

37-16 Union Street Redevelopment

Block 4978, Lot 56

FLUSHING, QUEENS COUNTY, NEW YORK

Phase 1B Archaeological Investigation

Prepared for:

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Chapter 1:**Introduction and Project Background**

A. INTRODUCTION AND PROJECT DESCRIPTION

ZL Macedonia, LLC (the “Applicant”) has submitted an application to the New York City Board of Standards and Appeals (BSA) regarding the proposed development of a 14-story (with basement) building at 37-16 Union Street (Block 4978, Lot 46) in the Flushing neighborhood of Queens (see **Figure 1**). The proposed building exceeds the maximum allowable height permitted by current zoning, and the Applicant is requesting a special permit from the BSA. The project site is limited to the existing tax lot: Block 3978, Lot 46, which is owned by the Applicant. The site is bounded to the west by an easement and to the south by an easement representing the former line of 38th Avenue. Both easements are included within Block 3978, Lot 7503. The Applicant does not own or control Lot 7503 and, therefore, no project-related disturbance would occur outside the limits of Block 3978, Lot 46.

This investigation concluded that no human remains are present to the south or west of the extant foundation of the church that formerly stood on the project site.

B. ENVIRONMENTAL REVIEW AND RELEVANT LEGISLATION

As described in detail in the following section, in 2019, AKRF was retained by Lions Group NYC (d/b/a ZL Macedonia, LLC) to provide archaeological services on the project site. At that time, the project was determined to be as-of-right and was not subject to environmental review. The 2019 investigation resulted in the recovery of a secondary burial deposit beneath the foundation of the former Macedonia African Methodist Episcopal (AME) Church.

As part of BSA’s recent consideration of the application, consultation was initiated with the New York City Landmarks Preservation Commission (LPC) regarding the proposed project. In an environmental review comment letter dated September 12, 2023, LPC requested that an Archaeological Documentary Study of the site, which was formerly the location of a church cemetery be prepared (see **Figure 2**). Lions Group subsequently retained AKRF to assist with coordination with LPC and to provide background information regarding the archaeological study that was completed in 2019. AKRF submitted a copy of the 2019 technical report to LPC on September 19, 2023. In a subsequent environmental review comment letter issued on September 28, 2023, LPC concurred with the archaeological investigation and its findings. LPC also requested the following information: 1) information regarding the extent to which the site has been excavated since the conclusion of the archaeological investigation in 2019 and 2) information regarding what additional excavation will occur as part of the proposed project as submitted to BSA. AKRF submitted to LPC a memorandum outlining the requested information on October 3, 2023. In a comment letter dated October 11, 2023, LPC requested additional analysis to confirm what portions of the project site remain archaeologically sensitive. AKRF submitted a second memorandum on November 3, 2023 that contained the supplemental information, which is summarized below. In a comment letter issued on November 17, 2023, LPC concurred with the supplemental memoranda and requested the preparation of a Work Plan outlining the scope of work for archaeological monitoring in the areas of sensitivity.

The archaeological investigation and recovery of human remains on the project site were completed prior to the passage of the New York State Unmarked Burial Site Protection Act (NY EXEC § 171, the “Act”),

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which went into effect on August 1, 2023 and requires consultation with the New York State Archaeologist. Pursuant to the terms of the Act, the New York State Archaeologist was notified in advance of the start of the monitoring. As described later in this report, no human remains were observed during this Phase 1B Archaeological Investigation and as such, the Act did not apply.

C. IDENTIFICATION OF/CONSULTATION WITH THE DESCENDANT COMMUNITY

As stipulated in LPC’s *Guidelines for Archaeological Work in New York City*,¹ “For any project involving burial grounds, burials, or traditional cultural properties, a good faith effort must be made to identify the appropriate descendant entity” (LPC 2018: 15). The community can be represented by an institution (e.g., a successor church); a kinship network with genetic links to the burial population; or individuals with social or community ties to the burial population. As part of the 2019 archaeological investigation, the Macedonia AME Church acted the descendant community, represented by Reverend Dr. MacEachern. The church and the reverend continue to act as the descendant community for this investigation. As no human remains were encountered, no further consultation with the descendant community was necessary.

D. PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS OF THE PROJECT SITE**PREVIOUS PHASE 1A ARCHAEOLOGICAL DOCUMENTARY STUDIES AND ARCHAEOLOGICAL TESTING ALONG PERIMETER**

The history of the church was previously described in a Phase 1A Archaeological Documentary Study of the larger Flushing Commons project site (which included all of Block 4978) that was completed by Historical Perspectives, Inc. (HPI) in 1988. HPI subsequently prepared a supplemental study of the site in 2006. As documented by HPI (1988), the churchyard was established around the time of the church’s construction in 1837 and an estimated 200 individuals were interred in the churchyard before its closure in 1909. The former Macedonia AME Church was constructed on a 60- by 106-foot property in 1837 that was later expanded to include a maximum width of 75 feet. The current project site comprises only the eastern 50 feet of the original church property, the remaining western 25 feet of the original cemetery is located west of the project site in an easement developed with the paved public plaza to the west (within Block 4978, part of Lot 7503). The church property on Lot 46 measures approximately 105 by 110 feet and includes the footprint of the former church (the western approximately 60 feet) and a former gym that was constructed to the east of the church in the 1950s (the eastern portion of the site).

