

4660M

Redding  
1995

# City Hall Park/2 Archaeological Site Report

The J. C. Decaux Public Lavatory  
Pilot Installation Project  
In NYC's City Hall Park



*Mark Redding*

Prepared for the New York City  
Landmarks Preservation Foundation

April 1993  
Revised: January 1995

510

# City Hall Park/2 Archaeological Site Report

The J.C. Decaux Public Lavatory Pilot Installation Project  
In NYC's City Hall Park

## SUPERVISING ARCHAEOLOGIST

**Daniel Pagano, Ph.D., S.O.P.A.**  
Director of Archaeology,  
New York City Landmarks Preservation Commission

## PROJECT DIRECTOR

**Mark D. Redding, M.A.**  
Editing and Report Preparation,  
Site Analysis, Methods, Results,  
Graphics and Interpretation

## CONTRIBUTORS

**Mauricio Ferreira, M.A.**  
Artifact Analysis, Results

**Kate Morgan**  
Faunal Analysis

**Anthousa Ridge, M.A.**  
Social and Architectural History

Prepared for the New York City Landmarks Preservation Foundation

April, 1993  
Revised: January, 1995

## ACKNOWLEDGMENTS

The team has found various ways to integrate different personal, disciplinary and methodological approaches to provide a systematic investigation of materials recently excavated from City Hall Park. This study benefitted from contributions of time and talent from many individuals.

The team would first and foremost like to thank Laurie Beckelman, Chair of the New York City Landmarks Preservation Commission (1990-94), and Merin Elizabeth Urban, Executive Director (1990-93) for their continuing commitment to the City Archaeology Program and for providing us with the opportunity to prepare this report. We thank Suzanne Davis of the J. M. Kaplan Fund and J. C. Decaux, for facilitating a grant to the Landmarks Preservation Foundation to help fund this report and for giving permission to use original engineering drawings. We would also like to thank Joan Olshansky, Chief of Staff at LPC, for her help.

The team would like to thank the following individuals for their contributions: Robert Apuzzo conscientiously reported his discovery of the unearthing of cultural materials on the site to LPC, loaned the team artifacts he collected and provided a critical assessment of photographs of the site; Jean Howson, Urban archaeologist, LPC, helped identify ceramic types, provided additional research materials and commented on drafts of the report. Marianne Dennis helped organize the artifact collection, computerized the collection inventory and labelled artifacts; Jamie Mandrake marked artifacts; Ed Rutsch contributed observations drawn from his involvement with the transportation of soil from the site, its sifting and the initial processing of recovered artifacts; Glen Castro provided the team with original engineering drawings, documentation of installation specification changes, and comments about the construction process; Gina Santucci, Director of Environmental Review, LPC, provided the team with practical information and support; and Carl Forster, photographer, LPC, photographed artifacts and printed site photos.

## **TABLE OF CONTENTS**

Title Page  
Acknowledgments

	<i>PAGE</i>
I. Summary .....	1
II. List of Figures .....	3

### **CHAPTER**

1. Introduction .....	6
2. Site Analysis .....	8
3. Social and Architectural History in NYC's City Hall Park .....	14
4. Methods .....	17
5. Results: Artifact and Faunal Analysis .....	19
6. Conclusions .....	32
7. Recommendations .....	34
8. Bibliography .....	35
9. Appendices .....	43
10. Figures .....	53

*Cover: An American one cent, issued in New York City coin in 1794 by "Talbot Allum & Lee," front.*

## I. SUMMARY

This assessment of the J. C. Decaux Public Lavatory Pilot Installation Project Site in NYC's City Hall Park was undertaken after the commencement of construction activities. The stratigraphic proveniences of the artifacts recovered from the site were not recorded, nor could they have been under the circumstances surrounding their recovery. During the preparation of this report, therefore, a comprehensive assessment of archaeological contexts could not be developed or used to interpret the site as is traditionally done during an archaeological investigation. Nevertheless, the team evaluated and "tested" the evidence for the presence of intact cultural remains in the Park and the cultural significance of the entire artifact assemblage. This report on our work clearly documents the archaeological potential of the northeast corner of City Hall Park and provides a limited set of cultural interpretations based on the artifactual record. Through a series of investigatory practices, including artifact, cartographic, volumetric and historical analysis, and a comparison of our findings with the 1989-91 archaeological investigation of the Almshouse Site (CHP/1), the area comprising the site of the June 1992 installation of two J. C. Decaux public lavatories is demonstrated to be one of high archaeological significance and sensitivity.

An examination of the artifact assemblage retrieved from the site revealed a *domestic* collection and confirmed the presence of Revolutionary Period Eighteenth and Nineteenth century archaeological deposits in the project area. The collection was particularly rich in Eighteenth century ceramic sherds. A mean ceramic date of 1776.23 was derived using 107 datable items (ceramic sherds and kaolin pipe fragments were lumped together).

The single site feature uncovered through recent construction activity has been interpreted as a possible Eighteenth or Nineteenth century stacked schist and mortar foundation. A definitive identification of this feature would require further field investigation. The estimated depth of the feature is 2.5-3.5' and its width approximately 20".

Cartographic references suggest that the location of the Site Feature corresponds well with the location of an early Nineteenth century structure at the corner of Chambers and Centre Street, possibly the Soup House/ Kitchen mentioned in the Minutes of the Common Council and shown on *A Landmark Map of City Hall Park* with accompanying notes (Hall 1910). This map identifies the northeast corner of the Park as the location of a "Soup-Dispensary" and as the subsequent location of a Fire Engine House removed in 1906. Recent historic research by the LPC has cited the actual location of the Souphouse as slightly southwest of the CHP/2 Site and questions the likelihood that the Souphouse and Dispensary were ever housed in the same building (Harris et al, 1993:22-3). Original Eighteenth century cartographic references also indicate that the site corresponds well with the location of several structures which stood along the southern boundary of the historic "Negro Burial Ground," today, Chambers Street.

The recovery of bone button blanks, "ordinary" tobacco smoking pipe fragments, and kiln furniture has reconfirmed the ubiquity of such artifacts within City Hall Park and supports the interpretation that corresponding craft activities were a common aspect of Eighteenth century social life within and near the Park. The presence of the bone button

blanks and "ordinary" pipe fragments may relate to the predominately lower economic status of area residents during the Eighteenth century. The assessment of faunal remains recovered from the site noted the high incidence for bos hyoid fragments (cow head bone), 5 of 9 with clear "butchery marks," which may represent the utilization of inexpensive cuts of meat on or near the site. It is unclear whether these bones are the remains of actual meals of such cuts or butchery waste products.

This report highlights the importance of site review and analysis to prevent the loss of important types of data found in association with historic sites and resources. The central message is that temporary development projects slated for archaeologically sensitive areas within the City should be subject to more stringent review before implementation. As part of the review process archaeological testing should be considered, and when conducted, the results evaluated and applied. During construction site monitoring may be appropriate to insure data collection and resource preservation.

This report also demonstrates the present and future potential for contributions by the City Archaeology Program. We make recommendations for the management of the artifact collection and for the future archaeological investigation of the site.

## II. LIST OF FIGURES

### *Chapter 1: Introduction*

- 1.1 Map indicating the location of the CHP/2 Site within the five Boroughs of NYC.
- 1.2 Map indicating CHP/2 Site within lower Manhattan near the N.E. corner of NYC's City Hall Park.
- 1.3 *Topographic Survey, City Hall Park, Borough of Manhattan*, Department of Parks and Recreation, City of New York, 1982, by Norman Porter Associates.
- 1.4 Photo: CHP/2 Site in June 1992, during the installation of public lavatories designed by J. C. Decaux.
- 1.5 Photo: CHP/2 Site in June 1992, during the installation of public lavatories designed by J. C. Decaux showing the north-south construction trench.
- 1.6 Photo: CHP/2 Site in June 1992, during the installation of public lavatories designed by J. C. Decaux showing the east-west construction trench.
- 1.7 Photo: View of the east-west construction trench looking south and showing Site Feature 1, the possible remains of a stacked schist structural foundation.
- 1.8 Photo: View of the east-west construction trench looking north and showing Site Feature 1, the possible remains of a stacked schist structural foundation.

### *Chapter 2: Site Analysis*

- 2.a Photo: Public lavatories designed by J. C. Decaux after final installation in NYC's City Hall Park in June 1992.
- 2.1 Original engineering section, looking east and showing the J. C. Decaux public lavatory units and the north-south sewer line construction trench as planned with slope .14 1/ft.
- 2.2 Engineering section looking east and showing: the J. C. Decaux public lavatory unit on the Park road and the north-south sewer line construction trench as excavated with slope .10 1/ft. (grey area).
- 2.3 Original engineering plan view showing: the CHP/2 Site, the location of Site Feature 1 and the J. C. Decaux public lavatory units.
- 2.4 Engineering plan view showing: the CHP/2 Site, the location of Site Feature 1, the J. C. Decaux public lavatory units, and the north-south and east-west construction trenches.
- 2.5 Photo: Second east-west water line construction trench.
- 2.6 Section looking west showing: Site Feature 1, the large public lavatory unit on the Park road, the original east-west water line construction trench the north-south sewer line construction trench, water main and sewer line.

- 2.7 Plan view showing: Site Feature 1, the large public lavatory unit on the Park road, the first east-west water line construction trench, the north-south sewer line construction trench, the second water line construction trench, the sewer line, concrete curb, water main and the north-south construction trench.
- 2.8 Section looking north showing: Site Feature 1, the large public lavatory unit on the Park road, the north-south construction trench, the original east-west water line construction trench, the second east-west water line construction trench and concrete curb.
- 2.9 *A Plan of the City of New York from an Actual Survey. (The Maerschallck Plan)* by Francis Maerschallck, 1763.
- 2.10 *Plan of the City of New York, in North America. (The Ratzler Plan)* by Bernard Ratzler, 1767.
- 2.11 *Topographic Atlas of the City of New York, (The Viele Map)* by Egbert L. Viele.
- 2.12 *Topographic Atlas of the City of New York, (The Viele Map)* by Egbert L. Viele.
- 2.13 The Reginald Bolton Map of Indian Paths of the Great Metropolis, 1922.
- 2.14 *Map of the City of New York*, by William Perris, 1857.
- 2.15 *Lloyd's Mammoth Map of the Business Portion of New York City*, by James T. Lloyd, 1867.

### ***Chapter 3: Social and Architectural History of NYC's City Hall Park***

- 3.1 *A Landmark Map of City Hall Park, New York*, by Edward Hagaman Hall, 1910.
- 3.2 *Aquatint: City Hall Park and Chambers Street from Broadway*, Aquatint, A. J. Stansbury, c.1825.

### ***Chapter 4: Methods***

- 4.1 Photo: Construction back-fill soil removed from the CHP/2 Site for sifting.
- 4.2 Photo: Delivery of construction back-fill soil from the CHP/2 Site to the New Jersey headquarters of Historic Conservation and Site Interpretation, Inc.
- 4.3 Photo: Archaeologists sifting back-fill soil at the New Jersey headquarters of Historic Conservation and Site Interpretation, Inc.



## *Chapter 5: Results*

- 5.1 Photo: Blue decorated Delftware sherds, British 1750-1780.
- 5.2 Photo: Grey, salt glazed stoneware rims, cobalt blue underglazed decoration, 18th century.
- 5.3 Photo: Lead glazed, slipware sherds with brown stripes, British, 1670-1795.
- 5.4 Photo: White salt glazed "scratch blue," stoneware, British, 1744-1775.
- 5.5 Photo: Three bone button blanks.
- 5.6 Photo: Brown salt glazed stoneware, Nottingham type, 1700-1810.
- 5.7 Photo: Grey, salt glazed undecorated stoneware sherds, 18th century.
- 5.8 Photo: Spirit or wine bottle base fragment, British (?), 1790-1810.
- 5.9 Photo: Kiln furniture, surface covered with salt glaze.
- 5.10 Photo: Miscellaneous building material recovered from the CHP/2 Site.
- 5.11 Photo: Coarse salt glazed decorated stoneware, 18th-early 19th century.
- 5.12 Photo: An American one cent, issued in New York City coin in 1794 by "Talbot Allum & Lee," front.
- 5.13 Photo: An American one cent, issued in New York City coin in 1794 by "Talbot Allum & Lee," back.
- 5.14 Photo: Undecorated kaolin smoking pipe fragments.
- 5.15 Photo: Undecorated kaolin smoking pipe bowl fragments, English (?), 1720-1820.
- 5.16 Photo: Bos hyoid fragments showing marks.
- 5.17 Graph: Comparison of 18th Century Archaeofauna – Major Taxa. (Amorosi, 1990)
- 5.18 Graph: Comparison of 18th Century Archaeofauna – Major Taxa. (Amorosi, 1990)

## 1. INTRODUCTION

On June 9, 1992, the New York City Landmarks Preservation Commission (LPC) was alerted by Robert Apuzzo, an avocational archaeologist, of the presence of cultural artifacts in the back-fill soil from a construction project in the northeast corner of City Hall Park (see Figs. 1.1, 1.2, 1.3). Daniel Pagano, Urban Archaeologist for LPC, was asked to inspect the site at the corner of Chambers and Centre Street. He met with representatives of the construction firm Vollmer Associates which was contracted from the City to install two public lavatories designed and provided by J. C. Decaux Street Equipment, Ltd. Mr. Pagano confirmed that the excavations required for the installation of the two facilities had in fact unearthed archaeologically significant materials (Fig. 1.4).

Mr. Pagano collected several artifacts from the site and photographed the construction trenches. He then prepared a memorandum reporting his findings to LPC. His memo noted that City Hall Park is one of the most sensitive and richest historic and archaeological areas in the City as confirmed by previous archaeological investigations and the on-going archaeological investigation of the African Burying Ground site situated just north of the Park. Mr. Pagano described the two trenches he had observed: "a large one running north-south (Fig. 1.5) from Chambers Street into the park, and a smaller one running east (Fig. 1.6) perpendicular to the larger one at its southern end" (Pagano, June 9, 1992). He stated that "a foundation constructed of 'Manhattan Schist' was observed to be transected by the smaller one" (ibid.) (Fig. 1.7 and 1.8 ). He also reported that, "archaeologists unrelated to the project have contacted LPC and reported finding bones, shell, brick, ceramic, glass and other remains in the dirt excavated from the site" (ibid.). The memorandum noted that no construction application was submitted to LPC and suggested that the following actions for archaeological mitigation be taken:

1. Stop construction and retain an archaeologist certified by the Society of Professional Archaeologists (S.O.P.A.).
2. The Archaeologist should conduct the following activities:
  - a) Record stratigraphy, features and artifacts from the walls of the excavation trenches;
  - b) Sift soil previously removed from trenches for artifacts and bones;
  - c) Analyze soil profiles and artifacts;
  - d) Determine archaeological significance;
  - e) Prepare a report on findings for Landmark review. (ibid.)

Unfortunately, it was not possible to follow all of these recommendations. Depositional strata and archaeological features were not mapped or recorded except in Mr. Pagano's photographs. Artifact proveniences were not recorded. It was possible to arrange the sifting of the back-fill soil from the construction site after transporting it to the New Jersey headquarters of Historic Conservation and Site Interpretation, Inc., a professional archaeological contract firm.

The artifacts recovered were delivered to LPC where they were analyzed under a grant to the Landmarks Preservation Foundation which has culminated in this report. The archaeology team has combined the skills of a museologist / historian, an anthropological archaeologist, a faunal analyst, and a public historian to complete an archaeological site analysis without the benefit of a record of specific archaeological contexts associated with specific material finds. Site review activities meant to prevent the loss of this type of information are found in LPC's Guidelines for Archaeology (LPC 4, 1987) and include documentary research, field testing and archaeological mitigation. Since this was a "temporary" project however, an application for construction did not have to be submitted to LPC and standard site review procedures and guidelines were not followed. As a result useful data related to the interpretation of the site were lost and the integrity of sub-surface resources threatened - even though the CHP/2 Site is situated in an area known for its archaeological significance and sensitivity.

## 2. SITE ANALYSIS

The site is situated in New York City's City Hall Park, Block 122. It is in the northeast corner of City Hall Park, at the corner of Chambers Street and Centre Streets and south across Chambers Street from the Surrogates Court Building. It includes part of a landscaped grassy area forming the northeast corner of the Park (see Figs. 1.2, 1.3, 2.3, 2.4).

The site is near the southeast corner of the African Burial Ground and the Commons Historic District designated as a NYC Landmark on February 25, 1993 and which has since been designated a National Historic Landmark.

For two centuries, City Hall Park has remained the center of political and institutional activity within the City. Accordingly the site comprises part of an important historic district and is surrounded by local, state and federal government buildings. The site area comprises a portion of the Park which is always bustling with pedestrians entering and leaving the park at Chambers Street or the subway terminal just to the south. During summer months concession stands set up along the Park road add activity.

In June 1992 Vollmer Associates Consulting Engineers installed two public lavatory units designed by J. C. Decaux Street Equipment, Ltd. at this location as part of a city-wide pilot installation project.

### ***Public Facility Construction Activity***

Vollmer Associates installed one small circular public lavatory (approximately 4.3 feet in diameter and 12 feet in height) on the south sidewalk along Chambers Street near the entrance to a road entering the Park off Chambers Street and another large public lavatory, rectangular with rounded corners (approximately 16.5 feet long, 5.5 feet wide and 10 feet in height) inside the Park on the Park road approximately 40 feet south of Chambers Street (Fig. 2.a). The final installation of the public lavatories differed in certain respects from the original engineering plan drawings. Discussions with the Site Director of the construction project have confirmed these changes. The New York City Department of Environmental Protection submitted a design alteration resulting in a reduction of the slope of the north-south sewage line connecting the larger lavatory to the sewer main beneath Chambers Street from .14 1/ft. slope to .10 1/ft. (Figs. 2.1, 2.2). This change required that the north-south construction trench (6 feet wide and 50 feet in length) be excavated to a depth of 8 feet rather than 6 feet beneath the large lavatory unit. In addition, the original engineering plan-view drawing (Fig. 2.3) shows the east-west water line construction trench (3 feet wide, 5 feet deep and 14.5 feet in length) approximately six feet north of what appears to be its actual placement (Fig. 2.4). Figure 2.4 also shows where another trench (one foot wide, 1.5 feet deep and 35.5 feet in length) was excavated from Centre Street, across the grassy area and over to the large lavatory on the Park road. Digging this second water line construction trench became necessary when the water main supplying the first line was decommissioned.

Because of the discoveries made during the initial construction work the digging of the second and final water line trench was monitored by the author. The procedure was as follows: the original water main connection was uncovered and a temporary water hose was attached to the water line running to the large lavatory, then a final trench was excavated to bury a permanent 1/2-3/4 inch diameter copper water line to a depth of 18-19 inches, sufficient to prevent its freezing during winter months (Fig. 2.5).

The total volume of sub-surface disturbance created by the installation of the large J. C. Deaux lavatory inside City Hall Park (south of the Chambers Street curb) was 121 cubic yards. This comprises 111.1 cubic yards from the large north-south trench, 8 cubic yards from the first east-west trench, and 1.9 cubic yards from the shallow trench dug across the full extent of the grassy area for the second water line.

With the removal and archaeological sifting of 16 cubic yards of soil (Rutsch, personal communication: 1992) 103.1 cubic yards of the soil removed from the two original construction trenches remained for back-filling.

### *Feature 1*

Feature 1 has been defined as a possible stacked schist and mortar structural foundation dating to the Eighteenth or Nineteenth century (Figs. 2.6, 2.7, 2.8). Feature 1 is located approximately 6 feet east of the Park road and approximately 55 feet from the Chambers Street curb in the northeast corner of City Hall Park (Figs. 2.3, 2.4, 2.7). Each exposed end of the feature appears to be approximately 20 inches square (Figs. 1.6, 1.7, 1.8). The exact depth of the feature is unclear as no measurements were taken while it was exposed. Approximated from photographs taken soon after its discovery and from first-hand accounts, the feature appears to continue north and south from its known coordinates beneath 2.5-3.5 feet of fill. This depth corresponds well with elevations for documented mixed Eighteenth and Nineteenth century deposits at the CHP/1 Almshouse Site.

The feature is in two sections, which were separated by the east-west water line construction trench originally dug to provide water to the large J. C. Deaux lavatory unit situated along the Park road (Figs. 2.2, 2.4, 2.6, 2.7, 2.8). Although Vollmer Associates' construction Site Director has stated that the mechanical excavation of the east-west trench was never noticeably "impeded" by the schist feature (Castro, personal communication 1992) the feature may well have been disturbed by the construction activity.

The feature appears to be constructed of blocks of stacked micaceous schist (Pagano and Apuzzo, personal communication 1992). Schist, a banded geologic form, has the property of splitting in "slabs of plates" (Gratacap 1904:27), an ideal architectural form. The site feature's "constructed" or "stacked" appearance is most clearly evident in the photograph of the southern section taken by Mr. Pagano (Fig. 1.7). It is not known if the stacked schist slabs are mortared in place. Evidence for the use of schist for construction within the confines of City Hall Park, includes a schist architectural element recovered from the Almshouse Site (CHP/1) and noted for its possible association to the architectural aspects of the site (Baugher 1990:106). In this case, however, a small isolated 12 to 16 inch square mortared schist element was found to be unaligned with an

excavated foundation wall and could not be directly associated with the architectural feature. A schist masonry element was recovered from the CHP/2 Site (Fig. 5.10; cat. no. CHP/2-1992-B1) but it too cannot be directly associated with schist Feature 1 or any other architectural structure. A early 18th century "well-constructed field stone and mortar foundation wall" was also uncovered at the Almshouse site and evaluated as being sufficient to support a multistory building (Grossman 1991).

## DEPOSITION

Relevant geology, Bureau of Topography Boring Records and Eighteenth, Nineteenth and Twentieth century cartographic references have been evaluated to more thoroughly evaluate CHP/2 Site stratigraphy and the likelihood of extant cultural resources including the remains of architectural structures. The results, while somewhat uneven, are presented below.

### ***Geology***

While some of the natural topography of Manhattan can still be seen in certain parks and in its most impervious geologic formations, the original topography of the island has been altered from its original pattern of hills, valleys, lakes, streams, marshes, plateaus, wooded and open fields through 300 years of continuous development.

Taken as a single geologic phenomenon the island of Manhattan is a "ridge, rising in elevation towards the north and sinking towards the south, where its rocky floor has disappeared below the mantle of surficial detritus, drift and sediments piled over it and broken up into north and south alignments of hills, intersected and diversified by flats, valleys, passes and ravines" (Gratacap 1904:9). This "rocky floor," known as the "Manhattan Formation," is composed of "peltic schists" (Davis 1970). In the area of City Hall Park the underlying schist formation is overlain with glacial and alluvial deposits, sands, gravels and clay to a depth of 90 feet (Cozzen's *Geographic History of Manhattan* in Gratacap 1904). Rather than being part of a natural protrusion of island bed rock within the Park, Site Feature 1 appears to be a cultural deposit transported to the CHP/2 Site i.e., either an *in situ* architectural feature or a secondary fill deposit.

### ***Boring Test Records and Stratigraphy***

The 1989 excavations at the Almshouse Site (CHP/1) situated between City Hall and the Tweed Court House revealed: a depth of 12-18 inches for most shallow stratum of mixed Eighteenth and Nineteenth century deposits (Baugher 1991:15-19), well-preserved Eighteenth century archaeological and structural remains sealed 18 inches below the modern asphalt pavement and a Seventeenth-Eighteenth century colonial surface at 18 inches beneath the most recent surface (Grossman 1991). Based on an assessment of 1968 Bureau of Topography Boring Records for tests located at locations peripheral to the CHP/1 Site between City Hall and the Tweed Court House, Grossman and Associates

had hypothesized a depth of three feet for the interface of a relatively thin near-surface fill and a compact underlying brown sand representing the original land form at the site (Grossman 1988, 1991). The final determination of a depth of 18 inches for the Colonial surface was considered consistent with historic topographic representations showing City Hall Park as a plateau dropping off to the north near Chambers Street and with City Hall, directly adjacent to the site, built on the highest point of that plateau (ibid).

The same boring records have been examined for this report. The two closest to the site seem to have little bearing for a determination of the elevation of the original landform in the project area itself. Both No. 22, located next to the middle of the east wall of the Tweed Court House and approximately 190 feet southwest of the site (indicating sand, gravel and brick chips to a depth of 11 feet below ground level, then compact brown sand, gravel and traces of silt), and No. 23A, located approximately 80 feet southwest of the site (indicating wood, gravel, sand, silt, and brick chips to 13 feet below ground level, then compact brown sand, gravel and traces of silt) suggest deep fill deposits well beneath the likely elevation of the original Park land contour. This may well result from "open-cutting construction activities" related to the subway line along the east side of the Park (Grossman 1991).

Based on this assessment, the results from the CHP/1 investigation and an independent analysis of historic topographic maps it is hypothesized that the elevation of the original colonial surface in the area of the CHP/2 Site, northeast of the CHP/1 Site, is at below 18 inches consistent with the original downward slope of the northern end of the Park plateau.

No clear changes in stratigraphy were observed during the construction phases of the lavatory installation project. The fill on the site was described as "a red, sandy glacial soil, with a fair amount of gravel and glacial ground cobble" and as not comprising a "rich midden" (Rutsch, personal communication: 1992). Observations made by the author while monitoring the excavation of the shallow east-west water line construction trench across the grassy area east of the site confirmed the absence of distinct stratigraphic changes to a depth of 18-19 inches and the absence of architectural features. This shallow trench may also have passed just 1' above sub-surface structural resources (Fig. 2.8). During its excavation the soil type removed from the trench was recorded as a homogeneous dark, sandy to gravelly loam fill with scattered glass and ceramic artifacts present.

### ***Cartographic References***

Original cartographic sources on file at the Map Division of the New York City Public Library were examined to further the analysis of the site and assess its archaeological potential. Several maps document the topography of the site area: the 1767 Ratzler Plan (Fig. 2.10); the 1775 Montessor Plan; the 1803 Goerck-Mangin Plan; the 1874 Viele Map (two versions have been identified and are shown as Fig. 2.11-12) showing the original land-contour and overlay of the 1874 City grid, and the Bolton map (1922) showing a combination of topography based on the Ratzler Plan, Native American trails and the 1922 urban grid. Additional Eighteenth, Nineteenth and Twentieth century maps were examined for evidence of historic structures in the immediate area of the CHP/2 Site. These were the 1731 Lyne Survey; the 1763 Maerschallck Plan (Fig. 2.9),

Grim's 1813 General Plan depicting 1742-4, the 1857 Perris Map (Fig. 2.14), the 1867 Lloyd Map (Figure 2.15) and the 1910 Landmark Map of City Hall Park by Hall (Fig. 3.1).

