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STAGE IA  
BLOCK 2172, LOT 64  
60 Nagle Avenue  
Inwood, Manhattan

for

YM-YWHA of Washington Heights

CEQR No. 88 - 194- M

Dr. Karen S. Robinson, SOPA  
Dr. Frederick A. Winter, SOPA

KEY PERSPECTIVES

November 15, 1988

471

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## INTRODUCTION

This study is designed to fulfill the requirement of a Stage IA documentary survey for block 2172, lot 64 in the Inwood section of Manhattan, as required by The New York City Landmarks Preservation Commission. This lot was flagged for study because it was viewed as being a potential source of significant remains dating to the prehistoric period of Amerind occupation in upper Manhattan. In addition, block 2172 is located in an area of significant activity during the historic period, particularly the Revolutionary War, and thus is a possible source of eighteenth century remains. The lot is planned to contain one hundred low-income units for the elderly and handicapped, developed by the YM-YWHA of Washington Heights, adjacent to its current facility at 54 Nagle Avenue. The new 14-story structure, like its low companion, will be set on piles and will have no basement.<sup>1</sup>

This study consists of an examination, through maps and texts, of the history of the area of block 2172 and its natural topography. In addition, the building history of the site has been researched and the site visited and examined in its present condition. The information is analyzed to determine if a Stage IB archaeological survey should or should not be required, and an appropriate recommendation is made. A Stage IB archaeological survey will be required if, on the basis of the Stage IA documen-

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1. For the standing structure, Piling Report, 2 August 1955, New York City Department of Buildings; for proposed structure, CEQR Application 88-194-M, 2/2/88.



tary research, the site is determined to have the possibility of yielding significant archaeological materials.

The research for this study was conducted at The New York Public Library, the Brooklyn College Library, the University Museum Library (University of Pennsylvania), The Buildings Department of the City of New York (Hudson Street) and in the authors' personal libraries.

## TOPOGRAPHY

### GENERAL AREA (MAP, PLATE 1)

Block 2172 lies in the Inwood district, within Manhattan Planning District 12 near the northernmost tip of Manhattan Island. The general area surrounding the site is dominated by the heights of Fort Tryon Park, which rise more than 200 feet above the site, on the west, cutting block 2172 off from the Hudson River. Access to the river is provided by the low ground at the northern edge of Fort Tryon Park, located about three--eighths of a mile north of the site. This low pass follows the line of modern Dyckman Street and Riverside Drive, extending from Broadway to the Hudson at Tubby's Hook.

To the east of block 2172 rise the heights of Fort George. These heights are positioned just south of the point where Dyckman Street runs to the Harlem River. North and northeast of block 2172 the ground is level, running to the now-drained marshes and partially filled inlet known originally as Half-Kill and more recently as Sherman's Creek.

Block 2172 thus sits at the apex of a low, flat wedge of land that extends south from a "base" along the southern side of Sherman's Creek. To judge from eighteenth century renderings, this bottom land consisted of cleared, broadly fenced fields and

scattered farmsteads during the Revolutionary War.<sup>2</sup> The low area between Forts George and Tryon, which includes block 2172, is identified as "Poverty Hollow" on the 1851 Dripps/Jones map of northern Manhattan.

A small brook or stream ran just southeast of block 2172 along the line of Nagle Avenue. The stream was one of a number of water courses that fed into Sherman's Creek. The stream does not appear to have had a standardized name. Bolton, the best known historian of Washington Heights and Inwood, calls it simply The Run.<sup>3</sup> A more romantic name, Barrier Gate Creek, appears on the anonymous map prepared in 1860 for the Commission of Washington Heights.<sup>4</sup> The creek rose in the vicinity of Fort Washington Avenue and 180th Street and flowed north along the line of Bennett Avenue. It crossed Broadway at the point where Broadway, Nagle Avenue, Bennett Avenue and Hillside Avenue all meet and then proceeded northeast along Nagle Avenue. Lot 64 fronts on the former stream course.

#### THE PROJECT AREA (MAP, PLATE 2, PHOTOGRAPHS, PLATES 5 & 6)

The proposed development site consists of a now empty lot on

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2. Kouwenhoven 1972:74, which reproduces the watercolor by Capt. Thomas Davies, 16 November 1776.

3. Bolton 1924:168.

4. Anon 1860. Although the map does not bear a signature, it is known that Frederick Law Olmsted received the nineteenth century commission for surveying Washington Heights and Inwood. The original Washington Heights and Kingsbridge section maps in the New York Public Library are therefore likely to be products of Olmsted or his staff.

block 2172, between a standing 3-story structure of the YM-YWHA and a new two-story commercial building, fronting on Nagle Avenue. To the northwest is a 6-story apartment building which faces onto Broadway, the road which follows the line of the early historic route to Kings Bridge.

The lot is paved overall with a rough tar and granite-chip paving, except in the northeast, where there are remnants of a concrete slab. At present, the lot is surrounded by a chain-link fence and serves as a parking lot for YM-YWHA vehicles.

The current surface of lot 64 is about one foot higher than the surface of Nagle Avenue and the cellar of the apartment building behind lot 64 is approximately the same elevation as the surface of lot 64, with the first story of that building at a level with its frontage on Broadway. Whether and how much alteration of the elevation of lot 64 from the original Poverty Hollow surface can be determined only by coring information, not the current topography.

## PREHISTORY

Prehistoric occupation in the northeast and New York City area has been divided into the following periods: Paleo-Indian, 10,500 - 8000 B.C., Archaic, 8000 - 1300 B.C., Transitional, 1300 - 1000 B.C., and Woodland, 1000 B.C. - historic occupation. The Archaic and Woodland periods have been subdivided into Early, Middle, and Late phases as follows: Early Archaic, 8000 - 6000 B.C., Middle Archaic, 6000 - 4000 B.C., Late Archaic, 4000 - 1300 B.C., Early Woodland, 1000 - 300 B.C., Middle Woodland, 300 B.C. - 1000 A.D., Late Woodland, 1000 A.D. - European contact.

