Clinton Broome Apartments

165 BROOME STREET; BLOCK 341, LOTS 60 AND 158

NEW YORK, NEW YORK

Phase 1B Archaeological Investigation

Prepared for:
Olive Branch Consulting, Ltd.
201 West Broadway, Unit 216
Port Jefferson, New York 11777

Prepared by:

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MAY 2022

Management Summary

OPRHP Project Review Number:	22PR02661
LPC Unique Project Identifier:	34101
Involved Agencies:	New York City Housing Development Corporation
Phase of Survey:	Phase 1B Archaeological Investigation
Location Information	
Location:	165 Broome Street; Manhattan (Block 341, Lots 60 and 158)
Minor Civil Division:	06101
County:	New York
Survey Area:	
Length:	153 feet
Width:	237 feet
Area:	0.9 acres (39,000 square feet)
USGS 7.5 Minute Quadrangle Map:	Brooklyn
Archaeological Survey Overview:	
Number of Trenches:	6
Number of Shovel Tests/Units:	0
Width of Plowed Strips:	n/a
Surface Survey Transect Interval:	n/a
Results of Archaeological Survey:	
Number of Prehistoric Sites Identified:	None
Number of Historic Sites Identified:	None
Sites Recommended for Phase 2/Avoidance:	None
Report Author:	Elizabeth D. Meade, PhD Registered Professional Archaeologist #16353
Date of Report:	May 2022

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Chapter 1: Introduction and Project Background

A. INTRODUCTION AND PROJECT DESCRIPTION

Grand Street Guild Housing Development Fund Company Inc., Grand Street Guild East Housing Development Fund Company Inc., Southeast Grand Street Guild Housing Development Fund Company Inc., and Clinton Broome Development LLC ("the applicants") are proposing to construct a 100 percent affordable residential building (Building 3-5) and a 100 percent affordable mixed-use residential and community facility building (Building 3-6) on the Lower East Side of Manhattan (see **Figures 1 and 2**). The proposed project is located on a portion of Parcel 3 (Block 341, Lots 60, 62, and 158[1]) of the Seward Park Extension East Large Scale Residential Development (LSRD). In order to facilitate the construction of the proposed project, the applicants proposed a minor modification to the LSRD ("the project area") site plan (described below) to allow for the construction of the new buildings, which was approved by the New York City Planning Commission (CPC) in December 2020. The applicants are currently pursuing a tax lot merger application with the New York City Department of Finance which, when final, will modify the tax lot numbers associated with the project site with Building 3-5 located on Block 341, Lots 60 and 158.

This Phase 1B Archaeological Investigation was completed only for the site of proposed Building 3-5, located on Block 341, Lots 60 and 158. The Phase 1B testing was completed between April 19 and April 20, 2022. Additional archaeological analysis will be completed on the site of Building 3-6 (Block 341, Lots 62 and 70) in the future.

B. PROJECT BACKGROUND AND PREVIOUS ENVIRONMENTAL REVIEW

The proposed development project is subject to City Environmental Quality Review (CEQR). As described below, the initial archaeological analysis and environmental review was completed pursuant to CEQR with CPC serving as lead agency. Subsequent to the CEQR review, it was determined that the project will also be seeking funding from the New York City Housing Development Corporation (HDC), as subject to Section 14.09 of the New York State Historic Preservation Act.

Pursuant to CEQR, consultation was previously initiated with the New York City Landmarks Preservation Commission (LPC) regarding the project area's potential archaeological significance. In a comment letter dated April 3, 2019, LPC determined that the project area was potentially archaeologically significant. To satisfy LPC's request, a Phase 1A Archaeological Documentary Study ("Phase 1A Study") of the project site was prepared by AKRF in June 2019. The conclusions of the Phase 1A Study are summarized below, in "Project Site History and Summary of Phase 1A Study Conclusions." LPC concurred with the conclusions and recommendations of the Phase 1A Study in a comment letter dated July 11, 2019, and requested a scope of work for archaeological testing on the project site. A Phase 1B Archaeological Work Plan/Testing Protocol was drafted in August 2019 and approved by LPC in a comment letter dated August 19, 2019.

Following the approval of the Work Plan and CPC land use and CEQR approvals, the project was delayed and the construction of Buildings 3-5 and 3-6 were separated into separate development projects. As such, this

[1] This property was previously included within Lot 58 and was recently subdivided.

Phase 1B Archaeological Investigation was completed only for the location of Building 3-5 on Block 341, Lots 60 and 158. A memorandum outlining changes to the project—including the reassignment of lot numbers, an updated schedule, and information on changes to the project funding—was submitted to LPC on April 11, 2022. In comments issued by email on April 12, 2022, LPC confirmed that archaeological testing could proceed according to the scope of work outlined in the previously approved 2019 Work Plan. LPC requested additional confirmation about the potential impact of the project on the historical streetbed of Attorney Street, which was determined to have potential archaeological sensitivity in the Phase 1A Study. After providing additional analysis, the results of which are summarized below, LPC confirmed in comments provided by email on May 4, 2022, that there are no further archaeological concerns regarding the streetbed of Attorney Street.

C. PROJECT SITE HISTORY AND SUMMARY OF PHASE 1A STUDY CONCLUSIONS

The research completed as part of the Phase 1A Study concluded that the project site was included within the larger farm and estate of James DeLancey in the 18th century and was later included within a smaller estate granted to DeLancey's son-in-law, Thomas Jones. By the 1820s and 1830s, the former DeLancey farm had been divided into blocks and lots and became increasingly developed and redeveloped throughout the 19th and 20th centuries. The historical streetbed of Attorney Street—now de-mapped—formerly ran through the eastern side of the project site. The project site was historically divided into more than a dozen smaller development lots that were developed with houses and commercial buildings by the early 19th century. Most of the historical lots located within the project site were disturbed by the construction of buildings with basements in the 19th and 20th centuries.

Given the extensive disturbance resulting from 19th and 20th century development on the project site, it was determined to have no sensitivity for archaeological resources dating to the precontact period. However, those historical lots for which no disturbance could be documented within rear yard areas were identified as potentially archaeologically sensitive, as those rear yards could potentially contain water-gathering and sanitary infrastructure (e.g., privies, cisterns, and wells) that pre-date the installation of water and sewer lines in the second half of the 19th century. In addition, undisturbed portions of the historical streetbed of Attorney Street between Broome and Grand Streets were identified as archaeologically sensitive for resources associated with the occupation of the DeLancey and Jones estates or earlier phases of occupation. The locations of archaeological sensitivity as identified in the Phase 1A Study are depicted on **Figure 3**. The Phase 1A Study recommended a Phase 1B Archaeological Investigation to confirm the presence or absence of archaeological resources within those sensitive lots within the project site that would be disturbed by the proposed project.

