1084 1084

STAGE IA SURVEY

124 - 130 East 7%th Street
Block 1413, lots 61, 62, 63, 63 1/2

for

Haseko (New York), Inc.

KEY PERSPECTIVES

Dr. Karen S. Rubinson, Director Frederick A. Winter, Director of Archaeological Services

January 13, 1984

466

TABLE OF CONTENTS

PLATE LIST		ii
INTRODUCTION		1
TOPOGRAPHY		3
PREHISTORY		5
HISTORICAL PERIODS		8
BUILDING HISTORY block 1413, lot 61 block 1413, lot 62 block 1413, lot 63 block 1413, lot 63 1/2		11 13 15 17
ANALYSIS AND RECOMMENDATIONS		21
PLATES	£	25
BIBLIOGRAPHY		37

PLATE LIST

Plate 1	Topographic map, Viele 1865
Plate 2 Plate 3	Site views, ghost of house lot 61 Site views, ghost of house lot 63 and general view
Plate 4 Plate 5 Plate 6 Plate 7	
Plate 8	Manhattan lying on the North River, 1639
Plate 9	Blue Book map, 1815
Plate 10	Bromley Atlas map, A879
Plate 11	Robinson Atlas map, 1885
Plate 12	Sanborn Atlas map, 1983

INTRODUCTION

This study is designed to fulfill the requirement of a Stage IA documentary survey for block 1413, lots 61 and 62, 124-130 East 79th Street, as required by the New York City Landmarks Commission. The site was flagged for study because it was within 600 feet of a watercourse, now underground. Such sites have been demonstrated to often be preferred by both Amerindians and farmers and thus have been recommended for Stage IA survey at a minimum.1

This study consists of an examination, through maps and texts, of the history of the area of block 1413 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 FB archaeological survey should or should not be required, and an appropriate recommendation is made. A Stage IB archaeological survey would be required if the site had the possibility of yielding significant archaeological materials.

The research for this study was conducted at The New York Public Library, Avery Library (Columbia University), The New York City Landmarks Commission, The Buildings Department of the City of New York (Municipal Building), The Deed Records Department of the City of New York (Surrogate Court), and the Municipal Archives (Tweed Court House), in addition

¹Baugher <u>et al</u>. 1982, p. 72ff.

to the authors' personal libraries. The site is immediately adjacent to the Upper East Side Historic District, and the Designation Report for that area was particularly helpful.

Maps reproduced herein are from photographs, since the photostat equipment was unavailable for several weeks at the New York Public Library. Therefore the maps were photographed; they are not printed to scale so no scales are noted.

TOPOGRAPHY

From map 1 of The Landmark Commission's 1982 preparatory study for a predictive model, as well as Viele's 1865 and 1874 maps and others, we can see that before the land forms were altered, a stream flowed out of what is now Central Park at 84th Street, crossed Madison Avenue at 79th and crossed Park Avenue between 77th and 76th Streets, continuing on to the East River. A branch of that stream began at 79th Street and Third Avenue, joining the main stream at 75th Street East of First Avenue. It is the presence of this stream that has resulted in the designation of the project area as having "high potential" for prehistoric remains. (See plate 1)

On the Viele maps as well as the Dripps 1854 map, the stream is visible. From these maps, it is also clear that the block which is now 1413 between Park and Lexington Avenues originally had a large outcropping of rock on it.

From the site visit, we could see that the rock outcropping has been leveled and that the stream is now entirely underground. The land now slopes up from lots 61 and 62 towards Park Avenue and then downwards towards Central Park. The present land also slopes downwards from lots 61 and 62 towards the East River. The site is near the top of a hill which rises from the Forties and crests at

81 Street.

The buildings on the site have been leveled and the site is covered with demolition debris. (See plates 2 and 3)

The five drilling cores show that bedrock is quite close to the present surface, covered with .5 to 3.5 feet of sand, gravel and building debris fill. The locations of the cores and the sections of each core are shown on disgrams attached. (See plates 4, 5, 6, and 7) In these sections, except for B-5, it can be seen that above the mica schist a layer of sand and gravel in varying proportions is .5 to 1.6 feet thick. In sections B-1, B-2, and B-3, the concrete is presumably basement floors of the demolished buildings. The concrete block in B-4 is possibly the backyard level of 124 E. 79th Street. In B-5, the fill contains building remains, including what may have been the broken basement floor of 130 E. 79th Street.

²Test borings, Warren George, Inc., 8-4-83.

