PHASE IA ARCHAEOLOGICAL IMPACT REPORT

for the

ATLANTIC TERMINAL AND BROOKLYN CENTER PROJECTS

BROOKLYN, NEW YORK

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BROOKLYN, NEW YORK

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TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Prehistoric</td>
<td>3</td>
</tr>
<tr>
<td>Historical Documentation</td>
<td>10</td>
</tr>
<tr>
<td>Conclusions</td>
<td>21</td>
</tr>
<tr>
<td>Recommendations</td>
<td>26</td>
</tr>
<tr>
<td>Bibliography</td>
<td>27</td>
</tr>
<tr>
<td>Figures and Photos</td>
<td>31</td>
</tr>
</tbody>
</table>
INTRODUCTION

As part of a continuing effort to revitalize the downtown neighborhoods of Brooklyn and create low-rise housing within close proximity to mass transit, New York City's Public Development Corporation has entered into an agreement with Rose Associates to undertake an extensive mixed-use development at both the Atlantic Terminal site and the Brooklyn Center site. Preliminary plans for the twenty-four acre Atlantic terminal site include office buildings, low-rise housing, two new parks, a large supermarket, a multiplex cinema and a 1,000 car garage. The Brooklyn Center site, which is one block north of the Atlantic Terminal parcel and is bounded by Flatbush Avenue, Fulton Street, and Lafayette Street, has a potential of 500,000 to 1.2 million square feet of office space. These parcels fall within the Atlantic Terminal and Brooklyn Center Urban Renewal Areas. (fig.1)

As a function of the normative city review process for land use applications, the New York City Landmarks Preservation Commission has requested an archaeological assessment of these two subject parcels. An assessment of the project sites' potential archaeological resources will enable the Commission to determine the presence/absence and degree of impact on these resources by the proposed demolition and construction activities. Archaeological resources are finite and non-renewable and the optimum time to assess their significance and organize for recovery or preservation is in the initial stages of project planning.

The area of the sites has been a part of major transportation routes through time. Both Bolton's Indian Paths in the Great Metropolis and Indian Life of Long Ago in the City of New York, and Furman's Antiquities of Long Island refer to major Indian trails and paths traversing the subject parcels. During the earliest colonial days this portion of Brooklyn formed part of the southern boundary of the settled village; and, the main north-south link of the western end of the island formed what was to become, in later years, the Flatbush Turnpike. Atlantic Avenue became the center of Long Island's earliest railroad endeavors and has remained in the forefront of rail activity well into the twentieth century. This Atlantic and Flatbush Avenue transportation hub now hosts eight different subway lines.
Residential neighborhoods, public facilities, and commercial enterprises developed within this transportation hub and along the vital connector routes. Two historic districts and individual landmark sites within the proposed area of impact now serve as reminders of the past vitality of this area. (fig. 2 and fig. 3)

The following report documents the available evidence pertinent to the presence and significance of archaeological resources on the Atlantic Terminal and Brooklyn Center sites. An assessment of the properties during the prehistoric period is addressed initially and is followed by an in-depth historical review. The summary of extensive research of maps, histories, and archives covers all of the events, places, and people of significance mentioned in the documentary record and from/of which any material remains might be expected to substantially contribute to the archaeological record and thus to our knowledge of past lifeways. Not only have we assessed the significance of potential archaeological resources within the sites, but also the likelihood that the integrity of these significant resources has survived nineteenth and twentieth century activities.
PREHISTORIC

The present knowledge and understanding of the Native Americans of coastal New York is derived from three sources: (1) ethnographic reports; (2) Indian artifact collections; and (3) archaeological investigations. The following outline of aboriginal lifeways within the region of the Atlantic Terminal and Brooklyn Center Urban Renewal Areas will depend upon these three sources and will be discussed in respective order.

Daniel Denton's c.1660 treatise on the Indians of Long Island details the culture encountered by seventeenth century Dutch and English adventurers and settlers:

To say something of the Indians, there is now but few upon the Island, and those few no ways hurtful but rather serviceable to the English, and it is to be admired, how strangely they have decrease by the Hand of God, since the English first settling of those parts; for since my time, where there were six towns, they are reduced to two small Villages, and it hath been generally observed, that where the English come to settle, a Divine Hand makes way for them, by removing or cutting off the Indians either by Wars one with the other, or by some raging mortal Disease.

They 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: Their Recreations are chiefly Football and Cards, at which they will play away all they have, excepting a Flap to cover their nakedness; They are great lovers of strong drink, yet do not care for drinking, unless they have enough to make themselves drunk; and if there be so many in their Company, that there is not sufficient to make them all drunk, they
usually select so many out of their Company, proportionable to the quantity of drink, and the rest must be spectators.

Their money is made of a Periwinkle shell of which there is black and white, made much like unto beads, and put upon strings. (Denton, p. 45)

According to maps made prior to 1640 Indians were occupying, at the least, four long houses in the Kings County area. These houses, reportedly occupied during the colder seasons, were located on maps in the following vicinities: (1) Flatlands; (2) the present location of Borough Hall; (3) Indian Pond at Bay Parkway and King's Highway; and, (4) Fort Hamilton. (Indian Trails of Kings County, compiled by F. B. Cropsey, p. 9) One chronicler of the mid-seventeenth century, VanderDonck, reported that Indian "castles" (seemingly denotes a fortified village) were located on steep, high hills, near a stream or river. (Baugher-Perlin, 1982, p. 11) By Denton's date of recording, c. 1660, the west end of Long Island hosted four or five Dutch towns and twelve English towns in addition to villages and farm houses. (Denton, p. 40) These Dutch and English settlements were situated in part on property obtained by the West India Company (5/10/1640) from the great chief Penhawitz, the head of the Canarsee tribe. (Stiles, 1867-9, p. 29) The Canarsee Indians were a strong western Long Island tribe of the Metoac or Matowas Confederacy. (Solecki, 1982, p. 97) The principal site and headquarters of the Indian population was Canarsie, a name which still appears on the city map in Flatbush. The village and planting fields extended inland from the present Canarsie Beach Park as far as Avenue J where it centered on East 92nd Street. (Lopez and Wisniewski, 1978, p. 208) By the time of European arrival in New York harbor the native Americans of this geographic area were part of the Delaware culture and speaking a Munsee dialect of the Eastern Algonquian language.

The earliest report of Indian artifact collecting comes from Gabriel Furman's recollections in the early nineteenth century (c. 1824-38). Furman recorded (in the year 1826) finds from the highest sandy barren hill in Brooklyn (seventy feet) that included a deeply buried hemlock board and an oyster and clam shell midden. (Furman, 1874, p. 74) There are additional early references to "immense shell heaps" in Brooklyn, located
at Canarsie, Flatlands, Bergen Island, and at 37th Street near Third Ave. In 1837 a cache of stone and flint blades, enough to fill "a wagon Load" was found at the Narrows. (Lopez and Wisniewski, 1978, p. 208) Reginald Bolton, a New Yorker with keen interest in the Native American past, spent innumerable hours in the first part of this century verifying the locations of earlier reports of Indian sites. Writing in 1934, Bolton reported locating Furman's sandy hill site, which included pre-historic ceramics, projectile points, a tobacco pipe and pipe fragments, in the central part of Brooklyn, south-Southeast of the project parcels. As can be seen on Bolton's map of "Indian Sites in the Borough of Brooklyn" (fig. 4) there are no specific sites listed for the two project parcels. However, the close proximity of site numbers 67 and 117 should be noted. Bolton's accompanying notes on these two sites are as follows:

67. WERPOS At Hoyt and Baltic Streets, Brooklyn, there was once a site having the same name as the village on Manhattan Island which was abandoned by the natives upon the sale of that island, and this place may have been in part their refuge.

