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Phase 1A Archaeological Documentary Study

Columbia Baker Field

Block 2244, Lots 1 and 2000

Borough of Manhattan, New York County, New York

Prepared for:

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Management Summary

SHPO Project Review Number: 10PR01207

Involved Agencies: New York City Planning Commission
New York City Department of City Planning

Phase of Survey: Phase 1A Documentary Study

Location Information
Location: 501 West 218th Street New York, New York
Manhattan Tax Block 2244, Lots 1 and 2000
Minor Civil Division: 06101
County: New York

Survey Area
Length: 244 meters (800 feet)
Width: 457 meters (1500 feet)
Total Area Surveyed: Approximately 23 acres

USGS 7.5 Minute Quadrangle Map: Central Park

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Date of Report: March 2010



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A. PROJECT OVERVIEW AND DESCRIPTION

Columbia University (CU) is proposing the construction of a new sports center at the University's Baker Field athletic complex at the northern tip of the Island of Manhattan (see Figure 1). The Baker Field project site is bounded to the north and west by the Harlem River, to the east by Broadway, and to the south by West 218th Street, comprising Manhattan Tax Block 2244 Lots 1 and 2000 (see Figure 2).

The proposed project would involve the construction of a new, 5-story (47,700 square foot) sports center near an existing field house at the southeastern corner of the project site. The sports center would house strength and conditioning space, offices for varsity sports, an auditorium, a hospitality suite, and student-athlete spaces. The proposed actions would also facilitate the construction of a dugout and press box for the existing softball field.

The new sports center would alleviate the current space constraints of the existing Chrystie Field House, which would remain in place as part of the proposed project while a nearby maintenance building would be demolished. To accommodate the sloping topography of the Area of Potential Effect (APE) in this location, a portion of the Sports Center would be constructed on a foundation of spread concrete footings to be installed between 4 and 6 feet below grade. Where the terrain is level, the lowest level floor construction will be an on-grade concrete slab. No cellar/basement is proposed for the new structure.

The proposed project would also include the development of a publicly accessible 39,638 square foot Waterfront Access Area along the western shore of Baker Field. The proposed waterfront improvements would relocate and re-clad an existing maintenance and storage shed from this new publicly accessible waterfront area to an existing parking area. Limited excavation may be required for this area. The Waterfront Access Area would be located partially on land owned by CU and partially on land owned by the City of New York that is currently part of Inwood Hill Park and the westerly end of West 218th Street as mapped. The construction of this Waterfront Access Area is subject to the approval of the New York City Department of City Planning (DCP) and would require an authorization to modify Waterfront Zoning Regulation requirements. The requested authorization is a discretionary action that requires review under City Environmental Quality Review (CEQR). The New York City Planning Commission (CPC) would serve as lead agency in coordination with DCP.

In comments dated January 15, 2010, the New York City Landmarks Preservation Commission (LPC) identified portions of the project site as potentially archaeologically sensitive and requested that a Phase 1A Archaeological Documentary Study be completed. The areas identified as potentially sensitive by LPC included the location of the proposed sports center ("Site 1") and the Waterfront Access Area ("Site 2"). LPC determined that the proposed softball field dugout would not impact archaeological resources as the proposed work would be an in-kind replacement of a similar dugout and press box already present on the site. Therefore the archaeological Area of Potential Effect (APE) for Site 1 includes the location of the proposed new structure and the APE for Site 2 includes the entire proposed Waterfront Access Area (see Figure 2). In comments dated March 10, 2010, the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) concurred with LPC's assessment.

B. RESEARCH GOALS AND METHODOLOGY

The goal of this Phase 1A Archaeological Documentary Study of the Baker Field project site is to determine the likelihood that potential archaeological resources have survived intact within the boundaries of the archaeological APE. The study has been designed to satisfy the requirements of OPRHP and LPC and it follows the guidelines of the New York Archaeological Council (NYAC). The study documents the history of the proposed project site as well as its potential to yield archaeological resources dating to both the precontact and historic periods. Research was completed to establish a chronology of the project site's development and to identify any individuals who may have owned the land or worked and/or resided there.

As part of the background research for this Archaeological Documentary Study, various primary and secondary resources were analyzed. These included historic maps and atlases; historic photographs; building construction, renovation, and demolition records; newspaper articles; local histories; and historic directories, and conveyance and census records. An attempt was made to review tax assessment records, however because the project site was not

included within a portion of Manhattan that was laid out with streets or house numbers and because the site was included within the real estate holdings of the Dyckman family, which owned most of Northern Manhattan until the late-19th century, it was difficult to identify the project site within historic tax assessment ledgers.

These published and unpublished resources were consulted at various repositories, including the New York Public Library, the New York City Municipal Archives, the New York Historical Society, the Manhattan Office of the City Register (New York City Department of Finance), and others. On-line textual archives such as Google Books and the Internet Archive Open Access Texts and the files of the New York City Department of Buildings (NYCDOB) were also accessed. In addition, site file searches were completed at OPRHP, LPC, and the New York State Museum (NYSM) to gather information regarding previously identified archaeological sites and previously conducted cultural resources assessments in the vicinity of the project site. Finally, a walkover of the site was completed to identify visible signs of disturbance and/or landscape transformation.

C. SUMMARY OF PREVIOUS CULTURAL RESOURCES ASSESSMENTS IN THE VICINITY OF THE PROJECT SITE

In 1984, Archaeologist Joan H. Geismar prepared *An Evaluation of the Archaeological Potential of the Community Hospital Site, New York, NY* for the firm Konheim & Ketcham (Geismar 1984a). The project site analyzed by Geismar at that time included Block 2244, Lots 100 and 200. Geismar concluded that despite the extensive landscape transformations that occurred in the vicinity of the project site during the historic period (including marble quarrying and the excavation of a ship canal in addition to leveling and grading associated with the construction of Baker Field), archaeological resources may have been protected under layers of added fill. Geismar later monitored the drilling of several large-bore cores and determined that portions of the “potentially sensitive areas of the...site...comprise modern or relatively modern fill and are devoid of prehistoric or historic material” while others could still contain intact archaeological resources (Geismar 1984a: 15). Geismar attributed the disturbance to the landscape transformations brought about during the initial construction of Baker Field in the 1920s. However, additional monitoring was completed by Greenhouse Archaeological Consultants, Inc. in 1986. During monitoring, an historic refuse dump was identified within the southwestern portion of what is now the hospital property. A total of 84 artifacts was recovered, most of which were glass bottles dating to the late-19th and early 20th centuries, and sterile subsoil was encountered between 8 and 15 feet below grade.

A. GEOLOGY AND TOPOGRAPHY

The project site is located in a geographic bedrock region known as the Inwood Lowland portion of the Manhattan Prong of the New England Upland Physiographic Province. The project area is underlain by a metamorphic rock including Lowerre Quartzite, Inwood Marble, and Manhattan Schist, which date to the Ordovician-Cambrian periods of the Paleozoic Era, approximately 450 million years ago (Isachsen et al 2000). Rock formations in this portion of northern Manhattan are typically composed of Inwood Marble, an easily weathering rock that is superimposed over older Fordham Gneiss bedrock layers (Schubert 1968). Inwood Marble has been quarried extensively in the region, including within the project site, since the historic period and many New York buildings, including the New York Public Library's main branch on Fifth Avenue at 42nd Street, are constructed of this type of stone (ibid). For the most part, the bedrock in this region is covered by Atlantic Coastal Plain glacial sediments, deposited by retreating glaciers more than 12,000 years ago (Isachsen et al 2000). Bedrock in the immediate vicinity of the project site is located between 6 and 30 feet below ground surface (AKRF 2009).

Current topographic information (see Figure 3) shows that the location of the proposed Sports Center is situated at approximately 40 feet above mean sea level (MSL) although the elevation begins to slope down gently to the south and east at the northwest corner of Broadway and 218th Street. However, as seen on topographic maps of the area published in 1860 by the Commissioners of Washington Heights and by an unknown cartographer in 1870, historically the project site was not as flat, and a large hill occupied much of the eastern half of Block 2244, rising to a maximum height of 70 feet above MSL. This hill was part of a large hill that was situated to the west of the historic Kingsbridge Road, now Broadway, between approximately 213th and 221st Streets. In fact, the route of Broadway in this location suggests that the road was angled to avoid this hill.

The 1860 map depicts the majority of the location of the proposed Sports Center at an elevation of between 30 to 50 feet and there is evidence that marble was quarried there. In the location of the Waterfront Access Area, the current elevation of the ground slopes between 0 feet and 30 feet above mean sea level. Historically, this area was partially occupied by tidal marshland, although the general elevation ranged between approximately 0 and 20 feet above MSL. Once again, there is evidence that marble quarrying occurred in both the Sports Center and Waterfront Access Area APEs on historic topographic maps.

B. HYDROLOGY

The waterways that originally made up the northern boundary of the island of Manhattan were drastically altered during the historic period. Whereas the project site currently marks the northern tip of the island, the island originally continued to the north for another 1,500 feet and was separated from the Bronx by Spuyten Duyvil Creek. Spuyten Duyvil Creek, which translates to the "Devil's Spout" or "Spitting Devil," was tremendously hard to navigate and was a major impediment to efficient shipping in the New York area. Originally, in the vicinity of the modern Ship Canal, two spring-fed freshwater streams ran in opposite directions—one east to the Harlem River and the other to the west to Spuyten Duyvil Creek—through a ravine that was rocky in the center and marshy at either end (Tieck 1968). In 1817 these streams were connected to form a saltwater channel that connected Spuyten Duyvil Creek with the Harlem River and a mill stream was also created at that time (ibid). Maps from the early 19th century including the 1836 Colton and 1865 Viele maps depict this small channel in the vicinity of what was later known as 222nd Street. By the mid-19th century, maps depict this as a slightly larger canal. At the end of the 19th century, this channel/canal was widened and deepened, creating the Harlem River Ship Canal and effectively cutting off the tip of Manhattan, which through landfilling is now the Marble Hill neighborhood of the Bronx (although it is technically still within the jurisdiction of the Borough of Manhattan).

Before the major landscape alterations of the late-19th century, the project site was bordered to the west by thick tracts of marshland which were punctuated in some areas by small streams that drained out into Spuyten Duyvil Creek. Numerous springs were present in the area as well (Smith 1938). Maps from the late 19th century also depict several ponds in the area. One of these was the man-made Dyckman Ice Pond, which measured 300 feet in length and 75 feet in width was "for the most part...cut out of the solid natural rock" and may have been more than 25 feet deep (ibid: 152). Kingsbridge marble was used to construct the southern end of the pond, which contained a "sluice"

cut through the rock to allow water to drain into the Spuyten Duyvil Creek to the west and wooden platforms were constructed out into pond for ice harvesting. The pond was fed by a combination of natural springs and Croton water and was crossed by a small bridge (ibid). The ice pond may have been first depicted on the 1860 topographic map mentioned above. That map depicts a deep ravine north of the western end of 218th Street (the projected lines of streets in this area are depicted on the map; however they do not correspond with modern street locations). However, this may be depicting an area where marble was quarried rather than a pond. By 1870, after I.M. Dyckman had established a residence in the area, the former quarry appears to have been turned into an ice pond. The pond appears to have been filled by the first decade of the 20th century.

Groundwater is expected to be at depths deeper than 40 feet below ground surface in the project site, although it would be shallower to the west, closer to the water (AKRF 2009).

C. SOILS

The *New York City Soil Reconnaissance Survey* published by the National Resource Conservation Service (2005) indicates that the soils in the vicinity of the project site belong to a soil complex known as the “Charlton-Greenbelt-Pavement & Buildings” complex. These soils are gneissic glacial tills or anthropogenic soils generally found in areas that have been partially cut and filled for use as athletic fields or cemeteries or for residential purposes. Typically, at least 15 percent of these soils, which are located only in Manhattan and the Bronx, are covered with impenetrable buildings and/or pavement. The soils are found in areas that are typically flat or gently sloping, with 0 to 8 percent slopes (New York City Soil Survey Staff 2005).

