HISTORICAL PERSPECTIVES INC.



Phase IA Archaeological Documentary Study

1 Maspeth Avenue, Brooklyn, New York 11211 Block 2892, Lot 1 (former Lots 2, 3, and 6)

LPC # Board of Standards and Appeals / 12BSA101K

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Prepared For:

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EXECUTIVE SUMMARY

Ocher Realty, LLC proposes to construct a mixed-use commercial and residential building on Block 2892, Lot 1, in the Williamsburg neighborhood of Brooklyn, Kings County, New York (Figures 1, 2 and 3). Block 2892 has two sub-blocks, divided by Conselyea Street, which runs east-west. The project site is located on the southern sub-block of Block 2892, which is bounded by Conselyea Street on the north, Maspeth Avenue on the south and southeast, Woodpoint Road on the east, and Humboldt Street on the west. In 2012, former Lots 1, 2, 3, and 6 were merged to form the existing Lot 1. However, for the purposes of this report, the pre-2012 lot designations will be used. The project site has an official address of 1 Maspeth Avenue, but also includes addresses of 378 and 384 Humboldt Street. The project site is an irregularly shaped lot, and abuts Lots 39 and 40, which are located to the east within the interior of the sub-block. It has frontages on Maspeth Avenue, Humboldt Street, and Conselyea Street.

Due to the need for a zoning variance, project materials were submitted to the New York City Landmarks Preservation Commission (LPC) for review in the fall of 2012. The LPC responded:

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 18th, 19th century residential and cemetery use (Bushwick Reformed Dutch Church Cemetery); and Native American occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010) (Santucci 9/28/2012).

In February 2013, results of a Phase I Environmental Site Assessment for the project site (EPDSCO 2012) were submitted to LPC (Rothkrug 2013). After review of the Phase I Environmental Site Assessment, LPC responded:

November 2012 Phase I Hazmat report has been reviewed. This report documents through maps and photographs that the project site has never been disturbed in historic times and appears to have remains of colonial cemetery and 19th c. residential development that have never been built on or destroyed. Native American potential may also be preserved on this site as well. No change to previous findings of archeological potential by LPC dated 9/28/2012...(Sutphin 3/13/2013).

The LPC review indicated that an archaeological documentary study was necessary for Block 2892, former Lots 2, 3, and 6. The former Lot 1 contains an extant three-story building with a full basement, and as such was exempted by LPC from the required archaeological documentary study. As such, although the project site includes former Lots 1, 2, 3, and 6, the Area of Potential Effect (APE) only includes former Lots 2, 3, and 6, which will be the focus of the following report.

The project site is located at the intersection of several former colonial roads that had begun as Native American trails, as shown on Figure 4. However, research has indicated that Native American settlements in the Williamsburg vicinity were located along local waterways, namely English Kills, Maspeth Creek, and Newtown Creek. The project site is located approximately 2000 feet from the former marshlands surrounding English Kills, and approximately 1200 feet from the former marshland surrounding the inland extent of Bushwick Creek. Newtown Creek is over a mile away. The closest known Native American site was probably located at a Native American place called *quandus quaricus* about five city blocks, or ca. 2000 feet east of the project site on the west bank of English Kills. Due to the inland location of the project site and APE, with its relatively long distance to potable water, HPI concludes that there is diminished precontact archaeological sensitivity.

The APE is located near the historic intersection of the 1660s Bushwick settlement known by the Dutch as *Het Dorp*. Woodpoint Road ran through the center of the settlement, and the Kiekeout Road marked the southern side. Portions of former Lots 1 and 2 fell within the roadbed of the Kiekeout Road, and the diagonal angles of these two lots retain the alignment of the old road. It is difficult to know what structures were located at *Het Dorp* during the 17th century; and more specifically on the APE. Although it is possible there were structures in the vicinity, this cannot be confirmed.

In 1711 the first Dutch Reformed Church was constructed northeast of the APE, probably north of and partially overlapping Conselyea Street. It was replaced in 1829 with the second Dutch Reformed Church, which was situated

about 75 feet northeast of the APE in the approximate same location as the first church. Both churches had their entrances facing southeast, along Woodpoint Road. The original cemetery for Bushwick was located on Woodpoint Road at the intersection of Kingsland and Withers Streets, approximately 1000 feet northeast of the project site. The second cemetery for Bushwick was established in 1814 to the north of the first Dutch Reformed Church and later the second Dutch Reformed Church. Historic accounts and maps (e.g. Ewen 1835, Figure 7; Vieth 1845; Higginson 1868+, Figure 9; Hyde 1904, Figure 14; Hyde 1916) clearly show that the cemetery was situated at the rear, or behind the churches, not in front of them or along the sides. The APE is southeast of the church locations, and would not have been either part of the church property, or in an area that would have contained burials. Historic maps show that the northern extent of the APE is located ca. 100 feet south of the former burial ground. Thus, HPI concludes that there is no sensitivity for the presence of former burials within the APE.

There is a greater likelihood that 18th and 19th century residential remains could survive within the APE. Photograph 12 shows that there were houses at the southeast corner of the project site block along the Kiekeout Road during the 18th century; much of the APE would have been located in the rear yard areas of these houses, which were located on a larger tract of land. This large holding was broken up in 1834 to form the approximately one-acre parcel shown on the 1835 map, and then in 1845 into smaller lot divisions that demarcated Lots 2, 3, and part of 6. At least by 1845, a deed indicates that former Lots 2 and 3 of the APE contained structures on them. These structures probably were the two and a half story frame houses that were depicted on all subsequent 19th - and 20th -century maps, and which were demolished in the late 1960s or early 1970s. It was not possible to identify specific residents prior to the 1870s due to a lack of addresses in city directories and census records, but residents listed along the project site streets generally held working class professions and census records show most were living in family units. The two houses on the APE likely had several households living in the buildings at any one time.

It is possible that remains from occupants who lived in buildings at the southeastern corner of the project site block during the 18th and early 19th centuries could still remain in undisturbed areas of the APE, as the APE would have constituted the rear and side yards of the ca. one-acre parcel shown on the 1835 map (Figure 7). It is more likely that remains from occupants of the post-1835 19th century buildings within the APE itself could still remain in undisturbed areas of the APE. Humboldt Street between Skillman and Maspeth Avenue was not provided with municipal sewers until 1899 (Brooklyn Daily Eagle 6/5/1899), meaning that residents would have relied on privies at least until this time, if not longer. It also is possible that wells and cisterns could be present within the APE.

The area of the APE with the greatest sensitivity for historic period archaeological resources is the northern end of former Lot 3 and all of Lot 6. These areas have never been developed with structures, and so should have the least amount of disturbance beneath the asphalt paving. The southern portion of former Lot 3 that once contained the two and a half story buildings likely is more disturbed. Although it is unclear from maps whether there was a basement under these buildings, the single soil boring completed as part of this project indicated ca. 5 feet of fill at the southern end of Lot 3, including what may be demolition debris. Also, because of the unusual configuration of the post-1845 lots, residents along Humboldt Street within the APE would not have had extensive rear lots, but rather would have used the sides of the lots for purposes normally reserved for rear yards. Former Lot 2, which currently contains a one-story garage and before that contained a shop, may be somewhat disturbed as well. Thus, HPI concludes that the northern extent of former Lot 3 and all of former Lot 6 have a high historic period archaeological sensitivity, while former Lot 2 and the southern portion of former Lot 3 have a moderate to low historic period archaeological sensitivity.

The locations on the consolidated modern Lot 1 where historic period archaeological sensitivity (both low to moderate and high) has been identified are shown on Figure 16. HPI did not identify any archaeological sensitivity for human remains associated with the Bushwick Reformed Dutch Church cemetery, formerly located approximately 100 feet north of the APE. If project plans include subsurface impacts to areas identified as sensitive for archaeological resources, HPI recommends that Phase IB archaeological field testing be undertaken within the area of high archaeological sensitivity. The archaeological field testing would involve using a backhoe to remove the existing pavement and any underlying modern fill or debris in order to expose potential archaeological resources. All Phase IB archaeological testing should be conducted according to OSHA regulations and applicable archaeological standards (LPC 2002, CEQR 2012). Professional archaeologists, with an understanding of and experience in urban archaeological excavation techniques, would be required to be part of the archaeological team.

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17.	Rear of second Bushwick Reformed Dutch Church as seen in 1907. Former cemetery located in area with ground disturbance shown, to rear of church, more than 100 feet north of the APE View looking southwest from intersection of Woodpoint Road and Skillman Avenue. Courtesy New York Public Library.

I. INTRODUCTION

Ocher Realty, LLC proposes to construct a mixed-use commercial and residential building on Block 2892, Lot 1, in the Williamsburg neighborhood of Brooklyn, Kings County, New York (Figures 1, 2 and 3). Block 2892 has two sub-blocks, divided by Conselyea Street, which runs east-west. The project site is located on the southern sub-block of Block 2892, which is bounded by Conselyea Street on the north, Maspeth Avenue on the south and southeast, Woodpoint Road on the east, and Humboldt Street on the west. In 2012, former Lots 1, 2, 3, and 6 were merged to form the existing Lot 1. However, for the purposes of this report, the pre-2012 lot designations will be used. The project site has an official address of 1 Maspeth Avenue, but also includes addresses of 378 and 384 Humboldt Street. The project site is an irregularly shaped lot, and abuts Lots 39 and 40, which are located to the east within the interior of the sub-block. It has frontages on Maspeth Avenue, Humboldt Street, and Conselyea Street.

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Ocher Realty has retained Historical Perspectives, Inc. (HPI) to complete the required Phase IA Archaeological Documentary Study, which has been prepared to satisfy the requirements of the City Environmental Quality Review (CEQR), and to comply with the standards of the LPC (LPC 2002; CEQR 2012). The HPI project team consisted of Julie Abell Horn, M.A., R.P.A., who conducted research, the site visit, and the report; and Cece Saunders, M.A., R.P.A. who assisted with the research, managed the project and provided editorial and interpretive assistance.

II. METHODOLOGY

The present study entailed review of various resources.

