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ARCHAEOLOGICAL IMPACT REPORT
for the
QUEENS BOULEVARD REZONING PROPOSAL PROJECT
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QUEENS BOULEVARD REZONING PROPOSAL PROJECT

QUEENS, NEW YORK

CEQR # 85 - 177Q

Prepared for:

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INTRODUCTION

The Queens Boulevard Rezoning Proposal involves a strip of land along Queens Boulevard in Elmhurst, Queens. The study area is bounded roughly by Conrail tracks to the west and 94th Street to the east with one or two blocks both north and south of Queens Boulevard along that stretch. Within the study area there are thirty-two separate parcels slated for rezoning. (See Figures 1 & 2)

An environmental impact statement to assess the potential impact of the proposed project on the existing neighborhood is required by the City of New York. The following report is a fulfillment of Task 4 - a description of the affected environment - as set forth in the Department of City Planning's Scope of Work. The purpose of this documentary study is to locate, identify, and evaluate potential archaeological resources in the study area. Task 5 will assess the potential for archaeologically significant resources being affected as a result of the rezoning action; if necessary mitigation measures will be proposed. Task 5 will be done in consultation with Landmarks Preservation Commission staff.

The following report will present a general history of Newtown - Elmhurst, written in part by Queens historian Vincent Seyfried, a review of the study area during both pre-historic and historic times, and a description of current conditions. When appropriate, current land use will be related to significant past structures/land use. That does not entail, however, an individual parcel by parcel discussion since a good number of the parcels occupy space that never hosted important events or structures according to our research. Therefore, the write-up will at times encompass large portions of the study area and at others will pertain to smaller, specific sites as warranted.

The text is accompanied by maps and old photographs furnished by Vincent Seyfried, and photographs of 1986 conditions. The recent photos contrast starkly with the older ones and vividly illustrate the enormous changes wrought by urbanization.

The conclusions - based on combined research of the past and present - will point out any locations on the 32 parcels where the probability of existing cultural resources occur. Task 5 will require - after consultation with the Landmarks Preservation Commission - an assessment of the significance and integrity of possibly intact archaeological resources and a projection of the impact of the Queens Boulevard Rezoning Proposal Project on any such resources.

GENERAL HISTORY OF NEWTOWN - ELMHURST

Elmhurst, as we call it today, was originally known as the Village of Newtown and was established by The Reverend Francis Doughty, a non-conformist minister from Massachusetts who had received permission from the Dutch authorities in New Amsterdam to establish a community in what is now Queens. (Named Middleburg under the Dutch. French, 1986:p. 548). Doughty's grant, approximately 14,000 acres, included "practically all of the present Long Island City and Newtown." (Von Skal, 1908: p. 24). In 1642 Doughty and his followers settled at the junction of Maspeth and Newtown Creeks - in the area now known as Maspeth. This early settlement, the second oldest colonial settlement on Long Island, was burned to the ground during an Indian uprising. In early 1652 Doughty and his followers moved inland for a second attempt at colonization. The center point of the Queens Boulevard Rezoning Project area is the site of this 1652 community.

The house lots in this village were laid out on the south side of the thoroughfare that preceded Queens Boulevard and on the north side of what is now known as Justice Street, "the intervening space being occupied by a wet tract traversed by the small Horse Brook. The lots laid out in this space (about an acre or two each) were intended only for pasturage, and were so used for nearly a century." (Kelley, 1909:p. 297). [This description of the land division most probably entails Project parcels 13, 14, 26-32.] The village slowly grew in the succeeding years; more English settlers drifted in, a Congregational chapel was built, a school taught by the minister opened, a Town clerk and magistrate were elected and roads were laid out. From the beginning there were no large homesteads. There were a few craftsmen among the villagers like blacksmiths, millers, and wheelwrights, but the vast majority of the residents depended solely on agriculture for a livelihood. "The early settlers of Long Island, coming as they did chiefly from the New England colonies, naturally followed the same system of tillage and rotation of crops to which they had been accustomed. They very soon discovered that success depended upon the application of manures. As early as 1653 the first settlers, by the terms of the patent from the Dutch governor for the lands they occupied, were required to pay to the government one-tenth of the revenue arising from the ground manured." (History of Queens County, 1882:p. 44)

In 1664 New Amsterdam was conquered by the English and the former Dutch colony was handed over as a personal fief to King Charles II's brother, the Duke of York. The settlement was named Newtown in 1665. The original land grants were confirmed by a succession of English governors - Nicoll/1666 and Dongan/1683. (French, 1861:p. 548). The colonists became dissatisfied

with the Duke of York's rule which provided for no representation, and, to pacify them, the Duke in 1683 reorganized the colony on the English model. Long Island was divided into three counties: Kings, Queens and Suffolk. The counties, in turn, were subdivided into Towns. Newtown became one of the six administrative divisions within Queens.

The Village of Newtown became the Town seat of the Town of Newtown and took on some importance as a result. A Town clerk recorded property transfers and sometimes wills and estate inventories; a town hall was built housing the jail, the assessors, the sheriff and the court and magistrate's offices. Road overseers and fence watchers were appointed yearly; also later on, a supervisor, the top administrative official was named. As early as 1666 the highway now known as Queens Boulevard was already a main lane of communication from the western end of Long Island as far as Jamaica. This wagon roadway, now dominating the Project site, was based, in part, on original Indian paths. (Kew Gardens Post, 1931: n.p.)

In the hundred years between the setting-up of the Towns (1683) and the outbreak of the Revolution (1776), Newtown grew considerably. The population went up by natural increase and Dutch families began to infiltrate from Brooklyn and even New York. There was also some immigration from Europe. The Indian population rapidly declined through European introduced diseases and emigration to Jersey and the West. "The inhabitants were so entirely given to agriculture, and had pursued it so assiduously, that in 1723 all the land in the township had been taken up." (HISTORY OF QUEEN'S COUNTY, 1882, p. 333). So the younger sons of Newtown's families had to move off Long Island to find free open land on which to settle. Farm size rapidly diminished in the 18th century by sub-division among heirs and sales. By 1776 Newtown was a well-established village with an upper class of landed gentry, smaller farmers, journeymen and a very tiny professional group.

The Revolution founded Newtown divided. The wealthier families had an interest in maintaining the status-quo: the Anglican church had been established against the will of the townspeople in 1704 and it formed the nucleus of Tory sentiment. The Congregationalists and Presbyterians, the only other groups, were strongly anti-Royalist in their sympathies. "Presbyterian churches were everywhere used for military purposes." (French, 1861:p. 545). The Battle of Long Island (August 26-28, 1776) decided the fate of the island; beginning in September 1776 British troops occupied Newtown and its outlying villages, patrolled the roads and exacted both food and lodging from the conquered populace. The local inhabitants were robbed often and all the woods cut down for fires in the soldiers' tents. During the Revolution cold Long Islanders dug peat from the swamps in Queens to use as fuel. (Stiles, 1867-9:p. 302). Throughout the

occupation Newtown was a town of divided loyalties with its sons represented in both armies.

When peace came in 1783 the British lingered on for months in order to evacuate their sympathizers to a refuge in Nova Scotia. Feelings ran high against these people; a few dared to return from Canada years later but often found their farms confiscated or sold off. The physical devastation left behind by the British took at least a quarter century to repair: cattle depleted or destroyed, woods cut down, churches destroyed, and farms neglected.

The Village of Newtown and, in fact, the whole Town of Newtown had a quiet history for the long period 1783-1850. It was a time healing and recovery with a very small increase in population. The advent of European immigration because of the Irish potato famine (1847) and the revolutions in Central Europe (1848) stirred up the stagnant pace of life in Queens. Developers and speculators began to appear, buying up farms and laying out new sub-divisions and even villages. A good example, though out of the study area, is Samuel Lord of the firm of Lord and Taylor who opened up a general store on Broadway and built himself a mansion at Broadway and Elmhurst Avenue. He erected six spacious mansions (Clermont Terrace) on the north side of Broadway between the railroad and the Episcopal Church and rented them as an investment.

The Civil War was a further quickening influence. Many Newtown boys saw the outside world for the first time and life was never thereafter the same. In 1854 the Flushing Railroad laid its tracks through Newtown Village to the East River. As early as 1801 the Flushing and Newtown Turnpike Road and Bridge Co. opened its road along 51st Avenue and Laurel Hill Blvd. to Greenpoint, Brooklyn, and Newtown Village became a junction point for travellers when stage coaches were at the peak of their popularity in the late 1840s and 1850s. The importance of Newtown Village was further enhanced when Thomson Avenue was laid out and opened from Long Island City to Broadway in 1870, giving a direct through route to New York. In the same year - 1870 - Hoffman Avenue was laid out from Broadway, Newtown, to Jamaica, at that time the most populous village in the county. Thomson Avenue and Hoffman Avenue today are the western and eastern ends, respectively, of Queens Boulevard. The route that is now Queens Boulevard (Hoffman and Thomson Avenue) was regulated at eighty feet wide by an act of the state legislature in 1869-70. (Kearns and Kirkorian, 1984:p. 5). The increased travel through Newtown Village spurred the opening of a hotel, the "Newtown Hotel," at the northwest corner of 51st Avenue and Broadway, and several saloons.

After 1870 Newtown Village began to be greatly outstripped by the explosive growth of Long Island City and Flushing. In the late 19th century press the village is gently mocked for its conservatism, smallness, and general air of somnolence. (Seyfried, 1985:p. 100). Of course, this could not last; in 1876, the street railway reached Newtown Village with its tracks in Broadway. In 1895 another street car line came through Broadway and 43rd Avenue going on to Corona and Flushing. Meanwhile, new villages grew up on all sides. One of these villages was developed in 1893 by Cord Meyer and named "Elmhurst." Though it was located northwest of the Village of Newtown (and of the project area), the name soon came to apply to the whole town. (Seyfried, 1982:p. See Figure 3).

Elmhurst entered New York City in 1898 along with the rest of Queens and shared in the rapid development that began with the opening of the Queensborough Bridge (1909) and the electrification of the Long Island Railroad (1913). The 200 foot wide Queens Boulevard was laid out in 1910 as an arterial highway through the heart of Queens and as an outlet for the automobile traffic that the bridge was beginning to bring in. The exceptional width of the boulevard caused the condemnation of a large number of buildings on the south side of the old road through Newtown and on the north side between 56th Avenue and the Long Island Expressway. Though the full width of the new highway was curbed and guttered, it was not until the 1940s that the full 200 foot width was used for five-lane traffic in each direction. (Seyfried, REGISTER Index). In 1913 a trolley line was built along the new road, linking Elmhurst with Long Island City and bringing New York within the 5¢ fare zone. (Reifschneider, 1950, p. 15). In 1932 the Queensborough Subway began to be constructed through Broadway and Queens Boulevard. In tunneling under Broadway for the four-track line, almost all the old 19th century wooden buildings on both sides of the street had to be demolished; as a result, Elmhurst lost much of its old-time village charm. In 1937 the subway was opened through to Jamaica, bringing rapid transit to central Queens for the first time.

In the post-World War II years the greatest changes in Elmhurst have been in population density. Developers bought up as many of the old one-family houses as they could acquire and built high-rise apartments all along Broadway, Elmhurst Avenue and Queens Boulevard. Commercial buildings have proliferated along the Long Island Railroad and along Queens Boulevard. The recent advent of the mega-stores - Macy's, Ohrbach's and Alexander's - has made Elmhurst a county-wide shopping center. The presence of the Long Island Expressway since the 1950s has greatly added to the traffic and intense urbanization of the Elmhurst area.

THE STUDY AREA - PREHISTORIC REVIEW

The term prehistoric refers to that period of time before recorded history. Without documentary evidence of a past culture archaeologists must assimilate data from various diverse sources to recreate extinct cultural lifeways of the prehistoric era. Written accounts of day to day activities, of documented hunting and housing patterns, and of kin relationships do not exist for the Native Americans who inhabited Long Island before the arrival of Europeans. Research aimed at gathering information on how the Native Americans of coastal New York camped, farmed, hunted, and gathered shellfish must rely on three basic sources. These sources are: (1) modern archaeological investigations of comparable area sites that provide information which can, with caution be applied to specific locales under study (See Fig. 4 - The spatial pattern of coastal New York sites that are reported in the published literature); (2) collections of Indian artifacts taken from the coastal New York area that may indicate where the Indians may have camped, what tools they may have used, and possibly their food preferences; and, (3) ethnographic reports by the earliest Europeans visiting and living in southern New York that provide descriptions of how the Native Americans looked and labored and where they congregated.

Assessing the likelihood that prehistoric peoples exploited all or part of the thirty-two parcels in the Queens Boulevard Rezoning Proposal Project requires an appreciation of the parcels as they existed before the topographical changes introduced after c. 1643 and, in particular, after c. 1925. The earliest available drawings, maps, and personal accounts indicate that the Project area was traversed by Horse Brook creek that flowed in an easterly direction and emptied into Flushing Creek. (See Figures 5, 6, and 7) The Queens Borough Topographical Bureau Final Map, Sections 19 and 26 (1910), depicts the contours of the project area prior to the extensive early twentieth century landfilling process that irrevocably changed the area. (See Figure 8A/B) The Final Map, in coordination with early maps (See Figures 9 and 10), places Parcel 14, 15, 16, and 17 within an extremely low-lying area bordering on a marsh, Parcel 11, 12, 13, 23, and 24 traversed by Horse Brook, Parcel 21 and 22 possibly on the northern boundary of Horse Brook with the remainder of the parcels on various elevations (20 - 35 feet above sea level) north of the water course. During the prehistoric era the Queens Boulevard Project area was generally, on the western end, a series of low knolls and ridges bordering a water course and, in the middle of the Project area, was gently sloping terrain surrounding a fresh water course, and in the eastern end, was land either inundated by marsh or low-lying land on the border of such a marsh. Secondary sources confirm this topographic outline. Von Skal states that the Newtown bogs were of considerable importance for the New Yorkers, for the peat taken from them was extensively used as fuel. (Von Skal, 1908, p. 24). Stiles,

well known nineteenth century Long Island historian, reported that quantities of Newtown bog peat were taken by soldiers for fuel during the Revolution. (Stiles, 1867-69, p. 302) Jessica Erlich's dissertation "A Town Study in Colonial New York: Newtown, Queens County (1642-1790)" states:

Not all of Newtown was arable land. Of the 16,800 acres, only 10,600 were tilled. Aside from the costal salt marshes, the high water table of northwest Long Island made many low lying areas swampy. The swamps were of little use until after the Revolution when the peat there was dug out for fuel. Where the land sloped, the ground water ran off as small creeks. These streams were used to water cattle....
(Erlich, 1979, p. 2)

Two photographs, see photos 65 and 66, graphically illustrate the low-lying nature of portions of the Queens Boulevard Rezoning Proposal Project area and the sloping nature of certain of the Project parcels.

Native Americans exploited different environmental niches over time and each geographical locality represents a specific environmental nich over time. To estimate the degree to which Native Americans did or did not exploit the Queens Boulevard Project area, the enviornmental nich if afforded and the likelihood it may have fulfilled the needs of a prehistoric culture must be appreciated. Therefore, the seminal factor determining the formation of archaeological sites on the Queens Boulevard Project site will be the differing use of the wetland margin zone through time. An understanding of wetland margin exploitation by prehistoric groups for an extended time period constitutes the basis for finding sites and interpreting the meaning and significance of these archaeological resources. Results from archaeological fieldwork throughout the northeast attest to the high probability of prehistoric exploitation of terraces within close proximity to a wetland, the confluence of two water systems or a terrace at the edge of a major fresh water source. (Snow, Dean, THE ARCHAEOLOGY OF NEW ENGLAND, 1980; Ritchie, William A. and Robert D. Funk, ABORIGINAL SETTLEMENT PATTERNS IN THE NORTHEAST, 1973, Memoir 20 of the New York State Museum and Science Service, Albany: The State Education Department) The following pages will detail reports and interpretations that are pertinent to the possibility that the Project site might have hosted a prehistoric camp, village, or hunting site. Pulling together all the possible information from the three sources described above will yield some idea of both how the Project area may have been exploited by Native Americans and what gaps exist in the archaeological record of western Long Island. Archaeological testing of any of the thirty-two parcels within the Project area would only be considered worthwhile if the documentary study indicated a strong likelihood that the site would have/could have hosted prehistoric peoples and the time period and/or locale-type

of the Project site is not well understood and documented.

It is necessary to separate the pre-contact peoples into distinct time periods according to their cultural characteristics in order to understand how Native Americans exploited different environmental niches over time. Archaeologists have gained knowledge about these different time periods and different topographical and resource features in varying degrees. The following selections are taken from the total body of archaeological reports because of their proximity to and similarities with the subject area.

Archaeologists in the northeast divide the prehistoric era into three sub-periods, the Paleo-Indian, the Archaic, and the Woodland Stages, which are further divided as shown below:

PERIOD	YEARS BEFORE PRESENT (BP)
Paleo-Indian	13,000 - 10,000
Early Archaic	10,000 - 8,000
Middle Archaic	8,000 - 6,000
Late Archaic	6,000 - 3,700
Terminal Archaic	3,700 - 2,700
Early Woodland	2,700 - 2,000
Middle Woodland	2,000 - 1,200
Late Woodland	1,200 - 300

Paleo-Indian

As the Wisconsinian ice sheet retreated, ending the Pleistocene Age approximately 12,000 to 11,000 years ago, Long Island's earliest inhabitants, the Paleo-Indians, entered the area. Hunters of big game, these nomadic Native Americans lived in a harsh environment, dominated by a spruce and fir forest, which was replaced by a pine forest as the climate warmed. The sea level of Long Island Sound during this time was much lower than today. "Most models suggest sea levels began stabilizing about 2000 to 3000 years ago ... Bloom and Stuiver (1963) suggest a drop of .18m per century between the period of 3000 and 7000 years ago." (Cited in Lightfoot, *et al*, 1985, p. 77) Research on Paleo-Indian sites indicates that three types of terrain were preferred during this time period:

- (1) lowland waterside camps near coniferous swamps and near larger rivers;

- (2) upland bluff camps in areas where deciduous trees dominated; and
- (3) ridge-top camps, also where deciduous trees dominated.
(Cited in Rutsch, 1983, p. 33)

Eisenberg does note that the waterside settlements he studied were situated on locally well-drained soils. (Eisenberg, n.d., p. 123) Archaeological reports from southern New York indicate that exploitation of upland zones was limited primarily to the Late Archaic Period and after whereas the recent Connecticut River Valley research indicates Paleo-Indian exploitation of the upland zone ridge terraces overlooking water courses. (Gorman, F. J. E., "Stage I and II Archaeological Investigations," Final Environmental Impact Statement-Somers Office Facility for J. M. Cortell and Associates, Inc., 1983, pp. 18-22; Kevin McBride, University of Connecticut, personal communication)

As can be seen on Figures 11 and 12 there are very few recorded Paleo-Indian sites, partly due to their temporary nature and low population density but also due to the rise in the sea level which has inundated many of the earliest sites. (Saxon, 1973, p. 252) We do not know with any certainty the drainage conditions on the Project site during this time of a lowered sea level and therefore hesitate to definitively state that Paleo-Indians once exploited the Queens Boulevard Project area although it is most likely.

Archaic

The Early Archaic Stage (c. 9,000 BP) followed the Paleo-Indian Stage in the coastal and tidewater area of New York and "is represented by numerous, small, nearly always multi-component sites, variously situated on tidal inlets, coves, and bays, particularly at the heads of the latter, and on fresh-water ponds on Long Island, Shelter Island, Manhattan Island, Fishers Island, and Staten Island ..., at various elevations having no consistent relationship to the particular cultural complex." (Ritchie, 1980, p. 143) The largest Archaic Stage site recognized in the northeast and the one most completely explored in the New York coastal district, is the Wading River site on eastern Long Island. This cultural complex, which is known for its diagnostic small stemmed projectile point, was represented by a site on the north shore of Suffolk County. The Wading River salt marsh occupies an embayment that is surrounded on three sides by the Harbor Hill terminal moraine, which is as much as 180 - 200 feet high, locally. The hills surrounding the marsh are dissected by several small valleys with streams, mostly intermittent, that flow northward into the Wading River tidal creek. Four sites actually made up the Wading River Archaic component and these sites can be studied for a trend in the Archaic exploitation of a water resource that might be applicable to the Queens Boulevard Project area. Three of the sites were situated on low protected

spots on the lee or eastern side of a prominent finger of land fronting the marsh. "They occupied small stretches of essentially level ground, in one case in an old erosional valley. The sites shared similar elevations, the edge of the dry ground ranging from about two to seven feet above mean high water." (Wyatt, 1982, p. 71) Cultural deposits at two of the sites extended underneath the marsh and three of the sites were immediately adjacent to fresh-water springs. One of the sites, a toolmaking station was situated on low, open, flat ground on the northeastern side of that same prominent finger of land, facing out across a finger of marsh onto the Sound. All of the sites were small in scale, ranging from 10,000 square feet to 66,000 square feet and revealed shallow cultural deposits, often less than two or three feet deep. (*ibid.*, p. 71) The Queens Boulevard Project area differs markedly from the Wading River site location in that there never were prominent hills or protecting land forms in the Project area. Only the "South Hills" of Newtown, which are south of the site area and technically part of the Harbor Hill moraine, are a noticeable topographical feature in the wider community area. (Erllich, 1979, p. 1) Also, the Wading River location is a coastal site and archaeologists have hypothesized that coastal and inland sites provided different resources for prehistoric peoples during different times of the year. More information is needed on Archaic inland sites so that these hypotheses can be tested.

Two other well-known sites on Long Island that exhibit some of the Archaic Period traits are the Grantville site near Flushing and the Garvi Point site. (Boyd, 1982, p. 67. See Figure 13) However, these sites are also situated in the coastal area and do not contribute to an understanding of how the prehistoric people exploited non-salt water resources. Of the 93 published site reports that cover the Bronx, Manhattan, Staten Island, Fisher's Island and Long Island, 84 per cent of the sites are classified as shell middens (i.e., coastal sites) and range in size from less than 1000 m² to one or more hectares. As Lightfoot, *et al.*, conclude "it is important to note...that the most visible sites in coastal New York are shell middens, some of which are characterized by extensive surficial scatters of shell debris that stand out in stark contrast to the surrounding, darker, sand/gravel matrix." (Lightfoot, *et al.*, 1985, p. 63) "By concentrating on visible shell middens, archaeological fieldwork has been restricted to one ecological zone--the coastal strip, especially along the north shore and two eastern forks of Long Island." (*ibid.*, p. 63)

Woodland

Approximately 3,000 years ago the sea level and exposed coastal regions were, in most respects, as they appear today. Although the Indians of this time period preferred occupation sites situated on well drained terraces or knolls overlooking bodies of water, they did take advantage of the natural richness

of the low areas --- water fowl, grasses, and tubers. The Woodland Stage Native American sites are associated with the introduction of ceramics (non-wheel formed clay vessels) and in the Late Woodland Stage with incipient agriculture (beans, corn and squash).

The archaeological evidence from Woodland Stage sites indicates a strong preference for large scale habitation sites to be within very close proximity to a major fresh water source, e.g., a river, a lake, an extensive wetland, and smaller scale extractive-functioning sites to be situated at other resource locales, e.g., quarrying sites, butchering stations, shell gathering localities. It is not fully understood at what times of the year specific site-types would have been exploited. Specific parcels of the Queens Boulevard Project could have, due to their elevated nature and proximity to a major fresh water resource, hosted an inland camp site of the Woodland Stage or even a larger scale semi-permanent habitation site of the Woodland Stage. Field reports from archaeological sites give credence to this supposition of probable Native American Woodland Stage exploitation of the Project area.

Middlesex Phase sites of Early Woodland times have been encountered during gravel and sand digging in a knoll or terrace near a river or lake. (Ritchie, 1980, p. 201) Late Woodland Stage sites of the East River Tradition in southern New York have been noted on the "second rise of ground above highwater level on tidal inlets" and situated "on tidal streams or coves" and on "well-drained sites." (*ibid.*, p. 264-5) The archaeological record details many coastal sites and defines a preference by Woodland Stage peoples to exploit well-drained localities. Although the Queens Boulevard Project area is not on a tidal inlet or on a river terrace a good portion of the subject area was elevated land abutting a sizeable fresh water resource.

In coastal New York, settlement data for Late Woodland people are at best spotty. Archaeological fieldwork on sites of this period has focused on shell middens, rockshelters, large agricultural villages, cemeteries, and stockaded settlements; but, as referred to above, the information on each site type is not considered complete or in any way equally represented in the published literature. Of interest to this development site area is the fact that most of the large open sites researched and reported contained sizeable pits up to six feet deep, filled with refuse but probably serving initially for cooking or storage, located beneath general ground middens. (Ritchie and Funk, 1973, p. 177-8) It is possible that an open site, containing such pits, could have been on certain parcels of the Queens Boulevard Project area (e.g., portions of Parcels 11 and 10, possibly portions of Parcels 2, 3, 9, 23, 26, and Parcels 4-8, and 27-32).

Two Woodland Stage inland sites were found by Mr. William Asadorian (Librarian of the Long Island Division of the Queens

Borough Public Library) in 1980 and 1981. These two sites representing a Middle Woodland Period site (located at the Captain Tilly Park, Jamaica) and a site on Archer Avenue west of Parsons Boulevard have not been completely published as of this date. (Seyfried, 1982, p. 23) These recent finds do indicate the potential for locating archaeological sites within an urban context and also the potential for laboratory analysis and comparative research yielding insights on inland site types. The Cusano site, 550 feet south of the previously discussed Wading River site (See Figure 13), has so far proved to be the only marshside site in Long Island evidencing a substantial Woodland occupation. (Wyatt, 1983, p. 73)

The Oakland Lake site, although situated on the coast northeast of the Queens Boulevard Project area, does have some characteristics comparable to the parcels proposed for rezoning. Yielding both Late Archaic and Woodland Stage material, the Oakland Lake site, before destruction in 1968, was situated on an northwest-southeast elevated ravine (27 feet above sea level) on a major fresh water resource (the Lake) which was fed by an interior creek (Alley Creek). The artifacts were recovered from soil layers 15-26 inches below the present ground surface.

A vast number of archaeological sites have been destroyed within this century as a progressive and active Elmhurst replaced the rural Newtown village. Ralph Solecki, Columbia University professor active in Queens archaeology since the 1930s, has mapped many of the sites that he knows were extant in the Borough of Queens prior to the 1940s. (See Figure 14) The following quote outlines many Indian sites in Queens that were known to The Committee on American Anthropology of the Flushing Historical Society to be lost during construction and development.

Building activity and public improvements have been a deterrent to the committee's research activities in the field. Out of a total of 29 Indian sites in Queens, 17 within the past three years have become entirely obliterated. In the process of enlarging the airport at LaGuardia Field, several sites on Jackson's Creek and Bowery Bay were destroyed. The World's Fair obliterated a large site on Flushing Creek and another at Sanford and Fowler Avenues, Flushing.

Perhaps the most destructive large scale operation was the construction of the Belt Parkway which covered 17 sites. The Parkway cut directly across the small farms in southern Queens and Brooklyn, bisected an especially interesting ground one half mile east of the Aqueduct race track, where the committee, one jump ahead of the dump truck, unearthed two burials in 1939.

The committee had scarcely begun work on Tallman's Island, at College Point, when the surveying crew for

the sewage disposal plant moved in. From then on it was a hectic race between the trowel and shovel of the archaeologist and the steamshovel and bulldozer of the engineer. (Solecki, 1941, n.p.)

Ralph Solecki's 1930s salvage work in Queens is directly pertinent to the Queens Boulevard Project area. According to the "Catalog of Photographs by Ralph Solecki - Long Island and Environs, Local Archaeology," held by the Long Island Division of the Queens Borough Public Library, Photograph Number 108 shows an "Elmhurst, Queens site. Looking north across Horsebrook. June 1937. Part of Large swamp running east of Elmhurst. South side of Horse Brook east to Elmhurst swamp. Indian site on north and south banks of stream." Dr. Solecki is unable at this time to identify the actual position of the photographer in 1937 and the exact location of this site was never plotted on a map.

(R. Solecki, personal communication, 4/18/86) This photograph contains no identifying characteristics - two boys playing in what is most probably Horsebrook in the center of a neighborhood scene of houses with sloping backyards and a road/telephone poles running in front of the houses.

The New York State Historic Preservation Office inventory files reflect this concentration of archaeological research and salvage fieldwork along the shore areas to the north and east of the Queens Boulevard Rezoning Project Proposal area. These sites include Bowery Bay, North Beach, College Point, Powell's Cove, Flushing Meadows, and Tallman's Island.

Not only do we have modern archaeological research reports to facilitate our recreation of the prehistoric era but historians and archaeologists rely, to some degree, on antiquarians' research and ethnographic reports. The earliest and most complete ethnographic report on Long Island's Native Americans was written c. 1660 by Daniel Denton. According to Denton, the Indian population, greatly reduced by Old World-introduced diseases, had already shrunk from six to two villages on all of Long Island. Denton states that the west end of Long Island hosted, by this time, four or five Dutch towns and twelve English towns in addition to villages and farm houses. (Denton, 1902, p. 40) As described by Denton, the Native Americans at this time "...live principally by Hunting, Fowling, and Fishing; their wives being the Husbandmen to till the Land, and plant their corn." "The meat they live most upon is Fish, Fowl, and Venison; they eat like wise Polecats, Skunks, Raccoon, Possum,

Turtles, and the like. They build small moveable Tents, which they remove two or three times a year, having their principal quarters where they plant their Corn; their Hunting quarters and their Fishing quarters." (ibid., p. 45)

As cited in "Towards an Archaeological Predictive Model for Manhattan: A Pilot Study," the mid-seventeenth century chronicler FanderDonck reported that Indian "castles" were located on steep, high hills, near a stream or river. FanderDonck's "castles" have long been interpreted as fortified villages. (Baugher-Perlin, et al., 1982, p. 11) As already stated above, archaeologists have located the largest prehistoric habitation sites on high ground providing good drainage, the advantages of uninterrupted views, and a fresh water source. The above chronicler undoubtedly describes many such sites that were indeed situated on steep, high hills. Only a limited portion of the Queens Boulevard Project general locality could be classified as hosting steep high hills. It must be understood that the reports of fortified or stockaded Indian villages are reflecting a time bias. That is, it is very possible that the Native Americans only sought such steep, high hill sites as a result of both the Iroquoian incursions into the area and the displacements wrought by the arrival of Europeans and, in earlier more peaceful times the defensive advantages of the steep, high hill sites were of less import.

Reginald Bolton's exhaustive research earlier this century and his MAP DEPICTING INDIAN PATHS IN THE GREAT METROPOLIS is always an initial step in the archaeological review process of New York City and his work is often extensively cited in such reports. (See Figure 15) Bolton reports that at the time of European influx the Rockaway Chieftaincy stretched diagonally across Long Island from the East River to Jamaica bay - from Maspeth to Rockaway. Its territory included all of the modern township of Newtown, the southern part of Hempstead, the region around Rockville Center, and the ocean front of Far Rockaway. Although it is difficult to assign our modern political boundaries to territorial divisions operable centuries ago, the Queens Boulevard Rezoning Proposal Project area Bolton assigns to the Matinecock, people of the Delaware culture and the Algonquian language group (Bolton, 1922, p. 171; Wilson, n.d., p. 2) The promontory now forming Long Island City and its environs to Corona, northwest of the Project area, was, at the time of the white man's arrival, a great tract of forest land that extended to Flushing Bay. This was known to the natives as Wandowenock. (Bolton, 1922, p. 175)

The Matinecock were at one time numerous, and their villages and contiguous cultivated fields were scattered all over the territory they occupied, but disease and warfare so reduced their number that their planting land became waste and their homes were abandoned. The line of Broadway was evidently a

natural line of travel between their Flushing settlement and their stations on the North Shore. Armbruster states that at the time of the arrival of the first white settlers an Indian trail existed where now Broadway runs. (*ibid.*, p. 183)

Bolton speculates that the major Indian settlements on the east and west sides of the current borough boundaries "were separated by the broad marshes extending on the west side of Flushing creek. Across part of this boggy tract a narrow neck of dry land extends nearly two-thirds of the distance, over which Broadway now makes its way uniting Jackson avenue with Flushing avenue. A canoe ferry over the creek was doubtless a necessary supplement to travel by this route, an effort which would have been warranted by the distance it saved." (*ibid.*, p. 184) (See Figure 15) Sensitivity reports (Gonzales and Daniel, 1978) and locational models (Ceci, 1980) demonstrate that waterways were no barrier between Indian groups/sites, and that reported prehistoric sites cluster around water sources and waterways.

Much of Bolton's recreation of the lifeways of the prehistoric era is based on the Indian relic collections and the reports of such collections from the locales he studied. According to Bolton, farming activities in the eighteenth century uncovered a Native American burial ground in Flushing, on a tract of land on the north side of Broadway. (*ibid.*, p. 182) Riker, in *Annals of Newtown*, reports on the large collection of "stone axes and arrowheads" that Judge Furman had collected in Maspeth and on the relics from Mr. Kouwenhoven's property. "Upon the property of Mr. Jackson, at the Poor Bowery, was an extensive deposit of burnt shells, the remains of their clam-roasts, from which Mr. Fish, former proprietor of the farm, is known to have carted scores if not hundreds of loads, to fertilize his land." (Riker, 1852, p. 73) Many of the reports on "arrowhead" collections are frustratingly vague, e.g. the one by Dr. Marshall in a 1926 issue of "Long Island Life," in which he locates the origin of the specimens as Jamaica, or Long Island, or Village Sites in Queens. (Marshall, 1926, n.p.; See Figure 16) Both J. Duval and Dr. Theodore Kazimiroff were amateur archaeologists active along the Queens northern shore earlier in this century but are now deceased. Many of the earliest mentioned collections or sightings of Indian artifacts were during farming activity. As stated previously, however, serious Indian artifact collectors and amateur archaeologists most often concentrated their activities along the coast, attempting to locate the large scale, visible, and artifact-laden shell middens.

The compilation of archaeological reports, antiquarian research, ethnographic records, and artifact collecting information unequivocally indicates the prehistoric exploitation of the general area of northern Queens and that, most probably, the prehistoric peoples traversed, in some way, portions of the Queens Boulevard Rezoning Proposal Project site. On a

particularistic scale, we cannot know with certainty the totality of the topographic changes that have been wrought on the Project area since c. 1650, and, therefore, can only speculate as to the exact elevation and slope of each parcel, the actual extent of the original Horse Brook wetland and the drainage conditions prevalent on each parcel during the prehistoric era. Based on these same sources, we know that the Native Americans preferred to inhabitate elevated ground abutting a major fresh water resource. Fieldwork and comparative analysis has yielded information on food-gathering techniques, tool types, house patterns, burial practices, and ceramic styles. However, archaeologists have recently raised questions concerning the prehistoric era on Long Island and these questions highlight the need for non-coastal site investigations. Lynn Ceci, a Professor at Queens College, Flushing, has hypothesized that aboriginal cultivation did not begin until after initial contact with Europeans and she has based a great deal of her argument on the lack of evidence in the archaeological record. Ceci suggests that permanent villages and maize cultivation did not occur until after European colonization; the pressures created by the European trading system resulted in a variance of the Indian's settlement pattern from temporary villages to increased sedentism. Large, permanent, fortified settlements developed in areas where the shells needed for wampum could be obtained and where European access to the finished product was fairly easy. (Ceci as cited in Baughe Perlin, et al, 1982, p. 11) Of particular concern to researchers of the western Long Island area is this question that Ceci has raised on the causal factors of the introduction of maize cultivation. Ceci has demonstrated the need to investigate pre-1600 non-coastal village sites for evidence of incipient agriculture. (For a more complete discussion of Ceci's theory, see Kearns and Kirkorian, 1984 and Ceci, 1979.)

As described above, there is both a spatial bias and a functional bias evident in the recorded archaeological data. The near exclusive study of shell middens has yielded a wealth of information on Long Island's coastal strip but also a skewed perspective on the functional range of prehistoric sites.

The published data base implies that prehistoric coastal hunter-gatherers spent much of their time gathering, consuming, and discarding shellfish. Yet the study of shell middens should be undertaken within a regional perspective that evaluates their relationship to other, less visible, and potentially under-represented site types. As Salwen (1970: 3-4) succinctly states, "To balance this one-sided impression, it will be necessary to search for and to excavate types of sites in the immediate coastal zones other than the easily discovered shell middens which constitute only a part of the settlement system." (Lightfoot, et al, 1985, p. 64)

The minimal fieldwork on western Long Island inland sites has definitely limited our understanding of the prehistoric seasonal settlement patterns operative during the different time Stages. "Investigations of some of the less disturbed inland sites may reveal that they were stations on the seasonal round, and that many of these localities were the scene of food procuring and/or processing activities from Late Archaic times up into the seventeenth century. Winter deer hunting and fishing, the taking of migratory fowl, and the gathering of wild plant foods such as the ground nut (Apios americana) are among likely inland food-getting activities." (Wyatt, 1982, p.77)

THE STUDY AREA - HISTORIC REVIEW

As might be expected in a town site as old as Newtown, there were numerous small dwellings, stores, churches, and public buildings in the immediate vicinity of Queens Boulevard. A number of 18th and early 19th century structures survived down to the 1920s and 30s, but nearly all have disappeared in recent years except for two churches discussed below. The tunnelling of Broadway for the four-track Independent Subway and the widening of Queens Boulevard to a 200 foot arterial highway were the two main pressures for the destruction of the buildings of historic Newtown.

Queens Boulevard

Queens Boulevard as an arterial highway is a modern creation. The name was coined in 1910 by the Board of Estimate of New York City to describe a great new road that would provide an outlet for traffic coming from Manhattan over the Queensborough Bridge and conduct it through the Queens County heartland to Jamaica and eastern Long Island.

Portions of the road were already in existence though in an unimproved form. Thomson Ave. had been laid out by an Act of the Legislature in 1870 to run from the Court House in Long Island City through to Grand Avenue, Elmhurst. (In center of project area) Nominally, Thomson Avenue was a 100 foot wide road for its whole length, but much of it was sandy and often nearly impassable. At the intersection of Grand and Broadway began Hoffman Avenue which was, in effect, a continuation of Thomson Avenue from Elmhurst to Jamaica. It was laid out by the Legislature in 1870 and named for Governor Hoffman of New York, but it generally followed the path of the ancient "old Jamaica Road," a route in use by the earliest European settlers and perhaps by Native Americans. A surviving fragment of the 19th century version of the old road lies within the study area - the stretch between 57th and 60th Avenues called "Hoffman Road."

As soon as the Queensborough Bridge opened in 1909, automobile traffic increased enormously on the new road; as early as 1912, 5000 cars were using Queens Blvd. on Saturdays and Sundays according to THE NEWTOWN REGISTER. (See Photo 1) The Long Island Railroad crossing at the west end of the study area became dangerous for both the railroad and the automobilists because impatient drivers so often tried to drive around the lowered gates. Finally, in 1914, the railroad, at a cost of \$200,000 built the existing masonry bridge at 68th Street. (See Photo 2)

In 1913 the Manhattan and Queens Traction Company built a trolley line on the sides of the road. The gradual widening of the road, section by section over its six-mile length, encouraged more traffic and the road would probably have reached saturation had not the Grand Central Parkway and the Long Island Expressway opened providentially in time to siphon off a large portion of the through traffic. Today, Queens Boulevard still carries heavy traffic, but it is predominately local traffic between Long Island City and Jamaica. Photographs 3 and 4 show Queens Boulevard as it was in 1903. Photo 5 was taken in 1986.