117. MARECHAWIK Supposed to have been an important village, in which the local sachem made his home, situated at Callatin Place and Elm Place, Brooklyn.

According to Bolton's findings and interpretations that he correlated with other "observers", at the time of European arrival the Native Americans had large tracts of upland fields in corn cultivation but their living and camping activities were concentrated along the shore and watercourses. These early twentieth century collectors were confident that probably all the "chief places of residence of the one-time owners of the "county" had been identified. Bolton stated that the "interior area was destitute of occupied stations, owing to the absence of watercourses." (Bolton, 1922, p. 130) "What is lacking, however, in regard to the native stations, is compensated by the existence of considerable definite information on the subject of native pathways. Records fortunately exist, by which the main Indian trails are identified with the King's highways and other old roadways which became the successors of native paths, so that their actual course is now traceable, and their systematic purpose becomes recognizable." (ibid., pp. 130-131) A study of
these re-discovered prehistoric pathways indicates that the main paths on Long Island connected together and led to what is now considered Brooklyn, converging at a point opposite the southern end of the island of Manhattan. (Bolton, 1934, p. 62; fig. 5) The main Indian path on Long Island commenced at the shore in the area later used for the Fulton Ferry landing and followed southward the line of the present Cadman Plaza. "The path following our present Fulton street, turned southeast at the Municipal Building, near which point the Old Red Hook lane branched off and led by a side path to the settlement at Werpos. Near the intersection of Nevins street with Fulton street the main pathway has now become Flatbush avenue, as it turned southward. On its way over the range of hills on which Prospect park is situated, the present Flatbush avenue is laid out somewhat to the west of the course of the old path. It diverged east of the avenue at Hanon place [sic.], crossing Atlantic avenue at Fort Greene place. At this point two important branches set off west and east." (Bolton, 1922, pp. 141-142; fig. 6)

It is often possible to gather information on past activities and also the locus of these activities from collectors of Indian artifacts. The whereabouts of the early Indian artifact collections mentioned above is, in most part, unknown. As lamented by Lopez and Wisniewski, "At one time there were undoubtedly numerous aboriginal sites in Kings County on the western end of Long Island in coastal New York, especially along the shoreline of the East River, the Narrows, Cowanus Bay and the bays of Gravesend, Jamaica and Sheephead. Today, however, Kings County, better known as Brooklyn, forms part of the busy skyscraper metropolis of Greater New York City. Not only are the sites gone, but remaining to us is not even a single site report, only a few place references here and there in the early literature." (Lopez and Wisniewski, 1978, p. 208) Research therefore must, in part, depend upon collections and information gathered before the urbanization of Kings County. The largest archaeological collection of Kings County material (1,241 catalogue entries) was purchased from the collector, William Wallace Tooker, of Sag Harbor, by the Department of Ethnology of the Museum of the Brooklyn Institute of Arts and Sciences in 1901. (Curlin, (the)Museums of the Brooklyn Institute of Arts and Sciences, 1905, p. 19) The Brooklyn Museum exchanged this collection with the Museum of the American Indian in April of 1960. (Ira Jacknis, Research Associate, The Brooklyn Museum, personal communication,
11/30/84) The Museum of the American Indian has not maintained the collection as one unit but the artifacts are still with the Heye Foundation. According to Robert Grunat, Research Associate with the Foundation, the Tooker Collection material represents, in the vast majority, aboriginal activity from the eastern portions of Long Island. (Personal communication, 5/22/1985) The Museum of American History does have ten drawers of Indian artifacts from Long Island but these pieces are not from the central Brooklyn area but are from the Ryders site and the Gravesend site. Ben DuBose of Brooklyn has a collection of artifacts found in this century but his artifacts are from the southern portion of Brooklyn (Canarsie). Inquiries of Dr. Fred Winters, a professor of archaeology at Brooklyn College and an archaeologist active in Brooklyn for the past ten years, revealed no further knowledge of Indian artifact collections within close proximity to the subject parcels. (Dr. Fred Winters, personal communication, 5/22/1985)

Over the past thirty years New York archaeologists have studied the collections listed above and have also excavated and interpreted newly discovered sites to arrive at a consensus of when the first people arrived in the southern New York area and how, through time, they patterned their lifeways. (e.g., Ritchie, 1973 and 1980; Saxon, 1973; C. Smith, 1950; Ceci, 1980) Even though we know that Paleo-Indians, hunters of big game, were the first inhabitants of southern New York approximately 10,000 - 12,000 years ago, evidence of these first inhabitants is often very difficult to locate archaeologically because the sea level rise since that time period has inundated the coastal sites. (Saxon, 1973, p. 202) However, it is possible to identify the probable locations of upland Paleo-Indian sites through research done by Leonard Eisenberg. He has identified three geographic locations preferred by them:

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

(2) upland bluff camps in areas where deciduous trees dominated;

(3) ridge-top camps, also where deciduous trees dominated." (as described in Rutsch, 1983, p. 33)
The Early Archaic Stage (c. 9,000 years ago) followed the Paleo-Indian Stage in the Long Island area and is represented by numerous small, nearly always multi-component sites, variously situated on tidal inlets, coves, and bays. By the late Archaic Stage (3,000 - 6,000 years ago), the exploitation of shellfish resources was in full force; the coastal shell middens still found today are a testament to this activity. Within the southern subarea of New York State, there is evidence of a transitional culture between the Archaic and Woodland Stages. Substantial sized sites of the Snook Kill Phase of this transitional stage have been located by archaeologists on high sandy river terraces. Although numerous small camps did exist during this period, relatively little use was made of inland sites.

By approximately 3,000 years ago, the Late Woodland Stage, which is noted for occupation sites on knolls or well-drained terraces in close proximity to a water resource, had begun. According to the archaeological record, Early Woodland/Middlesex Phase sites have been most often discovered during sand and gravel mining operations that were located near a lake or river (Ritchie, 1980, p. 201) and Late Woodland sites are usually found on the "second rise of ground above streams or coves" and on "well-drained sites." (ibid., pp. 264-265) The Woodland Stage is associated with the introduction of hand formed clay vessels and, by the time of European record-keeping in the New York area, maize cultivation.