In 2008, as part of an environmental investigation, five soil borings were taken in the area of the proposed Sports Center by Universal Testing & Inspection Services Inc. All of the borings identified a 4- to 5-inch layer of asphalt followed by a layer of silty sand with gravel to varying depths, followed by bedrock or decomposing bedrock at depths of 7 to 30 feet below ground surface. The depth of bedrock increased to the west, where more weathered bedrock was identified at depths as shallow as 15 feet below grade.

D. PALEOENVIRONMENT

Due to the extended glacial period that left the Northeast blanketed in thick ice sheets for thousands of years, the area was not inhabited by humans until approximately 11,000 years ago. As temperatures increased, a variety of flora and fauna spread through the region. At this time, large open forests of spruce, fir, pine, and other tree species expanded across the Northeast, interspersed with open meadows and marshland. A wide variety of animal life could also be found, including large mammals such as mammoth, mastodon, caribou, musk ox, moose, as well as smaller mammals such as fox, beaver, hare, and many kinds of marine animals.

Climate changes continued to re-shape the environment of the Northeast as time progressed. As the climate grew increasingly warmer, jack pine, fir, spruce, and birch trees were replaced with hardwood forests of red and white pine, oak, and beech (Ritchie 1980). Furthermore, a decrease in glacial runoff resulted in the creation of small bodies of water such as lakes as well as, later on, low-lying marshes and swampy areas. By the time of the Early Archaic period, beginning approximately 10,000 BP, there was “considerable environmental diversity, with a mosaic of wetlands, oak stands, and a variety of other plant resources...[making it]...an attractive and hospitable quarter for both human and animal populations” (Cantwell and Wall 2001: 53). Warmer temperatures forced the herds of large mammals to travel north before eventually dying out. The new surroundings attracted other animals such as rabbit, turkey, waterfowl, bear, turtles, and white-tailed deer. The expanded water courses became home to a variety of marine life, including many varieties of fish, clams, oysters, scallops, seals, and porpoises, among others (ibid).

E. CURRENT CONDITIONS

Block 2244 is currently occupied by Baker Field and houses athletic facilities for Columbia University including soccer, field hockey, baseball, and softball fields, tennis courts, a boathouse and crew sheds, and a football stadium. The proposed Sports Center APE is located at the southeastern corner of the property, at the northwest corner of West 218th Street and Broadway (see Photographs 1 through 6). A small, single-story garage/maintenance building is located in the southeast corner of the APE (see Photograph 1). This building is at the base of a steep slope that

begins at approximately 54 feet above mean sea level near the existing field house and soccer field to 36 feet above mean sea level near the maintenance building.

The APE in this area is bordered to the west by the existing Chrystie Field House (built 1950) and to the north by the existing soccer field. A grassy slope that is planted with trees occupies the northeastern portion of the project site and additional trees are present at the bottom of the slope, lining the western side of the maintenance facility (see Photograph 6). Along Broadway, the slope is covered with trees and rip rap that continues beneath the bleachers lining the sides of the soccer field (see Photograph 2). A paved asphalt parking lot is located at the western end of the APE, adjacent to the existing Field House. Portions of this parking area are relatively level, suggesting that some grading was done in this area to create a flat parking surface (see Photograph 5). The APE is lined with chain link fencing along Broadway and 218th Street.

The Waterfront Access Area APE is at the southwestern portion of the property (see Photographs 7 through 14). A portion of the APE is within Columbia University property while the extreme southwestern portion includes part of City-owned Inwood Park. The western two thirds of the APE are relatively flat while the eastern third includes a steep hill that slopes up to the east towards the football stadium. The APE is at sea level at the western end and at approximately 40 feet above sea level at the top of the hill to the east.

The APE includes a small cove near the foot of 218th Street that is partially lined with large marble boulders. The remainder of the cove is lined with trees and brush. On the southern side of the cove, which includes the Inwood Park portion of the APE, a stone wall lines the northern side of the street. To the north of this wall, steep, low hills covered with trees and brush slope down to the water. The Columbia University Remmer Boat House and a guard house are located to the north of the APE and two metal crew sheds (identified on current surveys as “shipping containers”) are located within the APE. An asphalt drive leads down the hill from 218th Street to a paved parking area near the waterfront. An additional paved path extends from the parking area directly into the water so that boats may be launched. The remainder of the southwestern portion of the APE is covered with grassy lawns. Numerous utility vaults, fire hydrants, or other above-ground evidence of subsurface utilities are visible along the driveway that leads down the hill.

A. PRECONTACT CONTEXT

Archaeologists have divided the time between the arrival of the first humans in northeastern North America and the arrival of Europeans more than 10,000 years later into three periods: Paleo-Indian (11,000-10,000 BP), Archaic (10,000-2,700 BP), and Woodland (2,700 BP-AD 1500). These divisions are based on certain changes in environmental conditions, technological advancements, and cultural adaptations, which are observable in the archaeological record.

As mentioned in Chapter 2, human populations did not inhabit the Northeast until the glaciers retreated some 11,000 years ago. These new occupants included Native American populations referred to by archaeologists as Paleo-Indians, the forbearers of the Delaware—also called the Lenape Indians—who would inhabit the land in later years. Archaeological evidence suggests that the Paleo-Indians were likely highly mobile hunters and gatherers who utilized a distinct style of lithic technology, typified by fluted points. They appear to have lived in small groups of fewer than 50 individuals (Dincauze 2000) and did not maintain permanent campsites. In addition, most of the Paleo-Indian sites that have been investigated were located near water sources. Because of the close proximity of Paleo-Indian sites to the coastline, few have been preserved in the New York City area.

The Archaic period has been sub-divided into three chronological segments, based on trends identified in the archaeological record which reflect not only the ecological transformations that occurred during this period, but the cultural changes as well. These have been termed the Early Archaic (10,000–8,000 BP), the Middle Archaic (8,000–6,000 BP) and the Late Archaic (6,000–2,700 BP) (Cantwell and Wall 2001). The Late Archaic is sometimes further divided to include the Terminal Archaic (3,000-2,700 BP). The abundance of food resources which arose during this period allowed the Archaic Native Americans to occupy individual sites on a permanent or semi-permanent basis, unlike their nomadic Paleo-Indian predecessors. Fishing technology was developed during the Middle Archaic in response to an increasing dependence on the area's marine resources. Tools continued to be crafted in part from foreign lithic materials, indicating that there was consistent trade among Native American groups from various regions in North America throughout the Archaic period. Few Early and Middle Archaic archaeological sites have been identified in New York City, although numerous Late Archaic sites have been identified in the area.

The Woodland period represents a cultural revolution of sorts for the Northeast. During this time, Native Americans began to alter their way of life, focusing on a settled, agricultural lifestyle rather than one of nomadic hunting and gathering. Social rituals become visible in the archaeological record at this time. Composite tools, bows and arrows, domesticated dogs, and elaborately decorated pottery were introduced to Native American culture at this time and burial sites grew increasingly complex. Woodland-era sites across North America indicate that there was an overall shift toward full-time agriculture and permanently settled villages. Archaic sites in New York City, however, suggest that the Native Americans there continued to hunt and forage on a part-time basis. This was most likely due to the incredibly diverse environmental niches that could be found across the region throughout the Woodland period (Cantwell and Wall 2001, Grumet 1995).

The Woodland period ended with the arrival of the first Europeans in the early 1500s. The natives of northern Manhattan and the Bronx were known as the *Wiechquaesgeck* (Grumet 1981). In general, the *Wiechquaesgeck* lived in villages consisting of multiple longhouses and practiced some farming, but subsisted mostly on food resources obtained by hunting, gathering, and fishing (Grumet 1995).

B. PREVIOUSLY IDENTIFIED NATIVE AMERICAN ARCHAEOLOGICAL SITES

Native American activity has been documented in both the immediate vicinity of the project site as well as in the region surrounding it. Dozens of precontact archaeological sites have been identified within a one mile radius of Baker Field, included many in the immediate vicinity (see Table 1). Site file searches at LPC, OPRHP and NYSM indicate that almost 30 archaeological sites have been identified within one mile of the project site, most of which were associated with the precontact archaeological occupation of the area. Most of these sites were discovered in the early 20th century by avocational archaeologists and were reported by authors such as Arthur C. Parker (1922), Reginald P. Bolton (1922), and Alanson Skinner (1920). Unfortunately, few of these sites were well-documented and little is known about the precontact sites' exact locations, extent, or artifact collections. In fact, many of these reported sites

seem to overlap and several have been grouped together in Table 1, below. The majority of the sites included shell heaps, lithic remnants, or other traces of Native American occupation while others included village sites and human and canine burials.

Table 1
Previously Identified Precontact Archaeological Sites

Site Name	Site Number	Approximate Distance from APE	Time Period	Site Type and Information	Reference(s)
<i>Kappock</i>	NYSM: 709	.25 miles (1,320 feet)	Unknown	None given.	Unknown
West 218th Street	NYSM: 711	.1 miles (500 feet)	Unknown	None given.	Unknown
	NYSM: 2838	.13 miles (700 feet)	Precontact	Village	Parker (1922)
	NYSM: 2839	.875 miles (4,620 feet)	Precontact	Village	Parker (1922)
Tubby Hook	OPRHP: A061.01.0056 NYSM: 4051	.75 miles (4,000)	Woodland	Village, shell midden, and refuse (pottery and lithic); probably destroyed for road construction	Skinner (1919) Parker (1922)
Ship Canal Site	OPRHP: A061-01-0113 NYSM:4052	.1 miles (500 feet)	Woodland	Shell midden, destroyed during canal excavation	Parker (1922) Geismar (1984a)
Inwood Hill Park	OPRHP: A061-01-0121, A005-01-0534, A061-01-0114, A061-01-0119 NYSM: 4053, 4054, 8368	.25 miles (1,320 feet)	Woodland, 18th Century	Village, rock shelters, and shell midden with pottery and canine burials. Overlaps with Revolutionary War campgrounds.	Parker (1922)
	NYSM: 4055	.3 miles (1,600 feet)	Late Woodland	Surface find: clay pot recovered during grading 18" below surface	
	NYSM: 4056	.12 miles (1,000 feet)	Precontact	Trail around rock formations	Parker (1922)
	NYSM: 4068	1 mile (5,280 feet)	Precontact	Village Site	Parker (1922)
	NYSM: 4069	.875 miles (4,620 feet)	Precontact	Traces of Occupation	Parker (1922)
	NYSM: 5320	.875 miles (4,620 feet)	Precontact	Traces of Occupation	Parker (1922)
	NYSM: 5321	.875 miles (4,620 feet)	Precontact	Traces of Occupation	Parker (1922)
	NYSM: 5322	.5 miles (2,640 feet)	Precontact	Traces of Occupation	Parker (1922)
	NYSM: 8369	.125 miles (660 feet)	Precontact	Shell Midden	Parker (1922)
	NYSM: 8371	.5 miles (2,640 feet)	Precontact	Camp	Parker (1922)
<i>Nipnichsen</i>	NYSM: 8375	.625 miles (3,300 feet)	Late Woodland	<i>Wickquaesgeck</i> Village on Spuyten Duyvil Hill	Parker (1922)
213th Street Village	OPRHP: A061-01-0533	.01 to .12 miles (500 to 1,000 feet)	Possibly Archaic	Surface collections included ground stone tools.	Parker (1922)
	OPRHP: A005-01-0056	.75 miles (3,960 feet)	Unknown	Unknown	Bolton and Calver (1910)

Table 1 (continued)
Previously Identified Precontact Archaeological Sites

Site Name	Site Number	Approximate Distance from APE	Time Period	Site Type and Information	Reference(s)
	OPRHP: A005-01-0054	.5 miles (2,640 feet)	Unknown	Unknown	unknown
<i>Shorakapkokl</i> "Cold Spring"	OPRHP: A060-01-0532	.25 miles (1,320 feet)	Archaic- Woodland	Cave and Shell Midden	Chenoweth (1895) Skinner (1920)
Fort Tryon Park	OPRHP: A061-01- 0123	1 mile (5,280 feet)	Early Woodland	Shell midden	

Native Americans were drawn to the area because its natural setting provided them with ideal occupation sites that were close to fresh and salt water resources. Native Americans remained in the area throughout the Contact Period and into the Historic Period, as European settlers remained largely confined to lower Manhattan until the mid-19th century. The best-documented Native American archaeological sites in Northern Manhattan are to the west of the project site within modern Inwood Park, at nearby Tubby Hook, and in the vicinity of Cold Spring, along Spuyten Duyvil Creek to the west of the project site. These sites include shell middens and rock shelters as well as lithic debitage dating to the Late Archaic (Cantwell and Wall 2001). It has been suggested that while the areas of higher elevation to the west may have been preferable for more permanent settlements, the area surrounding Block 2244 would have been ideal for resource exploitation, hunting and gathering, and perhaps seasonal campsites (Geismar 1984a). Native American presence in the area continued until at least the mid-1830s, when Native Americans were reported to be living near the western end of the Harlem River Ship Canal, which at the time was still composed of vast tracts of marshland (Tieck 1868).

