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ARCHAEOLOGICAL DOCUMENTARY STUDY  
EAST NEW YORK I URBAN RENEWAL AREA - 2nd AMENDMENT  
NEW YORK CITY, BOROUGH OF BROOKLYN  
CEQR #94-HPD-018K

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## I. INTRODUCTION

The proposed East New York I Urban Renewal Area - 2nd Amendment will involve construction on scattered sites of 382 new two-story, single family housing units, and the rehabilitation of 23 additional units. Although the overall urban renewal area is larger, this archaeological documentary study will focus on a thirteen square block area located south of New Lots Avenue (see Figures 1a and 1b), as specified in the scope-of-work. This study area is bounded on the north by New Lots Avenue, on the south by Linden Boulevard, on the east by Pennsylvania Avenue and on the west by Van Sinderen Avenue.

The scope-of-work for this study specified that its objective should be to assess the sensitivity of the area for the possible presence of Native American sites dating to the prehistoric period and to the period of Native American-European contact. The scope of work specifically stated that

the LPC [New York City Landmarks Preservation Commission] has required this study because of the proximity of the urban renewal area to Fresh Creek and because this area remained primarily agricultural through the 19th century. It should be noted that the LPC has not required research of 19th century cultural resources [original emphasis].

In addition to documentary research and analysis this study included a windshield survey of the study area, conducted on December 8, 1994.

A search of the files of the New York City Landmarks Preservation Commission indicated that two previous archaeological documentary studies have been conducted on properties within or immediately adjacent to the study area. Geismar (1988) conducted a study of property on the north side of Linden Boulevard between Sheffield and Pennsylvania Avenues. This property is located in the southeast corner of the present study area. Bankoff et al. (1988) conducted a study of block 3871, bounded by Linden Boulevard, Van Sinderen Avenue, DeWitt Avenue, Avenue D, and the Long Island Railroad tracks. This triangular block is immediately adjacent to the southwest corner of the present study area. Both of these studies concluded that the subject properties were not sensitive for the presence of Native American archaeological sites.

## II. DOCUMENTARY RESEARCH AND ANALYSIS - NATIVE AMERICAN SITES

### A. Study Area Environment

Twentieth century land modifications have obscured the original environmental setting of the study area. However, by reference to a series of maps dating from the 18th through the late 19th century (Figures 5-9), it can be seen that it was situated in the vicinity of one of the tidal creeks (Fresh Creek) and adjacent tidal marshes which bordered the shoreline of Jamaica Bay.

The configuration of the Creek and marshes as shown on the various maps appears to be similar. Although there are some differences between the 1781 map (Figure 5) and those dating to the 19th century, these are most likely due to the inaccuracies of early map-making, rather than actual environmental changes.

The maps dating to the late 19th century (Figures 8-10) show these physiographic features in relationship to the street grid. Some of the streets shown on these maps have a different alignment and/or name than the existing streets. During the late 19th century, a street first designated as Van Brunt and later as Vienna Avenue or Lorraine Avenue followed the present course of Linden Boulevard and Dewitt Avenue. At that time, Hegeman Avenue continued west of Williams Avenue along the present course of Linden Boulevard. Thus, the present course of Linden Boulevard follows the former course of Van Brunt (Vienna Avenue) westward to Alabama Avenue, and the former route of Hegeman Avenue west of Williams Avenue. The route of Linden Boulevard between Alabama and Williams Avenue was cut through what was formerly private property in the late 1920's or 1930's (see Figure 14c) and widened to its existing 170 foot width.

Most of the streets within the study area which extend south of New Lots Avenue were originally laid out with their present names. However, the street between Louisiana and Alabama Avenues, now known as Malta Street, was originally designated as Mississippi Avenue. Similarly the present Hinsdale Street was laid out in the 19th century as Henry Avenue. South of the study area, the avenue immediately south of Linden Boulevard, now known as Stanley Avenue, was originally laid out as Stoothoff Avenue.

As seen on the various maps, Fresh Creek extended approximately 7000 feet north of Jamaica Bay to a point located between Wortman and Stoothoff Avenues on the north and south, and between Louisiana Avenue and Malta Street on the east and west. At this point the Creek bent to the northwest running approximately parallel to and south of Vienna (Van Brunt) Avenue. West of the study area, the stream narrowed and continued to the northwest, crossing New Lots Avenue some 7 - 8 blocks (approximately 1900 feet) west of the study area.

As seen from the maps, west of Snediker Avenue the north side of

Fresh Creek was bordered by dry ground. East of Snediker Avenue, however, a band of marshland extended east of the Creek, parallel to and south of the location of Vienna Avenue to the approximate location of Alabama Avenue, where the border of the marshland turned to the south. As can be seen from the maps an irregularly shaped neck or spit of land extended southward into the marshes, with the "entrance" to this neck lying south of Vienna Avenue between Alabama and New Jersey Avenues.

The 1898 and 1908 maps indicate the street corner elevations within the study area. By interpolating between these elevations we have created a contour map of the land within the study area as it was in the turn-of-the-century period, prior to the extensive landfilling of the creek and adjacent marsh (see Figure 2). It should be emphasized that the location of the Creek and marshes and the topographic reconstruction shown on Figure 2 should be considered only as approximations.

In general, the turn-of-the-century maps show that the grade sloped downward to the south. The grades within the study area along New Lots Avenue ranged from 18.3 to 21.7 feet and along Hegeman Avenue from 14.0 to 16.1 feet. Along Vienna Avenue, east of Louisiana Avenue, the grades ranged from 12 to 13.5 feet while west of Louisiana Avenue, where the route of Vienna Avenue approached more closely to Fresh Creek, the grade is shown as nine feet.

## B. Native American Sites

Indications of prehistoric Native American activity have been reported in the vicinity of most of the tidal creeks along the southern shoreline of Brooklyn and Queens.

Bolton (1920, 1922, 1934) produced site maps and brief descriptions of most of the Native American site locations known in the late 19th and early 20th century (see Figure 3). However, most of the information about these sites comes from reports made in the 19th and early 20th century by collectors and avocational archaeologists. Thus, in most cases, only limited data are available as to the exact location, extent, functional nature and/or temporal affiliation of these sites.

### 1. Sites Near Fresh Creek

The major site in the vicinity of Fresh Creek would appear to be the one indicated on Bolton's map (Figure 3) as #51. The site is also shown in relation to the street grid on Bolton's more detailed map published in 1922 (Figure 4). The site was also noted by Parker (1922) and is included in the files of the New York State Museum as site #7390 (see Appendix A). Bolton (1934: 146) described this "Canarsie" site as "a village site, and extensive planting field, [which] extended back from Canarsie Beach Park as far as Avenue J, centered on East 92nd Street."

Bolton (1920:89) noted that "grooved axes and other artifacts" have been recovered from the Canarsie site. He states that this site was "probably the principal village-site of the tribe of the same name." However, there is no data which confirms that this site was actually occupied during the Contact period.

As indicated on Bolton's 1922 map (Figure 4) the site (including the "Canarsee planting land") extended from the vicinity of Seaview Avenue on the south to Avenue J on the north and from East 85th Street on the west to Rockaway Parkway on the east. The map indicates that shell deposits were concentrated in the southwestern portion of this area. The eastern portion of the overall site area indicated by Bolton would appear to be approximately 4-5 blocks west of the marshes adjacent to the western side of Fresh Creek. The site would have been situated on a spit or neck of dry ground which extended southward between the marsh areas adjoining Paerdegat Creek on the west and Fresh Creek on the east.

Other data indicate that there were additional Native American remains in the Fresh Creek area outside of the area indicated on Bolton's map. Solecki (1994) reports that during his ca. 1930's surface explorations in the vicinity of the Canarsie site he noted "a site at East 107th Street and Flatlands Avenue." However, Solecki provides no further information about this site. The location is approximately 200 feet west of Fresh Creek and immediately adjacent to the marshes adjacent to the Creek (see Figures 9 and 10a). The site location is at the end of a smaller neck of land extending into the marshes immediately east of the one on which Bolton's Canarsie site is located. This neck is located closer to the head of Fresh Creek than the one containing the Canarsie site. The site noted by Solecki may actually be an extension of the Canarsie site, or it may represent a separate occupation.

In addition to the Canarsie site, the files of the New York State Museum indicate the presence of three sites near Fresh Creek as reported by Arthur C. Parker in 1922. One of these is a "camp" site on the west side of Fresh Creek (NYSM Site #3610). This site may be the same one noted by Solecki. Two other sites were reported east of Fresh Creek. One of these was noted as a "village" site (NYSM Site #3609) and the other consisted of "shell middens" (NYSM site #3607). The site locations as plotted on maps by the New York State Museum (see Appendix A) are shown south of the study area and they may have been located on the neck of land which extended into the marsh in this area. However, since the locations given by the New York State Museum are only approximate, either of these sites, especially the one indicated as a "village" site, may have actually been located further to the north and closer to the head of the Creek.

## 2. Other Tidal Creek Sites

As noted above, indications of Native American remains have been

noted in association with nearly all of the tidal creeks in the Jamaica Bay vicinity. Two of these, in the vicinity of Gerritsen Creek in Brooklyn and Hawtree Creek in Queens, have been reported in sufficient detail to indicate that they represent permanent or semi-permanent occupation sites.

The Gerritsen Creek site, more frequently referenced as the Ryder's Pond site, is indicated on Bolton's maps (Figures 3 and 4) as #50. The site included occupational refuse as well as burials, which were uncovered during the grading of Avenue U (Bolton 1922). Artifacts collected from this site in the late 19th and early 20th century have been analyzed and reported in the literature (Lopez and Wisniewski 1971; 1972). As reported by these authors (1971) the site was bounded by the present location of Avenue R, East 32nd Street, Avenue W and Stuart Street. The artifact collection suggests that the site was occupied during the Archaic and Woodland portions of the prehistoric period and into the period of Native American - European contact in the early 17th century. The area occupied by the site as noted above would have extended for a considerable distance on a spit of land on the west side of Gerritsen Creek, from the southern portion of the spit to a location closer to the head of the Creek.

The other probable village site is the Aqueduct site, located near Hawtree Creek in Queens County. Excavations at this site were conducted in 1939 by a field survey party of the Flushing Historical Society. In addition to refuse middens and pits, a burial pit was encountered and excavated (Solecki 1947). Based on his analysis of material from the site, Smith (1950) assigned its occupation to the terminal prehistoric, Classons Point focus of the Late Woodland Period. The portion of the site excavated was apparently immediately south of North Conduit Avenue. Examination of Belt Parkway plans and historic period maps, as well as the results of archaeological borings taken in 1980 (Pickman 1980a), indicate that the ground at this location was approximately at the 16 foot contour, sloping downward to the northern edge of the marshes bordering Jamaica Bay. These marshes began immediately north of the Belt Parkway, some 200 feet south of North Conduit Avenue. The ground also sloped downward to the east to a location near the head of Hawtree Creek which, as shown on early 20th century maps, was located several hundred feet east of the site boundaries as defined based on the 1980 borings (see Pickman 1980). However, it is possible that the site was actually closer to the Creek as it existed in prehistoric times.

The results of the 1980 archaeological borings provided indications of the presence of refuse midden deposits overlying the marsh surface at the northern edge of the Belt Parkway (Pickman 1980a). These prehistoric deposits are now overlain by some 11 feet of fill. The data suggest that the occupation area was located on the higher ground to the north and that the site occupants disposed of refuse in the lower-lying ground at the edge of the marsh (Pickman 1980a).

In addition to the Aqueduct site (listed as site #136), Bolton

also notes a site closer to the head of Hawtree Creek. This site was listed by Bolton as the Hawtree site (see Figure 3 - #137), "on Hawtree Creek Road, at Flynn Avenue, where pottery sherds and a stone dish or mortar were found."

Less thoroughly reported indications of prehistoric occupation have been noted in the vicinity of the other Jamaica Bay tidal creeks. East of the Aqueduct site, Bolton's site #138 (see Figure 3) was located "at the head of Bergen Creek." It was described by Bolton (1934:151) as "probably a fishing station." There was apparently another site near Bergen Creek closer to Jamaica Bay. The Nassau County Museum Site files indicate a site (#154x) at Bergen's landing (approximately 1/2 mile south of the Southern Parkway). Eleven whole or fragmentary projectile points were recovered from this location (reported by Harris in Rothschild and Pickman 1978). This latter site was apparently located on an "island" of drier ground within the extensive area of marsh along the north shore of Jamaica Bay.

