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Archaeological Field Testing of the Wallabout Urban Renewal Area, Block 2027, Brooklyn, July 20 and 21, 1993



CEQR No. 88-232K

Prepared for the New York City Department
of Housing Preservation and Development (HPD)

Prepared by Joan H. Geismar, Ph.D.

September 1993

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ABSTRACT

A two day field testing program was conducted at the Wallabout Urban Renewal Area on July 20 and 21, 1993. Six trenches were excavated with a backhoe that was also used to clear and test the yard area of 16 North Portland Avenue where a privy pit may have been looted in 1988. All field work was supervised by the writer with two assistants. Testing did not offer any evidence of privy pits associated with houses situated on a defunct roadway (Division Street), nor did it provide any evidence of an 1841 tannery or another long-gone roadway (Old Wallabout Bridge Road). Moreover, no primary landfill was identified. The only feature of note was a brick cesspool (F1) bisected in Test Trench 1 (TT1). Although testing indicated great disturbance, it is possible that a privy pit may remain in the yard of 20 Flushing Avenue which was not available for testing in July 1993. Testing in this yard is still recommended.

TABLE OF CONTENTS

ABSTRACT

INTRODUCTION	1
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FIELD METHODS AND FINDINGS	7
Test Trench 1 (TT1)	7
Test Trench 2 (TT2)	12
Test Trench 3 (TT3)	12
Test Trench 4 (TT4)	18
Test Trench 5 (TT5)	18
Test Trench 6 (TT6)	20

CONCLUSIONS	21
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BIBLIOGRAPHY	24
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EXHIBITS

1. Sanborn (1992 updated) Correlated with 1840s Historical Information	2
2. Looking southwest across project site, photo	5
3. Field Map with Test Trenches and Features	8
4. Southern end of TT1, photo	10
5. F1 in TT1, East wall with pipe, photo	11
6. F1 in TT1, West wall, photo	11
7. F2 in TT1, looking east, photo	11
8. Backhoe in vegetation near TT2, photo	13
9. TT2 with water at bottom, photo	13
10. TT2, West Wall Profile	14
11. Brick walls in TT3, photo	16
12. Oil/petroleum-laden deposit in TT3, looking south, photo	16
13. Backdirt pile with artifacts, TT3, photo	16
14. TT3, East Wall Profile	17
15. TT4 showing cement floor and metal plate, photo ...	19
16. Correlation Between Historical Considerations and Field Testing	22

Photographs by Joan H. Geismar

Graphics by Amy Geller

INTRODUCTION

This report presents the results of archaeological field testing undertaken in the Wallabout Urban Renewal Area, Brooklyn, on July 20 and 21, 1993. It was carried out in accordance with an agreement between the New York City Department of Housing Preservation and Development (HPD) and Joan H. Geismar, Ph.D., dated April 27, 1992.

Testing, comprising backhoe trenching in potentially sensitive areas identified in a 1988 documentary report (Geismar 1988), was intended to document yard features, mainly privy (outhouse) pits associated with three houses dating from the 1840s. Two of the dwellings were built along a roadway (Division Street) that once crossed the site, but was eliminated by 1855 or 1856; evidence of this long-gone roadway was also to be sought. In addition, it seemed likely that former yards of demolished structures might contain nineteenth-century landfill of an unidentified nature, and that remnants of a tannery dating from 1841 might also be found. This structure, built on new landfill introduced into a former swamp area sometime between 1835 and 1841, may have been constructed on wooden pilings. If so, its only remains might be the post holes left from pilings, or the wooden vats used in the tanning process. This tannery was built along yet another defunct roadway, the Wallabout Bridge Road, and evidence of this former road was also a field consideration (Exhibit 1).

Two field days were proposed for the testing program. Recovery of artifactual material was not part of the testing plan.



Yard explorations were to be limited to an area on North Portland Avenue where backyards of houses on Division Street had been located on the site, and to one lot on Flushing Avenue (20 Flushing Avenue). However, the exact number and location of these Division Street yards in relation to the project site was somewhat problematic based on conflicting information found in old maps.

At most, only two of four backyards associated with the Division Street houses, the parts of the house lots considered most sensitive archaeologically, may lie within the project area. The 20 Flushing Avenue lot is located around the corner, fronting on the northern boundary of the project site. The location of this lot is also a question based on map data: although the 1855 Perris Atlas places it just west of the western limit of the site, it appears to be situated about 20 ft. further east according to subsequent maps. Moreover, the location of the Division Street houses is also somewhat speculative (see Exhibit 1). Consequently, two yards on North Portland Avenue were tested to explore two possible locations for these Division Street features (see Exhibit 16). The Flushing Avenue address (20 Flushing Avenue) has been the number of this lot since at least 1850.