HPI (1988) determined that the initial church property as purchased in 1811 was 60 feet wide by 105 feet, with additional land purchases made later that expanded its width to 140 feet. A church was constructed on the property in 1837. The 1841 Smith map of Flushing depicts the “Zion Church” property fronting on Liberty Street (later 38th Avenue) and indicates that the cemetery lot measured 60 feet along its north and south sides; 103.3 feet on its west side; and 106.2 feet along its east side. The Smith map depicts a 15-foot-wide vacant lot owned by the “Baptist Society” to the east of the church parcel, which appears to have been later incorporated into the church property in 1929. The approximately 75- by 105-foot church parcel appears to be depicted on the 1903 Sanborn map. The current project site includes the eastern portion the historical churchyard, an area approximately 55 feet in width along what was formerly 38th Avenue. The remaining western 25 feet of the original cemetery is located west of the project site in an easement developed with a paved public plaza (within Block 4978, Lot 20). The proposed project would not result in

¹ <http://www.nyc.gov/html/lpc/downloads/pdf/pubs/ayguide.pdf>

subsurface disturbance outside the project site, including within the easement to the west or the demapped streetbed to the south.

In 1931, the original church was demolished and a new, larger church was constructed on the same parcel. In advance of the 1931 expansion of the church, remains within the churchyard were disinterred and reburied in a common grave located near the northern side of the project site. The 1940s tax photograph taken by the New York City Department of Finance depicts the expanded church fronting directly onto the former 38th Avenue with no visible traces of the former churchyard that surrounded the first building.¹ The eastern half of the project site was developed with various buildings until it was acquired by the church and redeveloped with a gymnasium facility in the 1950s (see **Figure 3**). There are no historical indications that the area of the gymnasium was utilized for burials. The gymnasium featured a deep basement that extended to a depth of more than 14 feet below the grade of Union Street to the east.

HPI's 1988 and 2006 investigations determined that the original church property was sensitive for human remains and that a 15-foot buffer zone surrounding the north, south, and west sides of the former cemetery could also be potentially sensitive for human remains that may have been interred outside the mapped boundaries of the cemetery. In 2011, AKRF completed a Phase 1B Archaeological Investigation of a portion of the buffer zone lining the northeastern quadrant of the historical churchyard as part of the construction of the Macedonia Plaza development to the north of the church. That study concluded that the cemetery did not extend to the north of the mapped cemetery boundary in the area tested.

2019 ARCHAEOLOGICAL WORK AND SUBSEQUENT EXCAVATION

In 2019, AKRF was retained by Lions Group NYC, working with Reverend Dr. Richard MacEachern, the pastor of the church, to locate and exhume the secondary burial deposit. Dr. MacEachern represented the descendant community as defined in the 2018 LPC *Guidelines for Archaeological Work in New York City*. Prior to the start of the 2019 archaeological investigation, the church was demolished down to its foundation slab. The burial deposit was located within a 4-foot by 4-foot area that was approximately 18 to 24 inches in depth and was found approximately 12 feet below the ground surface (3.5 feet below the depth of the former foundation slab). In total, more than 1,000 bones and bone fragments were removed from the deposit, which was heavily saturated with and contaminated by spilled diesel heating oil. The secondary burial deposit featured a dense concentration of remains and is believed to represent the human remains that were disinterred during the expansion of the church in 1930. Bioarchaeological analysis of the recovered human remains identified a minimum of 31 individuals. The remains were in a fair to poor state of preservation. Given the pervasive diesel oil contamination, it was determined that the remains could not be reburied in another cemetery. AKRF assisted with the cleaning of the remains for cremation in coordination with Dr. MacEachern, a funeral director, and the New York City Department of Health (NYCDOH). Hazardous materials services were provided by Action Hazmat and were not part of AKRF's services beyond limited monitoring provided by AKRF's Site Assessment and Remediation department to ensure the safety of AKRF's workers.

The archaeological investigation within the footprint of the former church did not identify human remains outside of the secondary burial deposit except for a small area of disturbed bone that was encountered several feet to the west in association with a series of pipes. This deposit was believed to have originated within the secondary burial deposit and was later disturbed during the installation of infrastructure. AKRF determined at that time that the disinterment and removal of burial deposits within the church footprint was thorough and complete throughout the church's interior as it was expanded. No additional remains are expected to be present within the footprint of the church as it existed in 1930 and in the location of a former

¹ <https://nycma.lunaimaging.com/luna/servlet/s/y688nm> and <https://nycma.lunaimaging.com/luna/servlet/s/6lqgs0>

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gymnasium to the east, where the basement extended several feet deeper than the adjacent church. However, the investigation concluded that documentary evidence suggests that additional graves were present at one time to the south of the church's former footprint, within the church's former front yard, and west of the church footprint, where the cemetery continued beneath what is now an adjacent property that would not be impacted by the proposed project.