Each of these periods is characterized by particular settlement types. Paleo-Indian sites are often along areas of low, swampy ground or on very high, protected areas.<sup>5</sup> Within New York City, Paleo-Indian remains have been excavated at the Port Mobile site on Staten Island, and worked stone implements of Paleo-Indian type have been found at additional locations within that borough.<sup>6</sup> Although Paleo-Indian materials have not yet been discovered in Manhattan, some portions of the island were, in the recent past, of the topographic type favored by the Paleo-Indian hunters. Thus, the Urban Archaeologist's predictive model lists the Collect Pond area in lower Manhattan and Washington Heights

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<sup>5</sup>Ritchie 1980:7.

<sup>6</sup>Ibid.: pp. xvii f. and map, pp. 4f.

in the north as being potential areas for Paleo-Indian remains.<sup>7</sup>

In predicting the location of Paleo-Indian sites, it must be remembered that the topography of Manhattan and its surrounding region have changed since the beginning of the Neothermal period. The discovery of the remains of land-based megafauna such as mammoth and mastodon on the Atlantic Ocean floor along the Continental Shelf opposite the New York - New Jersey sea coast<sup>8</sup> serves as a reminder that the geography of the New York area has been altered considerably since antiquity, and that microhabitats such as the stream that flowed adjacent to the project area may have been radically different during the earlier periods of prehistory. Barrier Gate Creek, Sherman's Creek and even the Harlem River have probably shifted course since PaleoIndian times. Without core borings and other geological tests, it is difficult to predict the form Poverty Hollow would have taken in this early period.

The Early Archaic was characterized by small hunting camps. According to the Landmarks Commission study for a city-wide archaeological predictive model, such sites do not have great archaeological visibility, nor are they likely to be associated with particular land forms.<sup>9</sup> Finds from other portions of the U.S. Northeast indicate that during the Middle Archaic there was

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7. Baugher et al. 1982:10.

8. Chesler 1982:20.

9. Baugher et al. 1982:10

a large increase of population. As yet, there is little evidence of this time period in the New York City region and thus it is especially important to watch for remains from this era. Discoveries of Middle Archaic components are necessary in order to define occurrence-characteristics and increase the accuracy of future predictions of site occurrence.

For the Late Archaic, sites are most likely to be found in littoral areas.<sup>10</sup>

Littoral areas and the zones along major inland water ways such as the Hudson are also known to have been settled during Transitional times. Stone projectile points of Transitional type have been found in northern Manhattan, in the Inwood/Washington Heights district,<sup>11</sup> the area where the project site is located. As yet, there is not a large enough body of information to accurately predict Transitional site occurrence within New York City in anything except the most general terms.

In the Woodland period, many different kinds of settlements existed. Permanent and semi-permanent settlements, villages, as well as seasonal campsites and food gathering/processing stations, are characteristic. Agriculture was practiced, although this development may date only to the end of the Late Woodland period, following the first contact with Europeans.<sup>12</sup> Shellfish

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10. Baugher et al. 1982: 10-11.

11. Ritchie 1980:150-178 for general characteristics and distribution of Transitional remains.

12. Ceci 1982: 2-36.

collecting sites at tidal inlets are particularly well represented in this period, although this may simply be a reflection of the fact that the tidal zones were less likely to have been disturbed by subsequent city development than were inland areas.

In the mid-17th century, high hills near streams, rivers and agricultural fields, and fishing places were favored by the Indians for settlement.

At the time of European contact and Dutch settlement, Manhattan was occupied by Munsee-speaking Delaware groups: the Canarsee, who occupied western Long Island and probably controlled southern and possibly eastern Manhattan, and other Indian groups whose territory included the northern portions of the island.<sup>13</sup> Until recently, it was believed that the northernmost segment of Manhattan Island, including Inwood and the project area, had been occupied by two groups: The Reckgawawanks and the Wickquaesgecks, but Robert Grumet has now placed the Reckgawawanks at Haverstraw in Rockland County, thus leaving upper Manhattan to the Wickquaesgecks.<sup>14</sup>

Broadway, formerly known as Kings Bridge Road, follows the line of a prehistoric trail,<sup>15</sup> and Bolton<sup>16</sup> has noted that a native Amerind campsite or planting ground was located at the point where Barrier Gate Creek crossed this pathway. Bolton

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13. Trigger 1978:214, fig. 1.

14. Grumet 1981: 59-62; 1982:passim.

15. Grumet 1981:59.

16. 1909:79; 1924:5.



identified this crossing as the intersection of 194th Street and Broadway, although 194th Street was a "paper" street that was never actually established on the city's surface. This non-existent intersection of Bolton's would fall approximately at the junction of today's Broadway and Nagle Avenue, the intersection that marks the southwest corner of the project block. (See Map, Plate 3)

"Where the brook and trail crossed Broadway at 194th Street a favorable sloping bank, long used in truck farming by Adolph Zerrenner and his family, was utilized probably as a planting ground by natives, as shown by sundry native tools and fragments turned up in its soils."<sup>17</sup>

Earlier, Bolton had suggested that the 194th Street and Broadway site may have been a seasonal camp, with the cliffs of Fort Tryon heights serving as a barrier to protect the settlement from winter winds and storms. Possible support for this suggestion may be seen in the fact that prehistoric occupational debris have been found in rock shelters under the stone overhangs of the Fort Tryon park cliff between 194th and 198th Streets, directly across Broadway from the project block.<sup>18</sup>

The objects from these chance finds in the immediate area of block 2172 were not illustrated by Bolton, and their dates cannot be determined on the basis of the scanty information he provided.

A number of major Archaic and Woodland period settlements

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17. Bolton 1924:5; see Map 3, this report.