Field work was contingent upon access to the test areas, and, since a backhoe was integral to the testing strategy, it was understood that testing would be continuous so that a backhoe would be transported to the site only once. Testing was also contingent upon removal of the site's only standing structure, a former gas station that until recently served as an auto repair shop. This building was

located at 8 North Portland Avenue which was for all intents and purposes the corner of North Portland and Flushing Avenues.

A field reconnaissance in June 1993 revealed that the 20 Flushing Avenue lot remained inaccessible and the yard could not be tested. At this writing, a chain link fence still encloses the lots designated 20 and 22 Flushing Avenue in the northwestern limit of the project site, and entry to them is barred by a locked gate. Moreover, a large container, the load-carrying portion of a trailer truck, is situated on the 20 Flushing Avenue lot, covering its entire yard area. Consequently, after discussion with Beverly Reith, Director of Environmental Review at HPD, field work was limited to the two possible Division Street yards and the tannery site as well as to testing for the former roadways and for evidence of landfill.

As it turned out, field conditions--up to 5 ft. of building rubble strewn across the test areas and high, dense summertime vegetation (Exhibit 2)--made field work more difficult than anticipated, and the revised test plan required two field days as originally planned. Moreover, the location of six test trench locations did not entirely conform to proposed locations but were altered based on field conditions. In addition, one North Portland Avenue yard (16 North Portland Avenue, a lot that may have included part of a former Division Street yard) was entirely explored with the backhoe in an attempt to locate a sought-after privy feature (see Exhibit 3).



2 Vegetation covered a great deal of the project site during field testing. View is looking southwest toward backs of houses on North Elliot Place seen through the trees. (7/20/93)

Robert Wogish, of Robert Wogish Contractors, owned and operated the backhoe used in this testing program. All field work was under the direction of the writer assisted by Shelly Spritzer and Cas Stachelberg.

Despite intensive testing, where most trenches were dug to the water table (a depth of 9.5 to 10.5 ft.) and exploration of the entire yard at 16 North Portland Avenue, only one backyard feature was uncovered. This appears to be a brick cesspool associated with a structure that stood at 18 North Portland Avenue after the Division Street buildings were demolished. This circular, 4-ft. diameter feature was inadvertently cut by the backhoe during testing. No evidence of stone privy pits or other yard features, the tannery, or roadways was found. Nor was any obvious evidence of nineteenth-century landfill noted.