In sum, the topographic maps, and particularly the Viele Map and Montessor Plan, indicate that the region comprising the City Hall Park was once a plateau roughly bounded by present-day Chambers Street to the north, Ann Street to the south and William and Centre Street to the east. The "Commons," once a cattle grazing pasture in early Eighteenth century New York, dropped off sharply north of Chambers Street. The Ratzer Plan, the Bolton Map and the Montessor Plan each depict the northeast corner of modern-day City Hall Park as positioned at the head of a downwardly sloped 'pass' between hills positioned east and west. This pass appears to have lead directly to a declivity culminating in low-lying marshlands with tributaries and a fresh water pond known as the Kolch or Collect (Fig. 2.10). Modern-day Centre Street passes directly over this region which once formed part of a "transverse depression" across southern Manhattan allowing partial navigation between the East and Hudson Rivers (Gratacap 1904:20).

In earlier times the Reckgawawanc group of the Unami and the Mareckawick group of the Canarsee as well as other indigenous tribes may have had encampments in the area surrounding the Collect and the area surrounding City Hall Park may have once been the chief residence of native Manhattans who kept the choicest flat-lands under cultivation (Bolton 1974:13-21, 1992:47).

By the early Nineteenth century the marshy area surrounding the Collect had become a health menace and was drained. Eventually the Collect was filled over just as hills of natural drift material once reaching heights of 130 feet were gradually cut down to facilitate transportation (ibid:23).

The earliest historic cartographic reference for the presence of buildings on the CHP/2 Site area is the 1775 Montessor Plan which shows an L-shaped structure situated along the southern perimeter of the "Negro Burial Ground" (which lies to the north of modern-day Chambers Street) and on a direct line south of two structures each marked "Pot Maker." The 1767 Ratzer Plan shows a similar L-shaped structure, and two smaller rectangular structures just to the south located very near the CHP/2 Site area. The 1775 Montessor Plan shows a corresponding and similar rectangular structure possibly surrounded by a fenced-in garden area in the immediate vicinity of the site.

To establish correspondences between historic maps and the modern City map grid, the intersection of Frankfort Street and the earlier equivalent of modern-day Park Row--once known as the High Road to Boston and Chatham Street--was used as a reference point and an average city block length was derived as a unit of measure.

The 1857 Perris Map (Fig. 2.14) shows that the site area in the northeast corner of City Hall Park had by that date become the location of three structures. The 1867 Lloyd Map shows three buildings in the northeast corner of the Park. The western-most building is designated as the "Court Chambers and Tax Office," the building in the middle is designated as the "Croton Water Board" with an emblem adjacent to it designating it as a Police Station. The eastern-most building appears to be designated as a "Fire Engine House." The 1874 Viele Map (Fig. 2.11) also shows two buildings in the CHP/2 Site area that correspond with these depictions. The numbered explanatory notes accompanying



Edward Hagaman Hall's *The Landmark Map of City Hall Park* (Fig. 3.1) indicate that the western-most building (No. 7) was the site of the City Court House erected in 1852. The building in the middle (No.8) is identified as the Rotunda, 1818-1870 (see Chapter 3). The eastern-most building (No. 9) is described as the site of a "dispensary and soup-house" dating from 1817 and "later" and also as the location of a "Fire Engine House" which was "removed in 1906." The evidence indicates that Feature 1 corresponds most closely with the location of the middle portion of the east wall of this eastern-most building situated in the northeast corner of City Hall Park as documented on the 1857 Perris Map, 1867 Lloyd Map, and the 1910 Hall Map.

It should be noted, however, that independent historic research recently conducted by LPC has cited the actual location of the Souphouse as slightly southwest of the CHP/2 Site and questioned the likelihood that the Souphouse and Dispensary were ever housed in the same building (Harris et al. 1993: 22-23).

The location of Feature 1 also corresponds closely with a pattern of Eighteenth century structures shown on several maps. These structures include a relatively large L-shaped structure along the southern perimeter of the area designated in the Eighteenth century as the "Negro Burial Ground." Today this perimeter would seem to correspond with the east-west transect of Chambers Street although the exact southern boundary of the historic burying ground has yet to be established.

### 3. SOCIAL AND ARCHITECTURAL HISTORY OF NYC'S CITY HALL PARK

The City Hall Park has often played an important role in New York City's history. Indeed it was once described as the "cradle of Liberty." (Dawson, p. 94) Though the Park once housed a number of buildings, only two remain today: the Tweed Courthouse, which was constructed between 1861 and 1867 by Leopold Eidlitz, and City Hall. The City Hall cornerstones was laid in 1803 by Mayor Edward Livingston and the building was declared finished in 1812. At the time, it was considered by some to be "the handsomest structure" in the entire country (Lamb 1896:556). As the city's population grew dramatically during the Eighteenth and Nineteenth centuries a number of institutional facilities were erected in and around the Park, including the Almshouse (No. 5), the Souphouse (No. 9), and the Rotunda (No. 8). Most of these institutions were built as a direct response to specific economic and social concerns. All of these buildings were demolished.

#### *The Almshouse*

The first Almshouse, built in 1736, resulted from a desire "to formulate a more systematic plan" (Ross 1988:155) to deal efficiently with the growing number of poor, sick, mentally ill, and otherwise "unworthy" citizens. Economic conditions at the time were harsh (Ross refers to a "depression") and leading citizens complained, prior to the completion of the Almshouse, that tax revenues collected to support the poor were not sufficient. With the completion of the Almshouse and a city policy requiring institutionalization of those receiving help, the cost of support decreased. Though the authorities attempted to distinguish between recently impoverished workers and the truly "marginal" inmates, such efforts were largely unsuccessful and Almshouse residents suffered equally and severely. (Ross 1988, 48-156)

#### *The Second Almshouse*

As more and more people were admitted to the Almshouse, the need for additional buildings became evident. The structure was extended several times to accommodate the newcomers, but by 1790 the building's poor condition necessitated the erection of a new one. In 1797 a new Almshouse was built on Chambers Street and the inmates were transferred there, where they remained until a new structure was opened at Bellevue Hospital in 1816. The Second Almshouse building was then converted to serve as a "cultural center " for groups such as the New York Historical Society (Baugher 1990:6, 91).

### ***The Upper Barracks***

The Barracks, which was built on Chambers Street in 1757, originally housed the Twenty-eighth British Regiment. Their presence meant that the park was often "the scene of the outrage," as soldiers confronted an increasingly hostile citizenry (Dawson, p.22). It is reasonable to assume that it was a wooden building, since that was called for in plans for a Second Barracks which was never built. In any case, the building was gone by 1790 and the lot was later used for the Second Almshouse.

### ***The New Gaol***

The New Gaol or "provost" (a nickname owing to its use as a headquarters for a British Provost Marshall), was built in 1757. It was originally built as a debtors prison, was later used by the British to hold American rebel prisoners during the Revolutionary War, and finally served the city as a jail. Living conditions were poor, at best (Booth, 526). Bedding and food was so poor that the Humane Society felt compelled to intervene and provide the prisoners with relief. This small, "nearly square," three-story building with a cupola rising from its center stood to the east of City Hall (Stranger's Guide 1825: 119-120).

### ***The Bridewell***

The Bridewell was constructed in 1775 to house minor offenders, those who "had misbehaved in the Almshouse," and people "awaiting trial." This austere two-story building housed both men and women, who were segregated only by sex. While African Americans were "underrepresented in the Almshouse," they comprised at least fifty percent of the "inmate population" at the Bridewell. African Americans were brought to the Bridewell mainly for petty crimes, offenses that whites were usually not charged for (Cray 1988: 189, 198). Rehabilitation was not a goal. The air was described as "intolerably bad" and the food inadequate, beatings were common.

### ***The Souphouse***

By 1806, such was the concern over the maintenance of those who could not provide for themselves, especially Almshouse residents, that the Common Council of New York City allocated a maximum of \$600 for the erection of a Souphouse. In January, 1808, the Common Council announced that the Souphouse had been completed and its boilers were big enough to supply rations of food "without interference with the almshouse." Rations of soup and meat were ordered to be distributed four times a week (*Minutes of the Common Council* Vol. IV 1917:178, 703). From the records it is not clear where this additional structure was built. This building may have been constructed on the Almshouse grounds or on the top of a previous Almshouse structure in the vicinity.

Edward Hagan Hall's 1910 map (see Fig. 3.1) indicates that the northeast corner of the Park, in the immediate vicinity of the CHP/2 Site, was the site of an 1817 structure known as the "Dispensary-Souphouse," building. Unfortunately, there is not sufficient documentary evidence to verify that this area housed the Souphouse mentioned

in the 1808 minutes, a later Souphouse, or a Dispensary. The Minutes and other records of the Common Council of New York City make numerous references to the "medical attendance" on the Almshouse residents between 1801 and 1818. In 1800 the Common Council ruled that a physician, medicine, and medical instruments must be provided to Almshouse residents (Rules for the government of the Almshouse 1800). The delivery of vaccinations to the "Houses of the Poor" was recommended in 1818 (Minutes of the Common Council 1917, Vol. IX:539).

### *The Rotunda*

The Rotunda, an ornate circular brick building at the corner of Chambers and Cross Streets, was built by John Vanderlyn in 1818 (see Fig. 3.2 for a 1825 view of Chambers Street from Broadway). With a diameter of fifty feet and a height of thirty, it served as an art gallery for at least ten years. Many young American artists displayed their work at the Rotunda, which became something of an institution and gained notice for "panoramic views." (French 1860, p. 436) In return for putting up the building, Vanderlyn was given a ten year lease with rather favorable terms; he paid one pepper corn per year to the city (Stokes, Vol. III, p. 974-75). By 1860, it was being used as an office for the Almshouse (French 1860: 436).

The erection of the Rotunda and the City Hall coincided with the removal of Almshouse residents to Bellevue. The function of the Park was changing along with the City. As the center of City government, the Park became a showpiece and was no longer seen as a place to house society's less desirable elements.

## 4. METHODS

### *Field Methods*

By normative standards "field work" was not conducted at the CHP/2 Site. However, a set of standard field procedures was implemented once the site was brought to the attention of LPC. These include surveying, surface collection, mapping, monitoring and recording observations at the site, interviewing informants, recordation through photography, sifting soil to retrieve artifacts, sorting and curating artifacts by material type.

As was noted in the Introduction, Mr. Pagano was able to photograph the site soon after it was "discovered" i.e., when it was reported that historic artifacts were found in the construction back-fill soil and that a possible feature was visible in the east-west construction trench. His photographs have provided the basis for estimates of the depositional context and depth of Site Feature 1.

Historic Conservation and Site Interpretation, Inc., an archaeological consulting firm, directed by Edward Rutsch, was hired by J. C. Decaux to salvage archaeological remains from the site. Mr. Rutsch arranged for a truck to move 16 cubic yards of soil from the site to New Jersey headquarters of HCS (see Fig. 4.1 and 4.2). Under the direction of Mr. Rutsch, three archaeologists sifted the soil with 1/4 inch hardware mesh (Fig. 4.3). Afterwards the field crew sorted, washed, dried and organized the artifacts retrieved from the soil. Building materials were not saved in any abundance. One coin was found and delivered to the South Street Seaport Museum Conservation Laboratory where it was examined and sent to the LPC Archaeological Laboratory as were the rest of the artifacts in June 1992.

The site was monitored and mapped by Mark Redding during the excavation required for the installation of the second water line supplying the large lavatory unit on the Park road. The soil was examined and a few artifacts collected, soil samples were collected from the bottom of the trench and its profiles.

### *Laboratory Procedures*

During the first week of laboratory work the team divided the finds into the following categories: ceramics, porcelain, glass, clay smoking pipes, building material (mortar, brick, and metal), bones, shells, and modern material. Ceramics, porcelain, glass, and clay pipe fragments were cleaned in warm water with a soft brush and allowed to dry. Building material was cleaned with a dry brush. Shells and bone were given to the faunal analyst.

After the cleaning and drying process was complete analysis began. Items with diagnostic qualities were identified. These were examined closely and compared to diagnostic finds yielded by previous excavations. All diagnostic artifacts, along with those of particular interest for other reasons (e.g. design), were labelled with a reference to the site, the date, and a unique number (e.g., CHP/2-1992-#). The artifacts were labelled by first applying a coat of Ethyl Acetate (nail polish), writing the label in India ink and then sealing the ink with another layer of polish. All artifacts found to be diagnostic by date, type etc. were measured in English units. Non-diagnostic finds were placed in plastic bags

by group category and subcategory (e.g., "eight tin glaze earthenware sherds). At least one artifact was labelled in every bag. Each bag was marked on the outside using a waterproof marker. The information marked on each bag included the name of the site, the date, and the number of the labelled artifact it contained. A slip of acid free paper recording the same information was put in each bag. A form was designed with which to catalogue each bag citing the number of artifacts it contained, the category and subcategory it belonged to, the numeric code assigned to it, a physical description, artifact condition, date of recovery, diagnostic characteristics, dimensions, dating, and history. A final Artifact Inventory (see Appendixes 1-2) was generated from these catalogue forms and from further examination of artifacts.

## 5. RESULTS

In the absence of many of the types of data usually obtained through controlled archaeological excavation (such as a record of depositional contexts) the entire collection was systematized as derived from a single archaeological context synonymous with the known locations of the construction excavation trenches.

The collection was organized by series based on the identification of functional groups, subgroups of classes within these groups and specific artifact types (see Appendices 1-3). However, due to the artifacts' fragmentary nature, the identification of form, manufacture date and origin was difficult to determine. Dating mostly from the Eighteenth century, the only artifact types with reasonable diagnostic features were the tobacco smoking pipes (77%) and ceramics (62%). As the evolution of pottery making techniques and stylistic changes are well-known, ceramics are normally used to date other artifact types within the same depositional context (Baugher 1990:37). Due to the lack of such contextual data, the remaining artifacts could not be dated using the diagnostic ceramics and pipes.

The total number of artifacts recovered from the site, excluding Bone and Shell, was 445. The artifacts were grouped according to functional groups applying the organizational system described by Stanley South (South 1978:126-7). Appendix 3, "Functional Distribution of Artifacts" presents the result of calculations of the density of artifacts by class within each functional group. The basic categories examined are: Activities Group (Act) at 8.76%; Architecture Group (Arc) at 26.51%; Clothing Group (Clo) at .45%; Kitchen Group (Kit), 61.12%; and Personal Group (Per) at 3.15% of the total collection. The faunal assemblage will be discussed separately below.

A mean ceramic date of 1776.23 was derived using 107 datable artifacts (ceramic sherds and kaolin pipe fragments) drawn from catalogue entries 18, 19, 21, 22, 24, 26, 26.1, 30, 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 47, 62, 63, A1, A2, A3, A4 and A5.

### SMALL FINDS

#### *Activities Group*

With a total of 39 artifacts (9% of the total collection), this group includes manufacturing devices (2 kiln furniture); manufacturing debitage (3 bone button blanks); toys (one glass marble); miscellaneous hardware (one Twentieth century hose clamp, 7 wires, and 2 contemporary AA batteries); 2 botanical samples (Walnut shell); and an assortment of unidentified items made of metal (11), plastic (8), and leather (1). Despite our inability to date them precisely, kiln furniture and bone button blanks recovered from the site may date to the Eighteenth century. As Baugher (1989:40) pointed out, there were three Potteries located north of the City Hall Park during the late Eighteenth century. It is quite reasonable to speculate about a link between these two kiln furniture artifacts and local pottery production. The presence of bone button blanks in City Hall Park has been linked with the everyday life of the Eighteenth century Almshouse residents (Baugher 1990:55).

### ***Architecture Group***

The category described as the Architecture Group (Arc) comprises 118 artifacts (26% of the total collection). Of these, 73 items are fragments of window glass (16% of the total collection and 61% within the Architecture Group). Mostly covered with greenish patina, these small fragments could not be dated. The 16 items are construction nails (3.5% of the whole collection, and 13% within the Architecture Group). All the nails are highly corroded and 13 date from the Twentieth century. One item was classified as construction hardware (probably a joiner or fastener); and 28 items were classified as building materials (6% of the whole collection and 23% within the Architecture Group) (Fig. 5.10). Unfortunately these materials could not be dated.

Three pieces of schist, one with adhered mortar, and one mortar chunk, may be related to Feature 1 (tentatively identified as a Manhattan Schist foundation depicted in Figs. 1.7, 1.8, 2.5, 2.6). The schist piece with adhering mortar confirms the past use of schist for construction purposes and has been termed demolition debris. Another masonry fragment, a red flat brick with whitewash flakes of wall finish was found in association with the mortared schist element.

### ***Clothing Group***

The Clothing Group consists of only two artifacts (0.4% of the whole collection). They are identified as a twentieth century leather button covering and a rubber shoe pad.

### ***Kitchen Group***

With a total of 272 artifacts, the Kitchen Group is the largest functional group (62% of the whole collection), and it is formed by two specific categories of artifacts; ceramics (159 items, which comprises 35.7% of the whole collection of 59% with the Kitchen Group), and glass (113 items, 25.3% of the whole collection of 41% within the Kitchen Group).

### ***Ceramics***

Stanley South's article: "Evolution and Horizon as Revealed in Ceramic Analysis in Historical Archaeology" (South 1978:68-82) was very helpful in our attempt to identify the artifacts' type, date and origin. When possible, the identification of general technical and decorative features were also applied: vessel elements (rim, body and base); body firing (low and high fired); decoration (underglaze and overglaze painting, transfer-printing, etc.). This procedure often allowed us to date artifacts with remarkable precision e.g., six sherds of "Scratch blue" salt glazed British stoneware, 1774-1775. Three sherds are depicted in fig. 5.4.

Table 5.a below shows the distribution of the ceramic collection by diagnostic general types, datable items and vessel usage (table and utilitarian). The highest percentage of datable ceramics date to the Eighteenth century. From a total of 159 items, 99 were datable (62% of the ceramic collection). Of these, 55 sherds (55.5% of datable



ceramics) were diagnostic as part of Eighteenth century vessels; 43 sherds (43.5% of the datable ceramics) dated to a time frame encompassing the Eighteenth to the early Nineteenth century, and only one whiteware sherd (1% of the datable ceramics) was diagnostic as from the Nineteenth century.

Table 5.a: *Ceramic Ratios*

Ceramics	Totals	Datable	Table Ware	Utilitarian Ware
Unidentified	13 (8%)	X	X	X
Earthenwares	66 (41%)	39 (59%)	39 (59%)	27 (41%)
Stonewares	70 (44%)	54 (77%)	19 (27%)	51 (72%)
Porcelains	11 (6%)	6 (54%)	11 (100%)	X
Totals	159	99 (62%)	69 (43%)	78 (49%)

### *Earthenware*

With a total of 66 sherds, the earthenware types comprise 41% of the ceramic collection. Thirty-nine sherds (59%) were datable; 39 sherds (59%) can be classified as tablewares (dishes, tea sets), and 27 sherds (41%) are probably from utilitarian wares (storage, preparatory and cooking vessels). The tableware assemblage is mostly British-made, decorated and dates from the Eighteenth century. Twelve sherds are tin-glazed earthenware (*delftware*): two sherds of a plate with blue decorative border, British, (1750-1800) (see Fig. 5.1); two sherds with blue decorated floral motifs, British (1750-1800); 1 sherd with transfer printed decoration, British (1700-1802). Fourteen sherds are pearlware: nine undecorated sherds, British (1780-1830); four sherds with blue painted decoration, British (1775-1825); and one sherd with polychrome painted decoration, British (1795-1815). Ten sherds of creamware were identified and nine dated: one sherd of annular ware, British (1780-1815); eight undecorated sherds (1763-1820). The collection also includes two British, lead glazed slipware body sherds (1670-1795) (Fig. 5.3).

### *Stoneware*

Seventy sherds of stoneware (44% of the ceramic) were recovered from the CHP/2. Of these, 54 (77%) were datable. The 19 Eighteenth century sherds of delicate tableware are of British origin: 3 brown, salt-glazed sherds, Nottingham type (1700-1800)--Fig. 5.6 shows the delicacy of the incised decorative lines of one of these fragments; 6 white, salt-glazed sherds, "Scratch blue" type (1744-1775)--Fig. 5.4 shows two of these delicate tea set sherds; and 10 salt-glazed sherds probably from a dish (1740-85). The utilitarian vessel fragments include 28 sherds of grey, salt-glazed, cobalt blue underglaze decoration (1700-1799)--a variety of rim fragments can be seen in Fig. 5.2 and

5.7; seventeen sherds of coarse body, salt-glazed, possibly decorated ware dating from the Eighteenth to the early Nineteenth century; and 6 sherds of coarse body, salt-glazed, underglaze blue decorated ware, dating from the Eighteenth to early Nineteenth century. A direct link between local stoneware production and stoneware sherds within the collection was not established, though a link is supported by the recovery of two pieces of kiln furniture with body and glaze types (salt) similar in color and density to several stoneware sherds also recovered (see the three rim sherds in Fig. 5.11).

### *Porcelain*

Eleven sherds of hard paste Chinese porcelain were recovered from the site. Six sherds were datable (1660 - 1880) and described as underglaze blue-white Chinese export porcelain. The evidence of this expensive tableware in the Eighteenth century City Hall Park has been recorded in other archaeological reports. Regarding the investigation of the Eighteenth century Almshouse Site (CHP/1 1989-9), it has been suggested that the oriental porcelain fragments recovered from that site were possibly part of the Almshouse superintendent's household (Baugher 1989:38). There is little evidence for this conclusion, and the military presence on the site must be taken into consideration as a possible source of the porcelain.

### *Glass*

The second category classified as being part of the Kitchen Group is glass. Due to the fragmentary nature of the collection, the type, origin and shape of the 113 artifacts (25% of the whole collection, and 41% within the Kitchen Group), could not be identified. The artifacts diagnostic as part of bottles were 33 (7.4% of the whole collection and 12% within the Kitchen Group). However, two bottle bases were diagnostic as wine or spirit bottles, American, 1790-1810 (Fig. 5.8). A few fragments show unreadable mold marks and embossments. The generic term "curved" was applied to designate the fragments not sufficiently identified as being part of bottles. There are 80 glass fragments (18% of the whole collection and 29% within the Kitchen Group).

### *Personal Group*

With 14 artifacts, the Personal Group represents 3.1% of the whole collection. However, this group shows the highest percentage of datable artifacts by functional group: 92%. Artifacts in this group consisted of the following: tobacco pipe fragments and a coin, both discussed below.

### ***Tobacco Pipes***

Thirteen undecorated kaolin smoking pipe fragments were recovered from the site (Fig. 5.13; 5.14). Of these, three are bowl fragments and ten stem fragments. With regard to the dating of these artifacts, we decided to apply techniques found in J. C. Harrington's article, "Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes" (1978). As a result, one stem bore fragment was found to have a diameter of 5/64" (1710-1750), and nine stem fragments were found to have a diameter of 4/64" (1750-1800). Only one bowl fragment was complete enough to allow for the identification of its shape and size in order to apply stylistic comparisons. The bowl's configuration suggests an English origin and dates between 1720-1820 (Hume 1882:303).

### ***Coin***

An American one cent coin was recovered from the site. This artifact was issued in New York City in 1794 by "Talbot Allum & Lee." (Fig. 5.12, 5.13)

## **FAUNAL ANALYSIS**

### ***Introduction***

This section on faunal analysis was prepared by Kate Morgan. It provides an interpretation of the faunal collection recovered from the CHP/2 Site in the context of recent work in City Hall Park. Since the remains were not collected or recorded by provenience little can be said in terms of "change through time" reflected in the *part*, *piece*, or *level* of the faunal assemblage. These bones, however, were found in association with ceramics that date to the Eighteenth century which may give some clues as to the nature of the deposit.

This faunal analysis includes:

- 1) A comment on butchery observed in this assemblage.
- 2) A general statement about the City Hall Park Project conducted in 1990, two years prior to this excavation.
- 3) A narrative of the findings at the City Hall Park/2, (J. F. Decaux public lavatory excavation site).
- 4) A listing of Total Number of Bones (TNB) and percentages (%) are displayed on a separate sheet. These two mathematical methods, TNB and Percentage have proven to be the most reliable for analysis of fauna on historic sites (Amorosi 1984; Grayson 1978, 1979).

- 5) Some conclusory remarks and a comparison of the archaeofauna retrieved on New York City Sites.
- 6) Suggestions for further research.
- 7) *Tabulation Cards* cataloguing each bone (when possible) to species, anatomical part (when possible), age (when possible), butchery marks, and pathology. This initial procedure was conducted at Hunter College Archaeology Lab, which is directed by Dr. Thomas Amorosi. The animal species discovered at City Hall Park include: Bos (Cattle), Ovis/Capra (Sheep/Goat), Sus (Pig), Aves (Bird), Pisces (Fish), Feline (Cat), Tortoise, and Rodent. Shell (Oyster, Clam, Conch) were also counted and weighted at the LPC Archaeology Laboratory.

### ***1. A Preliminary Comment on Butchery***

In this report, domesticated mammalia were catalogued according to body parts that might coordinate to specific cuts of meat. Based on extensive research into late Eighteenth and Nineteenth century documentary sources, a cataloguing system was developed that infers the remains of bones to specific cuts of meat (Morgan 1982, 1987, 1989). This research has recently been corroborated in the computer tabulations and site research made by Amorosi (1984, 1990).

Excavated remains from the hindquarter of the mammal might have included sirloin (most expensive), rump, round, flank, shank, and hock (least expensive). From the forequarter, cuts of meat include the shoulder ( most expensive ), chuck, shank, and hock (least expensive). The axial portion of the animal, identified as the ribs and the vertebrae might range in cuts of meat such as prime ribs, chops, or cheaper cuts of meat.

### ***2. General Statement about City Hall Park - 1 Project, 1990***

It is important to note that an extensive, controlled archaeological excavation was conducted in City Hall Park in 1990 and that certain significant pieces of information were revealed concerning the archaeofauna from this area.

According to Thomas Amorosi, Faunal Analyst for the CHP/1 Site, the archaeofauna retrieved did *not* represent a diversified fauna compared with other large urban assemblages in New York City (1990:153). One may hypothesize that the lack of a diversified faunal assemblage was determined by the rather limited foodways of the residents at the Almshouse in the mid-Eighteenth century.

The Almshouse faunal remains differ interestingly from other New York City collections in revealing the highest percentage of total fish material found. There was also a high degree of fragmentation of bones which demonstrates a high ordinal count of species and scrap categories.

