRODUCTION 1

SITE HISTORY AND ARCHAEOLOGICAL POTENTIAL 2

METHODOLOGY AND RESULTS 3
Borings 3
NLB-3 3
NLB-4 3
NLB-5 3
Test Pits 4
LTP-5 4
LTP-6 4
LTP-7 4
LTP-9 5

CONCLUSIONS AND RECOMMENDATIONS 6

FIGURES AND PHOTOGRAPHS ..... after 6

BIBLIOGRAPHY 7

APPENDICES

Appendix A – Work Plans: October 26, 2010 and December 9, 2010
Appendix B – Boring Stratigraphy
Appendix C – Artifact Inventory

LIST OF FIGURES

Figure 1	The location of test pits (LTP-#) and borings (NLB-#) on Governors Island.
Figure 2	The location of boring NLB-3 on part of the 2006 Governors Island survey.
Figure 3	The location of boring NLB-4 and test pit LTP-6 on part of the 2006 Governors Island survey.
Figure 4	The locations of boring NLB-5 and test pits LTP-7 and LTP-9 on pa rt of the 20 06 Governors Is land survey.
Figure 5	The location of test pit LTP-6 on part of the 2006 Governors Island survey.
Figure 6	Planview of LTP-5.
Figure 7	South profile of LTP-6 after completion of approximately 4 feet of excavation.

LIST OF PHOTOGRAPHS

Cover	Start of work at LTP-5, facing northeast (photo courtesy B. Craine, Ocean and Coastal Consultants).
Photo 1	Parts of a book recovered from LTP-7.

INTRODUCTION

The Trust for Governors Island (TGI) has needed to place borings and test pits at various places along the perimeter of Governors Island, New York, New York. Six of these, three each, are within the Governors Island National Historic District and the New York City Governors Island Landmark district (see Figure 1). Research showed that five of these locations (NLB-3, 4 and 5 and LTP-5 and 6) had archaeological potential for the preservation of evidence of the original shoreline. It was also possible one of the borings (NLB- 5) could have contained evidence of a privy mapped in that location in 1867.

TGI, the New York State Historic Preservation Office (SHPO) and the New York City Landmarks Preservation Commission (LPC) had previously indicated archaeological boring inspection and test pit monitoring would be appropriate for this project. Appendix A contains the approved archaeological work plan for the sensitive locations and an addendum letter plan for an additional test pit.

This report presents the findings of the archaeological work conducted for the borings and test pits. 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 Langan Engineering & Environmental Services. The archaeological fieldwork described in this report was conducted by Ms. Stone on November 3, 8, 29 and 30 and December 1, 2010. The author would like to acknowledge the assistance of Bahadir C. Eksioglu, of Langan Engineering & Environmental Services, Robert Ryder of Turner Construction Company and Claire Kelly of TGI for facilitating the archaeological component of this project.

SITE HISTORY AND ARCHAEOLOGICAL POTENTIAL

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 (PAL 1996: 11; PAL 1997: 63-64; Stone 2006: 4-5,10 & 2008: 7; UMass 2003: 110-111). However, none of these is in proximity to any of the borings or test pits.

Two historic maps were consulted to evaluate the relationship of the borings and test pits to the original Governors Island shoreline and determine if any structures once existed in their vicinity; the 1813 Mangin map and the 1867 Barnard map (see Appendix A - Figures 2 and 3). These maps show that the five locations of borings and test pits under consideration (NLB-3, 4 and 5 and LTP-5 and 6) are at or near the original shoreline, but that two other test pits in the Historic District (LTP-7 and 9) are located in the fill just outside of Castle Williams. The 1867 Barnard map also depicts NLB-5 near a privy outside of Castle Williams.

Previous archaeological testing was completed nearby some of the boring and test pit locations, although that work generally did not penetrate below the fill layer. However, the testing conducted near LTP-6 unearthed a shell-containing deposit, buried approximately 2 feet (61 cm) deep, which was interpreted as part of the original ground surface (Stone 2007: 3-4. 6).

The archaeological work discussed here was conducted to determine the presence or absence of archaeological evidence related to the original Governors Island shoreline at all boring and test pit locations and to identify remains of a privy near Castle Williams, should it be present.

METHODOLOGY AND RESULTS

This section describes the excavations for the borings and test pits, along with the findings. Archaeological examination of the soil removed as part of the borings at NLB-3, NLB-4 and NLB-5 was completed, as was monitoring of test pits LTP-5 and LTP-6. The drilling rig used for the borings was fitted with a 2 inch (5 cm) diameter, 2-foot (61 cm) long split spoon sampler. Samples were taken continuously for the upper 8 or 12 feet (244 or 366 cm). The samples were all measured and recorded by the archaeologist prior to the engineer; however, the engineer took a portion of each sample prior to the archaeologist screening the remainder for artifact recovery. The stratigraphy within the borings was recorded on forms which have since been transcribed into table format and attached here as Appendix B.

The test pits abutted the seawall in all locations; however their size was somewhat variable and is discussed in detail below. The archaeologist had the authority to temporarily halt excavations should potentially significant archaeological resources be encountered. However, none were. If the test pit was safe for entry, then the archaeologist was able to take direct measurements of the stratigraphy. If not, measurements were taken from above. Elevations were recorded as depth below ground surface. Artifacts were recovered by the archaeologist from the backdirt of monitored test pits during excavation. However, artifacts were also recovered from LTP-7, a location not recommended for monitoring, by the engineer. Because those artifacts speak to the time period of the fill, they were analyzed and are also discussed here.

All recovered artifacts were washed and rinsed in tap water and left to air dry before labeling and rebagging in clean 4-mil perforated zip-lock bags. Recovered artifacts were individually labeled with the abbreviation "GI" for "Governors Island" and the context number (test pit number or boring number with a decimal subdivision representing stratum). All zip bags were labeled with the same information as well as the excavation date. All recorded artifacts are listed Appendix C. Governors Island is the current repository for all artifacts recovered during the conduct of work described in this report. Artifacts will be transferred there from the archaeological consultant upon notification of acceptance of this report by the review agencies.

Borings

NLB-3

NLB-3 was located in Kimmel Road near the southeast corner of Building #301 (see Figure 2). It was excavated with continuous sampling for the first six samples to a total depth of 12 feet (366 cm), then at 5-foot (152 cm) intervals. The upper stratum of Sample 6 was silty ash that contained a shell fragment. The bottom stratum was brown sandy silt with stones and contained no cultural material. Sample 7 began at 15 feet (457 cm), but the casing broke, likely due to presence of stone, and the boring was moved 3 feet (91 cm) to the north. The new location was advanced to 15 feet (457 cm) to start the next sample. That deposit was dark yellowish brown fine sand, typical of the Governors Island culturally sterile subsoil. Natural deposits were encountered to the base of excavation at 37 feet (11.3 m).