The name *Papperimemin*, meaning "the place where the stream is shut," was used to describe both Spuyten Duyvil Creek and the Marble Hill area of Manhattan, which was formerly part of the island but has since been separated from the island by the construction of the Harlem River Ship Canal (Grumet 1981). Marble Hill was also formerly known as *Saperewack*, possibly meaning "glistening place" (ibid). In addition, northern Manhattan was also referred to by Native Americans as *Muscoota* (Bolton 1922). Bolton (1922) also depicts a camp or Native American village or campground in the northern portion of the area now occupied by Block 2244, however this village is not described nor is there evidence of its presence included in any other documentary sources (Geismar 1984a).

Several authors imply that Native American trails were present within the project site or in its immediate vicinity. Grumet (1981) depicts a trail running through the project site along the western shore of northern Manhattan while Bolton (1922) identifies a trail running along the eastern side of the island in the vicinity of the project site. Bolton also indicates that a Native American camp was present within the northern portion of Block 2244, outside of the Baker Field project site.

In general, precontact sites in New York City have been identified on high, level ground in close proximity to fresh water and running water courses. The project site would have been ideal for Native American occupation, as evidenced by the large number of precontact archaeological sites identified within one mile of it.

A. THE EARLY HISTORY OF THE PROJECT SITE

The project site was included within a large land grant conveyed to Dutch settler Jan Nagel by Dutch Director-General William Kieft in 1677 (Bolton 1906). The land may previously have been granted to Johannes Vermilye, the brother in law of Nagel's wife, Rebecca Waldron (Geismar 1984a). Nagel co-purchased additional land with his friend, Jan Dyckman, a German settler (Riker 1904). After Nagel's death, Dyckman married his widow and took over Nagel's properties. After Jan's death, the property was divided among the Nagel and Dyckman children. Because no conveyance records for the property are on file until 1817, the ownership history of the project site during the 17th and 18th centuries is unclear. It is presumed, however, that the project site was used as farmland during this time.

B. TENSIONS AND CHANGE DURING THE REVOLUTIONARY WAR

The Dyckman family owned most of northern Manhattan by the beginning of the American Revolution in 1776. At that time, the project site appears to have been undeveloped farmland. The British Army took control of Kingsbridge in November 1776, and northern Manhattan was soon covered with British and Hessian military camps. The Prince Charles Redoubts were constructed at the top of Marble Hill, to the northeast of the project site, and Fort Washington was established at the northwestern tip of Manhattan on the Hudson River. Many maps of New York were produced during the war, many of which depict encampments, fortifications, and military roads in different configurations throughout northern Manhattan. Most maps depict camps in the vicinity of the project site, but only one, published in the 1861 *Manual of the Corporation of the City of New York* suggests that there may have been a camp on the project site itself.

A "pontoon bridge" was constructed west of the project site to cross the marshland and the Spuyten Duyvil Creek in 1779 (Bolton 1906). Two military roads were laid out through Block 2244 at this time; one originating at the Pontoon Bridge and running to the southeast to connect to the Kingsbridge Road and the other originating at the Kingsbridge Road in the vicinity of the Bolton mill and running to the southwest, crossing the Pontoon Bridge road, and continuing south (ibid). The pontoon bridge is depicted on the 1782 British Headquarters Map (Figure 4), which identifies it as "King's Bridge," not to be confused with the King's Bridge that connected Manhattan and the Bronx at Marble Hill and for which the neighborhood of Kingsbridge received its name.

Well-documented military hut camps were located on the Dyckman property to the southwest of the project site. Jan Dyckman's grandson, William, who owned the land at that time, sided with the Americans and fled Manhattan when the British gained control. William had been living in a home on the Harlem River in the vicinity of modern 210th Street, but upon his return found that the house had been burned by the British army. He then constructed a new home at 204th Street and Broadway, which is still standing and is now the Dyckman House museum.

C. QUARRYING AND RESIDENTIAL DEVELOPMENT IN THE NINETEENTH CENTURY

The 1815 Sackersdorff Farm map depicts the project site within a 29-acre parcel owned by Perkins Nicoll. A marble quarry is identified on the map in the vicinity of what is now the corner of West 218th Street and Broadway. Nicoll was involved with the establishment of both Marble Cemeteries in the East Village neighborhood of Manhattan and it is possible that the marble used to construct the vaults in these two locations came from his quarry. No city directories dating to the early 19th century suggest that Nichols lived in the vicinity of the quarry. The Sackersdorff map also lists George Washington Hall and John and Curtis Bolton as owners of the property. The chain of ownership at this time is slightly unclear as no conveyance records for Block 2244 were recorded until 1817.

Conveyances for the block (which was not lotted out until the mid-19th century) show that both Nichols and Hall and the Bolton Brothers owned land on the block during the first decades of the 19th century (see Appendix A). The Bolton land purchase may have only included the northern portion of the block in the vicinity of the former streams, which the Boltons enlarged to create a canal and stream for their marble cutting mill (Tieck 1968). The brothers maintained a house to the north of the mill, which can be seen on the 1836 Colton map (see Figure 5) but which was outside of the project site (ibid). The Boltons sold their interest in the property in 1823 to a man named Thomas Ogden, who two years later sold it to Nichols. Conveyances from 1817 and 1827 also show that members of the

Lambert family, which took over the Bolton quarry, were granted land in the area (Tieck 1968). A topographic map produced by Charles Henry Hall, to whom Nichols granted land in 1836 and 1840, depicts the “old mill” structure as well as two buildings to the south, immediately south of the mill stream. All three structures are also depicted on the 1860 topographical map (Figure 3) and appear to have been just north of Block 2244. Hall’s map identifies two marble quarries, one to the east of the mills and another in the vicinity of the Waterfront Access Area APE.

Hall’s map does not depict any additional structures in the vicinity of the APE, although only a portion of the APE is represented on the map. The 1836 Colton map depicts the project site in greater detail, showing the former Bolton mill buildings and home to the north of the project site, as well as several other structures in the immediate vicinity, as well as the marble quarry. An historic road is depicted running through Block 2244, leading from the Kingsbridge Road (now Broadway) south of the former canal to the southwest to a structure formerly located along Spuyten Duyvil Creek that is depicted as a lime kiln on the 1852 Dripps map of northern Manhattan. This road was built by the British army to lead to a pontoon bridge located on the shores of Spuyten Duyvil creek immediately west of the project site. Everything to the west of this road is depicted as marshland on the map. These same structures are depicted on the 1852 Dripps map, which refers to the marble quarries, lime kiln, and mill as “old,” indicating that they were no longer in use. An 1855 Coastal Survey appears to depict a structure at the top of the large hill located within Block 2244 at the time, but this is not depicted on any other historic maps of the area.

The 1860 topographic map (Figure 3) depicts a small road running in the vicinity of the road seen on earlier maps between the Bolton Mill and Spuyten Duyvil Creek, although on this map it is depicted as terminating at the quarry located within the Waterfront Access Area APE. The map, which was georeferenced to align with the current street grid (with a margin of error of approximately 50 feet), may indicate that the Kingsbridge Road, now in the vicinity of Broadway, was further to the west, indicating that a portion of a historic estate on the eastern side of Kingsbridge Road, within the historic property of Henry Post, may now be situated within the extreme eastern side of Block 2244. However, the boundaries of the estate as depicted on the 1860 topographic map show that it was north of the proposed Sports Center APE. No structures are depicted in either APE, although the stone wall that formerly separated the Dyckman estate from the Seaman/Drake property to the south may have been present within the Waterfront Access Area APE. However, it is also possible that the stone wall is now located beneath West 218th Street, as the boundary line between the two farms was later used as the center line for West 218th Street (New York Supplement and State Reporter 1914).

The gardener’s cottage of the Seaman/Drake estate was located immediately south of that wall on the western side of the property. Subsequent maps depict the cottage, which stood until the late 1910s, within the streetbed of West 218th Street. A small portion of that estate may be situated beneath a portion of the project site.

A similar, but less detailed topographic map of northern Manhattan was published in 1870. The map depicts the former quarries at both the southwestern and southeastern corners of Block 2244 and depicts a small path that connected them. The western quarry was depicted as a pond with a small channel that connected it to Spuyten Duyvil Creek. A small pond also appears to be depicted at the eastern quarry, near the northwest corner of Broadway and West 218th Street (this pond is not depicted on any other historic maps). By that time, the widening and realignment of Kingsbridge Road to conform to modern Broadway had been proposed, as depicted on the map, and as a result, the former structure depicted on the eastern side of Kingsbridge Road was now within the streetbed.

The 1870 topographic map does not depict any structures within either APE; however it was around that time Block 2244 was first developed with structures. Isaac Dyckman, whose family had owned huge tracts of land covering most of northern Manhattan since the 17th century, expanded on his family’s land holdings by purchasing the block in 1843. Isaac shared the farm with his brother, Michael, and the two bachelors resided for many years in the home formerly occupied by the Bolton brothers to the north of the project site (Tieck 1968). The men lived with their nephew, James Frederick Dyckman Smith, who had come to live with them in 1820 when he was a young boy. Michael Dyckman died in 1854 and Isaac in 1868. Neither man had any children, so the Dyckman estate was left to Smith, who as a provision of his inheritance as well as a tribute to his uncles changed his name to Isaac Michael Dyckman.

In 1867, the year before his uncle Isaac’s death, I.M. Dyckman married his distant cousin, Fannie Blackwell Brown, who was almost 20 years his junior. As a wedding present, he constructed a manor house and country estate on Block 2244. The family moved there after the mansion was completed, and I.M. Dyckman began to sell off the former Dyckman estate, as it had become more valuable as real estate than as farmland and thousands of lots were

sold between 1868 and 1871 (*New York Times* 1904). The 1867 Dripps map shows I. Dyckman as the owner of the 400 acre farm which at the time included the majority of Marble Hill to the north, but no structures are depicted within the boundaries of modern Block 2244. I.M. Dyckman owned the property with his wife and two daughters, Mary Alice and Fanny Fredericka, until his death in 1899. It is not clear if they lived on this property year-round, however, as they also owned a home at 15 East 71st Street in Manhattan, where Isaac M. Dyckman died and where his wife was listed as a resident until her death in 1914. The family's move may have also been connected to the construction of the Harlem River Ship Canal in the late-19th century, which involved significant blasting to get through the rock. The government leased land on the western side of Block 2244 and used it as a dumping ground for the stone and debris excavated during the canal's construction (Smith 1938). While the government was originally going to remove the debris, in 1900 it gave \$75,000 to Dyckman's estate to rid itself of this obligation and to terminate the lease (War Department 1901). As a result, the rock and debris piles were visible on the project site for decades, even after Columbia constructed a football field in the area.

