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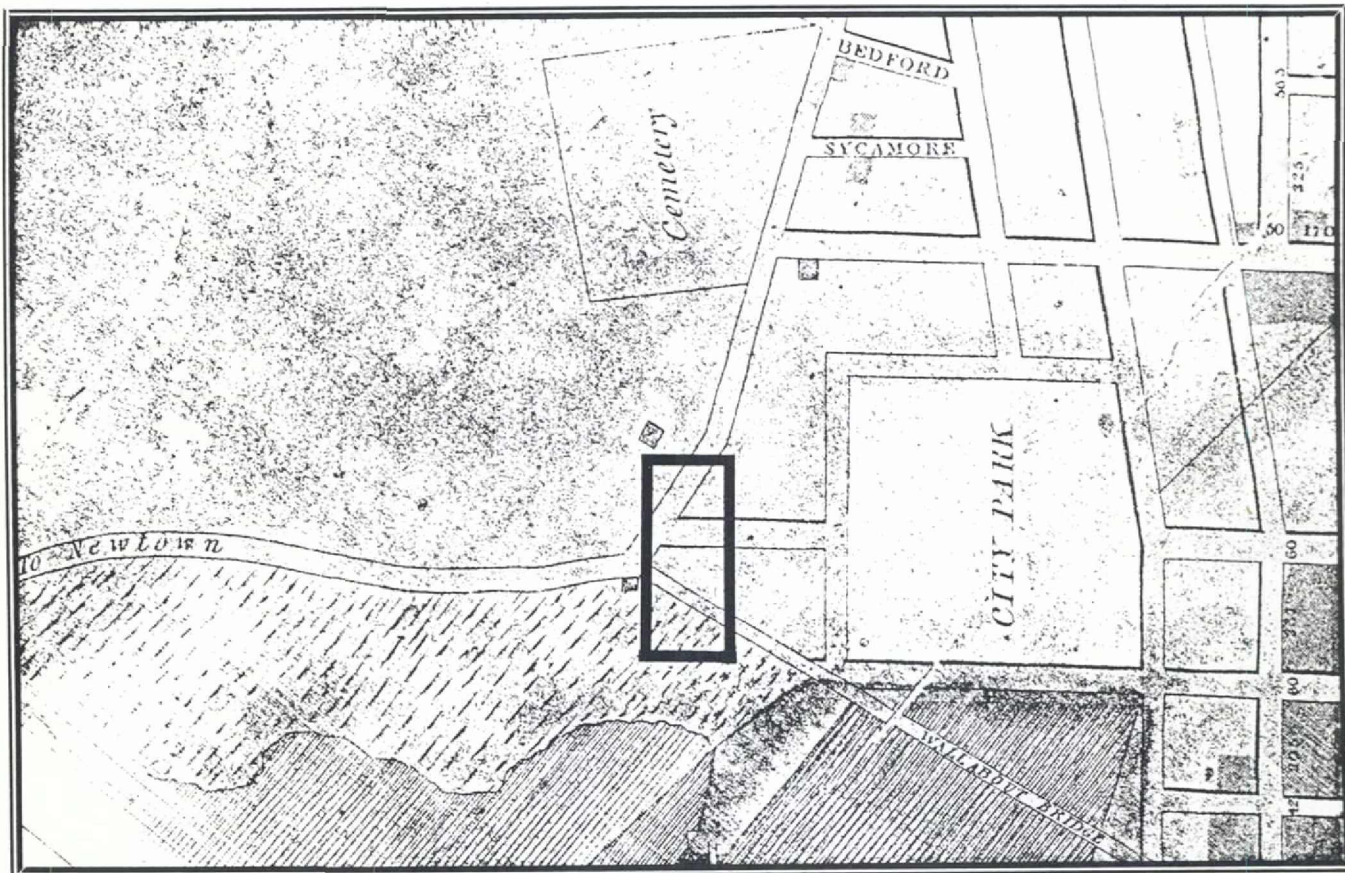
1988

DOCUMENTATION OF THE WALLABOUT URBAN RENEWAL
AREA HOUSING SITE (BLOCK 2027) BROOKLYN, NY

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CEQR No. ^{323K} 88-232K

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

Prepared by Joan H. Geismar, Ph.D.

October 14, 1988

155

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ACKNOWLEDGMENTS

ABSTRACT

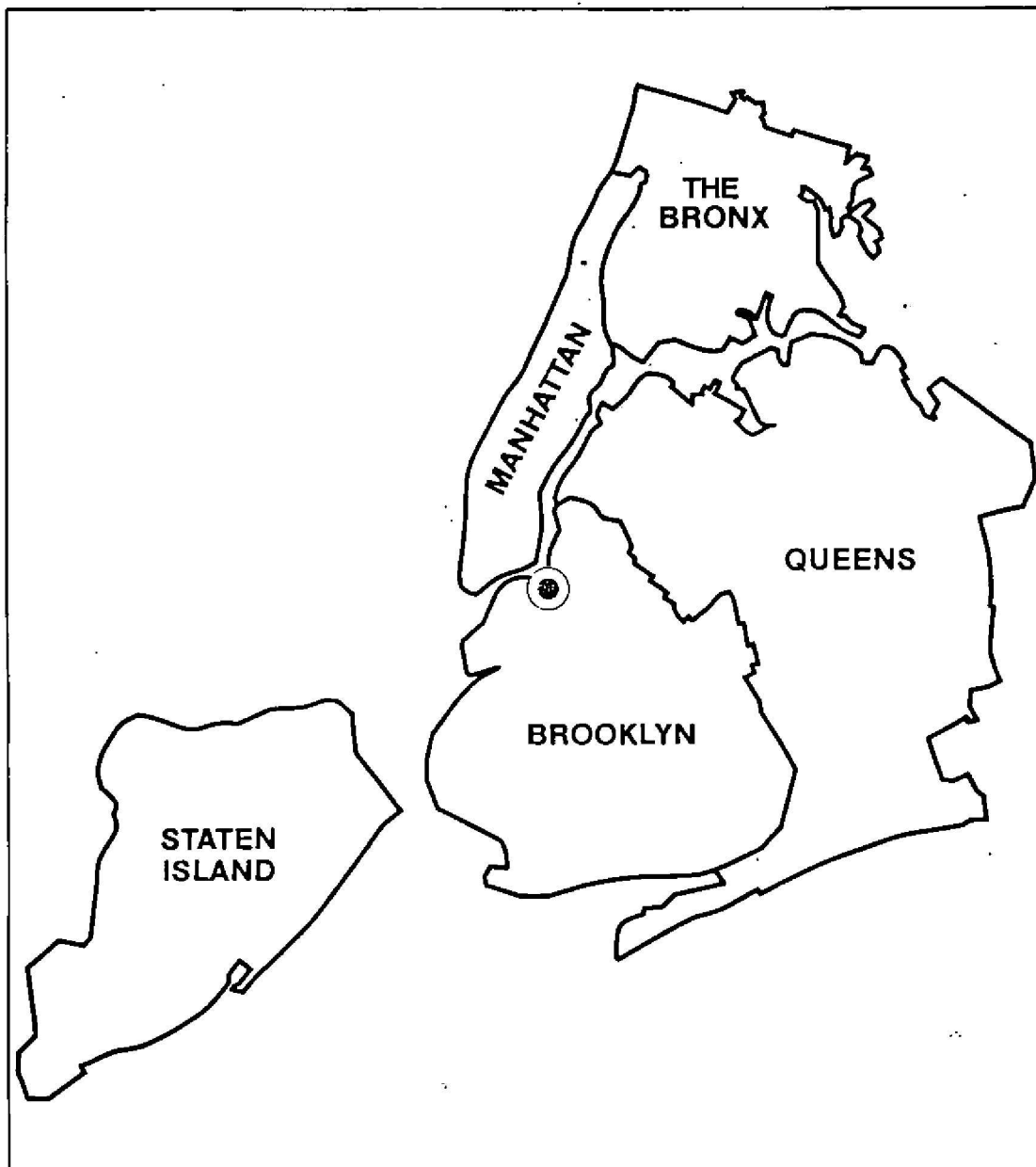
This report presents documentation of the proposed Wallabout Housing Development site, Block 2027 in the Ft. Greene or Wallabout section of Brooklyn. Research has indicated that the northern portion of the site, and perhaps its western part as well, is filled marsh. In its natural condition, it was an area that would have been attractive to prehistoric and early historic Native Americans for food collection, but not as a habitation site; given its fill history, the most likely evidence of this period that might remain would be shell middens or heaps.

Although the project area and the site had been owned since the 1640s, no structural development occurred until the nineteenth century. Between 1806 and 1850, a causeway, a tannery, and houses were built, and an earlier road was regulated. By the 1870s, if not before, the site had acquired its modern configuration, and most of the development from the first half of the century had been obliterated. Evidence of this early development sequence--including the materials and chronology of its fill and the social and economic conditions they reflect--may remain in the site's yards. Filled privies and cisterns that might offer clues to the lives and choices of the mid nineteenth century working and middle class families who lived here may also be found in these yards. Consequently, an archaeological testing program is recommended. It is also recommended that any soil boring or soil testing programs be coordinated with archaeological concerns in order to refine the recommended testing.

INTRODUCTORY SUMMARY

This report presents documentation of the Wallabout Urban Renewal Area Housing Site on Block 2027, Lots 23, 25, 26, 28, and 30 through 34, in the Wallabout or Fort Greene section of Brooklyn (Figure 1). It was prepared for the New York City Department of Housing Preservation and Development (HPD) as part of the city's environmental review procedure (CEQR No. 88-232K), and its goal was to determine the site's history and archaeological potential. This research and assessment was required prior to planned construction of 42 units of city-sponsored, low income, low rise housing.

Based on its location in the Wallabout Bay area, where use by prehistoric and early historic Native Americans is a possibility and where early Dutch settlement occurred, the project site was considered prehistorically and historically sensitive by the New York City Landmarks Preservation Commission (LPC). However, research into deeds, tax assessments, historical maps, wills, published histories, and unpublished reports has indicated that no structures related to Dutch or British Colonial settlement stood on the site. Moreover, its marsh and lowland setting would not have made an ideal Native American habitation site. To date, only one Native American site has been documented, not on the project site but within the project area (as will be seen in the discussion of prehistoric considerations, a site was described about one-half mile to the northwest in 1826). Therefore, it is possible that prehistoric or early historic Native American shell heaps or middens (accumulated shells and other debris) could have been located on the site which is partly a filled, shallow salt marsh. The chances of Native



Dept. of City Planning and



project site location (approx.)

no scale



American use are enhanced by the possibility that there might have been a fresh water spring nearby.

While it is not anticipated that remains of Dutch or British Colonial structures will be found, the site's nineteenth century development and associations are noteworthy: the project area of this deceptively mundane looking city block was actually quite complex. It was once crossed by the causeway to an early nineteenth century toll bridge and a street on which mid nineteenth century houses and stores are documented; the antecedents of this street may extend back to the eighteenth century, or even earlier. It also appears that a large tannery, functioning from 1840 or 1841 to 1843, occupied part of the site. Since a marsh existed in this area until at least 1835, the tannery was built either on fill or pilings.

Although much evidence of the block's use will have been obliterated by subsequent development, it is possible that test trenches would still provide documentation of its development sequence, including the techniques, the composition, and even the dating of the earliest landfill (land reclamation may have begun by 1813 or before, but the major episode seems to have occurred between 1835 and 1839). Sampling the fill would not only provide the unique opportunity to record an undisturbed fill sequence in Brooklyn, but would also offer information about attitudes toward health and sanitation in the 1830s when most of the filling was done; the absence of laws governing the City of Brooklyn's fill procedures suggests that a garbage-laden soil will be found.

As for its associations, site ownership can be traced to 1643 and 1646 when grants were made to Italian and French rather

than Dutch patentees, and its early nineteenth century owner, John Jackson, was instrumental in the development of the aforementioned toll bridge as well as the adjacent Brooklyn Navy Yard. By the mid nineteenth century, most of the project site belonged to a wealthy New York merchant who probably built most of the tenanted houses that stood on the modern block until the early 1930s. At that time, these were replaced by gas stations and stores on the Flushing Avenue side of the block. At present, an auto repair shop on the corner of Flushing and North Portland Avenues is the site's only standing structure (see Figures 4-10).

It is in the undeveloped yard area of the Flushing Avenue properties that the block's 1830s landfilling sequence and procedures may be archaeologically documented, and even earlier episodes may be uncovered in the North Portland Avenue yards; in addition, documenting the causeway--a raised road over marsh built either on fill or pilings--may offer singular information about engineering techniques. It is also possible that privies and cisterns, the archaeological equivalent of time capsules where clues to the city's social and economic history are often preserved, may also be located in several of these yards. Information from these deposits would not tell us about the rich or famous, but about the lives and choices of the working class tenant-occupants of the site's earliest, mid nineteenth century houses. Of all the site's development episodes, the 1840s tannery is the least likely to be archaeologically documented, but this remains to be seen; rather than structural evidence soil analysis may document its location.

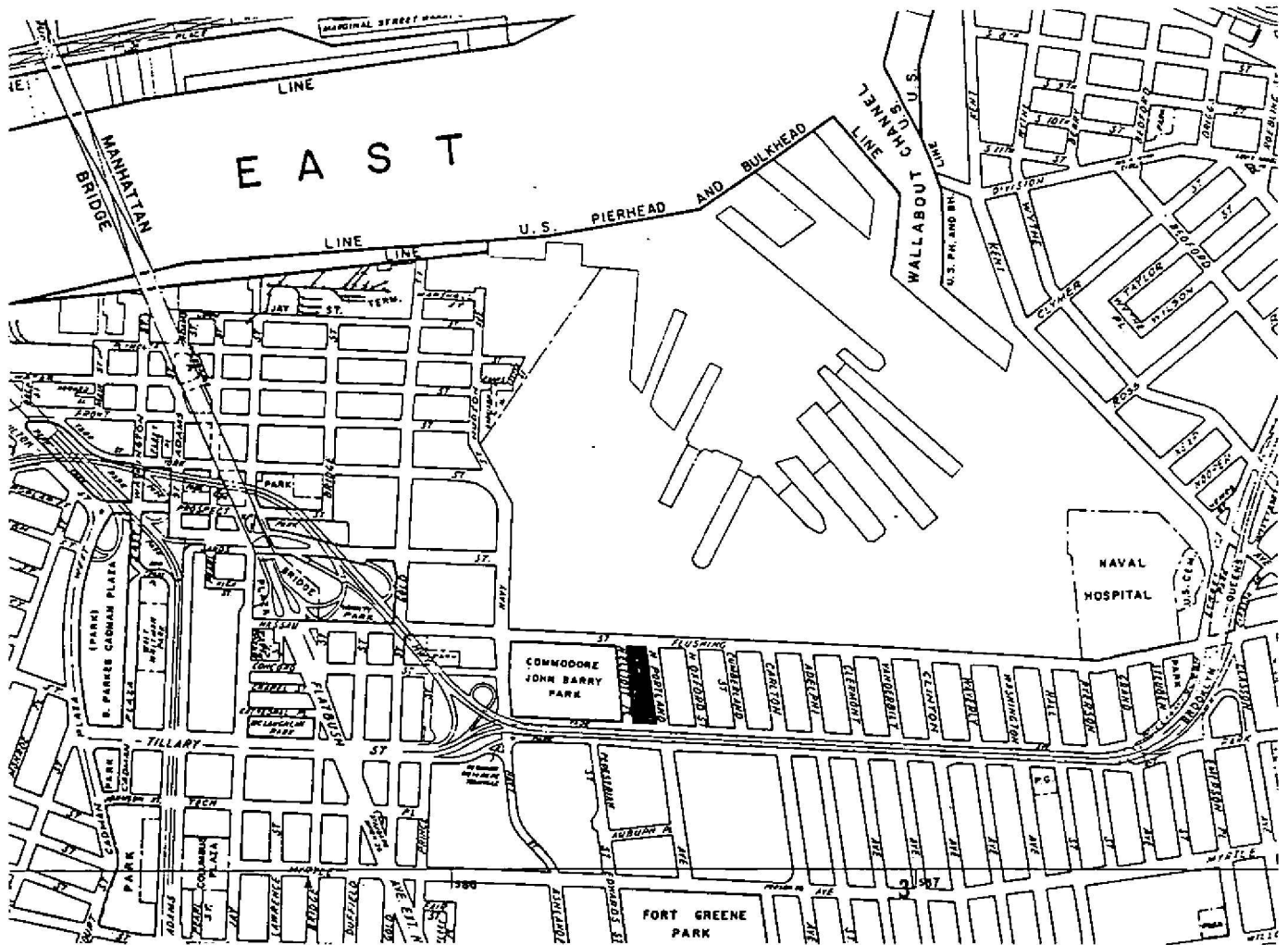
At this writing, no soil borings are available to shed light on the site's subsurface conditions, its archaeological

potential, or any soil contamination, but a sampling program will be implemented prior to finalizing construction plans. It is recommended that archaeological considerations--such as continuous rather than interval sampling--be incorporated into this program and, based on the findings, that an archaeological testing plan be designed. This will probably entail backhoe and hand trenching to document the site's fill and development stratigraphy, to recover fill and other soil samples, and to locate privies. Sampling the privy deposits from the site's earliest structures is also recommended.