Triangular Tract Bounded by Broadway on East, LIRR on North and New York Connecting Railroad on West: Includes Parcels 1-11 and 17-20

The northern part of this study area tract is a residential area largely built up with early 20th century houses of no special significance. Many of the lots are 40 x 100 but lots built on after 1920 are 25 x 100. Parcels 1-10 on the north side of Queens Blvd., and parcels 17-20 south of Queens Blvd. and down to 51st Avenue form a solidly commercial area. Nearly all have been built since 1940 and occupy ground whose use was agricultural until its modern commercial development. Maps of 1849 (Fig.18), 1852 (Fig.19), 1859 (Fig. 9), 1873 (Fig.10) and 1908 (Fig.17) illustrate the slow pace of development before the early 20th century. Photographs 6 through 23 show the existing conditions of Parcels 1-11 and 17-20.

Tract South of 51st Avenue and Queens Boulevard and Down To Grand Avenue - Parcels 21-25

This is an area solidly built up with rows of private houses, all attached, all 20 x 100, on Jacobus, Ireland, Hill-yer, Gorsline, Manilla, Codwise, Van Kleeck, Simonson, Goldsmith, and Van Loon Streets. There are a few intrusive modern apartment buildings on Van Kleeck Street. This area was all farm land down to early in the 20th century, with Horse Brook running through and draining it. A few scattered houses bordered Grand Avenue.

One notable building, though of modern construction, borders Queens Boulevard between Monson and Goldsmith Streets. The four story Elks Lodge of brick, granite and limestone, was built in 1923 and completed in 1924. A great bronze elk stands in front of the entrance like a sentinel. (See Photo 24) At the time of its dedication the building was one of the handsomest structures in Queens County and is still in good condition.

Photographs 25 through 29 show the Queens Boulevard frontage of Parcels 21 through 25.

South Side of Queens Boulevard Between Grand Avenue and 58th Avenue
Parcels 26 Through 32

Except for the buildings fronting on the south side of the boulevard, this large tract, eight blocks long and two blocks deep, is of very uniform character. It is covered almost entirely with 2½ story, wood-frame, detached private houses, almost every one of which was built during the housing boom of 1920-1930. Before 1910 this whole tract was farmland, nursery beds, Presbyterian church property, and the extensive rear yards of a number of large homes along the south side of Grand Avenue (dating from the late 19th century), all of which have now been swept away. On the Queens Boulevard frontage there were the old Corner House and the Renne House. Still standing are the "new" Presbyterian church, erected in 1895, and the 1927 vintage Elmwood Theatre.

Corner House

The Corner House once stood on the southeast corner of Queens Boulevard and Grand Avenue. It was built about 1716 and razed in 1916. It was built as a private house, then became a tavern during the Revolution and a favorite hangout for the British Occupation forces. It is said that the ballroom upstairs was used by the officers for formal dances. In the 19th century the building reverted to a private house and so remained until 1909 when the Newtown Gas Co. bought it for an office building and warehouse. In 1916 the city notified the owners that they wanted to demolish the building in order to get land for the widening of Queens Boulevard. Half-hearted attempts were made to rescue the building but it succumbed to the wreckers after two hundred years of existence. The site is now in the eastbound lanes of Queens Boulevard. (Seyfried, REGISTER Index) The 1927 Belcher-Hyde Atlas shows both old and new street widths and where the house once stood. (Fig. 20) Photograph 30 is of the Corner House before it was demolished.

Renne House

The southwest corner of Queens Boulevard and 57th Avenue was the site of the Renne House or "Big House," one of the best residences in Newtown at the time of the Revolution and was chosen by Lord Howe, commander of the British Occupation forces as his personal headquarters. Here he composed his narrative account of the Battle of Long Island for the war ministry in London. (Stiles, 1867-69, p. 290) In the early 19th century the place became known as the Bretonniere house, the name of one of its owners. The place burned down about 1880 and a Victorian mansard roofed house was erected on the site. This in turn was torn down in 1938. Another building was erected since then and its current occupant is a "Crazy Eddie's" store. (See photo 31) An interview with the owner of the building yielded the information that, because it was originally used by an automobile sales company, the foundation construction is deep and rather massive. The basement is over six feet deep. There is no

likelihood that remains of the Renne House worthy of investigation could have survived.

Photographs 32 through 38 show existing conditions along this tract containing Parcels 26 through 32. Note the Presbyterian Church in Photos 33 and 34 and the Elmwood Theatre in Photo 35.

Parcels 15 and 16

All maps consulted showed Parcels 15 and 16 as part of the Horsebrook Marsh through the 19th century. In fact, the "landmark" map drawn in 1908 cites Number 30 (See Fig.17) which is located NW of Parcel 15 as the site of the c.1750 Jessup House which was "considered to mark the end of the town." (Kelley, 1909,p.301) The watery plots have been filled and today are parking lots as shown in Photo 39.

Town Cemetery

The site of the ancient town cemetery is in the study area though not on one of the 32 Parcels. It is located on the SE corner of 92nd Street and 56th Avenue and is now a playground. It was laid out as the Town of Newtown burial ground shortly after 1652 and continued in use for the next 200 years. After the Civil War the burial ground ceased to be used because modern cemeteries offered better and more attractive grounds. In the 1880s and 90s the cemetery began to fall into neglect; weed trees sprang up and brambles covered the ground. (See Photo 40) The town made half-hearted attempts to maintain the fence and tidy up the roughly 200 x 150 foot plot. After consolidation with New York City in 1898 the cemetery became a dumping ground and many of the stones were broken. No city bureau wanted to accept jurisdiction despite prodding by civic organizations. Finally, in 1916, the Parks Department laid the remaining stones flat on the graves, leveled the plot and converted the place into a fenced-in playground. Photograph 41 shows the site as it looks today.

Tract on North Side of Queens Boulevard From Broadway to 90th Street - Parcels 12 through 14

Subway construction (See map, Fig. 21), street widening, and building disturbance have combined to destroy any cultural resources which once might have existed on the Queens Boulevard frontage of Parcels 12 through 14. The rear portions of Parcels 12 and 13 will be discussed in the following section.

Presbyterian Church

On the north side of Queens Boulevard about 200 feet east of Broadway formerly stood one of the old colonial churches, the Presbyterian. During the Revolution the original wooden building was pulled down by the British to obtain wood for the tents of the enlisted men camped in the fields; the steeple was sawed off and the pulpit used for firewood. (Riker, 1852, pp. 198-199) After the Revolution the Presbyterians built a new wooden Church very near the old and dedicated it in 1797. This structure was used all during the 19th century until 1895. A wealthy parishioner left the bulk of his fortune to the church on condition that the trustees build a large stone edifice, and this was dedicated in 1895 on a new site across the street. (Visible on Photo 34) This is the present church. The old building was used as a Sunday School until October 1928 when a fire in the steeple seriously weakened the beams. (Photo 42) In 1929 the 130 year old structure was demolished.

Directly east of the Church was the Presbyterian Churchyard. This was in continuous use all during the 19th century and burials were occasionally made as late as the 1920s. (Photo 43) As Elmhurst became heavily urbanized, it became more and more difficult to protect the cemetery and the site became very valuable as real estate. In 1948 the church resolved to sell the property; it took ten years to get the necessary legislation through the Legislature in Albany but in the fall of 1958 the bodies were finally exhumed and transferred to Evergreens. The Metropolitan apartment house now occupies the site. ? source
? footprint

Photographs 44 and 45 show parcel 14, and Photo 46 shows the Queens Boulevard portion of Parcel 13.

It is
Not clear if all bodies
have been removed.

At least,
usually headstones are.

Broadway and Parcels 11 and 12

The west side of Broadway, from Parcel 11 to the Justice Street intersection, contains today all recently erected buildings - late 1930s to World War II vintage. The Queensborough Subway makes a turn out of the East side of Broadway (Parcel 12) and into Queens Boulevard (See Fig. 20) and to make the curve as gentle as possible, the engineers cut a wide swath through the west side of Broadway and under the northeast corner. Extensive destruction of the buildings facing both sides of Broadway from Corona Avenue to Queens Boulevard was the result. The former structures on the west side were John Heeg's Hotel, Arcanum Hall, Wandowenock Fire Company #1, the former railroad station of the White Line, and the NEWTOWN REGISTER office (before 1873 the village grade school built in 1740). Photograph 47 shows the subway excavation in 1931. Heeg's Hotel stood on Parcel 11; photograph 18 shows that corner at Queens Boulevard as it is today.

Within the study area there still survives St. James Chapel, southwest corner of 51st Ave. and Broadway, now the oldest structure in Elmhurst. (See Photo 48) Built in 1735, the interior was finished in 1740; it was rebuilt in 1760 and again in 1816. The edifice was last used as a church in 1848, after which the congregation moved to a new church across the street (Photo 49), at the northwest corner of Broadway and Corona. The old colonial structure is now used as a Boy scout meeting hall. The successor church of 1848 lasted until Oct. 11, 1975 when vandals set fire to the vestibule and the church burnt to the ground. A new brick church and parsonage was erected in 1976-77.

At the outside edge of the study area on the southwest corner of Broadway and Corona stands the Dutch Reformed Church and Hall. The first church was erected in 1735 and was taken down in September 1831. The present edifice went up in 1832 and is a landmarked building. (Photo 50) The church is Georgian and classical in architecture and very simple in its lines; the interior is well preserved. On the north side of the church is a historic churchyard with many 18th and 19th century monuments marking the graves of many members of prominent families of old Newtown. The Reformed church today is a striking adaptation to the ethnic change in the neighborhood; Sunday services are offered in Korean, Chinese, Tamil, and English. Civic groups have the use of the parish hall adjoining the church.

The Town Hall site is now the small triangle at the junction of Justice Street and Broadway. The most recent town hall

was the sixth building on or near the site in three hundred years; it was built in 1892 and torn down in 1966. When the old Town of Newtown passed out of existence in 1898 through incorporation, the city converted the building to a police station. In its last days the building served as a Magistrate's Court. It is from Town Hall that the street in the rear derives its name "Justice Avenue" or previously "Court Street." (See Site Map, Fig. 22 for location) Since the demolition in 1966 there have been no buildings on the tiny triangle whose surface presumably caps the remains of six successive structures. The measurements on the Queens Topographic Bureau Final Map, Section 26, 1910, of the plot outline the sensitive zone. At a spot 40 feet equidistant from the Blocks to the north and south, the triangle measures 66'32" facing Broadway, 96'.38" along the south side of Justice St., 111'.35" along the north side of Justice, and 10'.27" where it faces Justice. Photograph 51 shows the Town Hall before 1892 and Photograph 52 was taken in 1986.

As stated above, early twentieth century construction and subway excavation in 1931 completely changed both sides of Broadway between Queens Boulevard and Justice Avenue and around the corner of Broadway into Queens Boulevard (Parcel 12). Three illustrations depict the change over time more eloquently than any words: a drawing looking north up Broadway from Queens Boulevard shows the area in 1850 (Photo 53); photo 54 is approximately the same view in 1914; photo 55 shows the vista in 1986. Photographs 56-58 move from north to south along the Broadway side of Parcel 12.

Parcel 13

Except for the Georgia Diner which occupies the corner of Queens Boulevard and 55th Avenue (See Photo 46), Parcel 13 is an open parking lot, and that is the portion which will be here considered. It is situated over and north of the Horse Brook which once ran through much of the entire study area. (See Figure 10 for the location of the stream). It is bounded by Justice Avenue on the north, 55th Avenue on the east, and the Metropolitan apartment building and a vacant space on the west. Information about the past land usage of this plot was obtained from maps, atlases, histories, newspapers, and photos.

A historian writing in 1909 described the residential development in that vicinity this way: "The house lots were laid out on the south side of the street (now Hoffman Avenue), and on the north side of Court Street [Justice Avenue], the intervening space being occupied by a wet tract traversed by the small Horse Brook. The lots laid out in this space (about an acre or two each) were intended only pasturage, and were so used for nearly

a century. Then some small houses were built, a few of which have survived, giving an antiquated air to the neighborhood, while most of the other old houses have disappeared." (Kelley, 1909,p.297). An 1850 view depicts some small houses on part of what is Parcel 13, though the NE part is not included. (See Photo 53). There are probably no structures shown on Riker's 1852 map, though it is hard to be positive (Fig. 19). There are some buildings shown on the 1859 Walling map, and also on the Dripps Map of 1873. (Figs. 9, 10). On atlases of 1891 (Wolverton), 1908 (Belcher-Hyder), and 1909 (Bromley), structures are shown, but the configuration differs on all three. What would be Parcel 13 is shown as vacant on the 1915 Belcher-Hyder. However, a photograph taken in 1912 definitely shows that there were houses and outbuildings on the property which is to the right of the three-story apartment building which is still standing. Their backyards slope rather steeply down to the Horse Brook. (See Photo 59) Likewise, a 1924 photograph shows some dwellings (Photo 65), and Queens historian Vincent Seyfried attests to the fact that a few of the old homes lingered into the 1960s before being finally razed.

In November 1873 the Newtown and Flushing Rail Road Company opened services on its White Line track, which traversed certain of the Queens Boulevard Rezoning parcels. According to The Long Island Rail Road history, "The White Line as completed was a short but well-constructed spur. The track left the main line immediately west of Maurice Avenue [51st Street], crossed that avenue diagonally at grade, crossed Queens Boulevard midway between Goldsmith and Van Alst [Van Loon] Streets, and reached the Newtown station at Broadway, within a few feet of the present stairs into the subway. The track crossed Broadway at grade and then paralleled Court Street [Justice Avenue]. Here was located the only siding on the branch. The track then cut across the farms and intersected Corona Avenue at 111th Street." (Seyfried, 1975-1984, Vol. 3:p.77). This routing, which passed between the Horse Brook waterway and Justice Avenue on parcel 13, is shown on the Dripps 1973 Map, see Fig. 10. The White Line survived less than five years and the dismantling of the rails started in 1878. In 1882 and 1883 the abutting property owners reclaimed the portions of the railroad right-of-way taken from them a decade before. (ibid:p.82). The installation of the main rails and the sidings was most likely the first full-scale filling and grading undertaken on parcel 13.

The present parking lot on the once-sloping parcel has a somewhat uneven surface, though it has obviously been filled and graded and is almost level. In fact, in some places - notable the southwest corner where it should be quite low, it is considerably higher than the abutting vacant or alley space. Photographs 60 through 64 show Parcel 13 from various angles.

CONCLUSIONS

Prehistoric Era Resources

As outlined in the "Prehistoric Review," we know that Native Americans were active within the Bourough of Queens for thousands of years. And, we know that Native Americans highly prized elevated sites within close proximity to a major water resource and that they required a fresh water source. Of course Native Americans exploited their total natural environment for hunting, fishing, and gathering plus camps and pathways and it is understood that single-find sites can be uncovered in almost any geographical location. However, we can only speculate as to the degree to which peoples of the distinct Stages of the prehistoric era exploited and manipulated the Queens Boulevard Rezoning Proposal Project area. Before fieldwork is recommended to substantiate or negate such speculation, specific conditions must be considered. The strength of such speculations must be weighed in conjunction with the research needs of New York archaeologists and the potential for subsurface resources having survived the exigencies of time. Simply, archaeological testing is recommended only if the high probability of a site and valuable research data can be expected to be found and if these results will greatly increase the knowledge and understanding of prehistoric peoples of western Long Island. Consultations with the staff archaeologist of the New York City Landmarks Preservation Commission during Task 5 will consider the mitigation possibilities for this particular Project.

In consideration of the Project topography during the prehistoric era (See Figs. 8A/B, 23), specific parcels can be eliminated from serious consideration for all time Stages because the low-lying nature of the land would most likely have prohibited activities other than hunting and/or gathering tasks: Parcels 15, 16, 17. Due to the original steep incline of Parcel 1, the parcel would probably never have functioned as a camp or village and the erosional factor involved on such a slope would probably have obliterated the integrity of a small function-specific site.

Solecki's (unspecified) streamside site location indicates the potential for Native American sites on Parcels 10 - 13 and 24 and 25. These possible sites would not represent the large open sites known to prevail during the Late Woodland time period but would possibly represent the edges of sites situated on the more level ground at a high elevation from the Horse Brook water course. The record of building and subway construction on Parcels 10, 11, and 12 obviate the need for further speculation on these sites. Modern construction and its resultant subsurface disturbance also removes Parcel 2 and most probably Parcel 3 from consideration for potential fieldwork.

Parcels 18 - 23 are situated on similar terrain: at an elevation of approximately 20 feet above MHW and within immediate

proximity to the original channel of Horse Brook. The southernmost portions of Parcels 18 and 19, at a lower elevation, were possibly traversed by the western extremity of Horse Brook. According to the archaeological research data, there is a very high probability that these parcels hosted both Archaic and Woodland occupation sites and/or work stations. The subsurface disturbance record of each parcel is not fully known. It is possible that the parking lots on the southern end of Parcels 18 and 19 are covering heretofore undisturbed fill that may be covering the Horse Brook wetland zone. Building the massive Pan American Motor Inn that fronts on Queens Boulevard and nearly covers all of Parcel 20 would most certainly have obliterated any possible remains of Archaic and/or Woodland resources.

Parcels 4 - 8, that are on the north side of Queens Boulevard and the original course of Horse Brook, were, more than likely, originally on a low knoll (20' above MHW). The eastern end of Parcel 9 drops in elevation toward the wetland area. Each of these parcels represents a likely location for an Archaic or Woodland site. It is not known if the vacant area at the northern end of Parcel 6 ever experienced foundation construction. A large number of the establishments along this strip - muffler shops and fast food outlets - could be of slab construction and therefore, if the parcels were not disturbed in a previous construction period, could be sealing potential archaeological resources. The subsurface disturbance inherent in a gas station business preclude consideration of the portions of parcels that host gas stations (that is, portions of Parcel 9, 18, 25).

The seven parcels located south of the Boulevard and east of Grand Avenue can be examined as a unit of potential fieldwork. Parcels 26 - 32, south of the wetland/watercourse zone, most probably had an elevation (post 3,000BP) of 25-30 feet above MHW. These particular sites probably fit the pattern for large open sites known to be preferred during the Late Woodland Stage. However, extensive twentieth century foundation and transportation construction impacts on this portion of the rezoning project precludes further archaeological consideration for specific areas: all of Parcel 26, see Photo 32 and note Seaman's Furniture and businesses fronting on the Boulevard that have deep basements; all of Parcel 27 that has been severely impacted by the construction and movement of the massive 1895 church building (see Photo 33) and the installation of a subway station (see Figure 21); all of Parcel 28, see Photos 33 and 34 and note the businesses fronting on the Boulevard that have deep basements; all of Parcel 32, note the massive Elmwood Theatre in Photo 38; and the southern portion of Parcel 31, the building currently occupied by Crazy Eddie's that is on the Boulevard and 57th Avenue corner lot has a full, deep basement.

There is a great deal of evidence that during the Archaic Stage the Native Americans exploited low-lying, flat sites which later became inundated. However, these sites were usually protected, by a ridge or "prominent finger of land" - a topographi-

cal feature not believed to have been present within the Project area during the Archaic Stage. It is possible that inland sites, unlike the coastal sites did not require this protective land mass. As indicated in the earlier discussion, relatively flat expanses of parts of the Project area (Parcel 14) might also have attracted Paleo-Indian exploitation during the lowered sea level times prior to 3,000 years ago. The degree of disturbance by the construction of the Jamaica Savings Bank on the western end of Parcel 14, the extent of the cellars underneath the one-story businesses (e.g. Dunkin' Donuts) fronting the Boulevard of the Parcel, and the nature of the matrix underneath the White Castle asphalt parking lot on the eastern end of the Parcel is not known and therefore the full potential of Parcel 14 cannot be appraised.

The site map (See Fig. 22) highlights those areas in the Queens Boulevard Rezoning Proposal Project area that might contain archaeologically sensitive resources. Although slightly more than one half of the Project parcels are tentatively considered as potential site locations, a considerable number of these locales will be eliminated from mitigation consideration during the Task 5 analysis. A function of Task 5, if deemed both necessary and appropriate by Landmarks, will be a study of the subsurface disturbance record for each of the sensitive areas. It is extremely difficult in urban settings to recreate the contours of a sloping backyard, to appreciate the cubic yards of fill present on a level parking lot, and to understand that potential resources may be buried underneath a McDonald's. (See Photo 67) The single track White Line Railroad operated for only three years but the laying of its track, along the north bank of Horse Brook, could have easily destroyed the archaeologically sensitive areas that concern us today. The archaeological record has documented the shallowness of many of the resources that we now seek to preserve. On Shelter Island many of the recovered artifacts were found only 10-15 cm below the surface. Could the original farming in Newtown, the road gradings, and the continual construction have left intact sensitive areas for current investigation? Consultations with Landmarks will need to consider the complete archaeological record, the current and past topographic features of the area, and the full range of mitigation issues before finer-scaled assessments are made on the 14 identified parcels. A simple tabulation of presence and absence of deep cellars within the noted parcels may eliminate them from further consideration.

Historic Era Resources

Although the Newtown Elmhurst area has been an important hub of human activity since the first days of colonization, most physical traces of these activities have been obliterated by the process of urbanization - particularly street widening and subway construction - which has been intense in the 20th century. The preceeding sections have highlighted some of the many events and structures which once took place and occupied parts of the area. However, evidence amassed during this study and outlined above lead us to conclude that - with two possible exceptions - material culture remains of any real significance have been destroyed.

The first of the sites which may have archaeological potential - the triangle at Broadway and Justice Street - is within the study area though not on a designated parcel. This small plot was part of a slightly larger one which hosted several - perhaps six - municipal buildings over the centuries. It is unknown how the final demolition of 1966 was accomplished, but it is reasonable to assume that the standing structure was pushed into its cellar if one existed. Even if there were no cellar, it is hardly logical to think that underground foundations or debris from previous buildings would have been removed during the razing.

The parking lot portion of Parcel 13 is the other locus of potentially significant resources. Exactly how the property was used and by whom was nowhere alluded to in any of the sources that were consulted, although there was abundant data concerning other loci which were considered important at one time or another. But even without specific documentation, it is evident that, beneath an undetermined amount of fill, Parcel 13 may contain backyard deposits from the 18th to the 20th century. It was 1917 before a trunk sewer was laid in this neighborhood and individual homes were connected during the 1920s. Therefore, individual house site refuse patterns, understandably restricted by municipal regulations in the later years, may be detectable for possibly the late eighteenth, nineteenth and the twentieth centuries. Based on this Task 4 description of the existing conditions, it is the Landmark Preservation Commission's decision as to whether potential value to be yielded by archaeological data from such resources is great enough to warrant detailed archival research and/or field testing to determine the presence or absence of cultural resources.

Task 5 will require - after consultation with LPC - an assessment of the significance and integrity of possibly intact archaeological resources, and of the impact of the proposed rezoning on any such resources.

BIBLIOGRAPHY

- Allee King Rosen and Fleming, Inc. and Vollmer Associates
 1983 "Feasibility Study for a Residential Development,
 Elmhurst, Queens." Mss. on file with Allee King Rosen
 and Fleming, Inc., New York.
- Armbruster, Eugene L.
 1923 Long Island Landmarks, Part I: The Town of Newtown.
 New York: privately published.
- Baughner-Perlin, Sherene, Meta Janowitz, Marc Kodack, Kate Morgan
 1982 "Towards an Archaeological Predictive Model for
 Manhattan: A Pilot Study. Mss on file with the NYCLPC.
- Bolton, Reginald P.
 1922 Indian Paths in the Great Metropolis. Indian Notes and
 Monographs, Museum of the American Indian, Misc. 23.
- Boyd, Glenda F.
 1982 "The Transitional Phase on Long Island," in the Second
 Coastal Archaeology Reader: 1900 to the Present, James
 E. Truex, editor. Vol. V of Readings in Long Island
 Archaeology and Ethnohistory. Stony Brook: SCAA.
- Ceci, Lynn
 1980 "Locational Analysis of Historic Algonquian Sites in
 Coastal New York: A Preliminary Study," in Proceedings
 of the Conference on Northeastern Archaeology. J. Moore,
 editor. University of Massachusetts, Amherst, Dept. of
 Anthropology Research Report 19: 71-91.
- 1979- "Maize Cultivation in Coastal New York: The Archaeolo-
 1980 gical, Agronomical, and Documentary Evidence," Robert
 L. Schuyler, editor. North American Archaeologist,
 Vol. 1: 1.
- Denton, Daniel
 1902 Denton's New York. Cleveland: The Burrows Brother Co.
 Reprinted from original edition of 1670.
- Eisenberg, Leonard
 1978 "Paleo-Indian Settlement Pattern in the Hudson and
 Delaware River Drainages," in Occasional Publications in
 Northeastern Anthropology, Vol. 4.
- Erlich, Jessica Kross
 1979 "A Town Study in Colonial New York: Newtown, Queen
 County

French, J. H.

1860 Gazetteer of the State of New York. Syracuse: R. P. Smith, Publishers.

Gonzales, E. and A. Daniel

1978 Suffolk County Cultural Resources Inventory. Gaynelle S. Levine, editor. Stony Brook: SCAA.

Gorman, F. J. E.

1983 "Stage I and II Archaeological Investigations," Final Environmental Impact Statement - Pepsico, Somers Office Facility. Pp. 18-22. Mss. on file with Jason Cortell and Associates, Inc., Waltham, MA.

Hazelton, Henry I.

1924 The Boroughs of Brooklyn and Queens-Counties of Nassau and Suffolk, Long Island, New York, 1609-1924, Vol. II. New York.

History of Queens County, New York.

1882 New York: W. W. Munsell and Company.

Historical Collection of the Borough of Queens

1935 W. P. A. Project: 465-97-3-20. Vol. 13: Newtown.

Kaeser, Edward

1978 "The Oakland Lake Site (Har-13-4)" in the Coastal Archaeology Reader, Vol. II in Readings in Long Island Archaeology and Ethnohistory. Stony Brook: SCAA.

Kearns, Betsy and Cece Kirkorian

1984 "Phase IA Archaeological Impact Report for the Rego Park Mall Project, Queens, New York." Mss on file with the NYCLPC.

Kearns, Betsy and Cece Kirkorian

1985 "Phase IA Archaeological Impact Report for the Sportsplex Project." Mss on file with the NYCLPC.

Kelley, Frank Bergen.

1909 "Historic Queens," Chapter XI in Historical Guide to the City of New York. New York: Frederick Stokes and Co.

Kross, Jessica

1983 The Evolution of an American Town: Newtown, New York: 1642-1775. Philadelphia: Temple University Press.

Lightfoot, Kent, Robert Kalin, Owen Lindauer, and Linda Wicks

1985 "Coastal New York Settlement Patterns: A Perspective from Shelter Island," in Man in the Northeast, No. 30: 59-82.

- Marshall, Dr. David T.
1926 "Long Island Natural History Notes: Indian Relics in Queens County," in Long Island Life, Vol XXIV, 1: n.p. July.
- Moeller, Roger
1980 6LF21: A Paleo-Indian Site in Western Connecticut. Occasional Paper Number 2. Washington, CT: American Indian Archaeological Institute.
- O'Gorman, William
1934 "Ancient Newtown," reprint of a series of newspaper articles in the Newtown Register." Mss located at the Queens Borough Public Library, Jamaica.
- Onderdonck, Henry
1846 Revolutionary Incidents of Queens County. New York: Leavitt, Trow and Company.
- Queens Borough Magazine
1923- Organ of the Queens Chamber of Commerce.
1924 Volumes IX and X.
- Reifschneider, Felix
1950 "Street Cars on Thomson Avenue," in Trolley Lines of the Empire State."
- Riker, James Jr.
1852 Annals of Newtown. New York: D. Fanshaw and Company.
- Ritchie, William A.
1980 The Archaeology of New York State. Harrison, NY: Harbor Hill Books. Revised edition.
- Ritchie, William A. and Robert E. Funk
1973 Aboriginal Settlement Patterns in the Northeast. Memoir 20. Albany, NY: New York State Museum and Science Service.
- Ross, Peter
1902 A History of Long Island. New York: Lewis Publishing Company.
- Rutsch, Edward S.
1983 "Westside Highway Cultural Resource Survey, Archaeological Work Program. Cultural Resources Research, contract #D-202836. Mss on file at NYCLPC.
- Saxon, Walter
1973 "The Paleo-Indian on Long Island," New York State Archaeological Association Bulletin, No. 57, March 1973. (As reprinted in The Coastal Archaeology Reader, Vol. II of Reading in Long Island Archaeology and Ethnohistory. Stony Brook: SCAA. 1978)

Seyfried, Vincent F.

n.d. "The Newtown Register: Index and Transcript of News Articles," Vol. I, 1909-1915, and Vol. II, 1916-1920. Mss. located at the Queens Borough Public Library, Jamaica.

1975- The Long Island Railroad, Vol. 3. Flushing NY: The
1984 Queens County Historical Society.

1982 Queens, A Pictorial History. Norfolk, VA: The Donning Company.

1985 "Index to Armbruster's Photographs of the Town of Newtown, 1922-1924." Mss. located at the Queens Borough Public Library, Jamaica.

1985 "Newtown as a Sleep Community," in Three Hundred Years of Long Island City.

Snow, Dean R.

1980 The Archaeology of New England. New York: Academic Press.

Solecki, Raph

1941 "The Indians Lived Here," in So This Is Flushing (newsletter), Flushing Historical Society, October.

n.d. "Catalog of Photographs by Ralph Solecki - Long Island and Environs, Local Archaeology." Mss. located at the Long Island Division of the Queens Borough Public Library, Jamaica.

Stiles, H. R.

1867- A History of the City of Brooklyn, Vol. I-III.
1869 Brooklyn, NY.

Vonskal, George

1908 Illustrated History of the Borough of Queens. New York: F. T. Smiley Publishing Company.

Wilson, John Ewell

n.d. "The Indians of Queens Borough, by the Historian of the Long Island Algonquin Society." Mss. located in the Long Island Collection, East Hampton Free Library.

Wyatt, Ronald J.

1982 "The Archaic on Long Island," in the Second Coastal Archaeology Reader: 1900 to the Present, James E. Truex, editor, Vol. V of Readings in Long Island Archaeology and Ethnohistory. Stony Brook: SCAA.

Figure 1

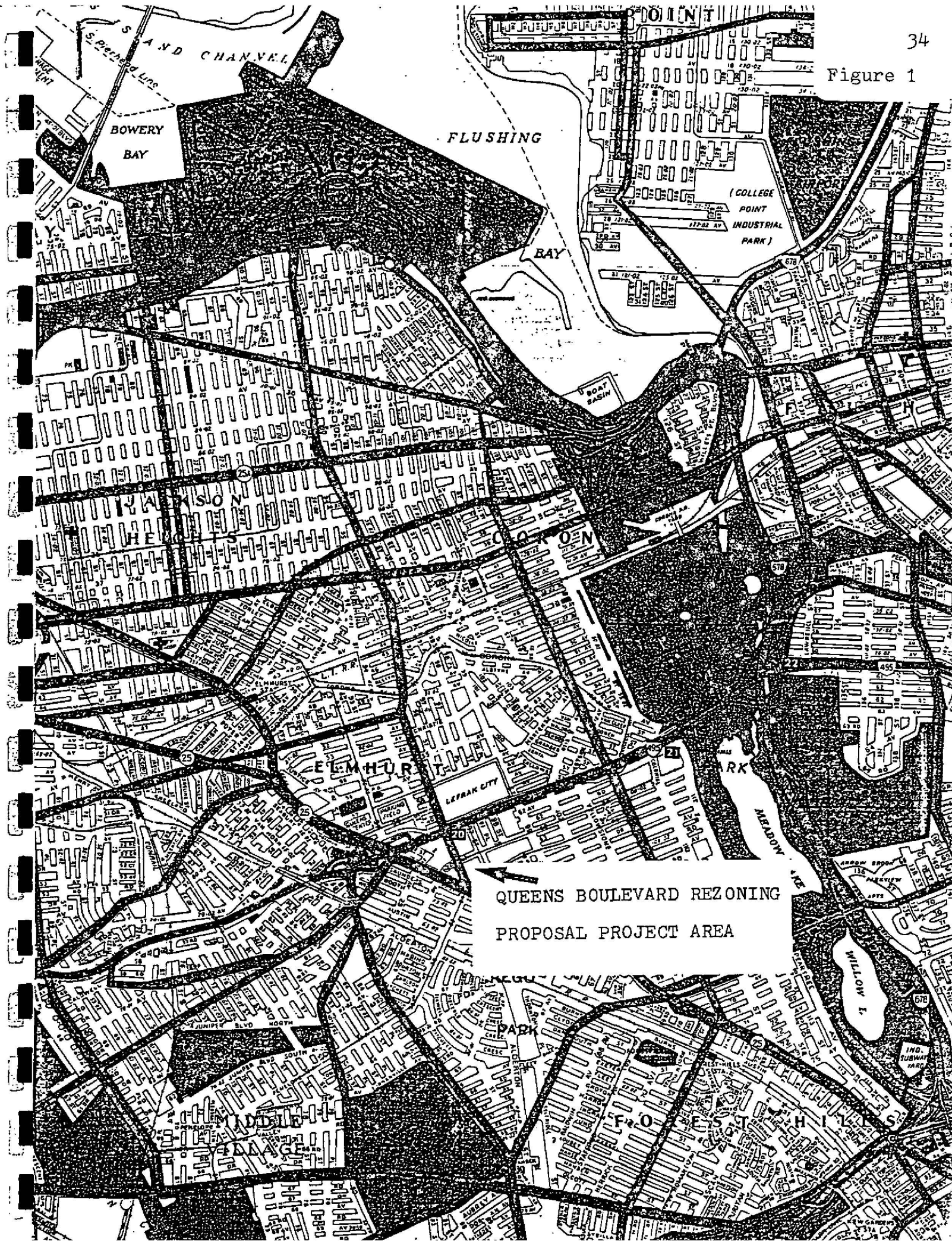
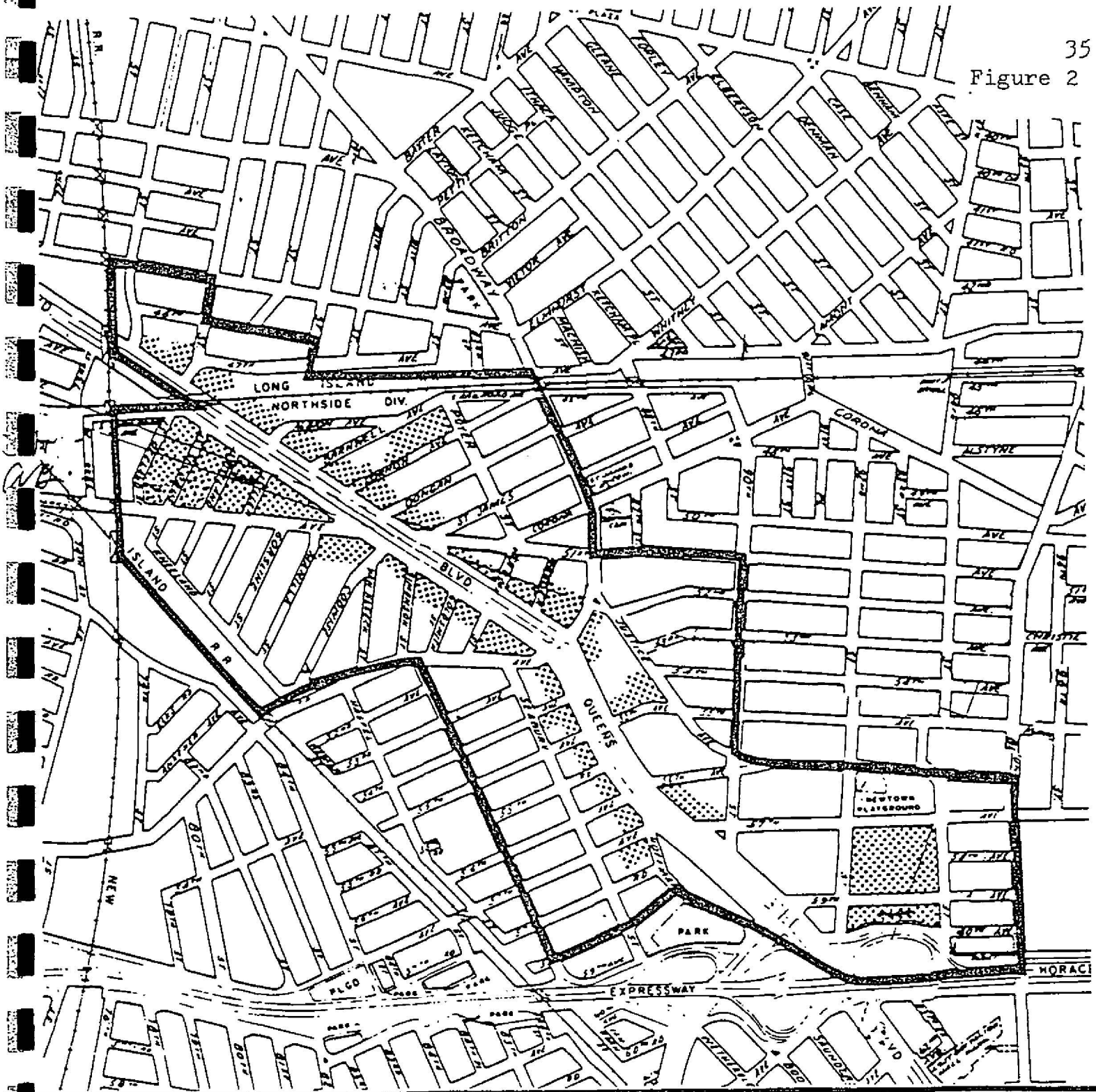


Figure 2



Proposed Project Study Area

Legend

 Study Area Boundary

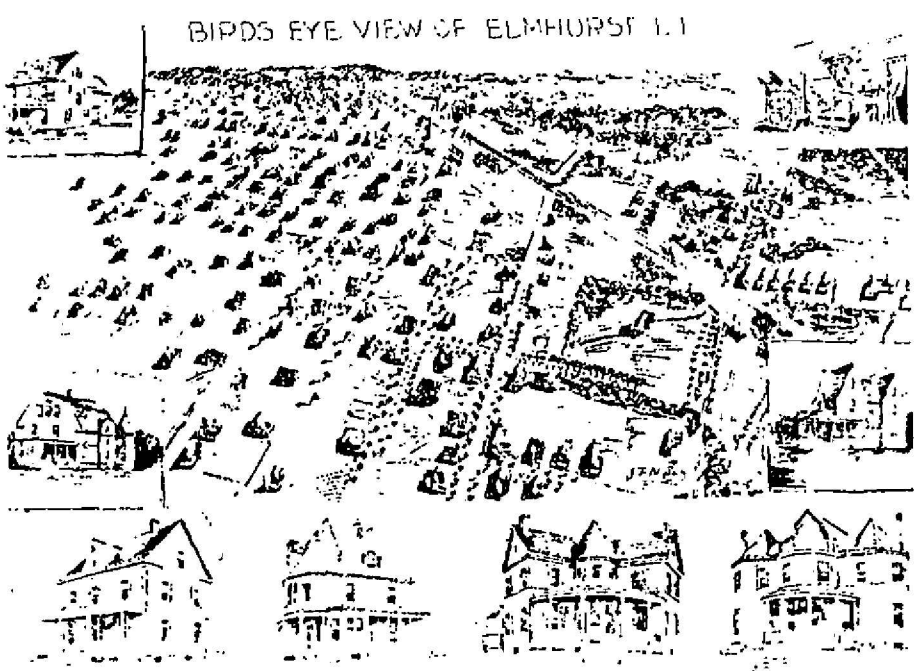
 Parcels Proposed for Rezoning

Provided by

Parsons Brinckerhoff Quade &
Douglas, New York, New York.



