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REPORT

ARCHAEOLOGICAL SURVEY

DOCUMENTARY RESEARCH

159TH STREET/ROCKAWAY TURNPIKE

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PREPARED FOR: EDWARD J. MINSKOFF EQUITIES,INC.

PREPARED BY: JO-ANN MC LEAN
PRINCIPAL INVESTIGATOR

596

MAY 1997

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JAMAICA, QUEENS COUNTY, NEW YORK CITY

NEW YORK

ARCHAEOLOGICAL SURVEY - DOCUMENTARY RESEARCH

I. INTRODUCTION

An Archaeological Documentary Research survey includes researching relevant maps, references and archival sources pertaining to a project area to determine whether or not historic and/or prehistoric cultural resources are potentially present. This research includes an investigation of the landscape to assess episodes of ground disturbance which might have deeply buried or destroyed such resources.

As required by the City Environmental Quality Review Technical Manual, information acquired during the Documentary Research survey should 1) identify the potential for significant cultural deposits (historic and/or prehistoric) at the project site 2) evaluate the integrity of the project site to produce any significant deposits 3) provide a course of treatment for any such deposits if identified 4) upon the identification of significant deposits provide data to register the site with the National Register of Historic Places.

The following report details the documentary research conducted by Jo-Ann McLean Inc., Archaeological Consultants for Edward J. Minskoff Equities, Inc. for the proposed project located at 159th Street and Rockaway Turnpike, Fourth Ward, Jamaica, Queens County, New York City; Lot. # 14260/North of Nassau Expressway (Figure 1). It will examine the geologic setting, prehistoric sensitivity, and historic occupation and development of the Jamaica Bay environs and project area. Finally, it will discuss the

relevance of these findings to the proposed project and provide conclusions and recommendations.

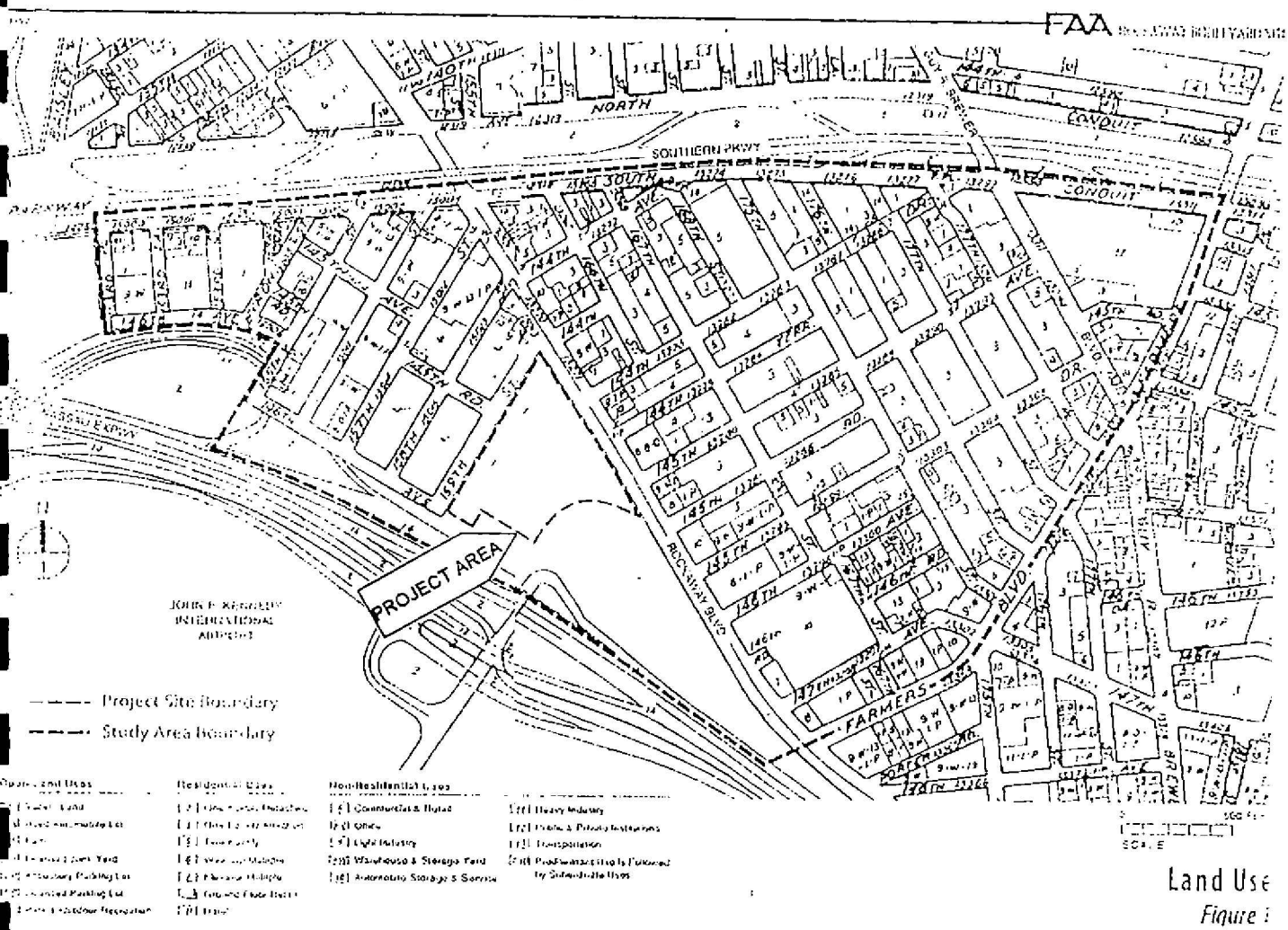


Figure 1- Land Use/ Study Map 1997- Courtesy Allee, King, Rosen & Fleming, Inc.

II. Physio-Geologic Setting

Jamaica Bay and Environs

> "Jamaica is the southwestern town in Queens County. It is bounded on the south by Rockaway Beach, a narrow neck of land belonging to Hempstead which extends between the ocean and Jamaica Bay; on the west by towns of Flatlands and New Lots, in Kings county; on the north by Newtown and Flushing and on the east by Hempstead. It has an average length and breath of about seven and one-half miles and includes a surface of about fifty-seven square miles. About one-third of the town, in the southwestern part is covered by the waters of Jamaica Bay, which communicates with the ocean through Rockaway Inlet. Through its central portion this bay is thickly interspersed with low islands which are separated from each other by narrow water passages. Between its northern boundary and the bay the town occupies a portion of the level part of the island south from what is known as the "backbone" (Munsell, p. 194)

In the area just north of the south western terminus of the Glacial outwash plain generally associated with the Wisconsin glaciation, approximately 55,000-10,000 years ago this "backbone" gave way to a ridge of small sandy hills and marshland. This tidal marsh became known as Jamaica Bay and environs which included several creeks which drained the mainland. The soils associated with the glacial outwash are typically stratified sand and gravel. The grains are generally sand size or gravel size and are rounded as a result of water transport. In general the sandy outwash materials are loose in consistency. These wetlands would have supported native vegetation, especially marsh grasses. Figure 2, (Renard,1835) illustrates clearly this physical landscape.

Dramatic changes to the physical manifestation of this landscape during the twentieth century will be discussed under the heading Historic Occupation and Development. It is important to note the location of the project area within this tidal

marsh environment. It is clearly above mean high water potentially providing habitable upland on the edge of the marsh.

Figure 2 - 1835, U.S.G.S. Map Coastal Long Island

III. PREHISTORY

A. Prehistory of Jamaica Bay and Environs

Historic records (Munsell, 1882; Grumet 1981) clearly indicate that at the time of European contact three groups of Native American Algonkians utilized the area of Jamaica Bay and environs, the Canarsees, the Rockaways and the Massapequa. Although the usefulness of the names imposed upon these native groups was clearly in terms of European understanding, differences observed likely represented extended kinship groups. These groups shared similar language and customs and their sachems or chiefs were often recorded as brothers (Gardner, 1660).

It is certain that Native Americans utilized all the water resources located within the Jamaica Bay area, establishing processing sites, temporary and/or permanent camps near them. These natives would have been exploiting the abundant marine resources in the area on a seasonal or likely year round basis. The files of the New York City Landmarks Preservation Commission report several identified sites recorded within a two miles radius of the project area. According to Boesch (1996a;see Figure 3) eight previously identified sites or culturally sensitive areas are recorded for the Borough of Queens within a two and one-half mile radius of the project area. They are described below. Please refer to Figure 3:

Site:" #71. Seventeen sites identified along route of the Belt Parkway in Queens. Sites excavated during construction of the parkway. Solecki nd, 1941. [*.5mile N/NW project area*]

#64. Traces of occupation. Parker, 1922 [*2.5miles SW project area*]

#65. Shell midden. Parker 1922 [*1.5 miles S/SW project area*]

#44. Campsite. Solecki, 1941 [*1 mile S/E project area*]

#45. Campsite. Solecki, 1941 [*.5 mile N/E project area*]

#48 Habitation Site - alternative location for contact period Village of Jemeco (site #8). Site reportedly also contains Woodland

period component. According to Hazelton (1925), site located at South End of Beaver Pond [*1 mile N/NW project area at Baisley Pond*]

(#8 Habitation site on Beaver Pond with possible contact period component Massapequa Village reportedly referred to as Jameco by contact Period Native Americans. The name reportedly translates as Beaver Pond. #48 alternative for Village of Jameco. (NYSM#4531;ACP-Quns-8-not shown beyond 2.5mile limit;nw of project)

#33. Aqueduct Site habitation and burial site at head of Hawtree Creek,Smith 1950;Solecki 1982. [*2.5 miles W project area*]

#73. Artifacts from private collection (collected in Springfield area) Kerns and Kerkorian 1988:18)." (Boesch;1996a)

Additionally Boesch (1996b) records:

#12. Project area considered sensitive for prehistoric materials

B. Prehistory of the Project Area

As indicated above the project area under consideration for this report is located within a one-half to two and one-half mile radius of the above referenced reported prehistoric sites and/or potentially sensitive areas. Additionally, an

"1858 excavation of Baisley Pond for the Water Works (See Figure 4) found several teeth of mastodon while removing Peat (L.I. Democrat, 1858) This indicates that the drainage course that still feeds the pond was active when extinct animals were alive indicating possible Paleo Indian materials and the potential for Archaic and Woodland features" (Greenhouse,1995) *[#48 above - 1 mile from project area*]

Due to it's proximity to known prehistoric sites, availability of fresh water, it's location between the two branches of Long Neck Creek (See Figure 4) and it's depiction as upland which would have provided an elevated position from which to exploit local marine resources and wetland features, the project area must be considered sensitive for aboriginal sites. This opinion is corroborate by the New York State Museum which evaluates the area as having a "High probability of producing Prehistoric Archaeological Data". (See Appendix B).

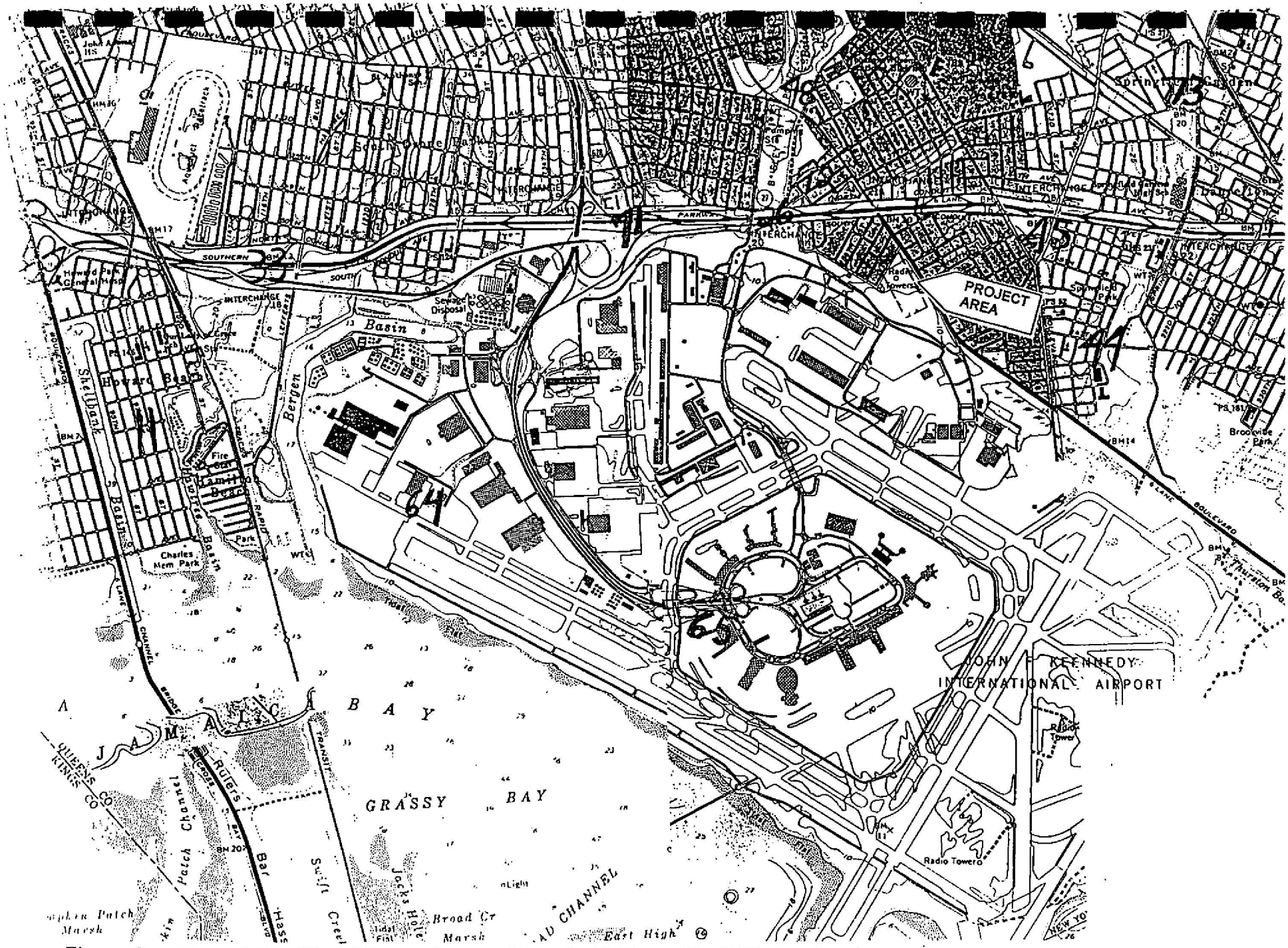


Figure 3 - Map of Identified Sites in Queens;Boesch 1996; on file NYC Landmarks Preservation Commission