18. Bolton 1924:5.

have been identified in Inwood, among them a stratified pre-- ceramic to late Woodland site at Dyckman Street and the Hudson River that was excavated by Skinner in 1919<sup>19</sup> and the Woodland to Contact period settlements identified by Bolton as Shorakappok and Muscoota, located further to the north.<sup>20</sup> Many smaller sites have also been found in Inwood. Among the distinctive characteristics of Inwood's Woodland settlements are shell deposits and pit burials of both humans and dogs.<sup>21</sup>

Based on these previous finds from the Inwood area, it could probably be argued that Woodland remains would be the most likely to be recovered from block 2172, but such a suggestion should hardly be interpreted as a scientific prediction.

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19. See Smith 1950: 172-174 with references.

20. Bolton 1934/1972: 134f. Grumet, 1981:36 and 52, interprets the native names more broadly as indicating regions rather than finite settlement sites.

21. See, generally, Finch 1909; Bolton 1909, 1924, 1934/-1972; Skinner 1915; Smith 1950.

## HISTORIC PERIODS AND LOT HISTORIES

Excellent, detailed and synthesized histories of the Washington Heights-Inwood area already exist in print<sup>22</sup> and it would be pointless for this report to attempt to duplicate what has already been published elsewhere. The goal here will be to integrate the history of block 2172 into the previously studied history of its surrounding neighborhood.

Inwood, the district in which block 2172 is located, was the last portion of Manhattan Island to be developed. As a reflection of this, maps of upper Manhattan continue to refer to the Inwood portion of Broadway by the boulevard's archaic name, Kings Bridge Road, until the end of the nineteenth century,<sup>23</sup> and even in the early twentieth century, the name Kings Bridge Road is retained in the atlases, albeit now in parentheses.<sup>24</sup> Building lots are not indicated within the development block until the 1880's.<sup>25</sup> Few of the lots on the block had construction prior to World War I, and lot 64 has never held significant structures. Under these circumstances, there seems little point in charting lot histories of the type appropriate to sites in the more com-

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22. E.g. Bolton 1924.

23. E.g., 1891 Bromley Atlas.

24. 1905 Bromley.

25. Cf. 1885 Robinson Atlas.

plex and fully developed neighborhoods in the south of Manhattan Island. Rather, the more general history of the block 2172 area will be combined in this section with what little we know about lot 64.<sup>26</sup>

Inwood did not receive much attention from the earliest European settlers of Manhattan. Natives issuing forth from Spuyten Duyvil Creek had attacked Henry Hudson's Half Moon as it returned from its pioneering explorations up the river,<sup>27</sup> and perhaps this hostile and active Amerind presence helped initially to keep the Europeans out of the neighborhood.

The famous 1639 Manatus map and the 1664-1668 Nicolls plan show the old native trail through Inwood, and this pathway, today's Broadway, was incorporated into the European's post road to Albany; but these early maps indicate clearly that European settlement did not extend into Inwood. Land in northern Inwood was acquired in 1677 by Jacobus Duyckman and Jan Naegel, both of whom are memorialized by modern street names, but Naegel at least did not take up residence in his new holding. He may have wished he had. On December 3rd in 1685 he was fined for dumping compost in the street in his home village of New Haarlem.<sup>28</sup>

Title to the land of Inwood passed by degree to the European

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26. There were no records in the New York City Department of Buildings pertaining to the lot to be developed. Records of the adjacent lots were also searched, but no pertinent information was located. The information here comes from atlases and informants.

27. Finch 1909:72.

28. Stokes VI:500.

colonizers. As everywhere in the newly colonized territories of North America, a certain amount of conflict arose between the natives, who thought they were selling temporary rights of hunting and land usage, and the Europeans, whose culture included the concept of absolute property transfer, but these confusions had no serious impact on the pace of European expansion into the district.<sup>29</sup> The final expropriation of native Amerind land in Inwood took place in 1688, although the last title transfers and payments were not completed until 1715.<sup>30</sup>

The area remained sparsely settled during the eighteenth century and it was not until the Revolutionary War that Inwood became the scene of a significant historical event. Indeed, it might be fairly said that it was only during the Revolutionary War that Inwood was the scene of a significant historical event. In November 1776, a major battle was fought in Inwood-Washington Heights between Washington's retreating Continental Army and the combined British and Hessian forces.<sup>31</sup> The British victory in the battle left the King's army in total control of Manhattan Island, a control it was to maintain throughout the remainder of the war.

Fort Tryon was defended by Maryland and Virginia regiments of the Continental Army. It was not, in fact, an independent fort, but an outlying battery of Fort Washington. Among the

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29. Cf. Bolton 1909: 94-102.

30. Bolton 1924: 19 and 39.

31. Stokes III:1031-1036.

American defenders of the battery was a young woman named Margaret Corbin who, when wounded in the British bombardment, became the "first American woman to shed her blood in active fighting for the cause of liberty."<sup>32</sup>

Following British-Hessian attacks on November 8th and 9th, the Colonials constructed a wooden barrier, presumably of abatis form, between Forts Tryon and George. The barrier cut Broadway at 196th Street, directly across the middle of block 2172 and just south of the development site. It cannot have provided a serious impediment to the advancing anti-revolutionary forces, and the crude military shelters of Revolutionary War date that were discovered during the later nineteenth century when Ellwood Street was constructed along block 2172's north-east border may have been built by Hessian troops in the barrier's shelter.<sup>33</sup> Fort Washington fell to the British on November 16th, 1776, and Inwood fell into its customary quiescence.

If there had been inhabitants within block 2172 in the first decade of the nineteenth century (and there is no hint in any record that there were), they might have been cheered in 1805 by the construction not far north along Kings Bridge Road/Broadway of Henry Norman's tavern. The public house, situated at the intersection of modern Riverside Drive and Broadway, served as a half-way station for travelers between New York and Yonkers. It eventually was called the Black Horse Tavern, but Bolton suggests

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32. Bolton 1924:158.