Census records from both enumerations of the 1870 census¹ list the family as residents of the Twelfth Ward of Manhattan (which included all property north of 86th Street) although a specific address is not given for the family nor are individual households distinguished, so it is difficult to determine how many people lived on the property at the time. The two enumerations include Isaac Michael, Fanny, and Mary Alice Dyckman, as part of the family as well as three Irish domestic servants, Mary and Bridget O'Brien and Margaret Henry. The first enumeration lists another member of the family, Mary Ann Dyckman, aged 28 while the second enumeration includes a 60-year old woman named Mary Dyckman. It is unclear which version includes the correct information. I.M. Dyckman is listed as a farmer or retired farmer in these censuses. In 1880, the household included Isaac M. and Fanny Dyckman, their two daughters, and five domestic servants whose occupations were listed as governess, servant, and laborer. The 1890 census was destroyed in a fire, and by 1900, after Isaac Michael's death, the family seems to have permanently moved to their home at 15 East 71st Street.

I.M. Dyckman's estate is clearly depicted for the first time on the 1879 Bromley atlas of New York City (see Figure 6). That map depicts the manor house in the vicinity of modern 218th Street, approximately 400 feet west of Broadway. To the northwest was a greenhouse and a lodge; to the southeast sheds and barns, and to the east the ice pond (building labels for these structures are included in a 1905 topographic map republished in Geismar 1984a). The manor house, greenhouse, and lodge were all depicted in an undated lithograph (see Figure 7a). The map shows that while the buildings of the Dyckman Estate were connected with a series of small roads and driveways, the old Bolton Mill Road was still present. One of the newly constructed roads passed over the ice pond, where there was a bridge (see Figure 7b). In addition, a 25-foot deep well was present on the I.M. Dyckman estate "just north of the porch at the west end of the house," which is now in the location of the existing field house and outside of the APE (Smith 1938: 150). The well was likely installed around the time of the home's construction and the house was supplied with Croton water by at least 1898 (*ibid*). No information is known about the location of privies on this property, although Tieck (1968) describes the 5-foot square privy of the former Bolton house to the north as being approximately 75 feet from the house, having multiple commodes (including a smaller one for children) and a cupola on top for ventilation. It is possible that similar facilities were constructed on the Dyckman estate.

D. TWENTIETH CENTURY: THE CONSTRUCTION OF BAKER FIELD

Few changes occurred within the portion of the Dyckman Estate currently making up Block 2244 until the end of the 19th century. By 1900, the Dyckman Estate had been divided into large lots, possibly in anticipation of further subdivision. The majority of Block 2244 was sold from I.M. Dyckman's estate to various individuals and real estate companies and the various lots changes hands several times. An amusement park similar to that at Coney Island was planned on the property as early as 1904 and the 1911 Bromley atlas identifies the property as the "Wonderland Park" (*New York Times* 1904). However, this park was never constructed nor was the land developed in any way.

In 1922, the land was for sale again and Columbia University, which had been planning to construct a stadium closer to its main campus, purchased the acreage (*New York Times* 1921). The land was purchased through a gift from an

¹ The 1870 census was taken a second time in many locations, including New York City after complaints were made that urban populations were under-represented in the census. The first enumeration was completed in July 1870 and the second in January 1871.

anonymous donor, later revealed to be George F. Baker, the Chairman of the Board of the First National Bank, in whose honor Baker Field was named. The initial purchase did not include Lots 35, 105, and 183, located on the western side of Broadway, however those were added to the property in 1924, after another donation from Baker. One of the first developments on the new field was the construction of a boathouse in the Waterfront Access Area APE, which was constructed near a “protected cove” at that location, as well as a sea wall (*New York Times* 1922a: 10). The first boat house was a steel structure on a permanent foundation that was funded by a gift from the Class of 1897 in honor of their 25th anniversary. As a result, the structure was referred to as the “97 Boat House” (Columbia University 1922).

In preparation for the construction of a football field, substantial grading was required across the site and a small hill in the vicinity of the manor house—where Columbia’s football team was living during training—was graded by 3 feet and the earth used to fill in areas of lower elevation on other parts of the site (*New York Times* 1922b). However, by the end of 1922, not enough grading had been completed across the site for the field to be ready for football season (*New York Times* 1922c). Perhaps the biggest impediment to the stadium’s construction was the 30,000 cubic yards of loose stone piled along the shores of the Block (*New York Times* 1925).

Between the 1920s and the late 1940s, the structures of the former I.M. Dyckman estate, including the manor house and several of its outbuildings, remained standing and were used by Columbia University for various purposes. These structures are depicted alongside newly constructed buildings on a plan of Baker Field produced in 1934, and buildings that correspond with structures on earlier historic maps are identified as a tool shed, caretaker’s house, and tractor shed (see Figure 8). That map also depicts the old quarry that covered most of the proposed Sports Center APE. In the vicinity of the Waterfront Access Area APE, the existing Remmer (formerly Gould) Boathouse and a rowing tank had been constructed to the north and two boathouses were within the APE: the 97 Boathouse and an identical one immediately to the south. In addition, the map depicts the driveway leading from West 218th Street to the Boat House, as well, and indicates that the hill was between 25 and 30 feet above sea level at its peak and at sea level at the base. The map also includes topographic data for the proposed Sports Center APE. The northwestern portion of the area east of the Manor House was at 50 feet above mean sea level, although at the beginning of the old quarry, the grade dropped steeply to 30 feet at the corner of West 218th Street and Broadway. This steep slope mirrors that seen in this area today. Two driveways were present in this APE at the time, one in the location of the existing driveway and another running parallel to Broadway on the eastern side of the area. It is possible that the driveways were paved with cinder at this time (Worden 1934). In addition, a flagpole was located to the east of the Manor House and a portion of the running track also entered the project site in the vicinity of the existing parking lot.

In 1934, during improvements for the newly created Inwood Park, southwest of the project site, the existing masonry wall lining the southwestern portion of the Waterfront Access Area APE was constructed. A plan produced by the New York City Department of Parks depicts the proposed line of West 218th Street west of Indian Road and identifies the area to the west, where the existing masonry wall currently makes a half-moon-shaped arc, as a water-filled “void.” Before the land was filled in and the new pathway was created, the cove near the foot of West 218th Street was much larger. An historic photograph taken by P.L. Sperr in 1935 depicts the area at the time as a gently sloping sandy beach lined with small boulders and chunks of marble.¹ Another photograph taken by Sperr four years later depicts more of the area, showing it as a gently sloping grassy hill planted with trees and brush.² Therefore, the steep slope seen in the area today appears to be artificial and the area in the southwestern portion of the APE may be partially or entirely made up of landfill from the 1930s. Both photographs also clearly depict the brick sewer outlet of the sewer installed within West 218th Street in 1917. Recent geotechnical borings performed within this APE indicate that a level of fill measuring between 7 and 30 feet in depth is present in this area (Langan 2009). As-built sewer maps from the New York City Department of Environmental Protection (DEP) show that in 1940 a sewer was installed by the Parks Department beneath the half-moon shaped curve that emptied out into the cove.

The existing Chrystie Field House was constructed in 1950 and was expanded to the west in 1955. The Dyckman Manor House was demolished for the construction of the field house. The 1951 Sanborn map is the first to depict the

¹ This picture can be viewed at: <http://digitalgallery.nypl.org/nypldigital/id?734342F>

² This picture can be viewed at: <http://digitalgallery.nypl.org/nypldigital/id?734327F>

new field house. That map does not depict any other structures in the vicinity of the proposed Sports Center APE and it continues to show the Gould, 97, and unnamed boathouses in the vicinity of the Waterfront Access Area APE. The original bleachers that surrounded the football field at that time may also have occupied a small portion of the APE.

No changes to either APE appear on Sanborn maps until 1989, when the existing maintenance building (built 1987) at the corner of West 218th Street and Broadway was depicted for the first time. Current Sanborn maps (Figure 2) depict only a single boathouse in the vicinity of the Waterfront Access Area, but its placement is not consistent with the two small boathouses currently on the site (see Photographs 7 through 12). As seen on an existing conditions map prepared by the University in 1984, prior to this building's construction, this area was occupied by a sloping lawn, a small concrete shed that appears to have covered an abandoned well, and an asphalt driveway. Some grading appears to have been completed in preparation for the construction of the maintenance building and the wide paved driveway adjacent to it. A baseball field formerly stood where the soccer field currently stands.

Columbia University provided AKRF with plans (dated 1999) for the removal of the 97 Boathouse and its adjacent structure, which had fallen into disrepair, and the construction of the existing guard house. The plans also note that asphalt within the APE in the vicinity of the existing paved area and depict a temporary structure formerly adjacent to the existing boathouse immediately east of the asphalt ramp leading to the water. At least three underground storage tanks were located to the north of the former boathouses as were two 275-gallon above ground storage tanks to the east of the southern boathouse (TRC Environmental Corporation 2000). These tanks stored petroleum and gasoline used to fuel watercraft and fuel pipes connected the tanks to fueling areas. The tanks were removed in 1999 and contaminated soil removed from an extensive area surrounding the former boathouses. Contaminated soils were removed until clean soil was reached, which resulted in the removal of .5 to 6 feet of soils below grade in various areas, depending on the level of contamination, which was worst below the '97 Boathouse. In addition, a clay pipe that may have served as a drain for the southern boathouse was also encountered during soil removal and 100 feet of a metal gas pipeline were removed (ibid).

A. SENSITIVITY ASSESSMENT

As part of the background research for this Phase 1A Archaeological Documentary Study, various primary and secondary resources were analyzed, including historic maps and atlases, historic photographs and lithographs, newspaper articles, and local histories. The information provided by these sources was analyzed to reach the following conclusions.

DISTURBANCE ASSESSMENT

There are two major phases of disturbance that impacted the project site during the historic period: marble quarrying in the early 19th century and the construction of Baker Field in the early 20th century. Quarries were identified in both locations and likely explain the steep slopes that are located in either corner of the site. The western quarry, in the vicinity of the Waterfront Access Area APE, was later converted into an ice pond fed by both natural springs and Croton Water. This pond appears to have been filled in the early 20th century in conjunction with the construction of Baker Field. Quarrying would have required intensive blasting and excavation to extract marble from each APE.

Subsequently, the conversion of the former Dyckman Estate into Baker Field required major landscape transformation. Substantial amounts of grading occurred across the site to even out the terrain, resulting in the cutting down of hills and using the sediments to fill in low-lying areas. Throughout the 20th century, buildings were constructed, utilities installed, and driveways graded and paved throughout both APES. In addition, the extensive underground storage tanks, pipeline, and contaminated soil removal in the Waterfront Access Area would have generated substantial disturbance to at least the top 5 feet of a large portion of that APE.

PRECONTACT SENSITIVITY ASSESSMENT

The precontact sensitivity of project sites in New York City is generally evaluated by their proximity to level slopes, water courses, well-drained soils, and previously identified precontact archaeological sites. The project site's original topographical setting would have made it a likely location for Native American campsites or resource exploitation locations, if not for a more permanent village location. The site was within close proximity to both fresh and saltwater resources and was surrounded by almost 30 previously documented precontact sites. Therefore, it is highly likely that there would have been Native American activity on the project site throughout the precontact period.

However, precontact archaeological sites are generally found at relatively shallow depths, usually within 5 feet of the original ground surface. The extensive disturbance throughout the project site caused by marble quarrying in the 19th century and the subsequent disturbance associated with the construction of Baker Field and Inwood Park in the early 20th century (grading, landfilling, building construction, installation of utilities and underground storage tanks, and the removal of contaminated soils) would have caused substantial disturbance to the original ground surface and the area just below it. Therefore, as a result of the disturbance throughout the project site, both the Waterfront Access Area and proposed Sports Center APEs are determined to have low sensitivity for precontact archaeological resources.