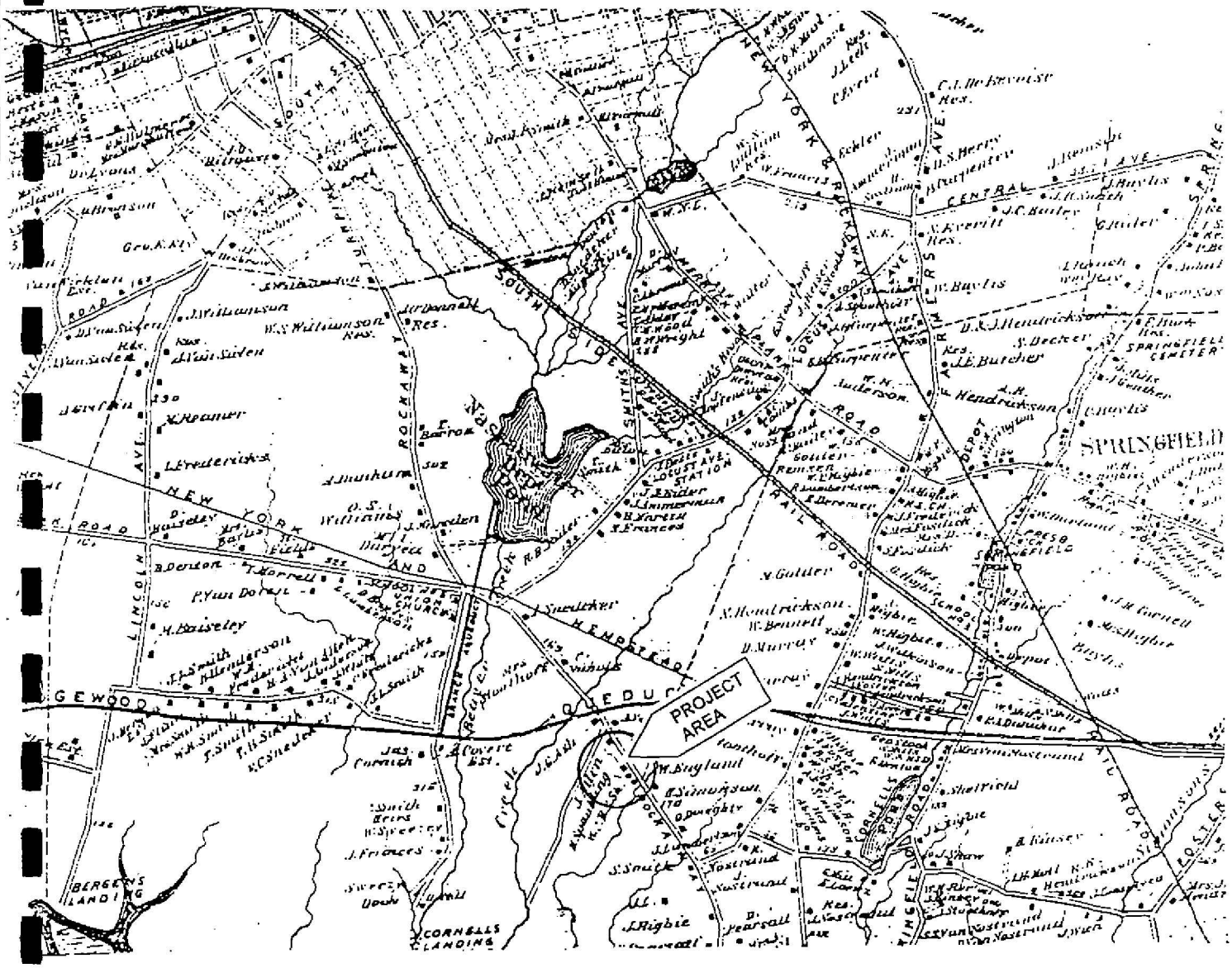


Figure 4 - 1873 Beers Atlas

IV. HISTORIC BACKGROUND

A. Seventeenth and Eighteenth and Nineteenth Century Occupation of Jamaica - A Brief Account -

The history of Jamaica begins with the execution of a land deed in 1655 with the local Native American groups:

> "Bee it known unto all men by these presents that wee whose names are under written have sold and set over from ourselves, our heires, executors, Administrators or Asigns unto Mr. Richard Odell, Nicholas Tanner, Ridhard Ogden & Nathaneil Denton, their Associates, Heirs, executors, administrators Assaignes A Certain tract off land *beginning at a great swamp lying on ye west side of Rockeway Neck* and so running westward to a river lying on ye east side off a neck off land which Mr. Coe hath hiered off ye indeans, which river is called by ye indeans Waubheag; ye North line running Near unto or about ye path yt goes from Hemstead [to?] Middlburrough, wt all ye uplands & meadowing within. ye afforesd bounds with all privilleges & appurtenances therunto belonging. In consideration whereoff the aforesd Mr. Richard Odell, Nicholas Tanner, Richard Ogden, Nathaniel Denton & their Associates shall give unto theese whose names are under written two guns, a coat And a certain quantity of powder and lead. In witness whereoff we have subscribe our hands this 13th of September Ano Domini 1655." This deed is signed by Daniel Denton and By Roger Linas, Casperonn, Adam or Achitterenose, Ruckquakek, Runnasuk, Aumerhas, Caumeuk, Manguaope and Waumetompack by their marks." (Munsell,p193)

In 1656 the settlers, originally from Hempstead, petitioned the Governor General of the New Netherlands, Peter Stuyvesant, for the as yet uninhabited land between Carnesse and the town of Hempstead. (Munsell, p.195) A 1660 patent was granted naming the town 'Rustdorp'. Munsell further discusses the division of lands among the original settlers and newcomers, especially concentrating on the common lands and the property around Beaver Pond. According to Gibson (nd),

> " The first official settlement was established around the Beaver Pond area. Each man was granted a house lot within the stockade, a plantation lot for farming, a forest lot for firewood and a meadow for raising cattle and horses. As exemplified in the land distribution, Rustdorp, during that time, was primarily an isolated farming community" (Gibson,nd).

When the British overran the New York Dutch colony the name of Rustdorp was changed to Jamaica, derived from a Native American word for Beaver. The town of Jamaica splayed out around the originally settled area of Beaver Pond. Here Jamaica's first churches were built, The Dutch Reformed in 1695 and Grace Episcopal in 1701. It was around these churches that much of Jamaica's history evolved as it became a political center for Queens. In 1809 the Brooklyn, Flatbush and Jamaica Company began work on a road to make Jamaica accessible to New York City. In 1866 a Railroad was completed from Brooklyn to Jamaica as was the Jamaica and Brooklyn Plank Road. In 1870 the Long Island Railroad extended it's south side branch from Long Island City to Babylon passing through Jamaica. Most of the occupants settled near the town and the prosperous village grew into a city in the Twentieth Century. It was within or near that city that much the historically significant activities occurred and structures of Jamaica reside with the exception of the Nassau Water Works Aqueduct which ran just to the west of the property site northeast to Baisley Pond. However, the once isolated farming community now had an easy and convenient way to move their produce from Jamaica to Brooklyn and New York City. These farms, providing the urban metropolis with farm products and goods to be consumed in the urban center, played a significant role in the growth of New York City.

Although the rich wildlife of Jamaica Bay and it's use as resort land is discussed by Munsell no discussion of the ownership of the marshlands was located. However, a L.I. Review Star article (7/30/48) mentions that "Each upland farmer who tilled the soil of Richmond Hill, Ozone Park, Forest Hills and Jamaica was given a piece of

marshland so he would have a source of salt-hay to bed down his cattle. The division of the lands in the southeastern portion of Jamaica, bordering the marsh and of the marsh itself is first illustrated in the Conklin Survey, (1860 no photo available) and do not appear to change in the 1891 Wolverton map (Figure 5;Note the lone structure present

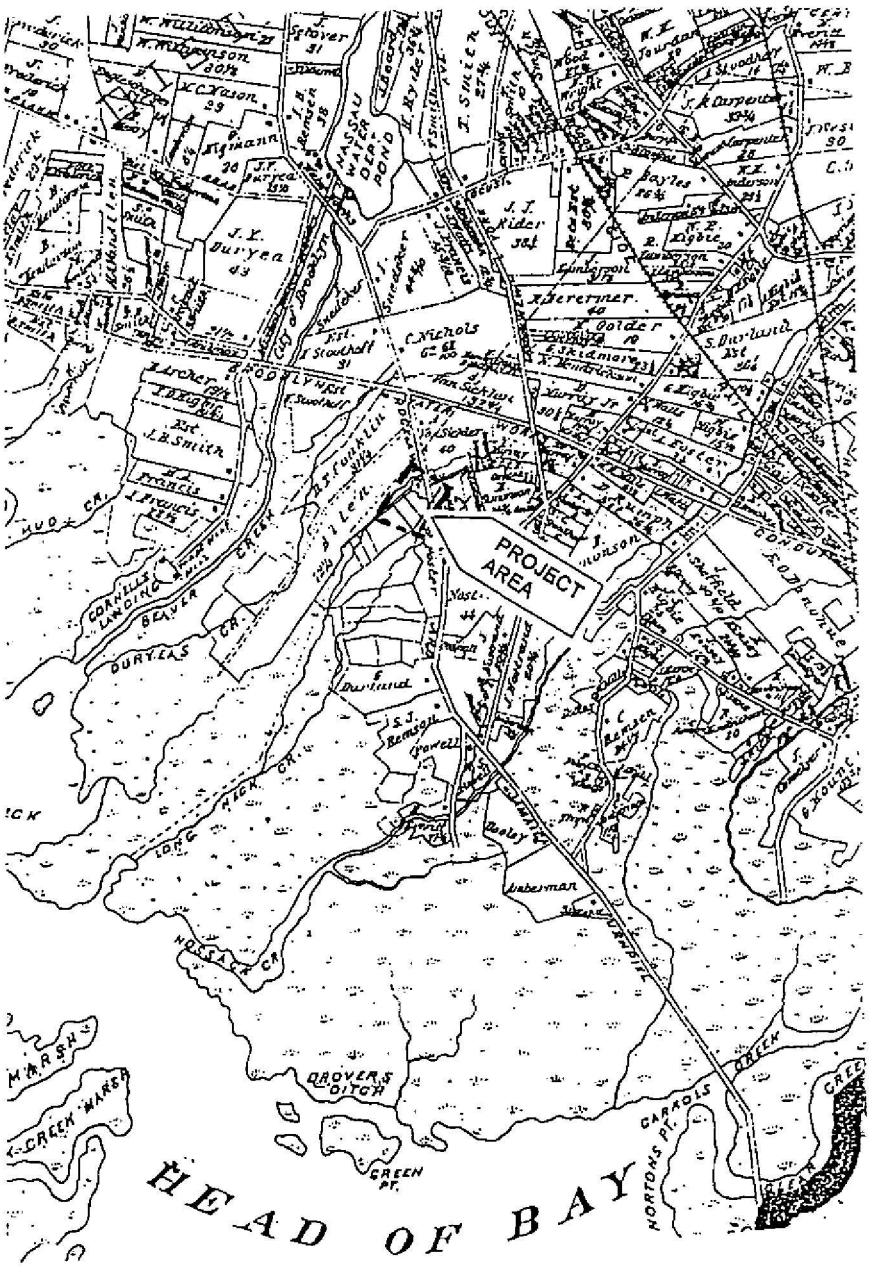


Figure 5 - 1891 Wolverton Map

in the area of the project. By 1909 (Figures 6 and 7) divisions of all lands including the marshlands along Jamaica Bay were privately held.

B. Seventeenth, Eighteenth and Nineteenth Century - Occupation of the Project Area

Prior to the 19th Century discussion of the project site as meadow and/or a resource for salt hay are the only evidence of it's use.

While the town of Jamaica was growing the section of Jamaica encompassing the project area also saw some early 19th Century occupation. Our first view of the project area is through the 1852 Dripps map which shows the area as marsh and upland along Rockaway Turnpike. The1873 Beers Atlas (Figure 4 & 8 enlarged) which does not indicate property lines shows some structures along the south/west side of Rockaway Turnpike, which may be located in the vicinity of the project area. The 1891 Wolverton (Figure 5) illustrates several small parcels in the area of the project site east of *Allen* and west of *P. Foster*. The structure shown in the corner of this area is likely either *H. Spaulding* or *W. B.S. Sh.* shown in the 1873 map.

C. Twentieth Century Occupation of the Project Area

The 1901 Hyde Map (Figure 6) delineates the beginning of modern building in this section of southwest Jamaica. The previously *D.T. Conklin* (Figure 5;1891) property has been transformed to *Idlewild Park* a residential development; *Allen* has been purchased by *F&G Pouch*, *A. Foster* retains his land and the previously unnamed parcels some of which form our project area have names associated with them; *H. C. Spaulding* remains; *A. Covert* owns +- 11Acres. The 1909 Bromley map (Figure 7) illustrates some change in ownership. *Idlewild Park* remains, the *F& G Pouch* property