D. ADDITIONAL ANALYSIS OF ATTORNEY STREET

As described previously, a memorandum providing updated information on documented disturbance within Attorney Street that was not available during the preparation of the Phase 1A Study was submitted to LPC in May 2022. The new information that was reviewed included data regarding existing and historical utilities within the streetbed and included surveys and maps as well as the results of a ground-penetrating radar investigation.

ADDITIONAL ANALYSIS PROVIDED TO LPC

City maps documenting the historical conditions of Attorney Street[1] indicate that it was 49.81 feet wide along Broome Street. Subsequent to the demapping of the street and redrawing of tax lot boundaries, the western 36.8 feet of the streetbed are situated within the project site (within Lot 60) and the remaining 13.01 feet are situated within portions of Lots 62 and 75 to the east of the project site. As shown on the attached maps and

[1] https://nycdcp-dcm-alteration-maps.nyc3.digitaloceanspaces.com/cp20853.pdf

plans, the historical streetbed contains a sewer and utility easement with a 12-inch sewer line, electrical lines, and gas lines and associated infrastructure. A recent ground-penetrating radar (GPR) investigation appears to confirm the presence of additional undocumented utilities throughout the historical streetbed.

As currently proposed, the new building to be constructed on the project site would extend into the western end of the historical streetbed by approximately eight feet. Electrical lines are known to be situated in this portion of the streetbed and the GPR investigation documented linear anomalies within this area near the southern end of the project site. In addition, a storm sewer will be installed through the center of the historical streetbed that would result in disturbance to a depth of approximately six feet below the ground surface. Other impacts to the streetbed would be shallower and associated with the construction of a public plaza, including paving, landscaping, and tree pits.

Given the extensive disturbance that was observed during the archaeological testing within the footprint of the parking garage; the documentation of additional utilities within the streetbed of Attorney Street beyond those documented in 2019; and the limited impacts of the project within the proposed streetbed, no further archaeological analysis of Attorney Street was recommended.

E. SITE CONDITIONS AT THE TIME OF THE PHASE 1B INVESTIGATION

The project site was developed with a multi-tier parking garage formerly located at 410 Grand Street. Research completed as part of the Phase 1A Study confirmed that the parking garage did not have a basement. Prior to the completion of the Phase 1B Archaeological Investigation, the parking garage was demolished to the level of its floor slab. Because of the change in grade between Grand and Broome Streets, which slope down to the north, the floor slab of the garage was split into two sections at two different grades. The northern half of the project site therefore had a ground surface that was situated at the grade of Broome Street and the ground surface of the southern half was approximately four feet higher. The two halves of the foundation slab were separated by a foundation wall that bisected the parking garage east–west and divided the site in two. Topographical surveys produced by Rogers Surveying, LLC in 2017—prior to the demolition of the building—indicate that the ground surface adjacent to the parking garage along Clinton Street at the southwestern corner of the site was at an elevation of 32.18 feet relative to the North American Vertical Datum of 1988 (NAVD88) and while the northwestern corner of the site was situated at an elevation of 28,84 feet NAVD88. As such, the four-foot change in elevation of the parking garage floor slab is consistent with the approximate four-foot change in elevation of the adjacent street. Following demolition, demolition debris and brick rubble was piled adjacent to the foundation wall separating the floor slabs to create a slope between the two halves of the floor slab.

The eastern foundation wall of the former garage was visible on the site, separating the garage from the area to the east, including the former Attorney Street roadbed. The area to the east was largely an asphalt paved former parking lot that at the time of the investigation was used for the storage of construction equipment and dumpsters. A set of stairs was located at the southern end of this area to allow access from the parking lot to the lot to the south which, as described previously, was situated at a slightly higher elevation. A construction fence lined the southern side of the project site near the southern side of the former parking garage, separating the site from an active public pedestrian walkway to the south.

Chapter 2: Research Design and Field Methodology

A. INTRODUCTION

The Phase 1B Archaeological Investigation of the project site was completed between April 19 and May 21, 2022. The Phase 1B Archaeological Investigation of the project site was supervised by Elizabeth D. Meade, PhD, Registered Professional Archaeologist (RPA) #16353, who served as Principal Investigator and Laboratory Director. Dr. Meade exceeds the requirements for the professional qualifications standards for archaeologists as defined by the Secretary of the Interior (36 CFR 61)[1] and complies with the codes and standards outlined by the RPA.[2] The fieldwork was supported by archaeologist Roseanne Quinn, who served as a field technician for the project. Backhoe services were provided by Brookside Environmental, Inc.

B. POTENTIAL ARCHAEOLOGICAL RESOURCES IDENTIFIED IN THE PHASE 1B WORK PLAN

As stated in the 2018 LPC guidelines, although documentary research determines archaeological potential, testing is required to confirm the presence of those resources and to determine their significance. LPC's guidelines indicate that "archaeological resources are significant if they provide new insight about the past and answer important research questions" (LPC 2018: 19). As described in the Phase 1B Work Plan, the objective of the Phase 1B Archaeological Investigation of the project site was to document the subsurface conditions of the project site to determine if soil levels are present that could potentially contain intact archaeological resources from the historic period occupation of the site. As described below, the Phase 1B Work Plan outlined possible archaeological resource types that could be present on the project site.

POTENTIAL ARCHAEOLOGICAL RESOURCES

Throughout the mid-19th century, every lot within the project site was occupied by one or more structures and nearly all had an open rear or center yard. By the end of the 19th century, the Lower East Side had become flooded with lower-class residents—including Irish; German; and, later, Jewish immigrants—living in overcrowded tenements. As described above, those historic lots that were not fully disturbed by basement excavation were determined to have moderate to high sensitivity for archaeological resources associated with the 19th century residential occupation of those lots. These archaeological resources were expected to include domestic shaft features, such as privies, cisterns, and wells, in the historic lots' rear yards. Privies—the shaft features constructed beneath outhouses—are typically expected to be located at the rear of the historic property, while wells and cisterns are typically located closer to a dwelling. These features would have remained in use until municipal water and sewer networks became available in the mid- to late 19th century, and possibly for decades after.

[1] https://www.nps.gov/history/local-law/arch_stnds_9.htm

[2] https://rpanet.org/page/CodesandStandards

C. RESEARCH QUESTIONS AND GOALS

The determination of an archaeological site's significance is directly related to whether the identified resources on that site are considered to be of high research value. In order to determine if any archaeological resources from the project site would be considered to have significant research value, a list of research questions was developed that can be applied to any identified archaeological resources within the project site in an attempt to determine their research value. These research topics were specific to the types of potential archaeological resources that could be encountered within the project site as described in the previous section, e.g., domestic shaft feature.