The summary and recommendations presented here are based on the detailed, documented information offered in the following sections.

SITE DESCRIPTION

The project site, which is situated across from the Brooklyn Navy Yard Development Corporation (formerly the Brooklyn Navy Yard), comprises approximately .76 of an acre bounded north by Flushing Avenue, east by North Portland Avenue, south by a vacant lot, and west by the yards of houses currently standing on North Elliot Place (Figures 2 and 3). As noted in the introduction, except for an auto repair shop at the corner of Flushing and North Portland Avenues, the site is now vacant. However, an assortment of two and three story structures standing on North Elliot Place suggests what North Portland Avenue may have been like prior to site clearing. On the southern part of the block, between the project site and Park Avenue, are high-rise apartments built as Federal Navy Housing. Just beyond, an elevated portion of the Brooklyn-Queens Expressway runs above Park Avenue (Figures 4 to 10).



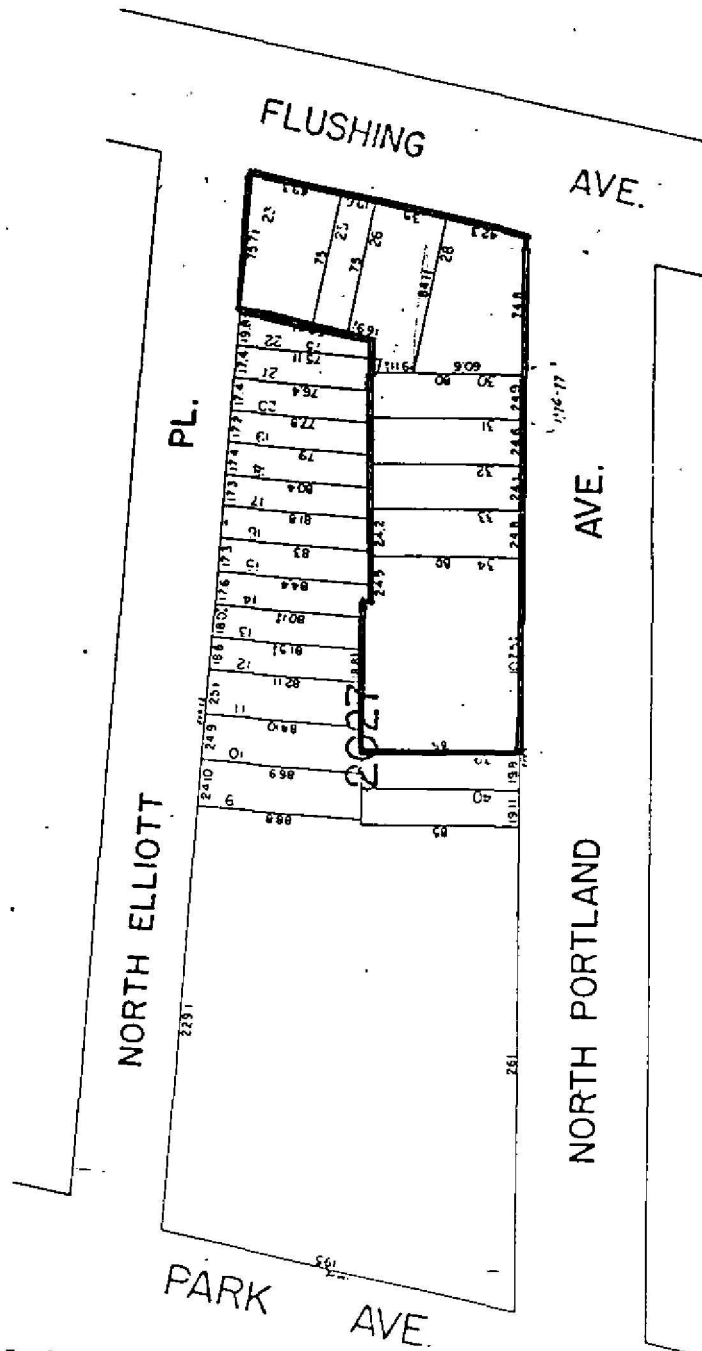
Dept. of City Planning 1982 Sectional Map No. 12



project block

0 1000
ft.





Tax Assessment Map Block 2027 Provided by HPD



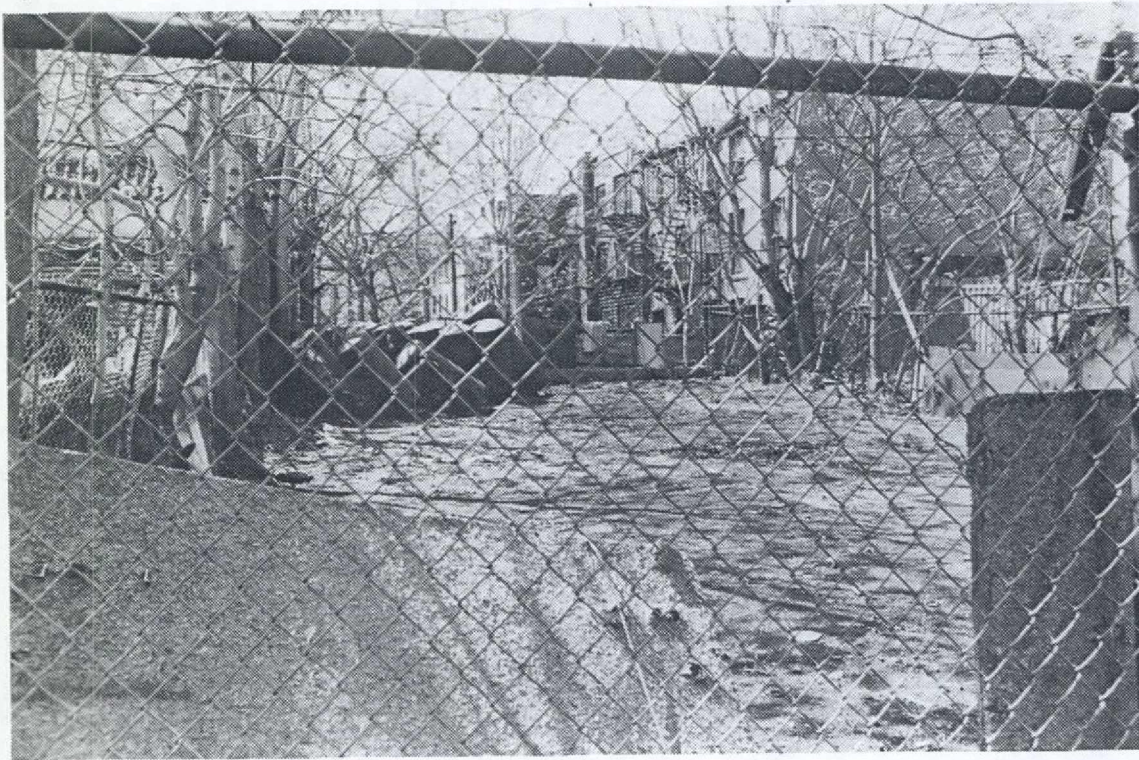
project site

dimensions indicated





4 The project site looking southwest from across Flushing Avenue. An auto repair shop, a former gas station on the corner of North Portland and Flushing Avenues (large arrow), is the site's only standing structure. Commodore John Barry Park (small arrow), across North Elliot Place, can be seen through the site trees (Geismar 5/13/88).



5 Looking through the fence on Flushing Avenue across vacant lot to buildings and yards of North Elliot Place houses. These buildings and yards were probably similar to those that once stood on the project site (Geismar 5/13/88).



6 Vacant lots on North Portland Avenue with high rise apartment building beyond three-story structures still standing on the block. These buildings (arrow) may be similar to those demolished on the site (Geismar 5/13/88).



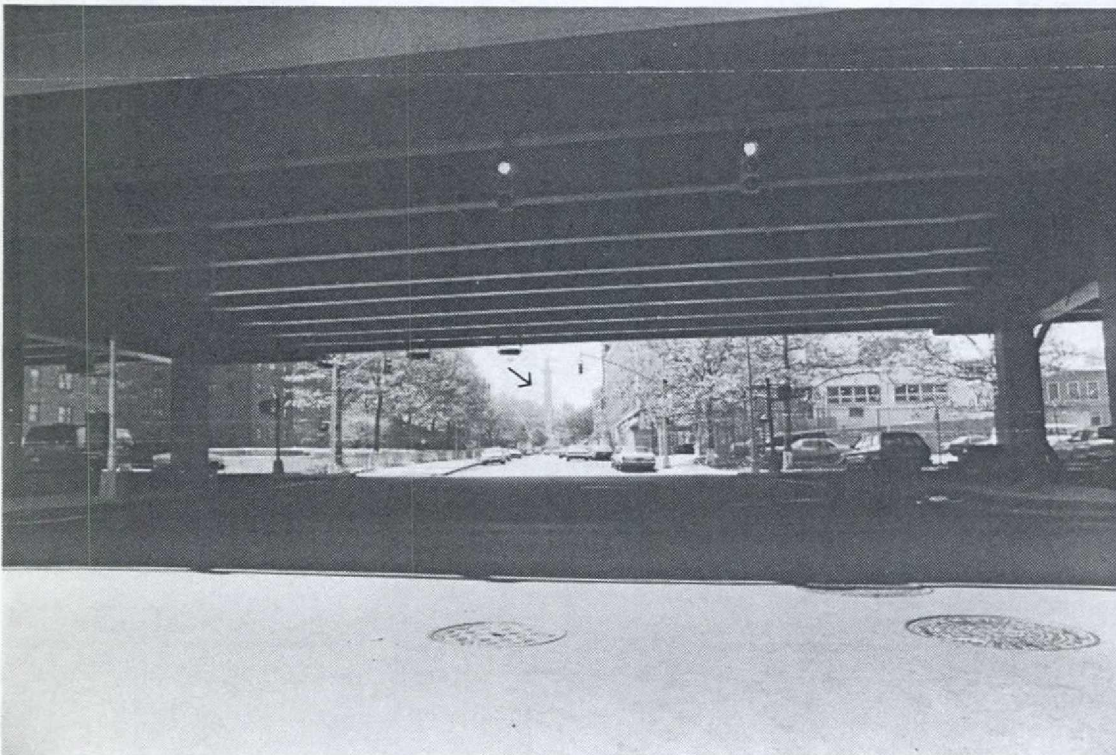
7 Looking north across the North Portland Avenue side of the site. Auto repair shop is in center of the view, and a former Navy Yard building (arrow) from the 1930s (Jay 1988: personal communication) is in the background (Geismar 5/13/88)



8 Site area on North Portland Avenue looking south toward three-story structures beyond the project site. Note rubble from demolished site buildings. High-rise apartment building on the Park Avenue side of the block is in the background. North Elliot Place houses and yards are to the right (Geismar 5/13/88).



9 North Elliot Place looking north toward the former Navy Yard (this part of the complex now belongs to the National Guard [Jay 1988: personal communication]). Commodore John Barry Park is on the left. Some of the houses on the right may be similar to those demolished on the project site (Geismar 5/13/88).



10 Looking south from Park Avenue and North Portland Avenue toward Ft. Greene Park (background). A monument to Americans who died on British prison ships anchored in Wallabout Bay during the Revolutionary War (arrow) can be seen. The Brooklyn-Queens Expressway is in the foreground (Geismar 5/13/88).

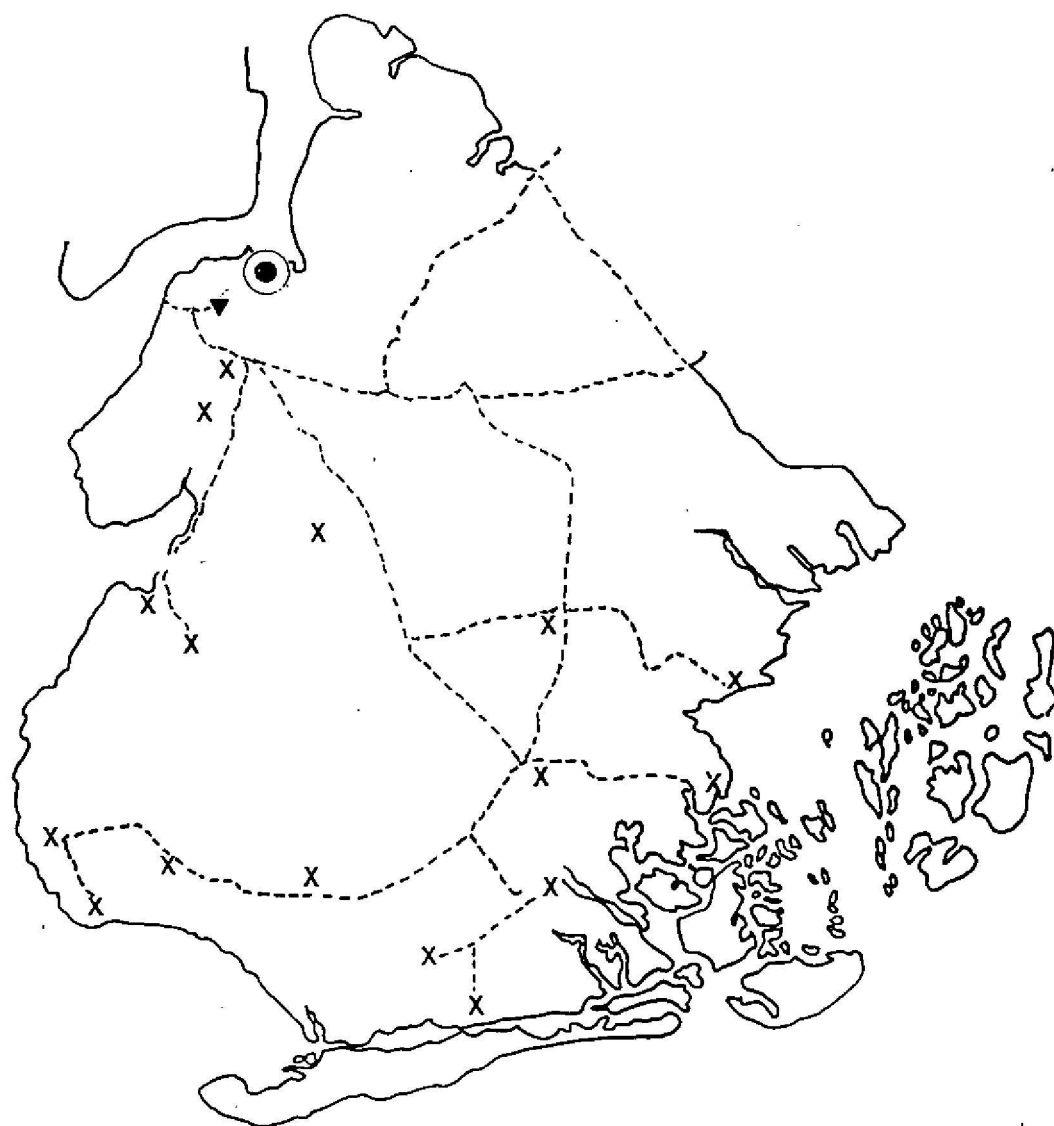
Several buildings can be seen over the brick wall of the former Navy Yard near Flushing Avenue (four structures belonging to this complex are New York City landmarks, and one of them, the Commandant's House¹ designed by Charles Bulfinch in association with John McCombe, Jr., in 1805-6, is also on the National Register of Historic Places [LPC 1979:65]). Two blocks to the south is Fort Greene Park surrounded to the south and east by the Fort Greene Historic District, also a New York City Landmark. In the park stands a monument to American prisoners martyred during the Revolutionary War; this monument, erected in 1873 (Huntington 1952:37), is visible from North Portland Avenue in the project area (see Figure 10).

