

Mixed Use Development at 809 Atlantic Avenue

Block 2010, Lots 1 and 59

BROOKLYN, KINGS COUNTY, NEW YORK

Phase 1B Archaeological Survey Report

Prepared for:

550 Clinton Partners LLC and 539 Vanderbilt Partners LLC
475 Park Avenue South
New York, NY 10016

Prepared by:



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JANUARY 2020

Executive Summary

CEQR Number: 18DCP179K
LPC Project Unique Identification Number: 32576
Involved Agencies: New York City Planning Commission
Phase of Survey: Phase 1B Archaeological Investigation

Location Information

Borough: Brooklyn
Block/Lot: Block 2010, Lots 1 and 59
Address: Lot 1: 539 Vanderbilt Avenue; Brooklyn, NY 11238
Lot 59: 809 Atlantic Avenue; Brooklyn, NY 11238
County: Kings County

Survey Area (Area of Archaeological Sensitivity)

Length (Project Area): 80 feet
Width (Project Area): 80 Feet
Area: 6,400 square feet

USGS 7.5 Minute Quadrangle Map: Brooklyn

Archaeological Survey Overview

Number of Trenches: Four
Size of Trenches: 5 to 24 feet in length; 5 to 13 feet in width; 2 to 9 feet in depth
Vertical Datum: North American Vertical Datum of 1988 (NAVD88)
Horizontal Datum: North American Datum of 1983 (NAD83)

Results of Archaeological Survey

Prehistoric Sites Identified: None
Historic Sites Identified: None
Sites Recommended for Avoidance: None

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A. INTRODUCTION AND PROPOSED PROJECT DESCRIPTION

550 Clinton Partners LLC and 539 Vanderbilt Partners LLC (“the applicants”) are proposing to redevelop the site at 809 Atlantic Avenue in the Clinton Hill neighborhood of Brooklyn (see **Figure 1**). The development site comprises Block 2010, Lots 1 and 59, located on the northern side of Atlantic Avenue between Vanderbilt Avenue and Clinton Avenue. The development site was previously developed with a series of one-story commercial buildings, which have since been demolished. With the project, the site will be developed with two mixed-use buildings—one on each lot within the development site—containing retail and office space and residential units. The building on Lot 1 would be 29 stories and the building on Lot 59 would be four stories and the two buildings would be connected with a shared corridor and cooling tower. The construction of the project required a zoning map amendment, a zoning text amendment, and special permits, which were approved by the City Planning Commission (CPC) in February, 2019.¹ The project was subject to New York City Environmental Quality Review (CEQR) and the CPC served as the lead agency for the environmental review.

B. PREVIOUS ENVIRONMENTAL REVIEW AND INVOLVED AGENCIES

Pursuant to CEQR, consultation was initiated with New York City Landmarks Preservation Commission (LPC) in order to obtain a preliminary determination of the project area’s potential archaeological sensitivity. In a comment letter dated July 21, 2017, LPC determined that the development site (Block 2010, Lots 1 and 59) as well as portions of the project area and rezoning area (Block 2010, Lots 10, 56, 57, and 58) are potentially archaeologically significant, and requested that a Phase 1A Study be prepared. Subsequent to the initial consultation with LPC, the actions and project area were revised and it was determined that subsurface disturbance would only occur on the development site (Lots 1 and 59). In a comment letter issued April 18, 2018, LPC confirmed that a Phase 1A Study was only required for the development site. The Applicants subsequently entered into a Restrictive Declaration requiring that the additional archaeological investigation and any subsequent archaeological assessments that are determined necessary would be undertaken in consultation with LPC prior to construction of the project.