The meat-bone items found in association to the Almshouse suggest that the occupants were from a low social-economic class. Clearly, what was missing from the Almshouse table were the more costly cuts of meat, such as a rib roast. Instead, a relatively high proportion of head (cranial) parts was found, which suggests the making of

stews with "junk meat." Pig's feet also seemed to have been a frequent meal for Almshouse residents (Amorosi: Appendix D, 1989).

Figures 3-5 in Amorosi's 1989 report, illustrate that the Almshouse residents were getting cuts of meat from a butcher shop and not from a home butchering process as one might expect for lower classes. Perhaps this puts a 'cautionary tale' on the assumption that those who made their visits to the butcher shop in the Eighteenth century were well-to-do. The urban butcher shop might have serviced both the wealthy and the residents of public institutions such as almshouses, prisons, and hospitals.

### **3. City Hall Park/2 Public Facility Project—Faunal Analysis, 1992**

Results based on an analysis of the unprovenienced archaeofauna retrieved in City Hall Park in 1992 are similar to those derived from materials retrieved in 1990 with the exception of Pisces (fish). While the 1990 remains yielded a high percentage of Pisces at 52% of the total bone count, only .04% of the total number of bones in the 1992 collection was Pisces.

Essentially, the majority of bones recovered fall in the categories of Bos (cattle) at 31.5%, medium mammal at 18.4%, and unidentified mammal at 28.8%. Aves (bird) follow at 4.9% of the recovered items and Ovis/Capra (sheep-goat) at 2.2%.

Other items represented at .04% include Rodent, Feline, Tortoise, and Pisces.

#### ***Cattle (Bos) Skeletal Element Distribution***

The depositional patterning for Cattle bone refuse shows a very high percentage of head and vertebrae elements at 87.1%. A significantly smaller percentage of long bone (limbs and feet) were retrieved at 12.8%. Ribs and scapula were not found in pieces identifiable as such.

Of the identifiable cattle items it can be hypothesized that the animals here butchered and /or consumed were relatively old (due to wear and plaque visible on teeth). It is also significant that 5 of the 9 cattle hyoid bones present in the assemblage, carried clear butchery marks on them (4 of these are shown in Figure 5.16). The question remains whether the marks indicate pre-meal butchery, whereby the head of the cattle was discarded and not eaten. Or whether the cut marks across the hyoid represent cuts in the kitchen, prior to serving a "head" stew.

R. Lee Lyman (1977:70) observes at Fort Walla Walla Dump Site in Washington State that "the wrist and ankle have high nutritional food value" as does the head. Therefore, we might assume that the poorer residents in the vicinity enjoyed such a meal.

Further research into Eighteenth century documentary sources, Eighteenth century foodways, and a finer analysis of the dateable depositional layers might show the subtle relationship between the animal part that is butchered or discarded and the part that is eaten.

### ***Caprine Skeletal Element Distribution***

The few remains of Caprine skeletal elements found represent an older animal.

### ***Medium Mammal Skeletal Element Distribution***

The Medium Mammal items, like cattle, also represent a high percentage of skull and vertebrae at 70.7%. Other mammal fragments - not identifiable by size, but identifiable by body-part also reflect a high percentage of skull bone at 76.9%.

### ***Aves Skeletal Element Distribution***

Of the 4.9% bird items retrieved, there were two long bones (18.1%) with cut marks. 45.4% of the total items were long bones. One tibia fragment was identifiably Gallus (chicken) type.

In terms of the butchery marks present upon the bird bones, one can hypothesize that these marks were made at the table and not at the time of butchery (pre-cooking).

### ***Other Species***

Other species represented include rodent (1.8%), cat (.04%), tortoise (.04%), and fish (.04%). No remarks can be made.

### ***Shell***

The presence of shell: Oyster at 61.9%, clam at 36.7%, and possibly conch at 1.3% adds to the dietary picture of this unprovenanced assemblage.

**4. Total Number of Bones and Percentages List\***  
**(TNB: 222)**

Bos	70	31.5%	87.1% skull and vertebrae	12.8% long bone
Ovis/ Capra	5	2.2%	80% teeth	20% long bone
Medium Mammal	41	18.4%	70.7% skull and vertebrae	29.2% long bone
Mammal (species unidentifiable)	13	28.8%	76.9% skull and vertebrae	23.1% long bone
Mammal (parts unidentifiable)	51			
<hr/>				
Aves	11	4.9%	.09% skull	45.4% long bone
<hr/>				
Rodent	4	1.8%		
Feline	1	.04%		
Pisces	1	.04%		
Tortoise	1	.04%		
Unident.	24	10.8%		

**Total Number of Shell and Percentages**  
**(TNB: 147)**

Oyster	91	61.90%
Clam	54	36.70%
Conch	2	1.30%

\*(see also below: 7. Tabulation Cards)

## **5. *Towards a Conclusion: A Comparison of Archaeofauna Retrieved On New York City Sites***

Thomas Amorosi's *Graph of Major Taxa* (Figs. 5.17, 5.18) excavated from Eighteenth century contexts at all the major New York City sites gives us a preliminary look at comparative foodways in the area.

Listed on the graph are the data from five major urban archaeology sites and three rural archaeological sites. It is valuable to use the percentages listed here to compare between taxa and between sites. However, for the purposes of this report an in-depth study is not appropriate.

One important point, however, can be made. Based on Amorosi's comparative table, there is no single pattern of species distribution between the urban sites and the rural sites. For example, both the Old Bank Farm in Rhode Island and the Stadt Huys Block in downtown Manhattan (originally the core of New Amsterdam) have relatively small percentages of Cattle remains. Why so little cattle remains on a farm? And, why so few cattle remains on a block of rather well-to-do inhabitants?

Similarly, the Conference House has a much higher percentage of Pig remains in comparison to the Almshouse near City Hall in Manhattan. Why would the 'poorhouse' of New York City not be serving the inexpensive cut of pork to its occupants? A closer look at the percentages (of the 1990 study) reveals that the residents at the Almshouse were throwing out 56% of fish refuse. So, the poor were living on fish stews, not "head" stews.

The CHP/2 findings, although unprovenienced, indicate an altogether different foodways pattern: a good deal of cheap cuts of beef (the head) were being butchered and/or eaten at the Eighteenth century table. In contrast to the CHP/1 excavation, little if no fish remains were found. On both sites however, mammal bone was being used for occupational purposes as evidenced by the retrieval of several pieces of bone-button blanks (see Results-Activities Group and Fig. 5.5).

These preliminary observations indicate the importance of looking more closely at the context of each site (ethnic origins, occupational activities, economic status, environmental conditions) and the detailed comparison of like and unlike characteristics between sites.

## **6. *Suggestions for Further Research***

Valuable information can be gotten from the retrieval and analyses of provenienced and unprovenienced archaeofauna. The following are suggestions for further research:

- 1) To continue a more in-depth identification of animal types within the species in order to create a more detailed catalogue of Eighteenth century foodways.

- 2) To clarify and break down the Major Taxa, especially in the case of birds, into wild versus domestic types. This would illustrate the inhabitants access to and utilization of both cultivated lands and uncultivated/forested areas.

- 3) To conduct further research into American colonial foodways - the dietary preferences and their relationships to class.



4) To continue archaeological site comparison as new sites are investigated to create a larger data base for observing patterns in diet, food preparation, and food waste disposal systems.

### 7. *Tabulation Cards*

---

#### **Bos (TNB: 70)**

1	atlas	bisected (natural)
2	vertebrae	frags.
11	incisors	whole (worn - mature animal)
5	molars	whole (w/plaque) with and w/o root
3	molars	frags.
4	mandible	large frag.; posterior angle; one mark
2	skull/cranium	frags.
3	cuboids	whole
6	long bone	frags.; unidentified
9	hyoid	5 with very clear cut or chop marks (see Fig. 5.16)

---

#### **Medium Mammal (TNB: 41)**

9	ribs	frags.
24	cranium	frags.
4	vertebrate	frags.
1	molar	
3	long bones	

---

#### **Mammal**

#### ***species and size not identifiable (TNB: 13)***

10	cranium	
1	phalange	frag; gnawed
2	rib	

---

---

**Mammal**

*species and part not identifiable* (TNB: 51)

51 unidentified

---

**Ovis/Capra (TNB: 5)**

3	molar	w/o root; large size; 2 with considerable plaque
1	molar	frag.
1	femur/humerus	proximal end

---

**Aves (TNB: 11)**

1	cranium	frag.
1	stemum	frag.
2	ribs	frags.
1	tibia	proximal end; gallus-type
2	metatarsus	1 distal; 1 proximal
1	femur	whole; cut marks
1	long bone	cut marks
2	unidentified	frags.

---

---

**MISCELLANEOUS (TNB: 24)**

**Rodent (TNB: 4)**

3 long bone whole  
1 hyoid

**Feline (TNB: 1)**

1 femur whole; juvenile

**Pisces (TNB: 1)**

1 unidentified

**Tortoise (TNB: 1)**

1 unidentified

---

**SHELL**

**Oyster**

13 whole 616 grams  
78 frags. 1073 grams

**Clams**

5 whole 445 grams  
49 frags. 505 grams

**Unidentified (conch-like)**

2 frags. 19 grams

---

## 6. CONCLUSIONS

The CHP/2 Site holds potential for future archaeological investigation. The site was sampled when 16 cubic yards of soil were removed for sifting. While much of the scientific research value associated with the artifacts collected from the site had been lost, it was possible to arrive at a limited set of analytical results and interpretive conclusions and to evaluate the archaeological significance of the site as a whole through artifact, cartographic and volumetric analysis and historical research. Conclusions drawn may have some comparative value for future site assessment in and near City Hall Park.

Artifact densities were calculated by type. Artifact yields per cubic yard should be of some value for future assessments of occupational intensity and the "richness" of fill deposits within City Hall Park. The volume of the site's sub-surface disturbance due to recent construction activity was defined. The retrieval of bone-button blanks and kiln furniture has documented the regularity of debitage from button manufacture and pot-making activities in mixed fill deposits within the City Hall Park and confirms the prevalence of related craft activities within or near the Park. The retrieval of "ordinary" tobacco smoking pipe fragments in conjunction with bone button-blanks supports the historic view that City Hall Park was populated by lower economic status resident groups and individuals during the Eighteenth century. The assessment of faunal remains recovered from the site noted similarities with the archaeofauna retrieved from the City Hall Park in 1992 with the exception of Pisces (fish), with a smaller amount collected from the CHP/2 site. A high incidence of bos hyoid fragments (cow head bone), was noted which may represent the utilization of inexpensive cuts of meat on or near the site, though it is unclear whether these bones are the remains of actual meals of such cuts of meat or butchery waste products. Markings noted on these fragments could not be conclusively identified.

In addition, an extensive array of Eighteenth century ceramic sherds was retrieved from the site. Results from an assessment of the unprovenienced CHP/2 ceramic collection (159 sherds total) show that with 99 sherds or 62% of the total ceramic collection dated, 55 sherds or 55.5% of datable sherds dated to the Eighteenth century, 43 sherds or 43.5% dated to a time frame encompassing the Eighteenth to the early Nineteenth century, and one whiteware sherd dated to the Nineteenth century. In functional terms, the entire ceramic collection yielded 49% utilitarian ware and 43% table ware. A mean ceramic date of 1776.23 was derived using 107 datable artifacts (ceramics sherds and kaolin pipe fragments).

The examination of original cartographic references reveals that the CHP/2 Site may correspond with the location of both Eighteenth and Nineteenth century structures. Three Eighteenth century maps depict similar structures near the modern-day intersection of Chambers Street and Centre Street, inside the Park. Several Nineteenth century maps indicate similar buildings in the north-east corner of the site which correspond with a depiction on Hall's *A Landmark Map of City Hall Park*, 1910, as a "dispensary-soupouse" and as the location of a "Fire Engine House" removed in 1906. Although historic research has confirmed that in 1806 the Common Council of New York allocated funds for the erection of a Soupouse completed in 1808, there is not sufficient evidence to verify that the site area was the location of the Soupouse. Historic research recently

conducted by LPC has tentatively isolated the location of the Souphouse as lying slightly southwest of the CHP/2 Site and has questioned the likelihood that the Souphouse and Dispensary were ever housed in the same building (Harris et al., 1933: 22-23).

Feature 1, discovered during the excavation of an east-west construction trench has been defined as a possible *in situ* stacked schist and mortar foundation dating to the Eighteenth or Nineteenth century. Feature 1 lies at an estimated depth of 2.5-3.5" which corresponds well with the elevation of mixed Eighteenth and Nineteenth century deposits excavated at the CHP/1 Almshouse site. A second shallow trench, dug to install an additional water line to the large public lavatory on the Park road may have passed just above this feature and other architectural and archaeological remains. It is possible that Feature 1 is a secondary fill deposit comprised of particularly large sections of building debris, however, Feature 1's apparent stacked construction does support the conclusion of the presence of a marginally intact section of an historic foundation wall in the northeast corner of NYC's City Hall Park.

Based on the evidence it is concluded that Feature 1 corresponds closely with both Eighteenth and Nineteenth century depictions i.e., in the middle portion of the east wall of the eastern-most building situated in the northeast corner of the Park as depicted on the Nineteenth century maps and several structures on Eighteenth century maps including a relatively large L-shaped structure along the southern perimeter of the area designated in the Eighteenth century as the "Negro Burial Ground," today the approximate location of Chambers Street.

## 7. RECOMMENDATIONS

The damage to an archaeological site is always permanent. We therefore recommend that all construction projects, including *temporary* projects, slated for areas of known archaeological sensitivity be brought under the purview of site review policies and procedures similar to that established by Section 106 of the National Historic Preservation Act (1966, as amended). In the event of further sub-surface construction in City Hall Park these review policies should be thoroughly applied.

Future archaeological research into the CHP/2 Site should attempt the definition, identification and interpretation of Feature 1 and any related features.

We recommend that the entire collection of diagnostic Eighteenth and Nineteenth century ceramics retrieved from the site be stabilized through conservation procedures and added to other type collections currently in the possession of the LPC to further the development of a type collection which comprises a wide variety of archaeological materials and samples. This growing collection should be made available to the archaeological community - students, avocationalists and professionals alike - to facilitate study and research.

## 8. BIBLIOGRAPHY

### PRIMARY SOURCES

#### AQUATINTS

- Stansbury, A. J.  
c. 1825      *City Hall Park and Chambers Street from Broadway*, aquatint.  
(Stokes, 1915-28, vol. 6, pl. 96A).

#### MAPS

- Anonymous  
1731      *A Plan of the City of New York from an Actual Survey made by James Lyne (The Bradford Map or the Lyne Survey)*. New York Public Library, Map division.
- Bridges, William  
1807      *The Commissioners Map of the City of New York*. New York Public Library, Map Division.
- Davis, James  
1970      *Geology Survey: Geology Map of New York*. The University of the State of New York, The State Education Department, New York.
- Grim, David  
1813      *A Plan of the City and Environs of New York*. (Grims' General Plan). New York Public Library, Map Division.
- Goerck, Casimer Th. and Mangin, Joseph Fr.  
1803      *A Plan and Regulation of the City of New York (Etc.)* (The Goerck-Mangin Plan). New York Public Library, Map Division.
- Bolton, Reginald P.  
1922      *Indian Paths of the Great Metropolis*. Edited by F. W. Hodge, 1922. Heye Foundation, New York Public Library Map Division.

- Hall, Edward Hagman  
 1910 *A Landmark Map of City Hall Park, New York.* New York Public Library, Map Division.
- Lloyd, James T.  
 1867 *Lloyd's Mammoth Map of the Business Portion of New York City.* New York Public Library, Map Division.
- Maerschallck, Francis  
 1763 *A Plan of the City of New York from an Actual Survey.* (The Maerschallck Plan). New York Public Library, Map Division.
- Montessor, John  
 1775 *A Plan of New York & Its Environs to Greenwich, on the North or Hudsons River ...* New York Public Library, Map Division.
- Norman Porter Associates  
 1982 *City of New York, Department of Parks and Recreation: City Hall Park, Borough of Manhattan, Topographic Survey.* IN: Grossman & Associates, Inc., 1991.
- Perris, William  
 1857-62 *Maps of the City of New York.* (Perris and Brown: New York) New York Public Library, Map Division.
- Ratzen (Ratzer), Bernard  
 1776 *Plan of the City of New York.* (The Ratzer Plan). (Stokes, 1915-28, vol. 1, pl. 42).
- Ratzer, Bernard  
 1767 *Plan of the City of New York, In North America.* (The Razter Plan). New York Public Library, Map Division.
- Viele, Egbert L.  
 1874 *Topographic Atlas of the City of New York.* New York Public Library, Map Division.



## MEMORANDA

The New York City Landmarks Preservation Commission  
June 9, 1992      *City Hall Park, Public Facility Excavations.* From  
Daniel Pagano, Urban Archaeologist, L.P.C. to the Honorable  
Deputy Mayor Barbara Fife and Laurie Beckelman, Chair, LPC.

## PERSONAL COMMUNICATION

Apuzzo, Robert  
October, 1992 *Personal Communication.*

Castro, Glen  
October, 1992 *Personal Communication.*

Rutsch, Ed  
October, 1992 *Personal Communication.*

## PUBLISHED DOCUMENTS

*Minutes of the Common Council of the City of New York (1784-1831).*  
1905      The City of New York, New York.

*Rules for the government of the alms-house in the city of New York.*  
1801      Furman and London, New York.

## SECONDARY SOURCES

Amorosi, Thomas  
1990      "Faunal Analysis," IN: *The Archaeological Investigation  
of the City Hall Park Site, Manhattan.* Prepared by the NYC  
Landmarks Preservation Commission.

1984      "A Study of the Faunal Remains from the Late 19th  
Century Site at 53rd Street and 3rd Avenue, Manhattan, NYC."

Barto, Stevens, S. Baugher, E. Lenick, K. Morgan, D. Pagano, R. Venables  
1989      *An Archaeological Planning Model of Richmondtown  
Restoration, Staten Island, New York.* Monograph on file  
at the New York City Landmarks Preservation Commission.

- Baughner-Perlin, Sherene, Meta Janowitz, Marc Kodack and Kate Morgan  
 1982 *Toward an Archaeological Predictive Model for Manhattan: A Pilot Study.* Report on file at the New York City Landmark Preservation Commission.
- Baughner, Sherene, et. al.  
 1983 *State Plan of All Five Boroughs, State Resource Planning Protection Program.* (RP3). Monograph on file at the New York City Landmarks Preservation Commission.
- Baughner, Sherene, J. Baragli and L. DeCasare  
 1985 *The Archaeological Investigation of the Voorlezer House Site, Staten Island, New York,* by S. Baughner et. al. Monograph on file at the Staten Island Historical Society.
- Baughner, Sherene, and Judith Baragli,  
 1987 *An Archaeological Investigation at the Matron's Cottage, Smug Harbor Cultural Center, Staten Island.* Monograph on file at the New York City Landmarks Preservation Commission.
- Baughner, Sherene et. al.  
 1990 *The Archaeological Investigation of the City Hall Park Site, Manhattan.* Monograph on file at the New York City Landmarks Preservation Commission.
- Bolton, Reginald, P.  
 1922 *Indian Paths of the Great Metropolis.* Edited by F.W. Hodge, Heye Foundation, New York.
- Bolton, Reginald P.  
 1975 *Indian Notes and Monographs.* New York Museum of the American Indian, Heye Foundation, New York.
- Booth, Mary L.  
 1865 *History of the City of New York.* W. R. C. Clark & Co., New York.
- Blunt's Stranger Guide  
 1825 *The Picture of New York.* A. T. Goodrich, New York.
- City of New York, Department of Public Works,  
 Division of Engineering Service  
 1968 *Subsurface Exploration Section, Record of Borings for New York Civic Center.*

- City of New York, Landmarks Preservation Commission  
1987 *Guidelines for Archaeology*, April.
- Cray, Robert E.  
1988 *Paupers and Poor Relief in New York City and its Rural Environs, 1700-1830*. Temple University Press, Philadelphia.
- Dawson, Henry Barton  
1867 *Gleanings from the Harvest-Field of American History*.  
New York.
- French, J. H.  
1860 *A Gazetteer of the State of New York*. Pearsall Smith,  
Syracuse, New York.
- Gratacap, A. M.  
1904 *Geology of the City of New York*. American Museum of  
Natural History. Brentano's, New York.
- Grayson, D. K.  
1978 "Minimum Numbers and Sample Size in Vertebrate Faunal  
Analysis." *American Antiquity*. 43:53-65.
- 1979 "On the Quantification of Vertebrate Archaeofauna." IN:  
*Advances in Archaeological Methods and Theory*. Edited by  
M. B. Schiffer, vol. 2, pp. 199-237. Academic Press, New York.
- Grossman & Associates, Inc.  
1988 *Archaeological Sensitivity Evaluation and Testing  
Recommendations for the Proposed Subterranean Utilities  
Corridor between City Hall and Tweed Court House, City Hall  
Park, New York City*. (Project Number PW-292-44). Prepared  
for the Department of General Services. Report on file at the  
New York City Landmark Preservation Commission.
- Grossman & Associates, Inc.  
1991 *The Buried History of City Hall Park: The Initial  
Archaeological Identification, Definition and Documentation  
of Well-Preserved 18th. Century Deposits and the Possible  
Structural Remains of N.Y.C.'s First Almshouse*. Prepared for  
the Department of General Services. Report on file at the New  
York City Landmark Preservation Commission.

- Harrington, J. C.  
 1978 "Dating Stem Fragments of Seventeenth and Eighteenth Century Clay Tobacco Pipes" IN: *Historical Archaeology: A Guide to Substantive and Theoretical Contributions*, edited by Robert L. Schuyler, pp. 63 - 65. Baywood Publishing Company, Inc. Farmingdale, NY.
- Harris, Gale, Jean Howson and Betsy Bradley  
 1993 *African Burial Ground and the Commons Historic District Designation Report*, New York City Landmarks Preservation Commission, pp. 22 - 23.
- Hume, Ivor Noel  
 1982 *A Guide to Artifacts of Colonial America*. Alfred A. Knopf, New York, pp. 303.
- Jochim, M. A.  
 1979 "Breaking Down the System: Recent Ecological Approaches in Archaeology." IN: *Advances in Archaeological Methods and Theory*, edited by M. Schiffer, vol. 2, pp. 199-237. Academic Press, New York.
- Kalm, Peter  
 1966 *The America of 1750: Peter Kalm's Travels in North America, the English Version of 1770*, edited by A. B. Benson, Dover, New York."
- Lamb, Martha J.  
 1896 *History of the City of New York: Its Origins, Rise and Progress*. The A. S. Barnes Company, New York.
- Lyman, R. L.  
 1977 "Analysis of Historical Faunal Remains." *Journal of Historical Archaeology*, 1:67-72.
- Mckearin, George and Helen L.  
 1941 *American Glass*. Crown, New York.
- Morgan, Kate  
 1982 "The History of Markets in New York City." IN: *Toward an Archaeological Predictive Model for Manhattan: A Pilot Study*, by S. Baugher et. al. Report on file at the New York City Landmark Preservation Commission.

- 1983 "Faunal Appendix." IN: *The Archaeological Investigation of the Voorlezer House Site, Staten Island, New York*, by S. Baugher et al. Monograph on file at the Staten Island Historical Society, pp. 160-164.
- 1984 "In Idea and Things: Foodways and Archaeology," written for the Foodways Conference, St. Marks Church, September.
- 1985 "Cultural Pluralism and Pots in New Amsterdam, New York City," by Janowitz, Morgan, Rothschild. IN: *Domestic Pottery of the Northeastern United States, 1625-1850*, edited by Sarah P. Turnbaugh, Academic Press, New York.
- 1987 "Faunal Report" IN: *An Archaeological Investigation at the Matron's Cottage, Smug Harbor Cultural Center, Staten Island*. Monograph on file at the New York City Landmarks Preservation Commission.
- 1989 "History of Markets." Exhibition Proposal, National Endowment for the Humanities.
- Richmond, F. F.  
1871 *New York and Its Institutions, 1609 - 1871*.  
E. B. Treat, New York.
- Rothman, David J.  
1971 *The Discovery of the Asylum: Social Order and Disorder in the New Republic*. Little Brown & Co.,  
New York.
- Ross, Steven J.  
1988 "Objects of Charity: Poor Relief, Poverty, and the Rise of the Almshouse in Early Eighteenth-Century New York City," IN: *Authority and Resistance in Early New York City*, edited by William Pencak and Conrad Edick Wright. The New York Historical Society, New York.
- Rothschild, Nan  
1989 "An Analysis of Subsistence and Adaptation in Early New York." Exhibition Proposal, National Endowment for the Humanities.

- South, Stanley  
1978 "Evolution and Horizon as Revealed in Ceramic Analysis  
in Historical Archaeology." IN: *Historical Archaeology: A Guide  
to Substantive and Theoretical Contributions*, edited by Robert  
L. Schuyler. Baywood Pub., Farmingdale, New York, pp. 63-67.
- Spafford, Gates Horatio  
1813 *A Gazetteer of the State of New York.*  
H.C. Southwick, Albany, New York.
- Spafford, Gates Horatio  
1824 *A Gazetteer of the State of New York.* Heart of the  
Lake Company, Albany New York. (Reprinted in 1981).
- Stokes, I. N. Phelps  
1915-1928 *The Iconography of Manhattan Island, 1498-1909.*  
Volumes 1-6. Robert H. Dodd, New York.