Adjacent to the site block, across North Elliot Place, is the Commodore John Barry Park, a city park since the 1830s. Although this cemented expanse appears less than noteworthy, in a reduced form it was the City of Brooklyn's first park and, as such, was originally called "City Park" (e.g., Herbert & Tolford 1835, see Figure 15 this report; Dikeman 1870:20). A school and school yard are now situated on the east side of North Portland Avenue, across from the project site.

PREHISTORIC CONSIDERATIONS

It has been noted that prehistoric activities undoubtedly occurred throughout the borough of Brooklyn (Church and Rutsch 1982:11); however most documented sites are located along or near Brooklyn's many bays and tidal creeks to the south (Figure 11). Since the project area was originally dominated by a bay and marsh that would have made a productive food collecting area, if not a

¹ This building is located outside the Navy Yard walls at Hudson Avenue and Evans Street, about one mile northwest of the project site.



● project site (approx.)

no scale N

X known Indian sites

---- Indian paths

▼ Rinnegokonck, a site at Bridge Street (Furman 1874:98-100)

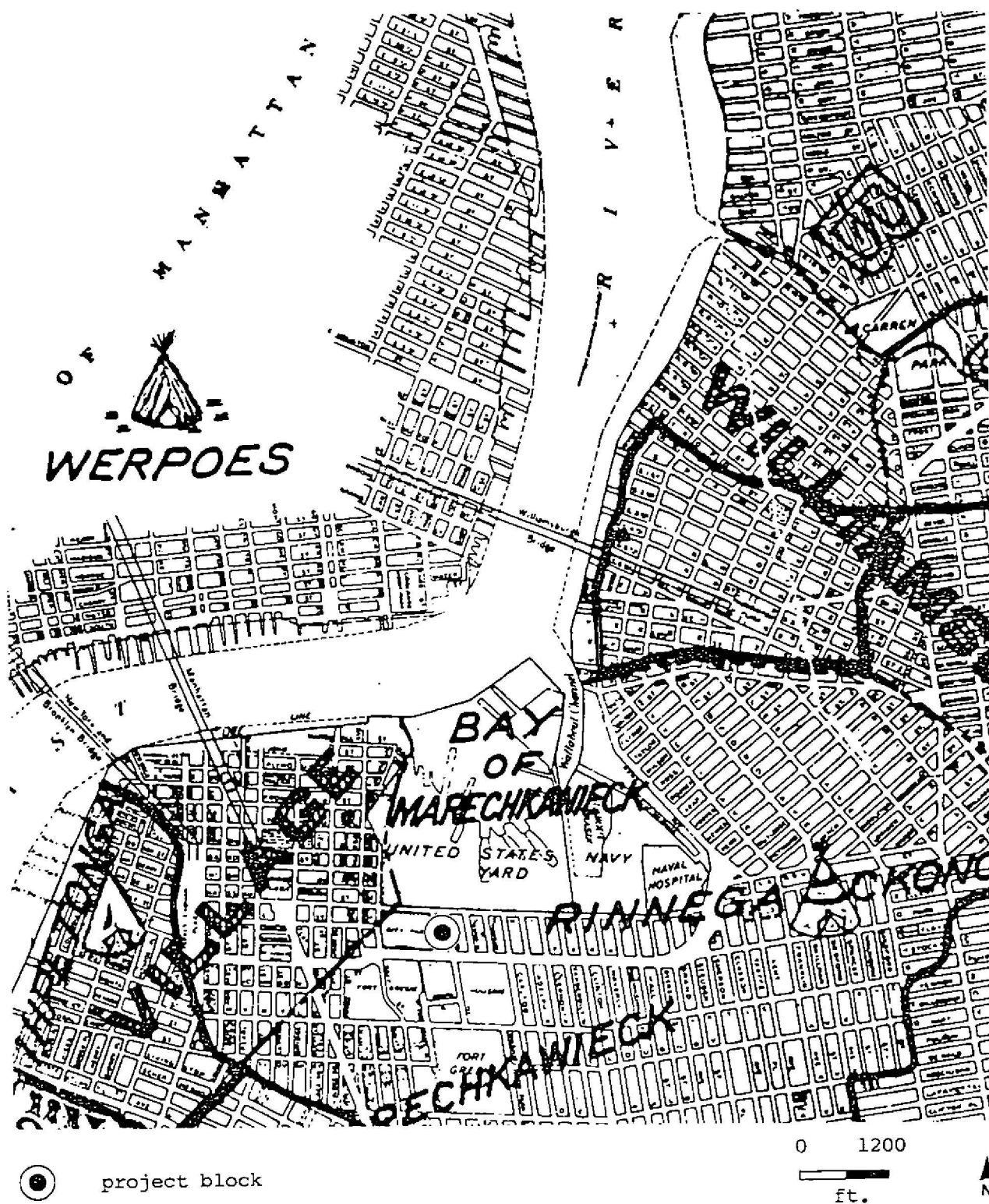
place to live, the absence of Native American sites may reflect poor documentation rather than actual conditions.

The dearth of documented sites is offset by the Native American place names associated with the area (Tooker 1911:102-103, 211-212; Kelly 1946, Figure 12 this report). It appears that although the New York State Museum Archaeological Site Files do not record any sites within a one-mile radius of the project site (Wellman 1988:personal communication), the Wallabout Bay and its environs were undoubtedly known and used by local Indian populations.

This use was established in 1826 when part of a 70-ft. sand hill, located approximately one-half mile from the project site (at what are now two graded blocks bounded by Jay, Front, Bridge, and York Streets) yielded Native American artifacts (Furman 1874:98-100). These items included fire cracked rocks found on the surface as well as coarse earthenware and the "heads of Indian arrows" in a layer of cinders and ashes that extended from 1 to 4 ft. below the surface. In addition, clay tobacco pipes and other unnamed articles were also noted (this site is referred to as Rinnegokonck in Bolton [1934:145] and is shown on Figure 13 this report). Both its proximity to the project site and its terrain make this site, probably a revisited camp, interesting.

?
not on map
Jay Front
Bridge York

Nearly four decades ago it was noted that in coastal New York, "Nearly all of the permanent settlement sites are situated on tidal streams and bays on the second rise of ground above the water" (Smith 1950:101); the exception was the shell heaps and middens often found near the shore. Subsequent research suggests that "permanent" local Native American settlement was mainly, if not



entirely, a phenomenon that correlated with the economics of European contact (Ceci 1977). As such, these settlements were usually recorded or noted historically. It appears that rather than permanent settlements, or "villages²" the areas near local tidal streams may have been where multi-component sites--part of a seasonal round of hunting and gathering--were located.

While permanent settlements do not appear to be an issue, as noted above, the marsh and lowland that comprised the project site would have made it attractive to Native American hunters and gatherers. This is particularly true during the millennia when sea level was lowered by glaciation and more, if not all, of the site may have been solid ground bordering a tidal marsh. But even then, it would have been gently sloping land devoid of the hills or rises that made ideal campsites (the nearest substantial hill would have been what is now Fort Greene Park). However, as will be seen (see the section on Landfill), prior to grading and filling, a low shoreline bluff may have crossed the site and a series of rises may have existed immediately south of the project site; moreover, it is possible that a tidal stream once flowed in the vicinity of North Portland and Flushing Avenues (e.g., Liber of Deeds [hereafter LD] 21:156). Perhaps even more importantly, a fresh water spring may have been located in this same vicinity (Stiles 1867:251 fn 2), but its location is somewhat questionable. It is therefore possible that shell middens or heaps preserved under fill might be present on or near the project site. On the other hand, grading the low bluff

² The definition of the Native American "village" in the local coastal context, as opposed to inland Iroquois sites, is problematic (Ceci 1988:personal communication).

may have destroyed these and other possible Native American deposits present on or near the project site.

Based on the availability of shell fish resources and the kind of artifacts often associated with these middens (for example, Late Woodland culture "arrow points"), in the continuum of approximately 10,000 to 12,000 years of possible Native American use of the area, this kind of site--as well as the one described by Furman--was relatively recent, most likely post-dating A.D. 650 (for detailed descriptions and discussions of Native American cultures in coastal New York see Ritchie 1969).

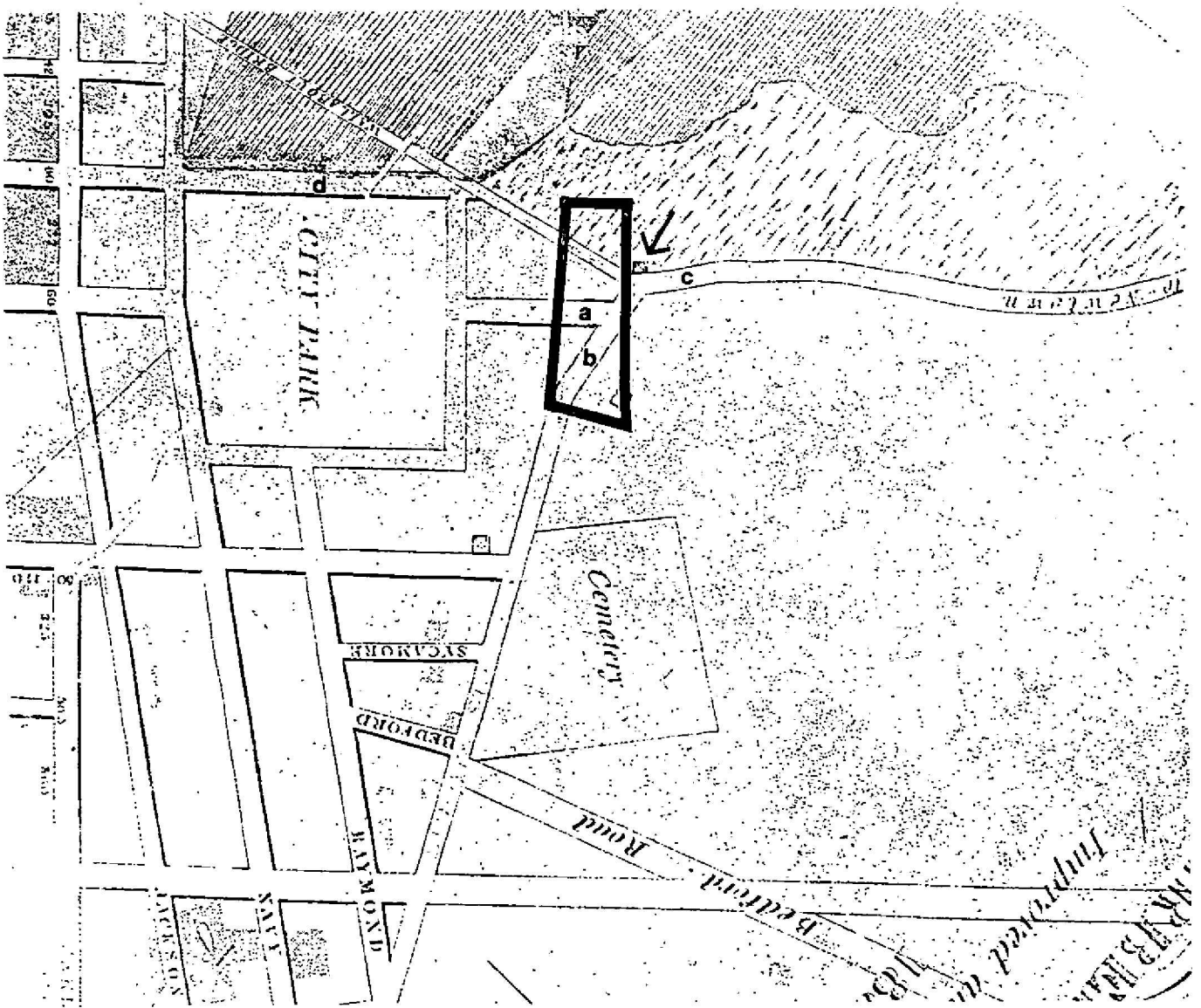
It appears, then, that undisturbed portions of the project site might harbor some evidence of Native American use preserved under fill. Since no soil boring information is available at this writing, the depth or nature of this fill is speculative as are all subsurface conditions. However, information from a road opening profile for North Portland Avenue (Profile 1841:No. 1071, see Figure 14 this report) suggests a minimum of 5 to 15 ft. of grading fill and an undetermined amount of landfill was deposited to eliminate the marsh in the northern part of the site (see Landfill section). The implied depth of these deposits, as well as the possible grading of a low bluff, suggests disturbance to the surface that would destroy all but the densest cultural deposits, such as shell middens. This same profile also indicates that 14 and 20-ft. rises may have existed just south of the project site (see a and b on Figure 14). This suggests that campsites, if not permanent settlements, are more likely to have been located just to the south, or perhaps even as far away as Fort Greene Park hill; but this is merely speculation.

LANDFILL AND ROAD DEVELOPMENT

Land reclamation has occurred throughout the world and throughout the ages in most, if not all, seaport areas (e.g., Geismar 1985). In New York City, map research and archaeology have documented that both sides of the East River and at least the Manhattan side of the Hudson were altered through filling (e.g., Louis Berger 1987; Geismar 1983, 1985; Rockman et. al 1983; Kearns and Kirkorian 1985; Solecki 1980). Using map and deed data, as well as written histories and road opening information, an attempt has been made to reconstruct the fill history of the project block.

Fill History

Historical maps indicate that in the first half of the nineteenth century, the northern part of the project site was a marsh crossed by a toll bridge or causeway built on fill or pilings (e.g., Herbert and Tolford 1835, Figure 13 this report; Stiles 1867:387; Tanner 1835; see also Historical Considerations this report). The marsh setting extended north to Wallabout Bay where the Navy Yard was then built on sand fill and pilings (Church and Rutsch 1982:5). A vivid description of what the site area was like prior to filling was given by the Brooklyn historian, Henry R. Stiles in 1870. He notes that many of Brooklyn's older residents remembered the area of the City Park as a "great spread of two hundred or three hundred acres of black mud and ooze, water and strong smelling creeks...a desolate unattractive spot..." (Stiles 1870:617); at least some of the project site must have fit this description.



- project block (approx.)
 a continuation of Concord Road (never run)
 b Division Street (unnamed on map)
 c Wallabout/Newtown Road
 d Nassau Street
 → toll house (?)