2019 PHASE 1A ARCHAEOLOGICAL DOCUMENTARY STUDY

A Phase 1A Archaeological Documentary Study of the development site was prepared by AKRF in November 2019 to satisfy LPC’s request and in compliance with the terms of the Restrictive Declaration. The study concluded that as a result of development-related disturbance, the site has no sensitivity for precontact archaeological resources. The southern portion of the development site—including the southern section of modern Lot 1 and all of Lot 59—do not appear to have been developed until the 1870s, by which time it appears that water and sewer lines were present within the streetbeds surrounding the development site. However, the northern portion of Lot 1 was developed at an earlier date and the former rear yards of buildings constructed in the northern half of Lot 1 before the late-19th century have

¹ ULURP Nos. C190071 ZMK; C190072 ZSK; C190073 ZSK; and N190074 ZRK.

not been fully disturbed by basement excavation. This part of the development site was therefore determined to have moderate sensitivity for archaeological resources associated with the 19th century residential occupation of those lots (see **Figure 1**). These archaeological resources are expected to include domestic shaft features such as privies, cisterns, and wells in the historic lots' rear yards. The remainder of the development site was determined to have low archaeological sensitivity associated with the historic period. In addition, while LPC had initially expressed concern that burials associated with a cemetery on the grounds of the Church of Saint Luke and Saint Matthew may be present, the Phase 1A research concluded that the development site is not considered to be sensitive for human remains. The burial vaults on the church grounds appear to have been confined to modern Lot 10 throughout the cemetery's period of active use.

The area of archaeological sensitivity is limited to the northern portion of Lot 1 as depicted on **Figure 1**. The Phase 1A Study recommended a Phase 1B Archaeological Investigation to confirm the presence or absence of archaeological resources within the area of sensitivity within the project site that would be disturbed by the proposed project. In a comment letter dated December 13, 2019, LPC concurred with the conclusions and recommendations of the Phase 1A study. On December 12, 2019, LPC issued a Notice of Satisfaction for Lot 59 only, as no further archaeological analysis is required on that lot.

DOB PERMIT AND RECENT SITE DISTURBANCE

Prior to the submission of the Phase 1A Study to LPC, the New York City Department of Buildings issued an excavation permit for Lot 1. Two trenches were then excavated within the area of archaeological sensitivity on Lot 1 (see **Figure 2**). Photographs of the excavated trench were provided to AKRF archaeologists. The photographs appear to depict relatively clean soils beneath a layer of asphalt pavement and refuse. No evidence of shaft features were reported to have been observed within the trenches. The trenches were excavated in the area between the locations where archaeological testing is proposed as described below and depicted on **Figure 2**. The disturbance therefore appears to have avoided the areas considered to be the most likely to be sensitive for archaeological resources, including the areas at the former rear lot line and near the rear wall of the 19th century homes that were located on the project site.

2020 WORK PLAN

A Phase 1B Archaeological Work Plan/Testing Protocol was prepared by AKRF in December 2019 to outline the proposed methodology for the Phase 1B archaeological investigation. In a comment letter dated January 2, 2020, LPC requested that the Phase 1B work include the re-excavation of the recently excavated trenches within the area of archaeological sensitivity and accordingly requested revisions to the Work Plan. A revised Work Plan was submitted to LPC in January 2020. In a comment letter dated January 6, 2020, LPC concurred with the Work Plan and approved the start of testing on the project site.

PROJECT TEAM

The Phase 1B Archaeological Investigation of the project site was supervised by Elizabeth D. Meade (MA, MPhil, Registered Professional Archaeologist (RPA) #16353), who served as Principal Investigator and Laboratory Director. The Field Director was A. Michael Pappalardo (MA, RPA #10469). Both Ms. Meade and Mr. Pappalardo exceed the requirements for the professional qualifications standards for

archaeologists as defined by the Secretary of the Interior (36CFR61)¹ and comply with the codes and standards outlined by the RPA.² Sub-consultants for specialized analysis were not required for the project.

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

² <https://rpanet.org/page/CodesandStandards>

A. RESEARCH GOALS

The objectives of the Phase 1B Archaeological Investigation of the archaeologically sensitive portion of the development site were to (1) ascertain the presence or absence of historic period archaeological deposits within the undisturbed portions of the site; and (2) to determine the potential 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 within 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 within the project site and the potential research questions/research goals that could be answered by the Phase 1B Archaeological Investigation are described below.