NLB-4

NLB-4 was also located in Kimmel Road, but near Building #12, Section K, the southern end of the northern part of the building (see Figure 3). NLB-4 was also excavated with continuous sampling for the first six samples to a total depth of 12 feet (366 cm), then at 5-foot (152 cm) intervals. Deposits containing cultural material were also found here through Sample 6 at 12 feet (366 cm) deep. Banding observed by the engineer in Samples 4 - 6 is an indication that those samples may represent the original ground surface at high and low tides. Natural soils were documented below that to the base of the boring at a depth of 32 feet (975 cm) below ground surface.

NLB-5

NLB-5 was located in Carder Road near Castle Williams (see Figure 4). Fill was recorded in the first four samples. Rock was hit in Sample 5, at 8.7 feet (265 cm) deep. A jacket casing was added and excavation proceeded with a 4 3/4-inch (12 cm) bit and water. Sample 6 was driven for 4 feet (122 cm). It contained a

large piece of schist, measuring 1.2 feet (37 cm) thick. That was underlain with two feet of large aggregate concrete. Five-foot interval sampling began at 15 feet (457 cm), Sample 7. That and the remaining two samples were natural deposits and devoid of cultural material. Sampling ended at 27 feet (823 cm) below ground surface.

Test Pits

LTP-5

LTP-5 was located just north of boring NLB-4 in Kimmel Road in front of Building #12 (see Figure 3). It measured 8.65 feet (264 cm) north to south along the seawall by 11.3 feet (344 cm) east to west. The upper levels of fill were quite dry. Dry gravel was found to a depth of about 3 feet (91 cm). Several pipes were soon after unearthed running parallel to the seawall from 4.5 to 5 feet (137 - 152 cm) below ground surface (see Figure 6). At that point deeper excavation continued only between the pipes, abutting the seawall. That deposit was all fill related to original seawall construction. The base of excavation was 9 feet (274 cm).

A number of artifacts were retained from the backdirt, including glass and ceramic sherds and a fragment of butchered cow bone. Based on the recovered artifacts, the *tpq* (*terminus post quem*), the earliest possible deposition date, is the 1850s.

LTP-6

LTP-6 was located in the grassy area east of Kimmel Road and south of Building #96 (see Figure 5). It measured approximately 6 feet (183 cm) north to south along the seawall and 7 feet (213 cm) east to west. The north profile contained three strata, as noted from above; topsoil to approximately 1 foot (30 cm) then dark yellowish brown silty sand to approximately 3 feet (91 cm) and light yellowish brown sand to approximately 4 feet (122 cm) below ground surface. At that depth moisture began distorting the soil color darker and the deposit was waterlogged at 5.5 feet (168 cm) when a leak from a void in the southeast corner of LTP-6 was exposed. Excavation stopped at that depth.

While LTP-6 was approximately 4 feet (122 cm) deep, excavation was temporarily stopped and there was an opportunity to directly document the stratigraphy. The southern profile was drawn (see Figure 7). It somewhat different that what had been documented from above in the north profile. However, the extent of the fill was to the base of excavation throughout the test pit.

A bottle base with a manufacture date range of the 1850s - 1920s was recovered from the back dirt of the middle stratum near the northern profile of LTP-6; however, brick fragments and pieces of buff-bodied clay sewer pipe were also observed. Although not retained, coal fragments and rusted unrecognizable metal were found at a similar depth in the southern profile, as seen in Figure 7.

LTP-7

LTP-7 was located on Carder Road, behind Castle Williams and about 100 feet (30 m) south of NLB-5 (see Figure 4). It is outside of the original Governors Island footprint as determined using overlays of the 1813 and 1867 maps (see Appendix A - Figures 2 and 3) and was therefore not recommended for inclusion in the archaeological monitoring plan. However, the team working on LTP-7 recovered a number of artifacts they felt were of archaeological interest. These were included in the analysis and are listed in the Inventory (see Appendix C). The assemblage includes six bottles and parts of a book. The bottles provide information on a possible deposition date for the fill; sometime after 1905. Historical record states the shoreline in this area was expanded between 1907 - 1909 (Nowak 2009: 77)

The book appears to be part of a city directory. Some of the text is legible; however, this does not include an entire line of any one entry (see Photo 1). Place names include Bronxville, Crestwood, Lawrence Park, Underhill Park and Yonkers. Street names include Bedford, Bushwich, Flatbush, Main and Prospect. Both residences and business are listed. Businesses include "Root LHF, Weigher," "Roovers Bros, Mfrs," "Rors John, Delicatessen" and a plumber is listed at "344 Hamburg." On-line research using Trow's Business Directory of the Borough of Brooklyn from 1899 shows "Root Louis H. F. under the category of "Weighers"

(Trow's 1899: 379). Roovers Brothers are listed as "Electrical Suppliers operating at 170 Dean Street (ibid.: 149). "Rors John" is listed at "1491 Bway and 1202 Bwick Ave" under "Delicatessen." Under the category "Plumbers & Gas Fitters" is "Lehmann & Miller" operating at 344 Hamburg Ave & 123 Graham Ave." Limited library research has been conducted to determine if a copy of this specific directory is available at the New York Public Library. It is not. However, the directories at the library indicate that Charles F. Rogers (Chas. F. is legible in the archaeological specimen) moved his plumbing business to 344 Hamburg in Brooklyn between 1901 and 1902 (Trow 1902: 306). This means the directory is no earlier than 1901.

Although some of the book is legible, it is in poor condition. Therefore the need to preserve it has been considered. Factors involved are the context of the book, its uniqueness, its ability to yield information that is not available from other sources and the costs of preservation. The book dates to sometime after 1901 and comes from a fill context of a time periods that is known, 1907 - 1909, and not considered archaeologically significant. However, there are no directories at the Public Library or on-line that contain Brooklyn and Yonkers, Bronxville or the other legible community names. This makes the book somewhat unique, although a final determination of the "uniqueness" factor cannot be established unless more of the book could be read.

A conservator was consulted, Gary McGowan of Cultural Preservation and Restoration, to determine best preservation method and the potential costs. He recommends freeze drying as the best method to preserve the book. The Landmarks Preservation Commission was consulted to determine if the LTP-7 assemblage would be appropriate for traveling school collection. LPC said it does sound appropriate, but was concerned about the condition of the book and whether or not it would be stable enough after conservation. The Trust for Governors Island is weighing the options for the future of the book and a decision will be made after this report has been submitted.

LTP-9

LTP-9 was added to the project after it had already begun and was therefore not included in the original monitoring plan. An addendum to the monitoring plan was submitted which recommended no archaeological work for LTP-9 because it was outside of the original Island footprint and was only to be excavated to a depth of 4 feet (122 cm) (see Appendix A). However the location and size of the test pit were subsequently mapped (see Figures 1 and 4). LTP-9 measured 10 feet (305 cm) north to south along the seawall and 5 feet (152 cm) east to west. The base of excavation was reportedly 4 feet (122 cm) below ground surface.