## 9. APPENDICES

### *Appendix 1: Inventory Taxonomy*

Codes	Functional Groups	Sub Groups	Artifact Types
Act.1 a	Activities	Manufacturing debitage	kiln furniture
Act.1 b	Activities	Manufacturing debitage	Bone button blanks
Act.2	Activities	Toys	Marbles
Act.3	Activities	Miscellaneous hardware	bolts, wire, iron bars
Act.4	Activities	Unidentifiable metal	Unidentifiable metal
Act.5	Activities	Unidentifiable plastic	Unidentifiable plastic
Act.6	Activities	Botanical	Botanical
Act.7	Activities	Unidentifiable leather	Unidentifiable leather
Arc.1	Architecture	Window glass	Window glass
Arc.2	Architecture	Nails	Nails
Arc.3	Architecture	Construction hardware	Construction hardware
Arc.4	Architecture	Building materials	Building materials
Clo.1	Clothing	Clothing	Button covering
Clo.2	Clothing	Clothing	Shoe pad
Kit.1	Kitchen	Ceramics	Ceramics
Kit.2	Kitchen	Glass	Glass
Kit.2 a	Kitchen	Glass	Bottles
Per.1	Personal	Coins	Coins
Per.2	Personal	Tobacco pipes	Tobacco pipes

*Taxonomy based on Stately South, Method & Theory in Historical Archaeology. New York: Academic Press, 1977, 126-127.*

## Appendix 2: Artifact Inventory

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH (*)
1	20c.	1	metal	alloy	unid	nail	unid	Arc.2
2	20c.	7	metal	metal	unid	nail	unid	Arc.2
3	20c.	1	metal	metal	unid	nail	unid	Arc.2
4	20c.	3	metal	metal	unid	nail	unid	Arc.2
5	20c.	1	metal	metal	unid	nail	unid	Arc.2
6	20c.	1	metal	metal	unid	nail	unid	Arc.2
7	unkn	7	metal	metal	unid	unid	unid	Act.4
8	20c.	1	metal	metal	unid	bolt	unid	Act.3
9	unkn	1	metal	lead	unid	unid	unid	Act.4
10	20c.	1	metal	metal	unid	unid	unid	Act.4
11	20c.	1	metal	metal	unid	hose clamp	unid	Act.3
12	20c.	7	metal	metal	unid	wire	unid	Act.3
13	unkn	1	metal	metal	unid	nail	unid	Arc.2
14	unkn	1	metal	metal	unid	unid	unid	Act.4
15	unkn	1	metal	metal	unid	nail	unid	Arc.2
16	unkn	1	metal	metal	unid	unid	unid	Arc.3
17	unkn	1	metal	metal	unid	unid	unid	Act.4
18	18c.	3	ceram	sherd	salt-	stone	rim	Kit.1
18	18c.	22	ceram	sherd	salt- glazed	stone ware	body	Kit.1
19	18c.	1	ceram	sherd	salt- glazed	stone ware	rim	Kit.1
20	unkn.	1	ceram	sherd	salt- glazed	stone ware	base	Kit.1
20	unkn	15	ceram	sherd	salt- glazed	stone ware	frag	Kit.1
21	18c/ e.19c	1	ceram	sherd	salt- glazed	stone ware	rim	Kit.1

Taxonomy based on Stately South, *Method & Theory in Historical Archaeology*. New York: Academic Press, 1977, 126-127.



*Appendix 2: Artifact Inventory*

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH
21	18c/ e.19c	2	ceram	sherd	salt- glazed	stone ware	body	Kit.1
22	18c/ e.19c	1	ceram	sherd	un- glazed	stone ware	rim	Kit.1
23	unkn	1	ceram	sherd	un- glazed	unid	rim	Kit.1
24	1700- 1799	2	ceram	sherd	salt- glazed	unid	frag	Kit.1
25	unkn	4	porce- lain	sherd	high- fired	unid	frag	Kit.1
26	c1790 -1840	1	porce- lain	sherd	high- fired	hard paste	base	Kit.1
26	c1790 -1840	4	porce- lain	sherd	high- fired	hard paste	frag	Kit.1
26.1	c1790 -1840	1	porce- lain	sherd	high- fired	hard paste	frag	Kit.1
27	unkn	1	porce- lain	sherd	high- fired	hard paste	frag	Kit.1
28	unkn	1	ceram	kiln furn	salt- glazed	kiln furn	unid	Act. 1a
29	unkn	1	ceram	sherd	lead- glazed	earth 'ware	rim	Kit.1
29	unkn	6	ceram	sherd	lead- glazed	earth 'ware	body	Kit.1
30	18c/ e.19c	1	ceram	sherd	salt- glazed	stone ware	base	Kit.1
31	1700- 1799	1	ceram	sherd	salt- glazed	stone ware	rim	Kit.1
32	1700 - 1802	1	ceram	sherd	tin- glazed	delft ware	rim	Kit.1
32.1	unkn	6	ceram	sherd	tin- glazed	delft ware	frag	Kit.1
33	1780- 1830	9	ceram	sherd	unid	pearl ware	frag	Kit.1
34	unkn	5	clay	brick	unid	unid	frag	Kit.1
35	1740- 1785	9	ceram	sherd	salt- glazed	stone ware	body	Kit.1

*Appendix 2: Artifact Inventory*

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH (*)
36	1750- 1775	1	ceram	sherd	salt- glazed	stone ware	body	Kit.1
36	1750- 1775	3	ceram	sherd	salt- glazed	stone ware	frag	Kit.1
37	1750- 1800	2	ceram	sherd	tin- glazed	delft ware	rim	Kit.1
37	1750- 1800	2	ceram	sherd	tin- glazed	delft ware	frag	Kit.1
38	1790- 1835	1	ceram	sherd	tin- glazed	delft ware	frag	Kit.1
39	1690- 1795	2	ceram	sherd	unid	slip ware	body	Kit.1
40	1820+	1	ceram	sherd	unid	white ware	frag	Kit.1
41	1790+	1	ceram	sherd	unid	cream ware	frag	Kit.1
42	1795- 1835	1	ceram	sherd	unid	pearl ware	frag	Kit.1
42	1775- 1825	4	ceram	sherd	unid	pearl ware	frag	Kit.1
43	1770s	1	ceram	sherd	salt- glazed	white ware	rim	Kit.1
44	1770- 1820s	2	ceram	sherd	unid	cream ware	rim	Kit.1
44	1770- 1820s	6	ceram	sherd	unid	cream ware	frag	Kit.1
44	1790+	1	ceram	sherd	unid	cream ware	frag	Kit.1
45	unkn	1	ceram	sherd	white- glazed	unid	frag	Kit.1
46	unkn	7	glass	glass	unid	win- dow	frag	Arc.1
47	19c.	1	clay	water pipe	unid	unid	rim	Arc.4
48	unkn	1	clay	water pipe	unid	unid	rim	Arc.4

*Appendix 2: Artifact Inventory*

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH
48	unkn	1	clay	water pipe	unid	unid	frag	Arc.4
49	unkn	1	ceram	sherd	lead-glazed	earth 'ware	rim	Kit.1
49	unkn	1	ceram	sherd	lead-glazed	earth 'ware	unid	Kit.1
49	unkn	1	ceram	sherd	lead-glazed	earth 'ware	unid	Kit.1
50	unkn	7	ceram	sherd	low fired	unid	unid	Kit.1
51	18/ 19c	1	clay	brick	unid	unid	frag	Arc.4
52	unkn	1	ceram	sherd	glazed sides	earth 'ware	body	Kit.1
53	unkn	1	stone	stone	NA	floor	frag	Arc.4
54	18c.	3	bone	butt. blank	unid	unid	frag	Act. 1b
55	unkn	3	glass	glass	unid	unid	frag	Kit.2
56	unkn	1	ceram	sherd	lead-glazed	earth 'ware	rim	Kit.1
56	unkn	1	ceram	sherd	lead-glazed	earth 'ware	frag	Kit.1
57	unkn	2	ceram	sherd	lead-glazed	earth 'ware	frag	Kit.1
58	unkn	4	ceram	sherd	unid	slip ware	frag	Kit.1
59	unkn	2	ceram	sherd	lead-glazed	earth 'ware	base	Kit.1
59	unkn	1	ceram	sherd	lead-glazed	earth 'ware	rim	Kit.1
59	unkn	11	ceram	sherd	lead-glazed	earth 'ware	body	Kit.1
60	unkn	1	ceram	frag	salt-glazed	stone ware	frag	Arc.4
61	20c.	5	glass	glass	unid	curved	frag	Kit.2

*Appendix 2: Artifact Inventory*

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH (*)
62	19c.	3	ceram	tile	white glaze	stone ware	frag	Arc.4
63	1720- 1820	1	kaolin	pipe	white glaze	N/A	bowl	Per.2
63	1710- 1750	1	kaolin	pipe	white glaze	N/A	stem	Per.2
63	1750- 1800	9	kaolin	pipe	white glaze	N/A	stem	Per.2
64	unkn	1	glass	glass	blown	bot- tle	base	Kit. 2a
64	unkn	6	glass	glass	blown	bot- tle	shoul- -der	Kit. 2a
64	unkn	14	glass	glass	blown	bot- tle	body	Kit. 2a
64	unkn	3	glass	glass	blown	bot- tle	neck	Kit. 2a
64	unkn	3	glass	glass	unid	bot- tle	body	Kit. 2a
65	unkn	1	glass	glass	unid	cur- ved	frag	Kit.2
66	unkn	11	glass	glass	unid	cur- ved	frag	Kit.2
67	20c.	1	glass	glass	unid	cur- ved	base	Kit.2
67	20c.	2	glass	glass	unid	cur- ved	frag	Kit.2
67	20c.	8	plas- tic	unid	unid	unid	frag	Act.5
67	20c.	2	N/A	bat- tery	N/A	size AA	N/A	Act.3
67	20c.	1	leath- er	leath- -er	unid	but- ton	N/A	Clo.1
67	unkn	1	leath- er	unid	unid	unid	N/A	Act.7
67	unkn	1	botan- ical	botan- ical	unid	wal- nut	frag	Act.6

*Appendix 2: Artifact Inventory*

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH (* )
67	20c.	1	rubber	clothing	unid	shoe pad	N/A	Clo.2
68	unkn	1	stone	stone	unid	marble	frag	Arc.4
69	20C.	1	glass	glass	unid	bottl	frag	Kit. 2a
70	unkn	1	glass	glass	cut clear	curvd	frag	Kit.2
71	unkn	1	glass	glass	unid	curvd	frag	Kit.2
72	unkn	1	glass	glass	unid	bottl	neck	Kit. 2a
72	unkn	1	glass	glass	unid	bottl	frag	Kit. 2a
73	20c.	1	glass	glass	pressd	window	frag	Arc.1
74	unkn	1	glass	glass	unid	curvd	frag	Kit.2
75	unkn	2	glass	glass	unid	curvd	frag	Kit.2
76	unkn	18	glass	glass	unid	window	frag	Arc.1
76	unkn	2	glass	glass	unid	curvd	frag	Kit.2
77	unkn	1	glass	glass	unid	window	frag	Kit.2
78	unkn	24	glass	glass	unid	window	frag	Arc.1
78	unkn	4	glass	glass	unid	curvd	frag	Kit.2
79	unkn	9	glass	glass	unid	curvd	frag	Kit.2
80	unkn	1	glass	glass	unid	curvd	frag	Kit.2
80	unkn	23	glass	glass	unid	window	frag	Arc.1
81	unkn	25	glass	glass	unid	curvd	frag	Kit.2
82	unkn	1	glass	glass	unid	curvd	frag	Kit.2
83	unkn	1	glass	glass	unid	bottl	neck	Kit. 2a
83	unkn	1	glass	glass	unid	curvd	frag	Kit.2
84	unkn	2	glass	glass	unid	curvd	frag	Kit.2

*Appendix 2: Artifact Inventory*

CAT#	DATE	CNT	MAT'L	CLASS	TECH	TYPE	ELM'T	SOUTH (*)
84	unkn	1	glass	glass	unid	curvd	frag	Kit.2
85	unkn	1	glass	glass	molded	curvd	frag	Kit.2
85	unkn	3	glass	glass	unid	curvd	frag	Kit.2
A1	1720/ 1800?	1	Kaolin	pipe	unid	N/A	bowl	Per.2
A2	18/ 19c.	1	ceram	sherd	salt- glazed	Stone ware	base	Kit.1
A3	18c.	1	ceram	sherd	salt- glazed	Stone ware	rim	Kit.1
A4	1744/ 1775	1	ceram	sherd	salt- glazed	Stone ware	rim	Kit.1
A5	1744/ 1775	1	ceram	sherd	salt- glazed	Stone ware	base	Kit.1
A6	1790/ 1810?	1	glass	glass	blown	bot- tle	base	Kit.2
A7	unkn	1	unid	slag	unid	slag	N/A	Act.6
A8	unkn	2	stone	stone	N/A	schis t	frag	Arc.4
A9	unkn	1	mortar	unid	unid	mor- tar	frag	Arc.4
A10	unkn	1	clay	brick	unid	unid	frag	Arc.4
B1	unkn	2	stone	stone	N/A	schis t	frag	Arc.4
B1	unkn	4	clay	brick	unid	unid	frag	Arc.4
B1	unkn	1	ceram	tile	unid	unid	frag	Arc.4
B1	unkn	1	ceram	water pipe	lead glazed	unid	frag	Arc.4
B1	unkn	1	sand base	brick	unid	unid	frag	Arc.4
B2	unkn	1	glass	toy	unid	mar- ble	N/A	Act.2

### Appendix 3: Functional Distribution of Artifacts

Categories/ artifact types	Total	% of collec- tion	% of catego- ry	Densi- ty per /yd <sup>3</sup>	Weight (gr)
Kitchen Group (Kit)	272	61.12	N/A	17.0	2097.50
1. Ceramics	159	35.73	58.45	9.9	1516.40
2. Glass	80	17.97	29.41	5.0	183.10
2.a Bottles	33	7.41	12.13	2.06	398.00
Architecture Group (Arc)	118	26.51	N/A	N/A	3496.60
1. Window Glass	73	16.40	61.09	4.56	62.60
2. Nails	16	3.60	13.56	1.0	313.00
3. Construction Hardware	1	0.22	0.85	0.625	37.00
4. Building Materials	28	6.30	23.70	1.75	3084.00
Personal Group (Per)	14	3.15	N/A	0.875	44.00
1. Coins	1	0.22	7.14	0.062	9.50
2. Tobacco Pipes	13	2.92	92.86	0.81	35.50
Clothing Group (Clo)	2	0.45	N/A	0.125	0.08
1. Button Covering	1	0.22	0.50	0.625	0.03
2. Shoe Pad	1	0.22	0.50	0.625	0.05

Taxonomy based on Stanely South, *Method & Theory in Historical Archaeology*. New York: Academic Press, 1977, 126-127.

*Appendix 3: Functional Distribution of Artifacts*

Categories/ artifact types	Total	% of collec- tion	% of catego- ry	Densi- ty per /yd <sup>3</sup>	Weight (g.)
Activities Grou (Act)	39	8.76	N/A	2.44	670.70
1.a Manufactu- ring/Kiln Furniture	2	0.45	5.28	0.125	413.00
1.b Manufactu- ring/Button Blanks	3	0.67	7.692	0.19	3.50
2. Toys (marbles)	1	0.22	2.564	0.625	5.50
3. Miscellane- ous Hardware (bolts,wire, iron bars)	11	2.47	28.21	0.69	78.00
4. Unidentifi- able Metal	11	2.47	28.21	0.69	165.00
5. Unidentifi- able Plastic	8	1.08	20.51	0.50	5.00
6. Botanical	2	0.45	5.128	0.125	0.50
7. Unidentifi- able Leather	1	0.22	2.564	0.062	0.20



**10. FIGURES**

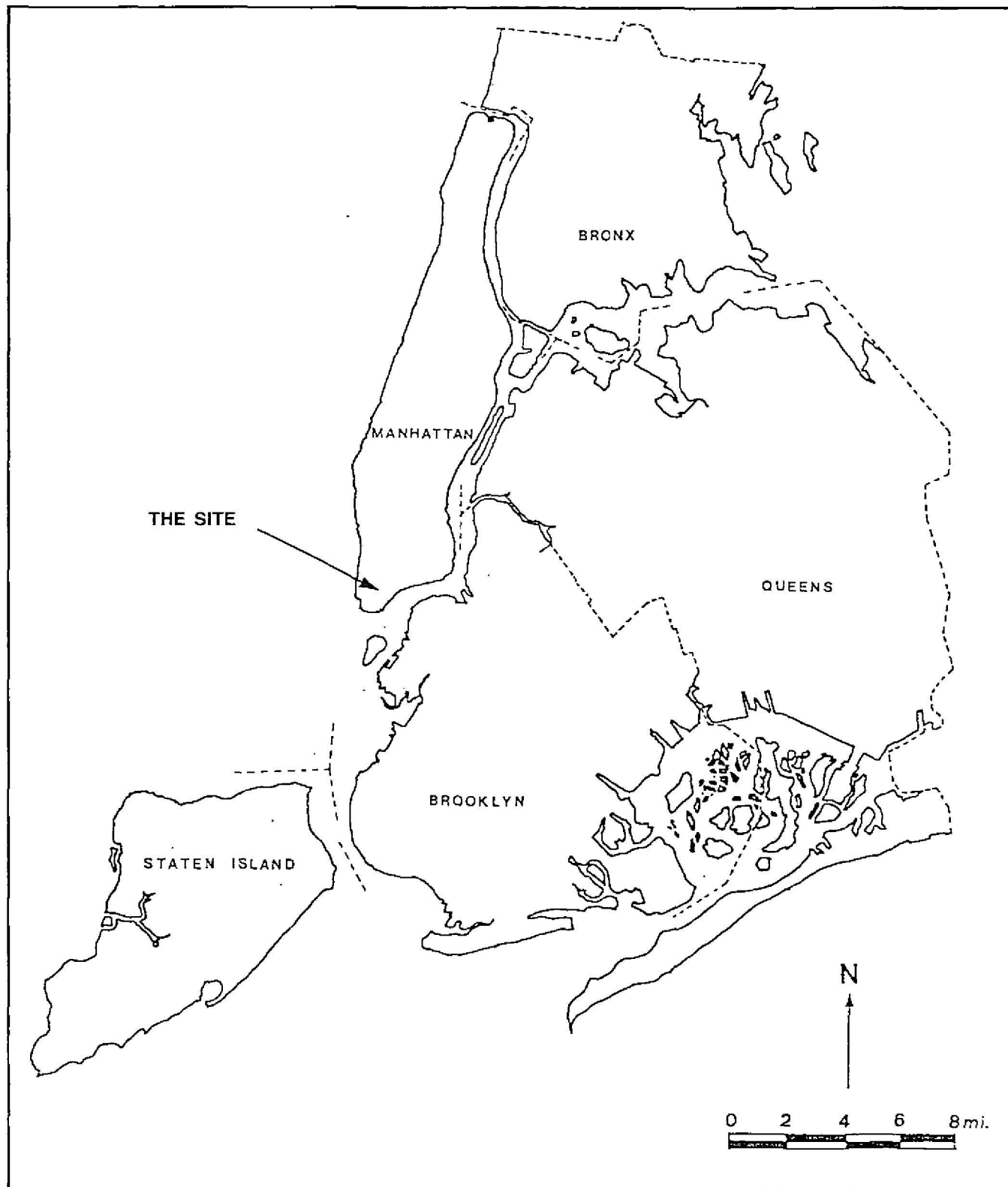


Figure 1.1 Map indicating the location of the CHP/2 Site within the five Boroughs of NYC.

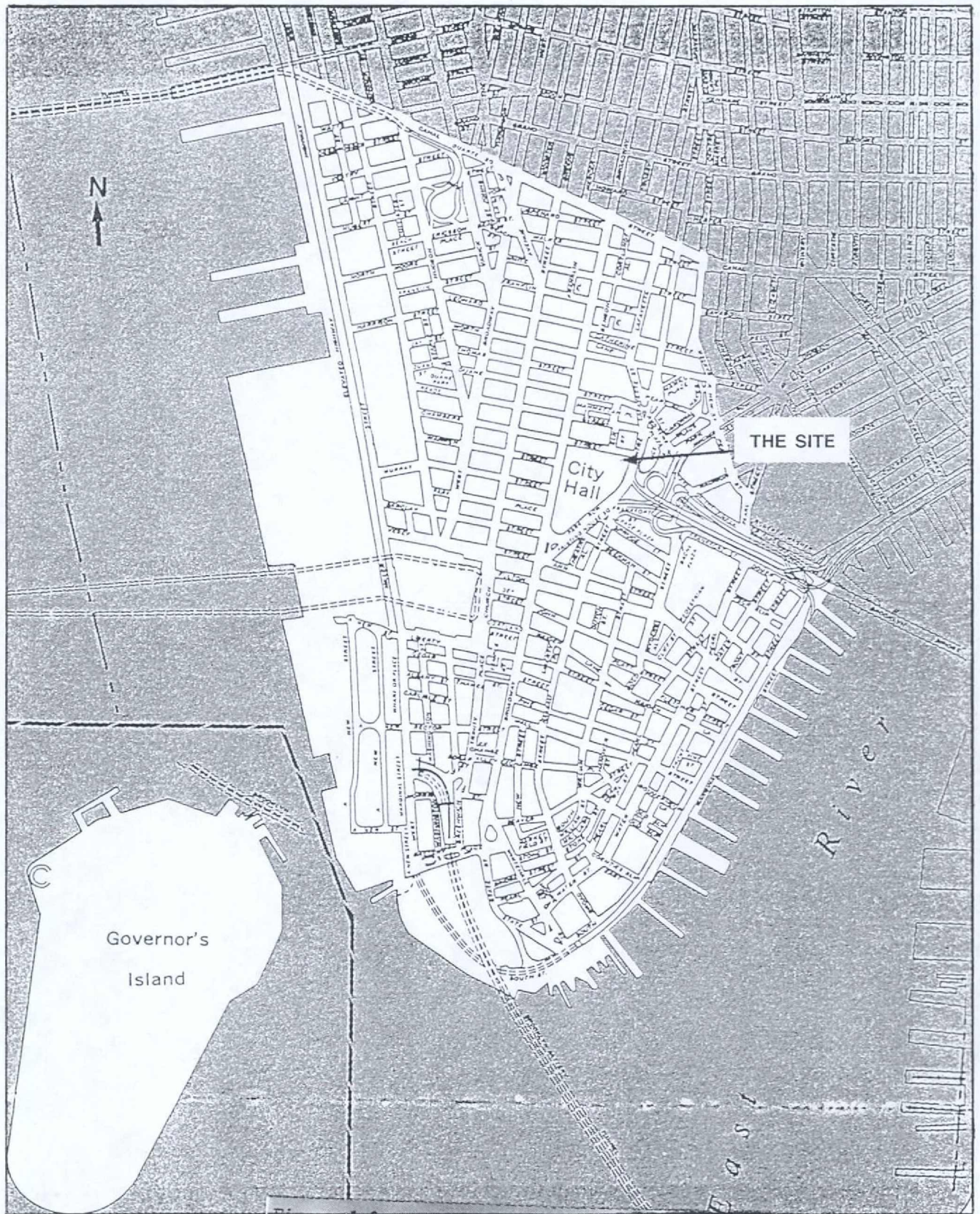


Figure 1.2 Map indicating CHP/2 Site within lower Manhattan near the N.E. corner of NYC's City Hall Park.

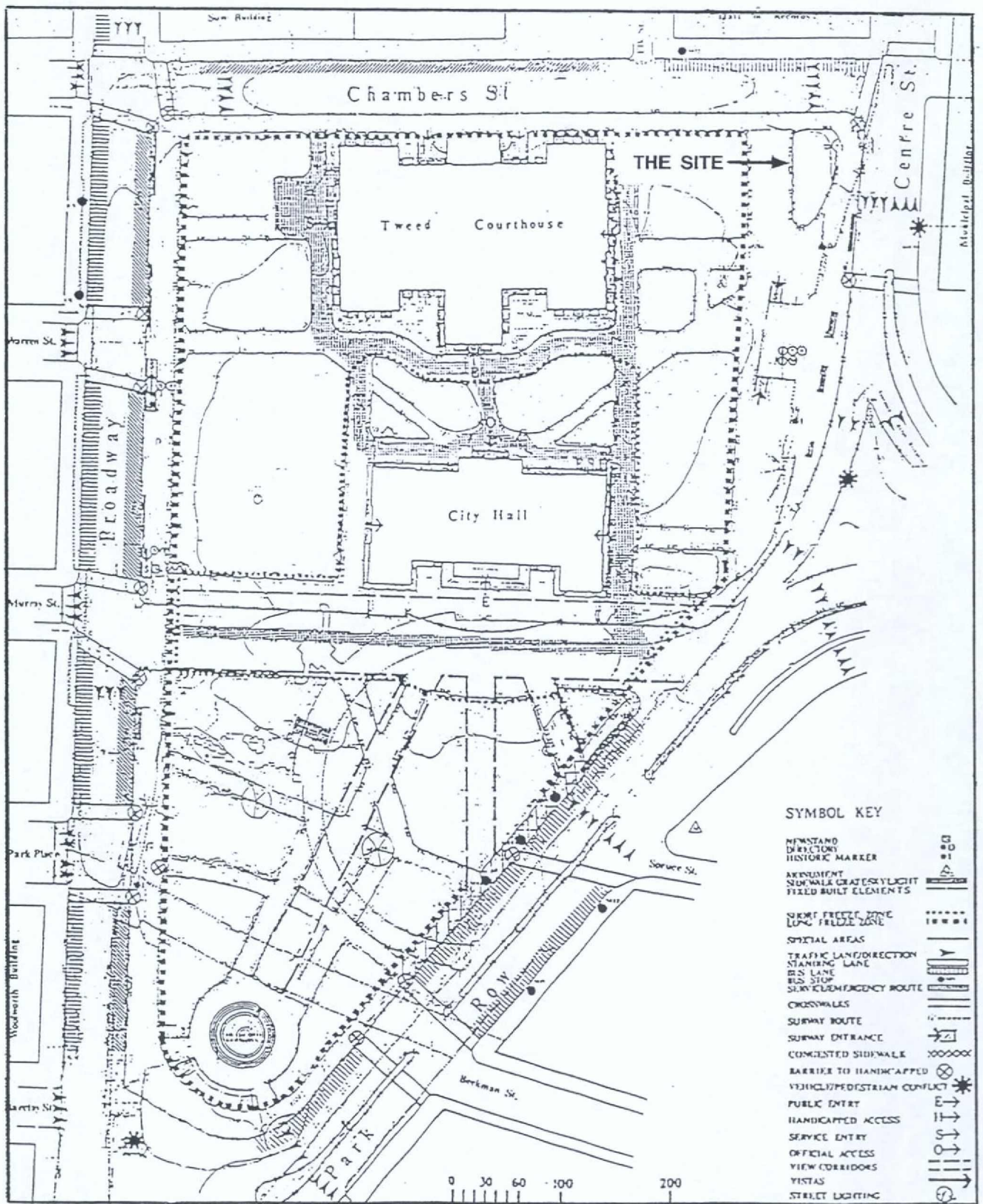
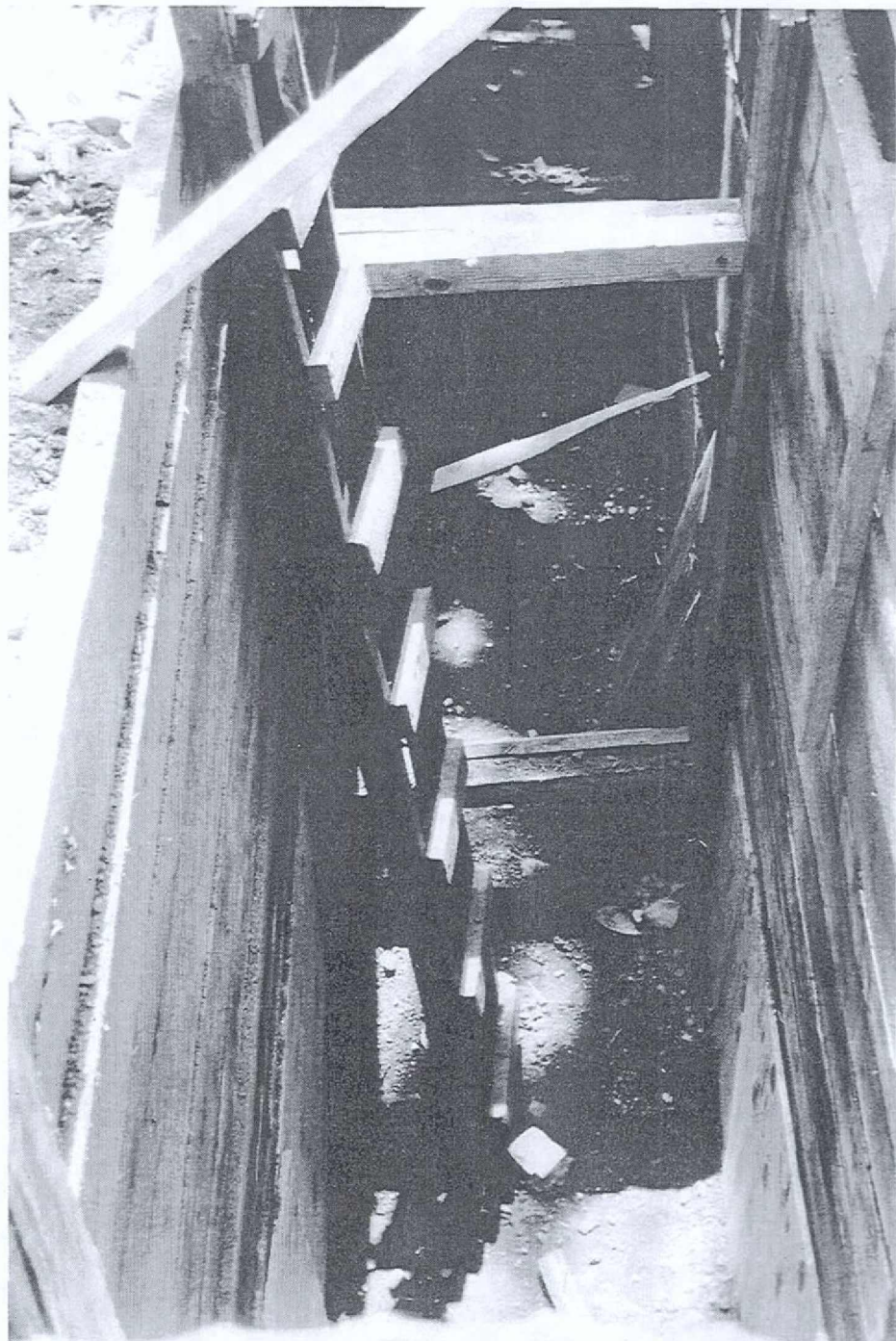


Figure 1.3 Topographic Survey, City Hall Park, Borough of Manhattan, Department of Parks and Recreation, City of New York, 1982, by Norman Porter Associates. IN: Grossman, 1991.