Bird's-eye views of towns were popular at the turn of the century. This one was published by the Cord Meyer Realty Company in 1896. The view looks south; the curving street at the right is Broadway, and the tree-bordered streets in the center are Ithaca and Judge streets. Seyfried photo



Photocopy from Seyfried, 1982.

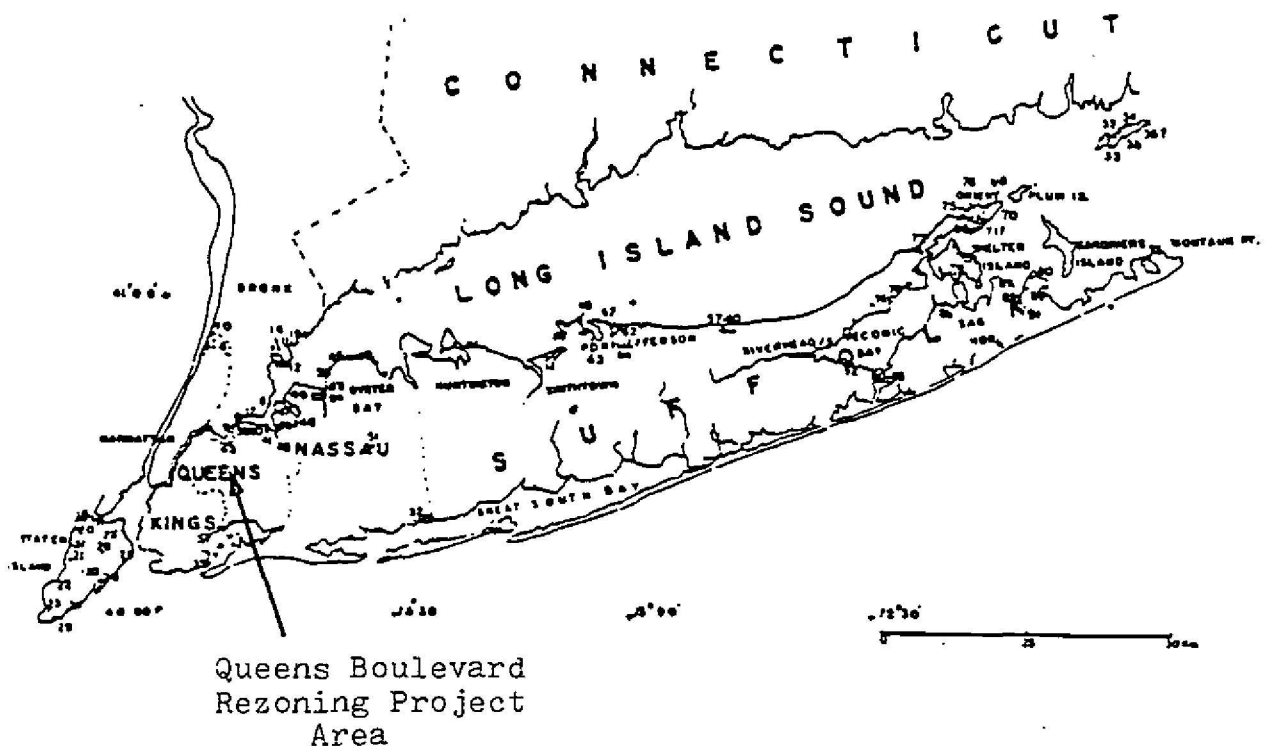
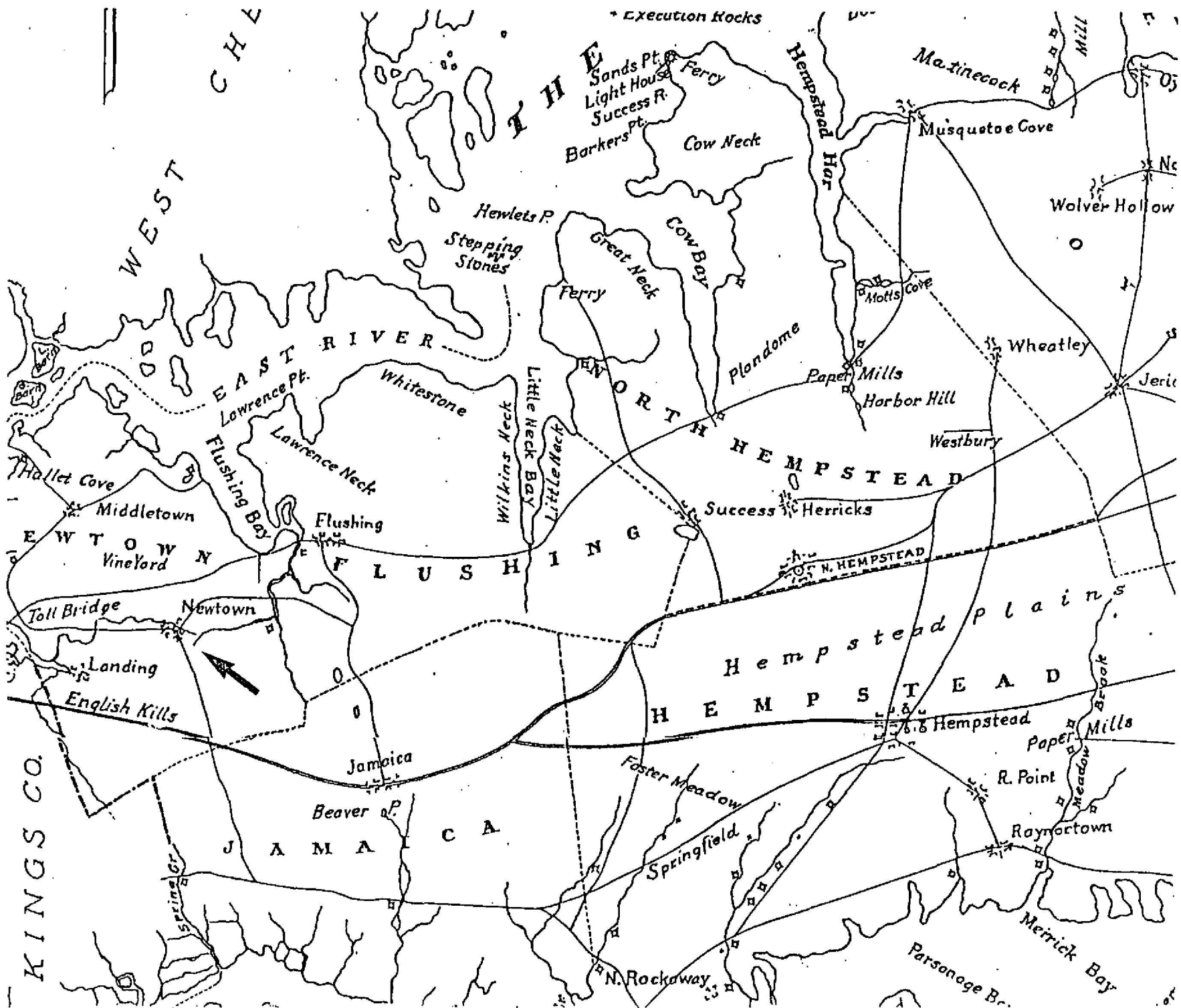


Figure 1. The spatial pattern of coastal New York sites that are reported in the published literature.

Figure 5

Photocopy of
Sir Henry Clinton's Map
1781
Provided by Gaynelle Levine





Photocopy of
BURR'S 1828 MAP REDRAWN IN 1940
Nassau Historical Society

Photo copy of
MAP OF LONG ISLAND WITH THE ENVIRONS OF NEW YORK
New York: Colton and Company
1836

Figure 7

Although the copy of this old map is very dark, one can make out the name of Newtown village and the stream running through the village center.

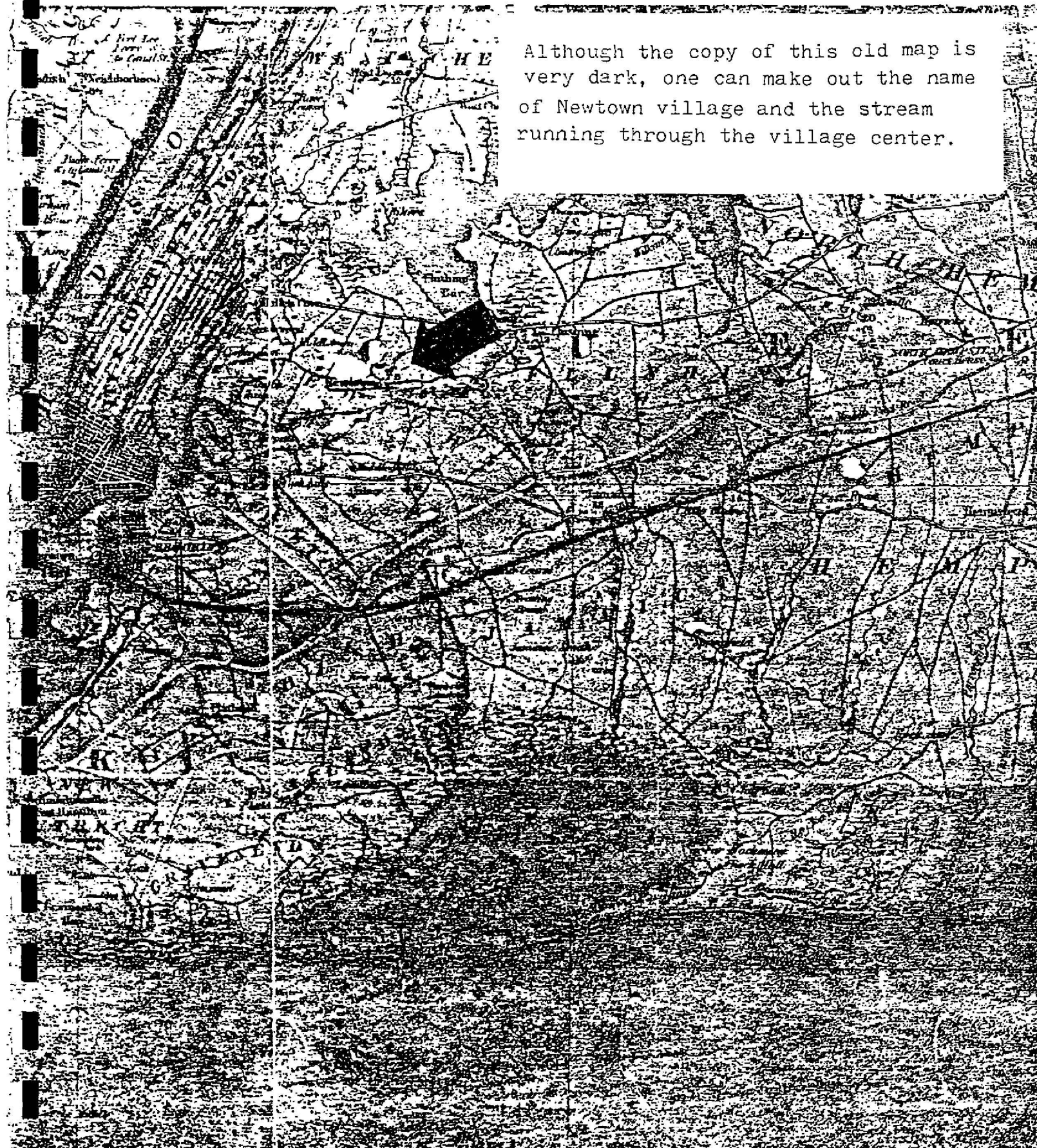


Figure 9

Photograph of
Walling Map, 1859
Vincent Seyfried Collection

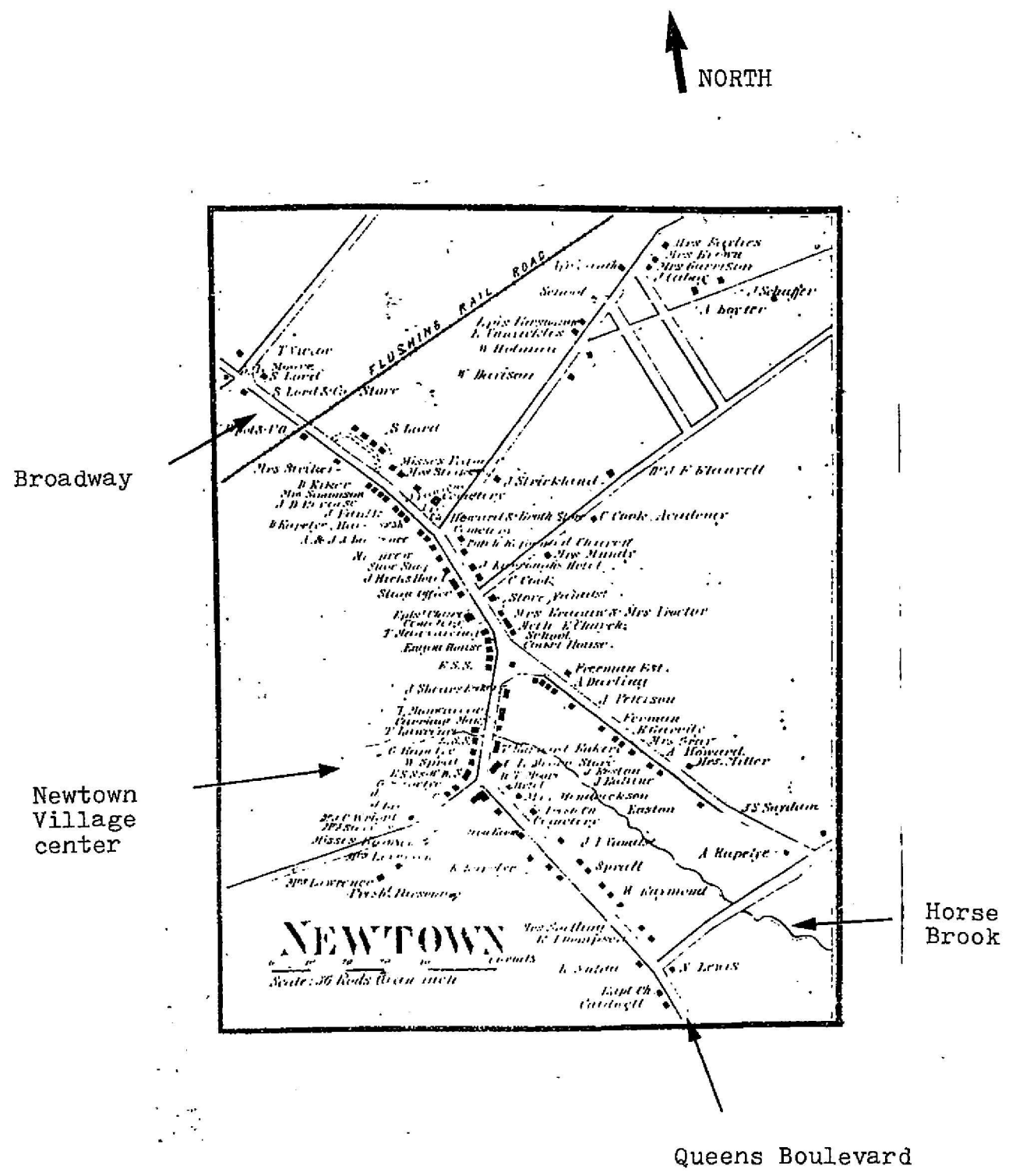
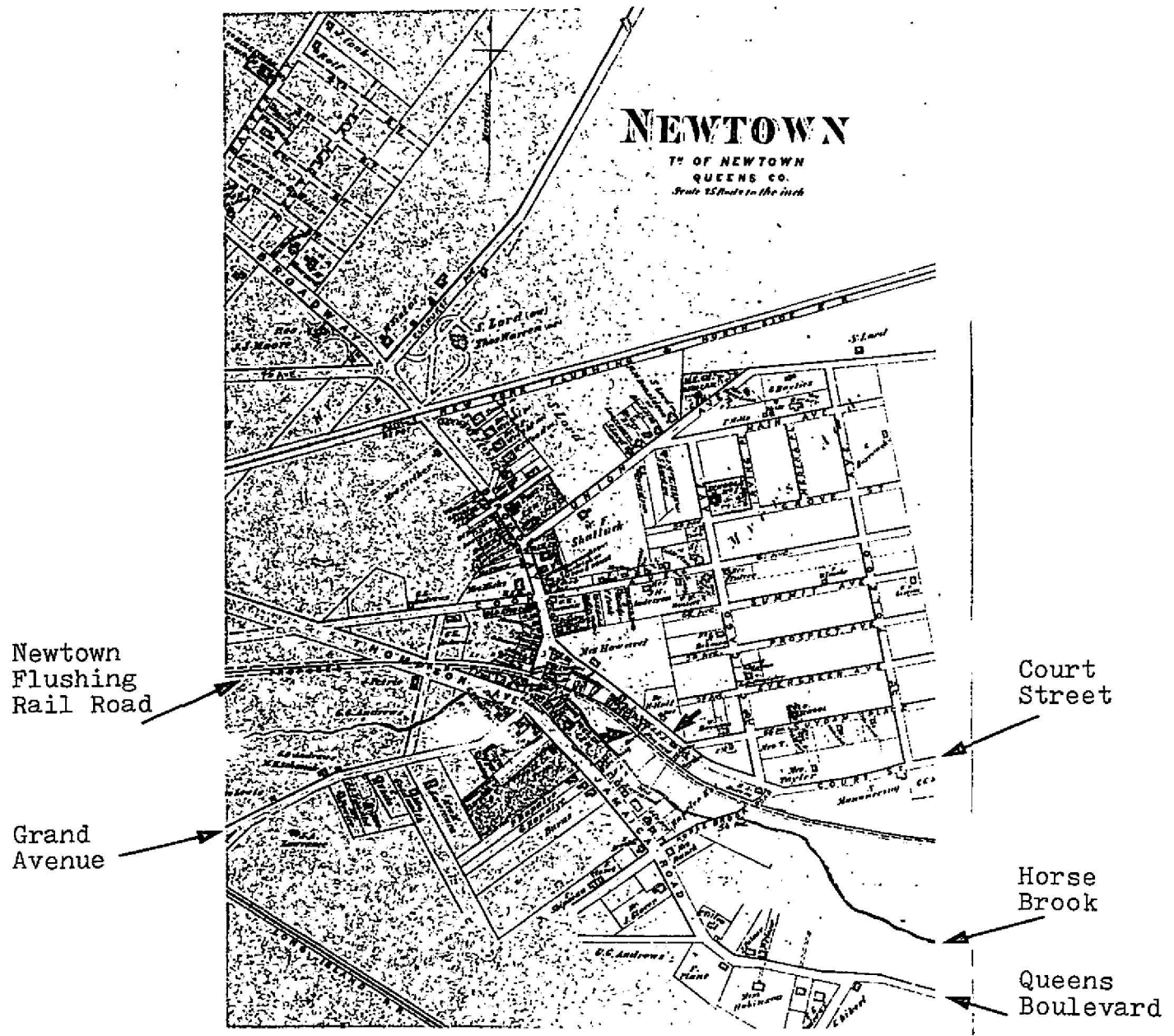


Figure 10

Photograph of
Dripps Map, 1873
Vincent Seyfried Collection

Note: Howard and Cannon homes on Court Street (Justice Ave.).

Pres. Ch. Cem. was removed in 1950s for the
Metropolitan apartment building.



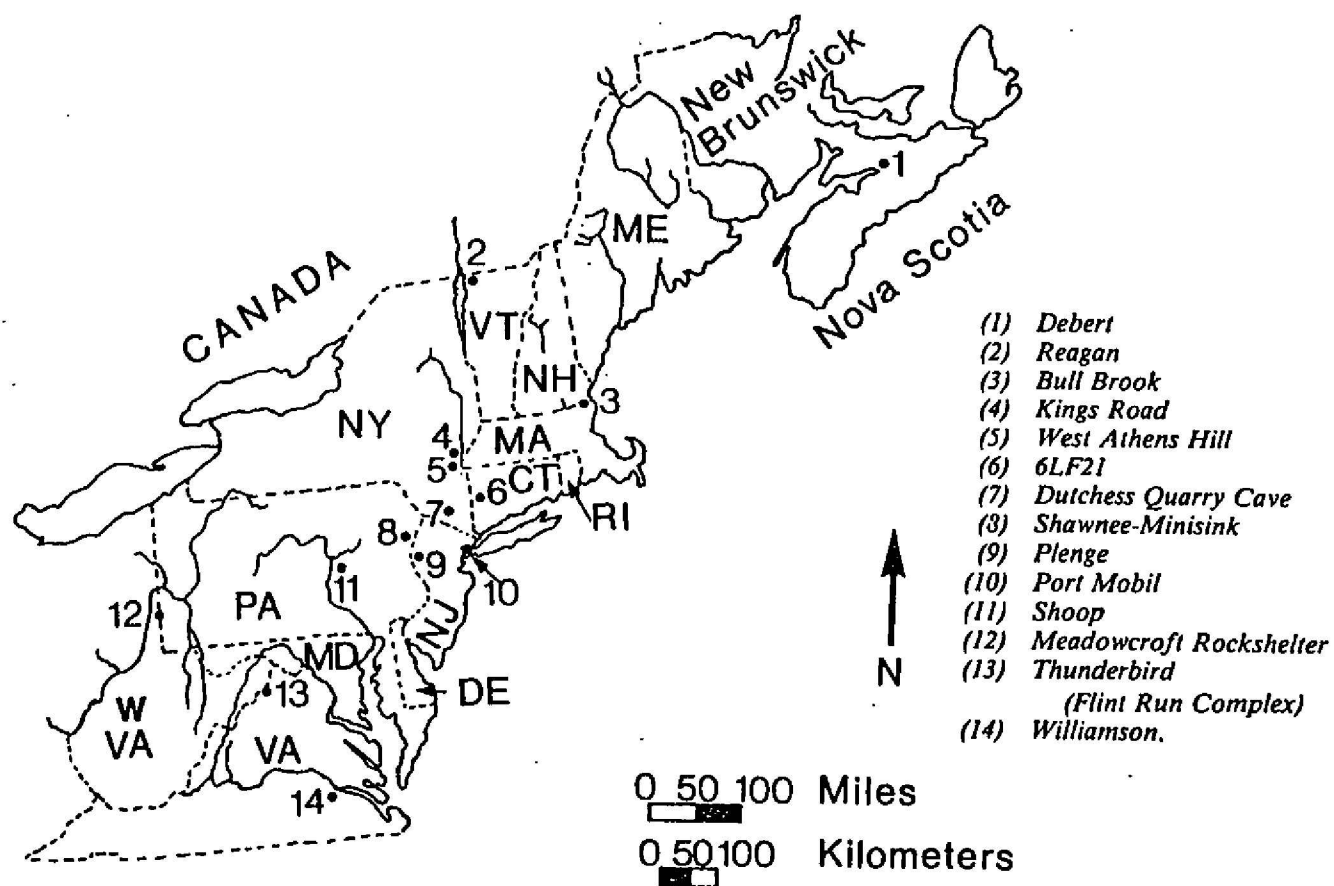


Fig. 1. Map showing location of fourteen Eastern United States and Canadian Paleo-Indian sites

PALEO-INDIAN SETTLEMENT PATTERN

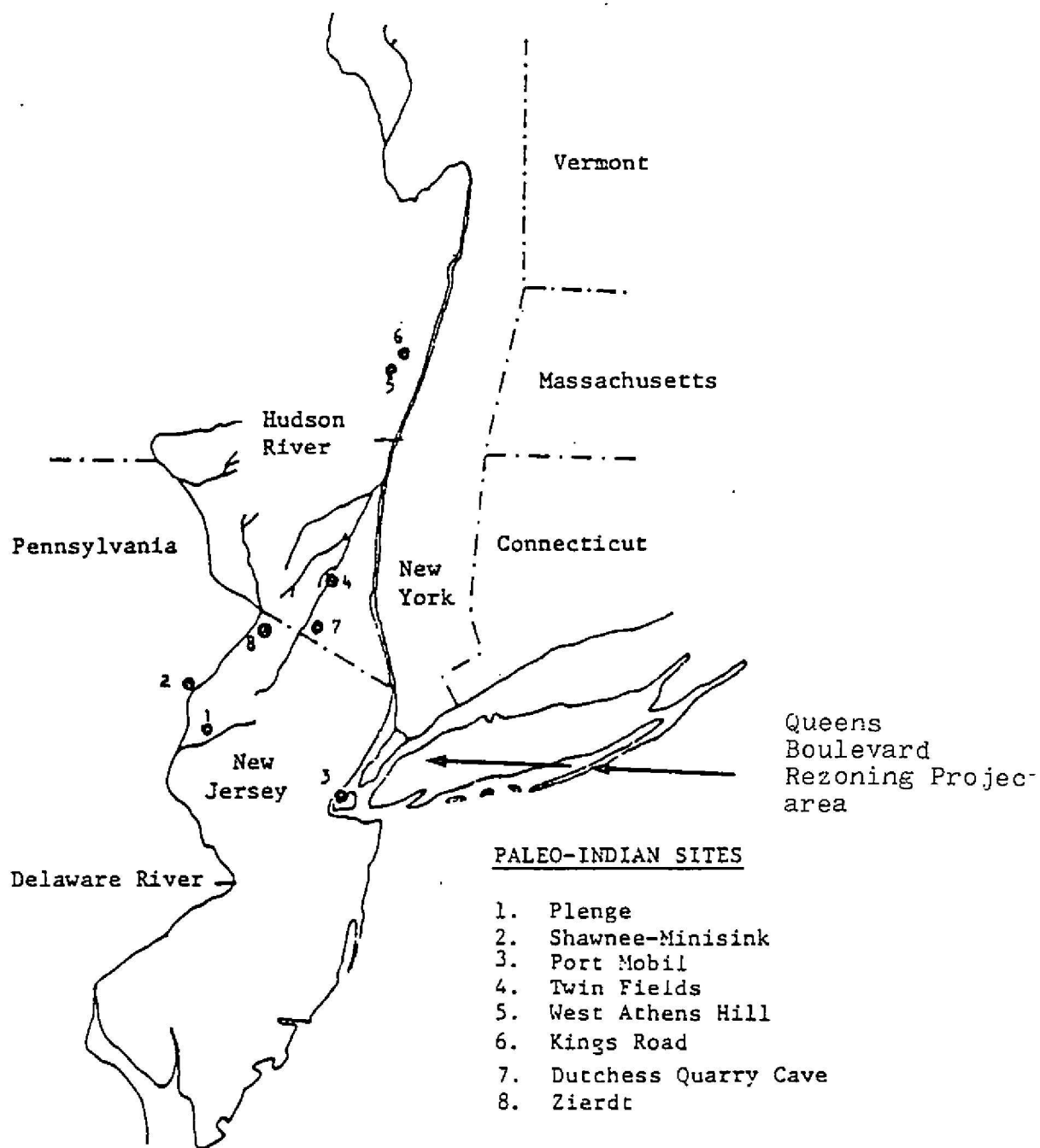


FIGURE 1

Map of the Study Area

(Photocopied from Eisenberg.)

(Photocopied from
Ceci, 1980.)

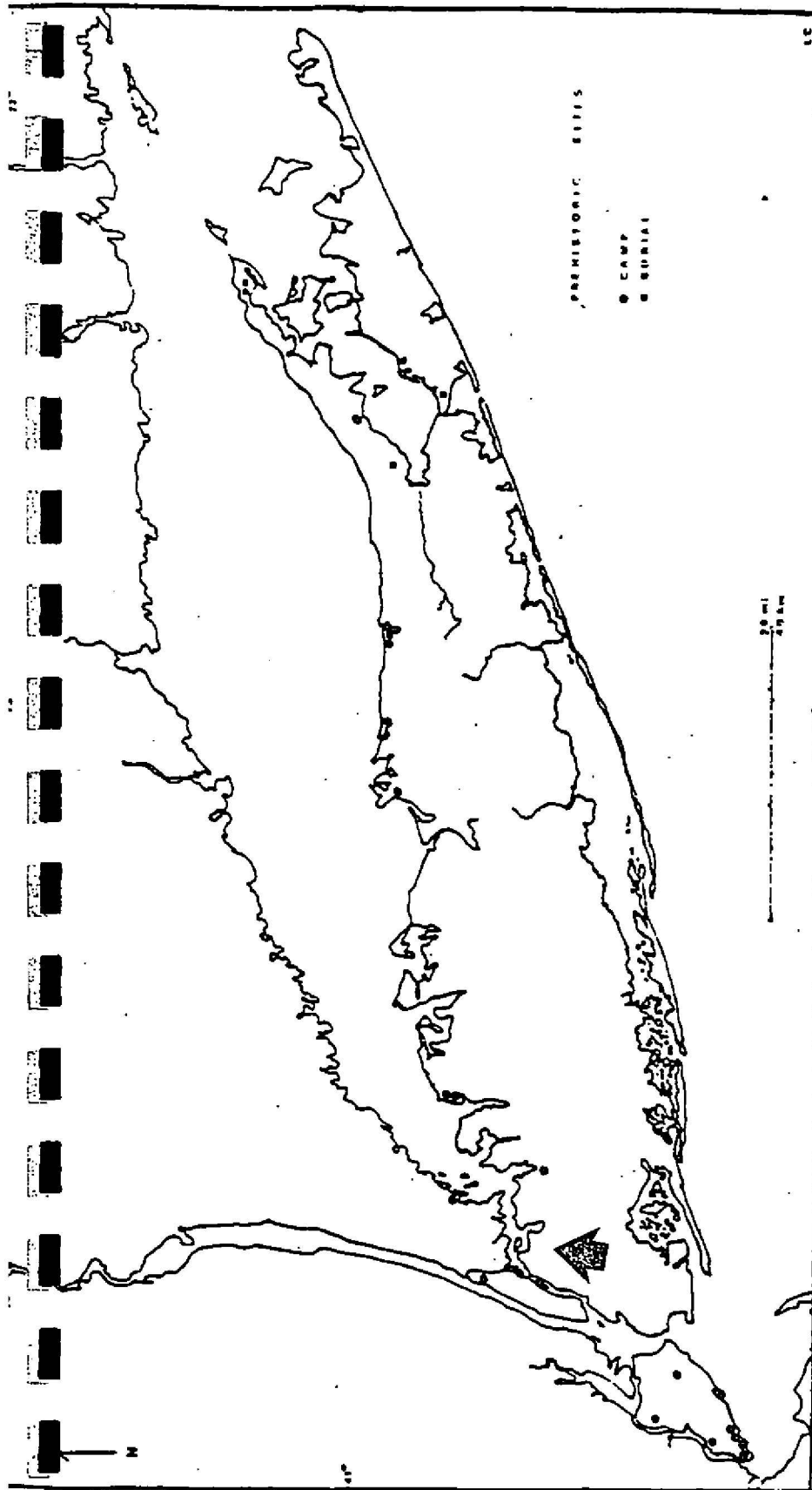


Fig. 2 Prehistoric Sites

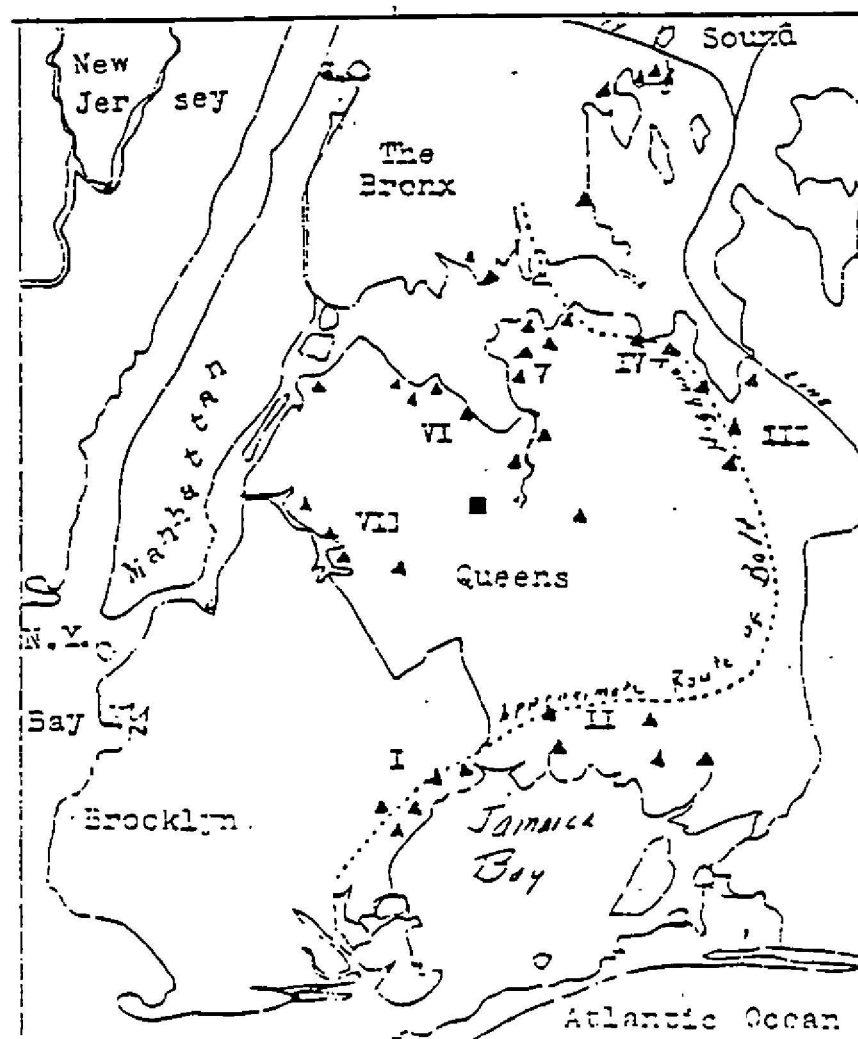
Table 1 Prehistoric sites in Coastal New York

County	Camp	Burials
Staten Island	Hollowell Hanes 1, 2 Old Place Richmond Hill Port Hobbs Hards Point Thyde Field	
Manhattan	Dyckman	
Bronx	Kaesser	
Queens	Oakland Lake	
Kings		
Wassau	Muskaeta Cove 2 Garvie Point	
Suffolk	Baxter Cusano Pipstave Hollow Shoreham Stony Brook Wedding River 1, 2	Jameport Orient 1 Orient 2 Sugar Loaf Hill

Sources: Ceci 1977; Gramly 1977; Patterson 1956; Ritchie 1959;
Rothchild and Lavin 1977.

Photocopied from
Solecki, 1941

Queens Boulevard
Rezoning Project
area ■

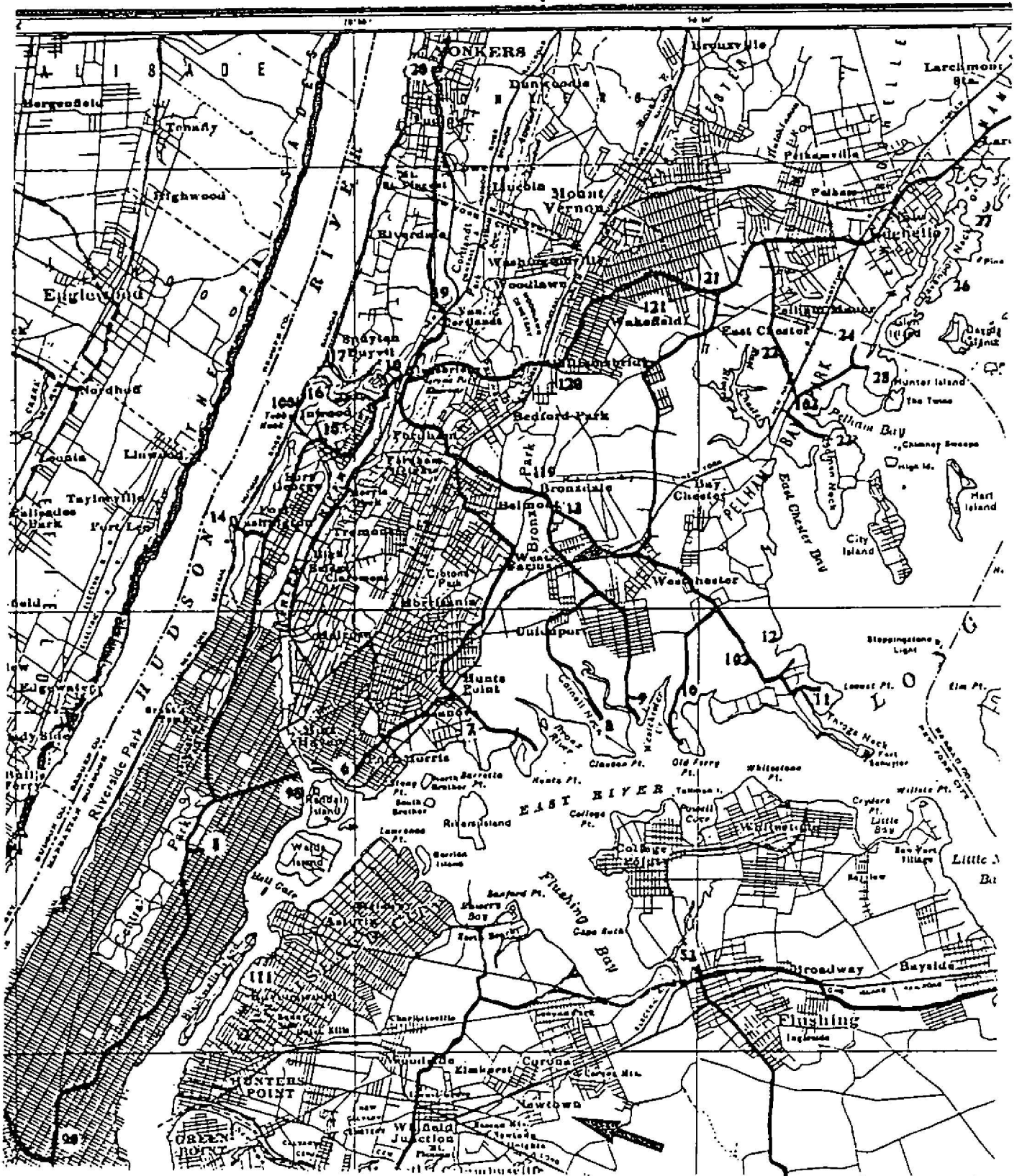


INDIAN VILLAGE SITES: Triangles on diagram indicate sites explored by Committee on American Anthropology of the Flushing Historical Society. Important locations described in accompanying article are numbered.

Photocopy of
MAP DEPICTING INDIAN PATHS IN THE GREAT METROPOLIS,
from
Bolton, 1920: n.p.

Note: Newtown

No Indian path shown traversing the project area in the village.



