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PHASE 1A CULTURAL RESOURCES ASSESSMENT

NEW HORIZONS RETAIL DEVELOPMENT BRONX, NEW YORK

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Mod-Bronx Bronx

Prepared for:

Edwards and Kelcey, Inc
90 West Street, Suite 1700
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September 22, 1997

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Authors:

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EXECUTIVE SUMMARY

PROJECT SITE DESCRIPTION

The City of New York proposes to dispose of a parcel of City-owned land to the MBD Community Housing Corporation (MBDCHC) for the purpose of constructing a new retail center to be known as the Horizons Retail Center (project). The project site is located in Bronx Community District 3, and is approximately 10.8 acres of land situated between East 176th and East 174th Streets on the north and south, and Boone and Vyse Avenues on the east and west (Figures 1, 2). This tract encompasses:

- Block 2998 - historically between Vyse and Bryant Avenues, and E. 174th and E. 176th Streets.
- Block 3003 - historically between Bryant and Longfellow Avenues, and E. 174th and E. 176th Streets.
- Block 3011 - historically between Longfellow and Boone Avenues, and E. 174th and E. 176th Streets.

Both Bryant and Longfellow Avenues have since been closed and deregulated between East 174th and East 176th Streets. A service road now bisects the center of the property on a north-south axis, through the middle of what was Block 3003.

Proposed development would comprise a new retail center of about 136,500 gross square feet, with a supermarket, department store, restaurant, smaller shops and parking areas. The proposed project would require special permits from the City Planning Commission. As part of this permitting process, an Environmental Assessment for the site is required.

RESULTS OF PRELIMINARY ASSESSMENT

A Preliminary Assessment of Cultural Resources documenting the Existing Conditions of the site in regard to architectural and archaeological resources was completed by Historical Perspectives, Inc., in January of 1997. The Preliminary Assessment is a precursor to the following documentary study and should be considered an integral part of the total Phase 1A report.

The Preliminary Assessment concluded that there are no buildings within the study area that are currently designated landmarks, are listed on State or National Registers, or are eligible for such listing (Historical Perspectives, 1997:7, 13). Therefore, the proposed project would have no impact on architectural resources.

It was also concluded that there is a minimal possibility of retrieving significant, intact prehistoric archaeological resources from the site, since most of the parcel was developed historically (Historical Perspectives, Inc., 1997:3, 9, 10, 11). Therefore, no further consideration of prehistoric resources is warranted.

In regard to archaeological resources of the historic era, the Preliminary Assessment posited that the project site had the potential to possess historical cultural resources associated with nineteenth century homelots and a nineteenth century cemetery associated with the Hedger-Edwards family reportedly once located at East 174th Street and Boone Avenue. Further documentary research was recommended for these two topics.

RESULTS OF DOCUMENTARY TOPIC-INTENSIVE RESEARCH

The Documentary Topic-Intensive Study was designed to expand upon the research completed for the Preliminary Assessment. Additional research was conducted in order to determine the likelihood that historical resources which may have once been deposited on the property may have remained undisturbed and have the potential to yield data of significance to the archaeological record. Combined with the data from documents and maps compiled for the Preliminary Assessment, the purpose of the intensive research is to narrow the focus of any subsequent field testing to those possibly undisturbed portions of the site that have the potential for providing significant resources that could address both general and specific research issues.

Evidence conclusively determined that the Hedger-Edwards family cemetery was located at least two blocks south of the project site on Boone Avenue at East 172nd Street, and thus the project site is not sensitive for historical period burials.

Based on archaeological potential, the prior disturbance record, and known subsurface conditions, the following lots are considered sensitive for shaft features associated with nineteenth century residential occupations:

Block 3003 Lot 43 Sensitivity	H. St. John dwelling	Moderate
Block 3011 Lot 26	Prof. A. Wood dwelling	High Sensitivity

No Build and Build conditions in regard to historical era archaeological resources were addressed in the Preliminary Assessment, but were then revised based on subsequently gathered data in the Documentary Study. Under the No Build Condition, potential resources will remain undisturbed if no development occurs. Under the Build Condition, construction plans as proposed will impact the sensitive lots listed above.

RECOMMENDATIONS

According to the City Environmental Quality Review (CEQR) guidelines, at the conclusion of the documentary research it is necessary "To determine whether there is sufficient evidence to justify another phase of work, namely field work, and to set forth the appropriate scope of the field effort. The level of work may depend on how likely it is that archaeological resources may be on the site" (CEQR Manual, 1993).

In accordance with CEQR guidelines and based on the Preliminary Assessment and Documentary Study, no further research nor mitigation is required in regard to the Hedger-Edwards cemetery since it was proven not to have existed on the project site. However, there are two lots with home lot shaft potential.

If avoidance of the two sensitive lots is not an option, then additional archaeological research in the form of Field Testing should be completed. It is recommended that this take the form of a two part testing plan. First, a limited number of back-hoe test trenches should be excavated over a sufficient testing area of each lot to verify the assumption that these lots are undisturbed. Since Lot 43 on Block 3003 had a tenement on it post-dating the historical occupation of the site, and no borings were completed on the backyard of the lot to date, the trenches would serve to identify any undisturbed areas which are sufficient in area to have hosted historical features. Furthermore, the very southern end of Lot 26 on Block 3011 was also the site of a later tenement, and the degree of disturbance to this section of the lot by this structure should be clarified.

If in fact the subsurface stratigraphy demonstrates that sufficient portions of each lot are undisturbed, then a more extensive series of back-hoe trenches should be completed to seek shaft features associated with the historical occupations. A specific testing plan should be developed, which would include establishing the location of lot lines and former structures with the aid of surveyors. Concurrent with this, intensive documentary research focusing on elucidating landowner chronology, and documenting specific residential episodes for those lots which will be impacted should be completed. The difficulties encountered in completing exhaustive primary records research for all of the project site lots made it a prohibitive task for this current investigation. Therefore, for those lots which will be impacted and which the initial back-hoe trenches reveal an undisturbed stratigraphy, this more exhaustive level of landowner investigation should be completed. Formal research questions regarding the archaeological resources for each lot would be developed as part of the mitigation plan.

DOCUMENTARY TOPIC-INTENSIVE STUDY: ARCHAEOLOGICAL RESOURCES

NEW HORIZONS RETAIL DEVELOPMENT BRONX, NEW YORK

Prepared for:

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P.O. Box 3037
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I. INTRODUCTION

The City of New York proposes to dispose of a parcel of City-owned land to the MBD Community Housing Corporation (MBDCHC) for the purpose of constructing a new retail center to be known as the Horizons Retail Center (project). The project site is located in Bronx Community District 3, and is approximately 10.8 acres of land situated between East 176th and East 174th Streets on the north and south, and Boone and Vyse Avenues on the east and west (Figures 1, 2). This tract encompasses:

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Both Bryant and Longfellow Avenues have since been closed and deregulated between East 174th and East 176th Streets. A service road now bisects the center of the property on a north-south axis, through the middle of what was Block 3003.

Proposed development would comprise a new retail center of about 136,500 gross square feet, with a supermarket, department store, restaurant, smaller shops and parking areas. The proposed project would require special permits from the City Planning Commission. As part of this permitting process, an Environmental Assessment for the site is required.

A Preliminary Assessment of Cultural Resources documenting the Existing Conditions of the site in regard to architectural and archaeological resources was completed by Historical Perspectives, Inc., in January of 1997. The Preliminary Assessment is a precursor to the following documentary study and should be considered an integral part of the total Phase 1A report.

The Preliminary Assessment concluded that there are no buildings within the study area that are currently designated landmarks, are listed on State or National Registers, or are eligible for such listing (Historical Perspectives, 1997:7, 13). Therefore, the proposed project would have no impact on architectural resources.

It was also concluded that there is a minimal possibility of retrieving significant, intact prehistoric archaeological resources from the site, since most of the parcel was developed historically (Historical Perspectives, Inc., 1997:3, 9, 10, 11). Therefore, no further consideration of prehistoric resources is warranted.

In regard to archaeological resources of the historic era, the Preliminary Assessment posited that the project site had the potential to possess historical cultural resources associated with nineteenth century homelots and a nineteenth century cemetery associated with the Hedger-Edwards family reportedly once located at East 174th Street and Boone Avenue. Further documentary research was recommended for these two topics.

This Documentary Topic-Intensive Study was designed to expand upon the research completed for the Preliminary Assessment. Additional research was conducted in order to determine the likelihood that historical resources which may have once been deposited on the property may have remained undisturbed and have the potential to yield data of significance to the archaeological record. Combined with the data from documents and maps compiled for the Preliminary Assessment, the purpose of the intensive research is to narrow the focus of any subsequent field testing to those possibly undisturbed portions of the site that have the potential for providing significant resources that could address both general and specific research issues.

II. SCOPE OF WORK

The previously completed Existing Conditions report identified areas within the project site which may have once possessed historical archaeological deposits (Historical Perspectives, Inc., 1997:14). Specifically, the northern ends of Lots 2998, 3003, and 3011, and the former street beds of Vyse, Bryant, and Longfellow Avenues once hosted dwellings dating to as early as 1876, and possibly earlier.

In addition to the homelots, the Hedger-Edwards family cemetery was reported to have once been somewhere near the intersection of East 174th Street and Boone Avenue (Sack 1974:46). The author who reported the Hedger/Edwards cemetery stated that it was removed when the roads were laid out, presumably sometime around the turn of the twentieth century. However, he failed to cite when the bodies were removed or where they were reinterred. Furthermore, he did not cite a reference for this removal.

The purpose of this additional documentary research is to determine whether historical resources, which may have once been deposited on the MDCHC project site, have remained undisturbed having survived subsequent construction episodes. It was also designed to determine the likelihood that potentially undisturbed resources would yield historically important information considered archaeologically significant. Research was also aimed at documenting the existence and subsequent removal of the Hedger/Edwards family cemetery.

These goals were accomplished through documenting the horizontal and vertical limits of potential nineteenth century resources, and assessing the extent and effects of later impacts. Soil boring logs were analyzed determine the subsurface stratigraphy, and rock data maps provided information on the depth to bedrock. Additional maps and atlases were examined to document landownership and construction episodes, and primary documents were sought to verify the location and removal of the Hedger-Edwards cemetery.

Documentary research was conducted at the Subsurface Data Bureau in Queens, the New York City Archives, the Bronx County Historical Society, the Westchester County Historical Society, the New York Historical Society, the Westchester County Archives, the White Plains Registrars Office, the New York Public Library, and the Fordham Library Center. Block and lot histories and conveyance records were sought at the Borough of the Bronx Clerks Office and the Block and Lot Files Department. Attempts were made to access records at the New York City Department of Health to document the reinterment of burials (which referred HPI to the NYC Archives), and the Bronx Bureau of Vital Records. Archives of the New York Times back to 1980 were also reviewed for articles on lost and abandoned cemeteries. The records of historian Bert Sacks were sought at Bronx repositories, to no avail, and

historians Alan Gilbert (Fordham University), Peter Ostrander (Kingsbridge Historical Society), Roger Weins (Fordham University), and Laura Tosi (Bronx County Historical Society) were also interviewed. Woodlawn Cemetery, which received many reinterments from the Bronx, was contacted and a letter of request for information on the Hedger/Edwards cemetery was sent (August 6, 1997). Finally, the New York Genealogical Society was also contacted, and a request for information on the cemetery was posted (August 4, 1997).