- Primary and secondary sources concerning the general precontact period and history of Bushwick and Williamsburg (historically spelled Williamsburgh) and specific events associated with the project site and vicinity were reviewed at the Brooklyn Historical Society, the library of HPI, and using online resources.
- Historic maps and photographs were reviewed at the New York Public Library, the Brooklyn Historical Society, the Brooklyn City Clerk's Office, the New York City Municipal Archives, the library of HPI, and using various online websites. These maps and photographs provided an overview of the topography and a chronology of land usage for the project site. A selection of these maps has been reproduced for this report.
- Land records for Block 2892 were reviewed at the Brooklyn Historical Society and selected deeds were reviewed at the Brooklyn City Register's Office, focusing on the 18th and 19th centuries.

- Tax assessment records were reviewed at the New York City Municipal Archives. These records include data from the late 1840s and early 1850s for Williamsburgh and data from 1867 through the end of the 19th century for Brooklyn. No tax records are available for the original Town of Bushwick.
- Selected city directories and federal census records were reviewed. City directories did not indicate specific addresses prior to the 1870s, which made identification of occupants on the site problematic. Likewise, federal census records only began recording addresses in 1880.
- Department of Building records were reviewed using online resources.
- Information about previously recorded archaeological sites and surveys in the area was compiled from data available at the New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP), the LPC, and the library of HPI.
- A Phase I Environmental Assessment (EPDSCO 2012), a Subsurface Investigation Report (Tri-State Drilling Technologies, Inc. 2013) and an architectural appraisal package (Scott H. Gallant & Associates, Inc. 2011) were provided by the project sponsors.
- Last, a site visit was conducted by Julie Abell Horn of HPI on March 15, 2013 to assess any obvious or unrecorded subsurface disturbance (Photographs 1-11; Figure 2).

III. CURRENT CONDITIONS AND ENVIRONMENTAL SETTING

A. Current Conditions

The APE includes three former lots, each described below.

Former Lot 2 (Photographs 1-2)

Former Lot 2 contains a one-story garage, which abuts and is connected to the building on former Lot 1. It covers the entire footprint of the lot. In 2002, the garage was upgraded to replace the front wall with brick masonry, close a rear door opening, and install a side door (DOB records). The large garage door facing Humboldt Street has been sealed shut on the inside. The garage is used as part of the commercial space on the ground floor of the building on former Lot 1. There are two wall air conditioners installed in the north facing wall of the building.

Former Lot 3 (Photographs 2-4)

Former Lot 3 is an asphalt-paved parking area, enclosed by a chain link fence along the Humboldt and Conselyea Street sides. There is a gate in the fence on the Humboldt Street side. Lots 39 and 40 border the lot on the east and south. There is a high chain link fence marking the boundary between the northern end of former Lots 3 and 39, but no clear boundary between Lot 40. The lot is used for parking and storage. The condition of the asphalt paving varies across the lot, but appears distressed in many places. An area of obvious disturbance is visible at the junction of this lot and Lot 40, where the ground is mounded and the asphalt paving is breached. The disturbed area appears to be mostly within Lot 40, however. A monitoring well cap is visible at the southern end of former Lot 3 near its boundary with the garage on former Lot 2. The monitoring well was installed as part of the soil test boring program completed in 2013

Former Lot 6 (Photograph 5)

Former Lot 6 is a narrow, triangular parcel that was created when Conselyea Street was extended from Humboldt Street to Woodpoint Road. It is covered with asphalt paving, but is not fenced or used for any specific purpose.

APE vicinity (Photographs 6-11)

The project site also includes former Lot 1, which is not part of the APE. It is a triangular-shaped parcel with frontages on both Maspeth Avenue and Humboldt Street. It contains a three-story frame building that covers the entire footprint of the lot. It has a full basement that also covers the entire lot footprint, as well as two sidewalk vaults that extend beyond the lot footprint, under both the Maspeth and Humboldt Street sidewalks. The building has a commercial business on the ground and basement floors (Lucy's Lucky Dog Pet Grooming Salon) and apartments on the upper floors.

The northern sub-block of Block 2892, on the north side of Conselyea Street, contains the St. Francis of Paola Church complex, which is located on the approximate former site of the Bushwick Reformed Church property. The church also owns the triangular-shaped Lot 37 at the southwest corner of Conselyea Street and Woodpoint Road on the project site sub-block, where a grotto/shrine is located. A New York City "pocket park," named the "Memorial Gore" is located south of the project site in the triangular parcel of land bounded by Maspeth Avenue, Metropolitan Avenue, and Bushwick Avenue. It is a memorial to neighborhood soldiers who died in World War I. The remainder of the project site block contains residences, apartment buildings, and garages fronting Maspeth Avenue.

B. Topography and Hydrology

The project site and vicinity are within a relatively level portion of Brooklyn with minimal change in elevation. By the time the first topographical maps were made during the 19th century, the project site vicinity had already been occupied by Native Americans for thousands of years and colonial and American residents for over 200 years, all of whom may have contributed to changes in the natural topography. Thus, it is difficult to determine the degree to which the natural landform has been altered. One of the earliest topographical maps that indicated elevations (U.S.G.S. 1891) showed the entire site vicinity to be between 20-40 feet above sea level. The earliest available Sanborn map, from 1888 (see Figure 12) indicates the project site was between 36-39 feet above sea level. Elevations have not changed more than a few inches since that time.

The project site is located approximately 2000 feet west of the edge of the former marshland surrounding a perennial waterway known as the west branch of Maspeth Creek, or English Kills, which flows north to empty into Newtown Creek, which in turn flows west to empty into the East River. The project site is also approximately 1200 feet southeast from the former marshland surrounding the inland extent of Bushwick Creek, which ran northwest and emptied into the East River.

C. Geology

Long Island is the top of a Coastal Plain ridge formation that is covered with glacial drift, in reality an elevated sea bottom demonstrating low topographic relief and extensive marshy tracts. In the last million years, as glaciers advanced and receded three times, the surficial geology of the island, including the project site, was profoundly altered. "The glacier was an effective agent of erosion, altering the landscape wherever it passed. Tons of soil and stone were carried forward, carving and planing the land surface. At the margins of the ice sheet massive accumulations of glacial debris were deposited, forming a series of low hills or terminal moraines" (Eisenberg 1978:19). Circa 18,000 years ago, the last ice sheet reached its southern limit, creating the Harbor Hill moraine that traverses the length of Long Island. The moraine lies several miles south of the project site. North of the moraine, the complex rising and subsidence of the coastal plain, relieved of its glacial burden, and the rising sea level, caused by the volume of melting ice, created the coastline of embayed rivers and estuaries, with extensive marsh tracts, which stabilized approximately 3,000 years ago (Schuberth 1968:195,199).

D. Soils

According to the soil survey for New York City, the project site falls within soil mapping unit 2, known as "Pavement & buildings, till substratum, 0 to 5 percent slopes" and described as:

Nearly level to gently sloping, highly urbanized areas with more than 80 percent of the surface covered by impervious pavement and buildings, over glacial till; generally located in urban centers (USDA 2005:11).

The subsurface investigation for the project site (Tri-State Drilling Technologies, Inc. 2013) was implemented based on results of the Phase I Environmental Assessment (EPDSCO 2012), which concluded that an abandoned underground storage tank for fuel likely was located beneath the basement floor of the building on the former Lot 1, which is outside the APE. Six soil borings were completed for this study. Borings 1, 2, and 4 were located within the basement of the building on former Lot 1, Borings 5 and 6 were located within the sidewalks of Humboldt Street and Maspeth Avenue, respectively, and Boring 3 was located within former Lot 3.

Boring 3 is the only one of the borings within the APE. The boring log indicated that the first five feet of the soil column contained fill, described as "Brn/Tan/ Black LOOSE F-M SAND, Silt stone, gravel, brick debris." The second five feet contained natural soils described as "Brn/Tand/Rd Dense F-M SAND & SILT little gravel Moist /wet layers" and the final five feet was described as glacial till. Groundwater was not encountered in the 15-foot deep boring. While the soil boring logs for this study clearly were not intended to describe every nuance of the soil column, as soil descriptions were only given in five-foot increments, the results nonetheless provide some evidence of both disturbance to the lot, in the form of demolition debris in the upper fill layer, and the presence of natural soils beneath the fill.

IV. BACKGROUND RESEARCH/HISTORICAL OVERVIEW

A. Precontact Summary

The precontact era in the coastal New York region can be divided into three time periods, based on human precontact adaptation to changing environmental conditions. These are generally known as the Paleo-Indian (c.12,000 to 10,000 years ago), the Archaic (c.10,000 to 2,700 years ago) and the Woodland (c.2,700 to 300 years ago). In order to be able to assess the project site's potential for precontact exploitation, it is first necessary to review these time periods and their associated settlement patterns.

Paleo-Indian Period (c.12,000 y.a. - 10,000 y.a.)

Toward the end of the Wisconsin Glaciation, during the Late Pleistocene Epoch, humans wandered across the exposed land bridge which connected Siberia and Alaska. These small groups of hunters were probably following the roaming herds of megafauna which were their chief prey. The distinctive weapon in their chipped stone tool kit was the fluted point, which has been found in association with mammoth, mastodon, bison and horse remains at various sites in the southwestern United States. Although none of these "kill sites" is located east of the Mississippi, the discovery of campsites such as that at Port Mobil, Staten Island, suggest a scattered, highly mobile population in bands of approximately 20 individuals, who ranged across a vast area necessary to support lifeways organized around the hunting of migratory game (Ritchie 1980:1-3, 13).

The fluted, lanceolate points, two to five inches in length with concave bases and channelled or fluted faces, presumably to facilitate hafting, exhibit a considerable range in shape and size. They were usually made from a high-grade silicious stone, often exotic to the region in which they are recovered, a function of their makers' seasonal migrations. Other artifacts in the Paleo-Indian tool kit include scrapers, knives, borers and gravers, tools which indicate extensive handiwork in wood, bone and leather (Ritchie 1980:3.6).

From the locations of recorded sites in the Northeast, Paleo-Indians exhibited a marked preference for well-elevated situations. However, 30% of sites were found on or near the margins of swampy ground. Environmental characteristics which appear to have been attractive to Paleo-Indians include the proximity of major waterways, large fertile valleys and the coastal plain, where the densest population of desired food animals was supported (Ritchie 1980:7). However since 10,000 years ago, the rise in sea level estimated to be from 75 to 80 feet, has submerged large numbers of these sites.