Bolton's site #139 was located near the head of Cornell Creek (near the present Baisley's Pond). Although Bolton (1934:51) describes the site as "probably a fishing or oystering place" it should be noted that location given by Bolton (1934:151) would place it north of the Jamaica Bay marshes and west of the Creek.

Another site (#140) was located at the head of Hassock Creek (also known as Thurston's Creek). "Pottery, stone implements and knives, [and] pitted hammer and flaked stones" were reported as recovered from this site (Bolton 1934:151). This site would also appear to have been north of the marshes.

Bolton does not indicate any sites on Spring Creek, which is approximately one mile east of the study area, on the Brooklyn-Queens border. However, survey notes dated 1938, which have been previously supplied to the author by Dr. Ralph Solecki (see Pickman 1980b), indicate that a concentration of shells and several prehistoric artifacts were found near Spring Creek at the end of Crescent Avenue at Fairfield (now Flatlands) Avenue. This location was near the southern end of a spit or neck of land projecting into the marshes west of Spring Creek, similar to the one which extends south of the study area.

#### C. Native American - European Contact Period

At the time of initial European settlement, the western end of Long Island was reportedly occupied by the Canarsie, who were apparently a sub-group of the Delaware. The Canarsie apparently had several settlements. Bolton (1920) suggests that their principal village sites were at Ryder's Pond and Canarsie at the site locations numbered 50 and 51 on his map (Figures 3 and 4) as discussed above. As noted previously, some contact period material was recovered from the Ryder's Pond site. No analysis of material from the Canarsie site has been reported.



Based on inferences drawn from references in early colonial documents, it has been inferred (e.g. Bolton 1922, Van Wyck 1924) that a major Canarsie settlement was located at Flatlands. However, although Indian burials were reportedly found in the graveyard of the Dutch Reformed Church at Flatlands during the course of excavation for European-American graves (DuBois 1884, Armbruster 1919, O'Halloran 1950), there are no reports of Native American occupational refuse being recovered from this location (see also Pickman 1994).

The Canarsie sachems sold the land bordering the Brooklyn portion of Jamaica Bay to the European settlers in three separate 1636 transactions. This land was described as comprising three "flats", collectively called Casteteuw (other spellings are given in the literature).

The deed of sale for the easternmost of the three tracts reads:

We, Director and Council of New Netherland etc, herewith testify and declare, that to-day date underwritten personally before us appeared Tenkirauw, Ketamau, Ararikan, Awachkouw, Warrinckehinck, Wappittawackenis, Ehitel, as owners, Penhawig, Kakapeteyno being present as chiefs of the district and declare, that voluntarily and advisedly, by special order of the rulers and with consent of the community, for certain goods, which they acknowledge to have received into their hands and power to their full satisfaction and contentment before the passing hereof, they have transferred, ceded, surrendered and conveyed as lawful, true and free possession, as they herewith transfer, cede, surrender and convey to and for the behoof of W. v. Twiller, Director General of New Netherland, the easternmost of the three flats, to them belonging, called Casteteuw situate on the island, by them called Sevanhacking between the bay of the North River and East River of New Netherland, stretching in length from a certain kil coming from the sea almost north into the woods and in width from a certain valley eastward also into the woods, with all the action, rights and privileges etc. etc. (Fernow 1883 XIV:3-4).

Tooker (1911:36) translates the term Casteteuw as 'where grass is cut or mowed.' This indicates that the sale included the marshes bordering Jamaica Bay. However, it is likely that the sale also included the areas of drier ground bordering the marshes. This is indicated by the phrase in the deed that the tract extended "into the woods."

The boundaries of the three tracts are vague, and in fact the boundaries of the middlemost of the three tracts as given in the deeds are identical to those of the easternmost (i.e. "in width from a certain valley eastward also into the woods" - Fernow 1883:XIV:2). Bolton (1922:157) maintains that the middlemost of the three flats "is apparently that tract which now includes Canarsie Beach Park, and is bounded on the westward by the Bestevaars Kill or Paerdegat Basin." If this is so, it is likely

that the easternmost tract extended east of Fresh Kill and included the study area.

#### D. Prehistoric Site Locations - Analysis

Although the Native American sites along the southern shore of Brooklyn and Queens have only been sketchily described, the reported locations suggest that sites were situated in order to exploit the subsistence resources to be found in tidal marshes and the adjacent open bay waters. The marshes would have provided a convenient nearby source of shellfish and a habitat favored by waterfowl. In addition, the freshwater creeks and smaller open water channels which penetrated the marshes would have provided access by canoe to open water fishing.

It would appear that most of the major creeks extended well north of the high tide line. These creeks probably had their origins in fresh water springs. Over the years runoff from these springs would have eroded channels in the soil. As sea levels rose, the southern portions of these channels would have been inundated by the tides, with the tidal scour widening and deepening the channels. Occupation sites, which require a nearby source of fresh water, would have been located above the tidal portion of the creeks, where fresh water was available, and at locations which were also in proximity to the resources of the marsh areas. Smith (1950:101) has noted that in coastal New York "nearly all of the permanent settlement sites are situated on tidal streams and bays on the second rise of ground above the water." However, as noted above, deposits associated with such sites have also been noted on lower ground.

Other sites were located on the spits or necks of land extending southward into the marshes. Unless fresh water springs were located on these necks, such sites would not have been in proximity to a fresh water source. These were most likely shellfish gathering stations, as suggested by Bolton.

Two extensive site areas, west of Fresh Creek and Gerritsen Creek, may have incorporated both functional site types, with occupation areas closer to the Creek heads and shellfish gathering areas further south on the land spits extending into the marshes.

While most of the sites noted above would appear to have been on the west side of the various tidal creeks it is uncertain whether this is significant, given the limited nature of the available data. In fact, as noted above, sites have been reported east of Fresh Creek.

It is possible that most areas in the vicinity of the tidal creeks were utilized at various times during the prehistoric period. The reported site locations as discussed above may be an artifact of the locations of cleared land, activities of 19th and early 20th century collectors, and the effects of 20th century



construction which lead both to exposure and destruction of sites.

Despite the reported recovery of Archaic period artifacts from the Ryder's Pond site, it would appear that most of the remains recovered from the sites noted above date to the Late Woodland period. Earlier in the prehistoric period, when sea levels were lower, shoreline sites would necessarily have been located further to the south. Such sites would now be at the location of the tidal marshes, or even further to the south on the drowned Continental shelf.

#### E. Analysis of Study Area Sensitivity

Based on the location of the study area and the presence of reported sites in the vicinity, the New York State Museum has evaluated it as having a "high probability of prehistoric occupancy or use" (see Appendix A).

As noted above, sites have been reported from areas near the heads of tidal creeks and adjacent salt marsh areas, and from spits or necks of land extending southward into the marshes. One of these necks extended into the marshes south of the study area. However, any sites on this spit would be located well south of the study area.

The southwestern portion of the study area, along the northern side of Linden Boulevard from Van Sinderen Avenue to Snediker Avenue, would have been closest to the fresh-water portion of Fresh Creek and to the head of the tidal portion and an adjacent area of marsh. However, the historic period maps which show the Creek and marsh areas in relation to the street grid (see Figures 8-10 and 13a) indicate that this portion of the study area was located some 900-1000 feet north of the open waters of Fresh Creek. In this area, the ground apparently rose some three feet from the Creek to the location of the present Dewitt Street (the former Vienna Avenue), and then rose an additional 5 1/2 to 7 feet to the present location of Linden Boulevard (see Figure 2). This location would appear to represent a "second rise" of ground, which Smith noted as a location of occupation sites. However, the distance of this higher ground from the Creek may reduce the sensitivity of this portion of the study area for the presence of Native American sites.

East of Snediker Avenue, Fresh Creek itself turned to the south, but an area of marsh extended eastward to a point between the present location of Malta Street and Alabama Avenue. The southern border of the study area (northern side of Linden Boulevard) is some 350 feet from the former location of the edge of the marsh at Alabama Avenue and some 475 feet at Malta Street, increasing to more than ca. 1000 feet at Hinsdale Street. In the Alabama Avenue-Malta Street area, the southern edge of the study area would have been some ca. 4 1/2 - 6 feet above the elevation of the nearby marshes (see Figure 2).

Although extensive landfilling of the former marsh and tidal Creek areas occurred south of the study area, the data suggest that this landfilling did not extend to the higher ground within the study area. Comparison of the street corner elevations as indicated on the turn-of-the-century maps with those shown on the 1993 Sanborn maps indicates the deposition of ca. two feet of fill at the intersection of Linden Boulevard and Van Sinderen Avenue and 1.1 feet at Snediker Avenue. At the other locations there has either been a raising of the grade of less than one foot or some slight downcutting.

Three borings taken on the property analysed by Geismar on the north side of Linden Boulevard between Sheffield and Pennsylvania Avenues indicated the presence of four to seven feet of "fill" (Geismar 1988). However, it is likely that most of this "fill," rather than representing landfill placed to raise the grade of low-lying ground, actually represents material within cellar holes or other excavations, as well as material deriving from previous structural demolition. Comparison of the boring locations as shown by Geismar (1988:29) and the location of the gas tanks and filling station buildings shown on the 1951 Sanborn maps supports the inference that disturbances associated with construction account for the boring results.

The results of twelve borings conducted on the block southwest of the study area analysed by Bankoff *et al.* (1988) indicated the presence of 2-4 feet of "fill" with one boring indicating an anomalous 12 feet of "fill". The presence of two feet of fill is not inconsistent with the analysis of street corner elevation changes in this area as noted above. The deeper deposits of "fill" probably derived from cellar holes and other disturbances as noted previously.

Examination of the nineteenth century maps discussed above and the more detailed twentieth century Sanborn maps indicate that there are lots and backyard areas in the southern portion of the study area where construction never occurred. In at least some of these locations it is possible that the ground surface prior to 20th century development of the area remains wholly or partially undisturbed. In some of these areas, disturbance of plow zone deposits and/or underlying surficial middens associated with any Native American sites located in the area may have occurred in the course of the utilization of backyard areas, and/or recent structural demolition. However, even in such areas any sub-surface features should remain intact.

The urban renewal area development map (Figure 1b) indicates that many of the lots containing undisturbed areas are not scheduled for development.

Between Van Sinderen and Snediker Avenues, open areas would include the backyards of the lots fronting on the north side of Linden Boulevard (see Figures 13b, 14a and 15a). However, none of these properties are scheduled for development. The backyards of

the lots at 682 and 684 Snediker Avenue have also remained open and would be possible field testing locations. These lots fall within a parcel (parcel 143) on which new construction will occur (see Figure 1b). The structures formerly located on these lots have been demolished and the demolition debris would appear to have been spread over the lot, raising its surface above the surrounding grade.

In the Malta Street-Alabama Avenue area, locations where construction has never occurred (see Figures 13c, 14b and 15b) would include the lots on the northwest corner of Alabama Avenue and Linden Boulevard (748-752 and 756-758 Alabama Avenue). However, these properties are not scheduled for development. The backyards of the buildings at 117-121 Malta Street also remained open. The structures have been demolished and these properties are now open lots which contain mounds of rubber tires and other debris (see Plate 1). These lots are located within development parcel 159 (see Figure 1b). On the western side of Malta Street, 4318) somewhat further from the former marshes, portions of the backyard areas at 100 - 108 Malta Street remained open (see Figures 13c, 14c and 15c). All of the buildings on this triangular block (block 4318) have been demolished and demolition debris covers this area, which is now used as a parking area for school busses (see Plate 2). This entire block is to be the site of new construction (parcel 158).

### III. CONCLUSIONS AND RECOMMENDATIONS

Analysis of the patterning of known Native American site locations indicates that areas near tidal creeks and adjacent marsh areas have a high degree of sensitivity for the presence of such sites. Because of its distance from Fresh Creek and the adjacent salt marshes, most of the study area is considered to have a low potential for containing Native American sites.

The most sensitive portions of the study area would be located along its southern border, on the northern side of Linden Boulevard. The portion between Van Sinderen and Snediker Avenues would have been closest to the fresh water portion of the Creek at a point where it adjoined the tidal portion and adjacent marshes. The high ground along Linden Boulevard would have been suitable for Native American occupation. However, this area is some 900 - 1000 feet from the Creek and adjacent marsh. This distance reduces the sensitivity of this portion of the study area from high to moderate.

The portion of the study area closest to the area of salt marsh adjacent to Fresh Creek would have been located on the northern side of Linden Boulevard in the vicinity of Malta Street and Alabama Avenue. This area, consisting of higher ground ca. 350-425 feet north of the salt marsh, would have been a considerable distance east of the fresh water portion of the Creek. Nevertheless, an extensive area of occupation could have extended to this location or a special purpose resource procurement camp could have been located here. This portion of the study area is also considered to have a moderate sensitivity for the presence of Native American archaeological deposits.

