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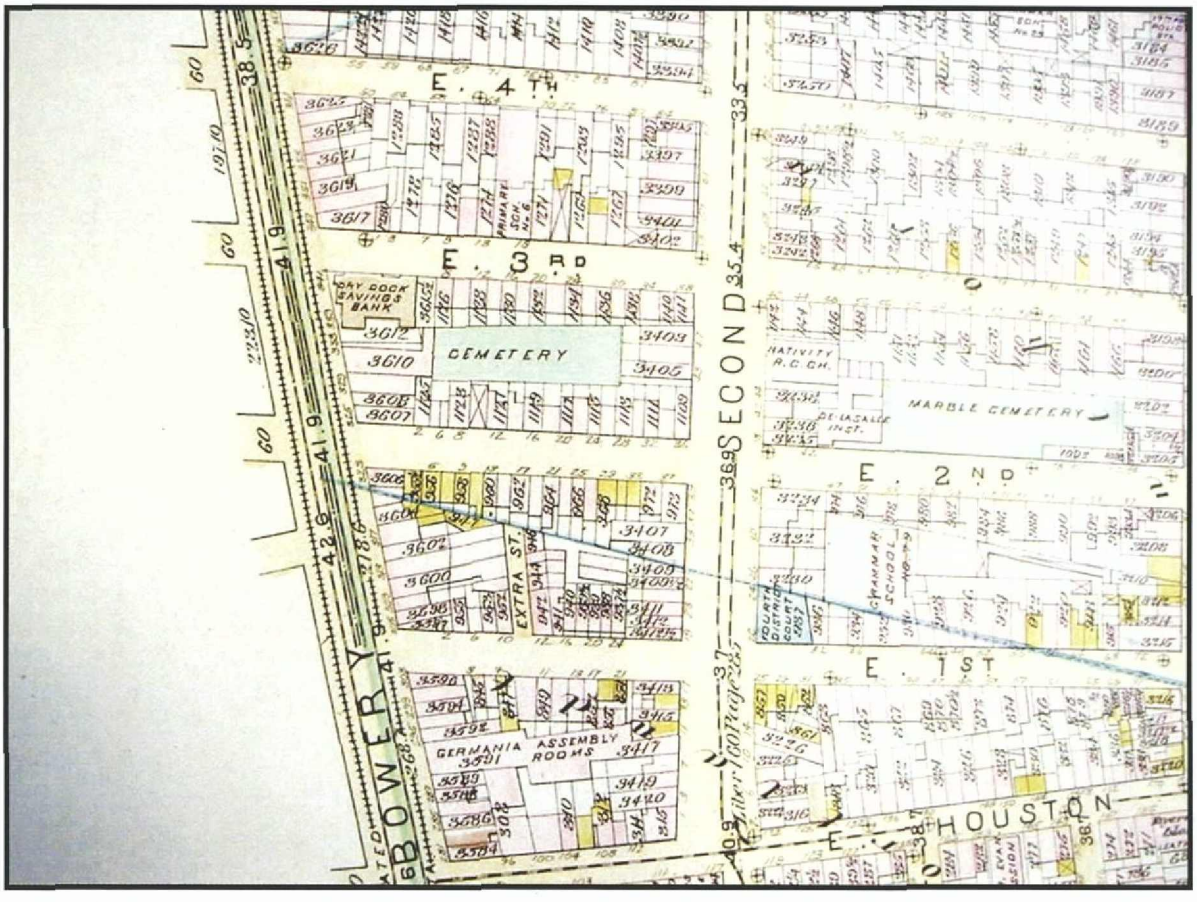
JMA 2004

# Archeological Investigations on Block 457, Lot 1 (Formerly 4 East First Street) Proposed Extra Place Apartments New York, New York

prepared for

Phipps Houses
New York, New York




by

John Milner Associates, Inc.
Croton-on-Hudson, New York

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June 2004

# ARCHEOLOGICAL INVESTIGATIONS ON BLOCK 457, LOT 1 (FORMERLY 4 EAST FIRST STREET) PROPOSED EXTRA PLACE APARTMENTS NEW YORK, NEW YORK

Prepared for

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**June 2004**

# MANAGEMENT SUMMARY

John Milner Associates (JMA) conducted archeological investigations during May 2004 at the location of the proposed Extra Place Apartments (the Project) located at 305–311 Bowery (at East First Street), New York, New York on behalf of the Project proponents, Phipps Houses. The Project is a component of the larger Cooper Square Urban Renewal Plan (CSURP). Archeological investigations were conducted within Block 457, Lot 1 (formerly Lot 55; hereafter Lot 55). This area was identified as having "archeological potential" in a previous historical overview and sensitivity assessment prepared for the CSURP.

Former Lot 55 included the rear yard of a now-demolished building at 4 East First Street. JMA identified a poorly articulated brownstone cistern located north of the rear wall of the former structure. No potentially significant deposits of artifacts were observed in association with this feature. Other features identified in the field included the rear (northern) wall of the basement foundation and deposits of structural debris both within and overlying the foundation remains. Sterile subsoil was encountered at the base of the structural foundations at a depth of 8 feet below the current ground surface.

Archeological investigations conducted within Lot 1 of Block 457 did not result in the identification of any potentially significant archeological deposits or features. No additional archeological work is recommended in association with the proposed construction on Lot 1 of Block 457.

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# 1.0 INTRODUCTION

## 1.1 PROJECT BACKGROUND

John Milner Associates, Inc. (JMA) conducted archeological investigations in advance of the proposed development of the Extra Place Apartments (the Project) located at 305-311 Bowery (at East First Street)(Block 457, part of Lot 1) on behalf of Phipps Houses. The proposed development is part of the larger Cooper Square Urban Renewal Plan (CSURP). The Cooper Square Urban Renewal Area is generally bounded by East 5th Street on the north, Second Avenue and Chrystie Street on the east, Stanton Street on the south, and the Bowery on the west. It includes portions of Blocks 427, 456 and 457. The CSURP calls for the construction of up to 713 units of housing in 7 to 14 story buildings. It also call for the construction of up to 175,000 square feet of retail commercial space, a net increase of up to 64,118 square feet of community facility space, and up to 225 on-site parking spaces.

Under the City Environmental Quality Review (CEQR) procedure, the New York City Department of Housing Preservation and Development (HPD) as CEQR lead agency, was required to determine if the project would have a significant effect on the environment. An environmental assessment was prepared, and HPD issued a revised Negative Declaration for the CSURP on June 7, 2001. The Negative Declaration references an *Historical Overview and Assessment* prepared for the CSURP in August 2000 (Parsons 2000) and states that based on the review of the documentary study, the NYC Landmarks Preservation Commission (LPC) is "requiring field testing on several lots in order to determine the potential for the recovery of significant nineteenth century resources."

The Negative Declaration also notes that the documentary study identified areas within the CSURP that "may have potential for discovery of human remains, surviving from the relocation of two nineteenth century cemeteries" and that a work plan must be developed for approval by the LPC prior to any site grading or construction work in the cemetery areas. Lot 28 within Block 457 is the site of the former Methodist Cemetery, which is located east of Extra Place and beyond the limits of the Extra Place Apartments Project Area.

All work done by JMA was conducted in accordance with both the *City Environmental Quality Review Technical Manual,* the *Landmarks Preservation Commission Guidelines for Archaeological Work in New York City* (the *Guidelines*) and, when appropriate, the New York Archaeological Council's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections* recommended for use by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). OPRHP may have certain review obligations under Section 14.09 of the New York State Parks, Recreation and Historic Preservation Law because of the involvement of the NYS Housing Finance Agency. However, JMA has assumed the LPC will be the primary review authority for the work described here.

## 1.2 AREA OF ARCHEOLOGICAL INVESTIGATION

The archeological fieldwork discussed in this report was conducted within Lot 1 of Block 457 in Manhattan. Block 457 is bounded by Second Street on the north, the Bowery on the west, Second Avenue on the east, and First Street on the south (Figure 1). The specific portion of Lot 1 of concern to LPC is the rear (northern) yard of the former structure located at 4 First Street (former Lot 55)(Figure 2).

## 1.3 PROJECT PERSONNEL

Principal JMA personnel involved in the CSURP archeological field investigation included Dr. Joel Klein (Senior Project Manager) and Patrick J. Heaton (Principal Archeologist). The field crew included Geraldine Baldwin and Elizabeth Murphy. Sarah Ruch and Scott Parker prepared the graphics and maps, and Margy Schoettle performed editing and layout for the report. All supporting documentation for the report and recovered archeological materials are currently on file at JMA's office in Croton-on-Hudson, New York.