The retreat of ice from the project area vicinity approximately 18,000 years ago and a global warming trend circa 14,000 years before present, encouraged Paleo-Indian settlement in the Northeast. The post-glacial environment of spruce and pine underwent a gradual modification in favor of deciduous hardwoods such as oak and hickory, which have greater importance in terms of nutritional value to both animals and humans than do conifers. By 8,000 B.C., these deciduous species dominated forests along the eastern seaboard. In addition, the megafauna on which Paleo-Indian diet was based "were rapidly becoming extinct, and were being replaced by the temperate-climate fauna that are indigenous today" (Gwynne 1982:190-191).

Archaic Period (c.10,000 y.a. - 2,700 y.a.)

The warming trend at the end of the last glaciation completely transformed the Northeastern coastal environment from tundra and conifer-dominated forests, to the present deciduous woodlands with generally modern distributions of fauna. Due to the dwindling contribution of meltwater from disappearing glaciers, the reduced flow of streams

and rivers promoted the formation of swamps and mudflats. These wetlands created a congenial environment for migratory waterfowl, and a host of edible plant species and shellfish. The new mixed hardwood forests of oak, hickory, chestnut, beech and elm attracted such mast-eating fauna as white-tailed deer, wild turkey, moose and beaver.

Although the Archaic diet was still based on hunting and gathering, due to the greater variety of plants available and exploited, excavated Archaic sites yield a wide array of plant processing tools, including grinding stones, mortars and pestles. The diagnostic tool was the grooved axe. In the coastal areas of New York, have been found 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" (Ritchie 1980:143). By the Late Archaic, these areas provided shellfish, small game, fish, salt hay and tuberous grasses, making larger more permanent settlements possible. Semi-nomadic life is still indicated, but wandering occurred within well-defined territorial limits, with seasonal movements between camps near exploitable resources. A dietary shift to shellfish in coastal New York near the end of the Archaic suggests a scarcity of large game, and a change from the early Archaic inland adaptation of forest hunting. Coastal sites show a principal reliance upon shellfish, especially oysters, hard and soft shell clams and bay scallops, which were readily available in the waters of the East River and Long Island Sound. Characteristic of the Late Archaic were "fish-tailed" projectile points and soapstone bowls (Ritchie 1980:142,166, 167, 171). In contrast to conditions during the Paleo-Indian, Early and Middle Archaic, "by Late Archaic times sea level was so close to present levels that its subsequent small rise has failed to obliterate much of what remains on Long Island from that period" (Gwynne 1982:192). Hence the Late Archaic Wading River complex, four sites on the north shore of Suffolk County, was found at the edge of a salt marsh, on dry ground ranging only two to seven feet above mean high water (Wyatt 1982:71).

Woodland and Contact Periods (c.2,700 y.a. - 300 y.a.)

From approximately 3,000 years ago until the arrival of the first Europeans, Native Americans of southern New York shared common attributes of the Woodland Stage: the advent of horticulture, extensive trade networks, large permanent or semi-permanent villages, pipe smoking, the bow and arrow and the production of clay vessels. The habitation sites of the Woodland Indians increased in size and permanence as they became ever more efficient in extracting food from their environment. The archaeological evidence from Woodland Period sites indicates a strong preference for large-scale habitation sites to be in close proximity to a major fresh water source, e.g., a river, a lake or an extensive wetland; and smaller scale sites for extractive operations, e.g., butchering stations, shell gathering loci and quarrying sites, to be situated at other resource locales. Late Woodland Stage sites of the East River Tradition in southern New York have been noted on the "second rise of ground above high water level on tidal inlets," and situated on "tidal streams or coves" and "well-drained sites" (Ritchie 1980:16). Carlyle S. Smith, who studied and analyzed the distribution of precontact ceramics in coastal New York, stated that "village sites" are found on the margins of bays and tidal streams" (Smith 1950:130).

Woodland Period tool kits show some minor variations as well as some major additions from previous Archaic tool kits. Plant processing tools became increasingly common and their presence seems to indicate an intensive harvesting of wild plant foods that may have approached the efficiency of horticulture, which itself appeared during the second half of the Woodland Period. The advent of horticulture is tied in with the introduction of ceramic containers which allowed for more efficient cooking of certain types of food and may also have functioned as storage for surplus food resources. Despite the advent of agriculture, shellfish and small game remained an important component of the Woodland diet. Shellfish refuse heaps, termed "middens," reached immense proportions, covering from one to over three acres. Deer, turkey, raccoon, muskrat, ducks and other game were stalked with bow and arrows, replacing the spear and javelin, while dug-out boats, bone hooks, harpoons and nets with pebble sinkers were employed in fishing (Ritchie 1980:179-180,267).

Historical narratives written by European travelers and settlers provide us with our only first-hand descriptions of Native American daily life and customs during 17th century. Johannes de Laet, in his *New World, or Description of West India*, published in Holland in 1625, wrote that the Native Americans:

are divided into many nations and languages, but differ little in manners. They dress in the skins of animals. Their food is maize, crushed fine and baked in cakes, with fish, birds and wild game. Their weapons are bows and arrows, their boats are made from the trunks of trees hollowed out by fire.

Some lead a wandering life, others live in bark houses, their furniture mainly mats and wooden dishes, stone hatchets, and stone pipes for smoking tobacco (Bolton 1972:16).

By the 17th century western Long Island was inhabited by Native Americans of the Delaware group, speaking a Munsee dialect, when the first Europeans arrived. The impact of the European colonization of Long Island drastically altered the lifestyles of Native Americans.

B. Previously Recorded Archaeological Sites and Surveys

The archaeological site file inventories from the New York State Museum (NYSM) and the NYSOPRHP indicate that one archaeological site has been recorded within a one-mile radius of the project site. This is the Vander Ende-Onderdonk House Site, located approximately one mile to the southeast just over the Queens County border on Flushing Avenue at Onderdonk Street. The site is also listed on the State and National Registers of Historic Places.

Beyond a one-mile radius, files indicate that two NYSM sites have been recorded along Newtown Creek. NYSM 3613, noted as "traces of occupation," is mapped along the Newtown Creek shore near the East River. A precontact period camp site, known as NYSM 4536, has been recorded at the head of Newtown Creek near the confluence of Maspeth Creek, in Queens County.

Additionally, although not formally recorded as an archaeological site, historic accounts note a Native American place name called *quandus quaricus* located along the west branch of Maspeth Creek, also known as the English Kills, in the northeastern section of Williamsburg (Grumet 1981:42). This site would have been located along the western banks of the creek and its surrounding marshlands, approximately 2000 feet east of the project site. Last, the colonial roads that formerly surrounded the project site, including Woodpoint Road, the Kiekeout Road, and the road to Newtown, now roughly the location of Metropolitan Avenue, were believed to be Native American trails that were appropriated for use by the colonists. Figure 4 shows the locations of former Native American paths and place names in relation to these roads, as well as the approximate location of *quandus quaricus* here labeled *Quandqequarecus*.

There have only been a few archaeological studies completed within a one-mile radius of the project site, and none have documented any new archaeological sites (e.g. Historical Perspectives 1992; City/Scape 1997; Bergoffen 2005).

C. Historic Period Summary

The project site falls within the colonial boundaries of the Town of Bushwick, and the 19th -century Village and City of Williamsburgh. The first purchase of land that would become Bushwick was in 1638 by the West India Company; the first European settlers came to the area in the 1640s, a scattered group of Swedes, Norwegians, and Dutch. In 1661, the village center of what would become known as Bushwick was laid out with 22 house lots, north of the intersection of what is now Bushwick and Metropolitan Avenues. The Dutch called the settlement *Het Dorp*, or village center. Several colonial roads, as noted above probably once Native American trails, demarcated the hamlet. The southern border was the road to Newtown, near the approximate location of Metropolitan Avenue. The Woodpoint Road, a portion of which still survives bordering Block 2892 on the east, ran northeast through the center of the settlement to Maspeth and Newtown creeks. The Kiekeout Road, so called because it ran west to the *Kieke*, or lookout, that had been built at the foot of South Fourth Street for colonial fortification, was a continuation of the road to Newtown and marked the remaining boundary (Stiles 1884; Armbruster 1912; Bushwick Savings Bank 1923). The Kiekeout Road passed through the project site, within the northern portion of Lot 1 and the southern portion of Lot 2; the former alignment of this road accounts for the diagonal angles of these two lot boundaries.

The Bushwick village center contained a number of structures. The anchor of the settlement was the Reformed Dutch Church, which was constructed about 1711 and endured until about 1829, before being replaced with a second church in the same location. The initial church was an octagonal structure, in the shape of a beehive or haystack. It had a communal space in which members brought their own seats. The entrance to the church faced southeast, toward the Woodpoint Road. At the intersection of the Woodpoint Road, the road to Newtown, and the

Kiekeout Road were several other buildings. On the northeast corner of Woodpoint Road and the road to Newtown was a "Town House", said to be the first municipal building on Long Island. A hotel was situated at the southwestern corner of this same intersection, and several houses were located at the entrance to the Kiekeout Road. Stiles describes these small residences as "one-story Dutch cottages, with their long curved sloping roofs" (Stiles 1884:15). An image of this intersection, drawn from memory by local resident Cornelia Meeker and published in 1864 (Photograph 12), shows the road intersections, the church, the hotel, and the residences, albeit depicted with peaked rather than sloped roofs. These residences were located at what is now the southeastern corner of Block 2892, and overlapping the modern Maspeth Avenue streetbed. A map by Stiles (1884; Figure 5) shows the locations of some of the principal buildings within *Het Dorp*, including the church, a school house, the Town House, and the original Bushwick village burial ground, located on Woodpoint Road at the intersection of Kingsland and Withers Streets, approximately 1000 feet northeast of the project site. A survey of Bushwick Township from 1797 (Figure 6) illustrates the location of the church amid the various local roads.

The project site was located at the edge of the *Het Dorp* settlement, with the southern extent (former Lot 1 and part of former Lot 2) extending into and southwest of the Kiekeout Road. It is unclear whether there were any structures on the project site itself during the colonial period, or whether it was part of the larger property containing the residences fronting the Woodpoint Road. The project site probably was part of a large tract owned prior to the Revolutionary War by Daniel Bordet, whose holdings extended as far east as Bushwick Avenue. As Stiles recounts, this large tract, which constituted nearly a third of the City of Williamsburgh, was noted on late 19th century maps "as lands of John Devoe, William P. Powers, Abraham Meserole, James Scholes, Abraham Remsen, Andrew Conselyea, McKibbin and Nichols, and others" (Stiles 1884:6).

