Fulton Houses Redevelopment
401 West 18th Street
Block 716, part of Lot 17
NEW YORK, NEW YORK COUNTY, NEW YORK

Phase 1B Archaeological Survey Report

Prepared for:
Artimus Construction
% 18th Street Fulton Equities LLC
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New York NY 10026

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JULY 2016
Management Summary

NYSHPO Project Review Number: 16PR02863
Involved Agencies: HUD
Phase of Survey: Phase 1B Archaeological Investigation

Location Information
Location: 401 West 18th Street, New York, NY
Block 716, part of Lot 17 (Historic Lot 17)
Minor Civil Division: 06101
County: New York County

Survey Area
Length: Approximately 10.67 meters (35 feet)
Width: Approximately 7.62 meters (25 feet)
Area: 0.02 acres (875 square feet)

USGS 7.5 Minute Quadrangle Map: Jersey City

Survey Area
Length: 10.67 meters (35 feet)
Width: 7.62 meters (25 feet)
Total Area Surveyed: 0.02 acres (875 square feet)
Number of Backhoe Trenches: 2
Size of Backhoe Trenches: Approximately 3 to 4.3 meters (10 to 14 feet) in length; 1 to 2.4 meters (3.5 to 8 feet) in width
Depth of Backhoe Trenches: Approximately 1.8 to 2.3 meters (6 to 7.5 feet)

Results of Archaeological Survey
Prehistoric Sites Identified: None
Historic Sites Identified: None
Sites Recommended for Avoidance: None

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Date of Report: July 2016
# Fulton Houses Redevelopment — Phase 1B Archaeological Investigation

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Chapter 1: Introduction and Project Background

A. INTRODUCTION AND PROPOSED PROJECT DESCRIPTION

18th Street Fulton Equities, LLC is proposing to redevelop a portion of the campus of the Fulton Houses in the Chelsea Neighborhood of Manhattan (see Figure 1). The Fulton Houses are currently owned and operated by the New York City Housing Authority (NYCHA). NYCHA, in coordination with the New York City Department of Housing Preservation and Development (HPD) and Artimus Construction propose to redevelop a portion of the Fulton Houses campus with a new mixed-use building containing affordable housing. The proposed development site is currently a paved parking lot and garbage compactor area at the western end of Lot 17 (see Figure 2). The proposed project is subject to New York City Environmental Quality Review (CEQR) and the New York State Environmental Quality Review Act (SEQRA). The final disposition of the development site by NYCHA is pursuant to Section 18 of the Housing Act of 1937. As per Section 18, the disposition of public housing requires permissions and approvals from the Department of Housing and Urban Development (HUD). These approvals are therefore also subject to review under Section 106 of the National Historic Preservation Act (NHPA).

B. SUMMARY OF PREVIOUS ENVIRONMENTAL REVIEW

PHASE 1A ARCHAEOLOGICAL DOCUMENTARY STUDY

In compliance with relevant environmental review legislation, NYCHA completed an Environmental Assessment Statement (EAS) for the Fulton Houses redevelopment project in 2013. As part of the EAS, Historical Perspectives, Inc. (HPI) conducted a Phase 1A Archaeological Documentary Study ("Phase 1A study") of a portion of the proposed development site in 2007. The Phase 1A study identified an area of archaeological sensitivity within the former rear yard of historic Lot 17, located in the extreme northwest corner of the proposed development site (see Figure 2). Phase 1B Archaeological testing was recommended in this area of sensitivity to confirm the presence or absence of archaeological resources associated with the 19th century occupation of that lot. In a comment letter dated June 7, 2013, the New York City Landmarks Preservation Commission (LPC) concurred with the conclusions and recommendations of the Phase 1A report. In that comment letter, LPC requested that a scope of work for the proposed phase 1B investigation be submitted for review.

On July 15, 2013, NYCHA, as lead agency for the environmental review of the Fulton Houses development project, issued a Negative Declaration (SEQRA Project 13CHA002M) stating that the proposed project would have no significant adverse impacts on environmental conditions, including archaeological resources under the condition that a Phase 1B Archaeological Investigation of the area of archaeological sensitivity be conducted prior to the construction of the proposed project. The 2013 EAS includes correspondence that indicates that in 2007, the New York State Historic Preservation Office (SHPO) determined that the construction of the proposed project would not result in impacts to archaeological resources and did not recommend additional analysis (SHPO Project Review Number 07PR00803). As such, it does not appear that additional correspondence with SHPO occurred at that time, including the submission of the Phase 1A prepared by HPI in 2007. As part of this Phase 1B
Archaeological Investigation, the Phase 1A study was submitted to SHPO and in a comment letter dated May 16, 2016, SHPO concurred with the report’s conclusions and recommendations.