There is no doubt that prehistoric peoples could have exploited the resources of what is now considered the downtown Brooklyn area. It is known that aboriginal activities were centered, to a great extent, on coastal and riverine locations. However, ethnographic reports and a few collections are from upland, interior sites not unlike the development project area. According to prior research and interpretation, the Atlantic Terminal and Brooklyn Center Urban Renewal Areas were most likely used for maize cultivation fields during the time just before and just after the arrival of Europeans. Also, according to the records, the project area was traversed by the major Indian pathways. The site topography and the distance from a natural water source indicates that there should not be a major prehistoric component within the project site. The significance of aboriginal pathways is testified to by the continued use of the pre-European routes of travel. However, even the extended use of a pathway would not
necessarily yield a concentration and/or pattern of artifacts within and along the pathway that would be detectable archaeologically and/or considered archaeologically significant. And, the history of accidental and purposeful earth moving activities within the sites and the adjoining roads and streets over the past 250 years indicates a low probability of locating a prehistoric archaeological component through field work.
HISTORICAL DOCUMENTATION

As a result of their prowess during the Age of Exploration, the Dutch acquired what is now the New York area early in the 17th century and called it New Netherlands. A 1621 grant from the States-General, the governing body of the Netherlands, gave administrative control of the territory to the Dutch West India Company. There is some difference of opinion among historians as to the first land transaction on what is now Brooklyn, in the western section of Long Island, (fig. 7) but it was probably a 1636 purchase of a huge tract from the Indians by Wouter Van Twiller, Director of the colony, and some associates. (Ment, 1979, p. 12) Another purchase in 1636 was of 930 acres by Wm. Adrianense Bennet and Jacques Bentyn from the Indians at "Gowanus." (Stiles, 1867-9, p. 23) Other transactions, either by private purchasers or under the aegis of Director Willem Kieft, followed quickly until most of the Indian lands on the west end of Long Island had been sold off from the native Americans to the Dutch by c. 1640. However, intense utilization of the land by Europeans was delayed by Indian/white agitation until after 1645.

The Dutch West India Company had the power to grant their newly acquired lands to individuals if they so chose. A small settlement developed at the site of a ferry service to New Amsterdam (Manhattan) in the middle of some of these land tracts called patents. There was a second tier of patents to the rear of the waterfront ones, and on them was established the "village" as opposed to the "ferry" section. (Stiles, 1867-9, p. 87) This village was located approximately where Borough Hall is today. The whole area was called Bruikleen or Breuckelen (which means "free loan" since the early colonists could "own" land for a quit-rent of one tenth of their produce after ten years) and was chartered in 1646.

There were five other towns which together formed King's county and which today make up the Borough of Brooklyn. (fig. 8) The term "Town" is somewhat misleading; in reality western Long Island consisted of placid farmland sparsely inhabited by a few hundred souls, principally of Dutch or English origin. It made little difference to the citizens' way of life when English rule superseded Dutch (though, of course, Breuckelen became Brookland) in 1664.
The project area lies approximately one and a half to two miles inland and in a southeasterly direction from the ferry landing (today's Fulton Ferry at the foot of the Brooklyn Bridge) about halfway between the East River shore and the settlement of Bedford near the Flatbush line. The land of the Brooklyn Center and Atlantic Avenue Terminal sites was outside the 1646 charted village, but included in the 1657 "Town" boundaries. (fig. 8) The acreage of the proposed project fans out north from an intersection where the road from the ferry split; one branch continued on to Jamaica (Queens) while the other went to Flatbush. A third road turned toward Gowanus. (fig. 9) These meandering roads, straightened, regulated, or re-routed in the second quarter of the 19th century (Dikeman,1870,p.42) generally followed routes of old Indian paths which the white settlers improved and widened. (Bolton, 1922,p. 140; fig. 5) As described in the previous section the main road from inland to the shore had originally been a principal Indian trail which was subsequently "widened into a wagon road, known as the Ferry Road." (Hazelton, 1924, p. 53) It was laid out in 1704 as a king's highway into Jamaica and Flatbush.

Except for the road network, the land now designated as the Atlantic Terminal and Brooklyn Center Urban Renewal Areas was part of a large holding among the "second tier" of patents mentioned above and granted to "Gerrit Wolphertsen (Van Couwenhoven) in 1647, fronting on the main road leading through the original settlement of Breuckelen, from Flatbush to 'The Ferry.'" (Stiles, 1867-9, p. 87) The 1874 Beers' Farm Line Map (located in the Long Island Historical Society) shows two other farm parcels, but Couwenhoven was the original owner of the entire territory. Today's street plan does not, of course, fit neatly over earlier land use patterns, but the blocks that now lie approximately north of Hanson and west of South Portland were purchased by Tredwell Jackson from Couwenhoven's heirs in 1798 and remained in the Jackson estate until the mid-nineteenth century. (fig. 6) But another tract noted on the Beers' map as "St. Felix" was not purchased by John R. St. Felix until 1833. The only part of that estate (St. Felix) in the study area is a very small triangle where Fulton intersects with Flatbush.

For over a century before the American Revolution the settlement was typical of any rural crossroads in a farming area; cultivated fields on either side of the road with a tavern and a few dwellings with their attendant outbuildings clustered near the intersection and a few others
sparsely scattered along the Brooklyn to Jamaica road (as shown on G. Hayward's Plan of the Village of Brooklyn and Part of Long Island in 1766. Negative of a print from McCloskey's Manual of 1864 in the New York Historical Society). By the end of the eighteenth century a tollgate had been placed on the road, transformed into a turnpike, to extract sums from travelers for the upkeep of the road.

The Revolution aroused little passion amongst Brooklyners in interior sections, most of whom were of Dutch descent. However, one of the most important early engagements of the war took place in Brooklyn in August of 1776 in which Washington deftly evacuated his troops to Manhattan under cover of night rather than face annihilation at the hands of General Howe and his English and Hessian troops. The Battle of Brooklyn led to seven years of British military occupation. "For the farmers of Kings County, profits from sales of produce and supplies to the occupation forces were balanced by the expense and inconvenience of compulsory billeting of troops, the loss of valuable timber cut to serve the British army's needs, and occasional theft and disorder from roving bands of privateers." (Ment, 1979, p. 24)

Whether or not there was that kind of impact on the project area during the war is unknown, but it did have some excitement during the actual Battle of Brooklyn. The inner line of shore defenses set up by the Americans ran from Wallabout Bay to Gowanus (see figs. 9, 10 and 11. Approximate location of ATURA noted by a star on each), but they were outflanked by the British army whose path is shown on the maps. A stop made by the British as they reached the Jamacia Road was at Baiker's Tavern (named on fig. 12, V in the project area. An enlargement of fig. 10.) (Hazelton, 1924, p. 53) There was no actual fighting in the vicinity, however.

The last two decades of the 18th century and the first two of the 19th saw noest but steady growth in the village surrounding the ferry, especially after the establishment of regular steam ferry service to and from Manhattan in 1814, but very little change in the predominantly agricultural character of the outlying areas. Henry Stiles, in his History of King's County, painted a verbal picture of the project area. (The sites he described are shown on fig. 13, but it must be kept in mind that these locations cannot be precisely pinpointed.) On the Jamaica turnpike was the "estate of John Jackson, [heir of Tredwell Jackson] ... His residence was located
on the north-east corner of the present Navy street [Rockwell] and Lafayette avenue, while back on the line of Raymond street [Ashland] and Lafayette avenue, were his barns, stables and gardens." (Stiles, 1867-9, p. 134) The toll gate on the turnpike "stood a little south of the present Hanson place, and about seventy-five feet west of St. Felix street. Some one hundred and fifty yards to the southward of the toll-gate stood the old John Cowenhoven house, a large heavy building of the Dutch type, with hump-backed roof, shaded by enormous willows and fronting south. Its location may be described as being on the west of Fort Greene place, about one hundred and sixty feet north of Atlantic avenue, and with its gable on the Flatbush turnpike; it was pulled down only a few years since."

"About two hundred feet south of the Cowenhoven house stood Baker's tavern, associated with the battle of Brooklyn, as being the point at which the long flanking-march of the British army finally ended on that day. A fine view of this building, more lately known as the old Bull's Head tavern, will be found in the Brooklyn Corporation Manual for 1867." (ibid., p. 135) It is possible that the view he mentions is the one shown in figure 14.