Domestic shaft features—such as those that may be located within the former rear yards of the houses formerly within the project site—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. 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 the Lower East Side during the 18th and 19th centuries.

D. FIELD AND ANALYTICAL METHODS

As described previously, this Phase 1B Archaeological Investigation was designed to confirm the presence or absence of archaeological resources and to determine if additional fieldwork would be required to evaluate the site's potential eligibility for listing on the State and National Registers of Historic Places (i.e., a Phase 2 Archaeological Survey/Evaluation). The Phase 1B Archaeological Investigation was conducted in accordance with LPC's "Guidelines for Archaeology work in New York City," issued in 2018,[1] with the standards for Historic and Cultural Resources analyses as specified in the *CEQR Technical Manual* as amended in 2014;[2] OPRHP's *Phase I Archaeological Report Format Requirements* as issued in 2005;[3] and the "Standards for Cultural Resources Investigations and the Curation of Archaeological Collections in New York State" as issued by the New York Archaeological Council (NYAC) in 1994 and adopted by OPRHP in 1995.[4]

All archaeological testing occurred within the parking lot in the locations depicted on **Figure 4**. The testing strategy as outlined below is consistent with that proposed in the approved Phase 1B Work Plan. Given the

[1] http://www.nyc.gov/html/lpc/downloads/pdf/pubs/ayguide.pdf

[2] http://www.nyc.gov/html/oec/downloads/pdf/2014_ceqr_tm/09_Historic_Resources_2014.pdf

[3] https://parks.ny.gov/documents/shpo/environmental-review/PhaseIReportStandards.pdf

[4] http://nyarchaeology.org/wp-content/uploads/2013/12/NYACStandards.pdf

location of the rubble slope, the presence of the large foundation wall bisecting the site, and the pedestrian walkway to the south, testing was concentrated in the southern half of the site within the footprint of the former garage. This resulted in the minor modification of some trench locations from those identified in the Phase 1B Work Plan.

METHODOLOGY FOR SUBSURFACE TESTING

The subsurface testing consisted of six mechanically excavated trenches supported with limited hand excavation. As no historical ground surfaces or archaeological features/artifact deposits were observed, the hand-excavation of shovel test pits (STPs) or testing units was not required. Backhoe operation and related services were provided by Brookside Environmental, Inc. Each trench measured 5 feet in width by 20 feet in length. The trench sizes were limited in part by the density of the reinforced concrete slab, as additional time was required to break through the slab to facilitate the excavation of the underlying trench in a safe manner. The placement of the trenches was determined by the archaeological team in the field and trenches were placed in areas free of obstructions (e.g., foundation walls or rubble piles) and where there was sufficient room for the backhoe to operate (e.g., sufficient space for the safe rotation/operation of the machine and for stockpiling of excavated soils) without presenting safety hazards to either the archaeological team or employees or the pedestrian walkway to the south of the site.

All trenches were measured and marked with spray paint prior to their excavation. The breakup and removal of existing concrete slab was completed using the backhoe outfitted with a hammer attachment. Once the concrete was removed, excavation proceeded with the backhoe outfitted with a standard toothed bucket. At each trench, the backhoe slowly and gently excavated soils within the trench under the direction and observation of the archaeological team. Because the soils underlying the slab were unexpectedly very loose, the excavation of each of the six trenches was delayed by collapsing soils from the sides of the trench walls, requiring additional excavation to reach the pre-collapse depth. Because the collapsing trench walls presented a safety hazard, the archaeological team did not enter any trenches at any depth. All observations were made from the stable ground surface and observations regarding soils and artifacts were collected from backdirt piles or from soils within the backhoe bucket before they were dumped. All measurements of soil stratigraphy are therefore approximate except for those locations where it is noted that more specific measurements could be directly recorded. At each trench, excavation proceeded until seemingly undisturbed subsoil was observed or until the machine could no longer excavate to greater depths. Each test location was backfilled following its excavation.

The archaeological team regularly troweled through the backdirt to make observations and collect artifacts. Collected artifacts and samples were placed in labeled zip-top polyethylene archaeological specimen bags.[1] Modern refuse (e.g., 20th century trash and Styrofoam) was not collected.

SITE DOCUMENTATION AND LOCATIONAL CONTROLS

Professional standards for excavation, screening, recording features and stratigraphy, labeling, mapping, and photographing any identified archaeological resources were applied during the Phase 1B Archaeological Investigation. All fieldwork was documented through notes, photographs, and drawings, and all relevant professional standards were applied. The archaeological team documented the excavation through both photographs and video.

Soil profiles including colors—recorded using Munsell® soil color charts—and texture/inclusions were recorded in field notes. Testing locations were recorded in field notes and field maps using standard

[1] Consistent with the LPC guidelines, all artifacts collected in the field will be placed in standard polyethylene specimen bags of at least 4 millimeters in thickness and 3 by 4 inches in size with zip-top closures and write-on blocks.

nomenclature and established using measuring tapes. All on-site testing was recorded relative to an on-site datum (e.g., the paved ground surface) and converted to NAVD88 based on spot elevations included on recent site surveys (a generic elevation of 32 feet NAVD88 was used for the ground surface of the test trenches based on those surveys). The North American Datum of 1983 (NAD83) was used as a permanent horizontal datum.

E. LABORATORY METHODS

All laboratory activity was conducted in compliance with guidelines established by the U.S. Department of the Interior/National Park Service for the Curation of Federally Owned and Administered Archaeological Collections (*36 CFR 79* and *36 CFR 66*). An archaeologist cleaned and inventoried the small number of artifacts collected during fieldwork. Given the limited number of artifacts collected and the lack of their research value, only a limited artifact inventory was prepared (see **Appendix B**). Information on collected artifacts is included in the following chapter. The artifacts are determined to have low research value and are not recommended for conservation or long-term curation.

A. SUMMARY OF TRENCH EXCAVATION

As described in the previous chapter, six trenches were excavated within the southern half of the footprint of the former parking garage (see **Figure 4**). The trenches were placed to avoid existing foundation walls and to provide a safe distance from the fence protecting a public pedestrian walkway at the southern end of the site. As shown in **Table 3-1** and shown on **Figures 5 through 10**, a generally consistent soil profile was observed across all six trenches. That profile included the following stratigraphic levels (depths are approximate: (1) the reinforced concrete slab (approximately 12 inches in thickness); (2) an underlying sandy fill used to level the site grade and support the slab (approximately two to five feet; with thicker deposits to the north to account for the site's natural grade change); (3) a brown fill with low to moderate quantities of brick rubble and demolition debris; and (4) possible subsoil that was briefly observed at variable depths only in Trenches 2, 3, and possibly 5. No evidence of shaft features; historical building foundations; in situ historical artifact deposits; or original or buried ground surfaces were observed. Observations and artifact analysis associated with individual trenches are outlined in the following section.