0 400
ft.

N

It appears the northern part of the site block was marsh until at least 1835 but that it was wholly or partly filled by 1839³; however, some filling may have occurred even earlier: eighteenth century maps indicate marsh north and west of an early road that seems to antedate Division Street, a road run, or at least named, in the nineteenth century (see Historical Considerations and Figures 17 and 18).

The man responsible for initiating the site's development in the form of filling and road and bridge building was John Jackson. Jackson, who purchased the site property in 1802 (LD 7:338), was the president of the Wallabout and Brooklyn Toll Bridge Company incorporated in 1805 (Stiles 1867:387); as such, and as one of the land owners involved, he was instrumental in creating the Wallabout Toll Bridge and road, the site's first major development (see below). This roadway, which Stiles describes as running from "the Cripplebush road to the easterly side of the Wallabout Mill-Pond, over which a bridge was built to Sands Street in Brooklyn" apparently included a causeway that crossed the project site (Stiles 1867:387); plans for the bridge (and causeway) were developed as early as 1805 (City Laws [hereafter CL] 1805:86) but were delayed at least until 1806 (CL 1806:20). Since four years were theoretically allowed for its construction, it appears likely that the bridge was in place by about 1810, or, as noted above, by 1813 at the latest.

The 1805 survey description for the Wallabout bridge and road indicates that Jackson's portion, which included the project

³ According to this time frame, filling part of the site would have been initiated by either the heirs of John Jackson or by Losee Van Nostrand, a leather dealer and the owner of the tannery mentioned in the introduction (see section on Historical Considerations).

site, comprised "6 chains, 65 links over the meadow...to the Wallebought pond of the United States...", or approximately 440 ft. between the east side of Jackson's property and the pond to the west. Stiles, citing Furman [1823], notes that although the bridge was supposed to be 1,400 ft. long, its length was actually only 768 ft.; 340 ft. of its eastern side (across the project site) were solid, and therefore filled, causeway, and there was additional causeway beyond the pond to the west (Stiles 1867:387).

The concept of a solid causeway again suggests some filling of the site between 1806 and 1813. Although it is not entirely clear, eighteenth century maps (see Figures 17 and 18) suggest there may also have been marsh just west of a road that predated Division Street. If this western marsh did exist, it may have been filled before 1813 when John Jackson sold a lot bounded north by the Wall-about Bridge and west and south by Jackson's land (not meadow or marsh) (LD 10:506). However, some maps dating from the 1830s continue to indicate this area as marsh (e.g., Tanner 1835; Colton 1835) which may reflect a time lag in map making, or a sequence that can only be clarified by archaeological testing.

Map and deed information also suggests that the northern part of the site was at least partially filled between 1835, when a marsh is still indicated, and 1839 when Losee Van Nostrand, a local leather manufacturer who would soon build a tannery (see Historical Considerations and Nineteenth Century Ownership and Occupation), purchased this part of the site from heirs of John Jackson (LD 84:362).

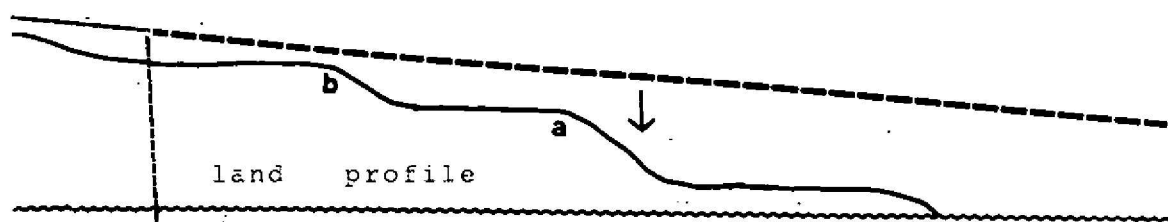
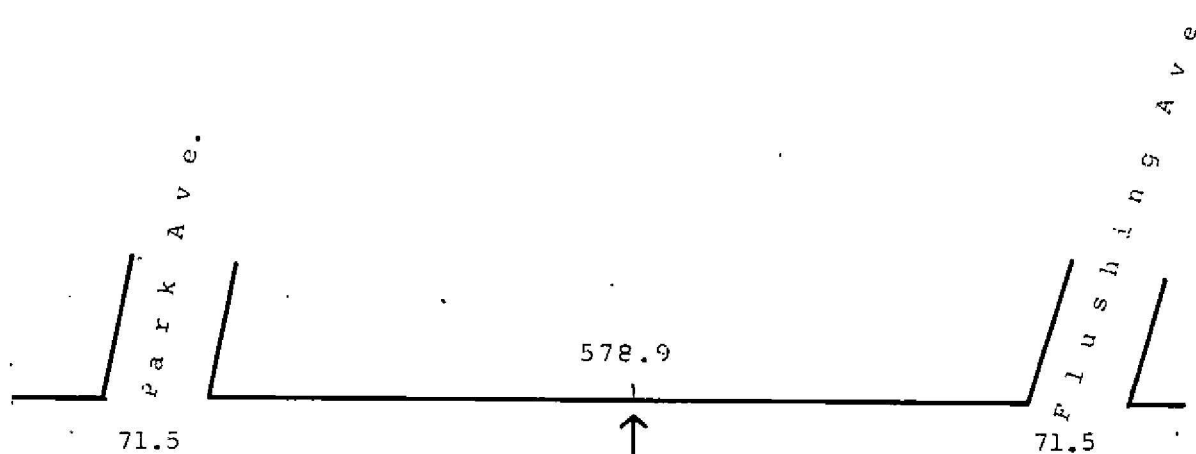
The bridge and causeway, as well as the Wallabout Road to Newtown, apparently remained open through the 1840s and perhaps into the 1850s. Although records are somewhat vague, the Wallabout Road to the east of North Portland Avenue was apparently closed in 1855 or 1856 (Girardi 1988:personal communication) when Flushing Avenue was fully opened.

As mentioned earlier, an 1841 street grading profile for North Portland Avenue⁴ indicates that 5 to 15 ft. of fill were planned to grade the street from south to north in the project area (see Figure 14). In addition, an undetermined amount of landfill had been deposited prior to drawing this profile to eliminate the marsh documented on the northern part of the site. This profile also offers information about the landfill sequence. For example, it indicates water in the vicinity of Flushing Avenue, then only a paper street, but solid land immediately to the south where a marsh is shown in 1835 (compare Figures 13 and 14 this report). Neither the causeway, which crossed the site from approximately 1805 to 1850, nor Division Street, which crossed it until about 1855 (Dikeman 1870:21; Girardi 1988:personal communication), are indicated on the profile map (see Commissions Chart 1839-1968:70, Figure 15 this report for street opening and closing information).

Landfill and Archaeology

There is no question that land reclamation was required before Flushing Avenue could be opened in the project area (according to information in the Brooklyn Directories, this occurred by