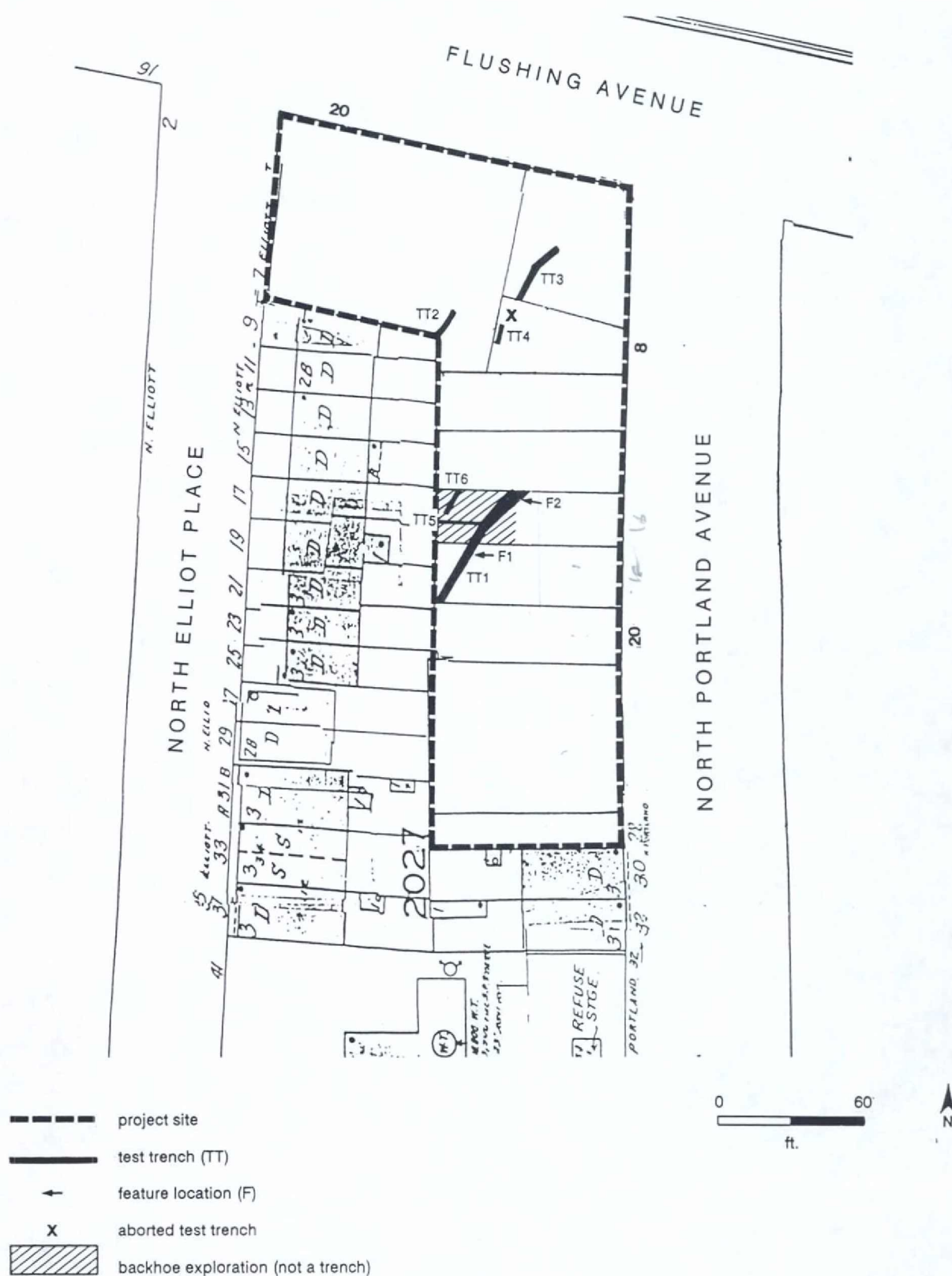
A current resident of one of the houses on North Elliot Place that back up to the project site informed us that "bottle hunters" had excavated privies five or six years ago in three North Portland Avenue yards within the project site while the buildings were still standing but vacant (Walkonen 1993:personal communication). Whether these features were associated with North Portland Street structures, or with the earlier 1840s Division Street houses, is unknown. Whatever their association or configuration, no evidence of the looted privy pits was found during the July testing program. It does seem possible, however, that any privy pit located in the rear yard of 20 Flushing Avenue, a lot where a house was built by the 1840s and a gas station was situated by 1932 (Geismar 1988:50), may still be intact.

The location of test trenches and excavated areas is illustrated in Exhibit 3.

FIELD METHODS AND FINDINGS

The two-day field testing program began on Tuesday, July 20, 1993. The first trench ^{TT1} was opened in the former backyards of 18 and 16 North Portland Avenue, the location of yards possibly associated with buildings constructed on what was formerly Division Street. As noted above, it is possible that only one of these yards falls within the site boundaries. The yards of at least two other Division Street buildings apparently lie beyond the project site (see Exhibit 1) and were not part of the testing plan.

Test Trench 1 (TT1) was run diagonally from southwest to northeast, across the rear portion of the two yards, a configuration that followed the rear property line of the Division Street houses. Building rubble was found throughout the first 5 ft. of excavation, and the underlying soil was a sandy fill interlaced with ash. The trench, which was 36.5 ft. long, 9.5 ft. deep, and approximately 3 ft. wide but wider at its southern end, was taken to and into ground water (see Exhibit 4), but the only feature of note was the aforementioned brick cesspool, designated Feature 1 (F1). This round construction behind 18 North Portland Avenue was inadvertently bisected by the backhoe (see Exhibits 5 and 6). It was encountered immediately below building rubble, and the interior of the feature was about 4 ft. in diameter, with remnants of a metal pipe entering it at its center from the east (see Exhibit 5). The feature was located near



the north property line of the 18 North Portland Avenue lot. It is possible that this was one of the looted features, but this remains unknown. No artifactual material was noted. *any fill?*

During the course of excavation, a corner of the building that had stood at 16 North Portland Avenue, a brick structure built between 1852 and 1879, was also found where it is indicated on nineteenth- and early-twentieth-century atlases. Designated Feature 2 (F2), this was the only other construction uncovered during excavation of TT1 (see Exhibit 7).

depths of F1 & F2 relative to each other, Bony evidence of yard & surface to 16 Portl. Ave?