HISTORIC SENSITIVITY ASSESSMENT

The project site is located in an area that was a hub of activity during the Revolutionary War and it is possible that British or Hessian camps were stationed there in the late 18th century. During the war, the British army constructed military roads across the area including one that connected to a pontoon bridge formerly located just west of the project site. After the end of the war, the Kingsbridge portion of Manhattan became known for its marble and marble quarries were established throughout the area in the early 19th century. Marble was quarried within the project site in both APEs.

In the 1840s, the property was purchased by the Dyckman family, which owned most of northern Manhattan. However, the Dyckmans used the area as farmland and did not develop it for residential use until approximately 1868. Isaac M. Dyckman lived on the property with his family until his death in 1899. After construction began on the Harlem River Ship Canal to the north of Block 2244, the Dyckmans appear to have been living on the estate only

part time. No historic maps depict any structures associated with the Dyckman estate in either APE, although the Manor House was approximately 75 feet west of the proposed Sports Center APE. Although the house was supplied with Croton Water by the end of the 19th century, it was not connected to municipal sewer networks during the time that the Dyckman family resided there. While a sewer was present in West 218th Street that emptied into the Spuyten Duyvil Creek, it is not clear if this was used for household waste or just for stormwater. Therefore, the Dyckman family would have used privies for sanitation and waste disposal and cisterns and wells for water collection. The manor house's well has been documented on the western side of the home, outside the APE, and cisterns would have been located in close proximity to the home as well. Therefore, it is not likely that any wells or cisterns associated with the Dyckman's occupation of the site would be located in either APE. Privies would have been located at even greater distances from the house, however probably no more than 100 feet, so as to remain convenient. The western portion of the proposed Sports Center APE is located within 100 feet of the former manor house. However, the driveway leading from the main road (now Broadway) to the estate was located through this area. It is less likely that privies would have been located near the driveway or close to the main road for the sake of modesty and privacy. In addition, the undated lithograph of the estate (Figure 7B) appears to depict the Manor House from a point within the APE, and it does not depict any small structures that could represent an outhouse to the east of the house.

Therefore, it does not appear likely that deep shaft features associated with the Dyckman estate would have been located within either the Waterfront Access Area or proposed Sports Center APEs. While historic trash deposits similar to the one identified in the northern portion of the block during monitoring in 1986 might have been present at one time, the amount of disturbance in both APEs suggests that the possibility of finding intact, undisturbed deposits is low. Therefore, the project site is determined to have low sensitivity for historic period archaeological resources.

B. RECOMMENDATIONS

As a result of the extensive disturbance caused by marble quarrying and the construction of Baker Field, the project site is determined to have low sensitivity for both precontact and historic period archaeological resources. Therefore, no additional work is proposed for the project site.

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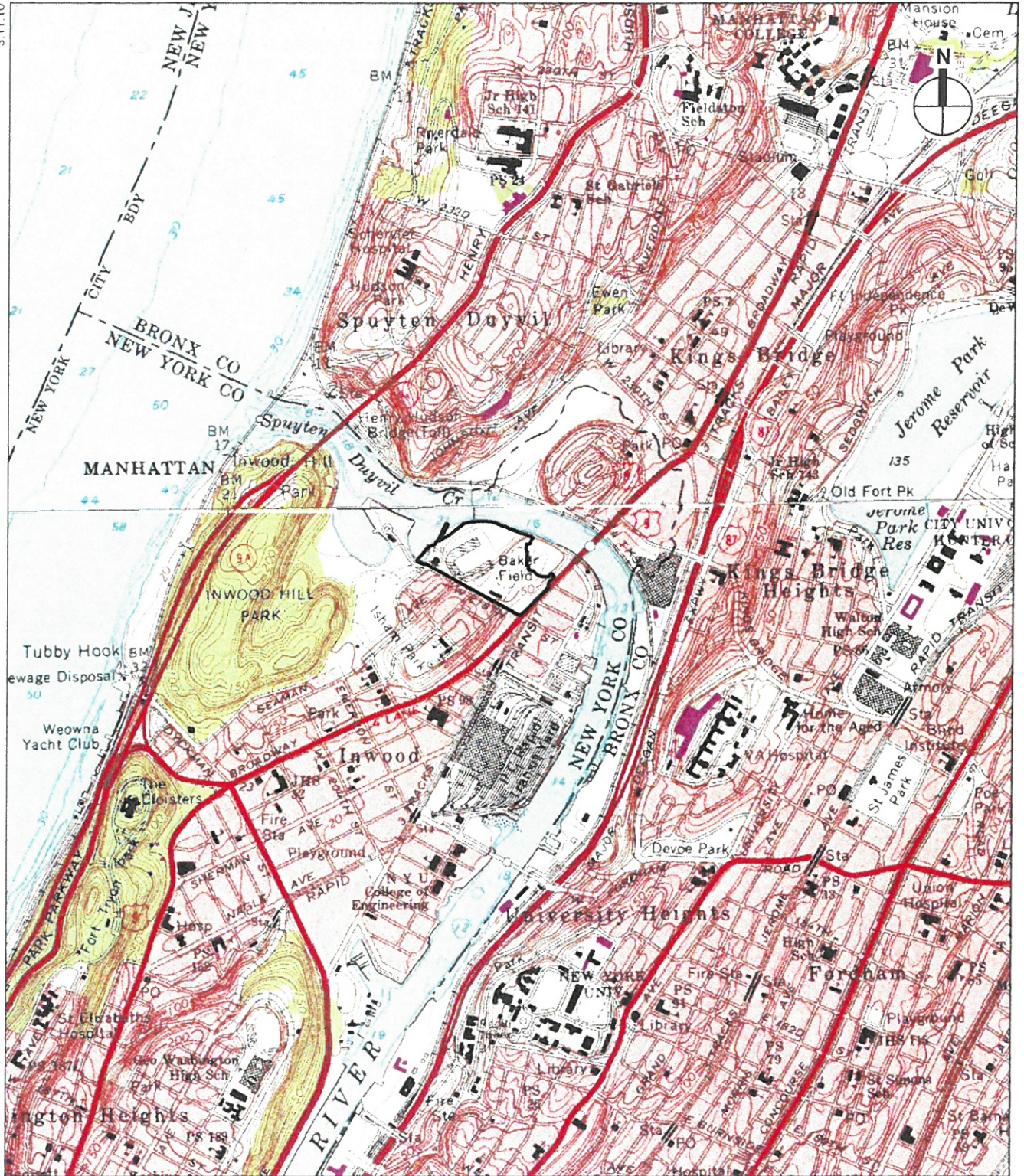
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Figures



3.11.10

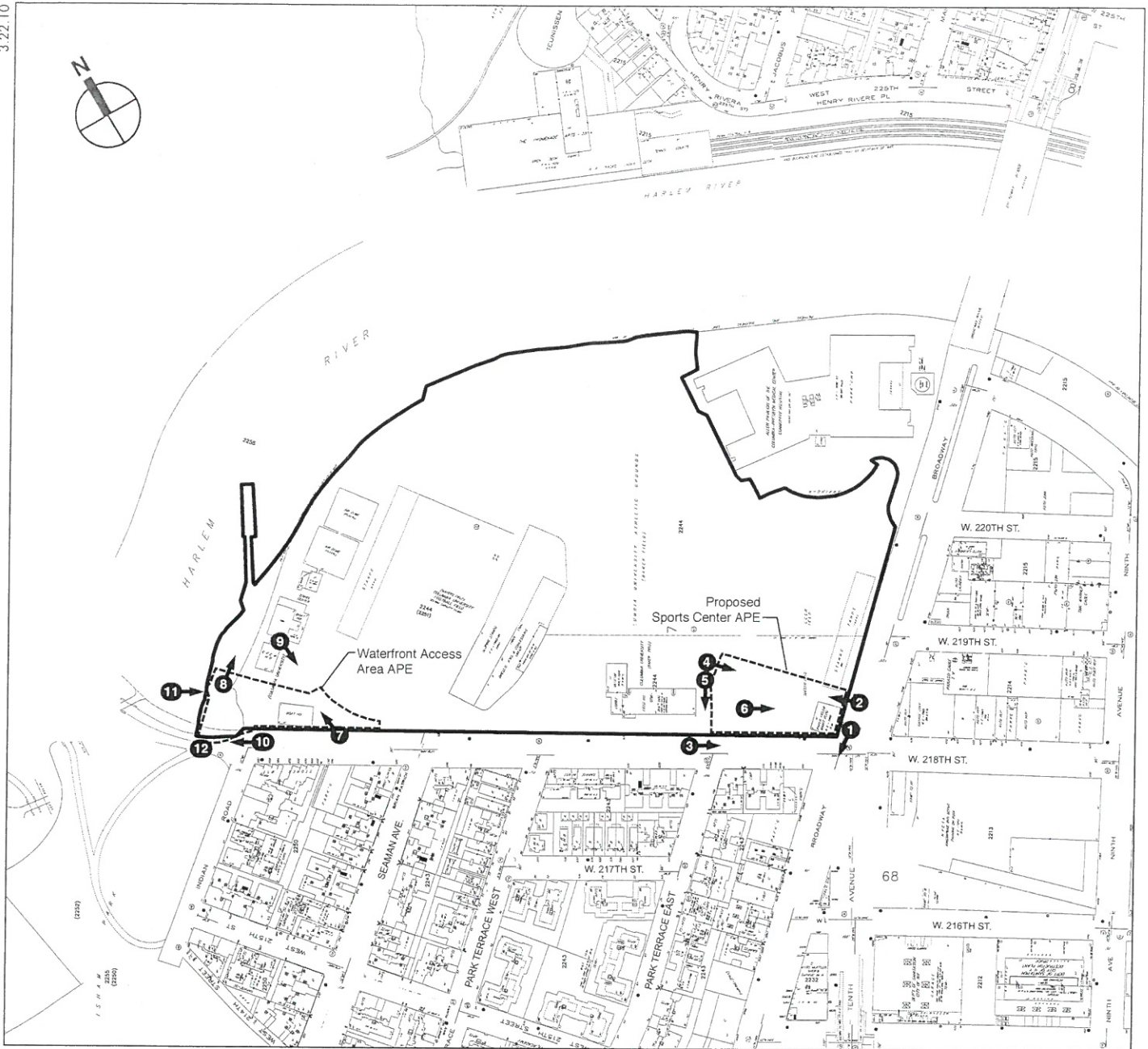




Block 2244

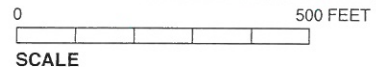
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SCALE

