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July 14, 2017

Mr. Philip Perazio
NYS Office of Parks, Recreation and Historic Preservation
Division for Historic Preservation
Peebles Island, PO Box 189
Waterford, NY 12188

Re: End of Phase 1B Fieldwork: Proposed Pre-K at 168 8th Street, Brooklyn, NY (16PR03021)

Dear Mr. Perazio:

As you are aware, the New York City School Construction Authority (SCA) proposes to construct a new, approximately 180-seat Pre-Kindergarten Center at 168 8th Street in the Gowanus neighborhood of Brooklyn, Kings County, NY (OPRHP Review number 16PR03021). The site, located on Block 1003, Lot 11, is currently a vacant lot, located on the block bounded by 9th Street to the south, 8th Street to the north, 4th Avenue to the east, and 3rd Avenue to the west (see **Figure 1**). The 13,500-square-foot project site has been vacant since the early 1990s and is currently covered with a thick, reinforced concrete slab that has been patched with asphalt in places.

The Phase 1B Archaeological Investigation of the project site involved the excavation of eight large trenches: four 20-foot-square trenches and four rectangular trenches measuring 10 feet in width and between 40 and 60 feet in length (see **Figure 2**). All or at least a portion of each trench was excavated to the depth of clean subsoil deposits that pre-date the human occupation of the region. Each trench was stepped to ensure worker safety and to prevent the collapse of trench walls. As such, a smaller area within each trench was selected for very deep excavation and the maximum depth was not reached across the entire trench. However, a sufficient portion of each trench was excavated to the maximum depth to observe and document soil stratigraphy and to identify features or evidence of past excavations. In addition, the slab across the northern half of the site was approximately 16 inches lower than the slab in the southern half of the site. The maximum depth of each trench ranged from 7.5 to 14 feet below ground surface. The testing was completed in accordance with the Phase 1B Archaeological Testing Protocol prepared by AKRF in February 2017 and approved by OPRHP in a comment letter dated March 15, 2017. The trenches were in the general location of the trenches as identified in the testing protocol although some locations were modified based on observations made in the field. Trenches in the southern half of the project site were shifted to the west because of newly observed disturbance along the eastern half of the site.

RESULTS OF THE PHASE 1B ARCHAEOLOGICAL INVESTIGATION

As described in the testing protocol, the Phase 1A Archaeological Documentary Study of the project site prepared by AKRF in November 2016 determined that the project site possessed moderate sensitivity for domestic shaft features associated with the 19th century occupation of the project site. The Phase 1A also determined that the project site—which has been identified by local community groups as a possible location for a mass grave associated with the Battle of Brooklyn in 1776—was not expected to be sensitive for human remains but that the project site's use as a burial location could not be ruled out. As such, the testing strategy was designed to confirm the presence or absence of 19th century shaft features or human remains on the project site. The preliminary results of the Phase 1B investigation are summarized in greater detail in the enclosed Phase 2 Archaeological Survey/Evaluation Testing Protocol and are summarized in **Table 1** and depicted in **Figure 2** and in **Photographs 1** through **12**.

Table 1
Preliminary Results of Phase 1B Investigation

Trench	Length (in feet)	Width (in feet)	Maximum Depth (in feet)	Observations
1	50	10	7.5	Extensive disturbance observed across much of the trench; brick foundation walls observed that appear to be associated with the late-19th century ink factory formerly located in the northwest corner of the project site (see **Figure 3**). An additional concrete wall was observed at the eastern end of the trench and disturbance associated with subsurface utilities was observed across much of the western end of the trench (see **Photograph 1**).
2	20	20	8	Additional foundation walls apparently associated with the ink factory were observed; a paved blue stone floor was observed to the south of/outside the factory's southern wall. An 8-inch metal floor drain was set into the blue stone that led to a network of metal pipes that ran underneath the floor surface (see **Photograph 2**). A small amount of petroleum-contaminated soil was observed at the corner of two brick walls within the former ink factory basement.
3	55	10	10	Additional brick walls, many subsurface utility lines, and a third concrete slab were encountered in the eastern half of the trench. The western half of the trench appeared to be less disturbed and two 6-inch-square wood fence posts were observed that appeared to be aligned with similar posts observed in Trench 4 (see **Photographs 3** and **4**). A dense concentration of 19th century artifacts was observed in the southeast corner of the trench that continued into Trench 4 immediately to the south. The artifacts did not appear to be associated with a feature. A square shovel test pit (STP3-1) was excavated through this concentration in the southwest corner of Trench 3.
4	20	20	8	Trench 4 exhibited little disturbance, though no features were encountered. Additional square wood posts were observed in addition to the dense artifact concentration noted above (see **Photographs 5** and **6**).