The trench and features were photographed (Exhibits 4-7), and the trench backfilled prior to leaving the site for the day. The backhoe was stored at the Brooklyn Navy Yard overnight with the cooperation of Peter Norwood, head of security for The Brooklyn Navy Yard Development Corporation.

While excavation of TT1 was underway, the site was visited by Beverly Reith, accompanied by Peter Taras and Mitchell Kaplan, from HPD and Gina Santucci and Jean Howson from the New York City Landmarks Preservation Commission (LPC). At the time, Ms. Howson expressed concern about water cisterns that might be found adjacent to rear building walls of the Division Street structures, but these buildings were smaller than those that ultimately stood on the site, and any associated cisterns would undoubtedly have been destroyed during construction of the larger North Portland Avenue buildings. Testing did not reveal any cisterns for these later structures.

Pat of orig. saw



4 Shelly Spritzer in TT1, view looking south. Note trashed stone lintel or step (arrow) at the southern end of the trench. (7/20/93)



5 Brick cesspool in east wall of TT1. Note metal pipe (center) entering from the west where the house formerly stood, and the building rubble just above the feature. (7/20/93)



6 Western portion of brick cesspool feature (F1) in TT1. Note brick wall of the feature damaged by the backhoe. (7/20/93)



7 Exposed brick wall (F2) (below story board) of demolished house formerly standing at 16 North Portland Avenue. Segment exposed in TT1. (7/20/93)

Field testing resumed on Wednesday, July 21. The focus of the investigation now temporarily shifted from privy pits or other backyard features to remnants of roadways and the 1840s tannery. As noted earlier, it was also hoped that evidence of landfill would be uncovered to provide information about local land reclamation. Once again, field conditions--including concrete and metal flooring from the former auto repair shop (see Exhibit 15) and the inaccessibility of the yards at 20 and 22 Flushing Avenue--required changes in the testing strategy.

What was projected distance of corner of N. Elliot Ave to E. of Wallabout Rd?

Test Trench 2 (TT2) was opened in the northeastern corner of the project site, formerly 26 and 24 Flushing Avenue in the vicinity of the old Wallabout Bridge Road. The trench was run diagonally from the northeast corner of the lot at 9 North Elliot Avenue toward the corner of North Portland and Flushing Avenues (see Exhibit 3). Although standing trees ultimately limited the length of the trench (Exhibit 8), it crossed the area considered potentially sensitive. This (14-) by 3-ft. trench was dug to 10.5 ft. where water was reached (see Exhibit 9), but no evidence of the roadway was found. Moreover, artifacts were neither profuse nor of an age that suggested a primary landfill material. Instead it appeared to be a later, relatively clean fill.

If stratigraphic profile shows all strata as large fill, what happened to old roadway?

The trench was photographed (Exhibit 9) and a soil profile drawn (Exhibit 10) before it was backfilled.