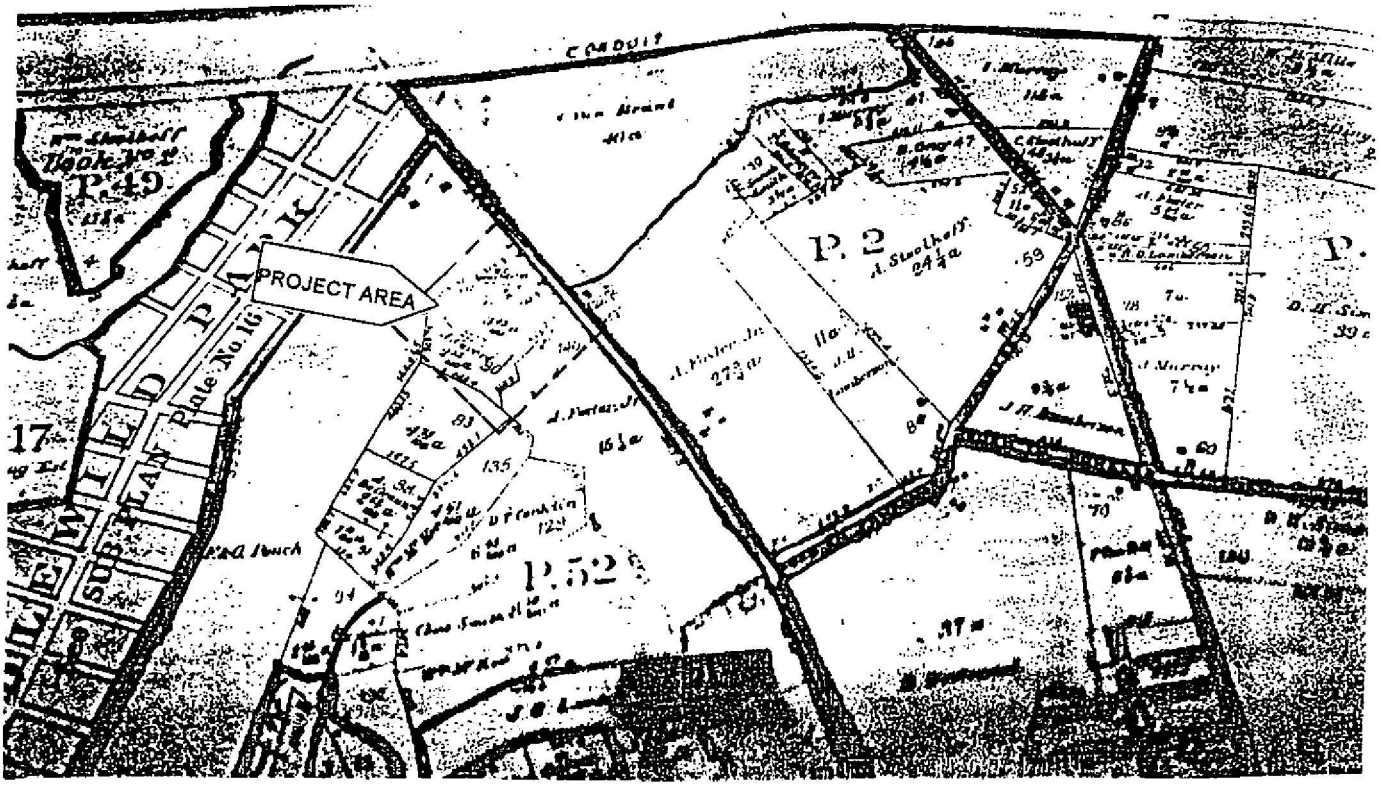


Figure 6 - 1901 Belcher Hyde Map

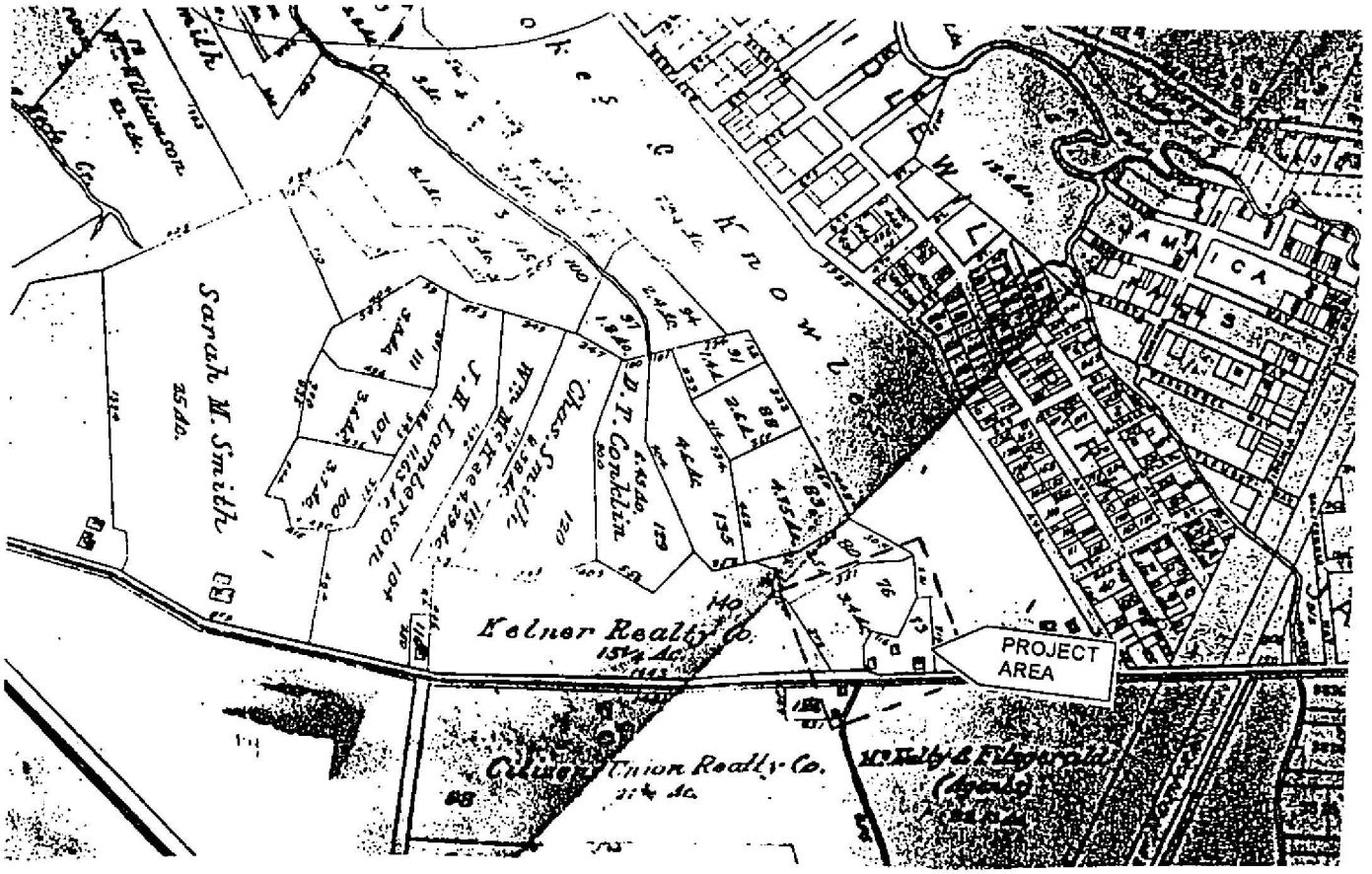


Figure 7 - 1909 Bromley Map

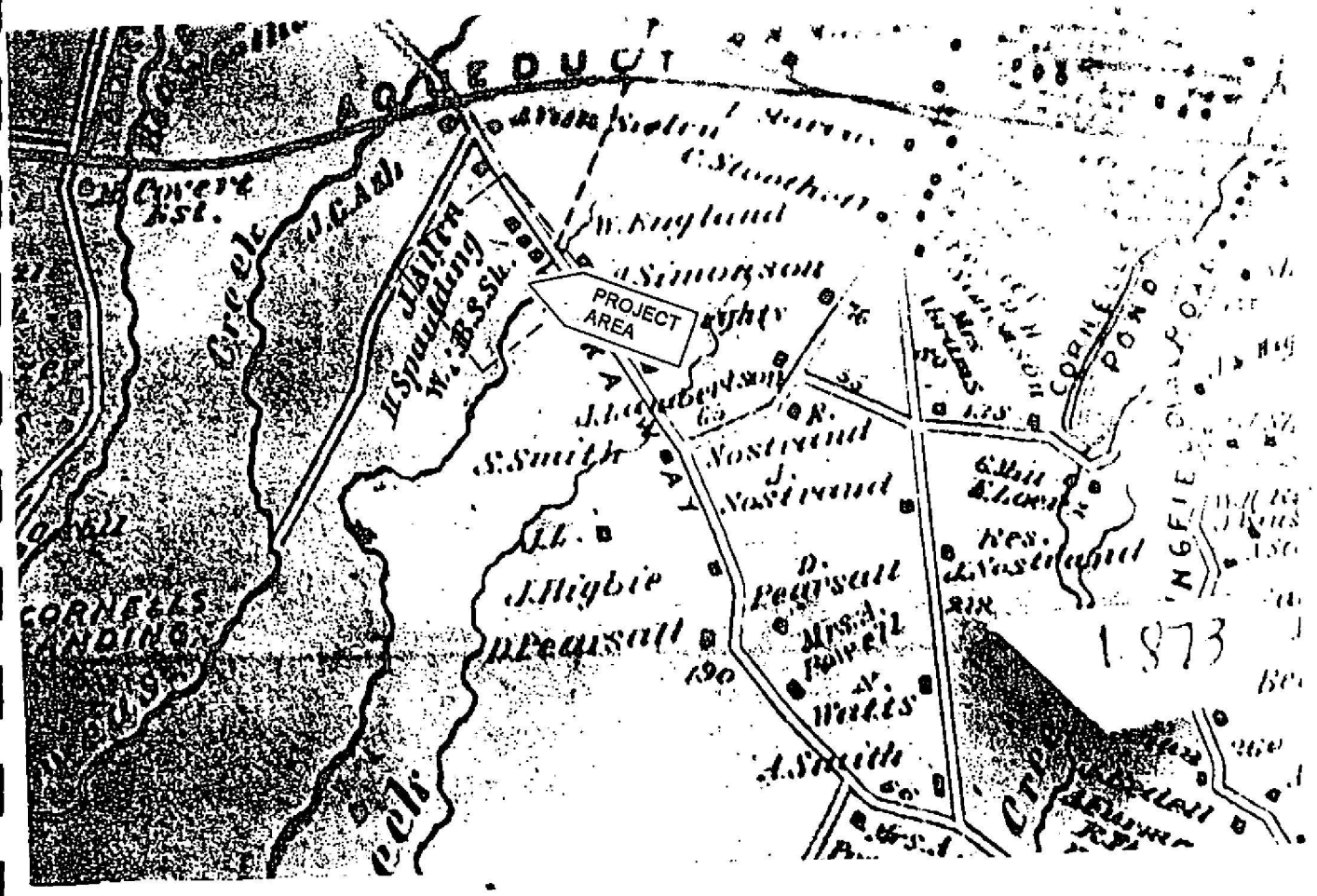


Figure 8- 1873 Beers Atlas (enlarged)

is now owned by *Stokes* and *Knowles*. The small parcels that make up the project area remain unchanged with perhaps the addition of two buildings on *Spaulding* next to the *Kelner Realty Co.* (formerly *P. Foster*).

The 1921 Hyde (Figure 9) illustrates additional changes. While the corner of the *Stokes and Knowles* property remains the same, it's western portion is subdivided. This western subdivision road will become 159th Street and the border of lot 4276, presently 14260 or the project area. Note the buildings on Lot 4276 which appear to be new and the 2 story structure and outbuilding which appear to be the remaining *Spaulding* structures; the easternmost building appears to be gone. The *Kelner Realty* property has become Rockaway Terrace inclusive of Jefferson and Columbia and Madison Streets, while the section between *Spaulding* and *Rockaway Terrace* is not developed.

The 1931 Hyde (Figure 10) shows a Gas station in the corner of the project area, the adjacent two buildings missing, an additional gas station on the former *Spaulding* property as well as additional structures, outbuildings and garages on the south side. It is uncertain, but appears that the large two story dwelling on this map is the original Spaulding house, due to the consistent shape of the two story structure and the location of an outbuilding directly behind the L-shaped extension which is similar to the 1921 Hyde depiction. No direct information regarding the occupants nor occupation associated with these structures was identified. Lot 4286 retains its structures. Note the Marsh Line running along the western border of the property cutting just below 'Spaulding' and up to Rockaway Turnpike.