PREHISTORY

Prehistoric occupation in the New York region can be divided into the following periods: Paleo-Indian, before 8000 B.C., Early Archaic, 8000-6000 B.C., Middle Archaic, 6000-4000 B.C., Late Archaic, 4000 B.C. - 1000 B.C., and Woodland, 1000 B.C. - historic occupation. The Woodland period may also, as the Archaic, be divided into subperiods: Early (ca. 1000 - 300 B.C.), Middle (300 B.C. - 1000 A.D.) and Late (1000 A.D. - 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, such as Collect Pond in lower Manhattan or Washington Heights. The project area does not fall into either catagory.

Early Archaic is characterized by small hunting camps. According to the Landmarks Commission study for a predictive model, such sites do not have great archaeological visibility.

The Middle Archaic is characterized by a large increase of population, as seen in other areas of the Northeast. 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 of this period, in order to predict

³Baugher et al., 1982, p. 10

occurance more reliably. .

In the Late Archaic, sites are most likely to be found in littoral areas, which makes the study area an unlikely place to find remains of this period.⁵

In the Woodland period, many different kinds of settlements existed. Permanent and semi-permanent settlements, villages, as well as seasonal campsites are characteristic. Agriculture was practiced, although this development may date only to the end of the Late Woodland period, following European colonization. Shellfish collecting sites at tidal inlets are also important in this period.

In the mid-17th century, high hills near streams or rivers and near fields and fishing places were favored as settlement locations. Thus, the study area is a likely possibility for such sites by virtue of its location and topography.

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 the Reckgawawanks, whose territory included the Northern portions of Manhattan. It is not clear from the available literature which Indian tribe controlled the project area in the 17th century.

⁵Baugher et al., 1982, pp. 10-11.

Trigger 1978, p. 214, fig. 1

It is clear, however, that the project area was along a route which the Indians used to travel to trade at Fort Amsterdam. Wickquasgeck Road (also Wieckquaesgeck/Weckquaesgeek), which was first mentioned by David de Vries in 1642, was probably later the Old Albany Post road. It crossed Park Avenue at approximately 80/81st Street, going from the south-east on towards St. Nicholas Avenue and Harlem. 8

Thus, the study area would have high potential to yield. Indian remains if the site had significant undisturbed areas.

⁸Grumet 1981, p. 59 and Bolton 1922, p. 55.

HISTORICAL PERIODS

The study for the predictive model divides the historical periods of Manhattan into six phases: 1609-1664, 1664-1720, 1720-1783, 1783-1815, 1815-1865, and 1865-1900.

In our study area farms occupy the region in the earlier four phases.

On the map "Manhattan Lying on the North River", a c. 1670 copy of a Dutch map of 1639, farms can be seen far to the north of the study area, as well as on the west side of Manhattan. There are no farms noted near the study area. (See Plate 8) Just to the north of the study area, however, is the letter F, marking the place labeled "The Quarter of the Blacks, the Company's slaves." It is hard because of the inaccuracies in the map to know the precise location of this area. It appears to be at about First Avenue, somewhere between the upper 70's and upper 90's on the modern street grid. According to Kouwenhoven, this is the only reference to such a quarter found in the literature.9

On both the Morton map of 1811 and the Blue Book of 1815, this area can be clearly seen to have many farms. However, no farmhouse is indicated in our study area on these maps. (See plate 9)

⁹Kouwenhoven 1972, pp. 35,36,37.

Some of the land in this area was held by the City of New York as Common Lands. The project area lay close to the boundry between the City of New York and Harlem Commons in this period. (See plate 9)

In the next phase, 1815-1865, the shape of this area began to change.

Transportation into lower Manhattan became available from the Upper East Side, via the Harlem Railroad as well as street trolleys. The Harlem Railroad went up Fourth (now Park) Avenue, just west to our project site. Later, the trolley lines were added on Third and Second Avenues, nearby. As a result, the area became more suitable for residental development.

Residential construction began to increase on the Upper East Side as the city's population increased, both from within and from the influx of immigrants from Europe. As the population density increased, a need for recreational facilities was recognized. Near our project area is Central Park, designed in 1857 by Frederick Law Olmstead and Calvert Vaux, and then called "Greensward."

Large institutions such as hospitals and schools were built on the Upper East Side during the mid-19th century as well. Just south of the project area were The German Hospital and Hebrew Orphans Asylum.