POTENTIAL ARCHAEOLOGICAL RESOURCES

As described above, the Phase 1A Study determined that undisturbed portions of the site have moderate sensitivity for archaeological resources associated with the early 19th century occupation of the development site. As described above, those historic lots that were not fully disturbed by basement excavation were determined to have moderate sensitivity for archaeological resources associated with the 19th century residential occupation of those lots. These archaeological resources are 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.

B. RESEARCH QUESTIONS

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 for the Work Plan that can be applied to any identified archaeological resources within the project site in an attempt to determine their research value. 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.

Domestic shaft features—such as those that may be located within the 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 Brooklyn during the 18th and 19th centuries.

As no archaeological resources (including both features and artifacts) were encountered during the Phase 1B investigation, the research questions developed as part of the Work Plan were not utilized during the subsequent analysis.

C. PHASE 1B TESTING METHODOLOGY

Although documentary research determines archaeological potential, excavation is required to determine if resources are *actually* present on a site. Therefore, this Phase 1B investigation entailed presence/absence testing. 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 and with 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 1994.³

Archaeological excavation within the development site took place only within the areas of archaeological sensitivity identified in the Phase 1A Study as shown on **Figure 2**.

PHASE 1B SUBSURFACE TESTING

Subsurface testing consisted of mechanically-excavated trenches and no hand testing was determined to be necessary during the Phase 1B work. The testing strategy that was employed was consistent with the testing protocol proposed in the Work Plan. The exact placement of the machine-excavated trenches and the depths to which they were excavated were determined based on the location of previously unknown obstructions as well as identified areas of contamination that were identified as a result of recent environmental testing.

A total of four backhoe trenches—two of which were double the width of standard trenches as described in the Work Plan—were excavated within the area of archaeological sensitivity (see **Figure 2**). Trenches were placed in two parallel lines on either side of the area of recent disturbance. The trenches of double width were excavated on the recently disturbed trenches and the undisturbed areas to the east. This allowed the archaeologists to examine the areas that were previously disturbed to determine if the recent excavation could have disturbed archaeological resources or features. These trench locations were situated in the approximate vicinity of the historical rear lot line and the rear building line of the buildings that were located in that area by the late 19th century.

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 <http://nyarchaeology.org/wp-content/uploads/2013/12/NYACStandards.pdf>

The backhoe trenches were excavated to the depth of sterile subsoil to confirm the presence or absence of archaeological resources. In those portions of the trenches that were previously excavated, the trenches was excavated to a depth greater than that previously dug. Each testing location was documented using standard nomenclature and established using measuring tapes and an on-site datum determined using site surveys. All fieldwork was documented through notes and photographs and all relevant professional standards (see above) will be applied.

As described in the next chapter, no features or archaeological resources were observed during the testing and no artifacts were collected.

HEALTH AND SAFETY PLAN

All fieldwork was completed pursuant to the safety measures outlined in the “AKRF Health & Safety Plan” as updated May 2018 and in compliance with the standards of the United States Department of Labor’s Occupational Safety and Health Administration (OSHA) pertaining to safe excavation practices. Archaeologists did not enter trenches that were deeper than 4 feet below the ground surface pursuant to all relevant safety standards.

A. INTRODUCTION

The Phase 1B Archaeological Investigation of the 809 Atlantic Avenue development site involved the excavation or attempted excavation of four trenches. As described in more detail below, no archaeological resources or features were observed and no artifacts were collected. Furthermore, no evidence was observed to suggest that archaeological resources were disturbed by the recently excavated trenches. The locations of the trenches as excavated are depicted on **Figure 2** and in **Photographs 1** through **4** on **Figures 3** and **4**. **Table 1** includes the complete record of excavation with observed soil profiles.