USGS Map, Central Park Quadrangle
Figure 1

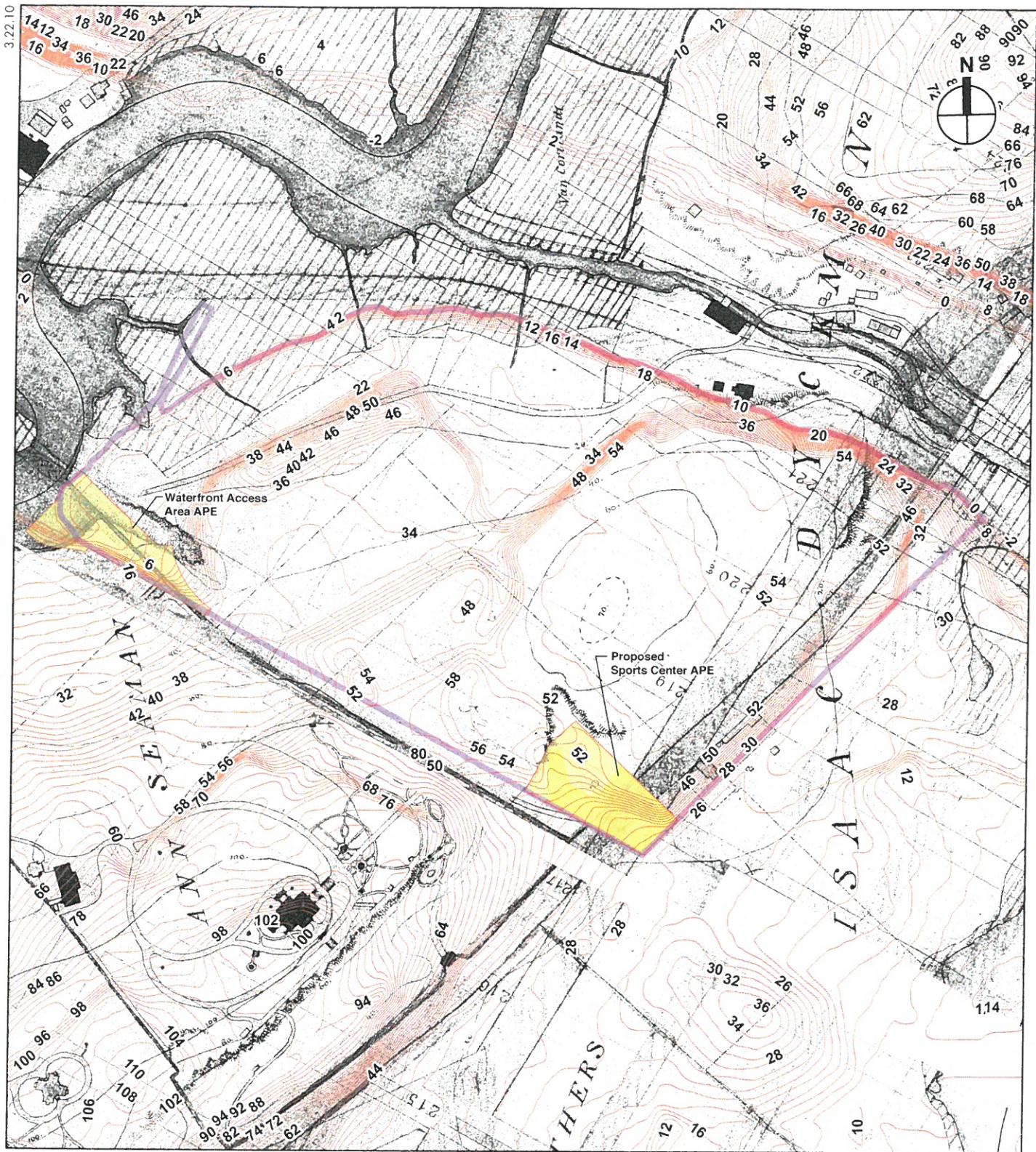




-  Block 2244, Lot 1
-  Photograph Number and Viewing Angle

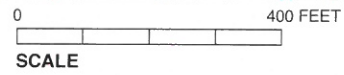






- Block 2244 Boundary
- 2 Foot Contours (2004)
- Area of Potential Effect (APE)

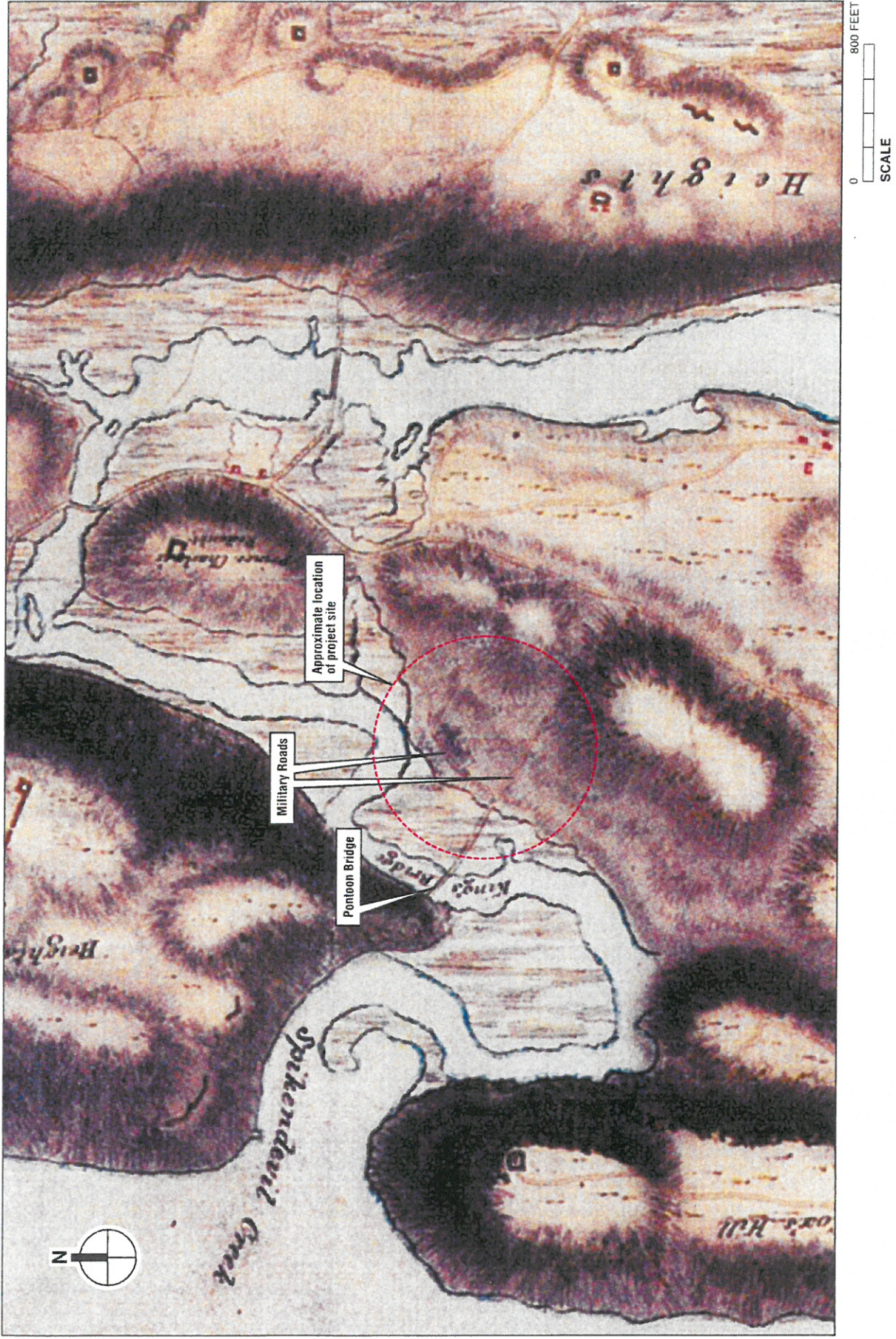
NOTE: Map georeferenced to align with the current street grid, the streets depicted in the map above represent proposed street lines and don't correspond to streets as mapped today. Margin of error is plus or minus 50 feet.



Commissioner of
Washington Heights Map, 1860
Figure 3

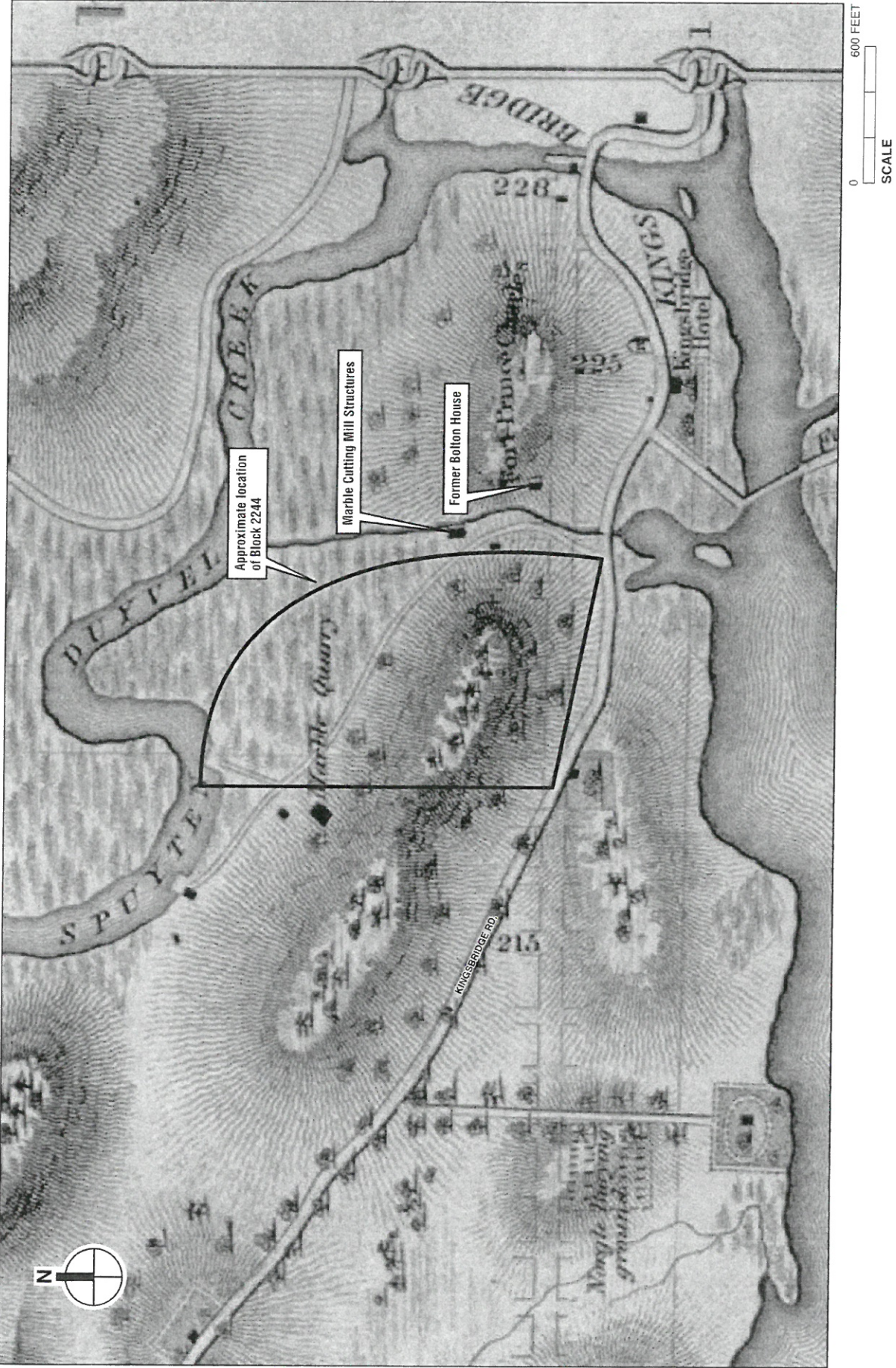


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British Headquarters Map, 1782
Figure 4