III. SITE LOCATION AND CONDITIONS

The MBDCHC project site is located in Bronx Community District 3 and is approximately 10.8 acres of land situated between East 174th and East 176th Streets on the north and south, and Boone and Vyse Avenues on the east and west (Figures 1, 2). This includes three former city blocks between East 174th and East 176th Streets - Block 2998 was bounded by Vyse and Bryant Avenues, Block 3003 was between Bryant and Longfellow Avenues, and Block 3011 was between Longfellow and Boone Avenues. Most of the site is currently vacant and undeveloped although a few tenements and small commercial buildings still front Boone and Vyse Avenues, and East 174th Street. Rock outcroppings are present on the property and a retaining wall bisects the site on the north-south axis. A small paved access road bisects the parcel. A branch of the Metro-north railway runs along Boston Road, just west of Vyse Avenue.

The borough of the Bronx lies within the Hudson Valley Region and is considered to be part of the New England Upland Physiographic Province, which is a northern extension of the Great Appalachian Valley (Schuberth 1968:10,74). Situated on the northern end of the Crotona Park Ridge, a wide area of moderately high land which extends northward from the South Bronx, the project site is underlaid by volcanic rock called the Manhattan Formation, composed mostly of quartz, mica, feldspar, and hornblend (Glenn 1978:2). The exposed bedrock on the site is composed of this coarse-grained schist. During the most recent period of glacial activity, the Wisconsin episode, the Bronx was covered by ice. Following deglaciation postglacial Lake Hudson covered much of the Hudson Valley below the Highlands including the project site. When it receded, smaller water courses were left scouring the landscape into what it is today. The Bronx River was one of these, running north-south about two blocks east of the project site.

IV. HISTORICAL RESEARCH

Historical Background

Much of the following background research was compiled for the previously completed Preliminary Assessment report (*Historical Perspectives*, 19997:3-7). That research was coupled with the additional documentary research completed for this report, and is presented here to provide a historical framework in which to assess and understand potential historical resources.

In 1663 Edward Jessup, an English Quaker, and John Richardson purchased a tract of land along the west side of the Bronx River from nine Native Americans (Jenkins 1912:42). Richardson eventually acquired most of the land encompassing the project site. After Richardson's death, the tract was later divided into twelve farms and became known as West Farms, referring to its location in relation to the larger town of Westchester to the east. Lot 7 of the original twelve farms was purchased by Thomas Hedger. The project site lay just to the north of his farmstead.

Early roads, such as West Farms Road to the east of the project site and sections of the Boston Post Road to the north and west of the project site, were established along existing Indian trails. In 1790 Lewis Morris built a 66-foot wide road from Manhattan, across the Harlem River, and through Morrisania and West Farms. This followed present day Third Avenue to 163rd Street, and up Spring Hill to Union Avenue and 170th Street. Morris owned all the land up until 170th Street, and had to purchase land north to East 174th Street for his road (Sack 1974:46). From there the road ran northeast to Bryant Avenue, Tremont Avenue, and finally joined West Farms Road. This became the Boston Post Road, now Boston Road, and was opened from East 174th Street to West Farms Road in 1825 (*ibid.*).

Numerous farmsteads and homes were also established near these new and improved roads, and a series of mills were built along the Bronx River. Boone Avenue, which was not laid out until the early twentieth century, was reportedly named after John Bone, who according to a West Farm's deed was the property owner near the Bronx River at East 176th Street (McNamara 1984: 243). To the south, Thomas Hedger had established a farm near 173rd Street and the Boston Post Road. It was reported that the Hedger-Edwards family cemetery was located somewhere near East 174th Street and Boone Avenue (Sack 1974:46). A full discussion of this cemetery is presented below.

Although West Farms was a separate community, it technically fell within the township of Westchester until 1846, when it split off and became the township of West Farms. West Farms was part of the county of Westchester, originally formed in 1683, until it was annexed by New York City in 1874 and became part of the 24th Ward. In

1898 it became part of the newly formed Borough of the Bronx (McNamara 1989:511; Jenkins 1912:7).

Rapid growth in population prompted a proposal for a system of sewer and water lines for the Bronx in the late nineteenth century. Between 1874 and 1891 33.3 miles of sewer lines had been built in the Bronx, and between 1891 and 1897 another 20 miles had been completed. After annexation in 1897, a total of 105 miles of sewer lines had been completed west of the Bronx River (North Side Board of Trade 1897:185). An 1897 map shows proposed sewer and water lines, and drainage basins for the streets within the project site, although the streets themselves were not opened and regulated for at least another five to ten years (Commissioner of New York City 1897; Sanborn 1901). Another 1897 map shows that sewer and probably water lines were in on East 176th Street from West Farms Road west to Longfellow Avenue, and also just west of Block 2998 on Boston Post Road (Bromley 1897). Therefore, at least part of the project site had access to these utilities by that time.

The township of West Farms grew in number as access to New York City improved. The opening of the subways in the early twentieth century brought further growth to this region resulting in a boom in apartment house construction.

The introduction of rapid transit, coupled with the low cost of land in the Bronx, an influx of immigrants, and the reformation of nineteenth century tenement laws had an immense impact on this area. Together these factors caused the residential character of the project site and surrounding neighborhoods to change dramatically. As population grew, the large estate tracts were subdivided and the project site was gridded with new roads. By 1901 Longfellow, Vyse, and Bryant Avenues were laid out on paper, but remained unimproved; sections of Boone Avenue had already been opened (Sanborn 1901).

Historically, Longfellow Avenue was once known as Division Street as it divided the estates of Minford and Woodruff between East 176th Streets and Boston Road (McNamara 1984:156). The Minford house once stood in the project site within the footprint of Bryant Avenue (Sanborn 1901, Figure 3). Vyse Avenue was laid out across the former village of Fairmount far south of the project site, where the Vyse family owned an estate called "Rocklands" (McNamara 1984:253). After 1905 Vyse Avenue was heavily developed with rows of apartment houses, and a predominantly Jewish neighborhood developed along it prior to World War II (McNamara 1984:253).

By the 1920s, much of the project site was covered with a series of uniform walk-up five and six-story brick tenements. These were built following a long history of tenement legislation in greater New York which had done much to improve housing conditions, but little to improve aesthetics. Most of these apartment buildings were

razed over the last several decades, but some still remain standing in the project site along Vyse Avenue.

Lot Histories - Nineteenth Century Dwellings

The following description of the project site historical usage refers to the historical city block and lot numbers depicted on Figure 3 (1901). The block numbers are:

- Block 2998 - between Vyse and Bryant Avenues, and E. 174th and E. 176th Streets.
- Block 3003 - between Bryant and Longfellow Avenues, and E. 174th and E. 176th Streets.
- Block 3011 - between Longfellow and Boone Avenues, and E. 174th and E. 176th Streets.

Each of these blocks was initially identified as having limited areas with the potential to possess nineteenth century historical deposits associated with specific homelots. Historical archaeological resources relating to dwellings are often preserved in privies, cisterns or wells, which in the days before the construction of municipal services - namely sewers and a public water supply - were an inevitable part of daily life. These shafts became convenient receptacles for all sorts of trash, providing a valuable time capsule of stratified deposits for the modern archaeologist. They frequently provide the best domestic remains recovered on urban sites. Truncated portions of these shaft features are often encountered on homelots because their deeper (to approximately 8 feet) and therefore earlier layers remain undisturbed by subsequent construction, and in fact, construction often preserves the lower sections of the features by sealing them beneath structures and fill layers.

Each lot within the project site initially identified as potentially sensitive was assessed for its historical sensitivity with this understanding. Soil borings were reviewed to determine which lots on each block, if any, would have the potential to possess the types of deeply buried deposits that are considered potentially archaeologically important. Records of the New York City Public Development Corporation, who was responsible for the construction of an existing roadway and retaining wall through the middle of Block 3003, were also sought to document the degree of disturbance it caused. Additional maps were also reviewed to track construction and disturbance episodes, and censuses and directories were examined to delineate residential episodes, however it should be noted that no maps dating between 1877 and 1897 showing landowners could be found for the project site at any of the repositories.

BLOCK 2998 Vyse to Bryant Avenues

The Preliminary Assessment found that the northern end of the block formerly hosted mid-to-late nineteenth century dwellings which presumably predated sewer and water hook-ups (ca. 1897-1910). The lots may contain shaft features associated with the homes and thus were considered potentially sensitive. The preliminary cartographic research did not reveal substantial subsurface disturbance at this end of the block; in fact some areas were later used as a lumber yard and as a playground which may have actually sealed in deeply buried deposits. In addition, sections of the streetbeds of Vyse and Bryant Avenues might contain archaeological deposits associated with historic dwellings. The remainder of the block either lacked archaeological potential or was extensively disturbed by tenement construction for which basements were excavated (Figure 8).

The earliest detailed map of the project site, dating to 1851, showed that land within this area was not divided into city blocks by that time, and that only Boston Post Road and West Farms Road had been laid out. At that time, the land within the project site was owned by J. Fitch, J. Walker, and R. Walker (Sydney & Neff 1851). The lack of clarity of the 1851 map made it difficult to ascertain whether or not there were actually structures present. Grantor/Grantee records show that the John Walker estate was sold to Abigail Minford in 1866 (Liber 598, p.363). According to one 1867 map the project site was vacant at that time. This may be due to mapping omissions, rather than the actual lack of structures, although the Colton map did show some structures in the surrounding vicinity (Colton 1867).

By 1868 there were three larger estates, each clearly shown with dwellings, which divided this block. From south to north these were owned by Jas. S. Sturgess, Thos. Minford, and "J.P.W." (Beers 1868, Figure 4). A long drive ran from West Farms Road to the south, through the Sturgess estate, north to Boston Post Road. At the northern end of the block bordering Prospect Street, or what is now East 176th Street, there were two additional unlabeled structures (Figure 4).

A more detailed Beers 1868 atlas showed the Sturges (lot 3), Minford (lot 16), and Woodcock (lot 29) houses present at that time. On the northern end of the block there were three additional houses. On Lot 34 fronting West Farms Road was a house belonging to Lounsbury, on Lot 41 fronting East 176th Street was Mrs. Rowland, and on an unnumbered lot just to the west of Rowland, was Mrs. Scanlon. This block remained unchanged through 1872, with the exception of the fact that C. Houseman now owned the Woodcock house on Lot 29 (Beers 1872). Thomas Minford, James Sturges, and Michael Houseman are all listed as landowners in West Farms on the 1870 census.

The lots appeared unchanged in 1876 (Beers 1876; Figure 5), and in 1877 the same landowners were listed (Beers 1877). By 1897 the routes of Vyse and Bryant Avenues, and East 174th Street had been laid out on paper, but they were shown as dashed lines indicating that they had not yet been opened and regulated (Bromley 1897; Figure 6). A 12" sewer or water line had been laid in the Boston Road directly west of the project site by that time, and on East 176th Street east of Longfellow Avenue. The Sturgess property was now owned by Sarah Sturgess, and the two-story house was clearly shown fronting what would become Bryant Avenue, with its eastern end actually protruding into its route. There were six outbuildings associated with this house, but they fell within block 3003 and will be discussed below. To the north of the Sturgesses was the two-story Minford House, also shown half within Block 2998 and half within what would become Bryant Avenue (Figure 6). To the north was the two-and-a-half story Houseman house and two associated framed outbuildings - one within Block 2998 and the other within the proposed route of Bryant Avenue. The Houseman dwelling stood in the center of the block on Lot 29.