The only other structure in the vicinity was a small house "near the junction of the Flatbush and Jamaica roads, now Elliott place and Atlantic avenue." (ibid., p. 135) Somewhat later in time - 1825 - the above mentioned location, expanded to twenty-five acres, became the site of Mr. Andre Parmentier's dwelling and "extensive horticultural garden" until his death in 1830 after which his widow was obliged to dispose of the grounds which were "cut up into building-lots and streets." (ibid., p. 135)

The enormous growth of New York City in the early 19th century clearly affected all of its neighbors. As noted above, steam ferry service between Brooklyn and Manhattan was established in 1814 which really gave impetus to the growth of Brooklyn in earnest. It stimulated the exchange of goods and services on a regular and dependable basis as well as suggesting the possibility of parts of the village being developed residentially as "bedroom" communities for Manhattan businessmen. The village form of government became inadequate and in 1834 Brooklyn obtained a city charter from the state legislature. David Ment sees the period between 1834 and 1865 as "an age of transition from a small but active village to a substantial urban center." (Ment, 1979, p. 37)
Change in the project area attests to the accuracy of that statement. That change is not easy to follow with exactitude; for instance, documents and maps are often drawn up on one date but filed, thus becoming official, on another. Future projections as well as past anachronisms are recorded on maps. Complex real estate deals as well as house number, lot number, block number, street name and location changes surely seemed logical and easily accommodated at the time, but they present the researcher with a bewildering array of puzzle pieces to fit into place.

An example both of the change occurring in the project area and the puzzle-like quality some of it had is represented by the 1839 Map of the City of Brooklyn shewing all the Streets and Avenues as Permanently Fixed with the Size of the Blocks, Different Properties and Owners Names by Alexander Martin, City Surveyor (viewed at the New York Historical Society), which is popularly referred to as the 1839 Grid Plan. One important order of business for the newly formed City of Brooklyn was street improvement. An 1835 street regularization (under Chapter 132 of Laws of 1835 printed in Dikeman, 1870, p.42) was mandated which often meant re-routing of important thoroughfares - among them the Flatbush and Jamaica Turnpikes. The new placement of these important arteries was shown on the 1839 plan as well as a grid plan imposed on a large portion of the city. (The old roads in relation to the new grid plan is shown on the Farm Line Plan, fig.6.) When these changes were actually accomplished, however, is a different matter, for the ATURA was still in an inchoate stage of urbanization until as late as 1855 despite the grandiose visions of city planners.

Some examples of the time lag between conceptualization and actualization are: of the North-South streets laid out on the 1839 grid plan, all but Navy (Rockwell) and Raymond (Ashland) existed only on paper. Atlantic extended only as far as about 5th Ave. in 1835; in fact, it was not until 1845 that the Smith Estate heirs ceded the land for its expansion from Ft. Greene Place to Clermont. (Topographic Index, Brooklyn Borough Hall) A booklet entitled In the Shadow of the Myrtle Avenue EL quoted the Brooklyn Eagle newspaper as saying that even in 1841, Fulton St. was a country road beyond City Hall.

Still further confirmation of the undeveloped nature of ATURA at mid-century is found in the Brooklyn City Directories which, for the years 1840-41 listed each block and named its inhabitants. Of the North/South streets,
only Navy (Rockwell) is present. In 1840 there were two people listed on that street between Lafayette and Fulton; in 1841 there were eight homes or shops. Mr. Jackson, shown on Lafayette, is the only person before Raymond St. (Ashland) which is the last cross street. On the other streets there were only these listings: 1840 - Sylvanius Baker's Tavern at the junction of Fulton with Atlantic [sic - Fulton apparently is still located on the old route and after the intersection is called Jamaica Turnpike]. The only listings on Atlantic end before the toll gate which is the last thing on the street - which coincides with its placement on figure 13 as being between the present 4th and 5th Avenues. (Also confirmed by Atlantic's 1835 terminus at 5th Ave.). The 1841 listings probably mean the same thing as those of 1840 though they were worded differently:

Fulton - NE side between Navy and Jamaica Turnpike
J. Cowenhoven - Fulton near Toll Gate
J.I. Cowenhoven - Fulton near Toll Gate
Sylvanius Baker, tavern.

It is also interesting to note how little difference the introduction of rail service in 1836 made to the project area in its first years of operation. A charter had been granted in 1832 to the Brooklyn and Jamaica Railroad to operate a steam railroad; the link between the ferry and Jamaica was opened in April of 1836. Comments by Stiles suggest why the impact of this new method of transportation was originally so slight. (One should refer to the picture of the Bull's Head Tavern (fig. 14) and note the steam engine in the extreme left corner - and this is almost a decade after rail service began.) "But although this road was a great advance on all previous modes of locomotion, its value, as a means of local travel, was limited to the immediate vicinity of the street through which it passed, and it served even this need imperfectly. It is not to be supposed that it had attained to the efficiency of the railways of the present day. The best locomotive in this country at that time, seldom exceeded a speed of twelve miles an hour, and the Long Island Railroad, having no competition to fear, was not then, nor for many years subsequently, equipped in the best manner. More than twenty years later, in its passage through Atlantic avenue, an active boy or man found no difficulty in keeping up with its express trains for two
or three miles. As to its local support, in its route through Kings County, it was much less valuable than a horse railroad would have been." (Stiles, 1867-9, p. 420)

"There was a settlement of moderate extent, near the present junction of Flatbush and Atlantic avenues..." adds Stiles (ibid., p. 420) and moving forward in time, maps of 1850 (Dripps, fig. 15) and 1855 (Perris) show minimal change from c. 1836. However, the study area was poised on the threshold of urbanization after two centuries of bucolic solitude. The change was occasioned in part by the explosive growth of New York City which had by the early 1830s already affected other parts of Brooklyn - especially the ferry district and Williamsburg. And such was the magnitude of the economic boom with its concomitant industrialization, shipping/dock expansion, and immigration, that the push out to the more remote sections was inevitable. During this mid-century period, the astonishing growth which catapulted Brooklyn into the position of the third largest city in the United States in 1860 (Ment, 1979, p. 38) necessitated the creation of a reservoir system, underground gas facilities, the expansion of the Fire and Police Departments, and the establishment of such amenities as cemeteries, parks and cultural institutions.

Going back to the railroad, which by all rights should have been the major travel mode facilitating this expansion, this statement was made in an April, 1984 publication celebrating one hundred and fifty years of rail service by the Long Island Railroad: "In 1859, The City of Brooklyn, bowing to pressure in the form of petitions and editorials, banned the use of steam locomotives on public streets. The underlying reason for the ban is unknown, but pedestrian fatalities, and traffic congestion, noise and crime undoubtedly played a role." [Undoubtedly!] "The line to Brooklyn became a horsecar operation until the locomotive ban was lifted in 1877." (LIRR, 1984, p. 3) David Ment, writing a century later than Henry Stiles, agreed with the latter about the importance of these horse cars or horse railways which were introduced to Brooklyn in 1854 by the Brooklyn City Railroad Company. "A forty passenger coach, placed on relatively smooth, relatively frictionless railway tracks, could be pulled through the city streets by a pair of horses. Operated along a fixed route, on a published schedule, and at a uniform fare, the horsecar provided - at least in theory - a predictable means of transportation. Although not very fast, it offered an alternative
to walking especially in inclement weather, and made
possible the development of residential neighborhoods
extending two or three miles from City Hall." (Kent,
1979, p. 48)