CONCLUSIONS AND RECOMMENDATIONS

Archaeological work was conducted at the locations of three borings and two test pits on Governors Island. These were located near the seawall behind Castle Williams and on the eastern perimeter of the historic district. Artifacts recovered from another test pit were also examined.

Evidence was sought relating to the original shoreline of Governors Island. Natural deposits were found buried beneath fill in all three borings at a depth between 12 to 15 feet below ground surface, possibly representing the depth of the original ground surface. LTP-5 contained only fill related to utilities and seawall construction or repair fill. LTP-6 was only excavated to 5.5 feet before being inundated with water. Deposits representing the original shoreline were not reached in either test pit. No evidence of a former privy was found in NLB-5.

Additionally, artifacts recovered by the engineers from LTP-7, a non-monitored location previously determined not significant for archaeological resources, confirm the fill there was deposited sometime in the early-20th century, after 1905. They relate to the repairs or reconstruction of the seawall in the area at the time the Island was expanded between 1907 - 1909 (Nowak 2009: 77). The artifacts include bottles and a book. The treatment of the book and disposition of the LTP-7 artifacts are currently under review by the Trust for Governors Island. The remainder of the artifacts from this project will be transferred to the Trust from the archaeologist upon acceptance of this report.

No potentially significant archaeological resources were present and no further archaeological fieldwork is recommended for this project. However, should plans change requiring additional excavation, those locations should be evaluated for their archaeological potential. It is also recommended the locations examined for this project be recorded in the TGI Governors Island GIS database.

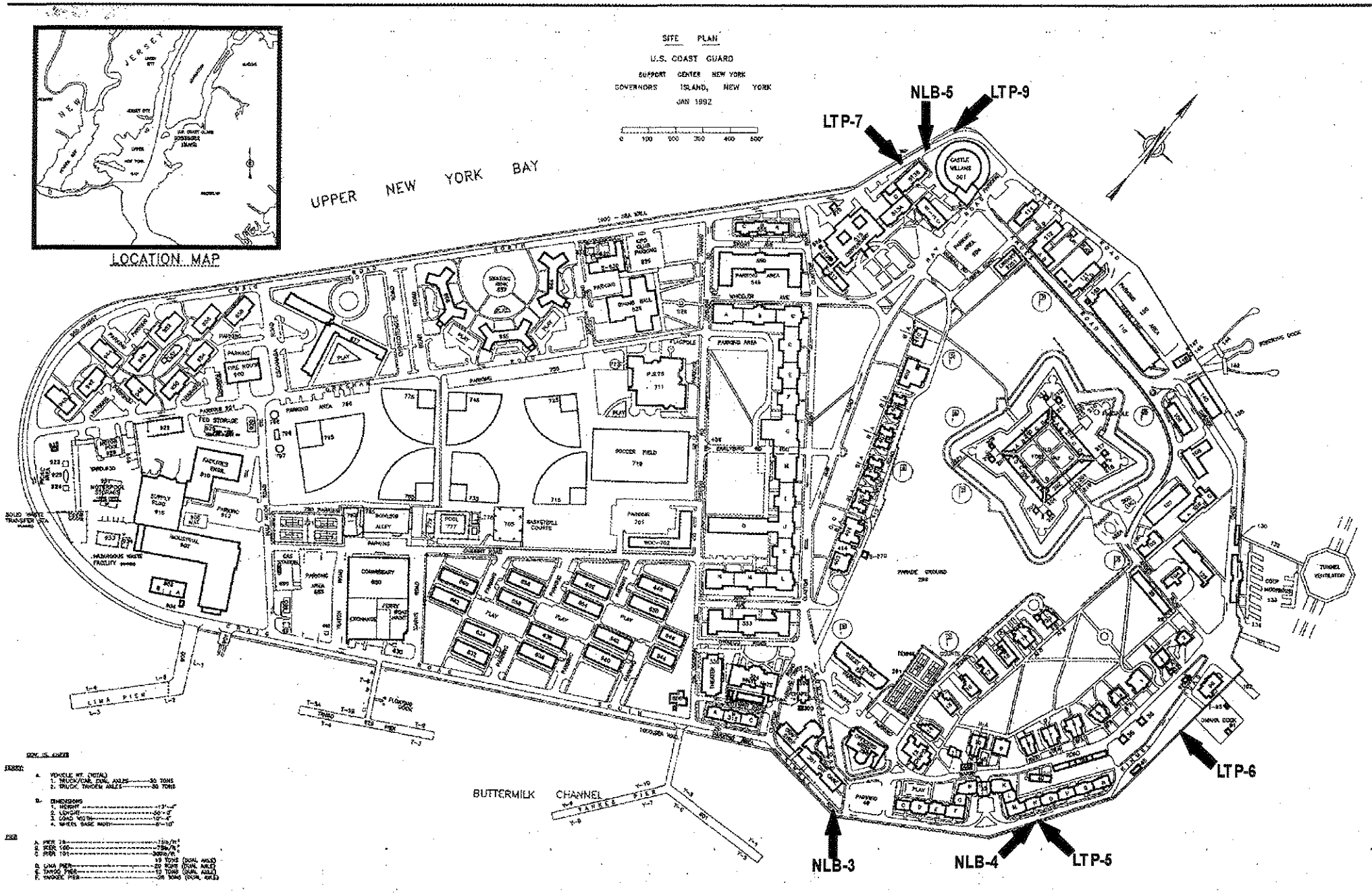


Figure 1 The location of test pits (LTP-#) and borings (NLB-#) on Governors Island.