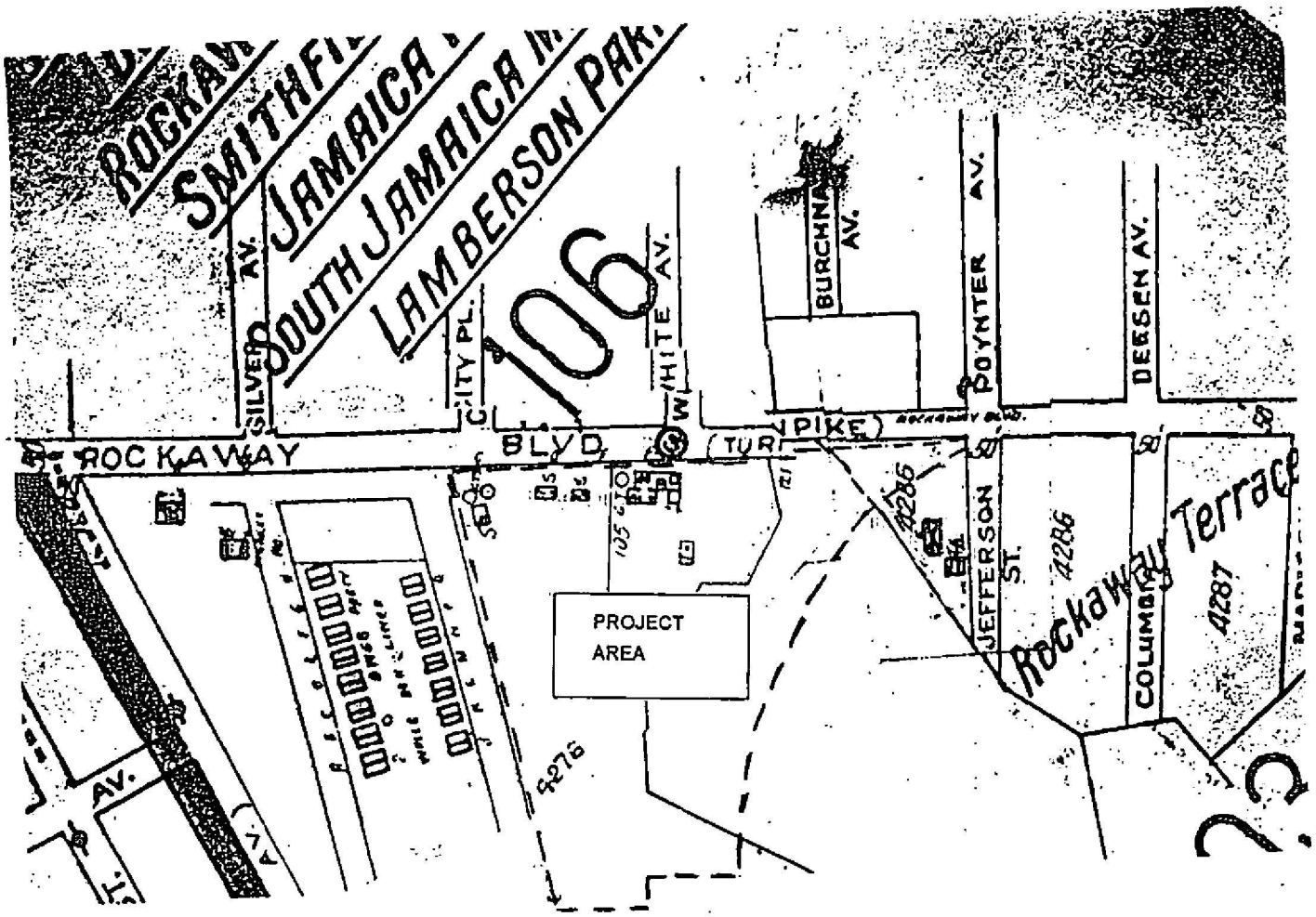


Figure 9 - 1921 Belcher Hyde Map

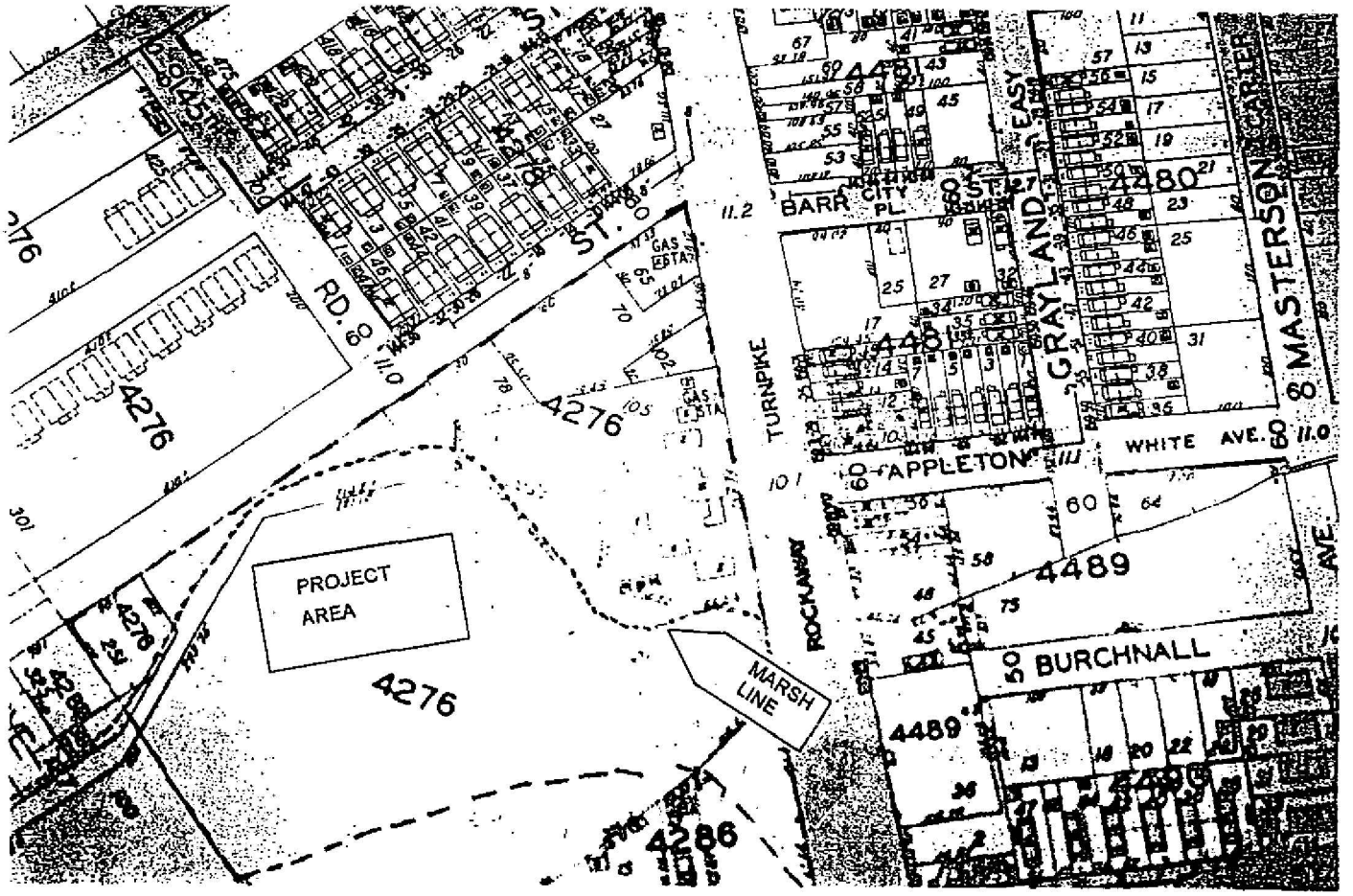


Figure 10 - 1931 Belcher Hyde

The 1937 Sandborn (Figure 11) details the further development of the western section of Lot 4276 to the west of 159th Street below 145th Street and to the Southeast. The majority of the project site property, however, remains unchanged. You will note Lot 4281 "All property below section of 146th Street now belongs to New Idlewild Airport." Again note Marsh Line.

D. Major Twentieth Century Changes to the Occupation of Jamaica Bay Environs and the Project Area

Idlewild Airport

The 1937 Hyde Map reflects a major change in the area of Jamaica Bay and it's environs. Although a small airfield, Anderson Field, was located within the Jamaica Bay marsh prior to 1939 a Long Island Daily Press article (August 19, 1940) discusses the proposal of a municipal airport in the area. By 1941 the "City had acquired the nucleus of the Idlewild site, a total of 1,190 Acres and continued to add space." "Some 1,867 buildings were condemned, steam shoveled and bulldozed." (Long Island Daily Press, Feb. 26, 1945) and plans were underway for the construction of the '*Airport of Tomorrow, the World's Largest* ...'(Long Island Daily Press, July 1943) on the Jamaica Bay marsh.

Situated at the north end of Jamaica Bay, "Dredging of the waters of Jamaica Bay provided the fill for the vast acreage with some 41,000,000 cubic yards of fill...the fill consisted of ten feet of sand on top of about six feet of marsh grass and at least fifty feet of sand." (Long Island Daily Press 7/43). By 1948,

> "they had raised the whole surface of the area, which is five miles from east to west and two and a half miles from north to south. In three and a half years...[they] raised the field an average of eight and a half feet. Into the area, they poured 65 million cubic yards of white sand dredged by ships from Jamaica Bay".(Long Island Daily Press, 6/27/48),

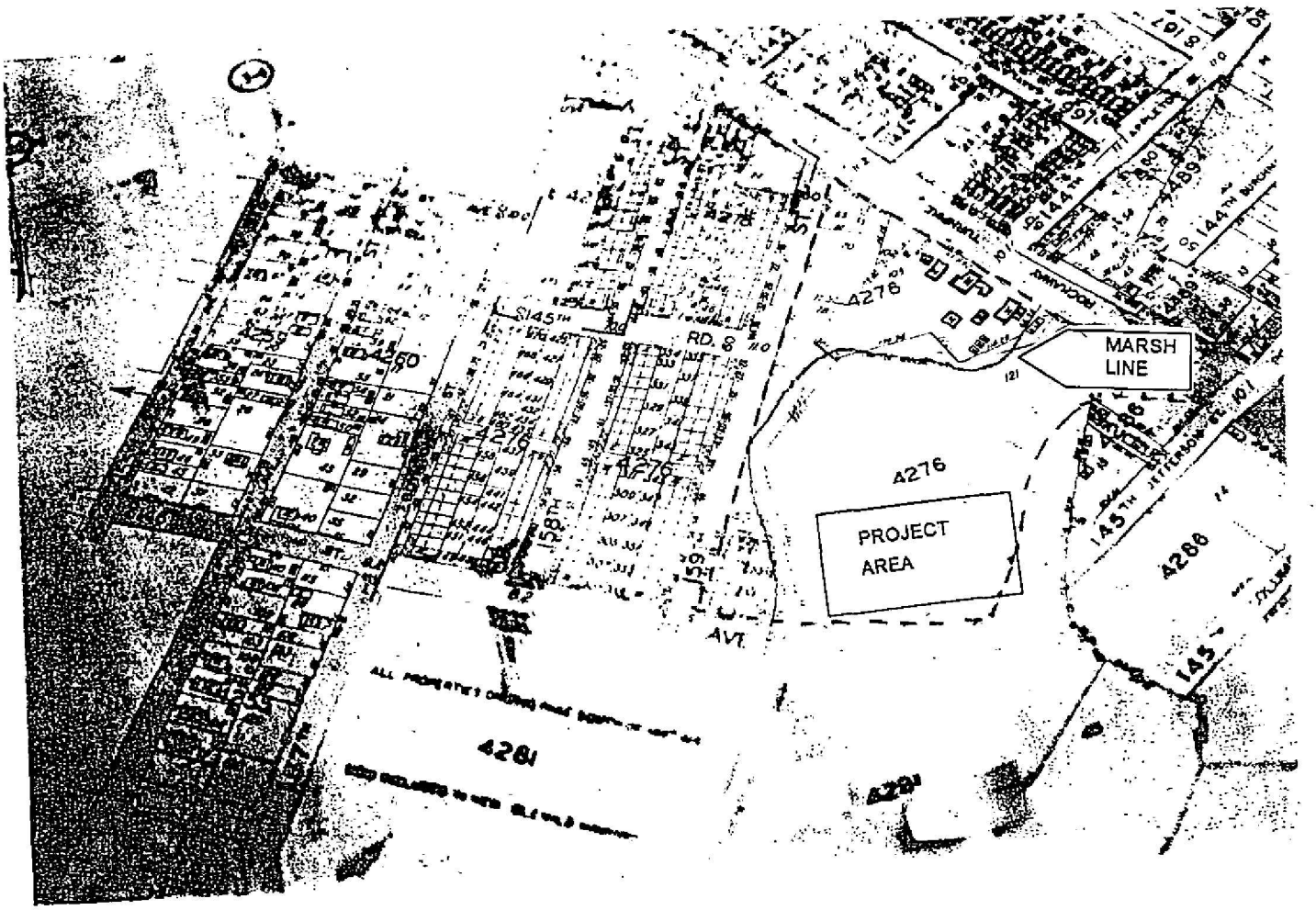


Figure 11 - 1937 Sandborn Map

And, by 1949 it was reported that ,

> "Construction began in April 1942 when the first dredge was put to work in Jamaica Bay to transform the 4,900 Acres of marshy swampland. In the next few years 68,200,000 cubic yards of hydraulic fill was dredged out of the bay" (Rockaway Review, June/49).

Clearly, the development and expansion of Idlewild Airport, renamed New York International Airport after 1947, altered the face of the Jamaica Bay environs and the project site. It is unknown which episode of land purchase or bulldozing specifically changed the topography in the project area. The 1937 map does not designate the project area nor any of lot 4276 as "Part of Idlewild Airport" as it does Lot 4281, however, a 1955 Port of New York Authority, Facility Location Map, New York International Airport (Figure 12) clearly illustrates the project area sectioned off with a small roadway open to Rockaway Boulevard (Turnpike), but shows no associated buildings.

The 1957 U.S.G.S. Jamaica Quadrangle map (Figure 13), depicts the project area in it's new role as part of the New York International Airport. According to the Long Island Daily Press (August 10, 1944) "The Mayor said that with the aid of radar and other technical devices and improvements developed in the war, airlines operating from Idlewild Airport expect to maintain their schedules with railroad precision in fog, or snow and rain". By 1957 (original construction date unknown) the project area contained the Radar Tower and Power Station for the airport. This is not believed to be the original Radar Tower as the 1955 Port Authority map locates a Radar Tower and a Radio Transmitter near the Western edge of the Airport facilities. The 1974 Hyde (Figure 14) Map clearly indicates that the property is part of John F. Kennedy Airport