# 2.0 BACKGROUND INFORMATION

## 2.1 PREVIOUS CULTURAL RESOURCES WORK

Previous cultural resources work associated with the CSURP include a Phase 1A historical overview and archeological sensitivity-assessment (Parsons 2000), and a work plan and research design for the field-testing on Block 457, Lot 1 (i.e., the work described in this report)(JMA 2004). Information contained in these earlier documents provided the bulk of the background information presented below. Historical map details from the Parsons (2000) report and other sources that are reproduced herein include the 1851 Dripps map (Figure 3), the 1875 Robinson atlas (Figure 4), and the 1903 and 1951 Sanborn atlases (Figures 5 and 6).

## 2.2 HISTORICAL BACKGROUND

In the seventeenth-century, the CSURP area was part of Colonial Governor Peter Stuyvestant's farm, or *bouwerie*, from which the street and surrounding neighborhood derived their name. As the population of New York expanded in the late-eighteenth and early-nineteenth centuries the city expanded northward. Urban development of the Bowery began in earnest after about 1800. By the 1820s the neighborhood was an entertainment center for the city and included numerous theatres, taverns, and oyster bars. After the Civil War the neighborhood entered a period of decline and lost its importance as a commercial and cultural center. The Third Avenue elevated line was constructed along Bowery in 1878, after which middle-class New Yorkers generally avoided the area. In the late-nineteenth century the neighborhood was associated with cheap entertainment, homelessness, drunkenness, and other generally disreputable activities. By 1890 the Bowery was notable for its numerous nickel museums, flophouses, brothels, saloons, and pawnshops (Burrows and Wallace 1999; Parsons 2000:6–7; Jackson 1995). In the 1900s the Bowery gained notoriety "as a place of squalor, alcoholism, and wretchedness" (Jackson 1995:131) and was arguably the most infamous "skid row" in the United States.

The specific portion of Lot 1 (formerly Lot 55; hereafter, Lot 55) of Block 457 of concern to LPC is presumably the area identified in the environmental assessment (Figure 2) as having "Archaeological Potential." This area corresponds to what the *Historical Overview and Assessment* (Parsons 2000) identifies as former Lot 55 (corresponding to 4 East First Street). Historical cartographic analysis conducted by Parsons (2000) indicates that a structure (or possibly a series of structures; the earlier maps lack sufficient detail to determine the specific qualities of the structures depicted) occupied Lot 55 between 1851 and (at least) 1920 (Dripps 1851; Robinson 1875; Sanborn 1903, 1920, 1947; Figures 3–6). The structure was demolished by 1947.

The 1903 Sanborn atlas (Figure 5) identifies the structure on Lot 55 (4 East First Street) as a five-story building (construction material is not indicated) used for both commercial and residential purposes. Lot 55 measured 25 feet in width (east-to-west) by approximately 75 feet in depth (north-to-south). The structure fronted on East First Street and extended 50 feet north towards the rear of the lot. In 1903, a sign painter occupied the commercial space on the first floor of 4 East First Street. The structure is labeled with both an "S" (for store, or storefront) and "D" (for dwelling). The "D" designation indicates a single-family residence, although the number of stories identified for the building makes it seem more likely that the structure housed multiple apartments.

The 1903 and 1920 Sanborn maps also depict two small, single-story structures (both smaller than 10-foot-square) located in the northwest and northeast corner of the lots. The function of these structures is not indicated, although it is reasonable to assume they served for storage purposes associated with the sign painter's shop. It is possible that these structures were built during earlier periods, or that they were built on foundations associated with earlier features. The size and location of the two structures correspond to the expected location for nineteenth-century privies on the lot.

City Directory Data reviewed by Parsons (2000:41) for 4 East First Street indicates that two commercial interests were located on the property in 1851 (Robert Hicinbothem, tinworker; and Joseph Muesse, boots). In 1869, City Directories list eight residents and three commercial interests (saddlery hardware, a printer, and a smith) at this address. Only two of the eight residents listed in 1869 share a common surname, which suggests that 4 East First Street included multiple domestic residences. Regarding the specific archeological potential for Lot 55, the *Historical Overview and Assessment* provided the following conclusions and evaluations:

> Lot 55 was a domestic and commercial property fronting on 1st Street west of Extra Place. The lot was occupied by a sign painter at the turn of the present century, but was earlier occupied by a range of skilled blue collar craftsmen ... including a saddler, upholsterer, smith, piano maker and printer. Also listed on Lot 55 were a clerk, porter, and merchant (liquor salesman). There is no evidence of basement construction on the lot, and thus the area has the potential for backyard shaft features (Parsons 2000:43).

## 2.3 RESEARCH DESIGN

The *Historical Overview and Assessment* identified several research questions that could be addressed by potential archeological deposits located with the Cooper Square Urban Renewal Area (i.e., within portions of Blocks 427, 456, and 457). These questions focus on the complexity of social relations related to ethnicity, class, and consumer behavior that resulted from the industrial revolution and growth of urban centers during the nineteenth century:

> Examinations of ceramic and faunal assemblages from yard features may allow questions to be addressed concerning the degree to which consumer behavior reflected social status and social aspirations in the Bowery. The most likely location for discovering artifact assemblages for such studies would be deep shaft features, such as wells, cisterns, or privies, located in the rear yards of undisturbed lots...
>
> Archeological investigations could thus potentially contribute to an understanding of several aspects of social structure in nineteenth century New York. The significance of ethnicity, for example, might be approached through the analysis of different behavioral patterns in terms of consumer choice displayed by immigrant groups... Artifact assemblages from these lots could furnish data applicable to the analysis of the relationship between social status and social aspirations in the Bowery, and of how and to what to degree these socioeconomic standings were reflected in consumer behavior. There also appears to have been a mixture of commercial and domestic use both within and between lots. Comparative analysis of artifact assemblages from yard features may be informative as to variations in property use and the apparent separation of domestic and work space (Parsons 2000:38, 44).

The purpose of field testing as defined in the *Guidelines* is to "determine whether the site *actually* contains significant archeological resources, as opposed to whether such resources may *potentially* exist on the site." The purpose of JMA's archeological testing in the rear yard of Lot 55 was to determine if intact nineteenth-century archeological deposits were present.

Given the small size of the testing area within Lot 55, JMA assumed that multiple machine-excavated trenches, together totaling a maximum of 50 linear feet, would be required to determine if archeological deposits were present. Based on a review of Sanborn atlas data, it appears that the northern wall of East First Street was located 25–30 feet south of the rear lot line. Possible features in the area north of the rear wall of the former structure would include intact nineteenth-century yard surfaces, sheet midden deposits, outbuilding remains, cisterns, wells, and/or other shaft features.

During a preliminary field reconnaissance of the site, JMA observed linear arrangements of brick on the ground surface that appeared to correspond with the western perimeter of the lot and the northern (rear) wall of the former structure. Verifying the former location of the building (based on the presence of foundation remains) was also proposed as a component of the field investigation. Trenches in the area formerly occupied by 4 East First Street would determine the extent of disturbance associated with construction and/or demolition of the structure.

# 3.0 RESEARCH METHODS

## 3.1 ARCHEOLOGICAL FIELD METHODS

John Milner Associates (JMA) conducted archeological field-testing on May 18 and May 19, 2004 within portions of Lot 1 of Block 457. A backhoe and operator, working under the supervision of JMA archeologists, were used to remove deposits of fill and overburden. Excavation continued until subsoil or a potentially significant archeological deposit was encountered, or until it became clear that twentieth-century construction and/or demolition had destroyed any potential archeological features. JMA recorded representative profiles for each trench and photographed all stages of work. In the following discussion, excavation depths are described in terms of feet below ground surface (bgs).

To further investigate depositional strata encountered during machine-aided excavation, JMA field personnel conducted hand excavations within potential archeological deposits. When potentially significant archeological features were encountered the area was cleared by hand excavation (i.e., using shovels and trowels), photographed, and drawn. The purpose of hand excavation was to determine the type of fill present within each feature, the approximate dates of the deposits, and the integrity of deposits within each feature. All hand-excavated soils were passed through one-quarter-inch hardware cloth to insure uniform recovery of artifacts. Representative samples of artifacts from the various fill layers and soil deposits were also recovered. This material was used to date episodes of disturbance across the Project Area. Recovered artifacts were placed in plastic bags labeled with provenience information.

## 3.2 LABORATORY METHODS

Recovered artifacts were returned to JMA's laboratory in Croton-on-Hudson, New York, for further analysis. All recovered artifacts were cleaned, inventoried, and cataloged. To the extent possible, the recovered artifacts were identified as to material, temporal or cultural/chronological association, style, and function. Artifacts were identified and dated using standard references (e.g., Apuzzo 1994; Brown 1982; Coysh and Henrywood 1982; Jones et al. 1989; Sussman 1997). The artifacts were placed in heavy duty, archival quality zip-lock plastic bags for long-term storage, and a provenience tag printed on acid-free paper was placed in each bag. The provenience information was also recorded on the outside of the bags, using an indelible marker.