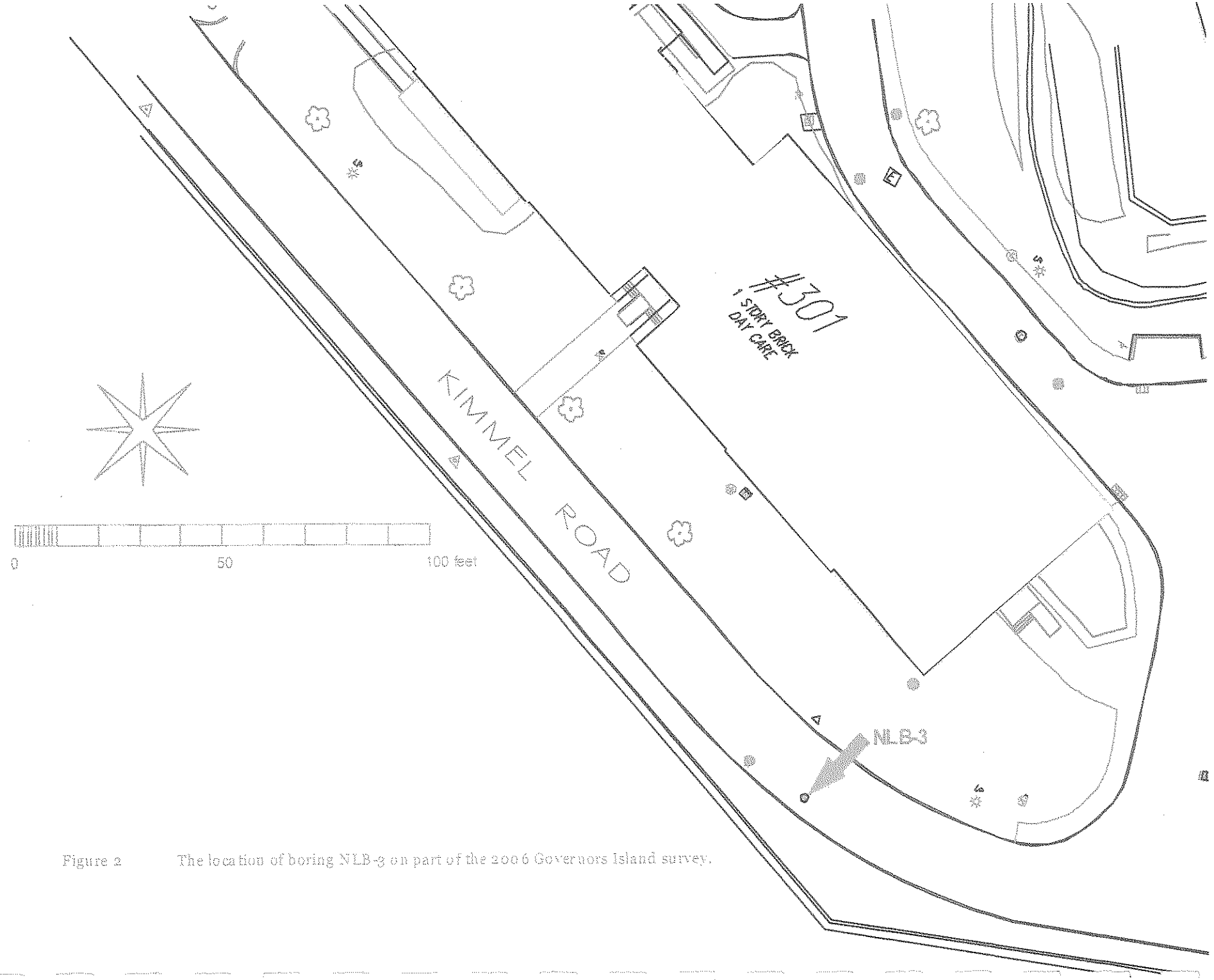


Figure 2 The location of boring NLB-3 on part of the 2006 