**PHASE 1B ARCHAEOLOGICAL TESTING PROTOCOL**

The Negative Declaration stipulated that prior to the commencement of the Phase 1B investigation, an Archaeological Testing Protocol must be prepared and submitted to LPC and the SHPO for review. In addition, the Negative Declaration stipulated that all archaeological testing must comply with applicable local standards for such investigations, as well as the safety protocols of the Occupational Safety and Health Administration (OSHA). To satisfy these requirements, a Phase 1B Archaeological Testing Protocol outlining the scope of work for this Phase 1B Archaeological Investigation was prepared by AKRF in March 2016. The Testing Protocol was submitted to LPC and SHPO for review and comment. In a comment letter dated May 4, 2016 LPC concurred with the scope of work and accepted the Testing Protocol, as did SHPO in a comment letter dated May 16, 2016.

Since the completion of the Phase 1A, the project site was expanded to the east and now includes historic Lot 21. Though the lot was not specifically analyzed as part of the Phase 1A, the ownership and development histories of Lot 21 were similar to Lot 20 and were referenced in the report. LPC and SHPO were consulted regarding the archaeological sensitivity of historic Lot 21 to determine if additional archaeological analysis was required for that property and no such analysis was requested.

**C. CURRENT SITE CONDITIONS**

The project site is currently a paved parking lot associated with the adjacent Fulton Houses. The area of archaeological sensitivity that was the subject of this investigation included the former rear yard of historic Lot 17. The southern and eastern portions of the area of sensitivity are currently paved with asphalt with a slight downward slope to the south (see Photograph 1 on Figure 3). Small steel parking gates with drop-down arms were present at the ends of some parking spaces that were set into 1-foot-square concrete foundations. The northern and western sides of the area of sensitivity were occupied by a Belgian block walkway lined with a concrete curb that was approximately 6 inches higher than the adjacent asphalt pavement (see Photograph 2 on Figure 3). An active electrical line crosses through the area of sensitivity in two locations, supplying electricity to lighting poles within the parking lot. The western side of the area of sensitivity was lined with an existing building (located at 443 West 18th Street). The lot bordering the area of sensitivity to the north features an excavated back yard, and as such, there is a steep drop in elevation to the north of the project site and a retaining wall lines the northern side of historic Lot 17.

**D. THE OCCUPATION AND DEVELOPMENT HISTORY OF THE PROJECT SITE**

The development and occupation histories of historic Lot 17 were described in HPI’s 2007 Phase 1A study of the project site. As described in that document, historic Lot 17 was developed with a residence by 1842, the year that water lines became available on West 18th Street. HPI determined that sewers were not installed within West 18th Street for at least 5 years after the construction of the home. Between 1842 and 1867, the home was occupied by the family of John Thomson, who likely built and then occupied the home for more than two decades. Historic maps indicate that additions were added to the rear of the home during the 19th century and that both the home and the additions were constructed with basements. The lot’s rear yard was undeveloped during the 19th and 20th centuries prior to its redevelopment as a parking lot and HPI did not uncover evidence that the area of sensitivity was excavated during the construction of the Fulton Houses in the 1960s.
A. RESEARCH GOALS

The objectives of the Phase 1B Archaeological Investigation of the Fulton Houses development site are to (1) ascertain the presence or absence of 19th century archaeological deposits and buried backyard shaft features within the rear yard of historic Lot 17; and (2) to determine the significance of any resources that are recovered. The determination of significance is largely dependent on the types of potential archaeological resources that could be encountered on the project site and on the specific research questions that can be answered through the analysis of those resources. The types of archaeological resources that are expected to be present on historic Lot 17 and potential research questions/research goals are described below.

POTENTIAL ARCHAEOLOGICAL RESOURCES

The Phase 1A study completed by HPI in 2007 determined that historic Lot 17 was developed with residential structures by 1842, five years before sewer lines were available within the streetbed of 18th Street. The rear yard of this lot does not appear to have been disturbed by subsequent excavation and are therefore determined to have sensitivity for archaeological resources associated with the 19th century residential occupation of those lots. These archaeological resources are expected to include privy pits—the shaft features constructed beneath outhouses—that were constructed to dispose of human and household waste. Such features are typically expected to be located at the rear of the historic property. HPI determined that the home on historic Lot 17 was likely constructed after municipal water networks were available and therefore it is less likely that wells and cisterns would have been located on the property for the purposes of water gathering. Any privy pits would have remained in use until the home was connected to municipal sewers after 1847, and may have been used for the deposition of household refuse for many years until it was finally full.