Figure 1.4 CHP/2 Site in June 1992, during the installation of public lavatories designed by J. C. Decaux.



**Figure 1.5** CHP/2 Site in June 1992 during the installation of public lavatories designed by J. C. Decaux: north-south construction trench.



**Figure 1.6** CHP/2 Site in June 1992 during the installation of public lavatories designed by J. C. Decaux: east-west construction trench.

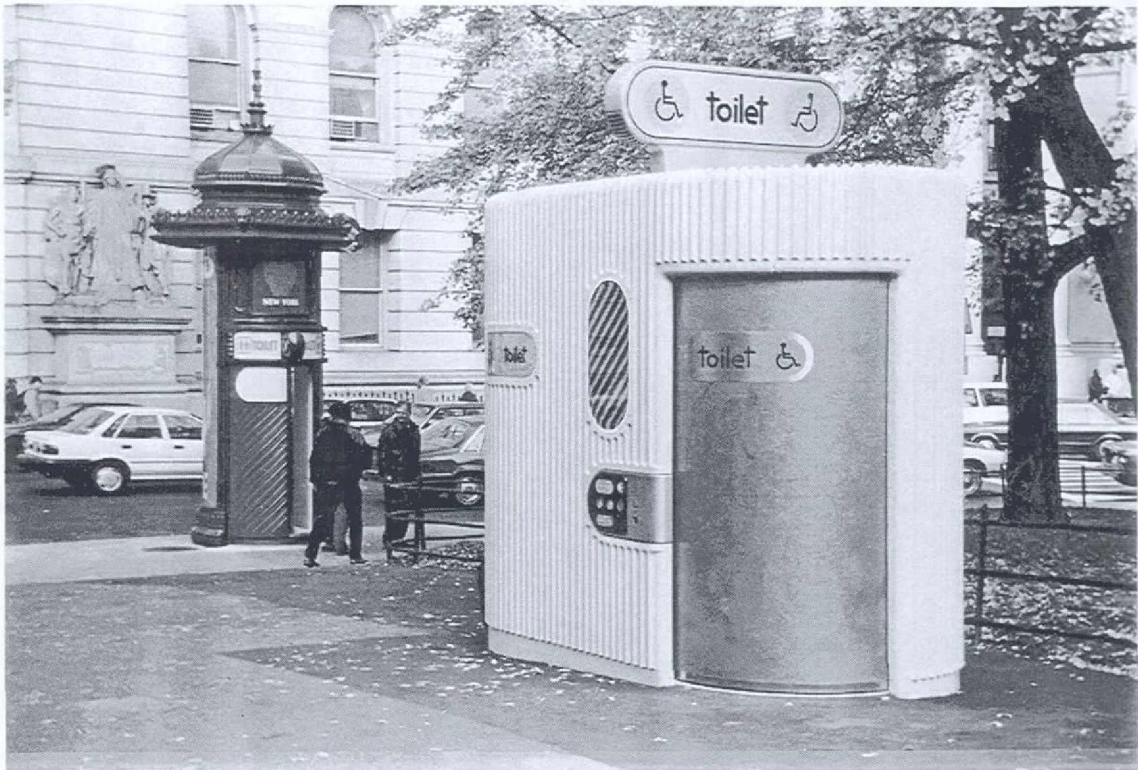


**Figure 1.7** View of the east-west construction trench looking south and showing Site Feature 1, the possible remains of a stacked schist structural foundation.

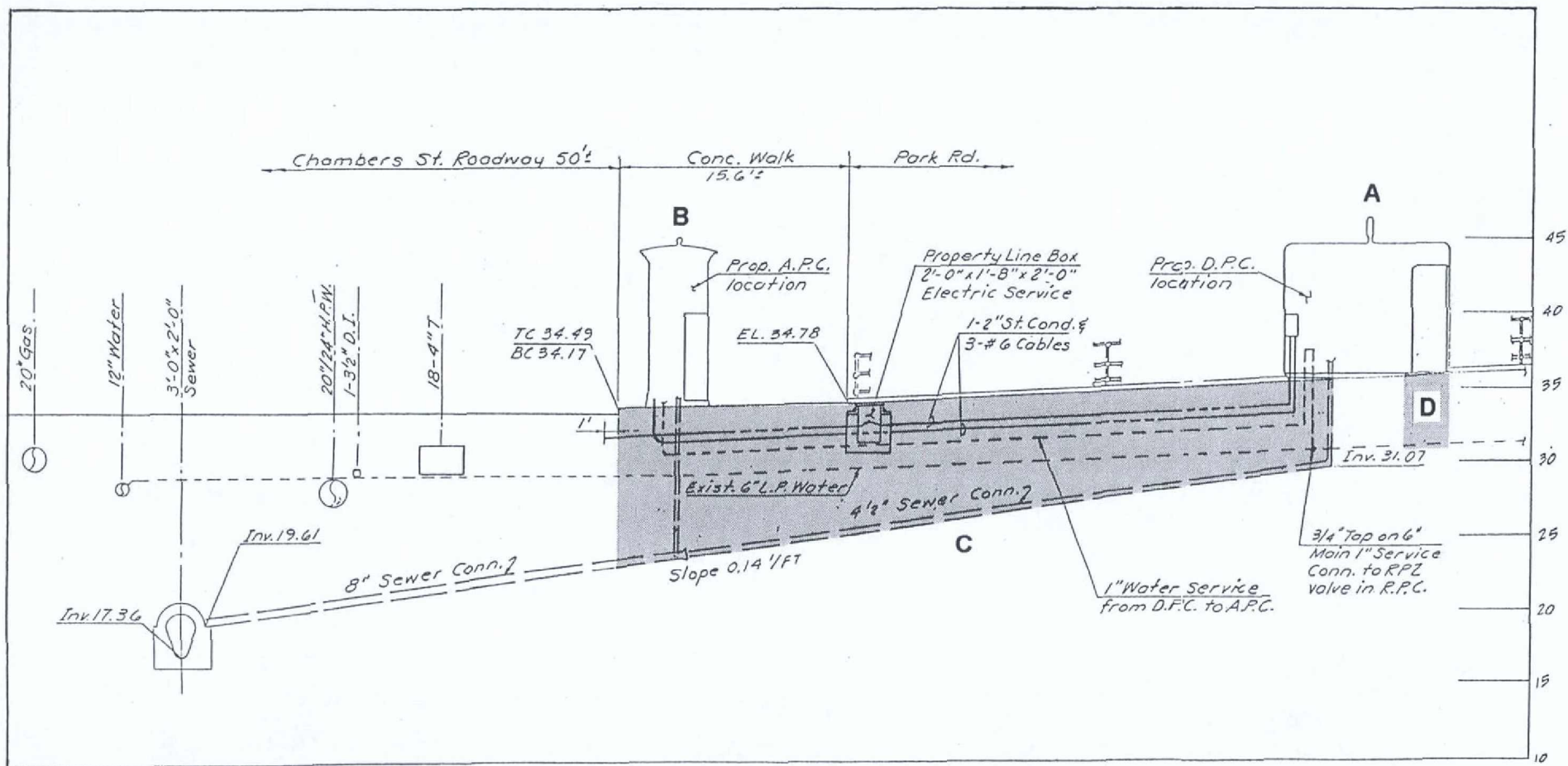




**Figure 1.8** View of the east-west construction trench looking north and showing Site Feature 1, the possible remains of a stacked schist structural foundation.



**Figure 2.a** Public lavatories designed by J. C. Decaux after final installation in NYC's City Hall Park in June 1992.



**Figure 2.1** Original engineering section looking east and showing: (a) large public lavatory unit on the Park road; (b) small public lavatory unit on the south sidewalk along Chambers Street; (c) the north-south construction trench as planned with slope .14 1/ft. (grey area); (d) east-west water line construction trench. (Original drawing provided by Vollmer Associates Consulting Engineers with the permission of J. C. Decaux Street Equipment, Ltd.)

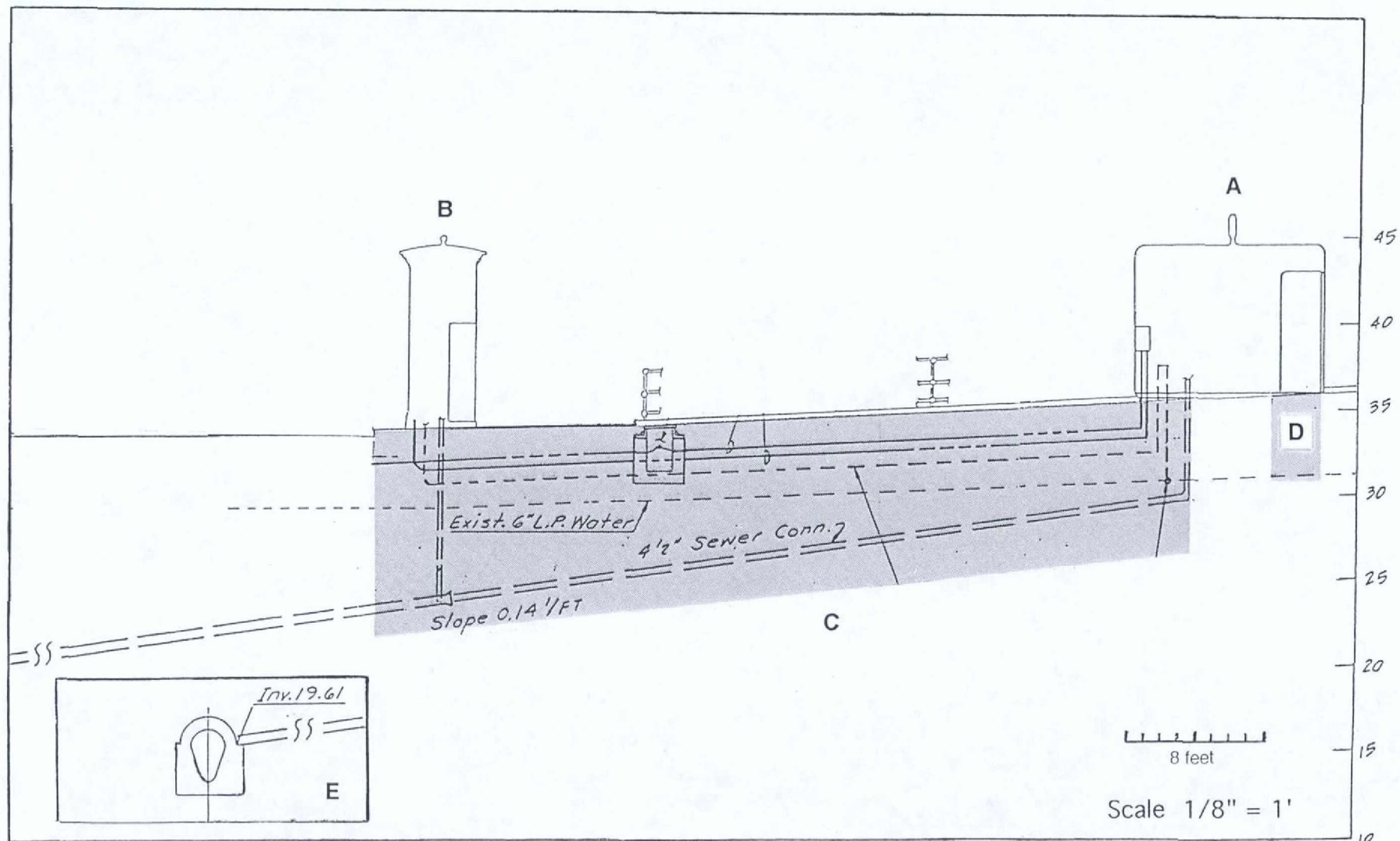


Figure 2.2 Engineering section, looking east and showing: (a) large public lavatory unit on the Park road; (b) small public lavatory unit on the south sidewalk along Chambers Street; (c) north-south sewer line construction trench as excavated with slope .10 1/ft. (grey area); (d) east-west water line construction trench; (e) sewer connection beneath Chambers Street showing elevation inversion. (Based on original drawing provided by Vollmer Associates Consulting Engineers with the permission of J. C. Decaux Street Equipment, Ltd.)

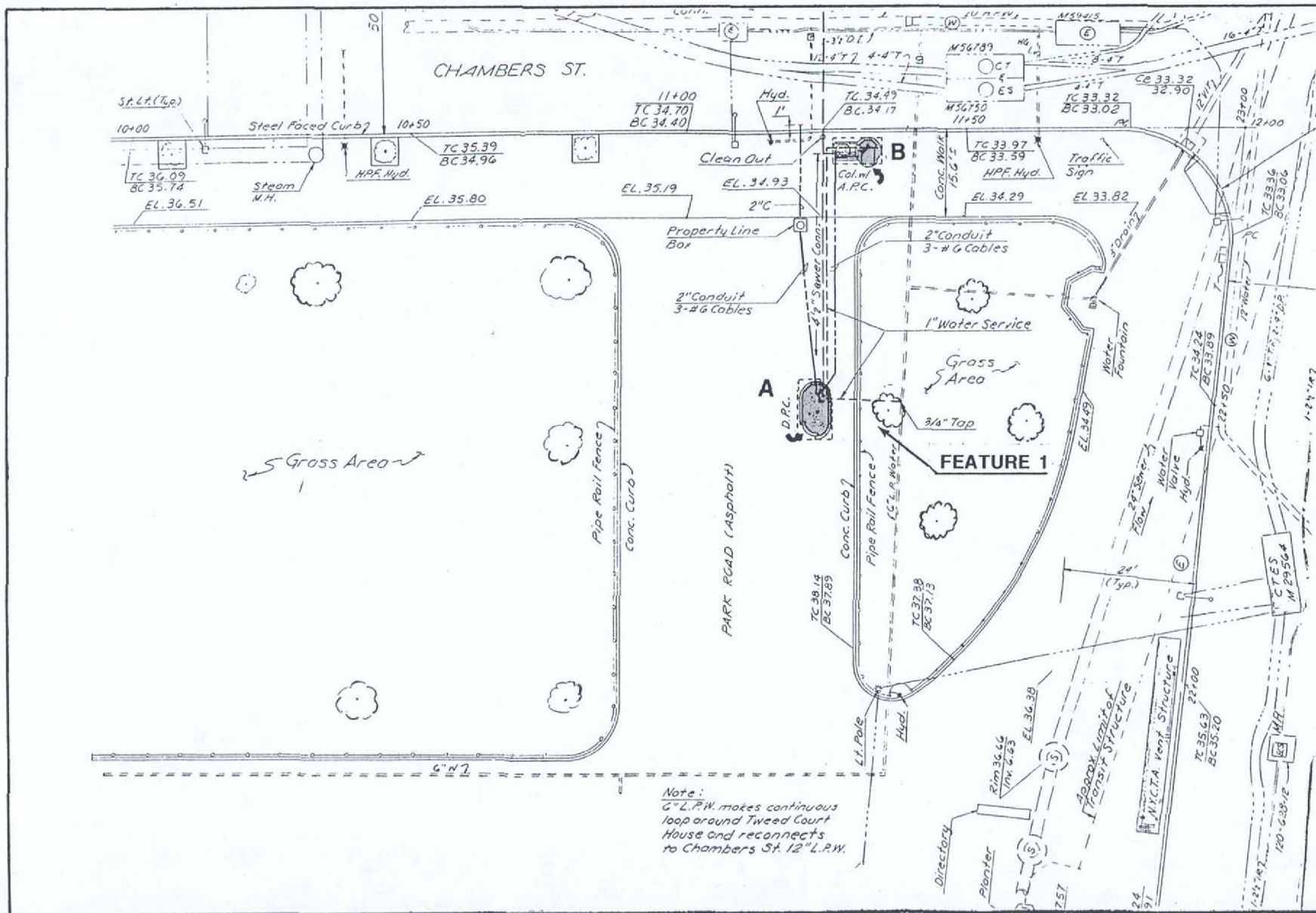
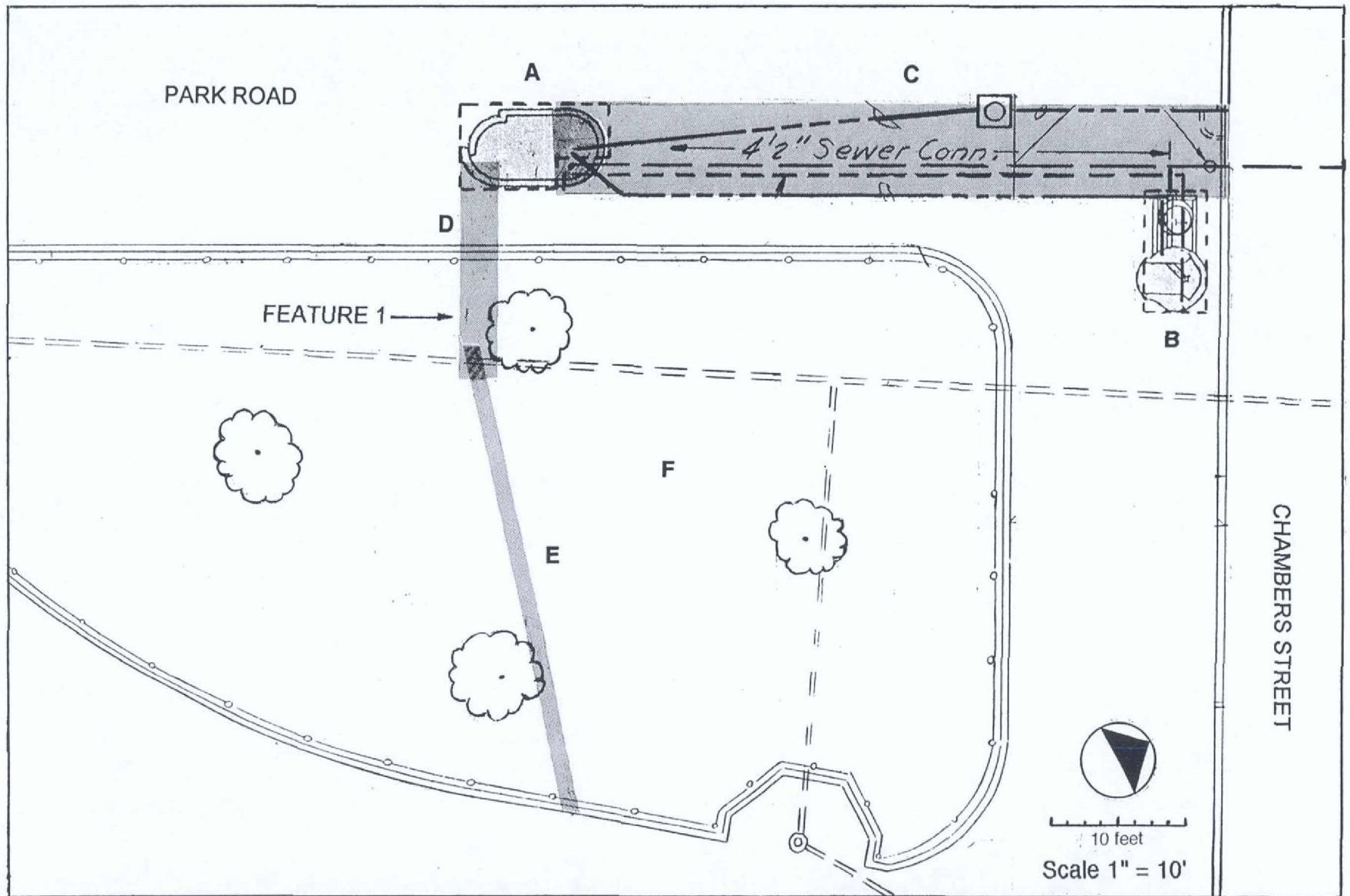


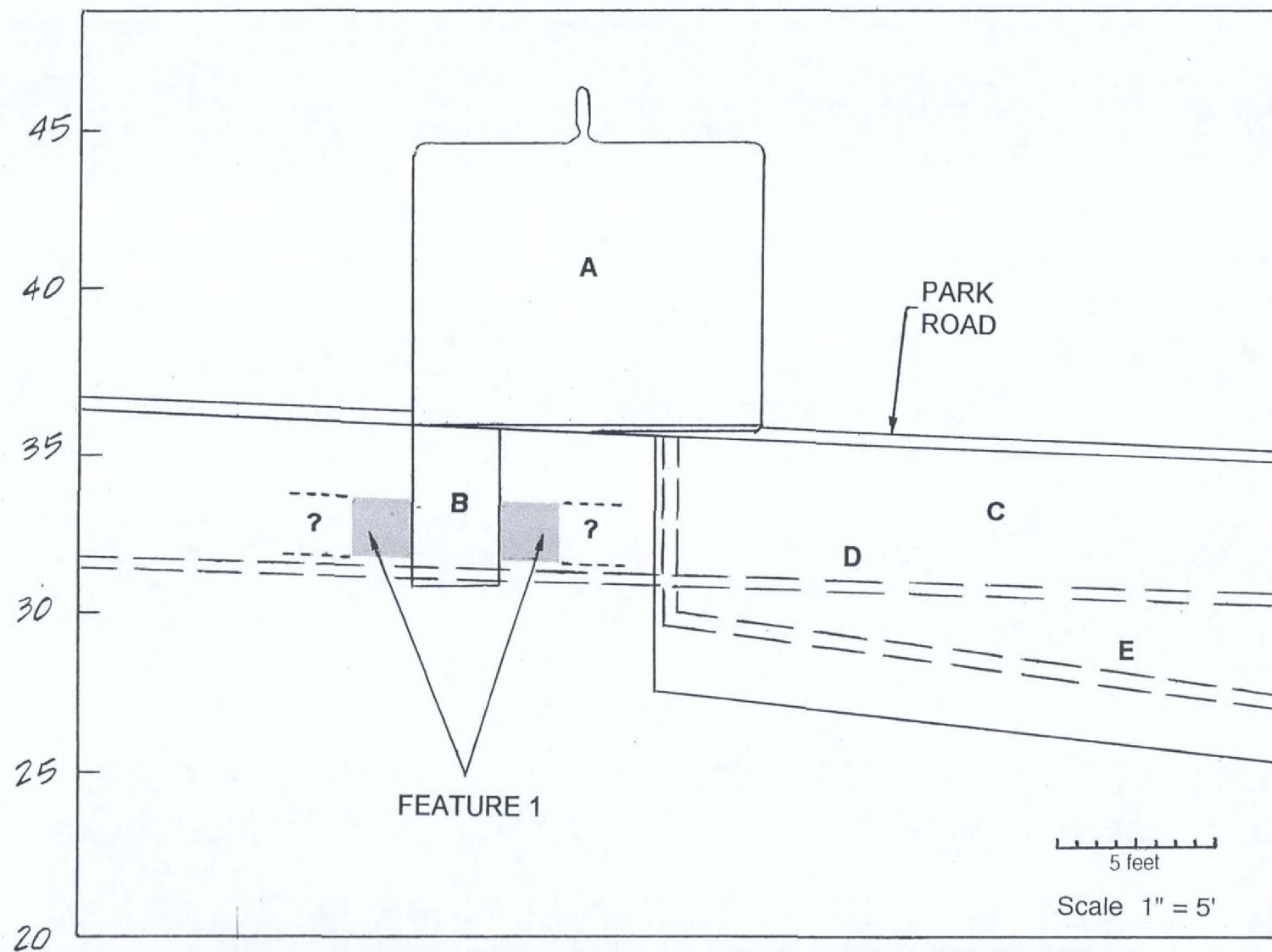
Figure 2.3 Original engineering plan view showing the CHP/2 Site, the location of Site Feature 1 and: (a) large public lavatory unit on the Park road; (b) small public lavatory unit on the south sidewalk along Chambers Street. (Drawing provided by Vollmer Associates Consulting Engineers with the permission of J. C. Decaux Street Equipment, Ltd.)