At the northern end of the block near East 176th Street there were six additional dwellings in 1897. Four of these fronted the Boston Post Road, three of which actually fell within the footprint of Vyse Avenue. Although there were no property owners listed, the Lounsbury house was still present on Lot 34, and two additional dwellings had been built on Lot 36. The structures fronting East 176th Street on Lots 41 and 49 had an associated framed outbuilding in the rear of each lot (Figure 6).

Another 1897 map of this area shows proposed brick sewer and water pipes which are to be laid in Vyse, Bryant, Longfellow and Boone Avenues (Commissioner of New York City 1897). Pipes to be laid out were typically 3' in diameter for sewers, and 15" and 18" in diameter for water. These sewer and water lines were installed sometime between 1897 and 1915 when the streets were opened and regulated.

The block appeared virtually unchanged in 1901, although this map clearly showed that six foot sewer lines were laid in Boston Post Road and all of East 176th Street by that time (Sanborn 1901; Figure 3). Lot 3 still had a large two-story house labeled as the Sturges Estate, which clearly extended out into the mapped Bryant Avenue (Sanborn 1901). The side and front yards surrounding this structure were within block 2998, but the back yard would have been in Bryant Avenue and on Block 3003. To the north on Lot 16 was the smaller Minford (now three-story) dwelling, also extending into Bryant Avenue and also with its front and side yards falling within this block. The Woodcock/Houseman house and surrounding yard on Lot 29 was still present, as were the structures on Lots 34, 36, 41, and Lot 49. The structures at the intersection of Vyse Avenue and East 176th Streets on Lot 36 actually fall, in part, into the mapped footprint of Vyse Avenues. Mrs. Sanlon's house on Lot 49, and the majority of the surrounding yard, also fall within the footprint of Bryant Avenue (Figure 3).

The 1905 landowner list revealed the following residents. Lot 3 was now part of the Benjamin Trask estate, while Lot 16 was still part of the Minford estate. Lot 29 was now owned by Henry Hunneke, Lot 34 by Michael J. Dowd, Lot 36 by C. Kelly, Lot 41 by James G. Rowland, and Lot 49 by Martin Schmidt (Bromley 1905).

By 1915 the nature of the project site was beginning to change. On Lot 3, the former Sturgess house was removed, and the first tenement was built on the block at the southern end of this lot. The Minford house on Lot 16 was realigned to front Bryant Avenue, and was still present, as was a small one-story garage at the northern end of this lot. The Houseman house on Lot 29 was still present at 1852 Vyse Avenue, and there was an additional one-story structure fronting Vyse Avenue. The dwelling on Lot 34, formerly belonging to Lounsbury, was present at 1862 Vyse Avenue. The dwelling on Lot 36 was reduced in size to accommodate the opening of Vyse Avenue, but was still present. A one-story store-house was built on the eastern side of the lot fronting East 176th Street (Sanborn 1915).

In 1915 Mrs. Rowland's dwelling on Lot 41 was still present, but the opening of Bryant Avenue forced the removal of the Scanlon house on the northern end of Lot 49. Concurrent with its removal a two-story dwelling was built on the back of this lot, so possibly, the Scanlon house was just moved. Regardless, the regulating and opening of Bryant Avenue in and of itself may have severely impacted the site of the former Scanlon house on the front of the lot, in addition to its surrounding yards. At the very least, the construction or reconstruction of the two-story dwelling on the back of the lot impacted that part of the lot.

By 1924, little had changed (Bromley 1924). However, by 1932 the character of the block had changed profoundly, and it was now largely covered by a series of attached five-story tenements with basements - two per 100' wide lot with a vaulted yard between them. Some of these had basements, some did not (Bromley 1932, Figure 7). Each of the structures maintained a very small (less than 25' wide) backyard, with the series of rear yards forming a small alleyway between the structures fronting Vyse Avenue and those fronting Bryant Avenue. The entire sites of the Sturgess, Minford, and Houseman dwellings, on Lots 3, 16, and 29, were greatly impacted by these tenements. The Lounsbury house on Lot 34 was removed and the western half of the lot was covered with a one-story structure on a slab foundation. The dwelling on Lot 36 was still present, but the ca. 1915 store-house was gone. The Rowland house on Lot 41 was also still present, as was the house on the back of Lot 49.

By 1950, little had changed from 1932, except at the northern end of the block (Sanborn 1950). Lot 34 was unchanged, with a one-story structure still covering the western half of the lot. The dwelling on Lot 36 was either renovated or replaced by a two-story structure housing a lumber business, and the remainder of the lot was used

as a lumber yard. Several sheds had been built on the lot associated with this activity. The dwelling on Lot 41 had been razed, and the entire lot was covered by a playground. The dwelling on the back of Lot 49 was still present.

Currently three of the twentieth century tenements are still standing at 1796-1806 and 1836-1840 Vyse Avenue and the rest of the block is vacant (Sanborn 1994).

In summary, the map research has revealed that the following lots may be sensitive for shaft features associated with the historical residential episodes which predate the installation of sewer and water lines at the turn of the twentieth century (refer to Figure 3 for lot locations):

Lot	First date on maps	1905 owner	Last date on maps
Lot 34	1868 Lounsbury	Mike Dowd	1915
Lot 36	1894 C. Kelly	C. Kelly	1950
Lot 41	1868 Mrs. Rowland	James Rowland	1950
Lot 49	1868 Scanlon		1901

Although other structures stood on the block, their loci were not determined sensitive for one of several reasons. First, many of the other structures were built either in conjunction with or after the installation of sewer and water lines, and therefore there is little likelihood that deeply buried undisturbed historical deposits associated with these later occupants were ever present. Second, some of the earlier structures, which predate sewer and water lines, were clearly impacted by the construction of Vyse and Bryant Avenues, or the twentieth century tenements with basements.

Soil boring logs and rock-data maps were consulted to determine the likelihood that any historical deposits on Lots 34, 36, 41, and/or 49 remained undisturbed having withstood the construction of a later building with a slab foundation (Lot 34), the creation of a lumber yard (Lot 36), the construction of a playground (Lot 41), and the regulating and opening of Bryant Avenue (Lot 49).

The rock-data maps show that bedrock in the vicinity of this block is rather shallow, and in some places actually protrudes from the surface. The 1938 Rock Line map of the Bronx shows that bedrock protruded through the surface in most of the vicinity of these potentially sensitive lots at the northern end of the block. Bryant Avenue had been opened by that time, and no bedrock is shown protruding through its route or through the former site of Lot 49. The 1938 rock elevations for the other three lots, heading from west to east, ranged from 70.5' to 78' above datum, while the surrounding street beds are shown at 69.4' and 61.5' at Vyse and Bryant Avenues, respectively. Maps confirm the elevations around this block as follows:

<u>Location</u>	<u>1891</u>	<u>1915 elev.</u>	<u>1932 elev.</u>	<u>1950 elev.</u>
176 x Vyse	60-80	70	70	70
176 x Bryant	60	63	-	63

The 1938 bedrock elevations for Lots 34, 36, and 41 are either at or above the surface elevations for surrounding cross road. This suggests several things; first, it would have been extremely difficult to excavate deep shafts for privies, cisterns, or wells on any of these three lots due to the bedrock. Second, any post 1938 construction on these lots would have had to contend with the protruding bedrock, and would have required extensive ground manipulation before any building episodes could commence. Finally, the regulating of Vyse and Bryant Avenues, and the installation of sewer and water lines as well as other utilities would have most likely necessitated blasting within the street beds where shallow bedrock existed.

Recent soil borings, completed by Richard S. Kessler, P.E., showed that the depth to bedrock on Lots 34, 36, and 41 was extremely shallow. On what were historically Lots 34 and 36, test pits KTP-19 and 19a encountered mica-schist bedrock at four and three feet deep, respectively. The levels above the bedrock were loose fill, containing gravel, concrete chunks, bricks, wood, rubber, fabric, and plastic (Test Pit Logs, KTP-19, 19A, 4/14/95). No undisturbed or pristine stratigraphic levels were encountered above bedrock.

On what was historically Lot 41, the site of Mrs. Rowland's dwelling, soil borings K-48 hit bedrock at 2' below the surface, while boring K-49 hit bedrock at 1.2' below the surface (Soil Boring Logs, K-48, K-49, 3/18/97). Again, there were only fill levels above the bedrock on this lot. This was the lot where a playground was built, which undoubtedly required the removal of bedrock and leveling the lot.

Maps and boring logs indicate that the bedrock on Lots 34, 36, and 41 is clearly too shallow to permit the types of historical deposits which would have survived later construction episodes. Deep shafts for privies, cisterns, and wells, could not be excavated where bedrock existed, therefore any resources associated with early dwellings would have been shallowly deposited. The very presence of the bedrock may have been exactly why twentieth century tenements were never built across these lots - the cost of bedrock removal may have been prohibitive. Regardless of how old the residential dwellings were on these lots, they are not considered sensitive for potentially important deposits due to the unquestionable lack of undisturbed deposits.

The 1938 Rock Line Map shows that bedrock beneath the northern end of Bryant Avenue is more deeply buried at 52' above datum, which is almost twenty feet below the bedrock elevation just to the west within the block itself. A boring conducted in what was Bryant Avenue, at approximately the location of former Lot 49, found bedrock at 14.3' below the surface (Soil Boring Log, K-38, 3/13/97). Above this were

layers of fill, gravel, silt, and a large boulder. There appeared to be non-fill deposits in some of the layers, mostly consisting of clayey silt, gravel, and sand. Another test pit to the south found bedrock at 3.5' at the west end of the pit, and 6.5' at the east end (Test Pit Log, KTP-10). This confirms the depths of bedrock reported on the 1938 Rock Line map.

The issue of sensitivity for Lot 49 is not as clear. Soil borings and the Rock Line map suggest that the bedrock here is rather deep, and there are at least 14' of fill and/or soil layers above it. This was the site of the Scanlon house, which stood from at least 1868 through at least 1901, and was removed by 1915 (Beers 1868, Figure 4; Sanborn 1901, 1915). Although the Scanlons did not appear in the Trow Directories for 1867, 1880, or 1890, they were listed as the property owners on the 1872, 1877, and 1905 maps (Beers 1872, 1877; Bromley 1905).

not provided
The 1915 map shows that either a new structure or the original Scanlon house had been moved to the very back of Lot 49 with the opening of Bryant Avenue across this lot (see Figures 3, 7). Very little of the original Lot 49 could have been left undisturbed between the site of the old house and the new one. The front of the lot was the actual site of the ca. 1868 structure, while the south end of the lot had the twentieth century dwelling which was built after sewer and water were available. Most likely, this back end of the lot is where an earlier privy would have stood. In fact, the 1901 atlas shows that a small one-story framed structure did once stand at the southern end of the lot, within Block 2998 - at the exact same location of the later ca. 1915 structure (Figure 3). This may have been an earlier privy or simply some other outbuilding. Regardless, the site of this outbuilding was severely impacted by the construction of the ca. 1915 house on the lot.

The area between the two dwellings which was not disturbed by later dwelling construction was, in all probability, disturbed with the creation of Bryant Avenue, and the installation of utility lines through the street bed. Three foot wide sewer lines, and 18" wide water lines were laid in the street to service surrounding lots. Furthermore, the lots themselves were tied into the sewer lines with connecting lines. There would have been very little unimpacted area left on Lot 49 where potential features may have existed.

In summary, all of the lots on Block 2998 originally identified as potentially sensitive for historical archaeological deposits were discounted upon further examination.