Effects About Mrs. Samuel maica.

at approximately 100 provided with a most a home of architect- is found in the resi- Mrs. Samuel Mar- maica. known Jamaica mer- Board of Trade, re- Brooklyn, which was -ling back and forth one time decided that -lived by a Jamaica the fashionable hill n Avenue. The house sun parlors and that s out upon a lawn, trees and a pergola



of Mrs. Samuel Martin, wing artistic landscape

owers, leading to the an arbor and a privet garden and strawberry and fronting on Ren- lower garden with its evergreen screen for evergreens include the bird bath, is an A beautiful feature of a tulip bed about 50 rooms in yellow, pink, n effective background in their rear. Many ers-by on the beauty screen of evergreens the front of the house, spacious sun parlor, as to provide chang- and plants through- the Rhododendrons

County are soon to provide a four-year county and to purchase tract has been sined on the North Shore ut by rail and motor which is pronounced -ector of the national be one of the finest eted. The tract, com- wooded, hilly country, of natural possibilities. takes, 1500 feet of United supply of pure of fast-flowing springs. on a ledge 110 feet will be opened for the m run for four weeks. County Council are: -presidents, Robert S. r, David J. Gilman;

Long Island Natural History Notes

By DR. DAVID T. MARSHALL

INDIAN RELICS IN QUEENS COUNTY

The average Boy Scout takes a great interest in anything pertaining to the American Indian and is pleased beyond measure to find some relic of the Indians.

The whole surface of Long Island is sowed with stone arrow heads, but as the area is large and most of the surface is covered with vegetation the chances of one's finding an arrow head if one were to set out to look for one are small.

There are certain places where one would expect to find arrow heads. These places are natural camp sites on the borders of ponds and streams.

fine grained quartz sandstone, metamorphic heat or chemical action or both. One occa- finds an arrow head of chalcedony, a hal- crained quartz, formed by deposition of qu- solution. In short the Indian made his arrow heads of any fine grained hard stone which came to hand.

It is doubtful if the Indians made arrow heads of stone much after the White Man came to this country, for almost any fragment of iron makes a better arrow point than a piece of stone. We have no certain relics of human beings dating from pre-glacial times in this country. The glacier is reckoned to have covered this part of the country not less than 20,000 years ago. Just how soon after the glacier Man appeared, is uncertain. The arrow heads we pick up here in Long Island may be anywhere from 200 to 10,000 years old.

The accompanying picture of arrow heads picked up in Queens County will give some idea for what one is to look.

Just now there are many farms which are no longer under cultivation which have been given over



Specimens of Indian Axes and Arrowheads from Village Sites in Queens County and other parts of Long Island. Photo by Weber, Jamaica.

LONG ISLAND COLLECTION
East Hampton Free Library
159 Main Street
EAST HAMPTON, N.Y. 11937
516-324-0222

The Indians, like other people, would choose a camp site where there was water and fish and game to be had.

Just now, for some obscure reason, the ponds in Queens county are drying up. Several of the ponds in Homewood have dried up completely. I should imagine that the floors of these ponds would be a likely place to find arrow heads. If one were to get below the layer of mud, there must have been many an arrow shot at bird or muskrat or other wild creature which was lost in the water, never to be recovered.

The arrows which were dropped on the shores of the pond or in the fields which have been plowed for two or three hundred years may long since have disappeared, but not so with the arrow-head covered by water. The Indians were subject to frequent periods of famine. One can picture the Indian boys with their crude bows and arrows hunting ceaselessly for something to eat, whether it be a frog or a small bird or a muskrat.

One of the things which impresses one as one looks over a collection of arrow heads is that they do not all "look like the pictures in the books." Many of them are crude and poorly finished, mere fragments of stone. There is very little real flint to be found in Queens County. In the glacial drift, which covers most of the island, one finds pieces of chert or hornstone. This is an impure variety of flint which comes from the limestone formations further northwest. Much of it is weathered and full of seams. It is hard to find a piece from which good flakes can be broken. Many of the arrow heads I have seen are made from white amorphous quartz. This white quartz occurs in the veins in the granite rocks of Western Bronx, the localities from which glacial drift came. White quartz is hard as flint and does not chip so. arrow heads are made from Jasper, w-

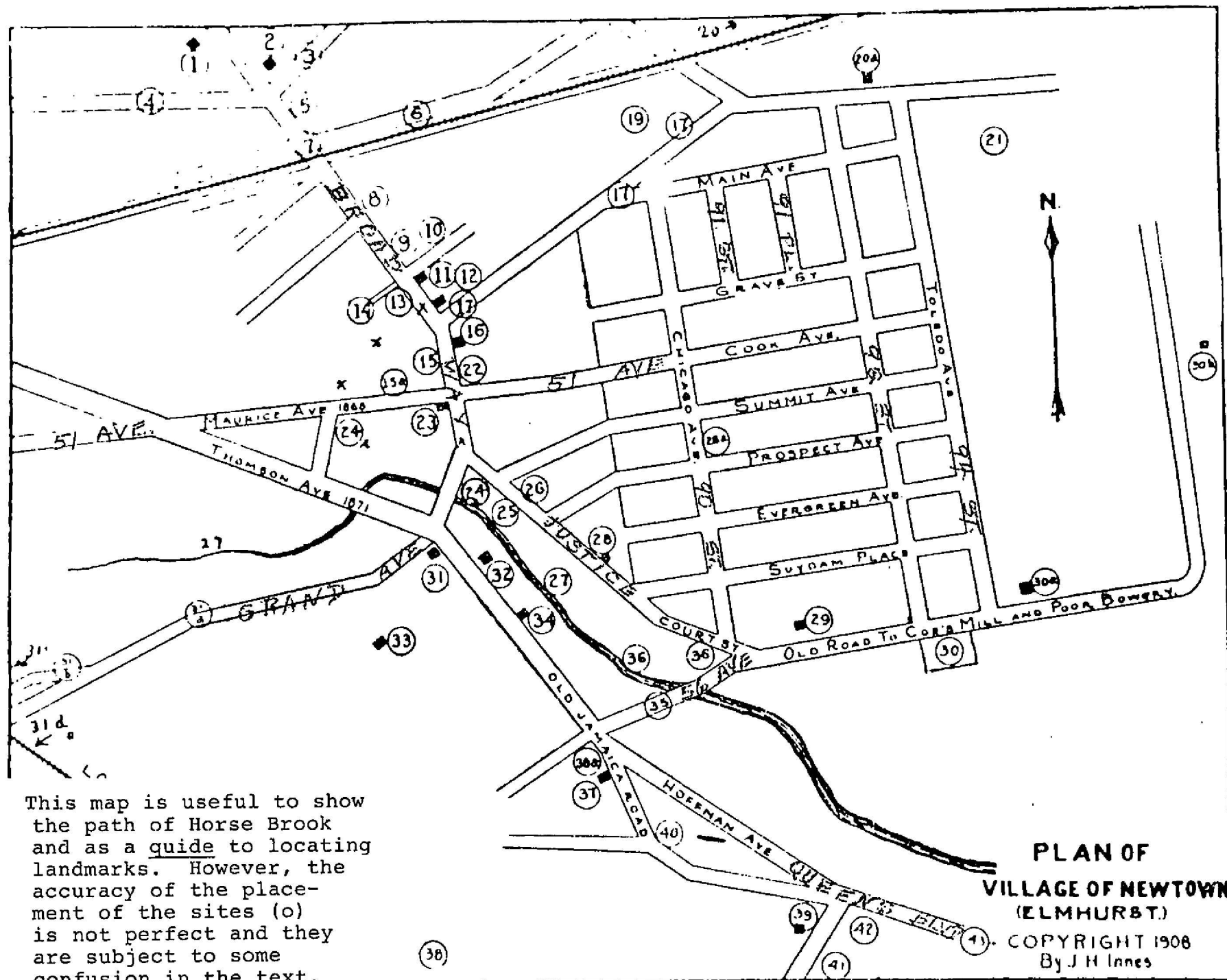
to the real estate developer. Some of these fields are bare of vegetation and the surface is washed clean by the rain. On this bare surface one has a chance to find arrow heads which one could never find while the land was under cultivation. I have in mind a large tract near Flushing which is as clear of vegetation as a schoolyard. A likely place to find mineral specimens and arrow heads.

No. 1 in the picture is an Indian axe which I found fifty years ago in Middlesex County, N. J. It is made of a fine grained trap, a very plentiful rock in the drift of Middlesex County, N. J. The axe is evidently a flat water and ice worn fragment of drift and the only work which has been done on it is the groove for the handle lashings and some sharpening of the point.

No. 2 was found near Jamaica. It also is a drift-worn fragment of quartzite; a fine grained quartz sandstone. Nothing save the groove is the work of man's hand. Neither Nos. 3 nor 4 are of flint, but rather of a jasperized sandstone or quartzite. Both of these are simply drift-stone with a groove worn in them by patient rubbing against some other stone. Both these were found on Long Island.

Several of the arrow heads pictured herewith were loaned me from the collection at P. S. 25 in Douglaston. These were presented to the School by Mr. Louis Walker of Douglaston, a very enthusiastic student of Indian relics and an expert on local birds.

Note the usual vague provenience given for an "arrowhead" collection.

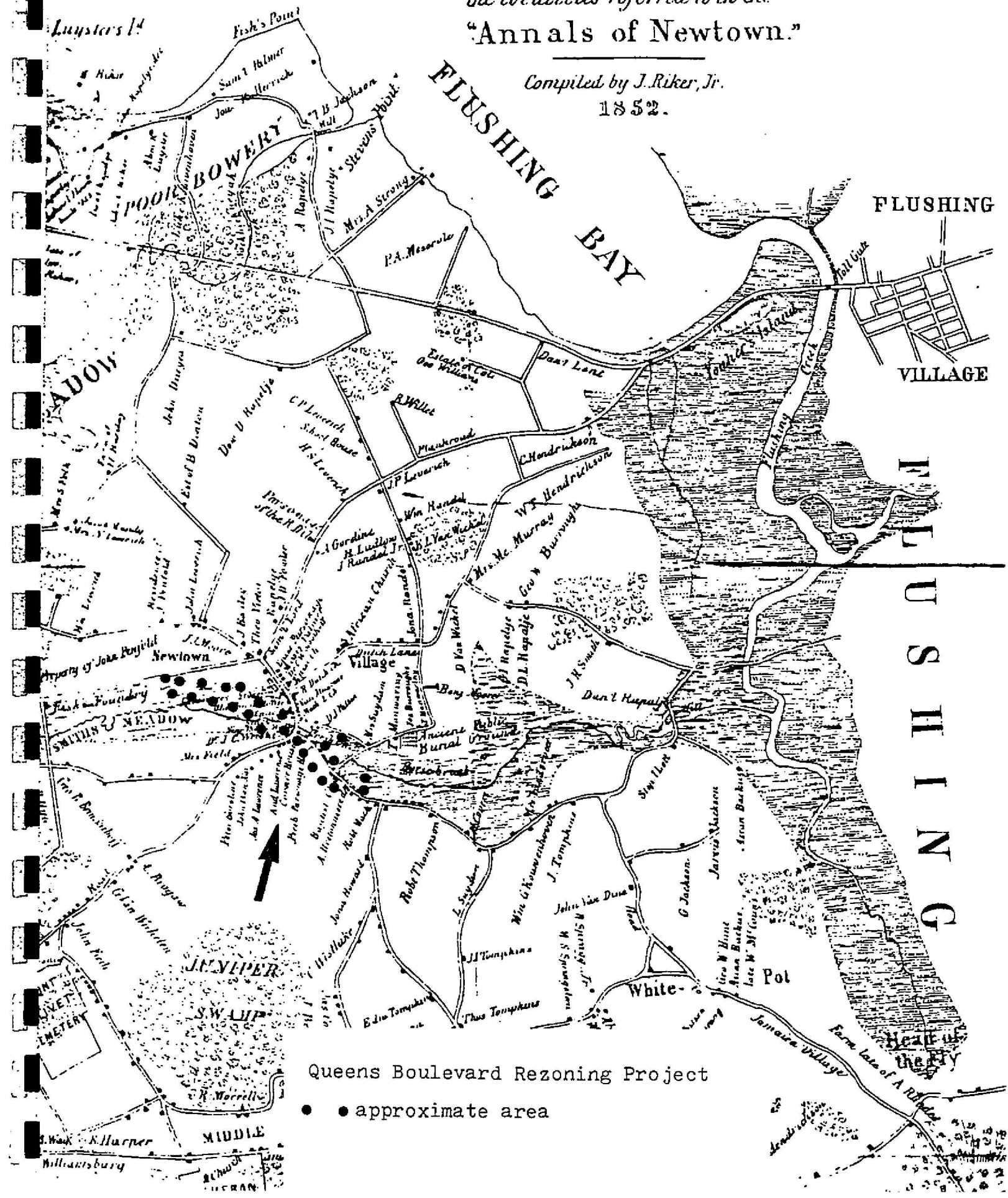


This map is useful to show the path of Horse Brook and as a guide to locating landmarks. However, the accuracy of the placement of the sites (o) is not perfect and they are subject to some confusion in the text.

Note Horse Brook flowing southeast from Broadway,

Designed to exhibit
the localities referred to in the
"Annals of Newtown."

Compiled by J. Riker, Jr.
1852.



Tracing from
Atlas of the Borough of Queens, Vol. II, 2nd Ward - Upper Part, Plate 28
E. Belcher Hyde, New York
1927
(This plate depicts exact same information as located in 1915 Hyde Atlas.)

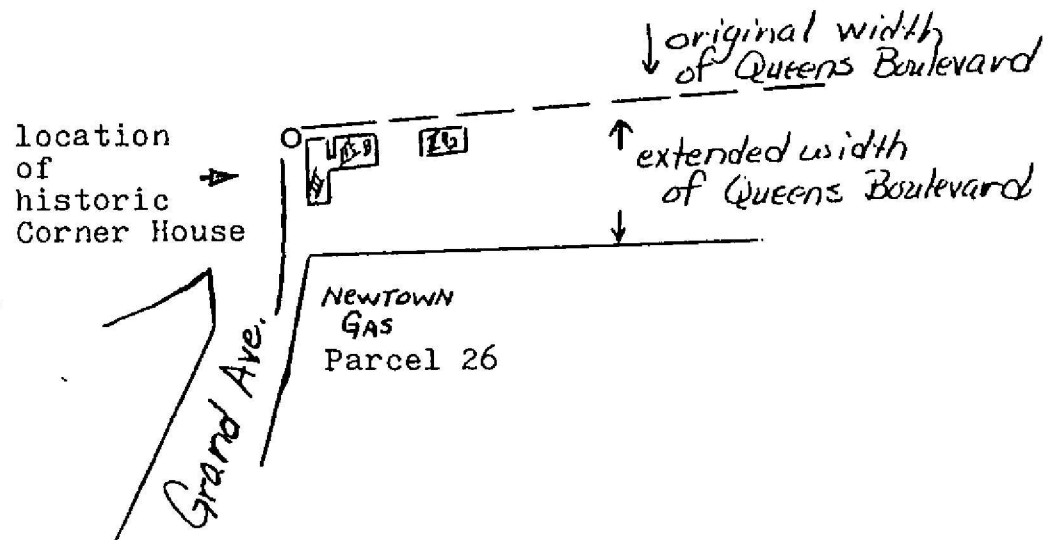
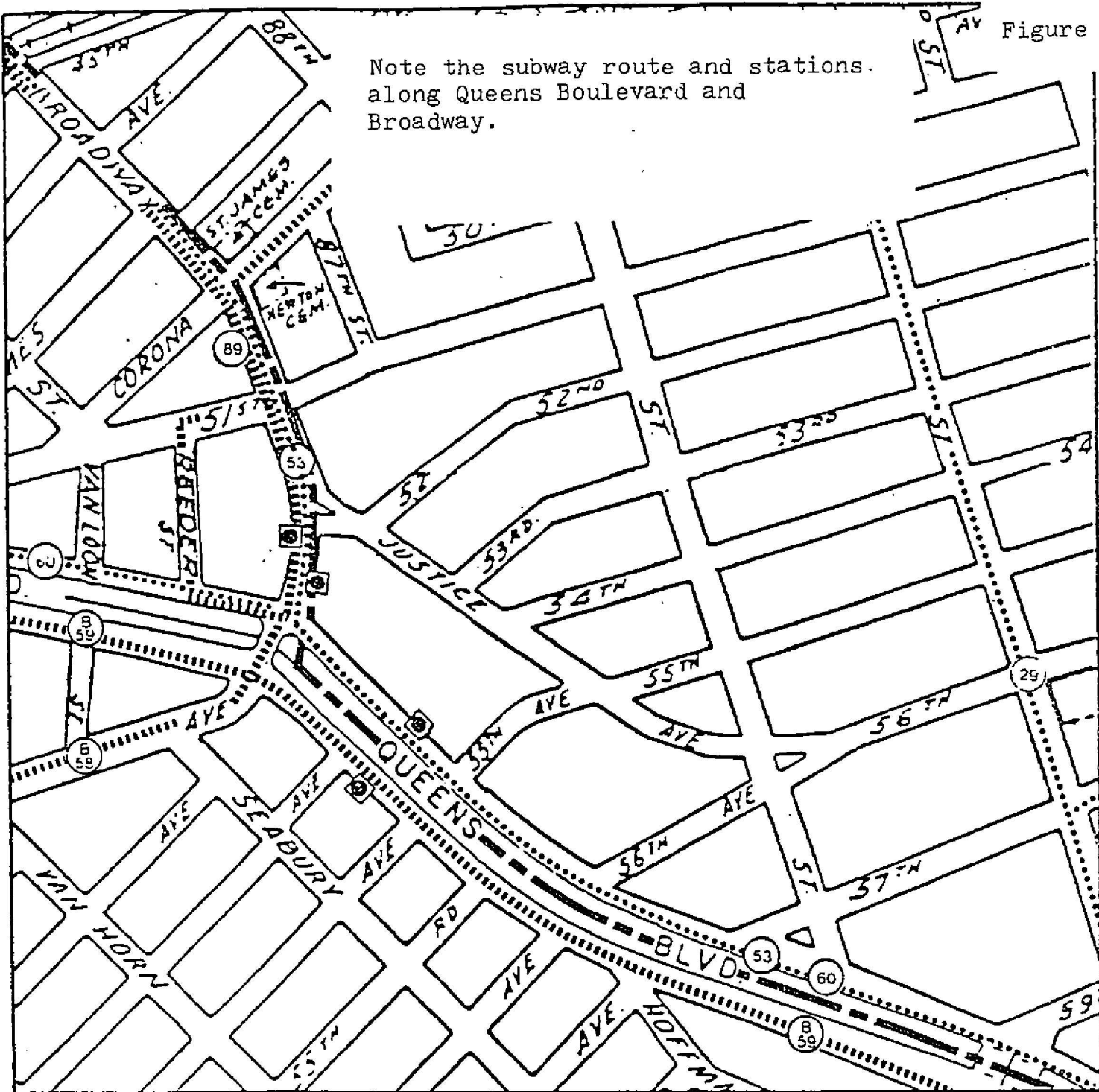


Figure 21

Note the subway route and stations.
along Queens Boulevard and
Broadway.



NORTH

200 0 200 400 600
FEET

Metropolitan Transit Authority Subway

New York City Transit Authority Bus Routes

Green Bus Lines Inc. Routes

Triboro Coach Corp. Bus Routes

Subway Station

Bus Route

FURNISHED BY ALLEE KING ROSEN
& FLEMING, INC.

PUBLIC TRANSPORTATION

FIGURE 6

TASK 4: Archaeological Impact Report



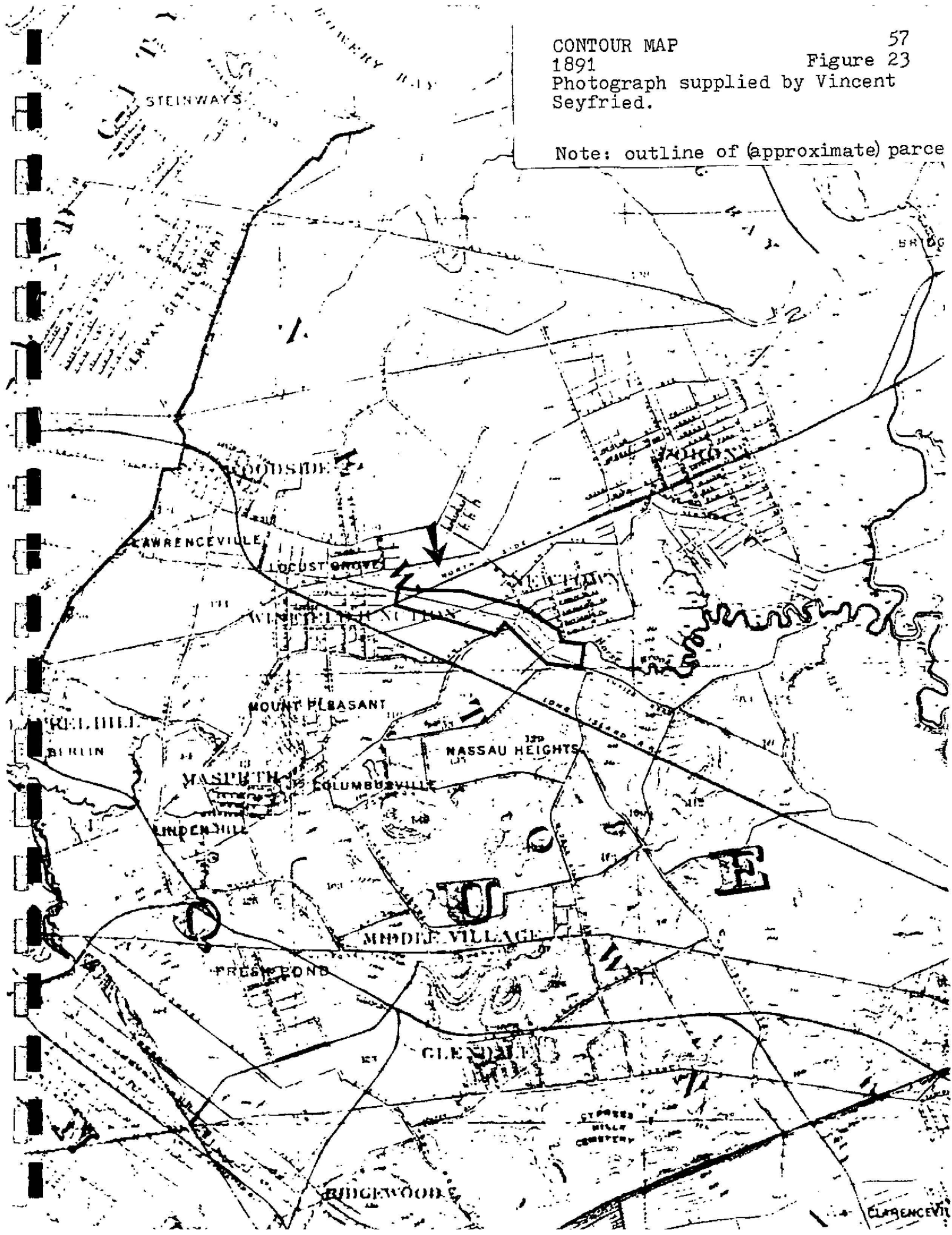
CONTOUR MAP

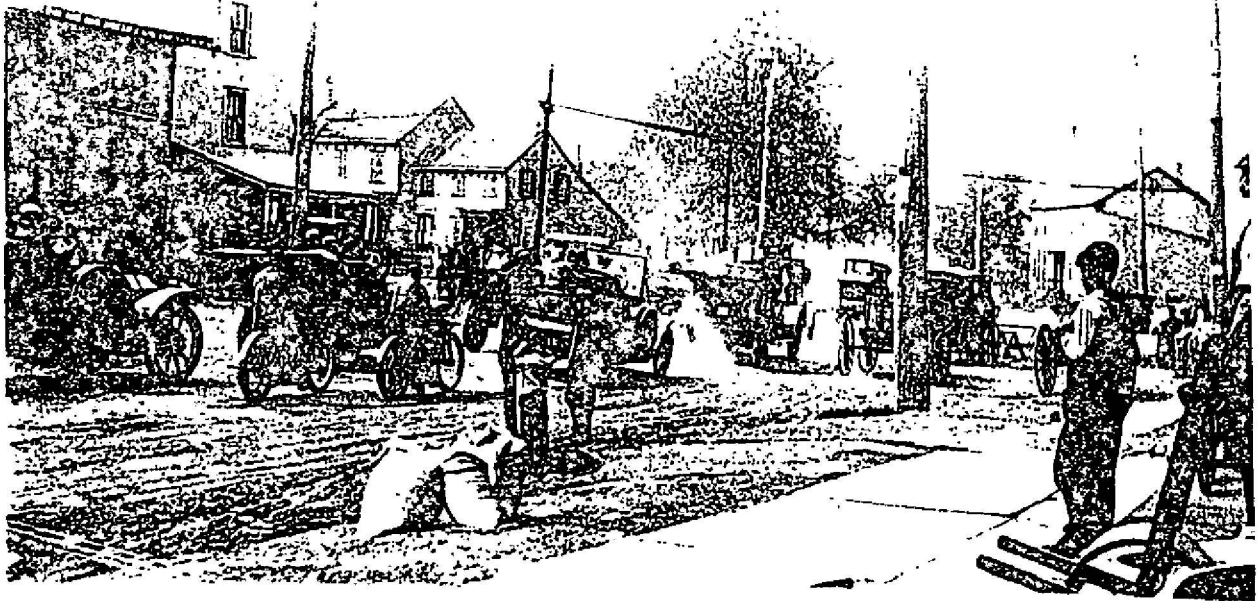
1891

57
Figure 23

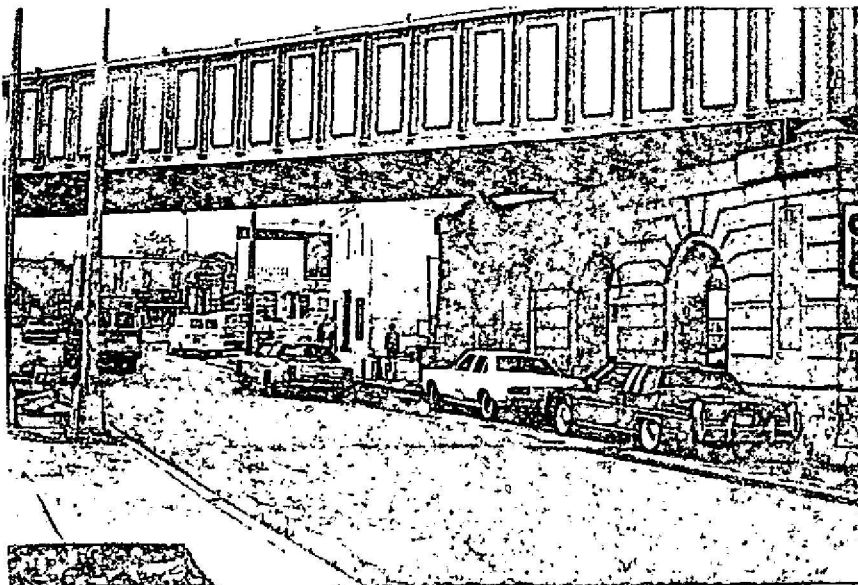
Photograph supplied by Vincent
Seyfried.

Note: outline of (approximate) parce





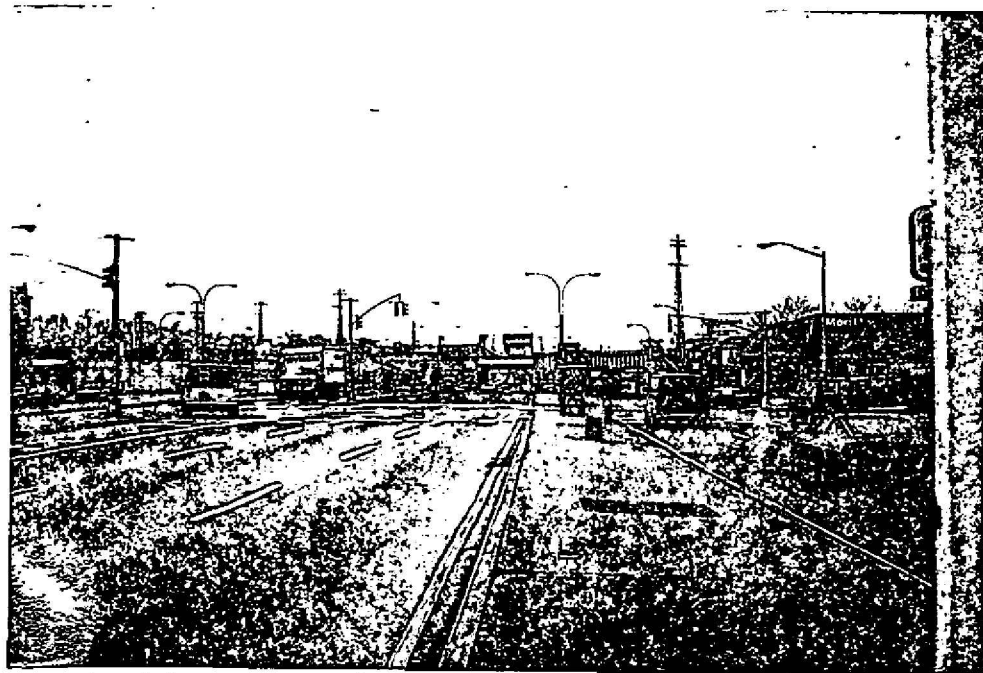
Looking West along Queens Boulevard at the corner of Grand Ave. in 1912



Railroad Bridge at 68th St. and Queens Boulevard - 1986



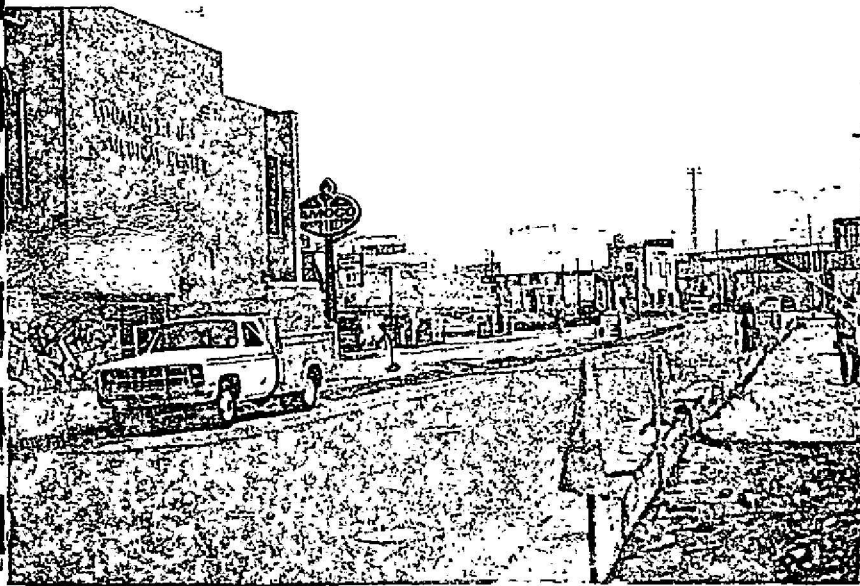
Looking West along Queens Boulevard from 55th Ave. in 1903



Looking West along Queens Boulevard in 1986

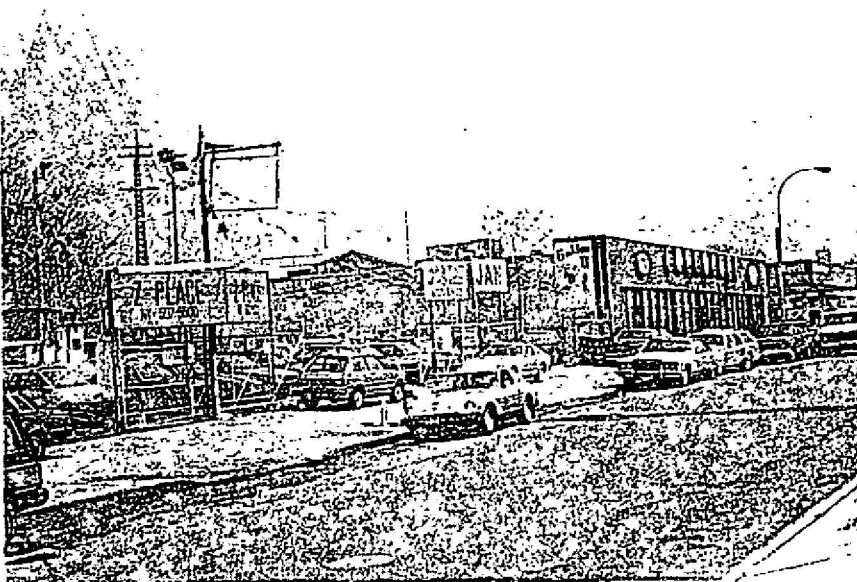
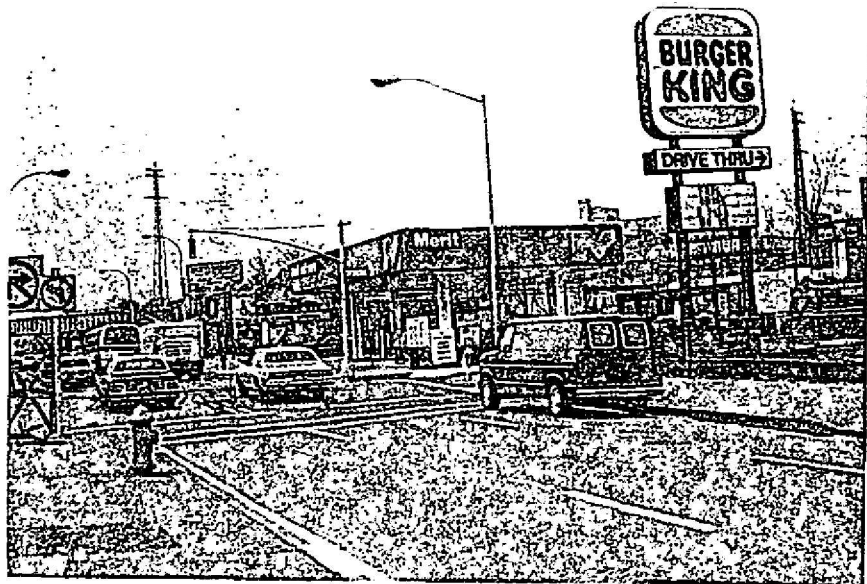


Looking East along Queens Boulevard from 57th Ave. in 1903



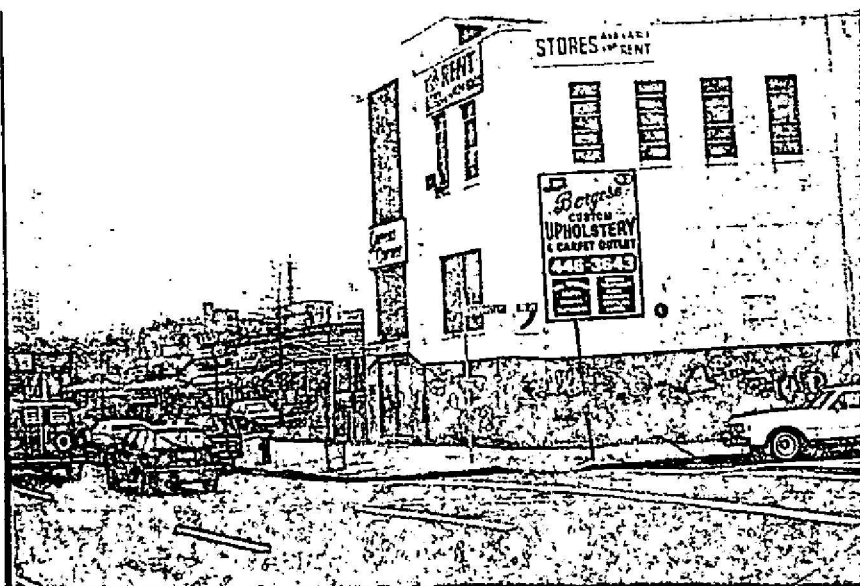
Left: Parcels 1&2
Looking east

Right: Parcel 3
Looking west



Left: Parcel 3
Looking east

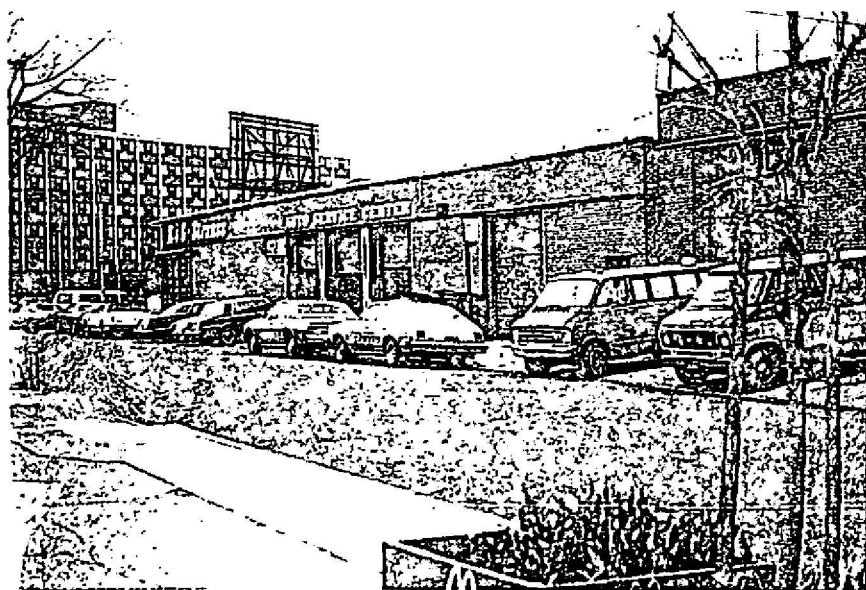
Photos 9,10,&11



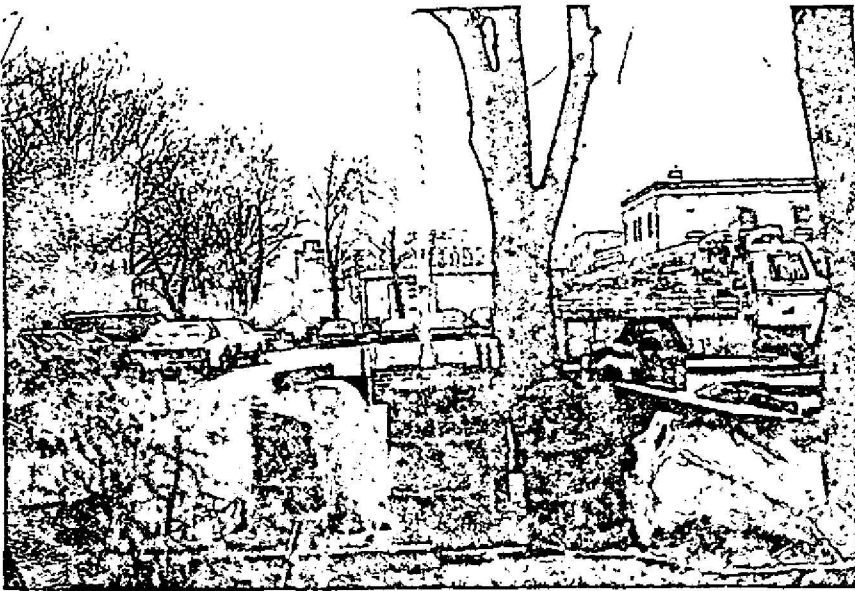
Left: Parcel 4
Looking west



Right: Parcel 5
Looking east



Left: Parcel 5
Looking SE from
Cornish St.