33. Moscow 1978:48.

that this name was unlikely to have been taken before 1812, the year when the more famous and more substantial Black Horse Tavern in what is today Central Park closed.<sup>34</sup>

It is revealing that, when the New York City Commissioners published their famous street grid plan for Manhattan Island in 1811, the grid was not extended beyond 155th Street. At that time, dense settlement within Manhattan did not extend even to Greenwich Village. The Commissioners may have been ambitious, but running the grid beyond 155th Street was obviously too much even for these future-seeing planners.

Block 2172 shows no settlement on the Commissioners' map. Houses were located to the south of the intersection of Barrier Gate Creek and Kings Bridge Road (i.e., on the block immediately south of block 2172) and also north of this intersection, to the west of Kings Bridge Road (i.e., within Fort Tryon Park opposite block 2172). The house to the south of the intersection was identified by the name Odyne. It was still included on the Jones/Dripps city map of 1851 and the Commissioners Map of 1860.

According to the 1815 "Blue Book," the Odyne house was on property owned by Jacobus Duyckman, a descendant of the neighborhood's original settler. Block 2172, in contrast, was part of the holdings of the "widow Duyckman," which extended north and east of Sherman's Creek. Kings Bridge Road served a property line as well as a pathway. West of the road, opposite block 2172, David Mollimoer and John B. Coles owned the land extending

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34. Bolton 1924:74 and 174.

to the Hudson River.

By the middle of the nineteenth century, it no longer seemed unlikely that dense urban settlement would eventually cover the entirety of Manhattan Island. City maps of this period regularly show street blocks covering Inwood, although the blocks are sometimes indicated as squares rather than the standard, rectangular blocks of the below-155th Street grid.<sup>35</sup> While none of these idealized early versions of the Inwood street plan actually conform to the streets that were eventually established in the neighborhood, thus providing a clear indication that these plans for an urbanized Inwood were premature, there are other signs of the neighborhood's growth. A rail station existed at Tubby's Hook, Dyckman Street and the Hudson River, from mid-century, and the neighborhood also boasted a hotel, a Presbyterian Church and a public school (Ward School, eventually P.S. 52).<sup>36</sup> It is noteworthy that all of the public facilities, with the exception of the railroad, were oriented towards Kings Bridge Road rather than towards the river.

Block 2172, now owned by Isaac Dyckman, was still undeveloped in 1860. The former Odyne house was occupied by Philipp Barton, but the land surrounding his house was still part of the Dyckman holding. The land across Kings Bridge Road from block

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<sup>35</sup>. Cf. Hayward/Valentine 1851; Jones/Dripps 1851.

<sup>36</sup>. Cf. Jones/Dripps 1851; Dripps 1854; The Commissioners of Washington Heights/Inwood Section Map of 1860.



2172 was owned by Lucius Chittenden.<sup>37</sup>

Dripps' Manhattan plan of 1867 provides the first record of construction within the area of block 2172. Although the 1867 map still shows Inwood cut by the imaginary and never-to-be--developed city grid, it indicates that there were three small wooden structures along Kings Bridge Road between the Inwood gas works, known from later maps to have been situated on the block immediately north of 2172, and the never-existent 195th Street, which presumably was supposed to be situated directly south of today's 196th Street. Also noteworthy on the 1867 map is the fact the Barrier Gate Creek is no longer indicated below its mouth at Sherman's Creek. Subsequent atlases also ignore Barrier Gate Creek's presence, and we can assume that it had been sewer-ed, buried or otherwise diverted by that time. The historic former stream bed is clearly seen in the core borings of the site, where the bedrock, glacial till, and silt and sand slope sharply from the back of the lot towards Nagle Avenue (Plates 7 and 8).

Even idealistic city planners will eventually despair of their hopes for a fully regularized and regulated society. By 1870, the city grid stops being mapped over Inwood, and the actual irregular street plan begins appearing on the city's maps. 196th Street is not established until the early twentieth

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<sup>37</sup>. Cf. Nov. 1860 Commissioners of Washington Heights Inwood Section map.

century<sup>38</sup> and the spellings Nagle Avenue and Ellwood Street are not yet standardized, appearing sometimes as "Naegle" and "Elwood," but from 1870 the neighborhood's maps at least reflected its physical reality.

By 1885,<sup>39</sup> the standard lot divisions begin appearing on drawings of block 2172 in the city atlases. Although the numeration system will change by the end of the nineteenth century, the lot boundaries are now established. Three small wooden structures exist on block 2172, but none seem to be on the area now called lot 64; rather, they are on what later became the northern side of 196th Street.

By the turn of the century, block 2172 had acquired some opulent neighbors. They were, however, located on the Fort Tryon heights above, where some of the city's flamboyant rich had acquired estates. At Fort Washington Road along the line of 196th Street, C.K.G. Billings had erected an elaborate stable for his racehorses. Billings, heir to a Chicago gas company fortune, was a noted horseman. His stables cost \$200,000, and if that was not sufficient to demonstrate his dedication to equestrianism, then his staging at a mid-town restaurant a formal dinner, in which the guests ate while seated on horseback, certainly was.<sup>40</sup>

In 1851, the low area between Fort Tryon and Fort George had

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38. Cf. 1905 Bromley.

39. Robinson Atlas.

40. Patterson 1978:168.

been termed Poverty Hollow.<sup>41</sup> The name may still have been appropriate a half-century later, thus contrasting greatly with the heights above.

The extension of the turn-of-the-century IRT subway line into Inwood in 1911 finally made possible the full urbanization of the neighborhood. 196th Street was cut through block 2172 while Sherman's Creek west of Nagle Avenue was filled in, which provided more land for development in the immediate vicinity of the subway station at Dyckman Street and Nagle Avenue. Development seems to have been slowed by World War I, but by the 1920's, block 2172 could claim five lots with five-story brick apartment houses (lots 30,34,39,146,49).<sup>42</sup> None of these lots were within the proposed development site.