any evid. compacted surfaces

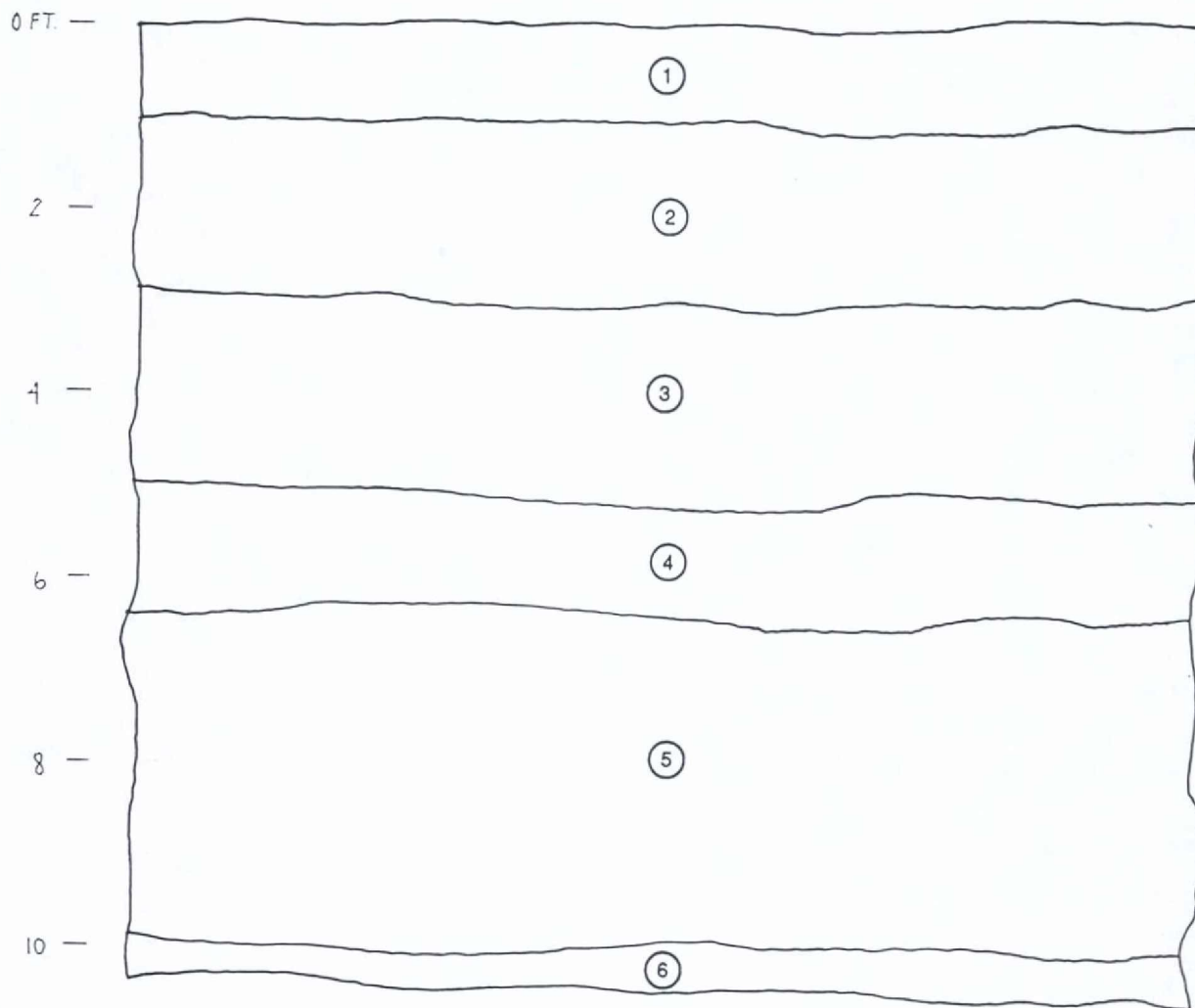
An attempt was made to open Test Trench 3 (TT3) at the rear of 26 Flushing Avenue as a continuation of TT2, but a concrete floor was



8 Bob Wogish running backhoe during excavation of TT2 with Cas Stachelberg monitoring in foreground. Note vegetation and trees that ultimately limited excavation of the trench. (7/21/93)



9 TT2 looking south. Ground water (arrow) at the bottom of the excavation was 10.5 ft. below the surface. (7/21/93)



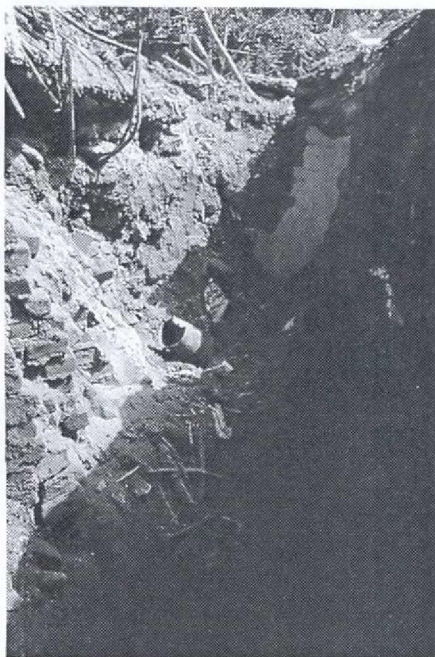
- ① surface (dark brown)
- ② grey ashy light brown/tan (fill)
- ③ reddish brown (fill)
- ④ ash layer (fill)
- ⑤ reddish brown (fill)
- ⑥ reddish brown (wet) with clinkers (fill) (water at bottom)

encountered that could not be removed with the backhoe. The trench was relocated a few feet to the northeast where asphalt rather than concrete was found, and excavation proceeded diagonally across much of the area believed to be the site of the 1841 tannery. This trench ran 26 ft. with a curve to the northeast, and was 3.5 ft. wide. It, too, was taken to water. The soil in the northeastern part, which lay within the brick walls of a former building, appeared to be oil or petroleum soaked (see Exhibits 11 and 12) and emitted a strong petroleum odor.