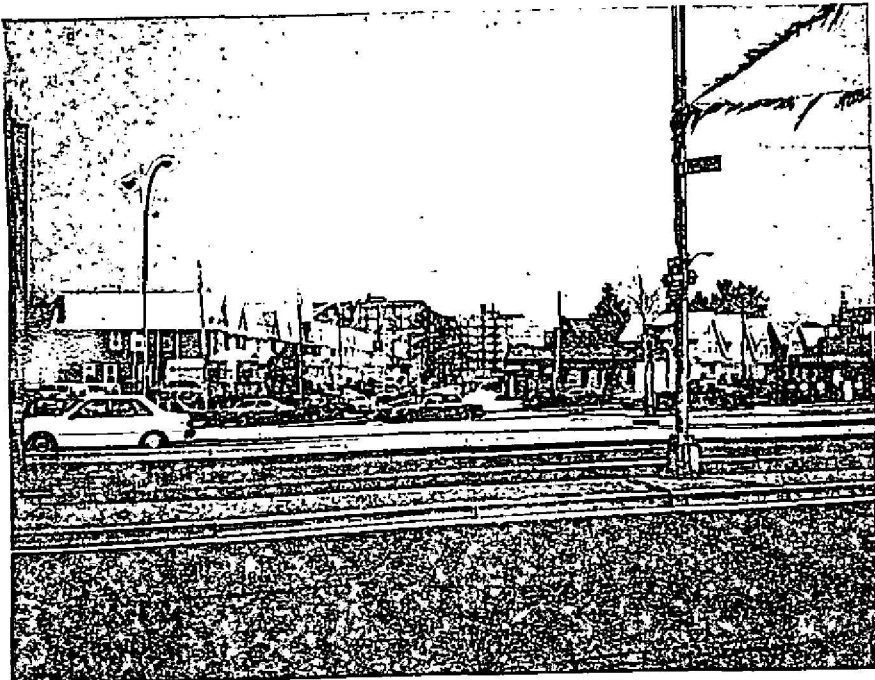


Left: Parcel 6
Looking west from
Poyer Street.

Right: Parcel 6
Looking northwest
from Poyer Street

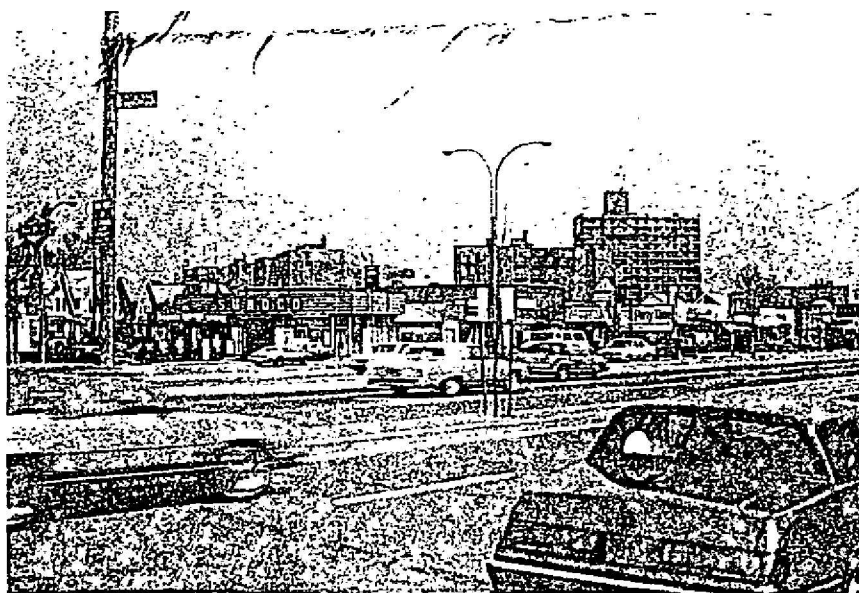


Left: Parcel 7
Looking southwest
from Cornish Avenue.

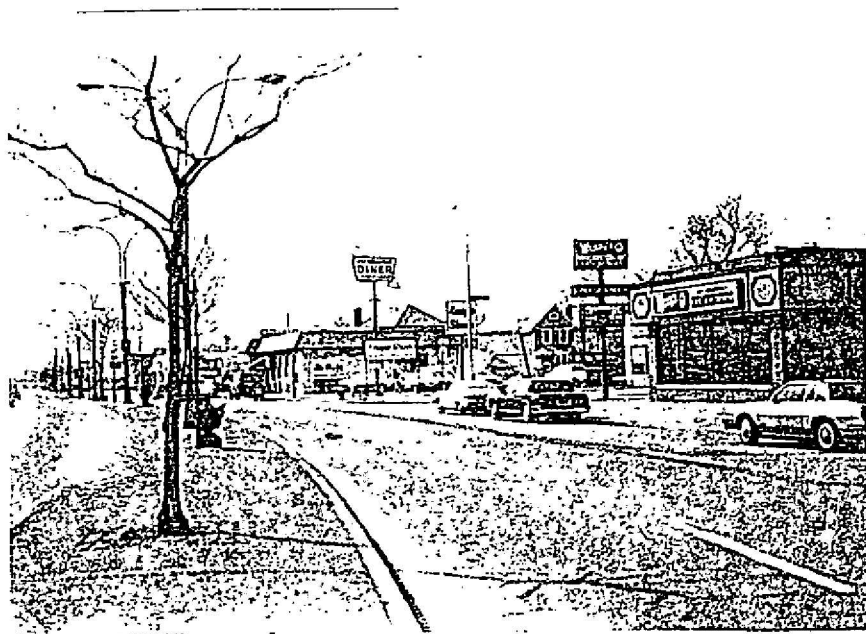


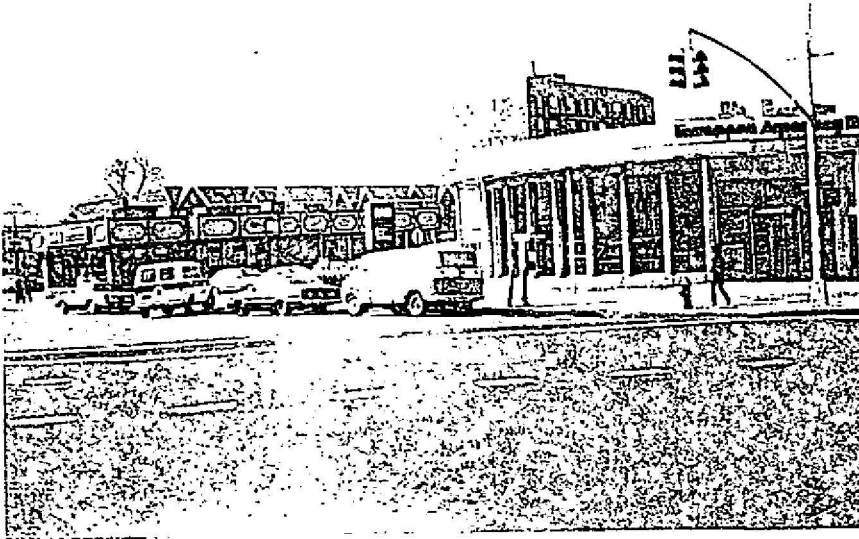
Left: Parcel 8
Looking north

Right: Parcel 9
Looking NW



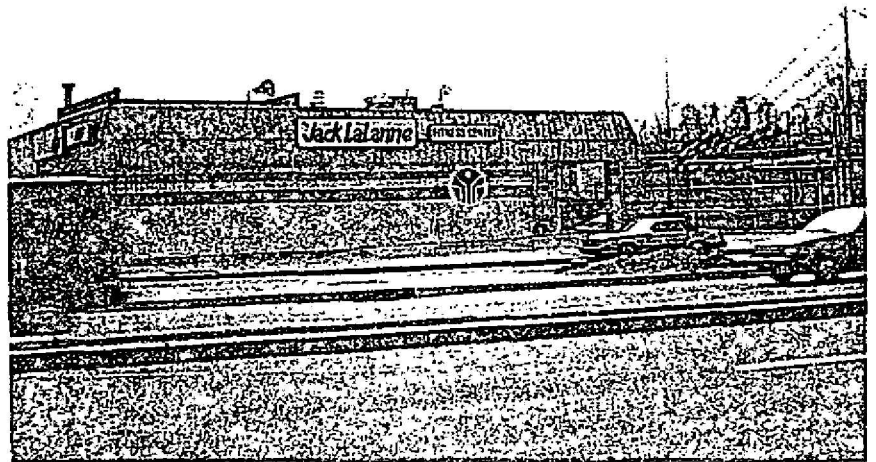
Left: Parcels 10&11
Looking west



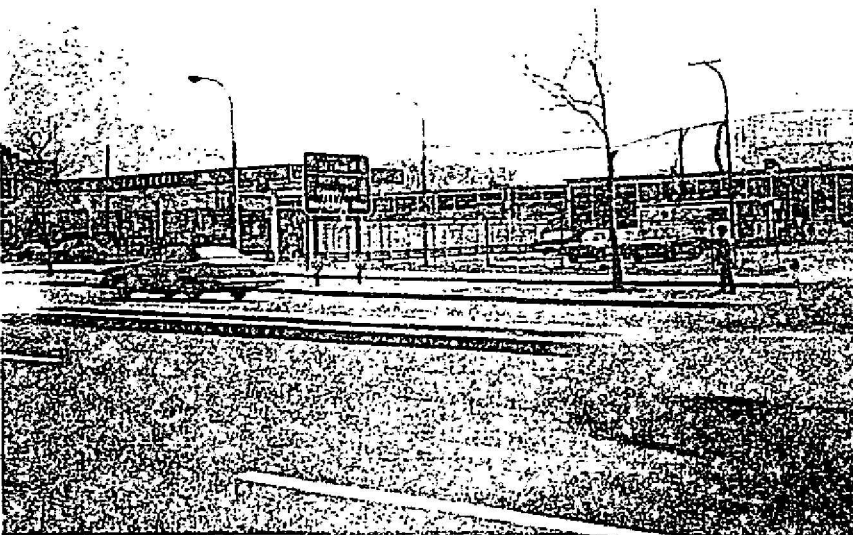


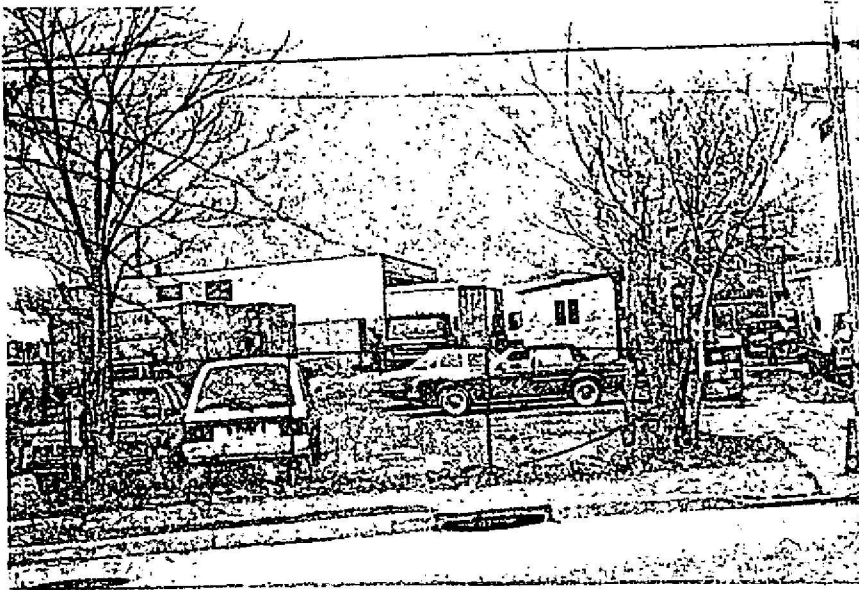
Left: Parcel 11
Looking NW

Right: Parcel 17
Looking south



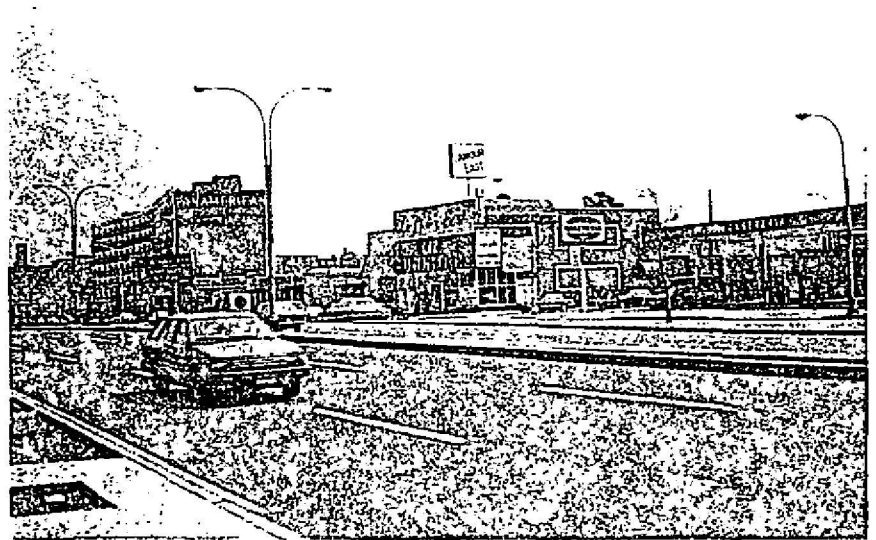
Left: Parcel 18
Looking south



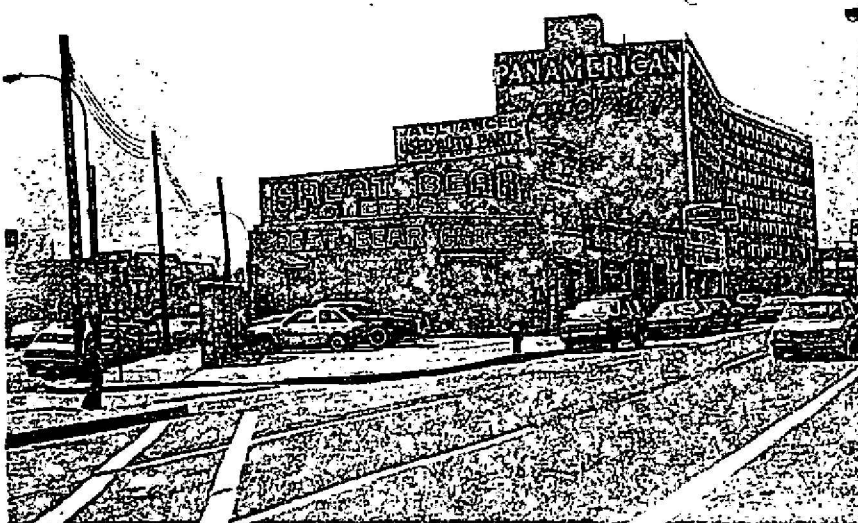


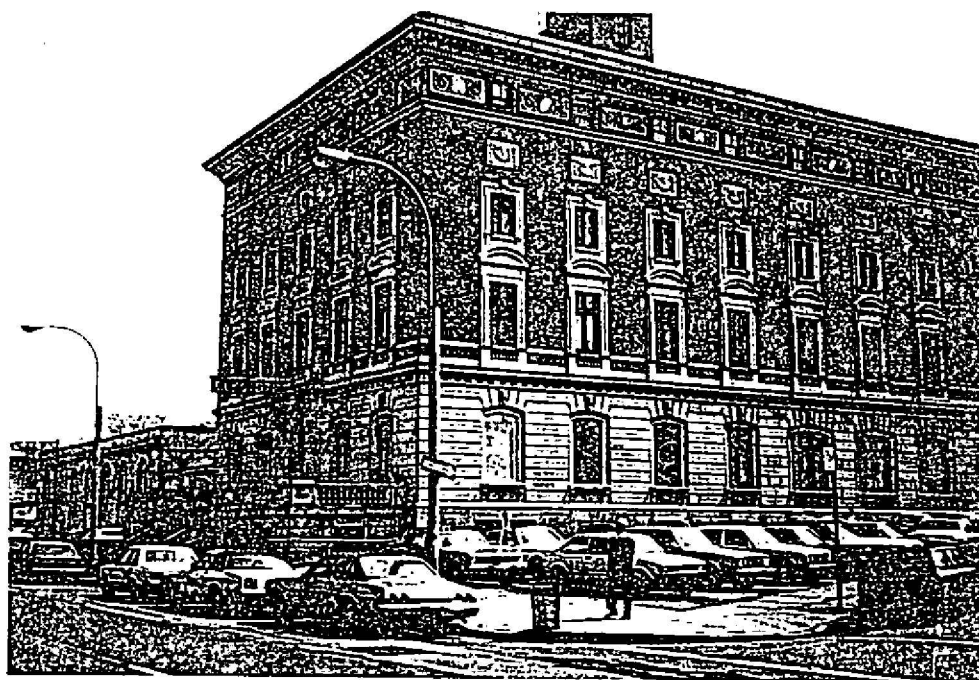
Left: Parcel 19 - rear
Looking east

Right: Parcel 19
Looking SE



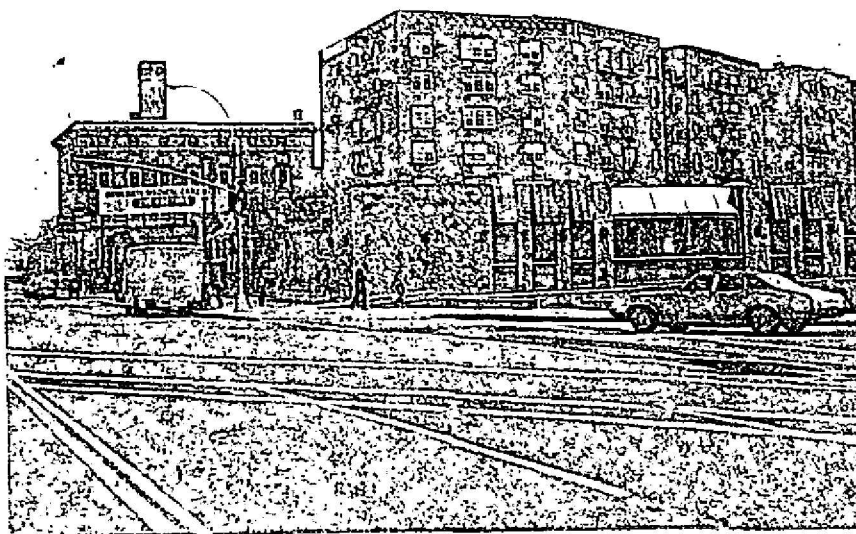
Left: Parcel 20
Looking SW





Parcel 23

Elks Lodge

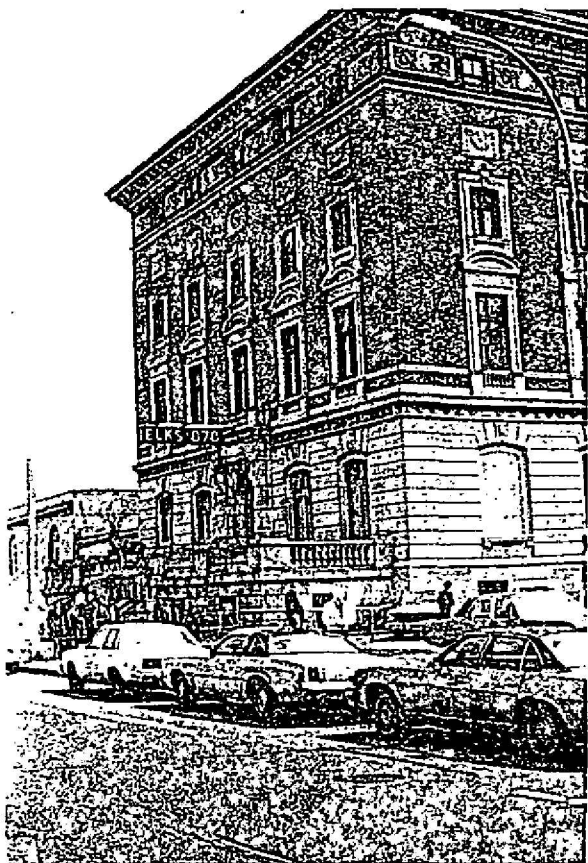


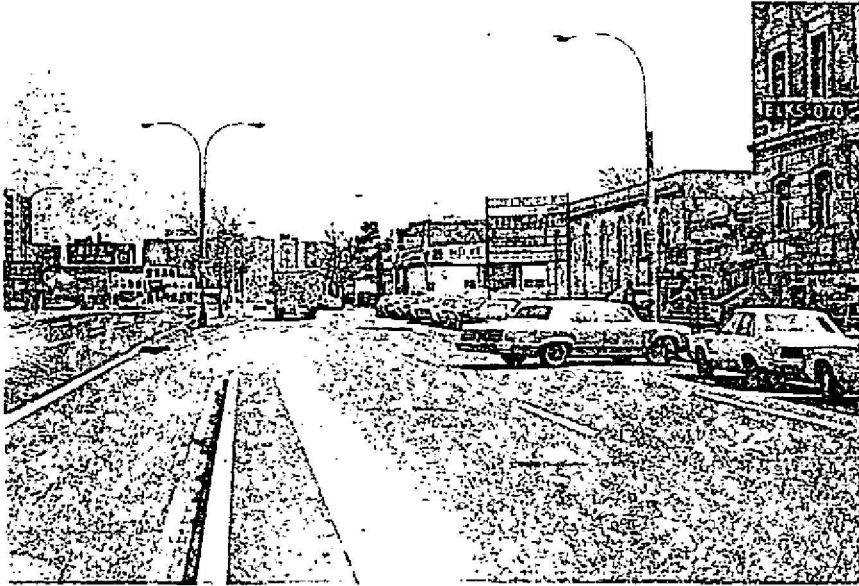
Left: Parcel 21
Looking east

Right: Parcel 22
Looking east



Left: Parcel 23
Looking SE





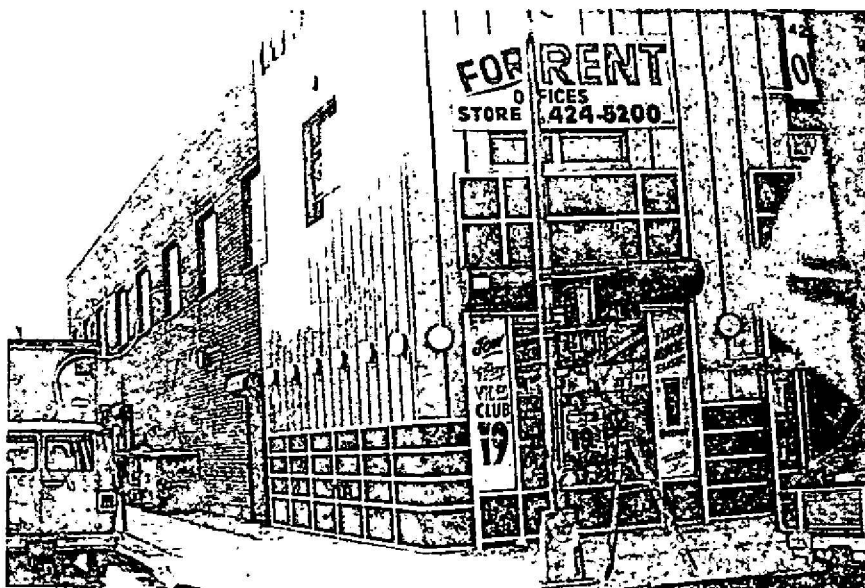
Left: Parcel 24
Looking east



Left: Parcel 25
Looking south



The "Corner House" pre 1916

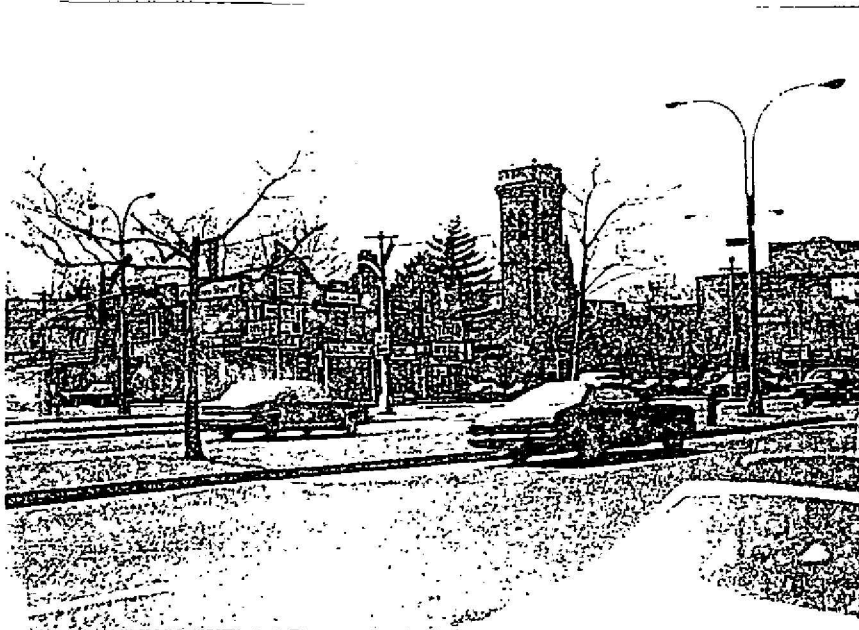
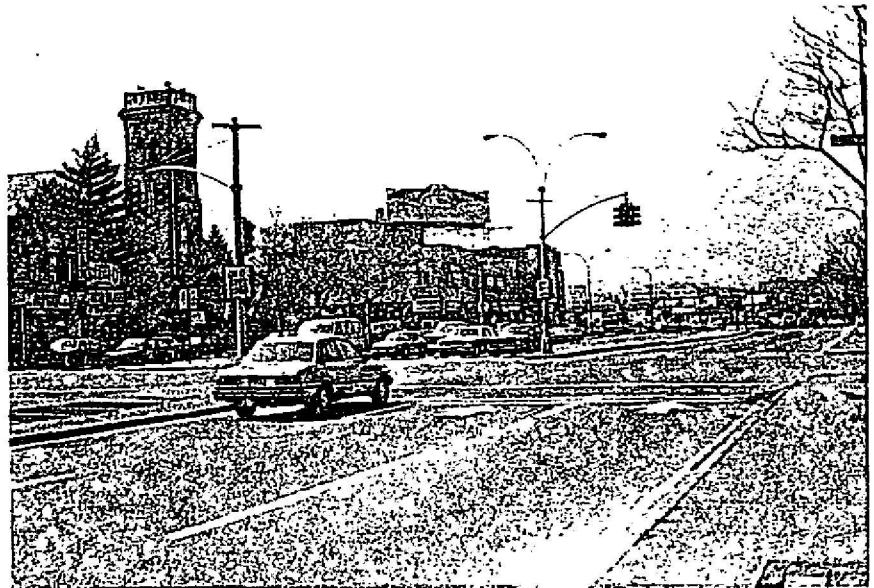


Parcel 31. Site of the "Corner House." Now occupied by "Crazy Eddie's"

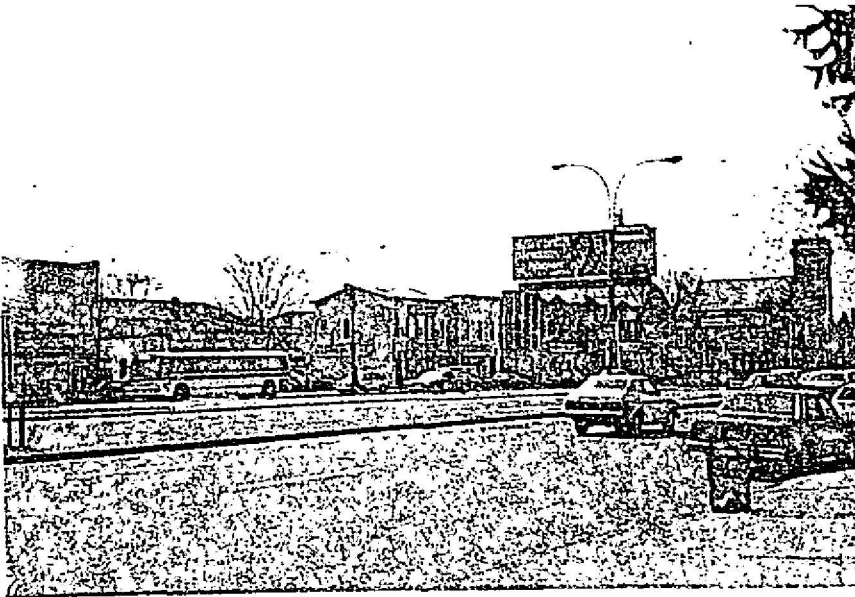


Left: Parcel 26
Looking SW

Right: Parcels 26&27
Looking SW



Left: Parcels 27&28
Looking south



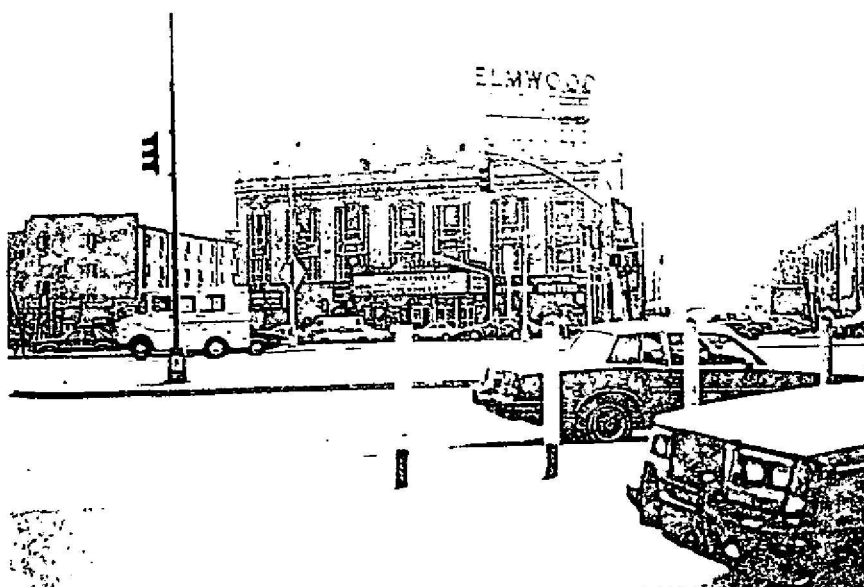
Left: Parcel 29
Looking SW

Right: Parcel 30
Looking SW



Left: Parcel 31
Looking south





Above: Parcel 32 Looking south

Below: Parcels 15&16 Looking east



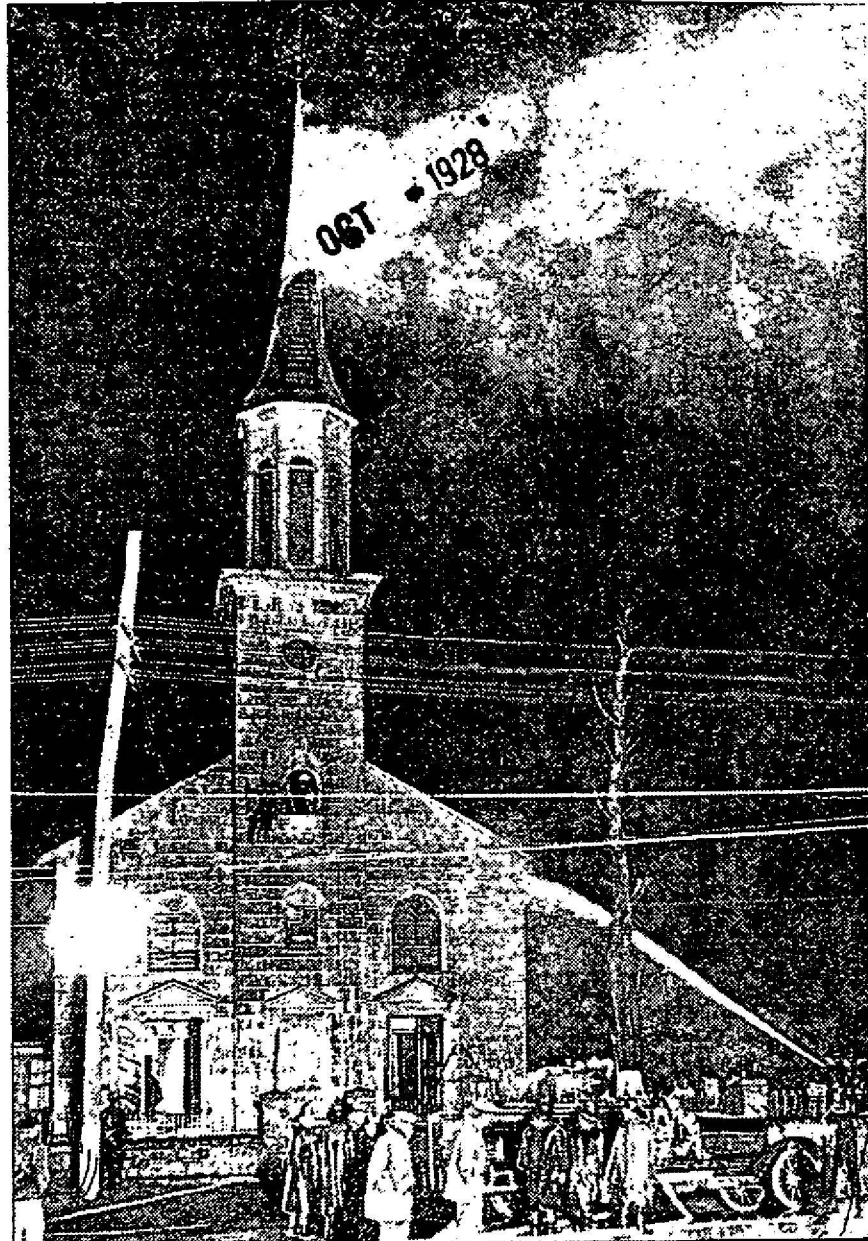


Above: Old Town Cemetery, c. 1910, at SE corner of 92nd St. and 56th Ave. Photograph originally part of the Queens Topographical Bureau Collection, now held by Vincent Seyfried.

Below: Playground on site of Old Town Cemetery, 1986.



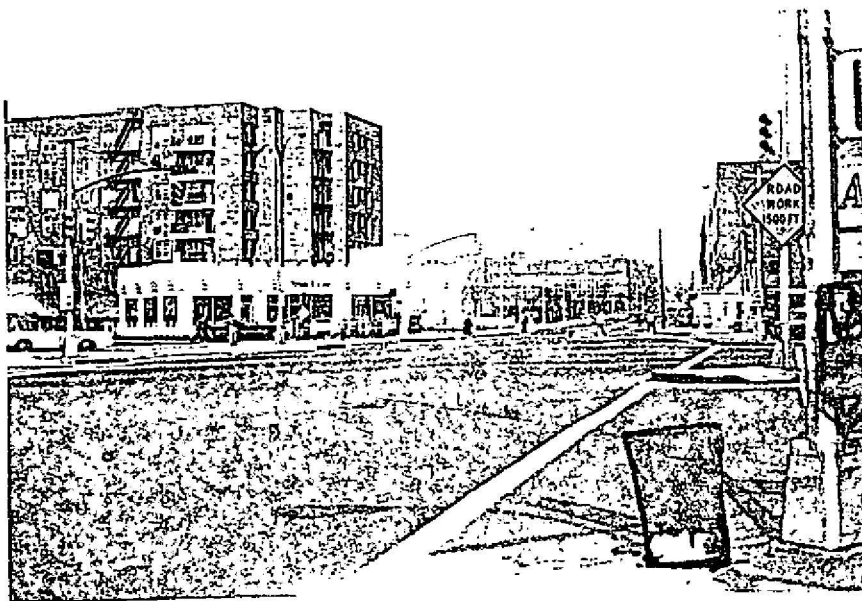
Fire in Steeple of Old Presbyterian Church in 1928. Demolished 1929



Old Presbyterian Church and Cemetery, c.1903. Looking northwest along Queens Boulevard from 55th Avenue.

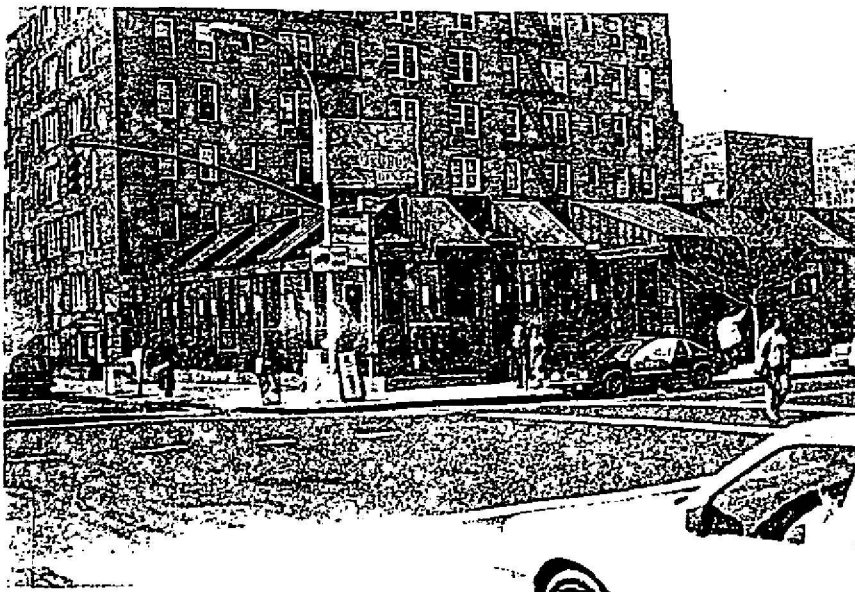
Photograph from a private collection.