Residential construction slowed in the area from 1857 to 1865, due to the panic of 1857 and the Civil War. After

the Civil War, at the beginning of the next phase of the study for the predictive model, real estate speculation became widespread and property values in the area rose significantly. Paved steet, sewers, gas-lights, and fresh-water lines were installed in the area by the 1870's. In the late 1870's, the elevated railroads were constructed on 2nd and 3rd Avenues. This increased easier access to the area further stimulated construction of residential housing. The population of the area increased greatly during the first five years of the 1880's. (See plates 10 and 11) Many builders erected groups of brownstones on speculation to be sold to the middle class moving into the area.

是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们也是一种,我们也是一种,我们也是一种,我们也是一种,我们也是一种, 第一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,我们就是一种,

The lots on the north side of block 1413 were among the last to be developed in the immediate vicinity. (See plates 10 and 11) There was a rock outcropping on the site, and it is possible that the presence of this feature made the site less desirable because of the cost of pre-construction demolition and site preparation. (See plate 1)

¹⁰Landmarks Preservation Commission 1981, pp. 7-8. 11Geismar 1983, p. 4f; various maps including Viele 1865, Bromley 1879 and Bromley 1880. 12Landmarks Preservation Commission 1981, p. 8.

BUILDING HISTORY

The first documented construction on lots 61 and 62 (which includes former lots 63 and 63 1/2) were brownstones. 130 East 79th Street (lot 61) was part of a group constructed in 1884 by James A. Frame and designed by Thom & Wilson. 128, 126, and 124 East 79th Street (lots 62, 63, and 63 1/2) were part of a group of brownstones built in 1880, also developed by James A. Frame with Thom & Wilson as architects.

These homes were sold to families of various ethnic Some of the first owners of the houses in these groups were presumably German-American (Sigismund B. Wortmann, Alexander Blumensteil). Others were of perhaps Polish extraction (Samuel Jerkowski) or of Irish descent (James The ethnic origins of other names are B. Fitzgerald). less clear (Arthur Dyett and Tucker David). The area was not an ethnic enclave, but an economic one. 13

In general, the building histories follow a pattern typical for the area. 14 There was nothing which distinguished them from other residential construction in the area at this time. They were first built in styles popular in the

¹³Landmarks Preservation Commission 1981, pp. 8-9. 14Landmarks Preservation Commission 1981, passim.

late 19th century. As fashions in architecture changed, the facades of these single-family homes were modified. Subsequently, they became two family homes and later multiple dwellings.

The individual history of each lot is outlined below.

Block 1413, lot 61 (130 E. 79th)

This brownstone was part of a group that included lots 56, 57, 58, 59, 60, and 60 1/2. It was erected in 1884 by A. Feame (as named in the building records) or James A. Frame (named in the deed records). The original house was 19 feet wide, the width of the lot, by 55 feet deep, with an extension 12 feet wide by 13 feet deep at the western edge of the lot. The lot was 102.2 feet deep. The building was described as five stories or four stories with a basement; the extension was three stories, or two stories with a basement. The original foundation was described as being 10 feet below the curb. The description of the foundation on the original 1884 building statement is "rock leveled off."

In 1922, the building was renovated. The stoop was removed and the main entrance placed at street level. An elevator was added as well as a new extension. The extension was 6 feet 6 inches wide and 13 feet deep, filling in the width of the lot next to the original 1884 rear extension. The foundations of this addition were described as 5 feet 0 inches below the curb.

In 1932, this building was still a private residence.

The owner converted the basement into a doctor's office and added a new extension onto the rear of the building. The new extension changed the overall dimensions of the building from 19 feet by 68 feet 2 inches to 19 feet by 96 feet 2 inches. The foundation of this new one-story extension rested on bedrock. (See plate 12)

No records show further changes to the dimensions of this building.

Plate 2 shows the ghost of this building on the walls to the east of the site.

Block 1413, lot 62 (128 E. 79)

これ 人名教徒 上上 大大大大大

.

This building was one of a group of brownstones built on lots 62, 63, 63 1/2, 64, 64 1/2, and 65 in 1880. The original construction and building records cannot be located either in the Buildings Department or the Municipal Archives. From the demolition permit for 120-122 East 79th Street (lots 64, 64 1/2, and 65), we can determine with some likelihood that the building on lot 62 was 58 feet deep and was four stories with a basement. The lot was 16 feet wide, the width of the building, and 102.2 feet deep.

This building was renovated in 1949, when the top floor was converted into a second/apartment. There is no record of a change in extent of the plan at this time.