Following the completion of the 2019 archaeological work and pursuant to the terms of the site's demolition permit, initial excavation within the footprint of the church building and adjacent gymnasium occurred within the limits of the foundation walls. The walls were required to be left in place per the terms of the demolition permit. The area within the interior of the former church footprint was excavated to depths of 6 to 14 feet below the former slab to recover the secondary burial deposit and confirm the absence of human remains elsewhere within the footprint (see **Figure 4**). Additional excavation occurred subsequent to the archaeological investigation as part of remediation activities and continued demolition. Following the completion of all excavation, the interior of the former church foundation was backfilled.

E. REVISED SENSITIVITY ASSESSMENT FOLLOWING 2019 EXCAVATION

HPI's 1988 study concluded that the entire original church property measuring 60 by 140 feet as well as a 15-foot-wide buffer zone to the north, west, and south (including a portion of the now de-mapped 38th Avenue) were sensitive for unmarked and undocumented graves containing human remains. This was reaffirmed by HPI's 2006 analysis of the site. Both studies indicated that it is less likely that intact graves would be encountered on the site given the extensive disturbance that occurred as a result of the reconstruction of the church in the 1930s, at which time human remains were reinterred in a single grave near the northern end of the church. The relocated human remains were recovered by AKRF in 2019.

As technology has advanced since the completion of both studies, an updated assessment of landscape modification on the site was completed as part of the completion of this memorandum. HPI's 1988 study included a copy of a 1911 topographical survey completed by the Queens Topographical Bureau and published as part of the "Final Maps of the Borough of Queens." The map appears to depict the topographical setting of the church yard prior to its excavation as part of the church reconstruction in the 1930s. The map identifies its datum as "mean high water" and it is assumed that the elevations are relative to the Queens Borough Datum (QBD).¹

The information from this survey was compared with modern topographical information obtained from Lidar information published by the City of New York in 2017—prior to the demolition of the church in 2019—and converted from the North American Vertical Datum of 1988 (NAVD88) to the QBD (New York City Department of Information Technology & Telecommunications 2019). The historical map indicates that the ground surface ca. 1911 sloped up to the southeast, with the northwest corner of the project site being at an elevation of approximately 52.5 feet QBD (54.1 feet NAVD88) and the southeast corner being at an elevation of more than 55 feet QBD (56.6 feet NAVD88). The current Lidar information indicates that as of 2017, the area's historical slope was altered as a result of the church's construction. However, the ground surface was at generally the same grade, with the northwest corner at an elevation of approximately 54.5 feet QBD (56.1 feet NAVD88) and the southeast corner at an elevation of 56.5 feet QBD (58.1 feet NAVD88). The foundation slab of the former church was located approximately 6.34 feet below grade, with the foundation walls likely extending to slightly greater depths. HPI's 1988 Phase 1A Study states that it is believed that excavation within the footprint extended an additional 4 to 5 feet below the slab. As such,

¹ The Queens Borough datum is located 1.625 feet below NAVD88. For example, an elevation of 10 feet above the Queens Borough Datum is 11.625 feet above NAVD88.

the construction of the church's foundation walls would have directly impacted the formal burial ground to a depth of at least 7 feet.

The eastern portion of the project site within the footprint of the former gymnasium is not considered archaeologically sensitive. The area within and below the footprint of the former church was archaeologically excavated in 2019 and human remains in that location were recovered at that time. The area within the remaining foundation walls is no longer considered to be sensitive for human remains. Given the extent to which the construction of the church disturbed the area and the documentation of the removal of remains in that area for interment in a single grave as recovered in 2019, it is not considered likely that intact graves remain within project site. However, areas that were not excavated as part of the 2019 archaeological investigation were determined to have low to moderate sensitivity for disarticulated human remains in disturbed contexts. These areas are depicted on **Figure 4**. Areas of sensitivity exist to the west and south of the project site as identified by HPI in 1988 and 2006; however, those areas would not be disturbed by the proposed project and are not part of the study area for this archaeological investigation.

F. PHASE 1B ARCHAEOLOGICAL WORK PLAN

Based on this revised sensitivity assessment, an Archaeological Work Plan ("Work Plan") summarizing the scope of work for the proposed archaeological investigation was prepared by AKRF in December 2023. LPC concurred with the Work Plan in a comment letter issued December 15, 2023 and requested that the Work Plan be submitted to the New York State Archaeologist, Christina Rieth, PhD, for review pursuant to the Act. Dr. Rieth concurred with the Work Plan in an email issued December 21, 2023.

It was initially assumed that the archaeological investigation would be completed during active construction and that because of the foundation remnant, the investigation would involve monitoring rather than testing. However, the archaeological work was able to be completed prior to the start of construction and involved more localized excavation completed for the sole purpose of the archaeological investigation. The monitoring of this excavation was completed in a manner consistent with that outlined in the Work Plan.