The Jewish Memorial Hospital was constructed on block 2172 in 1934-1936, displacing two small wooden buildings on lot 16 but not otherwise affecting the existing structures on the block. The hospital at this time covered lots 16 to 22, extending north from 196th Street and Broadway. These lots were hereafter termed lot 16. (See Table 1 for various lot numberings.) Subsequent northward expansions of the hospital reached as far as the old lot 26, which had held the nineteenth century wooden structure noted above. Building Department records indicate that the hospital supported the new wing it constructed on this lot with piles driven as much as 50 feet below grade, indicating how deep

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41. Jones/Dripps Map.

42. Bromley Atlas, 1925.

the bedrock must be in this area, in contrast to the surrounding heights. The slope of the bedrock is further illustrated by the fact that the 3-story YM-YWHA building, constructed in 1956, needed pilings from 13'11" to only 11 inches deep.<sup>43</sup> After construction of the "Y" building, the next activity on the block was the two-story building adjacent to lot 64 on the other side. This structure was completed in 1987.

Lot 64 has served as a parking lot and was minimally developed. Informants indicate that there were metal sheds placed on the site in 1944.<sup>44</sup> 20 small garage-sized structures are indicated on the Sanborn for 1979/80 (Map 2), which presumably were these metal sheds. The concrete slab on the northern side of the lot at the Nagle Avenue frontage might be a remnant of the floor of such a unit.

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43. New York City Department of Buildings.

44. Letter from Carol Lamberg to Sherene Baugher, October 14, 1988.

## CONCLUSIONS AND RECOMMENDATIONS

The research outlined above indicates that the project site was both a location where Amerind materials have been found in the past and where a significant event of the American Revolutionary War occurred. Thus, if undisturbed, it might have high potential for important archaeological remains. However, a site 100 feet south-east of lot 64, two lots with a similar building history, was tested in 1985 with null results. That site yielded fill to the water-table and neither pre-historic nor pre-twentieth century historic remains.<sup>45</sup>

The core borings of lot 64 indicate that there is from four to ten feet of fill on the site, with the fill extending below the current ground water surface. This fill, probably put on the site sometime towards the end of the 1860's, was likely contemporary with the sewerage up or other diversion of Barrier Gate Creek. Based on the results of the 1985 tests on lots 68 and 72, it is clear that shovel testing in these circumstances provides low probability of recovery of materials of significance, if not low probability of there being any materials of archaeological value to recover.

Nevertheless, there is some possibility of both historic and prehistoric remains at the site; therefore, if foundation tren-

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<sup>45</sup>. Winter 1985a and 1985b.

ches are dug on the site, providing horizontal exposure beneath the fill, we recommend that an archaeologist be present during the monitoring.



MAP 1: Upper Manhattan Showing  
Stream Courses and Project  
Block (after Baugher 1982)





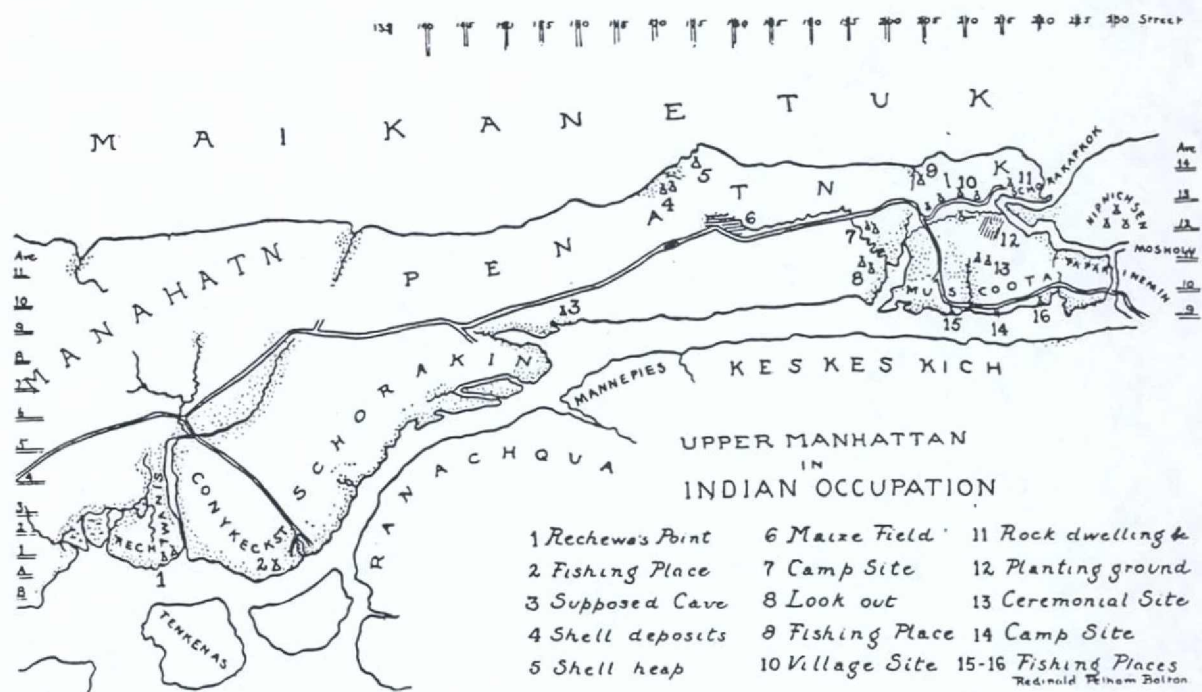
YM-YWHA OF WASHINGTON HEIGHTS  
WASHINGTON HEIGHTS ELDERLY HOUSING

KONHEIM & KETCHAM, INC.