Several years prior to the arrival of the horsecars,
the heirs to the Jackson estate apparently realized what
the future held and began "selling off part of their
'homestead' in building lots in 1849. The lots were the
25 by 100 feet then standard for new houses and fronted on
newly laid out Portland Avenue and Hampden Street (now
South Elliot Place)." (Historic Fort Greene, 1973, p. IV-3)
Descriptions of the areas contained in the Brooklyn
Academy of Music (BAM) and Fort Greene National Register
of Historic Places Inventory-Nomination Forms apply to all
of the ATURA site as it existed in the second half of the
19th century except for blocks 2001, & 2106 and the
southern portions of the blocks fronting on Atlantic
Avenue from Fort Greene Place to Carlton which will be
discussed below. (fig. 16) "The buildings...form a
homogeneous architectural ensemble reflecting...the
development of residential architecture during the
twenty-five year period c. 1855-1880. As is typical of
Brooklyn's nineteenth-century residential neighborhoods,
the houses...are primarily three-and four-story row
houses. Most are brick or brownstone-fronted resi-
dences...The majority of these houses were built on
speculation to house the burgeoning middle-class popu-
lation then moving to the city of Brooklyn from New York
City and surrounding areas." (Fort Greene Nomination
Form) fig. (13, 17, 18) graphically depict both typical
residential block layout and the change brought by
increasing urbanization/commercialization.

The project area also contains a number of 19th and
early 20th century structures built as adjuncts to the
residences. For example, there are two notable churches:
the Hanson Place M.E. Church erected in 1872 and the
Hanson Place Baptist Church which was dedicated in 1860.
The Brooklyn Academy of Music was completed in 1908, and
Brooklyn's skyscraper, the Williamsburgh Savings Bank, was
finished in 1929. (Figure 19 shows these buildings as
they now exist.) The latter two structures reflect a new
stage of development. "The real estate maps reveal a
change in the type of building going on, as they show
brownstones giving way to multi-story and more commercial
structures," such as the YMCA in 1915. "By 1929 we find
stores and apartment houses interspersed with private
homes." (Historic Fort Greene, 1973, p. III-9)
The 1930s brought more change. A creeping urban decay began to set in due to the depression plus the rise of suburbs which beckoned families from their now elderly buildings out to pleasant grassy plots with detached homes. The row houses became boarding houses or multi-unit dwellings with low rents/prices which attracted more economically disadvantaged inhabitants than the previous generations. They had little money for building upkeep and much of the study area had fallen on very hard times by the 1940s and 50s from which it is just beginning to emerge.

Blocks 2106 and 2001 and the southern portions of the blocks fronting on Atlantic Avenue from Fort Greene Place to Carlton exhibited different growth and use characteristics than the rest of the project area. This difference is undoubtedly due to their locations along important transportation routes. Block 2106, at the intersection of Fulton and Flatbush, was once part of the St. Felix and the Jackson estates and its development, beginning in the second quarter of the 19th century has always been commercial. Figure 20, which shows the intersection of Fulton and DeKalb, a block away, is representative of how the junction of Fulton and Flatbush looked at that time. According to Stiles, there was a minstrel hall on the corner of Fulton and Flatbush which "was a large frame building, and was first altered into a theatre by Welch and Hughes in 1872." But it was torn down and a fine new brick edifice erected in 1880. It was called the "Music Hall," and was "used for concerts and lectures." (Stiles, 1967-9, p. 1124) A parcel the same size as the Music Hall hosts a furniture store in 1911, and various other commercial enterprises, including a theatre, fill the block. (fig. 18) Today it is an unsightly mix of commercial, institutional and vacant lots.

Block 2001 was part of the Couwenhoven patent and was the site of the family home until mid-19th century when the regularization of Atlantic and Flatbush Avenues much as they are today was actually accomplished and division and sale of the property took place. On May 21,1873, a bill was passed to issue bonds of $150,000 for building the Thirteenth Regiment Armory, and on July 23 of that year, the cornerstone was laid at Hanson Place and Flatbush Ave. (See figs.13 & 21 for location and photo) The 1880 Bromley Atlas shows most of the rest of the block given over to the LIRR for terminal and depots. This probably
happened in the mid-70s when the railroad was allowed to operate steam engines along the Atlantic Avenue route for the first time since 1859. (fig. 22) "Planning for the elimination of street operation probably began at this time. The resulting 'Atlantic Avenue Improvement Act of 1898' created the elevated structure/underground tunnel and terminal still in use. The improvement was completed in 1905." (LIRR, Along the Track, 1984, p. 3) This was a massive undertaking involving enormous amounts of earth-moving as illustrated by two photographs of the actual construction (figs. 23 & 24) and four diagrams showing the extent of the complex (figs. 25 through 28, courtesy of the New York City Transit Authority.) The new terminal complex was impressive, indeed, as can be seen from two photographs. (figs. 29 & 30) (One taken before 1929 and the other afterwards as one can tell from the presence of the Williamsburgh Bank.)

A meat packing industry grew up around this transportation hub, both in Block 2001 and along Atlantic Avenue between Fort Greene Place and South Portland. (fig. 18) By 1974, it had become an undesirable presence. "The Fort Greene Meat Market blights and congests Fort Greene Place and South Elliot Place, but will relocate out of the Urban Renewal Area..." (NYCHDA, 1975, p. 22) And again, "the Fort Greene Meat Market will leave Atlantic Terminal when the new $24 million meat distribution center is completed in early 1975. The obsolete buildings in Atlantic Terminal will then be demolished." (ibid., p. 5)

Brooklyn Building Department Index cards show the demolition of a number of structures in the meat market area in 1978. Also demolished sometime since 1975 was the Rabinowitz Warehouse which stood behind the terminal building. The southern extremities of the blocks along Atlantic from South Portland to Clermont may have been occupied by blacks, though the evidence as to exactly when, where, and how extensive as presented in HISTORIC FORT GREENE is somewhat vague. In describing the ethnic diversity of the Ft. Greene area, the 1890 Federal Census is quoted as stating that in the blocks bounded by Lafayette and Atlantic, South Portland and Washington Streets "the buildings were principally private dwellings, with some tenements inhabited by a small colored population." (Historic Fort Greene, 1973, p. III-8) The authors of the chapter go on to say "Little is known about Fort Greene's first black population...Seth Scheiner in Negro Mecca writes that by 1860 the black population of Brooklyn was concentrated in two communities, with 53.3%
living in the Borough Hall/Fort Greene area. By 1890 according to Scheiner, the large majority of Brooklyn's black population lived south and east along Atlantic Avenue, beginning around Fort Greene." (ibid., p. III-8)

The annotation for footnote 18 cites Scheiner's book, Negro Mecca, A History of the Negro in New York City, 1865-1920, and comments that "Scheiner defines the area as 'southward and eastward from the Navy Yard to and along Atlantic Avenue to the western border of Bedford-Stuyvesant.'" (ibid., p. III-8)
CONCLUSIONS

A preliminary assessment of the data gathered on the ATURA sites suggested several research topics for investigation. First, there is the possibility of Indian remains. As discussed above, prehistoric peoples did travel along pathways that traversed the project sites. And it is probable that approximately four hundred years ago the project area hosted maize/bean/squash fields. It is even possible that a small, temporary habitation site was in the project area at an unknown pre-European time. After the arrival of the Dutch and English farmers and merchants the project area experienced a series of road gradings, the construction and demolition of homes and businesses, and the installation of a rail and subway system that undoubtedly disturbed to a great extent any prehistoric resources that may have been extant at one time. Therefore, we believe that, while the odd artifact may turn up during construction activity, the possibility of retrieving significant findings about early Native American lifeways is remote.