While it is considered that the portions of the study area noted above have only a moderate degree of archaeological sensitivity, because of the relative lack of data on the reported Native American sites along the Jamaica Bay shoreline it may be advisable to conduct limited field testing. Such testing could be conducted on those properties which are closest to the most sensitive areas, on which there are areas where construction has never occurred, and which are currently scheduled for development. Such locations include backyard areas associated with structures which formerly stood at 682-684 Snediker Avenue and 117-121 Malta Street. Other possible testing locations are portions of the properties at 100-108 Malta Street. However it should be noted that portions of these properties would have been disturbed by historic period construction.

Although extensive land filling did not occur in the area, the presence of demolition and other debris would appear to preclude manual testing. Therefore, testing would require the use of power equipment. Backhoe clearing and trenching would need to be utilized in order to remove surface debris and establish the stratigraphic sequence. Manual testing of any surfaces noted

could then be undertaken.

After reviewing a preliminary version of this report, the New York City Landmarks Preservation Commission has determined that due to the overall amount of disturbance within the study area, archaeological field testing would be unlikely to encounter undisturbed remains of prehistoric occupations. The Commission has determined that archaeological field investigations are not required.

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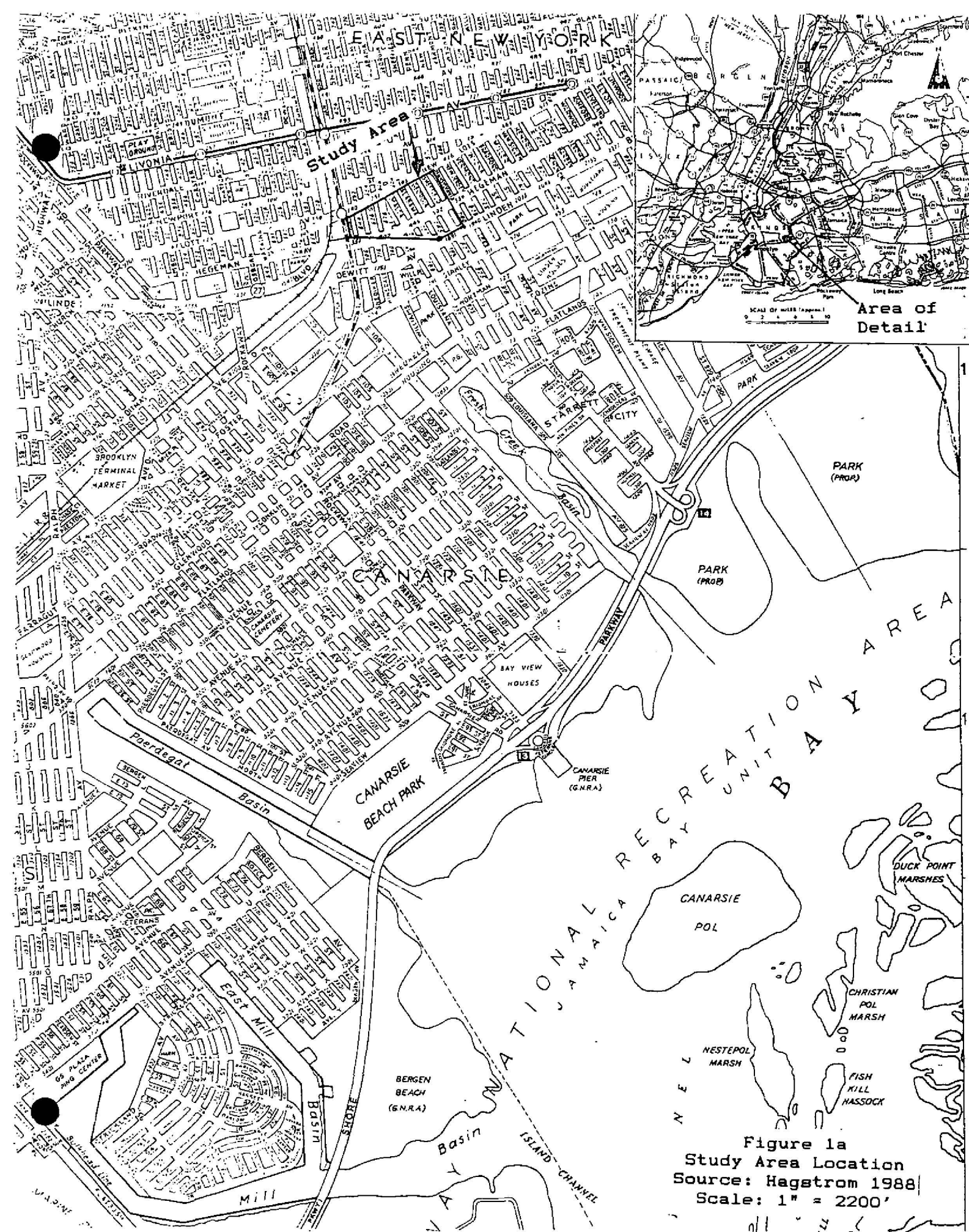
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## FIGURES



EAST NEW YORK I URA, 2ND AMENDMENT  
OVERALL MAP OF SITES

KEY MAP TO SECTIONS

Area with New Housing Site

NEW LOTS AVE.

Area Added





Figure 1b

OVERALL MAP OF  
PROPOSED SITES

LEGEND

--- PROJECT BOUNDARY

LAND USES

-  Residential
-  Public Open Space
-  Public and Institutional
-  Commercial



EXCLUDED FROM PROJECT

--- SETBACK NO NEW RESIDENTIAL CONSTRUCTION



DISPOSITION PARCEL BOUNDARY AND NUMBER



NOT TO BE ACQUIRED



MAJOR SOUND PROPERTY



REHABILITATION SITE



REHABILITATION/NEW CONSTRUCTION

THE CITY OF NEW YORK  
DEPARTMENT OF HOUSING PRESERVATION & DEVELOPMENT

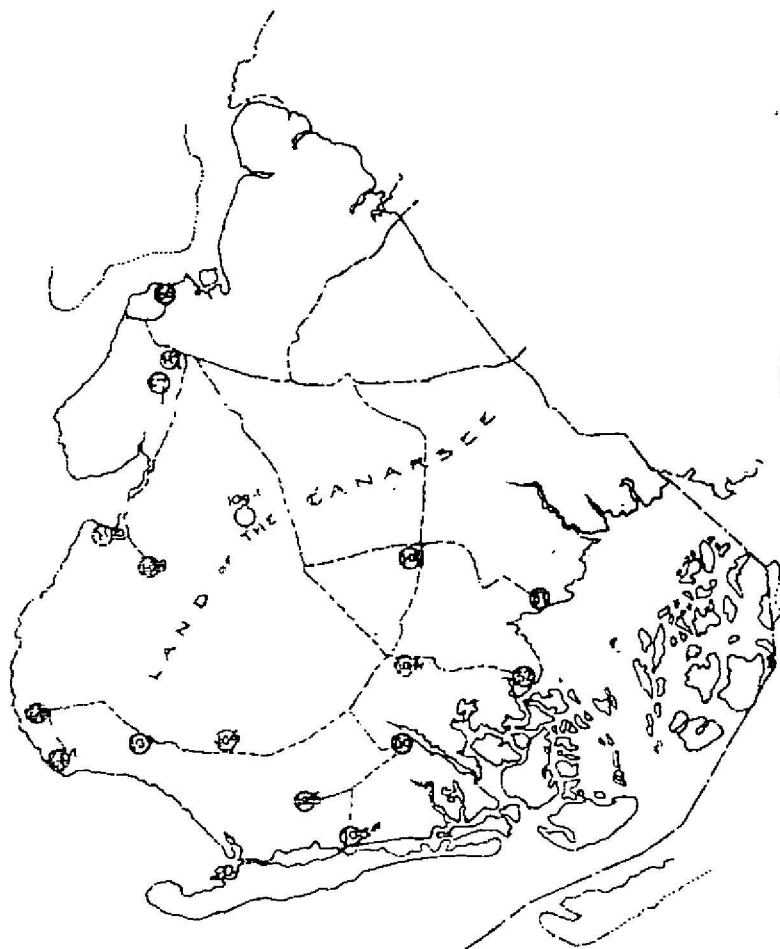
**EAST NEW YORK I**  
URBAN RENEWAL PROJECT

LAND USE PLAN

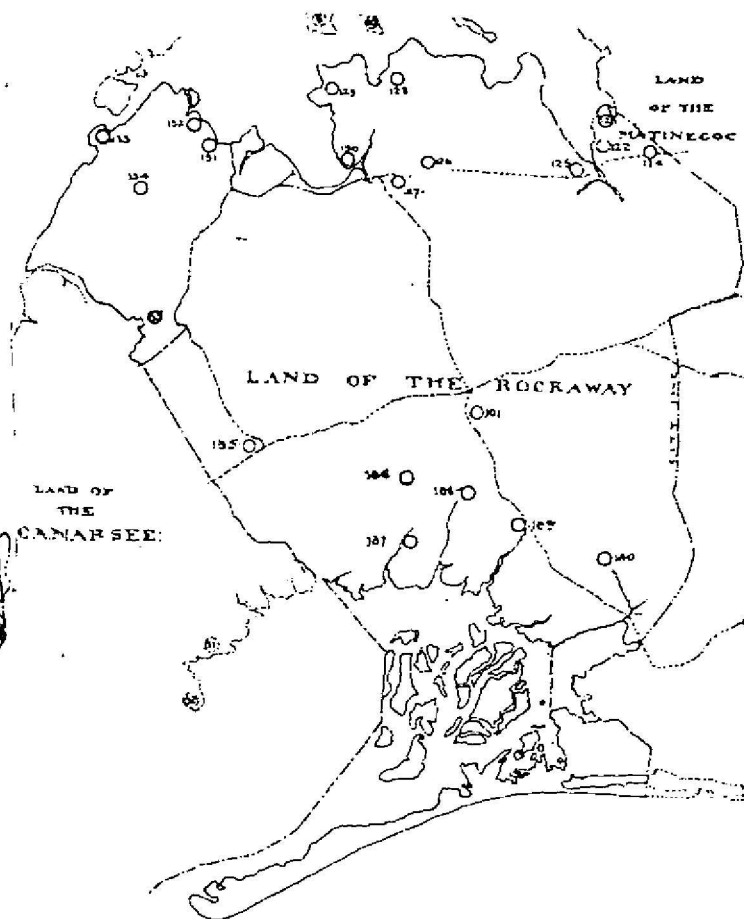
DATE: OCT. 1968  
REVISED: JULY 1985; MARCH 1990; JULY 1993







INDIAN SITES IN THE BOROUGH OF BROOKLYN



INDIAN SITES IN THE BOROUGH OF QUEENS

Figure 3  
Source: Bolton (1934:144;148)





Figure 4  
Location of Ryder's Pond and Canarsie Sites  
Source: Bolton (1922, Map VIID)



Figure 5  
Source: Taylor and Skinner (1781)  
Scale of Original: 1" = 1 mile



Figure 6  
Source: Connor (1852)  
Scale of Original: 1" = approximately 1265'