⁴ The only profile located for N. Elliot Place does not provide any pertinent informations since it dates from 1875, after the street was graded (Profile 1875:No.764).



- ~~~~~ water line
- proposed grade
- southern limit of project site
- a first small rise
- b second small rise
- proposed slope, projected

0 20
 ft. →

(vertical scale)



1845 or 1846). However, the exact method, extent, and dates of the filling, and the materials used, are not documented. Testing the block's relevant yard areas and sampling the fill should provide a great deal of information about this procedure, as well as any earlier filling that may have occurred.

It is doubtful that fill-retaining structures (e.g., bulkheads, derelict ships, etc.) would be found on the block (they are more likely to be located to the north, beyond Flushing Avenue). Instead, social issues, such as attitudes toward cleanliness, sanitation, and health in the City of Brooklyn could be addressed. For example, unlike New York City, which had instituted laws governing the cleanliness of landfill in the late eighteenth century (Geismar 1985), neither the acts and ordinances that relate to the incorporation of the City of Brooklyn in 1834 nor those of 1854 which consolidated Brooklyn, Williamsburgh, and Bushwick, address this issue (Laws and Ordinances 1836, 1854); consequently, garbage-laden fill would apparently have been legal here where it was theoretically unacceptable across the river⁵

Contemporaneous fill from the Empire Stores, a warehouse complex located on fill a short distance to the northwest on the East River, was relatively clean (Kirkorian 1988:personal communication). However, both initial monitoring of this site in 1979 (Solecki 1980) and later monitoring programs (Kearns and Kirkorian

⁵ New York City's laws were introduced in reaction to Yellow Fever epidemics that plagued the city annually in the late eighteenth century and into the nineteenth, laws that persisted beyond the Yellow Fever years. Although Brooklyn also experienced epidemics (Stiles 1869:203-205), no comparable reaction seems to have occurred.

1985) suggest disturbance from subsequent construction that obscured the nature of the original fill⁶.

In addition to the information it could offer about local land reclamation, sampling landfill from the yards of the project site would also provide the opportunity to make comparisons with material recovered from Manhattan (e.g., Geismar in press), or with fill yet to be sampled. That is to say, it would not only contribute information about the nature and methods of Brooklyn's mid nineteenth century or perhaps even earlier landfill, but also about public and private concerns or issues over time.

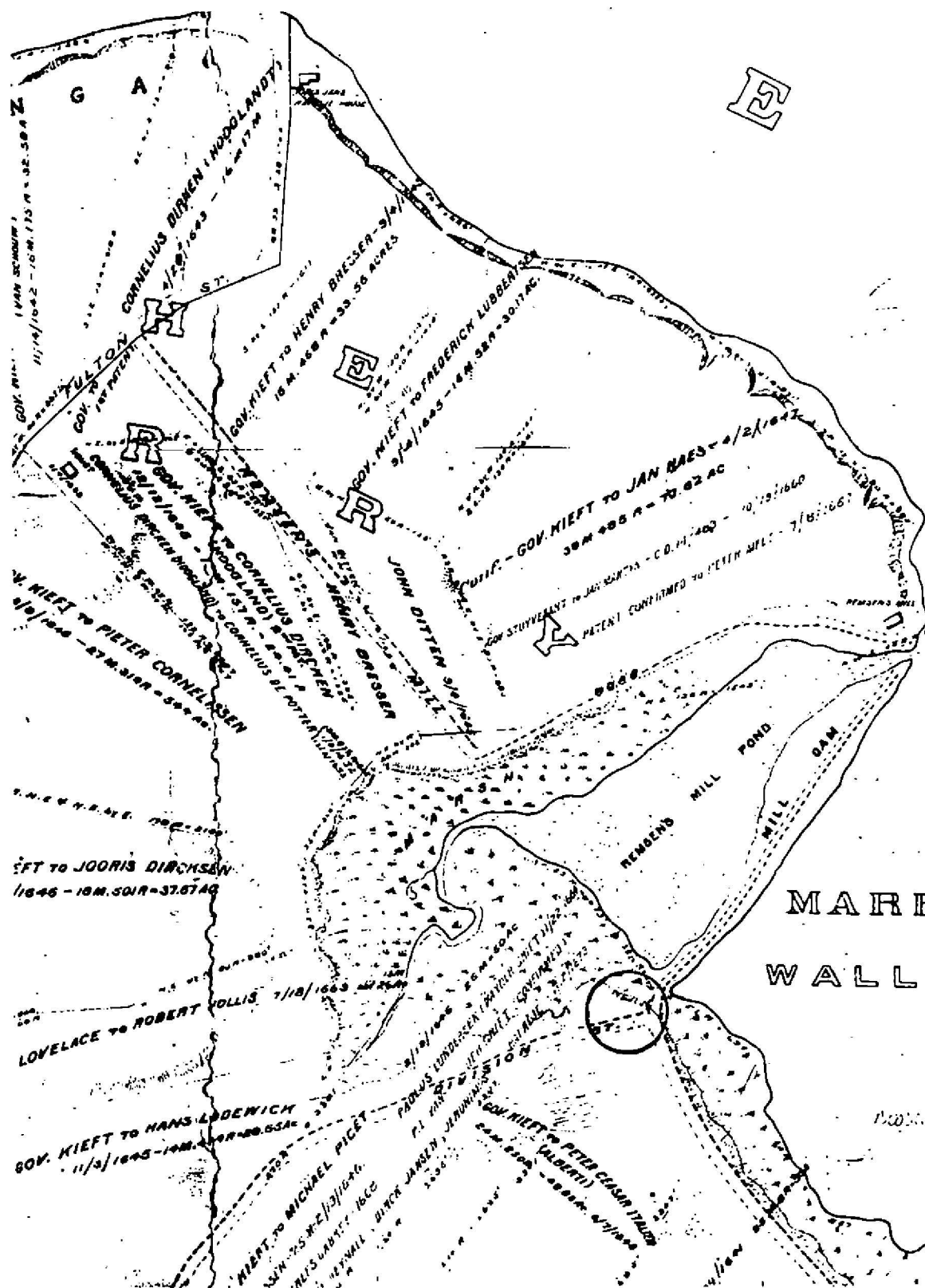
HISTORICAL CONSIDERATIONS

General History

Ownership in the project area can be traced to 1643 and 1646 when patents were granted to Pieter Caesar Italien and Michel Picet by William Kieft, the Director General of New Netherland (Stiles 1867:82-83; Mossdrop and Beers 1895-6, see Figure 16 this report). Stiles notes that by 1646, nearly the entire waterfront from Newtown Creek (to the northeast) to the south side of the Gowanus Bay (to the southwest) was owned and under cultivation (Stiles 1867:81); this included the "Wall-bogt" section, one of Brooklyn's earliest settlements. From this time through the 1830s local farms and tobacco plantations were worked, but no structures are documented on the project site (e.g., Stiles 1867:166).

Over time, the site property changed hands quite often (e.g., Stiles 1867:82-84; Brooklyn Historical Society Block Convey-

⁶ Pits and trenches from the 1979 excavations produced a greater quantity of domestic debris than the latter monitoring programs, but this may have been an effect of differences in size, depth, and number of collection units as well as the collection methods than the condition of fill.



project area (approx.)

no scale



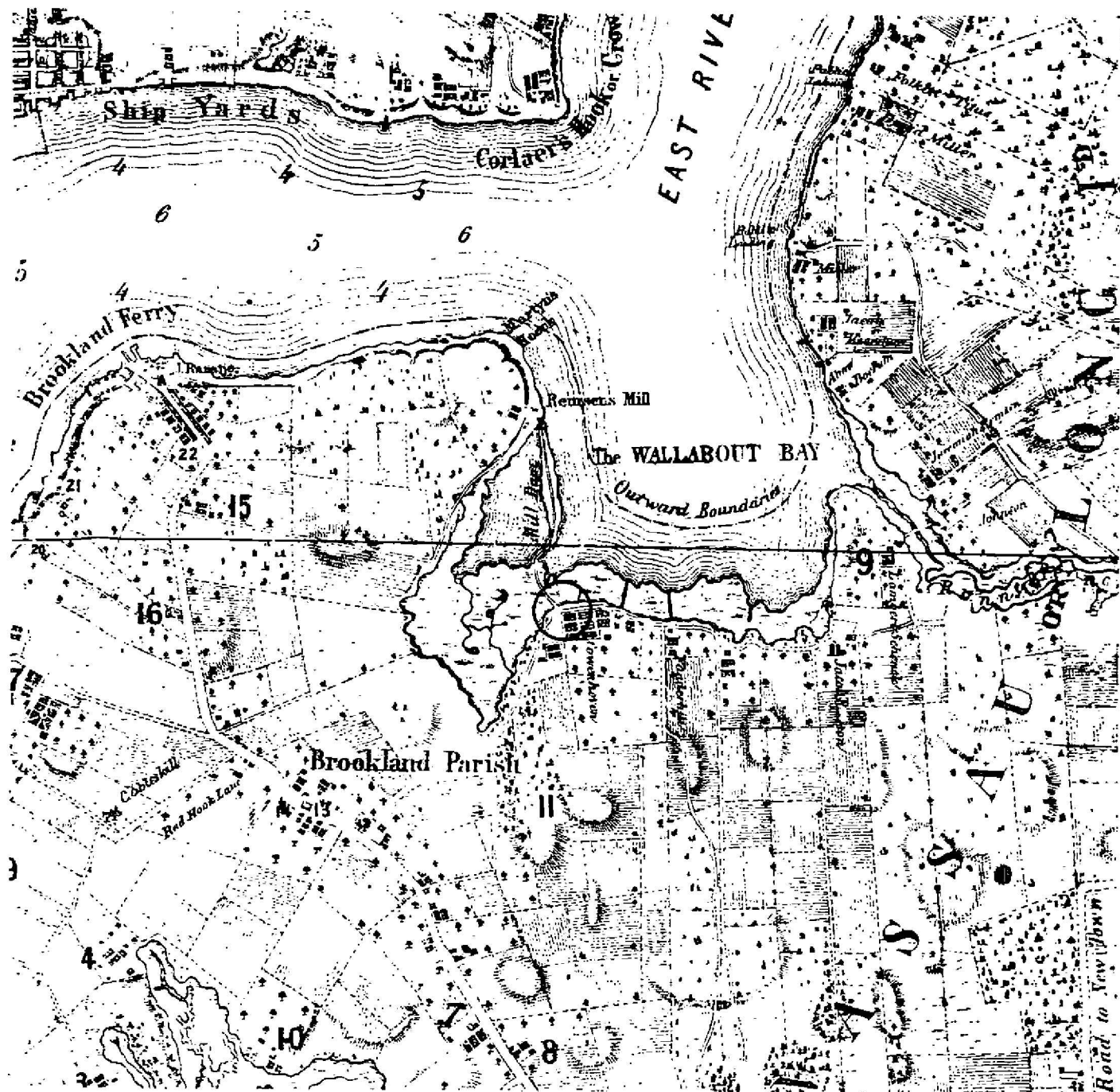
ance Summaries), but maps indicate that this land remained farmland and marsh well into the nineteenth century (see Ratzer 1766-67 and the British Head Quarters Map 1782 [Stevens 1900], Figures 17 and 18 this report⁷).

The site area in general, and Wallabout Bay in particular, played an important roll during the Revolutionary War (the site itself, however, does not appear to have been directly involved). Throughout the British occupation that lasted from 1776 to 1783 (see Stiles 1867:297-331 for an account of the occupation), the bay was where the infamous British prison ships were anchored and where thousands of American men lost their lives--not in battle but because of the abominable conditions existing on these vessels (see Stiles 1867:331-376 for a detailed, heart-rending account). In addition, Ft. Putnam (later rebuilt during the War of 1812 and renamed Ft. Greene) was situated just to the south (see Figure 18).

Not long after the Revolutionary War, John Jackson and his brothers came to Brooklyn and began purchasing land near the bay. (Stiles 1867:363). As noted earlier, in 1802 this included the site property. Although Jackson never lived on the site, his influence on it and throughout the project area was profound.

Jackson opened a ship yard on the west side of the Wallabout that he later sold to the Federal Government (through an inter-

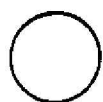
⁷ The Ratzer and British Headquarters [Stevens 1900] maps illustrated here were both done from survey and are known for their accuracy (Hudson 1988: personal communication). Neither of them show any development between 1767 and 1782 in the immediate project area. Other available maps, which are not considered as accurate (Konop 1988:personal communication)--one done from memory depicting the project area from 1776 to 1783 (Stiles 1867:opp. p. 332), the other supposedly a copy of a survey from 1814 (Stiles 1867:opp. p. 400)--have proved to be misleading and confusing and are not included here.



project block area (approx.)

0 1/4
mile





project block area (approx.)



A

described as "A large Fort begun in the Summer
--82 by Order of Sir Guy Carleton upon the prin-
cipal Height the Rebels had occupied...": Fort
Putnam, later Fort Greene

mediary) in 1801 for use as a naval ship yard (Stiles 1867:363; LD 1801 245:248; LD 1801 248:250). This 40-acre tract and ship yard later became the Brooklyn Navy Yard.

While digging on the western shore of the Wallabout in 1808, Jackson inadvertently exposed the bones of Americans who had died in the British prison ships. Apparently motivated by both altruism and political ambition, he donated land for their reburial (Stiles 1867:363-365); as noted in the site description, many of these remains were reinterred in Ft. Greene park in 1873.

Jackson was also a partner with wealthy New York merchant brothers, Joshua and Comfort Sands, in a scheme to develop "Olympia," a village on the western heights of Wallabout Bay (Stiles 1867:382-383). And, finally, he promoted a development just outside the Navy Yard walls on Sands Street, west of the project area. Named "Vinegar Hill" after a battle fought in the 1798 Irish rebellion, Jackson's aim was to sell this land to the Irish from New York City who came to work in the Navy Yard (Flood 1950). As noted in the Landfill section, it was this wealthy entrepreneur who initiated the site's development in the form of land reclamation and road and bridge building, and who affected development in the entire project area.

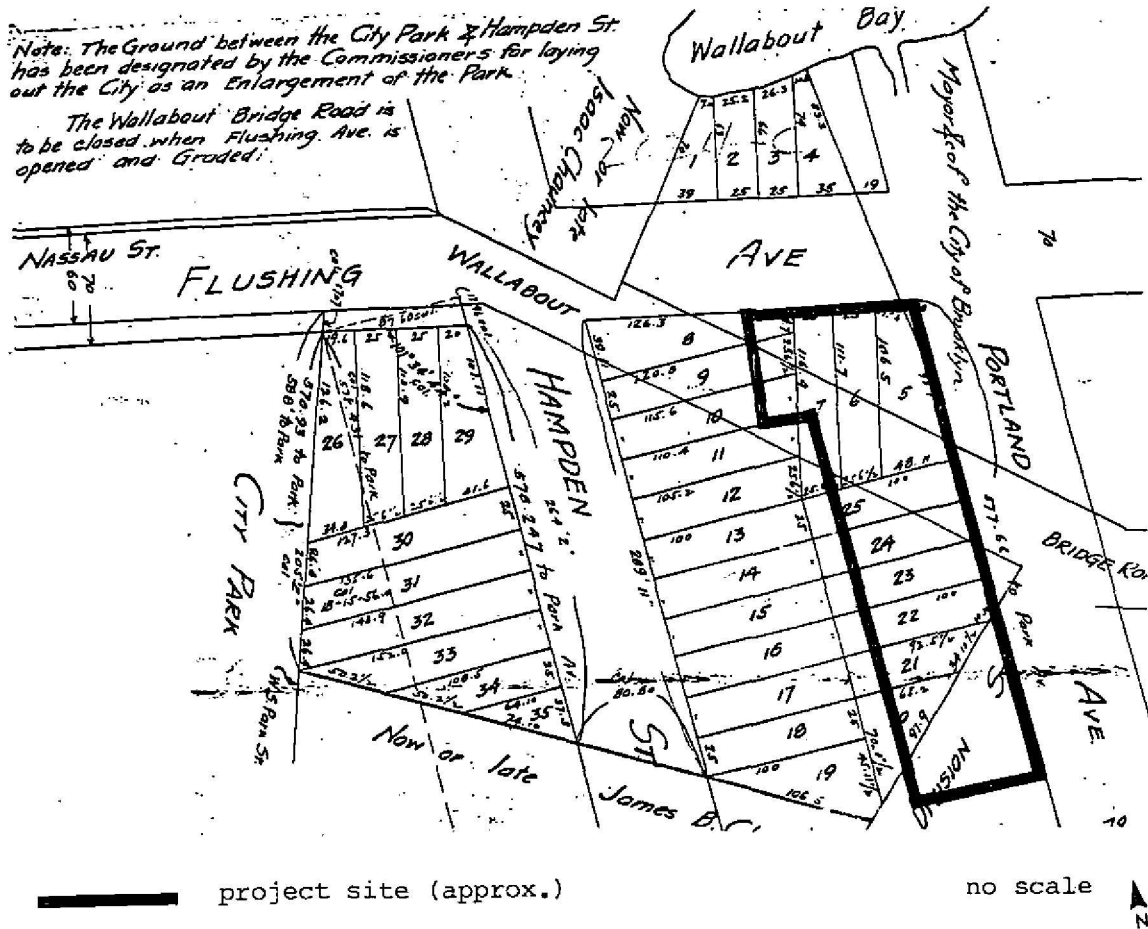
Establishing the Navy Yard undoubtedly influenced this development: the Wallabout Road (Old Newtown Road), the Wallabout Toll Bridge, and the regulation of Division Street may have been tied to the Navy Yard's needs, especially for better communication and housing. Certainly construction of houses in the project area and on the site itself, many of them with stores underneath, may have been prompted by the requirements of the community growing up around the