Governors Island survey.

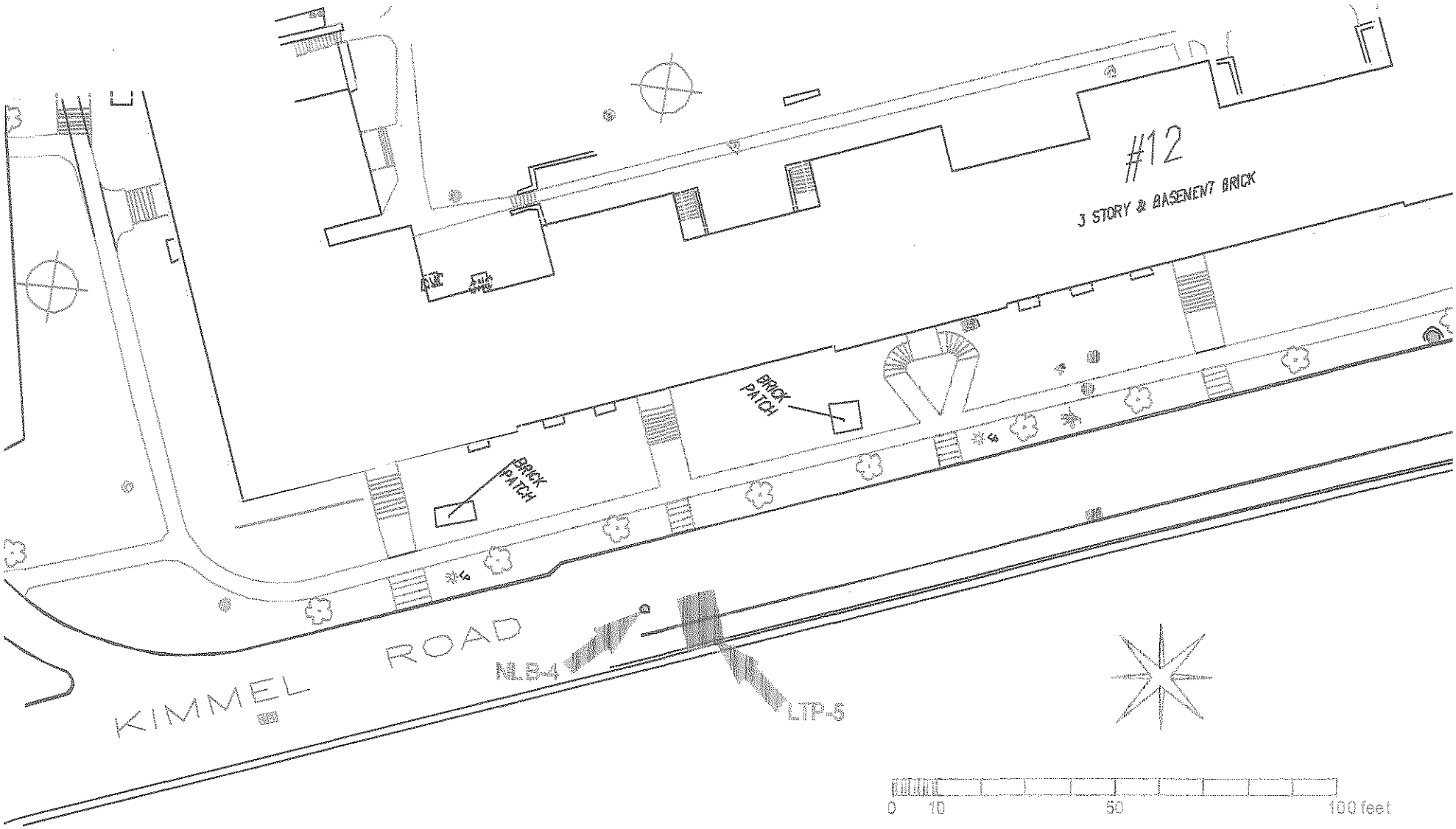
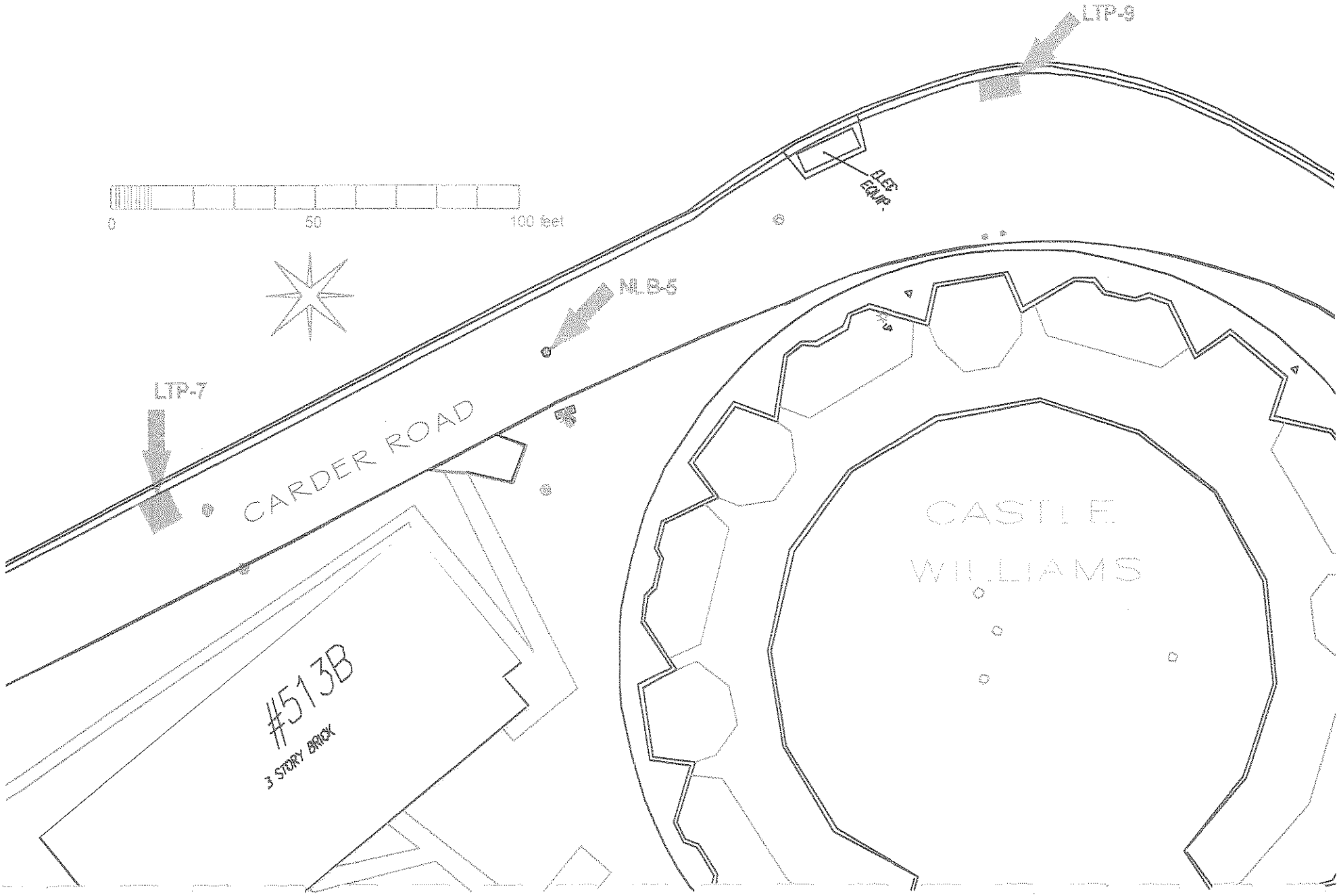