In 1952, 128 E. 79th Street was converted into a multiple dwelling. An addition was built which was described as making the building 16 feet wide and 85 feet deep. The addition was apparently 3 stories high. A three inch drain was installed in the yard at this time.

In 1963, this building was combined with 126 and 124 E. 79th Street into a single building. An extension was planned at this time to make a building 47 feet wide (lots 62, 63, and 63 1/2) by 82 feet 6 inches deep and 47 feet

wide in the rear (the entire width of the three lots). Complaints from residents on 78th Street who backed onto this property caused the plan to be changed to a width in back of 15 feet. (See plate 12) However, the building and complaint record indicates that the foundation for an extension 47 feet wide at a depth of 82 feet 6 inches (or 85 feet, according to the 1952 record) was begun before the plans were changed, thus apparently disturbing the site well beyond the constructed building line.

是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,我们就是一个,

Block 1413, lot 63 (126 E. 79)

This building was built in 1880 as part of the brownstone group including the building on lot 62. Like lot 62, the original building records for this lot cannot be located. This lot was 15 feet wide by 102.2 feet deep. From maps it appears that the building was the same size as the building on lot 62, four stories plus a basement, 58 feet deep and the width of the lot.

In 1910, this building was modified. It was described as having been 15 feet wide by 60 feet deep before modification. The new addition was at the back, two stories high with a basement, with foundations four feet deep. The new addition was 5.5 feet wide in the front (at the back wall of the original house), 8 feet 2 inches wide in the rear, and 26 feet 8 inches deep, extending the house approximately 86 feet into the lot.

In 1951, the house was converted to two family occupancy. Apparently this modification did not change the size of the building.

In 1953, the building was made into multiple apartments. The stoop was removed and a street entrance created. A new extension was added, which was described as being

12 feet wide and 19 feet deep. This would make the building longer than the lot, which is not possible. Presumably somewhere the record is inaccurate.

We do know that in 1963, this building was described as being 82 feet 6 inches deep, which is approximately how the building is shown on the Sanborn maps from recent years. (See plate 12) Thus, the probable maximum extent of this building was 15 feet by approximately 82 feet 6 inches to 86 feet. The renovations which were made to this building when it was combined in 1963 with 124 and 128 E. 79th were described above.

Block 1413, 1ot 63 1/2 (124 E. 79)

This brownstone building was built at the same time as those on lots 62 and 63 and like those buildings, the original building records for lot 63 1/2 are missing. The building was 16 feet wide, the width of the lot, and approximately 65 feet deep, having a three story extension built onto the five story building (or four stories and a basement), unlike its two neighboring buildings on the east. This lot, like the others discussed here, was 102.2 feet deep.

In 1906, this building had its facade modified. The stoop was removed and a street level door constructed. At this time the building was described as having foundations 10 feet below the curb.

In 1927, a new two-story addition was made to the basement and butler's pantry. The dimensions of the building were given as 16 feet wide and 72 feet 3 inches deep including the new addition. The foundations were said to be 5 feet deep.

In 1949, this building was converted into a multiplefamily dwelling. It was described in the building records as being 16 feet wide and 56 feet deep, but that depth appears to be in error in light of the other records.

This building was combined the 126 and 128 E. 79th Street into a single building in 1963 as described above. (See plate 12) A survey in 1964 showed the area behind this building to have a yard of 14 feet 6 inches deep by the width of the combined lots. As noted in the discussion on lot 62, this yard area had probably been disturbed before modification of the building plans had been made.

Plate 3 shows the ghost of this building on the west side of the site.

ANALYSIS AND RECOMMENDATIONS

The site, Block 1413 lots 61 and 62, does not require an archaeological survey even though it is in a location especially sensitive in prehistoric times because it is highly unlikely that there is any undisturbed deposit on the site.

First of all, it is likely that all of the lots were covered by a rock outcropping until construction of the 19th century buildings. Although definitive evidence is missing for lots 62, 63, and 63 ½, for lot 61 the 1884 building application notes in answer to question 8 that the foundation was "rock levelled off." This document, together with the rock outcrop indicated on various topographic maps, indicates that the project site probably had no soil to hold archaeological remains in prehistoric times. (See plate 1) Indeed, the recent drill cores show only .5 to 1.6 feet of sand and gravel above the rock and below the concrete basement floors and patio flags. (See plates 4-7)

Because water and sewage lines were in place in the area before the construction of the 19th century buildings,

there were no privies, cisterns, wells, or other similar features associated with the houses, features which often provide significant archaeological information.