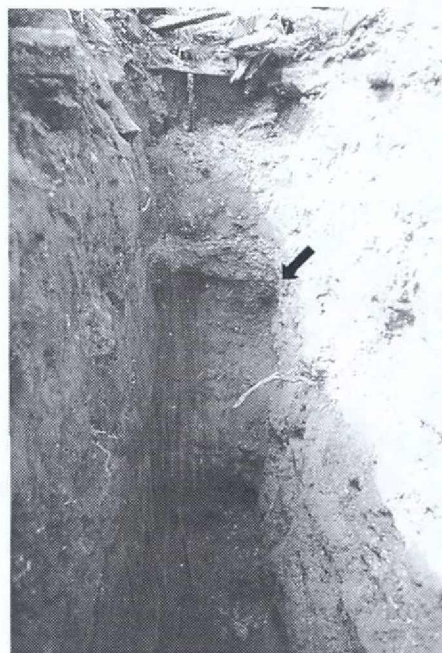
As noted above, this corner, like the one at North Elliott Place, was the site of a gas station by 1932. The brick walls found just below the asphalt confirmed the presence of a former building that predated the gas station structure, one that is shown on late nineteenth-century atlases. The soil beyond (south of) these walls was a fill with ash and clinkers that did not emit the petroleum odor. This, more than any other excavated fill, contained fragmented domestic artifacts such as small ceramic and glass fragments and some butchered animal bones (see Exhibit 13), but it did not appear to be archaeologically significant. No evidence of the tannery structure, the road, or early landfill was found. Nor was there any indication that further exploration would offer any significant findings.

any evidence of water-laid stratum corner of tannery? creek etc

Again, photos were taken (Exhibits 11-13) and the east wall of the trench profiled (Exhibit 14) before backfilling. One of the photos was of the backdirt pile where domestic artifacts, most of them--like soda and beer bottle fragments--of relatively recent origin, are in evidence (see Exhibit 13).



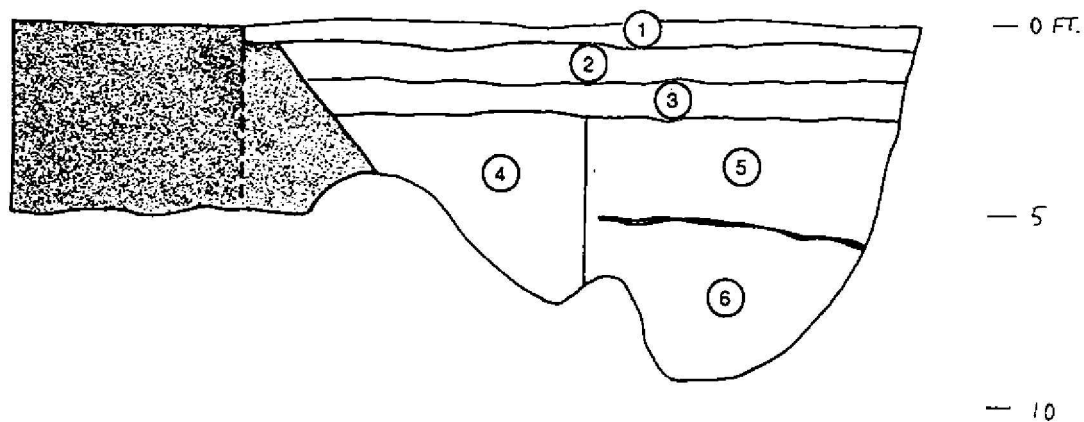
11 Brick building walls (left foreground and right rear) in TT3. View is looking south. Note the pipe and other debris lying in the trench. (7/21/93)






12 Oil or petroleum soaked deposit (arrow) in TT3. The deposit exuded a strong petroleum odor, but was limited in extent, probably lying under or near the pumps of a gas station built by 1932. (7/21/93)



13 Backdirt pile from TT3. North Portland Avenue is in the background. Note fragmented artifacts near story board. (7/21/93)



- ① asphalt layer/light brown soil (mixed)
- ② grey
- ③ reddish
- ④ oil/petroleum-soaked fill (strong petroleum odor)
- ⑤ reddish mottled with cinders
- ⑥ brown with wet ash and cinders (water at bottom)
-  brick wall
-  dense layer of coal, ash, and cinder
-  angle in brick wall (schematic)

Test Trench 4 (TT4) was opened in the 8 North Portland Avenue lot, but a concrete layer adjacent to what appeared to be an extensive 2 1/2-in. thick metal plate or floor found just below the ground surface made excavation impossible (see Exhibit 15). It is assumed that both the concrete and the large metal plate are remnants of the auto repair shop that until recently stood on this lot. This shallow trench, which was 6 ft. long, 2.5 ft. wide, but only 1 ft. deep, was photographed (Exhibit 15) and backfilled.