**Table 1
Record of Excavation**

Trench	Length (ft)	Width (ft)	Depth (ft)	Surface El. (NAVD88)	Soil Profile Below Ground Surface	Notes
1	24	11	9	74.14	0 to 6 inches: Concrete slab	Western 3-4 feet of trench previously excavated; no evidence of artifacts or features
					6 to 9 inches: Concrete bedding	
					9 inches to 1.5 to 2.25 feet: Fill material with demolition debris (shallower to the south)	
					1.5 to 2.25 feet to 4 feet: two layers; upper brown (7.5YR4/4) mixed silty sandy possibly representing a truncated fill level and a lower dark yellowish brown (10YR4/4) mixed silty sand with pockets of medium sand.	
					4 to 9 feet: clean reddish subsoil with large rocks and boulders beginning at 8 feet below grade	
2	24	13	9	74.14	0 to 6 inches: Concrete slab	Western 3-4 feet of trench previously excavated; no evidence of artifacts or features
					6 to 9 inches: Concrete bedding	
					9 inches to 1.42 to 2.25 feet: Brown (7.5YR4/4) mixed silt and sand fill material with demolition debris; shallower to the south; possibly truncation of soil level at northern end	
					1.42 to 2.25 feet to 4 feet: Yellowish brown (10YR5/4) very compact mixed medium sand and fine silty sand; some brown (7.5YR5/4) soil at northern end	
3	20	9	7	73.90	Entire trench situated within undocumented foundation cavity; intact concrete walls lining southern and eastern side of trench; possible sewer pipe encountered in southeast corner with foul-smelling liquid.	Excavation terminated before trench was fully excavated; foundation walls appear to have been associated with recently demolished building, which was not documented with a cellar
4	5	5	2-3	73.90	Continuation of subsurface foundation walls encountered in Trench 4; foundation wall running east-west observed 9 feet south of wall lining southern side of Trench 3.	Excavation terminated
Notes: Surface elevations were determined based on the site survey included as Figure 2 .						

B. SUMMARY OF TRENCHES

TRENCH 1

Trench 1 was located near the site's northeast corner. As requested by LPC, the trench incorporated both the area of recent excavation as well as the undisturbed area to the east (see **Figure 3, Photograph 1**). According to a survey of the site (see **Figure 2**), the surface elevation of the concrete pavement in this part of the site was 74.14 feet relative to the North American Vertical Datum of 1988 (NAVD88). The trench measured 24 feet in length (north-south) and 11 feet in width (east-west) and was excavated to a depth of 9 feet below the paved surface of the project site (approximately 65.14 feet relative to NAVD88).

The western 3 to 4 feet of the trench had been previously excavated. No evidence of archaeological resources or potentially disturbed features was observed within the previously excavated portion of the trench, which was observed to contain largely clean soil mixed with modern demolition debris (e.g., pipes, cinderblocks, and bricks). Within the undisturbed portion of the trench, the soil profile was observed as follows: a 6-inch-thick concrete slab over 2 to 3 inches of bedding material; fill material that extended between 1.5 and 2.25 feet below the ground surface; a possibly truncated layer of undulating, mixed brown silty sand layered over a layer of compact, dark yellowish brown mixed silty sand with pockets of medium sand. Reddish brown sandy subsoil was observed at greater depths along with several medium to large boulders.

No archaeological resources or features were observed within the trench, including both the undisturbed and disturbed areas.

TRENCH 2

Trench 2 was located immediately south of, and served as a continuation of, Trench 1 (see **Figure 3, Photograph 2**). The trench measured approximately 13 feet in width (east-west) and 24 feet in length (north-south) and was excavated to a depth of 9 feet below ground surface (65.14 feet relative to NAVD88). Like Trench 1, the western portion of this trench included the area that was previously excavated. The observations within this trench were nearly identical to those seen in Trench 1 in both the disturbed western portion and the undisturbed eastern portion. In this trench, the depth of the fill level underlying the concrete varied slightly more than in Trench 1. The same brown (7.5YR5/4) mixed sandy fill material was observed, but at a slightly shallower depth than that seen in Trench 1, ranging to maximum depths of 1.42 to 2.25 feet below the ground surface (approximately 72.72 to 71.89 feet relative to NAVD88). This was underlain by yellowish brown (10YR5/4) very compact medium to fine silty sand subsoil. At the northern end of the trench, pockets of brown (7.5YR5/4) soil were observed.

No archaeological resources or features were observed within the trench, including both the undisturbed and disturbed areas.