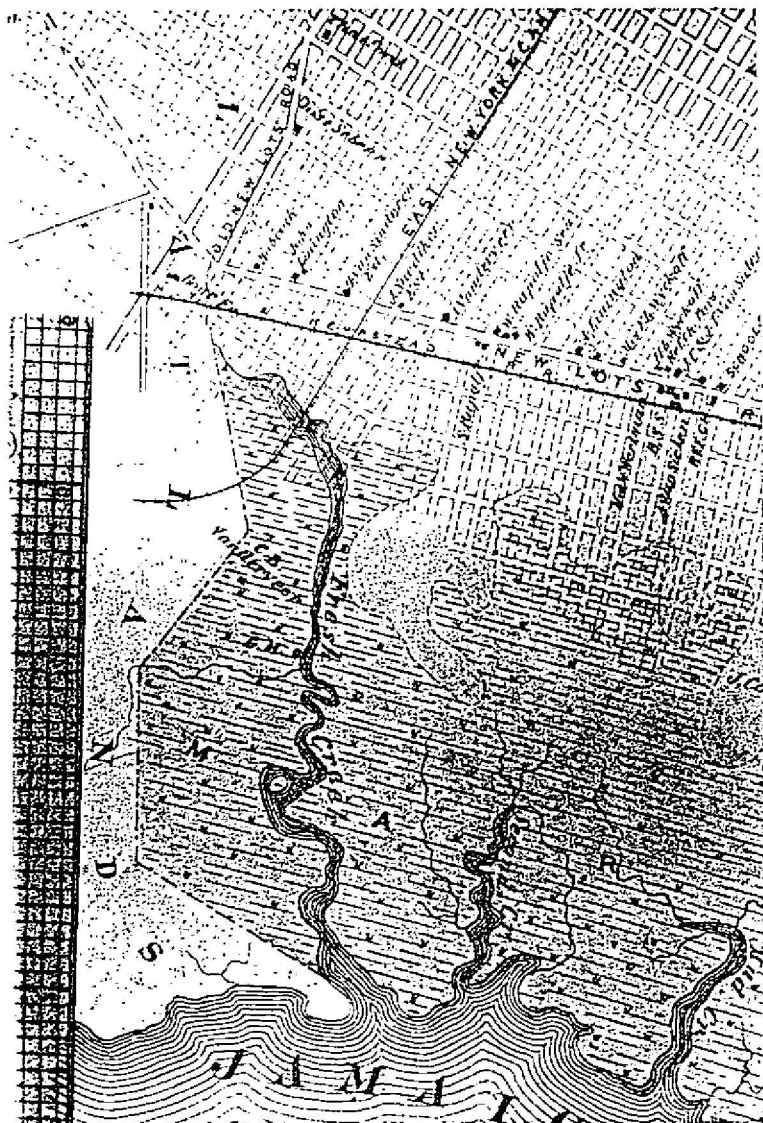


Figure 8  
 Source: Beers (1873:39)  
 Scale of Original: 1" = 120 rods

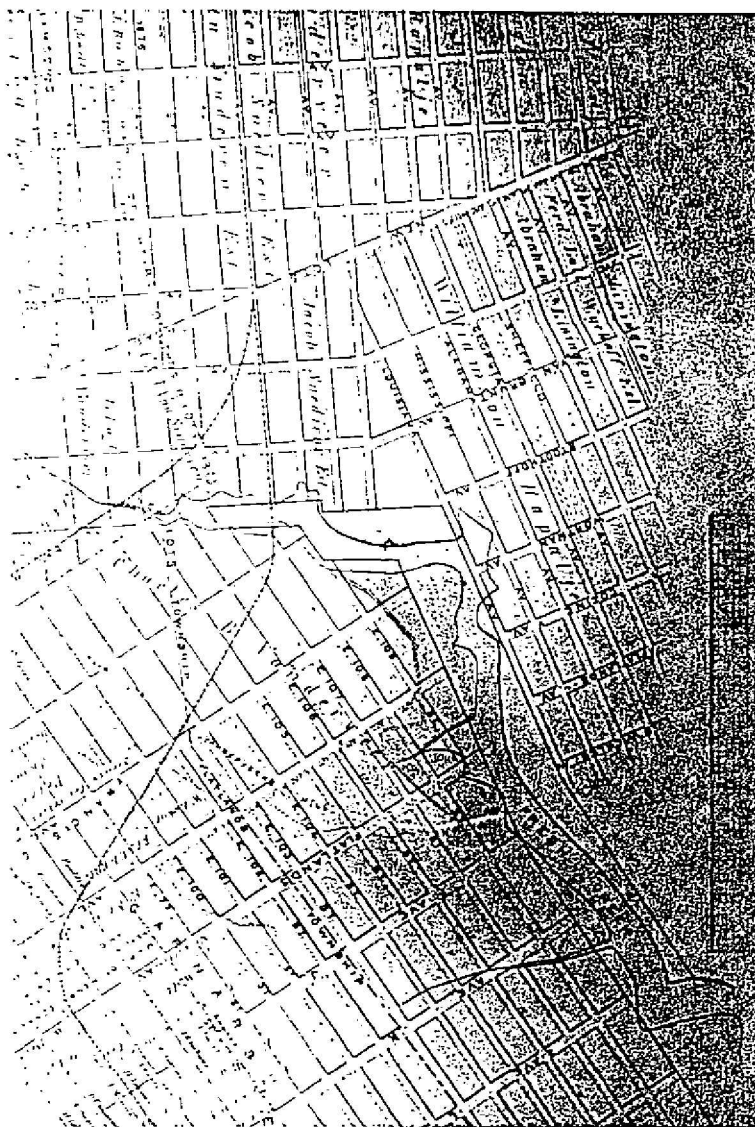


Figure 9  
Source: Dripps (1877:7)  
Scale of Original: 1" = 600'



Figure 10a  
Source: Robinson (1886:40)  
Scale of Original: 1" = 200'

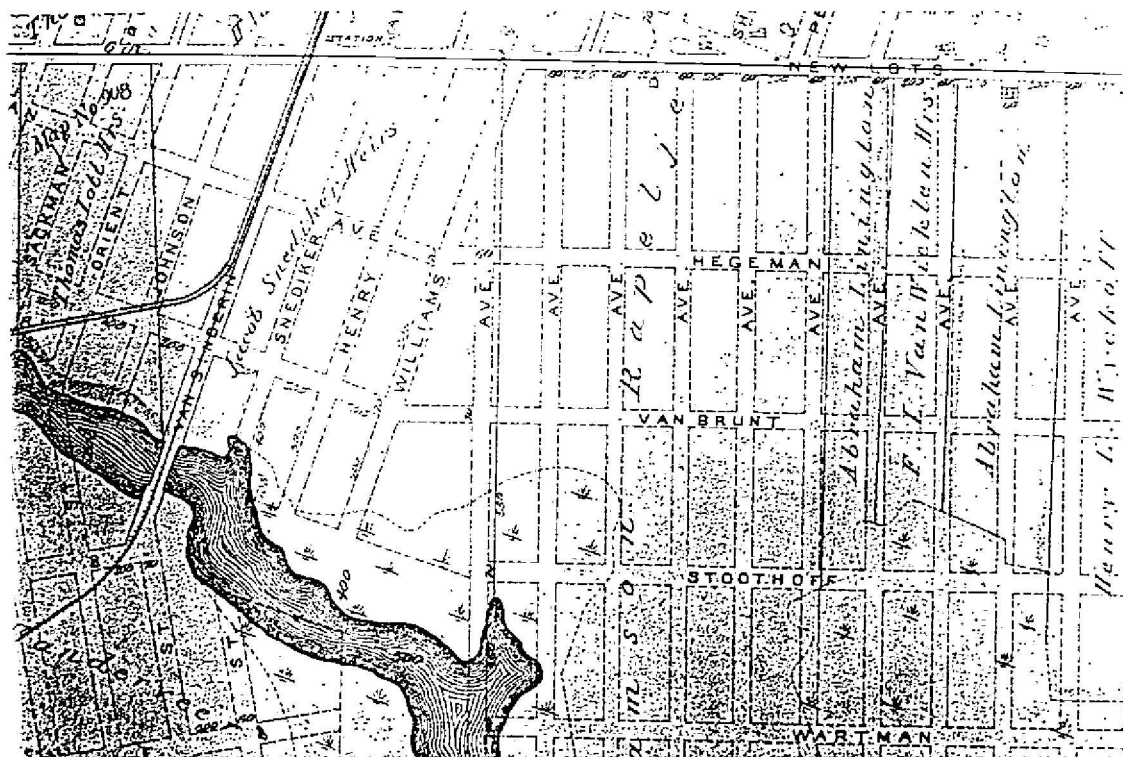


Figure 10b  
Source: Robinson (1886:40)  
Study Area Detail  
Scale of Original: 1" = 200'





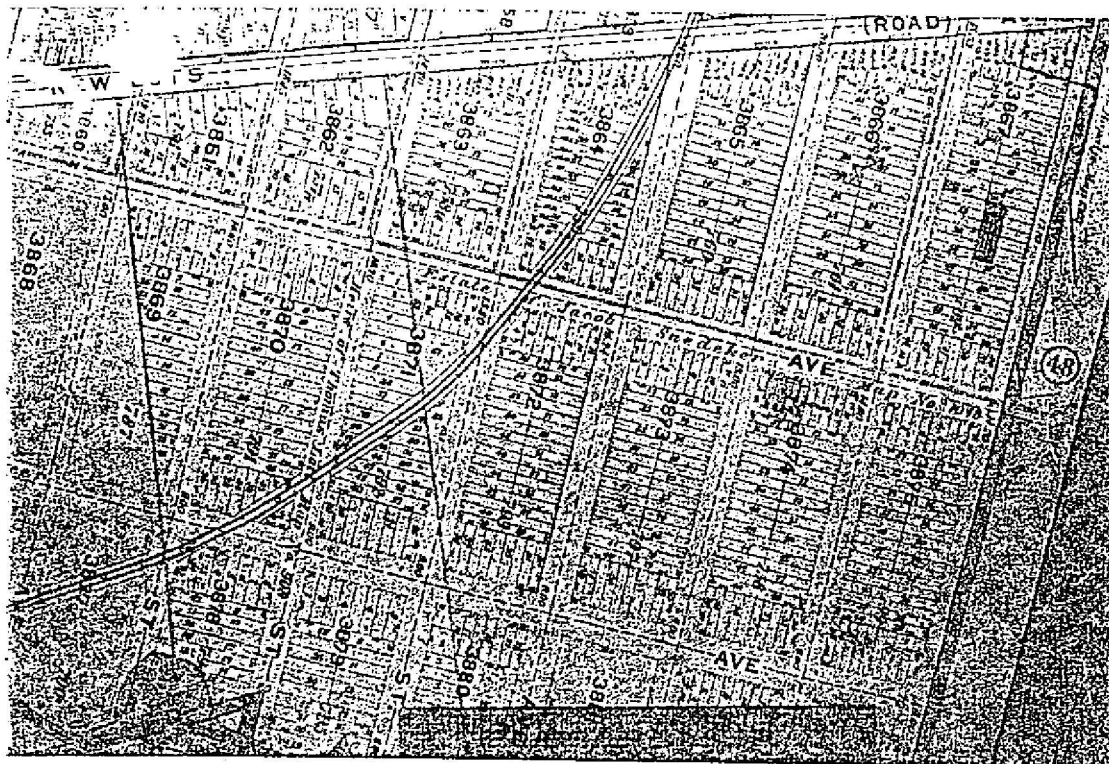


Figure 11b  
Source: Hyde (1898:41)  
Showing Portion of Study Area West of Williams Avenue  
Scale of Original: 1" = 150'