Left: Parcel 14
Looking SE

Right: Parcel 14
Looking north



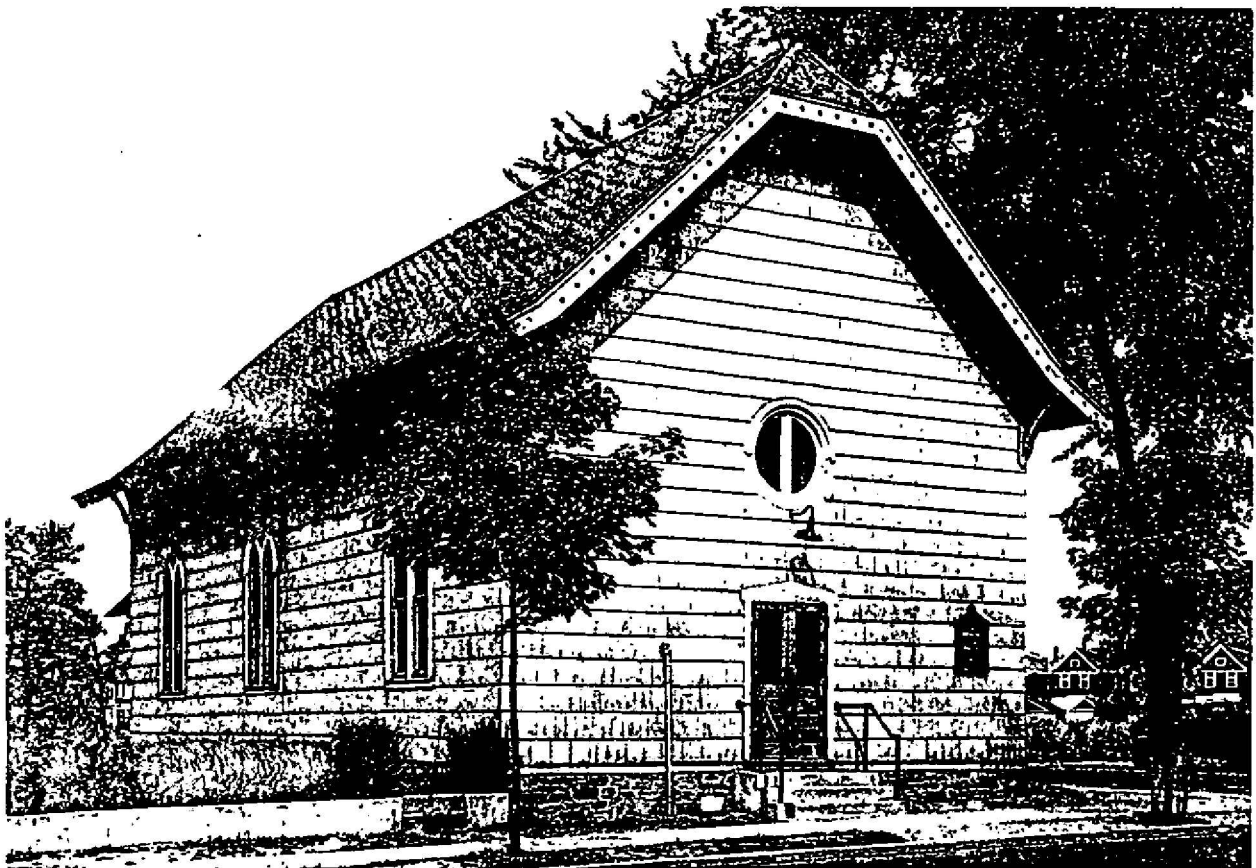
Left: Parcel 13
Looking NW

NE S

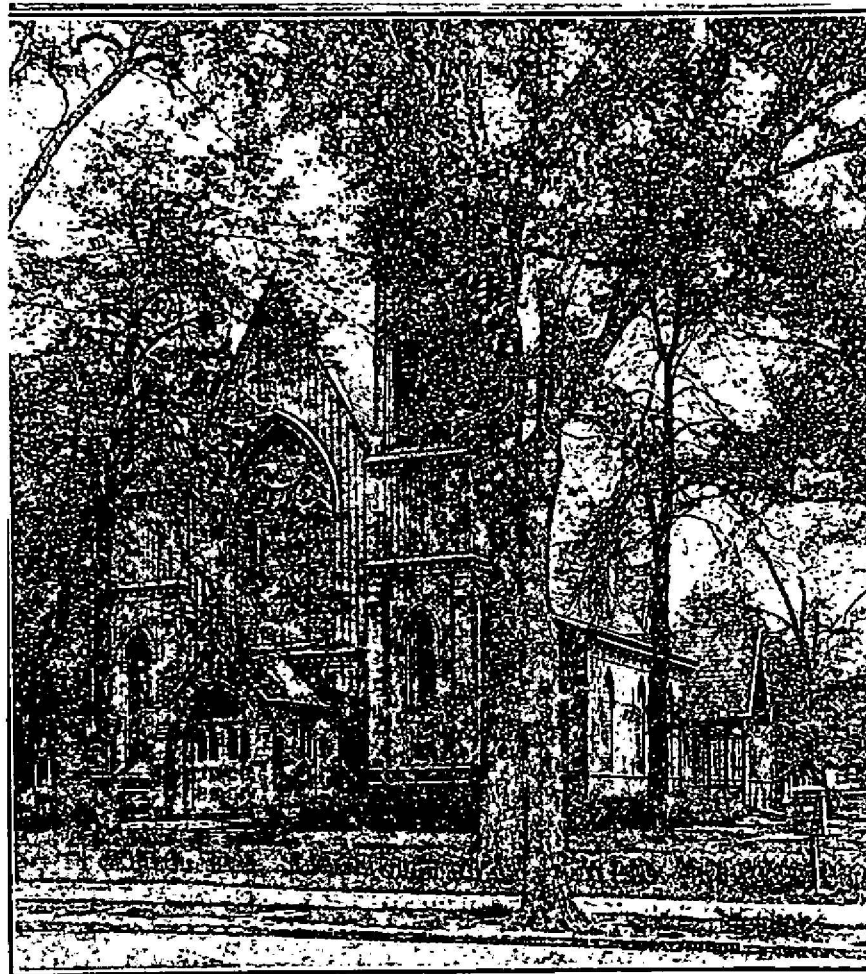
The 1931 subway excavation curving from Queens Boulevard on the left into Broadway on the right. Note the wide swath that has been cut into the west side of Broadway with many buildings removed and Heeg's Hotel at left cut in half. That is Parcel 11 which is shown as it exists today on Photo 18. The Elk's building is in the distance at left.



St. James Episcopal Church, built in 1735 and still standing on Broadway.



"New" St. James Church 1848-1975

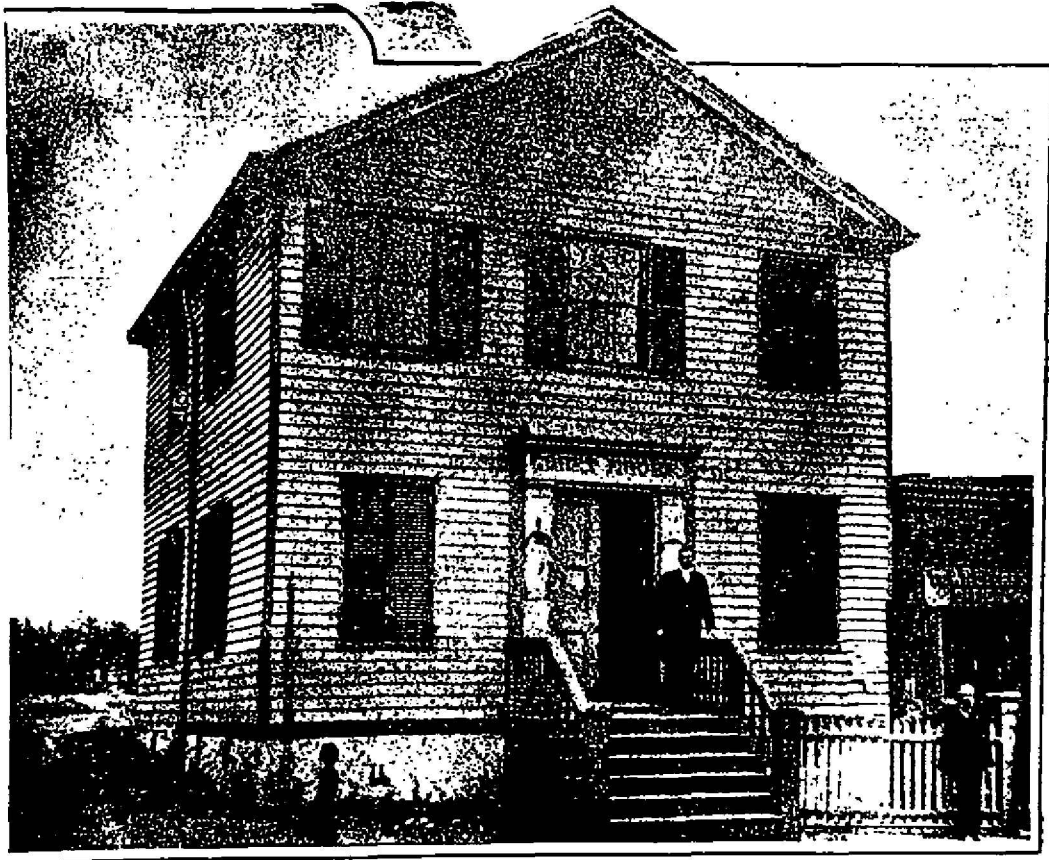


St. James P. E. Church, Elmhurst

Photo 50

Dutch Reformed Church and Parish Hall, Broadway in the foreground.
Erected in 1832, it is a landmarked building.





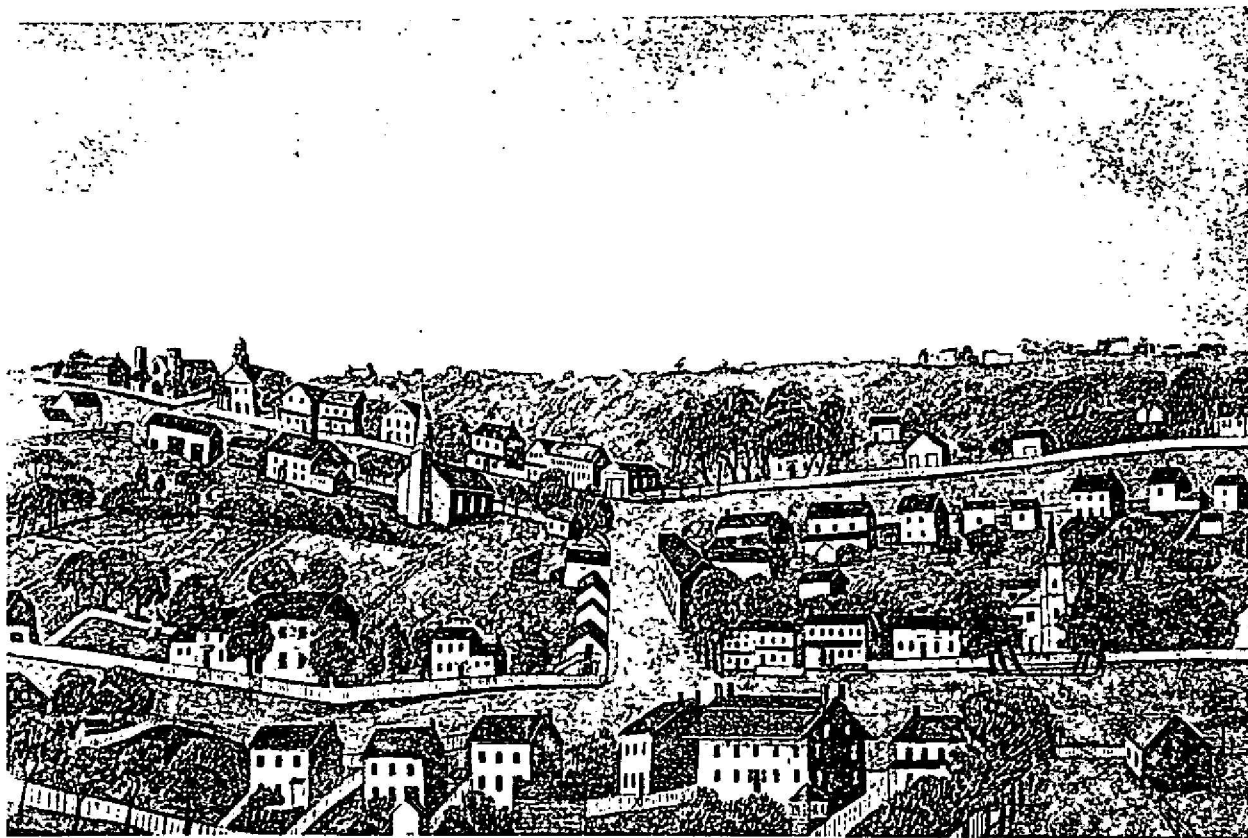
Above: Court House and Office of Town Clerk - before 1892

Below: The same site as it looks in 1986. It is the small triangle at the intersection of Broadway and Justice.



Painting of Newtown Village in 1850, artist unknown. Looking north up Broadway from Queens Boulevard.

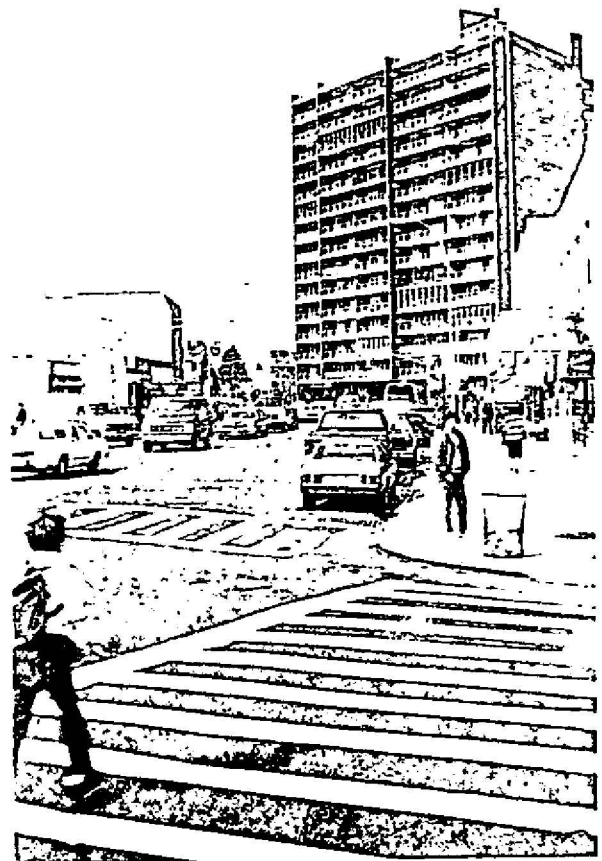
Repository: Three Village Museum, Stony Brook, New York.

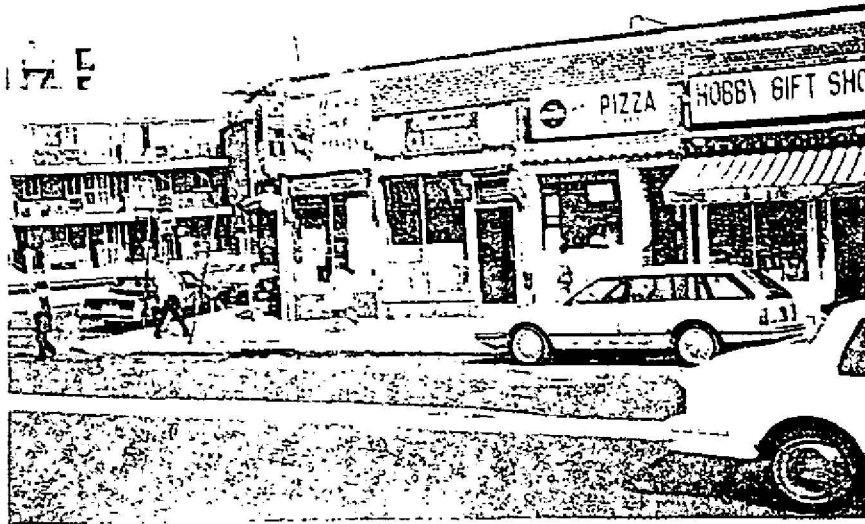




Above: Approximately the same
view as painting in Photo 53.
Taken in 1914

Right: View from same inter-
section of Broadway and
Queens Boulevard in 1986





Views of Parcel 12
on east side of
Broadway between
Queens Boulevard
and Justice Street.
Moving north to
south.



Parcel 13. Looking north from about Queens Boulevard toward Justice Street in 1912.



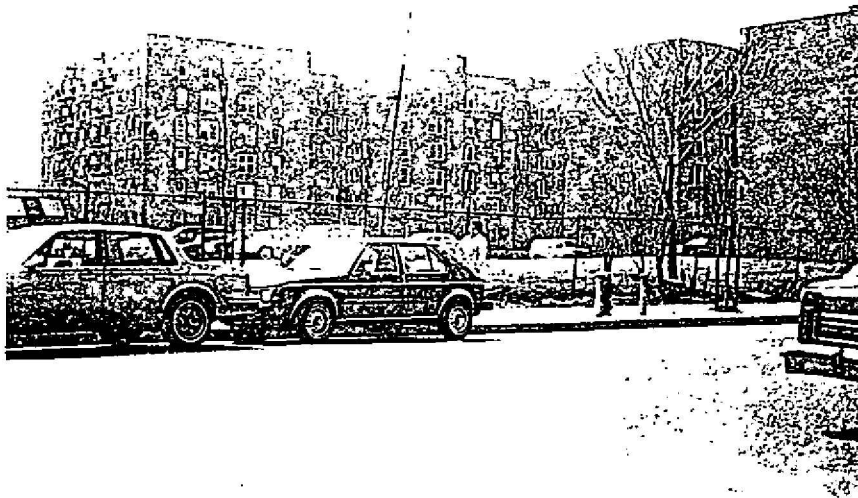


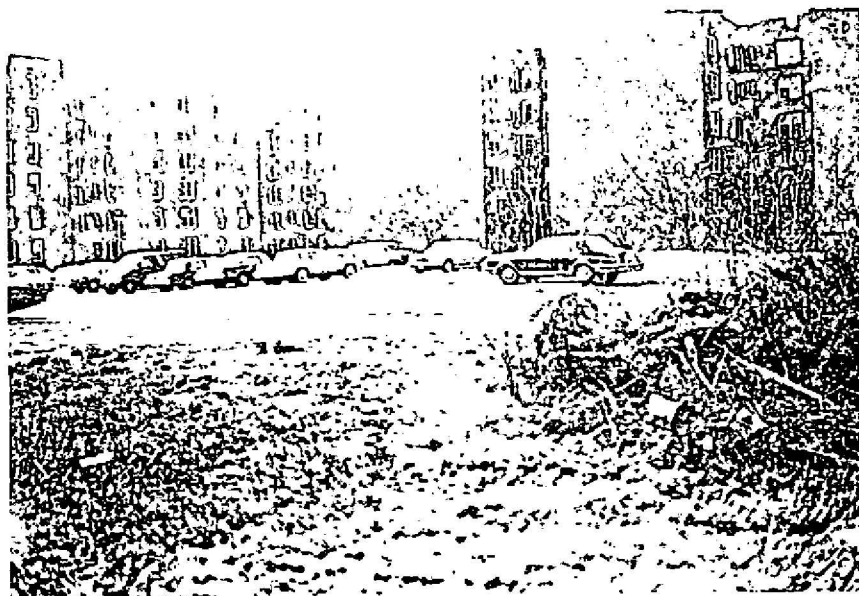
Left: Parcel 13
Looking north

Right: Parcel 13
Looking south
along west
boundary



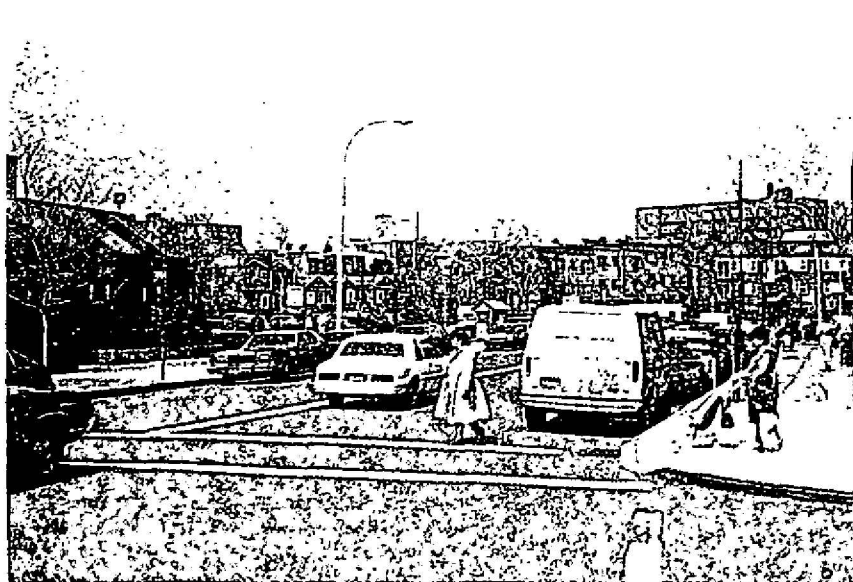
Left: Parcel 13
Looking SW





Above: Parcel 13 looking SW

Below: Parcel 13 looking north along 55th Avenue from Queens Boulevard



Looking north from Queens Boulevard and a point about 100 feet east of 57th Avenue over the Horsebrook Meadows to Justice Street. 1924



Horses grazing in Horse Brook - looking west from 56th Avenue through what is now Macy's to Old and New Presbyterian Churches.

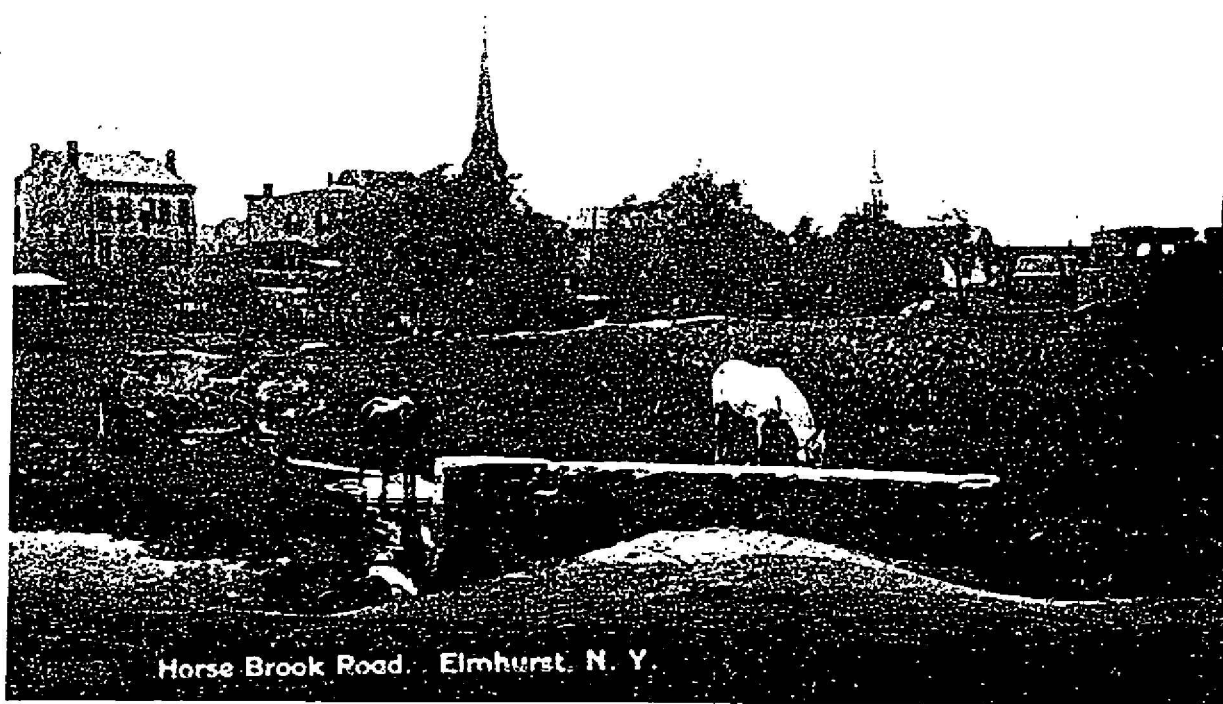
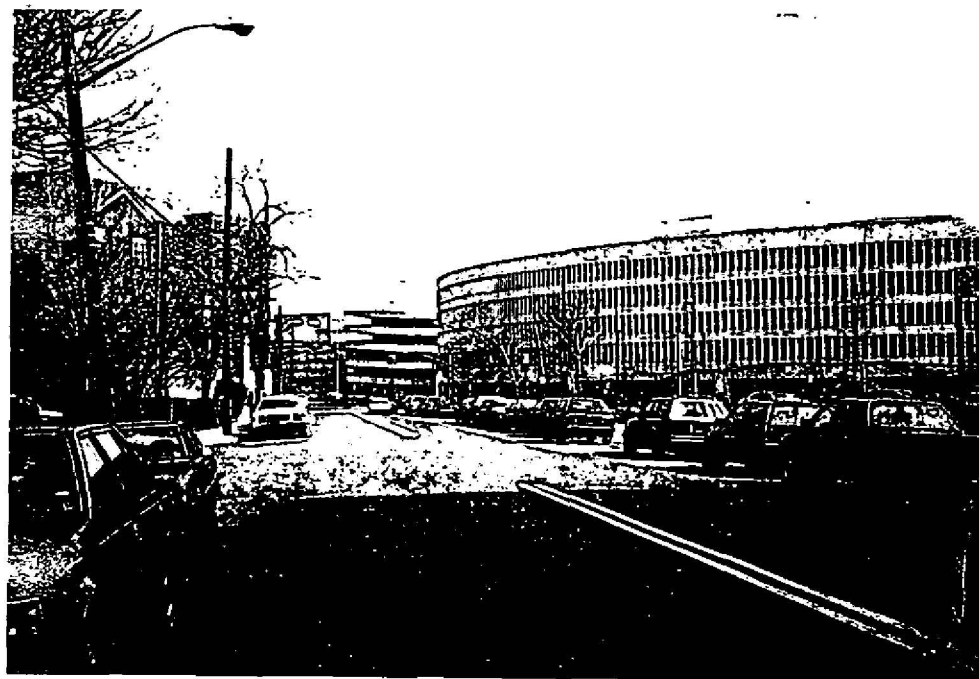


Photo 67



Justice Avenue, looking east from west of 53rd Ave.
Macy's Department store in view on right side.
Parcel 13 on extreme right side of photo.

INTRODUCTION

Task 4 defined 17 of the 32 Queens Boulevard Rezoning parcels as potentially archaeologically sensitive. (See Figure 22) This sensitivity, as outlined above, is predominantly associated with the prehistoric era. The results of the Task 4 work, a draft version of the "Archaeological Impact Report for the Queens Boulevard Rezoning Proposal Project," were submitted to the New York City Landmarks Preservation Commission for review. Discussions were held with the Commission archaeologists. The conclusions and recommendations of Task 4 were accepted; and, the research necessary to complete the rezoning impact analysis during Task 5 was outlined.

After discussions with the city review agency, one area identified in Task 4 as potentially sensitive was eliminated from further consideration. Although identified as potentially sensitive for historic resources of the earliest settlement of Newtown, the triangular traffic island at the intersection of Justice Avenue and Broadway, is actually not within a specific parcel under consideration for rezoning and was, therefore, not included in the Task 5 analysis.

In fulfillment of Task 5, each of the identified parcels, or portions of a parcel, (Parcels 4 - 8, 13, 14, 18, 19, 21 - 25, and 29 - 31) was subjected to further scrutiny to assess the impact of modern construction activities (residential, commercial, subway, railroad) on possible subsurface cultural resources. As described in the Conclusions: Prehistoric Era Resources, prehistoric resources in the southern New York area are not deeply buried and even the excavation for a shallow cellar foundation would obliterate any potential archaeological material located in natural soil layers. Introduced fill overburden is a phenomenon throughout the city and known to be present in the Queens Boulevard Rezoning Project area. These fill layers can, in many instances, provide a protective mantle over potential resources resting in the natural soils occurring at a deeper, buried strata. In the Task 5 process we examined available soil borings data in an attempt to assess the degree of fill on each parcel. Comparing the depth of known disturbance on each parcel with the depth of known fill has contributed greatly to our estimation of the potential sensitivity for the rezoning parcels.

The following parcel by parcel analysis presents information gathered from the Queens Borough Department of Buildings, Long Island Division of the Queens Borough Public Library/Jamaica, Queens Borough Conveyance Records, and Queens Borough House Number Division, Borough Hall. Additionally, eighteenth and nineteenth century Newtown records were requested from the Municipal Archives, Chambers Street, Manhattan; and information was gathered from Queens College historian, Leo Herskowitz.

When necessary to clarify the lot by lot descriptions, not-to-scale schematics - used during the study of the parcels - have been attached. And, pertinent soil borings data is included whenever available. The parcel analysis also includes information gathered from on-site inspections to the proposed rezoning area. Interviews with local shop keepers, real estate agents, and lawyers added further information for the analysis.

PARCEL ANALYSIS

Parcel 4

Block 1537

Bounded by Albion Avenue and Barnwell Avenue, and
Queens Boulevard (QB)

Currently:

Burger King and restaurant parking lot dominate northern and central portions of parcel (Lots 4, 12, 19, 22, 24); the vacant Borgese Upholstery, #78-21 QB, is on corner of Barnwell and QB (Lot 1).
See Photo 9.

Land Use History:

Earlier this century the Burger King plot supported a two story office building owned by Atwell, Gustin and Morris. (Atlas of Queens, Vol. 2, Hyde, 1927) The Block and Lot Folders do not contain any information before 1928 even though the "index cards" date new building permits for 1922, 1923, and 1924. New Building permits (1928 and 1936) indicate that a subsequent construction phase(s) placed a two story office building on the corner of Albion and QB. This building, no basement, was "to be supported on steel and concrete piles." Three metal storage buildings, no basements indicated, were to the rear of the office building on Albion. These structures were demolished before the Burger Kings' 1975 Building Permit (#184) application. According to the permit, the restaurant has no basement and is supported by 55 wooden pilings.

The Lot 1 three-story, concrete block building has a basement-level loading dock. This structure covers the lot. It is estimated that the depth of this foundation would have disturbed soil strata substantially beneath the fill overburden.

Borings Data:

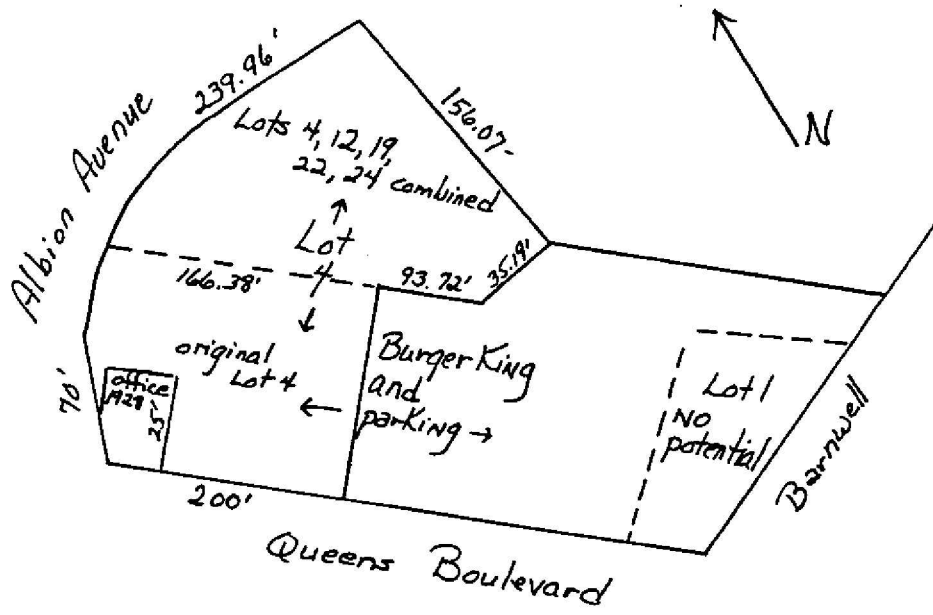
Three borings taken c.1975 show miscellaneous fill to a depth of 5-8 feet.

Potential Sensitivity:

Lot 1 of the parcel is eliminated from consideration of archaeological resources. The remainder of the parcel is characterized as potentially sensitive, beneath the 5-8' protective fill layer.

Parcel 4

Schematic, not-to-scale, measurements given.



Parcel 5

Block 1538

Bounded by Barnwell Ave., QB, and Cornish Ave.

Currently:

The northern corner is dominated by King Bear Mufflers and the southern corner is dominated by the Strauss Auto Center. The mid-block businesses are also automobile associated.

See Photos 10 and 11.

Land Use History:

According to Sanborn Insurance Maps (1914/updated to 1931), Lot 1, located 45.98' north of the Cornish-QB corner, hosted a dog kennel. Most likely this kennel was constructed in 1927 (NB#8310) on an 8" concrete slab foundation. The brick store (20'x 100') presently on Lot 1 does not list a basement level in the Block and Lot Folders file. The subsequent construction on this lot is not included in the files.

Lot 23, immediately north of Lot 1, was the site of a "lunch wagon" prior to 1936 when a 1 story frame, 4'x40' extension/alteration (A#2535) was added on a 12" concrete foundation trench wall 4' below grade. This diner (no basement) was removed for the 1974 construction (no basement) that covered Lot 10, 11, and 23. Borough records are missing for the new building permits issued for Lot 10 in 1905 and in 1935.

In 1969 (NB#1459) Lot 1, 98 and 99 were combined for one construction parcel. This building rests on approximately 53 creosoted wood pilings (20-40 feet in depth).

Borings Data:

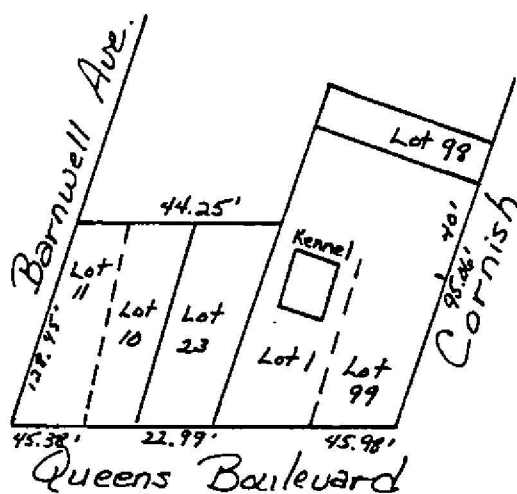
Data from 1969 and 1974 (Ace Test Boring) indicates that the parcel's fill is 5-9'. See Attached.

Potential Sensitivity:

The available buildings records and insurance maps do not depict subsurface disturbances to a degree that would have impacted archaeological resources beneath the fill overburden. Parcel 5 is potentially sensitive - beneath the 5-9' fill overburden.

Parcel 5

Schematic, not-to-scale, measurements given.



Parcel 5

NB 129/74

ACE Boring Inc.
38 Central Ave. Valley Stream 98
11580
4/22/74

(516) 561 2175

BORING 1				BORING 2				BORING 3			
DEPTH FT.	1/2 FT. SPOON BLOWS	1 FT. CASING BLOWS	MATERIAL	DEPTH FT.	1/2 FT. SPOON BLOWS	1 FT. CASING BLOWS	MATERIAL	DEPTH FT.	1/2 FT. SPOON BLOWS	1 FT. CASING BLOWS	MATERIAL
GROUND SURFACE EL (20.5)				GROUND SURFACE EL (20.7)				GROUND SURFACE EL (20.6)			
WATER 5.0	12.3	17	(FILL) SAND	WATER 5.0	12.3	15	(FILL) SAND	WATER 5.0	12.3	17	(FILL) SAND
		7	GRAVEL			9	GRAVEL			14	GRAVEL
		11	CLAY			13	CLAY			12	CLAY
		14	(11-05)			15	(11-05)			9	(11-05)
		21	MEDIUM TO FINE SAND			17	MEDIUM TO FINE SAND			10	MEDIUM TO FINE SAND
7.0	13	11	TO FINE SAND	7.0	13	11	TO FINE SAND	7.0	13	11	TO FINE SAND
10.0	12	10	SOME CLAY	10.0	12	9	SOME CLAY	10.0	12	8	SOME CLAY
		9				9				9	
		10				11				10	
15.0	11	12	(SAND-05)	15.0	11	11	(SAND-05)	15.0	11	12	(SAND-05)
		13				12				13	
		16				13				14	
		19				15				16	
20.0	10	18	MEDIUM TO FINE SAND	20.0	10	19	MEDIUM TO FINE SAND	20.0	10	17	MEDIUM TO FINE SAND
		20				21				18	
		13				14				15	
		18				19				18	
25.0	10	30	GRAVEL	25.0	10	29	GRAVEL	25.0	10	26	GRAVEL
		34				33				31	
		38				36				35	
		44				40				39	
30.0	10	32	SOME CLAY & SILT	30.0	10	29	SOME CLAY & SILT	30.0	10	26	SOME CLAY & SILT
		34				33				31	
		38				36				35	
		44				40				39	
35.0	10	32		35.0	10	29		35.0	10	26	
		34				33				31	
		38				36				35	
		44				40				39	
40.0	10	32		40.0	10	29		40.0	10	26	
		34				33				31	
		38				36				35	
		44				40				39	
41.5	10	32		41.5	10	29		41.5	10	26	
		34				33				31	
		38				36				35	
		44				40				39	

Parcel 6

Block 1538

Bounded by Barnwell Ave., Cornish Ave., and Poyer Street
Currently:

Second Ward Station of the Department of Water Supply maintains the entire parcel for a combination of purposes: stockpiling, vehicular parking, offices, garages. See Photos 12 and 13.

Land Use History:

Based on an analysis of a series of E. Belcher Hyde Atlases and Queens Building Department records, eight small lots on the corner of Poyer Street and Cornish Ave. (measuring ca. 160' x 150') have apparently never been built upon. Two cesspools connected to an auto repair shop on the north boundary may have impacted the northwest corner of these otherwise vacant lots. Large trees and an asphalt parking lot now occupy these lots that are part of the very large plot identified as Lot 75. Lot 75 fronts on Poyer Street and measures roughly 440' x 250'. Apparently the 1926 New Building permit (#16501) for the northern corner of Lot 75 was for the original structure (6' foundations and 11" below curb) on the lot although it lists an existing frame dwelling (2 stories with cellar) 220' "away." In the 1930s, auto repair shops, office buildings, garages and garage extensions were constructed, adjacent to the original corner unit, to form the Water Supply complex as seen today. These building permits do indicate a notable degree of subsurface disturbances due to such items as gas tank installation, cellars, cesspools, and below curb boiler rooms (ALT#3080/38, NB#4426/37). Construction of storage facilities in 1972 (NB#1538) further disturbed the southern end of Lot 75, although no basement was specified in the building plans.

Lot 76 was built upon in 1937. A frame office building and new garage - no basements indicated - replaced a demolished frame garage.

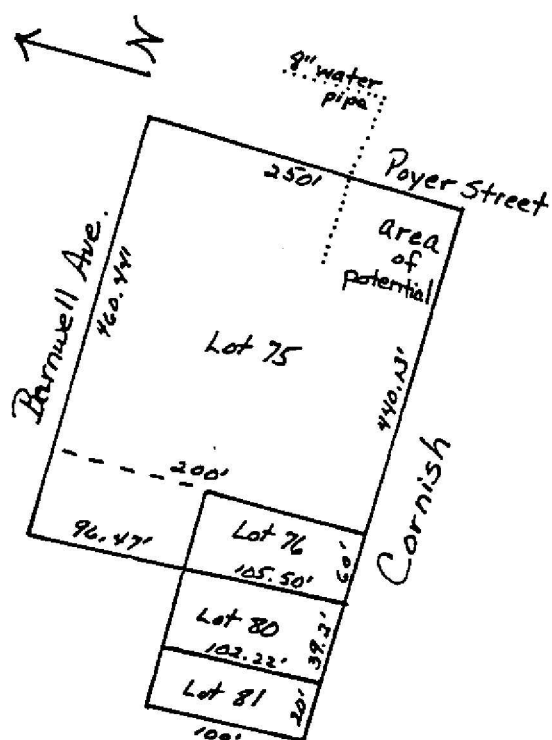
A house stood on Lot 80, situated at the southern corner of Parcel 6, until 1970 when it was demolished (DEM#501/70) and replaced with a surface parking lot (ALT#987/71). It is not known if this structure had a basement foundation.