Another general research topic is the reflection of activity of the American Revolution. In 1978 a gold Hessian cap plate was found by Professor Ralph Solecki of Columbia University in a sewer cut on Fulton Street near the East River at 9-13 feet below street level. As Solecki pointed out, the helmet provided "one of the few pieces of tangible evidence that such forces were actually here in Brooklyn." (Demeritt & Solecki, 1980, p. 276) Figure 9 shows that the continuation of Fulton Street as it led inland and was called the Brooklyn and Jamaica Road was the route the British army took during the Battle of Brooklyn. That route led through the project area, though the exact location cannot be determined on today's map. Also, there was no encampment, no battle, no prison - nothing that would suggest a definite locus for study. Thus it might be the case that a noteworthy artifact such as the Hessian helmet might be accidentally found; however, the documentary record simply will not support the validity of recommending subsurface testing to look for artifactual materials of the Revolutionary War era on the ATURA site.
As for the period from the Colonial era through the first half of the 19th century when the area became urbanized, there are three candidates in the documentary record for archaeological resources. First—is—the—Jackson farm complex. Stiles' statement of its location concurs with that shown on a map of "The Jackson Estate" with the notation "Copied and made to conform to the uniform scale adopted by the Commissioners of Records, 1897." (fig. 31) Arrow shows approximate position of the homesite. Conveyance Records - Portfolio of Copied Maps Vol. 10, p. 11) A similar time frame applies to the Couwenhoven homestead and outbuildings located near the intersection of Fort Greene Place and Atlantic Ave. as shown by the arrow on fig. 32. (Conveyance Records - Portfolio of Copied Maps, Vol. 10, p. 7, "Couwenhoven Estate, 1844.") It is readily apparent—when one scrutinizes—land usage since c. 1850 that there is no chance that any meaningful portion of these sites could have survived the building of streets and structures, the laying of utility lines, and the excavation for the Atlantic Terminal.

All documentary references to the tavern mentioned several times previously were carefully compared in order to determine its exact location. It is shown on one map of the Battle of Brooklyn as being quite near the intersection of Flatbush Road and the Brooklyn Jamaica Rd. (fig. 12) The intersection once existed in the project area. Both Hazleton and Stiles mention its role during the battle as a stopping place for British troops and Stiles described its location in relation to the mid-19th century street plan (See page 12 of this report) which would place it on about the corner of present day Atlantic and Fort Green Place. In the 1840-41 City Directories, a tavern is operated by Sylvanius Baker (a descendant of the Revolutionary Baker?) at what seems to be the same spot (Page 13 of this report) Stiles also commented that the name of the tavern was changed to the "Bull's Head," but we cannot be sure when that happened. An 1845 "view" shows the Bull's Head at the corner of Flatbush with what may well be the Couwenhoven home close by. (fig. 14) Still another reference is made to it in a Brooklyn Eagle publication. "The Bull's Head Tavern of Flatbush, just above the Music Hall, was some distance out of town
in those days, and it was patronized mostly by farmers who came to make use of the hay scales in front. It was torn down about the middle of this century and houses erected on its site;" (Brooklyn Daily Eagle, 1983, p. 76) And finally, there is a "Map of the Couwenhoven Estate in 1844" by Silas Ludlam which accompanied the record of a land transfer of Lot 376 from the Couwenhoven estate to Sylvanus Baker on May 29, 1844. (fig. 32) Lot 376 is next to Lot 449, a five sided parcel that evidently was the site of the tavern. Obviously, the part of the property that extended into Atlantic Avenue would have been obliterated by the 1898-1905 Atlantic Terminal project which made a deep cut below Atlantic Avenue for the tunnel. As for the portion of the lot which was on block 2002, we know it was replaced by other buildings by about mid-century. (St. Louis Dressed Beef and Armour Packing Co. occupied buildings on that corner in 1911 - fig. 18) There are no structures on the site at present, all having been demolished and the area apparently leveled. (See Photos) If, between the time the tavern was torn down and the modern demolition, there was only one generation of buildings on the site and if they had shallow foundations and basements, and if their demolition had not been accompanied by excavation, it is just possible that some material remains - such as truncated wells or privies - of the tavern might survive. However, even that possibility has been destroyed by construction activity in the late seventies according to Hardy Adasko of the NYC Public Development Corporation. (Personal communication, May, 1985) - A widening of the throat of the tunnel, with the subsurface area sold to the LIRR, effectively lopped off the southwest corner of Block 2002, Fort Greene and Atlantic, where the remaining portion of the tavern would have been. (fig. 33)

The study of neighborhoods is valuable to urban archaeologists interested in research topics such as status variability, consumption patterns, ethnicity, assimilation, and the effects of industrialization and urbanization. Fortunately, the presence of two historic districts adjacent to the ATURA sites will protect archaeological resources for future investigations of late 19th and early 20th century neighborhoods.
"Roads are networks which bind people and communities together, reflecting the trade and transportation patterns of the regions they serve. They also influence the settlement patterns of people, commerce and industry. For these reasons, roads should not be treated merely as adjuncts to other human endeavors, but as distinct entities worthy of study in their own right." (Kirkorian and Zeranski, 1981, p. 1) That statement surely applies to the ATURA area situated as it is by what were major arteries since prehistoric times. However, any remnants of these original thoroughfares were long ago eradicated by the inexorable spread of urbanization.

Within the past decade there has been a great deal of interest and archaeological research on cultural groups frequently cut out of the documentary history. Archaeology offers the exciting prospect of obtaining an independent source of data on minorities separate from written records that were in the main produced by a ruling majority. (Schuyler, 1980, p. viii) Weeksville, Brooklyn's first Black community located in the neighboring Bedford-Stuyvesant section of Brooklyn, has been examined in depth by historians and archaeologists. (Salwen and Bridges, 1980, p. 38) Another mid-nineteenth century Black community, Sandy Ground, located in Staten Island, was studied by Dr. Robert Schuyler in the seventies. (Schuyler, 1980, p. 52) The Black community that existed in the project area in the mid-to-late nineteenth century was not as long lived as the two above mentioned communities. Ethnicity research in this project area does not seem to be warranted.

Industrial archaeologists are interested in every phase of railroad building, operation, and equipment. The procedures and technology used to build the Atlantic Avenue Terminal complex from 1898 to 1905 are well documented in the written record. A tunnel under Atlantic Ave.
from about Furman Street to Court or Boerum Street was built by the LIRR in 1844 and closed off in 1861. Its rediscovery in 1979 has engendered a great deal of interest, and its relationship to the ATURA project was an early concern. However, because of its distance from the site, the tunnel will not be impacted by any actions in the study area.