Tracing the ownership of the APE parcels during the 17th and 18th centuries is difficult, due to the large size of the property tracts during this period and the inability to match many old property boundaries to the landmarks on the modern city grid. There are also a number of gaps and omissions in the title records. However, it does appear that the APE was not owned by the town or the church, but rather was privately held. It is likely that the APE, along with adjacent lands, was owned by the Gilbert family during the 1790s through the mid-1830s (Liber 7:138; Liber 45:526). In 1834 the estate executors for Margaret Gilbert (widow of original landowner Ebenezer Gilbert) sold an approximately one-acre parcel including former Lots 2, 3, and 6 to Noah Waterbury, a well-known Williamsburgh resident. This was only one year before the Williamsburgh city grid was extended east to Bushwick Avenue. A filed map from 1835 (Figure 7) illustrates the Waterbury property in relation to the newly surveyed city streets, as well as to the church property to the east. The southern end of the project site, containing former Lot 1 and part of former Lot 2, was within the streetbed of the Kiekeout Road, and the remainder of the project site was within vacant land that would have constituted the rear and side yards of the structures fronting Woodpoint Road.

The 1835 survey map also clearly shows the location of the Bushwick Reformed Dutch Church and its associated cemetery. In about 1829, after over a hundred years of use, the original octagonal church was razed and a new rectangular shaped church was erected in its place, with the same orientation and entrance on the southeast facing Woodpoint Road. The new church is the one shown on the 1835 map. The cemetery to the north of the church was established in 1814, when the first interments occurred. Historic accounts and maps clearly indicate that the cemetery was located behind the church, or to the north, and did not extend to the front, or south side, of the church; the APE is located ca. 100 feet south of the former burial ground (Vieth 1845; Higginson 1868+, Figure 9; Hyde 1904, Figure 14; Hyde 1916). In 1879 the original Bushwick burying ground on the Woodpoint Road at the intersection of Kingsland and Withers Street was closed and the bodies reinterred under the second Bushwick Church (Stiles 1884; Armbruster 1912). The cemetery north of the Bushwick Reformed Dutch Church remained in use through the 19th century, but by the 1890s, plans were underway to remove the burials, which occurred during the first decades of the 20th century (Land Records). The Bushwick Church itself was razed in the 1910s in order to extend Conselvea Street from Humboldt Street through to Woodpoint Road (Bushwick Savings Bank 1923). Historic Photographs 13-14 depict the second Bushwick Reformed Dutch Church at about the turn of the 20th century, and prior to its demolition. Historic Photograph 15 shows the church in relation to the APE, and historic Photographs 16-17 depict the disturbed ground surface to the north of the church, presumably showing the removal of the cemetery in ca. 1907.

Former Lots 2, 3, and 6 of the APE were sold by Noah Waterbury after only two years, to Ezekiel Clevenger in 1836 (Liber 61:382). In 1845, Ezekiel Clevenger sold former Lots 2 and 3 to Oliver Gates; the deed indicated the property already had buildings on it (Liber 129:411). However, the Clevenger family continued to own former Lot

6 until 1887, when the children of Ezekiel Clevenger sold that property (which includes what is now the footprint of Conselyea Street) to the Reformed Dutch Church of Bushwick (Liber 1745:291). Lot 6 passed from the Dutch Reformed Church to the Roman Catholic Church when the property changed hands in the 20th century; the Roman Catholic Church retained the lot until selling to the project sponsors in 2011 (City Register Record 2011000043749).

Tax assessment records for Williamsburgh in the late 1840s and early 1850s indicate that both Ezekiel Clevenger and Oliver Gates, the owners of the APE lots, were non-residents of the town, or absentee landlords. Each man was assessed for a structure on their respective lots; Clevenger's was noted simply as a building and Gates' as a house. Historic maps (Dripps 1850, Figure 8; Higginson 1868+, Figure 9; Dripps 1869, Figure 10) indicate that Clevenger's structure was located north of the APE, probably at least partially within the footprint of what is now Conselyea Street. Gates' house was within the APE, along the Humboldt Street frontage at the southern end of former Lot 3. The Higginson map (dated 1868 but almost certainly an update from a later year, as it illustrates the route of Maspeth Avenue, which was not extended south of Block 2892 until after 1869) shows that former Lot 3 had two frame buildings, each 2.5 stories high.

City directories that included Williamsburgh indicate that the project site and vicinity were home to a variety of working class residents by at least the 1850s, although it is difficult to determine specific residents of the APE because city directories from this period through the early 1870s did not use addresses, only street names. By the mid-1850s, Oliver Gates was listed as a resident of the neighborhood, but again it is difficult to determine his exact location. A sampling of listings from *Smith's Brooklyn Directory* for 1856 includes these residents, some of whom probably were living with their families in the APE.

Gates Oliver, gluemaker, h. Conselyea st. n. Bushwick av. King Catharine, wid. Richard, L. h. Smith, n. Conselyea Nipe John, laborer, h. Smith. cor. Conselyea Smith, Michael, starchmaker, h. Conselyea st. near Bushwick av. Strawson, John, machinist, h. Smith n. Conselyea Batey Joseph, laborer, h. Smith n. Conselyea Conway Patrick, cartman, h. Conselyea st. n. Bushwick av. Debevoise James, h. Bushwick av. n. Conselyea McConnell John, gluemaker, h. Smith, n. Conselyea Oberkon Anthony, laborer, h. Smith, n. Conselyea

Federal census records from 1850, 1860, and 1870 indicate similar listings of working class families in the neighborhood, although again because addresses were not given it is not possible to pinpoint which families were living on which lots. Tax assessment records for Brooklyn, beginning in 1867, show that former Lots 2 and 3 were attributed to "Gates" through 1870, "Clevenger" through 1873, and then Ellen Mannering (perhaps a daughter of Oliver Gates as no deeds were found showing the transfer of property) through the mid-1880s. Former Lot 6 continued to be held by the Clevenger family through the late 1880s.

Historic maps through the end of the 19th century (Bromley 1880, Figure 11; Hopkins 1880; Robinson 1886; Sanborn 1888, Figure 12; Ulitz 1898, Figure 13) show little change to the APE, other than the construction of a building on former Lot 2 in the 1890s. A five-year lease by David Mannering to Moses Robinson in 1892 (Liber 3088:96) indicated Robinson was permitted to build a "shop" on the lot, which presumably is shown on the 1898 Ulitz map and the subsequent 1904 Hyde map (Figure 14), 1907 Sanborn map, and 1916 Hyde map. The shop was of frame construction, faced Humboldt Street, and had a small open yard area at its rear. The present concrete block garage on former Lot 2 appears to have been constructed between 1916-1933, as it is shown on the updated 1933 Sanborn map (Figure 15) and the 1951 Sanborn map. The existing building on former Lot 1 of the project site was constructed in the 1880s, and initially was used as a bakery (Bromley 1880, Figure 11; Hopkins 1880; Robinson 1886; Sanborn 1888, Figure 12).

Sanborn maps from the second half of the 20th century indicate that during the late 1960s or early 1970s, the two frame buildings on former Lot 3 of the APE were demolished, and since that time the lot has been vacant and used for surface parking and storage. As noted in the Current Conditions section, in 2002 the garage on former Lot 2 of the APE was upgraded to replace the front wall with brick masonry, close a rear door opening, and install a side door (DOB records).

V. CONCLUSIONS

The purpose of this Phase IA Archaeological Documentary Study was to determine whether archaeological resources from Native American occupations, 18th and 19th century residential use, and 18th and 19th century cemetery use could remain on the APE of the project site. The APE includes former Lots 2, 3, and 6 of modern Lot 1. The following sections outline the conclusions for these resources.

A. Precontact Archaeological Sensitivity

The project site is located at the intersection of several former colonial roads that had begun as Native American trails, as shown on Figure 4. However, research has indicated that Native American settlements in the Williamsburg vicinity were located along local waterways, namely English Kills, Maspeth Creek, and Newtown Creek. The project site is located approximately 2000 feet from the former marshlands surrounding English Kills, and approximately 1200 feet from the former marshland surrounding the inland extent of Bushwick Creek. Newtown Creek is over a mile away. The closest known Native American site was probably located at a Native American place called *quandus quaricus* about five city blocks, or ca. 2000 feet east of the project site on the west bank of English Kills. Due to the inland location of the project site and APE, with its relatively long distance to potable water, HPI concludes that there is diminished precontact archaeological sensitivity.

B. Historic Period Archaeological Sensitivity

The APE is located near the historic intersection of the 1660s Bushwick settlement known by the Dutch as *Het Dorp*. Woodpoint Road ran through the center of the settlement, and the Kiekeout Road marked the southern side. Portions of former Lots 1 and 2 fell within the roadbed of the Kiekeout Road, and the diagonal angles of these two lots retain the alignment of the old road. It is difficult to know what structures were located at *Het Dorp* during the 17th century; and more specifically on the APE. Although it is possible there were structures in the vicinity, this cannot be confirmed.

In 1711 the first Dutch Reformed Church was constructed northeast of the APE, probably north of and partially overlapping Conselyea Street. It was replaced in 1829 with the second Dutch Reformed Church, which was situated about 75 feet northeast of the APE in the approximate same location as the first church. Both churches had their entrances facing southeast, along Woodpoint Road. The original cemetery for Bushwick was located on Woodpoint Road at the intersection of Kingsland and Withers Streets, approximately 1000 feet northeast of the project site. The second cemetery for Bushwick was established in 1814 to the north of the first Dutch Reformed Church and later the second Dutch Reformed Church. Historic accounts and maps (e.g. Ewen 1835, Figure 7; Vieth 1845; Higginson 1868+, Figure 9; Hyde 1904, Figure 14; Hyde 1916) clearly show that the cemetery was situated at the rear, or behind the churches, not in front of them or along the sides. The APE is southeast of the church locations, and would not have been either part of the church property, or in an area that would have contained burials. Historic maps show that the northern extent of the APE is located ca. 100 feet south of the former burial ground. Thus, HPI concludes that there is no sensitivity for the presence of former burials within the APE.