Had there been archaeological remains, however, the history of building on the site indicates the likelihood that none of the material would have remained undisturbed. First, following the then-current construction practices, the rock would have been blasted with explosives to create a level surface in the original 19th-century construction phase. Second, all original 19th-century backyards were eventually either covered with buildings or prepared to be covered with buildings, to within 6 feet of the property line on lot 61 and to within 14 feet of the backyard fence on lot 62.16

The original building on lot 61 had foundations 10 feet below the curb, which is confirmed by drill-core B-2. The 1922 addition had foundations at 5 feet below the curb. The 1932 addition, furthest to the south on the lot, rested on bedrock, according to the building plans, so only approximately 6 feet to the rear of the building remained potentially undisturbed up to the fence at the back.

The original lot 62 has less information extant about building depth. The original 19th century basement was probably about 10 feet below the curb, as seen in drill-core B-3, and as mentioned for lot 63 1/2 in 1906. There is

¹⁵ Edwin Friedman, personal communication.
16 The 14-foot depth is indicated on a 1964 survey of the site included in the records of the Buildings Department.

no record of the depth of the basement on the 1954 addition. The 1963 extension also does not have a record of basement depth and the depth of disturbance cannot be determined from the complaint letters. A survey of new lot 62 in 1964 places the basement at a depth of 62.0, an average of about one foot below the curb. The survey doesn't indicate at what point this depth was determined.

The original house on lot 63 had foundations 10 feet 6 inches deep. The addition added in 1910 had four-foot deep foundations. The extension added in 1953 was poorly described. If the information was recorded accurately, this extension had a foundation 18 inches below grade. There is no information about the depth of the 1963 extension. A survey of new lot 62 in 1964 places the basement at a depth of 62.0, an average of about one foot below the curb. The survey does not indicate at what point this depth was determined.

The original house on lot 63 1/2 had foundations 10 feet below the curb, which is confirmed by drill core B-1. The foundations of the 1927 addition were 5 feet deep. There is no information about the depth of the 1963 extension. A survey of new lot 62 in 1964 placed the basement at a depth of 62.0, an average of about one foot below the curb. The survey does not indicate at what point this depth was determined.

There is no way to determine the depth of disturbance

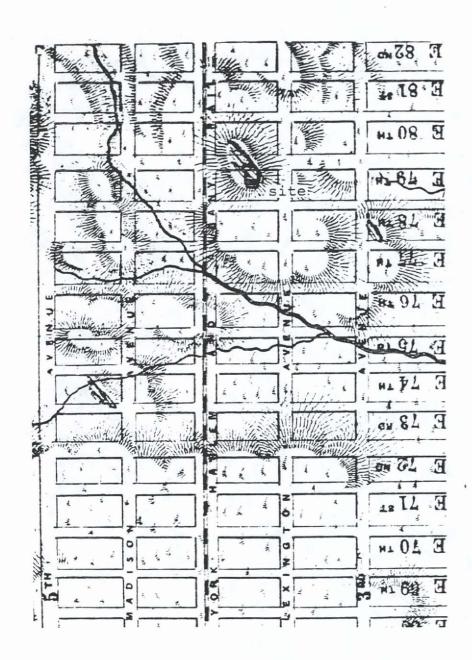
in 1962 of the remaining backyard on new lot 62 during the excavation prior to the complaints and subsequent change of permit. We know only that the complaint letters described the disturbance as extending to "within a few feet of the south property line of 126 E. 79th Street ... close to the back of 121 E. 78th and 117 E. 78th."

The backyard of lot 62 was also disturbed by the placement of a 3-inch drainpipe as well as the excavation for the concrete backyard fence. It is unlikely that with all of the above-mentioned building activity, any significant portion of the yard remained undisturbed.

Finally, the core samples indicated that the areas between the concrete floors and bedrock are sand and gravel when they are not building debris. Since sand and gravel are not naturally occurring near the surface in this area, it is likely that this sand and gravel is fill transported from elsewhere in order to level the site in the 19th century, rather than naturally occurring earlier deposits.

All of these factors taken together indicate very little possibility of undisturbed archaeological material, if any, on block 1413, lot 61 and 62. Thus, since the study area would not be likely to yield significant cultural resources, no archaeological field survey is recommended.

¹⁷ Records from the Buildings Department, including letter dated October 9, 1962.