RESEARCH QUESTIONS

According to the guidelines for cultural resources as laid out in the 2014 CEQR Technical Manual, the determination of significance of a project site is directly related to whether the identified resource type “is likely to contribute to current knowledge of the history of the period in question” (Section 321.2.5: page 9-11). In order to determine if any archaeological resources from historic Lot 17 would be considered to have significant research value, a list of research issues has been developed. These research topics are specific to the types of potential archaeological resources that could be encountered within the project site as described in the previous section.

Archaeological resources recovered from the site could produce data about the individuals who resided and/or worked on the project site during the 19th century. For historic period archaeological resources, domestic shaft features—such as those that may be located within the former rear yard of historic Lot 17—can contain important archaeological resources. As described above, these features were frequently filled with domestic refuse after they were no longer used for their original purposes. In the case of privies, such refuse deposition would typically also have occurred during the period of active use, as there
were few alternate methods of garbage disposal at the time. As such, filled shaft features often contain valuable information about the daily lives of a site’s residents.

Artifacts recovered from trash or surface deposits are the material remains of what an individual purchases and/or uses on a daily or routine basis and they can provide insight into certain aspects of his or her life. Such consumption patterns are strongly influenced by socioeconomic status, occupation, household composition, and ethnicity. What a person buys and/or uses on a routine basis is behavior that reflects the multiple components of that individual’s life. Archaeological evidence from residential lots can provide information on how different characteristics such as socioeconomic status or ethnicity have influenced consumer choice behavior. Information that can be gathered from domestic shaft features can be used to make generalizations about what life was like for the individuals and families that resided on a property. This information can then be compared and contrasted with data associated with similar populations elsewhere in the city. Similarly, if resources associated with the industrial use of the project site are encountered, they can be compared and contrasted with other archaeological sites in the region to identify broader patterns. These comparisons could yield previously unknown insights into the ways of life of the individuals living in this area of Manhattan during the first half of the 19th century.

**B. PHASE 1B ARCHAEOLOGICAL TESTING METHODOLOGY**

As stated in the *CEQR Technical Manual*, although documentary research determines archaeological potential, testing is required to confirm the presence or absence of such resources. Therefore, this protocol addresses Phase 1 presence/absence testing, as well as site evaluation for National Register eligibility (Phase 2 testing), which may become necessary. As part of this Phase 1B Archaeological Investigation, two trenches were excavated within historic Lot 17 as identified on Figure 2. All field testing was completed in accordance LPC’s *Guidelines for Archaeological Work in New York City* (2002) and the New York Archaeological Council’s (NYAC) *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (1994). All archaeological testing will be completed by or under the supervision of a Registered Professional Archaeologist (RPA) with industry standard qualifications. Each testing location was documented using standard nomenclature, recorded through digital photography and field notes, and their locations were established using measuring tapes and surveyed on-site landmarks. Soil colors were identified using Munsell soil color charts.

Subsurface testing consisted of two mechanically-excavated trenches within the area of archaeological sensitivity as identified in the 2007 Phase 1A study. The first trench, opened near the rear (northern) lot line of historic Lot 17, was an irregular shape and measured between 4 and 8 feet in width and 12 to 14 feet in length. The trench was excavated to a depth of 6 to 7 feet, where clean subsoil was encountered. The trench was excavated through the former rear yard at a northwest-southeast angle to avoid steel parking gates and active electrical lines and was approximately 4.5 to 5 feet from the retaining wall lining the northern side of the area of sensitivity and the building along the western side to avoid undermining those structures. The second trench was excavated near the rear (northern) wall of the home formerly located on historic Lot 17 and measured 10 feet in length, 3.5 feet in width, and was excavated to a depth of 7.5 feet below the ground surface. Subsoils from the lower depths—which could not be examined *in situ* as a result of safety concerns—were examined within the backhoe bucket before it was dumped into the spoil pile. Artifacts were collected from both trenches as appropriate. Collected artifacts were placed into labeled plastic bags and transported to the AKRF laboratory for washing and processing. As the artifacts were not associated with intact features, only a small diagnostic sample was collected. An artifact catalog was not prepared for these materials and the artifacts are summarized in this document.
Chapter 3: Results of Survey

A. RESULTS OF FIELD TESTING

As described in Chapter 2: Research Goals and Methodology, the Phase 1B Archaeological Investigation of the Fulton Houses Redevelopment project site involved the excavation of two trenches within the former rear yard of historic Lot 17. The area of sensitivity identified in the 2007 Phase 1A study measured approximately 25 feet in width and 35 feet in length. The rear yard was identified as sensitive for 19th century shaft features (e.g. privies, cisterns, and wells) associated with the lot’s earliest occupation. Two trenches were excavated in an attempt to locate potential shaft features, as described below.