There is a greater likelihood that 18th and 19th century residential remains could survive within the APE. Photograph 12 shows that there were houses at the southeast corner of the project site block along the Kiekeout Road during the 18th century; much of the APE would have been located in the rear yard areas of these houses, which were located on a larger tract of land. This large holding was broken up in 1834 to form the approximately one-acre parcel shown on the 1835 map, and then in 1845 into smaller lot divisions that demarcated Lots 2, 3, and part of 6. At least by 1845, a deed indicates that former Lots 2 and 3 of the APE contained structures on them. These structures probably were the two and a half story frame houses that were depicted on all subsequent 19th - and 20th -century maps, and which were demolished in the late 1960s or early 1970s. It was not possible to identify specific residents prior to the 1870s due to a lack of addresses in city directories and census records, but residents listed along the project site streets generally held working class professions and census records show most were living in family units. The two houses on the APE likely had several households living in the buildings at any one time.

It is possible that remains from occupants who lived in buildings at the southeastern corner of the project site block during the 18th and early 19th centuries could still remain in undisturbed areas of the APE, as the APE would have

constituted the rear and side yards of the ca. one-acre parcel shown on the 1835 map (Figure 7). It is more likely that remains from occupants of the post-1835 19th century buildings within the APE itself could still remain in undisturbed areas of the APE. Humboldt Street between Skillman and Maspeth Avenue was not provided with municipal sewers until 1899 (Brooklyn Daily Eagle 6/5/1899), meaning that residents would have relied on privies at least until this time, if not longer. It also is possible that wells and cisterns could be present within the APE.

The area of the APE with the greatest sensitivity for historic period archaeological resources is the northern end of former Lot 3 and all of Lot 6. These areas have never been developed with structures, and so should have the least amount of disturbance beneath the asphalt paving. The southern portion of former Lot 3 that once contained the two and a half story buildings likely is more disturbed. Although it is unclear from maps whether there was a basement under these buildings, the single soil boring completed as part of this project indicated ca. 5 feet of fill at the southern end of Lot 3, including what may be demolition debris. Also, because of the unusual configuration of the post-1845 lots, residents along Humboldt Street within the APE would not have had extensive rear lots, but rather would have used the sides of the lots for purposes normally reserved for rear yards. Former Lot 2, which currently contains a one-story garage and before that contained a shop, may be somewhat disturbed as well. Thus, HPI concludes that the northern extent of former Lot 3 and all of former Lot 6 have a high historic period archaeological sensitivity, while former Lot 2 and the southern portion of former Lot 3 have a moderate to low historic period archaeological sensitivity.

VI. RECOMMENDATIONS

The locations on the consolidated modern Lot 1 where historic period archaeological sensitivity (both low to moderate and high) has been identified are shown on Figure 16. HPI did not identify any archaeological sensitivity for human remains associated with the Bushwick Reformed Dutch Church cemetery, formerly located approximately 100 feet north of the APE. If project plans include subsurface impacts to areas identified as sensitive for archaeological resources, HPI recommends that Phase IB archaeological field testing be undertaken within the area of high archaeological sensitivity. The archaeological field testing would involve using a backhoe to remove the existing pavement and any underlying modern fill or debris in order to expose potential archaeological resources. All Phase IB archaeological testing should be conducted according to OSHA regulations and applicable archaeological standards (LPC 2002, CEQR 2012). Professional archaeologists, with an understanding of and experience in urban archaeological excavation techniques, would be required to be part of the archaeological team.

VII. REFERENCES

Armbruster, Eugene L.

1912 The Eastern District of Brooklyn. G. Quattlander, Williamsburg, New York.

Assessed Valuation of Real Estate for Brooklyn

On microfilm at the New York City Municipal Archives.

-1888

Assessed Valuation of Real Estate for Williamsburgh

On microfilm at the New York City Municipal Archives.

Beadel, Henry

1797 Survey of Bushwick Township in Kings County ...Oct. 28, 1797. On file at the Brooklyn Historical Society.

Bergoffen, Celia

2005 Phase 1B Archeological Testing Report, 90 Havemeyer Street, B 2368 L 27, 28.

Bolton, Reginald Pelham

1972 Indian Life of Long Ago in the City of New York, enlarged ed. Harmony Books, New York.

Bromley, G. W. and Co.

1880 Atlas of the Entire City of Brooklyn, New York. G. W. Bromley & Co., New York.

Brooklyn Historical Society Land Conveyances

As cited in the text.

Bushwick Savings Bank

1923 Memoirs of Bushwick (Boswijk), 1637-1923. Bushwick Savings Bank, Brooklyn, N.Y.

City Environmental Quality Review (CEQR)

2012 City Environmental Quality Review Technical Manual. City of New York, Mayor's Office of Environmental Coordination.

City of New York, Department of Buildings (DOB)

1898-present Indexed records available online at http://www.nyc.gov/html/dob/html/bis.html.

City/Scape

1997 Block 3070, Lot 10-14, 140 Johnson Ave., Williamsburg, Brooklyn. Stage 1A Literature Review and Archaeological and Historic Sensitivity Evaluation.

Dripps, Matthew

1850 Map of the City of Brooklyn, also the Village of Williamsburgh.

1869 Map of the city of Brooklyn: being the former cities of Brooklyn & Williamsburgh and the town of Bushwick, as consolidated January 1st, 1855 by an act of the legislature of the State of New York ... showing also a part of the City of New York.

Eisenberg, Leonard

1978 "Paleo-Indian Settlement Patterns in the Hudson-Delaware River Drainages." Occasional Publications in Northeastern Anthropology, No. 4.

EPDSCO

2012 Phase I Environmental Site Assessment, 1 Maspeth Avenue, Block 2892, Lot 1, Brooklyn, N.Y. 11211. Prepared for Ocher Realty, LLC, Brooklyn, N.Y.

Ewen, D.

1835 Map of the Additional Bounds of the Village of Williamsburg, Kings County, Showing the same as permanently laid out into Streets. City of Brooklyn Filed Map 719.

Federal Census for Brooklyn

- Available electronically. http://www.ancestry.com. Accessed 4 April 2013.
- Available electronically. http://www.ancestry.com. Accessed 4 April 2013.
- Available electronically. http://www.ancestry.com. Accessed 4 April 2013.
- Available electronically. http://www.ancestry.com. Accessed 4 April 2013.

Grumet, Robert S.

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

Gwynne, Gretchen Anderson

1982 "Prehistoric Archaeology at Mount Sinai Harbor, Suffolk County, New York." In *The Second Coastal Archaeology Reader*, Volume V. James E. Truex, editor. SCAA, Stony Brook, New York.

Higginson, J.H.

1868+ Higginson's Insurance Maps of the City of Brooklyn, L. I.

Historical Perspectives, Inc. (HPI)

1992 *Phase 1A Archaeological Assessment Scholes Street Urban Renewal Area Housing Site*. For: The New York City Department of Housing Preservation and Development, Office of Development.

Hopkins, G.M.

1880 Detailed estate and old farm line atlas of the city of Brooklyn.

Hyde, E.B.

1904 Atlas of the Brooklyn Borough of the City of New York. Hyde and Company, New York.

1916 Atlas of the Brooklyn Borough of the City of New York. Hyde and Company, New York.

Kelly, James A.

1946 Indian Villages, Paths, Ponds and Places in Kings County.

Landmarks Preservation Commission (LPC)

2002 Landmarks Preservation Commission Guidelines for Archaeological Work in New York City.

Ritchie, William A.

1980 The Archaeology of New York State. Revised Edition. Harbor Hill Books, NY.

Robinson, E.

1886 Robinson's Atlas of the City of Brooklyn, New York. New York: E. Robinson.

Rothkrug, Hiram

2013 Letter to Gina Santucci, Landmarks Preservation Commission. February 26, 2013.

Sanborn Map Company

1888 Insurance Maps of the Borough of Brooklyn. New York.

- 1907 Insurance Maps of the Borough of Brooklyn. New York.
- 1933 Insurance Maps of the Borough of Brooklyn. New York.

- 1951 Insurance Maps of the Borough of Brooklyn. New York.
- 1965 Insurance Maps of the Borough of Brooklyn. New York.
- 1968 Insurance Maps of the Borough of Brooklyn. New York.
- 1977 Insurance Maps of the Borough of Brooklyn. New York.

Santucci, Gina

2012 Archaeological Review Findings, Landmarks Preservation Commission. September 28, 2012.

Schuberth, Christopher J.

1968 The Geology of New York City and Environs. Natural History Press, Garden City, New York.

Scott H. Gallant & Associates, Inc.

Appraisal of a Mixed-Use Three-Story and Extension Building Located at 378-388 Humboldt Street, Section 10; Block 2892; Lot 1, 2 & , Brooklyn, NY 11211. Prepared for William Casey Sovereign Bank Real Estate Appraisal Unit, Philadelphia, PA.

Smith, Carlyle Shreeve

1950 *The Archaeology of Coastal New York*, Anthropological Papers of the American Museum of Natural History, 43(2), New York.

Stiles, Henry R.

A History of the Town of Bushwick, Kings County, N.Y. Reprinted from *The Illustrated History of Kings County*, edited by Dr. H. R. Stiles, and published by W. W. Munsell & Co., Brooklyn, N.Y.

Sutphin, Amanda

2013 Archaeological Review Findings, Landmarks Preservation Commission. March 13, 2013.

Tri-State Drilling Technologies, Inc.

2013 Subsurface Investigation Report, 1 Maspeth Avenue, Brooklyn, New York, Block 2892, Lot 1. Prepared for Ocher Realty.

Ulitz, Hugo

1898 Atlas of the Brooklyn Borough of the City of New York. Hyde and Company, New York.

United States Department of Agriculture (USDA)

2005 New York City Reconnaissance Soil Survey. United States Department of Agriculture, Natural Resources Conservation Service, Staten Island, NY.

United States Geological Survey (U.S.G.S.)

1891 Brooklyn, N.Y. 15 Minute Topographic Quadrangle.

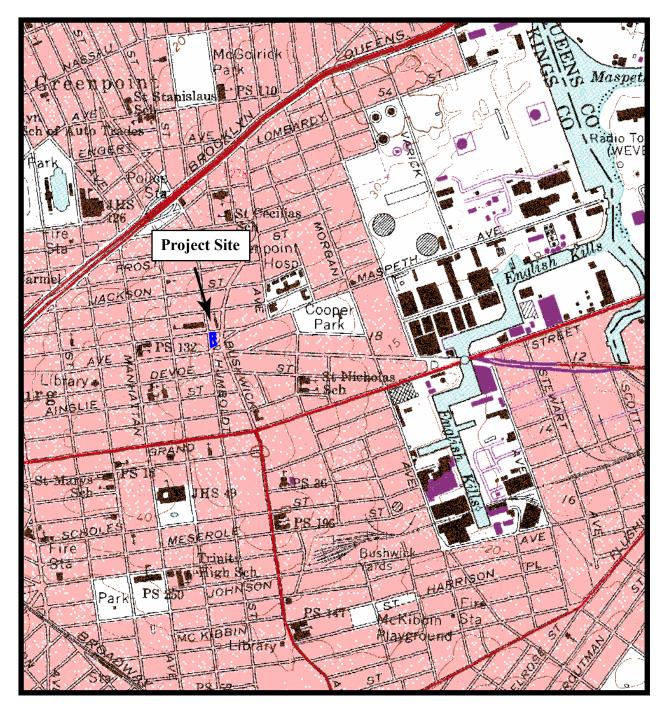
1979 Brooklyn, N.Y. 7.5 Minute Topographic Quadrangle.