Table 3-1
Summary of Trenches

Trench	Size (feet)			Surface El. (NAVD88)	Observed Soil Levels		
	L	W	D		Depth (feet)	Description	Soil Color/Texture
1	20	5	~10*	~32	0 to 1	Reinforced slab and bedding material with plastic sheeting	n/a
					1 to 5	Sand foundation	Yellowish brown (10YR5/6) very clean coarse sand
					5 to ~10	Brown fill	Dark grayish brown (10YR4/2) coarse silty sand with low concentrations of brick rubble and occasional artifacts
2	20	5	10	~32	0 to 1	Reinforced slab and bedding material	n/a
					1 to 5	Sand foundation	Dark yellowish brown (10YR4/6) very clean coarse sand
					5 to ~9-10	Brown fill	Brown (10YR4/3) coarse silty sand with low concentrations of brick rubble and occasional artifacts
					~9-10'	Possible subsoil	Lighter color and possible texture change observed below fill
3	20	5	12	~32	0 to 1	Reinforced slab and bedding material	n/a
					1 to 3	Sand foundation	Brownish yellow (10YR6/4) very clean coarse sand
					3 to 12	Brown fill	Dark grayish brown (10YR4/2) sandy silt with low concentrations of brick rubble and occasional artifacts (slightly more rubble than seen in other trenches) and massive boulders
					~12'	Possible subsoil	Lighter color and possible texture change observed below fill

Table 3-1 (cont'd)
Summary of Trenches

Trench	Size (feet)			Surface El. (NAVD88)	Observed Soil Levels		
	L	W	D		Depth (feet)	Description	Soil Color/Texture
4	20	5	10	~32	0 to 1	Reinforced slab and bedding material	n/a
					1 to 3	Sand foundation	Brownish yellow (10YR6/4) very clean coarse sand
					3 to 12	Brown fill	Brown (10YR4/3) sandy silt with low concentrations of brick rubble and occasional artifacts Under foundation wall: Dark Brown (10YR3/3) damp silty sand with little rubble; appears more natural
5	20	5	12	~32	0 to 1	Reinforced slab and bedding material	n/a
					1 to 2.7	Sand foundation	Brownish yellow (10YR6/4) very clean coarse sand
					2.7 to ~7	Brown fill	Brown (10YR4/3) silty sand with low concentrations of brick rubble and occasional artifacts; brick rubble especially dense in west wall
					~7 to ~12	Lighter fill	Dark yellowish brown (10YR3/4) sandy wilt with less rubble
6	20	5	12	~32	0 to 1	Reinforced slab and bedding material	n/a
					1 to 3	Sand foundation	Brownish yellow (10YR6/6) very clean coarse sand
					3 to 12	Brown fill	Brown (10YR4/3) silty sand with low concentrations of brick rubble and occasional artifacts (including Styrofoam)

Notes: *Measurement of deepest point of excavation was prevented by continuously collapsing trench walls

B. OBSERVATIONS WITHIN INDIVIDUAL TRENCHES

TRENCH 1

Trench 1 was oriented north–south and was 5 feet in width by 20 feet in length. The trench located as mapped in the approved Work Plan was slightly further north and would have been fully situated within the rear yard of the building formerly known as 144 Clinton Street. However, given the placement of the foundation wall that bisected the former parking garage east–west, the trench was opened in the southern portion of the 144 Clinton Street rear yard and extended to the south into the property formerly known as 146 Clinton Street. The property at 146 Clinton Street was formerly developed with a building with a basement. The northern half of the trench was excavated first, followed by the southern half. During all parts of the excavation, the soils within the trench walls were observed to be extremely loose and continued to collapse into the trench throughout the excavation. The trench was excavated to a depth of approximately 10 feet before excavation was terminated due to the consistent collapse of the surrounding trench walls.

The clean sandy layer beneath the concrete slab was approximately two feet thick in this trench. The sand was associated with a layer of clear plastic sheeting and contained 20th century refuse (e.g., a plastic coffee cup lid). The underlying brown fill contained low concentrations of brick rubble and demolition debris, including pipes.

Eleven artifacts were recovered from the brown fill included low concentrations of mixed historical objects typical of those seen in urban fill deposits that have been previously excavated and refilled. The artifacts included fragments of older (18th century to early 19th century) ceramics such as blue shell edge pearlware and slip trailed redware in the same contexts as mid-19th century or later white granite fragments and porcelain fragments likely representing 20th century plumbing fixtures. No differences were observed in the fill material in the north and south halves of the trench despite historical differences in the use of those

areas as a rear yard and basement cavity, respectively. The uniformity of the trench across the property lines, the absence of dense deposits of brick rubble or debris, and the mixture of modern and historical artifacts suggests that the brown fill layer represents extensive excavation and backfilling in advance of the construction of the parking garage. No evidence of features was observed within the trench.

TRENCH 2

Trench 2 was a 5- by 20-foot trench situated east–west and was located in the rear yards of the buildings formerly known as 169 and 171 Broome Street. The trench was opened to the south of the foundation wall that bisected the parking garage, which was used as the north wall of the trench and prevented soil collapses similar to those seen during the excavation of Trench 1. The same two soil layers were observed beneath the slab: a layer of very clean sand underlain by a brown fill layer containing low concentrations of brick rubble and modern refuse (e.g., Styrofoam and architectural debris). The foundation wall in the north wall of the trench extended to a depth of approximately six feet below the ground surface and was associated with a series of pipes, one of which began to drain water into the trench during excavation. Massive boulders and segments of mortared brick walls were observed during excavation of the western half of the trench. Light-colored subsoil appeared to be observed at the base of the trench at a depth of approximately 9 to 10 feet. The subsoil layer could not be fully explored due to the collapsing soils from the southern trench wall and the flooding associated with the pipes in the foundation wall. No evidence of shaft features was observed and no artifacts were collected from Trench 2.

TRENCH 3

Trench 3 was a north–south-oriented, 5- by 20-foot trench situated in portions of the historical rear yards of the buildings formerly located at 169 Broome and 146 Clinton Streets. The sandy foundation layer beneath the concrete slab was slightly thinner than that seen in Trenches 1 and 2, measuring approximately 2 to 3 feet in thickness, with the depth increasing to the north. The underlying brown fill layer was also significantly thicker and denser. The fill extended to a depth of at least 12 feet below the ground surface and contained denser deposits of demolition debris, including iron girders and pipes. A massive boulder obstructed excavation in the south half of the trench beginning at a depth of 5.5 feet below the slab. Lighter soils presumed to be the subsoil were observed at a depth of approximately 12 feet below the ground surface. No shaft features were observed within the trench.