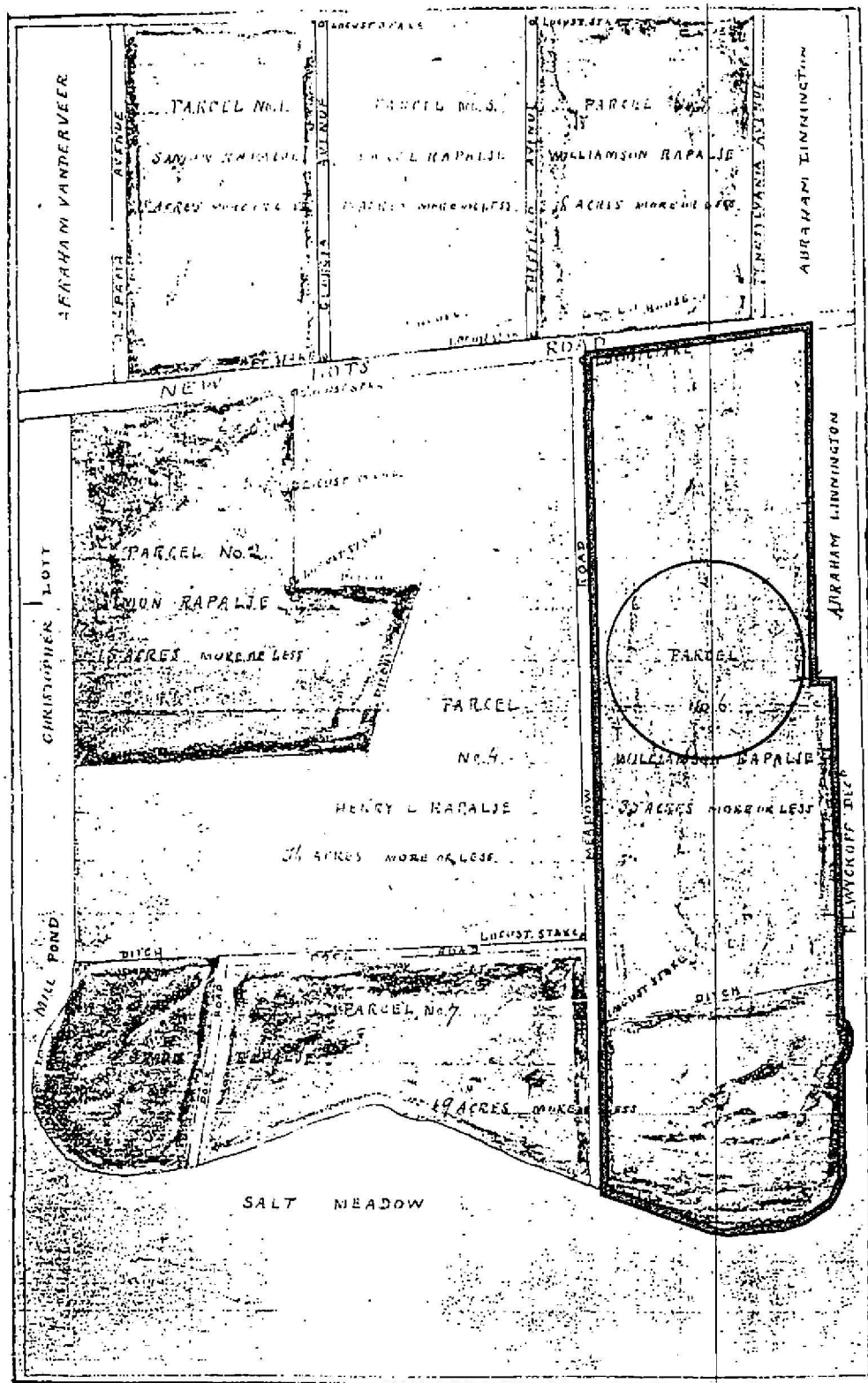


Figure 12  
 Copy of Map Included with Last Will and Testament of  
 Williamson Rapelje 1868 (Will Liber 113:359)  
 No Scale  
 Source: Geismar (1988:21)

Vienna Avenue

AVE.

AVE.

AVE.

VAN SINDEREN

SNEDIKER

3880

3881

80

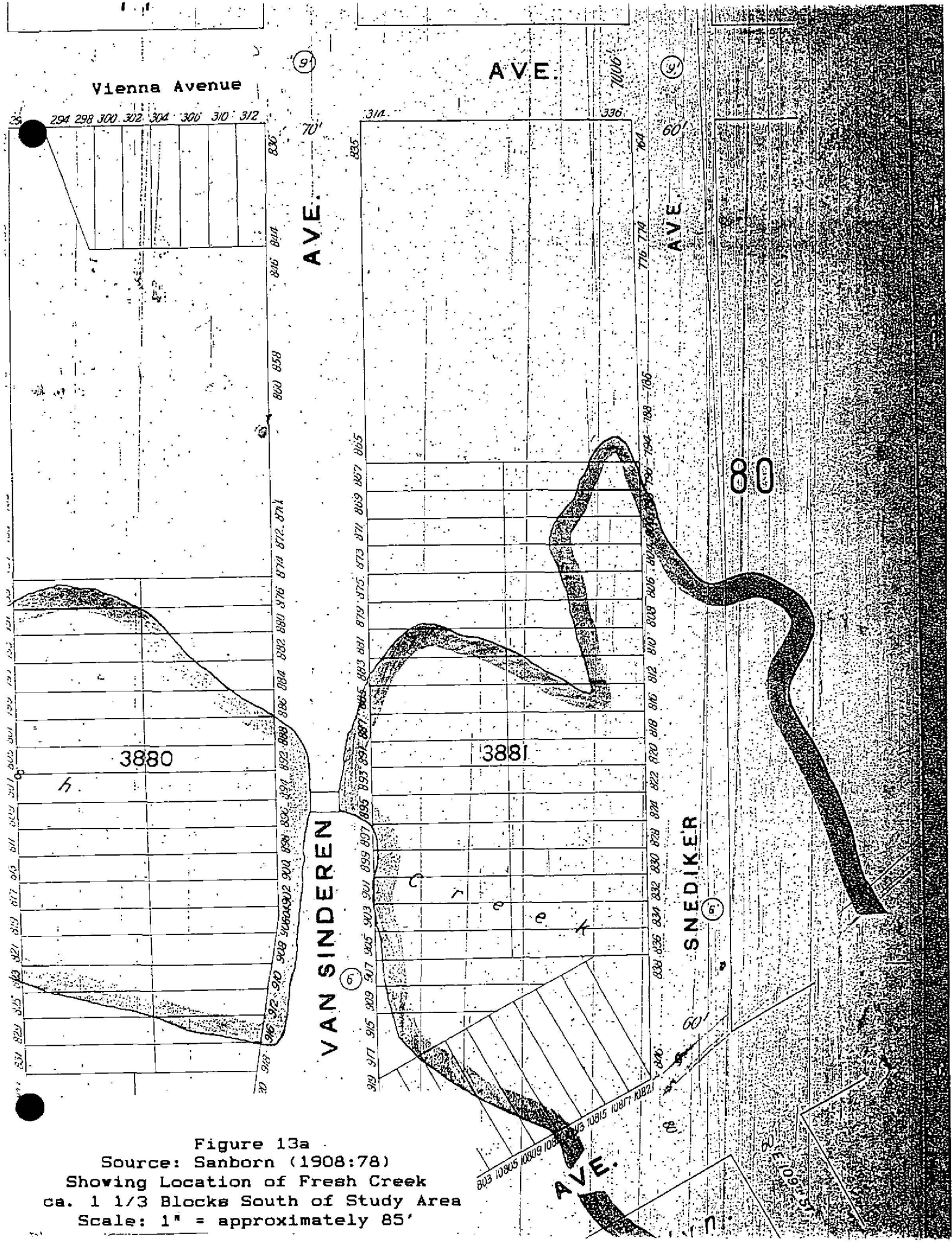
Figure 13a

Source: Sanborn (1908:78)

Showing Location of Fresh Creek

ca. 1 1/3 Blocks South of Study Area

Scale: 1" = approximately 85'





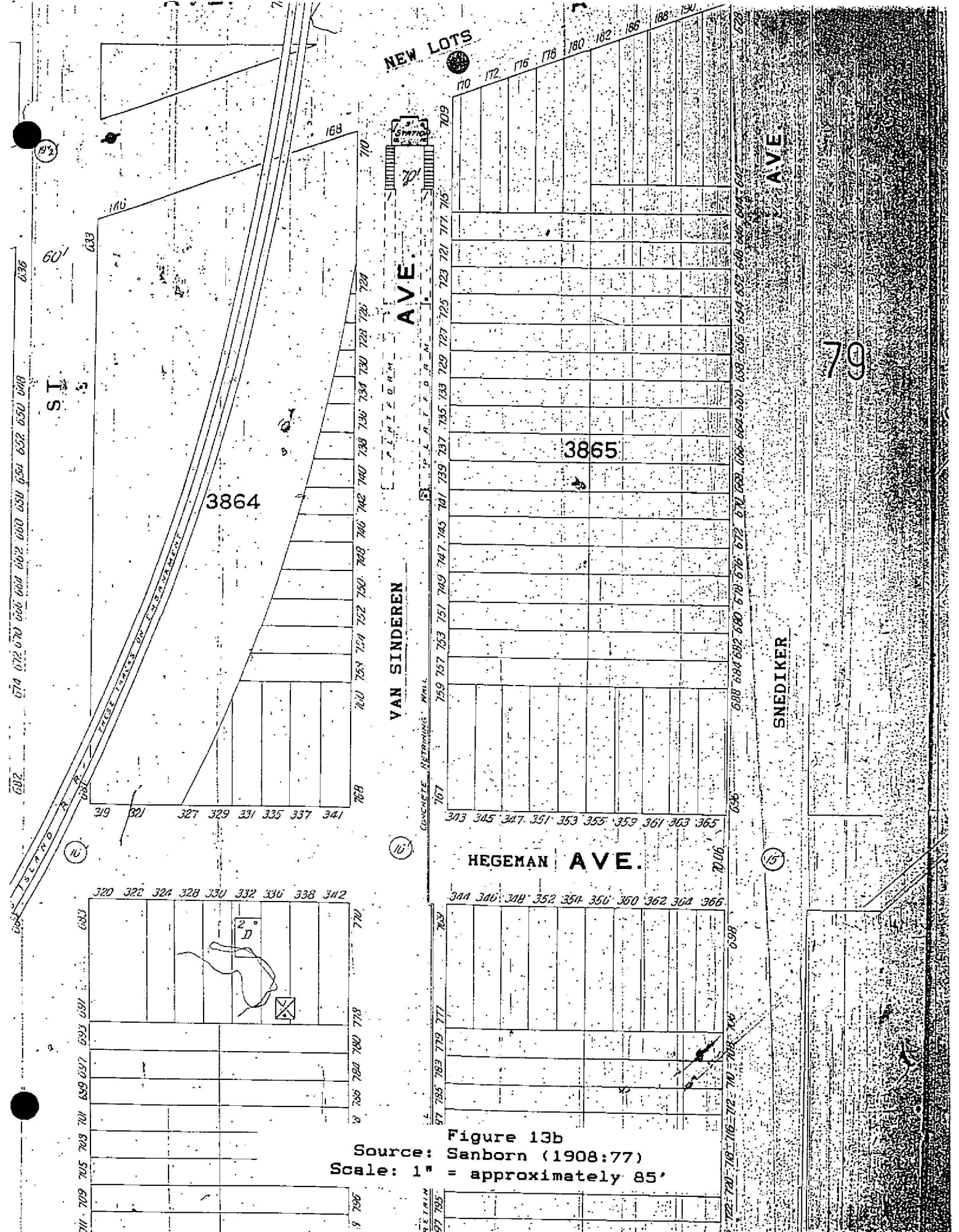


Figure 13b  
 Source: Sanborn (1908:77)  
 Scale: 1" = approximately 85'