Vieth, Isaac

1845 A Map of the Village of Williamsburgh, Kings County, N.Y.

Wyatt, Ronald J.

1982 "The Archaic on Long Island." In *The Second Coastal Archaeology Reader*, Volume V. James Truex, editor. SCAA, Stony Brook, New York.



Phase IA Archaeological Documentary Study 1 Maspeth Avenue, Brooklyn, New York 11211 Block 2892, Lot 1 (former Lots 2, 3, and 6)



Figure 1: Project site on Brooklyn, N.Y. 7.5 Minute Topographic Quadrangle (U.S.G.S. 1979).

<u>0 500 1000 1500 2000 25</u>00 FEET



Phase IA Archaeological Documentary Study 1 Maspeth Avenue, Brooklyn, New York 11211 Block 2892, Lot 1 (former Lots 2, 3, and 6)



Figure 2: Project site, APE, and photograph locations on modern aerial photograph (Bing 2013).

0 25 50 75 100 125 FEET

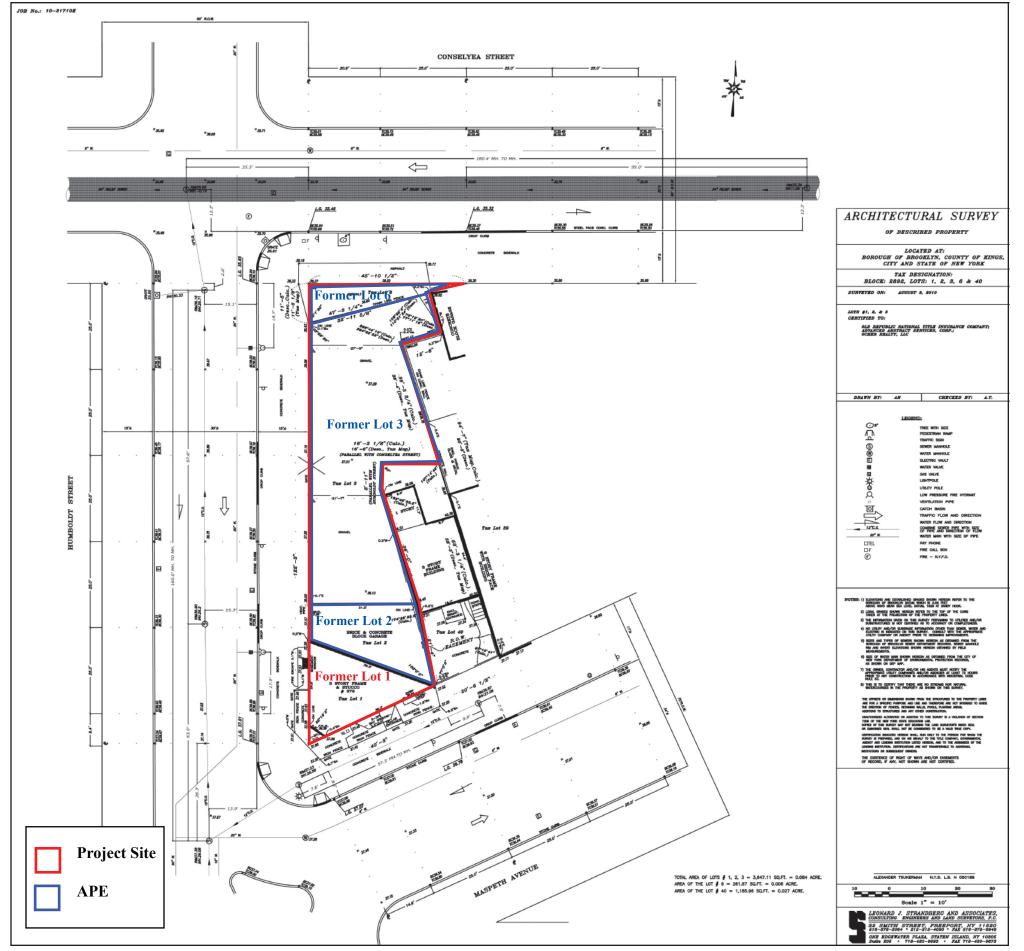
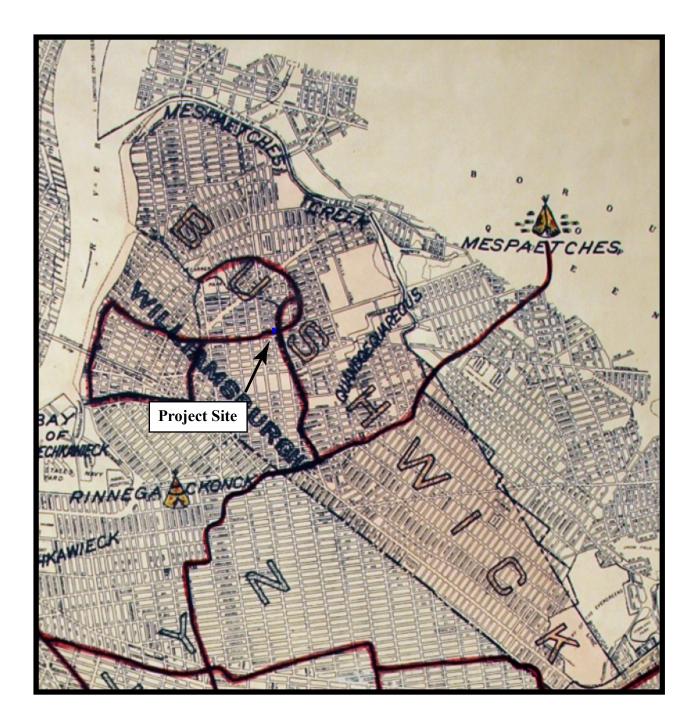


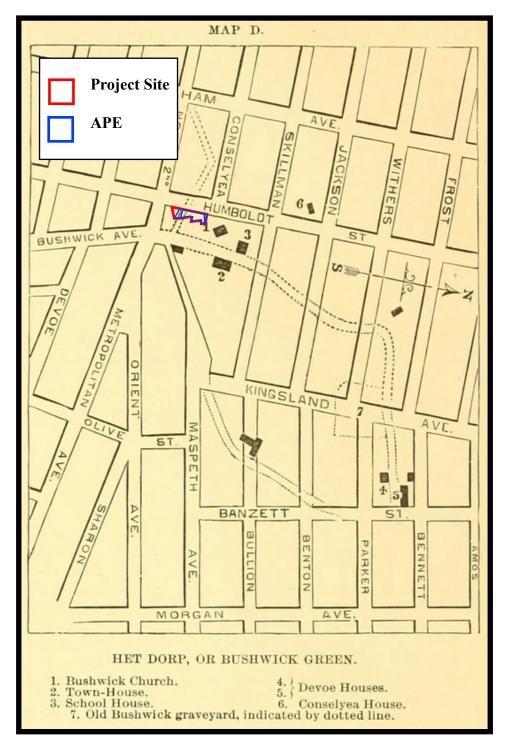
Figure 3: Project site and APE on modern architectural survey (Leonard J. Strandberg and Associates 2010).



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Figure 4: Project site on Indian Villages, Paths, Ponds and Places in Kings County (Kelly 1946).



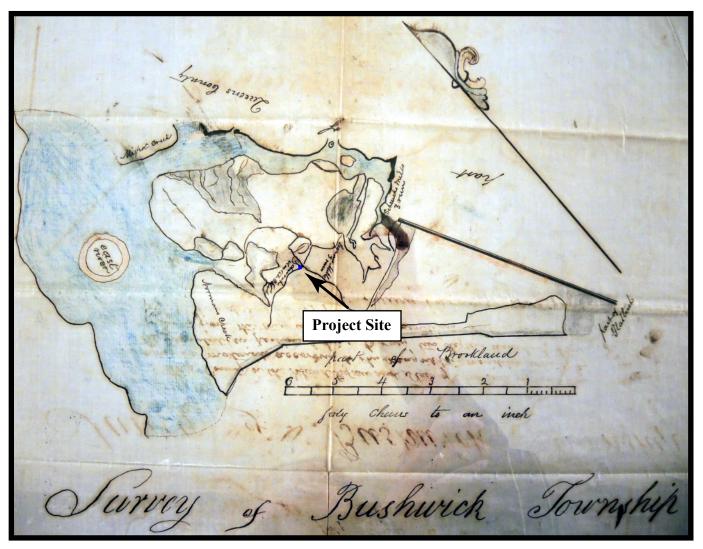
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Figure 5: Project site and APE on Het Dorp, or Bushwick Green (Stiles 1884).

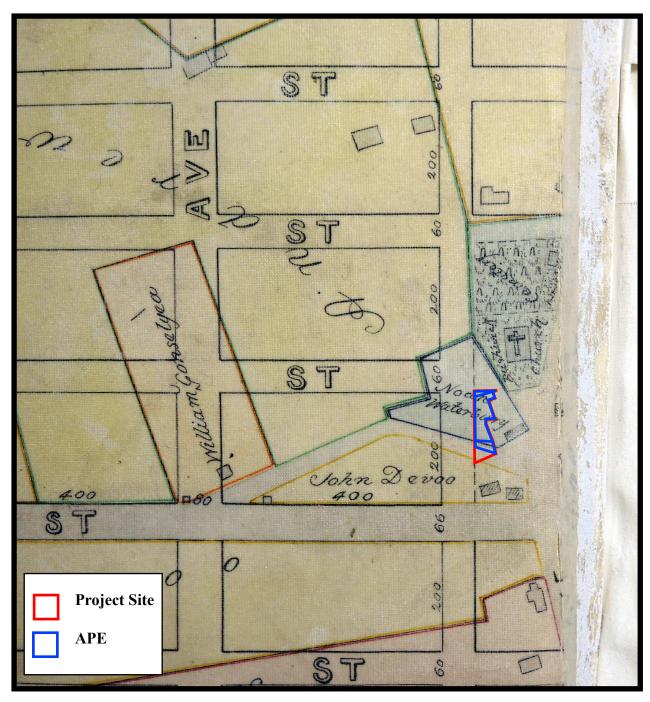
0	200	400	600	800	1000	FEET



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Figure 6: Project site on Survey of Bushwick Township (Beadel 1797).