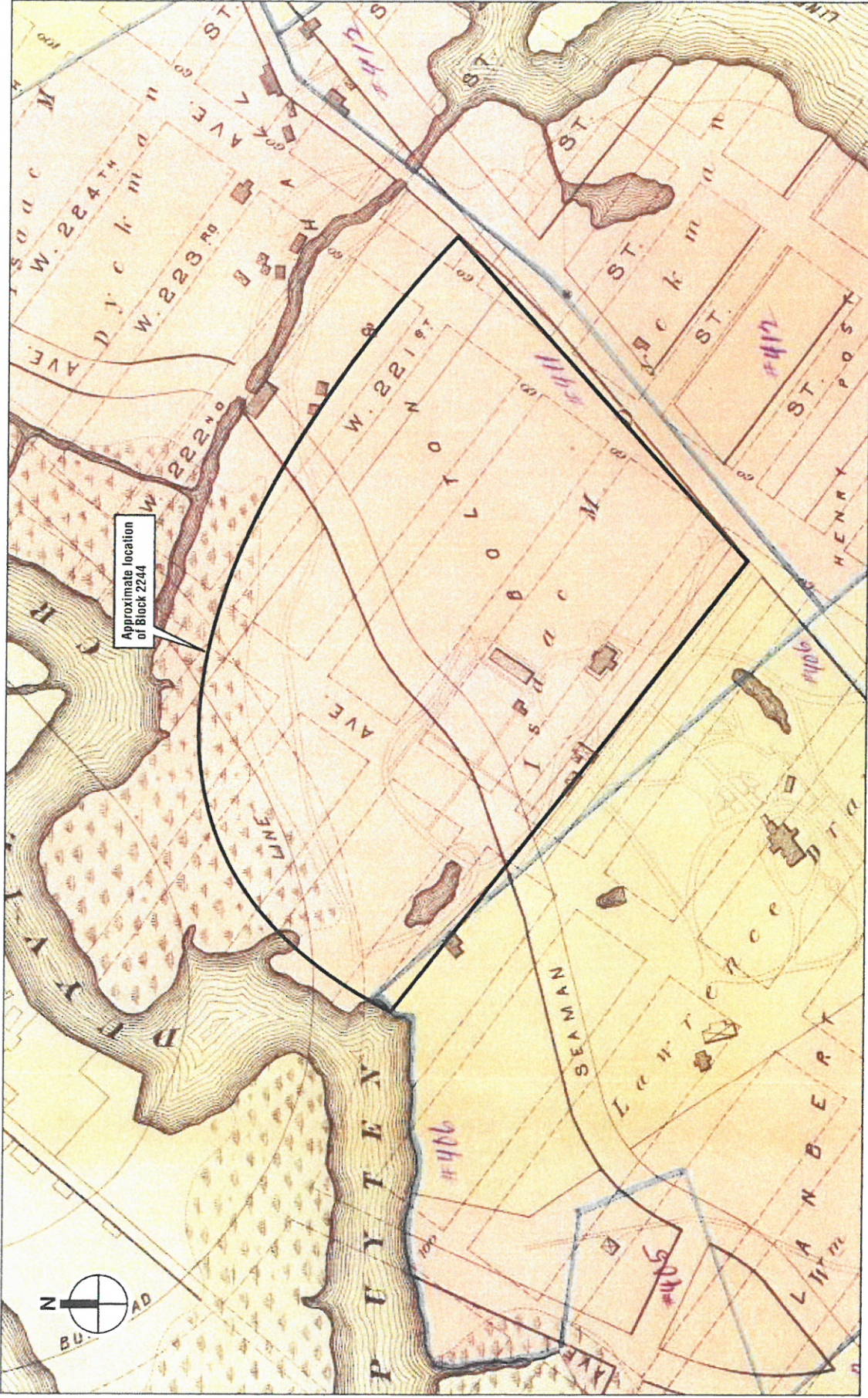




J.H. Colton Map, 1836
Figure 5



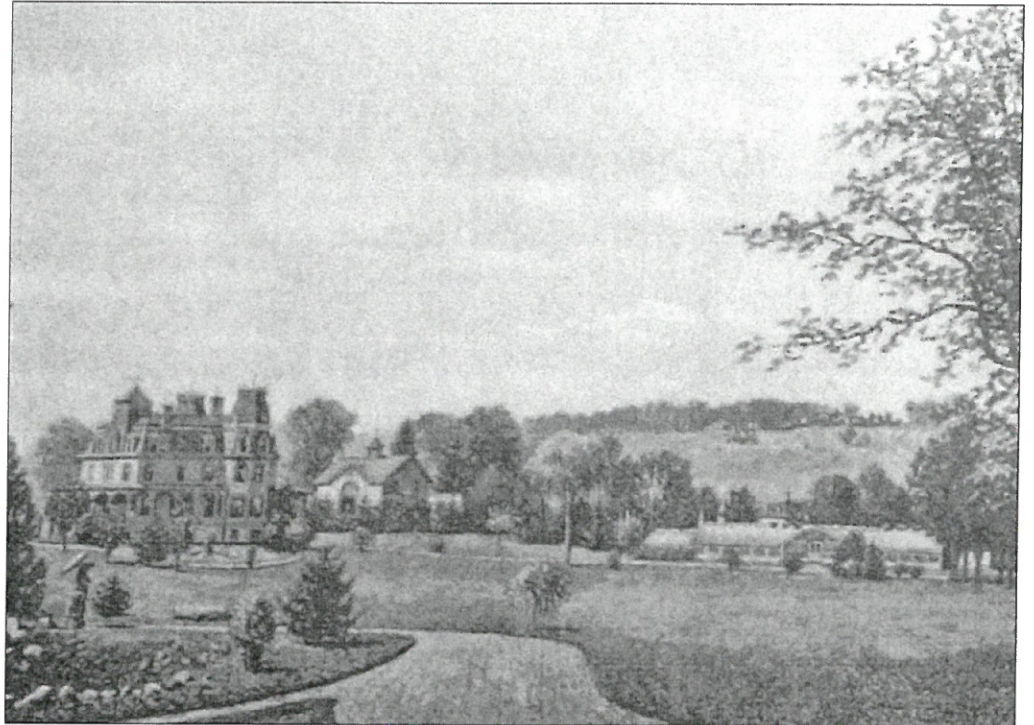
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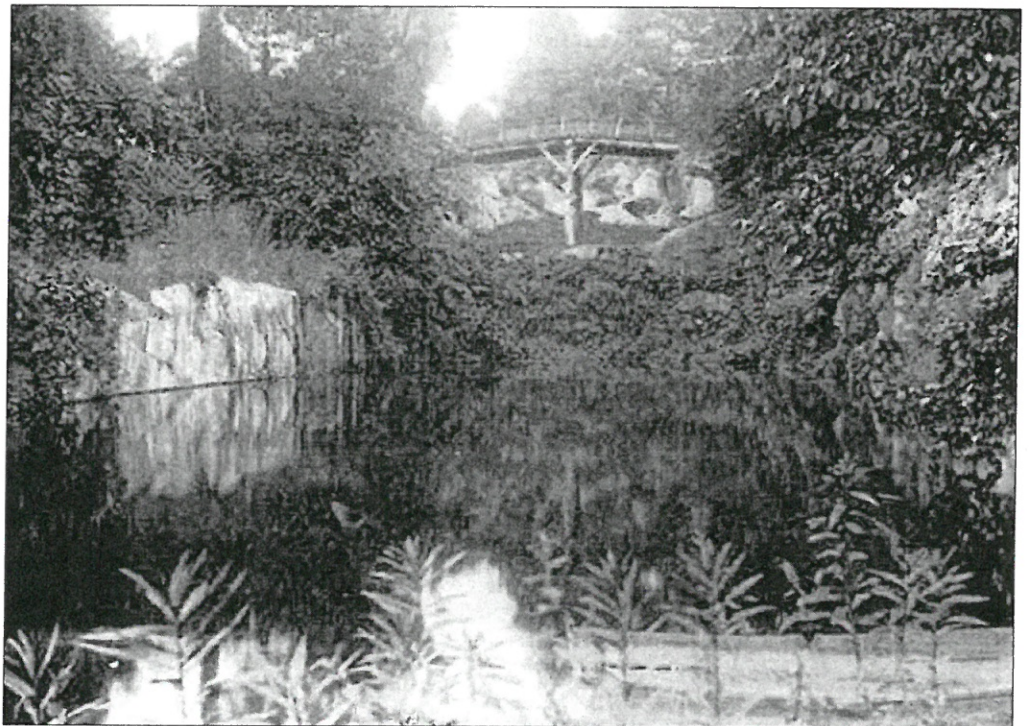
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G.W. Bromley Atlas, 1879
Figure 6



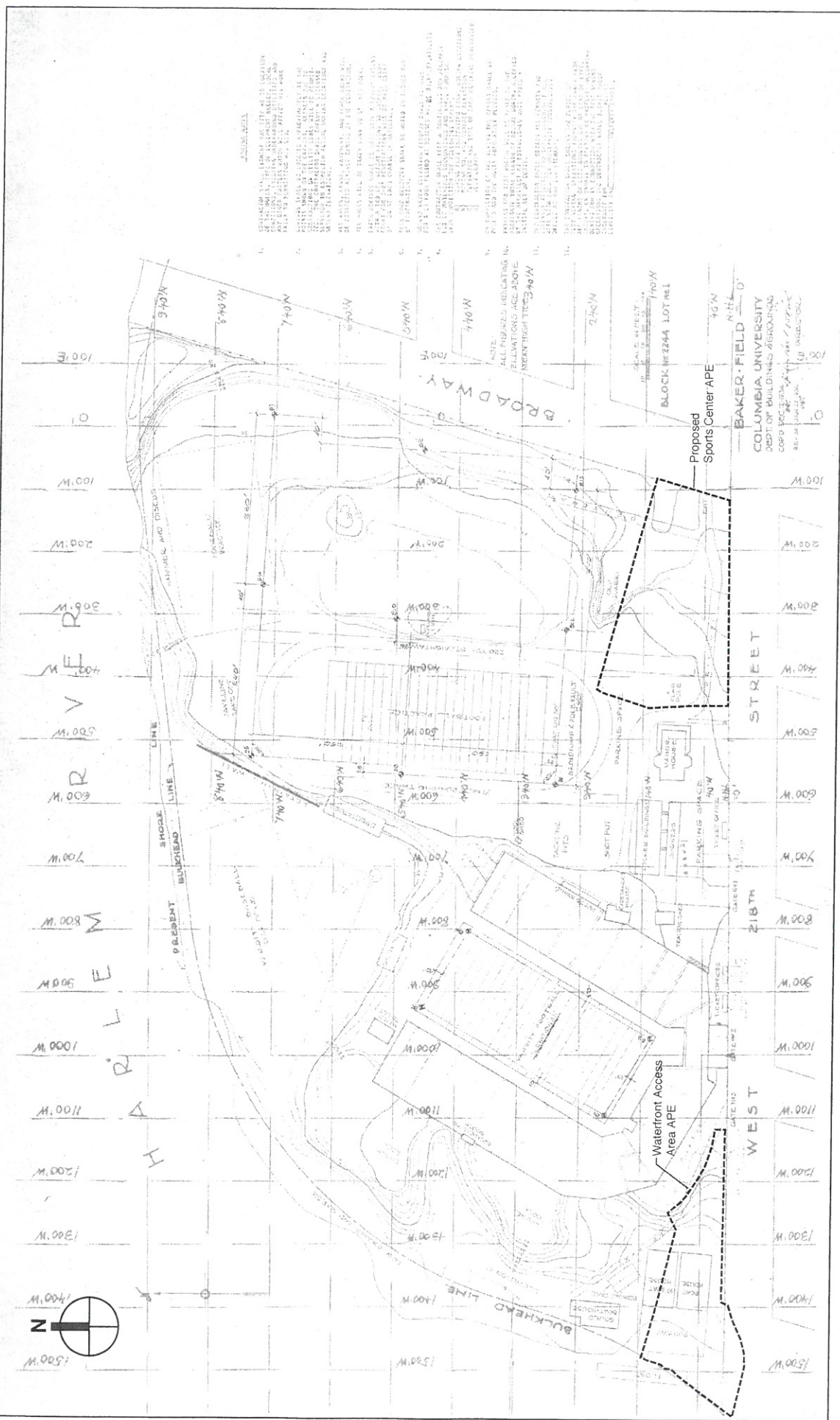


Undated lithograph of Dyckman Estate (from Tieck 1968) **A**



Dyckman ice pond and bridge, 1898 (from Smith 1938) **B**





Map of Baker Field, 1934
Figure 8



Photographs



3.19.10



Looking south down Broadway at 1-story maintenance building at corner of West 218th Street