TRENCH 3

Trench 3 was attempted in the vicinity of the former rear wall of the homes located on the northern portion of the development site in the late 19th century. The location of the trench was shifted slightly to the east at the direction of an environmental scientist from Langan Environmental so as to avoid an area of possible contamination. Almost immediately following the start of excavation, concrete foundation walls were encountered in the southern and eastern walls of the trench (see **Figure 4, Photograph 3**). These structural elements are presumed to have been associated with the recently-demolished car wash facility that formerly occupied the site, which was not believed to have been constructed with a cellar. The trench appeared to be entirely within the subsurface foundation cavity of the modern building. Water with a strong foul odor began to fill the trench from a broken pipe located in the trench's southeastern

corner. The excavation of the trench was terminated at a depth of approximately 7 feet below ground surface (66.9 feet relative to NAVD88) and the western half of the trench was not fully excavated. The partially-excavated trench was approximately 9 feet in width (east-west) and 20 feet in length (north-south).

No archaeological resources or features were observed within the trench, the location of which was entirely disturbed as a result of the construction of the recently demolished building.

TRENCH 4

The archaeological team attempted to open a fourth trench immediately to the south of Trench 3. A second large concrete foundation wall was encountered approximately 9 feet to the south of the wall lining the southern side of Trench 3. Due to the presence of the foundation walls and an additional area of soil contamination reported further to the south, Trench 4 was abandoned and no further excavation was determined to be necessary in that portion of the site (see **Figure 4, Photograph 4**). The attempted trench was approximately 5 feet square and was excavated to a depth of 2 to 3 feet (approximately 71.90 to 72.90 feet relative to NAVD88) before being abandoned. Further excavation to the south was abandoned due to the presence of a second area of contaminated soil.

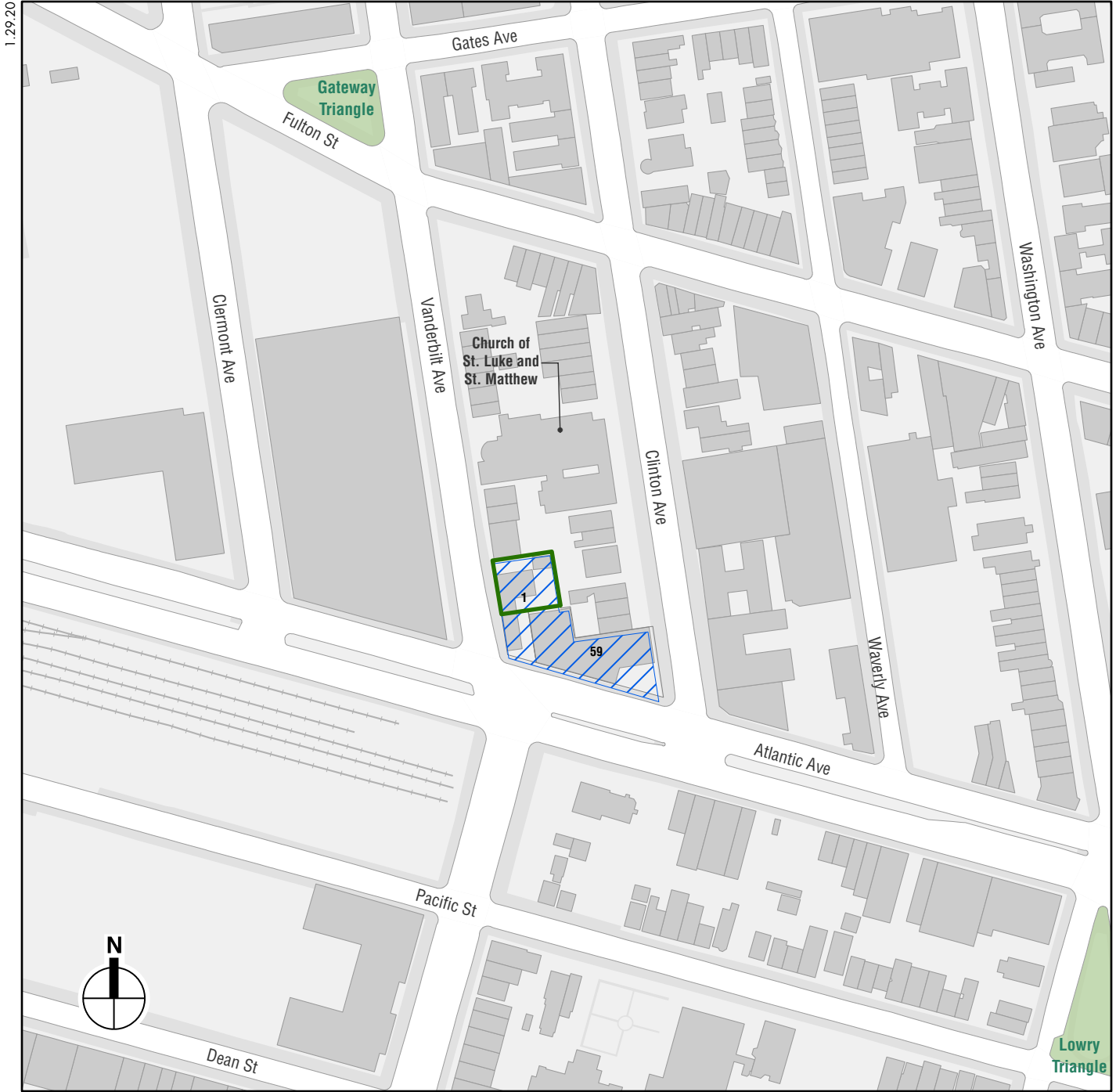
No archaeological resources or features were observed within the trench, the location of which was entirely disturbed as a result of the construction of the recently demolished building.