Potential Sensitivity:

The history of this large parcel precludes the majority of the land from any further archaeological research. The eastern quadrant of Lot 75, that is now used for vehicular parking, is considered potentially sensitive.

Parcel 6

Schematic, not-to-scale, measurements given.



Parcel 7

Block 1539

Bounded by Cornish Ave., QB, and Dongan Ave.

Currently:

A McDonald's one story restaurant and surface parking cover the entire parcel. See Photo 14.

Land Use History:

Lot 1, in the middle of the parcel approximately 115' south of the intersection of Cornish and QB, corner of Dongan Ave. and QB, was first built upon in 1914-15 (NB#3733). Although these building specifications were not located, the Block and Lot Folder does indicate a basement level. The Sanborn Insurance Maps (Vol. 9, 1914, corr. to 1931) lists this building as the Thoroughfare Garage.

In 1914 an Alterations Permit (#3733) was issued for the garage/gas station on Lot 4, which is on the southeast corner of the parcel. In 1916 another extension, no basement indicated, was added to the existing garage (ALT#1783).

1914 and 1916 permits for advertising signs indicate that Lot 13, corner of Cornish Ave. and QB, was vacant land into the twentieth century. The Sanborn Insurance Maps show two small stores (presence/absence of cellars not indicated) on Lots 9, 10, and 13 before 1931. According to information from an adjacent land plot, Lots 10 and 13 supported a gas station, presumably with underground storage tanks, by 1942. Lots 9, 10, 13, and 1 were unified in 1953 (NB#326) for the construction of a one story metal/cement block building that included a basement level in the non-central areas.

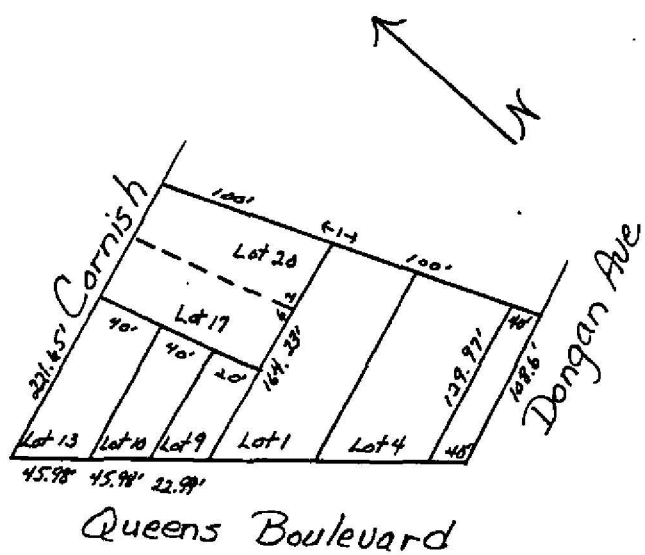
Lots 17 and 20, fronting on Cornish Ave., supported a garage with a "cellar" after 1917 (NB#1879/17).

Potential Sensitivity:

Without soil borings data, it is impossible to definitively state that the basement foundation construction (Lots 1, 4, 10, 13, 17, 20) did destroy all the archaeological resources; however, soil borings data from nearby parcel 5 suggests a probable fill layer of no more than 9'. Construction activities over the vast majority of parcel 7 indicate that the archaeological potential on this parcel has been severely limited to Lot 9, with a 22.99' frontage on QB. It is estimated that this small lot has been so impacted from the bordering subsurface construction activities that the potential for undisturbed archaeological resources does not warrant further consideration.

Parcel 7

Schematic, not-to-scale, measurements given.



Parcel 8

Block 1540

Bounded by Dongan Ave., St. James Ave., and QB

Currently:

The Rayco Auto shop is on the corner of QB and St. James Ave. A small, fenced open space lies between the southern wall of Rayco and St. James. The remainder of the block, north to Dongan, also hosts auto-related stores, e.g. Lee Myles at 81-11 QB.

Land Use History:

A visit to the Rayco business identified a cellar level foundation and the history of this section (Lots 2,3,6) was investigated no further.

Block and Lot Folders do not include information on the vacant parcel at the corner of St. James and QB.

Lots 7, 8, and 11 were combined, becoming Lot 7, for the construction of a one story brick building, no basement, which is still standing (NB#1252/1954). Prior to this construction, the space was used for car lots with a one story frame office. Lot 7 measures 114.95' along QB and 142.27' along Dongan Ave. Alteration records show that the original corner lot of Parcel 8, Dongan Ave. and QB, was a garage, without a basement, before 1929 (Alt#5033) - most probably dating from the new building permit of 1918 (NB#297) that was not in the Borough files. Interestingly, a number of gas station construction proposals for this northern corner of the parcel were proposed but opposed and ultimately rejected over the years. According to our field investigation, numerous extensions, alterations, and temporary structures have been added to Lot 7 over the years - none apparently involved a subsurface level.

Borings Data:

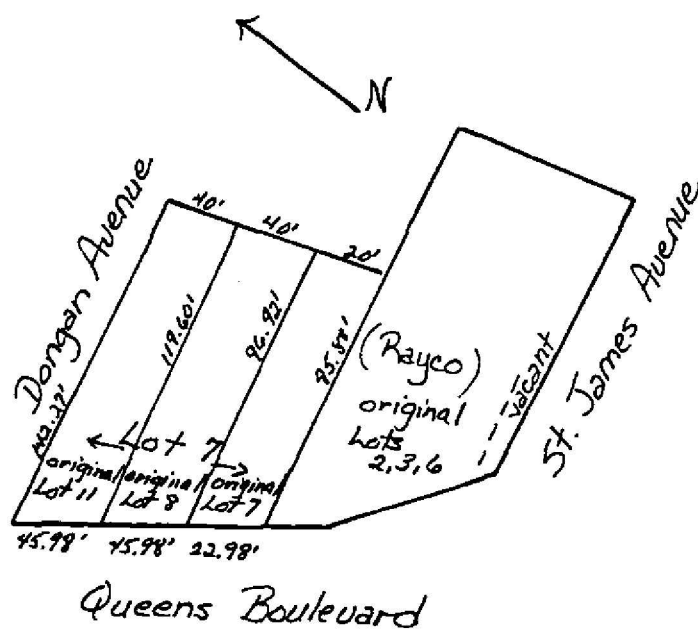
Test pits and borings were dug in 1954 but the results were not included in the Borough records.

Potential Sensitivity:

Although the small car lot area between St. James Ave. and the Rayco building has been vacant land (Hyde Atlas, 1909,1914,1927) since the earliest part of this century, we feel that the area is too physically restricted - between the road construction and the building construction to hold sufficient potential to warrant monitoring and/or further consideration. The buildings and garages on the large Lot 7, however, could be resting upon potential resources undisturbed by twentieth century construction.

Parcel 8

Schematic, not-to-scale, measurements given.



Parcel 13

Block 1842

Bounded by Justice Avenue, 55th Avenue, and QB

Currently:

Presently the only structure on parcel 13 is the one story Georgia Diner that sits on the QB and 55th Avenue corner, the southern portion of Lot 66. The remainder of the parcel, Lot 39, that stretches all the way to Justice Avenue (originally called Court Street and also Justice Street), is used for the Diner's customer parking. See Photos 59 - 62 and attached schematics.

Land Use History:

As stated in the Task 4 review of parcel 13 (pp. 24, 25), this wet tract, south of Broadway and between Justice Avenue and QB, was used for approximately 100 years as pasturage. By the mid 1800s houses were erected on the eastern and western perimeters of this wet tract - parcels 12 and 13. Some of the small houses built on the higher elevations of the one and two acre lots existed into the twentieth century. The White Line railroad bed (1872-1883) traversed parcel 13, between the path of Horse Brook and Justice Avenue. Task 4 results indicated a potential for both prehistoric and historic archaeological sensitivity. The following in-depth lot by lot analysis addresses the possibility of such resources.

Lot 66

According to a new building permit in 1976 (NB#360) the present Georgia Diner was built over a basement-level foundation. This was confirmed by field inspection. Three dry wells, 8'10" x 4'10", planned for the current parking lot at the rear of Lot 66, were the only proposed additional disturbances for this Lot after 1976.

The earliest building documents (NB#2990/1917) for Lot 66 refer to a house with a basement situated on the original Lot 66, which was partly on Block 1842 and partly under 55th Avenue. This original Lot 66 and the Georgia Diner location overlap somewhat. As was stated in the Task 4 results, the QB frontage of parcel 13 has been impacted by the deep excavations for the subway installation.

Lot 39

Lot 39 is presently a parking lot, although in 1931 it was still divided into at least five lots on which stood four houses (Sanborn 1914, corrected to 1931, Vol. 10, plate 72). Since there is no record of the construction for these four houses in the Queens

Borough Department of Buildings, which keeps records back to 1895, it is safe to assume that these dwellings were nineteenth century constructions. Without building specifications on file, it is impossible to know with certainty if any of these four structures had deeply excavated basement levels. The only record of a new building permit issued for Lot 39, NB#1956/1961E, is missing. This was presumably planned as a six story apartment building, which was mentioned in BN#885/1962 as not having been started. (BN#885/1962 was to build a sidewalk vault along 55th Avenue, which would not have impacted the dwelling lots on Justice Avenue.) The pre-1931 history of Lot 39, described below, is divided according to the old lot numbers, as recorded on the 1908 Hyde Atlas: Lots 78, 84, 86, 87, 88. See the Walling Map, page 42/ Fig. 9, for clarification. Also, see attached schematics. _

Lot 78

By 1837 the vacant Lot 78 is owned by James H. Kolyer (Deeds Liber TT Page 192) who sells the undeveloped plot in 1866 (L 240 P 71) to William Easston (sic). In 1923 William Easton was still listed as the owner. Lot 78 does appear as vacant land on the 1852 Riker map (Fig. 19) and the 1859 Walling map (Fig. 9). On the 1873 Dripps map (Fig. 10) Lot 78 still appears to be vacant land, associated with the E & A Howard residence east of Lot 78. The E & A Howard homestead is on Lot 75 (approximately 105' x 65'), the lot abutting Lot 78's eastern boundary. When the sixty-foot wide 55th Avenue [originally known as both Suydam and Lewis] was extended through parcel 13, sometime prior to 1908, Lot 75 and the southeast corner of Lot 78 became part of the public right-of-way; and, the one-and-a-half story frame dwelling and out-buildings on Lot 75 were more than likely demolished at that time. The other houses along Justice Avenue were not disturbed by the building or any subsequent widening of 55th Avenue. This corner lot is still shown as vacant land on twentieth century atlases (Sanborn 1914/corrected to 1931, Vol. 10, plate 72; Belcher Hyde 1908/corrected to 1909, Vol. 2, plate 26.)

Lot 84

Lot 84, an undeveloped plot, was purchased from James H. Kolyer by John Batting in 1837 (Liber TT Page 192). At that time Justice Avenue was known as the "highway road" or the "highway to Flushing." Besides Lot 84, Kolyner owned the land to the east and to the west of Lot 84 and other properties in Newtown which he had inherited. There is no indication that either James Kolyer or Anne, his wife, lived on any of the

lots discussed in this analysis. They are not mentioned on the 1859 Walling map nor on the 1852 Riker map. A descendant of Batting, also named John Batting, inherited the property and sold it to Jane Cannon in 1866 (Liber 240 Page 71). At some time during the Batting family ownership, a house was built on the land. It is shown on the Walling map of 1859. His immediate neighbors on each side, John Boston and William Easton are shown on the Walling map as described in the deed. In the 1866 deed, the dimensions of the property are unchanged, in spite of the fact that a part of the southern side of the lot was by then vested in the Town of Newtown, ostensibly to widen the ditch and drain which ran behind all four properties discussed. During the 1870s and 1880s the lot dimensions were further reduced, albeit temporarily, by the right-of-way for the Newtown and Flushing Rail Road. These reduced dimensions appear on none of the deeds, but they do appear in the 1908/ corrected to 1909 Hyde atlas. See attached sketches.

The Cannon family ownership is confirmed by the 1873 Dripps map, see Fig. 10. Jane Cannon willed the property to her son George Henry Cannon, and her daughter Matilda Emhoff. George Cannon, who was a bachelor, lived in the house until 1920, when he sold it to Josephine Tay (Liber 2324 Page 327). Tay owned the property, at what was then 50 Justice Street, for only three years, when she sold it to Teofil and Katayna Gwozdziowski in 1923 (Liber 2669 Page 85302).

Lot 86

The ownership record for Lot 86 had to be determined using information culled from the deeds to the surrounding properties - Lots 87, 84, and 88.

In 1837, the property was owned by Michael Hogge. It was apparently joined with Lot 87, because the 1836 deed to the neighboring Lot 88 lists Michael Hogge as owner of Lot 87 as well. The land was described as formerly owned by James H. Kolyer, so it had been recently conveyed to Hogge (Liber PP Page 427 for Lot 88). Although Michael Hogge was still owner in 1841 (Liber 55 Page 208 for Lot 88), a Mary Hogge split the parcel equally and sold what became Lot 87 to Bernard Gheirty (Gheerity or Garrity) in 1848. The Hogges probably never lived on the property. Mary Hogge is described as a resident of New York City (Liber 77 Page 207 for Lot 87). Lot 86 was probably sold a little earlier, for in the 1848 deed to Lot 87 the owner of Lot 86 was "formerly" John Bolton. Bolton was probably a misspelling or transcription error, for the name John Boston and a house appear on

the Walling map (1859) as the immediate neighbor of John Batting in Lot 84. In 1866 John Boston (Bosston) is listed as deceased (Liber 237 Page 191 for Lot 87; Liber 240 Page 71 for Lot 84). John Boston is listed as "formerly" owning the land in 1923 (Liber 2669 Page 85302 for Lot 84), but a John Boston still lives there in 1945 (Liber 5203 Page 614). There is no record of the Boston family having sold the land, so it was presumably they who owned it from circa 1845 until 1956 when the city foreclosed for failure to pay taxes (Liber 6882 Page 106 for Lot 86, renamed Lot 44).

The reduced dimensions of the lot, due to the nineteenth century public right-of-ways, is evident in the Hyde atlas of 1908/corrected to 1909.

Lot 87

After Lot 87 was split off from Lot 86 and sold by Mary Hogge to Bernard Gherity (1848), it was sold the following year to Aaron F. Howard (Liber 81 Page 103). Gheirty and his wife Charlotte were residents of Newtown before and after they purchased Lot 87. Their house on Court Street, the earlier name for Justice Avenue, was closer to the Court House, see the Walling map of 1859, Fig. 9. It is unlikely that they resided on Lot 87, especially since there is vacant land west of Lot 86 in 1859. Aaron Furman Howard, a Newtown resident, had already owned the neighboring property to the west, Lot 88, since 1845 (Liber 67 Page 256). His house is clearly shown in Lot 88 on the Walling map. He and his wife Sarah Jane Howard did not keep the land long and sold it to Aaron Weaver also of Newtown, in 1866. At this point there is a gap in the records. The next deed found shows that ownership has passed to the Heinsen family, as Jacob Heinsen is indicated as owner by 1906 (Liber 1418 Page 182 for Lot 88). The property passed by will through the Heinsen family: John Jacob Heisen (will of 1915) to Katy Heinsen (will of 1923) to John A. Heinsen (will of 1945) to Anna Heinsen (Liber 5203 Page 614). As described in the deeds, the lot dimensions remain unaltered, in spite of the fact that 405 sq.ft. at the rear of the lot were conveyed to the Newtown and Flushing Rail Road before 1866 (Liber 5203 Page 614). As on the other lots, the reduced dimensions do appear in the 1908/corrected to 1909 Hyde atlas even though the right-of-ways were reclaimed in the 1880s.

Lot 88

Lot 88 was purchased from James H. Kolyer in 1836 by Robert Gedney of New York County (Liber PP Page 427). Gedney later bought another parcel (listed as Lot 90

in 1908) of land from Kolyer (1841) which extended his holdings behind Lot 84, 86, and 87 as far as Horse Brook. See the attached sketches. By this time, Gedney was being described as "Merchant Tailor" of Newtown (Liber 55 Page 208). Aaron F. Howard purchased both the front and rear properties in 1845 and probably built the house shown as belonging to "A. Howard" on the 1859 map (Liber 67 Page 256). If it is the same house depicted in the 1908 Hyde atlas, it was probably the largest on Block 1842. Howard also bought Lot 87 in 1849 (Liber 81 Page 103). There is a gap in the records at this time, and it is not certain when he or the other Howards sold the property. It is possible that he sold Lot 88 about the same time he sold Lot 87, 1866 (Liber 237 Page 191), but this is only conjecture. In any case, Howard did split up the two parcels that Gedney had purchased in 1836 and 1841 (Liber 2592 Page 11365), and the plot with the house and frontage on Court Street/Justice Avenue was further reduced in size when Howard sold the rear 24 feet of the property to the railroad company. See the attached sketches. The 1906 deed documents the transfer of the land from Louis Tomford (unmarried, of Elmhurst) to Herman Krieger of Brooklyn (Liber 1418 Page 182). Although the Kriegers lived in Brooklyn, an Annie Krieger lived at 30 Justice Street/Avenue, and the land was conveyed to her by Herman and Leonore Krieger in 1924 (Liber 2592 Page 11365).

The border of the rear of Lot 88 seems to have caused particular confusion. As late as 1931, the atlases included Lot 90 behind Lot 88 which had been split off in the nineteenth century (Sanborn 1914/corrected to 1931, Vol. 10, plate 72), or the separate lots were numbered, but no dividing line was drawn between them (Hyde 1908/corrected to 1909). Eventually this was corrected, and the true dimensions were printed (Hyde, 1941, plate 28).

Borings Data:

Three borings are recorded from the 1976 Georgia Diner project. Beneath a layer of asphalt, the layer of fill overburden ranged from 19' - 23'. The individual borings (see attached schematics for boring locations) were described as follows:

- B1 - misc. fill to 21': sand, silt, wood, gravel, brick, etc.
- B2 - misc. fill to 23': sand, silt, cinders, brick, etc.
- B3 - misc. fill to 19': sand, gravel, wood, cinders, etc.

The depth of this fill layer is not surprising in consideration of the original topography (see Figure 8B) associated with the Horse Brook wetlands. Currently parcel 13, as described in the Task 4 study, is uneven and is raised above the current QB curb level. We know that filling started during the 1880s in the rear of the homelots for the placement of railroad beds. Conveyance records indicate that individual homes were still on parcel 13 in the 1950s, most probably on a little-altered landscape. Although not documented in the Borough records, it is likely that after the removal of the Presbyterian cemetery the subsequent deep excavation for the construction of the Metropolitan apartment complex yielded thousands of cubic yards of fill that may have been dumped on parcel 13.

Potential Sensitivity:

Prehistoric peoples, as discussed in the Task 4 study, are known to have preferred elevated sites within close proximity to a fresh water source. Both the northern and southern extremities of parcel 13 were elevated areas within immediate reach of Horse Brook. Undisturbed archaeological resources of southern New York's prehistoric era have been found in relatively shallow excavations. It is our estimation that the nineteenth century residential construction described above, plus the subway installation, severely impacted the potential for locating prehistoric resources along the vast majority of the original 15' - 20' contour elevation on parcel 13. It is very possible that Lot 78 has, indeed, been vacant during Newtown's development; and, therefore there is potential for prehistoric archaeology on the eastern corner lot. The deep fill overburden on parcel 13 has actually worked as a protective mantle for the potential resources approximately 19' - 26' below grade. See Fig. 8B for an understanding of the circa 1910 topography.

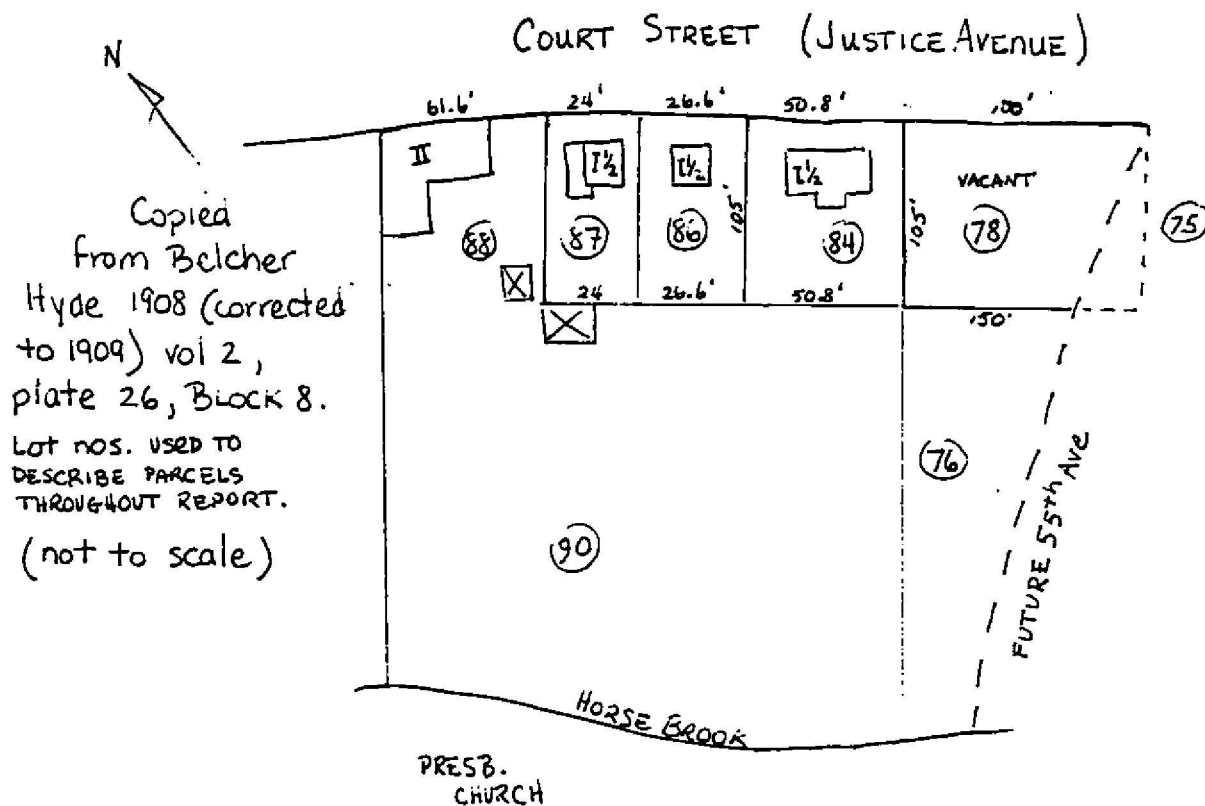
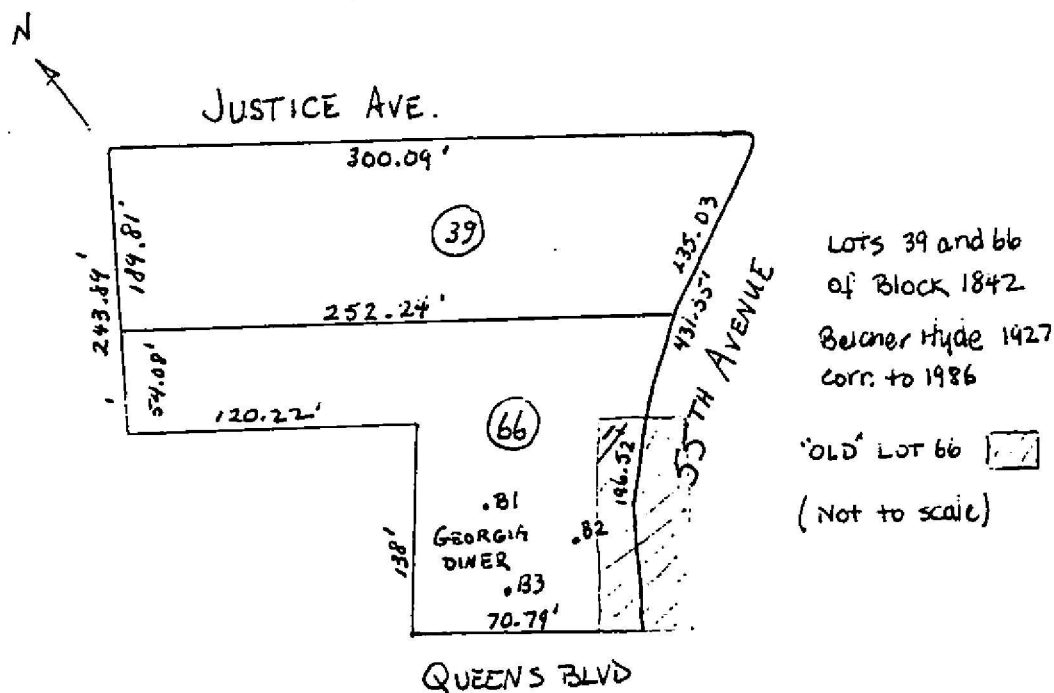
Lots 84, 86, 87, and 88 all hosted nineteenth century homes. These homes undoubtedly had privies, wells and/or cisterns in the rear yards. Such features can become valuable time capsules of a past era if the cultural detritus associated with the feature can be related to a known social element, such as a particular family or ethnic group. The documentary record for Lots 87 and 88 is unclear as to the total number of years that any one particular family resided on the lots. It is known that the homesteads had been transferred from the original dwellers prior to the introduction of a public sewer drainage system. This probable lack of continuity removes these Lots from further consideration for historical archaeological

potential. However, the documentary evidence implies that Lots 84 and 86 remained in the possession of the same family for over 50 years and until the introduction of public utilities. Lot 84 was apparently occupied by a Cannon family member from 1866 to 1920 and the John Boston family occupied Lot 86 from 1845 to 1956. Both Lot 84 and Lot 86 are considered potentially sensitive for historic resources. Again, it is our opinion that the introduced overburden has acted as a preservation mantle for the buried, nineteenth century materials.

According to the original deed dimensions, Lots 78, 84, and 86 have a combined frontage on Justice Avenue of (approximately) 178'. The rear lot depth from Justice Avenue is (approximately) 105'. It is possible that, due to the extreme depth of the "miscellaneous fill," construction impacts, that are a result of the proposed rezoning, could be designed so as not to reach the undisturbed historical and prehistorical strata. Additional borings data from the northern half of the parcel would be necessary before such avoidance techniques could be effectively implemented.

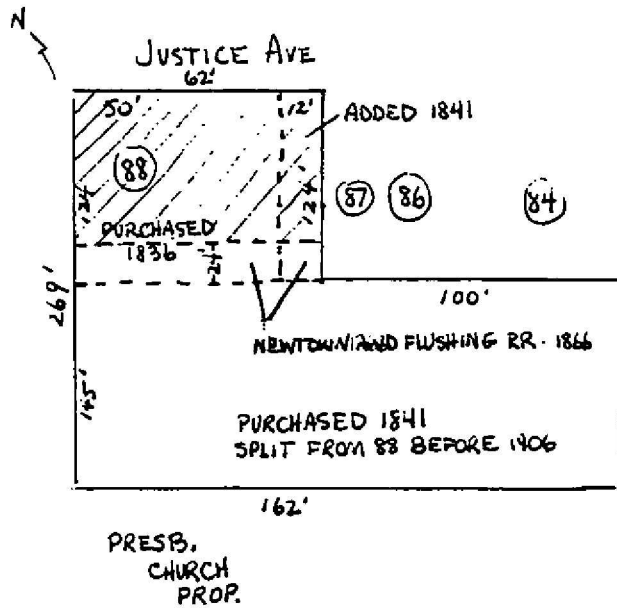
Parcel 13

Schematics, not-to-scale, measurements given.




Parcel 13

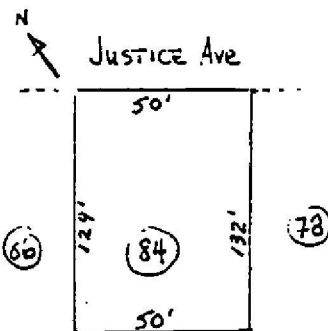
Schematics, not-to-scale, measurements given.



Lot 88: ADDITIONS
+ SUBTRACTIONS FROM
PARCEL AS DESCRIBED

IN DEEDS: L 2592 P. 11365 1924
L 1418 P. 182 1906
L 67 P. 256 1845
L 55 P. 208 1841
L PP P. 427 1836

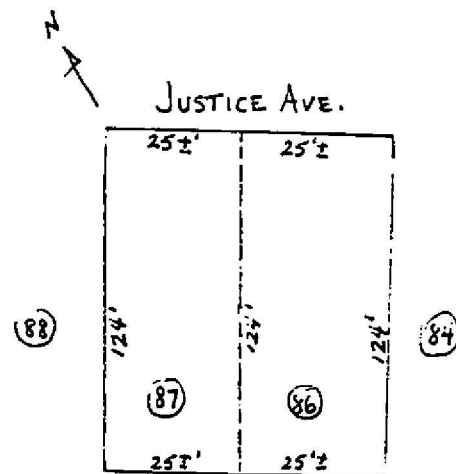
AREA OF 88 IN 1906 
(NOT TO SCALE)



Lot 84 as described

in Deeds: Liber 2669 Page 85302 1923
L. 240 P. 71 1866
L. TT P. 192 1837

(NOT TO SCALE)



Lots 86+87 as described

in Deeds: Liber 5203 Page 614 1945
L. 237 P. 191 1866
L. 81 P. 103 1849
L. 77 P. 207 1848

(Not to scale)

Parcel 14

Block 1845

Bounded by 56th Ave., 57th Ave., and QB

Currently:

The Jamaica Savings Bank dominates the northern one-third of the parcel, 120'10" on QB x 129'5.25" on 56th Ave. The southern one-third of the parcel hosts the fifty year old White Castle fast food restaurant and parking lot, 81.06' on QB x 195.01' on 57th Ave. One story small businesses, including the Dunkin' Donuts coffee bar, a shoe store, and a bedding store, constitute the QB frontage mid-block. A massive subway ventilation and control unit is located immediately south of the Savings Bank lot on QB. See Photos 44 and 45.

Land Use History:

A field check inside the Savings Bank revealed a full, operational basement at least 10 feet below curb level. According to the 1908 Hyde Atlas (Vol. II, 1st and 2nd Wards), this corner lot did support a two story frame dwelling with out-buildings. However, in consideration of the soil borings data, see below, no further research on this lot in the parcel was deemed necessary.

B 1845
L 1

The earliest building records available for this parcel date to 1899. In this year a machine shop was constructed (NB#793), on piles in "sand," on a lot (Lot 49) that subsequently became the northern half of the White Castle property. In 1933 (NB#1259) a 65'x 72' building was erected on the same lot, most probably replacing the earlier machine shop, although no demolition records were located. Constructed as a trim and lumber shed with an "assemble room" and offices, it rested on brick and concrete piers that were specified for 4 feet below the surface. This structure was torn down prior to 1961.

Early records of Lot 41, as indicated by the Block and Lot Folder index card files, include alteration permits in 1912, 1931 and a 1923 demolition permit. These records were not found. The 1938 White Castle building (NB#10571) was on the original Lot 41 (6.06' on QB x 195.01' on 57th Ave.) and fronted on 57th Ave. A cellar (concrete on earth) was incorporated into the plans as a "store room, toilet, and dressing room." Three years later and outdoor parking lot, built to "rests on earth," for 75 cars was added (MISC#137). In 1961 Lots 41 and 49 were combined (Lot 41) when the present White Castle was erected (NB#4641). The current restaurant building, fronting on QB, has a cellar with a depth of 7.67'.

Early twentieth century atlases show parcel 14 as owned, in large part, by H. Werner, Cath. Beckman, E. H. Simonson and the C. Meyer Devel. Co. Although predominantly vacant at this time the parcel did contain several frame dwellings - one with a store on the first floor - and a brick home in addition to the structure described for the Savings Bank lot. The Borough's building records for the central portion of this parcel are incomplete. Lot 57, 89-23 QB, immediately north of the White Castle property, hosts a one story commercial building that includes the Dunkin' Donuts coffee bar and a bridal salon. According to the only extant records available for this lot, the present structure, built in 1980 (BN#27/80) does not have a basement level. This was confirmed during a field visit. Lot 59, with 56.90' frontage at 89-17 QB, lies immediately south of the Jamaica Savings Bank and contains an ice cream parlor, shoe store, and Sleepy's Mattress store. The incomplete Block and Lot file only lists the new construction of 1977 (NB#88) for Lot 59. As standing today, this "mercantile building" has a cellar at least 10' below the sidewalk surface and rests on 52 pilings.

Borings Data:

Two borings (1961) show a fill layer (ashes, red brick, topsoil, cinders, concrete, sand and gravel) approximately 10' thick on Lot 41. The borings show water at 11' and "river mud and sand" at 10-12'.

Potential Sensitivity:

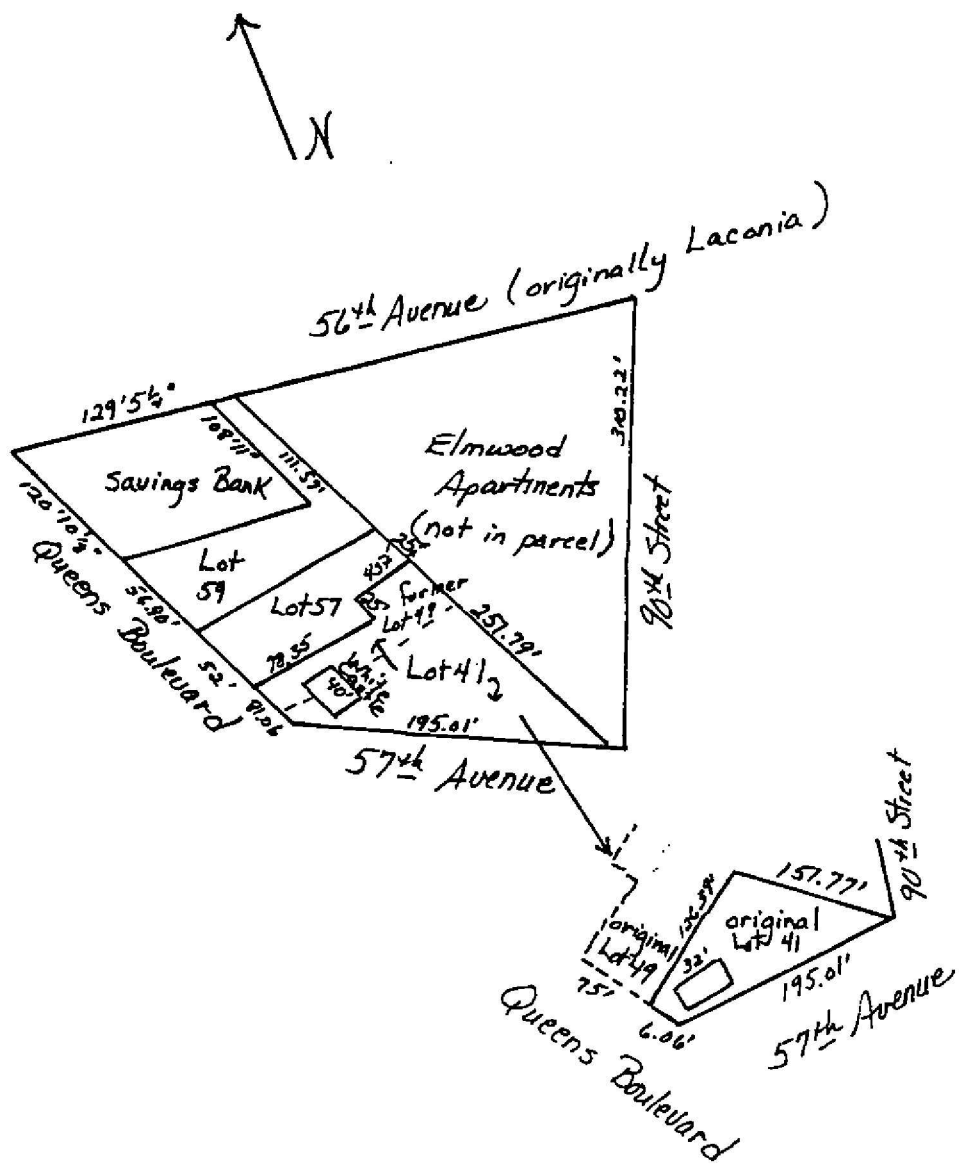
The rear of the current Lot 41 (approximately 45' on the north x 251.79' on the east) and Lot 57 are the only areas of parcel 14 that have not been disturbed by twentieth century deep foundation construction. That portion of Lot 57 that fronts on QB has been impacted by subway construction. It is impossible to know with certainty what pre-1900 construction activities did take place on these areas and consequently disturbed the subsurface resources. But, without a clear indication that these portions of Lots 41 and Lot 57 of parcel 14 have been disturbed to a depth beyond the fill overburden, they must be considered potentially sensitive.

for what? NA }

B 1845 lot 1 no any potential

Parcel 14

Schematic, not-to-scale, measurements given.



Parcel 18

Block 2451

Bounded by QB, Jacobus, Ireland Street, and 51st Street

Currently:

The northernmost corner of the parcel is a fenced, vacant lot that, according to workers on the block, is scheduled for a motel construction project. The remainder of the parcel is covered with two detached, one story brick warehouse/office buildings. The most northerly of these two buildings houses the Tiffany Auto Collision at 50-15 Jacobus, ITM at 50-22 Ireland, and Century Fasteners at 50-20 Ireland. The second building is presently vacant and undergoing renovations. See Photo 20.

Land Use History:

According to the 1908 Hyde Atlas of the Borough of Queens, Vol. II, parcel 18 was a part of the Sackett Moore Estate and vacant land at least during the earliest part of this century. As late as 1941 the corrected Hyde Atlas depicts development on only the lots that front QB.

We were unable to locate Block and Lot Folder information on Lots 1 and 3, the current vacant plot that fronts on QB. Atlases are contradictory but do associate this northern corner lot with the gas station/garage business on Lots 6 and 9, immediately south and east of the Lots 1 and 3 corner (Hyde, 1914/corrected to 1941).

Both of the one story brick warehouse/office buildings on parcel 18, constructed during 1955, were built upon driven pilings and did not include basement levels. No earlier buildings were listed for either of these two lots. Lot 15 (NB#4787), situated mid-block between QB and 51st Street, was developed by Ernest Sohn Creations, Inc. The major portion of Lot 21, with a total 211.21' frontage on 51st Street, was developed by Advanco Products, Inc. (NB#4466). The eastern portion of Lot 21, approximately 166.06' x 50', that fronts on both Ireland and 51st Street was used for parking and loading. It is possible that this plot may have always been vacant.