The meat packing industry was well entrenched in the project area for over seventy-five years. As a major distribution center for dressed meats this neighborhood was important in the economic system of the City. However, before archaeological field investigations are recommended for any site that site must be considered significant and there must be the expectation that physical remains of the past will be detectable. Unlike slaughter houses and tan yards, a meat packing and distribution establishment of the late nineteenth and twentieth century is not likely to have left behind faunal remains and industry specific machinery to the degree that would warrant field investigations. Most importantly, the meat packing industry sites must satisfy the requirements of "significance" as outlined by the National Register of Historic Places: (1) association with events that have made significant contribution to the broad patterns of our history; and/or (2) association with the lives of persons significant in our past; and/or (3) embodiment of distinctive characteristics of a type, period, or method of construction, or representation of a significant and distinguishable entity whose components may lack individual distinction; and/or (4) the potential of yielding information important in prehistory or history. In consideration of these criteria, the meat packing sites of the Atlantic Terminal Urban Renewal Area do not warrant a field investigation.
RECOMMENDATIONS

The preceding report has detailed the findings of a documentary/archival study of the Atlantic Terminal and Brooklyn Center Urban Renewal Areas in order to ascertain the possibility of there being significant archaeological resources on the site which would be impacted by the proposed construction. The results of the research show that any areas which might have contained such resources have been destroyed by construction activity. Thus the proposed ATURA project would have "no impact" on archaeological resources.
<table>
<thead>
<tr>
<th>Author/Title</th>
<th>Year</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Avenue Commission</td>
<td>1896</td>
<td>STATUS OF THE LONG ISLAND RAILROAD COMPANY ON ATLANTIC AVENUE IN THE CITY OF BROOKLYN. Compiled by Counsel for Use of the Commission.</td>
</tr>
<tr>
<td>BROOKLYN DAILY EAGLE</td>
<td>1911</td>
<td>Article with no title or author listed.</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td></td>
</tr>
<tr>
<td>Cropsey, Frances Bergen (compiler)</td>
<td>1925</td>
<td>&quot;Indian Trails of Kings County,&quot; Read at Meeting of Women of '76, D.A.R. November 1925.</td>
</tr>
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Photocopied from the
New York Times

![Map of Atlantic Terminal Redevelopment]

1. Offices
2. Supermarket, cinema complex, and garage
3. Park
4. Town houses
5. Offices (Brooklyn Center)
6. Low-rise offices and retail
7. To be determined

Fig. 1
Kings County, New York
Landmarks Preservation Commission
District Boundaries
Boundary lines extend around the edges of the properties. The numbers shown are properties within the district.

FORT GREENE HISTORIC DISTRICT
BROOKLYN
Designated September 26, 1978
(Boundaries extended in 1984 not shown)
LANDMARKS PRESERVATION COMMISSION
Photocopied from:

INDIAN SITES IN THE BOROUGH OF BROOKLYN
Photocopied from Weigold, 1974, p. 9.

Fig. 7

Detail of Map by Nicolaas Vlaomer of Amsterdam 1662 ("Journal of Long Island History," 1967)

Detail of Map of "View Nederland" by Johannis Van Keu de of Amsterdam, 1685 ("Journal of Long Island History," 1967)

(Note: Flatlands and this road have been brought into the map, though several miles from the lines of Brooklyn.)

PLANS OF THE
POSITIONS AND MOVEMENTS
OF THE
BRITISH AND AMERICAN ARMY
on the 20th & 21st of August 1776,
ON LONG ISLAND
WITH PROJECTIONS OF THE,
MODERN STREETS.
Prepared by T. C. Reed.
Brooklyn, 1800.

EAST
Photocopy from:
Reference Collection of the
Long Island Historical
Society

DAY OF
NEW YORK
PLAN OF THE
BATTLE OF LONG ISLAND
AND OF THE
BROOKLYN DEFENCES
AUGUST 27TH 1776
Compiled by
HENRY P. JOHNSTON
scale: 1" = 200'

Tracing of:
ATLAS OF THE CITY OF BROOKLYN
G. W. Bromley and E. Robinson, Co., New York
1880
(see accompanying page for explanatory notes)
Explanatory Notes for 1880 ATLAS
x ........... hydrant
+++ .......... railroad tracks
X ........... stable or shed
frame ........ frame/brick/stone refers to construction material
40 ........... old block numbers
2001 .......... new block numbers

The one block shown in full detail is representative of all the blocks (except 40/2001), even the two blocks to the east that are not shown. Apparently developed along 20' x 100' lines. Fig. 13 shows all named buildings on ATLAS.

1 Jackson Home
2 Jackson outbuilding
3 Toll Gate
4 Cowenhoven Home
5 Baker's Tavern
Fig. 14

Photocopied from:

Postcard Collection of the New York Historical Society

Brooklyn Eagle Post Card, Series 14, No. 83.

Old Bull's Head Tavern on Flatbush Avenue in 1845.
tracing of

MAP OF THE CITY OF BROOKLYN, 1850
Matthew Dripps

Fig. 15

scale:
1" = 300'
Atlantic Terminal Redevelopment

Fig. 16

Brooklyn Academy of Music
Williamsburg Savings Bank
Long Island Railroad Terminal and subway station

Points:
1. Offices
2. Supermarket, cinema complex, and garage
3. Park
4. Town houses
5. Offices (Brooklyn Center)
6. Low-rise offices and retail
7. To be determined

Brooklyn Academy of Music Historic District
Fort Greene Historic District

photocopied from The New York Times
A study was made of the E. Belcher Hyde Atlas of the Borough of Brooklyn, 1898, and a comparison was made between this map and the Hyde 1911 Atlas.

Study Notes on the 1898 Hyde Atlas:

1. Street width for St. Felix was 50' and Fulton Street was listed as 80'.

2. No subways or elevated rails shown. Brooklyn Academy was not on Atlas. No LIRR iron depot but 16 lines or spurs terminate in a depot. Cannot decipher the rail line after intersection on Atlantic Avenue and Fort Greene.

3. The location of the Terminal Building as we see it in 1985, was, in 1898, the site of a Cycle Club. (One view of the area in an old photograph listed the site as a Riding Club.)

4. Blocks 2004, 2005, and 2006 all show irregular development with a mixture of brick and frame dwellings, many detached. Hanson Baptist Church is largest building on all three blocks and only building named.

5. Block 1118, the small triangular parcel near the Terminal Building, is shown with storefront-dwellings.

6. Interior vacant spaces (backyards) in most blocks.
Notes on Hyde 1911 Atlas
(located in Avery Library, Columbia University)

1. Trolley lines on Fulton, Flatbush and Atlantic Avenue

2. Sewers vary greatly per street, with some streets being serviced by two sewer lines.
   Range in size includes: 12", 15", 18", 24", 48" to 60" along Elliot Street.
   3'6" brick line shown on Atlantic between Elliot and Portland.

3. Water lines as follows:
   6" on Portland, Lafayette, Elliott, Fort Greene, St. Felix
   12" on Atlantic, Fulton
   16" on Flatbush
   30" on Ashland

4. Street widths as follows:
   Atlantic Avenue . . . .120'
   Portland . . . .70'
   Elliott . . . .70'
   Fort Greene . . . .70'
   St. Felix . . . .?
   Ashland . . . .50'
   Rockwell . . . .50'
   Fulton . . . .?
   Lafayette . . . .80'

5. Old Gowanus Road is what is now called Fifth Avenue, which comes in at Fort Greene.

6. 13th Regimental Armory gone and in its place is a brick LIRR depot.