# 4.0 RESULTS OF FIELDWORK

JMA conducted archeological invetsigations within the rear (northern) portion of former Lot 55 to determine whether nineteenth-century refuse deposits associated with 4 East First Street were extant. JMA personnel supervised machine-aided excavation to remove the asphalt and overburden over the rear (northern) portion of the lot.

*Archeological Test Trench 1*

Trench 1 measured 30 feet north-to-south by 10 feet east-to-west and was excavated along the eastern perimeter of the lot extending south from the northeast corner of the lot (Figure 7). The uppermost soil horizon (Stratum I, Figure 8) was uniform throughout the trench and consisted of dark grayish brown sandy loam fill that extended between 6 inches and 1-foot bgs.

The rear (north) wall of 4 East First Street was documented within Trench 1 (Plates 1 and 2). The wall is constructed of mortared brownstone and is located 15 feet south of the rear lot line (Figure 8). The top of the wall was encountered at 1.5 feet bgs, and the wall extended to a depth of 8 feet bgs. The interior of the structural foundation (south of the wall) included two strata of demolition rubble. Stratum II was reddish brown sandy loam fill with brick rubble and demolition debris that extended between 1-foot and 8 feet bgs. Stratum II represents debris from the demolition of the former structure at 4 East First Street. The underlying fill deposit (Stratum III) was dark gray sandy loam with ash, cinders, and structural-timber debris. This deposit extended from 4.5 to 8 feet bgs and represented a mound in the center of the foundation (Figure 8). A similar deposit of dark gray fill was documented along the northern side of the foundation wall.

Underlying the base of the foundation wall and the interior deposits of structural debris (Strata II and III), JMA documented a horizon of strong brown sand with gravel, pebbles, and smooth, water-worn cobbles (Stratum IV, Figure 8). This horizon did not include any structural debris or other artifacts, and represents glacial till or outwash. The trench was not continued below the uppermost 2 feet of the subsoil.

North of the foundation wall, JMA documented a partially demolished brownstone structure (Feature 1) within the former rear yard area of Lot 55. Remnant brownstone elements of this feature indicated that a brownstone structure, approximately 8 feet in diameter with an arched vault ceiling, had been constructed off of the rear wall of 4 East First Street (Plate 3). The poorly articulated top of the feature was documented approximately 2 feet bgs. The base of the feature (at 7 feet bgs) rested directly upon the strong brown sand subsoil (Stratum IV).

The feature fill included two distinct depositional units (Figure 8). JMA investigated a mottled deposit of gray, grayish brown, and black loam with ash, cinders, and plaster (Stratum 1A) that overlay and slumped into the uppermost portions of the disarticulated vault. This deposit extended between 1 foot and 4.75 feet bgs. Stratum 1A included a low-density assemblage of nineteenth-century domestic debris (Plate 4). Materials recovered from Stratum 1A are listed in Table 1. The lower half of the vault (between 4 feet and 7 feet bgs) was filled with brown sandy loam with brownstone cobbles and brick fragments (Stratum 1B). No artifacts were observed within this fill deposit during the archeological testing.

**Table 1. Artifacts recovered from Feature 1 overburden and fill (Stratum 1A).**

| Count | Type | Date Range |
|---|---|---|
| 1 | Mold-blown white (clear) bottle "John J. McConnell / 648 Water St New York / Registered" | Late 19th cty. |
| 1 | Aqua blown-in-mold bottle "United Bottling Co. / P.F. O'Neill / 508 Greenwich St. New York / Bottle not to be sold / Registered." | 1875-1900 |
| 2 | Ceramic marbles | 1880-1920 |
| 1 | Large "Benny" Cat's Eye ceramic marble | 1880-1920 |
| 2 | Ironstone sherds (1 plate fragment, 1 rim sherd) | 1813-1900 |
| 1 | Soft paste porcelain, gilded polychrome over-glaze, "Forget m-" (Rim sherd) | 1850-2000 |
| 1 | Nottingham brown stoneware | 1683-1910 |
| 1 | Polychrome transfer-print whiteware | 1835-1915 |
| 1 | Metal bottle seal | - |
| 2 | Domestic gray stoneware, brown-glazed exterior, white interior (1 rim sherd, 1 spout sherd) | 1805-1930 |
| 1 | Soft-paste porcelain figurine face fragment | 1870-1930 |
| 1 | Blown-in-mold medicine/tonic bottle | Late 19th cty. |
| 1 | Molded ironstone (base sherd of goblet vessel) | 1813-1900 |
| 1 | Ironstone Cup/bowl (1/2 vessel) | 1813-1900 |

JMA did not observe an intact floor at the base of Feature 1. The quantity of disarticulated stone observed throughout Stratum 1B suggests that the feature was partially demolished at the time it was filled. The sample of artifacts recovered from Stratum 1A (overlying and in the upper portions of the feature) date to the late-nineteenth century (Table 1). Based on the presence of these artifacts at the top of the feature, it is likely that Feature 1 was demolished and filled around the turn-of-the-twentieth century.

The location, size, and form of the brownstone structure suggest that Feature 1 may have been a cistern. Streaked deposits of plaster were observed within the feature's fill; however, an intact coating of plaster was not observed along the interior of the remaining brownstone walls. The feature was poorly articulated and did not include a dense assemblage of *in situ* domestic debris. JMA did not observe any deposits in association with the feature that may have yielded information about the former inhabitants of 4 East First Street.

*Archeological Test Trench 2*

Trench 2 measured 30 feet east-to-west by 15 feet north-to-south and was excavated along the northern perimeter of the lot extending west from the northeast corner of the lot (Figure 7). Soils observed within Trench 2 (Figure 9) were comparable to the soil stratigraphy documented within Trench 1. The thin horizon of topsoil (Stratum I) was underlain throughout the trench by reddish brown sandy fill with brick rubble (Stratum II). West of Feature 1, Stratum II extended to only 2.5–3 feet bgs and was underlain by strong brown sand subsoil (Stratum IV).

The rear (eastern) foundation wall of the former structure at 309 Bowery was documented in the western portion of the trench (Figure 9; Plate 5). Soils observed west of the wall (within the 309 Bowery foundation interior) included reddish brown brick rubble (Stratum II) and dark gray sandy loam fill (Stratum III). No additional archeological features were observed within the rear yard of Lot 55 during the excavation of Trench 2.

*Archeological Test Trench 3*

During JMA's archeological fieldwork, a local informant stated that he had observed an open hole in the center of Lot 1 that he interpreted as a privy. The informant stated that the open hole contained nineteenth-century glass vessels, and had been recently filled so that contractors working on nearby construction projects could use the lot for parking. The informant indicated that the open hole had been located adjacent to the exposed tops of the brick foundation wall at the rear (eastern) end of the former structure at 305 Bowery.

JMA conducted machine-aided trenching at this location to determine if an intact shaft feature was present. Trench 3 measured approximately 12 feet north-to-south by 5 feet east-to-west (Figure 7). The rear foundation wall of the former structure at 305 Bowery served as the eastern wall of the trench (Plate 6). The interior of the 305 Bowery foundation was filled with reddish brown and brown sandy fill with brick rubble and demolition debris. The base of the foundation wall and interior fill deposit was documented at 12 feet bgs, and underlain by strong brown sand subsoil.

Numerous glass vessels were observed within the upper 1.5 feet of the foundation fill deposit within Trench 3. These vessels included Snapple, Budweiser, Heineken, and Olde English bottles. No potential shaft features, nor concentrations of nineteenth-century artifacts, were observed in this location. Based on the results of the archeological testing, the apparent feature described by an informant at this location appears to have been a depression or void within the basement fill that was used to dispose of twentieth-century street litter.

# 5.0 CONCLUSIONS AND RECOMMENDATIONS

## 5.1 SUMMARY AND CONCLUSIONS

JMA conducted archeological investigations within a portion of Lot 1 (former Lot 55) of Block 457 in New York, New York in advance of the proposed Extra Place Apartments project. This area was identified as having "archeological potential" in a previous historical overview and sensitivity assessment prepared for the CSURP (Parsons 2000).

Former Lot 55 included the rear yard of a now-demolished building at 4 East First Street. JMA documented a poorly articulated brownstone cistern located north of the rear wall of the former structure. No potentially significant deposits of artifacts were observed in association with this feature. Other features documented at the site included the rear (northern) wall of the basement foundation and deposits of structural debris both within and overlying the foundation remains. Sterile subsoil was documented at the base of the structural foundations at a depth of 8 feet below the current ground surface.

## 5.2 RECOMMENDATIONS

Archeological investigations conducted within Lot 1 of Block 457 did not result in the identification of any potentially significant archeological deposits or features. No additional archeological work is recommended in association with the proposed construction on Lot 1 of Block 457.

# 6.0 REFERENCES CITED

Appuzzo, Robert
1994 *Bottles of Old New York: A Pictorial Guide to Early New York City Bottles, 1680–1925.* R & L Publishing, New York.