A total of fourteen artifacts was collected from Trench 3, nearly all of which were architectural debris including rusted nails; floor tiles (some still arranged into mosaic patterns with concrete/cement floor segments); a terra cotta tile; and porcelain plumbing fixture fragments. Non-architectural artifacts included three colorless glass bottle fragments and a colorless glass prism believed to be a decorative element from a lamp.

TRENCH 4

Trench 4 was excavated east–west to the south of the parking garage foundation wall along the same line as Trench 2. The trench was located in what was historically the rear yard of the buildings formerly at 165 and 167 Broome Street. The brown fill layer in this trench contained few artifacts in addition to modern demolition debris. Very large pipes were observed in those soils in the western part of the trench that were in association with the parking garage foundation wall lining the trench's northern side. Unlike Trench 2, however, a difference in soil texture and color was visible beneath the foundation wall. The soils there were slightly darker, damper, and contained limited amounts of rubble and demolition debris.

Sixteen artifacts were recovered from the brown fill material within Trench 4. The majority of these were architectural objects, including floor tiles, window glass, fragments of plumbing fixtures, and unidentifiable

items. Other artifacts included a fragment of brown bottle glass, a late-20th century teal plastic cup holder manufactured by the Carthage Cup Company of Carthage, Texas; and three white earthenware ceramic plate or bowl fragments, one of which featured a black transfer print.

TRENCH 5

Trench 5 was situated north–south in the vicinity of the former rear yards of the buildings formerly known as 165 Broome and 39 Attorney Streets. The trench contained denser brick rubble than that seen in previous trenches, particularly in the western wall. A former brick rear dwelling stood at the western end of the property at 39 Attorney Street west of Trench 5. While the research completed for the Phase 1A Study did not suggest that the rear building had a basement, the denser concentrations of rubble to the west of Trench 5 may suggest that it either had a basement level or a substantial foundation. The denser rubble extended to a depth of approximately 7 feet below grade, below which was a layer of slightly cleaner, lighter soils. These soils continued to a depth of 12 feet, the maximum possible reach for the backhoe being used for the excavation. Lighter soils similar to the potential subsoil observed in Trenches 2 and 3 was observed towards the bottom of the excavation; however, the collapse of the loose soils in the trench walls prevented further examination of these deposits. A support column associated with the former parking garage was observed within the northeast corner of the trench. No evidence of shaft features was observed and no artifacts were collected within Trench 5.

TRENCH 6

Trench 6 was oriented north–south within the former rear yards of 37 to 39 Attorney Street. As per the 2019 Work Plan, the trench was originally to be located within the rear yard of 35 Attorney Street; however, that part of the site was inaccessible due to its proximity to the public pedestrian plaza. Trench 6 as actually excavated was also situated within the footprints of the rear dwellings of 37 to 39 Attorney Street as noted previously. The soils in the trench were noticeably cleaner and contained less brick rubble than those observed in Trench 5 to the north, despite being partially within the same historical property. A large concrete support column associated with the former parking garage was observed within the west wall of Trench 6 near its southwestern corner. The column extended past a depth of 12 feet, which was the maximum depth that could be reached by the backhoe used for the excavation and it is presumed to continue to a greater depth. A total of four artifacts was recovered from the trench, including floor tiles and porcelain plumbing fixture fragments. No evidence of shaft features was observed.

Chapter 4: Conclusions and Recommendations

A. CONCLUSIONS

Each of the six trenches excavated for this Phase 1B Archaeological Investigation exhibited the same three general stratigraphic levels with minimal variation in thickness/depth: (1) concrete slab bedding (approximately one foot thick); (2) a coarse, clean sand laid down to support the slab and correct the site's natural downward slope from south to north (two to five feet thick, with thicker deposits to the north); and (3) brown fill material with varying amounts of brick rubble and demolition debris. In Trenches 2 and 3 and possibly in Trench 5, lighter subsoil was observed beneath the fill layer at depths of 10 to 12 feet below the ground surface. In all trenches, the soils were unusually loose and the trench walls collapsed easily. Historical artifacts predating the 20th century were found in plow concentrations only in Trench 1 and appeared to be mixed with modern refuse and 20th century building debris. While support columns and foundation walls associated with the former parking garage were observed within four of the six trenches, no *in situ* foundation walls or basement cavities were observed across the project site.

The results of the testing appear to suggest that the construction of the parking garage resulted in the extensive disturbance of the historical properties on the project site. The soils on the project site therefore appear to have been excavated and loosely redeposited before being covered with a layer of clean, coarse sand before the floor slab was constructed across the site. While the slab of the former parking garage featured and approximately four-foot grade change across the site, that change appeared to mimic the natural downward slope of the block and the adjacent streets. Therefore the higher elevation of the southern portion of the site doesn't reflect the addition of fill material to change the grade with the exception of the clean sandy layer used to support and create a level surface for the construction of the slab. As such, the depth of fill material observed during the Phase 1B testing does not appear to reflect landscape modification or the importation of fill material on the site.

Given the depths of the support columns for the former parking garage and the depth of the fill material as identified, it therefore appears that extensive disturbance occurred across the project site as a result of the construction of the parking garage. This disturbance appears to have removed traces of historical building foundations and backyard deposits, including any potential shaft features.[1] No evidence of shaft features or original ground surfaces were observed to depths of 10 to 12 feet below the ground surface across the testing area. Given the extent of the disturbance and the confirmation of disturbance associated with the construction of the parking garage, the project site is determined to have no archaeological sensitivity.

B. RECOMMENDATIONS

The Phase 1B Archaeological Investigation identified extensive disturbance to the project site associated with the construction of the recently demolished parking garage in the late 20th century. Furthermore, as described previously, additional analysis has confirmed that the project would not result in impacts to areas

[1] Foundation walls and intact backyard surfaces were observed during the archaeological investigation of the Essex Crossing site immediately to the west (AKRF 2014). The Essex Crossing site was also included within the Seward Park LSRD and the development sites analyzed as part of that project featured similar development histories to the current project site, suggesting differing patterns of disturbance associated with late 20th century demolition and redevelopment.

of archaeological sensitivity within the historical streetbed of Attorney Street. Therefore, the project will not result in impacts on archaeological resources and no further archaeological analysis is recommended.

References

AKRF, Inc.