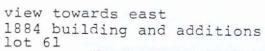


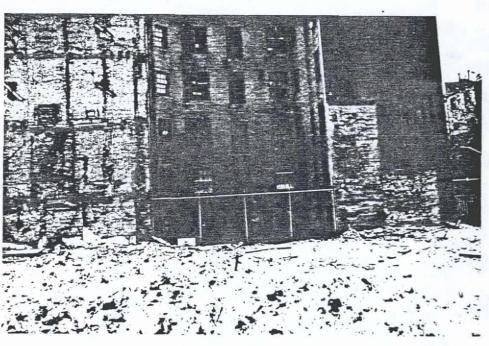
Topographic map, after Viele 1865



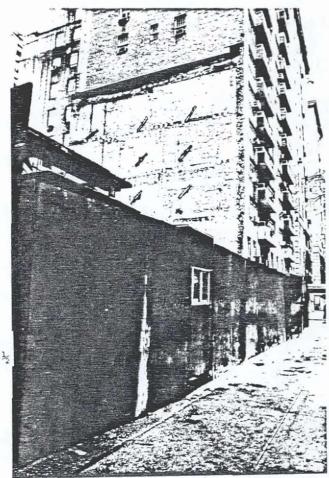
view towards east north end of lot

1884 building, lot 61





Photographs by Karen S. Rubinson January 1984

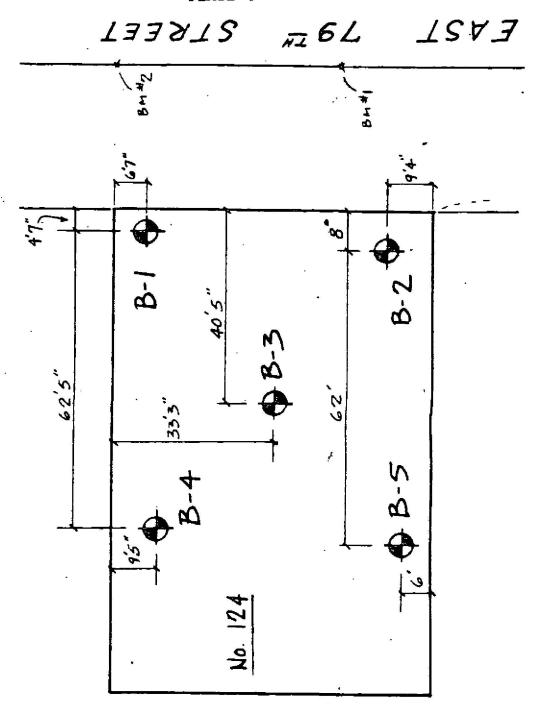


view from street of ghost, original building, lot $63\frac{1}{2}$

view of lot towards south



note ghosts of rear extensions



Plan of core borings (1" = 20')

From Warren George Inc. 8-4-83

B-1

B-2

ELEV. =	54	.2
CONCRETE E1:540/ Brown silty f/m SAND, trace of gravel. SM 7-65 E1:525	1	Casing
Gray MICA SCHIST 2-65 (trace of seams)	RUN #1	lec.= 5' 1009, BX
E):47.5		

Water @ 52.5 @ 2:00PM 7/29/83

ELEV. =	53	. 4
FILL - SAND, ASHES & GRAVEL E1: 52.1		30 25
Gray MICA SCHIST (OCCAS. SEAMS) 3-65	4 2CX	lec = 3' 60% BX

Water @ 52.0 @ 150 PAI 7/29/83

Sections, core borings B-1, B-2 (1" = 2')

From Warren George Inc. 8-4-83

ELEV.	54	<u> </u>
Brown SAND,		
GRAVEL & COBBLES	KU2 #	Bec.= 5' 100%
Gray		
MICA SCHIST (trace of seams)	N	Rec. =
2-65	# 2	100% BX

Section, core boring B-3 (1" = 2')

From Warren George Inc. 8-4-83

B-4

ELEV .: 62.5

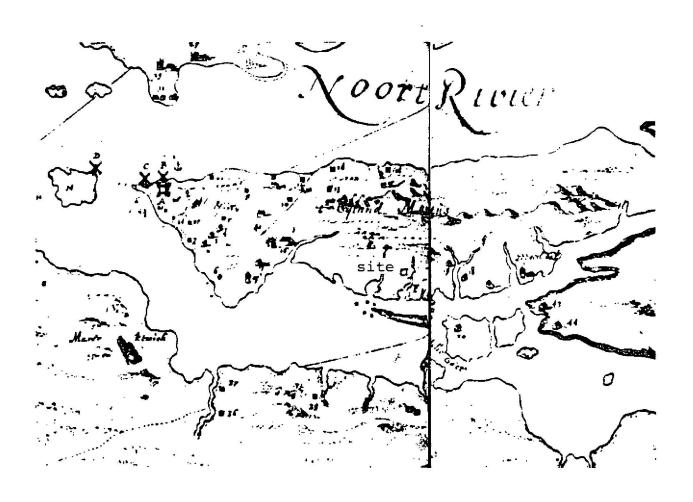
Brown gravelly flm SAND. SW. 6-65 Els627		
Gray MICA SCHIST (trace of seams) 2-65	#/	Rez : 4'6" 90% 8X