BLOCK 3003 Bryant to Longfellow Avenues

In 1868 there were three estates spanning this block belonging to Jas. S. Sturges (Lot 1), Thos. Minford (Lot 14), and J.P.W or Woodcock (Lot 27), although the

main estate dwellings were actually situated on Block 2998 (Beers 1868, Figure 4). A small house was built on Lot 38 fronting East 176th Street, belonging to H. Shaw or Shew (see Figure 3 for location of lots). Just to the east on Lot 32 was a small north-south lane called Meyers Row which had a series of nine small attached one-story row houses which fronted it. The entire lot may have belonged to J. Rowland. To the east was Lot 43 which had a dwelling on East 176th Street belonging to H. St. John. A small dead-end road called Elisabeth Street ran where Longfellow Avenue would eventually be laid out, and at its southern end on Lot 50, was a house belonging to Jno. Moke (Figure 4). All of the structures and landowners appeared unchanged in 1872, 1876, and 1877 (Beers 1872, 1876; Figure 5; Beers 1877).

By 1897 there were six framed outbuildings on Lot 1 associated with the Sturges estate. Lot 14 had part of a frame building which actually extended into what would become Longfellow Avenue. Lot 27 was still vacant, and all of the other structures appear unchanged from 1868 (Bromley 1897, Figure 6). A small framed shed was built on the back of Lot 43, and another small framed outbuilding appeared on the east side of Lot 50 in the proposed route of Longfellow Avenue. By 1897 there was a sewer line, and probably water as well, in East 176th Street as far west as Longfellow Avenue (Figure 6). By 1901 there were only five outbuildings on Lot 1, and the building on Lot 14 was labeled hennery, and was probably a chicken coop. The remaining structures on Lots 32, 38, 43, and 50 were unchanged, although a few of the row houses on Lot 32, Meyers Row, had framed outbuildings at the back of their lots. The proposed routes of Bryant and Longfellow Avenues were shown running through Lots 38 and 50 (Sanborn 1901; Figure 3). By this time a 6' sewer line was shown through all of East 176th Street.

In 1905 the landowners were listed as Benjamin Trask for Lot 1, the Thomas Minford estate for Lot 14, Henry Hunneke for the vacant Lot 27, James G. Rowland for Lot 32, Martin Schmidt for Lot 38, A.C. Mapes for Lot 43, and the Thomas Minford estate for Lot 50 (Bromley 1905).

By 1915 Lot 1 was vacant, but the Hennery still stood on Lot 14. All of the buildings on the northern end of the block on Lots 32, 43, and 50 appeared unchanged, however all structures had been removed from the path of the Bryant and Longfellow Avenues where they crossed Lots 38 and 50. The routes of Meyers Row and Elisabeth Street had been removed from the map as well (Sanborn 1915). By 1932 all of the former structures had been razed and replaced by a series of five and six-story tenements, most with basements, which covered the majority of the block (Bromley 1932; Figure 7). At the northern end of the block fronting East 176th Street over the site of former smaller dwellings on Lots 32 and 43, stood a rectangular six-story tenement with a large interior courtyard, but no basement (Bromley 1932). The site of the structure on Lot 50 was completely covered by a five-story tenement with a basement.

The block appeared virtually unchanged in 1950, except for one important change: the tenement covering Lots 32 and 43 was shown as a five-story structure with a basement (Sanborn 1950). While this may simply reflect a difference in recording methods, it suggests that there may have been subsurface impacts to any historical deposits which may have once existed on Lots 32 and 43.

The entire block is currently vacant with the exception of a building and a community garden at 985 East 174th Street, and a playground at the intersection of Longfellow Avenue and East 174th Street (Sanborn 1994). An access road and retaining walls, which were constructed in 1988, run north-south through the center of this block.

The northern end of the block fronting East 176th Street is potentially sensitive for nineteenth century home-lot deposits associated with the dwellings which once stood on Lots 32 and 43 (Figure 3). Although there was a large tenement built over this section of the block by the 1930s, it is not clear if it had a basement. In addition the structure had a large interior courtyard. This suggests that any deeply buried deposits associated with the earlier dwellings may have been undisturbed by twentieth century construction. The remainder of the block was clearly disturbed by tenement construction, each of which had basements.

In addition to the sensitivity for resources at the northern end of block, a small section of Bryant Avenue is considered moderately sensitive for resources associated with the Shew dwelling on Lot 38 (Figure 3).

In summary, the following lots and structures were initially found to be potentially sensitive for historical resources:

Lot	First date on maps	1905 owner	Last date on maps
Lot 38 (Bryant Ave)	1868 Shew	Schmidt	1901
Lot 32 (Meyers Row)	1868 J. Rowland*	J.G. Rowland	1915 Not ok see pp 18
Lot 43	1868 H. St. John	A. C. Mapes	1915 ok

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*Although Rowland owned the lot itself, there were nine attached single-family dwellings fronting Meyers Row on it. The occupants of each individual structure were not listed.

Historical elevation data revealed the following:

Location	1891	1915 elev.	1932 elev.	1950 elev.
176 x Bryant	60	63	-	63
176 x Longfellow	40-60	46	46	45

The elevations at street intersections have not apparently changed over the last one hundred years. A review of the 1938 Rock Line map shows that there was no bedrock protruding from the surface at the northern end of this block at that time. Bedrock at the intersection of Bryant Avenue and East 176th Street was found at 52.4' while the street bed was situated at 61.5', indicating that bedrock was considerably deeper at that time, existing about 9' below the surface. Bedrock was found at 40' above the datum point at Longfellow Avenue and East 176th Street, while the surface elevation was at 45', indicating the bedrock was just about five feet below the surface at that intersection in 1938.

Current soil borings contain the following data. Approximately where the Shew house on Lot 38 once stood in the path of Bryant Avenue, boring K-38 shows layers of sand and gravel over bedrock which was reached at 14' below the current surface (Soil Boring Log, K-38, 3/13/97). There appeared to be non-fill deposits in some of the layers, mostly consisting of clayey silt, gravel, and sand. Another test pit to the south found bedrock at 3.5' at the west end of the pit, and 6.5' at the east end (Test Pit Log, KTP-10). This confirms the depths of bedrock reported on the 1938 Rock Line map.

Despite the depth to bedrock, sewer and water lines were installed through Lot 38 after Bryant Avenue was created which would have caused tremendous subsurface impacts. It is likely that shaft features associated with the ca. 1868 dwelling were at least partially disturbed by the installation of utility lines, and storm and sanitary sewers. The lot was fairly narrow, less than 25' in width, and probably about 200' in length, and fell entirely in the middle of Bryant Avenue. Although the deep bedrock in this area suggests that shaft features could have been created in the 1860s, the work involved with the regulating of Bryant Avenue and subsurface utilities would have probably caused a large degree of disturbance to them. Any remnants of shaft features would have been severely truncated. Therefore, this lot is not considered sensitive for historical period cultural resources.

Where the row-houses fronting Meyers Row on Lot 32 once stood, borings show zero to four feet of fill, followed by two feet of sand with silt. No stratigraphic deposits were recorded between six and ten feet below the surface, where bedrock was then encountered (Soil Boring Log, K-6, 4/18/95). Another test pit nearby revealed fill in the upper levels to 2.5', including wood plastic, brick, and rubber, followed by a foot of yellow brown sand and gravel, two deeper layers of sand, silt, and gravel, and bedrock at 11.5' (Test Pit Log, KTP-8, 4/14/95). Natural stratigraphic deposits appear to exist between 2.5' and 11.5' below the surface. However, further research revealed that most of these lots were disturbed in the 1980s.

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According to Mel Glickman, the EDC engineer who was in charge of the construction of the access roadway through the middle of this block in 1988, while the actual roadway construction had only about a one foot depth of impact to Lot 32, the

storm and sanitary sewers, with catch basins and manholes, disturbed a minimum of seven feet below that (personal communication to Betsy Kearns, September 16, 1997). Therefore, the roadway which crosses over the backs of all the lots associated with the Meyer's Row dwellings has caused impacts to a depth of at least eight feet. As a result of this disturbance, all of Lot 32 is no longer considered archaeologically sensitive.

South of the backyard of the former H. St. John house on Lot 43, borings K-33 and K-34 show fill over bedrock at five feet, and fill over bedrock at 8.5' respectively. Fill levels contained brick, wood, and in some cases concrete, right down to the bedrock. Boring K-29 taken almost at the exact site of the former St. John house shows that bedrock was encountered at ground surface (Soil Boring Log, K-29). To the north of this fronting East 176th Street, bedrock was encountered at 18 inches below the surface beneath a shallow layer of fill (Soil Boring Log, K-5). The shallow bedrock in this area, and the presence of fill with concrete above bedrock suggests that the original topography on the front of this lot was greatly altered with the twentieth century construction and demolition of the tenement. Although bedrock is deeper to the south of this lot, fill levels also extend down to bedrock. There may be undisturbed soil in what was the backyard where the tenement's courtyard existed, but no soil borings were available to confirm this. Therefore, Lot 43 is considered moderately sensitive for historical deposits.

In summary, Lots 32 and 38 were found to be disturbed and are no longer considered archaeologically sensitive. Lot 43 was found to have moderate archaeological sensitivity since there were no soil borings in the backyard which would either confirm or dismiss disturbance.

BLOCK 3011 Longfellow to Boone Avenues

In 1868, there were two structures east of Elisabeth Street on East 176th Street belonging to Prof A. Wood on Lot 26, and Robt. Wilson on Lot 30 (Beers 1868; Figure 4). These two structures appeared unchanged through 1872, 1876, and 1877 (Beers 1872; Beers 1876 Figure 5; Beers 1877). The 1897 map showed that these two structures were still present, but that each lot had an additional framed outbuilding constructed on it, south of the dwellings. East 176th Street had a sewer and/or water line in this area by that time (Bromley 1897; Figure 6). These lots appeared unchanged in 1901 (Sanborn 1901, Figure 3). However, by that time a dwelling had been constructed on Lot 41. The construction date of the Lot 41 dwelling suggests that it was built in conjunction with the availability of sewer and water lines, or shortly thereafter.

The 1905 landowners of the three dwellings were Daniel Mapes for Lot 26, Robert Wilson for Lot 30, and Daniel Mapes for Lot 41 (Bromley 1905). The block

not provided

appeared virtually unchanged in 1915, although the outbuilding on the back of Lot 26 was listed as a storehouse (Sanborn 1915).

By 1932 there were a number of five and six-story tenements on the block, some with basements, as well as a one-story garage fronting Boone Avenue (Bromley 1932, Figure 7). Unlike the former two blocks, this block was not covered with as many structures by 1932: two tenements with basements stood fronting East 174th Street (these were built in 1922-23 by the HWG Building Corporation [Building Permit 3310, 1922]), and three six-story tenements without basements fronted Longfellow Avenue mid-block. The dwellings at the northern end of the block on Lots 26, 30, and 41 were still present (Figure 7).

By 1950 a Milk Depot, and an unlabeled structure had been built fronting Boone Avenue. The northern one-third of the block, where the previous buildings on Lots 26, 30, and 41 once stood, was vacant by that time (Sanborn 1950).

There are currently a series of one-story commercial and industrial structures fronting the entire length of Boone Avenue, over the locations of former structures on Lots 30 and 41. They do not appear to have basements. The tenements fronting East 174th Street are extant, but the remainder of the block is vacant (Sanborn 1994).

There were three dwellings on the northern end of this block at the turn of the twentieth century. However, only two of these are considered archaeologically sensitive because they were built prior to the availability of sewer and/or water lines and thus may have associated shaft features from wells, privies, and/or cisterns. The dwelling on Lot 41 was built in conjunction with the availability of public utilities, and probably never had historical deposits which would be archaeologically significant.