Brown, Ann R.
1982 *Historic Ceramic Typology with Principle Dates of Manufacture and Descriptive Characteristics for Identification.* DELDOT Archeology Series 15. Delaware Department of Transportation, Dover.

Burrows, Edwin G., and Mike Wallace
1999 *Gotham: A History of New York to 1898.* Oxford University Press, New York.

Coysh, A. W. and R. K. Henrywood
1982 *The Dictionary of Blue and White Printed Pottery 1780–1880.* Antique Collector's Club Ltd., Woodbridge, Suffolk.

Dripps, Matthew
1851 *Map of the City of New York Extending Northward to 50th Street.* Collections of the New York Public Library Maps Division, New York.

Jackson, Kenneth T.
1995 Bowery. In *The Encyclopedia of New York City*, edited by Kenneth T. Jackson, pp. 131–132. Yale University Press, New Haven and London.

John Milner Associates, Inc. (JMA)
2004 *Archeological Work Plan, Block 457, Lot 1 (formerly 4 East First Street), Extra Place Apartments (Cooper Square Urban Renewal Plan).* Prepared for New York city Landmarks Preservation Commission, New York. John Milner Associates, Inc., Croton-on-Hudson, New York. May 2004.

Jones, Olive, C. Sullivan, G. L. Miller, E. A. Smith, J. E. Harris, and K. Lunn
1989 *The Parks Canada Glass Glossary.* Revised edition. Canadian Parks Service, Ottawa, Ontario.

Parsons Engineering Science, Inc. [Parsons]
2000 *Cooper Square Community Development: Historical Overview and Assessment.* Report on file New York City Landmarks Preservation Commission, New York.

Robinson, Elisha
1875 *Atlas of the City of New York.* E. Robinson Publisher, New York. JMA Archives, Croton-on-Hudson, New York.

Sanborn Map Company
1903 *Insurance Maps of the Borough of New York, City of New York.* Sanborn Map Company, Pelham, New York.

1947 *Insurance Maps of the Borough of New York, City of New York* [1920 edition corrected through 1947]. Sanborn Map Company, Pelham, New York.

Sussman, Lynne
1997 *Mocha, Banded, Cat's Eye, and Other Factory-Made Slipware.* Studies in Northeast Historical Archaeology 1. Boston University, Boston.

United States Geological Survey (USGS)
1979 *Brooklyn, N.Y.* 7.5-minute series topographic quadrangle. United States Geological Survey, Reston, Virginia. Scale 1:24,000.

1981 *Jersey City, N.J.-N.Y.* 7.5-minute series topographic quadrangle. United States Geological Survey, Reston, Virginia. Scale 1:24,000.

# FIGURES

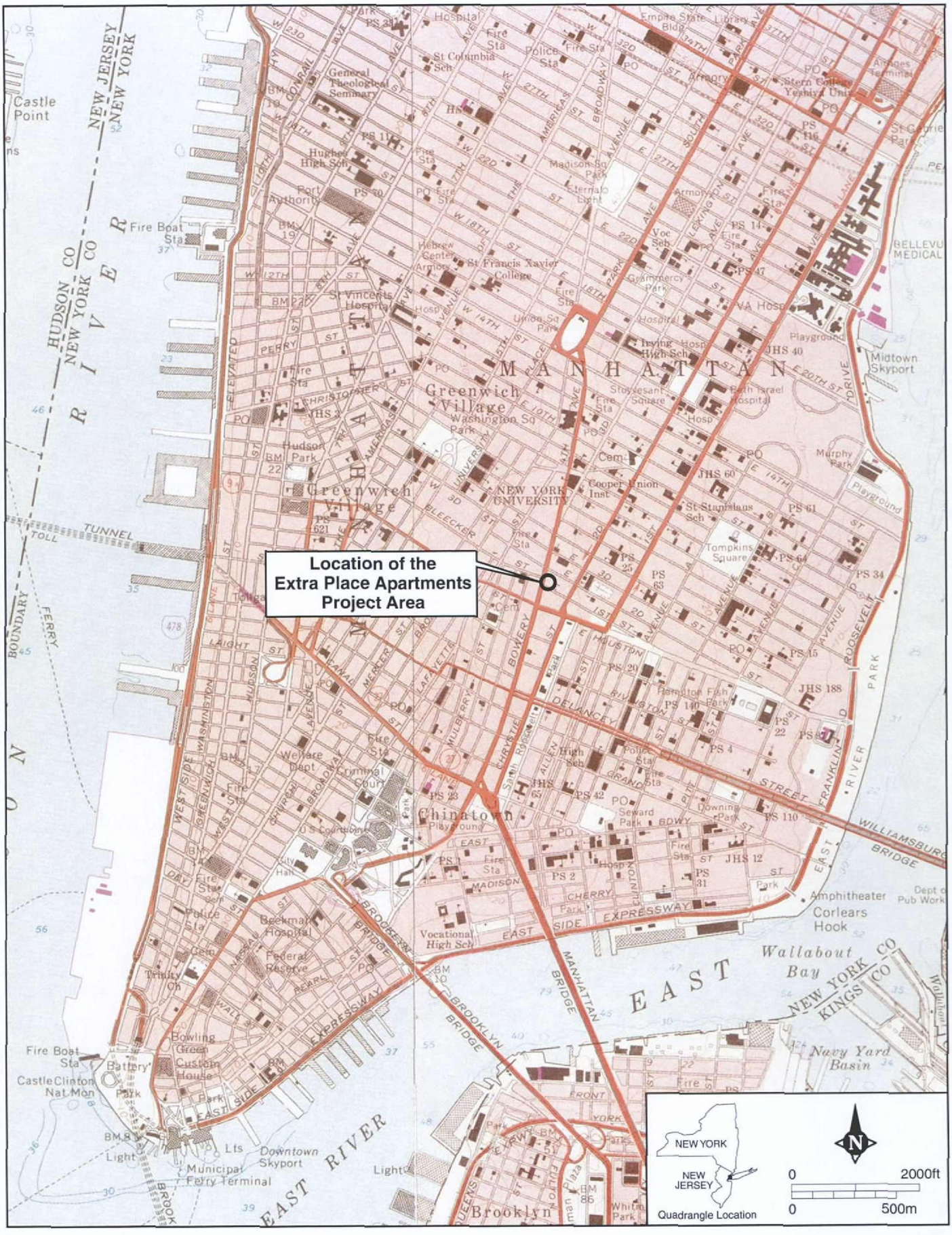


Figure 1. Detail of the *Jersey City, N.J.-N.Y.* and *Brooklyn, N.Y.* (USGS 1981, 1979) 7.5-minute quadrangles showing the location of the Extra Place Apartments Project Area (Block 457, Lot 1).