**Figure 2.4** Engineering plan view of the CHP/2 Site showing the location of Site Feature 1 and: (a) large public lavatory unit on the Park road; (b) small public lavatory unit on the south sidewalk along Chambers Street; (c) north-south sewer line construction trench; (d) original east-west water line construction trench; (e) second east-west water line construction trench; (f) grassy area. (Based on a drawing provided by Vollmer Associates Consulting Engineers with the permission of J. C. Decaux Street Equipment, Ltd.)

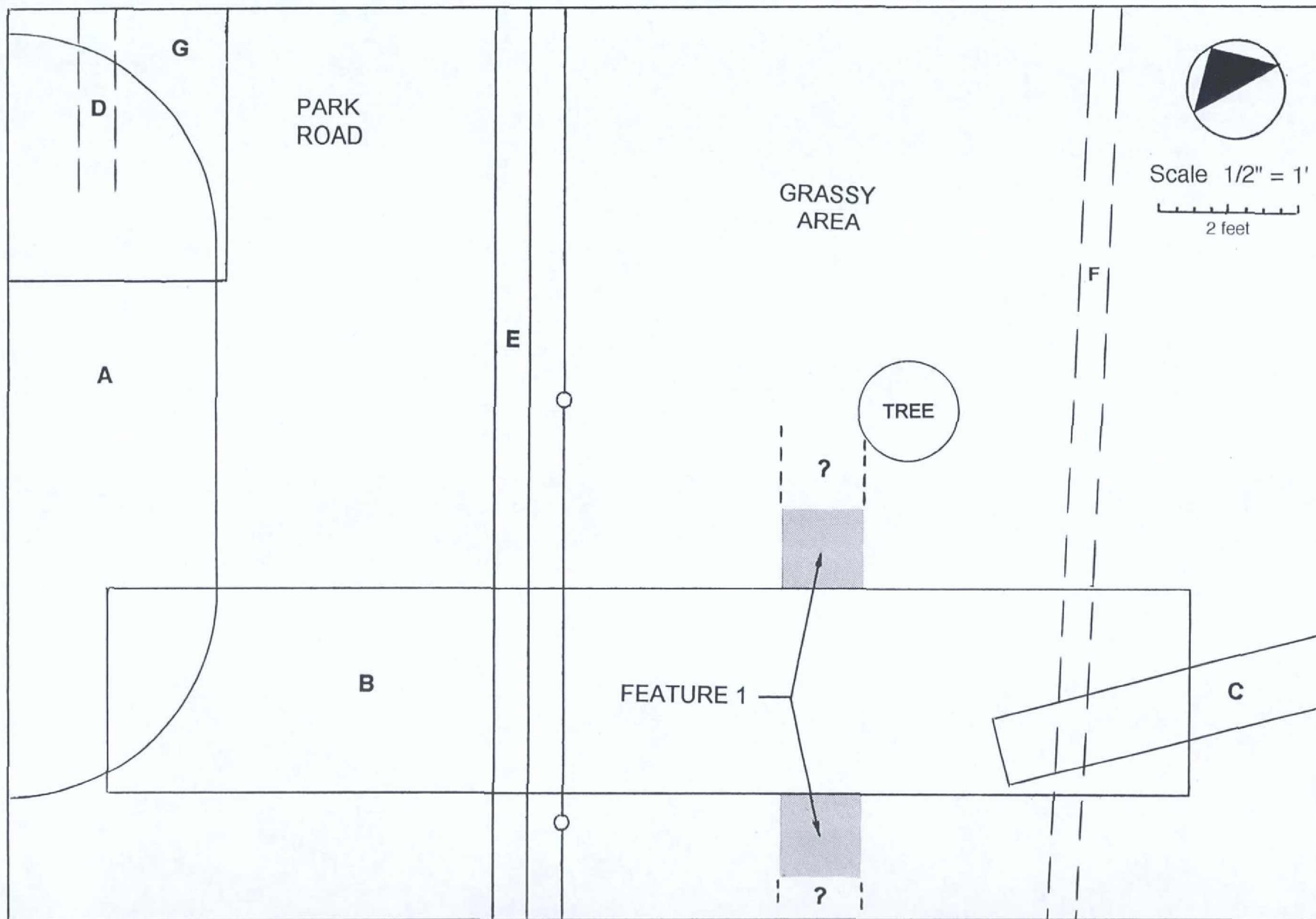


Figure 2.5 Second east-west water line construction trench.

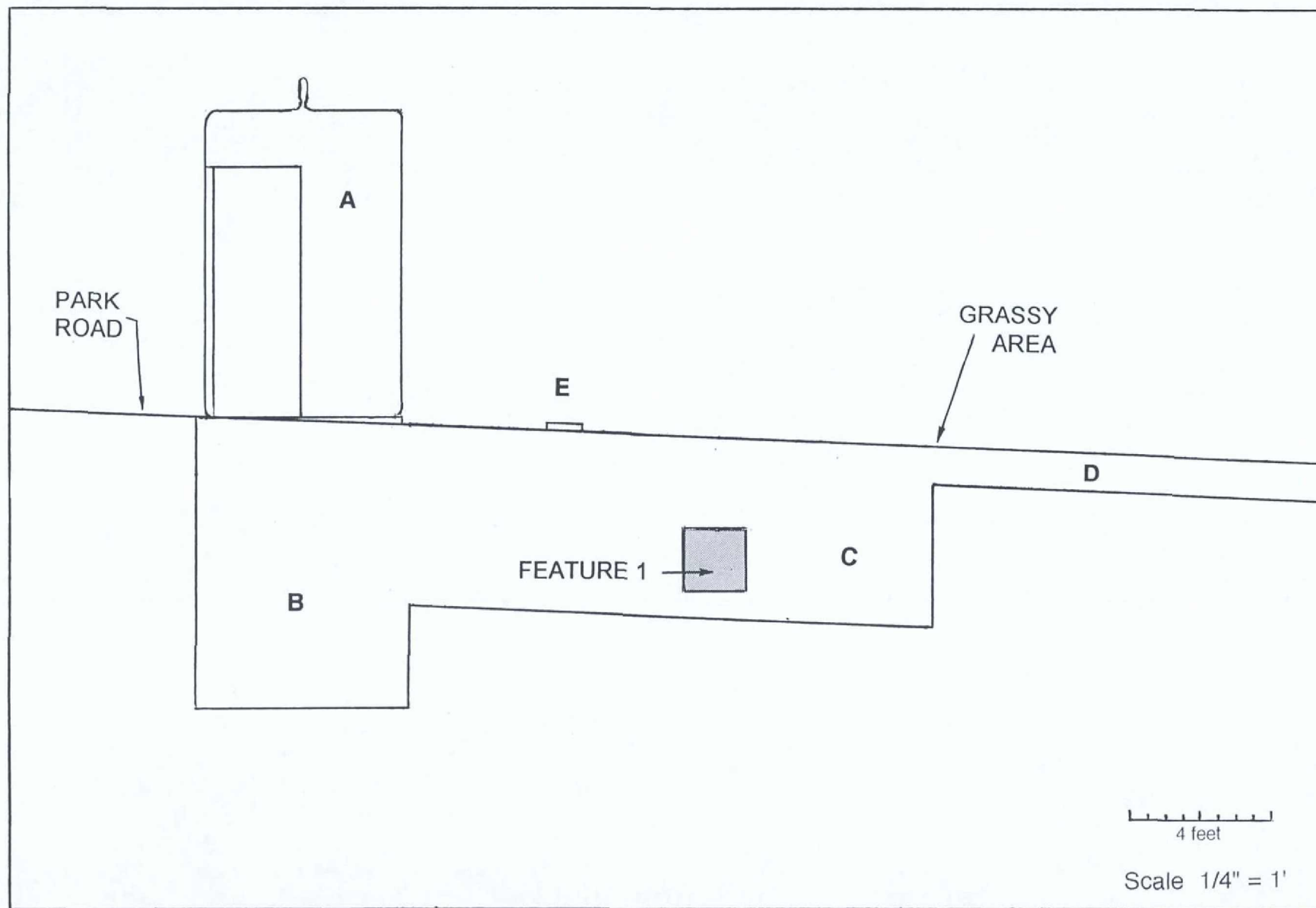


**Figure 2.6** Section looking west showing Site Feature 1 and: (a) the large public lavatory unit on the Park road; (b) the original east-west water line construction trench; (c) the north-south sewer line construction trench; (d) water main; (e) sewer line (Redding 1993).





**Figure 2.7** Plan view showing the CHP/2 Site, Feature 1 and: (a) large public lavatory unit on the Park road; (b) first east-west water line construction trench; (c) second east-west water line construction trench; (d) sewer line; (e) concrete curb; (f) water main as originally planned; (g) north-south construction trench (Redding 1993).



**Figure 2.8** Section looking north showing Site Feature 1 and: (a) large public lavatory unit on the Park road; (b) north-south sewer line construction trench; (c) original east-west water line construction trench; (d) second east-west water line construction trench; (e) concrete curb (Redding 1993).

A PLAN OF THE CITY OF NEW YORK, REDUCED FROM AN ACTUAL SURVEY, By T. Maerschalckm. 1763.

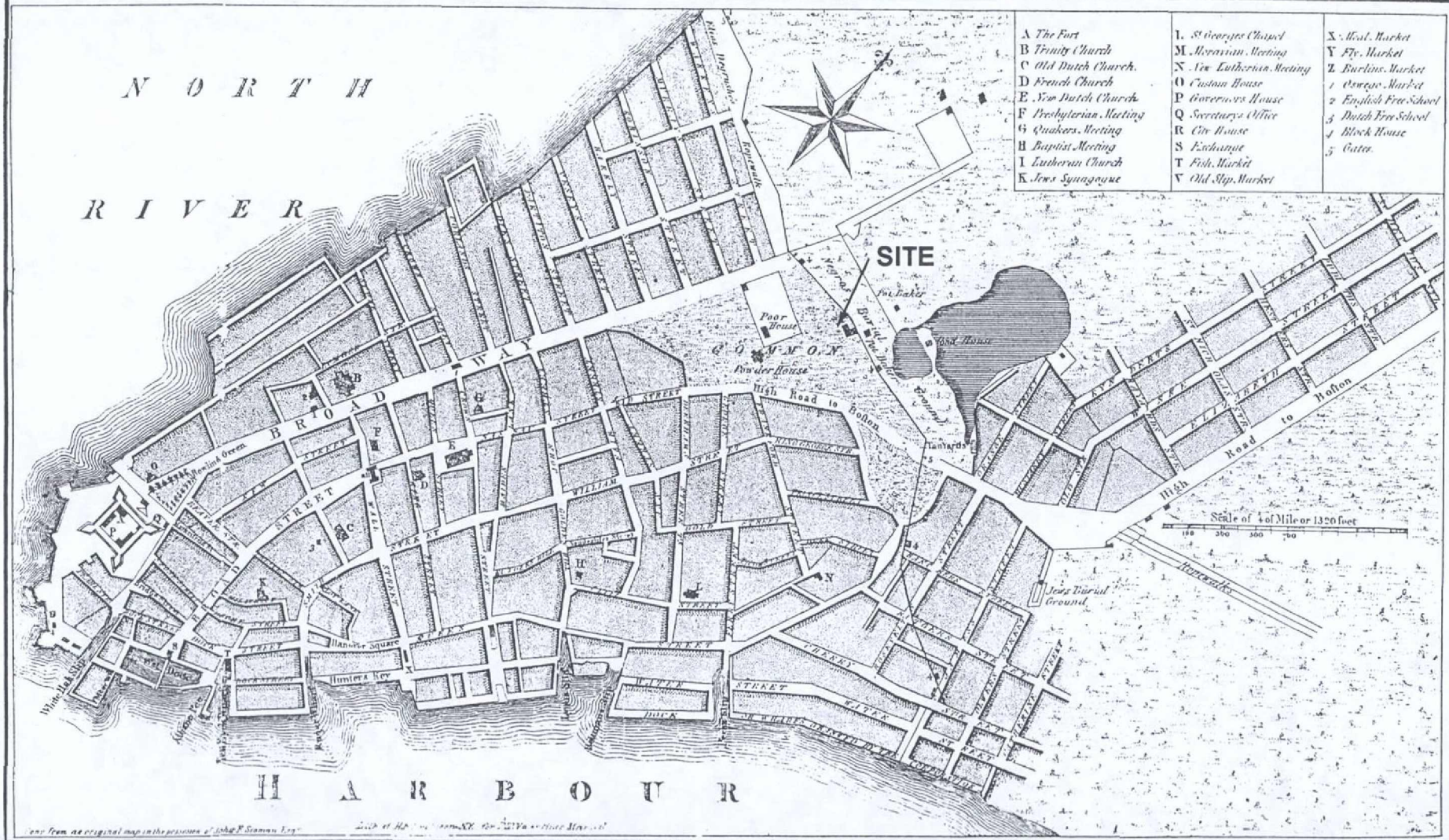


Figure 2.9 A Plan of the City of New York from an Actual Survey.  
(The Maerschalck Plan) by Francis Maerschalck, 1763.

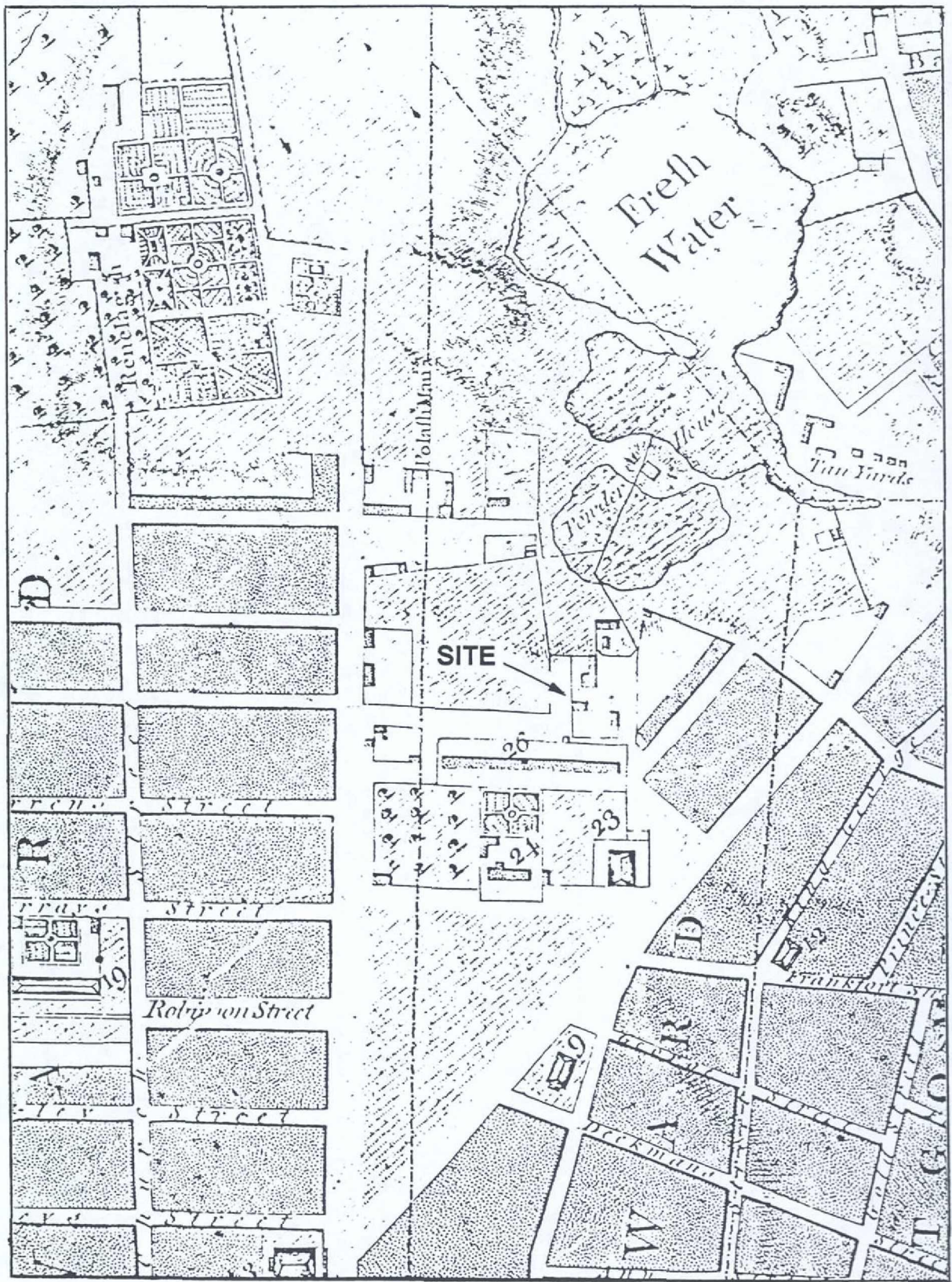


Figure 2.10 Plan of the City of New York, in North America.  
(The Ratzler Plan) by Bernard Ratzler, 1767.

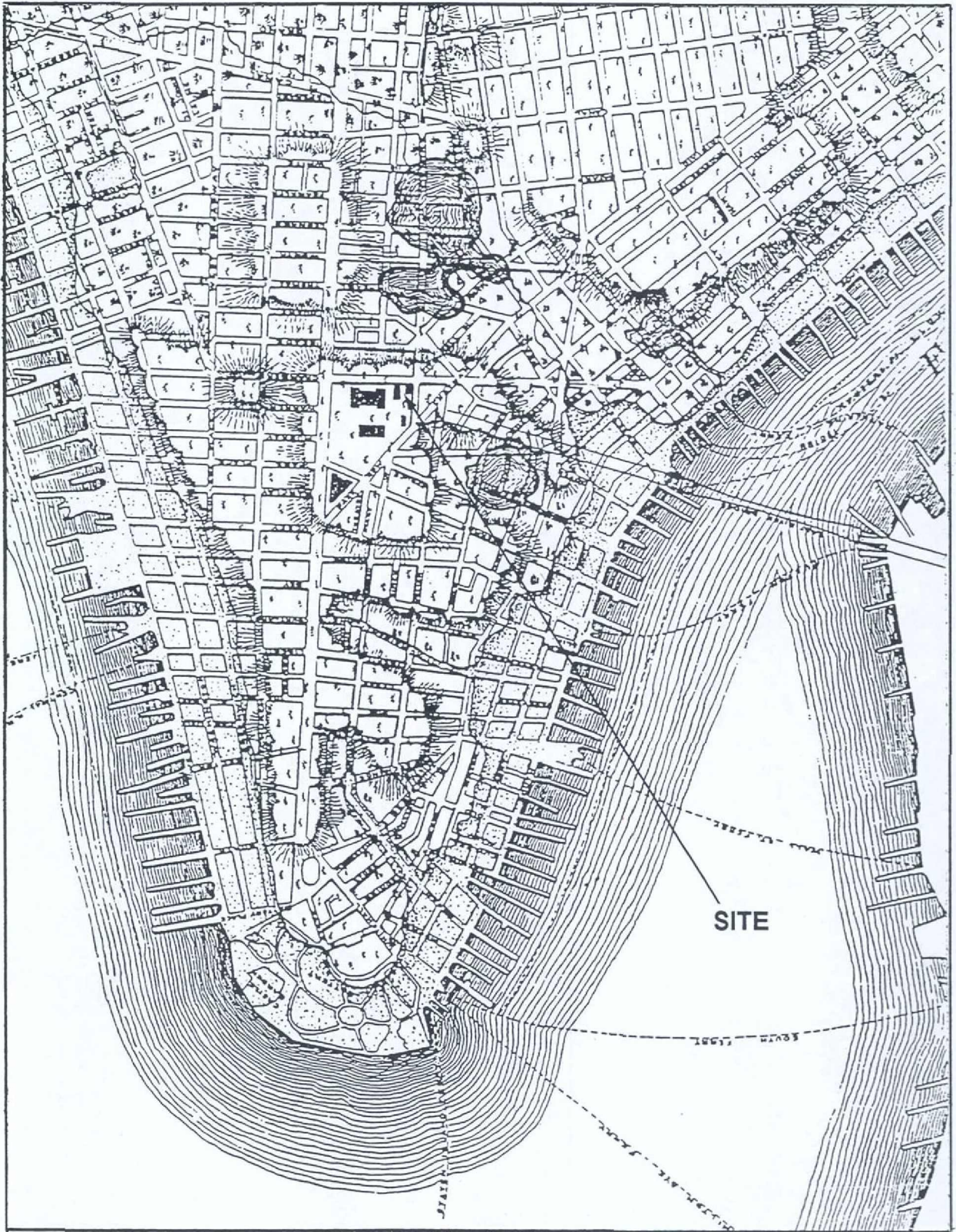


Figure 2.11 *Topographic Atlas of the City of New York,*  
(The Viele Map) by Egbert L. Viele, 1874.

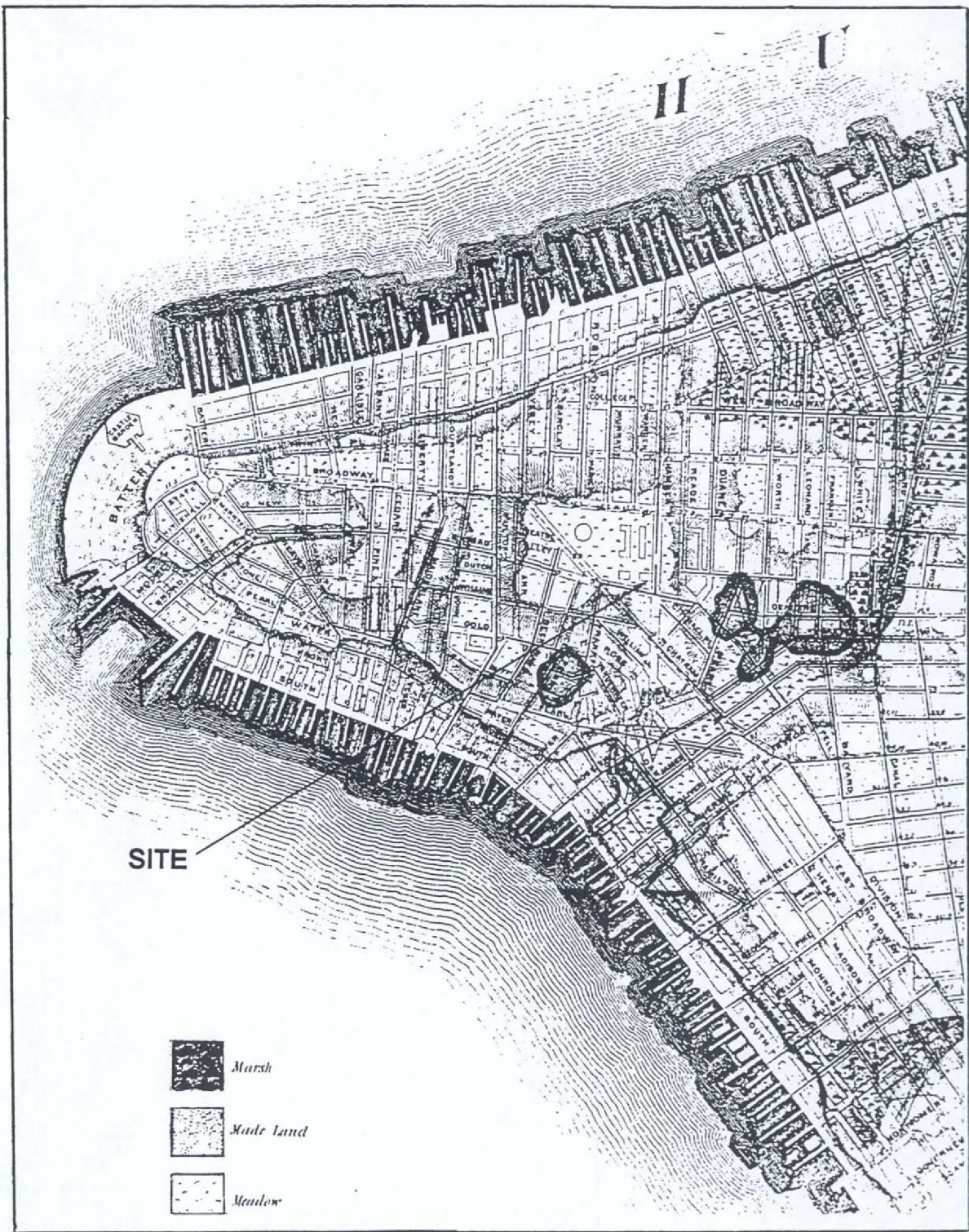


Figure 2.12 Topographic Atlas of the City of New York,  
 (The Viele Map) by Egbert L. Viele, 1874.