G. CURRENT SITE CONDITIONS

Following the completion of archaeological investigation and the remediation of hazardous materials on the site in 2019, the excavated area within the existing foundation remnants of the church and the gymnasium were backfilled. At the time of the archaeological testing completed as part of this investigation, the ground surface of the backfilled project site sloped downward slightly to the west. The eastern side of the project site was situated at the same elevation of Union Street to the west while the ground surface in the western portion of the project site was approximately 3 feet lower in elevation. Extant foundation walls protruding above the ground surface along the northern and part of the western sides of the project site were used to estimate the ground surface elevation and were used as landmarks while testing locations were measured out.

Chapter 2:

Research Design and Field Methodology

A. INTRODUCTION

The Phase 1B Archaeological Investigation of the project site was completed on January 23, 2024. 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. 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

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). The previous archaeological investigation confirmed the presence of human remains within the secondary burial location and a small nearby disturbed area. No intact graves or disarticulated remains were documented elsewhere within the former church footprint or in the location of the adjacent gymnasium building.

This section outlines the project goals and basic research questions that could be used to interpret any recovered human remains and associated funerary artifacts associated with burial (e.g., shroud pins, coffin nails or other hardware, or coffin fragments) or with funerary offerings/grave goods that may have been interred with the deceased.

The goals of this archaeological investigation were to (1) document the subsurface conditions of the project site to determine the presence or absence of human remains; (2) to determine if any observed human remains are in the form of intact graves or disarticulated/redeposited human skeletal elements; (3) to document any intact or partially intact burials, and (4) to recover remains encountered during excavation for later reburial or cremation in accordance with the descendant community's wishes.

In the event that human remains and associated funerary artifacts had been encountered, they might have yielded significant archaeological data. The approved Work Plan identified the following research questions that could have been addressed in the event that human remains were encountered:

1. What is the history of the burial ground's use in the 19th and 20th centuries? What were the funerary customs at this cemetery and how did they change over time?
2. What were the demographics and lifeways of the burial population and how do they compare to published information regarding other contemporary cemeteries?

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

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

As no additional human remains were encountered, these research questions were not addressed as part of this investigation.

C. FIELD AND ANALYTICAL METHODS

As described previously, this Phase 1B Archaeological Investigation was designed to confirm the presence or absence of archaeological resources of human remains to determine if additional fieldwork would be required to further document human remains on the project site. 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

All excavation completed in association with this archaeological investigation occurred within areas of archaeological sensitivity as depicted on **Figure 4**. As described previously, the excavation was completed in advance of construction and as such, only the areas of sensitivity were excavated as part of this investigation. No soils were excavated within the former church foundation, including the areas where the secondary burial deposit was recovered in 2019. The area of sensitivity in the extreme northwestern corner of the project site could not be tested because of obstructions associated with the extant foundation wall along the northern and eastern sides as well as the presence of utilities and the location of the property boundary along the western side. However, this area of sensitivity was the narrowest and most disturbed by the construction of the existing foundation and given the observations made in the areas to the south, it is no longer considered to be archaeologically sensitive.

The subsurface investigation consisted of the excavation of the areas of sensitivity south and west of the church foundation using a mechanical excavator. As no historical ground surfaces or soils potentially containing human remains, suspected human remains, or other archaeological features/artifact deposits were observed, hand-excavation of shovel test pits (STPs) or testing units was not required. Backhoe operation and related services were provided by Mandarin Enterprise. Using site plans and the Work Plan, the areas of sensitivity were measured out and marked relative to existing fences and buildings around the project site's perimeter. Where possible, the extant foundation walls were used as a landmark to guide the excavation. The areas of sensitivity were excavated first moving east to west along what was historically the church's front yard; then along the western side of the foundation; and finally in a small pocket between the historical foundations of the church and the gymnasium. The archaeologist did not enter any unshored trenches deeper than 5 feet pursuant to the terms of the Health and Safety Plan included in the Work Plan. When the excavations were less than 5 feet in depth, the monitoring archaeologist periodically entered the trench to shovel skim the soils and make observations when soil color changes were observed. For excavation at greater depths, the archaeological monitor was positioned in an area that provided a view of both the interior of the excavation as well as the backdirt pile. The stockpiled backdirt was periodically examined using a trowel.

Each area was excavated to a depth of 10 feet below the ground surface, or approximately 45 to 48 feet NAVD88. No historical artifacts were observed and no artifacts were collected during the investigation. As such, no laboratory analysis was necessary,

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>

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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. 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 using standard nomenclature and established using measuring tapes. All on-site testing was recorded relative to the datum of the ground surface of Union Street near the construction site entrance and converted to the North American Vertical Datum of 1988 (NAVD88) based on Lidar information collected in 2017 and published by the City of New York in 2019. The on-site datum was approximately 58 feet NAVD88 and the extant foundation walls were used to measure the uneven ground surface in the western portion of the site relative to the on-site datum. The North American Datum of 1983 (NAD83) was used as a permanent horizontal datum.