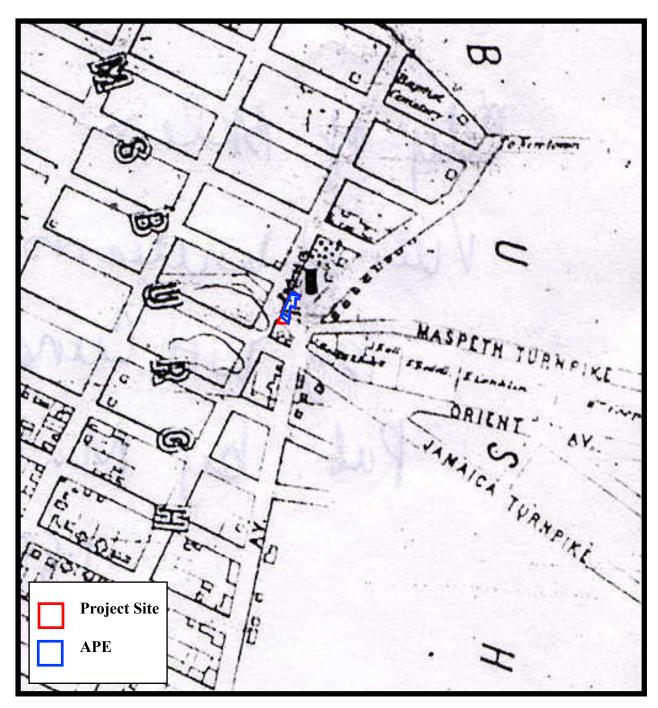


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Figure 7: Project site and APE on *Map of the Additional Bounds of the Village of Williamsburg, Kings County, Showing the same as permanently laid out into Streets* (Ewen 1835). Filed Map 719.

0 100 200 300 400 500 FEET

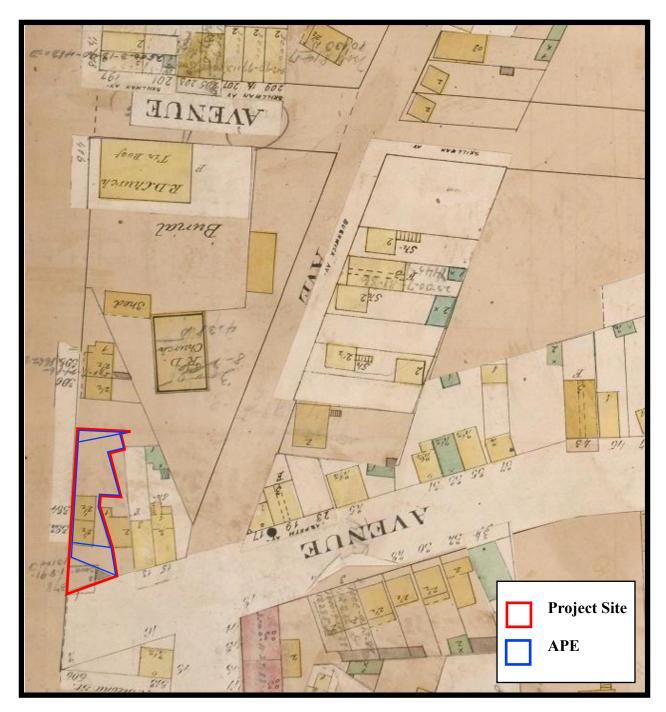


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Figure 8: Project site and APE on *Map of the City of Brooklyn, also the Village of Williamsburgh* (Dripps 1850).

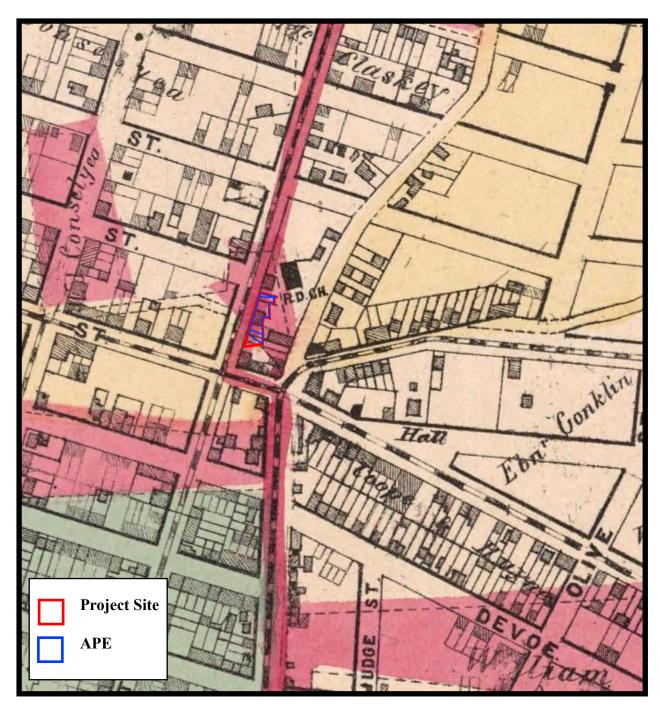
0 200 400 600 800 1000 FEET



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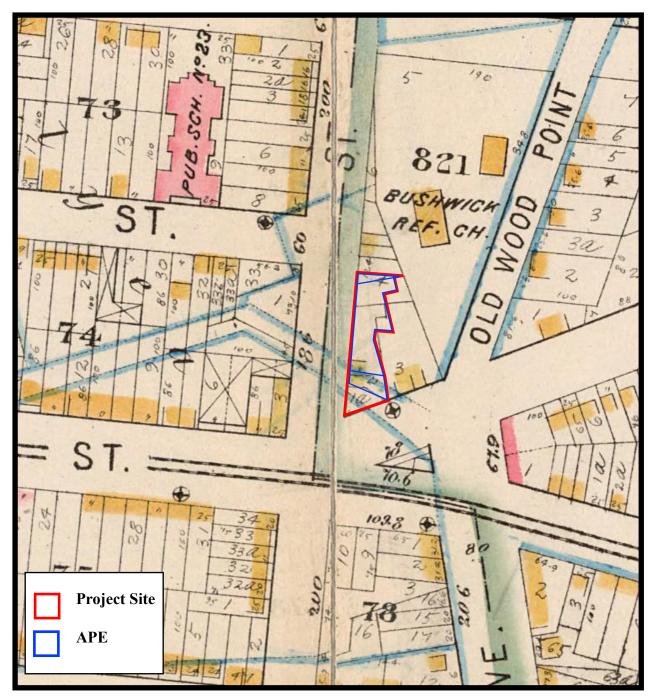
Figure 9: Project site and APE on *Higginson's Insurance Maps of the City of Brooklyn, L. I.* (Higginson 1868+).



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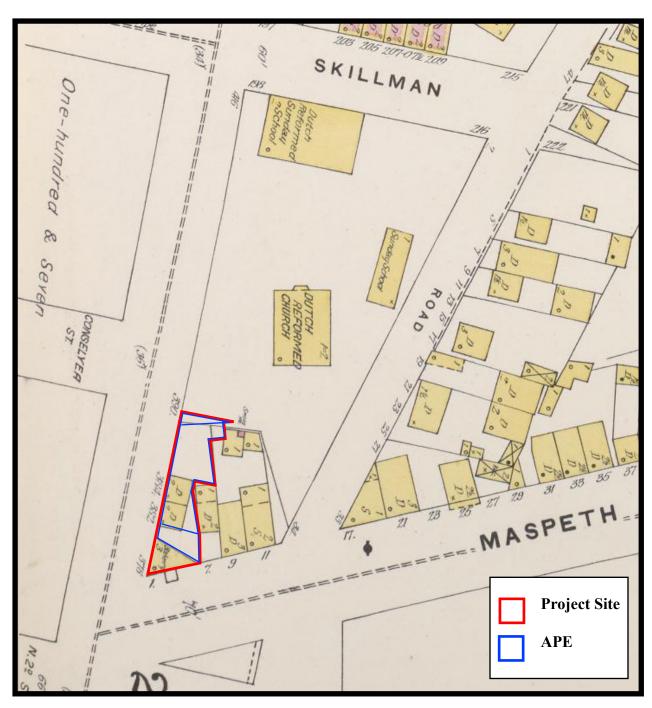
Figure 10: Project site and APE on Map of the City of Brooklyn (Dripps 1869).



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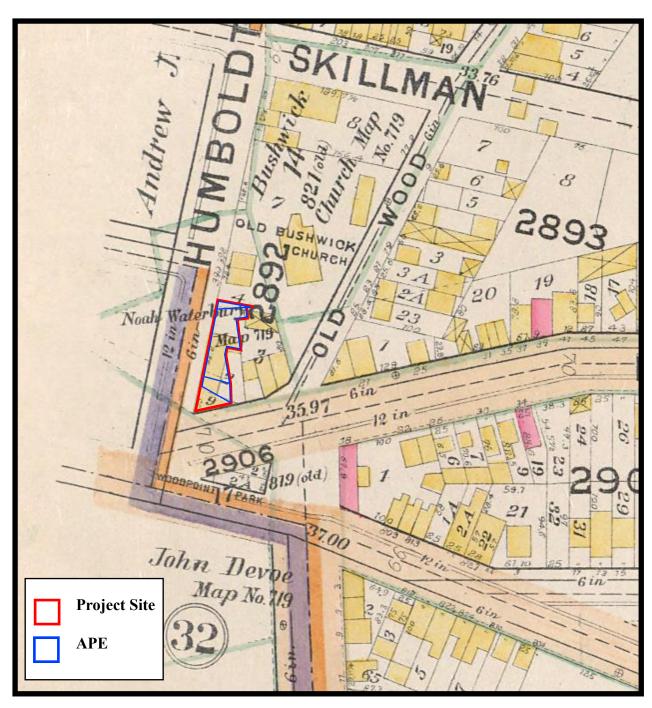
Figure 11: Project site and APE on Atlas of the Entire City of Brooklyn (Bromley 1880).