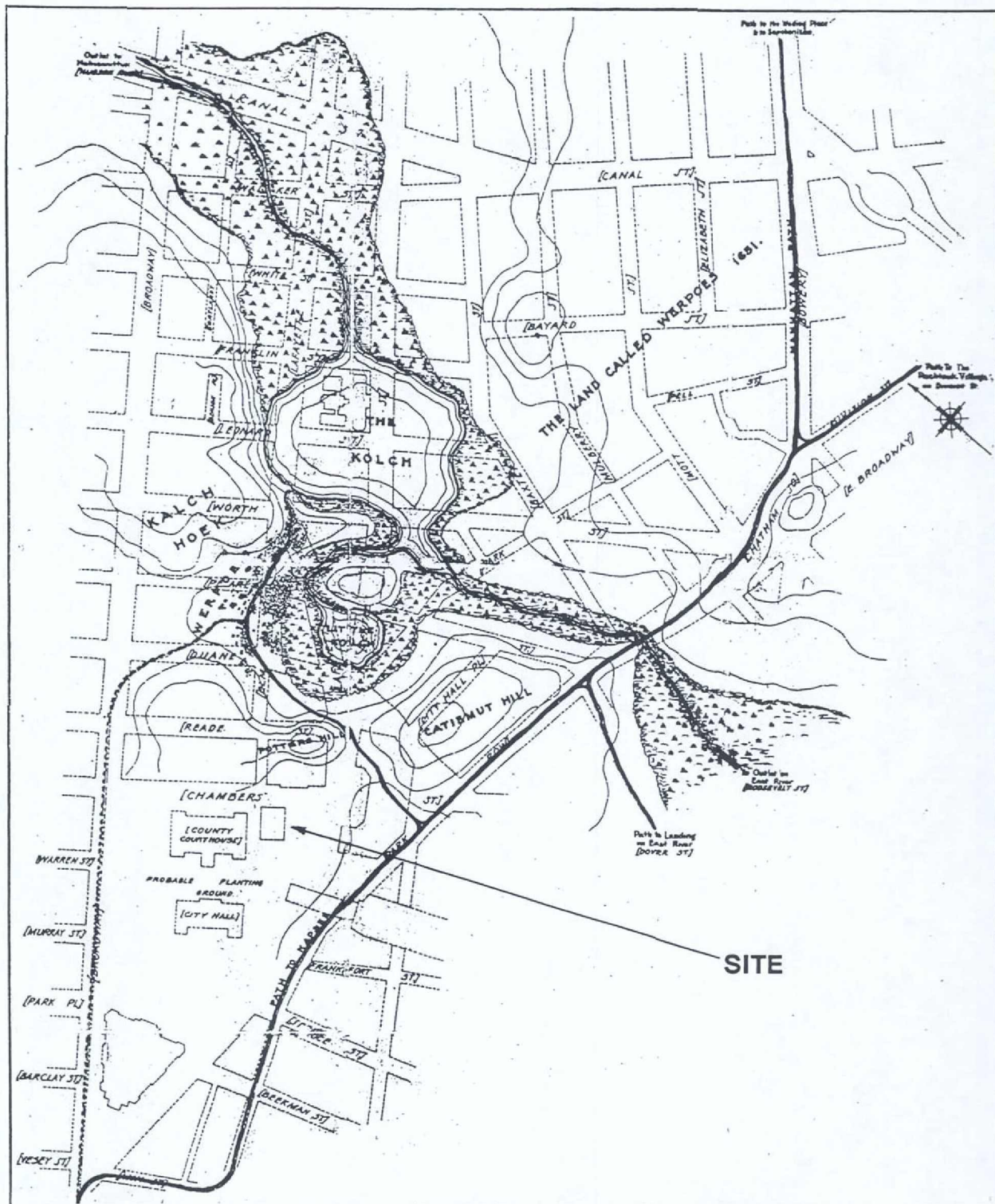


Figure 2.13 The Reginald Bolton Map. IN: *Indian Paths of the Great Metropolis, 1922.*

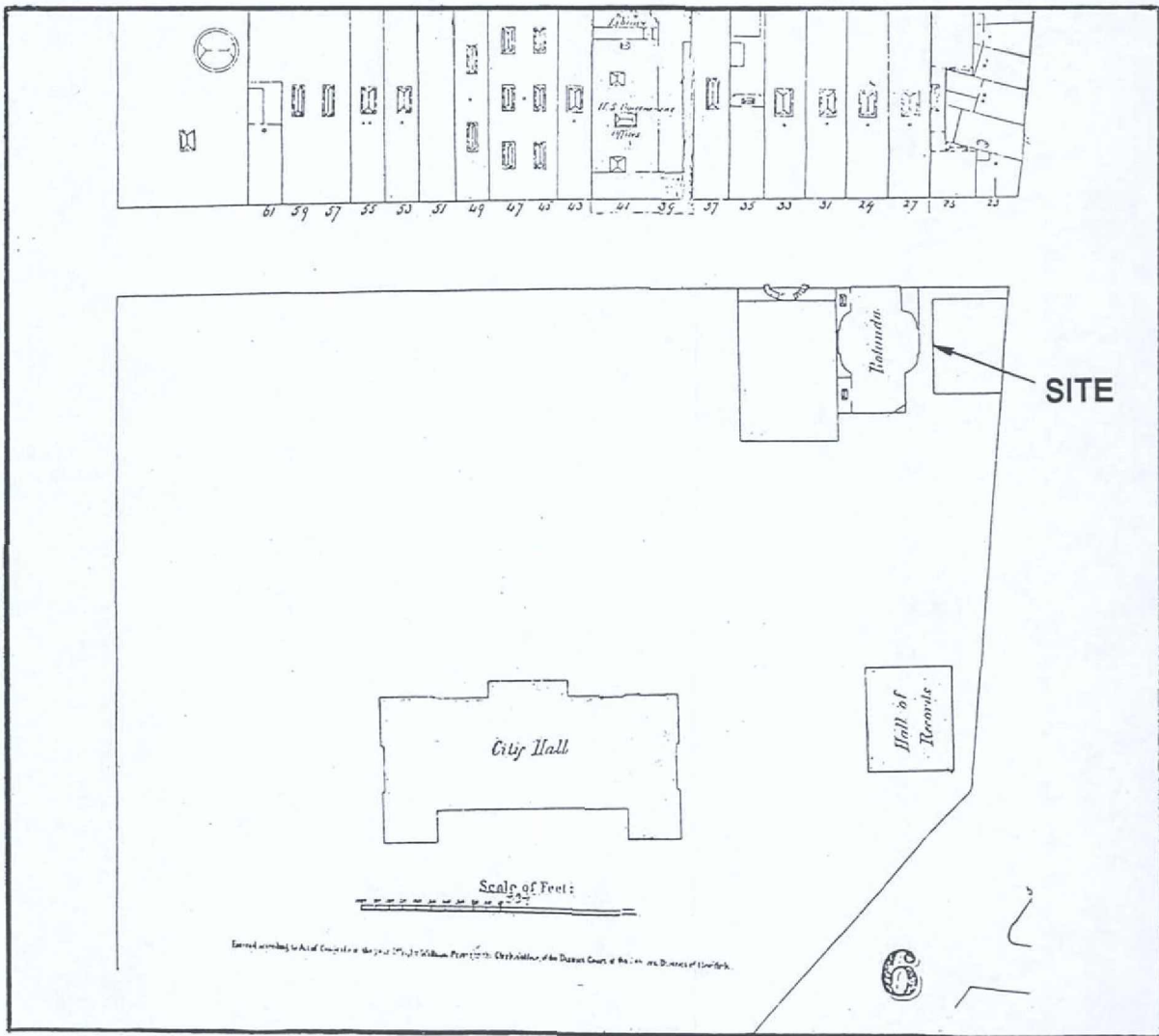


Figure 2.14 Map of the City of New York, by William Perris, 1857.



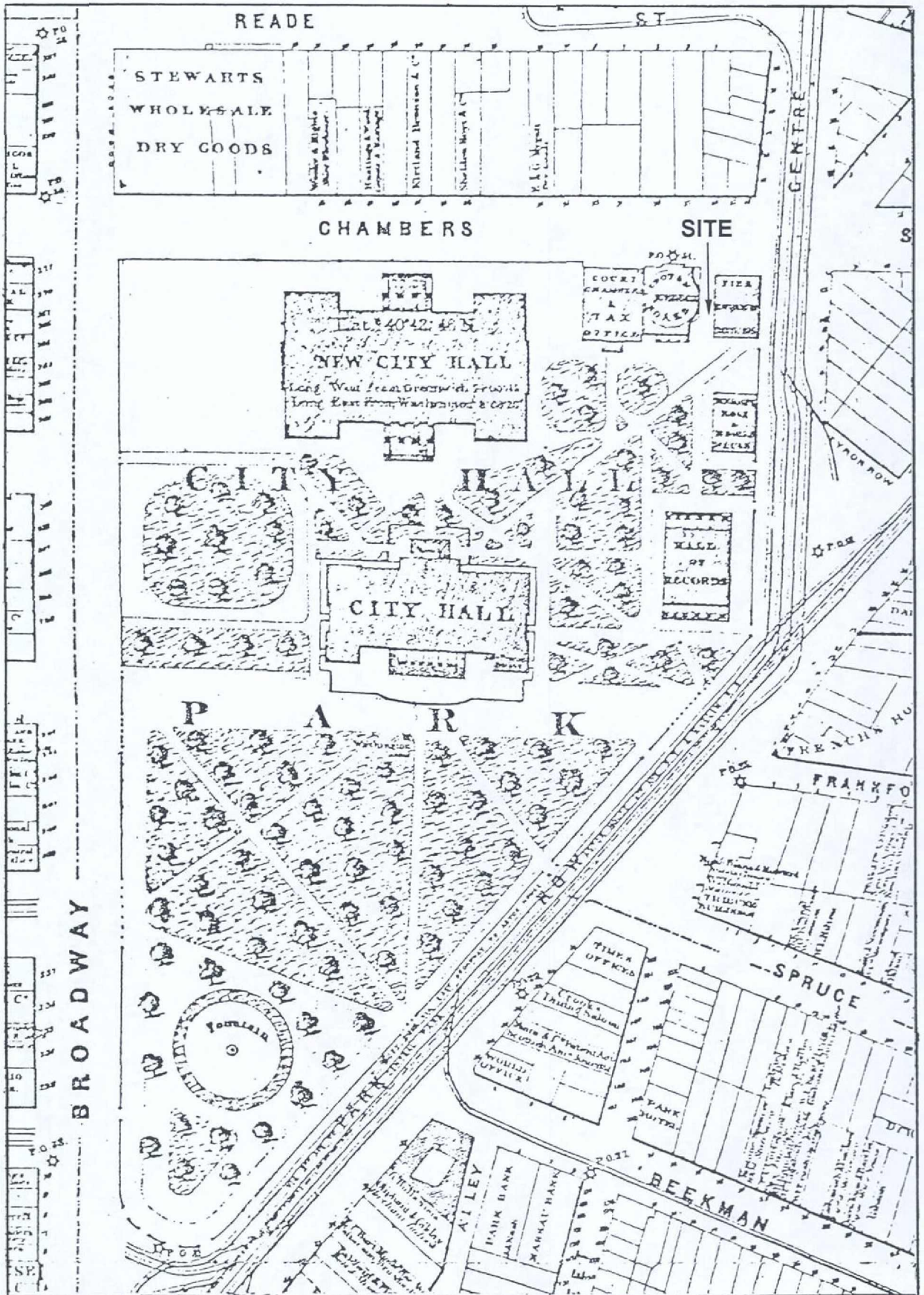


Figure 2.15 Lloyd's Mammoth Map of the Business Portion of New York City, by James T. Lloyd, 1867.

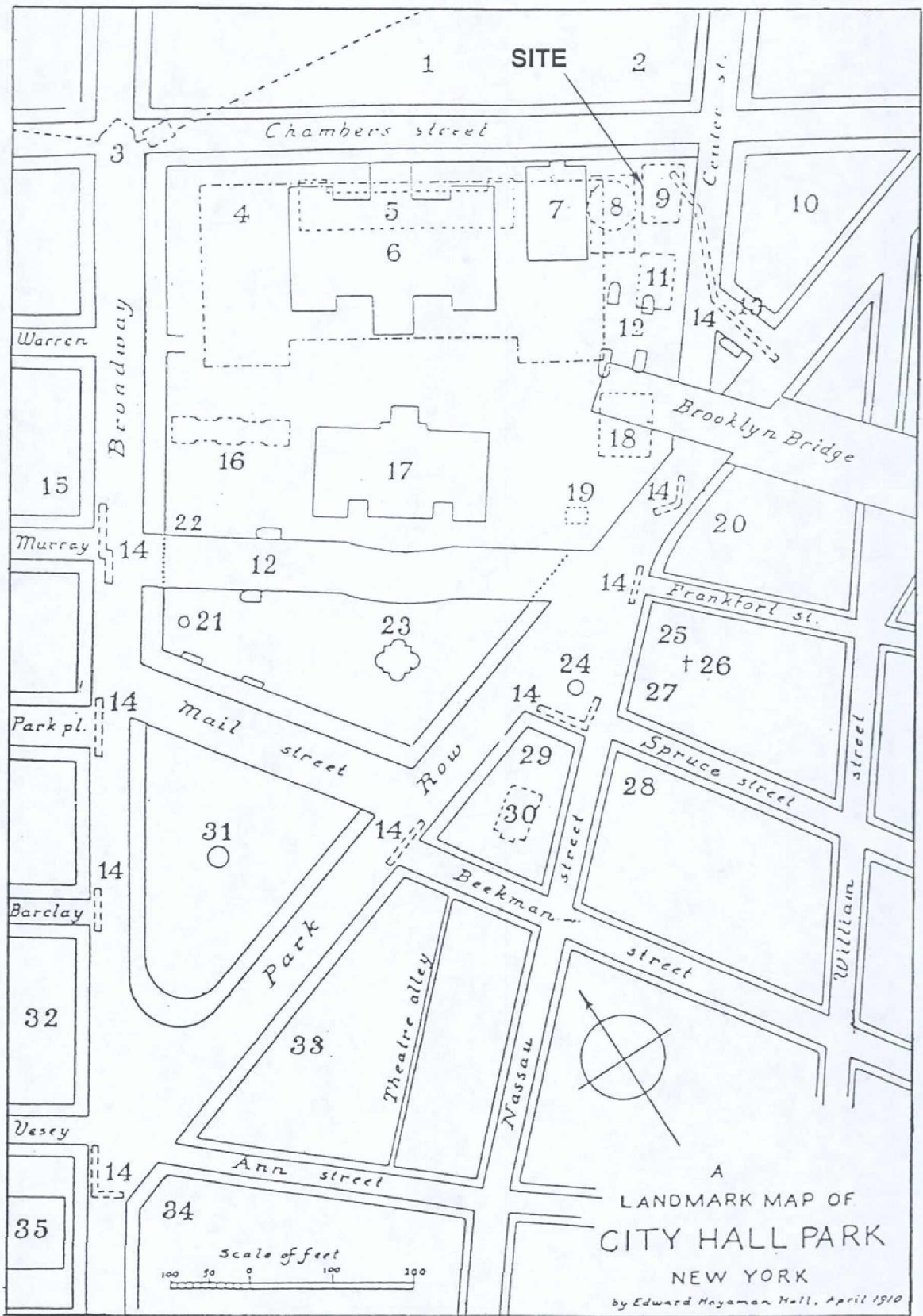


Figure 3.1 A Landmark Map of City Hall Park, New York, by Edward Hagan Hall, 1910: (1) southern boundary of the African Burying Ground; (2) Hall of Records; (5) Second Almshouse, also the site of the Upper Barracks; (6) the Tweed Court House; (7) City Courthouse erected in 1852; (8) Rotunda, 1818-1870; (9) Soupshouse and Dispensary, 1817 and later, also the site of Fire Engine House removed in 1906; (16) the Bridewell; (17) City Hall; (18) the Gaol; (19) the Powder Magazine.

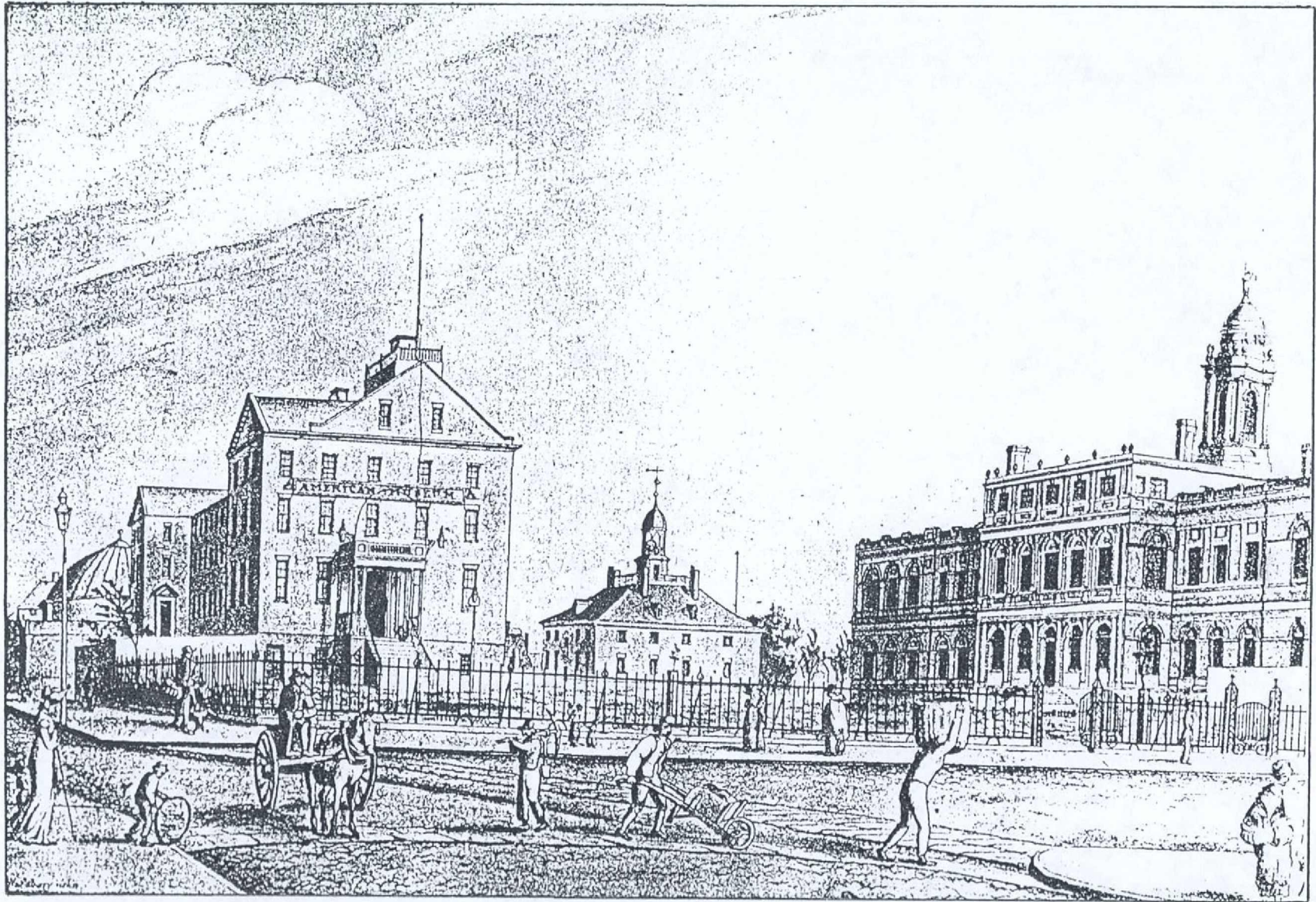


Figure 3.2 City Hall Park and Chambers Street from Broadway, Aquatint, A. J. Stansbury, c. 1825



**Figure 4.1** Back-fill soil removed from the CHP/2 Site for sifting.



**Figure 4.2** Delivery of back-fill soil from the CHP/2 Site to the New Jersey headquarters of Historic Conservation and Site Interpretation, Inc.



**Figure 4.3** Archaeologists sifting CHP/2 Site back-fill soil at the New Jersey headquarters of Historic Conservation and Site Interpretation, Inc.

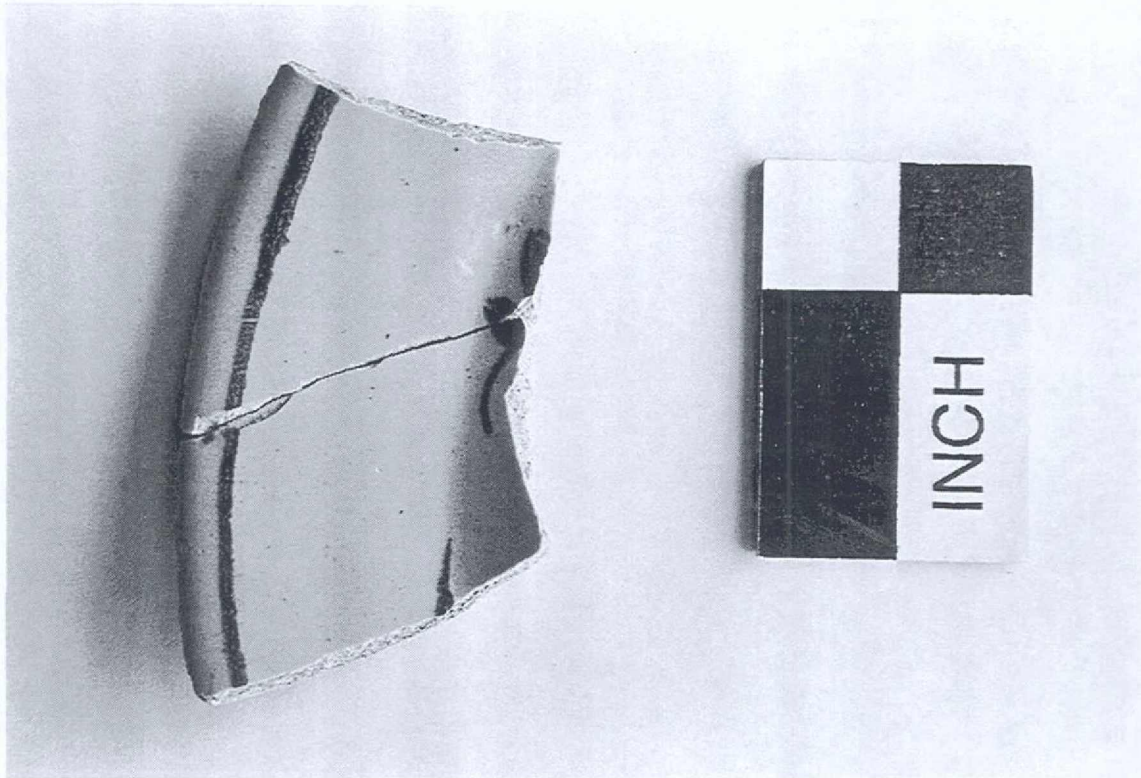


Figure 5.1 Blue decorated Delftware sherds, British 1750-1780.

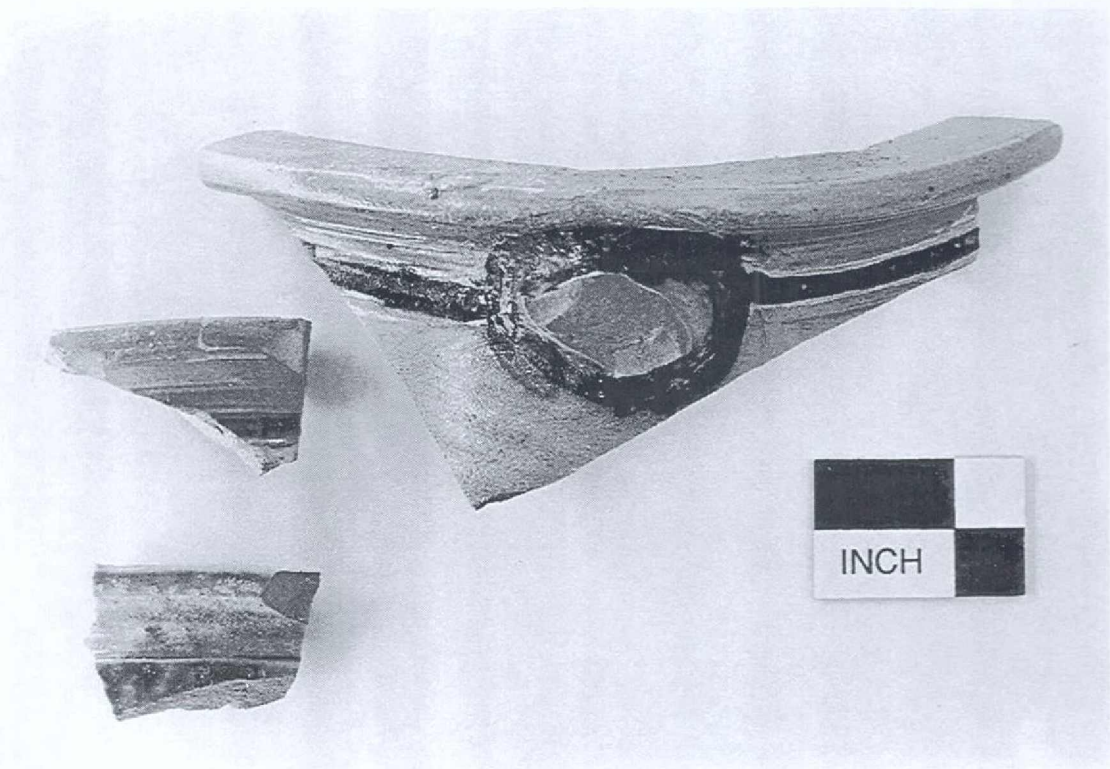


Figure 5.2 Grey, salt glazed stoneware rims, cobalt blue underglazed decoration, 18th century.

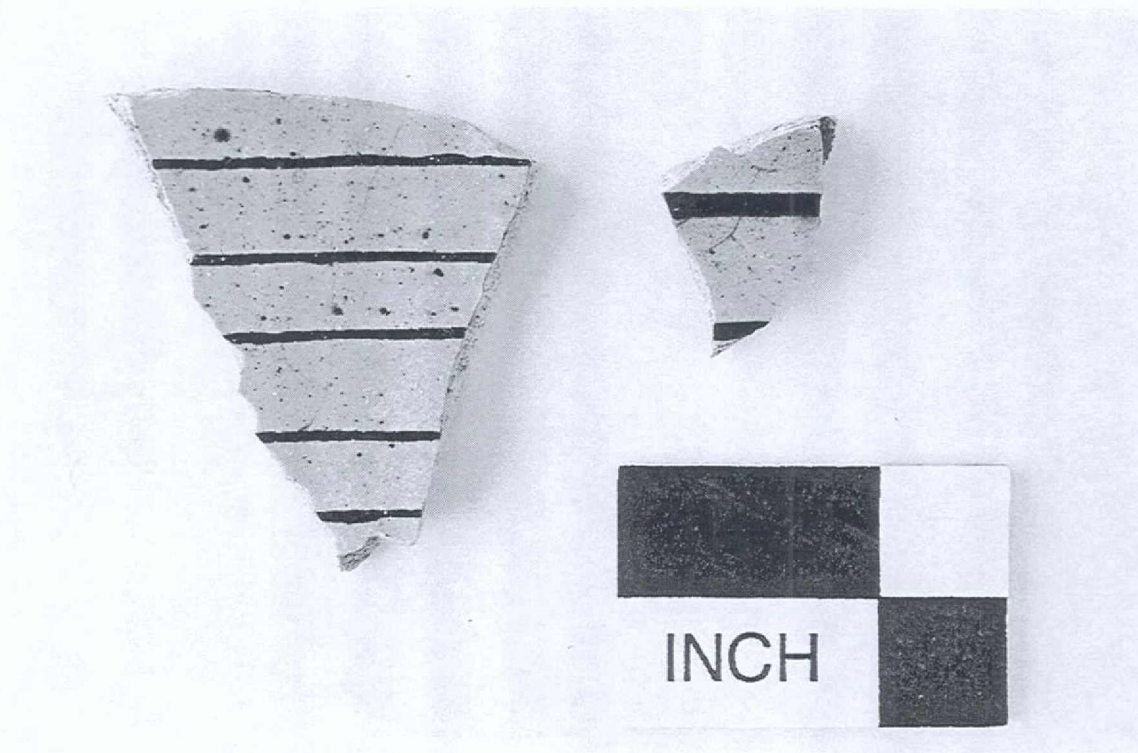


Figure 5.3 Lead glazed, slipware sherds with brown stripes, British, 1670-1795.