Navy Yard as well as a general spread of development throughout the City of Brooklyn.

The site's first structure appears to have been commercial rather than residential. In 1840, Losee Van Nostrand, a local leather manufacturer (Brooklyn Directories 1834 to 1843), opened a large tannery on the north side of the Wallabout Road [causeway] near Division Street (Brooklyn Directories 1840, 1841; AT 1841; Atlas Map 1841:x-3). Historically, tanneries were built near swamps or ponds (e.g., Norcross 1901:2) which may in part explain why Van Nostrand chose to buy newly-filled, or perhaps not yet fully filled, land for a tannery from the heirs of John Jackson in 1839 (LD 1839 86:142; see Figure 19 this report for a map of the site's subdivision of the site property proposed by Jackson's heirs). A mortgage taken by Van Nostrand in June of 1841 (Liber of Mortgages [hereafter LM] 1841 69:124) suggests his building may have been under construction, or, since a tannery is listed on the site in the Brooklyn Directory's first street directory (Brooklyn Directory 1840), he may have taken a mortgage to recover costs.

As shown on the 1841 damages map for Flushing Avenue (Atlas Map 1841:x-3), this structure was about 120 ft. long by 35 ft. wide. Its duration is a question, but it appears to have functioned for only three or four years (see Nineteenth Century Ownership and Occupation this report).

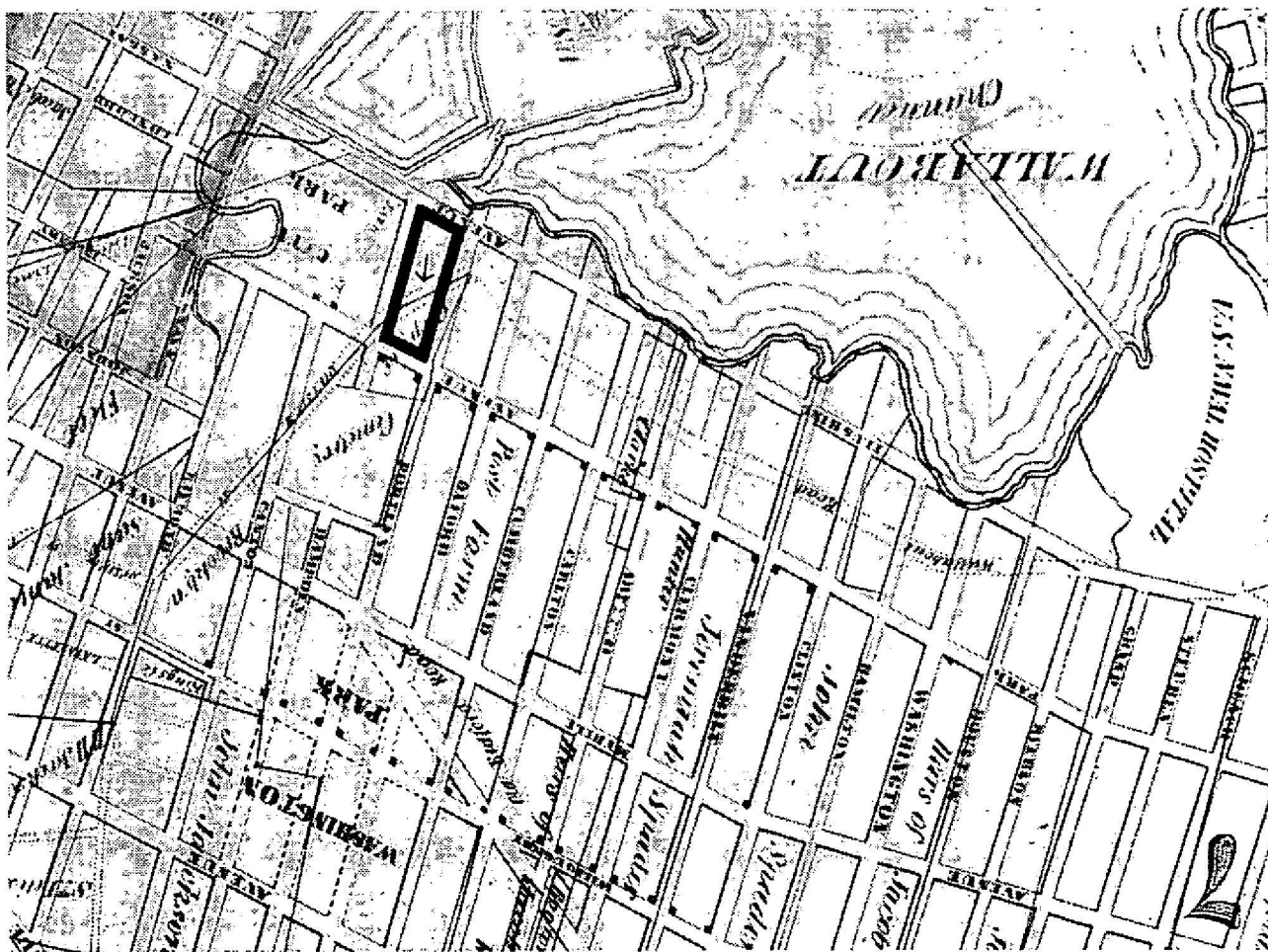
In 1843, building construction in the site's ward, the seventh, was greater than in the others: of the 570 buildings either erected or under construction in Brooklyn's nine wards that year, 122 were located in the seventh (Stiles 1869:274).



By 1846, Flushing Avenue had been opened in the site area, but development was still sparse (Brooklyn Directories 1845-46; see Figure 20 for a general view of the site area, minus its buildings, at this time). However, as early as 1842 or 1843, a grocer was probably living on Division Street in the site area, and by 1845 or 1846 he may have been joined by a tanner perhaps associated with Van Nostrand's tannery (Federal Census 1850; Brooklyn Directories 1842-1851; see section on Nineteenth Century Ownership and Occupation). By 1847, Ft. Greene Park--briefly named Washington Park--was authorized to open (Stiles 1869:272); this also might have influenced subsequent neighborhood development.

The 1855 Perris Insurance Atlas, the first to document Brooklyn's structures on a block by block basis, indicates five frame dwellings on the site, two with stores on the first floor (Figure 21). Exactly when these houses were built, and who occupied them, remains somewhat speculative (see section on Nineteenth Century Ownership and Occupation).

In 1852, Valentine G. Hall, a wealthy, retired wool merchant from New York (NY Directories 1844-45; NY Times 1880), started buying and selling properties on the site (e.g., LD 1852 84:258); in 1879, he owned fifteen of the site's seventeen houses (AT 1879:7), and at least one he didn't then own had once also belonged to him (No. 20 Flushing Avenue). By this time, all obvious evidence of the marsh, the early roads, and the bridge was gone and the block had taken on its modern appearance and (see Robinson 1886, Figure 22 this report, for one of the earliest examples of this new configuration).



project block



indicates Division Street on project block

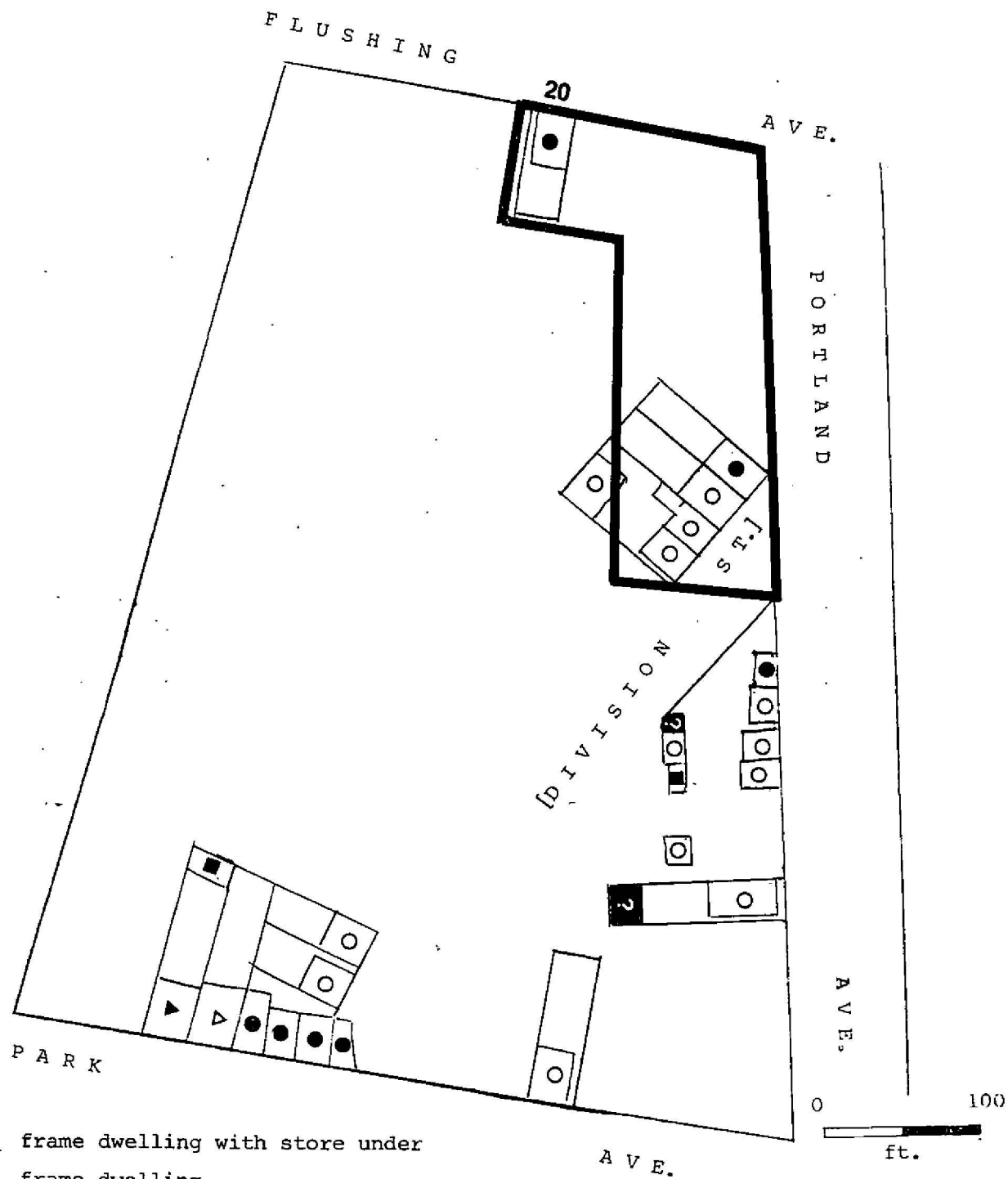
0 800



ft.



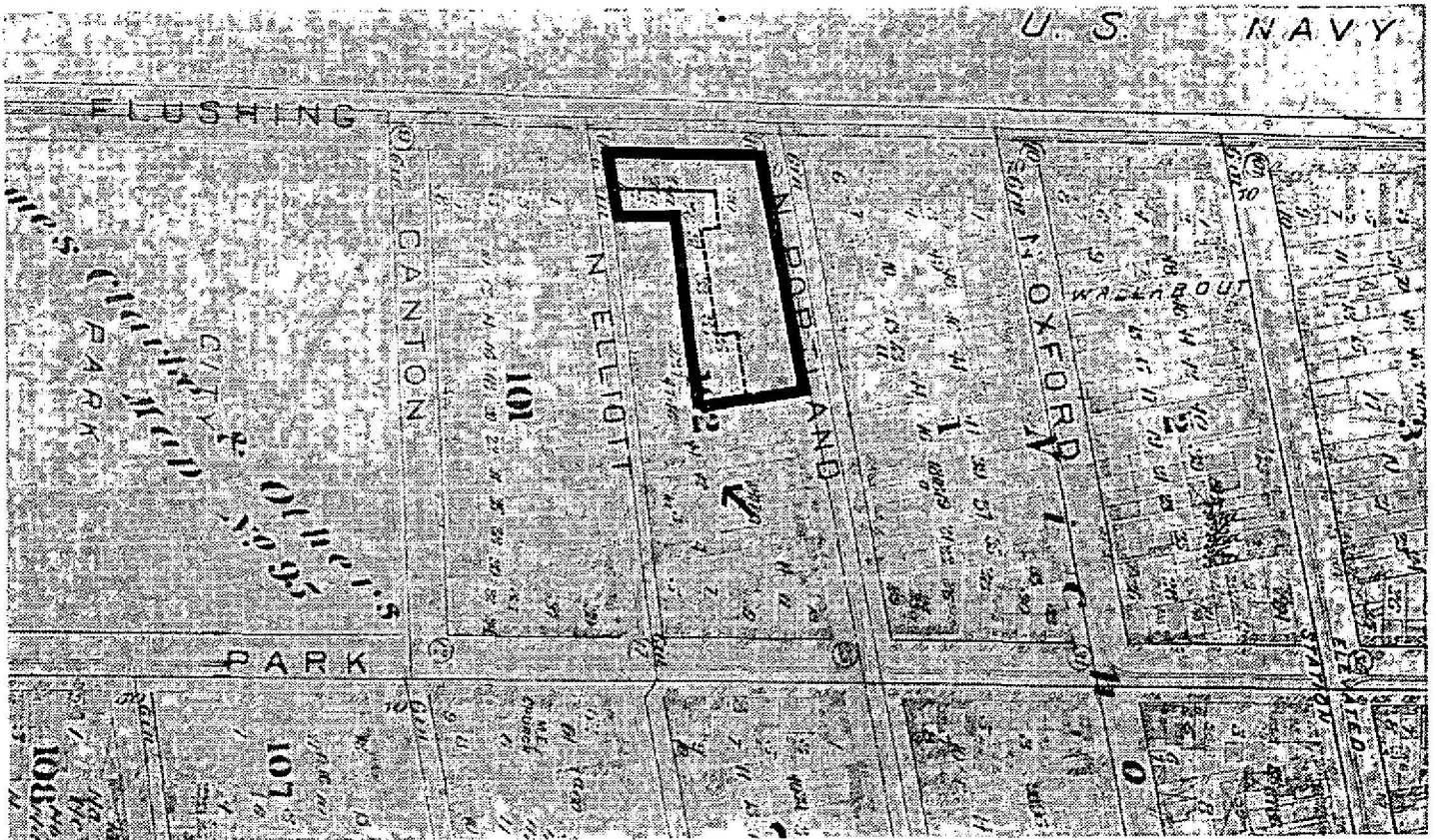
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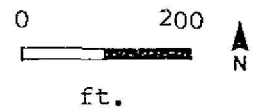
- frame dwelling with store under
- frame dwelling
- △ brick dwelling with store under
- ▲ brick dwelling
- brick or stone store
- ? unidentified structure

— project site (approx.)

Note: location of 20 Flushing Ave.
appears incorrect; see fn 11 in text)



-  project site
-  back wall line of site structures
-  Division St. (now defunct)

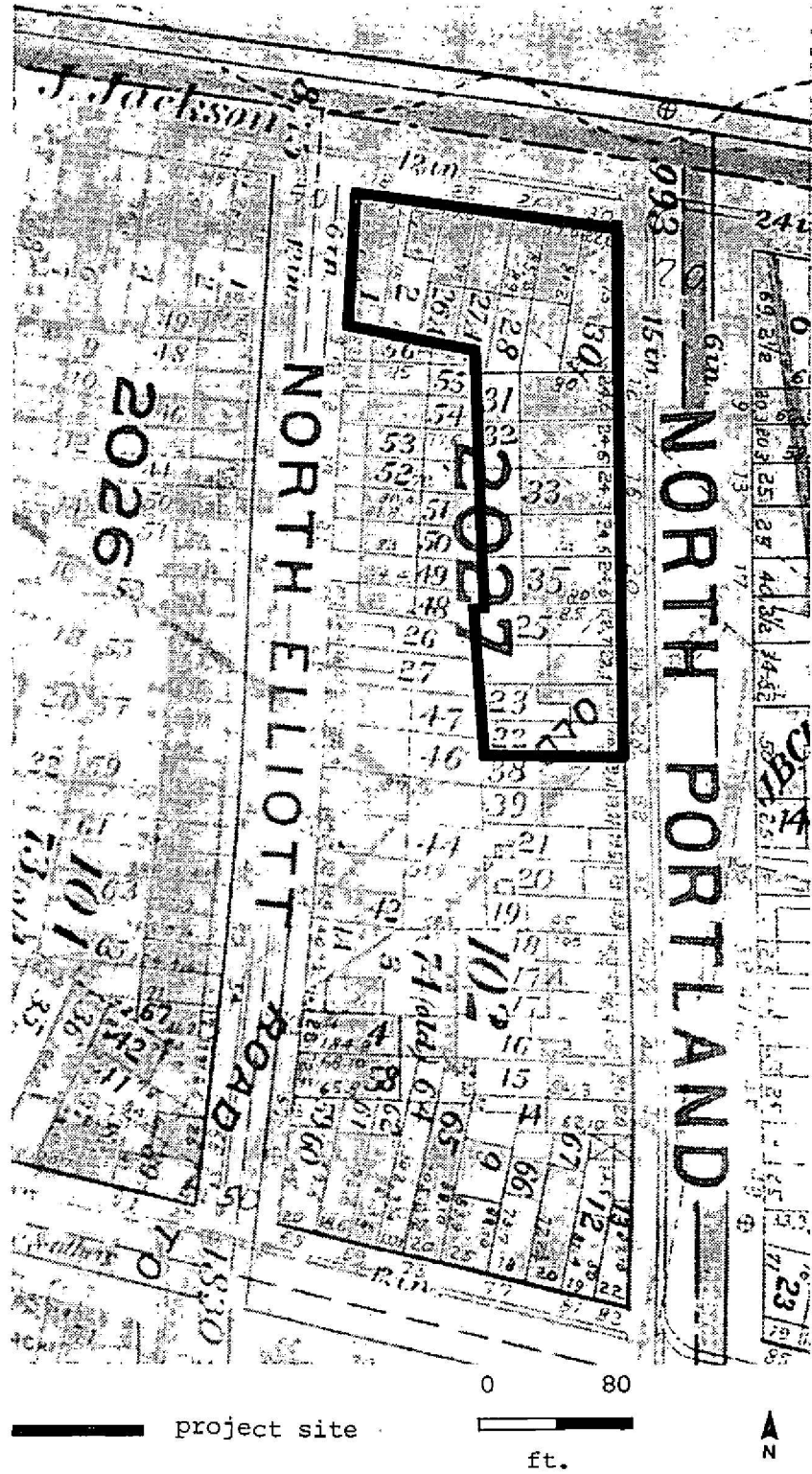


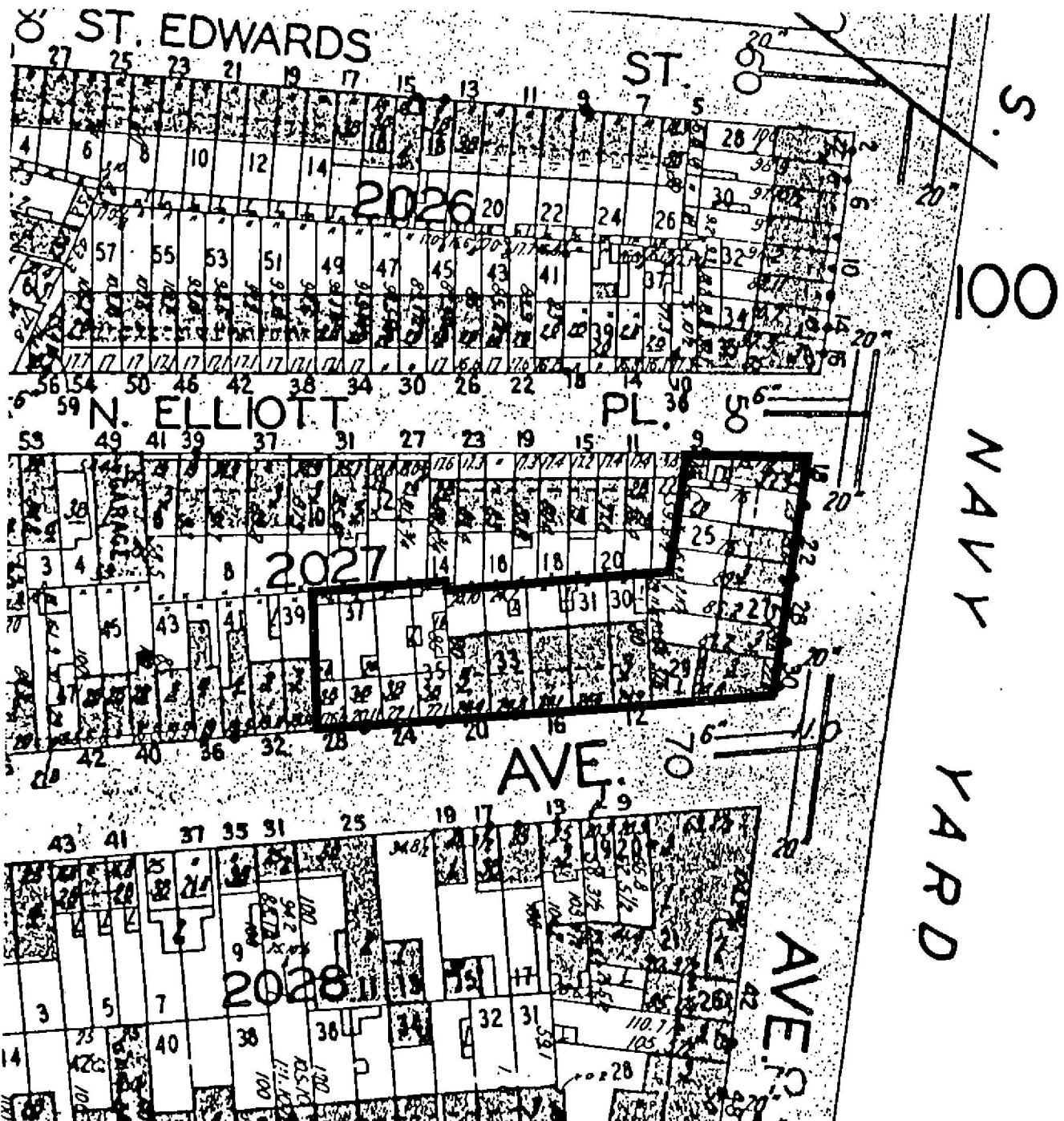
Both municipal water and sewerage systems were planned for the City of Brooklyn by the late 1850s (see Stiles 1884:584-594 for a detailed discussion), and by the late 1870s, sewers were apparently in place in the project area (Board of Health 1875-6:map). However, both the problems of these systems in former marsh areas (Stiles 1884:593) and social and economic considerations may have delayed the adoption of these services into site buildings. For example, even when city sewerage was available in New York City in the mid nineteenth century, absentee owners were not eager to pay for it. As is proving to be the case in Manhattan, archaeology may contribute information about adoption of city services into the working class home (Geismar in preparation).

Block development appears relatively stable from the late nineteenth century⁸ until the 1930s (Figures 23-24). By 1932, the Flushing Avenue properties were all or mainly commercial, but buildings on the side streets were still dwellings; however, many if not all of them now housed two or three families rather than one.

In 1932, the houses that had stood on Flushing Avenue, including No 20, by then the site's only survivor from the mid nineteenth century, had been replaced by gas stations on either corner (LD 1932 5260:395; 1932 5267:307). By 1939, if not before, five of ten site lots then on North Portland Avenue (several of these have now been combined) were vacant (AT 1939:40; see Figure 25). A description of the project area, taken from a 1939 development suitability study reads as follows:

⁸ A comparison of the 1886 Robinson Atlas (Figure 22) with the 1898 Beers Atlas (Figure 23) suggests that the configuration of some of the Portland Avenue buildings changed over time; however, there are back yard areas that remained undeveloped.

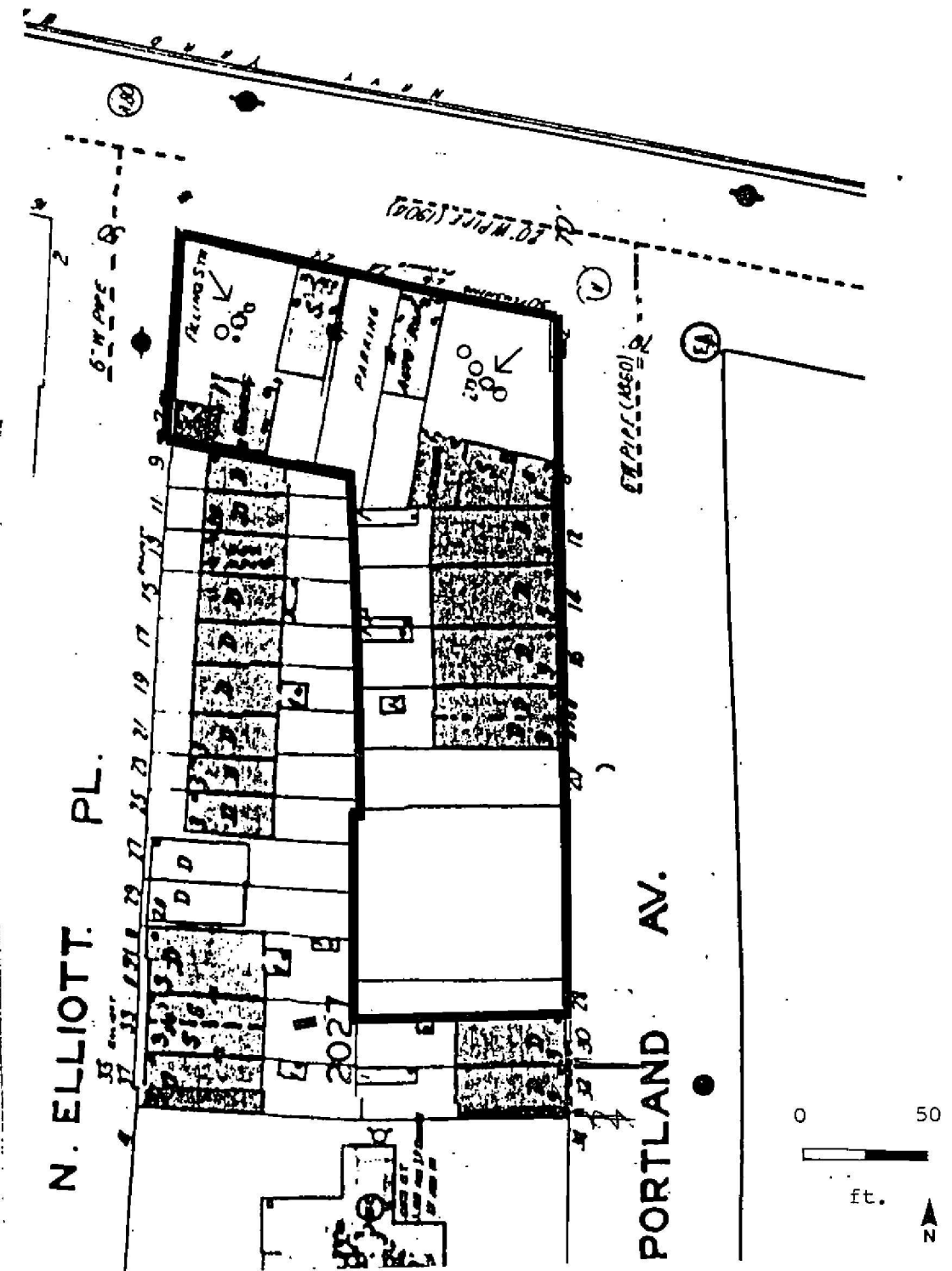






project site

0 100
ft.





 project site
 gas pumps of c. 1932 gas stations

The Navy Yard area in Brooklyn is a suitable area for a low rent housing project...the district is characterized by the extreme dilapidation of much of its housing, with only here and there an occasional structure which might be considered adequate under present day standards. The buildings are two- and three-story structures, erected fifty or more years ago as one family residences. In more recent years, they have been converted into multi-family dwellings for low-income families. In relation to the city as a whole, this area is a logical site for clearance, replanning and the construction of low-rent housing (Citizens' Housing Council 1939:1).

Today, even the gas stations are gone, and, as mentioned in the site description, the only standing structure is an auto repair shop on the corner of North Portland and Flushing Avenues (see Figures 4-8). In addition to any evidence of its early development that may remain in and under fill, the site's legacy may include the problem of gas and oil waste contamination from defunct gas stations. The extent of this contamination, and its implications for archaeological testing, remain to be seen.

Nineteenth Century Ownership and Occupation

Since the site's development history begins in the nineteenth century, this period warrants detailed analysis. The three men most closely identified with this development are John Jackson, Losee Van Nostrand, and Valentine G. Hall. Of the three, only Van Nostrand was a native of Brooklyn and his association was the most personal, involving occupation as well as ownership.

Jackson, who was originally from Jeruselem, Long Island (now Wantagh [Proehl and Shupe 1984:34], came to Brooklyn with his two brothers, Samuel and Treadwell, in the 1790s (Stiles 1867:363). As noted previously, by 1802, he had purchased the site property

which was then meadow and salt marsh. Ship building was among his many interests, and he is known to have a ship yard on the west side of Wallabout Bay (Stiles 1869:34-35); in addition, he was the overseer of at least some of the innovative ships built in Manhattan's ship yards (Stiles 1869:129).