TRENCH 1

Trench 1 was opened along the rear (northern) lot line of the area of sensitivity identified in the Phase 1A study, in the location where privies would be expected (see Figure 2). To avoid these obstructions and to avoid undermining adjacent walls, Trench 1 was opened at an angle extending northwest-southeast through the northern portion of the area of sensitivity. The trench was located within a circular area currently paved with Belgian block and lined with a concrete curb that is elevated 6 inches above the adjacent asphalt-paved parking lot. The surface of the Belgian block pavement in this area was recently disturbed as a result of the removal of a temporary homeless encampment; however, the lower depths do not appear to have been impacted.

The trench was an irregular shape as a result of collapsing trench walls and the additional excavation of darker fill materials in the northern wall of the trench. The width of the trench therefore varied between 4 and 8 feet and its length was between 12 and 14 feet. The northwest corner of the trench was approximately 5 feet south and 4.5 feet east of the northwest corner of the area of sensitivity. The trench was excavated to a depth of approximately 6 feet below the Belgian block surface and 5.5 feet below the adjacent asphalt pavement. The fill materials within the trench were generally loose, sandy fill and the walls of the trench collapsed easily, resulting in its irregular shape, and preventing the soils at greater depths from being examined closely due to safety concerns.

Immediately beneath the Belgian block surface was a layer of clean, light brown sandy fill that served as the foundation for the paved walkway. Between the clean sand and a depth of approximately 3.5 feet was a layer of reddish brown fill with brick rubble and demolition debris. Roots and tree remnants were observed within these materials, suggesting the former presence of a tree in this location. A large paving stone was removed from a depth of approximately 2 feet near the northeast corner of the trench, but it did not appear to be associated with an intact ground surface or feature. The northern side of the trench contained a darker black silty fill with some ashy material (see Photographs 3 and 4 on Figure 4). This fill material contained low concentrations of 19th century artifactual material, including flowerpot fragments, redware, whiteware, and bottle glass. The artifacts were not associated with an intact feature. The bucket of the backhoe was used to scrape down the wall of the darker fill material and no intact features or dense concentrations of artifacts were observed within the wall. Clean, dark yellowish brown (10YR4/6) compact silty clay subsoil was observed at a depth of 6 feet below the Belgian block pavement (5.5 feet below the asphalt parking surface).
Fulton Houses Redevelopment—Phase 1B Archaeological Investigation

No intact features were observed in this location and no intact soil levels were observed that would suggest that shaft features could be present.

TRENCH 2

Trench 2 was opened near the southern end of the rear yard of the home formerly located on historic Lot 17 (see Figure 2). Though it is presumed that the home was connected to municipal water lines at the time of its construction circa 1842, if any wells or cisterns were present within the rear yard, they are expected to have been located near the rear of the home. The trench measured 10 feet in length, 3.5 feet in width, and was excavated to a depth of 7.5 feet. The southwest corner of the trench was 10 feet east of the wall lining the western side of the site and 30 feet south of the northern limits of the site.

The trench was covered with a thick layer of asphalt and asphalt bedding immediately below the paved surface. Underlying the asphalt was a layer of brown sandy silt with brick rubble. A copper utility pipe running north-south through the trench was encountered at a depth of 4 feet below the ground surface and 5 feet 2 inches east of the trench’s western wall (see Photograph 5 on Figure 5). Excavation was terminated west of this pipe and continued only to the east. Dark yellowish brown (10YR4/6) damp, sandy, silty subsoil was encountered at a depth of approximately 6 feet below the ground surface. The upper levels of the subsoil contained 19th century artifacts and root material of various sizes. The trench was excavated to a depth of 7.5 feet and the lower levels of the subsoil did not contain any artifacts or cultural material of any kind (see Photograph 6 on Figure 5).

No intact features were observed in this location and no intact soil levels were observed that would suggest that shaft features could be present.