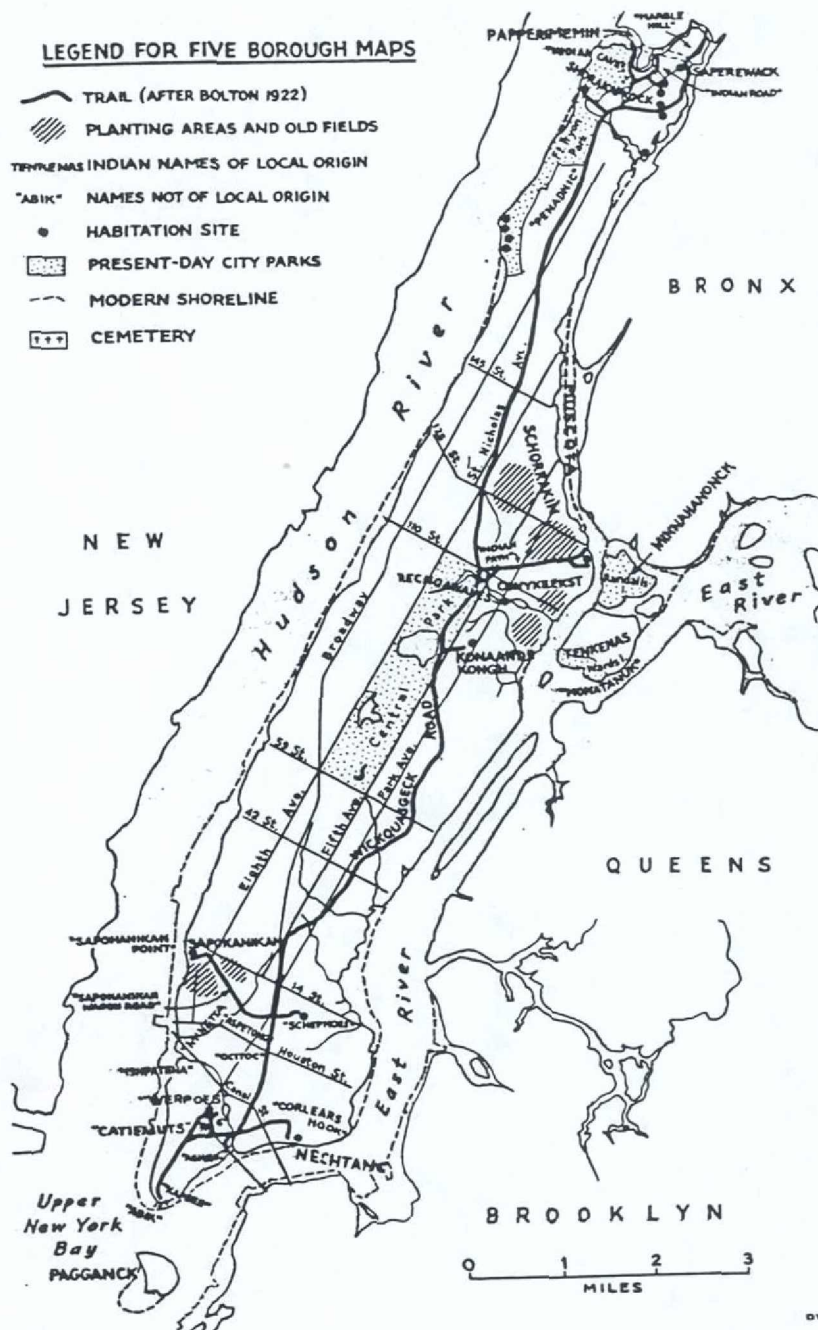




MAP 3: Native Amerind Settlements in Upper Manhattan (after Bolton 1909:80. Number 7 = Block 2172)

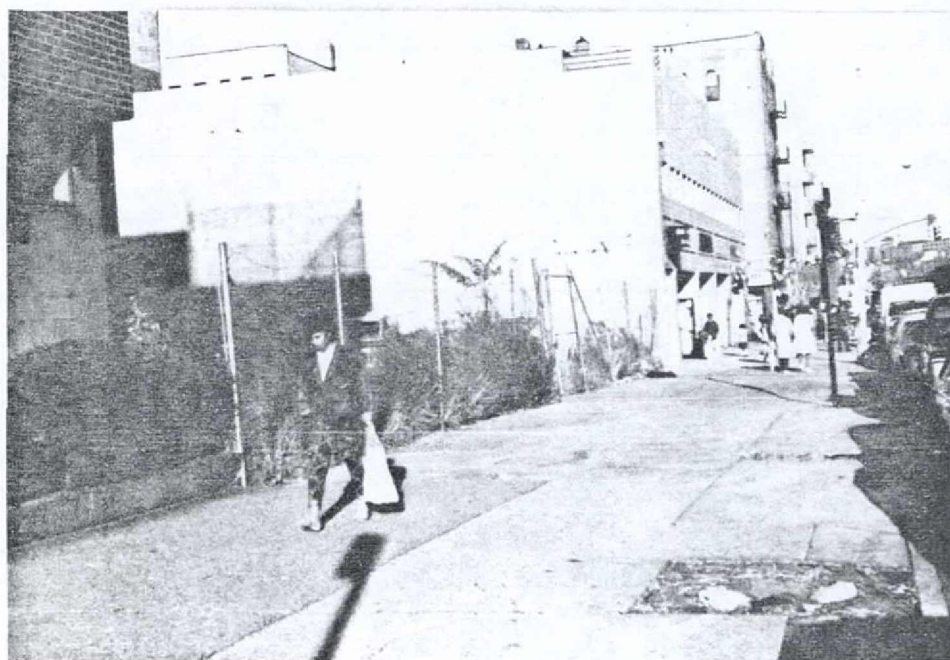


**LEGEND FOR FIVE BOROUGH MAPS**





A: View of site from east. YW-YMHA at left, newly constructed commercial building at right.



B: View along Nagle Avenue towards northeast. Note lower elevation of site in comparison to surrounding area.