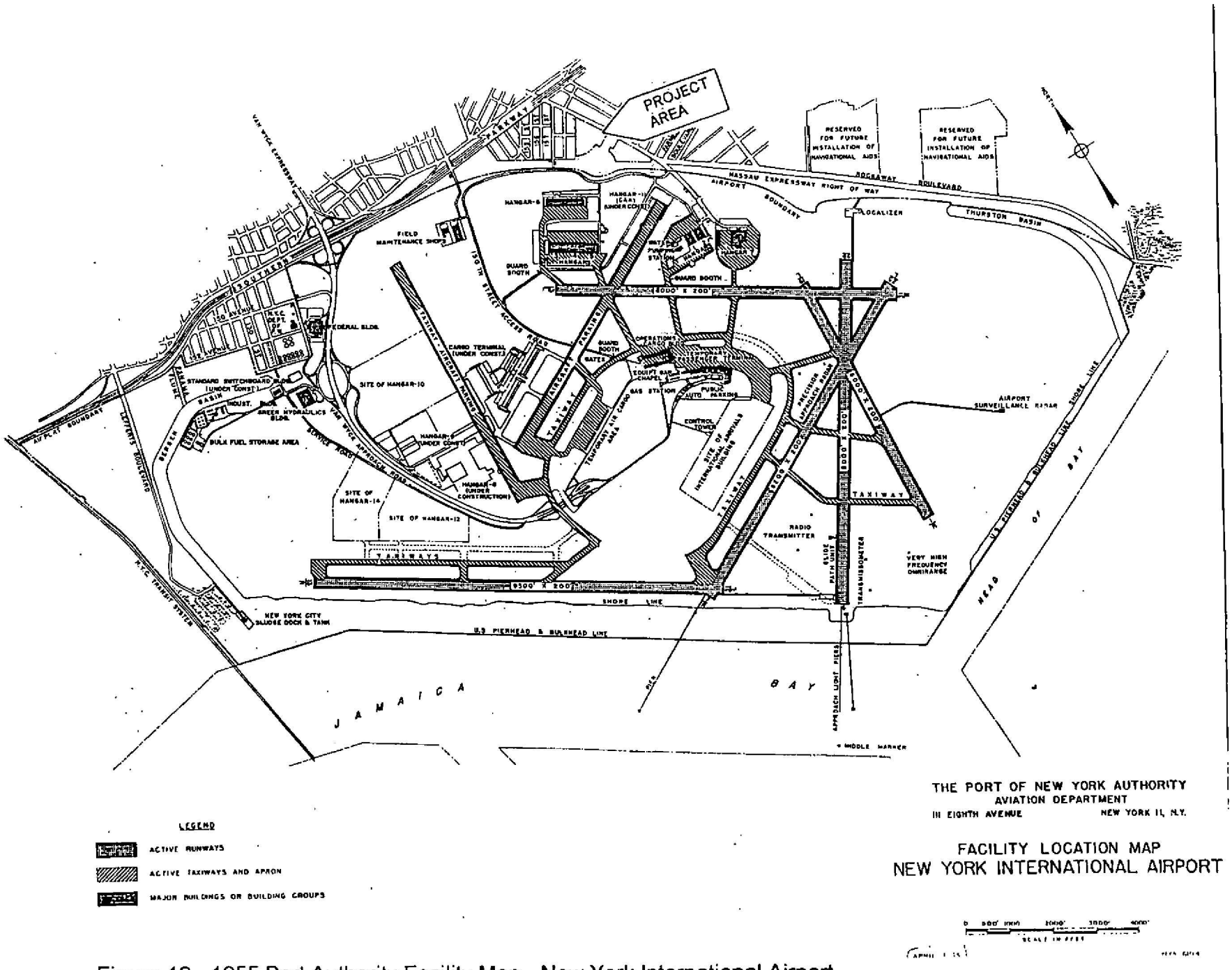


Figure 12 - 1955 Port Authority Facility Map - New York International Airport

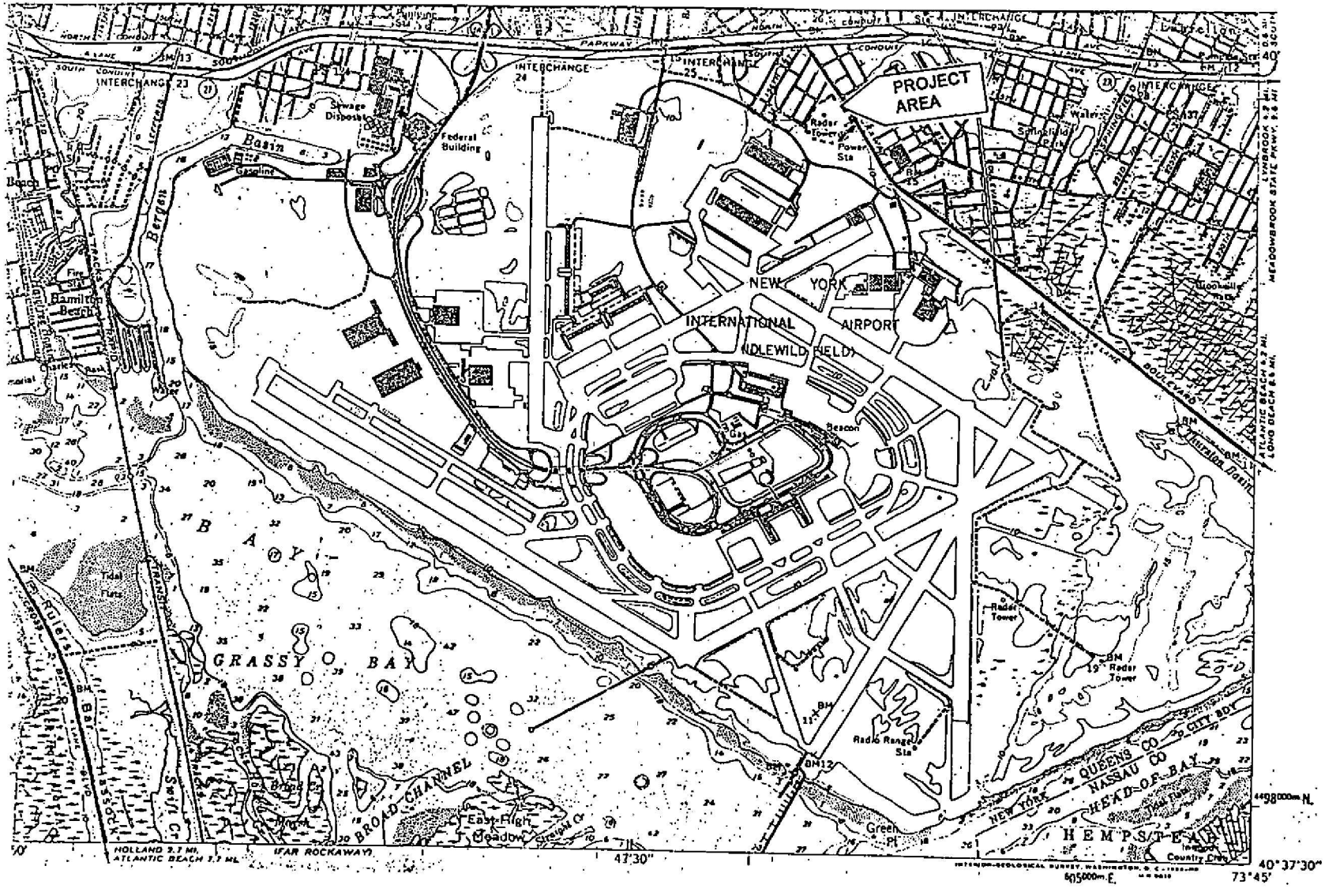


Figure 13 - 1957 U.S.G. S. Jamaica Quadrangle Map

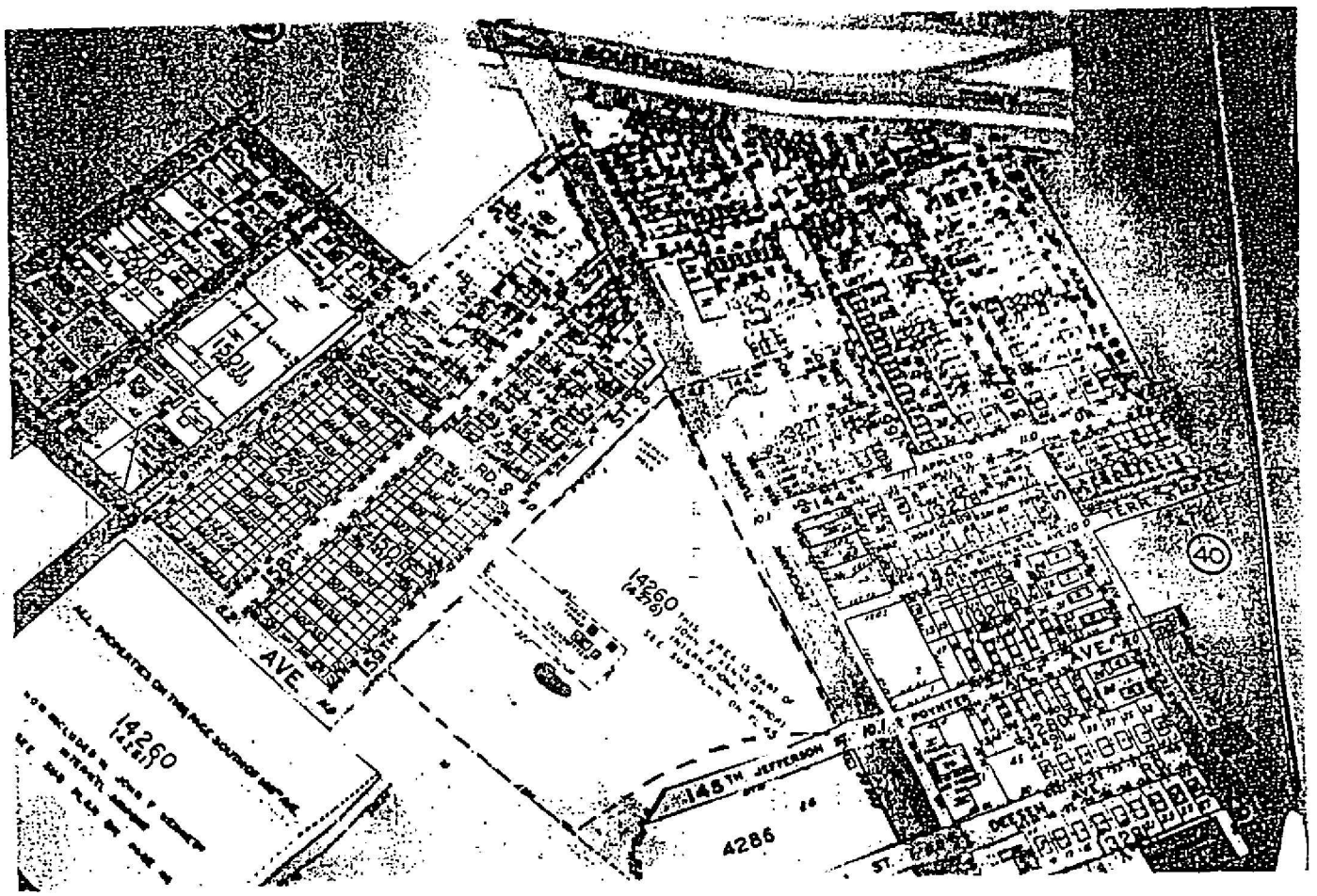


Figure 14 - 1931 Belcher Hyde ;updated to 1974

and pinpoints the location of the Radar Tower, Radio Transmitter and outbuildings on lot 14620 (formerly Lot 4276), at three hundred feet south of 159th street midway between 145th Road and 146th Avenue. All other structures, as well as those on Lot 4286 are gone. You will note the American Legion Field in the northwest corner of the project area where the gas station once stood.

The Nassau Expressway

In 1954 for the first time the Proposed Nassau Expressway is expressed in dotted lines on the Hagstrom's Atlas of Queens and Nassau Counties. The 1957, 1978, and 1989 all show different configurations of this proposed roadway in relation to the project site area. Finally, the 1997 illustrates the final designation of this roadway and the current size and shape of the project area and adjacent land.

Figure 15 (1974Belcher Hyde map) is included to illustrate the vast size of the John F. Kennedy International Airport (dedicated on December 24, 1963) and change to the landscape when compared to the 1873 Beers (Figure 3).

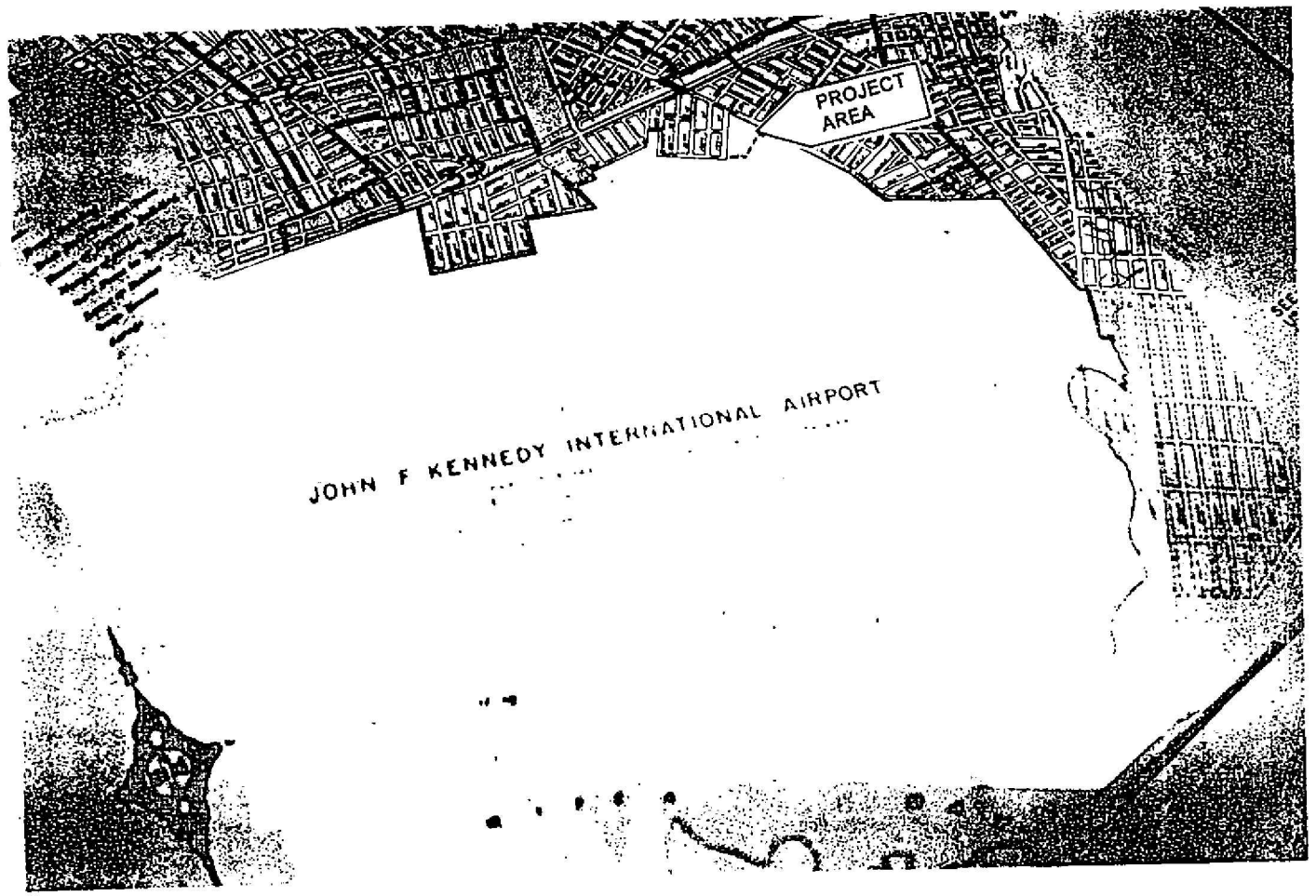


Figure 15 - 1974 (updated 1931 Hyde)

V. GEOLOGIC DATA ON PROJECT SITE

The 1915 Final Maps of the Borough of Queens (no photo available) illustrates that most of the project area lay five feet or less above mean high water. Only the northwest portion of the project area bordering Rockaway Turnpike and 159th Street was depicted as being above this level. Figure 11 corroborates that only this portion of the project area was above the marsh line.

Although the soil borings (Please see Figure 16 & 17) do not delineate the marsh line (ie. evidence of peat across the site) making it difficult to determine the natural sands from fill sands, they do contribute to a further understanding that most of the area was below or just above mean high water. Water was encountered at two feet five inches to three feet below grade in three of the six tests. These tests were conducted in sections of the property that could have received up to five feet of fill. The deeper water table (three feet eight inches) at Boring B6, (located close to the tower) is likely the result of additional fill added during the construction of the tower and associated buildings.

Boring B5 at the northwest corner is located at one of the highest spot on the property. The boring indicates that the fill, here, is more shallow than at most other parts of the site perhaps only two feet. As expected the water level here is deeper, placed at five feet two inches below grade. Boring B2 also indicates a level of fill from two to two and one half feet and a water level of three foot eight inches. Both these borings demonstrate consistency with the historic maps that indicate that this portion of the property is on upland, just above the marsh line.