Table 1
Preliminary Results of Phase 1B Investigation

Trench	Length (in feet)	Width (in feet)	Maximum Depth (in feet)	Observations
5	57	10	12.5	The western end of Trench 5 appeared to contain an intact buried ground surface that was disrupted by a shallow, rectangular excavation (approximately 4 feet in width) that had been re-filled with an ashy fill (see **Photograph 7**). Three STPs were excavated in this area, one west of the ashy fill (STP 5-2), one within the fill layer (STP 5-1), and one to the east (STP 5-3). The ash layer appeared to be less than one foot in thickness and was immediately over a possible buried ground surface. Clean, undisturbed subsoil was observed in all three STPs at a depth of 8 to 26 inches below the top of the STP (which were opened 3 feet below the ground surface). Evidence of a deep (12-foot) refilled trench was observed in the northern wall of the eastern half of Trench 5. The previous excavation was backfilled with mixed soils and very large boulders and appears to be associated with the construction of a concrete support column that was observed within the northern wall of the trench. At the eastern end of the trench, a large brick cistern and a stone well consistent with 19th century shaft features were encountered (see **Photograph 8**). The features appeared to be filled with ashy material and were reburied pending a Phase 2 archaeological evaluation.
6	20	20	6 to 9 (impeded by tank and large boulders)	The eastern half of Trench 6 was extensively disturbed by the installation of a fuel oil tank, the top of which was encountered at a depth of approximately 6 feet beneath the ground surface. Disturbance in the western half of the trench was also observed in association with the construction of two additional concrete support footings although isolated areas of potentially natural soils were also observed (see **Photograph 9**).
7	20	20	10	The brick foundation walls of the western wing of the 19th century house that formerly stood on the project site were observed near the southern and western walls of Trench 7 (see **Photograph 10**). The remnant of a poured concrete floor was observed and the floor appeared to have been underlain by a thin layer of ashy fill containing what appeared to be 19th century artifacts. The ashy layer was on top of clean subsoil.
8	40	10	10.5	The western two-thirds of Trench 8 appeared to have been extensively disturbed by the installation of utility lines and gasoline tanks (see **Photograph 11**). Disturbed portions of brick walls likely representing the front wall of the 19th century home were observed in the southern portion of the trench (see **Photograph 12**).

Note: Each trench was stepped to ensure worker safety and to prevent the collapse of trench walls. As such, a smaller area within each trench was selected for very deep excavation and the maximum depth was not reached across the entire trench. However, a sufficient portion of each trench was excavated to the maximum depth to observe and document soil stratigraphy and to identify features or evidence of past excavations. In addition, the slab across the northern half of the site was approximately 16 inches lower than the slab in the southern half of the site.

EVIDENCE OF DISTURBANCE ACROSS THE PROJECT SITE

Evidence of both historic and modern disturbance was observed during the course of the Phase 1B investigation. A new building was recently constructed immediately to the east of the project site along 9th Street and basement excavation associated with the construction of that building extended onto the eastern side of the project site and an area of disturbance extending at least 10 feet west of the new building was observed on the project site. Extensive disturbance associated with the construction of an automobile garage across the site in 1917 and the conversion of the building into a factory in the mid-20th century was also seen in each of the eight trenches. A second concrete slab, presumably representing the floor surface of the garage, was observed underneath the at-grade slab that covers the project site in its entirety. A vast network of pipes, fuel oil tanks, and gasoline tanks was observed beneath these two slabs. At least three underground storage tanks were observed in the southern half of the project site that were

not previously detected during a non-invasive geophysical survey that was conducted as part of a Phase II Environmental Site Investigation of the project site completed by TRC Engineers, Inc. in 2013. The lack of success of the geophysical study to detect large tanks was likely due to the presence of significant quantities of metal within and immediately beneath the two slabs covering the site. As shown in Figure 2, the majority of utility-related disturbance across the entire project site and utility- and tank-related disturbance was observed in the southern half of the project site.