Borings Data:

A total of 16 soil borings were done for the 1950s construction. An "inorganic fill" layer is from 3' to 8' thick. A distinct "bog" layer shows up in 10 of the boring records, directly beneath the fill layer. Archaeologists review borings logs for the presence of peat layers that indicate past environmental niches that would have supported prehistoric

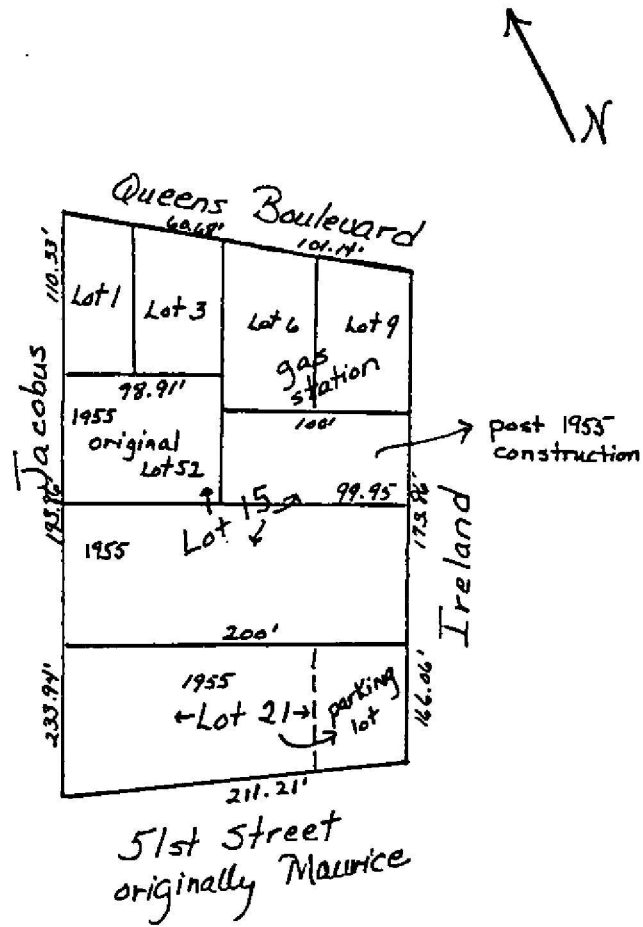
peoples. It is not clear if this identified "bog" layer is comparable to a peat layer and, therefore, indicative of prehistoric potential.

Potential Sensitivity:

Because of the lack of documented subsurface disturbances, coupled with the borings report of a "bog" layer, Lots 1, 3, 15, and 21 of this parcel must be considered as potentially sensitive for the presence of prehistoric archaeological resources.

Parcel 18

Schematic, not-to-scale, measurements given.



Parcel 19

Block 2452

Bounded by QB, Ireland and Hillyer Streets, and 51st Street
Currently:

The northwestern corner of the parcel, QB and Ireland, is dominated by the Liz Furniture showroom/warehouse. Mid-block, fronting on QB, is L'Amour East. Also mid-block is an alley/parking lane that exits onto QB. Speed World Auto Parts covers the northeastern corner of the parcel, 77-20 QB. The southern lots of the parcel are currently being used for vehicular parking. See Photos 21 and 22.

Land Use History:

Parcel 19 is shown as vacant land and part of the Sackett Moore Estate on the 1908 Hyde Atlas, Vol. II, 1st and 2nd Wards. The parcel's earliest proposed construction activity, as listed on the Block and Lot Folders index cards, took place in 1928 - on Lot 7 at the corner of QB and Hillyer (NB#11150) and in 1937 - on Lot 20 at the corner of 51st Street and Hillyer (NB#3271). These Borough records were not found. Also, as with all the other parcels in the Queens Boulevard Rezoning Proposal Project, there is no definitive way to assess the possible effect of an undocumented building phase.

A field visit to Speed World noted a basement/boiler room under a portion of the corner, one story brick building. This may be the same cellar noted in the 1947 permit (NB#4838) for a factory "at rear of lot." Due to these known disturbances, the northeastern corner of the parcel, the original Lot 7, was eliminated from further archaeological consideration. The original Lot 7 was combined with Lots 12 and 16 to form Lot 10 during the proposed 1984 masonry building construction on original Lot 12. No basement level was indicated on the specifications.

We were unable to locate any building records for the northwestern corner of parcel 19, the original Lot 1, (Liz Furniture). It is named both a used car lot and a used car building in 1947 documents but more specific information was unavailable.

In 1947 a major portion of the northern half of the parcel was combined as Lot 1 for the construction of a two story auto showroom (NB#1457). A cellar (for boiler) was placed "on ground" according to the specifications.

Subsequent activities and proposals on the entire parcel involve surficial activities only - e.g.,

vehicular parking and conversion to a roller skating rink (ALT1919/62; ALT1918/62; ALT923/80).

Borings Data:

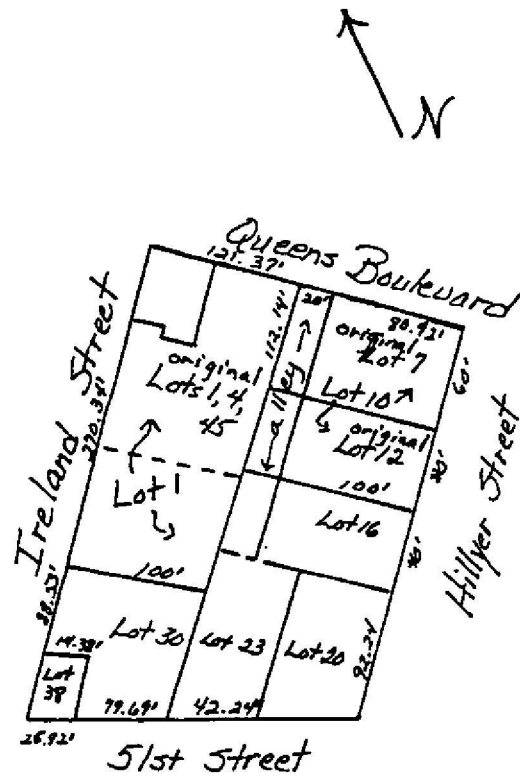
Eight borings taken (1947) on the western portion of the parcel, revealed fill, mixed with sand, to a depth of 6-8'. Only at one boring location was a one foot lens of "bog" noted. Two borings taken on the QB and Hillyer corner also revealed 8' of fill. During 1984 five borings were reported for Lots 12 and 16, indicating up to 11' of fill overburden (cinders, gravel, sand).

Potential Sensitivity:

Documents, field inspections, and atlases indicate that the lots fronting on QB have most probably been disturbed to a sufficient degree to eliminate them from further archaeological consideration. It is very possible that the alleyway west of the original Lot 7 has always been undeveloped land. However, we feel that the impacts on this narrow space from the deep excavations on the bordering properties have, most probably, severely disturbed any potential for archaeological resources. The rear portion of parcel 19 (Lots 12, 16, 20, 23, 30, 38, and the rear half of Lot 1) is potentially sensitive to prehistoric archaeological resources beneath the 6-11' of fill overburden.

Parcel 19

Schematic, not-to-scale, measurements given.



Parcel 21

Block 2472

Bounded by Manilla Street, 51st Street, QB, and Codwise Place

Currently:

The Sage Diner and the adjacent surface parking lot front on QB and 51st Street and cover the rezoning parcel. See Photo 25.

Land Use History:

The 1914 Sanborn Insurance Maps of the Borough of Queens (Vol. 9) show four frame dwellings - 1 story front porch, 2 and-a-half story house, and detached garage - and one brick front store on parcel 21's Lots 141, 143, and 144. No basements are indicated. The 1914 Hyde Atlas, updated to 1931, depicts Lots 1 and 138 and the QB and Codwise Place corner as vacant land.

Interviews with Sage Diner personnel revealed that the new one story restaurant, which replaced a "twenty year old building," has a 10'-12' basement. The land area under and immediately surrounding the diner was eliminated from any further archaeological consideration.

The earliest documented construction on the parcel dates to the 1914 New Building permit for a house with a "cellar" on Lot 138 (NB#806). A one story brick factory was built on Lot 138 in 1953 (NB#1402) and demolished in approximately 1981.

In 1917 a house with a basement was built on Lot 1 (NB#2859). Three years later a garage was erected (NB#5397).

The subsequent consolidation of structures and lots and parking lot extensions did not further impact the subsurface strata of parcel 21 (NB#531,2,3;ALT#758).

Potential Sensitivity:

Working only with borings data from neighboring Parcel 22, we can only speculate that a fill overburden of between 2.5' to 9' is present on the parcel. The building documents, field inspection and cartographic analysis preclude any further consideration of the original Lot 9 - the Diner area - and its immediate parking spaces which evidently supported dwellings in the first part of this century (original Lots 4-8). Basement levels for private residences can only be inferred in this instance. Lot 141, 40' directly east of the Manilla and 51st Street intersection, is similar to the parking lot of the Diner

because the 1914 Hyde Atlas shows two dwellings and outbuildings on the plot but we can only speculate as to the presence of a basement level. It is documented that Lots 1 and 138 were drastically impacted by basement foundation construction. The limited, available information on this parcel indicates some potential sensitivity in specific, confined areas where building records are incomplete: original Lots 1 and 4-8.

Parcel 22

Block 2474

Bounded by Codwise Place, QB, and Simonson Street

Currently:

The new, brick Doctors medical building/patient parking occupies the northern one half of the parcel. A fenced, vacant lot full of cars occupies the QB and Simonson Street corner. See Photo 26.

Land Use History:

A review of the 1908 Hyde Atlas (Vol. II, 1st and 2nd Wards) shows the parcel as vacant land owned by Henry Eilerman. The 1914 Hyde Atlas corrected to 1941 (Plate #51) only shows a concrete block structure on the rear of Lot 42 - corresponding to the rear of the Doctors building. Lots 40, 44, and 50 are vacant.

Borough building records show that twice (NB#8064/'27 and NB#1766/'33) proposals to build a gas station on the corner of QB and Simonson Street were rejected. This irregularly shaped Lot 44, 53.87' on QB x 110.67' on Simonson, was zoned for residential use and the appropriate variances were not issued. The ground was described as dry clay. The 1948 new building permit (NB#1910) for a two-car garage could indicate an unidentified residence on the plot or garage usage by persons from a neighboring lot or either an auto repair/garage service circumventing the zoning stipulations.

The 1927 proposal for a gas station on Lot 44 includes a diagram with a frame dwelling on both Lot 40 and Lot 42. However, the Block and Lot Folders do not include any building information before the 1983 construction of the Doctors building (NB#123) on both lots, now designated simply as Lot 40. This one story structure does not have a basement level. It rests on 4' of clean, tamped sand and gravel fill. This foundation fill layer replaced 4' of organic fill removed in conjunction with the 1983 project.

Borings Data:

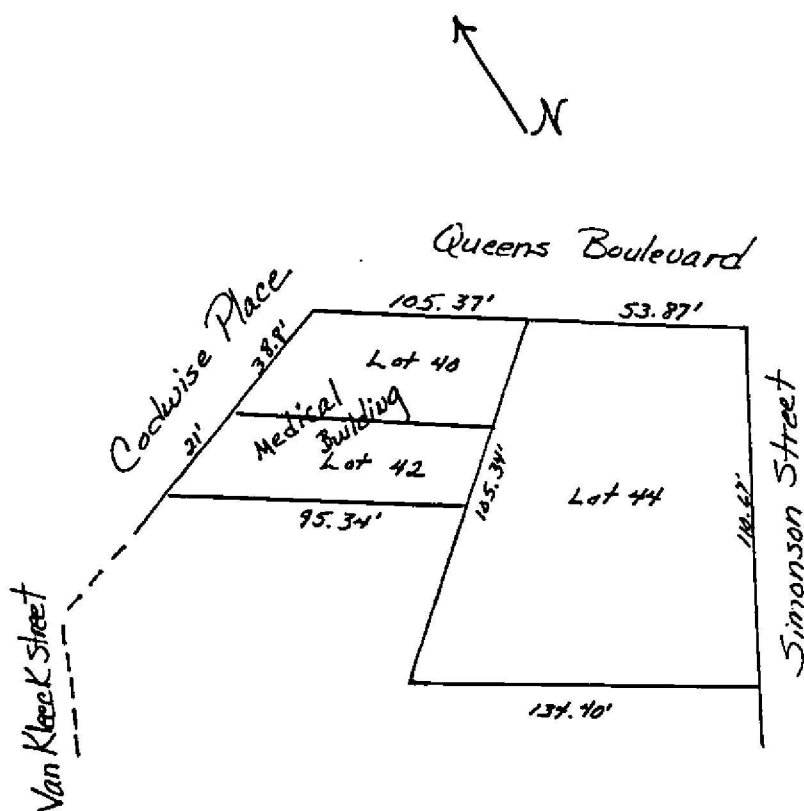
Two borings were taken in 1983 on the combined Lot 40. These report a macadam surface lying over 2.5' to 9.5' of fill overburden. The water table was reported to be 8'- 8.5' below grade.

Potential Sensitivity:

There is no indication that modern activities have so severely impacted the subsurface strata of this parcel that it should be removed from consideration as potentially sensitive.

Parcel 22

Schematic, not-to-scale, measurements given.



Parcel 23

Block 2475

Bounded by Simonson Street, QB, and Goldsmith

Currently:

Parcel 23 is the site of the Elks' No. 876 B.P.O.E. Hall. See Photos 27 and 28.

Land Use History:

According to the 1908 Hyde Atlas (Vol. II, 1st and 2nd Wards), this parcel was vacant land at the turn of the century. Although owned in large part by Henry Eilerman, a 1.4 acre plot next to Goldsmith Ave. was owned by the Simonson family by 1908.

The massive stone, raised stoop 4 story structure commands QB. There is a basement in the original section of the building - the western half of the parcel. The eastern half of the parcel hosts a steel frame gymnasium and swimming pool that is attached to the earlier, taller structure (Sanborn Insurance Maps of the Borough of Queens, 1914, Plate 24).

Potential Sensitivity:

Although borings data was not available for this parcel, the information from Parcel 22 and Parcel 25 indicates a fill layer of no more than 10' on this particular parcel. It is estimated that the construction impact of the original Elks Hall and the adjoining sports facility would reach beneath the fill layer and severely disturb any potential archaeological resources.

Parcel 24

Block 2476

Bounded by Goldsmith, Van Loon Street, and QB

Currently:

This small strip fronts on QB and includes a closed deli in a building on the corner of QB and Goldsmith (83-02 QB), a functioning auto repair garage in the rear of the vacant deli building, four identical two story, brick early twentieth century residences at mid-block that now house a variety of health services and real estate businesses, and the large Italian Charities assembly hall/offices on the southern corner lot (83-20 QB) at QB and Van Loon Street.

Land Use History:

According to the 1908 Hyde Atlas (Vol. II, 1st and 2nd Wards) the only development within the entire parcel at the turn of the century was in Lot 1, the QB and Van Loon corner plot that now hosts the Italian Charities structure. This development consisted of two structures: 1 frame, two story stable and 1 frame, one story stable.

A field visit to this parcel and interviews with on-site workers proved that deep basement foundations (8-10') are under the major portion of the deli building and the four mid-block structures. The small auto repair shop, fronting on Van Loon Street, appears to occupy the original alley/driveway part of the corner lot. This repair shop was not built over a basement.

The Italian Charities brick, multi-story building, a center for local senior citizen activities and meals, was constructed in 1936. We were able to review a photograph collection and newspaper accounts of the construction process in the Charities' offices. The excavation for the building's crawl space and foundation footings was not more than 5'-8' below curb level.

Potential Sensitivity:

Based on soil borings data from neighboring parcels, we feel that the construction of the standing structures at 83-02, 83-06, and 83-10, has most probably disrupted the soil strata directly beneath the fill overburden. Therefore, we have eliminated the north half of the parcel from any further archaeological consideration. However, the development history of the original Lot 1 corner plot indicates that any potential subsurface resources have not been severely impacted. The southern half of the parcel, 83-20 QB, must be considered potentially sensitive.

Parcel 25

Block 2477

Bounded by QB, Van Loon Street, Grand Ave.

Currently:

The presence of a gas station on the triangular plot at the intersection of Grand Ave. and QB was noted during the Task 4 process and, therefore, these lots (original Lots 16 and 20) were eliminated from the Task 5 analysis. A car wash operation dominates the parcel's most northerly corner, at the intersection of Van Loon Street and QB. Hook and Ladder Company #136/Engine #287 of the New York Fire Department occupies a two story firehouse on Lot 26, fronting on Grand Ave. See Photo 29.

Land Use History:

What about Driggs? 1873 building 1859

The documented construction history of this parcel goes back to 1906. In this year the Simonson family erected a temporary tennis dressing room (12'x 12') on the rear of the 100'x 100' Lot 23 (NB#1758). By the late 1920s, Lot 23 supported a frame store, no basement, that fronted onto QB (ALT#399). By 1951, when a proposed building project was suspended (NB#4844), this lot had been halved so that the QB frontage was reduced to 59.70' and the Grand Ave., frontage was reduced to 50'. A brick building was erected on Lot 23 in 1954 (NB#4634) for the manufacture of automobile seat covers. This construction did not involve deep foundation excavations.

New houses, with cellars, were built on Lots 29 and 32 in 1902 and 1907, respectively (NB#414, NB#1431).

A 20'x30' house was standing on Lot 35 by 1918 when "cesspool" work was carried out (ALT#2515). No basement was indicated on these documents.

A house was evidently situated on Lot 1 during the first half of this century because a permit for a 1 or 2 car garage, 104' south of QB, "for existing house" was issued in 1950. A missing 1948 new building permit document (NB#8939) might be related to this residential usage. In 1953 Lots 139-142, 150, and 151 were combined to form a new, irregularly shaped Lot 1 for the establishment of a car wash business. The brick car wash, no basement specified, fronts on Van Loon Street.

The only building records for Lot 5 are from the 1948 brick office/furniture warehouse construction that covered the entire lot, except for one small plot in the southwest corner of the lot. No cellar level is listed for this building.

Lot 26 hosts an operating New York Fire Department station. According to the Hyde Atlas, corrected to 1941, this station was built in 1914. A large scale, thematic, non-contiguous landmarks designation of New York fire houses is currently under the sponsorship of the New York Landmarks Conservancy. We checked with Lisa Niven of the Landmarks Conservancy who verified that this fire house is not on the list of proposed landmarks.

Borings Data:

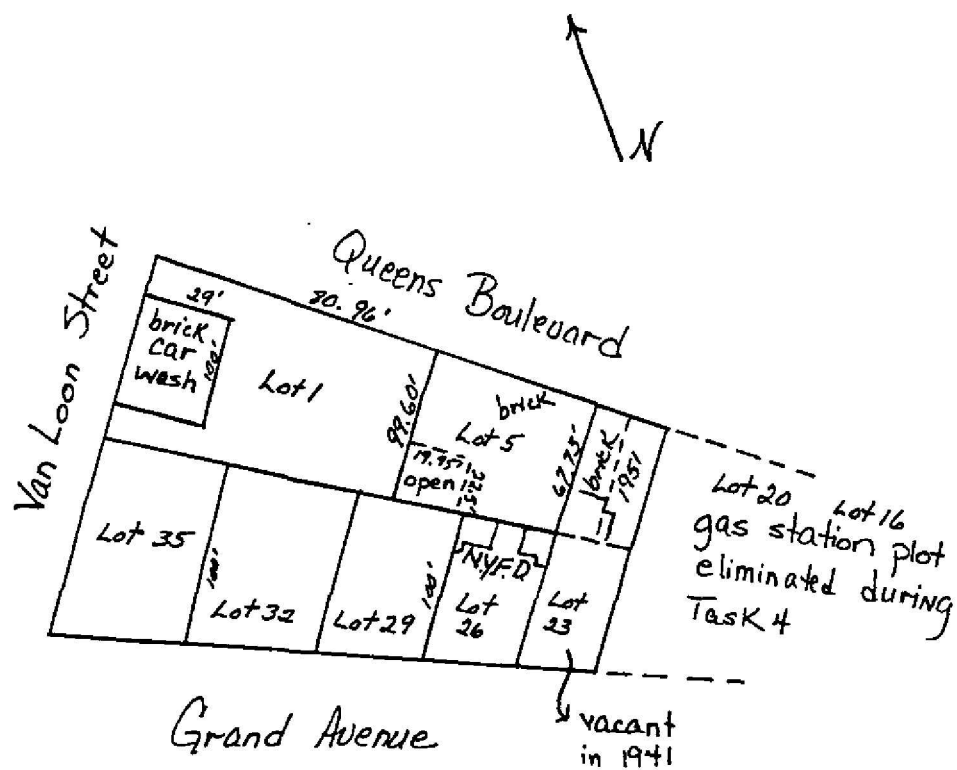
Five borings taken in 1948 on Lot 5 listed a 10'- 12' layer of fill mixed with sand and stones. The water level varied from 8'6" - 12' beneath the QB curb. In two borings a "bog" layer was noted, at 10'- 12'.

Potential Sensitivity:

Due to the incomplete nature of the documents, it is impossible to discount the majority of the parcel as having no archaeological potential. We know with certainty that Lots 29 and 32 have been impacted by cellar construction that more than likely reached beyond the fill overburden. However, the remainder of the parcel, identified during Task 4 as potentially sensitive, must be considered potentially sensitive.

Parcel 25

Schematic, not-to-scale, measurements given.



Parcel 29

Block 2853

Bounded by QB, 55th Avenue and 55th Road

Currently:

The southern corner at QB and 55th Rd. is occupied by a defunct gas station now used as a car park. The remainder of the block is composed of law offices and stores that front on QB, 87-02 to 87-18.
See Photo 35.

Land Use History:

A site inspection and interviews with long time residents and parcel businessmen revealed the high degree of impact that this parcel has experienced. Each of the lots in rezoning parcel 29 revealed deep, subsurface impacts. The corner lot at QB and 55th Road hosts buried gas tanks. Deep basements, window wells, and sidewalk freight entrances are all obvious along the QB sidewalk. Each of these properties was inspected:

Queens Boulevard #87-02	John Blaha Law Offices
87-04	Chinese restaurant
87-06	M. T. Pockets Bar
87-08	Sleep Center
87-10	Vitacco Law Offices
87-16	Check cashing service
87-18	Hair salon

Borings Data:

No borings data was available for review. John Blaha, current President of the Elmhurst Chamber of Commerce and a lawyer with offices on this parcel for over 25 years, related the local concept of the below grade conditions along QB and the path of the Horse Brook. His experiences and perceptions over the years, confirmed by his law office associates, indicate that the original soil conditions:

- (1) around parcel 14 and east of parcel 14 were sandy;
- (2) in the area west of QB between Grand Ave. and 57th Road were "solid earth";
- (3) in the area surrounding parcel 9 and 10 were swampy; and,
- (4) in the vicinity of Codwise Place and Manilla Street were inundated by seasonal flooding and, therefore necessitated the pile construction techniques used in the neighborhood.

In consideration of the "solid earth" described and the distance from the path of Horse Brook, it is estimated that the fill layer would not be so deep

as to have protected the original soil layers during the cellar level foundation excavations.

Potential Sensitivity:

A field visit confirmed the degree of impact that the standing structures have had on subsurface soil strata. We feel that this entire parcel should be eliminated from further archaeological consideration.

Parcel 30

Block 2854

Bounded by QB, 55th Road, and 56th Avenue

Currently:

Two very large business complexes dominate this rezoning parcel. At 88-10 QB, the northern corner, are offices and inspection garages for All State. On the southern corner of the parcel, 88-12 QB, is the Moderama Furniture store and warehouse. See Photo 36.

Land Use History:

A field inspection obviated the need for further research into the history of this land parcel. Both businesses are using a deep, below grade level for business purposes. For example, Moderama has operated out of the same premises for over 35 years, although they were not the builders of the present structure and the Moderama basement level is used for furniture display.

Borings Data:

The closest known borings are from parcel 14, east of parcel 30 across QB. These borings are from a plot of land much closer to Horse Brook and known from early maps to have been a wetland border area. Parcel 14 borings indicate a fill layer of 10'. It is unlikely that the fill layer on parcel 30 would be any deeper than 10' and possibly slightly less than 10'.

Potential Sensitivity:

An inspection of both properties on parcel 30 revealed deep basement level construction that has most probably severely impacted any potential subsurface cultural resources. We feel it is not necessary to further investigate this parcel for archaeological potential.

Parcel 31

Block 2855

Bounded by QB, 56th Ave. and 57th Ave.

Currently:

The southern corner of the parcel, at the corner of QB and 57th Ave., hosts Crazy Eddie's music shop. This particular corner lot was eliminated from further consideration during Task 4. Moving north from Crazy Eddie's along QB, is the Love Boutique (an adult book store), a small, open air flower market, and one large building, 89-06 QB, that houses four separate businesses (including a tavern and a delicatessen). See Photo 37.

Land Use History:

As shown on the 1914 Sanborn Insurance Maps (Vol. 9, Plate 24), parcel 31 hosted a commercial strip of one story frame attached stores, with brick facades, during the first decade of this century. Also fronting on QB was a detached two story frame store. Frame dwellings were situated on the corner lots and facing the side streets of 56th and 57th Avenues.

A site inspection of parcel 31 revealed that each of the standing structures has a deep basement, 8'-10' beneath the QB curb level. The Love Boutique has an inside entrance to a lower level, where the public toilets are located. The attached stores on the north corner have working sidewalk freight entrances. In the narrow alley between the Love Boutique and the attached stores is a nursery protected by awnings.

Borings Data:

The closest known borings are from parcel 14, east of parcel 31 and across QB. These borings are from a plot of land much closer to the original path of Horse Brook and known from early maps to have been a wetland border area. Parcel 14 borings indicate a fill layer of 10'. It is unlikely that the fill layer on parcel 31 would be any deeper than 10' and possibly slightly less than 10'.

Potential Sensitivity:

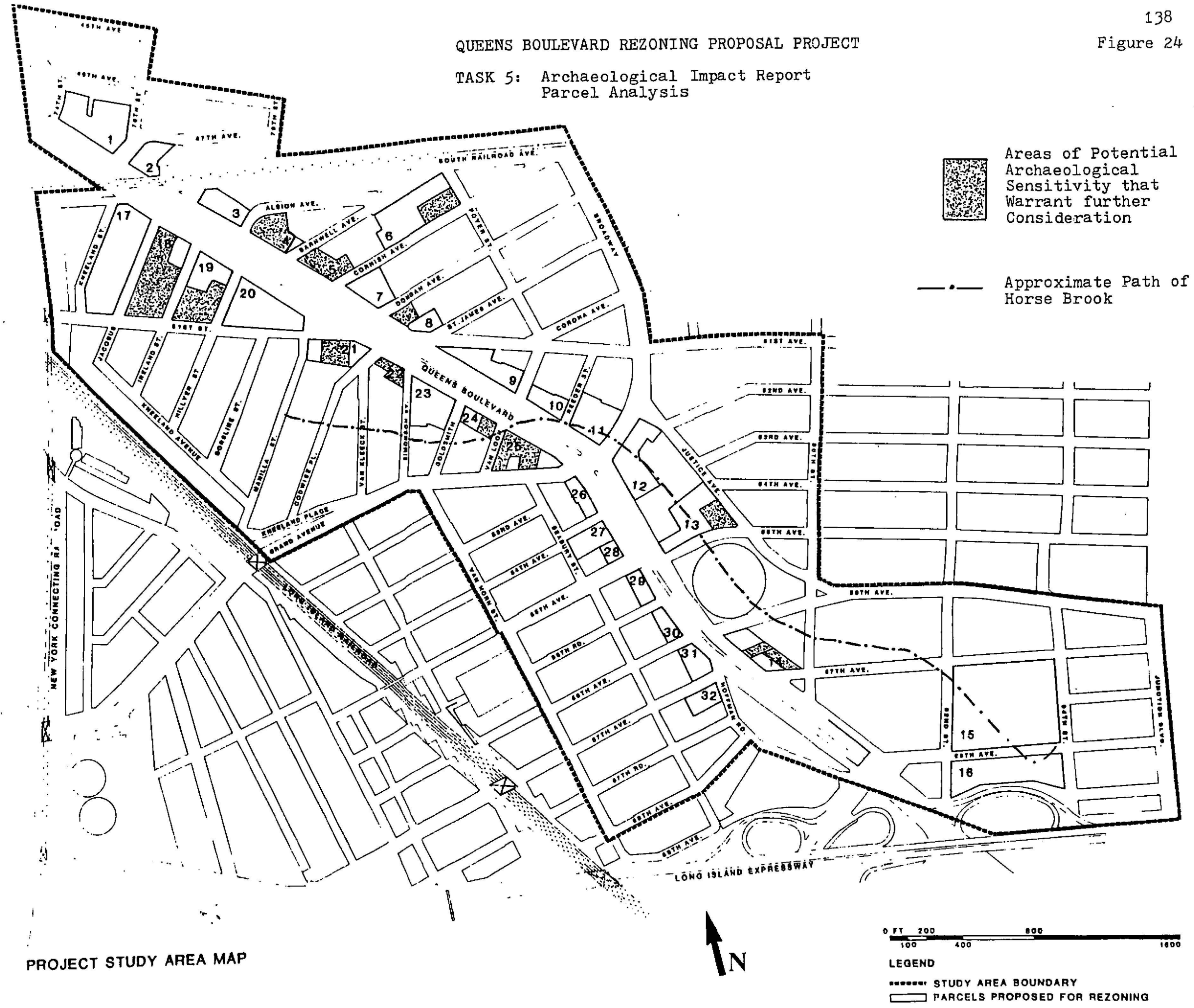
We feel that the deep basement excavations involved in the construction of the present buildings on parcel 31 severely impacted the potential resources that may have existed in the shallow soil layers under the fill overburden on the building lots. We feel that the potential resources in the narrow alleyway have also been severely impacted by the construction excavations of the adjoining buildings. No further consideration of archaeological potential for parcel 31 is warranted.

CONCLUSIONS

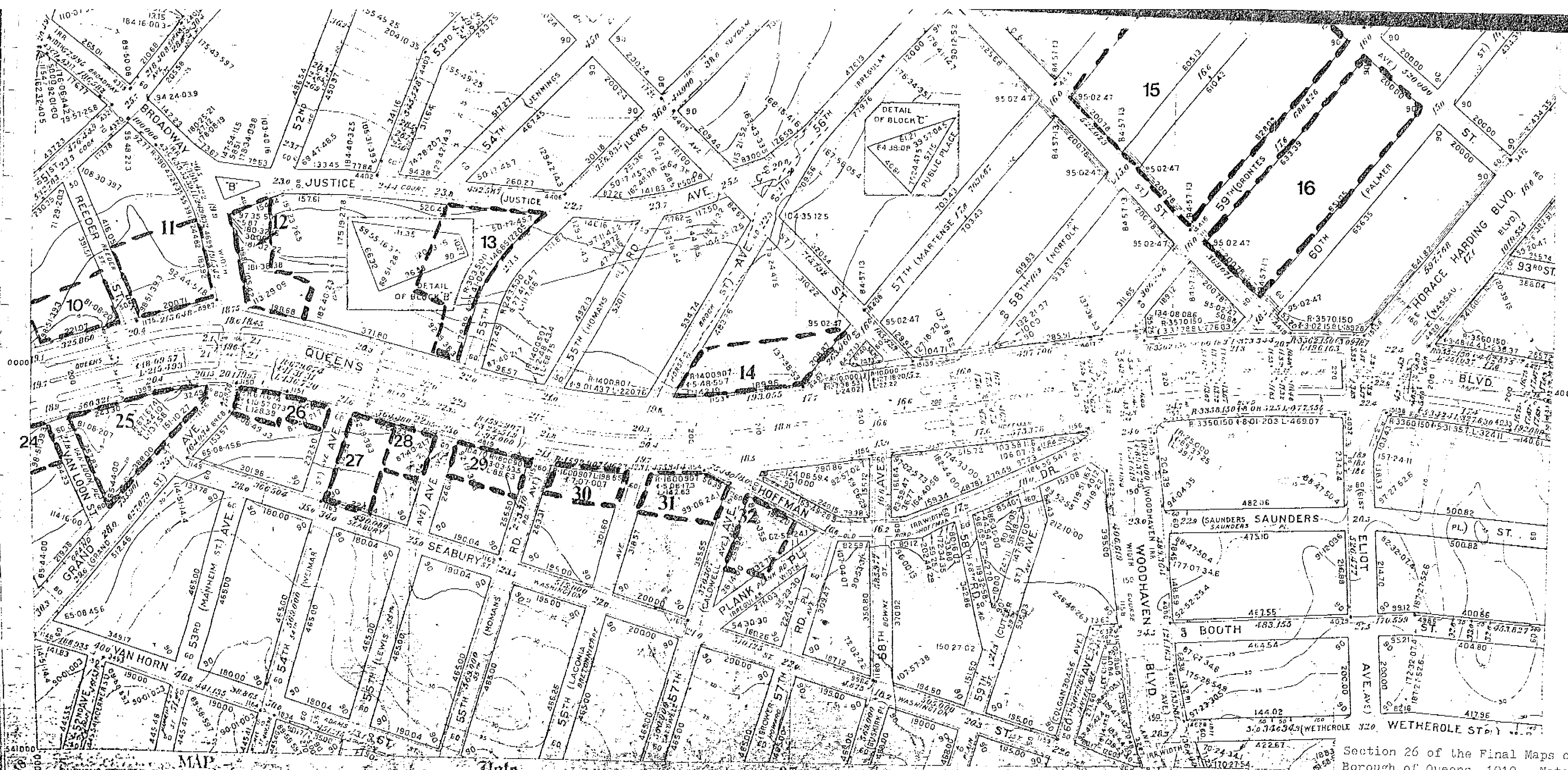
The following Figure 24 depicts those parcels, or portions of parcels, that, as a result of the Task 5 study, are considered potentially sensitive for archaeological resources. Out of the 17 parcels examined, 5 complete parcels were eliminated from further archaeological consideration and only 12 parcels are still considered potentially sensitive. Of these 12 parcels only a total of 3 parcels (4, 5, and 22) have not had their area of sensitivity reduced from the land mass identified in Task 4. On the 9 remaining parcels only specific lots within each parcel are flagged for further consideration. Both prehistoric era and historic era sensitivity was confirmed. Field investigations, a Phase 1B study, are necessary to verify the potential of these areas flagged during Task 5. It is possible that the proposed Queens Boulevard rezoning could result in negative impacts on cultural resources in these potentially sensitive areas. Before actions - such as housing construction - that are a direct result of the proposed rezoning commence, these identified areas must be further evaluated in a Phase 1B investigation. This evaluation can be planned to either precede the disturbance activities; or, it is sometimes possible that this evaluation can be planned, under the direction of the New York City Landmarks Preservation Commission, to coincide with the demolition/construction process.

QUEENS BOULEVARD REZONING PROPOSAL PROJECT

TASK 5: Archaeological Impact Report
Parcel Analysis



PROJECT STUDY AREA MAP

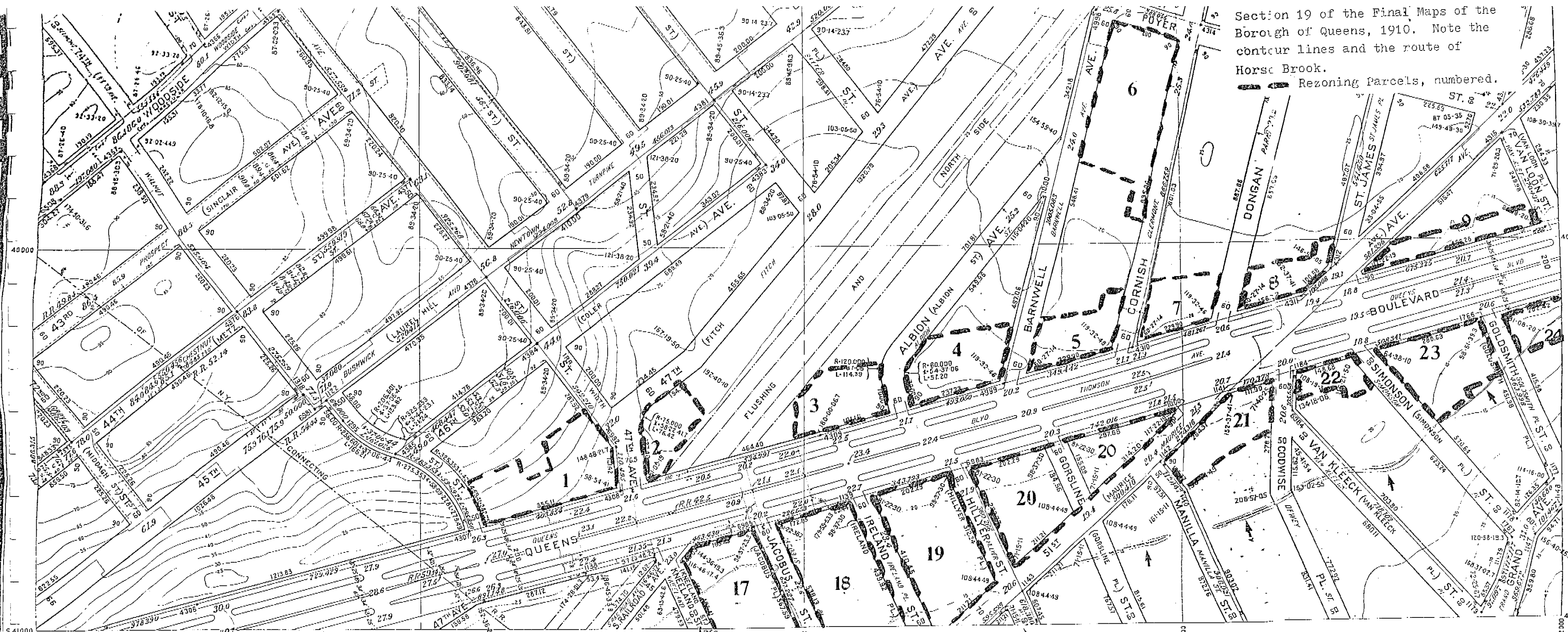


MAP
SHOWING STREET SYSTEM FOR THE TERRITORY DESIGNATED AS
SECTION 26
of the Final Maps of the Borough of Queens
1910

Note
The position of the street lines is indicated with reference to a
system of monuments taken collectively
for the purpose of showing the location of the street lines
and the route of Horse Brook.
CITY OF NEW YORK, BOROUGH OF QUEENS
OFFICE OF THE PRESIDENT

Section 26 of the Final Maps of the
Borough of Queens, 1910. Note the
contour lines and the route of
Horse Brook.

Section 19 of the Final Maps of the Borough of Queens, 1910. Note the contour lines and the route of Horse Brook.
Rezoning Parcels, numbered.



SECTION 19
of Final Maps of the Borough of Queens
Prepared under authority of Chapter 466 of the Laws of 1901.
Dated New York, February 10, 1910

Samuel Brown
President of the Borough of Queens.
Robert R. Brown
Engineer in Charge

Note
The position of the street lines is indicated with reference to a system of monuments taken collectively.
Grades refer to a datum 2.725 above U.S. Coast & Geodetic Survey datum and apply to intersections of center lines of streets unless otherwise indicated and are shown thus: 3.0
Portions of existing streets shown thus: --- included within the blocks hereby established are ultimately to be discontinued

18
CITY OF NEW YORK
Office of the President of the Borough of Queens
Topographical Bureau

Scale 1" = 100'
Note
Data for contours on this map was obtained in 1904

I, Joseph Haag, Secretary of the Board of Estimate and Apportionment of the City of New York, do hereby certify that this map is one of three similar maps made at the direction of and adopted by the said Board of Estimate and Apportionment on the 17th day of June, 1910 and approved by the Mayor on the 24th day of June, 1910 entitled Section 19 of Final Maps of the Borough of Queens superseding all maps heretofore filed affecting the area embraced by said map, in so far as it makes any changes therein.
Prepared for the Board of Estimate and Apportionment under authority of the Charter of the City of New York.

Dated New York
Secretary Board of Estimate and Apportionment
* This map includes modifications adopted by the Board of Estimate prior to April 11, 1940