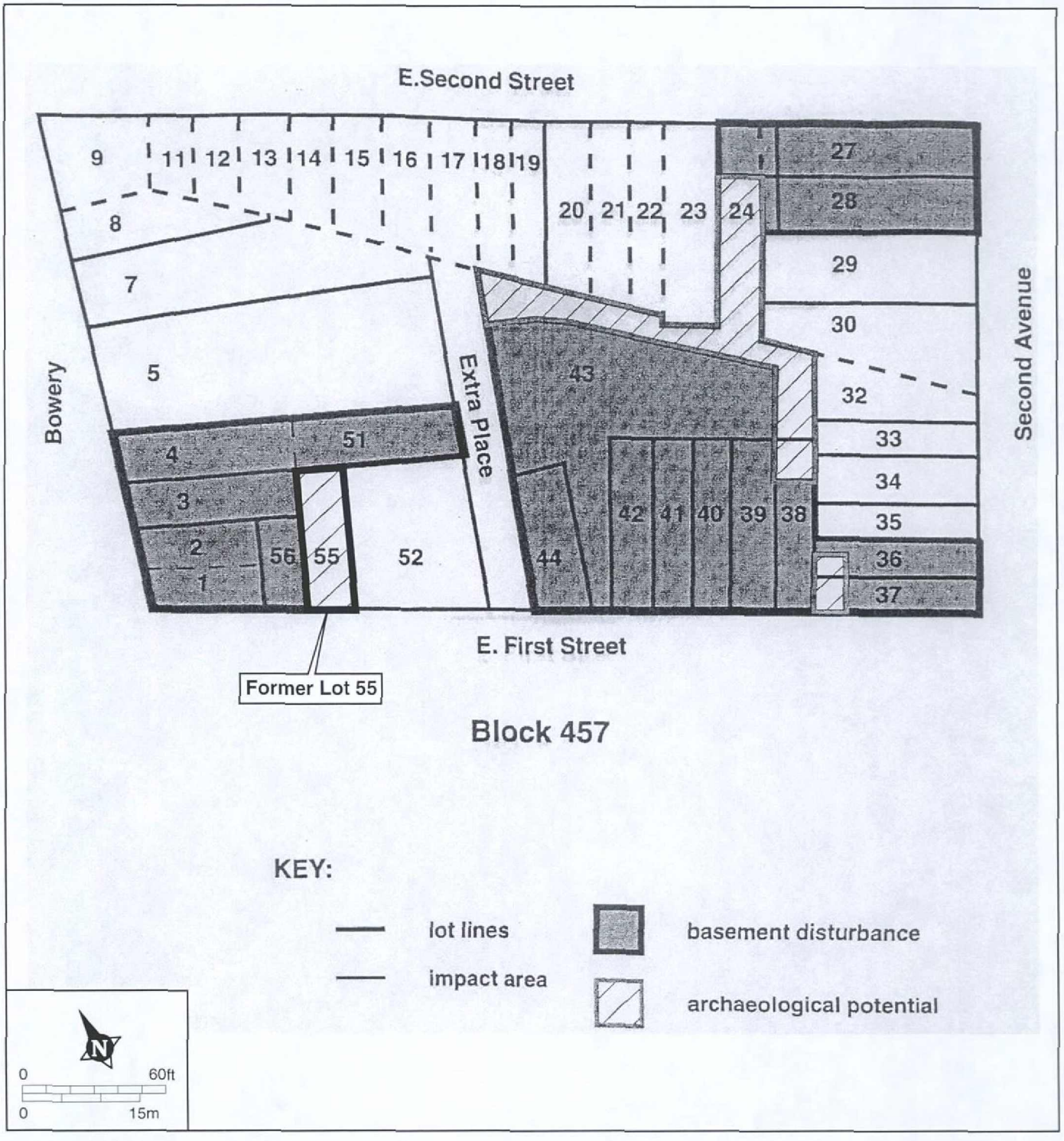


Figure 2. Areas of "Archaeological Potential" on Block 457, modified from Parsons (2000).

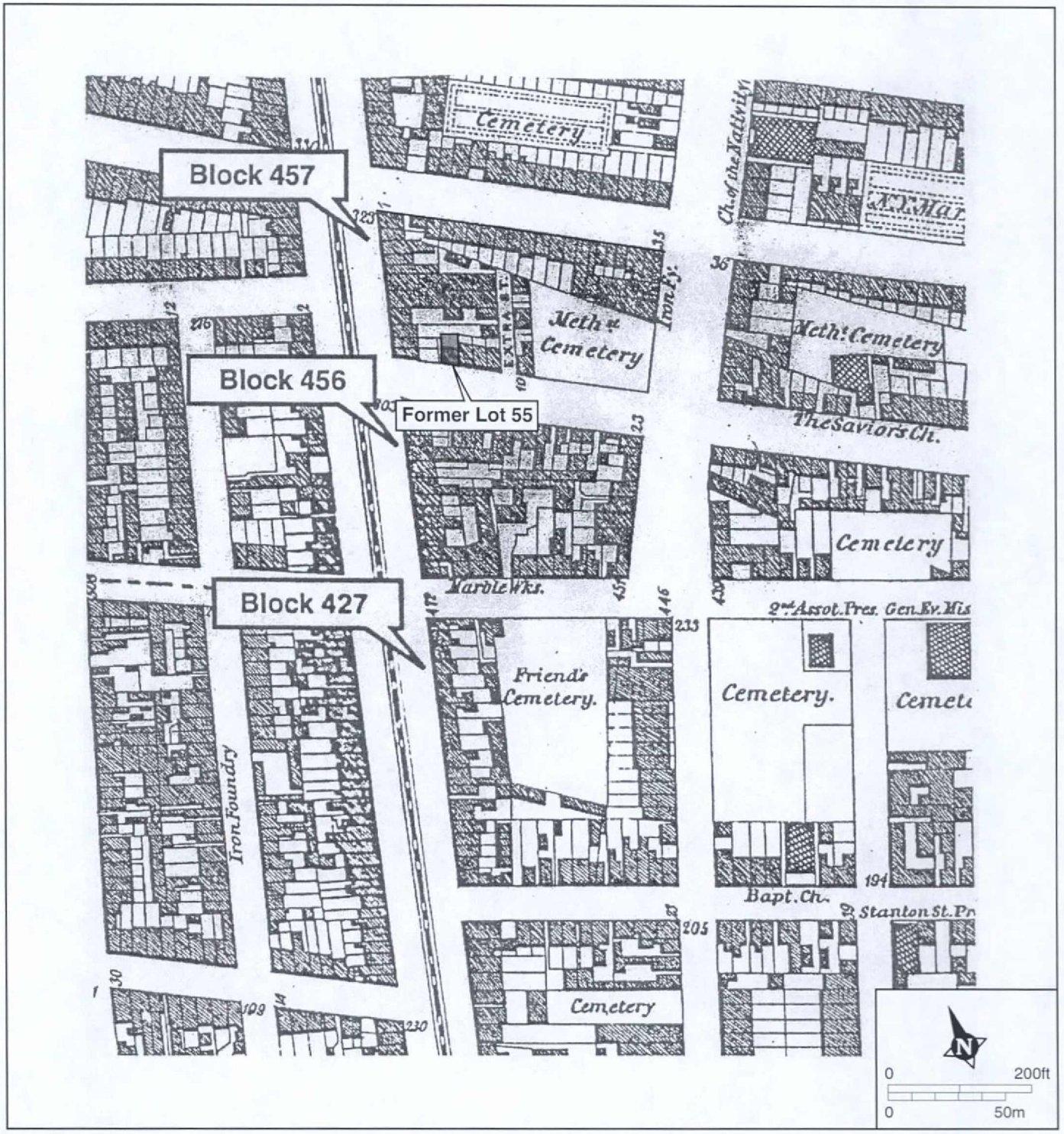


Figure 3. Detail of the 1851 Dripps map showing the location of former Lot 55, modified from Parsons (2000).

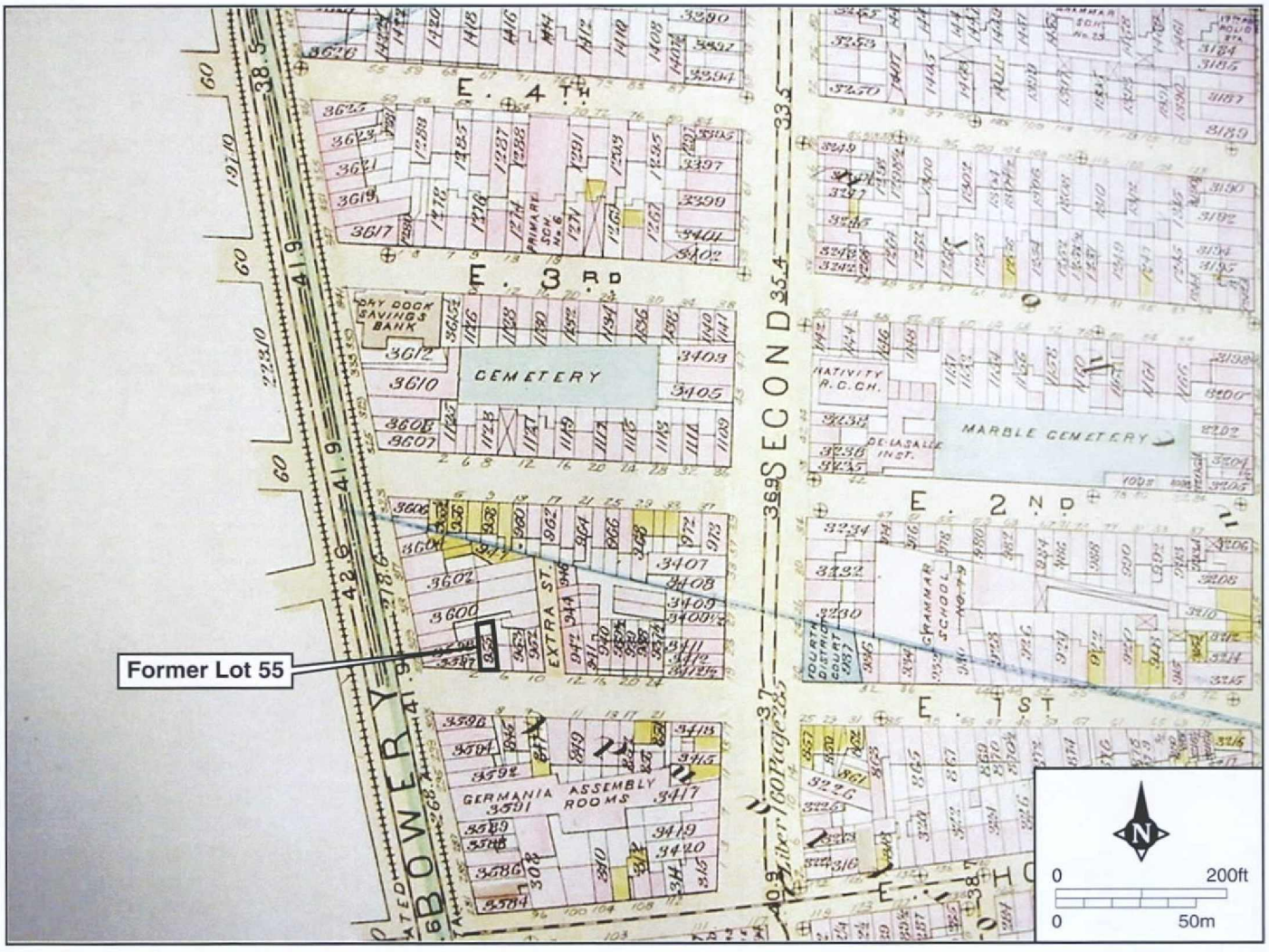


Figure 4. Detail of the 1875 Robinson atlas showing the location of former Lot 55.