In summary, the following lots and structures were initially found to be potentially sensitive on Block 3011:

<u>Lot</u>	<u>First date on maps</u>	<u>1905 owner</u>	<u>Last date on maps</u>
Lot 26	1868 Prof. A. Wood	Daniel Mapes	1932
Lot 30	1868 Robt. Wilson	Robt. Wilson	1932

Cartographic research has confirmed that the elevations of street intersections around the northern end of this block have changed very little over the last one hundred years.

<u>Location</u>	<u>1891</u>	<u>1915 elev.</u>	<u>1932 elev.</u>	<u>1950 elev.</u>
176 x Longfellow	40-60	46	46	45
176 x Boone	20-40	22	-	22

The elevation data indicates that the elevations of street beds surrounding the project site have remained virtually unchanged over the last one hundred years. The 1938 Rock Line map shows bedrock outcrops on Block 3011, south of Lot 41. No outcrops are shown at the site of former Lots 26 or 30. Bedrock was found at 40' above the datum point at Longfellow Avenue and East 176th Street, while the surface elevation was at 45', indicating the bedrock was just about five feet below the surface at that intersection at that time. At the intersection of Boone Avenue and East 176th Street, Bedrock was found at about 17', while the surface elevation was 21.2', indicating that bedrock was at least four feet deep in this area.

The current boring logs from a test pit placed on former Lot 26 showed that fill extended from the surface to four feet. From four to six feet was a layer of mottled brown and grey sand, silt, and gravel, and beneath this was a layer of yellow brown sand silt, and gravel. Bedrock was reached at 9.3' (Test Pit Log, KTP-2, 4/14/95). Seemingly undisturbed stratigraphic deposits exist between four and nine feet below the surface which were interpreted as virgin soil (personal communication, Richard Kessler, September 15, 1997). A six-story tenement was built on the southern end of the lot by the 1930s, but this was removed by the 1950s and the area is now vacant. The degree of disturbance caused by this construction episode is unclear. It is possible that earlier shaft features may have been created in conjunction with the use of the ca. 1868 house on this lot, and may have remained undisturbed beneath the fill elsewhere on the lot. Therefore, Lot 26 is considered sensitive for historical deposits.

A boring taken about thirty feet west of where the Wilson house stood on Lot 30 showed that fill extended to a depth of four feet below the surface. Beneath this was a two-foot level of yellow brown sand, silt, and gravel, followed by a refusal on probable bedrock at 6.5' below the surface (Test Pit Log, KTP-1, 4/14/95). No borings were performed where the house actually stood on Lot 30, or in its surrounding yard since this area is currently covered by an industrial building. Since borings were unavailable to verify the depth of fill, the level of disturbance, and the depth of bedrock, this lot must still be considered potentially sensitive for historical period archaeological deposits. However, current construction plans do not call for the removal of the existing structure on the lot, and therefore the lot will not be impacted. ✓

In summary, Lot 26 was found to be sensitive for potential historical period archaeological resources associated with a nineteenth century dwelling. Although Lot 30 may be sensitive, it is currently covered by an industrial building which is to remain extant and will not be impacted as part of this development project.

Hedger-Edwards Cemetery

The previously completed documentary assessment identified the possible location of the Hedger-Edwards cemetery within the southeastern corner of the project site. According to historian Bert Sack,

The Hedger-Edwards family owned a large piece of land and a farm near 173rd Street and Boston Post Road. Their family cemetery was at 174th Street and Boone Avenue. This cemetery, which held the remains of several Civil War soldiers, has disappeared. The bodies were removed when the streets were laid out. (Sack 1974:46)

The description of this cemetery's location and subsequent removal offered by Sack spurred the need for more thorough research documenting its existence. According to Laura Tosi, the Bronx County Historical Society librarian, Mr. Sack was very active in researching the history of West Farms and was considered an accurate historian. Unfortunately, he has since died and neither the Bronx County Historical Society, the New York Historical Society, nor Lehman College have his records (personal communications, Laura Tosi, August 1, 1997, Janet Munch, August 15, 1997). There were no primary records of the cemetery or its removal at the Bronx County Historical Society, or at any of the other repositories and agencies contacted including the New York City Department of Health and the Municipal Archives.

An exhaustive search of maps, atlases, and other primary documents to support Mr. Sack's placement of the Hedger/Edwards cemetery failed to produce any evidence of its existence at East 174th Street (Beers 1867, 1868, 1872, 1877; Bromley 1897; Robinson 1888, 1890, 1897; Sanborn 1901, 1905; Sydney and Neff 1851; Viele 1874). However, an 1877 atlas did show a cemetery near the Hedger Farm, which once bordered the Bronx River south of the project site (Beers 1877). The map clearly shows a cemetery south of the project site on Boone Avenue, closer to what eventually became East 172nd Street. The cemetery appeared to be directly next to land belonging to the Whelans. The earlier 1872 Beers atlas depicted this as the "Episcopal Church Grave Yard" and clearly shows it at East 172nd Street, far south of the project site (Figure 5). The 1897 atlas also places a cemetery at East 172nd Street (Bromley 1897). These were the only maps found depicting any cemetery near the project site, and none labeled the cemetery as being the Hedger-Edwards burial plot.

Gabrielle Nicholson, a librarian at the Westchester County Historical Society, said that their records show the closest reported cemetery was at East 172nd Street and Boone Avenue (Renino 1984:8586). This was where the West Farms Dutch Reformed Church cemetery stood before it was removed to Woodlawn Cemetery. She did not know when this cemetery was moved, and had no record of the Hedger-Edwards cemetery (personal communication August 1, 1997).

Alexis Carrington with the New York City Geological Society stated that she had done research on another cemetery nearby, and that the Hedger Edwards cemetery may have been part of the Dutch Reformed Church cemetery at East 172nd Street. According to her research at the New York State Cemetery Association,

most of the graves, including the monuments, were removed to Woodlawn Cemetery, when after 75 years of abandonment, the land was purchased by developers who voluntarily paid to have the graves moved (personal communication August 6 & 8, 1997).

The only document found pertaining to the actual Hedger-Edwards cemetery was a typed manuscript by Stephen Wray titled "The Old Village of West Farms" (1942). This text gave a detailed description of the 1840's establishment of the First Reformed Protestant Dutch Church of West Farms, located at East 179th Street and the Boston Post Road, which was formed by a congregation which split from the Presbyterian Church at East 180th Street. Since there was no land in the middle of the village adjoining the new Church for burial of their deceased, a burial ground was established far to the south at what is now 172nd Street.

At the same time the Church was seeking land for its new burial ground, the former Hedger-Edwards farm was being subdivided into lots and sold for building purposes. According to Wray,

Up a little lane running northwest out of this [Boston Post] road at what is now 172nd Street, lay two lots, 100 feet wide by about 200 feet deep, right alongside of the old private burying-lot of the Hedgers and Edwards. These lots William Corsa had bought and he sold them to Horace Rowland, who, on April 19th, 1845, sold them for a Cemetery to the Minister, Elders and Deacons of the First Reformed Protestant Dutch Church of West Farms. (Wray 1942:141).

The Church cemetery contained members of the Wilson, Kelly, Jennings, Rowland, Corsa, Mapes, Austin, and Traub families, as well as some Civil War veterans. Wray further states that...

Right along the easterly side of this Dutch Reformed Cemetery lay the burial plot of the Hedger family and their kin the Edwards and Brownes. The oldest tombstone is that of Thomas Edwards who died in 1807 - Prior to that, only slabs of gray mica-studded rock, unmarked, show where lay the Hedgers, early owners of the hundred acre farm known as Lot 7 of the original West Farms survey of 1711, whose farm-house was at 173rd Street and Boone Avenue where Farmer Edwards, killed in the raid on this home by British soldiers in 1776 when he would not disclose where he had buried the family silver, without doubt lies (Wray 1942:142).

This reference clearly places the Hedger-Edwards family cemetery adjacent to the Dutch Reformed Church cemetery at East 172nd Street and Boone Avenue, two blocks south of the project site. Although the two cemeteries were apparently adjacent, there are no references to the Hedger family actually being part of the Dutch Reformed Church (Scharf 1886:839; Wray 1942:141). A search of baptismal records of the Dutch Reformed Church only lists one Hedger among the congregation, and he was listed as somewhere upstate in Columbia County in 1892 (Holland Society of New York 1990:111).

The description of the small size of the church's cemetery lot, 100 x 200 feet, indicates that it was not large enough to extend north two blocks up into the project site at East 174th Street, and places it well south of the project area. Furthermore, it was reported that sometime in the early twentieth century, Boone Avenue and East 172nd Street were cut through the cemetery and most of the bodies were removed. The undisturbed part of the cemetery was left in place and allowed to deteriorate (Wray 1942:141).

An undated article on file at the Bronx County Historical Society confirms that a cemetery, most likely the Dutch Reformed Church plot, was encountered at East 172nd Street by laborers while blasting for new Bronx sewers in the early twentieth century (Newspaper Article, Vertical File, Cemeteries, Bronx County Historical Society). According to the article the cemetery was originally encountered when East 172nd Street and Boone Avenue were being laid out; and only the headstones were removed even though there was money set aside for the removal and reinterment of the deceased. Boone Avenue was then laid out directly through the old cemetery. The bodies were later exposed when the area was dynamited for sewer installation. At that time, nearly twenty bodies were uncovered, and friends and relatives speculated that up to 100 bodies may still be there. William Butler, a local undertaker, said he removed many of the bodies to Woodlawn Cemetery for families that paid him, but neither the City nor Church had the rest removed (Vertical File, Cemeteries, Bronx County Historical Society). No burials were reportedly encountered anywhere near East 174th Street.

According to the New York State Cemetery Association, the only data they have on the Dutch Reformed Church Cemetery is an index card with the name of a Real Estate Lawyer who handled the sale of the apparently abandoned property. Whomever purchased the property may have had the interments moved. The card was dated to sometime in the 1940s, possibly 1948 (Alexis Carrington, August 8, 1997).

Ms. Tosi of the Bronx County Historical Society also suggested that the burials may have been reinterred at the Woodlawn Cemetery which is where the Soldier's Cemetery (formerly at 180th Street and Bryant Avenue) was moved. An attempt was made to access Woodlawn's records to document the reinterment of the Hedger-Edwards family. They reported over 100 people with the surname of Edwards, and no record of Thomas Hedger's interment (correspondence from Margaret M. Clarke, Woodlawn Cemetery, September 12, 1997).

Although no formal records of the Hedger-Edwards cemetery or its removal were found, likely due to the small size of this family plot and its early date, the documentary research strongly supports that this cemetery was at East 172nd Street, two blocks south of the project site (Wray 1942:142). Maps and atlases place both the Hedger Farm and the Dutch Reformed Church Cemetery in that area, and no cemeteries were found to exist anywhere closer to the project site. A description of the Hedger-Edwards farm tract, known as Lot 7 of the original twelve farms, places its northern boundary at 173rd Street, south of the project site. Furthermore, the old Hedger-Edwards farmhouse was also south of the project site by at least one block, near 173rd Street. At no time did the Hedger-Edwards farm or land holdings extend north as far as the project site. Therefore, the placement of the cemetery at East 174th Street by historian Sack was most likely in error.