Test Trench 5 (TT5) was another attempt to locate a privy pit, but this time the one described by Tate Walkonen, the local resident mentioned above. This shallow trench was placed in the center of the yard at 16 North Portland Avenue where Mr. Walkonen believed the privy dug five or six years before had been located. Building rubble was cleared, and trench excavations began about 4.5 ft. from the rear property line (trees made it impossible to get any closer to the back of the yard). This location may have included the rear part of a Division Street yard and, given the usual location of urban privies about 2 ft. from rear property lines, would have exposed part if not all of the privy pit Mr. Walkonen had mentioned.

Building rubble at the back of the yard was shallower than what was encountered elsewhere in the yard (only 2 ft. of rubble as opposed to the 5 ft. cleared in TT1). The trench crossed TT1, but no privy feature was located.



15 Cement slab (bottom) and metal plate (top) in TT4, apparently the remnants of an auto body shop that stood on this part of the site until recently. The backhoe is attempting to excavate between the two, but with no success. (7/21/93)

Before backfilling TT5, Test Trench 6 (TT6) was run parallel to, but west of, TT1. It ran 12.5 ft. from southwest to northeast and comprised a brown soil with ash below the rubble. A concrete slab was uncovered about 6 ft. below the surface in the southern part of the trench. Mortared brick, possibly a section of a demolished building wall, was also exposed. No privy pit, or other backyard features, was encountered.

The backhoe was used to continue exploration, and ultimately the entire rear portion of the 16 North Portland Street yard was excavated below the building rubble (which, as noted above, extended 2 to 5 ft. below the surface). The excavations, which may have included at least a portion of a former Division Street yard, extended minimally 4.5 ft. below building rubble, but no privy feature was encountered.

Photos of TT6 were taken, but are not included here. All excavations were then backfilled and testing terminated. During the course of the day, Peter Taras and Mitchell Kaplan of HPD made a second site visit.

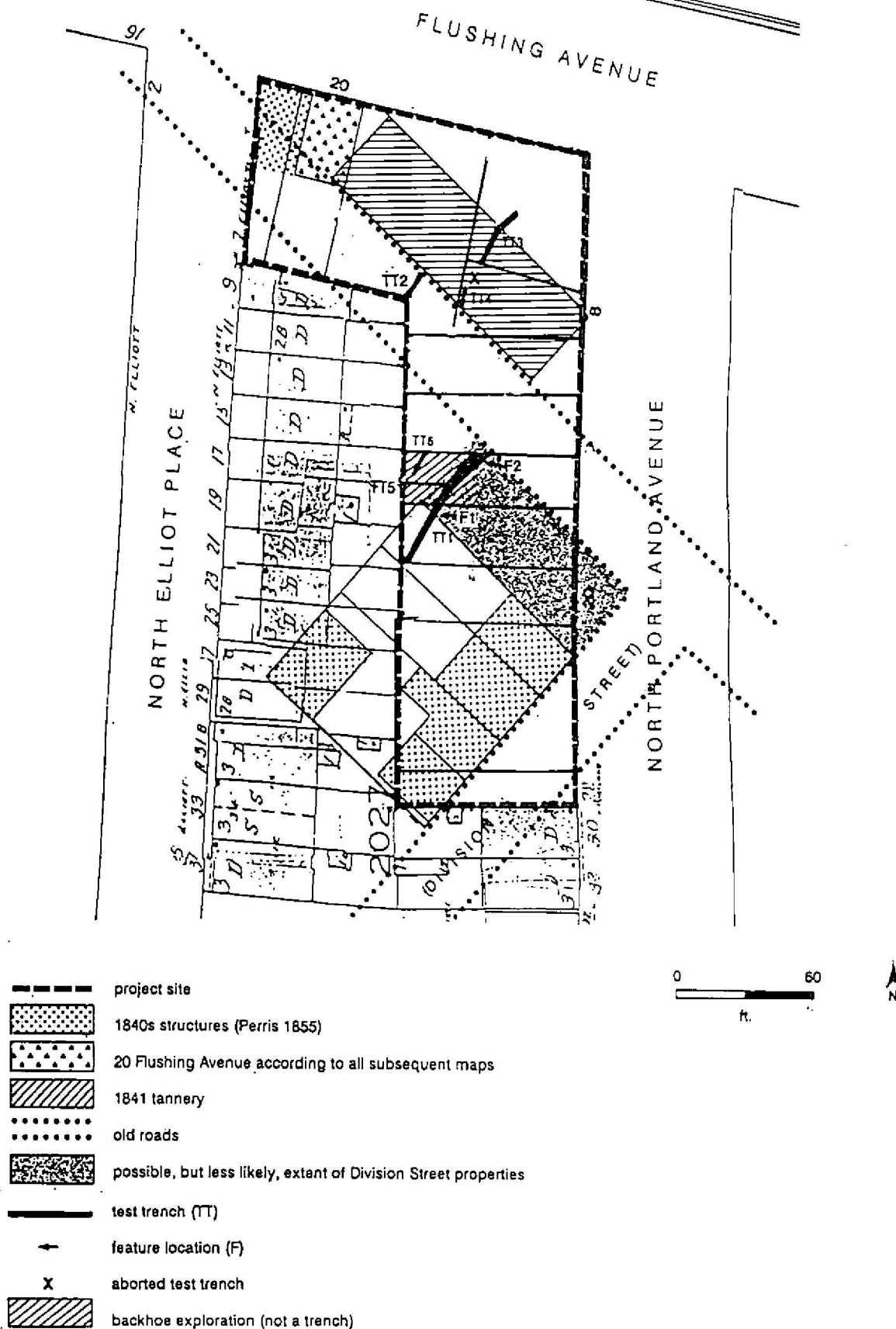
Although artifact recovery was not part of the testing plan, seven artifacts were collected as grab samples from two trenches for possible dating purposes. This material has been washed and then numbered according to trench designations. Four artifacts came from TT1. They include a whole round aqua medicine bottle (TT1-1) with a double "14" embossed on its base that may date to the late-nineteenth