No archaeological resources or features were observed in any of the four trenches that were attempted as part of the Phase 1B Investigation of the 809 Atlantic Avenue development site. No artifacts were observed or collected during the testing and no artifact analysis was required. A sufficient sample of the former rear yard areas was excavated to confirm that undisturbed shaft features are not likely to be present within the archaeologically sensitive portion of the development site. It is also determined that recent excavation did not result in the disturbance of archaeological resources or shaft features. No further archaeological analysis is therefore recommended.

References

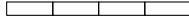
- AKRF, Inc.
2019 “Mixed Use Development at 809 Atlantic Avenue; Block 2010, Lots 1 and 59; Brooklyn, Kings County, New York: Phase 1A Archaeological Documentary Study.” Prepared for: 550 Clinton Partners LLC and 539 Vanderbilt Partners LLC; New York, NY.
- 2020 “Mixed Use Development at 809 Atlantic Avenue; Block 2010, Lots 1 and 59; Brooklyn, Kings County, New York: Phase 1B Archaeological Work Plan/Testing Protocol.” Prepared for: 550 Clinton Partners LLC and 539 Vanderbilt Partners LLC; New York, NY.
- City Environmental Quality Review
2014 “CEQR Technical Manual.” Available online:
http://www.nyc.gov/html/oec/html/ceqr/technical_manual_2014.shtml.
- Mueser Rutledge Consulting Engineers
2018 “550 Clinton Avenue.” Updated 2019. Prepared for Hopestreet Development.
- Munsell Color
2000 *Munsell® Soil Color Charts*. Year 2000 Revised Washable Edition. Grand Rapids, MI: Munsell Color.
- New York Archaeological Council
1994 *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State*. Accessed March 2014:
<http://nyarchaeology.org/assets/standards/NYACStandards.pdf>
- New York City Landmarks Preservation Commission
2018 “Landmarks Preservation Commission Guidelines for Archaeological Work in New York City.” Available online at:
https://www1.nyc.gov/assets/lpc/downloads/pdf/2018_Guidelines%20for%20Archaeology_Final_high%20res.pdf