Figure 3 The location of boring NLB 4 and test pit LTP 6 on part of the 2006 Governors Island survey.

Figure 4 The locations of boring NLB 5 and test pits LTP 7 and LTP 9 on part of the 2006 Governors Island survey.



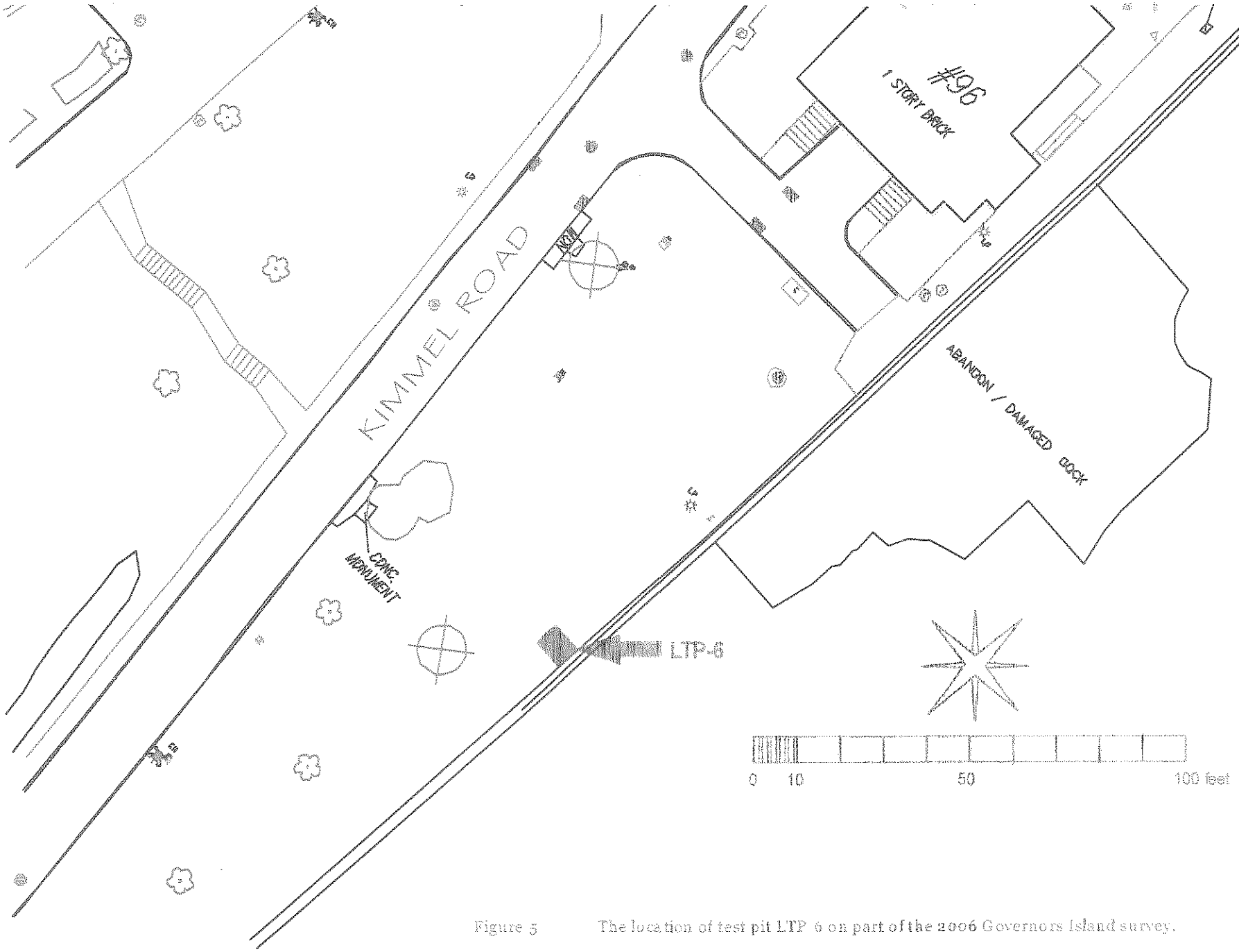


Figure 5 The location of test pit LTP 6 on part of the 2006 Governors Island survey.

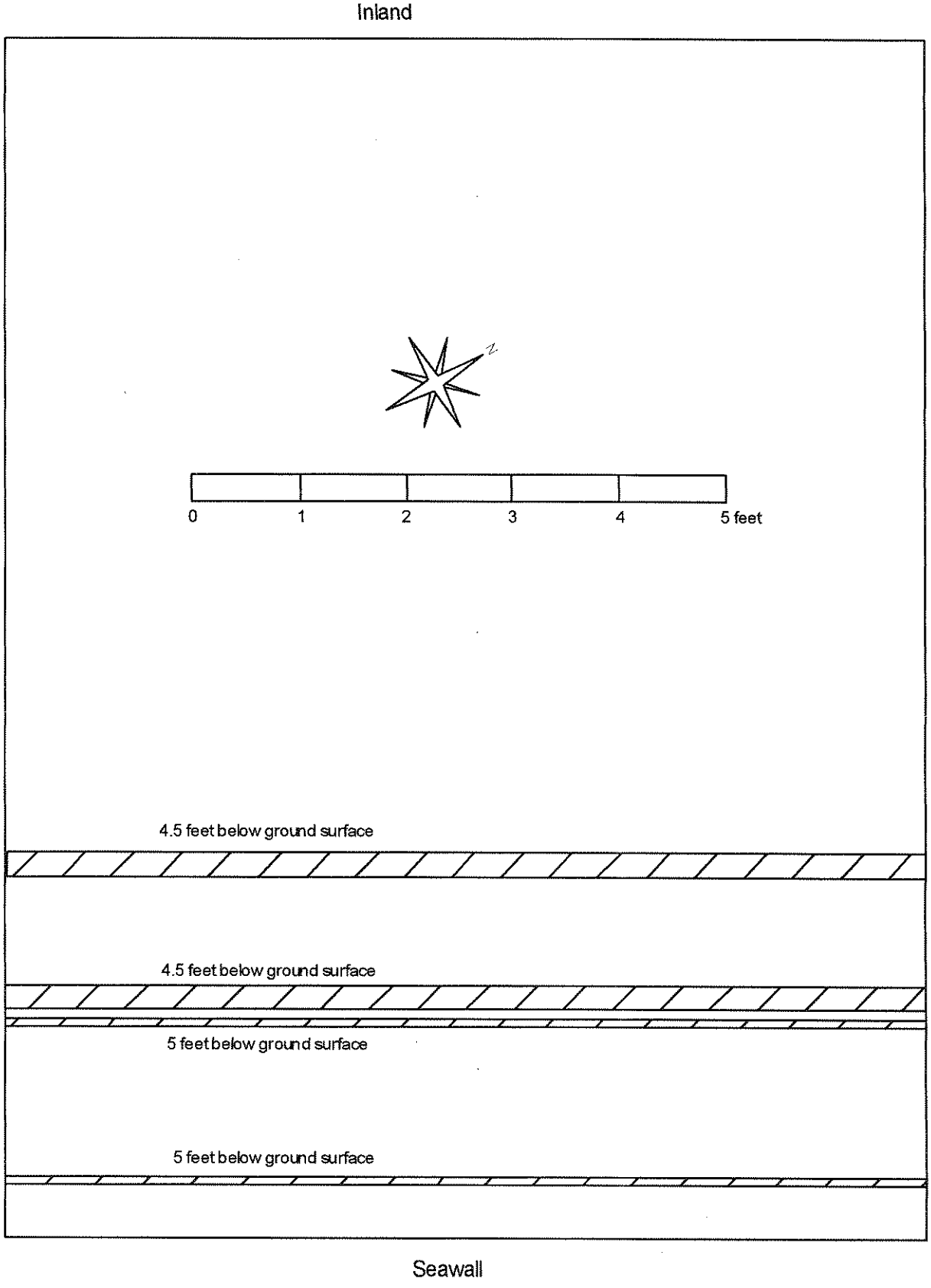


Figure 6 Plan view of LTP-5.