V. DISCUSSION

Residential Dwellings

The intensive documentary research has found that there may be historical deposits associated with nineteenth century residential dwellings on Blocks 3003 and 3011. Specifically the documentary research found the following lots to be potentially sensitive since houses were built on them by at least 1868, and sewer and water lines were not available in the neighborhood until 1897 in some places, and 1901 in others:

Block 3003	Lot 43	H. St. John dwelling	Moderate Sensitivity
Block 3011	Lot 26	Prof. A. Wood dwelling	High Sensitivity

After these lots were identified as sensitive, census and directory research was undertaken at the Westchester County Historical Society, the Bronx County Historical Society, and the New York Public Library Local History Room. Difficulties in this research arose because the 1860 census index was available but the reel numbers needed to review actual census entries on microfiche were missing. The 1880 and 1900 Soundex census indexes were vaguely alphabetical, and would have required reviewing each micro-fiche reel available to find references to occupants, and the 1890 census has been destroyed. Furthermore, there were no nineteenth century street addresses or block and lot numbers provided in the census records or directories. According to the Westchester County Historical Society, the nineteenth century New York State census records for West Farms have been lost.

Trow Directories were reviewed for the dates 1867-68, 1875-76, 1880-81, and 1890; few of the known residents depicted on maps were listed. The Block and Lot records shed no light on early residential episodes. At the Block and Lot Department, the WPA Block abstracts begin with block 4000, so the project site blocks (2998, 3003, and 3011) were not included. Furthermore, the Grantor/Grantee records are alphabetized by year; thus the specific year of a land transaction would have to be known before a deed transfer could be found. Therefore, most of the information on residents came from maps and atlases, and from a review of the 1860 and 1870 census indexes, and - where listed - the Trow directories. Unfortunately, none of these sources provided precise addresses or locations.

The following table presents the summary of census and directory data, presented together with landowner information obtained from maps and atlases:

Lot	First & last dates on maps	Earliest Owner	1877 Owner	1805 Owner	Census & Directory Information
BLOCK 3003:					
Lot 43	1868 -1915	H. St. John	St. John	A.C. Mapes	Albert, George St. John 1860 Horaton St. John (27-clerk b. NY) Wife (35), Infant, & Irish Servant 1870* Mapes in 1860 & 70 (probably off site) C.A. Mapes (surveyor) 1880-81 Moved to NYC by 1890 Daniel Jr. (feed) 1880-81 Home on Woodruff (176th St) 1890
BLOCK 3011:					
Lot 26	1868 -1932	Prof. A. Wood	W. Wood	Daniel Mapes	Andrew Wood 1860 Alphonaz, Andrew Wood 1870 Alphonse Wood (60-College prof, b.NY) Wife (56),2-3children, servant 1870* Alphonso Wood, author 1875 Mapes in 1860 & 70 (probably off site) C.A. Mapes (surveyor) 1880-81 Moved to NYC by 1890 Daniel Jr. (feed) 1880-81 Home on Woodruff (176th St) 1890

The 1870 census records which listed both Wood and St. John together on pages 384 and 385, also listed numerous other residents for the immediate area, presumably within the project site blocks, although the exact locations are unknown. The families, their occupations, and their place of birth give some indication of what the neighborhood was like at that time:

Name	Occupation	Place of Birth
Kelley	Dressmaker	Ireland
Hoffman	Skin Factory	Prussia
Michwiedz	Clerk	Poland
VanEyke	Clergyman	New York
Holmes	Teamster	New York
William	?	Ireland
Flahr	Works in Skins	Prussia
Welch	Factory	New York
Waldin	Laborer	Prussia
Bacher	Skin Factory	Prussia
Irving	Mother of 5	Ireland

Some of these residents probably lived in the nine single-family attached dwellings on Meyers Row, Block 3003 Lot 32, although the property was owned by the Rowlands. No specific information on Meyers Row could be found.

The documentary research has concluded that Lot 43 on Block 3003 and Lot 26 on Block 3011 are sensitive for historical period cultural resources which may be archaeologically visible and potentially significant. Dwellings on each of these lots date to at least 1868 (Beers 1868, Figure 4), and were removed sometime in the twentieth century (Sanborn 1901, Figure 3; Sanborn 1915; Bromley 1932). Since public utilities were not available until ca.1897 and ca.1901, these structures would have been occupied for at least thirty years without public sewer and water, necessitating the use of wells, privies, and cisterns.

The examination of historical residential lots has long been the focus of archaeological study. These site types have the potential to provide information about the individuals living there as well as about the surrounding community. Artifacts recovered have the potential to provide details about the everyday life of the residents, including the gender make-up of the residents, their occupations, and in some cases the socio-economic status of these individuals. They offer information about the market system, and often a window for the examination of consumer choice patterns. Very little archaeological data relating to nineteenth century home sites has been recovered from the Bronx, and thus shaft features on these lots are considered potentially significant under National Register Criterion D in that they "may be likely to yield information important in prehistory or history." Comparative studies of artifactual material between each of these lots could provide valuable information on nineteenth century lifestyles in West Farms.

Hedger-Edwards Cemetery

The documentary research strongly indicates that the Hedger-Edwards cemetery, reported by historian Sack as being at East 174th Street and Boone Avenue, was actually sited at 172nd Street and Boone Avenue next to the Methodist Church Cemetery (Wray 1942:142). Maps and atlases depict this as the only location of a cemetery in the nineteenth century, and clearly places the Hedger land holdings south of the project site (Beers 1868, 1872, 1876, 1877; Bromley 1897). The family farmhouse stood a block south of the project site near 173rd Street and Boone Avenue, and the remainder of their tract was south of this.

An exhaustive search of New York City, Bronx, and Westchester County archives, maps, and records failed to place any cemetery within or directly adjacent to the project site boundaries. The reported size of the Methodist Church plot on East 172nd Street, 100' x 200', was small enough so that it could not have extended north to the project site at East 174th Street, and the Hedger-Edwards family plot was probably

similarly sized. Furthermore, when excavations on Boone Avenue were being completed for sewer lines in the twentieth century, burials were encountered at East 172nd Street, not East 174th Street.

Evidence has conclusively determined that the Hedger-Edwards family cemetery was located at least two blocks south of the project site on Boone Avenue, and thus the project site is not sensitive for historical period burials.

VI. CONCLUSIONS AND RECOMMENDATIONS

Residential Dwellings

The project site once hosted numerous dwellings dating to as early as ca. 1868 on Blocks 2998, 3003, and 3011. Many of these homes and their surrounding yards which would otherwise be sensitive for historical deposits associated with residents, have been extensively impacted by twentieth century tenement construction, the construction of Bryant and Longfellow Avenues and buried utility lines, and the construction of an access road and retaining walls through the middle of Block 3003 together with utility lines and drainage features. Most of the tenements had basements, which could have required excavations into the historical lots and house sites. Basements are typically between eight and ten feet below the surface, which would have been approximately the same depths at which shaft features would have occurred. Therefore, these excavations would have impacted shallow yard scatter, as well as the deeper shaft features.

There were two lots, however, which were not clearly impacted by twentieth century construction: (see Figure 3 for locations):

Block 3003 - Lot 43	A ca. 1868 dwelling owned by H. St. John and A.C. Mapes which was removed between 1915 and 1932.
Block 3011 - Lot 26	A ca. 1868 dwelling belonging to Prof. A. Wood and A.C. Mapes which was removed between 1932 and 1950.

Both of these lots were determined to be potentially sensitive for historical period residential deposits associated with former occupants. Furthermore, the lot owners were established for the most of the thirty years during which these lots were occupied and public utilities were not available. Census and directory data were gathered, and limited information on each owner was obtained.

The level of archaeological sensitivity for each lot varies. For example, Lot 43 may have been more impacted by twentieth century construction episodes, but complete disturbance could not be proved (see pages 13, and 17-19 above). In contrast, Lot 26 was left undeveloped following the demolition of its nineteenth century dwelling, with the exception of a tenement constructed on the very southern end of the lot. Accordingly, Lot 43 was judged to be moderately sensitive, and Lot 26 was judged to be highly sensitive based on the degree of documented disturbance

Hedger-Edwards Cemetery

The intensive documentary research has concluded that the project site is not sensitive for any historical period burials associated with the Hedger-Edwards family cemetery which was found to be located two blocks to the south at East 172nd Street. The report by historian Sack that this family plot once existed at East 174th Street was in error, as other historians place it next to the Methodist Church cemetery at East 172nd Street. Furthermore, neither the Hedges nor Edwards owned land within the project site, and the northern boundary of their family farm was at least one block to the south. Since their cemetery was undoubtedly on their farm land, it would not have been sited north of their property boundary. The cemetery's location at East 172nd Street places it within their farmland.

NO BUILD CONDITION

If the future project is not implemented under the No Build Condition, then there may or may not be alternative construction plans proposed. Some potentially sensitive archaeological areas may be impacted if other projects are realized. These potentially sensitive areas are on the Block 3003, Lot 43, and on Block 3011, Lot 26. It should be noted that potentially significant deposits may exist on Lot 30, Block 3011, but that they are currently protected beneath an industrial building. In the No Build Condition, if no development occurs then these lots will be left undisturbed, and any potential resources will be left in situ. However, if other construction plans impact any of these lots it may cause disturbance to potentially significant nineteenth century home lot deposits.

BUILD CONDITION

The proposed construction plans show that supermarket and retail shop construction will adversely impact both of the nineteenth century home lots identified as potentially sensitive. Supermarket construction will likely impact Block 3003, Lot 43, and Block 3011, Lot 26. Where the actual construction of the retail complex does not extend onto these lots, site preparation, landscaping, infrastructure installation, and other construction related activities may cause subsurface impacts.