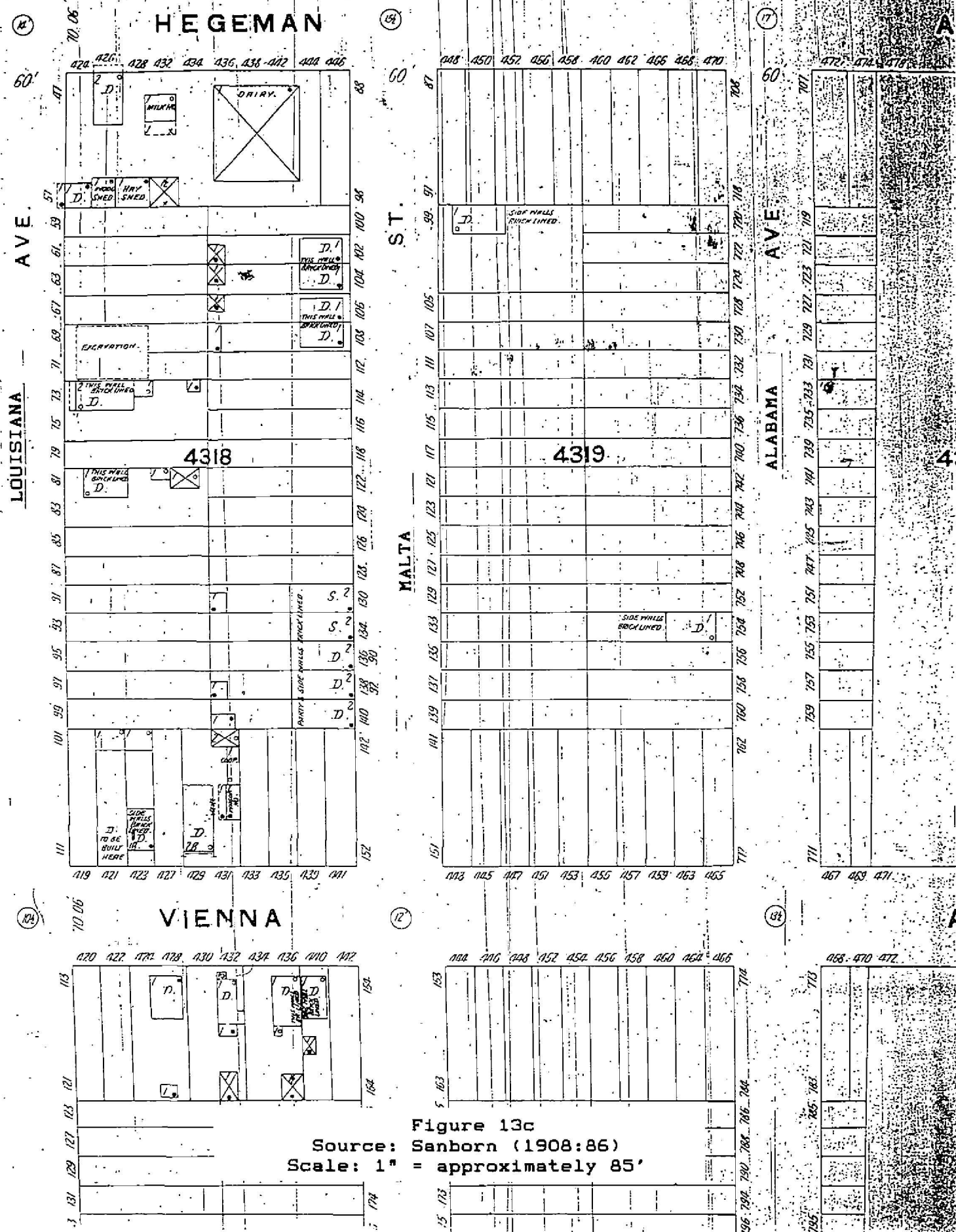
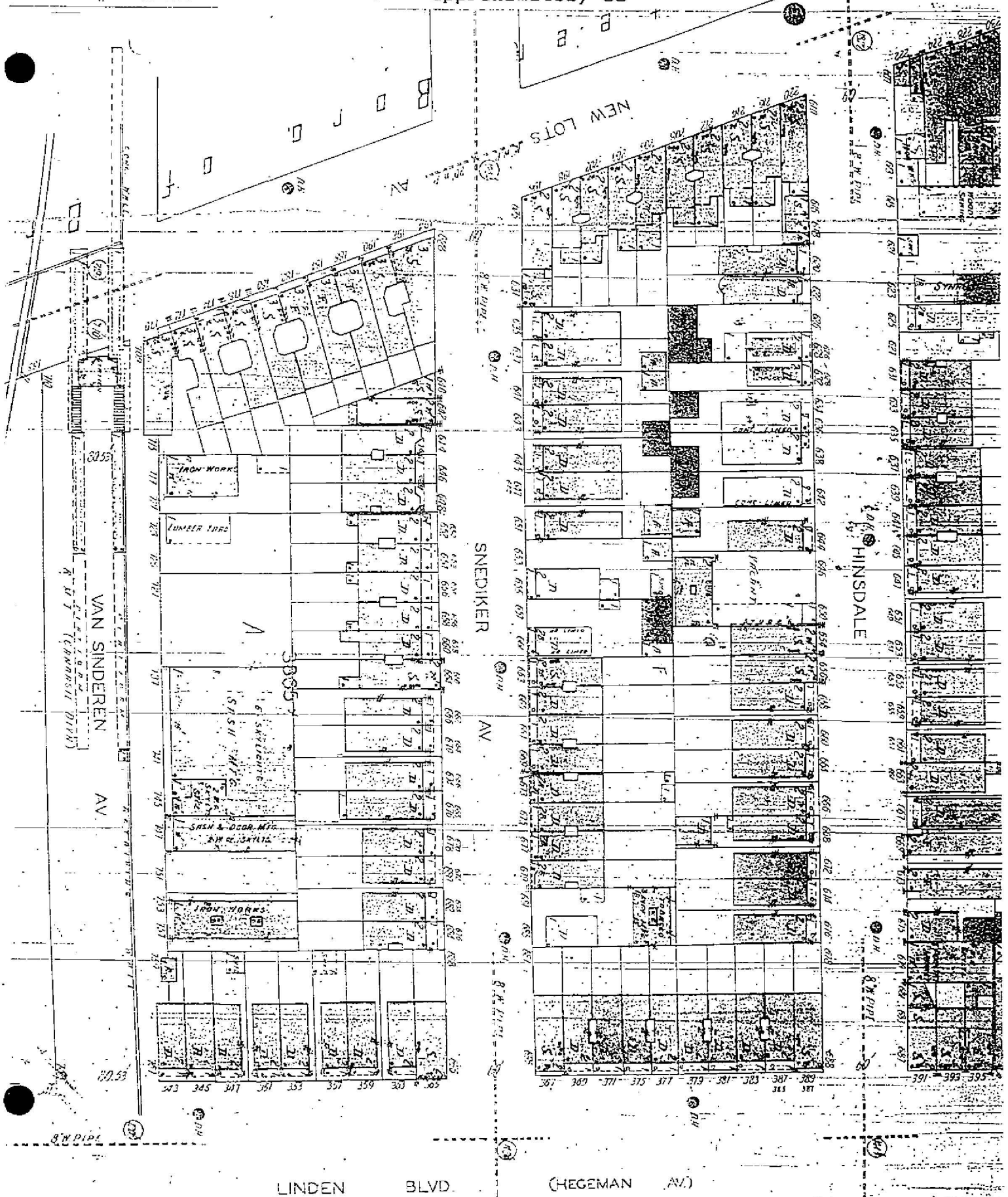


Figure 14a  
Source: Sanborn (1928:9)  
Scale: 1" = approximately 85'





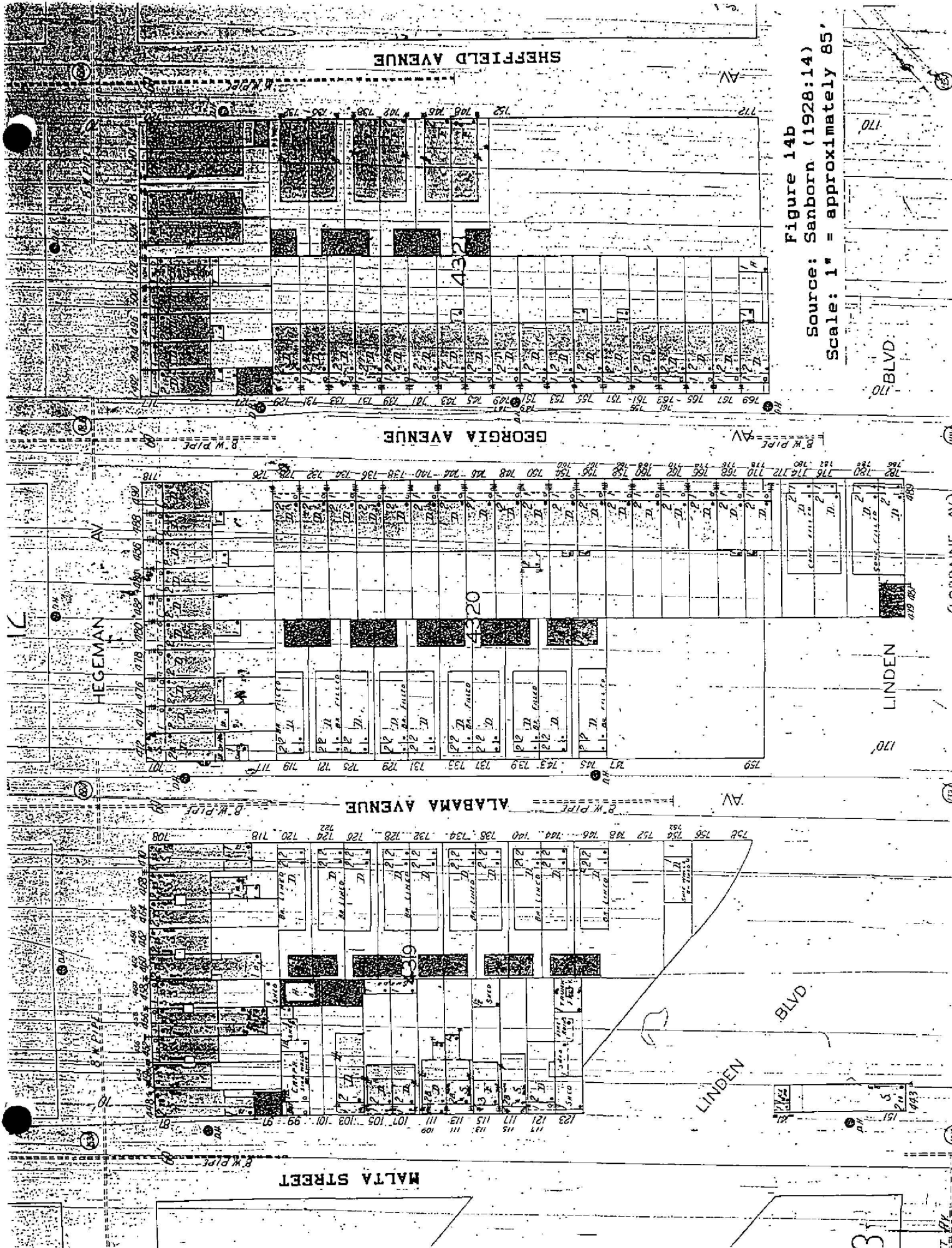


Figure 14b

Source: Sanborn (1928:14)

Scale: 1" = approximately 85'