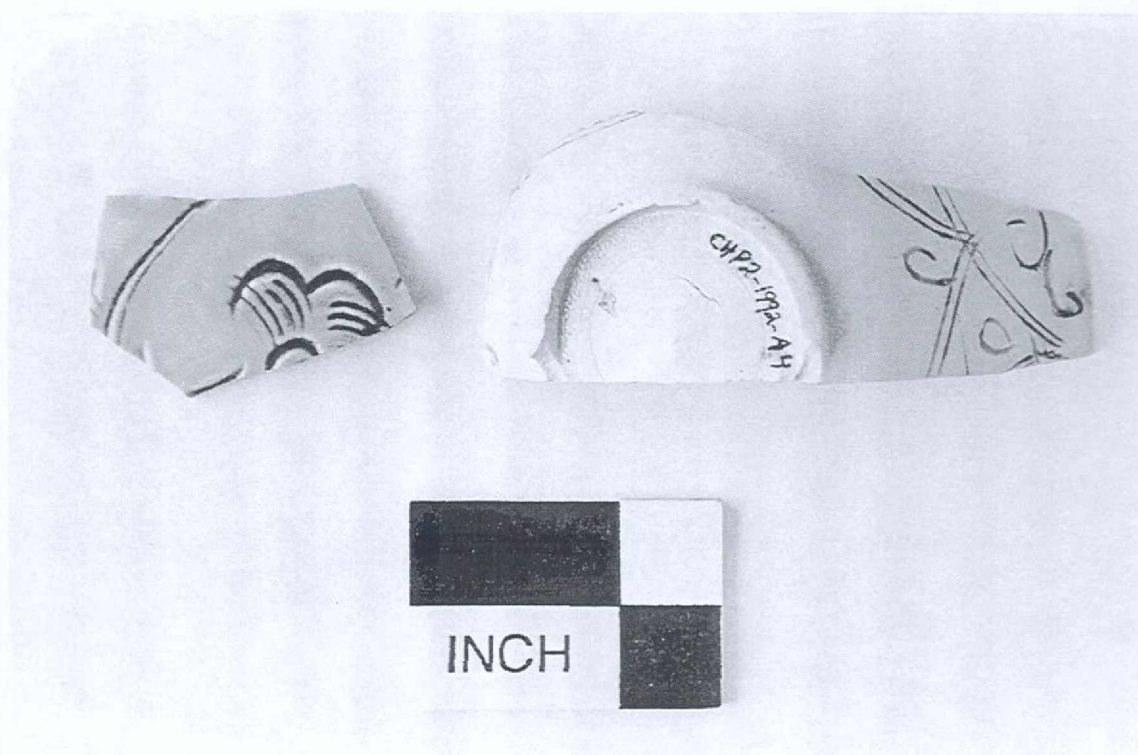


Figure 5.4 White salt glazed "scratch blue," stoneware, British, 1744-1775.

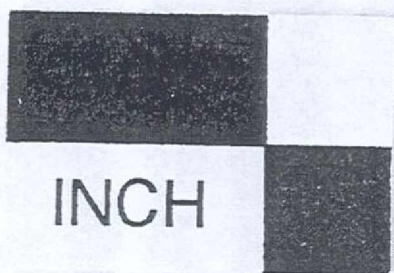


Figure 5.5 Three bone button blanks.

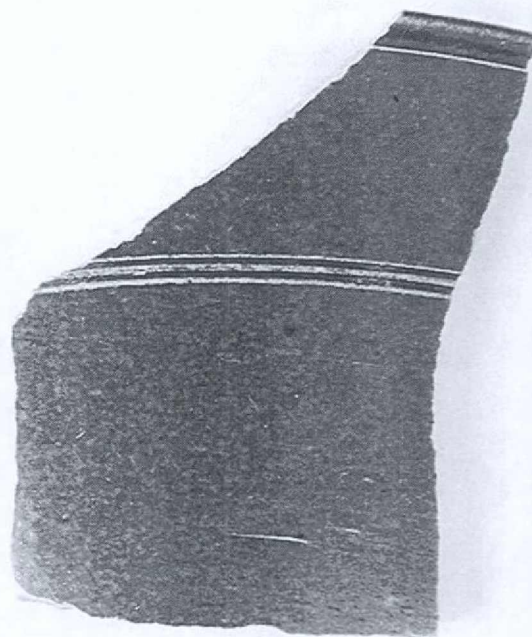
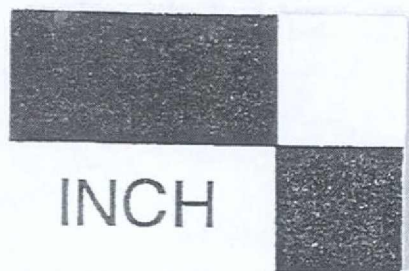


Figure 5.6 Brown salt glazed stoneware,  
Nottingham type, 1700-1810.



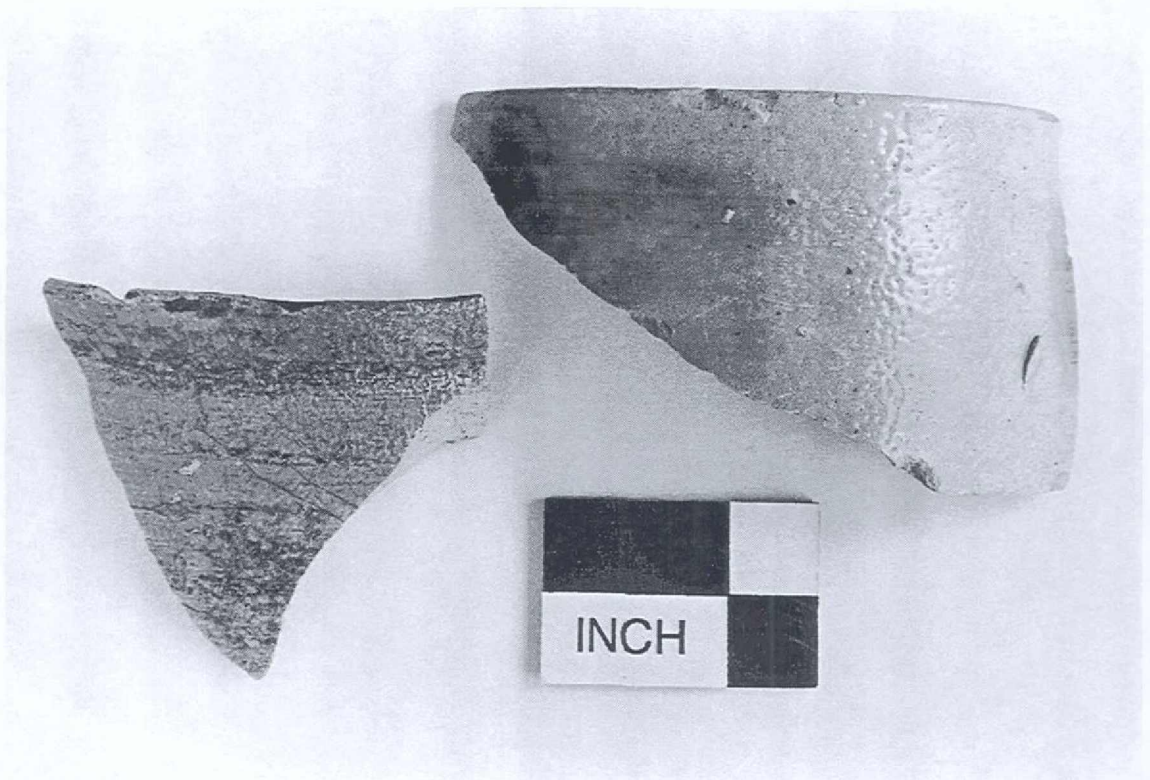


Figure 5.7 Grey, salt glazed undecorated stoneware sherds, 18th century.



Figure 5.8 Spirit or wine bottle base fragment, British (?), 1790-1810.

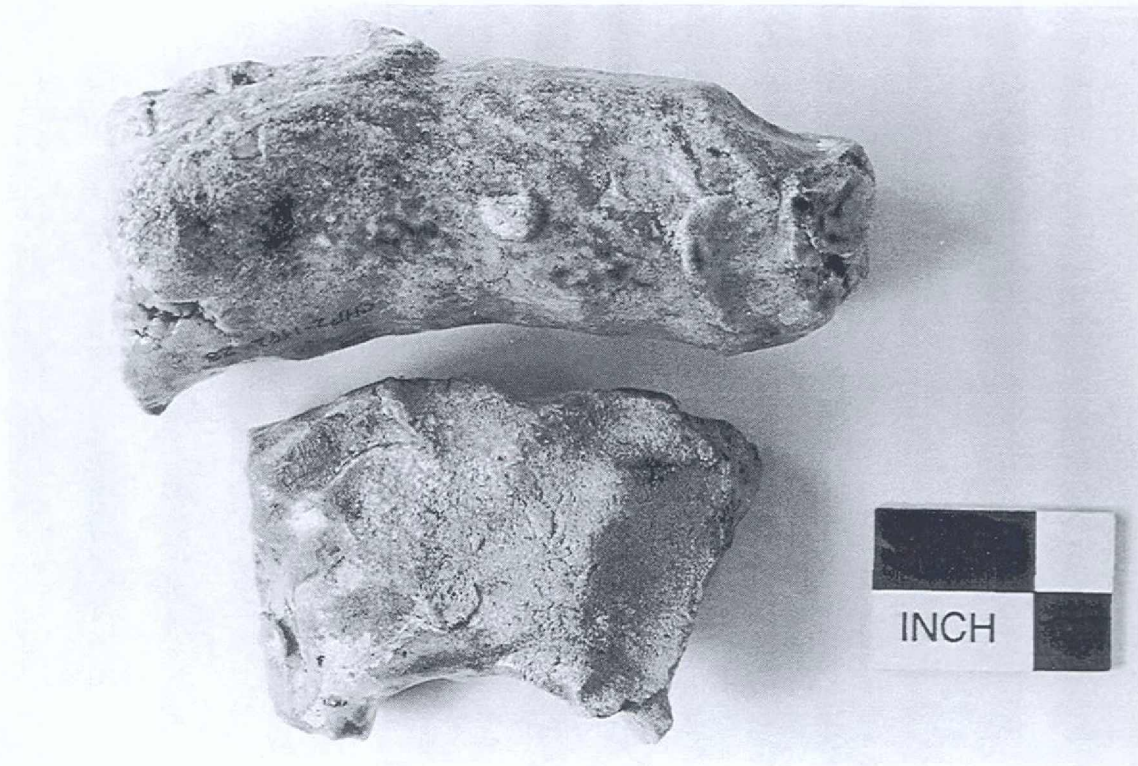


Figure 5.9 Kiln furniture, surface covered with salt glaze.



Figure 5.10 Miscellaneous building material recovered from the CHP/2 Site.



Figure 5.11 Coarse salt glazed decorated stoneware, 18th-early 19th century.

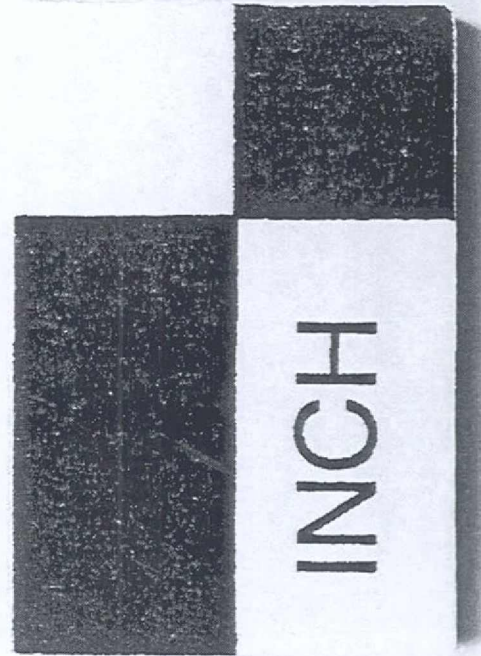


Figure 5.12 An American one cent, issued in New York City coin in 1794 by "Talbot Allum & Lee," front.

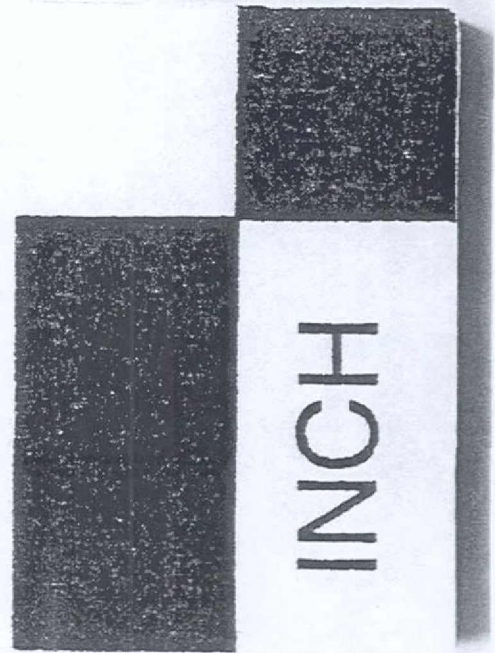
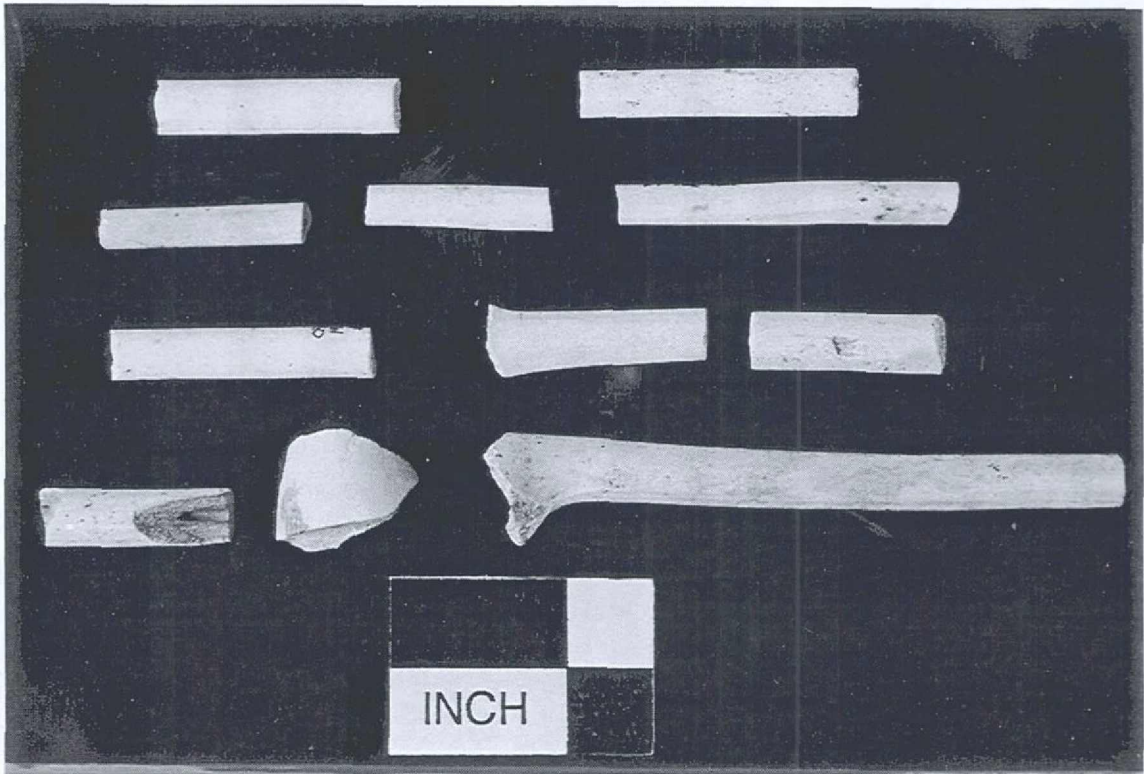
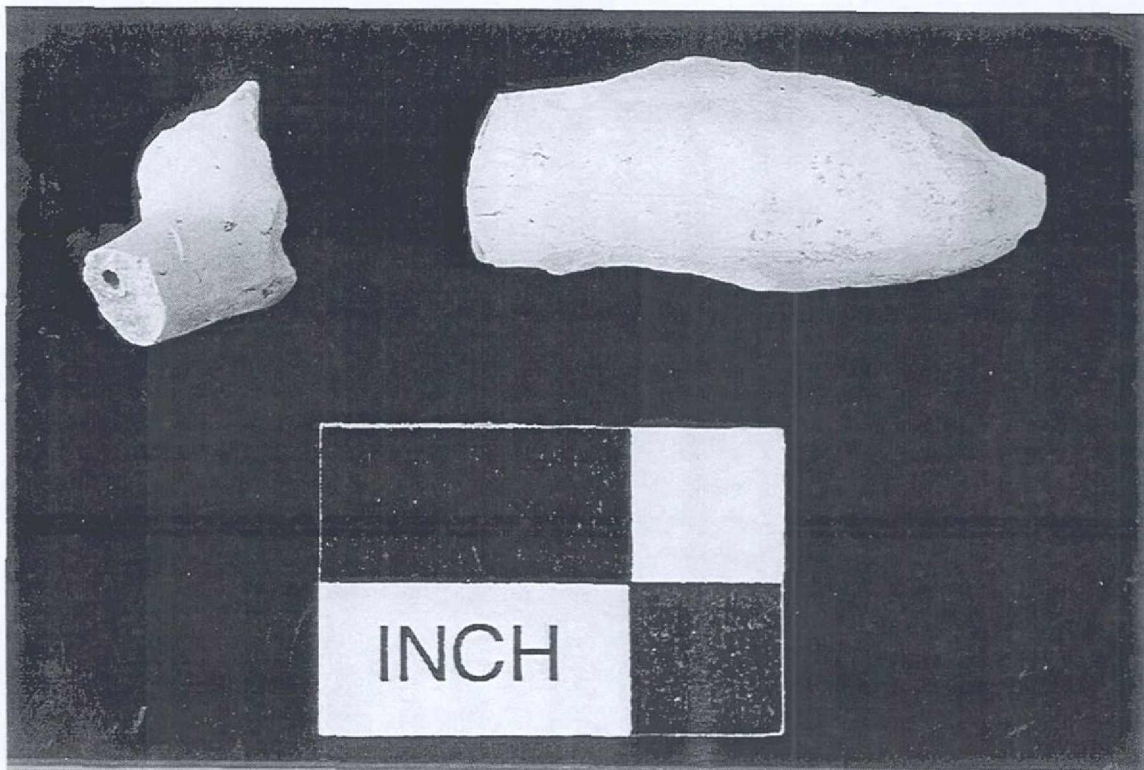


Figure 5.13 An American one cent, issued in New York City coin in 1794 by "Talbot Allum & Lee," back.



**Figure 5.14** Undecorated kaolin smoking pipe fragments. These stems date to 1750-1800. The fragment on the upper left dates to 1710-1750.



**Figure 5.15** Undecorated kaolin smoking pipe bowl fragments, English (?), 1720-1820.

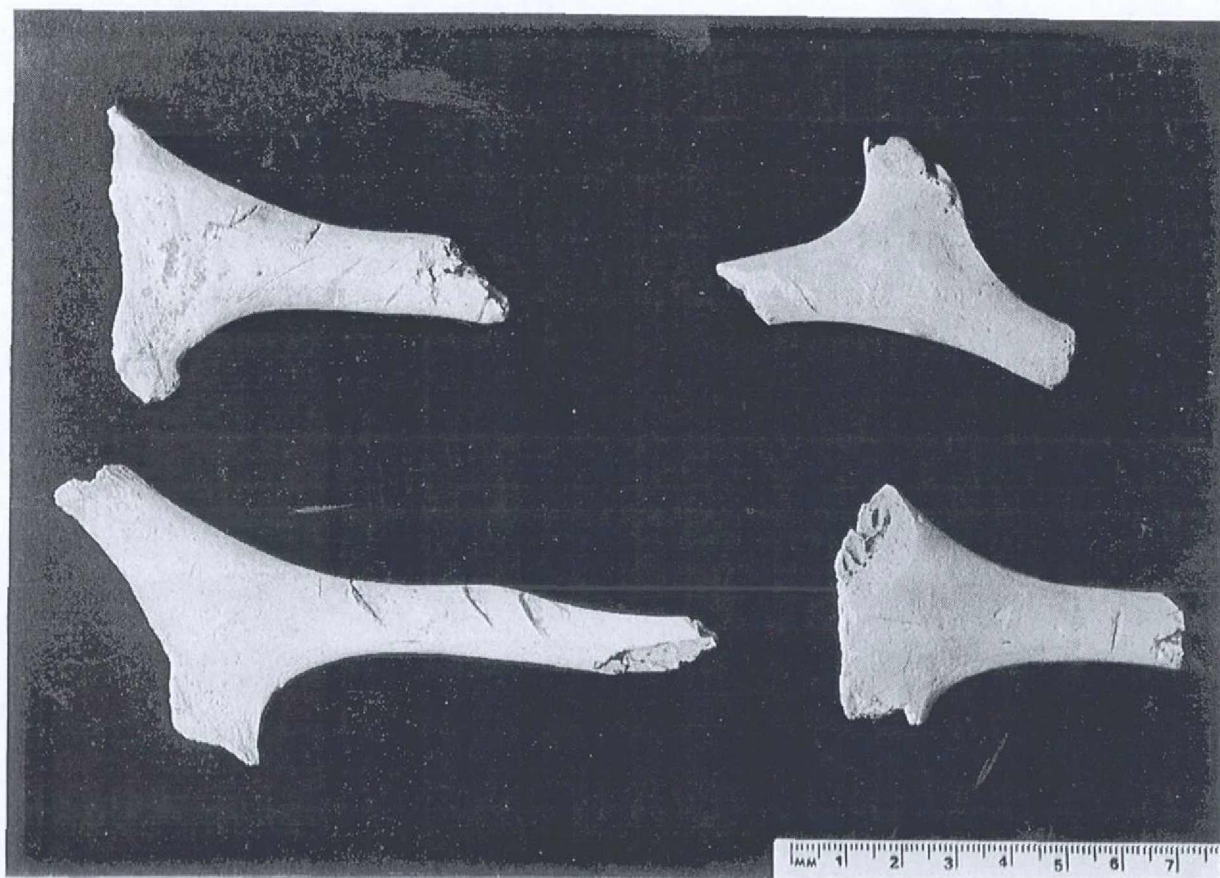


Figure 5.16 Bos hyoid fragments showing marks.

80

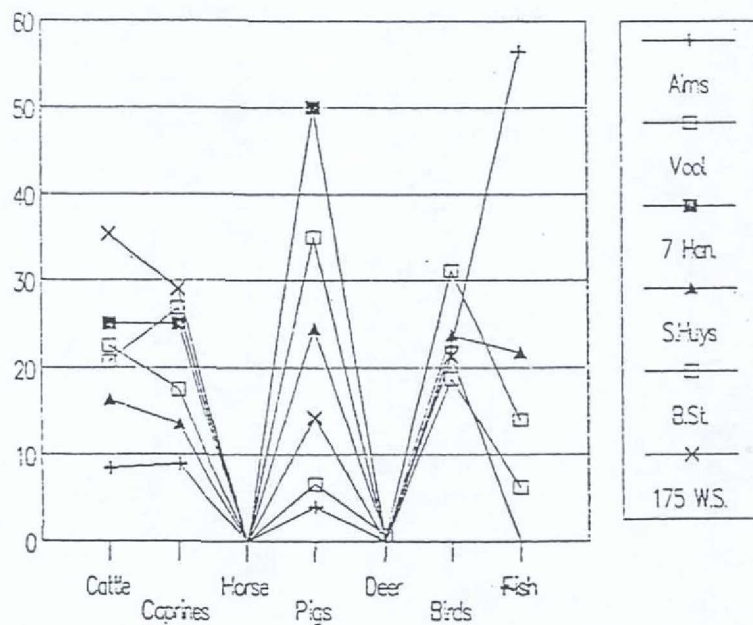


Figure 5.17 Comparison of 18th Century Archaeofauna -- Major Taxa. (Amorosi, 1990)

80

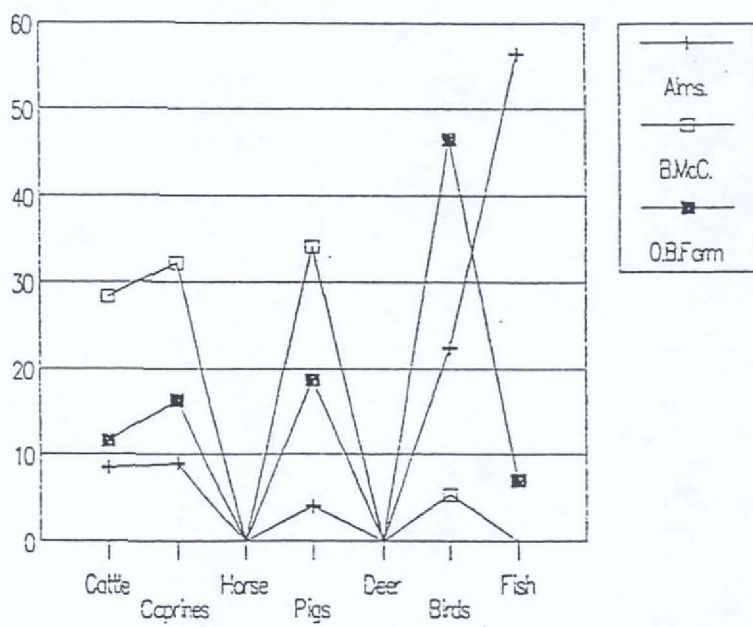


Figure 5.18 Comparison of 18th Century Archaeofauna -- Major Taxa. (Amorosi, 1990)