2011 Phase 1A Archaeological Documentary Study: Seward Park Mixed-Use Development Project; Block 346, Lot 40; Block 347, Lot 71; Block 352, Lots 1 and 28; Block 353, Lot 44; Block 354, Lots 1 and 12; Block 409, Lot 56; and Block 410, Lot 38 Lower East Side, New York, New York. Prepared for: New York City Economic Development Corporation; New York, NY.

2014 Phase 1B Archaeological Investigation: Essex Crossing (Seward Park Mixed-Use Development Project); Block 346, Lot 40; Block 347, Lot 71; Block 352, Lots 1 and 28; Block 353, Lot 44; Block 354, Lots 1 and 12; Block 409, Lot 56; and Block 410, Lot 38 Lower East Side, New York, New York. Prepared for: Delancey Street Associates, LLC; New York, NY

Azizi, Sharla C., Diane Dallal, Mallory A. Gordon, Meta F. Janowitz, Nadia N.S. Maczaj, and Marie-Lorraine Pipes

1996 *Analytical Coding System for Historic Period Artifacts*. Prepared for: Louis Berger and Associates.

New York Archaeological Council

1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. The New York Archaeological Council.

New York City Landmarks Preservation Commission

2018 *Guidelines for Archaeological Work in New York City*. https://www1.nyc.gov/assets/lpc/downloads/pdf/2018_Guidelines%20for%20Archaeology_Final_high%20res.pdf

Figures

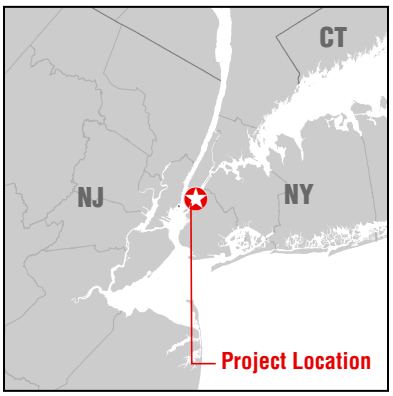
5.6.22

Data source: USGS The National Map, https://basemap.nationalmap.gov/arcgis/rest/services/USGSTopo/MapServer

0 2,000 FEET

Project Site

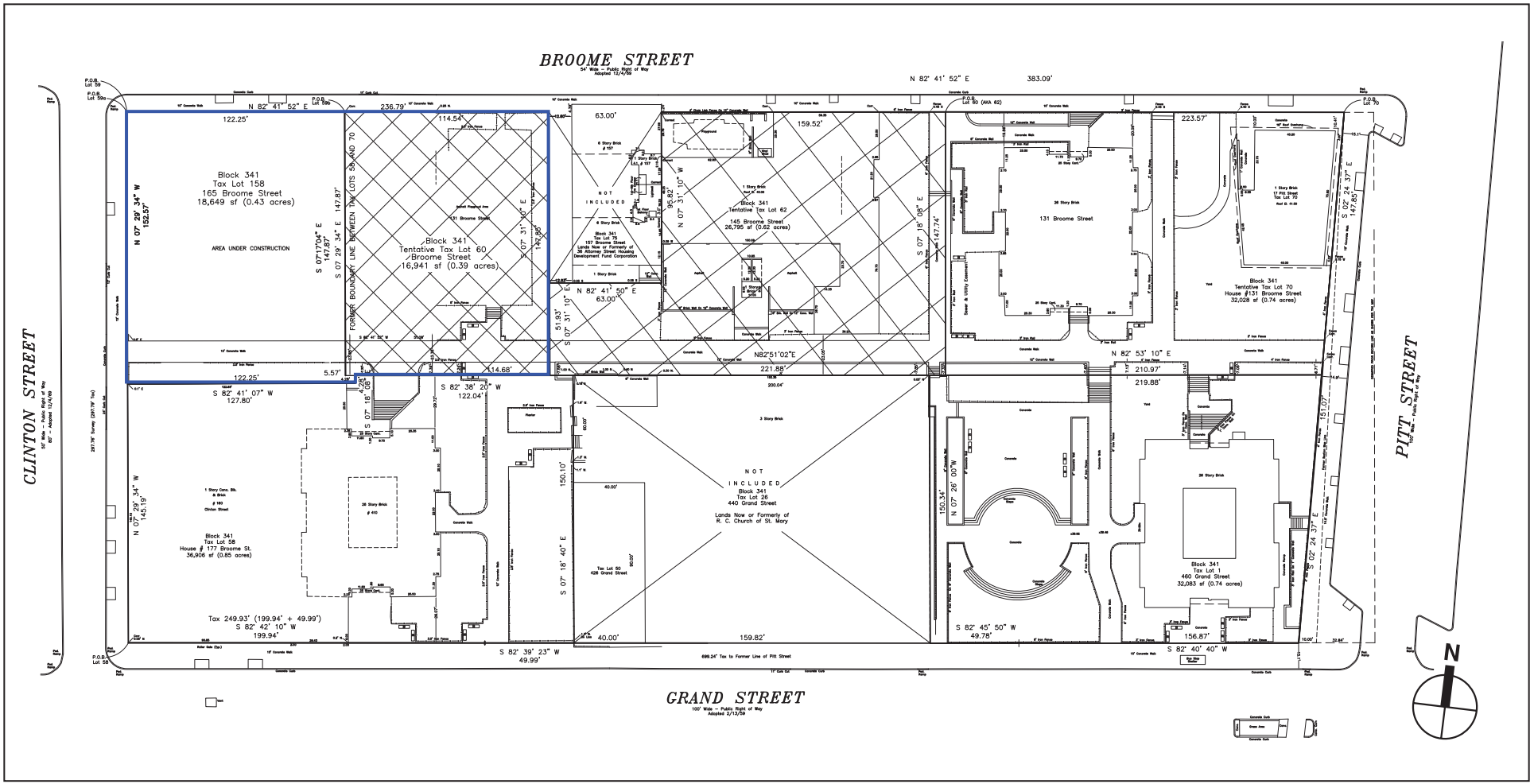
Approximate coordinates of Project Site:
73°59'9"W 40°42'59"N