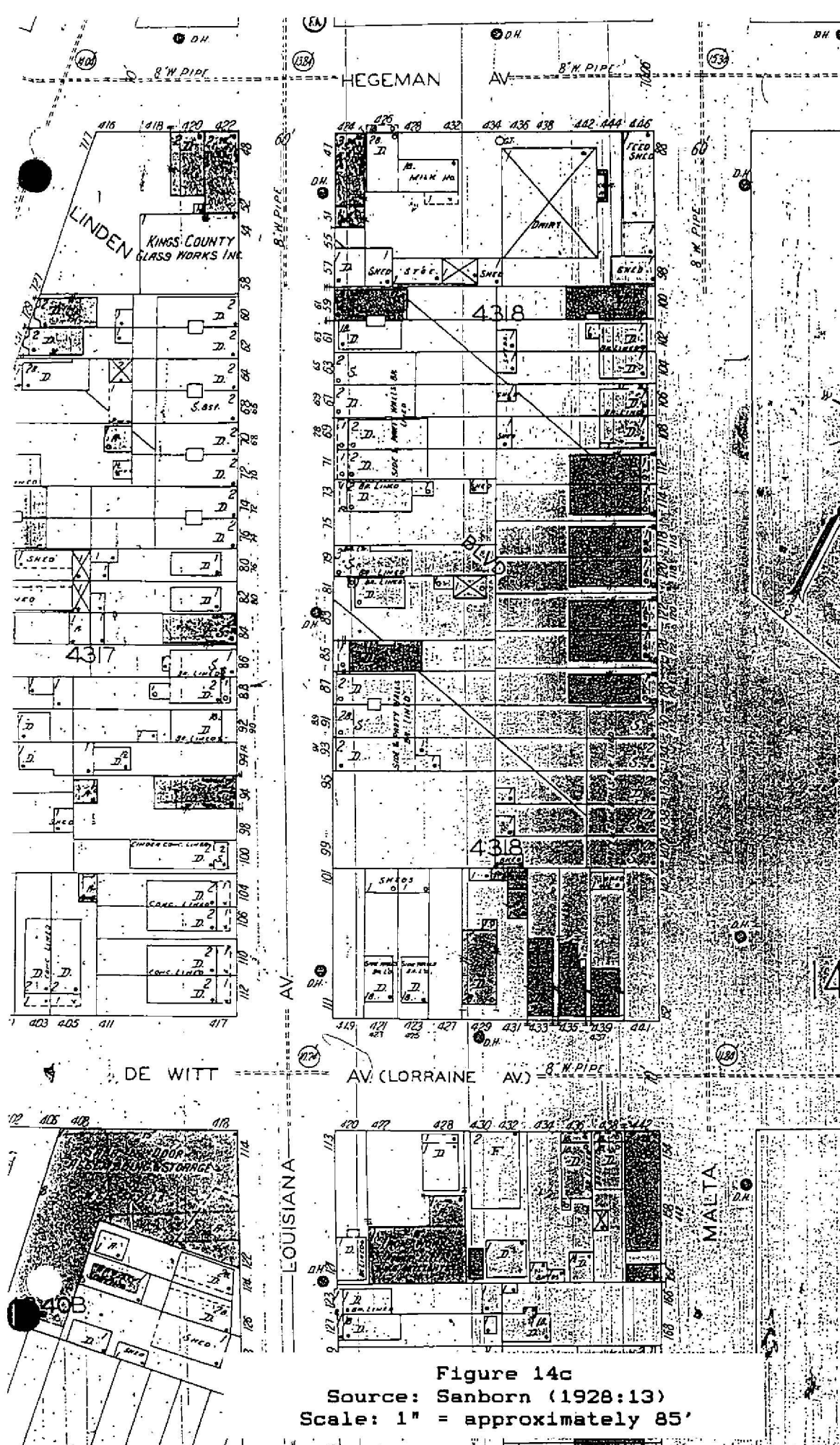
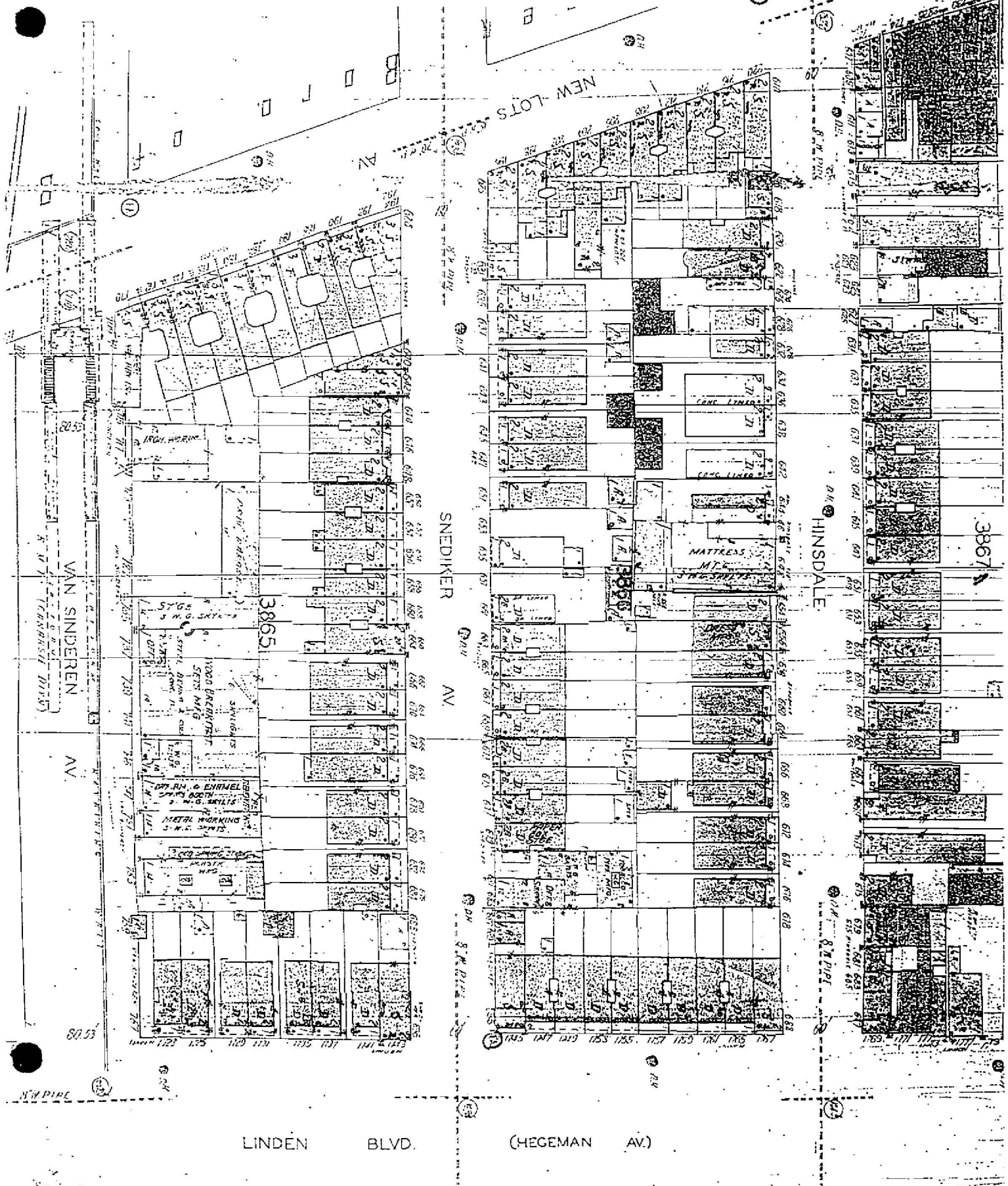


Figure 14c  
 Source: Sanborn (1928:13)  
 Scale: 1" = approximately 85'





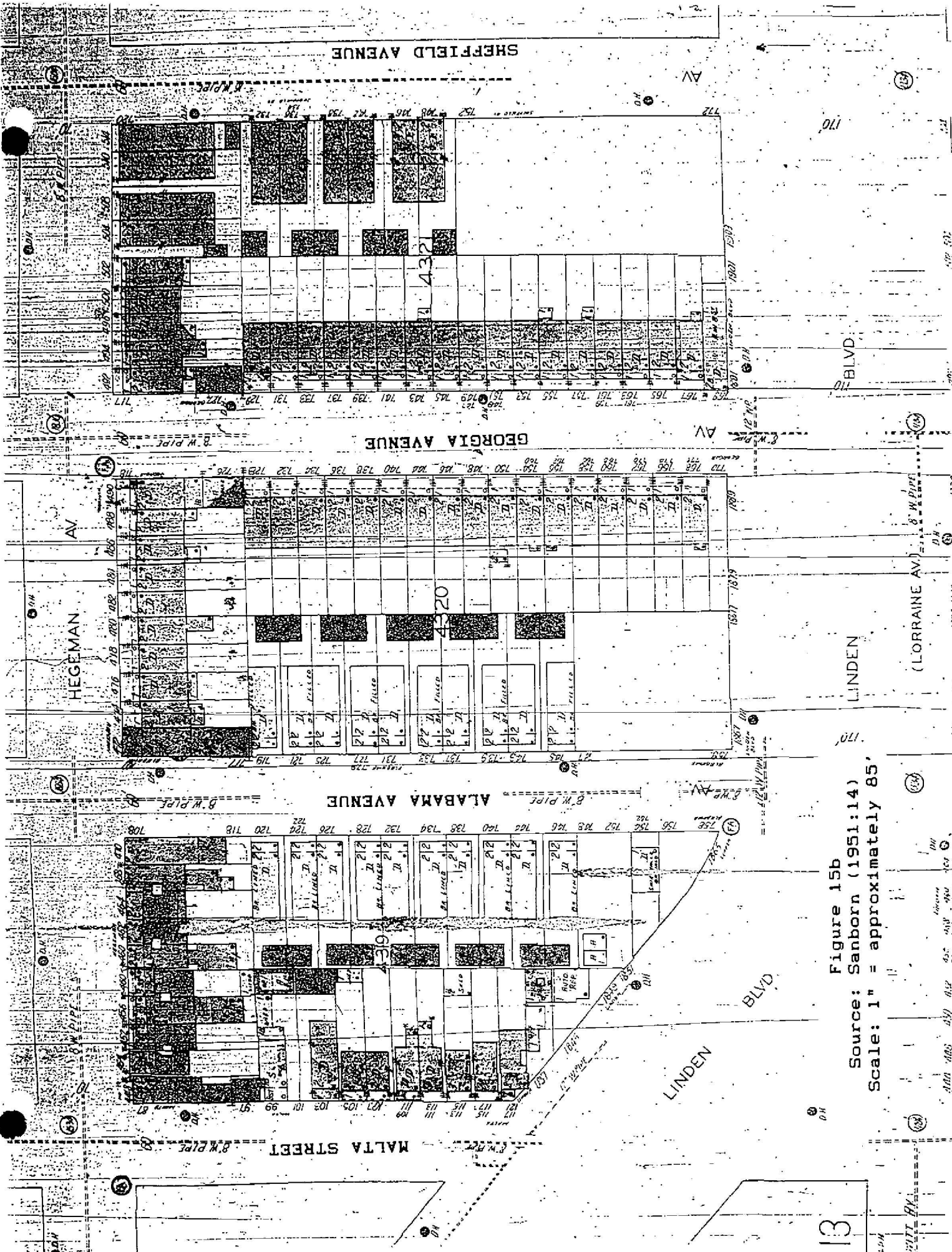


Figure 15b  
 Source: Sanborn (1951:14)  
 Scale: 1" = approximately 85'



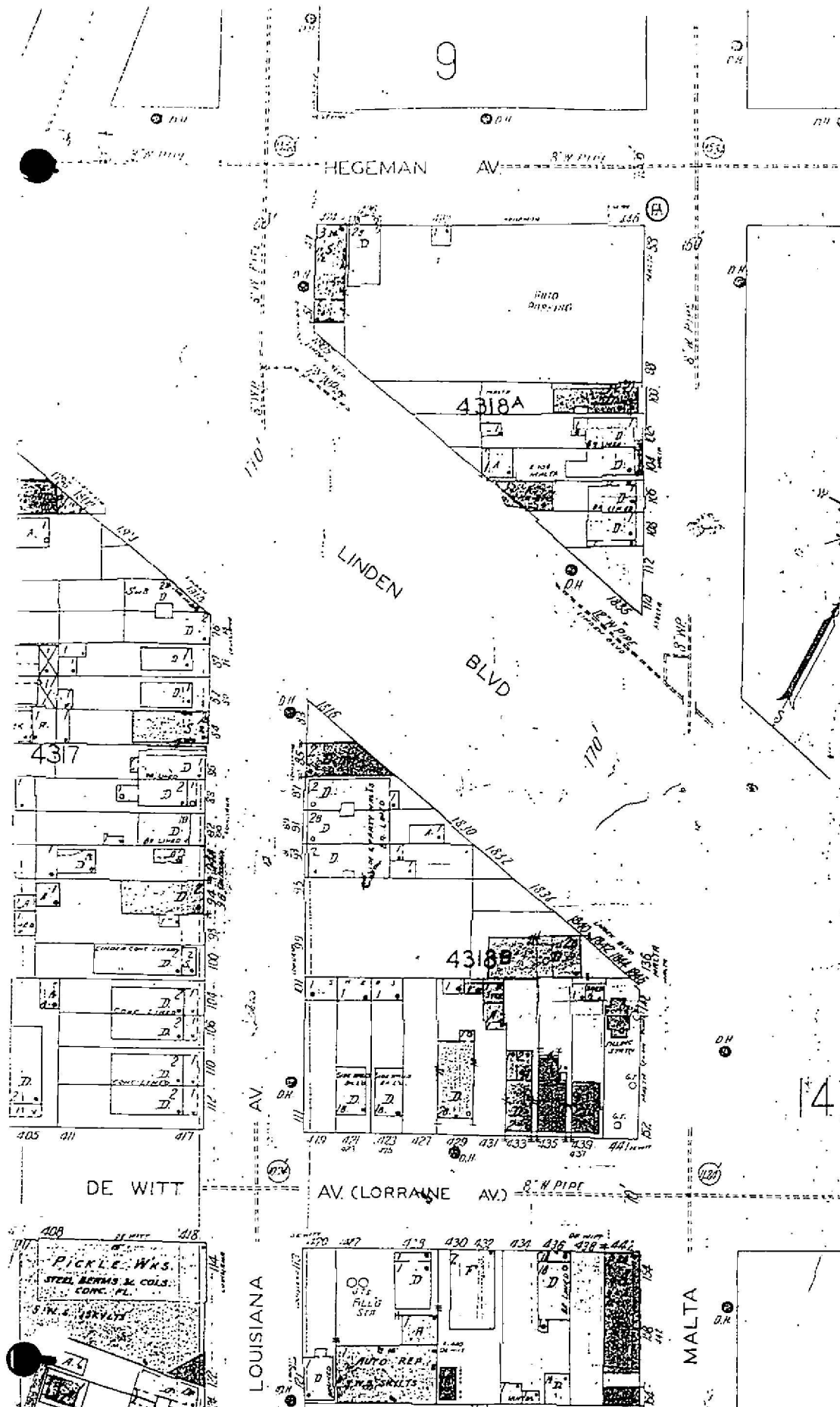


Figure 15c  
Source: Sanborn (1951:13)  
Scale: 1" = approximately 85'