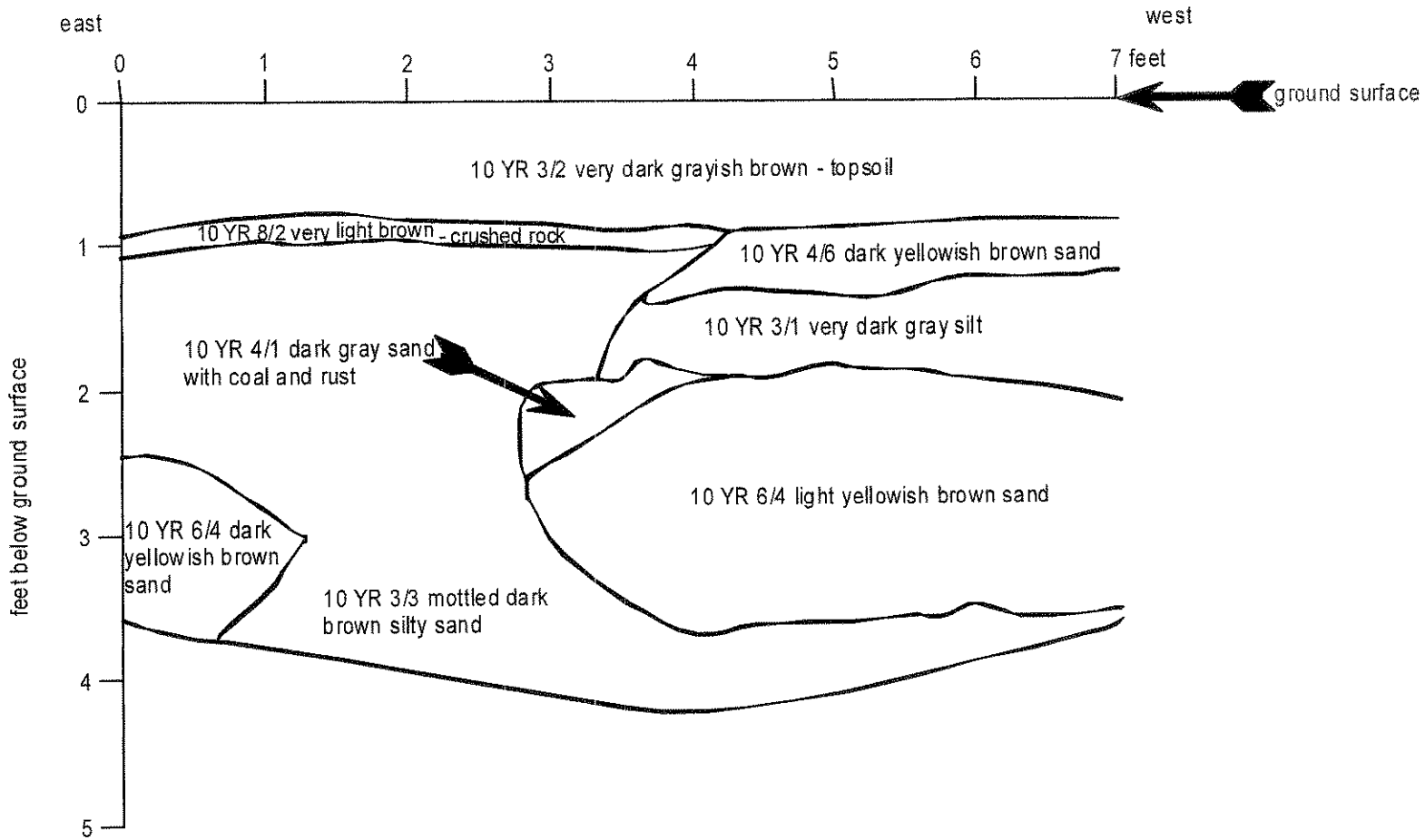


Figure 7 South profile of LTP-6 after completion of approximately 4 feet of excavation.

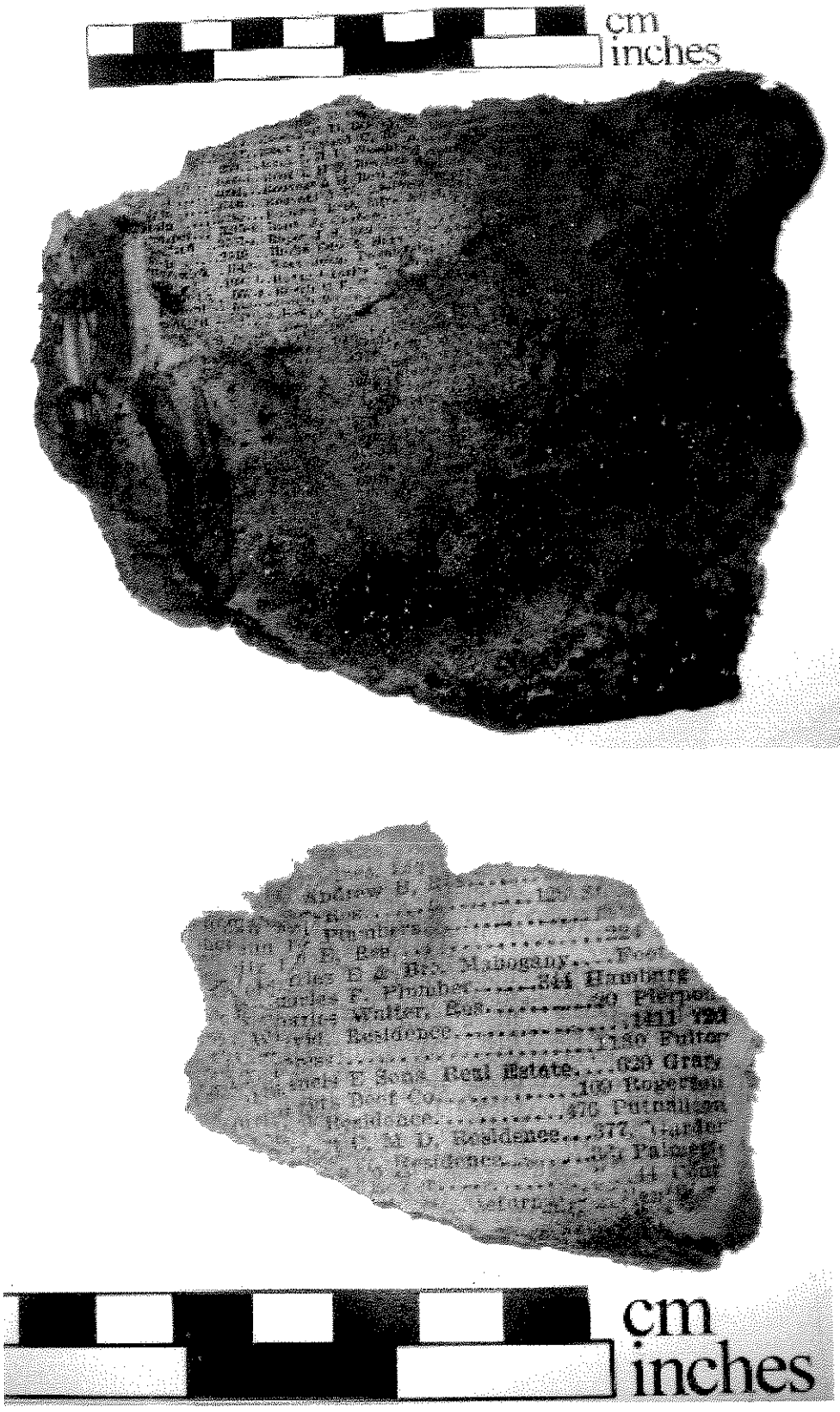


Photo 1 Pieces of a book recovered from LTP-7.

BIBLIOGRAPHY

Fike, Richard E.

1987 *The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles.* Salt Lake City: Gibbs M. Smith, Inc. Peregrine Smith Books.

Nowak, Lisa

2009 Cultural Landscape Report for Governors Island National Monument, New York, New York. Volume 2. Prepared by Olmsted Center for Landscape Preservation. Prepared for the National Park Service. Draft - July 2009.

Noel Hume, Ivor

1991 *A Guide to Artifacts of Colonial America.* Originally published 1969. New York: Vintage Books.

Public Archaeology Laboratory, Inc.

1996 Phase 1A Archaeological Assessment of the Governors Island National Historic Landmark District, Governors Island, New York. Submitted to ABB Environmental Services, Inc. Revised August 1996. PAL Report No. 751.