DOCUMENTATION OF 19TH CENTURY FEATURES AND GROUND SURFACES

Despite extensive modern disturbance, numerous features and intact ground surfaces associated with the 19th century occupation of the project site were encountered and documented, including one brick cistern and one stone well. As seen on the 1888 Sanborn map, the southern half of the project site was developed with a brick dwelling and the northern half was developed with an ink factory (see **Figure 3**). The home and factory were owned between 1885 and 1906 by John Gianella, a Swiss-Italian ink manufacturer, and his brother-in-law, Charles M. Higgins. The buildings in the northern half of the property were modified and redeveloped in the late-19th and early 20th centuries before all of the buildings were demolished and the site was redeveloped with a gas station in 1917.

The brick foundation walls and blue stone paved floor appear to be associated with the ink factory buildings that were present on the site in the late-19th century as seen on historic maps. Maps indicate that the eastern portion of the northern half of the project site was redeveloped with a brick building between 1908 and 1916 and the additional concrete slabs and foundation walls observed in the eastern portions of Trenches 1 and 3 appear to be associated with that building. The wooden piles may be associated with a small iron-framed wood building located to the southwest of the ink factory as seen only on the 1898 Hyde map of Brooklyn; all other maps depict that portion of the project site as undeveloped. The brick cistern and stone well observed in the eastern portion of Trench 5 confirm the presence of an intact 19th century backyard area and the western end of Trench 5 and the brick foundation walls in Trench 7 confirm that the 19th century ground surface is still partially intact and that it is situated immediately above clean subsoil. A Phase 2 Archaeological Evaluation of the brick cistern and stone well is recommended as described below.

CONFIRMATION OF ABSENCE OF HUMAN REMAINS ON THE PROJECT SITE

No evidence of human remains or grave shafts was observed in any of the eight trenches, which constitute a significant sample of the project site. While analysis is still on-going, no features or artifact deposits clearly dating to the 18th century or associated with military activity were observed. It is therefore exceedingly unlikely that intact 18th century archaeological sites or human remains are located on the project site. In addition, there was no evidence that the site is covered with extensive fill deposits and as such, it is not likely that 18th century archaeological sites would be located at greater depths.

RECOMMENDATIONS FOR PHASE 2 EVALUATION OF 19TH CENTURY SHAFT FEATURES

As mentioned previously, a Phase 2 evaluation of the area surrounding the brick cistern and stone well observed at the eastern end of Trench 5 is recommended. It is expected that the Phase 2 evaluation of the features observed at the eastern end of Trench 5 will effectively serve as a data recovery to mitigate the unavoidable adverse effects of the proposed action. The Phase 2 evaluation/data recovery will result in the collection of a large sample of the data associated with the features. In addition, the Phase 2 evaluation will require the opening of a large area around the features, exposing a greater portion of the seemingly intact ground surface, which could expose additional features. Laboratory processing of recovered artifacts will be initiated following the completion of the Phase 2 survey and a detailed Phase 1B/Phase 2 technical report will be prepared (a stand-alone Phase 1B report is not proposed at this time). The final report will document all methodologies used during the course of the Phase 1B and Phase 2 archaeological investigations and will discuss all findings that emerged from the recovered data, as well as maps, plans, drawings, photographs, and/or other relevant images as needed to illustrate project

findings. The report will include a site map showing the location of all resources identified (see **Figure 2**), as well as a complete inventory of the artifacts. Finally, the report will include extensive analysis of the artifacts collected during the archaeological investigation, a comparison of the assemblage with nearby sites where similar features were investigated and will incorporate documentary research from the Phase 1A study.

No additional archaeological investigation is recommended for the remainder of the site, which was sufficiently sampled as part of the Phase 1B archaeological investigation. Pending the completion of the Phase 2 evaluations/Data Recovery and OPRHP's acceptance of the final technical report, the project will have no adverse impacts on archaeological resources.

Thank you for your assistance with this matter. If you have any questions, please do not hesitate to contact me at emeade@akrf.com or by telephone at (646) 388-9811.