Jackson's role in the site's development has been mentioned in the sections on Landfill and Historical considerations. Of greatest concern here was the construction of the Wallabout Toll Bridge and its causeway and the reclamation of marsh that covered the northern and perhaps the western portions of the site; Jackson was instrumental in both undertakings. In addition, he sold site lots as early as 1813 (LD 1813 10:506) and, occasionally bought some back (LD 1821 21:156). But he does not seem responsible for the construction of any buildings (two structures are indicated on the 1835 Herbert and Tolford Survey [Figure 13], possibly a small toll house [Stiles 1869:167], on North Portland Avenue and an unidentified structure to the south that may have been on the project block but was not on the site).

Jackson died intestate in 1828 (Letters of Administration 1828 3:104) and his wife, Sarah or Sally, probably about ten years later. No will in her name has been located, but deeds from 1839 and newspaper advertisements (e.g., Brooklyn Evening Star 1843) indicate that the Jackson children began selling the site and other properties at this time.

The site's first structure (besides the causeway) was apparently the 120-ft. long tannery built by Losee Van Nostrand, probably by 1840 but certainly by 1841 (as noted earlier, the tan-

nery is indicated in an 1840 street directory, but not listed by name or location in the body of the directory; by 1841, it is named and taxed [TA 1841]; a street damages map for Flushing Avenue indicates its size [Atlas 1841:x-3]).

Van Nostrand, a descendant of Hans Van Nostrand who came to America from Holland around 1640 (Pelletreau and Brown nd:228), was a leather manufacturer. Parenthetically, he was also a principal in the short-lived New-York and Brooklyn Crown Glass Company (Brooklyn Directories 1834-1836) and was on the board of directors of Brooklyn's first library (Stiles 1870:888-892). He was therefore a fellow board member of Gabriel Furman, an early Brooklyn historian who was responsible for documenting the Native American site at the sand hill discussed earlier in this report.

Three years before buying site land and four or five years before building his tannery, the following advertisement appeared in a Brooklyn Directory:

Hides, Oil, Leather, &c

The subscriber has removed his Leather Store, to No. 3 Front-street where he would be happy to serve his customers and the public generally. He has a general assortment of Sole and Upper Leather and all Skirting [sic?], Hog-skins, Sheep-skins, Top-hides, &c. suitable for saddle and-harness-making. He can supply at the shortest notice from his tannery, any quantity of half-tanned Leather, or Oiled Leather suitable for the rigging of vessels. Also, Hand Belt and Hose Leather for machinery. All of which will be disposed of on the most reasonable terms by L. VAN NOSTRAND. N. B. The highest cash price paid for green hides and calf-skins. Brooklyn, May, 1836. (Brooklyn Directory 1836/37).

It appears from the 1841 Flushing Avenue Street Damages map, from the Brooklyn Directories (which note the Van Nostrand

Tannery on the north side of the Wallabout Road from Division and Nassau⁹ to Newtown Road), and the 1841 tax manuscript that Van Nostrand's tannery was on the site from at least 1841 (and perhaps 1840); since it was located on the north side of the causeway, it was built on new fill or pilings. Moreover, it persisted until at least 1843. He also built houses nearby for his tanners (one may have been on the site block, but not on the site itself [see Figure 26]) (AT 1841; Atlas 1841:x-3). It is possible that John Gardiner, a tanner who later bought site property at Division Street (see below) and who is listed in the Brooklyn Directory as living on "Wallabout n[ear] tannery" and "Nassau n[ear] Division" in 1842 and 1843, may have lived in one or another of these houses.

As was the case with Jackson, Van Nostrand's heirs ultimately sold his property¹⁰. Among the buyers was Valentine G. Hall (LD 1852 280:245, 248), a wealthy, retired wool merchant from New York City (e.g., NY Times 1880:5:4).

Hall's first purchase, from John Van Nostrand, Losee's son and presumably his heir (no will or letters of administration are filed for Losee Van Nostrand), was made in 1852 (LD 1852 280:245, 248). Many of his subsequent acquisitions--particularly those on North Portland Avenue--were made through foreclosure sales (e.g., Lots 23 through 30 [LD 1873-1879]). Between 1852 and 1879 he acquired almost the entire northern part of the project block and, therefore,

⁹ Nassau Street was an old street that ended at the eastern end of the City Park (see "d" on Figure 13); Flushing Avenue is actually an extension of this street.

¹⁰ Before this sale, Van Nostrand's son John had purchased a small triangle of land from the City of Brooklyn (LD 1850:236:495) that gave the northeastern corner of the block its modern configuration.

most of the project site. This ownership belies his 1880 obituary that notes his life was devoted to "domestic and religious affairs" after his early retirement in about 1845 (NY Times 1880:5:4).

A paucity of tax records makes it impossible to reconstruct the actual building schedule for the site's houses. It does appear, however, that with few exceptions, Hall or his son and heir, Valentine G. Hall, Jr., were responsible for the construction of the buildings standing by the end of the nineteenth century. However, there were also structures, most of them later demolished, that predated Hall's ownership. These included the houses on Division Street and one on Flushing Avenue, all but one of them probably built by Losee Van Nostrand or his son, John (the possible exception was a house on Division Street that belonged to John Gardiner).

Hall's first purchase, from John Van Nostrand in 1852 (LD 1852 280:245), encompassed all of the modern block north of Division Street except Gardiner's property (Gardiner was the tanner mentioned above who had purchased his lot from John Van Nostrand in 1850 (LD 1850 215:402). Almost exactly four years later, Hall bought the Gardiner property (LD 1854 365:264), thereby acquiring the entire site north of Division Street.

There is little question that the houses on the north side of Division Street, a street run by 1835 but with earlier antecedents (see Landfill), were built before Hall's 1852 purchase. According to the 1855 Perris Atlas noted previously, all of them were frame structures (see Figure 21); however, an 1850 deed and mortgage cites "the wall of the brick building now on the adjoining lot" as the partition between John Gardiner's lot on Division Street

and the lot immediately to the north [LD 1850 215:402; LM 1850 165:92). This raises a question about construction¹¹. These structures were apparently demolished after 1855. The site land on the south side of Division Street, bought from the City of Brooklyn by a William Draper in 1845 (LD 1845 129:341), was unimproved when purchased by Hall in 1854 (LD 1854:306).

While it appears that Valentine G. Hall or his son may have built most of the houses constructed on the site after 1852, the builders and occupants of the defunct Division Street houses are a question. The aforementioned tanner, John Gardiner, appears to have lived here, and a grocer, Thomas Petit, may have been a neighbor--both of them in houses located on the project site. However, these occupations are somewhat speculative. For example, when Gardiner bought his lot in 1850, no house or dwelling was cited in the deed. But, based on the 1850 Federal Census and directory information, it appears he was a local resident as early as 1842 and on the site by 1845. This is also true of Petit, who appears to be on Division Street as early as 1842.

It is possible that Gardiner lived on the Division Street property prior to purchasing it--perhaps as a tenant of Losee Van Nostrand who may also have been his employer--since he is listed in the directories as living "on Division n[ear] Flushing av" from 1845 till 1848 or 1849. Interestingly, in 1850, the year he bought the Division Street property from Losee Van Nostrand, Gardiner is listed as living west of the site block on Flushing near North Canton.