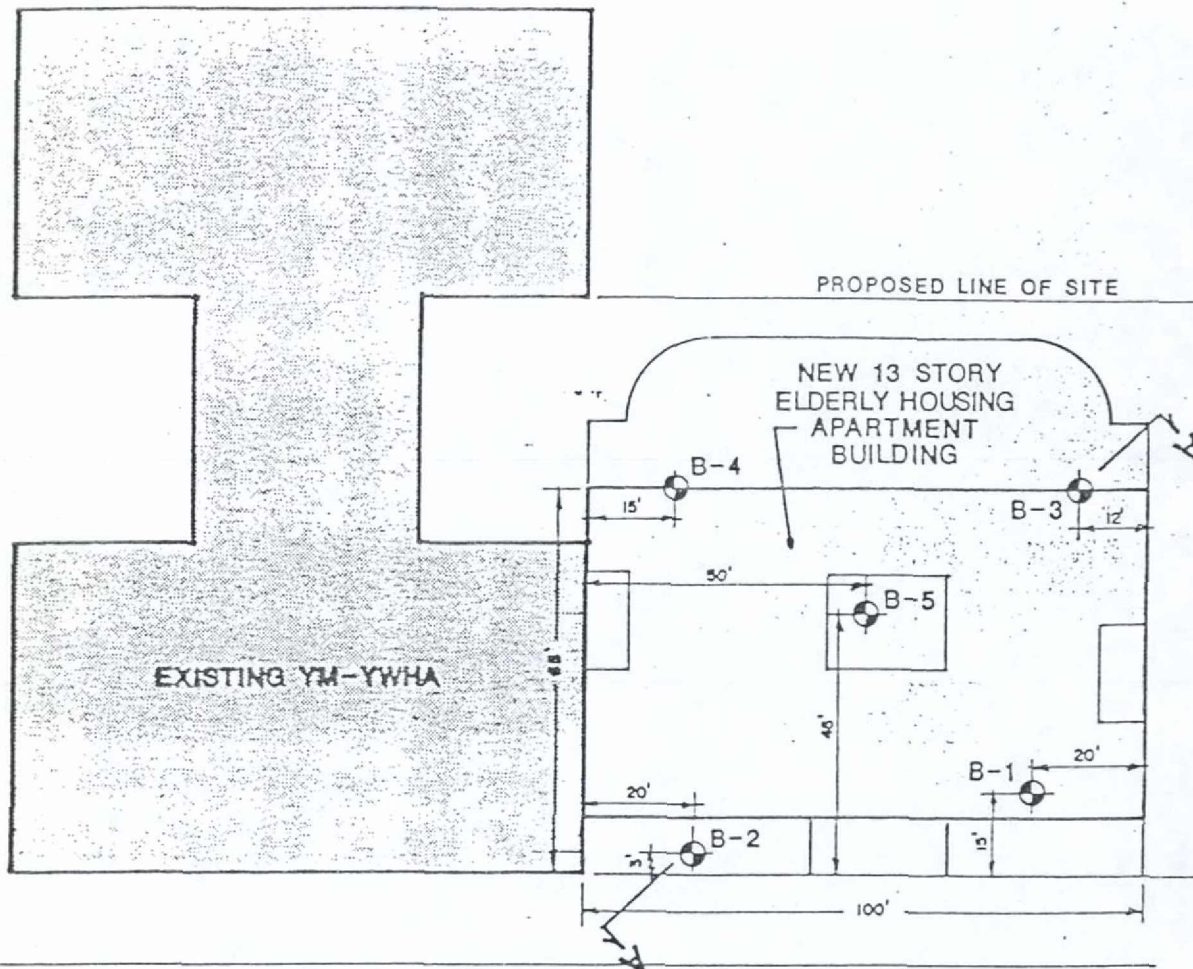




A: View of southwest corner of lot 64. Y building at left. Apartment building which fronts on Broadway at rear.



B: Northeast corner of lot 64, with several layers of concrete slab (former garage floors). Note height of site above Nagle Avenue sidewalk.