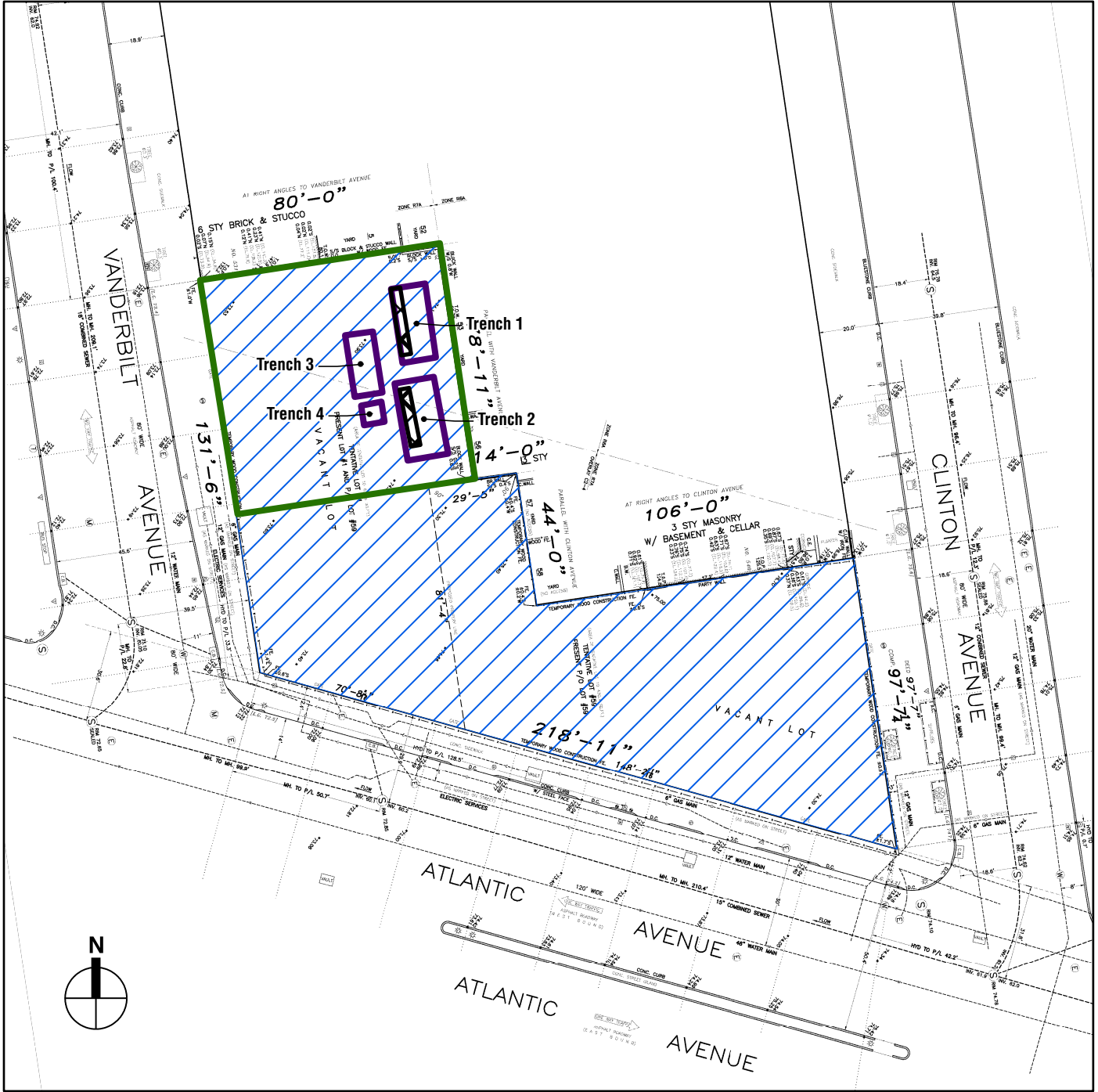
Figures



-  Development Site
-  Area of Archaeological Sensitivity
-  Tax Lot Boundary and Number


0 200 FEET





-  Development Site
-  Area of Archaeological Sensitivity
-  Phase 1B Trench
-  Recent Disturbance

0 50 FEET





The undisturbed eastern wall of Trench 1, showing excavation to a depth of nine feet 1



Looking north at Trench 2, excavated to a depth of nine feet 2



Looking south at foundation remains in Trench 3 3



Looking east at the southern end of Trench 3 (left) and the abandoned Trench 4 (right) 4