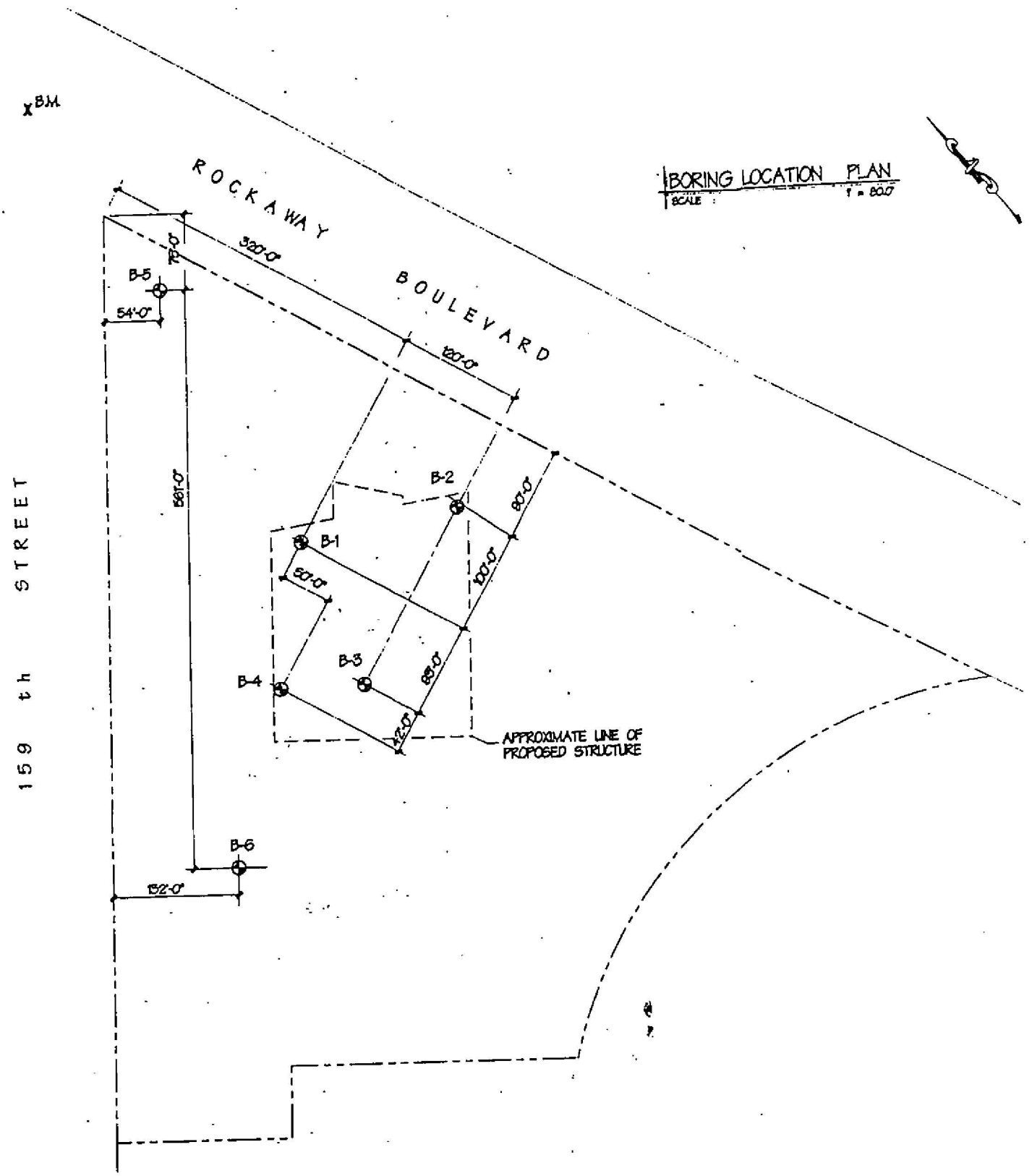


Figure 16 - Boring Location Map -Courtesy of Soil Mechanics, Inc. 1997

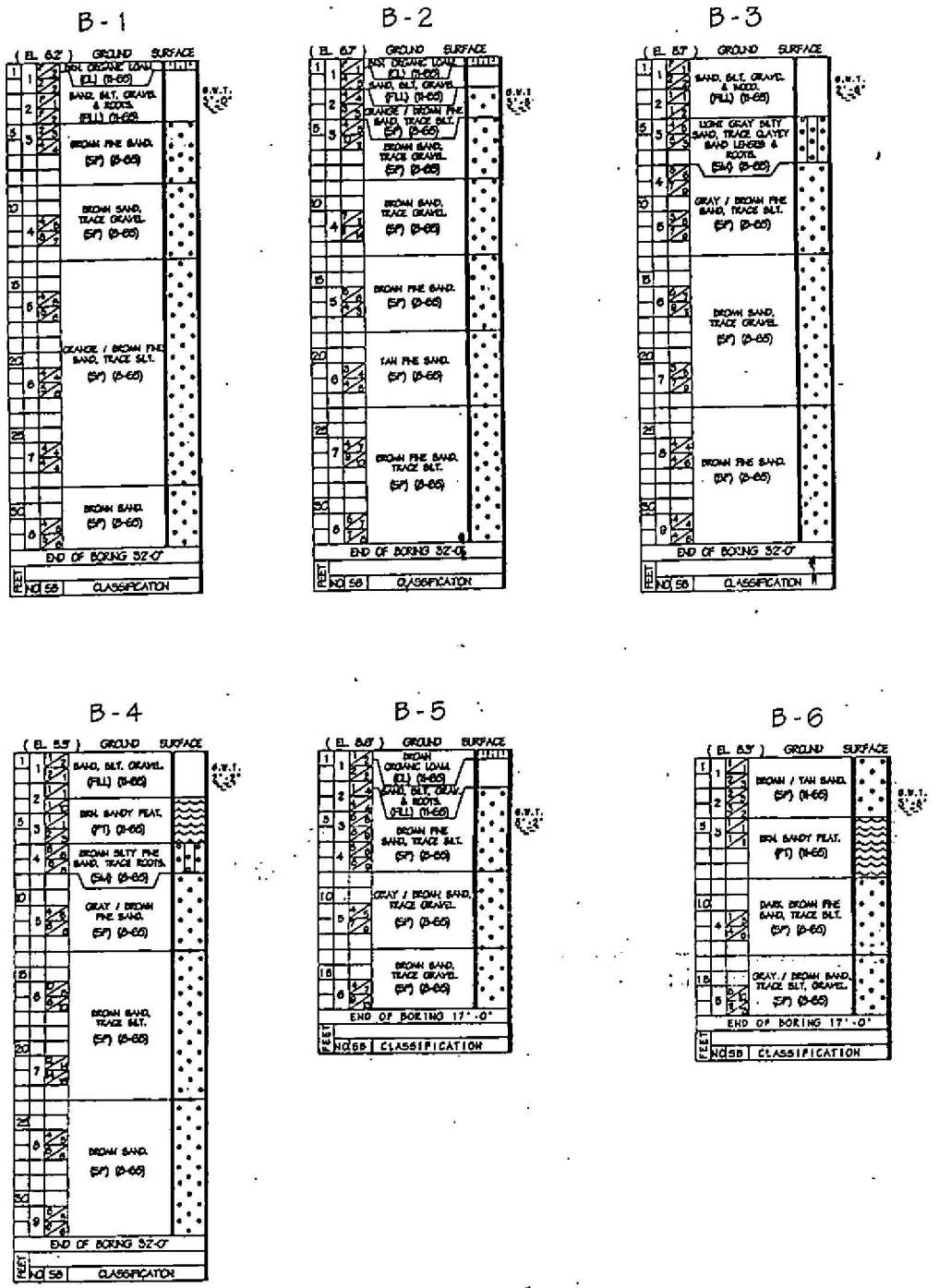


Figure 17 - Soil Borings - Courtesy of Soil Mechanics, Inc. 1997

VI. DISCUSSION AND RELEVANCE OF THE DOCUMENTATION TO THE CURRENT PROPOSED PROJECT at 159 Street and Rockaway Turnpike

A. Prehistoric Cultural Resources and Sensitivity

Undisputed dramatic topographical change has occurred to the southwestern section of Jamaica in the area of Jamaica Bay and environs. Extreme fill episodes have undoubtedly produced deeply buried stratified prehistoric cultural resources in some areas. In addition dredging episodes may have inadvertently deposited prehistoric materials on top of historic living surfaces resulting in the potential for recovery of prehistoric materials from disturbed strata.

The 1915 Final Maps of the Borough of Queens indicate that most of the land within the project area, with the exception of the northwest corner, was close to or below mean high water indicating that it was not suitable for prehistoric occupation. This northwest corner land surface bordering Rockaway Turnpike and 159th Street being somewhat higher than the marshland to the south might have offered natives a point of departure into the marsh or served as a processing area.

Much of the area that might have been utilized by Native Americans has been disturbed by historic construction and demolition. Grading associated with these episodes may have disturbed prehistoric materials remaining within the first two feet across the area and/or additionally heightened the grade protecting them. Although the marsh lands certainly would have been exploited by these people, the expectation of more than scattered finds there is unlikely. Additionally this low lying marsh area would have undergone deep fill episodes (up to five feet) leaving prehistoric levels five to seven feet below current ground surface.

Areas which might not have been impacted by construction excavation and may yield prehistoric materials are marked on Figure 18 (with overlay).

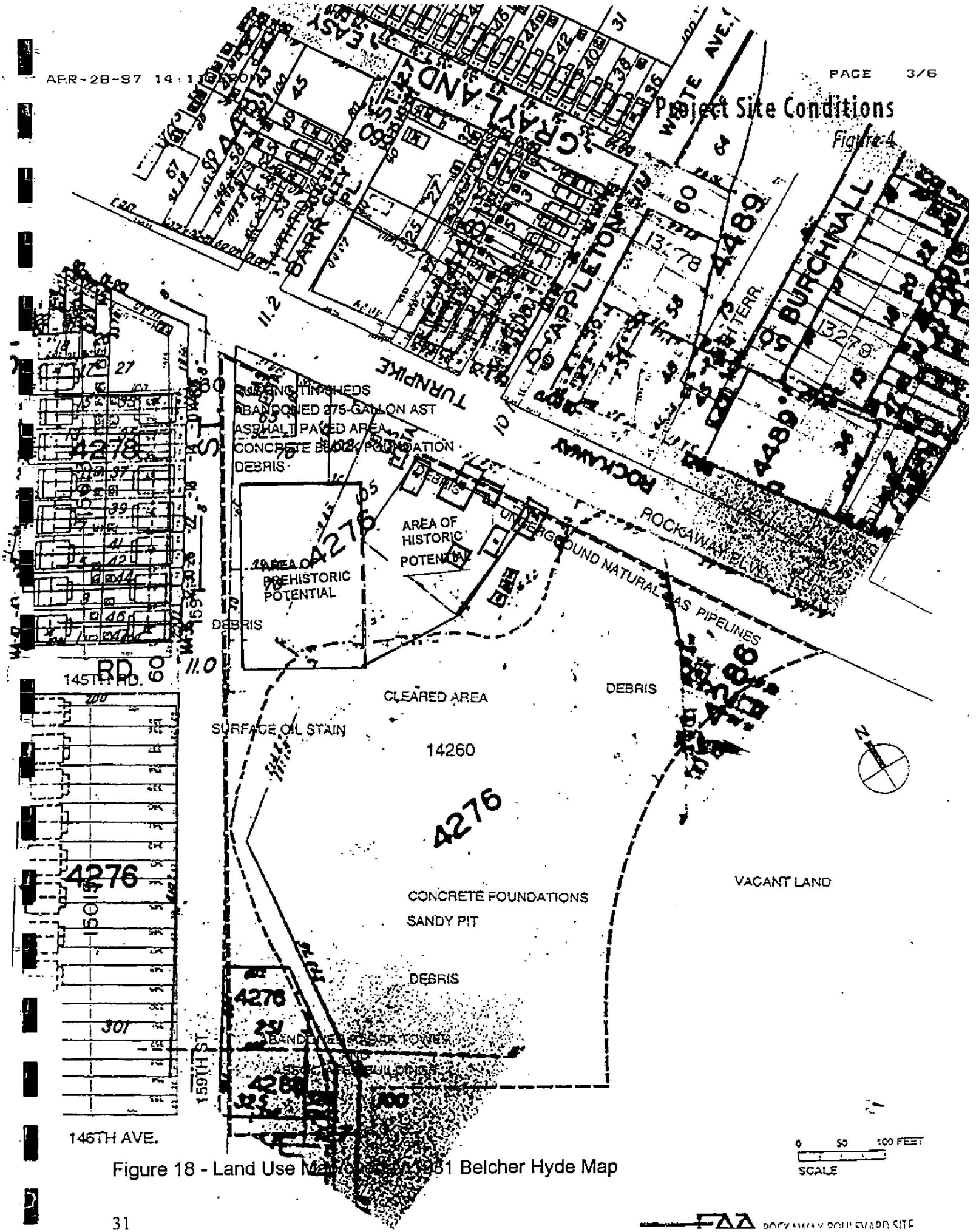


Figure 18 - Land Use Map, 1981 Belcher Hyde Map

ROCKAWAY BOULEVARD SITE

Project Site Conditions

Figure 4

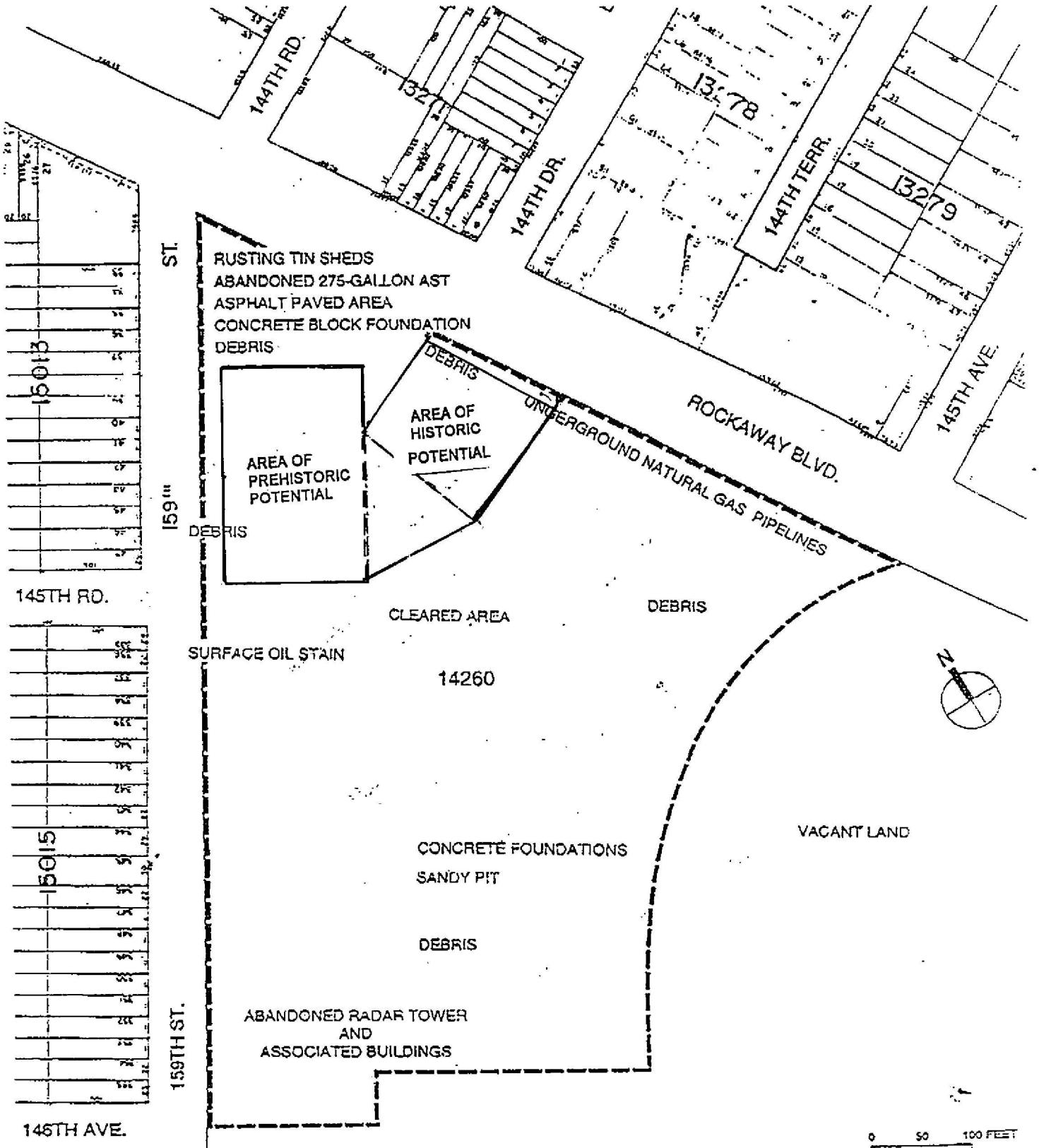


Figure 18 - Land Use Map/overlay 1931 Belcher Hyde Map

B. Historic Cultural Resources and Sensitivity

No references to any significant activity, significant person, event nor group was established during the documentary research relative to the project site. Of possible historic significance, however, is the *J. Spaulding* homestead which is present as far back as the 1873 Beers Atlas map (possibly the Dripps 1852). This structure appears to remain at least until 1931 and potentially until the property was acquired for the construction of the Idlewild Airport. At least one outbuilding is associated with this two story house structure and might have survived with it. Even in the face of continued reuse of the land the section potentially containing features associated with these structures does not appear to have been utilized. Privies, cisterns and wells associated with the original construction of the *Spaulding* house and the *Wm. S. Sh.* may remain in situ.