RECOMMENDATIONS

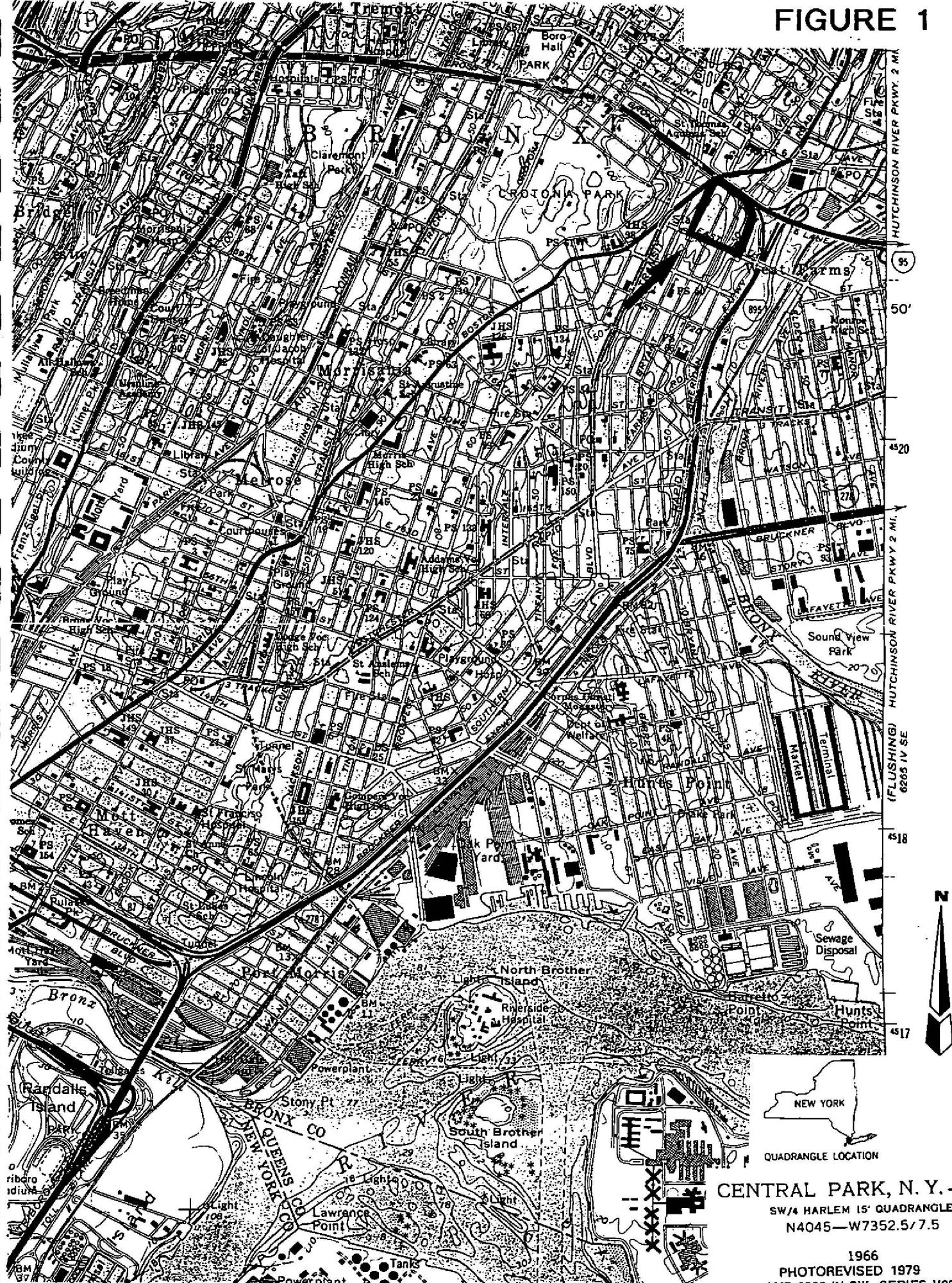
According to the City Environmental Quality Review (CEQR) guidelines, at the conclusion of the documentary research it is necessary "To determine whether there is sufficient evidence to justify another phase of work, namely field work, and to set forth the appropriate scope of the field effort. The level of work may depend on how likely it is that archaeological resources may be on the site" (CEQR Manual, 1993).

In accordance with CEQR guidelines and based on the Preliminary Assessment and Documentary Study, no further research nor mitigation is required in regard to the Hedger-Edwards cemetery since it was proven not to have existed on the project site. However, there are two lots with home lot shaft potential.

If avoidance of the two sensitive lots is not an option, then additional archaeological research in the form of Field Testing should be completed. It is recommended that this take the form of a two part testing plan. First, a limited number of back-hoe test trenches should be excavated over a sufficient testing area of each lot to verify the assumption that these lots are undisturbed. Since Lot 43 on Block 3003 had a tenement on it post-dating the historical occupation of the site, and no borings were completed in the backyard of the lot to date, the trenches would serve to identify any undisturbed areas which are sufficient in area to have hosted historical features. Furthermore, the very southern end of Lot 26 on Block 3011 was also the site of a later tenement, and the degree of disturbance to this section of the lot by this structure should be clarified.

If in fact the subsurface stratigraphy demonstrates that sufficient portions of each lot are undisturbed, then a more extensive series of back-hoe trenches should be completed to seek shaft features associated with the historical occupations. A specific testing plan should be developed, which would include establishing the location of lot lines and former structures with the aid of surveyors. Concurrent with this, intensive documentary research focusing on elucidating landowner chronology, and documenting specific residential episodes for those lots which will be impacted should be completed. The difficulties encountered in completing exhaustive primary records research for all of the project site lots made it a prohibitive task for this current investigation. Therefore, for those lots which will be impacted and which the initial back-hoe trenches reveal an undisturbed stratigraphy, this more exhaustive level of landowner investigation should be completed. Formal research questions regarding the archaeological resources for each lot would be developed as part of the mitigation plan.

FIGURE 1





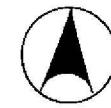
LEGEND

— ARCHITECTURAL STUDY ARE

— — — SECONDARY STUDY AREA



PROJECT SITE



3 800 7733

FIGURE 2

NEW HORIZONS RETAIL CENTER

STUDY AREA

EDWARDS AND KELCEY ENGINEERS, INC.

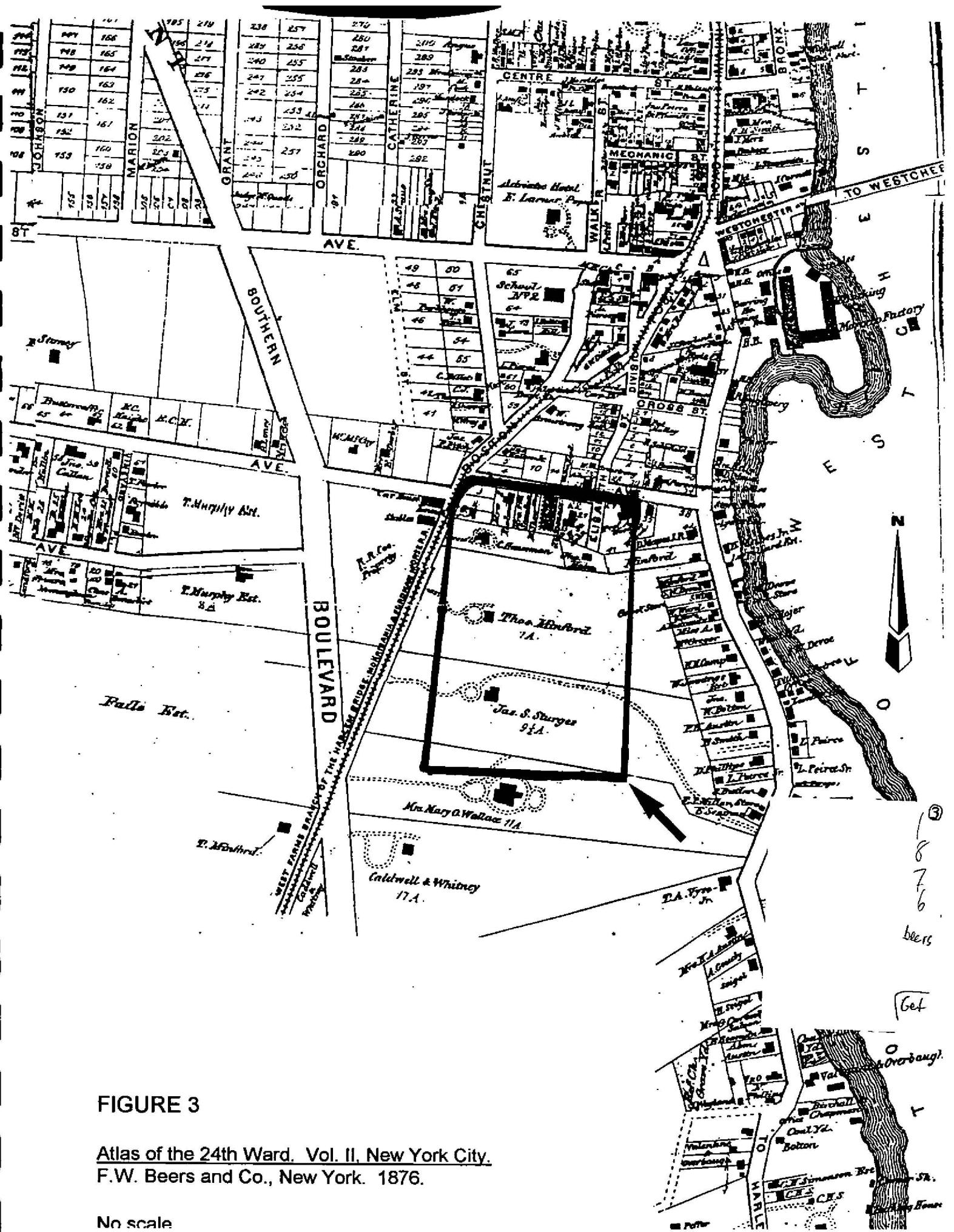


FIGURE 3

Atlas of the 24th Ward. Vol. II, New York City.
F.W. Beers and Co., New York. 1876.

No scale



FIGURE 5
Undated photograph of tenement at 1787 Longfellow Avenue,
facing northwest. Courtesy of Bronx Historical Society.



FIGURE 6
Undated photograph of tenement at 1815 Longfellow Avenue,
facing northwest. Courtesy of Bronx Historical Society.



FIGURE 4
Undated photograph of tenements at 1773-1775 Longfellow Avenue,
facing northwest. Courtesy of Bronx Historical Society.