or early twentieth century; an oval brown glass bottle base fragment, probably a strap-shoulder shape, with an "S" in a diamond on the bottom (TT1-2), possibly of late-nineteenth-century manufacture; a late-nineteenth century tobacco pipe bowl (TT1-3)* identified by Diane Dallal; and a badly eroded 1984 Lincoln penny from near the surface. Three others were from TT2: a ceramic plate fragment (TT2-1) with a printed and painted (?) floral pattern in the center, blue transfer printed edging, and part of a stamped mark on its base that reads "MA...", (possibly "MADE IN ENGLAND") that appears to have been manufactured after 1892; an undated whiteware or graniteware bowl (?) fragment (TT2-2) with a small molded head design (TT2-2); and a small, clear, whole, machine-made medicine bottle (TT2-3) embossed "02" on the base that post-dates 1906. It should be remembered that these artifacts were mixed with obviously more recent material, as well as possibly older fragments. They will be given to HPD along with this report.

CONCLUSIONS

Six trenches and an entire yard were tested, and only one feature of note, a brick cesspool with a metal pipe (F1), was documented. Moreover, there was no obvious evidence found for the old Wallabout Bridge Road or the 1841 tannery built on its north side,

*This pinkish clay pipe bowl is the most unusual of all the artifacts noted during testing. Diane Dallal has tentatively identified it as a "Hamburg" model, a pipe with a ribbed bowl set at an acute angle to the stem portion. A reed, or bent stem, would have been used to smoke the pipe. It was possibly manufactured in Pamplin, Virginia sometime between 1879 and 1900, the most productive period of manufacture, although it could have been made through 1944 (Dallal letter, September 15, 1993).



nor was primary landfill documented. In general, a relatively modern fill was found throughout the tested areas. (Exhibit 16 correlates historical considerations with test trenches and other excavations.)

The July archaeological field work documented a greatly disturbed site with no obvious archaeological potential, but these findings do not negate the necessity of testing for the privy that might be associated with the structure that once stood at 20 Flushing Avenue. Although privies said to be located in the yards of North Portland Avenue properties may have been looted in the late 1980s, there is no evidence that this occurred in the 20 Flushing Avenue lot. Unfortunately, this lot was not available for testing during the July 1993 field program. While no evidence of the old Wallabout Bridge Road was found in July, it is conceivable that it may also survive in the lot at 20 Flushing Avenue or neighboring lots that may have less disturbance than the areas tested to date. Therefore, testing of the 20 Flushing Avenue backyard is still recommended.

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