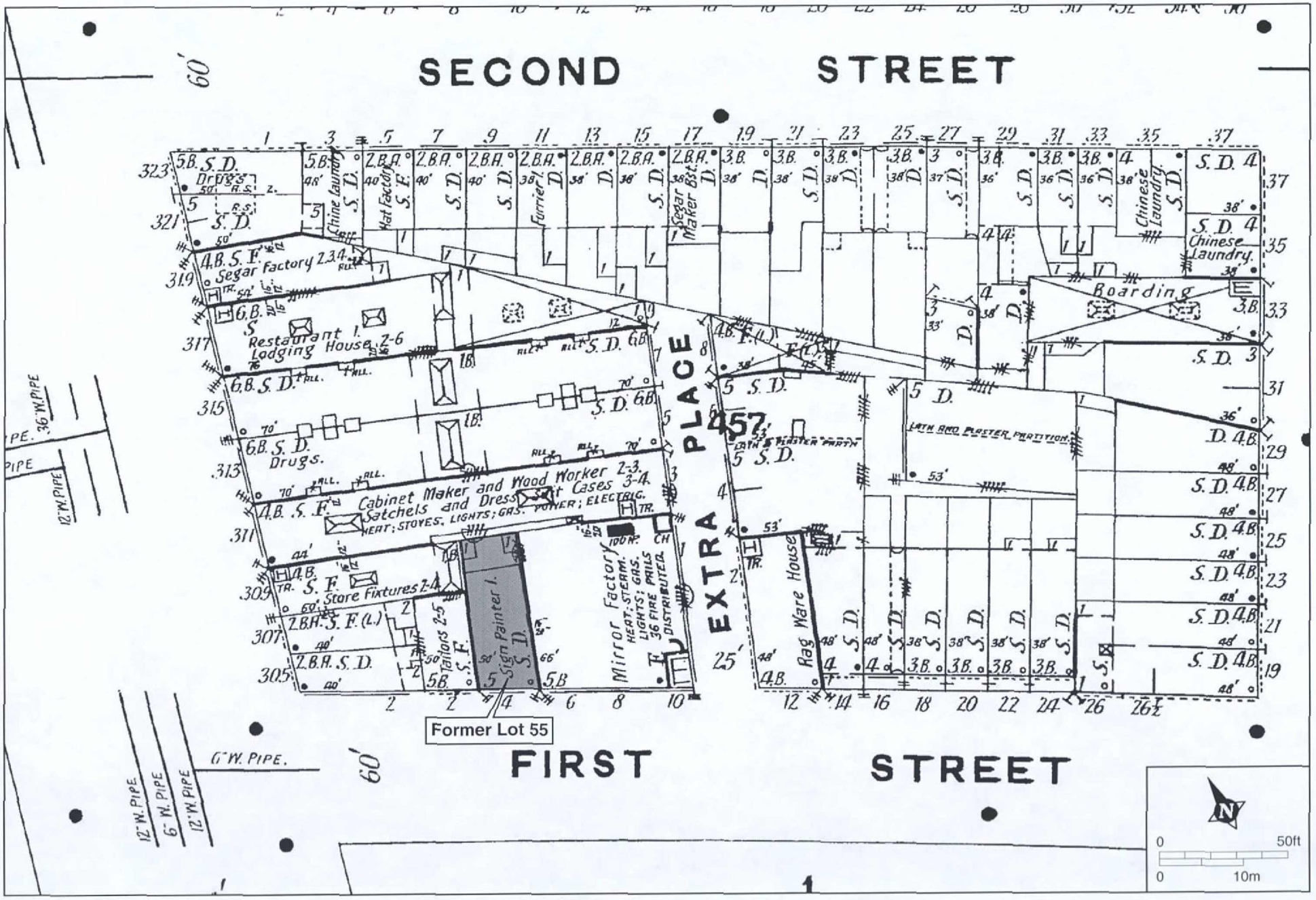


Figure 5. Detail of the 1903 Sanborn atlas showing the location of former Lot 55.

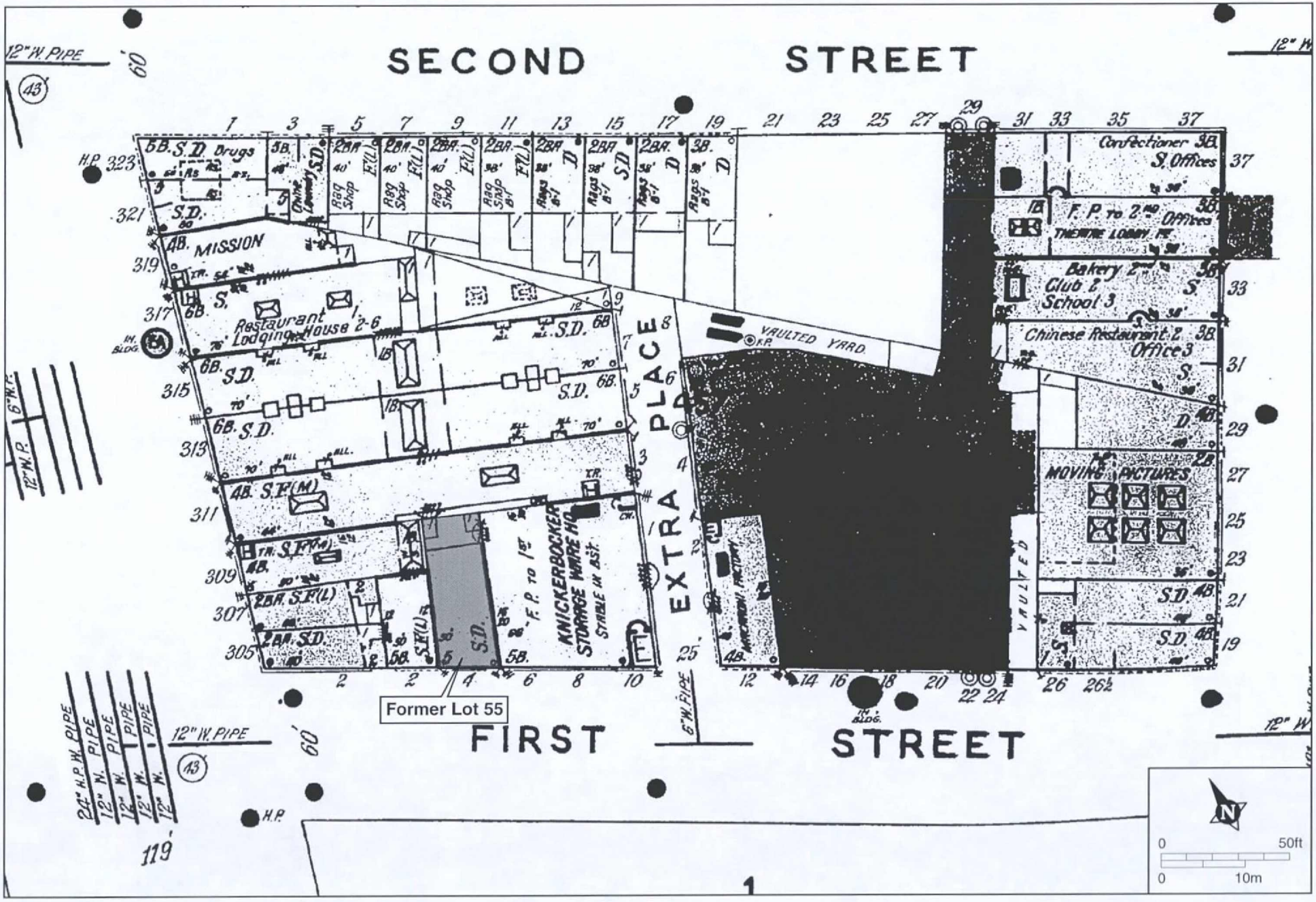


Figure 6. Detail of the 1947 Sanborn atlas showing the location of former Lot 55.