1997 Technical Report. Phase 1B Archaeological Survey of the Governors Island National Historic Landmark District, Governors Island, New York. Submitted to HRP Assoc., Inc. and USCT/CEU Providence. Revised October 16, 1997. PAL, Inc. Report No. 851.

Samford, Patricia M.

1997 Response to a Market: Dating English Underglaze Transfer-Printed Wares. *Historical Archaeology* 31(2):1-30.

Society for Historical Archaeology

2010 http://www.sha.org/bottle/bases.htm#Semi-automatic%20machine%20bases;
http://www.sha.org/bottle/dating.htm#Question%203;
http://www.sha.org/bottle/machinemadedating.htm#Question%208
http://www.sha.org/bottle/machinemadedating.htm#Question%208
http://www.sha.org/bottle/soda.htm#Other%20Soda/Mineral%20Water%20Styles
Accessed December 30, 2010.

South, Stanley

1978 Evolution and Horizon as Revealed in Ceramic Analysis in Historical Archaeology. In *Historical Archaeology: A Guide to Substantive and Theoretical Contributions.* Robert L. Schuyler (ed.). Pp. 68-82. Reprinted. Framingdale, NY: Baywood Publishing Company, Inc. Originally published 1971. In *The Conference on Historic Site Archaeology Papers* 6(2):71-106.

Stone, Linda

2006 Report on pre-Construction Archaeological Testing and Construction Monitoring for New Sewers in and Around Buildings 107, 108, 125 and 135 on Governors Island, New York, New York. Prepared for Bedford Construction Corp. August 7, 2006.

2007 Report on Archaeological Testing and Monitoring for Eight Tree Replacements on Governors Island, New York, New York. Prepared for Almstead Tree & Shrub Care Company. July 30, 2007.

2008 Report on Archaeological Testing and monitoring for Sigh Post Hole Excavations on Governors Island, New York, New York. Prepared for Turner Construction Corporation. August 6, 2008.

Trow's business directory of the Boroughs of Brooklyn and Queens

1899 http://books.google.com/books?id=gPkvAAAAYAAJ&printsec=frontcover#v=onepage&q&f=false Original from - Harvard University, Digitized - Nov 5, 2008. Accessed December 30, 2010.

1906 Trow's Business Directory of Greater New York (Five Boroughs Combined).

University Of Massachusetts, Archaeological Services

2003 Archaeological Overview an Assessment of Governors Island national Monument New York, New York. Presented to: William Griswold, National Park Service. UM-410.

APPENDIX A

WORK PLANS

October 26, 2010
December 9, 2010

ARCHAEOLOGICAL RESEARCH AND WORK PLAN FOR BORINGS AND TEST PITS IN THE GOVERNORS ISLAND HISTORIC DISTRICT NEW YORK, NEW YORK

October 26, 2010

The Trust for Governors Island (TGI) plans to do several borings and test pits on Governors Island, New York, New York. Six of these, three each, will be within the Governors Island National Historic District and the New York City Governors Island Landmark district (see Figure 1). The archaeological work described here is subject to the regulations of and the review by the New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the New York City Landmarks Preservation Commission (LPC).

Borings will extend either at least 25 feet or at least 10 feet into suitable bearing strata or to rock, whichever occurs first. Continuous sampling will be conducted to at least 12 feet. Excavations for test pits will use a backhoe and the size of the test pits will be approximately 4 by 6 feet and extend to a depth of about 10 feet below ground surface.

As a first step in determining the archaeological potential of these locations, a comparison of them to the original Governors Island shoreline, as depicted on the 1813 Mangin Map, has been completed to determine if the locations are within the original Island footprint (see Figure 2). Only one location is clearly outside of the original Island footprint, LTP-7. Two locations are just barely outside of the original Island footprint at low tide, NLB-4 and LTP-6 on the 1813 map. Two other locations are on the original low water line, NLB-5 and LTP-5. The final location, NLB-3, is between the high and low water lines of the original Governors Island shoreline as depicted in 1813.

Because several of the locations are so close to the original shoreline on the overlay and overlays cannot be 100% predictors, the shoreline as depicted on the 1867 Barnard map was also evaluated (see Figure 3). Again, LTP-7 is clearly outside of the original Island footprint, as is NLB-4. NLB-3 and LTP-5 are along the 1867 low water line. LTP-6 is along the 1867 high water line and NLB-5 is just inside of it. Furthermore, NLB-5 is quite near a privy on the map.

Discrepancies between the relationship of the planned borings and test pits to the original shoreline on the two historic maps is not uncommon. Factors including the natural changes to the then unprotected shoreline and the accuracy of the maps themselves should be considered. Based on the analysis of these two maps, only LTP-7 can be eliminated from further archaeological consideration.

Previous archaeological reports have been consulted to determine if the potential exists for the preservation of archaeological remains in the remaining five test locations. The closest previous archaeological work to NLB-3 was for a tree replacement. NLB-4 and LTP-5 are near the location of the same excavations for sign posts and for seawall repairs which were archaeologically monitored. NLB-5 is near the location of archaeological testing and of monitoring excavations for a fire hydrant and for a sign post. LTP-6 was not far from previous excavations for a seawall repair and for a tree replacement.

Governors Island - Borings and Test Pits

Artifact Inventory

Context	Material	Identity	Form	Color	Count	Description	DateRange
NLB-3.5	Glass		curved	amber	2		1860 - present
NLB-4.4	Glass		flat	clear	1		
LTP-5	Bone		cow		1	butcher marks	
	Ceramic	pearlware		white	1	blue transfer print	c.1780-1840
	Ceramic	pearlware	rim	white	1	blue transfer print	c.1780-1840
	Glass		curved	green	1	mends with base	1850s-1920s
	Glass		bottle base	green	1	turn molded; 3" dia.; 1 3/4" kick up; mends with sherd	1850s-1920s
LTP-6	Glass		bottle base	dark green	1	turn molded; devitrified; 3' dia.: 2" kick up;	1850s-1920s
LTP-7	Glass		curved	clear	6	part of 1 gallon jug; mends with body, neck & finish	1905-1930s+
	Glass		bottle	aqua	1	whole; wide mouth screw top; 3 1/4"dia.; 6" high	1890s-1920s
	Glass		bottle	clear	1	whole; milk-type bottle; 2 3/4" dia.; 7' high	1905-1940s+
	Glass		bottle	dark green	1	whole; wine-type bottle; 3" dia.; 11" high; possible paper/painted label remnants; tooled finish	1820s-1920s+
	Glass		bottle	aqua	2	whole; round bottom soda type; 2 ½" dia.; 9" & 9 1/5" high;	1870s-1910s
	Glass		bottle body, neck & finish	clear	1	part of 1 gallon jug; 5" dia.; tooled finish; possible siphon type; mends with 6 sherds	1905-1930s+
	Paper		book		2	likely part of a directory	
			Total Artifact Recovered =		23		