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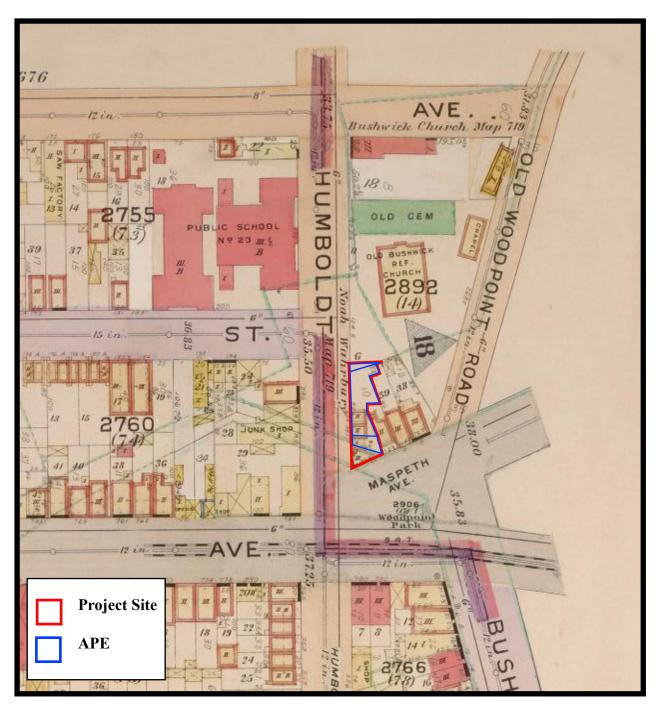
Figure 12: Project site and APE on Insurance Maps Brooklyn, New York (Sanborn 1888).



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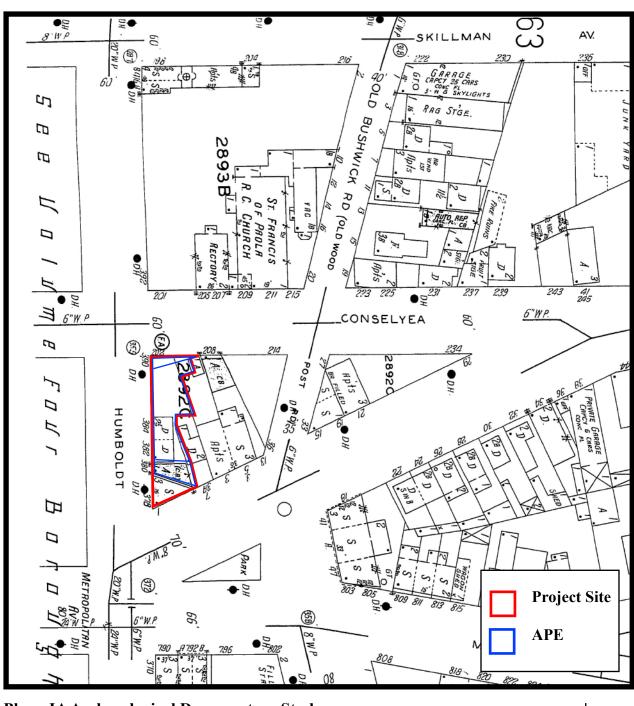
Figure 13: Project site and APE on *Atlas of the Brooklyn Borough of the City of New York* (Ulitz 1898).



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Figure 14: Project site and APE on *Atlas of the Brooklyn of Borough, City of New York* (Hyde 1904).



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Figure 15: Project site and APE on *Insurance Maps of the Borough of Brooklyn, New York* (Sanborn 1933).

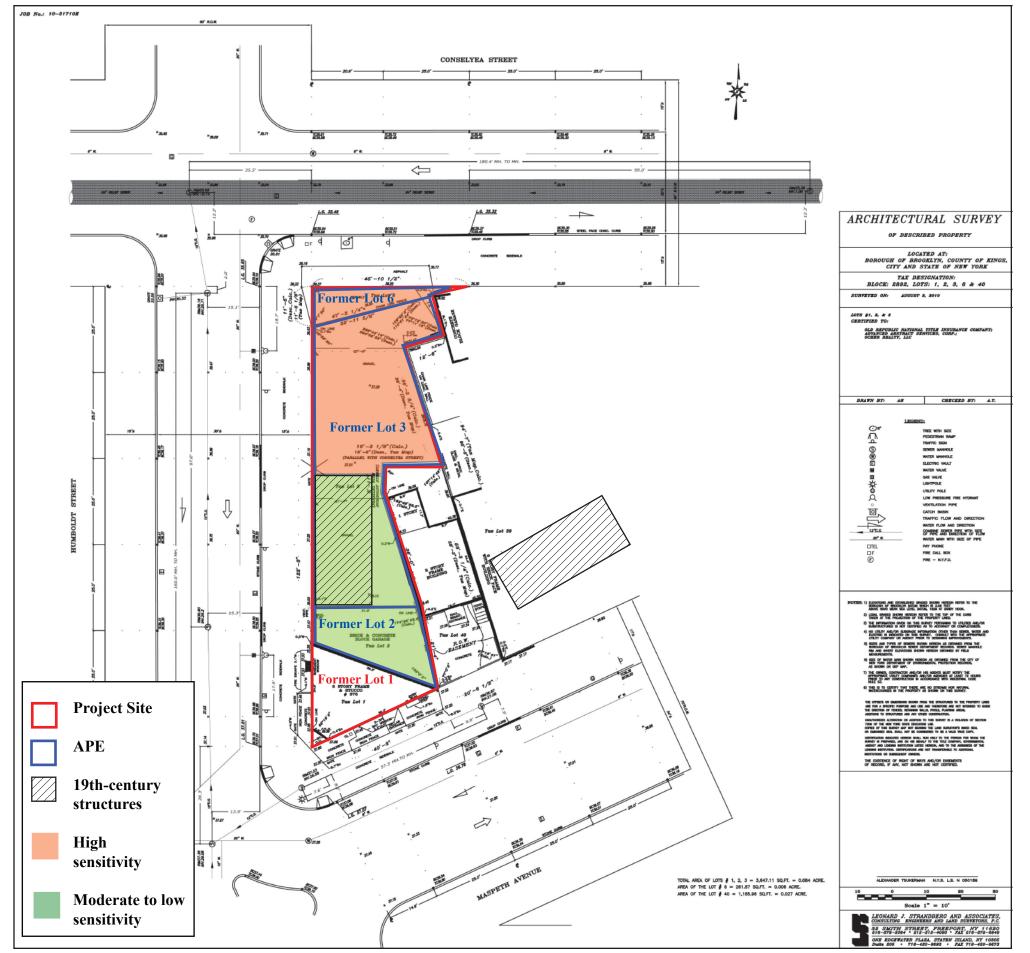


Figure 16: Project site, APE, locations of former structures, and archaeological sensitivity on modern architectural survey (Leonard J. Strandenberg and Associates 2010).



Photograph 1: Former Lot 2 with brick faced one-story garage abutting and connecting to the building on former Lot 1. View looking northeast from Humboldt Street.



Photograph 2: Former Lot 2 with garage in background behind parked car and former Lot 3 in foreground showing asphalt-paved parking area. View looking southeast from interior of former Lot 3 near Humboldt Street.



Photograph 3: Former Lot 3 showing asphalt-paved parking area. View looking northwest from interior of former Lot 3 near Humboldt Street.



Photograph 4: Former Lot 3 showing asphalt-paved parking area. View looking southwest from interior of former Lot 3 with Humboldt Street in right background.



Photograph 5: Former Lot 6 in foreground, a narrow, triangular parcel paved with asphalt. Former Lot 3 is in right background behind fence. View looking southeast from sidewalk at intersection of Humboldt and Conselyea Streets.



Photograph 6: Former Lot 1 (not part of the APE) with its triangular-shaped three-story frame building. View looking northeast from the intersection of Maspeth Avenue and Humboldt Street.



Photograph 7: St. Francis of Paola Church, located on the approximate former site of the Bushwick Reformed Church property. Not part of the APE. View looking northwest from intersection of Conselyea Street and Woodpoint Road.



Photograph 8: Grotto/shrine on triangular-shaped Lot 37 at southwest corner of Conselyea Street and Woodpoint Road, owned by St. Francis of Paola Church. Not part of the APE. View looking southeast from interior of lot.



Photograph 9: New York City "pocket park," named the "Memorial Gore" located south of the project site in the triangular parcel of land bounded by Maspeth Avenue, Metropolitan Avenue, and Bushwick Avenue. Not part of the APE. View looking east.



Photograph 10: Residence on Lot 40, abutting project site on east. Not part of the APE. View looking north from Maspeth Avenue.



Photograph 11: Garages on Lots 38 and 39, with project site behind fence to right. Not part of the APE. View looking southeast from Conselyea Street.



Photograph 12: Intersection of Woodpoint Road (center and right) and Kiekeout Road (between sets of houses on left), drawn from memory by local resident Cornelia Meeker and published in 1864. Original Bushwick Reformed Dutch Church is in center background, with houses at southeast corner of project site block to left of church. Courtesy New York Public Library.



Photograph 13: Second Bushwick Reformed Dutch Church as seen in 1899. Not part of the APE. View looking northwest from Woodpoint Road. Courtesy Brooklyn Public Library.



Photograph 14: Second Bushwick Reformed Dutch Church as seen in 1905. Not part of the APE. View looking northeast from Humboldt Street. Courtesy Brooklyn Public Library.



Photograph 15: Second Bushwick Reformed Dutch Church as seen in 1907. Project site is shown on right. View looking northeast from Humboldt Street. Courtesy New York Public Library.



Photograph 16: Rear of second Bushwick Reformed Dutch Church as seen in 1907. Former cemetery located in area with ground disturbance shown, to rear of church, more than 100 feet north of the APE. View looking southeast from Humboldt Street. Courtesy New York Public Library.



Photograph 17: Rear of second Bushwick Reformed Dutch Church as seen in 1907. Former cemetery located in area with ground disturbance shown, to rear of church, more than 100 feet north of the APE. View looking southwest from intersection of Woodpoint Road and Skillman Avenue. Courtesy New York Public Library.