NAGLE AVENUE

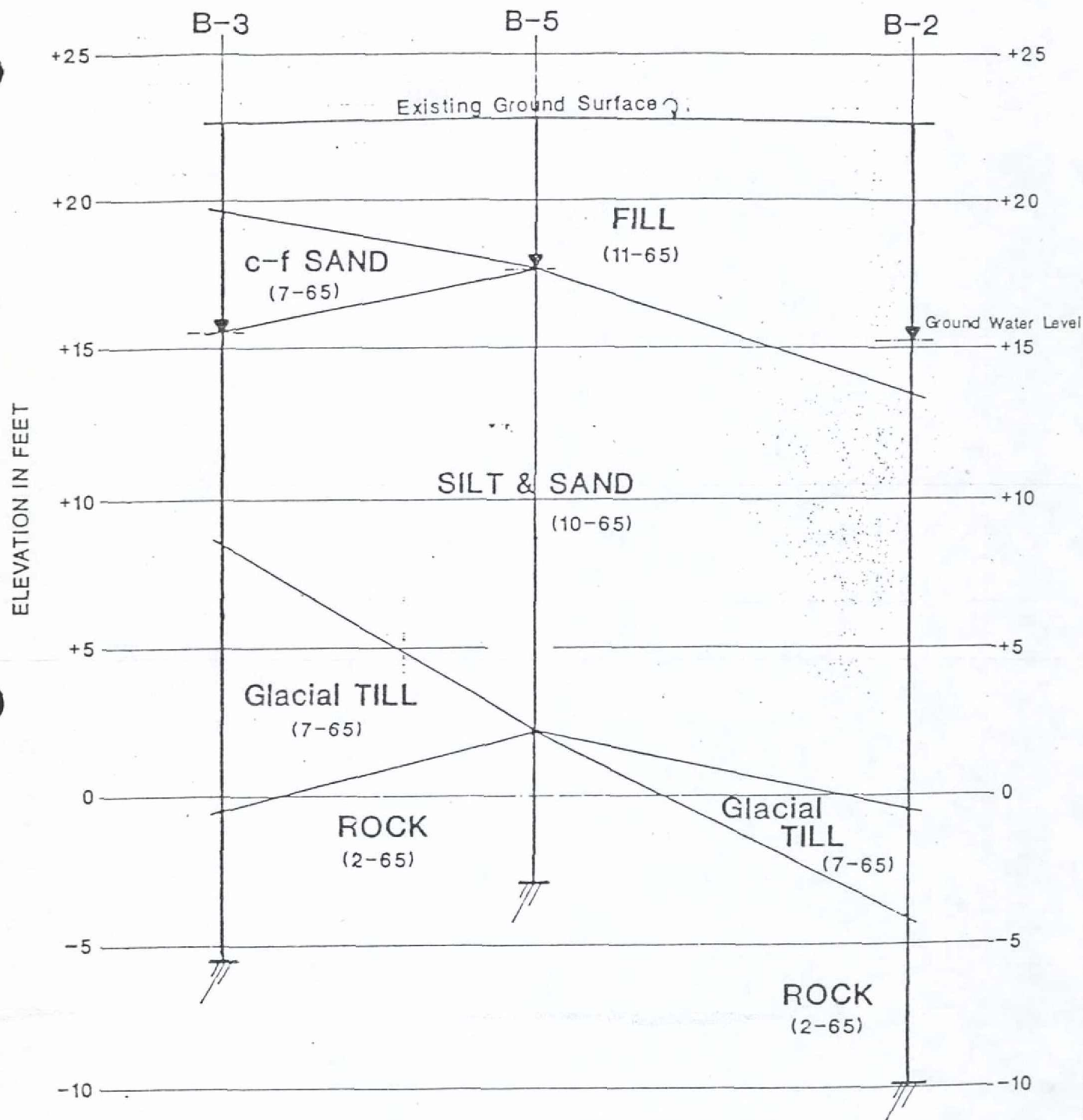
60 NAGLE AVENUE ELDERLY HOUSING

NEW YORK, N.Y.

Date:	FEB/13/1987	Scale:	N.T.S.	Job No.	871002	
RAAMOT ASSOCIATES, P.C. CONSULTING ENGINEERS TWO PENNSYLVANIA PLAZA NEW YORK, N.Y.				Title:	BORING LOCATION PLAN	
					Dwg. No.	1

PLATE 7





**60 NAGLE AVENUE ELDERLY HOUSING**  
NEW YORK, N.Y.

Date: FEB/19/87	Scale: Vert. 1"=5' Horiz. 1"=50'	Job No. 871002	
RAAMOT ASSOCIATES, P.C. CONSULTING ENGINEERS TWO PENNSYLVANIA PLAZA NEW YORK, N.Y.			Title: SOIL PROFILE A-A PLATE 8
			Cwg. No. 2

TABLE 1 : LOT NUMBER CHANGES

Block 2172: Lot Numbers

<u>Pre-1898</u>	<u>1898</u>	<u>1905/1920</u>	<u>1934</u>
89	32	34 & 39	
90	30	30 & 39	
91	28		
92	26		
93	24		
94	22		16
95	20		16
96	18		16
97	16		16
98	14		
99	12		
100	11		
100 1/2	10		
101	8		
102	6		
103	4		
104	1		
105	72		
106	68		
107	<u>64</u>		
108	60		60,61,62,63
109	46	46 & 49 & 51 & 56	
110	41		

196th Street occupies Lot 14 and portions of Lots 51, 60, 64, and 68.

\_\_\_\_\_ is lot of development site.

# MAPS CONSULTED

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- 1934 G. Bromley & Co: Manhattan Land Book
- 1925 G. Bromley & Co: Manhattan Land Book
- 1911 G. W. Bromley: Atlas of the City of New York
- 1905(corrected to May 1920) G.W. & Walter Bromley: Atlas of the City of New York
- 1898 G.W. Bromley: Atlas of the City of New York
- 1891 G.W. Bromley & Co: Atlas of the City of New York
- 1885 Robinson: Atlas of the City of New York
- 1880 Colton: New Map of the City and County of New York
- 1879 M. Dripps: Map of New York City
- 1875 Goulding: Directory Map of New York City
- 1875 M. Dripps: Map of the City and County of New York
- 1874 Egbert L. Viele: Topographical Atlas of the City of New York
- 1870 anon. Map of the City of New York Showing its Political Divisions and Subdivisions
- 1867 M. Dripps: Plan of New York City from the Battery to Spuyten Duyvil
- 1860 anon. King's Bridge Section. Copied from the Preliminary Map of the Commissioners of Washington Heights, November 1860.
- 1860 anon. Washington Heights Section. Copied from the Preliminary Map of the Commissioners of Washington Heights, November 1860.
- 1854 M. Dripps: Topographical Map of the City of New York
- 1852 Map of the City of New York. 1852. Lithography by George Hayward for D.T. Valentine's Manual
- 1851 Map of That Part of the City and County of New York North of 50th Street. Surveyed and Published by H.A. Jones. Published by M. Dripps.
- 1851 Map of the City of New York. 1851. Lithography by George Hayward for D.T. Valentine's Manual.
- 1845 T. and E.H. Ensign: The City of New York.
- 1836 J.H. Colton and Co.: Topographical Map of the City and County of New York and the adjacent county.
- 1831 "DeWitt Map". Map of the City and County of New York by David H. Burr. 2nd ed.
- 1815 Manhattan "Blue Book" Sachersdorf
- 1807-1811 Commissioner's Map (Map of the City of New York and Island of Manhattan laid out by the Commissioners appointed by the Legislature April 3, 1807. Engraved by P. Maverich.)
- 1778 Thos. Kitchin Sr., Hydrographer to His Majesty: Map of New York I with the Adjacent Rocks and other Remarkable Parts of Hell's Gate
- 1777 Joseph Sauthier: A Topographical Map of the North'n Part of New York Island, Exhibiting the Plan of



Fort Washington, now Fort Knyphausen, with the Rebels  
 Lines to the Southward (Kouwenhoven, 72)

1776 A Sketch of Park of the Island of New York Showing  
 the Operations of his Majesties Troops on the 16  
 November 1776 which Terminated in the immediate sur-  
 render of Fort Washington

1664-1668 Nicolls Plan

1639 Manatus Map

1609/1909 Townsend MacCoun: The Island of Manhattan at the Time  
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