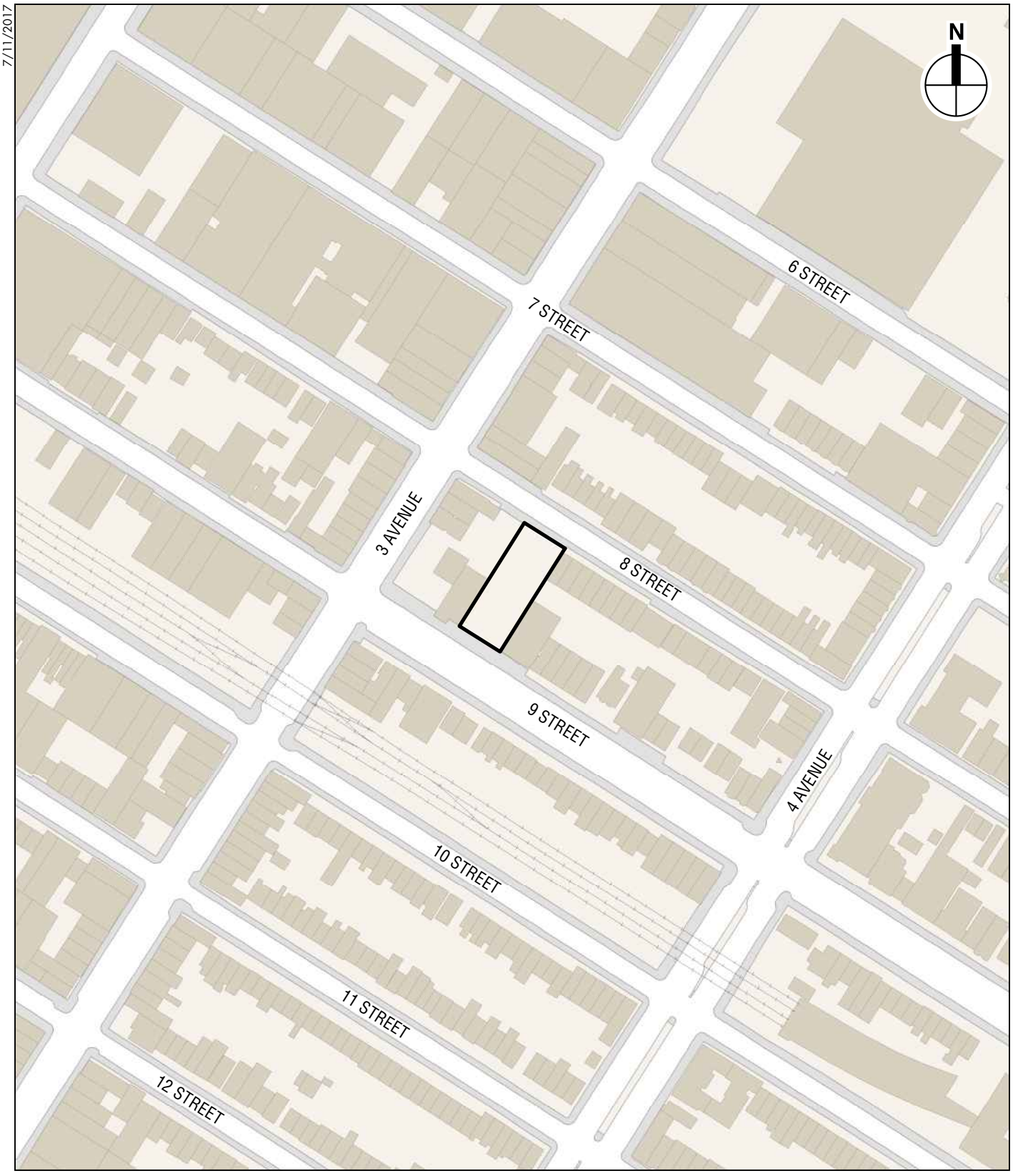
Sincerely,

Elizabeth D. Meade, RPA
Technical Director/Archaeologist

cc:
Kelly Murphy, SCA
Keri Cibelli, AKRF

Attachments:
Figure 1
Figure 2
Figure 3
Photographs 1 through 12

7/11/2017



Project Site

0 200 FEET

SCA: 168 8th Street, Brooklyn

Project Location
Figure 1

7.14.17

8TH STREET

9TH STREET

area disturbed by recent basement excavation on adjoining property

concrete wall
brick wall
STP 1-1
brick wall
disturbed area with large pipes

TRENCH ONE

concrete foundation underbrick wall
brick wall
brick wall
paved blue stone floor
8" floor drain
disturbed area with large pipes

TRENCH TWO

thick concrete
brick wall
disturbed area with multiple pipes
brick wall
6" square wooden posts
approximate area of artifact concentration
STP 3-1