B. SUMMARY OF ARTIFACTS

A total of 19 artifacts was recovered during the Phase 1B investigation, including six from Trench 1 and 13 from Trench 2. None of the artifacts were associated with intact archaeological features or artifact deposits and artifacts were observed in low concentrations across the site.

The artifacts from Trench 1 were collected from the backdirt pile and originated within fill deposits inside the trench (see Photograph 7 on Figure 6). The artifacts were representative of late-19th or early 20th century domestic life and included an undecorated white ironstone cup or jar fragment; three fragments from different aqua or clear glass bottles; and a fragment from a glass lamp or decorative dish or vase. One large, rectangular aqua glass bottle was recovered that was produced by Leslie, Dunham & Co., a producer of syrups and honey, was embossed with the phrase, “All persons are warned against using this bottle for maple syrup” and was likely produced between 1880 and 1920 (Corning Glass Museum n.d.). Finally, a small cobalt blue glass bottle was recovered that was embossed with a series of diamond patterns and dots typical of poison bottles that were produced beginning in the 1870s (Lindsay 2016).

The artifacts recovered from Trench 2 were collected from the upper levels of subsoil; approximately 6 to 6.5 feet below the paved ground surface (see Photograph 8 on Figure 6). The artifacts do not appear to have been intentionally deposited within the subsoil and were not associated with a feature. The artifacts were likely deposited in the subsoil through bioturbation, root activity, rodent burrowing, or redeposition. The artifacts were typical of those associated with 19th century domestic life, and included a highly weathered oyster shell; a painted porcelain dish fragment with a blue floral pattern; a possible Pearlware plate fragment with a hand painted blue floral motif; two white earthenware dish fragments; a buff-bodied stoneware bottle fragment; five highly fragmented creamware sherds; and a fragmented and weathered animal bone. The artifacts were observed in low concentrations within the upper levels of the subsoil only. Below a depth of approximately 6.5 feet, the subsoil contained no cultural material.
Chapter 4: Conclusions

As described previously, the Phase 1B Archaeological Investigation of the Fulton Houses redevelopment project site involved the excavation of two trenches within the rear yard of the home that formerly stood on historic Lot 17. The 2007 Phase 1A study of the site had identified this 25- by 35-foot area as sensitive for archaeological resources—including shaft features such as privies, cisterns, and wells—that were associated with the 19th century occupation of the historic lot. The test trenches were excavated in the vicinity of the rear lot line (where privies would be expected) and near the location of the rear wall of the historic home on the property (where cisterns and wells would be expected).

Neither trench contained intact archaeological features or dense concentrations of artifacts and no evidence that such resources may be present was observed. A limited number of late-19th and early-20th century artifacts were recovered from both trenches, but none of the artifacts were associated with intact features or archaeological deposits. The soils within the rear yard appeared to be composed of fill or redeposited materials over the underlying subsoil. Disturbance to the area appears to have occurred as a result of the construction, expansion, and demolition of buildings, including the excavation of the rear yard immediately adjacent to the project site to the north. The construction of the adjacent NYCHA housing complex and the existing parking lot, including subsurface utilities associated with lighting, also appear to have resulted in disturbance to the former rear yard of historic Lot 17.

The former rear yard of historic Lot 17 therefore does not appear to have any archaeological potential and no additional work is recommended.
AKRF, Inc. 2016 “Phase 1B Archaeological Testing Protocol: Fulton Houses Development; 401-413 West 18th Street; Block 716, part of Lot 17, New York, New York.” Prepared for: 18th Street Fulton Equities, LLC, New York, NY.


Figures
Fulton Houses Redevelopment

Project Location

Figure 1
Looking northwest at the area of archaeological sensitivity identified in the 2007 Phase 1A. Electrical lines connect to the lamppost in the background through this portion of the site.

The location of Trench 1 prior to excavation. The Belgian block surface had recently been disturbed, but the underlying soils were intact. On the opposite side of the fence at the right of the photograph is an excavated rear yard at a lower elevation.
Figure 4

Trench 1 Photographs

3. Looking southeast at Trench 1, showing dark black fill to the north (left) and clean subsoil at the bottom of the trench (center).

4. The dark black fill in the northern wall of Trench 1. The excavator was later used to scrape down this wall and no features were observed.
Figure 5

5 Looking west at the western half of Trench 2, showing the metal utility pipe at the center and the excavated western portion of the trench.

6 The eastern half of Trench 2, showing the depth of clean subsoil at the end of the excavation.
Artifacts recovered from Trench 1

Artifacts recovered from Trench 2

Artifact Photographs