7. Block 2002 and block 2003 host row houses but the southern border of these two blocks, Atlantic Avenue, looks as if there has been a degree of disturbance. The three blocks north: 2114, 2113, and 2112 bounded by Hanson, Fulton/Lafayette, South Portland, South Elliott, and Fort Greene, and St. Felix, seem to be divided into approx. 20'x100' lots (200' blocks) with very regular row houses and back yards. The Brooklyn Academy and Hanson Place Church block much more irregular than these blocks. The small triangular block, 1118, also hosted brick rowhouses. Also, the triangular blocks between Fulton and Hanson (2114 and 2115) were also shown with brick rowhouses.
photocopied from:


legend to accompany fig. 19 map

31
french-speaking baptist church

32
masonic temple

33
queen of all saints church
(roman catholic)

34
former site of
the cathedral of brooklyn
current site of bishop loughlin high school

35
former residence of joseph steele

36
cadman memorial church
(congregational)

37
the former mohawk hotel

38
brown memorial church (baptist)
former washington avenue baptist church

39
former offices of
the rubel coal and ice corp.

40
cathedral college
of the immaculate conception
preparatory seminary

41
church of st. luke and st. matthew (episcopal)

42
royal castle apartments

43
the paul robeson theater

44
former residence of samuel booth
former mayor of brooklyn (1866-1867)

45
former
brooklyn eye and ear hospital

58
the majestic theater

59
pioneer warehouse

60
the granada hotel

61
the brooklyn academy of music
(bam)

62
proposed park adjoining bam

63
williamsburg savings
bank tower (also on this block.
but not visible, is the
brooklyn music school and playhouse.

64
the fowler memorial

65
hanson place
central methodist church

66
former central brooklyn headquarters
of the ymca

67
hanson place
seventh day adventist church
formerly the hanson place baptist church

68
cuyler core park

69
brooklyn
visiting nurse association

70
south oxford tennis club
Photocoped from:

Postcard Collection of the New York Historical Society
Photocopied from:

Postcard Collection of the New York Historical Society

Brooklyn Eagle Post Card, Series 5, No. 29.
Old 13th Regiment Armory, Razed to Make Way for the L. I. R. R. Station.
Atlantic Avenue, Brooklyn, was a bustling route with LIRR passenger and freight service, along with the vehicles of the day, crowding the busy thoroughfare. Forenay locomotive No. 203 moves along the middle of the avenue in 1890's. In the early 1900's, the line was elevated and/or tunneled, most of the way through Brooklyn.
Photocoped from:

Postcard Collection of the New York Historical Society
Collections of the Long Island Historical Society
Figure 25

Concourse Level: Existing

- Site Boundary

- LIRR Passenger Area

Source: SSV&K/G&P, LIRR

1978
Photocopied from:

Collections of the Long Island Historical Society
Photocopied from:

Postcard Collection of the New York Historical Society
As with Fig. 31, the notation on this map reads “Copied and made to conform to the uniform scale adopted by the Commissioners of Records, 1897.”

On Fig. 31 and Fig. 32 the photocopies have been slightly reduced from the original.
FUTURE CROSSOVER

"---- COLUMNS TO

REMOVED AS IT IS EQUIVALENT CURVE LENGTH 125 L.F.

FLATBUSH AVENUE TERMINAL

SOUTH ELLIS PL.

SOUTH PORTLAND AVE.

ATLANTIC AVE.

RECOMMENDED TRACK ALIGNMENT

Platform

Courtesy of the New York City Public Development Corporation
Brooklyn Center site block:  
view - north to south from intersection of Fulton Street/Mall and Flatbush Avenue

Brooklyn Center site block:  
view - west to east down Fulton Street from intersection of Fulton and Flatbush Avenue  
area of development on right of photo
Brooklyn Center site block:
view - north to south from
Fulton Street
between Rockwell
Place and Flatbush
Avenue

The Granada Hotel
(now known as the
Brooklyn Arms) is
not within the
proposed development.

Brooklyn Center site block:
view - northeast to southwest from Fulton Street between Rockwell
Place and Ashland, vacant buildings on right of photo
Brooklyn Center site block:
view - south to north from west side of intersection of Lafayette Street and Flatbush Ave.
vacant land between Flatbush Ave. and Rockwell and Lafayette St. on the right side and Pioneer Warehouses on left side of photo

Brooklyn Center site block:
view - southwest to northeast

Rockwell Place (once known as Navy Street) in middle of photo
Atlantic Avenue Terminal site:
view - north, northeast to south, southwest across Flatbush Avenue at intersection of Flatbush and Hanson Place. Terminal Building on extreme left, note subway entrances. Sign and facade network of "King Fried Chicken" covers an early twentieth century Atlantic Avenue subway station.

Atlantic Avenue Terminal site:
view - south to north from intersection of Atlantic and Flatbush Avenue. Terminal Building in the foreground. Williamsburg Bank in the background.
Atlantic Avenue Terminal site:
view - west to east from intersection of Atlantic and Flatbush extreme southwest corner of Terminal Building block on left and southernmost portion of development project is at far right (Underberg)
At one time, the Club Car Bar site was headquarters for a "save the railroad terminal" organization.
Atlantic Avenue Terminal site:
view - northeast to southwest from Hanson Place, just east of Ashland

Atlantic Avenue Terminal site:
view - southwest to northeast from intersection of Atlantic Avenue and Flatbush Avenue, note raised platform
Three large buildings in the rear of photo, YMCA on the left and Salvation Army on the right, are not in the development project.
Atlantic Avenue Terminal site:
view - east to west along northern border of the block that parallels Hanson Place, Terminal building on next block which is shielded in photo by weed growth, between South Elliott and Fort Greene

Atlantic Avenue Terminal site:
view - north to south from intersection of Hanson Place and Fort Greene, note Omaha Meat company building in the middle of photo - a lone remnant of the once active meat and packing market of the neighborhood
Atlantic Avenue Terminal site:
view - north, northeast to south, southwest from Hanson Place
together on the site includes S. Elliott and Fort Greene
note Omaha Meat company in the middle of photo

Atlantic Avenue Terminal site:
view - north to south down S. Portland between Hanson Place
and Atlantic Avenue (southern one-half of the block)
Atlantic Avenue Terminal site:
view - southeast to northwest from southern side of intersection between Atlantic Avenue and South Oxford
note high rise housing on left side of photo on Portland, is not within development project

Atlantic Avenue Terminal site:
view - south to north from Atlantic Avenue approximately at point where Cumberland Street would cut through the block
Atlantic Avenue Terminal site:
view - south to north of west side of Carlton Street between Atlantic Avenue and Fulton Street
note the Brooklyn Eye and Ear Hospital (former) which is north of the development project is presently undergoing renovation

Atlantic Avenue Terminal site:
view - north to south down the defunct/de-mapped Cumberland Street from Fulton Street, note the "squatter" activity
Atlantic Avenue Terminal site:
view - southeast to northwest from Atlantic Avenue, just east of intersection of Atlantic and South Oxford, Williamsburg Bank (corner of Hanson and Ashland) in center of photo
The Atlantic Terminal Urban Renewal Area
view - northwest to southeast from northwest side of intersection
of Hanson Place and South Elliott Place
Hanson Place Seventh Day Adventist Church, formerly the Hanson Place
Baptist Church, a designated landmark, not within the project site

The Atlantic Terminal Urban Renewal Area
view - southeast to northwest from intersection of
Hanson Place and South Elliott, not within the project site.
Atlantic Avenue Terminal Site
view - west to east
South Oxford Street, showing remnants of demolished homes on area tentatively proposed to be a park
Atlantic Avenue Terminal Site
view - north to south
South Oxford Street, South Oxford Tennis Club -
formerly a funeral home