TRENCH THREE

TRENCH FOUR

site elevation change

overburden
brick cistern with ashy fill
stone well
concrete footer
deep disturbance in north wall
ashy fill
STP 5-3
STP 5-1
STP 5-2

TRENCH FIVE

disturbed by fuel oil tank
concrete footer
possibly natural soils
concrete footer
disturbed fill

TRENCH SIX

ashy layer with artifacts
remnant of 1"-thick poured concrete floor
brick foundation wall

TRENCH SEVEN

fuel oil pipe
brick wall segment
pipe
concrete footer
disturbed by gasoline tanks
disturbed brick wall remnant

TRENCH EIGHT

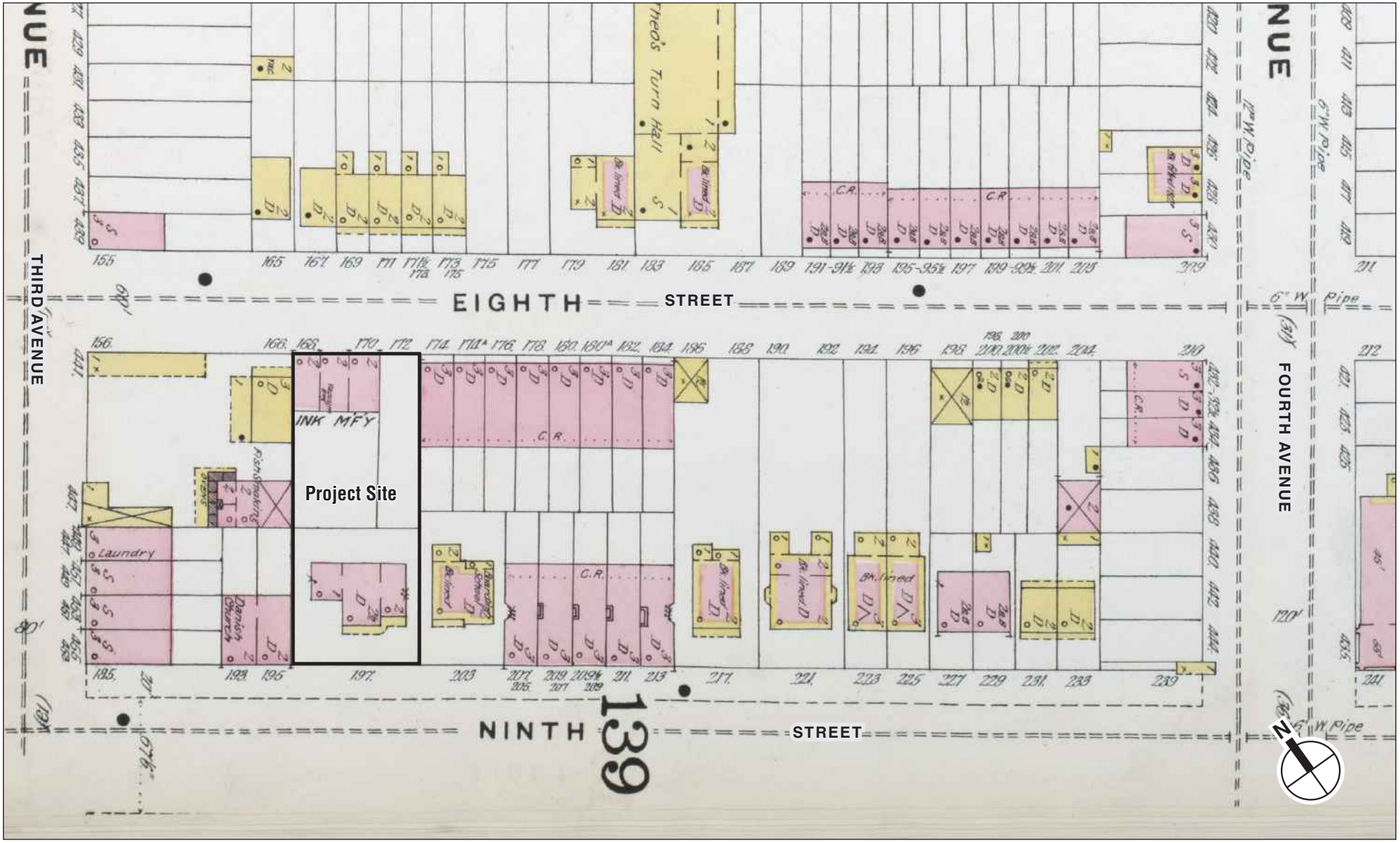
N

0 50 FEET

SCA: 168 8th Street, Brooklyn

Excavation Site Plan
Figure 2

7.11.17



1888 Sanborn Map

SCA: 168 8th Street, Brooklyn

Figure 3

The east half of Trench 1, showing a brick foundation wall believed to be associated with a 19th century ink factory (center) and a concrete wall (background) associated with a later building. **1**