USGS Topographic Map – Brooklyn Quadrangle

165 BROOME STREET

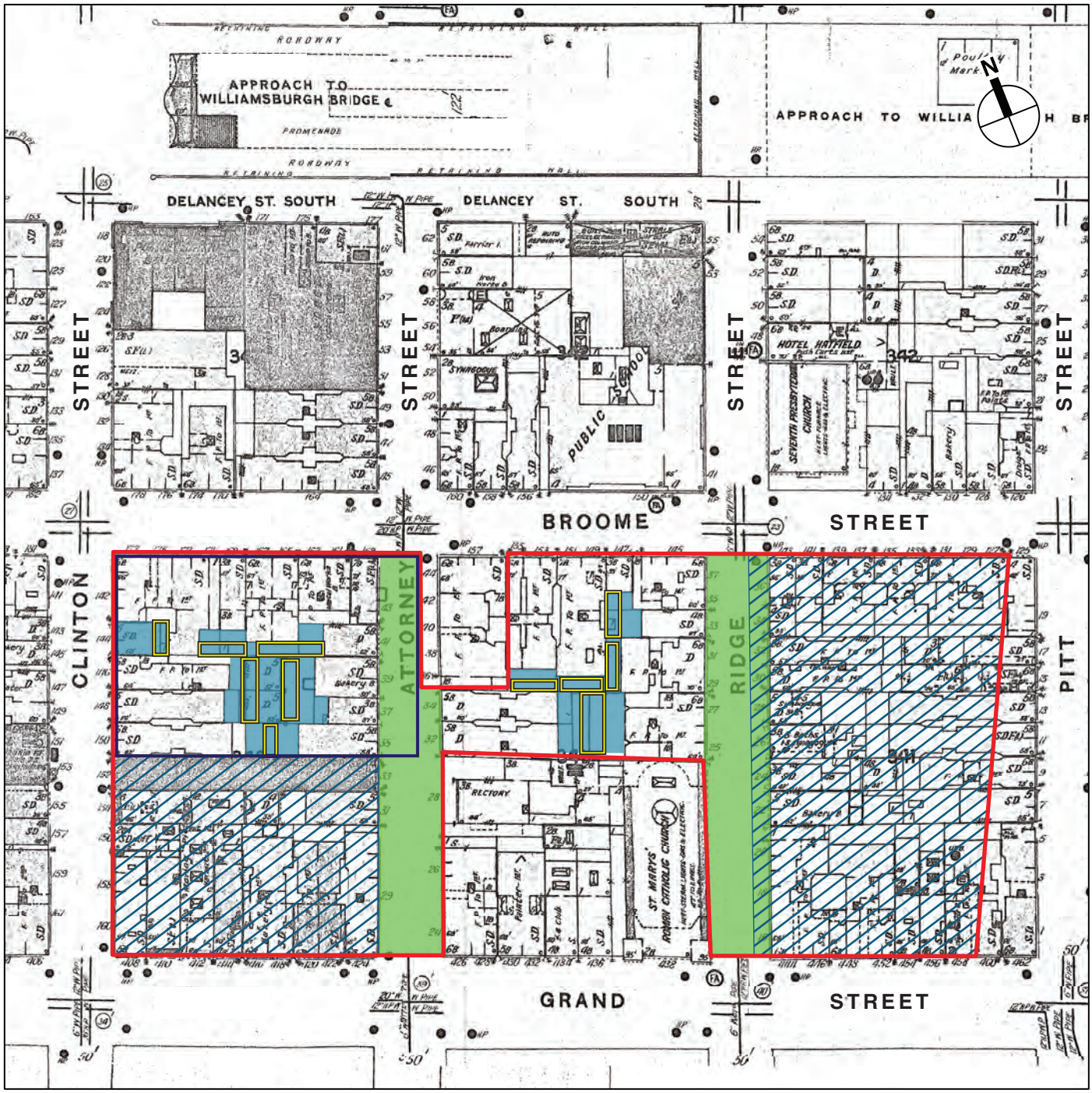
Figure 1



Project Site (Block 341, Lots 158 and 60)

Site Plan Showing Revised Tax Lots

5.6.22



Project Area as studied in Phase 1A

New Lots 158 and 60

Areas Where Subsurface Disturbance is not Proposed

Proposed Trench Location

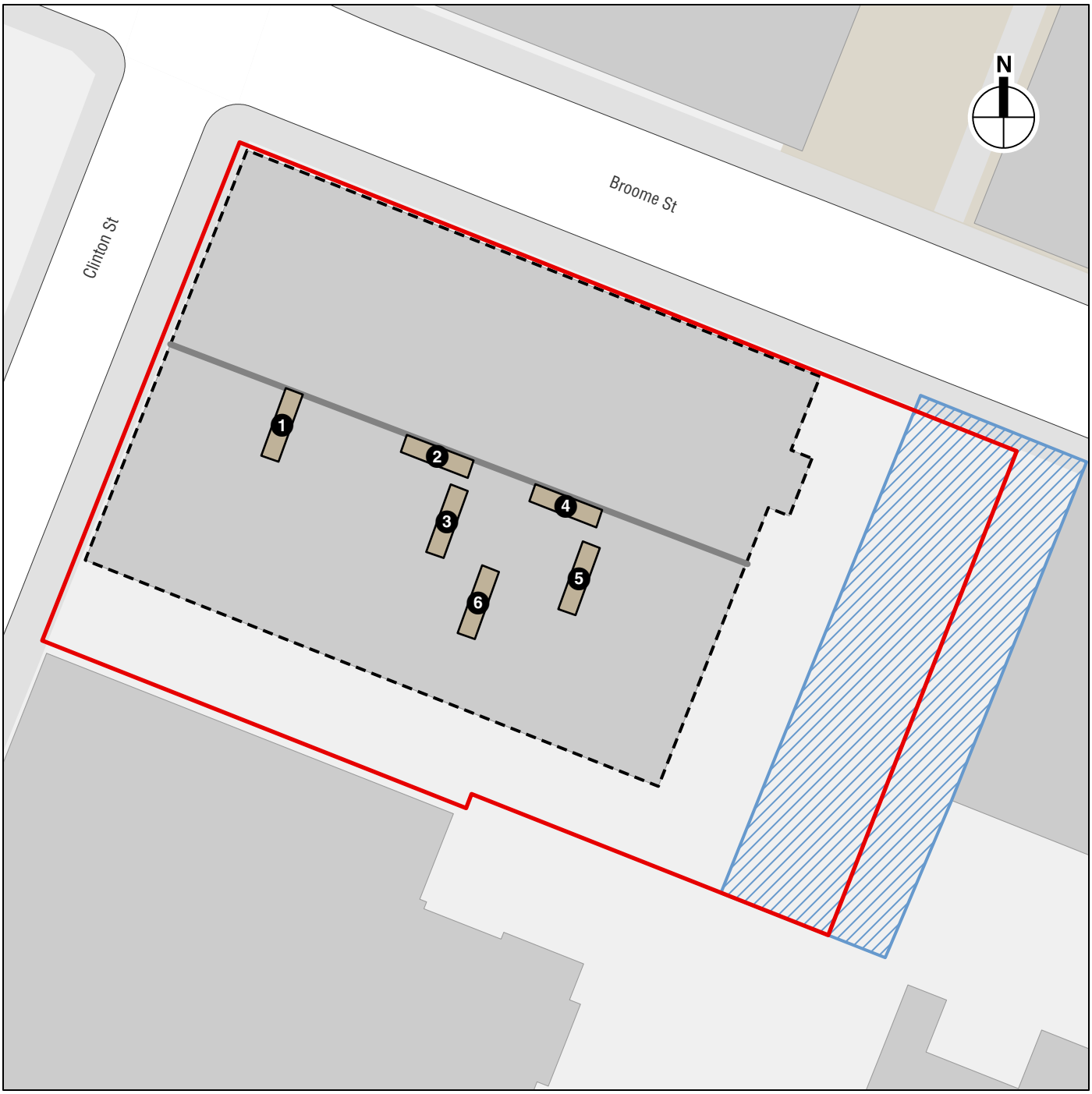
Areas Sensitive for Rear Yard Shaft Features