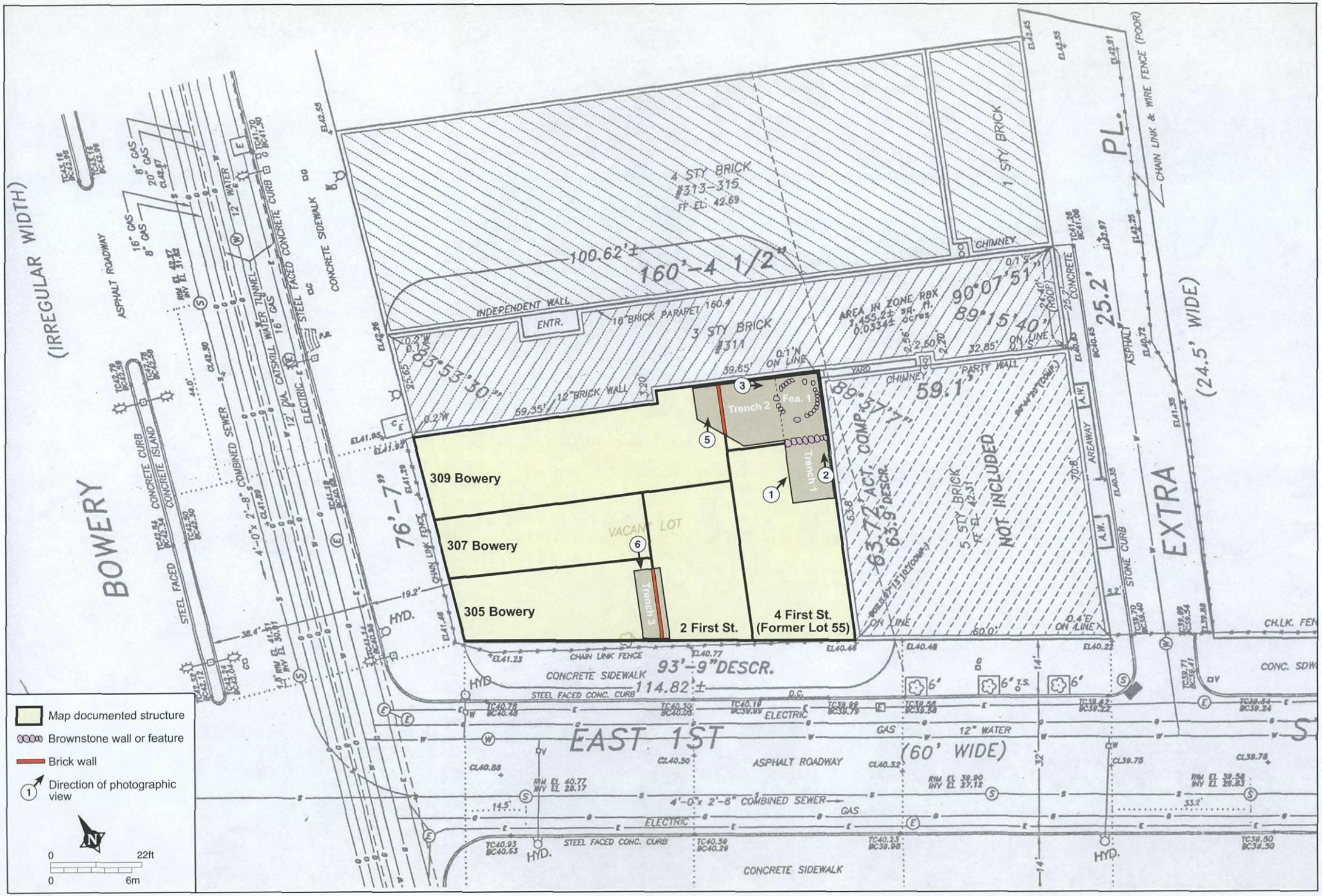


Figure 7. Existing conditions survey showing the limits of excavation and features documented during the archeological investigation; photographic views are indicated by Plate Number.

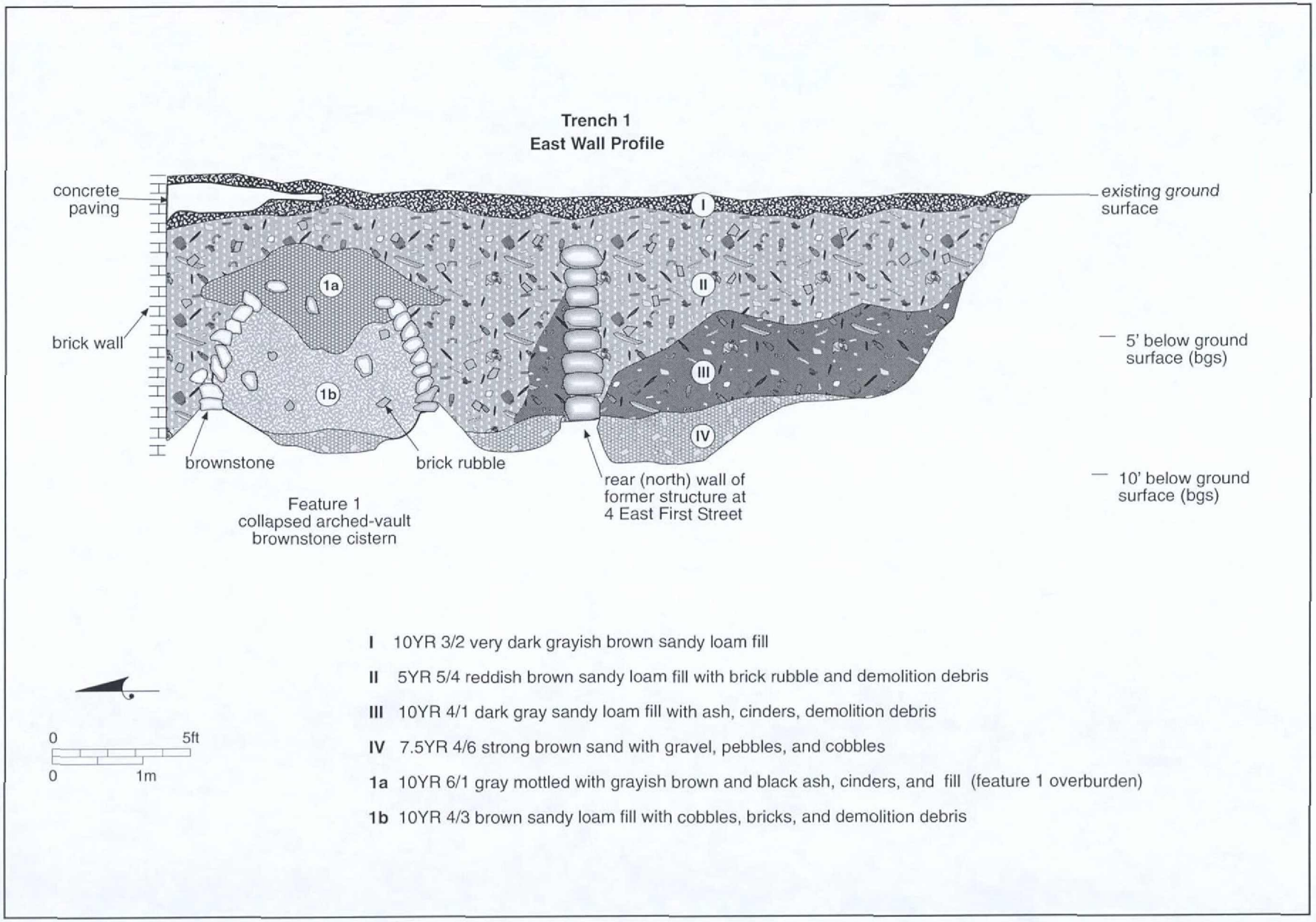


Figure 8. Archeological Test Trench 1, east wall profile.