Water @ 59.5 @ 200 PM - 7/29/83 B-5

	ELEV	59	1.7
	FILL - Bricks, Wood, broken concrete & sand.		7 12 17 35
<i>}</i>	Gray MICA SCHIST (trace of seams) 2-65 E1:56.2	VUN #/	Rec = 4'6" 90% BX

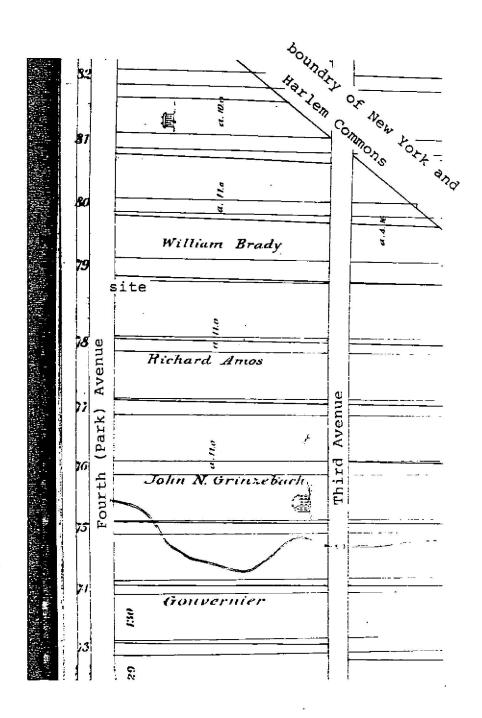
Sections, core borings B-4, B-5 (1" = 2')

From Warren George Inc. 8-4-83



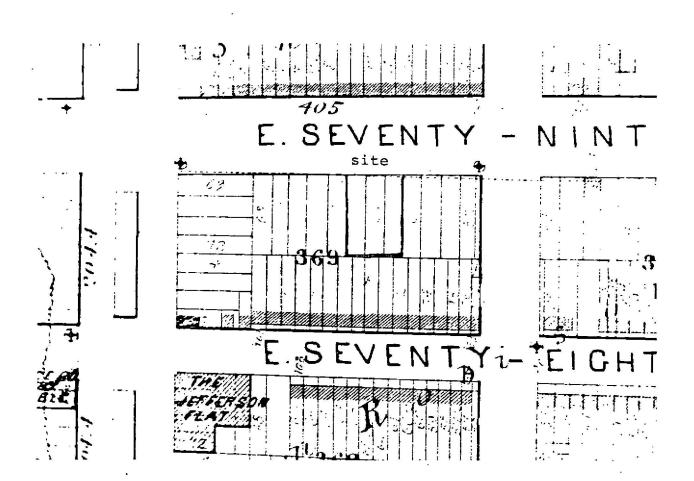
Manhattan Lying on the North River 1639 (copy c. 1670)

after Kouwenhoven 1972, p. 37



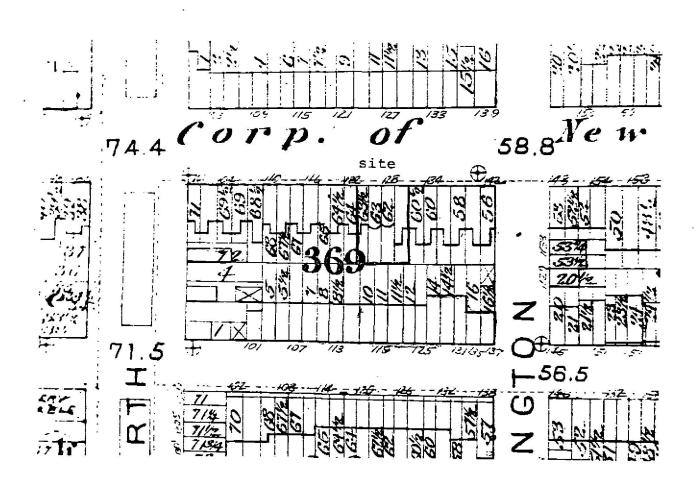
Map of Farms 1815 (The Blue Book)

after Sackersdorff, pl. 12 (New York, 1887)