Streetbeds with Archaeological Sensitivity in Undisturbed Areas

Archaeological Sensitivity Map from Phase 1B Work Plan

165 BROOME STREET

Figure 3



Location of Archaeological Test Trenches

165 BROOME STREET

Figure 4

Looking southwest across the project site from Broome Street, showing the 4-foot difference in the grade of the floor slab and the mound of brick rubble **1**

View east across the area of higher elevation, showing the part of the slab where the test trenches were excavated. The fence at right is near the southern wall of the parking garage foundation **2**

Site Photographs

Figure 5

View of excavation of Trench 1; the lighter colored soils in the foreground were the result of the collapse of the trench walls following excavation to greater depths **3**

The bottom of the foundation wall observed in the north wall of Trench 2 **4**

5 The lowest point of the excavation of Trench 2 where the archaeologists observed what appeared to be subsoil beneath the fill deposit; the backhoe is being used to hold back the soils to prevent collapse

6 A massive boulder observed in the southern half of Trench 3

Stratigraphy in the wall of Trench 3, showing the concrete slab, the underlying slab, and the brown fill **7**

Brown fill material and the foundation wall in the northern wall of Trench 4 **8**

Seemingly cleaner soil beneath the foundation wall in Trench 4 **9**

Stratigraphy visible in the wall of Trench 5 **10**

Site Photographs
Figure 9

Fill material observed within Trench 6; note column at left **11**

The support column observed within Trench 6 that extended beyond the excavator's maximum reach **12**

Appendix A: Artifact Catalog

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Trench	Provenience	Group	Class	Object	Part	Material/ Ware	Color	Count	Production Date(s)	Comments	Source
1	North half; brick fill/backdirt	Faunal	Consumption	Shell	Fragment	Shell	white	1		Very worn and poorly preserved	
		Household	Dishes	Plate?	Rim fragment	Pearlware	white and blue	1	1775-1840	Blue shell edge; scalloped and impressed	Azizi, et al. 1996
		Household	Food	Bottle	Body fragment	Glass	Colorless	1		Very thick	
		Household	Sanitary	Chamber Pot	Rim fragment	White granite	White	1	1840-present		Azizi, et al. 1996
	South half; brick fill/backdirt	Architectural	Brick	Brick	Fragment	Red earthenware	Red	1			
		Architectural	Plumbing	Toilet?	Fragment	Porcelain	White	3		One very large	
		Architectural	Window	Flat glass	Fragment	Glass	Colorless	1			
		Household	Dishes	Plate?	Body fragment	Slip-trailed redware	Red and yellow	1	1670-1850		Azizi, et al. 1996
		Household	Food	Bottle	Body fragment	Glass	Olive	1			
3	North half; brick fill/backdirt 15' bgs	Architectural	Fastener	Nail	Whole	Rusted iron/ conglomerate	n/a	1			
		Architectural	Floor	Floor segment with cement base and tile mosaic remnants	Conglomerate	cement, porcelain	White and red	1		Three white tiles; two red (one partial)	
		Architectural	Floor	Square Tile	Whole/fragment	porcelain	Light pink	2			
		Architectural	Floor	Tile	Fragment	Earthenware	Ivory	2		Molded lines on underside	
		Architectural	Floor	Tile	Fragment	Earthenware	Green	1		Molded lines on underside	
		Architectural	Floor	Rectangular Tile with cement	Whole	Marble?	Gray	1			
		Architectural	Plumbing	Toilet?	Fragment	porcelain	White	1			
		Architectural	Unident	Unident	Fragment	terra cotta	Brown/gray	1		Thick; center poorly fired	
		Household	Food	Bottle	Body fragment	Glass	Colorless	3		Very thick	
		Household	Lamp	Prism	Fragment	Glass	Colorless	1		Has remnant of hole/channel for metal or string connector	
4	East half; Brick fill/Backdirt	Architectural	Floor	Hexagonal Tile	Whole	porcelain	White	1			
		Architectural	Floor	Tile	Fragment	Earthenware	Pink	1		Molded lines on underside	
		Architectural	Window	Safety Glass	Fragment	Glass	Colorless	2		Very thick	
		Architectural	Window	Flat glass	Fragment	Glass	Colorless	1			
		Household	Food	Bottle	Body fragment	Glass	Brown	1			
		Architectural	Floor	Square Tile	Whole	Unident	Gray	1			
		Architectural	Floor	Rectangular Tile	Fragment	Porcelain?	Maroon	1			

Trench	Provenience	Group	Class	Object	Part	Material/ Ware	Color	Count	Production Date(s)	Comments	Source
		Architectural	Plumbing	Toilet?	Fragment	Porcelain	White	1			
		Architectural	Unident	Unident	Fragment	Coarse earthenware	White	1			
		Architectural	Unident	Unident	Fragment	Slate?	Gray	1		Rectangular; tile remnant?	
		Architectural	Window	Safety Glass	Fragment	Glass	Colorless	1		Very thick	
		Household	Dishes	Cup holder	Whole	Plastic	Teal	1	Late 20th c.	Base marked "Carthage/Cup Co./Carthage/Texas"	
		Household	Dishes	Bowl	Body fragment	white earthenware with black transfer print	White	1	1815-1915		Azizi, et al. 1996
		Household	Dishes	Plate	Rim fragment	white earthenware	White	1			
4	South half; brick fill/backdirt	Household	Dishes	Plate	Body fragment	white earthenware	White	1			
		Architectural	Floor	Hexagonal Tile	Whole	porcelain	White	1			
	North half; brick	Architectural	Floor	Tile	Fragment	Earthenware	Pink	1		Molded lines on underside	
6	fill/backdirt	Architectural	Plumbing	Toilet?	Fragment	porcelain	White	2			
TOTAL:								**45**			