A. INTRODUCTION

As described previously, three of the four areas of archaeological sensitivity were entirely or partially excavated to a depth of 10 feet below the ground surface as part of this Phase 1B Archaeological Investigation (see **Figure 4**). Where possible, the extant foundation walls were used as a guide during the excavation. As described previously, because of the proximity of the property boundary to the extant foundation walls, the extreme northwestern corner of the project site could not be excavated. However, the observations of conditions adjacent to the foundation that were made elsewhere throughout the site suggest that the small area outside the foundation at the northwestern corner of the project site was likely disturbed during the construction of the foundation and is therefore not archaeologically sensitive. No evidence of human remains or possible grave shafts was observed in any of the areas excavated.

B. AREA SOUTHEAST OF CHURCH FOUNDATION

The former front yard of the church to the east of its main entrance was excavated between the foundation wall of the gymnasium to the east and the former church stairs to the west (see **Photographs 1 and 2** on **Figure 5**). This area represents the largest portion of the project site that was not disturbed by the construction of the church foundation. The excavated area measured approximately 23 feet in length and at least 7 feet in width and foundation walls were observed in the western and eastern ends. An approximately 3-foot-thick layer of debris and rubble was observed across the entire area. Below that depth was dark yellowish brown (10YR4/6) silty sand that appeared consistent with undisturbed glacial till. Excavation continued to a depth of 10 feet below the ground surface, at which point similar dark yellowish brown (10YR3/6) slightly silty coarse sand with rocks and cobbles was observed. The soils below the upper layer of fill all appeared natural and did not contain artifacts or refuse and were consistent across the full length of the area tested.

C. AREA SOUTHWEST OF CHURCH FOUNDATION

In the area to the south of the church west of the church's main entrance stairs, nearly the entire front yard of the church was excavated (see **Photographs 3 and 4** on **Figure 6**). A 3-foot-thick layer of demolition debris and rubble was once again observed. Soils in this area were similar to those seen to the east, with a greater amount of rubble observed in the north wall closer to the former church foundation, which was exposed in the northern and eastern walls of the excavation. Remnants of a paved asphalt surface and possibly remnants of the adjacent sidewalk of what was formerly 38th Avenue were visible in the southern wall 1 to 2 feet below the ground surface. The majority of this area was previously disturbed by the installation of a large underground storage tank that appeared to extend to a depth of at least 7 to 8 feet below the ground surface between the church foundation and the former northern line of 38th Avenue. Excavation was terminated in the vicinity of the tank. To the east, the area was excavated to a depth of 10 feet, where dark yellowish brown (10YR4/4) coarse, damp silty sand was observed.

D. AREA WEST OF CHURCH FOUNDATION

Excavation occurred in a 3- to 5-foot wide area along the western side of the former church foundation, which was visible in the eastern wall of the excavation at a depth of up to 6 feet below the ground surface (see **Photographs 5 and 6** on **Figure 7**). The southern and northern ends of this area of sensitivity were excavated as part of this Phase 1B Archaeological Investigation. Much of this area contained demolition debris and rubble, especially in those areas adjacent to the foundation wall and in the vicinity of the area where stairs originally led to the church basement. West of the southwest corner of the church, yellowish brown (10YR5/6) silty sand was observed at a depth of 3 feet below the layer of rubble. At a depth of 10 feet, dark yellowish brown (10YR4/4) coarse, damp silty sand was observed. Near the northwest corner of the former church, soils were stained and disturbed to a depth of at least 10 feet in the vicinity of the former basement stairs. To the south of the stairs, soils were clean and natural, with dark yellowish brown (10YR3/6) coarse damp slightly silty sand with rocks and gravel observed at a depth of 10 feet below the ground surface.

E. AREA BETWEEN GYMNASIUM AND CHURCH FOUNDATION

A portion of the small area formed between the former church and gymnasium foundations was excavated as part of this investigation and the gymnasium's foundation walls were observed in the eastern and southern walls of the excavation (see **Photographs 7 and 8** on **Figure 8**). Extensive demolition debris was observed in this area and rubble was densest adjacent to the former gymnasium foundation. Cleaner, more natural-looking soils were observed in the western half of this excavation. Dark yellowish brown (10YR4/6) coarse silty sand was observed at a depth of 10 feet below the ground surface.

Chapter 4:

Conclusions and Recommendations

A. CONCLUSIONS

None of the areas excavated for this Phase 1B Archaeological Investigation exhibited evidence of additional human remains—in the form of disarticulated or intact graves—or of grave shafts. In the former front yard areas to the south of the church, a consistent approximately 3-foot-thick layer of demolition debris was observed beneath ground surface. Beneath that was a layer of seemingly natural dark yellowish brown silty sand with rocks and cobbles, consistent with glacial till and subsoils in this area. A disturbed area obstructed by an underground storage tank was observed near the southwest corner of the church. Testing along the western side of the foundation documented disturbed soils adjacent to the foundation. Finally, testing in a small area formed between the historical foundations of the church and the gymnasium documented extensive disturbance adjacent to the gymnasium foundation to the east and more natural looking soils adjacent to the church foundation to the west.