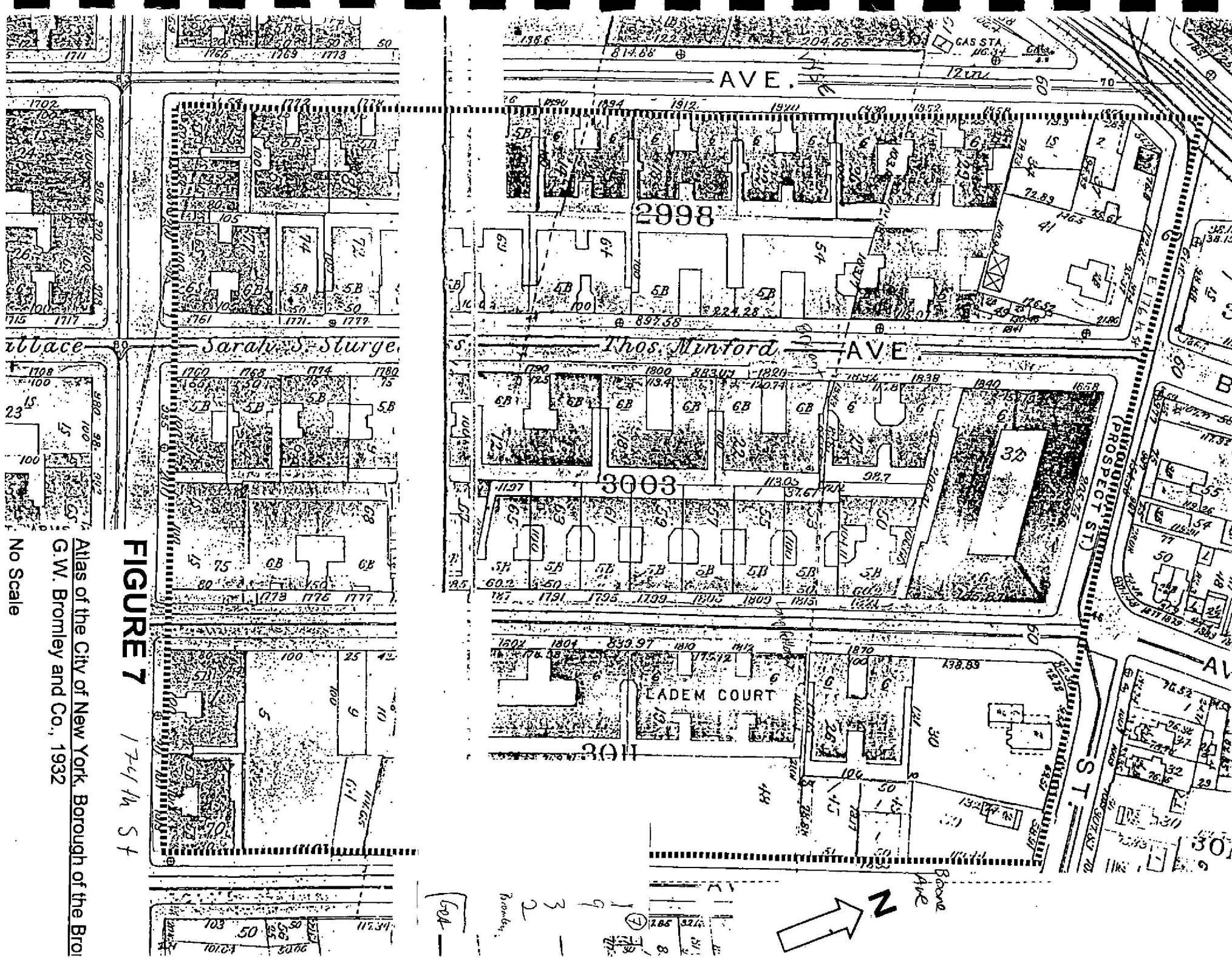


FIGURE 7
174th St

Atlas of the City of New York, Borough of the Bronx
G.W. Bromley and Co., 1932

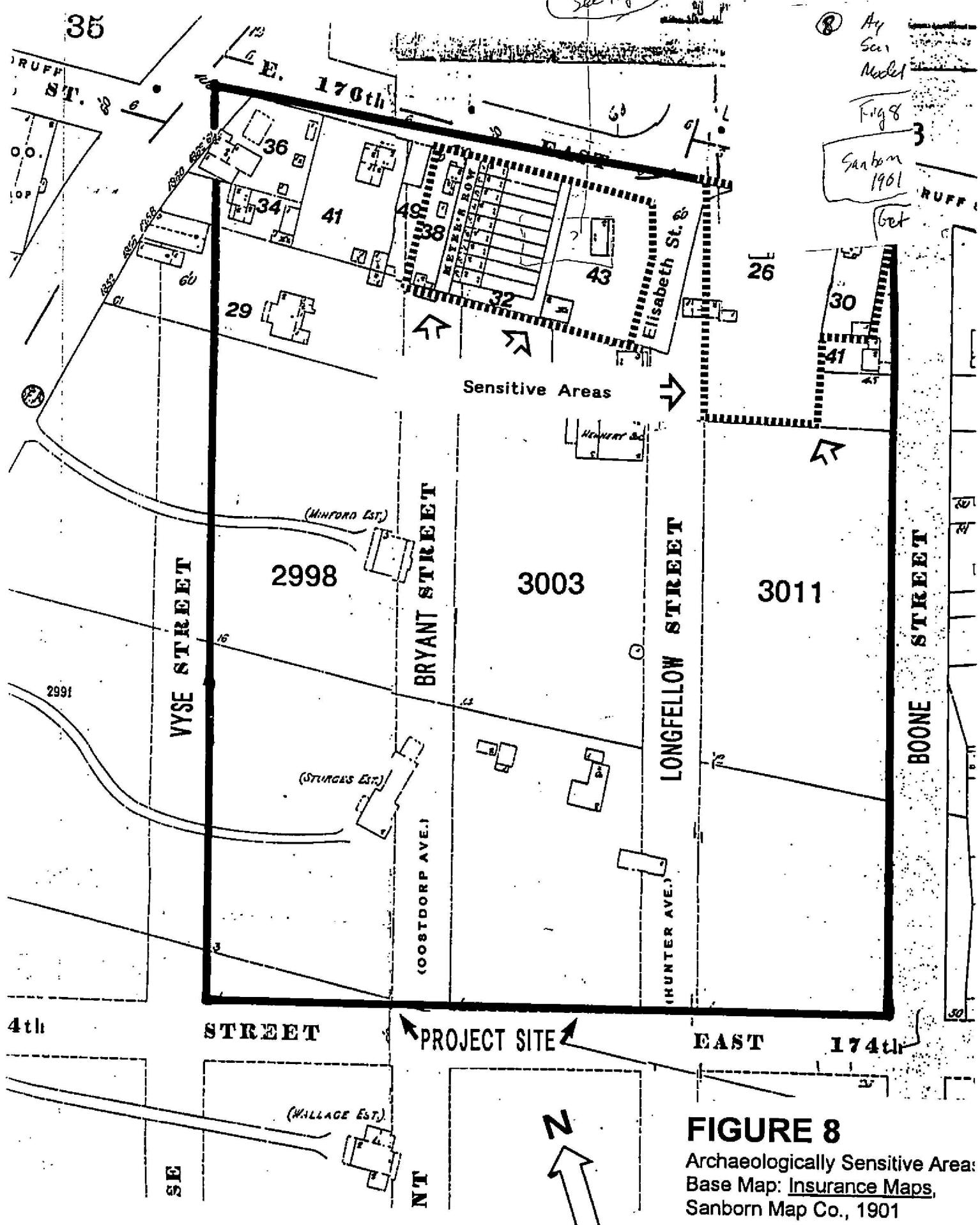
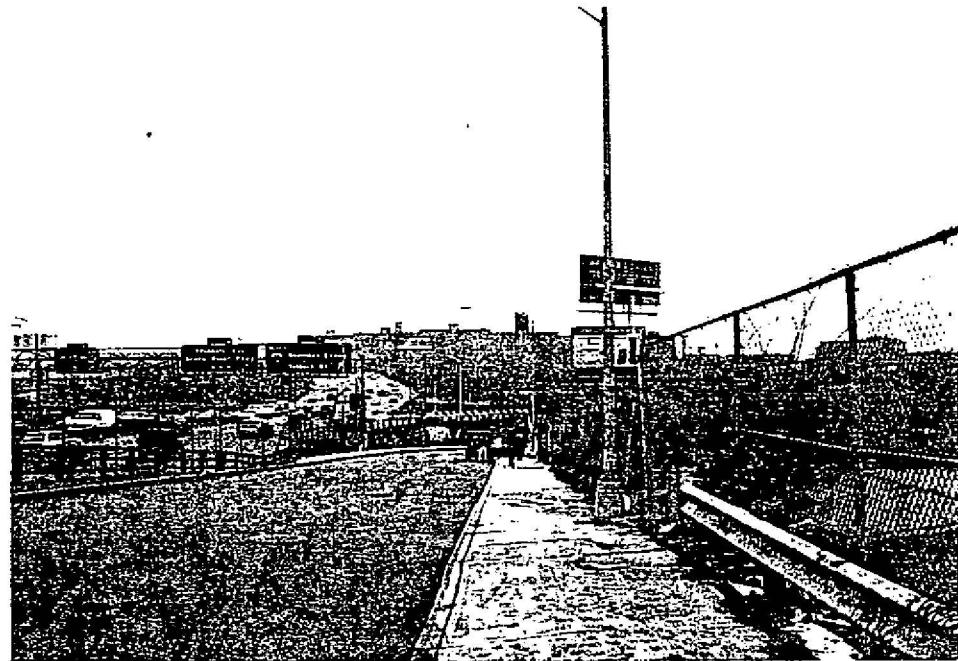


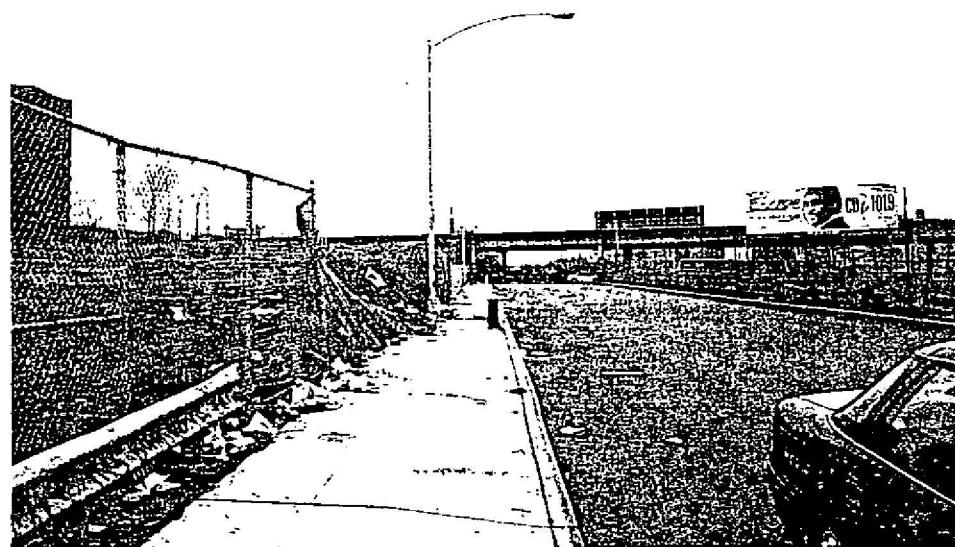
FIGURE 8

Archaeologically Sensitive Areas
Base Map: Insurance Maps,
Sanborn Map Co., 1901

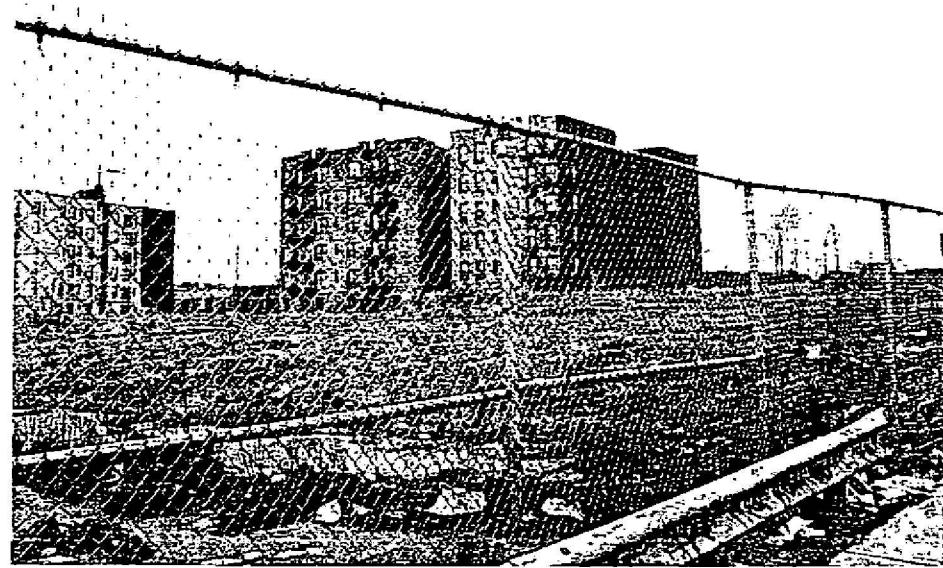
No Scale



PHOTOGRAPH A: 176th Street at service road, facing east towards Boone Avenue.



PHOTOGRAPH B: 176h Street at service road, facing west towards Vyse Avenue.



PHOTOGRAPH C: 176th Street at service road, facing southwest towards tenements on Vyse Avenue in project site.



PHOTOGRAPH D: 176th Street at service road, facing south to service road on project site.



PHOTOGRAPH E: Facing south from 176th Street towards the former route of Longfellow Avenue and Block 3011 in project site.



PHOTOGRAPH F: Intersection of 176th Street and Boone Avenue.
Facing south to project site fronting Boone Avenue.



PHOTOGRAPH G: Intersection of 174th Street and Longfellow Avenue.
Facing northeast to tenements in project site.



PHOTOGRAPH H: Intersection of 174th Street and Longfellow Avenue. Facing
northwest to playground and tenements on 174th Street.

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