1



Looking west from West 218th Street at rip-rap covered hill between maintenance building and soccer field bleachers (at right)

2



3.19.10



Looking east down West 218th Street towards Broadway, showing parking area and the maintenance building at the bottom of the slope

3



Top of the hill immediately south of soccer field; looking southeast

4





Flat parking area immediately east of the existing Field House 5



Grassy slope within proposed Sports Center APE, looking east towards maintenance building 6





7
Looking west down the paved driveway leading from West 218th Street to the Boat House. Workshop shed and Guard House are at the bottom of the hill



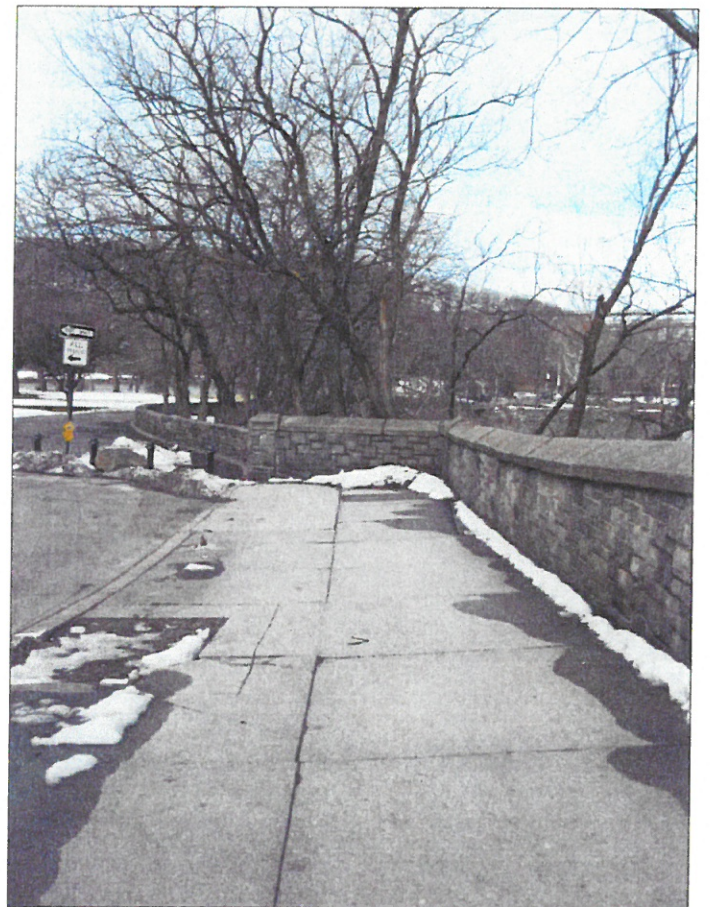
8
Marble boulders lining the shore of the Spuyten Duyvil Creek within the Waterfront Access Area APE



3.19.10



Looking southeast at the flat, grassy area to the north and east of the cove **9**



Looking west down West 218th Street at the stone wall lining the southern side of the APE **10**





Looking east at the waterfront and cove 11



Northern side of cove at foot of West 218th Street, looking north from the southern side of the cove. Note marble boulders lining shore and the steep slope in the foreground 12



Appendices



Appendix A:

Conveyance Records for Block 2244

Date	Grantor	Grantee	Liber	Page	Remarks
1654 - 1816	No Instruments of Record				
2/5/1817	Henry Post	George Washington Hall and John Curtis Bolton	120	181	Not lotted
8/5/1817	Perkins and Bridget Nichols	David R. Lambert	122	462	Not lotted
12/26/1818	George Washington Hall	John Curtis Bolton	145	15	Not lotted, 1/3 interest
12/26/1818	George Washington Hall	John Curtis Bolton	145	21	Not lotted
6/3/1823	Garrit Myer, Eve Dyckman, and Phebe Myer	John Bolton, George Washington Hall	167	75	Not lotted
8/7/1823	John Bolton	Thomas L. Ogden	169	125	Not lotted
10/14/1825	Thomas and Martha Ogden	Perkins Nichols	193	456	Not lotted
10/27/1827	Andrew & Elizabeth Garr	Henry Lambert	227	24	Not lotted
6/30/1836	Perkins Nichols	Charles Hall	362	286	Not lotted
8/1/1836	Charles Hall	Perkins Nichols	362	403	Not lotted
9/11/1840	Perkins Nichols	Charles Henry Hall	407	474	Not lotted
10/30/1840	David P. Hall	Charles Mullett Hall	409	594	Not lotted
5/22/1841	Philo T. Ruggles (Master in Chancery) and Charles H. Hall, defendant	Charles Mullett Hall	416	310	Not lotted
8/1/1842	Charles Mullett Hall	William S. McCoun	428	267	Not lotted
4/21/1843	Jacob Post	Dorothy Post	435	243	Not lotted
10/19/1843	Jacob Acker (Sheriff)	George Hawes	439	126	Not lotted, certificate
10/19/1843	George Hawes-Haues	Isaac Adriance	439	126	Not lotted
10/21/1843	Isaac Adriance	Isaac M. Dyckman	440	168	Not lotted
10/21/1843	William S. McCoun	Isaac M. Dyckman	440	171	Not lotted, 1/2 interest
10/21/1843	Jacob Acker (Sheriff)	Isaac Adriance	440	174	Not lotted
2/23/1844	James Huggins (Master in Chancery)	Julia Maria Lambert	442	289	Not lotted
7/31/1845	Jacob Acker/Charles Henry Hall	Certificate of Sale	465	304	Not lotted
7/31/1845	George Haws and Jacob Acker/Charles Henry Hall	Isaac Adriance	465	306	Not lotted
1846-1866	No Instruments of Record				
10/12/1867	Isaac Dyckman	James FD Smith	1022	429	Not lotted
11/3/1870	William D. Smith	Isaac Dyckman	1165	182	Not lotted
12/4/1873	John H. Dyckman (Mary A), Emiline Crane (Benjamin F), Maria Underhill, Priscilla Smith (Caleb, Sarah L. Sarah M.), James C. Courter (Elizabeth A), and Hannah Fulton (Samuel)	Isaac Michael Dyckman	1268	498	Not lotted
1874 - 1891	No Instruments of Record				
5/31/1892	Isaac M. (Fannie B) Dyckman	Alexander T. VanNest	2	428	Lot 220
10/16/1896	Alex Van Next	Third Avenue Railroad Company	8	96	Not lotted
7/17/1901	Alex VanNest	American Real Estate Company	17	31	Lot 220
10/2/1901	Supreme Court - in the matter of West 218th St from Seaman Ave to Ninth Ave	Order Appointing commissioners entered 9/3/1901	filed	140	

Columbia Baker Field —Phase 1A Archaeological Documentary Study

Date	Grantor	Grantee	Liber	Page	Remarks
10/18/1904	Park Mortgage Company	Gustavus Markewitz	18	190	release of mortgage; Lots 1, 35, 70, 105, 140, 183
10/18/1904	Isaac M. Dyckman	Gustavus Markewitz	18	193	Lots 1, 35, 70, 105, 140, 183
10/18/1904	Gustavus Markewitz	Central Realty Bond & Trust	18	194	Lots 35, 105, 183
10/18/1904	Gustavus Markewitz	Andrew J. Cobe	18	196	Lots 1, 70, 140
11/11/1904	Gustavus Markewitz	Andrew J. Cobe	22	63	Lot 220
11/11/1904	American Real Estate Company	Gustavus Markewitz	22	57	Lot 220
11/12/1904	Farmers Loan and Trust Company	American Real Estate Company	22	66	release of mortgage; Lot 220
2/1/1905	Andrew Cobe	Thomas R. Hart	22	283	Lease; Lots 35, 105, 183
3/27/1905	Central Realty Bond & Trust Company	Margaret A. Meyer	24	205	Lots 35, 105, 183
3/27/1905	Margaret A. Meyer	Central Realty Bond & Trust	24	206	Surrender of lease; Lots 1, 70, 140, 220
1917	This block closed and discontinued 1/1/1917. Superseded by new block 2244. This block has been changed by the opening of W 219th and 220th Streets and Indian Road.				
4/8/1905	Thomas R. Hart	Andrew J. Cobe	23	265	Not lotted
2/7/1906	Lawyers Title Insurance and Trust Company (formerly Central Realty Bond & Trust Co)	Henry Morgantheau	27	307	Lots 35, 105, 183
2/21/1906	Wesley Thorn	City Real Estate Company	27	332	Lots 1, 70, 140, and 220
2/21/1906	Andrew Cobe	Wesley Thorn	27	328	Lots 1, 70, 140, and 220
5/17/1906	Supreme Court (in the matter of West 219th Street from Broadway to Isham Street)	Petition and order appointing commissioners of estimate and assessment	filed	334	
4/8/1907	Henry Morgantheau Company	City of New York	32	50	Easement; Lots 35, 105, and 183
4/8/1907	Mutual Life Insurance Company	Consent	32	52	Lots 35, 105, and 183
6/6/1916	Henry Morgantheau Company	Delta Holding Corporation	53	153	Lots 35, 105, and 183, and streets
9/18/1917	Schuyler M. Meyer	Mutual Life Insurance Company of New York	3019	499	Foreclosure; Lots 35, 105, and 183, also West 219th and 220th Streets
8/5/1919	Robert R. Perkins	City Real Estate Company	3086	489	Release of Mortgage; Lot 1
9/4/1920	Mutual Life Insurance Company of New York	Fitz Roy Realty Corporation	3173	256	Lots 35, 105, 183
1/5/1922	City Real Estate Company	Trustees of Columbia University	3256	442	Lots 1, 70, 140, and 220
12/28/1922	Fitz Roy Realty Corporation	Mutual Life Insurance Company of New York	3322	13	Lots 1 (part of), 35, 105, 183
1/9/1924	Mutual Life	Trustees of Columbia University	3408	421	Lots 35, 105, 183, and part of street
6/9/1924	Mutual Life Insurance Company of New York	Trustees of Columbia University	3322	13	Lots 35, 105, 183
Sources: Conveyances on file at the Manhattan Office of the City Register, New York City Department of Finance.					

Appendix B:

Summary of Census Research for Block 2244

Census Year/ Location	Name	Age	Profession	Birthplace	Other
1870 (First Enumeration) Ward 12, District 1	I.M. Dyckman	54	Retired Farmer	New York	Real Estate: \$450,000 Personal Estate: \$450,000
	Fanny Dyckman	34		New York	
	Mary A. Dyckman	1	At Home	New York	
	Mary Ann Dyckman	28	At Home	New York	
	Mary O'Brien	30	Domestic	Ireland	
	Marcy Henry	30	Domestic	Ireland	
	Bridget O'Brien	20	Domestic	Ireland	
1870 (Second Enumeration) Ward 12, District 18	I.M. Dyckman	55	Farmer	New York	
	Fanny Dyckman	36		New York	
	Mary A. Dyckman	2		New York	
	Mary Dyckman	60		New York	
	Mary O'Brien	30		New York	
	Bridget O'Brien	22		New York	
	Margaret Henry	2		New York	
1880 Kingsbridge Road	Isaac Dykeman	66	Ret. Farmer	New York	
	Fanny Dykeman	47	Keeping House	New York	
	Alice M. Dykeman	11	At Home	New York	
	Fanny Dykeman	9	At home	New York	
	Sarah Armour	25	Governess	England	
	Mary Oliver	25	Servant	Ireland	
	Kate McGinnie	25	Servant	Ireland	
	Mary Aikene	50	Servant	New York	
	Jacob Post	64	Laborer	New York	

Sources: Federal census ledgers accessed through Ancestry.com.