No remaining traces of the cemetery was observed in any of the areas excavated and no artifacts were observed within any of the monitored soils. Given the extent of landscape modification observed in the trenches, the likelihood of the site containing intact graves/human remains beyond those collected from the secondary deposit in 2019 is low. It therefore appears that the disinterment completed in 1930s was done with care by the church and care was taken to ensure that all remains were removed from the area later disturbed by the expansion of the church.

B. RECOMMENDATIONS

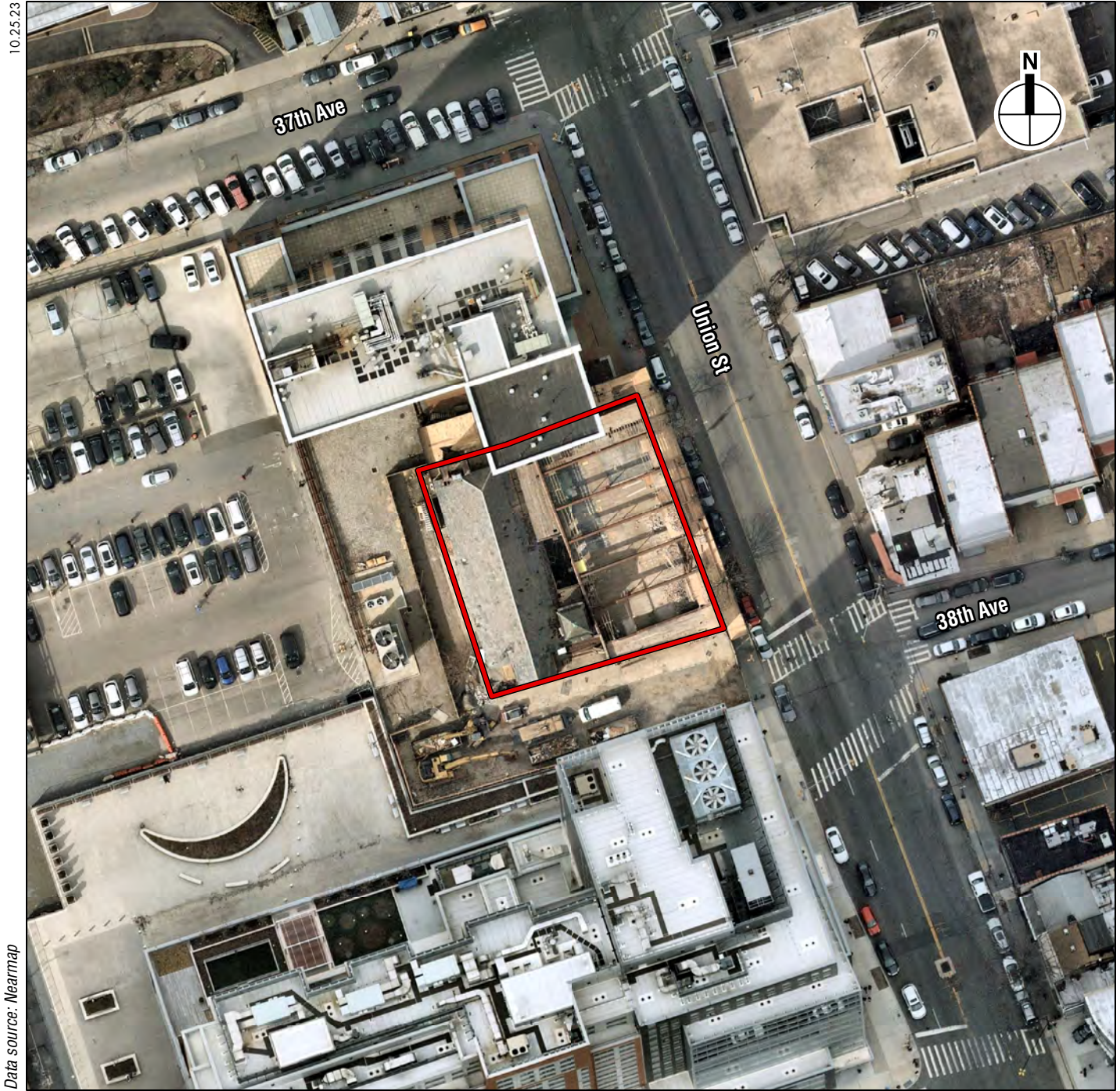
All human remains formerly interred in the secondary deposit within the church foundation were exhumed by archaeologists in 2019. This investigation concludes that human remains or graves are not expected to be located outside the church foundation within the project site. That portion of the historical cemetery now situated to the west of the project site remains sensitive for human remains, but would not be impacted by the project. In the event that additional human remains are encountered during construction, the Plan for the Discovery of Human Remains included as **Appendix A** will be implemented. The Plan for the Discovery of Human Remains is a version of the Human Remains Discovery Plan that was included within the approved Phase 1B Work Plan. Whereas the previous plan addressed the potential discovery of human remains during the archaeological investigation, the Plan included in **Appendix A** addresses outlines the steps that must be taken in the event that human remains are unexpectedly encountered during the construction of the project, when archaeologists are not expected to be present on site.