All other structures appear to be built post 1901 and do not demonstrate any significance.

The Radar Tower structure and outbuilding presently on the property are associated with a later phase of development of the airport, not of any significant architectural relevance, and therefore are not considered historically significant (see Appendix A).

Since the land surface bordering Rockaway Turnpike was somewhat higher than the marshland to the south and based on the soil borings it is clear that the sand fill associated with the construction of Idlewild Airport is not as deep along this roadway. The buildings associated with *Spaulding* were assumed to have been demolished

during the Idlewild construction episodes. Grading of the area after these episodes may have additionally hightened the grade. (See Figure 18 & 19)

C. Current Site Data

A full pedestrian reconnaissance was not possible due to the fencing around the site. However, the site was visited twice and photographs taken. (See Appendix A) The site is bounded on the north/east by the Rockaway Turnpike, the south/west by the Nassau Expressway, the north/west by 159th Street and the south/east by a point of land meeting the intersection of the Rockaway Turnpike and the Nassau Expressway (near Farmers Boulevard). (See Figure 1)

The portion of the property adjacent to Rockaway Turnpike and the northern section of 159th Street appears to be three to four feet below grade; six feet below grade (personal communication; Gary Davis, Edward J. Minskoff Equities, Inc.;May 2, 1997). Most of the property is cleared and covered with grass and/or a type of tall marsh grass. Some deciduous and flowering trees line the property, especially on the north and the east. Low shrubs are scattered along the borders. (See Appendix A;Plate A and B.)

The corner of 159th and Rockaway (see Appendix A;Plate C and D) consists of low lying land containing two sheds and a basketball court (in use by local youth) with blacktop surface, in the area where the 1921 Gas Station once stood and later the American Legion Field. At the opposite corner, the northwest, stands the radar tower and two outbuildings (Appendix A; Plate E and F) but, not as they appear on the 1974 map. Apparently the current structures are more modern than those circa 1974 which

stood 300 feet from 159th Street. Opposed to that diagram the tower now stands directly next to 159th Street and west of a one story building with basement. The Land Use, Inc. Map 1997 (Figure 18) shows foundations on the site of the earlier tower location. Running perpendicular to the radar tower is 146th Avenue. All development west of 146th Avenue has been demolished and it, as well as the tower, are separated by a small hill/wall from Nassau Expressway. There appear to be no other buildings or visible foundations on the property.

Clearly portions of the site have been disturbed. (See Figure 18 with overlay) The northeast corner would have experienced extreme disturbance with the excavation for the gas tanks. Additionally along the west border (Rockaway Turnpike), the location of the second gas station; other structures and the installation of natural gas lines in the 20th century would have impacted deposits.

The section once containing the Spaulding residence and outbuilding directly behind it experienced no subsequent documented sub-surface disturbance.

The previous location of the radar tower and outbuildings would have produced sub-surface disturbance in that area, foundations remain.

At least one of the present outbuildings associated with the current radio tower has a basement.

Project Site Conditions

Figure 4

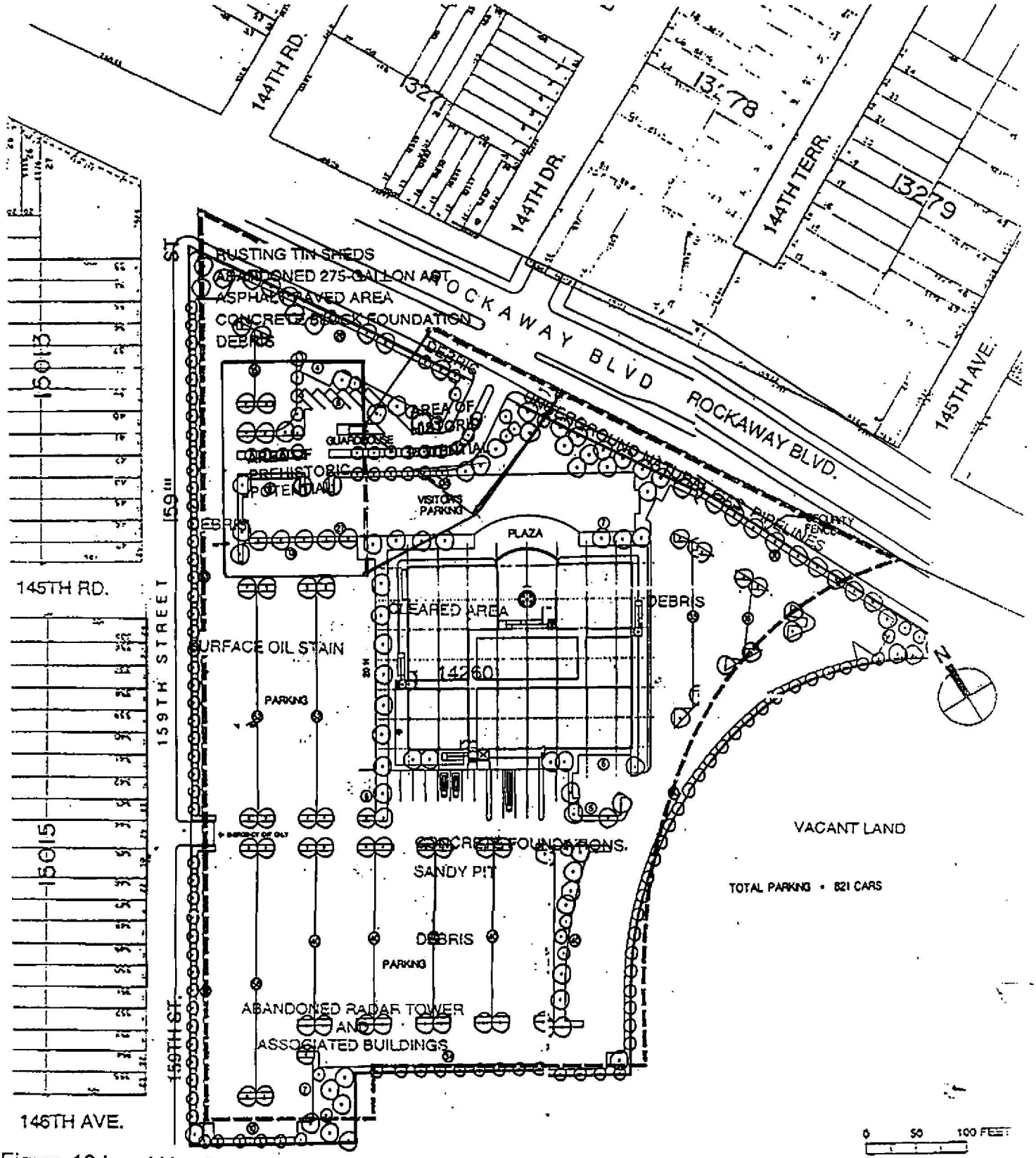


Figure 19 Land Use Map 1997- Courtesy Allee, King, Rosen &Fleming, Inc. - Overlay Proposed Building Location

Project Site Conditions

Figure 4

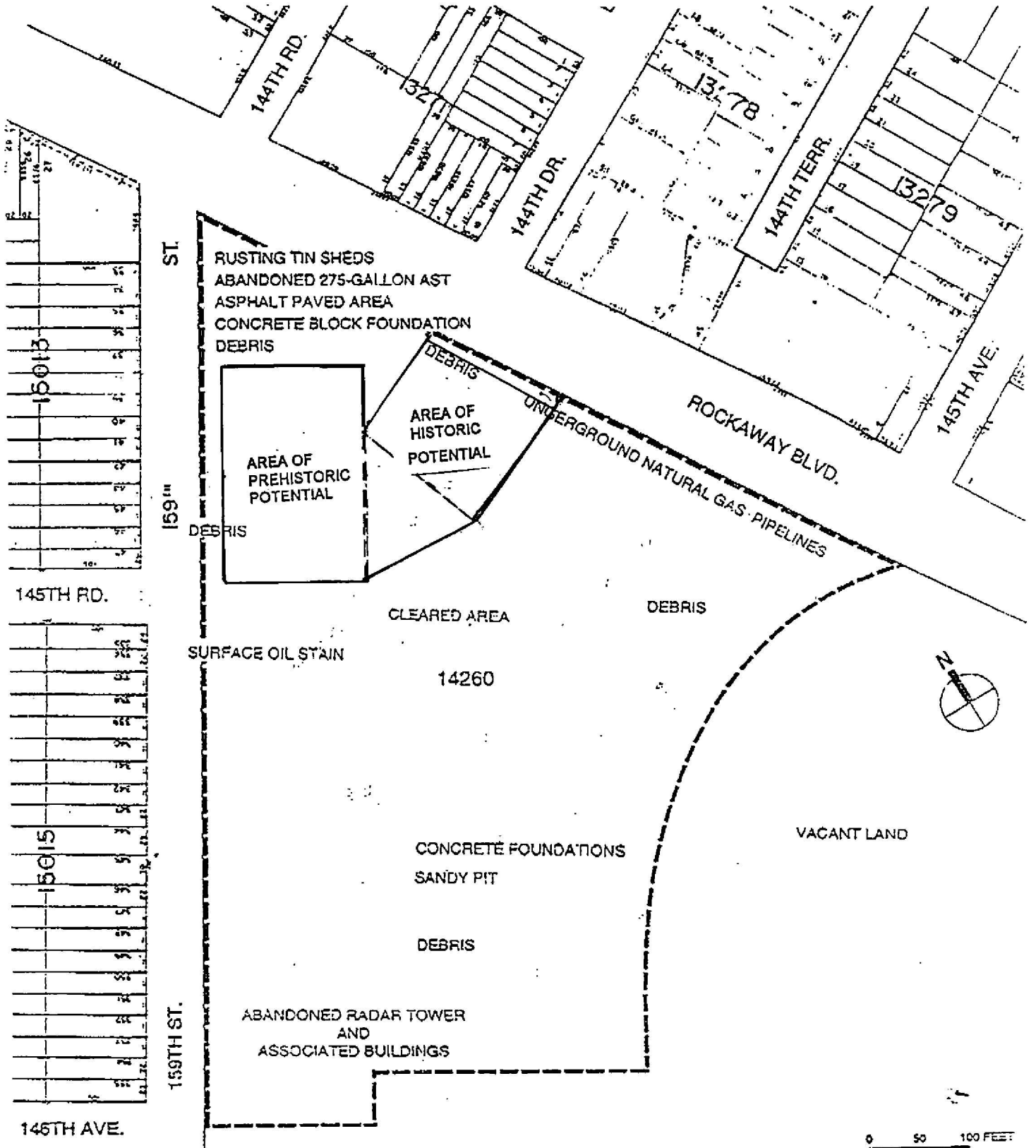


Figure 19 Land Use Map 1997- Courtesy Allee, King, Rosen &Fleming, Inc. - Overlay Proposed Building Location

VII. CONCLUSIONS AND RECOMMENDATIONS

Prehistoric Cultural Resources - Potential and Integrity

The Documentary Research for the proposed 159th Street/Rockaway Turnpike project revealed a major prehistoric component surrounding the project site with clear documentation of prehistoric settlement and exploitation of marine resources in the area. Episodes of fill for the Idlewild Airport may have buried some of the resources. Prehistoric cultural resources could contain evidence of subsistence strategy, local resource exploitation and settlement patterns which would add to our knowledge and understanding of north east coast native groups. Investigation of these resources might aid in addressing the following: 1. An investigation of the relationships between marsh land, upland, habitation and processing site function and location? .2. Temporal and spatial land use; A Paleo component has been linked with the Baisley Pond area. What are it's spatial limits and what implications do they have for further understanding the Paleo period? 3. Can food preferences within an abundant and rich environment be recognized and explored through the recovery of faunal debris? Do they have implications for understanding cultural reality and taboo among Algonkians? 4. Seasonal and permanent habitation or processing site patterns might be delineated for this coastal group. 5. Raw material availability and preference might be determined through lithic analysis.

The proximity of the project site to two remarkable Queens sites, The Aqueduct Site, a Native American burial site, village and shell heaps (See Figure 3;Solecki; # 33) and a large shell midden and village site to the south west (Parker, 1920 #11) add credibility to the line of questioning suggested above. These two sites excavated in the

1920's may be related and may have extended as far as the uplands of the project area. Potential for prehistoric cultural resources is considered to be very high.

The upland area has already experienced episodes of disturbance. Historic building has impacted the land lying closest to Rockaway Turnpike, however, the section of the northwest corner noted on Figure 18 denotes an area where integrity is considered to be high and prehistoric materials may remain in situ. The grading and construction related activities for the proposed Guard House, roadways, curbs, and landscaping will likely impact prehistoric materials in this area, therefore, field testing is recommended. A course of treatment of these resources is outlined in Appendix C.