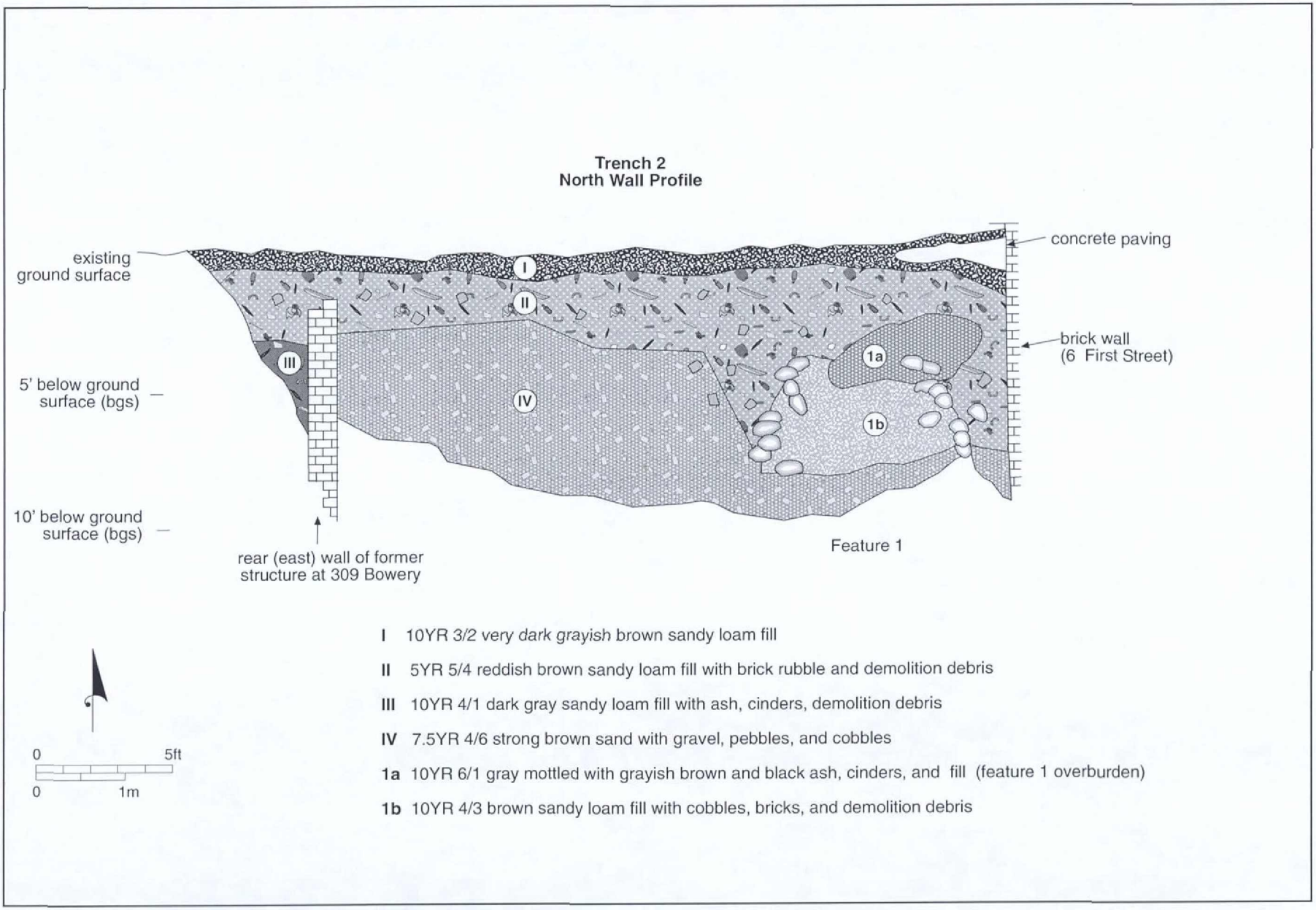


Figure 9. Archeological Test Trench 2, north wall profile.

# PLATES

Plate 1. The rear (northern) foundation wall of 4 East First Street documented within Archeological Test Trench 1; view to the northeast.

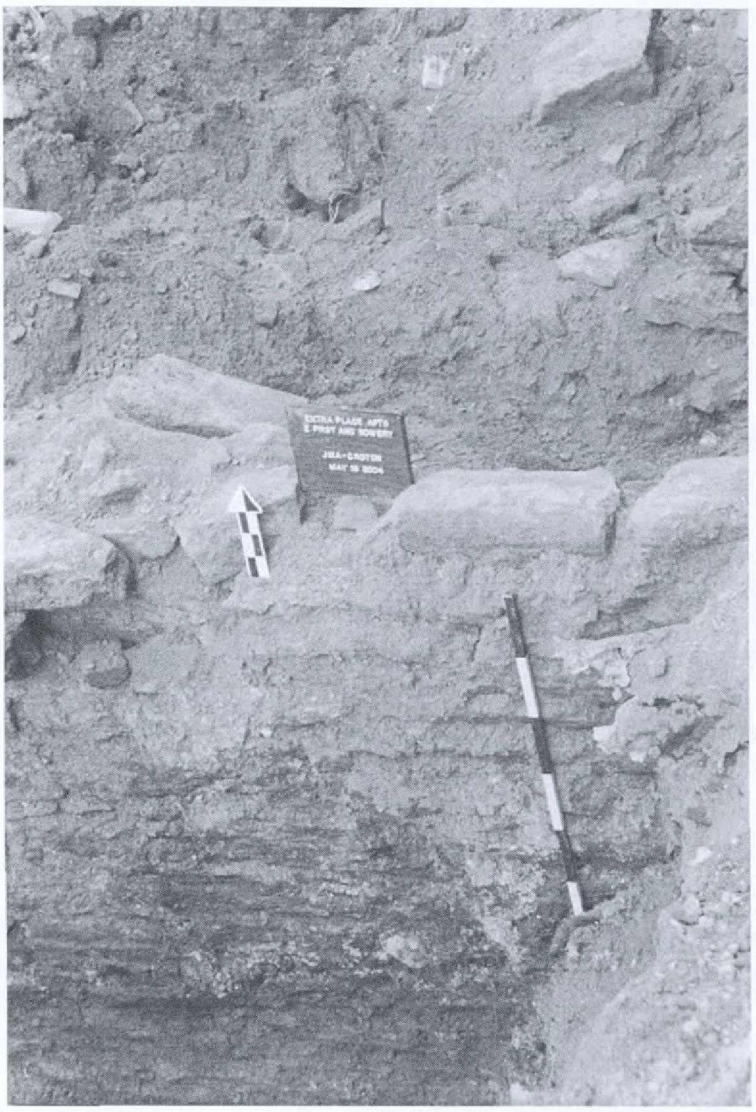

Plate 2. Detail of the rear (northern) foundation wall of 4 East First Street; view to the north.

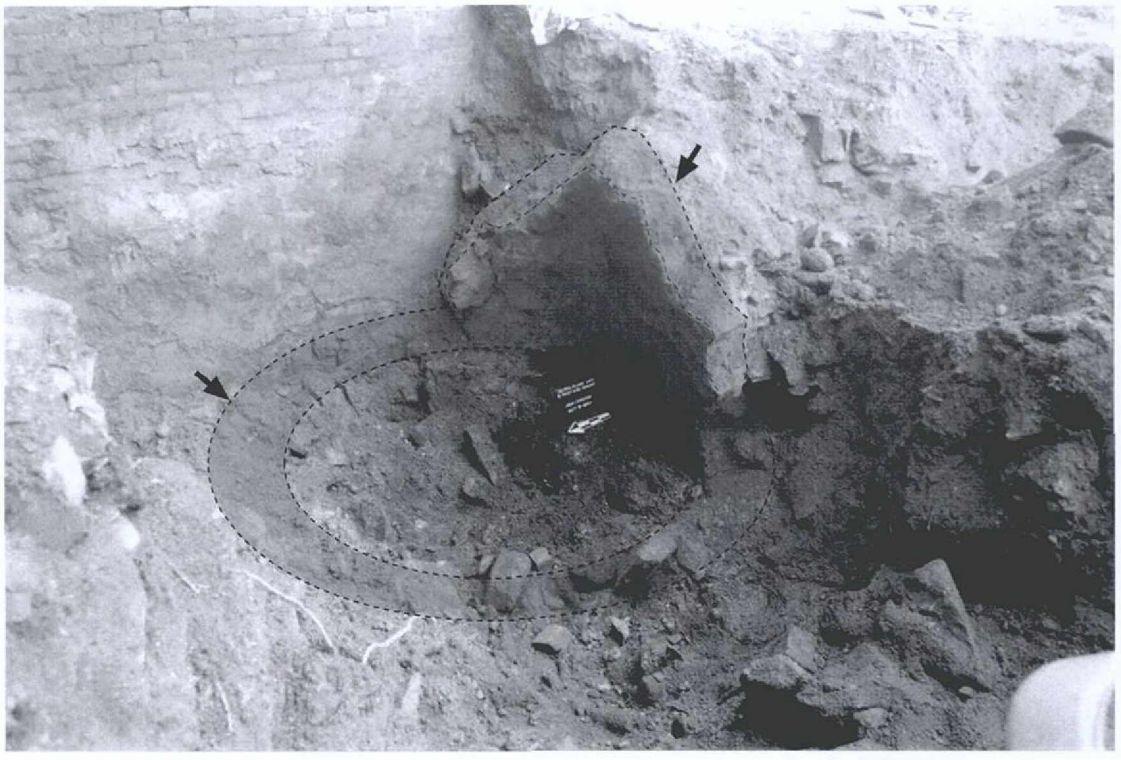

Plate 3. Feature 1, a poorly articulated brownstone, arched vault structure was documented in the rear yard area of former Lot 55; view to the east.

Plate 4. Artifacts recovered from the overburden and upper fill deposit (Stratum 1A) within Feature 1.

Plate 5. The rear (eastern) foundation wall of 309 Bowery documented within Archeological Test Trench 2; view to the north.

Plate 6. The rear wall of 305 Bowery exposed during the excavation of Archeological Test Trench 3; view to the south.

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