References

- AKRF
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Figures

10.25.23

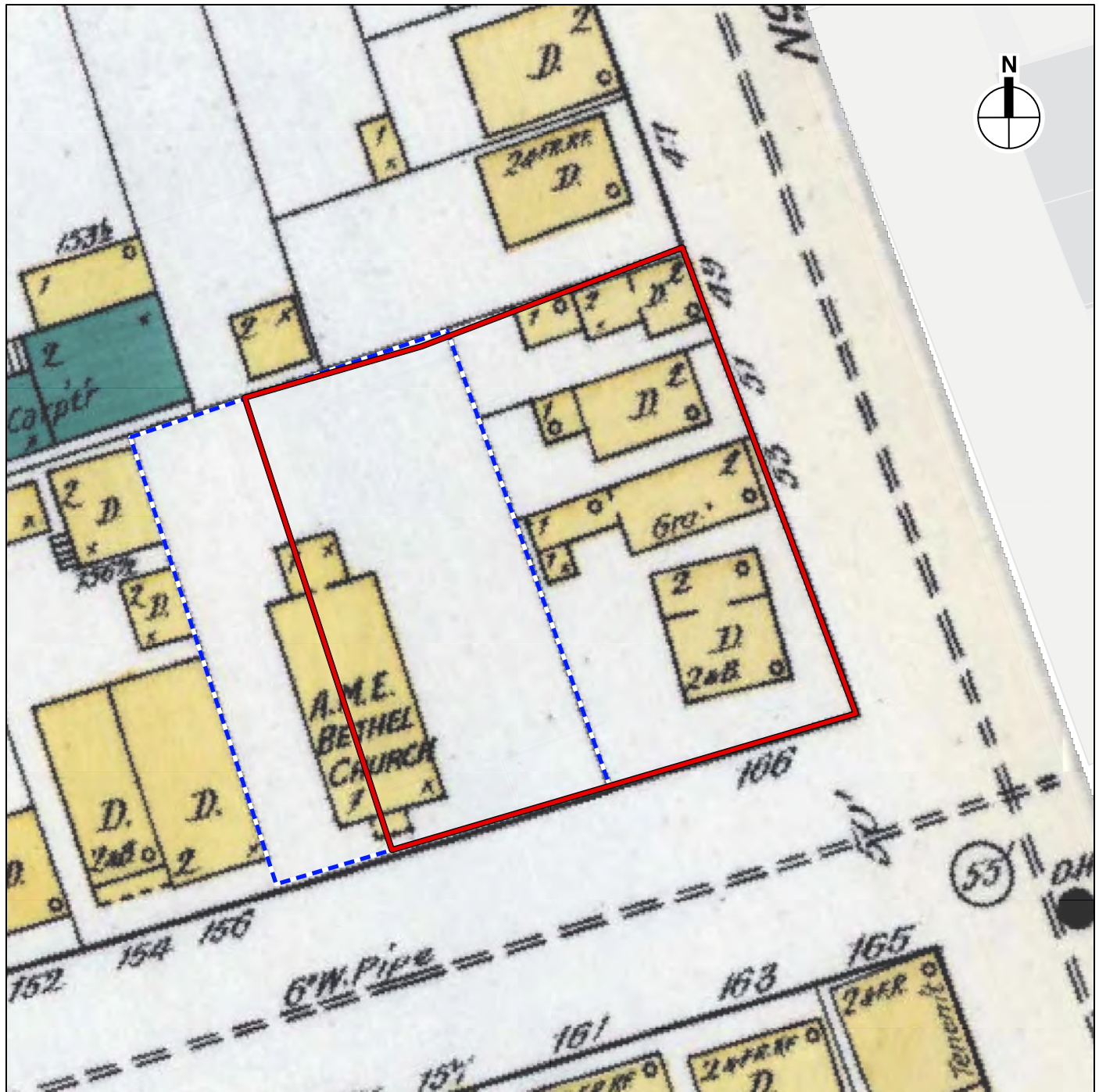


Data source: Nearmap

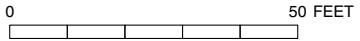
 Project Site

0  100 FEET

10.25.23



- Project Site
- Original Churchyard Boundary



2.6.24

Source: Nearmap (image taken September 2023)



- Project Site
- Original Churchyard Boundary
- Archaeologically Sensitive Areas Recommended for Monitoring
- Disturbed Area/Not Archaeologically Sensitive
- Excavated Area

0 50 FEET

Archaeological Sensitivity and Testing Locations

2.6.24



Looking east at the excavation in the southeast yard of the church, showing natural soils emerging approximately 3 feet below a layer of rubble 1