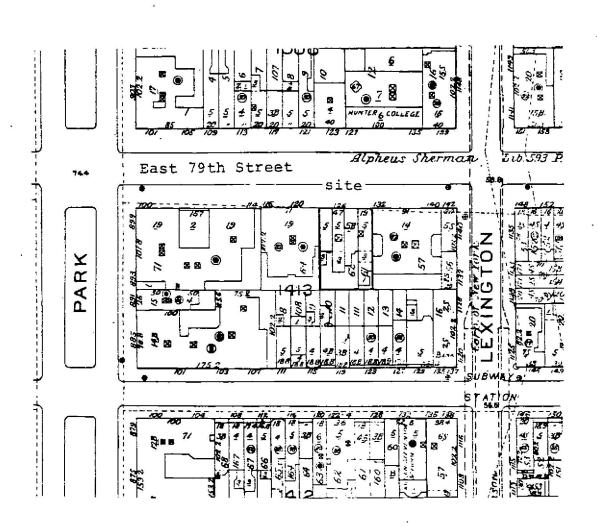
Block in 1879

after Bromley 1897, pl. 21



Block in 1885

after Robinson 1885, pl. 20



Block in 1983 (1" = 120')

after Sanborn, pl. 112

þ£

BIBLIOGRAPHY

Books, Articles, and Manuscripts

	Landmarks Perservation Commission, unpublished)
Bolton, R.P. 1922	"Indian Paths in the Great Metorpolis," <u>Contributions from the Museum</u> , 23 (Museum of The American Indian, Heye Foundation, New York).
Ceci, Lynn 1982	"Method and Theory in Coastal New York Archaeology: Paradigms of Settlement Patterns" North American Archaeologist, 3, pp. 5-36.
Geismar, Joan 1983	"Manhattan 1855-1879," New York State Plan (Resource Protection Planning Process[RP3]) New York City Study Unit 1815-1898 (unpublished).
Grumet, Robert Steven 1981	Native American Place Names in New York City (Museum of the City of New York, New York).
Kouwenhoven, John A.	The Columbia Historical Portrait of New York

New York City Landmarks
Preservation Commission
1981

Baugher, Sherene, et al.

1982

1972

Upper East Side Historic District Designation
Report (unpublished).

Towards an Archaeological Predictive Model

For Manhattan: A Pilot Study (New York City

Stokes, I.N. Phelps 1915-1928 Iconography of Manhattan Island (New York).

Trigger, Bruce, ed. 1978

Handbook of North American Indians, The Northeast (Smithsonian Institution, Washington, D.C.)

Maps and Atlases (chronological order)

(Harper & Row, New York).

Manhattan Lying on the North River 1639, 1670 copy in Kouwenhoven 1972

New York in 1800, Louis Risse, Pub. Robert A Welcke, 1900.

Map of City of New York and Island of Manhattan, Wm. Bridges, Pub. Jacob Morton, 1811.

- Maps of Farms (Commonly Called The Blue Book 1815), Otto Sackersdorff, Pub. E. Robinson 1887
- Topographical Map of the City and County of New York, Pub. J.H. Colton & Co., 1836
- Topographical Map of New York City, County and Vicinity, Pub. M.Dripps, 1854.
- Sanitary and Topographical Map of the City and Island, Egbert C. Viele, 1865.
- Plan of New York City from the Battery to Spuyten Duyvil Creek, Pub. Matthew Dripps, 1867.
- Plan of New York City, Pub. Matthew Dripps, 1869.
- Topographical Altas of the City of New York, Egbert L. Viele, 1874.
- Map of the City and County of New York, Pub. Matthew Dripps, 1975.
- Atlas of the Entire City of New York, G.W. Bromley & Co, 1879, Pub. George W. Bromley & E. Robinson, 1879.
- Atlas of the 19th and 22nd Ward, City of New York, Pub. George W. & Walter S. Bromley, 1880.
- Robinson's Atlas of the City of New York, Pub. E. Robinson, 1885.
- Atlas of the City of New York, G.W. Bromley & Co, Pub. Geo. W. Bromley and Walter S. Bromley, 1891.
- Manhattan Borough and Part of the Bronx, 1897.
- Sanborn Map Company 1975-76 and 1983.