PLATES

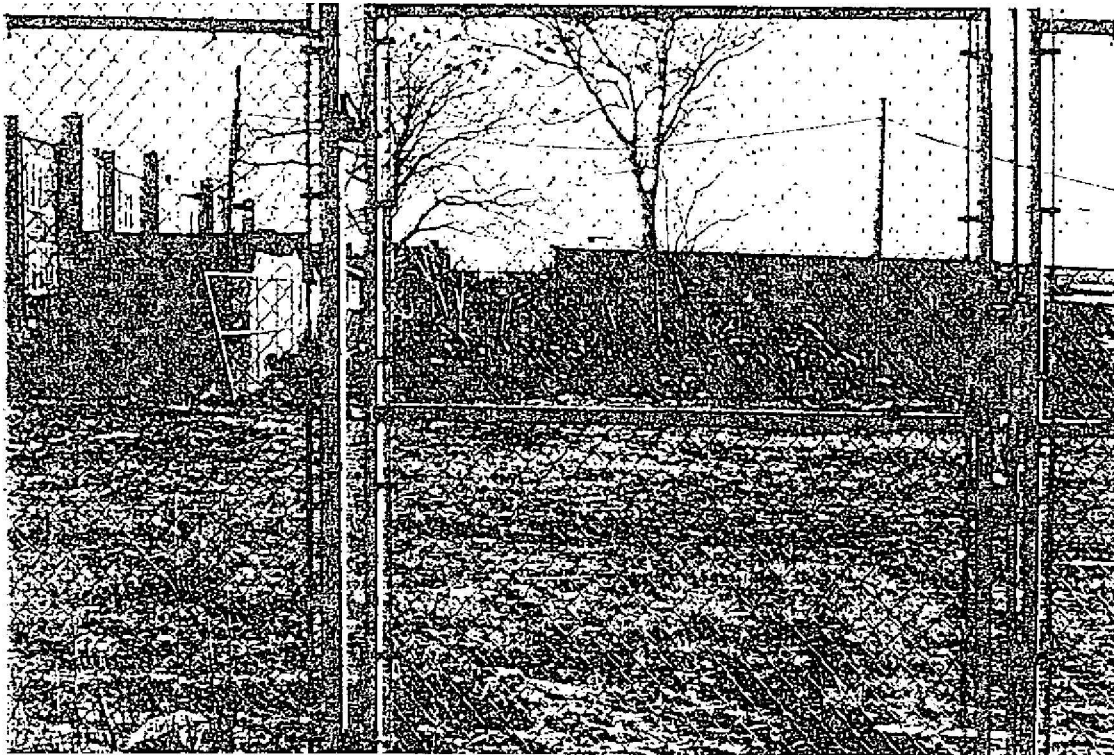


Plate 1  
Backyard Area of Lots on East Side of Malta Avenue  
View South From Hegeman Avenue .



Plate 2

Block 4318

View Southeast From Hegeman Avenue Looking Toward Corner of  
Linden Boulevard and Malta Avenue (Behind School Busses)

APPENDIX A

NEW YORK STATE MUSEUM RESPONSE TO INFORMATION REQUEST

## NEW YORK STATE MUSEUM

3122 Cultural Education Center  
Albany, NY 12230  
518/474-5813 FAX 518/473-8496

Anthropological Survey

Page 1 of 2

DATE: 12/8/94

To:

ARNOLD PICKMAN  
150 EAST 56TH STREET  
NEW YORK, NY 10022

Proposed Project: CRM STUDY  
7.5' U.S.G.S. Quad: JAMAICA+

In response to your request our staff has conducted a search of our data files\* for locations and descriptions of prehistoric archaeological sites within the area indicated above. The results of the search are given below. If specific information requested has not been provided by this letter, it is likely that we are not able to provide it at this time, either because of staff limitations or policy regarding disclosure of archaeological site data.

Questions regarding this reply can be directed to the site file manager, at (518) 474-5813 or the above address. Please refer to the N.Y.S.M. site identification numbers when requesting additional information.

Please resubmit this request if action is taken more than one year after your initial information request.

\*[NOTE: Our files normally do not contain historic archeological sites or architectural properties. For information on these types of sites as well as prehistoric sites not listed in the N.Y.S.M. files contact The State Historic Preservation Office; Office of Parks, Recreation & Historic Preservation; Agency Building #1; Empire State Plaza; Albany, NY, 12238 at (518) 474-0479.

### RESULTS OF THE FILE SEARCH:

Recorded sites ARE located in or within one mile of the project area. If so, see attached list.

Code "ACP" = sites reported by Arthur C. Parker in *The Archeology Of New York*, 1922, as transcribed from his unpublished maps.

SEARCH CONDUCTED BY: BV (initials) Anthropological Survey, NYS Museum

cc: N.Y.S. OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION; HISTORIC PRESERVATION FIELD SERVICES BUREAU



12/8/94 To: ARNOLD PICKMAN,

Project: CRM STUDY Topo. Maps: JAMAICA+  
Bu/initials) Anthropological Survey, NYSM

New York State Museum Prehistoric Archaeological Site Files

**EVALUATION OF ARCHAEOLOGICAL SENSITIVITY FOR PREHISTORIC (NATIVE AMERICAN) SITES**

Examination of the data suggests that the location indicated has the following sensitivity rating:

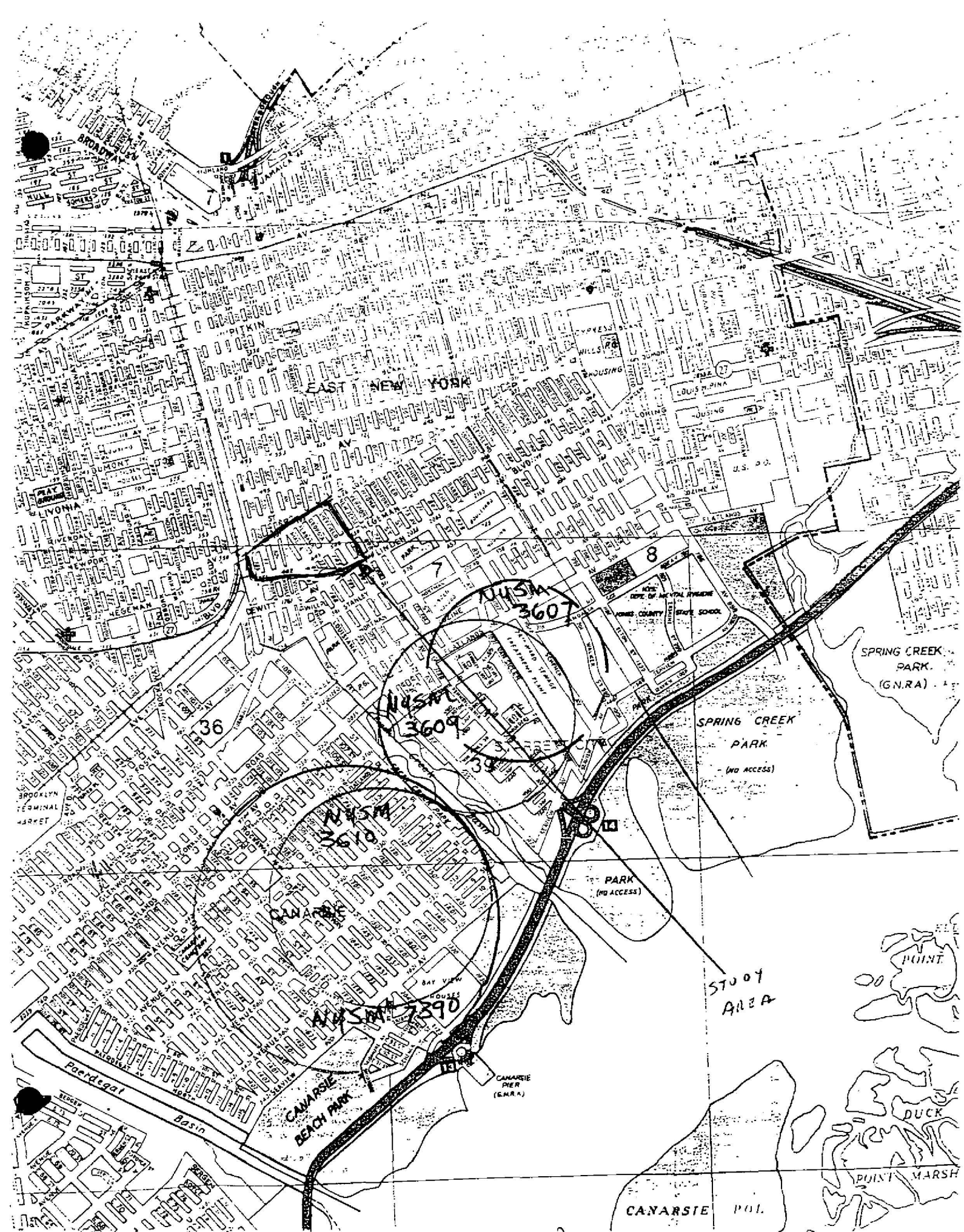
HIGH PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.

The reasons for this finding are given below:

- ☐ A RECORDED SITE(S) IS(ARE) INDICATED IN, ADJACENT TO, OR IN THE VICINITY OF THE LOCATION AND WE HAVE REASON TO BELIEVE IT(HEY) COULD BE IMPACTED BY THE PROPOSED ACTIVITY.
- ☒ A RECORDED SITE IS INDICATED IN THE GENERAL VICINITY OR SOME DISTANCE AWAY. DUE TO THE MARGIN OF ERROR IN THE LOCATION DATA IT IS POSSIBLE THE SITE ACTUALLY EXISTS IN OR IMMEDIATELY ADJACENT TO THE LOCATION.
- ☒ THE TERRAIN IN THE LOCATION IS SIMILAR TO TERRAIN IN THE GENERAL VICINITY WHERE RECORDED ARCHAEOLOGICAL SITES ARE INDICATED.
- ☒ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A HIGH PROBABILITY OF PREHISTORIC OCCUPATION OR USE.
- ☐ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A MEDIUM PROBABILITY OF PREHISTORIC OCCUPATION OR USE.
- ☐ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A LOW PROBABILITY OF PREHISTORIC OCCUPATION OR USE.
- ☐ EVIDENCE OF CULTURAL OR NATURAL DESTRUCTIVE IMPACTS SUGGESTS A LOSS OF ORIGINAL CULTURAL DEPOSITS IN THIS LOCATION.
- ☐ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION ARE MIXED, A HIGHER THAN AVERAGE PROBABILITY OF PREHISTORIC OCCUPATION OR USE IS SUGGESTED FOR AREAS IN THE VICINITY OF EITHER PRESENT OR PREEXISTING BODIES OF WATER, WATERWAYS, OR SWAMPS. A HIGHER THAN AVERAGE PROBABILITY IS SUGGESTED FOR ROCK FACES WHICH AFFORD SHELTER OR FOR AREAS SHELTERED BY BLUFFS OR HILLS. AREAS IN THE VICINITY OF CHERT DEPOSITS HAVE A HIGHER THAN AVERAGE PROBABILITY OF USE. DISTINCTIVE HILLS OR LOW RIDGES HAVE AN AVERAGE PROBABILITY OF USE AS A BURYING GROUND. LOW PROBABILITY IS SUGGESTED FOR AREAS OF EROSIONAL STEEP SLOPE.
- ☐ PROBABILITY RATING IS BASED ON THE ASSUMED PRESENCE OF INTACT ORIGINAL DEPOSITS, POSSIBILITY UNDER FILL, IN THE AREA. IF NEAR WATER OR IF DEEPLY BURIED, MATERIALS MAY OCCUR SUBMERGED BELOW THE WATER TABLE.
- ☐ INFORMATION ON OTHER SITES MAY BE AVAILABLE IN A REGIONAL INVENTORY MAINTAINED AT THE FOLLOWING LOCATION(S).

COMMENTS:

cc: N.Y.S. OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION; H. P. FIELD SERVICES BUREAU



OR AS AUTHORIZED IN WRITING BY THE NYCB ANTHROPOLOGY CHAIRMAN

1190	ACP KN01 NO INFO NO(1)	*NO INFO; SHELL WIDGNS	SHELL IN TITRIN WIDGNS SYMBOL A.I.P. MAP	BRATICA,BROOKLYN PARKER,A.C.	NO INFO	1.
		NO INFO		W (BROOKLYN)	-(1)	2.
				WIN	1922	3.H
1200	ACP KN01 NO INFO NO(1)	*NO INFO; SHELL	BROOKLYN	PARKER,A.C.	NO INFO	1.
		NO INFO		(BROOKLYN)	-(1)	2.
				WIN	1922	3.H
1310	ACP KN01 NO INFO NO(1)	*NO INFO; SHELL	BROOKLYN	PARKER,A.C.	NO INFO	1.
		NO INFO		(BROOKLYN)	-(1)	2.
				WIN	1922	3.H
1390	ACP KN01 NO INFO NO(1)	*NO INFO(NO INFO) SHELL WIDGNS	*.IMMENSE SHELL REAP(1)	BROOKLYN	PARKER,A.C.	1.H
		NO INFO		BROOKLYN	-(THOMPSON:192)	INFO
				WIN	2	3.