Looking southwest at an intact brick foundation wall,blue stone paved floor surface (with floor drain), and utilities within Trench 2. **2**

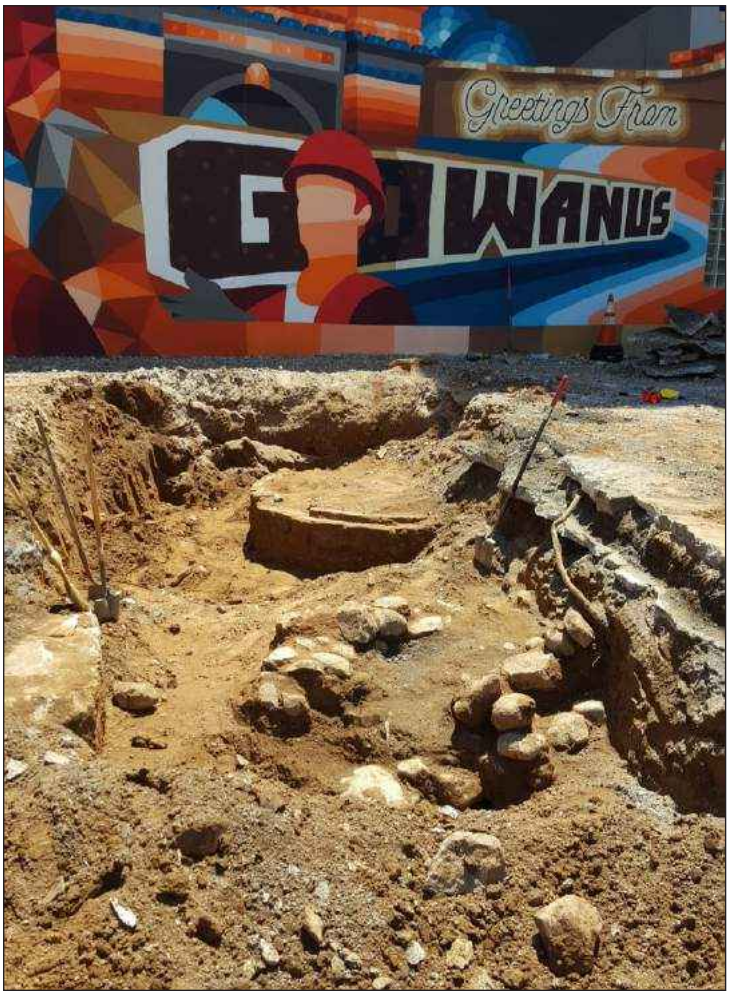
Clean soil layers within the northern wall of the west half of Trench 3. **3**

Evidence of utility-related disturbance and brick walls in the northern wall of the east half of Trench 3. **4**

Looking northwest at clean soils at a shallow depth (2 to 3 feet) beneath the two concrete slabs in Trench 4. **5**

A 6-inch-square wood post found in the clean subsoil in the east wall of Trench 4, one of several similar posts found in the immediate area. **6**

Looking northeast at the western end of Trench 5, showing three Shovel Test Pits (STPs) excavated into buried ground surfaces; the middle STP was excavated into a rectangular area of ashy fill. **7**



Shaft features encountered at the east end of Trench 5, including a stone well (at bottom) and a brick cistern (at top). **8**

Looking south at the west half of Trench 6, showing disturbed fill on the right and possibly natural soils on the left; the east half of this trench contained a buried fuel oil tank of unknown size. **9**

Looking northeast at Trench 7, showing brick foundation walls from a 19th century house (at left and right) and clean subsoil that was exposed beneath a thin layer of ashy fill containing artifacts. **10**

Looking west at Trench 8; the pipes at left lead to at least two buried gasoline tanks and the lighter soil in the background appears to be clean subsoil. **11**

Partial remnant of a brick wall in the northern wall of Trench 8 that appears to have been disturbed during the installation of the gasoline tanks; soils to the west of the disturbed area appear to be clean. **12**