Based on the 1915 Final Maps of the Borough of Queens and soil borings prehistoric resources on the rest of the site may be currently five to seven feet below the present ground surface. According to Gary Davis of Minskoff Equities, engineering specifications for the proposed project include,

1) the addition of six feet [perhaps four feet in the northwest corner] of fill to bring the present land surface to grade
2) a ten foot foundation and the use of pillings for stabilization of the building.

The main structure is being placed on one of the points of the site requiring six feet of fill (See Figure 19). With the previously deposited five feet of fill the total depth of fill in this area will be eleven feet. The proposed ten foot basement will not impact deeply buried deposits. The proposed pillings will clearly extend into potentially sensitive areas, however, their dimensions will not impact a substantial portion of these resources. Additionally the construction of roadways, curbbing, and landscaping will not impact resources in this area. Field Testing is not recommended for this area.

Historic Cultural Resources - Potential and Integrity

Historically the area was a substantial distance from the settlement at Beaver Pond and the sprawling metropolis of the Town of Jamaica. It clearly represented a portion of an early farming community in the 17th and 18th century, exploited mostly for it's salt hay. The 19th Century, with the building of the Jamaica and Brooklyn Plank Road, allowed for easier travel to and from the city. Aside from this convenience increasing recreational use of the area for swimming and fishing, Jamaica now became the rest stop for farmers bringing their products to the city markets, clearly a contributing factor in the growth and urbanization of New York City. The 20th Century began to see some urbanization of the area which abruptly came to an end with the utilization of the marshland as home to Idlewild Airport.

Nothing of known historic significance occurred on the project site, however, the early Spaulding Homstead may contribute to our understanding of early farm life along the marsh area of Jamaica, in the shadow of New York City, during the 19th Century. The house and associated outbuildings were likely bulldozed and graded into sheet scatter across the property, however, foundations, privies, cisterns etc. may still remain in situ under fill in those areas flagged on Figure 18).

Investigation of these remains may add to our knowledge of the development of New York as urban center and to the farm/city relationship. 1. Research into these potential cultural resources may prove informative for those studying the transition from a farm economy to an urban/industrial area. 2. Questions regarding the age of the Spaulding Structure might be addressed by locating and studying it's foundation and builder's trenches. 3. Trash deposits and filled features such as privies and cisterns

may provide household items informative of the types of goods in use and/or available to this farm family and how they compare with other early farmsteads both on Long Island and in New York City. 4. Questions regarding privy and cistern construction, placement and/or use might also be addressed.

Most of the building plans (Figure 19), appear to avoid the area of sub-surface historic potential, however, the establishment of sprinkler systems, sewer and utility lines running toward Rockaway Turnpike will likely impact the integrity of these potential features therefore, field testing is recommended. A course of treatment for the historic resources is addressed in Appendix C.

WORKS CITED

Boesch, Eugene

1996a *Previously Identified Native American Sites In the Borough of Queens; map and key.* On file at New York City Landmarks Preservation Commission.

1996b *Cultural Resource Investigations Conducted in the Borough of Queens as of September 1996;* On Jamaica USGS map and key. On file at New York City Landmarks Preservation Commission.

Gardiner, L.

1660 Relations of the Pequot Warres. Acorn club edition, Hartford, Connecticut (1901)

Gittman, Charles

1921 *Jamaica Long Island, Vo. 1. A Documentary History of Jamaica Long Island 1655-1800:* Unpublished

Gibson, David H.

nd *Jamaica, New York: A Biography.* on file Queens Borough Public Library Unpublished

Grumet, Robert

1981 Native American Place Names in New York City. Museum of The City of New York

Jamaica Chamber of Commerce

1956 *The Story of Jamaica*, Jamaica Chamber of commerce Bldg., Jamaica, NY

Long Island Daily Press

1938-1963 Various articles.

Munsell, W. W. and Co.

1882 History of Queens Co., New York

Queens Topographical Bureau

1915 *The Final Map of the Borough of Queeens*, New York.

Roberts, William, et al.

1995 *Historical and Archaeological Sensitivity Evaluation of the Baisley Park Triangle Project, Springfield Gardens, Queens County, New York.* Prepared for R.W. Hall. Greenhouse Consultants, Inc.

APPENDIX A

Plate A - Looking North West at property from Rockaway Turnpike

Plate B - Looking Southeast into property from 159th Street

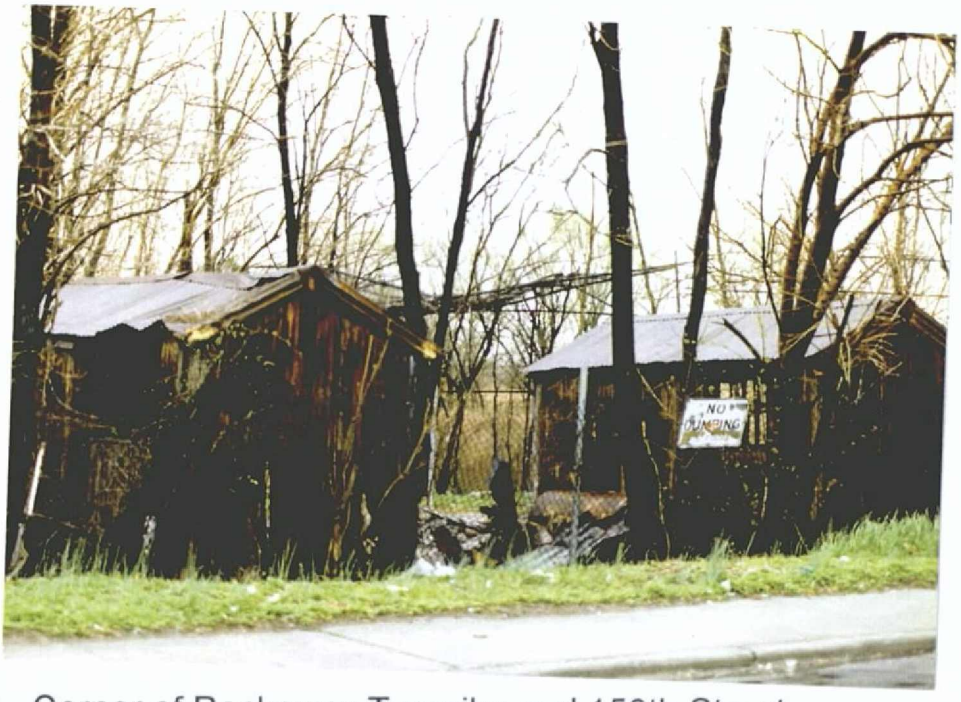


Plate C - Corner of Rockaway Turnpike and 159th Street

Plate D - Basketball court corner of 159th Street

Plate E - Current/abandoned tower

Plate F - Looking Southeast from 145 Avenue/tower and outbuilding

APPENDIX B

NEW YORK STATE MUSEUM

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

Anthropological Survey

DATE: 04/11/97

To:
JOANNE MCLEAN
JOANNE MCLEAN INC.
4 DUNNE PLACE
LYNBROOK, NY 11563

Proposed Project: 159ST\ROCKAWAY
7.5' U.S.G.S. Quad:

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: BW (initials) Anthropological Survey, NYS Museum

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

04/11/97 To: JOANNE MCLEAN, JOANNE MCLEAN INC.

Project: 159ST\ROCKAWAY Topo. Maps:
BW (initials) Anthropological Survey, NYSM
Recorded sites ARE located in or within one mile of the project area.

New York State Museum Prehistoric Archaeological Site Files
EVALUATIONOF ARCHAEOLOGICALSENSITIVITY 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(THEY) 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.

[X] THE TERRAIN IN THE LOCATION IS SIMILAR TO TERRAIN IN THE GENERAL VICINITY WHERE RECORDED ARCHAEOLOGICAL SITES ARE INDICATED.

[X] 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

APPENDIX C

N.Y.S. MUSEUM ARCHAEOLOGICAL SITE FILE
RM. 3122, C.E.C., ALBANY, N.Y., 12230
CONFIDENTIAL:INFORMATION FOR RELEASE ONLY AS REQUIRED BY LAW
OR AS AUTHORIZED IN WRITING BY THE NYSM ANTHROPOLOGY SURVEY

-ID. # S- NYSM ----	ALT, OLD, (DHP)	SITE NAME --------	REPORTED: *:AGE :SITETYPE :STRATIG	REMARKS ---------	USGS TOPO 7:5' (15') :COUNTY ---------	REPORTER (RECORDER) -[EARLIER REPORTER]	PROJ. ID. # -----	DFILE 1NOTE 2MAP: 3ELOC
548	ACP QUNS NO#(NO INFO)	NO INFO	* NO INFO(NO INFO) :TRACES OF OCCUPATION :NO INFO		JAMAICA (BROOKLYN) :QUE	PARKER,A.C. -[NO INFO]	NO INFO	1.NO INFO 2.NO 3.F

159TH STREET AND ROCKAWAY TURNPIKE
QUEENS, NEW YORK

COURSE OF TREATMENT
For : POTENTIALLY SIGNIFICANT CULTURAL DEPOSITS

The following proposed Course of Treatment for potentially significant cultural deposits at 159th Street and Rockaway Turnpike is based on the findings of the Documentary Research conducted by Jo-Ann McLean, Inc. for Edward J. Minskoff Equities, Inc.

Of concern are the pre-historic and historic sub-surface materials which might be present on an upland portion of the site consisting in less than three acres. Documentary evidence clearly points to high prehistoric sensitivity for the project site. The presence of a mid- 19th Century farmstead establishes criteria for historic research. Research questions to be addressed may be referenced by turning to pages 36 -39 of this report.

The goal of the proposed Course of Treatment diagramed below is to determine presence or absence of archaeological materials. If presence of significant materials with the potential to address the research questions are located further field investigation will be outlined. If the findings are negative this will be clearly stated in the report.

Course of Treatment/Scope of Work

The recommended testing strategy to determine presence or absence of significant cultural resources for 159th Street and Rockaway consists of:

Method

Field Testing

Six backhoe trenches are recommended in the areas of proposed sensitivity. These are illustrated on the attached Figure C1. These tests will be at least two feet wide and extend to depths of sterile sub-soil to determine the distribution of any ground surfaces revealing prehistoric materials or unless primary historic features are encountered that preclude it, such as foundations, privies, cisterns, trash pits etc. Trench depth will depend on these conditions. Shoring of trenches is not anticipated.

Strategically placed shovel tests may be employed for additional control.

Depending on field conditions four (4) field days are anticipated to complete the testing program. The principal archaeologist will supervise all work and monitor backhoe trenching; two to three field personnel will be present.

Report

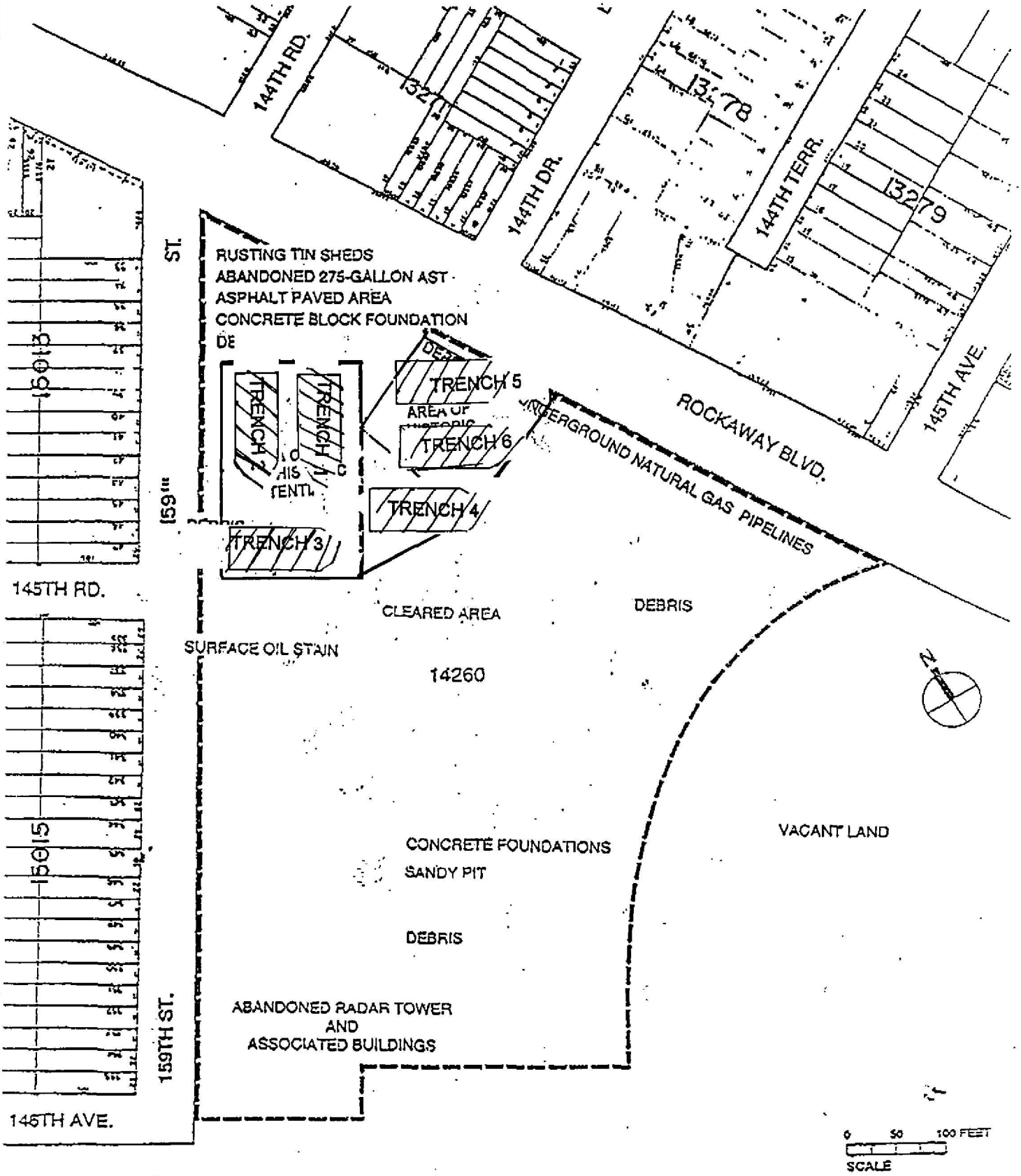
A report documenting the testing phase and findings including site drawings (stratigraphy, maps), photographs, results and recommendations will be prepared by the principal investigator for submission to the proper officials.

If historic deposits are identified a chain of title search to document continuity of occupation should be researched included in the report.

Budget: A budget will be prepared upon request.

Project Site Conditions

Figure 4



FAA ROCKAWAY BOULEVARD SITE

Figure C1- Proposed backhoe trenches to test for presence or absence of significant cultural resources in sensitive sections of site