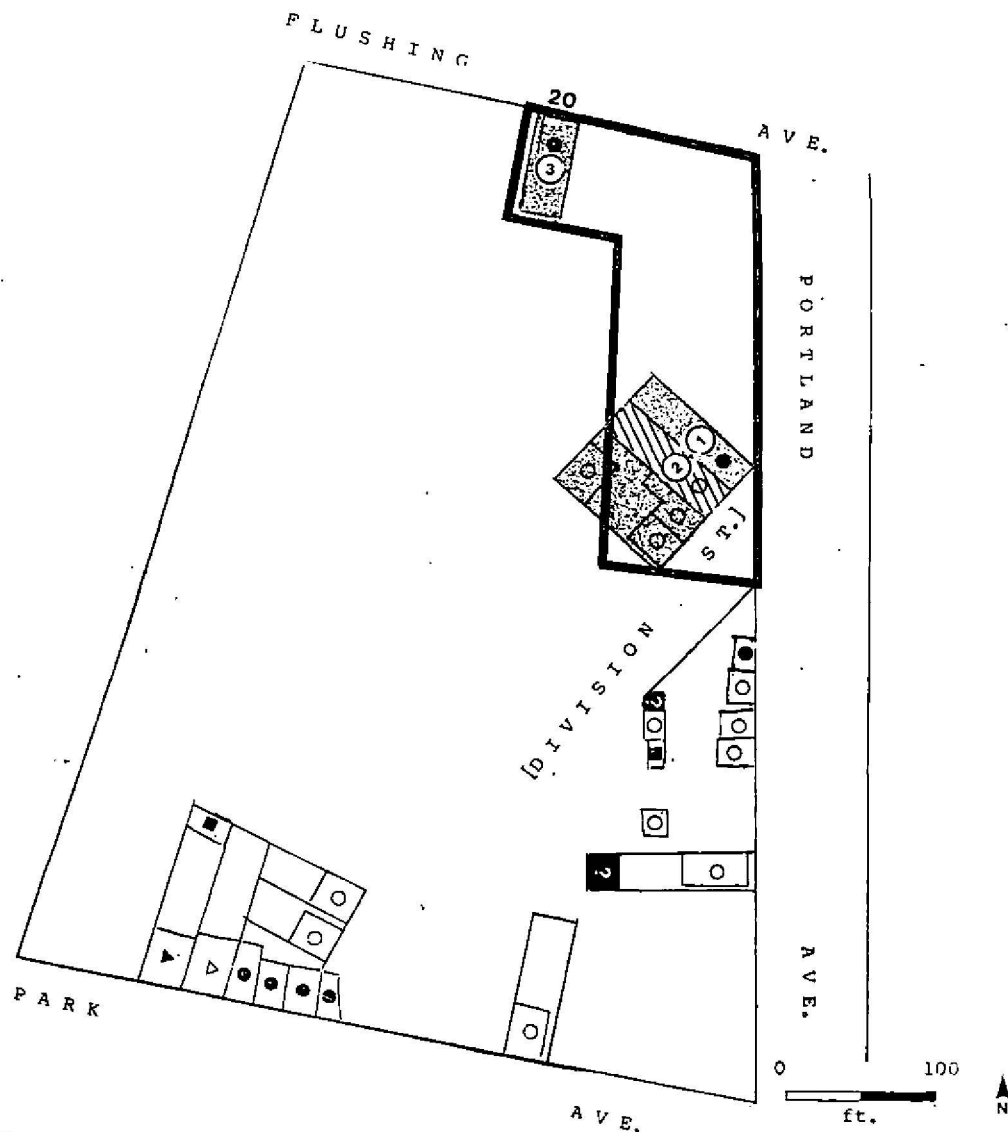
¹¹ At least one measurement on this atlas is also questionable: the placement of No. 20 Flushing Avenue, when correlated with all available data, indicates it would have been situated slightly to the east of its mapped position, leaving a vacant lot to the west within the site boundaries.

Since Gardiner did not sell this property to Hall until 1854, he may himself have become a landlord, renting out the house that then stood on the site. It is assumed from directory and deed information that his home from 1845 until 1849 was a house on Division Street situated on the second lot in from Portland Avenue.

Thomas Petit is the site's only other possibly identifiable tenant-occupant from this period. As early as 1842, until 1847, his address is given in the directories as "Division c[orner] Wall-about;" even his 1849 address--"Division c[orner] Flushing av"--could conceivably be the same address (Division Street never extended to Flushing Avenue). Only in 1850, when it became "Flushing av n[ear] the Park," is a change of address indicated.

Petit's occupancy is particularly interesting since he not only may have lived in a Division Street house from 1842 until 1849, he may also have then lived at No. 20 Flushing Avenue, another frame house and store on the site, from 1850 to 1852. This seems likely since his address in 1850 and 1851 is described as "Flushing near Portland", and the only structure then standing on this part of the site block was No. 20 (see Figure 26 for ownership and occupation).

Unfortunately, this is all somewhat speculative since records from this time period are sparse (for example, only one tax record, from 1841 and therefore before either the Division Street houses or No. 20 Flushing Avenue were built, is available). A consecutive tax record does not begin until 1879, after the Division Street properties were demolished but No. 20 Flushing Avenue continued to stand. Nevertheless, this meagre information and additional data from the 1850 census--which lists laborers, tanners, ped-



- frame dwelling with store under
- frame dwelling
- △ brick dwelling with store under
- ▲ brick dwelling
- brick or stone store
- ? unidentified structure
- project site (approx.)

Jackson (1801) → Van Nostrand (1839) → Hall (1852)

Jackson (1801) → Van Nostrand (1839) → Gardiner (1850) → Hall (1854)

① Petit 1842-1848/9

② Gardiner 1845-1848/9

③ Petit 1850-1852

Note: location of 20 Flushing Ave.
appears incorrect; see fn 11 in text)

dlers, a sea captain, and a carpenter in the site area--indicate that the occupants, if not the owners, of site properties were working or middle class families.

No. 20 Flushing Avenue was the only early site structure to survive past the mid 1850s (see Figures 22 to 24). This three-story building, situated on property first owned by the Van Nostrands and then, by 1852, by Valentine G. Hall, was rented to Thomas Matchett in 1862 (this would leave a ten year gap between the Petit and Matchett occupations). Matchett's first directory listing on the site was "Hotel[,] Flushing av n[ear] Portland av" (before this, his business had alternated between "liquors" and "hotel" at various addresses [e.g., Brooklyn Directories 1857-1860]).

Matchett purchased this property from Hall in 1867 (LD 1867 745:227); he ultimately kept the store but lived at various addresses over the years, apparently renting out the upper stories of No. 20. In 1894, he sold the property to Eliza Matchett (LD 1894 2249:81)--perhaps his daughter or daughter-in-law, who may or may not have lived there (no listing for her has been found in the directories).

Tax information indicates the property remained in the Matchett family at least through 1910 (AT 1910), and that No. 20 stood on its site until the North Elliot Place and North Portland Avenue gas stations were built in 1932 (e.g. Sanborn 1915 updated to 1929; LD 5260 1932:260; 5267 1932:41). As noted earlier, the tenant-ed buildings, perhaps most of them built by Valentine G. Hall, remained on the project site until the 1930s. Many of the site's structures were demolished by 1945 (e.g., Sanborn 1915 updated to 1945; see Figure 25 this report).

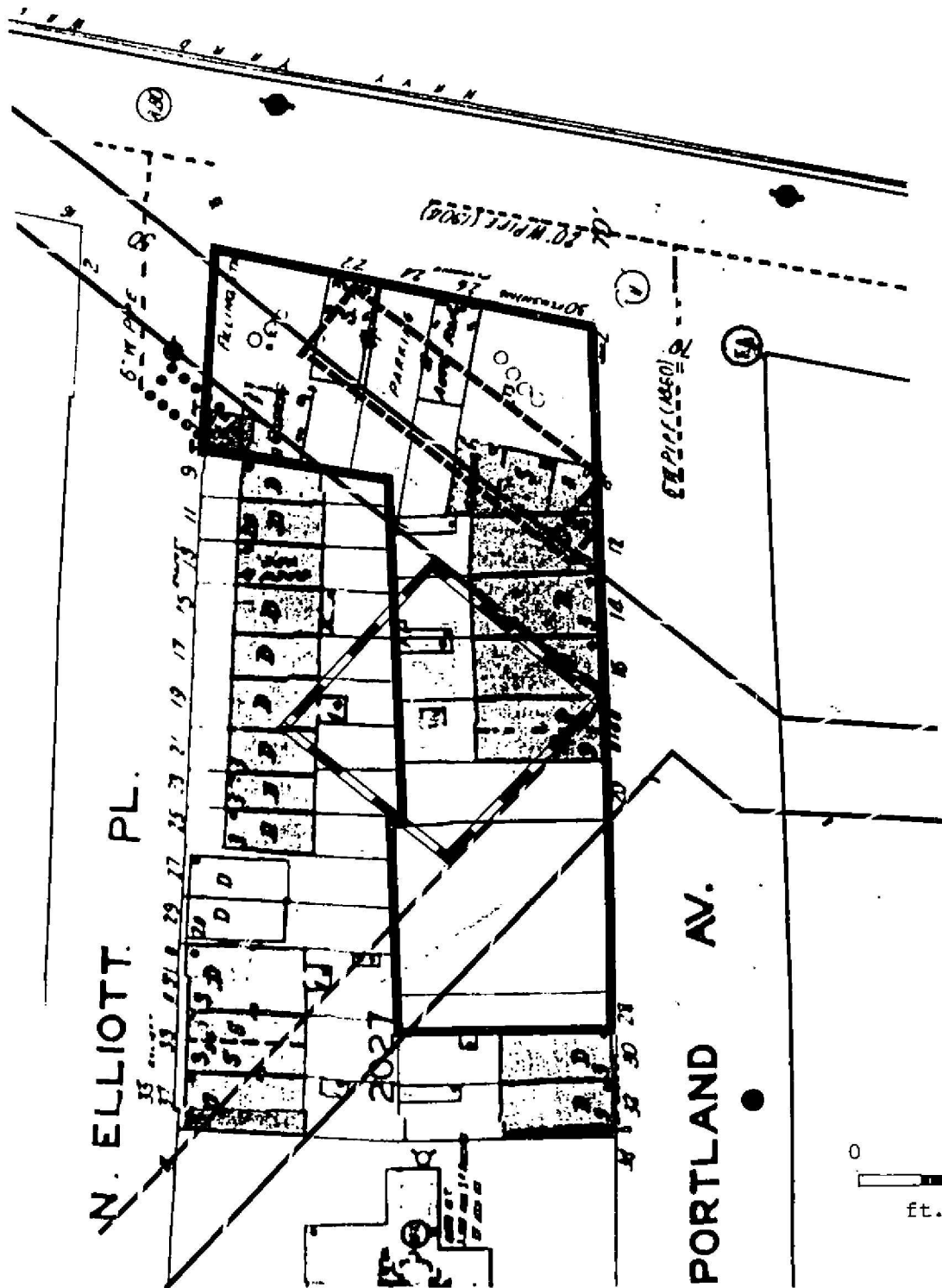
The reconstruction presented here indicates that site structures that date from the 1840s were built on Division Street, a road that, as was noted earlier, was closed about 1855 or 1856. This defunct road may have separated filled land to the west from the site's solid land to the east, and the houses that bordered its northern side from about 1842 until the mid 1850s were demolished by 1879 if not before (AT 1879).

These Division Street buildings and No. 20 Flushing Avenue were tenanted and sometimes owned by working and middle class, single-family occupants, albeit perhaps extended families (for example, three households are listed with John Gardiner in the 1850 census, but they may all have been relatives). In addition, since these buildings were erected before sewers were installed in the adjoining streets, they undoubtedly used privies for their sanitation, and in a lowland situation, cisterns may have been used to collect drinking water.

By 1879, and probably before, the project block had developed its modern configuration (see Figure 22 for the earliest depiction of the block's buildings); the only remnant of an earlier time was No. 20 Flushing Avenue, a frame structure that persisted until the early 1930s. (Figure 27 summarizes the site's nineteenth century development.)

SUMMARY AND RECOMMENDATIONS

The information presented here combines data on landfill, prehistory, a general site history, and an ownership and occupation history. Based on this information, it appears that archaeological investigation of this site would not concern well known people but

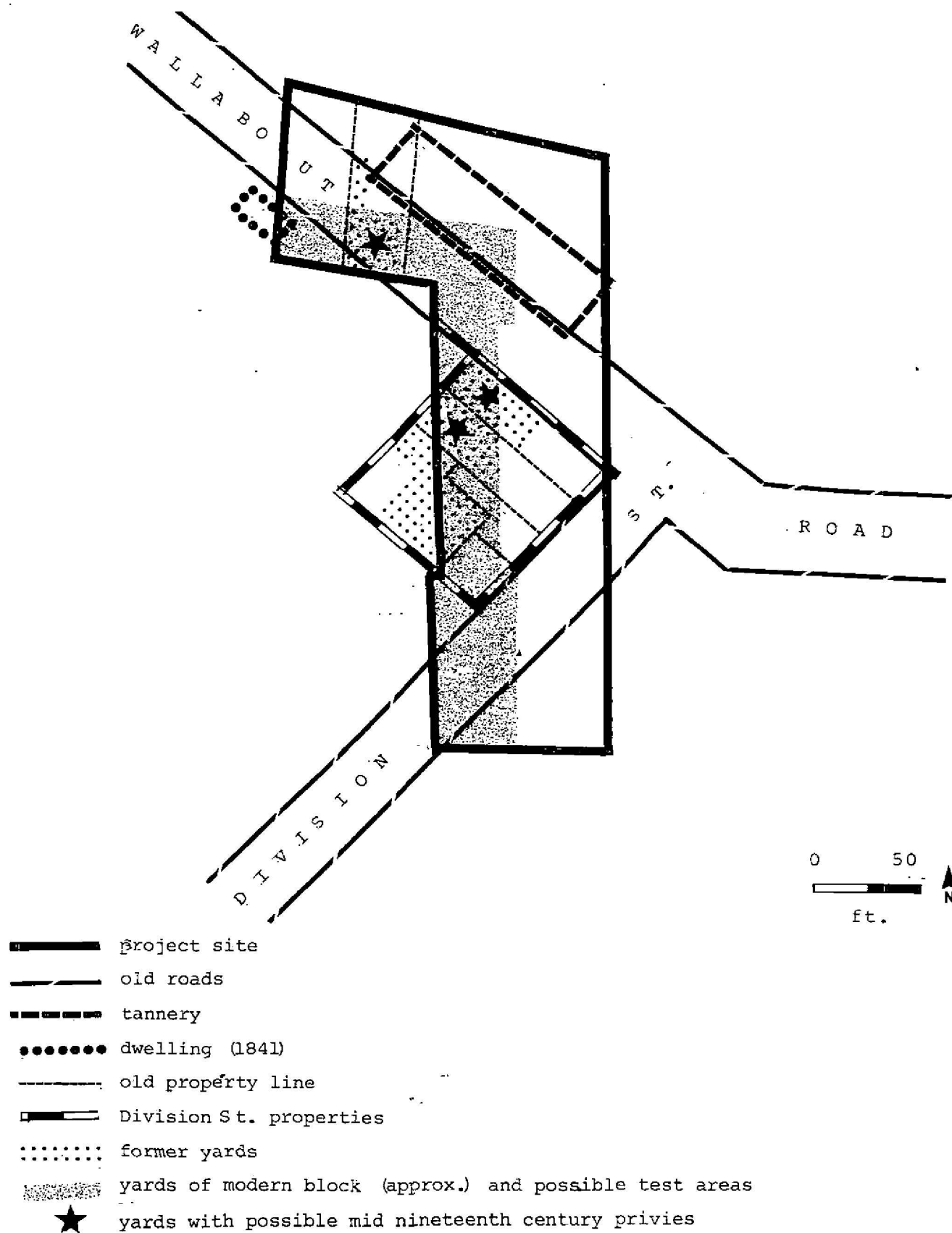


- | | | | |
|--|--------------------------------|--|--|
| | Division St. properties (1855) | | structure (1841) |
| | tannery (1841) | | Wallabout Bridge/Road and Division St. |
| | project site (1945 map) | | |

working or middle class families in a developing urban environment; it might also document a continuum that extends back to prehistoric times and development that began and intensified in the nineteenth century. In other words, testing selected site areas would offer unique information about site use and development specifically and urban development in general.

Based on this information, it is suggested that a testing program to address these issues be developed. Of particular concern are the landfilling techniques and materials used to create parts of the site, the chronology of this fill, and the site's sequence of development as it is recorded in the ground. Another concern is the information to be found in the privies, and perhaps the cisterns, of the earliest houses; these are features that may be preserved under building rubble and grading fill. Sampling and analyzing these deposits will provide information to add to our limited but growing knowledge of the lives of working and middle class people living in developing urban areas in the mid nineteenth century (Figure 28 indicates the suggested areas of sensitivity).

It should be noted that any proposed areas of testing might be modified by information from soil borings. In this regard, it is recommended that archaeological concerns and the input of an archaeologist, as well as attendance in the field to examine soil samples, be part of the soil boring and soil testing program yet to be implemented. In addition, soil boring logs and, if warranted, soil samples should be made available to the archaeologist. This would allow for a refinement of the recommendations made here and the development of a well-designed scope of testing.



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