Same view after excavation to a depth of 10 feet below the ground surface 2

2.6.24



Looking northwest across the excavation at the southwest corner of the former church, showing the utility obstruction in the center and natural soils to the east (bottom right) and north (top right) **3**



View north along the western side of the west wall of the church foundation (visible in the right wall) from a point near the southwest corner of the former church **4**

2.6.24



Looking south at the excavation along the western wall of the former church (at right)

5



Looking southeast at the former foundation wall, showing disturbed soils adjacent to the wall

6

2.6.24



View south of the excavation between the foundations of the former church and gymnasium, with foundation walls visible in the east (left) and south (top) walls of the excavation 7



Looking in the opposite direction, showing more natural soils in the base of the excavation and along the western side 8

Appendix A: Plan for the Discovery of Human Remains

Plan for the Discovery of Human Remains During Construction

In the event of the discovery of human remains or suspected human remains during the construction of the project:

1. The Contractor¹ will stop work immediately in the area of the find to protect the integrity of the find. The location of the find will be flagged or fenced to ensure the safety of the human remains and to avoid potential damage to the remains. At all times human remains or suspected human remains must be treated with the utmost dignity and respect.
2. The Contractor will immediately notify Lions Group and Lions Group will notify the Archaeological Consultant (AKRF) of the find. Notification will include: specific location of discovery within the disturbed area of the work site; the nature of the discovery; and photographs of the remains or suspected remains. The Contractor will not restart work in the area of the find until Lions Group has granted clearance.
3. If the archaeological consultant determines the remains are human or if the find is ambiguous, the Contractor will call 911 as required by New York City law. Local law enforcement will notify the Office of the Chief Medical Examiner (OCME). The Archaeological Consultant will also contact and cooperate with OCME to notify, as required, any additional law enforcement agencies or parties that would need to be alerted, as appropriate.

OCME Contact: Dr. Bradley Adams, Forensic Anthropologist
Telephone: Primary: 212.447.2030; Secondary: 718.804.8050
Address: 520 First Avenue, New York, New York 10016
E-mail: badams@ocme.nyc.gov

4. Lions Group will notify Reverend Richard McEachern of the Macedonia AME Church, who represents the descendant community. The Archaeological Consultant will immediately notify the New York State Archaeologist and LPC of the find if neither have been notified by OCME; the contacts for LPC and the State Archaeologist are listed below:

LPC Contact: Amanda Sutphin; Director of Archaeology
Telephone: (212) 602-6353
Address: New York City Landmarks Preservation Commission
 1 Centre Street, 9th Floor, New York, NY 10007
E-mail: asutphin@lpc.nyc.gov

State Archaeologist: Dr. Christina Rieth
Telephone: 518-402-5975
Address: New York State Museum Cultural Education Center 222
 Madison Avenue Albany, NY 12230
E-mail: christina.rieth@nysed.gov

¹ As a result of the contractor training process, an appropriate individual (e.g., the site foreperson) will be identified to serve as the role of the Contractor as defined in this protocol.

Appendix A: Plan for the Discovery of Human Remains During Construction

5. If OCME/NYPD determine that they have no concerns for the remains (e.g., the site is not designated a crime scene), Lions Group will direct the Archaeological Consultant to begin a more detailed archaeological assessment of the find's significance/physical extent.
6. While unlikely given the site's use as a historic period cemetery, if the human remains are determined to be of Native American origin, all remains and any associated funerary objects will be left in place and protected from further disturbance until consultation with indigenous Nations can be initiated pursuant to the Native American Graves Protection and Repatriation Act (NAGPRA) in consultation with LPC and the State Archaeologist. Any requests made by the Indigenous Nations that represent Queens County regarding the treatment of the remains—including reburial or requested offerings—will be honored.
7. If it is determined that intact interments or disarticulated human remains dating to the historic period are present and the remains are disarticulated, the Archaeological Consultant will collect the bone(s) or bone fragment and will package the remains on site for temporary storage in a secure on-site location. Documentation of the location of the recovery area will be written on the bag in which the remains are placed. Excavation will not resume until the archaeologist has cleared the immediate area of all disarticulated remains.
8. If it is determined that intact interments are present, excavation will terminate in that location and remains will be left in place and protected from further disturbance. The Archaeological Consultant will notify the descendant community, the New York State Archaeologist, and LPC regarding avoidance or exhumation of the grave(s). Specific measures may include:
 - Formal archaeological evaluation of the location of the intact burial;
 - Visits to the site by the State Archaeologist, LPC, the descendant community, and other parties as appropriate;
 - Approval to resume excavation following completion of fieldwork.
9. If determined necessary, a funeral director will be retained by Lions Group. As required by City Law, the funeral director will apply for a disinterment permit from the New York City Department of Health (NYCDOH) before human remains are removed from the project site. In the event that NYCDOH is unresponsive in the attempt to secure required permits, LPC will be consulted regarding next steps.
10. Work will not resume on the project site until authorized by the New York State Archaeologist and LPC and, in the event that intact graves are encountered, in conjunction with the implementation of a mitigation plan approved by the descendant community.